

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

# **CLEANUP ACTION REPORT**



### Property:

Broadcast Apartments Property 1420 East Madison Street Seattle, Washington VCP No. NW2954

Report Date: August 17, 2016

### Prepared for:

1420 East Madison Street LLC117 East Louisa Street, Suite 143Seattle, Washington

## **Cleanup Action Report**

Prepared for:

**1420 East Madison Street LLC** 117 East Louisa Street, Suite 143 Seattle, Washington 98102

#### **Broadcast Apartments Property** 1420 East Madison Street Seattle, Washington 98122

Project No.: 1002-003

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#### ACRONYMS AND ABBREVIATIONS

μg/L	micrograms per liter
amsl	above mean sea level
Apollo	Apollo Geophysics
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CAP Addendum	Cleanup Action Plan Addendum
CAR	Cleanup Action Report
COC	chemical of concern
DRPH	diesel-range petroleum hydrocarbons
Ecology	Washington State Department of Ecology
EDC	ethylene dichloride (1,2-dichloroethane)
EPA	U.S. Environmental Protection Agency
Filco	Filco Corporation
GCI	Geotech Consultants, Inc.
GPR	ground-penetrating radar
GRPH	gasoline-range petroleum hydrocarbons
GSM	GeoScience Management, Inc.
HASP	Health and Safety Plan
ICC	International Code Council
Kulchin	Kulchin Foundation Drilling Company
mg/kg	milligrams per kilogram
MTCA	Washington State Model Toxics Control Act
NWTPH	Northwest Total Petroleum Hydrocarbon
ORPH	oil-range petroleum hydrocarbons

### **ACRONYMS AND ABBREVIATIONS (CONTINUED)**

PCS	petroleum-contaminated soil
PID	photoionization detector
the Property	the Broadcast Apartments property located at 1420 East Madison Street in Seattle, Washington
SAP	Sampling and Analysis Plan
SoundEarth	SoundEarth Strategies, Inc.
ТРН	total petroleum hydrocarbon
USGS	U. S. Geological Survey
UST	underground storage tank
VCP	Voluntary Cleanup Program
VOC	volatile organic compound
WAC	Washington Administrative Code

#### **EXECUTIVE SUMMARY**

On behalf of 1420 East Madison Street LLC, SoundEarth Strategies, Inc. (SoundEarth) has prepared this Cleanup Action Report for the Property located at 1420 East Madison Street in Seattle, Washington (the Property). The cleanup action was performed as an independent remedial action in accordance with the Washington State Model Toxics Control Act (MTCA) Cleanup Regulation as established in Chapter 340 of Title 173 of the Washington Administrative Code. The Property is enrolled in the Washington State Department of Ecology's Voluntary Cleanup Program (No. NW1621). The cleanup action was completed in general accordance with activities described in the Cleanup Action Plan Addendum and the Sampling and Analysis Plan, both prepared by SoundEarth.

The Property consists of two irregularly shaped parcels that cover approximately 12,266 square feet (0.28 acres) of land. Immediately prior to current redevelopment activities, the Property was vacant, with an asphalt-paved parking lot. The Property is located at an approximate elevation of 367 to 380 feet above mean sea level, approximately 1.2 miles northeast of downtown Seattle.

The Property was initially developed in 1891 with a store, heated by a stove. By 1950, the Property was redeveloped with as many as five storefronts, occupied by commercial businesses, including a laundry facility, a rug cleaner, a dye works, sheet-metal shops, and several auto service/repair businesses. An automotive garage was present in the northwest portion of the Property. In 1965, all of the structures were demolished, and a Taco Time restaurant was constructed on the Property. The restaurant operated from 1965 through 2010 and was demolished in 2010.

Subsurface soil beneath the Property consists primarily of dense silty, fine to medium sand with varying amounts of gravel, locally interbedded with layers of silt and fine sand that extends to the maximum depth explored of 40.5 feet below ground surface (bgs). These soils were interpreted to be glacial till. Concentrations of petroleum hydrocarbons exceeding applicable soil cleanup levels were identified in the western and central portions of the Property.

Two water-bearing zones are present beneath the Property: a shallow, discontinuous, perched waterbearing zone at a maximum approximate depth of 18 feet bgs and an intermediate, more continuous water-bearing zone at a maximum approximate depth of 31 feet bgs. Groundwater, in general, flows to the west-southwest on the Property. Concentrations exceeding applicable groundwater cleanup levels of ethylene dichloride (EDC; also known as 1,2-dichloroethane) have been detected in groundwater in the south-central portion of the Property.

Property redevelopment commenced in December 2015 and included mass excavation of the Property from lot-line to lot-line up to 31 feet bgs. All of the on-Property soil exhibiting signs of petroleum impacts were excavated and disposed of at the CEMEX thermal treatment facility in Everett, Washington.

Four 12-inch-diameter and one 14-inch-diameter dewatering wells were installed in February 2016. Beginning in March, after continuously wet soil conditions were encountered in areas of the excavation floor, a temporary construction perimeter dewatering system was installed. The perimeter dewatering system comprised 2-inch-diameter, schedule 40 PVC angled well casings spaced at 6-foot intervals around the perimeter of the Property and connected to a header pipe leading to a pump in the northwest corner of the Property. The dewatering wells were pumped at a rate of approximately 10,000

gallons per day beginning on March 16, 2016. All water produced during dewatering was discharged into the sewer system.

The redevelopment excavation removed soil with concentrations of the chemicals of concern (COCs) exceeding MTCA Method A cleanup levels. All on-Property excavation confirmation soil samples were compliant with MTCA Method A cleanup levels for all COCs.

Groundwater samples collected from three dewatering wells installed within the intermediate waterbearing zone across the Property during and after the redevelopment excavation did not exhibit EDC or other chlorinated volatile organic compound concentrations in excess of the MTCA Method A cleanup levels after the initial sampling event in February 2016. In addition, gauging of monitoring well MW16 in April and May 2016 indicated that the well was dry. Based on the absence of the perched water-bearing zone, and recent compliant analytical results from the samples collected within the intermediate waterbearing zone, it is our opinion that further assessment of groundwater is not warranted.

The new mixed-use building was constructed with a permanent dewatering system that pumps and discharges water collected in the building's footing drains and discharges to the combined sewer system.

In summary:

- A total of 6,433 tons of soil was excavated from the Property during excavation for Property redevelopment and disposed of as petroleum-contaminated soil at the CEMEX thermal treatment facility in Everett, Washington. All confirmation samples collected from the excavation are compliant with MTCA Method A cleanup levels.
- The development excavation completely removed the on-Property perched water zone, as off-Property perched water was not observed to be seeping in through the excavation sidewalls. Groundwater samples collected from three on-Property wells did not exhibit EDC concentrations in excess of MTCA Method A cleanup levels.

This executive summary is presented solely for introductory purposes, and the information contained in this section should be used only in conjunction with the full text of this report. A complete description of the project, site conditions, investigative methods, and investigation results is contained within this report.

### 1.0 INTRODUCTION

SoundEarth Strategies, Inc. (SoundEarth) has prepared this Cleanup Action Report (CAR) on behalf of 1420 East Madison Street LLC, to present the results of the cleanup action conducted at the Property located at 1420 East Madison Street in Seattle, Washington (the Property), as shown on Figure 1. This cleanup action was conducted to meet the requirements of the Washington State Model Toxics Control Act (MTCA) Cleanup Regulations as established in Chapter 340 of Title 173 of the Washington Administrative Code (WAC 173-340). The Property is enrolled in the Washington State Department of Ecology's (Ecology's) Voluntary Cleanup Program (No. NW2954).

Subsurface investigations conducted by SoundEarth and others have confirmed releases of the following chemicals of concern (COCs) to soil beneath the Property: gasoline-range petroleum hydrocarbons (GRPH); diesel-range petroleum hydrocarbons (DRPH); oil-range petroleum hydrocarbons (ORPH); and benzene, toluene, ethylbenzene, and total xylenes (BTEX). DRPH and ethylene dichloride (EDC; also known as 1,2-dichloroethane) have been identified in groundwater beneath the Property. The source of the GRPH, DRPH, ORPH, and BTEX impacts appears to be a release of heating oil from an underground storage tank (UST) associated with the former on-Property sheet metal shop; the EDC impacts appear to be related to the former on-Property sheet metal shop or dye works and laundry/cleaners.

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 results and conclusions of the cleanup action.

#### 1.1 PURPOSE

The purpose of the cleanup action was to remove soil contamination from the Property concurrent with excavation and construction activities related to redevelopment. The objective of this CAR is to document field activities that were conducted for the cleanup action described in the Cleanup Action Plan Addendum (CAP Addendum; SoundEarth 2015a) and the Sampling and Analysis Plan (SAP; SoundEarth 2015c).

#### 1.2 **REPORT ORGANIZATION**

This CAR 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, including site demolition, shoring installation, soil excavation, UST decommissioning and removal, temporary construction dewatering and permanent building dewatering, and soil and groundwater sampling.
- Section 4.0, Compliance Monitoring. This section describes the protection, performance, and confirmational monitoring that was conducted as part of cleanup action, including a discussion of soil sampling results.

- Section 5.0, Construction and Permanent Dewatering. This section describes the construction dewatering wells that were installed in February 2016 and the permanent dewatering system that was installed as a part of building construction.
- Section 6.0, Groundwater Evaluation. This section describes the results of an evaluation of groundwater conditions at the Property, including groundwater analytical results, historical groundwater elevations, flow direction, as well as temporary construction dewatering and the building's permanent dewatering system.
- Section 7.0, Conclusions. This section presents the conclusions based on the results of the cleanup action.
- Section 8.0, Limitations. This section presents SoundEarth's standard limitations associated with conducting the work reported herein and preparing this report.
- Section 9.0, References. This section lists references cited in this document.

#### 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 investigations conducted at the Property, and a summary of the selected cleanup action and remediation levels. Additional background, including historical land use of surrounding parcels, geologic and hydrogeologic setting, and details of previous environmental investigations, is provided in the CAP Addendum (SoundEarth 2015a).

#### 2.1 PROPERTY LOCATION AND DESCRIPTION

The Property is located approximately 1.2 miles northeast of downtown Seattle, as shown in Figure 1. The Property consists of two irregularly shaped tax parcels (King County Parcel Nos. 1728800075 and 1728800080) that cover approximately 12,266 square feet (0.28 acres) of land in Township 25 North/Range 4 East/Section 32. Figure 2 depicts a plan view/layout of the Property. According to the King County iMap application, the Property is located at an approximate elevation of 367 to 380 feet above mean sea level (amsl), with the highest elevations on the eastern portion of the Property. Immediately prior to current redevelopment activities, the Property was vacant, with an asphalt-paved parking lot. The Property is currently owned by 1420 East Madison Street LLC.

Development in the vicinity of the Property is a mix of residential and commercial uses. Uses of adjoining properties are summarized below and are also shown on Figure 2.

- North. The Property is bounded to the north by an alley, beyond which is a three-story apartment building. The First African Methodist Episcopal Church and its associated parking lot are located to the northwest of the Property.
- East. A mixed use apartment building is located across 15<sup>th</sup> Avenue East to the east of the Property.
- **South.** The south-adjoining property, located across East Madison Street, is occupied by McGilvra Place Park, a City of Seattle public park.
- West. A parking lot is located on the west-adjoining property, with a dry cleaner (Royal Cleaners) beyond.

#### 2.2 LAND USE HISTORY

The Property was initially developed in 1891 with a store, heated by a stove. By 1950, the Property was redeveloped with as many as five storefronts, occupied by commercial businesses, including a laundry facility, a rug cleaner, a dye works, sheet-metal shops, and several auto service/repair businesses. An automotive garage was present in the northwest portion of the Property. In 1965, all of the structures were demolished, and a Taco Time restaurant was constructed on the Property. The restaurant operated from 1965 through 2010 and was demolished in 2010.

#### 2.3 FUTURE LAND USE

The Property is in the process of being redeveloped with one 6-story structure. The project includes the construction of a mixed-use development that will extend lot-line to lot-line. Development plans include 70 residential units above 2,854 square feet of restaurant space and 4 live-work units. Three levels of parking accommodating 70 vehicles will be constructed below grade.

#### 2.4 PROPERTY GEOLOGY AND HYDROLOGY

This section summarizes the geologic and hydrologic conditions encountered beneath the Property.

#### 2.4.1 <u>Geology</u>

The Washington State Department of Natural Resources online Subsurface Geology Information System indicated that the Property is underlain by Pleistocene Vashon Stade glacial till (geologic unit Qgt), which generally consists of very dense silty sand with variable gravel content. Fill material was encountered beneath the Property. The fill material was comprised of silty fine to medium sand and gravel, with wood, brick and metal debris from ground surface to a depth of approximately 6 feet below ground surface (bgs). Underlying the fill material is native silty, fine to medium sand with varying amounts of gravel, locally interbedded with layers of silt and fine sand to the maximum depth explored of 40.5 feet bgs.

#### 2.4.2 <u>Hydrology</u>

Both the King County iMap application and the U. S. Geological Survey (USGS) Topographic Map of the Seattle North, Washington Quadrangle, published in 1983, depict topography in the vicinity of the Property as sloping downward to the southwest (King County iMAP 2015, USGS 1983). The topographic map depicts the closest surface water body as Elliot Bay, which is located approximately 1.5 miles to the west.

Subsurface investigations conducted by SoundEarth and others indicate that two water-bearing zones are present beneath the Property: a shallow, discontinuous, perched water-bearing zone at a maximum approximate depth of 18 feet bgs (perched interval) and an intermediate, more continuous water-bearing zone at a maximum approximate depth of 31 feet bgs (intermediate interval). Groundwater elevations for the perched groundwater table measured on February 28, 2014, ranged between 9.76 to 14.32 feet bgs in monitoring wells MW01, MW05, and MW08. The groundwater contours measured during this 2014 event indicate that the perched groundwater, in general, flows to the west–southwest with average gradients between 0.059 and 0.10 feet per foot. The migration direction for the underlying intermediate water-bearing zone has not been assessed.

### 2.5 SUMMARY OF PREVIOUS INVESTIGATIONS

Several investigations have been conducted by others at the Property since 2003. The following subsections provide a summary of previous environmental work performed at the Property.

### 2.5.1 <u>Geotech Consultants, Inc. Limited Phase II Environmental Site Assessment, 2003</u>

In 2003, Geotech Consultants, Inc. (GCI) conducted a limited Phase II Environmental Site Assessment, which included three soil borings advanced to a depth of approximately 40 feet bgs (GCI 2003). Concentrations of 180 milligrams per kilogram (mg/kg) of DRPH and 860 mg/kg of ORPH were detected in a boring at the northwest corner of the Property. Groundwater samples contained EDC in concentrations of 41 micrograms per liter ( $\mu$ g/L) and 5.7  $\mu$ g/L, exceeding the MTCA Method A cleanup level of 5.0  $\mu$ g/L.

### 2.5.2 Noll Environmental, Inc. Phase II Environmental Site Assessment, 2005

In October 2005, Noll Environmental, Inc. (Noll) conducted a Phase II Environmental Site Assessment at the Property. Soil samples were collected from five geoprobe soil borings at the Property at depths ranging from 0 to 16 feet bgs. No dry cleaning solvents were found in the site soil samples analyzed. Petroleum hydrocarbons in the diesel and oil range were found in one boring at 6 feet bgs, but at concentrations well below MTCA Method A cleanup levels (Noll 2005).

#### 2.5.3 <u>Noll Environmental, Inc. Groundwater Monitoring Well Installation and Sampling,</u> 2006

In January 2006, three groundwater monitoring wells (MW01, MW02, and MW03) were installed by Noll. EDC was detected in two monitoring wells and was detected above MTCA Method A cleanup levels in two monitoring wells (Noll 2006).

### 2.5.4 Apollo Geophysics GPR Investigation, 2006

Apollo Geophysics (Apollo) conducted a ground-penetrating radar (GPR) survey in April 2006 to assess if USTs were present on the Property. Apollo detected two subsurface features in the southeast corner of the parking lot near East Madison Street (Apollo 2006).

#### 2.5.5 <u>GeoScience Management, Inc. Groundwater Monitoring Well Installation and</u> <u>Sampling, June 2006</u>

Three additional wells (MW04, MW05, and MW06) were installed by GeoScience Management, Inc. (GSM) for the area adjacent to the GPR detections. All six wells were sampled. Total petroleum hydrocarbons (TPH) was not detected in the wells. EDC was detected above MTCA Method A cleanup levels in monitoring wells MW01, MW05, and MW06 (GSM 2006).

### 2.5.6 G-Logics, Inc. Subsurface Assessment, January 2009

To provide additional information regarding soil and groundwater contamination at the Property, a subsurface exploration was conducted by G-Logics, Inc. (G-Logics) in 2009. The exploration included collecting 17 soil vapor samples, drilling 11 shallow soil borings and 5 deeper soil borings, and installing 4 additional monitoring wells (MW07, MW08, MW09, and MW10). The findings were as follows (G-Logics 2009a):

- Of the 17 soil vapor samples collected, none contained detectable concentrations of EDC or any other volatile organic compounds (VOCs) analyzed by U.S. Environmental Protection Agency (EPA) Method 8260B.
- DRPH was detected at concentrations exceeding MTCA Method A levels in two borings, immediately northeast of the restaurant building at a depth of approximately 10 to 15 feet bgs.
- None of the ten groundwater samples submitted for analysis contained detectable concentrations of chlorinated solvents or other VOCs.

### 2.5.7 G-Logics, Inc. Groundwater Monitoring Well Sampling, May 2009

G-Logics conducted groundwater sampling of the ten monitoring wells on the Property in July 2009. No EDC was detected in any of the wells. DRPH was detected in one well at a concentration slightly exceeding the MTCA Method A cleanup level (G-Logics 2009b).

#### 2.5.8 <u>G-Logics, Inc. Groundwater Monitoring Well Sampling, August 2009</u>

G-Logics conducted groundwater sampling of the ten monitoring wells on the Property in August 2009. Samples collected from four wells contained concentrations of EDC; three of these were above MTCA Method A cleanup level. DRPH was not detected in any of the sampled wells (G-Logics 2009c).

#### 2.5.9 G-Logics, Inc. Groundwater Monitoring Well Installation and Sampling, April 2010

In February 2010, G-Logics installed three additional monitoring wells (MW11, MW12, and MW13; G-Logics 2010a) on the former restaurant location (the Taco Time building was demolished in January 2010). Soil samples did not contain detectable concentrations of VOCs. Thirteen groundwater samples were submitted for VOC analysis. Samples collected from six wells contained concentrations of EDC; three of these were above MTCA Method A cleanup level. One groundwater sample was submitted for DRPH analysis, and contained no detectable DRPH.

#### 2.5.10 <u>G-Logics, Inc. Groundwater Monitoring Well Installation and Sampling, September</u> 2010

In August 2010, G-Logics installed two additional groundwater monitoring wells (MW14 and MW15; G-Logics 2010b) on the northeastern portion of the Property to further characterize the extent and possible migration pattern of EDC. The two wells were sampled and three existing wells were resampled. Samples were submitted for VOC analysis. EDC exceeded MTCA Method A cleanup levels in two of the wells (MW01 and MW08).

#### 2.5.11 <u>Environmental Associates, Inc. Groundwater Sampling & Preliminary Hydraulic</u> <u>Conductivity Assessment, 2012</u>

Environmental Associates, Inc. (EAI) sampled groundwater from 8 of the 15 wells and performed a preliminary field evaluation of hydraulic conductivity of the groundwater-bearing zone below the Property (EAI 2012a). EDC was detected above MTCA Method A cleanup level in groundwater in three of the wells sampled.

#### 2.5.12 <u>Environmental Associates Revised Work Plan—Proposed Independent Cleanup Action,</u> 2012

EAI submitted a proposed Cleanup Action Plan, which included direct excavation and off-site disposal of soil during site redevelopment, as well as managing groundwater through the combination of a perimeter dewatering system and/or direct pumping of exposed and accumulated groundwater from the floor of the excavation as it progresses below the water table elevation (EAI 2012b).

#### 2.5.13 Geosyntec Consultants Phase I ESA, 2013

Geosyntec Consultants completed a Phase I Environmental Assessment of the Property in 2013 (Geosyntec 2013). This prior Phase I ESA identified the following recognized environmental concerns for the Property:

- Confirmed EDC-impacted groundwater resulting from the historical dry cleaning activities on site.
- Confirmed diesel-impacted groundwater from historical automotive repair activities on site.
- Confirmed diesel- and oil-range TPH impacted soil from historical automotive repair activities on site.
- Evidence of past land use activities suggests the potential that USTs could be present on the Site. Geophysical surveys conducted by other consultants identified two locations where USTs could possibly exist. Sufficient investigation is needed to verify the UST status at these two locations.

#### 2.5.14 SoundEarth 2015 Cleanup Action Plan Addendum, February 12, 2015

SoundEarth staff conducted a limited subsurface investigation at the Property in February and March 2014, and incorporated the results into a Cleanup Action Plan Addendum submitted to Ecology (SoundEarth 2015a). The purpose of the investigation was to evaluate whether the EDC-contaminated groundwater extended beyond the Property boundary to the south, to determine whether GPR anomalies identified during previous investigations were USTs, and to further characterize the hydrogeology beneath the Property.

The results of the investigations conducted at the Site suggest that the petroleum impacts confirmed in soil and groundwater beneath the Site may be the result of a release from former automotive repair activities that may have operated in the former automotive garage, located in the northwest portion of the Property.

- Soil. Soil generally consisted of dense gravelly sand with varying amounts of silt. Fill was encountered from 0 to approximately 5 feet bgs. No indications of petroleum contamination were observed during drilling activities. The soil sample collected from SESB01 at a depth of 20 feet bgs did not contain detectable concentrations of DRPH or ORPH and, therefore, remained below the applicable cleanup levels.
- Groundwater. The groundwater samples collected from monitoring wells MW05 and MW08 contained concentrations of EDC in excess of the cleanup level; EDC concentrations in monitoring wells MW01, MW06, MW09, MW10 through MW12,

MW14, and MW16 were below the Method A cleanup level and/or the laboratory detection limit.

 USTs. No USTs were encountered at the locations previously identified by the 2006 GPR survey.

EDC impacts confirmed in groundwater within the south-central portion of the Property may also be attributable to a release from the former sheet metal and/or dye works facilities. According to the Agency for Toxic Substances & Disease Registry's Toxicological Profile, EDC has been historically produced as a chemical intermediate for dyes and resins (US Department of Health and Human Services 2001). The EPA document *Locating and Estimating Air Emissions from Sources of Ethylene Dichloride* also lists EDC use in metal degreasing, paint, varnish, finish remover, soaps, and scouring compounds (1984). Considering that both sheet metal and dye works facilities historically operated on the Property, the EDC is likely attributable to one or both facilities operating from at least 1950 to 1965. Because no EDC source has been identified in soil, it is likely that the source of EDC may have been from a leaking underground sewer line.

The proposed redevelopment of the Property will require a mass excavation lot-line to lot-line to a maximum depth of 31 feet bgs, thus removing all previously identified petroleum-contaminated soil (PCS).

The cleanup action to remediate groundwater prior to the proposed excavation included conducting an in situ chemical oxidation event at the Property to reduce low-level EDC concentrations in groundwater to below cleanup level.

#### 2.5.15 Ecology Opinion on Proposed Cleanup

In a letter dated May 18, 2015, Ecology issued the opinion that "upon completion of your proposed cleanup, no further remedial action will be necessary to clean up contamination at the Site."

#### 2.5.16 SoundEarth Phase I ESA, September 14, 2015

SoundEarth was commissioned by 1420 East Madison Street LLC to complete a Phase I Environmental Site Assessment of the Property in 2015(SoundEarth 2015b). The Phase I ESA identified and summarized to the extent feasible, the previously discussed recognized environmental conditions resulting from the use, manufacture, storage, and disposal of hazardous or toxic substances that could affect the future acquisition and/or development of the Property. The assessment was intended to satisfy the level of effort often referred to as "all appropriate inquiry" in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC § 9601, with the objective of complying with lender requirements as part of the planned redevelopment of the Property.

#### 2.6 SELECTED CLEANUP ACTION

The selected cleanup action for soil at the Property was a mass excavation lot-line to lot-line, which was compatible with the Property redevelopment, to a maximum depth of 31 feet bgs, thus removing all previously identified PCS. The deepest portion of redevelopment excavation was completed to an approximate elevation of 341 feet amsl, with depths ranging from approximately 20 feet bgs near the southwest Property corner to approximately 31 feet bgs near the northeast Property corner.

The selected cleanup action to remediate groundwater prior to the proposed excavation included conducting an in situ chemical oxidation event at the Property to reduce low-level EDC concentrations in groundwater to below the MTCA Method A cleanup level.

#### 2.7 REMEDIATON LEVELS

Remediation levels for the cleanup action are equal to the MTCA Method A cleanup levels for the COCs. The MTCA Method A cleanup levels for the COCs are listed in the table below.

Chemical of Concern	MTCA Method A Cleanup Level for Soil (mg/kg)	MTCA Method A Cleanup Level for Groundwater (μg/L)	Source
GRPH	30/100 <sup>(1)</sup>	800/1000 <sup>(2)</sup>	
DRPH	2000	500	
ORPH	2000	500	MTCA Cleanup Levels;
Benzene	0.03	5	WAC 173-340-740(2)(b)(i);
Toluene	7	1000	Table 740-1
Ethylbenzene	6	700	
Total Xylenes	9	1000	
EDC	480 <sup>(3)</sup>	5	

NOTES:

<sup>(1)</sup>100 mg/kg when benzene is not detected and 30 mg/kg when benzene is detected.

 $^{(2)}$  1000  $\mu g/L$  when benzene is not detected and 800  $\mu g/L$  when benzene is detected.

<sup>(3)</sup>MTCA Method B cleanup level; Method A cleanup level not established.

 $\mu$ g/L = micrograms per liter

DRPH = diesel-range petroleum hydrocarbons

EDC = ethylene dichloride

GRPH = gasoline-range petroleum hydrocarbons

mg/kg = milligrams per kilogram

MTCA = Washington State Model Toxics Control Act

ORPH = oil-range petroleum hydrocarbons

WAC = Washington Administrative Code

### 3.0 CLEANUP ACTION IMPLEMENTATION

This section provides a description of the components of the cleanup action implemented for the Property. Implementation of the cleanup action was coordinated with redevelopment activities. Construction activities were coordinated by W.G. Clark, the general contractor. Photographs of the cleanup action implementation process are provided with this report and annotated for the field activity being performed.

### 3.1 SOIL DISPOSAL PROFILE AND SOIL CLASSIFICATION

PCS was transported to the CEMEX thermal treatment facility in Everett, Washington.

Soil without aesthetic impacts (e.g., staining, sheen, or odors) was disposed of as non-impacted soil at selected disposal locations or used as non-impacted fill material. Soil exhibiting elevated contaminant

concentrations or aesthetic impacts (petroleum staining, sheen, or odors) was disposed of at the CEMEX facility. Soil exhibiting aesthetic impacts was disposed of in this manner, even if analytical testing indicated that concentrations were below MTCA Method A cleanup levels. A soil disposal profile was created for the project based on the existing historical soil laboratory analytical data prior to commencement of excavation activities. A more detailed discussion of soil classification is included in the SAP (SoundEarth 2015c).

#### 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 Titles 29 of the Code of Federal Regulations. SoundEarth personnel operated under the HASP and in compliance with the HASP prepared by W.G. Clark, who was responsible for the health and safety of all workers on the Property.

SoundEarth field-screened ambient air during the excavation and shoring activities to monitor petroleum hydrocarbon levels in the breathing zone of personnel, equipment operators, and at the Property boundaries. Ambient air field screening was conducted using a photoionization detector (PID). Results of ambient air monitoring are discussed in Section 4.1.

#### 3.3 MONITORING WELL DECOMMISSIONING

Fifteen monitoring wells (MW01 through MW15) were decommissioned by SoundEarth in accordance with WAC 173-160-460. All fifteen monitoring wells were located within the excavation area. One monitoring well, MW16, remains to the south of the Property in the East Madison Street sidewalk.

#### 3.4 SHORING INSTALLATION

Perimeter temporary shoring was installed to enable the removal of soil for Property redevelopment. Shoring was installed by Kulchin Foundation Drilling Company (Kulchin) from January to May 2016. Shoring was installed according to the design of the project structural engineer, CT Engineering of Seattle, Washington, and installation was overseen by Associated Earth Sciences, Inc., the project geotechnical engineer. The shoring plan consisted of conventional H-piles and wood lagging along the northern Property boundary and soil nail and shotcrete shoring with vertical elements along the west, south, and east Property boundaries. The H-piles along the northern Property boundary were installed using a solid-stem auger drill rig to advance boreholes to elevations of about 341 feet to 333 feet amsl.

#### 3.5 HEATING OIL UST DISCOVERIES AND DECOMMISSIONING

A communication plan was implemented that outlined the response action and notification procedure for discoveries of potential contamination sources or areas of contaminated soil that may be encountered during excavation activities. During this portion of the cleanup action, Santana equipment operators observed conditions that were indicative of potential contamination. W.G. Clark and SoundEarth personnel were alerted of the following issues:

- Obvious petroleum staining, sheen, or colored hues in soil or standing water.
- Presence of diesel- or oil-like vapor or odor.
- The presence of buried pipes, conduits, USTs, or unexplained metallic objects or debris.

SoundEarth personnel evaluated the above conditions and developed sampling plans to characterize and manage the material. Additional details for the discovery of USTs are provided in the sections below.

#### 3.5.1 <u>USTs</u>

Three USTs were encountered at the Property during excavation activities, identified as UST01, UST02, and UST03.

UST01 was encountered on January 6, 2016, in the central portion of the Property. This tank had a capacity of 300 gallons and contained approximately 3" of oily water at the time of removal. UST01 was observed to be in poor condition, with significant corrosion, pitting, and numerous holes observed in the tank walls.

UST02 was encountered on January 15, 2016, in the western portion of the Property. This tank had a capacity of 675 gallons and contained approximately 230 gallons of oily water at the time of discovery. On January 18, 2016, W.G. Clark notified SoundEarth that rainwater had filled and displaced the contents of UST02, pooling in puddles to the south and east of the tank. A thin sheen of petroleum was observed on the puddles. Marine Vacuum Services, Inc. pumped approximately 1,300 gallons of oily water from within UST02 and the surrounding puddles.

UST03 was encountered on January 19, 2016, in the northern portion of the Property. This tank had a capacity of 2,000 gallons and contained approximately 500 gallons of oily water at the time of removal. Product lines were observed emerging from the top of the west side of the tank, running toward the apartment building boiler room to the north.

For each of the three USTs, SoundEarth provided an International Code Council (ICC)-certified UST Site Assessor and conducted a site assessment in general accordance with Ecology's *Guidance for Site Checks and Site Assessments for Underground Storage Tanks* (Ecology 2003). SoundEarth contracted with Filco Corporation (Filco), a Washington State Licensed UST Decommissioner of Seattle, Washington, to provide an ICC-certified UST Decommissioner and a National Fire Protection-certified Marine Chemist. Santana, the earthworks contractor responsible for the excavation and transportation of soils, provided construction support during removal of the USTs. UST01, UST02, and UST03 were properly permitted, pumped, decommissioned, cleaned and triple-rinsed, and disposed of by Filco.

Elevated PID readings, strong hydrocarbon odors, and gray staining were observed in soil directly beneath each of the USTs and on the sidewalls of the tank pits. Discrete soil samples were collected from each of the UST excavations and analyzed for DRPH, ORPH, and chlorinated VOCs. Soil samples collected from the UST01 and UST02 tank pits contained concentrations of DRPH exceeding the cleanup level. Soil samples collected from the UST03 tank pit contained concentrations of DRPH and ORPH below applicable cleanup levels. Based on field screening and analytical results, impacted soil in these areas was classified as PCS and segregated from non-impacted soil. Widespread soil impacts encountered in the central portion of the Property appear to be primarily attributable to the release from UST01.

Soil analytical results are presented in Tables 1 and 2. The locations of the former USTs and sample locations are shown on Figure 3. Letters of Certification for UST01, UST02, and UST03 are included in Appendix A.

#### 3.6 EXCAVATION OF CONTAMINATED SOIL

Remedial excavation was conducted between December 2015 and April 2016. W.G. Clark was the general contractor for the duration of the project, and Santana was the earthworks contractor responsible for the excavation and transportation of soils. A SoundEarth geologist observed excavation activities for known and discovered contaminated soils. The excavation was conducted from lot-line to lot-line as part of the Property redevelopment. During excavation activities, soil was excavated with track-mounted hydraulic excavators and either stockpiled within the construction excavation area or directly loaded into haul trucks.

Soil excavated during the cleanup action was classified for disposal based on the presence or absence of elevated contaminant concentrations and aesthetic impacts (petroleum staining, sheen, or odor). The majority of soil excavated for redevelopment was managed as non-impacted soil and disposed of accordingly. Soil exhibiting elevated contaminate concentrations and/or aesthetic impacts was transported to the CEMEX facility in Everett, Washington, for disposal. A total of 6,433 tons of PCS was removed from the Property during redevelopment.

Prior to excavation activities, the western and central portions of the Property were identified as designated remediation areas where DRPH and ORPH had been detected at concentrations exceeding the applicable cleanup levels, based on historical Property use and the results of previous subsurface investigations. Additionally, the south-central portion of the Property was identified as a potential soil source area for EDC that has been detected in groundwater samples collected from wells in that area.

Samples collected throughout the excavation activities were identified based on their location relative to a grid defined by vertical shoring elements along the southern, eastern, and western Property boundaries (VE1 through VE56) and the soldier piles along the northern Property boundary (N1 through N21). Soil samples were labeled according to grid location and/or sidewall, and depth in feet below grade or below the elevation of the southeast corner of the Property.

Soil was excavated in approximately 5-foot lifts to correspond with the shoring installation schedule. PCS was excavated and either stockpiled and subsequently loaded into haul trucks for transport and disposal at CEMEX or directly loaded into haul trucks for transport and disposal at the CEMEX facility.

In the south-central portion of the Property, between vertical elements VE23 through VE13, soil was excavated in approximately 2-foot lifts to screen and sample for the presence of EDC. Soil in this area was field-screened for sheen, staining, odor, and elevated PID readings. Screening and sampling for the presence of EDC in soil was discontinued after no EDC-impacted soil was detected in the top 6 feet of this area.

### 3.7 SOIL TRANSPORTATION AND DISPOSAL TRACKING

Santana tracked all PCS exported from the Property and maintained a log of all trucks departing the Property with impacted soil for disposal at the CEMEX thermal treatment facility in Everett, Washington. A soil manifest was provided for every individual load of soil. SoundEarth obtained soil disposal profiles, on behalf of 1420 East Madison Street LLC, based on the analytical data gathered during the environmental investigation.

A total of 6,816 tons of PCS was exported from the Property. A summary of exported PCS is presented in Appendix B.

### 4.0 COMPLIANCE MONITORING

There are three types of compliance monitoring identified for the cleanup action (WAC 173-340-410): protection, performance, and confirmational 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.
- **Confirmational 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**

In accordance with the HASP and during drilling, shoring, and excavation activities, SoundEarth monitored ambient air for petroleum hydrocarbons in the breathing zone of personnel and equipment operators and at the Property boundaries. Air monitoring was conducted using a PID. Results of the air monitoring indicated that petroleum hydrocarbon levels in ambient air on the Property did not exceed the applicable Occupational Safety and Health Administration permissible exposure limits or the National Institute for Occupational Safety and Health recommended exposure limits.

### 4.2 PERFORMANCE MONITORING OF SOIL

Performance monitoring included the collection of soil samples from the following locations: the floor of the excavation in areas of known or suspected impacted soil, the sidewalls and bottom of the UST excavation areas, and the stockpiles for waste profiling and off-site disposal. Performance monitoring and field screening of soil was conducted during the remedial excavation activities to direct advancement of the excavation. A SoundEarth geologist observed the excavation of identified impacted soil during excavation activities and performed field screening of non-impacted soil areas to confirm the lack of notable impacts. Field screening included observation of the soil for staining, sheen, and odors. In addition to physical observations, a PID was used to qualitatively measure volatile organic vapors in the soil. Soil samples were collected by a SoundEarth geologist and transferred directly to laboratoryprepared sample containers labeled with unique laboratory identification numbers. The containers were placed in an iced cooler and transported for laboratory analysis to Friedman & Bruya, Inc. of Seattle, Washington, under standard chain-of-custody protocols. All samples were analyzed for DRPH and ORPH by Northwest Total Petroleum Hydrocarbon (NWTPH) Method NWTPH-Dx. Select samples were analyzed for GRPH by Method NWTPH-Gx, BTEX by EPA Method 8021B, and chlorinated VOCs (including EDC) by EPA Method 8062C. Analytical results for performance soil samples are presented in Tables 1 and 2 and depicted on Figures 3, 4, and 5. Laboratory analytical results are included in Appendix C.

### 4.3 CONFIRMATIONAL MONITORING OF SOIL

Confirmational monitoring included the collection of soil samples from the final extent of the remedial excavation area. Confirmation samples were collected from the excavation floor directly beneath any

performance sample, or a sample from previous subsurface investigations, containing concentrations of contaminants above the applicable MTCA Method A cleanup levels. All confirmation samples were analyzed for DRPH and ORPH by Method NWTPH-Dx. Select confirmation samples were analyzed for GRPH by Method NWTPH-Gx and BTEX by EPA Method 8021B. Analytical results for confirmation samples are presented in Tables 1 and 2 and depicted on Figures 3, 4, and 5. Laboratory analytical results are included in Appendix C.

The excavation associated with Property redevelopment removed all soil with concentrations of the COCs exceeding MTCA Method A cleanup levels on the Property. All confirmation soil samples were compliant with MTCA Method A cleanup levels for all COCs.

### 5.0 CONSTRUCTION AND PERMANENT DEWATERING

Construction dewatering commenced in February 2016 with the installation of four dewatering wells, designated as DW01 through DW04. The wells were installed by Kulchin Drilling. Dewatering wells DW01 through DW03 were constructed with 12-inch-diameter, schedule 40 PVC casings screened from 40 to 20 feet bgs. Dewatering well DW04 was constructed with 12-inch-diameter, schedule 40 PVC screened from 36 to 16 feet bgs. In April 2016, dewatering well DW05 was installed near the total planned depth of excavation. Dewatering well DW05 was constructed with 14-inch-diameter, corrugated PVC casing screened from 5 to 20 feet bgs. SoundEarth did not observe the installation of dewatering well DW05. The locations of these wells are shown on Figures 2 and 3. Boring logs for dewatering wells DW01 through DW04 are provided in Appendix D.

Beginning in March, after continuously wet soil conditions were encountered in areas of the excavation floor, a perimeter dewatering system was installed. The perimeter dewatering system comprised 2-inchdiameter, schedule 40 PVC angled well casings spaced at 6-foot intervals around the perimeter of the Property and connected to a header pipe leading to a pump in the northwest corner of the Property. The dewatering wells were pumped at a rate of approximately 10,000 gallons per day beginning on March 16, 2016. All water produced during dewatering was discharged into the sewer system.

A permanent dewatering system was installed as a part of building construction. The dewatering system includes drainage panels along the basement walls and sub-slab piping that direct collects water into a sump. The sump water is then pumped off-Property into the combined sewer system. A copy of the drainage as-built design is included in Appendix E.

### 6.0 GROUNDWATER EVALUATION

Dewatering wells DW01 through DW05 were installed between February and April 2016. Groundwater in these wells was encountered at depths of approximately 23 to 31 feet bgs, which corresponds to elevations 342 to 346 feet amsl. Grab groundwater samples were collected from wells DW02, DW03, and DW05 by SoundEarth up to four times between February and May 2016. Samples were analyzed for EDC by EPA Method 8260C. During the sampling event on February 15, 2016, EDC was detected in DW02 at a concentration of 5.7  $\mu$ g/L, which exceeds the MTCA Method A cleanup level of 5  $\mu$ g/L. EDC was detected in DW03 at a concentration of 2.3  $\mu$ g/L during the same sampling event, which is below the cleanup level. During all subsequent sampling events, EDC was not detected in samples from any of the wells that were sampled.

Fifteen monitoring wells within the footprint of the excavation (MW01 through MW15) were decommissioned in August 2015. The remaining monitoring well, MW16, is located in the East Madison Street sidewalk south of the Property. MW16, which is screened from 15 to 25 feet bgs, was observed to be dry in April and May 2016. The absence of groundwater in MW16 and no observed seepage from the excavation sidewalls indicates that the shallow perched water-bearing zone has been removed from the Property.

Groundwater analytical results are presented in Table 3. Laboratory analytical reports for groundwater samples are provided in Appendix F.

### 7.0 CONCLUSIONS

Based on the results of the compliance monitoring described above, the cleanup action has been accomplished. Soil containing concentrations of COCs above the remediation levels was removed from the Property, and the remaining soil is compliant with MTCA Method A cleanup levels. This conclusion is based on the concentrations of COCs in confirmation soil samples collected directly beneath any performance sample, or a sample from previous subsurface investigations, containing concentrations of contaminants above the applicable MTCA Method A cleanup levels.

Construction dewatering took place at the Property beginning in March 2016. Monitoring well observations indicate that the shallow perched water-bearing zone has been removed from the Property. Water from the dewatering wells was sampled and analyzed for EDC multiple times throughout the excavation and dewatering activities. All sampling events following the initial event in February 2016 indicated that EDC was not present in groundwater at the Property.

The cleanup action at the Property was performed in accordance with the Ecology-approved CAP Addendum (SoundEarth 2015a). The following conclusions are supported by the data generated during the implementation of the cleanup action at the Property:

- The nature and extent of releases of COCs encountered within the Property boundaries have been fully characterized.
- 3 discovered heating oil USTs were properly decommissioned and removed from the Property, in general accordance with Ecology's *Guidance for Site Checks and Site* Assessments for Underground Storage Tanks (Ecology 2003).
- COCs in soil have been removed and remediation levels have been met throughout the Property.
- All excavated soils were transported to an appropriate treatment, storage, and disposal facility.
- Shallow perched groundwater has been removed from the Property, and COCs are below applicable remediation levels in groundwater sampled from intermediate water-bearing zone wells across the Property.
- Deeper groundwater from the intermediate water-bearing zone below the source location is compliant with MTCA Method A cleanup levels.
- No further action is necessary for the COCs, and the Property no longer presents a threat to human health or the environment.

Based upon these conclusions, SoundEarth requests an opinion from Ecology as to the sufficiency to obtain a No Further Action determination for the cleanup action.

#### 8.0 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 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.

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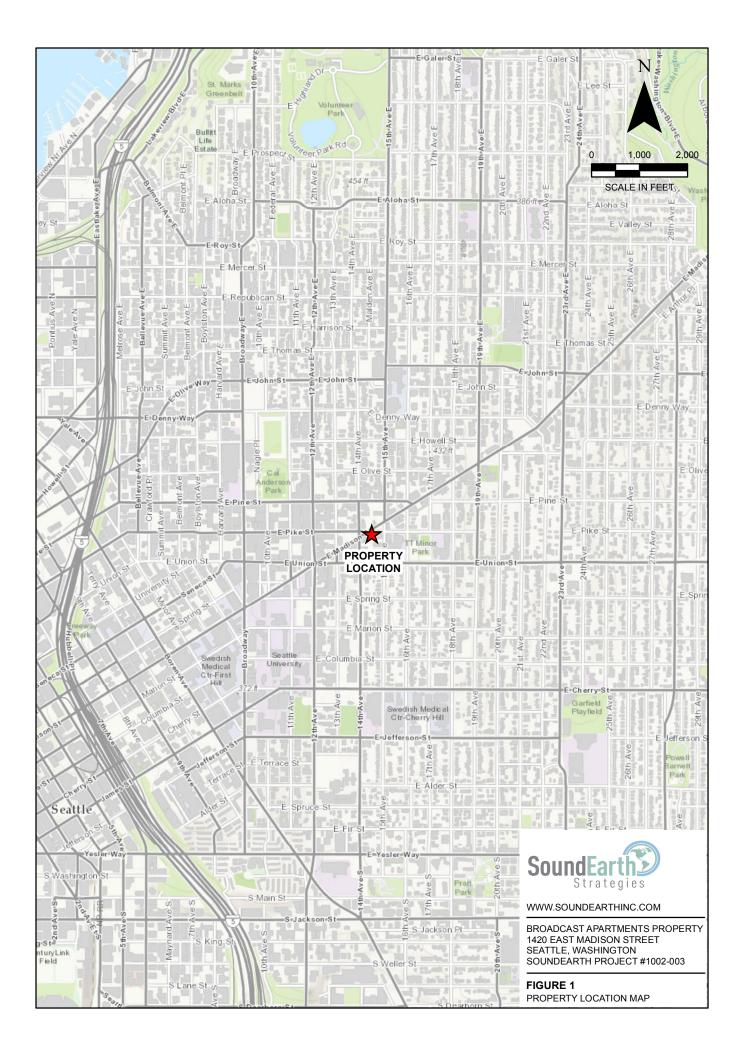
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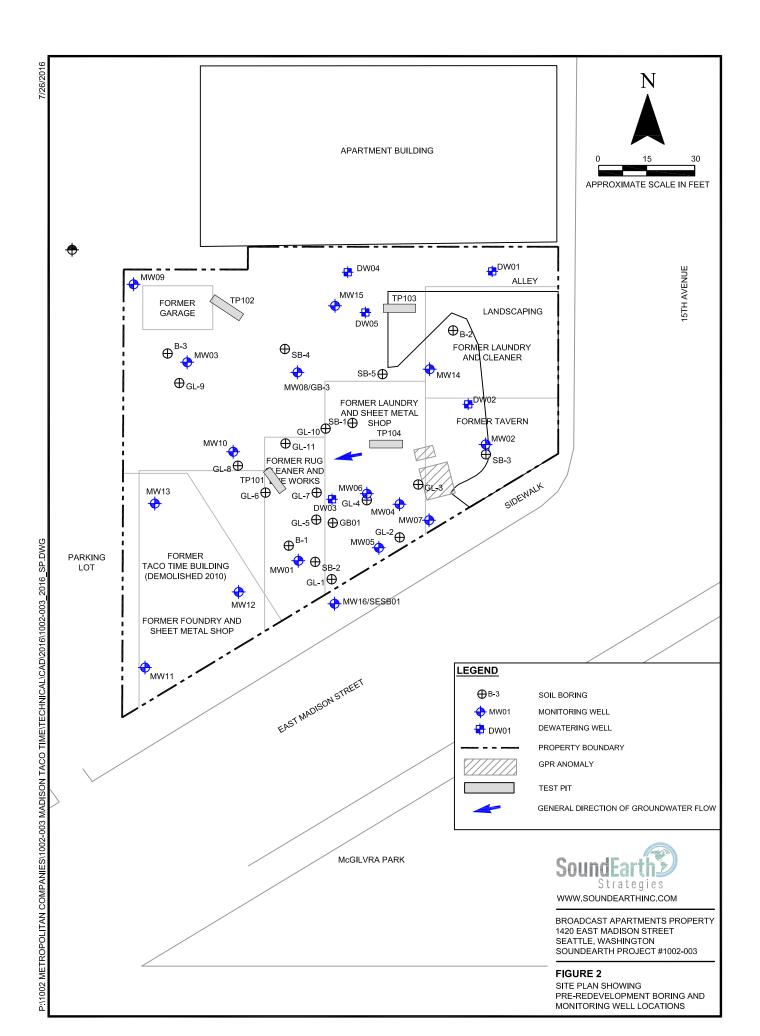
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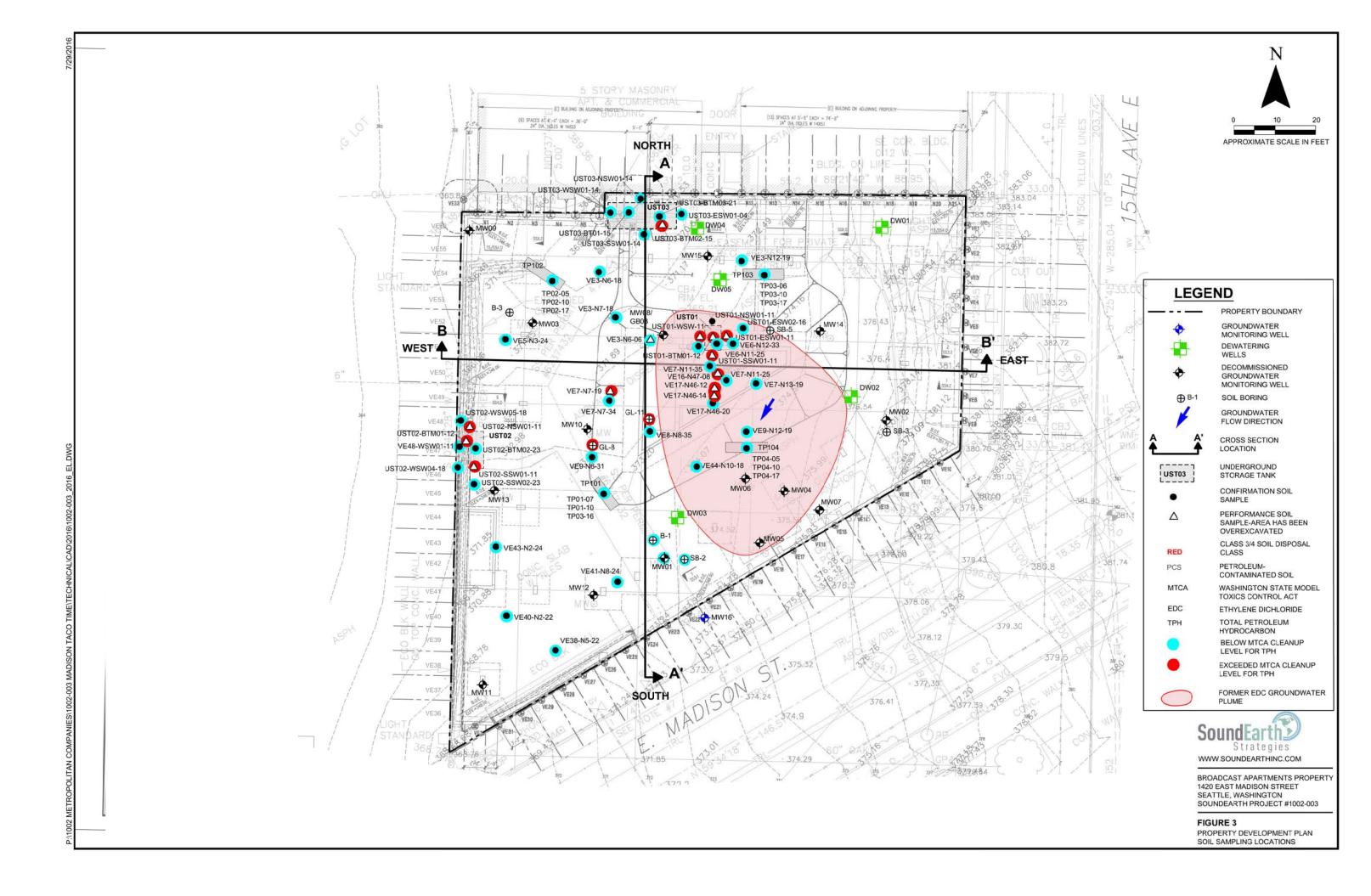
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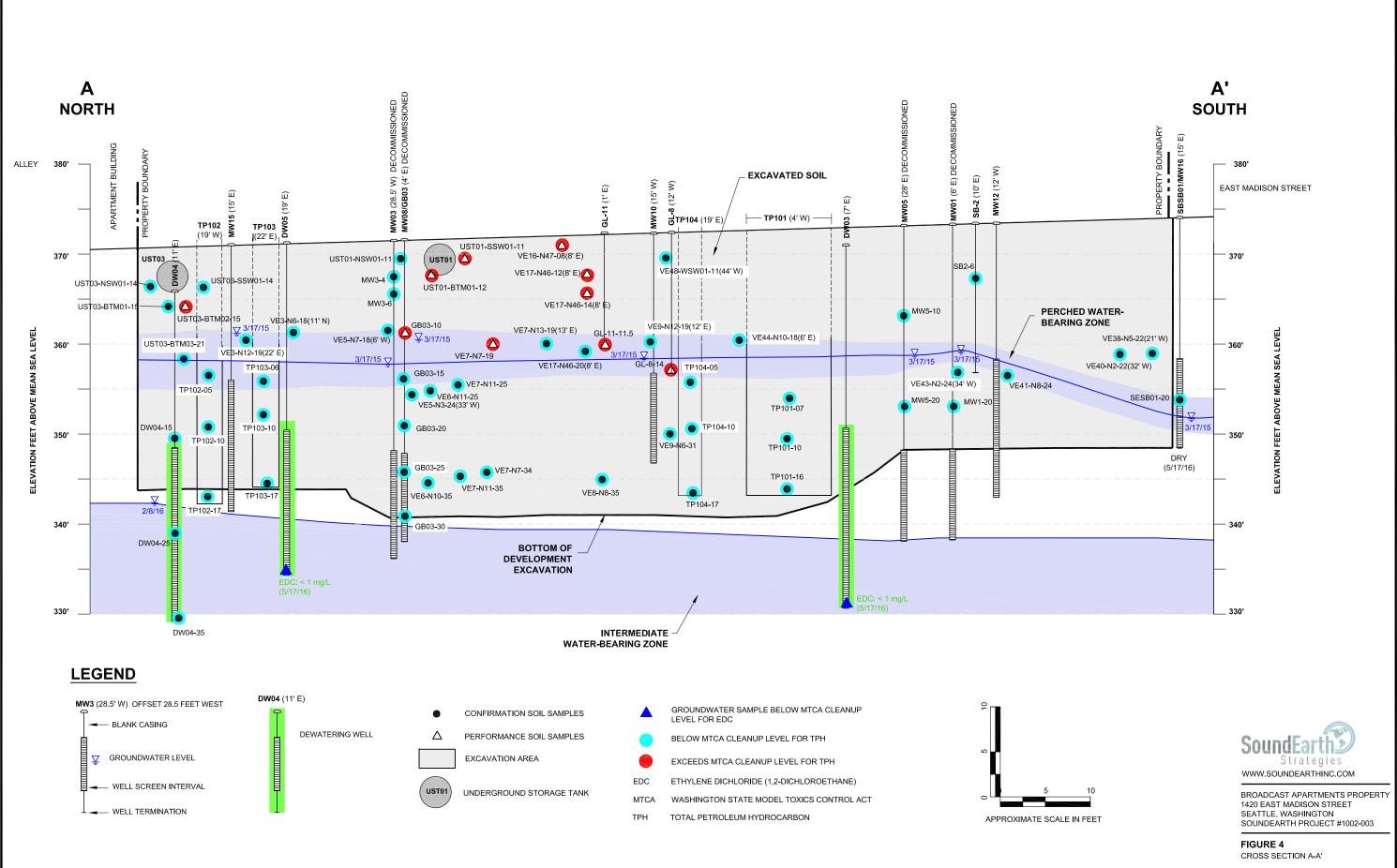
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**FIGURES** 

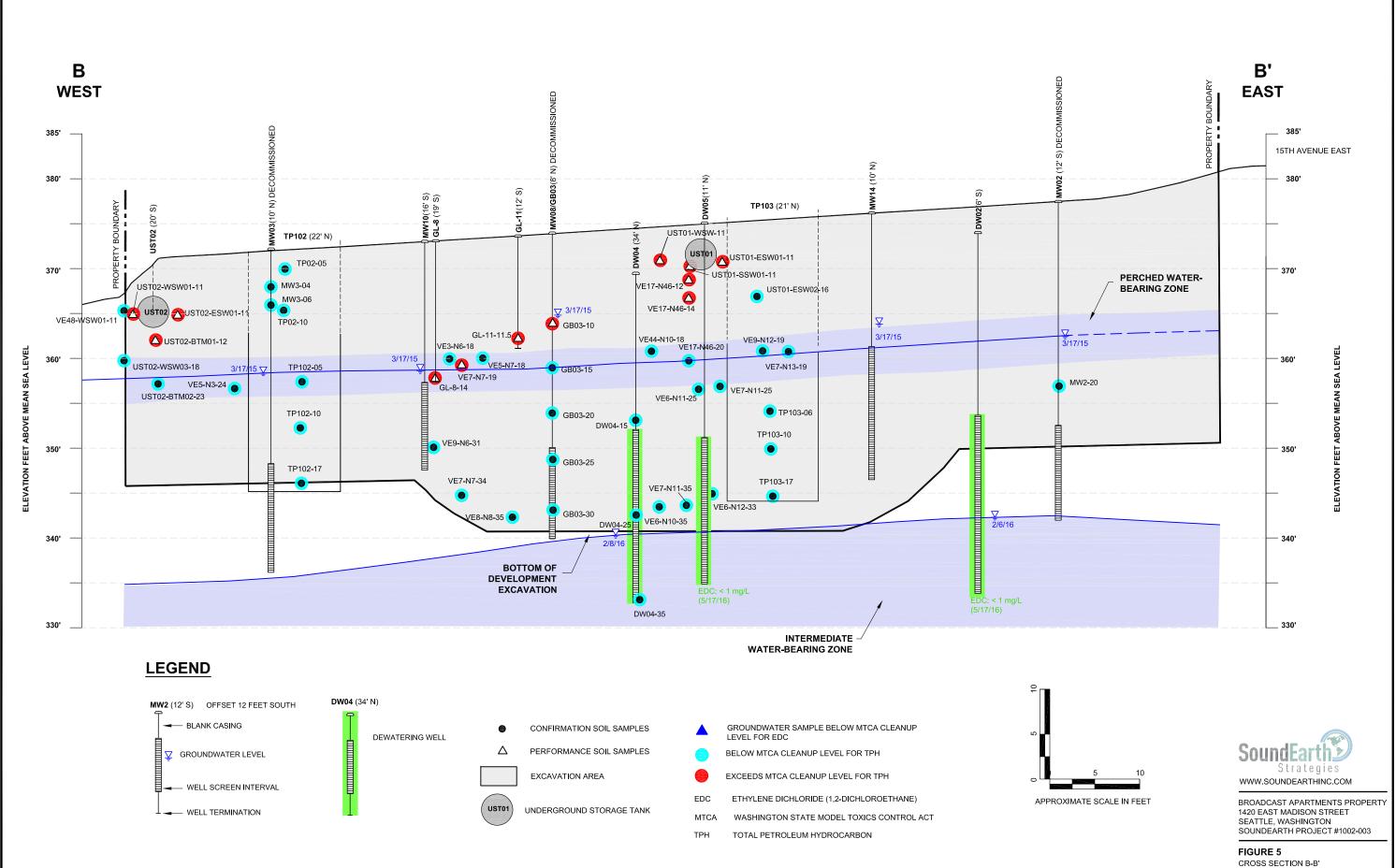








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TABLES



Table 1 Summary of Soil Analytical Results Total Petroleum Hydrocarbons Broadcast Apartments Property 1420 East Madison Street Seattle, Washington

								Analytical Results (mg/kg)							
Sample ID	Lab ID	Sample Location	Sample Date	Sample Type	Sample Matrix	Sample Depth bgs <sup>(1)</sup> (feet)	Performance/ Confirmational Sample	GRPH <sup>(2)</sup>	DRPH <sup>(3)</sup>	ORPH <sup>(3)</sup>	Benzene <sup>(4)</sup>	Toluene <sup>(4)</sup>	Ethylbenzene <sup>(4)</sup>	Total Xylenes <sup>(4)</sup>	
						Performan	ce Soil Samples - Excavated	1							
VE18-N63-06	601030-01	VE18-N63	01/05/16	Disposal	Soil	6	Performance	150	1,300	<250					
VE22-N44-09	601071-01	VE22-N44	01/07/16	Disposal	Soil	9	Performance		320	<250					
VE16-N47-08	601073-01	VE16-N47	01/08/16	Disposal	soil	8	Performance		10,000	6,200					
UST01-BTM01-12	601072-01	UST01	01/08/16	Bottom	Soil	12	Performance		4,500	<250					
UST01-SSW01-11	601072-02	UST01	01/08/16	South Sidewall	Soil	11	Performance		5,100	<250					
UST01-WSW01-11	601072-03	UST01	01/08/16	West Sidewall	Soil	11	Performance		8,000	<250					
UST01-ESW01-11	601072-04	UST01	01/08/16	East Sidewall	Soil	11	Performance		4,200	<250					
VE17-N46-12	601101-03	VE17-N46	01/11/16	Disposal	Soil	12	Performance		5,700	<250					
VE17-N46-14	601101-04	VE17-N46	01/11/16	Disposal	Soil	14	Performance		5,300	<250					
VE17-N46-20	601101-07	VE17-N46	01/11/16	Disposal	Soil	20	Performance		180	<250					
UST02-BTM01-12	601207-01	UST02	01/19/16	Bottom	Soil	12	Performance		3,900	<250					
UST02-WSW01-11	601207-02	UST02	01/19/16	West Sidewall	Soil	11	Performance		11,000	<250					
UST02-ESW01-11	601207-03	UST02	01/19/16	East Sidewall	Soil	11	Performance		4,500	<250					
UST02-SSW01-11	601207-04	UST02	01/19/16	South Sidewall	Soil	11	Performance		18,000	350 <sup>×</sup>					
UST03-BTM02-15	601264-02	UST03	01/20/16	Bottom	Soil	15	Performance		5,900	330					
VE7-N7-19	601186-01	VE7-N7	02/16/16	Surface grab	Soil	19	Performance		4,100	<250					
VE3-N3-11	602328-01	VE3-N3	02/19/16	Surface grab	Soil	11	Performance		<50	<250					
VE3-N3-16	603027-01	VE3-N3	03/01/16	Surface grab	Soil	16	Performance		<50	<250					
VE4-N5-17	603027-02	VE4-N5	03/01/16	Surface grab	Soil	17	Performance		<50	<250					
SP01	603175-01	SP01	03/09/16	Stockpile	Soil		Performance		<50	<250					
	T	r	r — — — — — — — — — — — — — — — — — — —			Confi	rmation Soil Samples		n			1			
DW04-15	602114-01	DW04	02/08/16	Soil Cuttings	Soil	15	Confirmation		<50	<250					
DW04-25	602114-02	DW04	02/08/16	Soil Cuttings	Soil	25	Confirmation		<50	<250					
DW04-35	602114-03	DW04	02/08/16	Soil Cuttings	Soil	35	Confirmation		<50	<250					
VE48-WSW01-11	602204-01	VE48-WSW01	02/11/16	West Sidewall	Soil	11	Confirmation		<50	<250					
VE3-N6-18	602327-01	VE3-N6	02/19/16	Surface grab	Soil	18	Confirmation		<50	<250					
VE3-N12-19	602327-02	VE3-N12	02/19/16	Surface grab	Soil	19	Confirmation		<50	<250					
VE7-N13-19	602327-03	VE7-N13	02/19/16	Surface grab	Soil	19	Confirmation		<50	<250					
VE9-N12-19	602327-04	VE9-N12	02/19/16	Surface grab	Soil	19	Confirmation		<50	<250					
VE44-N10-18	602327-05	VE44-N10	02/19/16	Surface grab	Soil	18	Confirmation		<50	<250					
VE5-N7-18	602327-05	VE5-N7	02/19/16	Surface grab	Soil	18	Confirmation		<50	<250					
VE5-N3-24	603175-02	VE5-N3	03/09/16	Surface grab	Soil	24	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	
VE43-N2-24	603160-01	VE43-N2	03/09/16	Surface grab	Soil	24	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	
VE40-N2-22	603160-02	V40-N2	03/09/16	Surface grab	Soil	22	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	
VE6-N11-25	603241-01	VE6-N11	03/14/16	Surface grab	Soil	24	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	
VE7-N11-25	603241-02	VE7-N11	03/14/16	Surface grab	Soil	24	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	
VE38-N5-22	603241-03	VE38-N5	03/14/16	Surface grab	Soil	22	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	
VE41-N8-24	604326-01	VE41-N8	04/15/16	Surface grab	Soil	24	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	
VE9-N6-31	604326-02	VE9-N6	04/15/16	Surface grab	Soil	31	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	
VE8-N8-35	604326-03	VE8-N8	04/15/16	Surface grab	Soil	35	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	
VE7-N7-34	604326-04	VE7-N7	04/15/16	Surface grab	Soil	34	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	
VE6-N10-35	604326-05	VE6-N10	04/15/16	Surface grab	Soil	35	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	
VE7-N11-35	604326-06	VE7-N11	04/15/16	Surface grab	Soil	35	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	
VE6-N12-33	604326-07	VE6-N12	04/15/16	Surface grab	Soil	33	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	
MTCA Method A Cleanup Levels <sup>(5)</sup>								100/30 <sup>(6)</sup>	2000	2000	0.03	7	6	9	



Table 1 Summary of Soil Analytical Results Total Petroleum Hydrocarbons Broadcast Apartments Property 1420 East Madison Street Seattle, Washington

								Analytical Results (mg/kg)						
Sample ID	Lab ID	Sample Location	Sample Date	Sample Type	Sample Matrix	Sample Depth bgs <sup>(1)</sup> (feet)	Performance/ Confirmational Sample	GRPH <sup>(2)</sup>	DRPH <sup>(3)</sup>	ORPH <sup>(3)</sup>	Benzene <sup>(4)</sup>	Toluene <sup>(4)</sup>	Ethylbenzene <sup>(4)</sup>	Total Xylenes <sup>(4)</sup>
						U	ST 01 Soil Samples							
UST01-BTM01-12	601072-01	UST01	01/08/16	Bottom	Soil	12	Site Assessment		4,500	<250				
UST01-SSW01-11	601072-02	UST01	01/08/16	South Sidewall	Soil	11	Site Assessment		5,100	<250				
UST01-WSW01-11	601072-03	UST01	01/08/16	West Sidewall	Soil	11	Site Assessment		8,000	<250				
UST01-ESW01-11	601072-04	UST01	01/08/16	East Sidewall	Soil	11	Site Assessment		4,200	<250				
UST01-NSW01-11	601072-05	UST01	01/08/16	North Sidewall	Soil	11	Confirmation		150	<250				
UST01-ESW02-16	601072-06	UST01	01/08/16	East Sidewall	Soil	16	Confirmation		<50	<250				
						Ū	ST02 Soil Samples							
UST02-BTM01-12	601207-01	UST02	01/19/16	Bottom	Soil	12	Site Assessment		3,900	<250				
UST02-WSW01-11	601207-02	UST02	01/19/16	West Sidewall	Soil	11	Site Assessment		11,000	<250				
UST02-ESW01-11	601207-03	UST02	01/19/16	East Sidewall	Soil	11	Site Assessment		4,500	<250				
UST02-SSW01-11	601207-04	UST02	01/19/16	South Sidewall	Soil	11	Site Assessment		18,000	350 <sup>×</sup>				
UST02-NSW01-11	601207-05	UST02	01/19/16	North Sidewall	Soil	11	Confirmation		730	<250				
UST02-WSW03-18	603105-01	UST02	03/04/16	West Sidewall	Soil	18	Confirmation		<50	<250				
UST02-WSW04-18	603105-03	UST02	03/04/16	West Sidewall	Soil	18	Confirmation		<50	<250				
UST02-WSW05-18	603105-04	UST02	03/04/16	West Sidewall	Soil	18	Confirmation		<50	<250				
UST02-SSW02-23	603105-06	UST02	03/04/16	South Sidewall	Soil	23	Confirmation		<50	<250				
UST02-BTM02-23	603105-07	UST02	03/04/16	Bottom	Soil	23	Confirmation		<50	<250				
		•	•	•		U	ST03 Soil Samples				•	•		*
UST03-BTM01-15	601264-01	UST03	01/20/16	Bottom	Soil	15	Confirmation		1,600	1,000				
UST03-SSW01-14	601264-03	UST03	01/20/16	South Sidewall	Soil	14	Confirmation		520	360				
UST03-NSW01-14	601264-04	UST03	01/20/16	North Sidewall	Soil	14	Confirmation		<50	<250				
UST03-WSW01-14	601264-05	UST03	01/20/16	West Sidewall	Soil	14	Confirmation		<50	<250				
UST03-ESW01-14	601264-06	UST03	01/20/16	East Sidewall	Soil	14	Confirmation		<50	<250				
UST03-BTM03-21	603105-02	UST03	03/04/16	Bottom	soil	21	Confirmation		<50	<250				
						Octob	er Test Pit Soil Samples							
TP04NSW-10	510084-01	TP04	10/05/15	Test Pit	Soil	10		150	1,600	<250	<0.02	<0.02	0.17	0.35
TP04NSW-13	510084-02	TP04	10/05/15	Test Pit	Soil	13		73	1,100	<250	<0.02	<0.02	0.035	0.14
TP04SSW-10	510084-04	TP04	10/05/15	Test Pit	Soil	10		120	1,700	<250	<0.02	<0.02	0.085	0.25
TP04SSW-15	510084-05	TP04	10/05/15	Test Pit	Soil	15		190	2,200	<250	<0.02	<0.02	0.24	0.46
TP05NSW-15	510084-08	TP05	10/05/15	Test Pit	Soil	15		33	380	<250	<0.02	<0.02	<0.02	<0.06
TP05SSW-18	510084-09	TP05	10/05/15	Test Pit	Soil	18		43	480	420	<0.02	<0.02	<0.02	<0.06
TP04SSW-Composite	510084-06	TP04	10/05/15	Composite	Soil									
TP05-Composite	510084-10	TP05	10/05/15	Composite	Soil									
MTCA Method A Cleanup Levels <sup>(5)</sup>	)	•	• • •			•		100/30 <sup>(6)</sup>	2000	2000	0.03	7	6	9



Table 1 Summary of Soil Analytical Results Total Petroleum Hydrocarbons Broadcast Apartments Property 1420 East Madison Street Seattle, Washington

								Analytical Results (mg/kg)						
Sample ID	Lab ID	Sample Location	Sample Date	Sample Type	Sample Matrix	Sample Depth bgs <sup>(1)</sup> (feet)	Performance/ Confirmational Sample	GRPH <sup>(2)</sup>	DRPH <sup>(3)</sup>	ORPH <sup>(3)</sup>	Benzene <sup>(4)</sup>	Toluene <sup>(4)</sup>	Ethylbenzene <sup>(4)</sup>	Total Xylenes <sup>(4)</sup>
		1	1		l	Excavat	ion Test Pit Soil Samples		I			Г <u> </u>		
TP101-07	602354-03	TP101	02/19/16	Test Pit	Soil	7	Confirmation		<50	<250				
TP101-10	602354-01	TP101	02/19/16	Test Pit	Soil	10	Confirmation		<50	<250				
TP101-16	602354-04	TP101	02/19/16	Test Pit	Soil	16	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06
TP102-05	602353-03	TP102	02/20/16	Test Pit	Soil	5	Confirmation		<50	<250				
TP102-10	602353-02	TP102	02/20/16	Test Pit	Soil	10	Confirmation		<50	<250				
TP102-17	602353-01	TP102	02/20/16	Test Pit	Soil	17	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06
TP103-06	602353-04	TP103	02/20/16	Test Pit	Soil	6	Confirmation		<50	<250				
TP103-10	602353-05	TP103	02/20/16	Test Pit	Soil	10	Confirmation		<50	<250				
TP103-17	602353-06	TP103	02/20/16	Test Pit	Soil	17	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06
TP104-05	602353-09	TP104	02/20/16	Test Pit	Soil	5	Confirmation		<50	<250				
TP104-10	602353-08	TP104	02/20/16	Test Pit	Soil	10	Confirmation		<50	<250				
TP104-17	602353-09	TP104	02/20/16	Test Pit	Soil	17	Confirmation	<2	<50	<250	<0.02	<0.02	<0.02	<0.06
MTCA Method A Cleanup Levels	(5)							100/30 <sup>(6)</sup>	2000	2000	0.03	7	6	9

NOTES:

Red denotes concentration exceeds MTCA Method A cleanup level for soil.

Samples analyzed by Friedman & Bruya, Inc. of Seattle, Washington.

 $^{\rm (1)}$  Sample depth in feet below Madison Street sidewalk surface at Vertical Element VE9.

(2) Analyzed by Method NWTPH-Gx.

<sup>(3)</sup> Analyzed by Method NWTPH-Dx.

(4) Analyzed by EPA Method 8021B

<sup>(5)</sup> MTCA Method A Cleanup Levels, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

 $^{\rm (6)}$  100 mg/kg when benzene is not detected and 30 mg/kg when benzene is detected.

Laboratory Notes:

<sup>x</sup>The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

#### -- = not analyzed

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

DRPH = diesel-range petroleum hydrocarbons

EPA = U.S. Environmental Protection Agency

GRPH = gasoline-range petroleum hydrocarbons

mg/kg = milligrams per kilogram

MTCA = Washington State Model Toxics Control Act

NA = not applicable

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbons



Table 2 Summary of Soil Analytical Results Chlorinated VOCs and Metals Broadcast Apartments Property 1420 East Madison Street Seattle, Washington

															Analytical	Results (m	g/kg)						
											Chl	orinated Vo	latile Organi	c Compound	ds <sup>(2)</sup>				Metals <sup>(3)</sup>				
Sample ID	Lab ID	Sample Location	Sample Date	Sample Type	Sample Matrix	Sample Depth bgs <sup>(1)</sup> (feet)	Performance/ Confirmational Sample	Vinyl chloride	Chloroethane	1,1-Dichloroethene	Methylene chloride	trans-1,2-Dichloroethene	1,1-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloroethane (EDC)	1,1,1-Trichloroethane	Trichloroethene (TCE)	Tetrachloroethene (PCE)	Total Arsenic	Total Cadmium	Total Chromium	Total Lead	Total Mercury
								Excavatio	n Soil Sampl	es													
VE16-N16-02.0	601009-02	VE16-N16	01/04/16	EDC	Soil	2.0	Performance	<0.01	<0.01	<0.02	<0.5 <sup>jl</sup>	< 0.01	<0.01	< 0.01	<0.01	< 0.01	<0.01	< 0.01					
VE20-N13-02.0	601009-03	VE20-N13	01/04/16	EDC	Soil	2.0	Performance	< 0.01	< 0.01	<0.02	<0.5 <sup>jl</sup>	< 0.01	<0.01	<0.01	< 0.01	<0.01	<0.01	<0.01					
VE18-N25-04.0	601009-04	VE18-N25	01/04/16	EDC	Soil	4.0	Performance	< 0.01	<0.01	<0.02	<0.5 <sup>jl</sup>	< 0.01	<0.01	< 0.01	<0.01	<0.01	<0.01	<0.01					
VE15-N7-04.0	601009-05	VE15-N7	01/04/16	EDC	Soil	4.0	Performance	<0.01	<0.01	<0.02	<0.5 <sup>jl</sup>	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					
VE18-N63-06	601030-01	VE18-N63	01/05/16	Disposal	Soil	6.0	Performance	<0.01	<0.01	<0.01	<0.5 <sup>jl</sup>	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					
VE16-N24-06	601074-01	VE16-N24	01/07/16	EDC	Soil	6.0	Performance	<0.01	<0.01	< 0.02 <sup>ca</sup>	<0.5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					
VE18-N26-06	601074-02	VE18-N26	01/07/16	EDC	Soil	6.0	Performance	<0.01	<0.01	< 0.02 <sup>ca</sup>	<0.5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					
VE22-N44-09	601071-01	VE22-N44	01/07/16	Disposal	Soil	9.0	Performance																
VE16-N47-08	601073-01	VE16-N47	01/08/16	Disposal	Soil/Grease	8.0	Performance	<0.01	<0.01	< 0.02 <sup>ca</sup>	<0.5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					
VE17-N46-12	601101-03	VE17-N46	01/11/16	Disposal	Soil	12.0	Performance																
VE17-N46-14	601101-04	VE17-N46	01/11/16	Disposal	Soil	14.0	Performance																
VE17-N46-20	601101-07	VE17-N46	01/11/16	Disposal	Soil	20.0	Performance																
								UST01	Soil Samples			-											
UST01-BTM01-12	601072-01	UST01	01/08/16	Bottom	Soil	12.0	Site Assessment	<0.01	< 0.01	< 0.02 <sup>ca</sup>	<0.5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					
UST01-SSW01-11	601072-02	UST01	01/08/16	South Sidewall	Soil	11.0	Site Assessment																
UST01-WSW01-11	601072-03	UST01	01/08/16	West Sidewall	Soil	11.0	Site Assessment																
UST01-ESW01-11	601072-04	UST01	01/08/16	East Sidewall	Soil	11.0	Site Assessment																
UST01-NSW01-11	601072-05	UST01	01/08/16	North Sidewall	Soil	11.0	Site Assessment																
UST01-ESW02-16	601072-06	UST01	01/08/16	East Sidewall	Soil	16.0	Site Assessment																
	<b>.</b>	1	1	r	1	I	1	UST02	Soil Samples								1				T		
UST02-BTM01-12	601207-01	UST02	01/19/16	Bottom	Soil	12.0	Site Assessment																
UST02-WSW01-11	601207-02	UST02	01/19/16	West Sidewall	Soil	11.0	Site Assessment															<u> </u>	
UST02-ESW01-11	601207-03	UST02	01/19/16	East Sidewall	Soil	11.0	Site Assessment																
UST02-SSW01-11	601207-04	UST02	01/19/16	South Sidewall	Soil	11.0	Site Assessment																
UST02-NSW01-11	601207-05	UST02	01/19/16	North Sidewall	Soil	11.0	Site Assessment																
	-		1		T	1		UST03	Soil Samples				1				1	1	1	1	1		
UST03-BTM01-15	601264-01	UST03	01/20/16	Bottom	Soil	15.0	Site Assessment																
UST03-BTM02-15	601264-02	UST03	01/20/16	Bottom	Soil	15.0	Site Assessment																
UST03-SSW01-14	601264-03	UST03	01/20/16	South Sidewall	Soil	14.0	Site Assessment																
UST03-NSW01-14	601264-04	UST03	01/20/16	North Sidewall	Soil	14.0	Site Assessment																
UST03-WSW01-14	601264-05	UST03	01/20/16	West Sidewall	Soil	14.0	Site Assessment																
UST03-ESW01-14	601264-06	UST03	01/20/16	East Sidewall	Soil	14.0	Site Assessment					(5)											
MTCA Method A Cleanup Levels								<b>0.67</b> <sup>(4)</sup>	NE	<b>4,000</b> <sup>(5)</sup>	<b>0.02</b> <sup>(4)</sup>	<b>1,600</b> <sup>(5)</sup>	16,000 <sup>(5)</sup>	<b>160</b> <sup>(5)</sup>	<b>11</b> <sup>(6)</sup>	<b>2</b> <sup>(4)</sup>	<b>0.03</b> <sup>(4)</sup>	<b>0.05</b> <sup>(4)</sup>	<b>20</b> <sup>(4)</sup>	<b>2</b> <sup>(4)</sup>	<b>2000</b> <sup>(4)</sup>	<b>250</b> <sup>(4)</sup>	<b>2</b> <sup>(4)</sup>



Table 2 Summary of Soil Analytical Results Chlorinated VOCs and Metals Broadcast Apartments Property 1420 East Madison Street Seattle, Washington

														Analytical	Results (m	g/kg)						
										Ch	lorinated Vo	latile Organ	ic Compoun	ds <sup>(2)</sup>						Metals <sup>(3)</sup>		
	· · ·			-			Test Pit	Soil Sample	es													
TP04NSW-10	510084-01	TP04	10/05/15	North Sidewall	Soil	10	 															
TP04NSW-13	510084-02	TP04	10/05/15	North Sidewall	Soil	13	 															
TP04SSW-10	510084-04	TP04	10/05/15	South Sidewall	Soil	10	 															
TP04SSW-15	510084-05	TP04	10/05/15	South Sidewall	Soil	15	 															
TP05NSW-15	510084-08	TP05	10/05/15	North Sidewall	Soil	15	 															
TP05SSW-18	510084-09	TP05	10/05/15	South Sidewall	Soil	18	 															
TP04SSW-Composite	510084-06	TP04	10/05/15	Composite	Soil		 											<1	<1	6.23	1.47	<1
TP05-Composite	510084-10	TP05	10/05/15	Composite	Soil		 											<1	<1	5.37	1.10	<1
MTCA Method A Cleanup Leve	ls						<b>0.67</b> <sup>(4)</sup>	NE	<b>4,000</b> <sup>(5)</sup>	<b>0.02</b> <sup>(4)</sup>	1,600 <sup>(5)</sup>	16,000 <sup>(5)</sup>	<b>160</b> <sup>(5)</sup>	<b>11</b> <sup>(6)</sup>	<b>2</b> <sup>(4)</sup>	<b>0.03</b> <sup>(4)</sup>	<b>0.05</b> <sup>(4)</sup>	<b>20</b> <sup>(4)</sup>	<b>2</b> <sup>(4)</sup>	<b>2000</b> <sup>(4)</sup>	<b>250</b> <sup>(4)</sup>	<b>2</b> <sup>(4)</sup>

#### NOTES:

Red denotes concentration exceeds MTCA Method A cleanup level for soil.

Samples analyzed by Friedman & Bruya, Inc. of Seattle, Washington.

<sup>(1)</sup> Sample depth in feet below Madison Street sidewalk surface at the corresponding Vertical Element VE9.

(2) Analyzed by EPA Method 8260C.

<sup>(3)</sup> Analyzed by EPA Method 6020.

<sup>(4)</sup> MTCA Method A Cleanup Levels, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

<sup>(5)</sup>CLARC, Soil, Method B Cleanup Levels, Non-Carcinogen, Standard Formula Value, Direct Contact (ingestion only), CLARC website <a href="https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx">https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx</a>.

(6) CLARC, Soil, Method B Cleanup Levels, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), CLARC website <a href="https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx">https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx</a>.

Laboratory Notes:

<sup>ca</sup> The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

<sup>1]</sup> The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

### -- = not analyzed

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

CLARC = Cleanup Levels and Rick Calculation

EPA = U.S. Environmental Protection Agency

mg/kg = milligrams per kilogram

MTCA= Washington State Model Toxics Control Act

NA = not applicable

NE = not established

SoundEarth = SoundEarth Strategies, Inc.



### Table 3 Summary of Groundwater Analytical Results Broadcast Apartments Property 1420 East Madison Street Seattle, Washington

	Sample		Analytical Re	esults (in microgra	ams per liter)	Sulfate
Well ID	Date	Sampled By	DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	EDC <sup>(2)</sup>	(in milligrams per liter
B-1	06/13/03	GSM	ND	ND	41	
B-2	06/13/03	GSM	ND	ND		
B-3	06/13/03	GSM	ND	ND	5.7	
	01/13/06	Noll	<130	<250	53	
	02/02/06	GSM	<130	<250	69	
	06/16/06	GSM	<130	<250	54	
	06/16/06	GSM	<130	<250	58	
	01/28/09	G-Logics			<1.0	
	05/12/09	G-Logics			<1.0	
	08/27/09	G-Logics			23	
MW01	03/02/10	G-Logics			11	
	08/20/10	G-Logics			18	
	03/15/12	EAI			8.9	
	02/28/14	SoundEarth			3.3	
	08/14/14	SoundEarth			6.6	
	12/18/14	SoundEarth			1.3	
	03/17/15	SoundEarth			1.5	
	01/13/06	Noll	<130	<250	<2	
	06/16/06	GeoScience		~230	<2	
	01/28/09				<1.0	
		G-Logics				
MW02	05/12/09	G-Logics			<1.0	
	08/27/09	G-Logics			<1.0	
	08/27/09	G-Logics			<1.0	
	03/02/10	G-Logics			<1.0	
	08/20/10	G-Logics			<1.0	
	01/13/06	Noll	<130	<250	3	
	06/16/06	GSM			<2	
NA14/00	01/28/09	G-Logics			<1.0	
MW03	05/12/09	G-Logics	<100	<200	<1.0	
	08/27/09	G-Logics			<1.0	
	03/02/10	G-Logics			<1.0	
	08/20/10	G-Logics			<1.0	
	06/17/06	GSM	<130	<250	6.0	
	01/28/09	G-Logics			<1.0	
	05/12/09	G-Logics			<1.0	
MW04	03/02/10	G-Logics			<1.0	
	08/27/09	G-Logics			<1.0	
	03/02/10	G-Logics			<1.0	
	08/20/10	G-Logics			<1.0	
	06/16/06	GSM	<130	<250	61	
	01/28/09	G-Logics			<1.0	
	05/12/09	G-Logics			<1.0	
	08/27/09	G-Logics			<1.0	
	03/02/10	G-Logics			8.1	
MW05	03/15/12	EAI			9.9	
	02/28/14	SoundEarth			11	
	08/14/14	SoundEarth			6.5	
	12/18/14	SoundEarth			2.3	
	03/17/15	SoundEarth			6.2	
0 0 0 - + h l 0 (	Cleanup Level <sup>(3)</sup>	Connection	500	500	5	250



### Table 3 Summary of Groundwater Analytical Results Broadcast Apartments Property 1420 East Madison Street Seattle, Washington

	Sample		Analytical Re	esults (in microgra	ams per liter)	Sulfate
Well ID	Date	Sampled By	DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	EDC <sup>(2)</sup>	(in milligrams per liter)
	06/16/06	GeoScience	<130	<250	32	
	01/28/09	G-Logics			<1.0	
	05/12/09	G-Logics			<1.0	
	08/27/09	G-Logics			7.0	
	03/02/10	G-Logics			15	
MW06	03/15/12	EAI	<50	<250	<1	
	02/28/14	SoundEarth			<1	
	09/18/14	SoundEarth			1.5 <sup>(4)</sup>	30.8
	12/18/14	SoundEarth			1.2	
	03/17/15	SoundEarth			<1	
	01/28/09	G-Logics			<1.0	
	05/12/09					
MW07	08/27/09	G-Logics			<1.0	
		G-Logics			1.2	
	03/02/10	G-Logics			0.71 <sup>J</sup>	
	01/28/09	G-Logics	<100	<200	<1.0	
	05/12/09	G-Logics	<100	<200	<1.0	
	08/27/09	G-Logics	<200		8.4	
	03/02/10	G-Logics			8.2	
MW08	08/20/10	G-Logics			7.6	
	03/15/12	EAI	<50	<250	7	
	02/28/14	SoundEarth			5.7	
	08/14/14	SoundEarth			<1	
	12/18/14	SoundEarth			2.2	
	03/17/15	SoundEarth	-		5.9	
	01/28/09	G-Logics			<1.0	
	05/12/09	G-Logics			<1.0	
	08/27/09	G-Logics			<1.0	
	03/02/10	G-Logics			<1.0	
MW09	03/13/14	SoundEarth			<1	
	05/19/14	SoundEarth				23.3
	08/14/14	SoundEarth			<1	29.9
	12/18/14	SoundEarth			<1	26.8
	03/17/15	SoundEarth			<1	
	01/28/09	G-Logics	<100	<200	<1.0	
	05/12/09	G-Logics	590	<200	<1.0	
	08/27/09	G-Logics	<200		<1.0	
MW10	03/02/10	G-Logics	<100	<200	<1.0	
	03/02/10	G-Logics	<100	<200		
	03/15/12	EAI	540	<250	<1	
	02/28/14	SoundEarth			<1	
	02/28/14	G-Logics			<1.0	
	03/02/10	G-Logics			<1.0	
N/1\A/1 1	03/15/12	EAI			<1	
MW11	02/28/14	SoundEarth			<1	
	05/19/14	SoundEarth				154
	08/14/14	SoundEarth				184
	12/18/14	SoundEarth				160
TCA Method A (	Cleanup Level		500	500	5	250



### Table 3 Summary of Groundwater Analytical Results Broadcast Apartments Property 1420 East Madison Street Seattle, Washington

	Sample		Analytical R	esults (in microgra	ıms per liter)	Sulfate
Well ID	Date	Sampled By	DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	EDC <sup>(2)</sup>	(in milligrams per liter)
	01/28/09	G-Logics			0.75 <sup>J</sup>	
MW12	08/20/10	G-Logics			<1.0	
1010012	03/15/12	EAI			<1	
	02/28/14	SoundEarth			<1	
MW13	01/28/09	G-Logics			<1.0	
MW14	08/20/10	G-Logics			<1.0	
1010014	03/15/12	EAI			<1	
MW15	08/20/10	G-Logics			<1.0	
1010015	02/28/14	SoundEarth			<1	
	03/13/14	SoundEarth			<1	
	08/14/14	SoundEarth			<1	
MW16	09/22/14	SoundEarth				525
	12/18/14	SoundEarth			<1	658
	03/17/15	SoundEarth			<1	1,780
	02/15/16	SoundEarth			5.7	
DW02 <sup>(4)</sup>	04/22/16	SoundEarth			<0.1	
DWUZ	05/10/16	SoundEarth			<1	
	05/17/16	SoundEarth			<1	
	02/15/16	SoundEarth			2.3	
<b>DW03</b> <sup>(4)</sup>	05/10/16	SoundEarth			<1	
	05/17/16	SoundEarth			<1	
DW05 <sup>(4)</sup>	05/10/16	SoundEarth			<1	
	05/17/16	SoundEarth			<1	
MTCA Method A C	Cleanup Level <sup>(3)</sup>		500	500	5	250 <sup>(5)</sup>

NOTES:

Red denotes concentration in excess of MTCA Method A Cleanup Level for Groundwater.

Samples collected by SoundEarth analyzed by Friedman & Bruya, Inc. of Seattle, Washington.

<sup>(1)</sup>Analyzed by Method NWTPH-Dx.

<sup>(2)</sup>Analyzed by U.S. Environmental Protection Agency Method 8260C.

<sup>(3)</sup>MTCA Cleanup Regulation, Method A Cleanup Levels, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Adiminstrative Code, revised November 2007.

<sup>(4)</sup>Grab groundwater sample; collected prior to stabilization of water quality parameters.

<sup>(5)</sup>Secondary Maximum Contaminant Level

-- = not measured or not analyzed

< = not detected above the applicable laboratory reporting limit

DRPH = diesel-range petroleum hydrocarbons

EAI = Environmental Associates Inc.

EDC = 1,2-dichloroethane (ethylene dichloride)

G-Logics = G-Logics, Inc.

Geotech = Geotech Consultants, Inc.

GSM = GeoScience Management

MTCA = Washington State Model Toxics Control Act

Noll = Noll Environmental, Inc.

ORPH = oil-range petroleum hydrocarbons

SoundEarth = SoundEarth Strategies, Inc.

Laboratory Note: JEstimated Value

## PHOTOGRAPHS



 Project No.:
 1002-003

 Date:
 July 18, 2016

 Drawn By:
 JSL

 Chk By:
 CCC



Photograph 1. Taken October 5, 2015, looking south. Note TP04 and soil stockpile.



Photograph 3. Taken January 8, 2016. USTO1 removed and placed on trailer for disposal off site. Note holes in tank walls.



Photograph 2. Taken January 8, 2016, looking northeast. Removal of UST01.



Photograph 4. Taken January 8, 2016, looking south in the vicinity of UST01. Note the boundary between non-impacted soil and stained PCS.



Photograph 5. Taken January 18, 2016, looking southwest. MarVac pumping out displaced contents of UST02.



Photograph 6. Taken January 19, 2016, looking north. Removal of UST02 along west side of Property.



Project No.: Date: Drawn By: Chk By:

1002-003 July 18, 2016 JSL CCC



Photograph 7. Taken January 20, 2016, looking east. Removal of UST03. Note product lines connecting UST03 to apartment building to the north.



Photograph 7. Taken January 26, 2016, looking south. Plastic sheeting laid down over PCS.



Photograph 9. Taken February 6, 2016, looking southeast. Kulchin installing dewatering well DW01.



Photograph 6. Taken January 20, 2016, looking southwest. UST03 removed and placed on trailer.



Photograph 8. Taken January 27, 2016, looking northeast. PCS stockpile covered with plastic. Kulchin installing H-piles along north Property boundary.



Photograph 10. Taken February 11, 2016, looking west. Clean soil to the west of former location of UST02.



Project No.: Date: Drawn By: Chk By: 1002-003 July 18, 2016 JSL CCC



Photograph 11. Taken February 17, 2016, looking south. Excavating and stockpiling PCS.



Photograph 13. Taken February 20, 2016, looking west. Digging test pit TP102.



Photograph 17. Taken March 4, 2016, looking southwest. Kulchin installing soil nails, second lift of shoring along west wall. Soil in floor of excavation is non-impacted.



Photograph 12. Taken February 18, 2016, looking south. Loading PCS stockpile into haul truck.



Photograph 16. February 25, 2016, looking southwest. Kulchin completing first lift of perimeter shoring.



Photograph 18. Taken March 14, 2016, looking east. Kulchin installing angled dewatering wells around perimeter of Property.



Project No.: Date: Drawn By: Chk By:

1002-003 July 18, 2016 JSL CCC



Photograph 19. Taken April 15, 2016, looking southeast. Total depth of excavation has been reached in center of Property. Footing installation in progress.



Photograph 20. Taken May 10, 2016, looking northeast. Set up prior to collecting groundwater sample from dewatering well DW05.

# APPENDIX A UST LETTERS OF CERTIFICATION



# **REC'D** FEB 1 0 2016

# LETTER OF CERTIFICATION

January 8th, 2016

Sound Earth Strategies 2811 Fairview Ave E, Suite 200 Seattle, Washington 98122

RE: Commercial Underground Heating Oil Tank at 1420 E Madison Street Seattle, Washington 98122

This is to certify that Filco Company, Inc. has removed one approximate 300 gallon underground commercial heating oil tank from the above named property. The tank and its contents were disposed of according to the codes and guidelines set forth by the Washington State Department of Ecology and local Fire Department regulations and the decommissioned tank meets these standards.

Phil Suctens

Phil Suetens President Filco Co., Inc.

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Your			1413	•
Seattle			PEDANTE A	- KANSA
Fire Depar	tment		ee PERMIT S	
			TION FOR TEMPORAL	
Code 7908		Commercia	al Tank Removal/Deco	mmissioning
Permit Fee: \$	218.00		<b>C</b>	Date Issued: 01
TO BE COMPLETE	D BY PERMIT	APPLICANT	Tank(s) must be remove	ed from site on the same day as per
FIRM NAME	Filco Co	npany, Inc.	·	
MAILING ADDRI	ss PO Box 3	31228		SUITE
CITY	Seattle	<u> </u>	STATE WA	ZIP 98103
JOBSITE ADDRES	is 1420 East	Madison St.		21 90103
CONTACT PERSO	N Nate Mc	ntgomery	PHONE NUMB	ER (206)423-1791
Number of Tank(	s): one	Tank Size(:		[]
Product(s) Previo	usly Containe		•	Aboveground tank
Removal (Ma	rine Chemist i	nspection and cert	ificate required for all tanks reg	
Abandonmen and/or unknow	t-in-Place (Ma	rine Chemist certi	ficate required for tanks previou	usly containing Class I flammable liq
Hot work bein		No	<b>—</b> 3	eparate hot work permit is required)
ermit application	s may be subr	nitted in person w	veekdays from 8:00 a.m. to 5:0	00 p.m. or mailed to:
Seattle Fire De Fire Marshal's 220 Third Ave Seattle, WA 9	partment Office – Perr S, 2 <sup>md</sup> Floor		To pay with a Visa or Ma	aster Card: Fax or email this applica IRM RECEIPT AND MAKE PAYMEN X: (206) 386-1348
	I WIAT DE RE	WOVED/DECOM	or to needed inspection time MISSIONED ONLY AFTER F	e to arrange for an appointment. IRE DEPARTMENT INSPECTION E OF THIS FIRE DEPARTMENT F

20001/0001

2016

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PERMIT

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 peripit conditions: Tank removal/decommissioning must be performed, or directly supervised, by an ICC certified Individual (WAC 173-360-600) Ό a chod FMO USE: APPROVED BY: Check No .: Inspector: SFD ID# Receipt No.: Name of Marine Chemist rave Ne Fr WKCertificate # Application ID#: ଚଞ 00 Date: ß (01/15)

11



REC'D MAR T & 2016

# LETTER OF CERTIFICATION

January 19th, 2016

Sound Earth Strategies 2811 Fairview Ave E, Suite 200 Seattle, Washington 98122

RE: Commercial Underground Heating Oil Tank at 1420 E Madison Street Seattle, Washington 98122

This is to certify that Filco Company, Inc. has removed one approximate 675 gallon underground commercial heating oil tank from the above named property. The tank and its contents were disposed of according to the codes and guidelines set forth by the Washington State Department of Ecology and local Fire Department regulations and the decommissioned tank meets these standards.

Phil Suetens

Phil Suetens President Filco Co., Inc.

Fire Department       APPLICATION FOR TEMPORARY PERMIT         Code 7908       Commercial Tank Removal/Decommissioning         Permit Fee: \$218.00       Date Issued: ////////////////////////////////////				,	Tipe die
Seattle Fire Department APPLICATION FOR TEMPORARY PERMIT APPLICATION FOR TEMPORARY PERMIT Code 7908 Commercial Tank Removal/Decommissioning Permit Fee: \$218.00 Code 7908 Commercial Tank Removal/Decommissioning Permit Set 5218.00 Code COMPLETED BY PERMIT APPLICANT Tank(s) must be removed from site on the same day aspermit & issue Filco Company, Inc. MAILING ADDRESS PO Box 31228 SUITE Contract PERSON Nate Montgomery PHONE NUMBER (206 )423-1791 Number of Tank(s): One Tank Size(s): 600 Aboveground tank Code(s) Previously Commined: _heating oil Aboueground tank Code(s) Previously Commined: _heating oil Aboueground tank Common Signific Chemist inspection and certificate required for all tanks negariless of size or contents) Abadomment-in-Place (Marine Chemist certificate required for all tanks negariless of size or contents) Abadomment-in-Place (Marine Chemist certificate required for tanks previously containing Class 1 flammable liquids addor unknowns) Hot work being conducted: Comparise Code Size Comparises To pay with a Vise or Master Card: Fax or email this application THEM CALL US TO CONFIRM NECEPT AND MAKE PAYMENT Teif: (206) 386-1450, Fax: (206) 386-1430 E-mail: germits@seatule.cov Call 386-1450, size least 24 hours prior to needed inspection time to arrange for an appointment. TAKK MAY BE REMOVED DECOMMISSIONED ONLY AFTER FIRE DEPARTMENT TEIF: (206) 386-1450, Fax: (206) 386-1430 E-mail: germits@seatule.cov E-mail: germits@seatule.cov NO HOT WORK IS ALLOWED ON A TANK SYSTEM PRIOR TO ISSUANCE OF THIS FIRE DEPARTMENT PERMIT Inspection NO HOT WORK IS ALLOWED ON A TANK SYSTEM PRIOR TO ISSUANCE OF THIS FIRE DEPARTMENT PERMIT Fire Assnall's and all applicable provisions of the Seatule Fire Code, federal, state and loce galations. THIS PERMIT IS NULL AND VOID IP PERMIT CONDITIONS ARE NOT ATTACHED Herebal permit conditions: Tank remove/decommissioning must be partomed or directly supervised by an CC confided individual /MAC 773-864 Prior Single Seatule.cov Prior And Single Seatule.cov Prior Prior Single Single Single	<u>ನೆಯ್ಯ-ಸ್ಥಾರ್ಥಿಕೆ ಅಡಿಸ್ಟ್ ಎಂಬರ್ ಸ್ಥಾನಕ</u> ್ರದ ನಂತರ ನಿರ್ದರ್ಶಿಸಿದ್ದು ನಂತರ ನ	r aller i valattigtege og, sogi		alaan kaleeda ka	0/100)
Fire Department       APPLICATION FOR TEMPORARY PERMIT         Code 7908       Commercial Tank Removal/Decommissioning         Permit Fee: \$218.00       Date Issued: ////////////////////////////////////	Your				
APPLICATION FOR TEMPORARY PERMIT         Code 7908       Commercial Tank Removal/Decommissioning         Permit Fee: \$218.00       Date Issued: ///9/////         O BE COMPLETED BY PERMIT APPLICANT       Tank(s) must be removed from site on the same day as/permit k6 issued         O BE COMPLETED BY PERMIT APPLICANT       Tank(s) must be removed from site on the same day as/permit k6 issued         MALLING ADDRESS PO BOX 31228       SUITE         CITY       Seattle       STATE WA       ZIP 98103         DOBSITE ADDRESS 1420 E. Madison St.       Contract PERSON Nate Montgornery       PHONE NUMBER (206 )423-1791         Number of Tank(s): One       Tank Size(s): 600       Aboveground tank         Product(s) Previously Contained: heating old       Moveground tank         Product(s) Previously Contained: heating old       Moveground tank         Abandoment-in-Pleck (Marine Chemist certificate required for all tanks regardless of size or contents)       Abandoment-in-Pleck (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)         trint applications may be submitted in person weekdays from 8:00 a.m. to 5:00 p.m., or mailed to:       Seattle K010-2008         Seattle Fire Department       To pay with a Visa or Master Card: Fax or email this application THEN CALL US TO CONFIRM RECEIPT AND MAKE PAYMENT Te:	Seattle				(A)
Permit Fee: \$218.00       Date Issued: 1/19/14/2         Tank(s) must be removed from site on the same day as permit be issued.       Prevent Files Company, Inc.         MAILING ADDRESS PO Box 31228       SUITE         CETTY       Seattle       STATE WA         CONTACT PERSON       Nate Montgomery         PHONE NUMBER (2005) 423-1791       Number of Tank(s): One       Tank Size(s): 600         CONTACT PERSON       Nate Montgomery       PHONE NUMBER (2005) 423-1791         Number of Tank(s): One       Tank Size(s): 600       Aboveground tank         Product(s) Previously Contained: heating oil       Image: Control of the size of the size or contents)         Abandonment-in-Place (Marine Chemist certificate required for 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:       Image: No       Yes (If yes, a separate hot work permit is required)         termit applications may be submitted in person weekdays from 8:00 a.m. to 5:00 p.m., or mailed to:       Seattle Fire Department         To pay with a Visa or Master Card: Fax or email this application       The CALL US TO CONFIRM RECEIPT AND MAKE PAVMENT         Tel (2005) 386-1450, fax: (206) 386-1450	Fire Department	APPLICATIO	ON FOR TEMPORARY H	ERMIT	Y
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O BE COMPLETED BY PERMIT APPLICANT         FIRM NAME       FIICO COmpany, Inc.         MALLING ADDRESS PO Box 31228       SUITE         CTITY       Seattle       STATE WA       ZIP 98103         DOBSITE ADDRESS 1420 E. Madison St.       Construct PERSON Nate Montgomery       PHONE NUMBER (206) 423-1791         Number of Tank(s): One       Tank Size(s): 600       Aboveground tank         Product(s) Previously Contained:       Tank Size(s): 600       Aboveground tank         Product(s) Previously Contained:       Inelating Oil       Underground tank         Product(s) Previously Contained:       Inelating Oil       Underground tank         Abondonment-in-Place (Marine Chemist 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:       Image: No       Yes (If yes, a separate hot work permit is required)         sentil applications may be submitted in person weekdays from 8:00 a.m. to 5:00 p.m., or mailed to:       Seattle KA 98104-2008         Seattle Fire Department       To pay with a Visa or Master Card: Fax or email this application         Price Marshal's Office – Permits       THEN CALL US TO CONFIRM RECEIPT AND MAKE PAYMENT         200 1386-1450, at least 24 hours prior to needed inspection time to arrange for an appointment.       TANKS MAY	Permit Fee: \$218.00				
MAILING ADDRESS PO Box 31228       SUITE         CHTY       Seattle       STATE WA       ZIP 98103         IODISTIE ADDRESS 1420 E. Madison St.       CONTACT PERSON Nate Montgomery       PHONE NUMBER (206) 423-1791         Number of Tank(s): One       Tank Size(s): 600       Aboveground tank         Product(s) Previously Contained: heating oil       Onderground tank         Product(s) Previously Contained: heating oil       Underground tank         Abandonment-in-Place (Marine Chemist 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:       Image: Superstand to required for tanks previously containing Class I flammable liquids and/or unknowns)         Hot work being conducted:       Image: Superstand to required for tanks previously containing Class I flammable liquids and/or unknowns)         Hot work being conducted:       Image: Superstand to required for tanks previously containing Class I flammable liquids and/or unknowns)         Hot work being conducted:       Image: Superstand to required for tanks previously containing Class I flammable liquids and/or unknowns)         Ermit applications may be submitted in person weekdays from 8:00 a.m. to 5:00 p.m., or mailed to:       Seattle Fire Department         Trick days 5, 2 <sup>rd</sup> Floor       To pay with a Visa or Master Card: Fax or email this application THEN CALL US TO CONFIRM NECEIPT A	TO BE COMPLETED BY PERMIT		Tank(s) must be removed fr	om site on the same d	ay as permit is issued!
Seattle       STATE       WA       ZIP       98103         IODISTE ADDRESS       1420 E. Madison St.	FIRM NAME Filco Co	mpany, Inc.			
CONTRACT PERSON       Nate Montgomery       PHONE NUMBER       (206.)423-1791         Number of Tank(s): One       Tank Size(s): 600       Aboveground tank         Product(s) Previously Contained:       heating oil       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:       Image: No       Yes (If yes, a separate hot work permit is required)         Seattle Fire Department       To pay with a Visa or Master Card: Fax or email this application THEN CALL US TO CONFIRM RECEIPT AND MAKE PAYMENT 1220 Third Ave S, 2 <sup>nd</sup> Floor       Tel: (206) 386-1450 / Fax: (205) 386-1348         E-mail: germits@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 PERMITI         rmission is hereby granted to reinove or decommission the tank(s) identified in this permit in accordance with the attached inditions, all noted special conditions, and all applicable provisions of the Seattle Fire Code, federal, state and loce gualations. THIS PERMIT IS NULL AND VOID IF PERMIT CONDITIONS ARE NOT ATTACHED         Med USE:       MADF_MOVED BY:       Inspector:	MAILING ADDRESS PO Box	31228		SUITE	
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Number of Tank(s): One       Tank Size(s): 600       Aboveground tank         Product(s) Previously Contained: heating oil       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)         ermit applications may be submitted in person weekdays from 8:00 a.m. to 5:00 p.m., or mailed to:       Seattle Fire Department         Pire Marshal's Office - Permits       To pay with a Visa or Master Card: Fax or email this application         THEN CALL US TO CONFIRM RECEIPT AND MAKE PAYMENT       12: (206) 386-1450 / Fax: (206) 386-1450 /	JOBSITE ADDRESS 1420 E.	/ladison St.			
Product(s) Previously Contained: heating oil       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 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:       Image: Content is required for tanks previously containing Class I flammable liquids and/or unknowns)         Hot work being conducted:       Image: Content is required for tanks previously containing Class I flammable liquids and/or unknowns)         Hot work being conducted:       Image: Content is required for tanks previously containing Class I flammable liquids and/or unknowns)         Hot work being conducted:       Image: Content is required for tanks previously containing Class I flammable liquids and/or unknowns)         Hot work being conducted:       Image: Content is required for tanks previously containing Class I flammable liquids and/or unknowns)         ermit applications may be submitted in person weekdays from 8:00 a.m. to 5:00 p.m., or mailed to:       Seattle Fire Department         Fire Marshal's Office – Permits       To pay with a Visa or Master Card: Fax or email this application THEN CALL US TO CONFIRM RECEIPT AND MAKE PAYMENT         220 Third Ave S, 2 <sup>nd</sup> Floor       Tel: (206) 386-1450 / Fax: (206) 386-1348         Seattle, WA 98104-2608       E-mail: germits@seattle.gov <tr< td=""><td>CONTACT PERSON Nate M</td><td>ontgomery</td><td>PHONE NUMBER</td><td>(206)423-1791</td><td></td></tr<>	CONTACT PERSON Nate M	ontgomery	PHONE NUMBER	(206)423-1791	
Seattle Fire Department       To pay with a Visa or Master Card: Fax or email this application         Fire Marshal's Office – Permits       To pay with a Visa or Master Card: Fax or email this application         220 Third Ave S, 2 <sup>nd</sup> Floor       Tel: (206) 386-1450 / Fax: (206) 386-1348         Seattle, WA 98104-2608       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 PERMITI         ermission is hereby granted to remove or decommission the tank(s) identified in this permit in accordance with the attached inditions, all noted special conditions, and all applicable provisions of the Seattle Fire Code, federal, state and local guatations. THIS PERMIT IS NULL AND VOID IF PERMIT CONDITIONS ARE NOT ATTACHED         weelal permit conditions:       Tank removal/decommissioning must be performed, or directly supervised, by an ICC certified individual (WAC 173-360-4         WMO USE:       UA5_011504         Check No.:       UA5_011504         Check No.:       DIA5_011504         Check No.:       DIA5_011504         Check No.:       DIA5_011504         Check No.:       DIA5_011504         Check No.:       DIA5_011514	Abandonment-in-Place (Marine Chemist Abandonment-in-Place (Mand/or unknowns)	inspection and certificat	te required for tanks previously	less of size or contents	) nınable liquids
Pire Marshal's Office – Permits       THEN CALL US TO CONFIRM RECEIPT AND MAKE PAYMENT         220 Third Ave S, 2 <sup>nd</sup> Floor       Tel: (206) 386-1450 / Fax: (206) 386-1348         Seattle, WA 98104-2608       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 PERMITI         ormission is hereby granted to remove or decommission the tank(s) identified in this permit in accordance with the attached nditions, all noted special conditions, and all applicable provisions of the Seattle Fire Code, federal, state and loca gulations. THIS PERMIT IS NULL AND VOID IF PERMIT CONDITIONS ARE NOT ATTACHED         MOUSIE:         Check No.:         DIA	ermit applications may be su	omitted in person week	days from 8:00 a.m. to 5:00	o.m., or mailed to:	
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 PERMITI         armission is hereby granted to remove or decommission the tank(s) identified in this permit in accordance with the attached nditions, all noted special conditions, and all applicable provisions of the Seattle Fire Code, federal, state and local gulations. THIS PERMIT IS NULL AND VOID IF PERMIT CONDITIONS ARE NOT ATTACHED         Decial permit conditions:       Tank removal/decommissioning must be performed, or directly supervised, by an ICC certified Individual (WAC 173-360-6         TMO USE:       Image: Imag	Fire Marshal's Office – Pe 220 Third Ave S, 2 <sup>nd</sup> Floor		THEN CALL US TO CONFIRI Tel: (206) 386-1450 / Fax: (	<mark>/I RECEIPT AND MAK</mark> 206) 386-1348	•
Inditions, all noted special conditions, and all applicable provisions of the Seattle Fire Code, federal, state and local gulations. THIS PERMIT IS NULL AND VOID IF PERMIT CONDITIONS ARE NOT ATTACHED         Secial permit conditions:       Tank removal/decommissioning must be performed, or directly supervised, by an ICC certified individual (WAC 173-360-6         TMO USE:       Ulabor 1000000000000000000000000000000000000	TANKS MAY BE	REMOVED/DECOMMIS	SSIONED ONLY AFTER FIR	E DEPARTMENT INS	PECTION
APPROVED BY:         Check No.: $0/250/15/6$ Leceipt No.: $5-250/233$ Name of Marine Chemist $M_{12}/29M_{2}$ SFD ID# $1/48/1$ Name of Marine Chemist $M_{12}/29M_{2}$	onditions, all noted special	conditions, and all ap	pplicable provisions of the S	seattle Fire Code, fea	leral, state and local
Check No.: $0/350/15/6$ Inspector: $1.012180$ SFD ID# $148/$ Name of Marine Ghemist $M_{12}SCHM11$ Certificate # $7/1$	pecial permit conditions: Ta	nk removal/decommissionin,	g must be performed, or directly sup	ervised, by an ICC certified	Individual (WAC 173-360-600
Check No.: $0/350/15/6$ Inspector: $1.012180$ SFD ID# $148/$ Name of Marine Ghemist $M_{12}SCHM11$ Certificate # $7/1$	·····				
Check No.: $0/350/15/6$ Inspector: $1.012180$ SFD ID# $148/$ Name of Marine Ghemist $M_{12}SCHM11$ Certificate # $7/1$					
Receipt No.: 5-254223 Name of Marine Chemist Mike SCHMITT Certificate # 7/1 -	10126811	511			1481
		. 70	- M		
	Application ID#: 10375	11	NALL		4648

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### SOUND TESTING, INC.

P.O. BOX 16204 SEATTLE, WA 98116	
	MARINE CHEMIST CERTIFICATE
(206) 932-0206 FAX (206) 937-3848	<b>SERIAL Nº</b> 46648
WWW.SOUNDTESTINGINC.COM	
Filco Co. F	Acont 1/19/2016
Survey Requested by Vessel Owner of	Agent Date
Survey Requested by     Vessel Dwner o       UST-1420 E. Mad.s.s.m     Vessel Dwner o       Fuel O:1 / Worker       I Sub.s.       Tests Perfor       Tests Perfor	T 1420 E. Madison Sta
	il CAA HAR ABOTH
Last Three (3) Loadings Tests Perform	1524 H25, CO. VOCS, 08:56 a.m., ned VISUAL Time Survey Completed
Tanla	
Ullage: 120.8%.02,090LEL,	Llepm Has Llepm CD, 76ppm VDCs T
(Water	r & DRD Resid.)
Tank Emptied - Min. Wa	Llepm H2S Llepm Cli, 76ppm VCCs ] r & DRP Resid.) fer / Biby Resid. Bottom
- Tamle Mous ha	Safely excavated =
Tank The	Salery exclusioners
	transported -
N. L. C. F. L.	st Work - No burning I welding
NOZ Safe Tor H	or work - No Burking I we laing
	· · · · · · · · · · · · · · · · · · ·

### 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 issued 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.

$\Lambda$ , $\Lambda$		
"The undersigned acknowledges receipt of this Certificate and understands	conditions and This Certificate is ba	sed on conditions existing at the time the inspection herein set forth was completed
limitations under which it was issued."		to compliance with all qualifications and instructions. Signed
	Company Date	Marine Chemist Cripticate No.
POSTI	ING	



REC'D MAR 1 6 2016

# LETTER OF CERTIFICATION

January 19th, 2016

Sound Earth Strategies 2811 Fairview Ave E, Suite 200 Seattle, Washington 98122

RE: Commercial Underground Heating Oil Tank at 1420 E Madison Street Seattle, Washington 98122

This is to certify that Filco Company, Inc. has removed one approximate 2,000 gallon underground commercial heating oil tank from the above named property. The tank and its contents were disposed of according to the codes and guidelines set forth by the Washington State Department of Ecology and local Fire Department regulations and the decommissioned tank meets these standards.

Phil Suctens

Phil Suetens President Filco Co., Inc.

		Wed 01/20/16 @
		RECEIVED
Your		JAN 1 9 2016
Seattle Fire Department		PERMIT SECTION
rne Department	APPLICA	TION FOR TEMPORARY PERMIT
Code 7908	Commercia	l Tank Removal/Decommissioning
Permit Fee: \$218.00	UT ADD( 10 1517)	Date Issued: 1/20/20/ Tank(s) must be removed from site on the same day as permit is issued!
FIRM NAME Filco (	Company, Inc.	
MAILING ADDRESS PO BO		SUITE
CITY Seattl		STATE WA ZIP 98103
JOBSITE ADDRESS 1420 E	. Madison St	
CONTACT PERSON Nate	Montgomery	PHONE NUMBER (206)423-1791
<u> </u>	ist inspection and cert (Marine Chemist certi	Underground tank rtificate required for all tanks regardless of size or contents) ificate required for tanks previously containing Class I flammable liquids Yes (If yes, a separate hot work permit is required)
Permit applications may be Seattle Fire Department Fire Marshal's Office – 220 Third Ave S, 2 <sup>nd</sup> Flo Seattle, WA 98104-260	Permits	weekdays from 8:00 a.m. to 5:00 p.m., or mailed to: 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: <u>permits@seattle.gov</u>
TANKS MAY BE NO HOT WORK IS ALLO Permission is hereby granted onditions, all noted special egulations. THIS PERMIT	E REMOVED/DECOM DWED ON A TANK S d to remove or decom al conditions, and al IS NULL AND VOI	rior to needed inspection time to arrange for an appointment. MMISSIONED ONLY AFTER FIRE DEPARTMENT INSPECTION SYSTEM PRIOR TO ISSUANCE OF THIS FIRE DEPARTMENT PERMIT! mmission the tank(s) identified in this permit in accordance with the attached ill applicable provisions of the Seattle Fire Code, federal, state and local ID IF PERMIT CONDITIONS ARE NOT ATTACHED sioning must be performed, or directly supervised, by an ICC certified individual (WAC 173-360-500)

	JOE (20105220 1384
FMO USE:	APPROVED BY:
Check No.: 00006130011916	Inspector: JE GRAWPORD SFD ID# 13 09
Receipt No.: 5-266269	Name of Marine Chemist <u>JE TR4-TIEVIK</u> Certificate # <u>725</u>
Application ID#: 103765	Date: 1/20/20/6

(01/15)

SOUND TESTING, INC.			
P.O. BOX 16204 SEATTLE, WA 98116	MA	RINE CHEMIST CI	ERTIFICATE
(206) 932-0206 FAX (206) 937-3848	1/21 2		Nº 46641
WWW.SOUNDTESTINGINC.COM	-		
FILCO	FILCO Vessel Owner or Agent		1/20/15
Survey Requested by		1420 E MAD	ISAN ST
Vessel	Type of Vessel		Specific Location of Vessel
(HEATING OIL) A3	VISHAL, OZ LEL	CO.HZS, THC	1038 HRS
Last Three (3) Loadings	Tests Performed		Time Survey Completed
	~		
·			
	SAFE	FOR EXCANAT	AN .
~ 2,000 cal. US			
~ 2,000 gal. US		OR TRANSPORT	
	- CATE I	OK IKANSPORT	
		70.9% LEL=	1 200
	- 02=	ZO, 9% LEL=	
		HESE THE GED	
	CD=	H2SZIADM	
	THE	= 85 pom = 1 pr	om
			<u></u>
· · · · · · · · · · · · · · · · · · ·			
	<u> </u>		
,,,			
METER: BW S/N SK3	13-000374/CA	L: 0800 1/20	/16/
In the event of changes a	adversely affecting conditions in the a stop all work and contact the undersig	above spaces, or if in any doubt, aned Marine Chemist.	12-10-10
Qualifications: Manipulation of valves or devices tending to a			is certificate, will

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."

1

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.

Initiations under which it was issued.		this is the project	i to vompanit i in i i	
Signed Celes	FILCO	1/20/16 Date	Signed	U Jutter 725 Certificate No.

POSTING

# APPENDIX B

# SOIL DISPOSAL DOCUMENTATION



# Ticket List By Customer\Order\Product

То



 Date From
 12/21/2015

 Location(s)
 1876

 Order:
 41046267

03/17/2016

								S	С	V
								h i	a s	o i
Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	р	h	d
Scale Tick 1420 EAST	ets MADISON STREE	T LLC								
41046267 1192508										
12/23/15	1876085263	P:1420 ESAT MADISON	1876-1, EVERETT SOIL GENERIC	9:12:00	9:21:00	6.34	TON	R		
1/4/16	1876085323	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	9:39:00	9:54:00	29.41	TON	R		
1/5/16	1876085340	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	12:03:00	12:27:00	33.58	TON	R		
1/5/16	1876085341	P:76:1420 EAST MADISON	1876-3, EVERETT SOIL GENERIC	12:15:00	12:34:00	35.27	TON	R		
1/11/16	1876085382	P:76:1420 EAST MADISON	1876-5, EVERETT SOIL GENERIC	8:43:00	9:00:00	32.86	TON	R		
1/11/16	1876085383	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	8:47:00	9:04:00	33.73	TON	R		
1/11/16	1876085384	P:76:1420 EAST MADISON	GR16T, GIRARD RESOURCES	9:47:00	10:07:00	36.29	TON	R		
1/11/16	1876085385	P:76:1420 EAST MADISON	1876-5, EVERETT SOIL GENERIC	0:00:00	11:18:00	28.88	TON			
1/11/16	1876085386	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	11:23:00	30.39	TON			
1/11/16	1876085387	P:76:1420 EAST MADISON	GR16T, GIRARD RESOURCES	0:00:00	12:20:00	33.93	TON	R		
1/11/16	1876085390	P:76:1420 EAST MADISON	GR16T, GIRARD RESOURCES	0:00:00	14:42:00	35.76	TON	R		
1/26/16	1876085531	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	8:02:00	8:24:00	17.34	TON	R		
1/26/16	1876085532	P:76:1420 EAST MADISON	1876-1, EVERETT SOIL GENERIC	8:45:00	8:56:00	16.53	TON	R		
1/26/16	1876085533	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	0:00:00	9:15:00	9.17	TON	R		
1/26/16	1876085534	P:76:1420 EAST MADISON	FT7T, FISCHER TRUCKING	9:04:00	9:19:00	15.19	TON	R		
1/26/16	1876085535	P:76:1420 EAST MADISON	1876-1, EVERETT SOIL GENERIC	0:00:00	10:54:00	13.42	TON			
1/26/16	1876085536	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	11:00:00	12.61	TON			
1/26/16	1876085537	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	0:00:00	11:10:00	12.89	TON			
1/26/16	1876085538	P:76:1420 EAST MADISON	FT7T, FISCHER TRUCKING	0:00:00	11:18:00	12.39	TON			

								S h	C a	V o
Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	i p	s h	i d
1/26/16	1876085539	P:76:1420 EAST MADISON	1876-1, EVERETT SOIL GENERIC	0:00:00	12:30:00	15.35	TON			
1/26/16	1876085540	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	12:38:00	14.49	TON			
1/26/16	1876085541	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	0:00:00	12:50:00	13.94	TON			
1/26/16	1876085542	P:76:1420 EAST MADISON	FT7T, FISCHER TRUCKING	0:00:00	12:57:00	15.38	TON			
1/26/16	1876085543	P:76:1420 EAST MADISON	FT9T, FISCHER TRUCKING	13:50:00	14:01:00	13.58	TON	R		
1/26/16	1876085544	P:76:1420 EAST MADISON	1876-1, EVERETT SOIL GENERIC	0:00:00	14:04:00	13.68	TON			
1/26/16	1876085545	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	14:18:00	12.99	TON			
1/26/16	1876085546	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	0:00:00	14:30:00	12.36	TON			
1/26/16	1876085548	P:76:1420 EAST MADISON	FT7T, FISCHER TRUCKING	0:00:00	14:45:00	13.32	TON			
2/11/16	1876085682	P:76:1420 EAST MADISON	GR12T, GIRARD RESOURCES	13:19:00	13:41:00	30.11	TON	R		
2/11/16	1876085683	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	13:21:00	13:43:00	32.22	TON	R		
2/11/16	1876085684	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	13:30:00	13:55:00	28.78	TON	R		
2/11/16	1876085685	P:76:1420 EAST MADISON	1876-3, EVERETT SOIL GENERIC	13:38:00	14:00:00	33.84	TON	R		
2/11/16	1876085686	P:76:1420 EAST MADISON	GR15SD, GIRARD RESOURCES	13:46:00	14:12:00	29.35	TON	R		
2/11/16	1876085687	P:76:1420 EAST MADISON	1876-4, EVERETT SOIL GENERIC	13:56:00	14:17:00	32.91	TON	R		
2/12/16	1876085691	P:76:1420 EAST MADISON	GR15SD, GIRARD RESOURCES	8:31:00	8:42:00	22.66	TON	R		
2/12/16	1876085692	P:76:1420 EAST MADISON	GR12T, GIRARD RESOURCES	8:37:00	8:52:00	25.80	TON	R		
2/12/16	1876085693	P:76:1420 EAST MADISON	1876-1, EVERETT SOIL GENERIC	8:47:00	9:05:00	25.98	TON	R		
2/12/16	1876085695	P:76:1420 EAST MADISON	GR9T, GIRARD RESOURCES	9:18:00	9:34:00	23.86	TON	R		
2/12/16	1876085697	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	9:23:00	9:44:00	23.53	TON	R		
2/12/16	1876085699	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	10:09:00	10:25:00	25.08	TON	R		
2/12/16	1876085703	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	0:00:00	11:00:00	25.59	TON			
2/12/16	1876085704	P:76:1420 EAST MADISON	GR12T, GIRARD RESOURCES	0:00:00	11:30:00	30.60	TON			
2/12/16	1876085705	P:76:1420 EAST MADISON	1876-1, EVERETT SOIL GENERIC	0:00:00	11:40:00	29.35	TON			
2/12/16	1876085707	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	12:09:00	29.51	TON			
2/12/16	1876085708	P:76:1420 EAST MADISON	GR9T, GIRARD RESOURCES	0:00:00	12:14:00	27.74	TON			

								S h	C a	V o
Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	i p	s h	i d
2/12/16	1876085712	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	0:00:00	12:48:00	27.13	TON			
2/12/16	1876085714	P:76:1420 EAST MADISON	GR15SD, GIRARD RESOURCES	0:00:00	13:10:00	27.23	TON			
2/16/16	1876085743	P:76:1420 EAST MADISON	GR3T, GIRARD RESOURCES	10:20:00	10:36:00	29.47	TON	R		
2/16/16	1876085745	P:76:1420 EAST MADISON	GR15SD, GIRARD RESOURCES	10:35:00	10:58:00	26.91	TON	R		
2/16/16	1876085746	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	10:40:00	11:01:00	32.35	TON	R		
2/16/16	1876085748	P:76:1420 EAST MADISON	FT02T, FISCHER TRUCKING	11:20:00	11:40:00	30.91	TON	R		
2/16/16	1876085749	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	11:21:00	11:47:00	31.07	TON	R		
2/16/16	1876085750	P:76:1420 EAST MADISON	GR12T, GIRARD RESOURCES	0:00:00	11:49:00	0.00	TON			V
2/16/16	1876085751	P:76:1420 EAST MADISON	FT10T, FISCHER TRUCKING	11:23:00	11:53:00	32.10	TON	R		
2/16/16	1876085752	P:76:1420 EAST MADISON	1876-3, EVERETT SOIL GENERIC	11:29:00	11:55:00	30.53	TON	R		
2/16/16	1876085753	P:76:1420 EAST MADISON	FT03T, FISCHER TRUCKING	11:37:00	12:01:00	32.27	TON	R		
2/16/16	1876085755	P:76:1420 EAST MADISON	GR12T, GIRARD RESOURCES	0:00:00	12:09:00	30.93	TON			
2/16/16	1876085756	P:76:1420 EAST MADISON	GR3T, GIRARD RESOURCES	0:00:00	12:20:00	30.44	TON	R		
2/16/16	1876085757	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	0:00:00	12:36:00	26.50	TON			
2/16/16	1876085758	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	0:00:00	12:43:00	32.76	TON	R		
2/16/16	1876085760	P:76:1420 EAST MADISON	FT02T, FISCHER TRUCKING	0:00:00	13:14:00	30.43	TON			
2/16/16	1876085761	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	13:31:00	30.62	TON			
2/16/16	1876085762	P:76:1420 EAST MADISON	1876-4, EVERETT SOIL GENERIC	0:00:00	13:39:00	31.52	TON			
2/16/16	1876085763	P:76:1420 EAST MADISON	FT10T, FISCHER TRUCKING	0:00:00	13:46:00	33.16	TON	R		
2/16/16	1876085764	P:76:1420 EAST MADISON	1876-3, EVERETT SOIL GENERIC	0:00:00	13:48:00	27.87	TON			
2/16/16	1876085766	P:76:1420 EAST MADISON	GR12T, GIRARD RESOURCES	0:00:00	13:54:00	30.47	TON			
2/16/16	1876085767	P:76:1420 EAST MADISON	GR3T, GIRARD RESOURCES	0:00:00	14:22:00	31.93	TON	R		
2/16/16	1876085768	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	0:00:00	14:26:00	26.16	TON			
2/16/16	1876085771	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	0:00:00	14:45:00	31.28	TON			
2/16/16	1876085772	P:76:1420 EAST MADISON	FT02T, FISCHER TRUCKING	0:00:00	15:14:00	31.42	TON			
2/16/16	1876085773	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	15:36:00	27.72	TON			

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Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	i p	s h	i d
2/16/16	1876085774	P:76:1420 EAST MADISON	1876-4, EVERETT SOIL GENERIC	0:00:00	15:43:00	31.88	TON	R		
2/17/16	1876085776	P:76:1420 EAST MADISON	GR2T, GIRARD RESOURCES	7:54:00	8:12:00	31.44	TON	R		
2/17/16	1876085777	P:76:1420 EAST MADISON	GR3T, GIRARD RESOURCES	8:23:00	8:34:00	27.68	TON	R		
2/17/16	1876085778	P:76:1420 EAST MADISON	GR12T, GIRARD RESOURCES	8:25:00	8:35:00	28.17	TON	R		
2/17/16	1876085779	P:76:1420 EAST MADISON	GR15SD, GIRARD RESOURCES	8:31:00	8:43:00	28.56	TON	R		
2/17/16	1876085780	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	8:51:00	9:05:00	29.32	TON	R		
2/17/16	1876085781	P:76:1420 EAST MADISON	1876-1, EVERETT SOIL GENERIC	8:53:00	9:11:00	29.59	TON	R		
2/17/16	1876085782	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	8:55:00	9:15:00	31.09	TON	R		
2/17/16	1876085783	P:76:1420 EAST MADISON	1876-3, EVERETT SOIL GENERIC	9:02:00	9:18:00	28.75	TON	R		
2/17/16	1876085787	P:76:1420 EAST MADISON	GR3T, GIRARD RESOURCES	0:00:00	10:27:00	27.85	TON			
2/17/16	1876085788	P:76:1420 EAST MADISON	GR12T, GIRARD RESOURCES	0:00:00	10:30:00	27.32	TON			
2/17/16	1876085789	P:76:1420 EAST MADISON	GR2T, GIRARD RESOURCES	0:00:00	10:32:00	29.30	TON			
2/17/16	1876085790	P:76:1420 EAST MADISON	GR15SD, GIRARD RESOURCES	0:00:00	10:42:00	28.19	TON			
2/17/16	1876085791	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	0:00:00	11:07:00	29.66	TON			
2/17/16	1876085793	P:76:1420 EAST MADISON	1876-3, EVERETT SOIL GENERIC	0:00:00	11:09:00	29.86	TON			
2/17/16	1876085794	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	11:13:00	28.85	TON			
2/17/16	1876085796	P:76:1420 EAST MADISON	1876-1, EVERETT SOIL GENERIC	0:00:00	11:40:00	29.24	TON			
2/19/16	1876085820	P:76:1420 EAST MADISON	GR3T, GIRARD RESOURCES	8:08:00	8:29:00	29.43	TON	R		
2/19/16	1876085822	P:76:1420 EAST MADISON	1876-9, EVERETT SOIL GENERIC	8:35:00	8:50:00	31.67	TON	R		
2/19/16	1876085823	P:76:1420 EAST MADISON	1876-10, EVERETT SOIL GENERIC	8:37:00	8:52:00	29.22	TON	R		
2/19/16	1876085824	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	8:44:00	9:02:00	26.97	TON	R		
2/19/16	1876085827	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	9:00:00	9:12:00	32.73	TON	R		
2/19/16	1876085838	P:76:1420 EAST MADISON	GR3T, GIRARD RESOURCES	0:00:00	10:39:00	28.22	TON			
2/19/16	1876085839	P:76:1420 EAST MADISON	GR2T, GIRARD RESOURCES	10:25:00	10:51:00	26.33	TON	R		
2/19/16	1876085840	P:76:1420 EAST MADISON	1876-9, EVERETT SOIL GENERIC	0:00:00	10:53:00	28.50	TON			
2/19/16	1876085841	P:76:1420 EAST MADISON	1876-10, EVERETT SOIL GENERIC	0:00:00	10:59:00	29.76	TON			

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Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	ı p	s h	ı d
2/19/16	1876085842	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	11:02:00	0.00	TON			V
2/22/16	1876085883	P:76:1420 EAST MADISON	GR15SD, GIRARD RESOURCES	8:45:00	9:05:00	27.34	TON	R		
2/22/16	1876085885	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	8:56:00	9:10:00	30.52	TON	R		
2/22/16	1876085886	P:76:1420 EAST MADISON	GR2T, GIRARD RESOURCES	8:58:00	9:18:00	32.79	TON	R		
2/22/16	1876085887	P:76:1420 EAST MADISON	1876-4, EVERETT SOIL GENERIC	9:06:00	9:25:00	32.39	TON	R		
2/22/16	1876085890	P:76:1420 EAST MADISON	1876-5, EVERETT SOIL GENERIC	9:33:00	9:47:00	31.46	TON	R		
2/22/16	1876085892	P:76:1420 EAST MADISON	1876-9, EVERETT SOIL GENERIC	9:42:00	10:01:00	33.60	TON	R		
2/22/16	1876085893	P:76:1420 EAST MADISON	1876-10, EVERETT SOIL GENERIC	0:00:00	10:18:00	32.54	TON	R		
2/22/16	1876085896	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	10:57:00	32.08	TON			
2/22/16	1876085897	P:76:1420 EAST MADISON	1876-4, EVERETT SOIL GENERIC	0:00:00	11:05:00	33.06	TON			
2/22/16	1876085899	P:76:1420 EAST MADISON	1876-5, EVERETT SOIL GENERIC	0:00:00	11:28:00	30.11	TON			
2/22/16	1876085900	P:76:1420 EAST MADISON	1876-6, EVERETT SOIL GENERIC	0:00:00	11:42:00	34.21	TON	R		
2/22/16	1876085901	P:76:1420 EAST MADISON	1876-9, EVERETT SOIL GENERIC	0:00:00	11:47:00	33.97	TON	R		
2/22/16	1876085904	P:76:1420 EAST MADISON	1876-10, EVERETT SOIL GENERIC	0:00:00	12:02:00	34.61	TON	R		
2/22/16	1876085905	P:76:1420 EAST MADISON	GR2T, GIRARD RESOURCES	0:00:00	12:04:00	31.05	TON	R		
2/22/16	1876085908	P:76:1420 EAST MADISON	1876-4, EVERETT SOIL GENERIC	0:00:00	13:04:00	31.68	TON			
2/22/16	1876085909	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	13:10:00	25.48	TON			
2/22/16	1876085910	P:76:1420 EAST MADISON	1876-5, EVERETT SOIL GENERIC	0:00:00	13:19:00	31.17	TON			
2/22/16	1876085911	P:76:1420 EAST MADISON	1876-6, EVERETT SOIL GENERIC	0:00:00	13:40:00	28.73	TON			
2/22/16	1876085912	P:76:1420 EAST MADISON	1876-9, EVERETT SOIL GENERIC	0:00:00	13:49:00	24.98	TON			
2/22/16	1876085913	P:76:1420 EAST MADISON	GR15SD, GIRARD RESOURCES	0:00:00	14:51:00	29.27	TON			
2/24/16	1876085944	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	9:02:00	9:17:00	27.99	TON	R		
2/24/16	1876085946	P:76:1420 EAST MADISON	1876-9, EVERETT SOIL GENERIC	0:00:00	9:28:00	32.40	TON	R		
2/24/16	1876085947	P:76:1420 EAST MADISON	1876-9, EVERETT SOIL GENERIC	0:00:00	9:29:00	8.52	TON			
2/24/16	1876085957	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	0:00:00	12:42:00	31.46	TON			
2/24/16	1876085959	P:76:1420 EAST MADISON	1876-9, EVERETT SOIL GENERIC	0:00:00	12:47:00	33.47	TON	R		

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Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	i p	s h	i d
2/25/16	1876085972	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	9:20:00	9:38:00	28.62	TON	R		
2/25/16	1876085975	P:76:1420 EAST MADISON	GR2T, GIRARD RESOURCES	9:42:00	9:57:00	31.72	TON	R		
2/25/16	1876085985	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	0:00:00	12:50:00	28.39	TON			
2/25/16	1876085986	P:76:1420 EAST MADISON	GR2T, GIRARD RESOURCES	0:00:00	12:51:00	29.91	TON			
2/25/16	1876085992	P:76:1420 EAST MADISON	GR2T, GIRARD RESOURCES	0:00:00	16:08:00	27.21	TON			
2/25/16	1876085993	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	0:00:00	16:12:00	27.63	TON			
2/26/16	1876085994	P:76:1420 EAST MADISON	GR12T, GIRARD RESOURCES	7:47:00	8:00:00	26.71	TON	R		
2/26/16	1876085995	P:76:1420 EAST MADISON	S144TF, SANTANA TRUCKING	7:57:00	8:09:00	27.91	TON	R		
2/26/16	1876085996	P:76:1420 EAST MADISON	GR2T, GIRARD RESOURCES	7:40:00	8:13:00	25.52	TON	R		
2/26/16	1876085997	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	0:00:00	8:15:00	0.00	TON			V
2/26/16	1876085998	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	0:00:00	8:27:00	27.12	TON			
2/26/16	1876085999	P:76:1420 EAST MADISON	1876-1, EVERETT SOIL GENERIC	8:19:00	8:40:00	38.93	TON	R		
2/26/16	1876086000	P:76:1420 EAST MADISON	1875-2, EVERETT GENERIC	8:21:00	8:42:00	0.00	TON	R		V
2/26/16	1876086001	P:76:1420 EAST MADISON	1876-3, EVERETT SOIL GENERIC	8:24:00	8:46:00	25.74	TON	R		
2/26/16	1876086002	P:76:1420 EAST MADISON	SS127, SILVER STREAK	8:26:00	8:48:00	26.31	TON	R		
2/26/16	1876086003	P:76:1420 EAST MADISON	SS108,SILVER STREAK	8:28:00	8:50:00	27.75	TON	R		
2/26/16	1876086004	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	8:29:00	8:51:00	27.31	TON	R		
2/26/16	1876086005	P:76:1420 EAST MADISON	SS175T, SILVER STREAK TRUCKINC	8:37:00	8:53:00	30.25	TON	R		
2/26/16	1876086006	P:76:1420 EAST MADISON	SS37T, SILVER STREAK	8:41:00	9:04:00	26.73	TON	R		
2/26/16	1876086007	P:76:1420 EAST MADISON	SS107, SILVER STREAK	8:43:00	9:08:00	26.71	TON	R		
2/26/16	1876086008	P:76:1420 EAST MADISON	SS41T, SILVER STREAK	8:45:00	9:09:00	28.69	TON	R		
2/26/16	1876086009	P:76:1420 EAST MADISON	SS97T, SILVER STREAK	8:47:00	9:15:00	30.08	TON	R		
2/26/16	1876086010	P:76:1420 EAST MADISON	SS93, SILVER STREAK	8:49:00	9:17:00	28.44	TON	R		
2/26/16	1876086011	P:76:1420 EAST MADISON	1876-4, EVERETT SOIL GENERIC	8:53:00	9:22:00	29.68	TON	R		
2/26/16	1876086012	P:76:1420 EAST MADISON	CTI410,CITY TRANSFER	9:03:00	9:24:00	26.59	TON	R		
2/26/16	1876086013	P:76:1420 EAST MADISON	CTI426CITY TRANSFER	9:14:00	9:28:00	26.02	TON	R		

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Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	р р	s h	d
2/26/16	1876086014	P:76:1420 EAST MADISON	CTI417,CITY TRANSFER	9:16:00	9:32:00	26.41	TON	R		
2/26/16	1876086016	P:76:1420 EAST MADISON	S144TF, SANTANA TRUCKING	0:00:00	10:04:00	26.52	TON			
2/26/16	1876086017	P:76:1420 EAST MADISON	GR16T, GIRARD RESOURCES	10:06:00	10:23:00	25.86	TON	R		
2/26/16	1876086018	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	10:33:00	28.44	TON			
2/26/16	1876086019	P:76:1420 EAST MADISON	SS175T, SILVER STREAK TRUCKING	0:00:00	10:44:00	28.94	TON			
2/26/16	1876086020	P:76:1420 EAST MADISON	GR12T, GIRARD RESOURCES	0:00:00	10:57:00	26.87	TON			
2/26/16	1876086021	P:76:1420 EAST MADISON	GR2T, GIRARD RESOURCES	0:00:00	10:59:00	29.37	TON			
2/26/16	1876086022	P:76:1420 EAST MADISON	SS41T, SILVER STREAK	0:00:00	11:00:00	30.00	TON			
2/26/16	1876086023	P:76:1420 EAST MADISON	SS93, SILVER STREAK	0:00:00	11:07:00	29.86	TON			
2/26/16	1876086024	P:76:1420 EAST MADISON	CTI410,CITY TRANSFER	0:00:00	11:10:00	27.91	TON			
2/26/16	1876086025	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	0:00:00	11:12:00	30.52	TON			
2/26/16	1876086026	P:76:1420 EAST MADISON	1876-4, EVERETT SOIL GENERIC	0:00:00	11:15:00	30.18	TON			
2/26/16	1876086027	P:76:1420 EAST MADISON	CTI426CITY TRANSFER	0:00:00	11:16:00	28.89	TON			
2/26/16	1876086028	P:76:1420 EAST MADISON	1876-3, EVERETT SOIL GENERIC	0:00:00	11:21:00	29.61	TON			
2/26/16	1876086029	P:76:1420 EAST MADISON	1876-1, EVERETT SOIL GENERIC	0:00:00	11:37:00	26.89	TON			
2/26/16	1876086030	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	0:00:00	11:39:00	27.89	TON			
2/26/16	1876086031	P:76:1420 EAST MADISON	SS127, SILVER STREAK	0:00:00	11:43:00	28.39	TON			
2/26/16	1876086032	P:76:1420 EAST MADISON	SS108,SILVER STREAK	0:00:00	11:45:00	29.14	TON			
2/26/16	1876086033	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	0:00:00	11:48:00	37.76	TON	R		
2/26/16	1876086034	P:76:1420 EAST MADISON	SS37T, SILVER STREAK	0:00:00	11:52:00	33.35	TON	R		
2/26/16	1876086035	P:76:1420 EAST MADISON	S144TF, SANTANA TRUCKING	0:00:00	11:56:00	25.11	TON			
2/26/16	1876086036	P:76:1420 EAST MADISON	SS107, SILVER STREAK	0:00:00	12:00:00	30.31	TON			
2/26/16	1876086037	P:76:1420 EAST MADISON	SS97T, SILVER STREAK	0:00:00	12:02:00	25.04	TON			
2/26/16	1876086038	P:76:1420 EAST MADISON	GR16T, GIRARD RESOURCES	0:00:00	12:23:00	27.95	TON			
2/26/16	1876086039	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	12:29:00	27.05	TON			
2/26/16	1876086040	P:76:1420 EAST MADISON	CTI412,CITY TRANSFER	12:34:00	12:45:00	26.70	TON	R		

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Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	i p	s h	i d
2/26/16	1876086041	P:76:1420 EAST MADISON	SS175T, SILVER STREAK TRUCKING	0:00:00	12:50:00	30.12	TON			
2/26/16	1876086042	P:76:1420 EAST MADISON	SS41T, SILVER STREAK	0:00:00	13:09:00	30.85	TON			
2/26/16	1876086043	P:76:1420 EAST MADISON	CTI410,CITY TRANSFER	0:00:00	13:13:00	26.85	TON			
2/26/16	1876086044	P:76:1420 EAST MADISON	CTI426CITY TRANSFER	0:00:00	13:26:00	29.29	TON			
2/26/16	1876086045	P:76:1420 EAST MADISON	1876-4, EVERETT SOIL GENERIC	0:00:00	13:30:00	28.43	TON			
2/26/16	1876086046	P:76:1420 EAST MADISON	SS93, SILVER STREAK	0:00:00	13:34:00	29.20	TON			
2/26/16	1876086047	P:76:1420 EAST MADISON	1876-3, EVERETT SOIL GENERIC	0:00:00	13:37:00	27.77	TON			
2/26/16	1876086048	P:76:1420 EAST MADISON	GR2T, GIRARD RESOURCES	0:00:00	13:57:00	26.40	TON			
2/26/16	1876086049	P:76:1420 EAST MADISON	GR12T, GIRARD RESOURCES	0:00:00	14:02:00	25.10	TON			
2/26/16	1876086050	P:76:1420 EAST MADISON	S144TF, SANTANA TRUCKING	0:00:00	14:06:00	25.34	TON			
2/26/16	1876086052	P:76:1420 EAST MADISON	GR15SD, GIRARD RESOURCES	0:00:00	14:17:00	21.24	TON			
2/26/16	1876086053	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	14:42:00	24.75	TON			
2/26/16	1876086054	P:76:1420 EAST MADISON	1876-1, EVERETT SOIL GENERIC	0:00:00	14:54:00	21.88	TON			
2/26/16	1876086055	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	0:00:00	14:56:00	26.80	TON			
2/26/16	1876086056	P:76:1420 EAST MADISON	SS127, SILVER STREAK	0:00:00	14:59:00	25.15	TON			
2/26/16	1876086057	P:76:1420 EAST MADISON	GR16T, GIRARD RESOURCES	0:00:00	15:01:00	27.89	TON			
2/26/16	1876086058	P:76:1420 EAST MADISON	SS108, SILVER STREAK	0:00:00	15:03:00	26.54	TON			
2/26/16	1876086059	P:76:1420 EAST MADISON	SS175T, SILVER STREAK TRUCKING	0:00:00	15:11:00	30.85	TON			
2/26/16	1876086060	P:76:1420 EAST MADISON	CTI412,CITY TRANSFER	0:00:00	15:13:00	27.55	TON			
2/26/16	1876086061	P:76:1420 EAST MADISON	SS37T, SILVER STREAK	0:00:00	15:16:00	22.88	TON			
2/29/16	1876086089	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	13:54:00	14:16:00	26.38	TON	R		
3/1/16	1876086097	P:76:1420 EAST MADISON	GR3T, GIRARD RESOURCES	9:53:00	10:07:00	25.26	TON	R		
3/1/16	1876086099	P:76:1420 EAST MADISON	1876-9, EVERETT SOIL GENERIC	10:17:00	10:30:00	29.57	TON	R		
3/1/16	1876086102	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	11:39:00	11:59:00	25.79	TON	R		
3/1/16	1876086103	P:76:1420 EAST MADISON	1876-3, EVERETT SOIL GENERIC	11:41:00	12:00:00	26.27	TON	R		
3/1/16	1876086104	P:76:1420 EAST MADISON	SS37T, SILVER STREAK	11:50:00	12:35:00	23.86	TON	R		

								S h	C a	V o
Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	i p	s h	i d
3/3/16	1876086150	P:76:1420 EAST MADISON	GR12T, GIRARD RESOURCES	12:38:00	12:51:00	27.71	TON	R		
3/3/16	1876086153	P:76:1420 EAST MADISON	1876-1, EVERETT SOIL GENERIC	13:08:00	13:23:00	25.95	TON	R		
3/3/16	1876086155	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	13:12:00	13:32:00	26.87	TON	R		
3/3/16	1876086158	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	13:22:00	13:41:00	28.47	TON	R		
3/3/16	1876086161	P:76:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	13:37:00	14:00:00	30.64	TON	R		
3/3/16	1876086162	P:76:1420 EAST MADISON	1876-3, EVERETT SOIL GENERIC	13:46:00	14:02:00	28.73	TON	R		
3/3/16	1876086164	P:76:1420 EAST MADISON	GR16T, GIRARD RESOURCES	13:57:00	14:15:00	30.15	TON	R		
3/3/16	1876086168	P:76:1420 EAST MADISON	1876-1, EVERETT SOIL GENERIC	0:00:00	15:22:00	28.63	TON			
3/3/16	1876086169	P:76:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	0:00:00	15:38:00	28.86	TON			
3/15/16	1876086291	P:76:1420 EAST MADISON	GR12T, GIRARD RESOURCES	0:00:00	11:05:00	27.41	TON			
3/15/16	1876086292	P:76:1420 EAST MADISON	GR3T, GIRARD RESOURCES	0:00:00	11:10:00	25.42	TON			
3/15/16	1876086293	P:76:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	11:12:00	24.65	TON			
3/15/16	1876086294	P:76:1420 EAST MADISON	FR23,FRULING INC	0:00:00	11:56:00	27.35	TON			
3/15/16	1876086296	P:76:1420 EAST MADISON	FR1T, FRUHLING INC	11:54:00	12:18:00	29.55	TON	R		
Product To Order Tota Customer	als 215				Qty Qty Qty	5,822. 5,822. 5,822.	95 TOI	N		
Grand Tot	tal	215			Qty	5,822.9	5 TON			



# Ticket List By Customer\Order\Product

То



 Date From
 12/21/2015

 Location(s)
 1875

 Order:
 41053231

03/17/2016

		Order: 4	1053231							
Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	S h i p	C a s h	V o i d
Scale Tic 1420 EAS	ckets T MADISON STREE	ET LLC								
41053231 1192506										
2/19/16	1875446825	P:75:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	11:04:00	30.30	TON			
2/19/16	1875446827	P:75:1420 EAST MADISON	1876-2, EVERETT SOIL GENERIC	0:00:00	11:16:00	31.11	TON			
2/19/16	1875446843	P:75:1420 EAST MADISON	GR2T, GIRARD RESOURCES	0:00:00	12:43:00	29.70	TON	R		
2/19/16	1875446845	P:75:1420 EAST MADISON	GR3T, GIRARD RESOURCES	0:00:00	13:02:00	28.51	TON			
2/22/16	1875446896	P:75:1420 EAST MADISON	1876-6, EVERETT SOIL GENERIC	9:38:00	9:56:00	32.02	TON	R		
3/14/16	1875448356	P:75:1420 EAST MADISON	GR13T, GIRARD RESOURCES	11:45:00	11:53:00	28.37	TON	R		
3/14/16	1875448367	P:75:1420 EAST MADISON	FR1T,FRUHLING INC	13:07:00	13:17:00	28.95	TON	R		
3/14/16	1875448369	P:75:1420 EAST MADISON	FR13T, FRUHLING INC	13:09:00	13:20:00	30.17	TON	R		
3/14/16	1875448372	P:75:1420 EAST MADISON	FR23,FRULING INC	13:23:00	13:32:00	28.10	TON	R		
3/14/16	1875448373	P:75:1420 EAST MADISON	FR14,FRULING INC	13:26:00	13:37:00	27.54	TON	R		
3/14/16	1875448375	P:75:1420 EAST MADISON	GR13T, GIRARD RESOURCES	0:00:00	13:45:00	29.63	TON			
3/14/16	1875448376	P:75:1420 EAST MADISON	FR6T, FRUHLING INC	13:28:00	13:48:00	29.93	TON	R		
3/14/16	1875448377	P:75:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	13:34:00	13:50:00	28.64	TON	R		
3/14/16	1875448378	P:75:1420 EAST MADISON	GR11T, GIRARD RESOURCES	13:35:00	13:52:00	27.60	TON	R		
3/14/16	1875448379	P:75:1420 EAST MADISON	GR12T, GIRARD RESOURCES	13:36:00	13:53:00	28.35	TON	R		
3/15/16	1875448396	P:75:1420 EAST MADISON	GR15SD,GIRARD RESOURCES	8:01:00	8:08:00	27.88	TON	R		
3/15/16	1875448398	P:75:1420 EAST MADISON	GR12T, GIRARD RESOURCES	8:25:00	8:34:00	28.61	TON	R		
3/15/16	1875448403	P:75:1420 EAST MADISON	GR3T, GIRARD RESOURCES	8:38:00	8:53:00	27.59	TON	R		
3/15/16	1875448405	P:75:1420 EAST MADISON	GR13T, GIRARD RESOURCES	8:55:00	9:04:00	30.48	TON	R		

								S h	C a	V o
Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	i p	s h	i d
3/15/16	1875448413	P:75:1420 EAST MADISON	FR1T, FRUHLING INC	9:32:00	9:45:00	25.17	TON	R		
3/15/16	1875448414	P:75:1420 EAST MADISON	FR23, FRULING INC	9:33:00	9:47:00	31.14	TON	R		
Product To Order Tota Customer	als 21				Qty Qty Qty	609. 609. 609.	79 TOP	1		
Grand Tota	al	21			Qty	609.79	O TON			

## **APPENDIX C**

## LABORATORY ANALYTICAL REPORTS FOR SOIL

Friedman & Bruya, Inc. #510084

## 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

October 12, 2015

Chuck Cacek, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on October 6, 2015 from the SOU\_1002-003\_ 20151006, F&BI 510084 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: Jonathan Loeffler SOU1012R.DOC

## FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on October 6, 2015 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20151006, F&BI 510084 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
510084 -01	TP04NSW-10
510084 -02	TP04NSW-13
510084 -03	TP04NSW-16
510084 -04	TP04SSW-10
510084 -05	TP04SSW-15
510084 -06	TP04SSW-Composite
510084 -07	TP04NSW-Composite
510084 -08	TP05NSW-15
510084 -09	TP05SSW-18
510084 -10	TP05-Composite

All quality control requirements were acceptable.

## FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 10/12/15 Date Received: 10/06/15 Project: SOU\_1002-003\_20151006, F&BI 510084 Date Extracted: 10/07/15 Date Analyzed: 10/07/15

## 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)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate ( <u>% Recovery)</u> (Limit 50-150)
TP04NSW-10 510084-01	< 0.02	< 0.02	0.17	0.35	150	95
TP04NSW-13 510084-02	< 0.02	< 0.02	0.035	0.14	73	93
TP04SSW-10 510084-04	< 0.02	< 0.02	0.085	0.25	120	95
TP04SSW-15 510084-05	< 0.02	< 0.02	0.24	0.46	190	96
TP05NSW-15 510084-08	< 0.02	< 0.02	< 0.02	< 0.06	33	92
TP05SSW-18 510084-09	<0.02	< 0.02	<0.02	<0.06	43	93
Method Blank <sup>05-2046 MB</sup>	<0.02	< 0.02	<0.02	< 0.06	<2	89

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/12/15 Date Received: 10/06/15 Project: SOU\_1002-003\_20151006, F&BI 510084 Date Extracted: 10/07/15 Date Analyzed: 10/07/15

## 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 56-165)
TP04NSW-10 510084-01	1,600	<250	100
TP04NSW-13 510084-02	1,100	<250	101
TP04SSW-10 510084-04	1,700	<250	106
TP04SSW-15 510084-05	2,200	<250	107
TP05NSW-15 510084-08	380	<250	106
TP05SSW-18 510084-09	480	420	104
Method Blank <sup>05-2064 MB</sup>	<50	<250	95

# ENVIRONMENTAL CHEMISTS

# Analysis For Total Metals By EPA Method 200.8

Client ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	TP04SSW-Composite 10/06/15 10/07/15 10/07/15 Soil mg/kg (ppm) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20151006 510084-06 510084-06.020 ICPMS1 SP
		Lower	Upper
Internal Standard:	% Recovery:	Limit:	Limit:
Germanium	95	60	125
Indium	93	60	125
Holmium	100	60	125
Analyte:	Concentration mg/kg (ppm)		
Arsenic	<1		
Barium	12.2		
Cadmium	<1		
Chromium	6.23		
Lead	1.47		
Mercury	<1		
Selenium	<1		
Silver	<1		

# ENVIRONMENTAL CHEMISTS

# Analysis For Total Metals By EPA Method 200.8

Client ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	TP05-Composite 10/06/15 10/07/15 10/07/15 Soil mg/kg (ppm) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20151006 510084-10 510084-10.021 ICPMS1 SP
		Lower	Upper
Internal Standard:	% Recovery:	Limit:	Limit:
Germanium	92	60	125
Indium	92	60	125
Holmium	98	60	125
Analyte:	Concentration mg/kg (ppm)		
Arsenic	<1		
Barium	11.8		
Cadmium	<1		
Chromium	5.37		
Lead	1.10		
Mercury	<1		
Selenium	<1		
Silver	<1		

# ENVIRONMENTAL CHEMISTS

# Analysis For Total Metals By EPA Method 200.8

Client ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blank NA 10/07/15 10/07/15 Soil mg/kg (ppm) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20151006 I5-571 mb2 I5-571 mb2.019 ICPMS1 SP
		Lower	Upper
Internal Standard:	% Recovery:	Limit:	Limit:
Germanium	93	60	125
Indium	95	60	125
Holmium	101	60	125
	Concentration		
Analyte:	mg/kg (ppm)		
Arsenic	<1		
Barium	<1		
Cadmium	<1		
Chromium	<1		
Lead	<1		
Mercury	<1		
Selenium	<1		

<1

Silver

#### ENVIRONMENTAL CHEMISTS

Date of Report: 10/12/15 Date Received: 10/06/15 Project: SOU\_1002-003\_20151006, F&BI 510084

## 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: Laboratory Control Sample

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	0.5	93	87	69-120	7
Toluene	mg/kg (ppm)	0.5	96	91	70-117	5
Ethylbenzene	mg/kg (ppm)	0.5	95	92	65-123	3
Xylenes	mg/kg (ppm)	1.5	92	90	66-120	2
Gasoline	mg/kg (ppm)	20	100	100	71-131	0

## ENVIRONMENTAL CHEMISTS

Date of Report: 10/12/15 Date Received: 10/06/15 Project: SOU\_1002-003\_20151006, F&BI 510084

## QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 5	510084-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	1,500	121	110	63-146	10
Laboratory Code: I	.aboratory Contr	ol Samp	le				
			Percent				
	Reporting	Spike	Recovery	Accep	tance		
Analyte	Units	Level	LCS	Crite	eria		
Diesel Extended	mg/kg (ppm)	5,000	104	79-1	44		

## ENVIRONMENTAL CHEMISTS

Date of Report: 10/12/15 Date Received: 10/06/15 Project: SOU\_1002-003\_20151006, F&BI 510084

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 510063-01 (Matrix Spike)

			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Arsenic	mg/kg (ppm)	10	2.40	99	95	67-121	4
Barium	mg/kg (ppm)	50	30.5	109	113	74-135	4
Cadmium	mg/kg (ppm)	10	<1	105	101	88-121	4
Chromium	mg/kg (ppm)	50	5.58	92	91	57-128	1
Lead	mg/kg (ppm)	50	5.33	103	98	59-148	5
Mercury	mg/kg (ppm	10	<1	102	100	50-150	2
Selenium	mg/kg (ppm)	5	<1	87	85	55-130	2
Silver	mg/kg (ppm)	10	<1	94	91	41-139	3

Laboratory Code: Laboratory Control Sample

Ĵ	•	•	Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Arsenic	mg/kg (ppm)	10	99	83-113
Barium	mg/kg (ppm)	50	106	85-116
Cadmium	mg/kg (ppm)	10	105	85-114
Chromium	mg/kg (ppm)	50	101	78-121
Lead	mg/kg (ppm)	50	105	80-120
Mercury	mg/kg (ppm)	10	103	70-130
Selenium	mg/kg (ppm)	5	100	87-117
Silver	mg/kg (ppm)	10	94	42-142

#### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

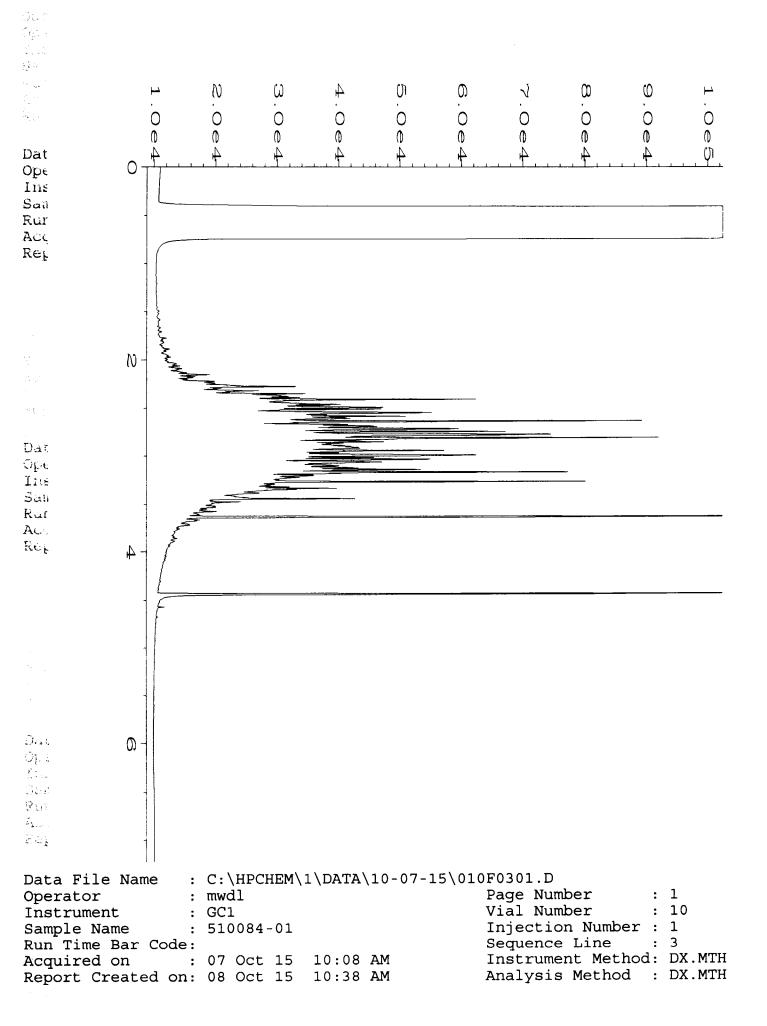
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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.

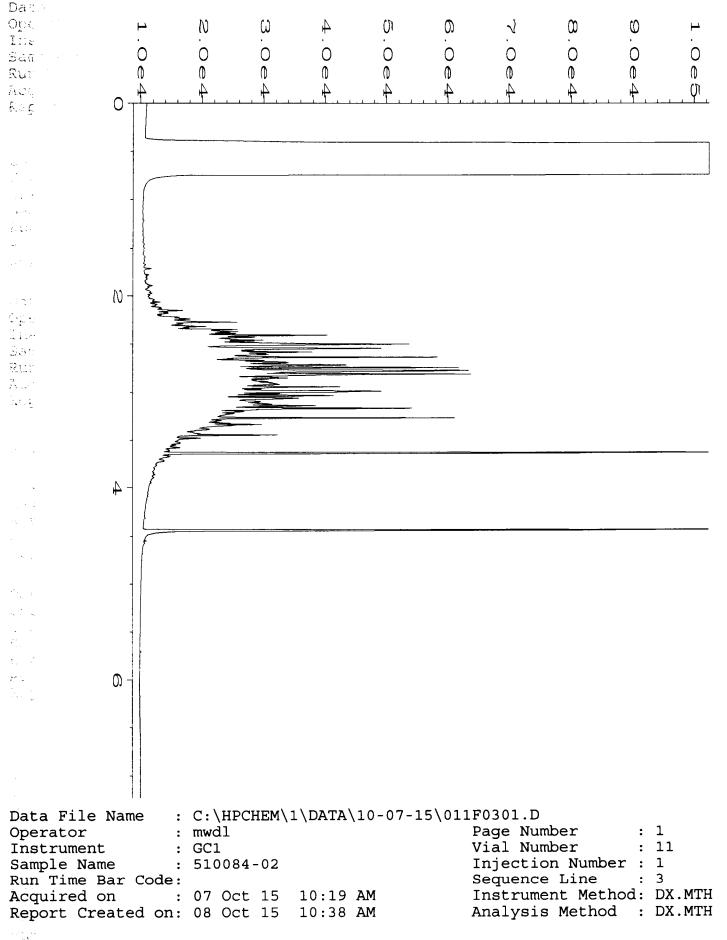
vo - The value reported fell outside the control limits established for this analyte.

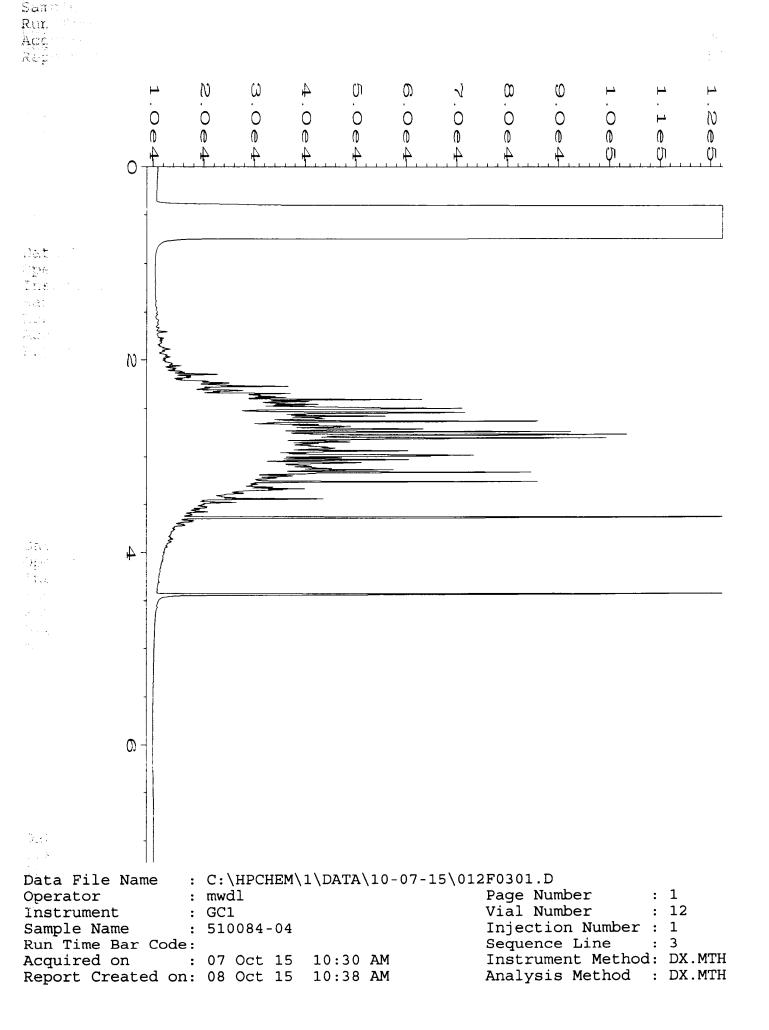
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

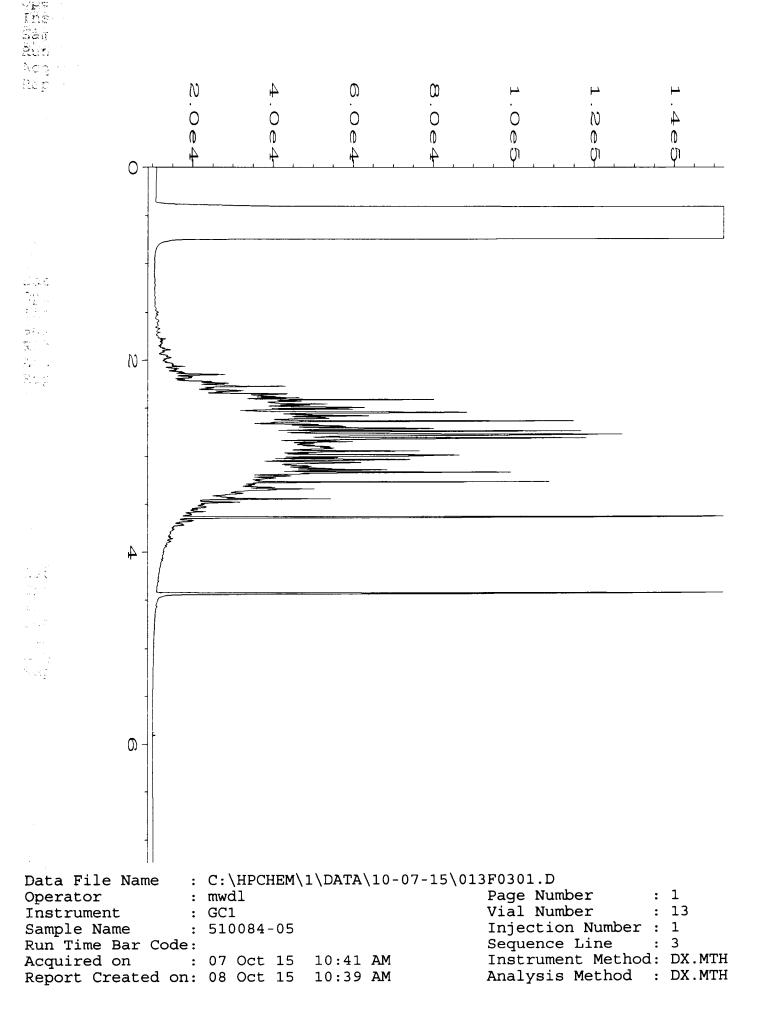


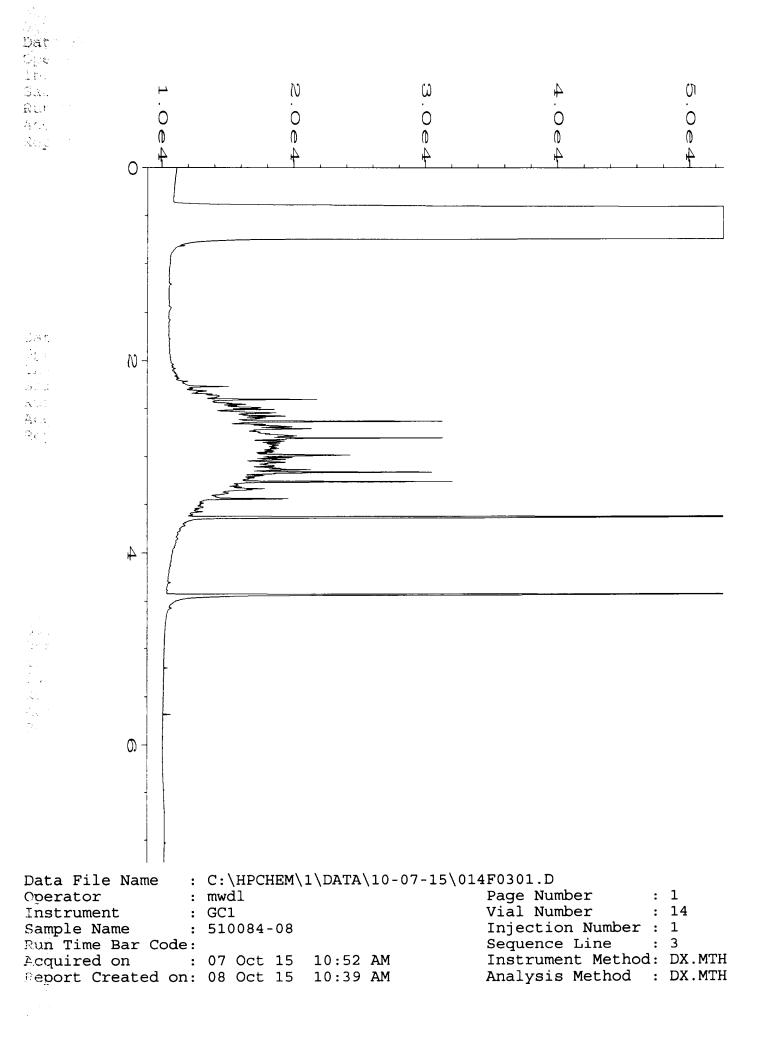
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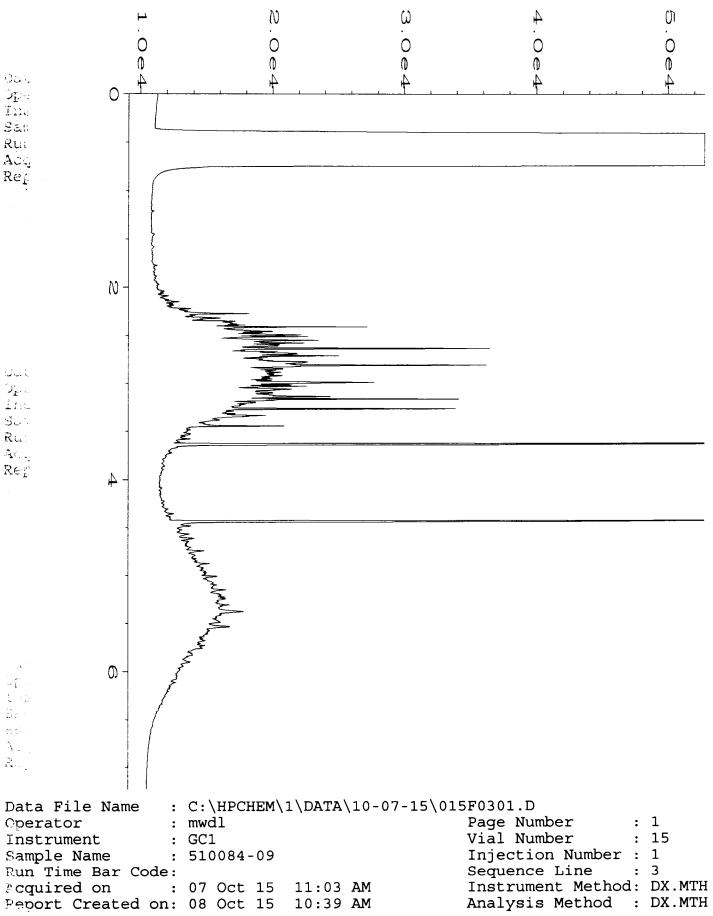


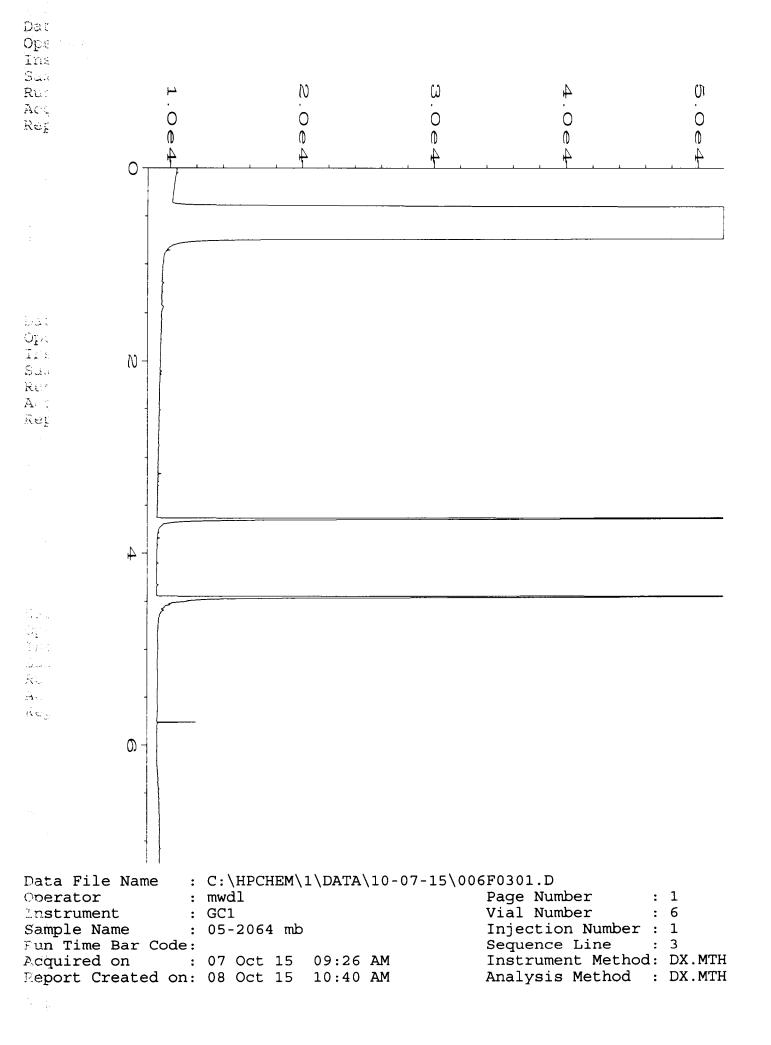


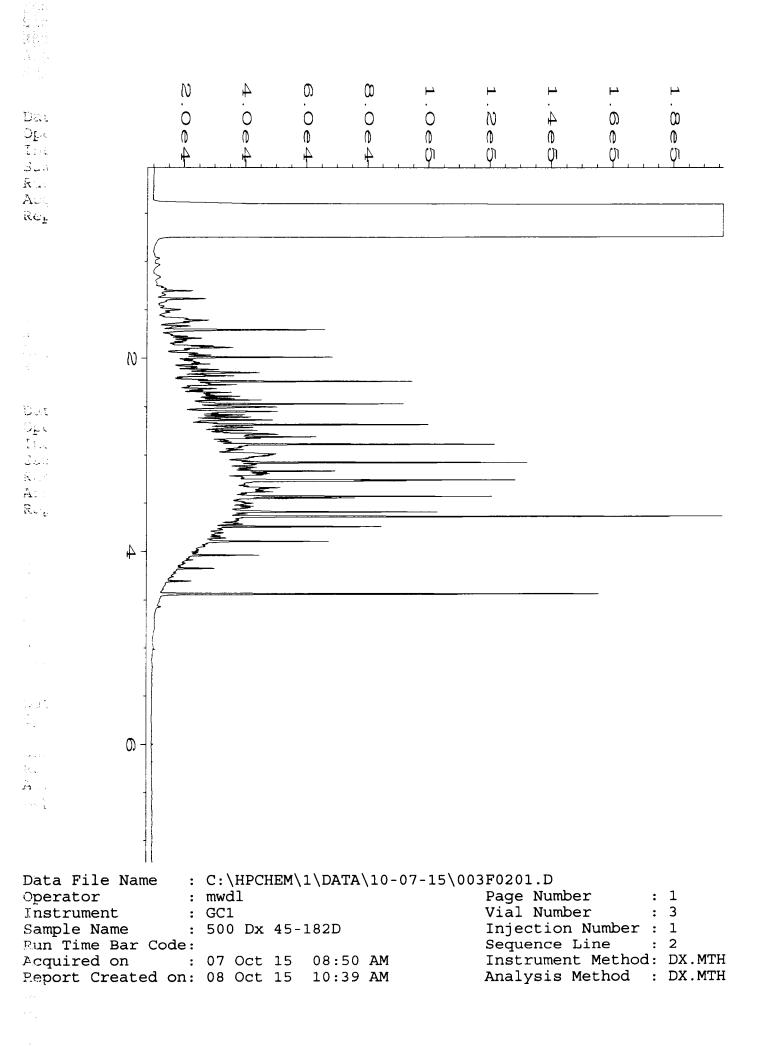












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Send Report To Chuck Cacek; cc: Jonathan Loeffler

Company\_SoundEarth Strategies, Inc.\_\_

Address 2811 Fairview Avenue East, Suite 2000

City, State, ZIP\_\_Seattle, Washington 98102

Phone #\_(206) 306-1900 Fax #\_(206) 306-1907

AMPLE CHAIN OF CUSTODY	ME 10-06-	15 1E03/4
SAMPLERS (signature)		Page #of /
PROJECT NAME/NO. MADISON TACO TIME 1002-003	PO #	Standard (2 Weeks) X-RUSH (1-week TAT Rush charges authorized by:
REMARKS	GEMS Y / N	SAMPLE DISPOSAL Dispose after 30 days Return samples Will call with instructions

	r						······					ALYSE	<u>S REQ</u>	UESTE	D	
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-GX	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 M <del>e</del> tais			Notes
TPOYNSW-10	TPOH NSW	10'	Or A-E	10/5/15	1350	SOIL	5	×	×	X						
TPO4NSW-13	TPOH NSW	13'	021		1400		1	×	$\times$	×						
TPO4NSW-16	TPOH NSW	16'	03		1406											
TP0455W-10	TPOH SSW	101	84		1420			$\times$	×	X	******					
TPO455W-15	TPOH SSW	15'	051		1430			X	×	×						
TRO455W-COMPOSIT	E TPO455W		ଚନ		1500		131						X			
TPO4NSW -COMPOSIT	E TPOU NSW	·	07		1502		131									
TPOSNSW-15	TPOS NOW	15'	OS A,F		1545			X	×	X		******				
TP0555W-18	TPOS SSW	18	OGV		1604			X	×	X						
TPOS COMPOSITE	TPOS	•ـــــــــــــــــــــــــــــــــــــ	10	1	1610		1	Ĺ					X			
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Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by	JONATHAN LOEFFLER	SOUNDEARTH	10/6/15	
Seattle, WA 98119-2029	Received by:	Jasan Stalor	FEDEXSDC	10/6/15	
Ph. (206) 285-8282	Relinquished by:				
Fax (206) 283-5044	Received by:	Jas Shihnn	FBT	10/06/15	14:30
				<u> </u>	

Friedman & Bruya, Inc. #601009

#### 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 13, 2016

Chuck Cacek, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on January 4, 2016 from the SOU\_ 1002-003\_ 20160104, F&BI 601009 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: Jonathan Loeffler SOU0113R.DOC

#### ENVIRONMENTAL CHEMISTS

#### CASE NARRATIVE

This case narrative encompasses samples received on January 4, 2015 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_ 1002-003\_ 20160104, F&BI 601009 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
601009 -01	VE22-N80-02.0
601009 -02	VE16-N16-02.0
601009 -03	VE20-N13-02.0
601009 -04	VE18-N25-04.0
601009 -05	VE15-N7-04.0

Vinyl chloride and methylene chloride failed below the acceptance criteria in the 8260C matrix spike samples. The vinyl chloride laboratory control sample passed the acceptance criteria, therefore the data were acceptable. The methylene chloride laboratory control sample failed, therefore the data were flagged.

The 8260C laboratory control sample and laboratory control sample duplicate 1,1dichloroethene exceeded the acceptance criteria. 1,1-Dichloroethene was not detected in the samples, therefore the data were acceptable.

All other quality control requirements were acceptable.

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	VE16-N16-0 01/04/16 01/06/16 01/07/16 Soil mg/kg (ppm)	2.0 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_ 1002-003_ 20160104, F&BI 601009 601009-02 010657.D GCMS9 JS
Surrogates:		% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane	-d4	96	50	150
Toluene-d8	ui	100	50	150
4-Bromofluorobenz	ene	100	50	150
Compounds:		Concentration mg/kg (ppm)		
Vinyl chloride		<0.01		
Chloroethane		< 0.01		
1,1-Dichloroethene		< 0.02		
Methylene chloride		<0.5 jl		
trans-1,2-Dichloroe	thene	< 0.01		
1,1-Dichloroethane		< 0.01		
cis-1,2-Dichloroethe	ene	< 0.01		
1,2-Dichloroethane	(EDC)	< 0.01		
1,1,1-Trichloroetha	ne	< 0.01		
Trichloroethene		< 0.01		
Tetrachloroethene		< 0.01		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	VE20-N13-0 01/04/16 01/06/16 01/07/16 Soil mg/kg (ppm	)2.0 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_ 1002-003_ 20160104, F&BI 601009 601009-03 010658.D GCMS9 JS
Surrogates:		% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane	-d4	94	50	150
Toluene-d8		99	50	150
4-Bromofluorobenz	ene	99	50	150
Compounds:		Concentration mg/kg (ppm)		
Vinyl chloride		< 0.01		
Chloroethane		< 0.01		
1,1-Dichloroethene		< 0.02		
Methylene chloride		<0.5 jl		
trans-1,2-Dichloroe	thene	< 0.01		
1,1-Dichloroethane		< 0.01		
cis-1,2-Dichloroethe		< 0.01		
1,2-Dichloroethane		< 0.01		
1,1,1-Trichloroetha	ne	< 0.01		
Trichloroethene		< 0.01		
Tetrachlor oethene		< 0.01		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	VE18-N25-0 01/04/16 01/06/16 01/07/16 Soil mg/kg (ppm)		Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_ 1002-003_ 20160104, F&BI 601009 601009-04 010659.D GCMS9 JS
Surrogatos		% Pacavary:	Lower Limit:	Upper Limit:
Surrogates: 1,2-Dichloroethane	44	% Recovery: 53	50	150
Toluene-d8	-44	53 63	50 50	150
4-Bromofluorobenz	ono	101	50 50	150
4-DI OIIIOII UOI ODEIIZ	ene	101	50	150
		Concentration		
Compounds:		mg/kg (ppm)		
Vinyl chloride		< 0.01		
Chloroethane		< 0.01		
1,1-Dichloroethene		< 0.02		
Methylene chloride		<0.5 jl		
trans-1,2-Dichloroe	thene	< 0.01		
1,1-Dichloroethane		< 0.01		
cis-1,2-Dichloroethe	ene	< 0.01		
1,2-Dichloroethane	(EDC)	< 0.01		
1,1,1-Trichloroetha	ne	< 0.01		
Trichloroethene		< 0.01		
Tetrachloroethene		< 0.01		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	VE15-N7-04 01/04/16 01/06/16 01/07/16 Soil mg/kg (ppm)	.0 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_ 1002-003_ 20160104, F&BI 601009 601009-05 010660.D GCMS9 JS
Surrogates:		% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane	-d4	95	50	150
Toluene-d8		99	50	150
4-Bromofluorobenz	ene	101	50	150
Compounds:		Concentration mg/kg (ppm)		
Vinyl chloride		< 0.01		
Chloroethane		< 0.01		
1,1-Dichloroethene		< 0.02		
Methylene chloride		<0.5 jl		
trans-1,2-Dichloroe	thene	< 0.01		
1,1-Dichloroethane		< 0.01		
cis-1,2-Dichloroethe	ene	< 0.01		
1,2-Dichloroethane	(EDC)	< 0.01		
1,1,1-Trichloroetha	ne	< 0.01		
Trichloroethene		< 0.01		
Tetrachloroethene		< 0.01		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blan Not Applical 01/06/16 01/07/16 Soil mg/kg (ppm)		Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_ 1002-003_ 20160104, F&BI 601009 06-021 mb 010649.D GCMS9 JS
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	97	50	150
Toluene-d8		98	50	150
4-Bromofluorobenz	ene	98	50	150
		Concentration		
Compounds:		mg/kg (ppm)		
Vinyl chloride		< 0.01		
Chloroethane		< 0.01		
1,1-Dichloroethene		< 0.02		
Methylene chloride		<0.5 jl		
trans-1,2-Dichloroe	thene	< 0.01		
1,1-Dichloroethane		< 0.01		
cis-1,2-Dichloroethe	ene	< 0.01		
1,2-Dichloroethane	(EDC)	< 0.01		
1,1,1-Trichloroetha	ne	< 0.01		
Trichloroethene		< 0.01		
Tetrachloroethene		<0.01		

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/13/16 Date Received: 01/04/16 Project: SOU\_ 1002-003\_ 20160104, F&BI 601009

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C SIM

Laboratory Code: 601030-01 (Matrix Spike)

	1 /		Sample	Percent	
	Reporting	Spike	Result	Recovery	Acceptance
Analyte	Units	Level	(Wet wt)	MS	Criteria
Vinyl chloride	mg/kg (ppm)	0.2	< 0.01	45 vo	50-150
Chloroethane	mg/kg (ppm)	0.2	< 0.01	55	50-150
1,1-Dichloroethene	mg/kg (ppm)	0.2	< 0.02	104	50-150
Methylene chloride	mg/kg (ppm)	0.2	< 0.5	43 vo	50-150
1,1-Dichloroethane	mg/kg (ppm)	0.2	< 0.01	70	50-150
1,1,1-Trichloroethane	mg/kg (ppm)	0.2	< 0.01	58	50-150
Trichloroethene	mg/kg (ppm)	0.2	< 0.01	68	50-150
Tetrachloroethene	mg/kg (ppm)	0.2	< 0.01	63	50-150

Laboratory Code: Laboratory Control Sample

Laboratory Code: Laboratory Control Sample					
		Percent	Percent		
Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Units	Level	LCS	LCSD	Criteria	(Limit 0.20)
mg/kg (ppm)	0.2	75	83	70-130	10
mg/kg (ppm)	0.2	82	89	70-130	8
mg/kg (ppm)	0.2	152 vo	161 vo	70-130	6
mg/kg (ppm)	0.2	50 vo	122	70-130	84 vo
mg/kg (ppm)	0.2	106	98	70-130	8
mg/kg (ppm)	0.2	83	88	70-130	6
mg/kg (ppm)	0.2	92	101	70-130	9
mg/kg (ppm)	0.2	99	99	70-130	0
	Reporting Units mg/kg (ppm) mg/kg (ppm) mg/kg (ppm) mg/kg (ppm) mg/kg (ppm) mg/kg (ppm) mg/kg (ppm)	Reporting UnitsSpike Levelmg/kg (ppm)0.2mg/kg (ppm)0.2mg/kg (ppm)0.2mg/kg (ppm)0.2mg/kg (ppm)0.2mg/kg (ppm)0.2mg/kg (ppm)0.2mg/kg (ppm)0.2mg/kg (ppm)0.2mg/kg (ppm)0.2	Reporting UnitsSpike LevelPercent Recovery LCSmg/kg (ppm)0.275mg/kg (ppm)0.282mg/kg (ppm)0.2152 vomg/kg (ppm)0.250 vomg/kg (ppm)0.2106mg/kg (ppm)0.283mg/kg (ppm)0.292	Reporting Units         Spike Level         Percent Recovery LCS         Percent Recovery LCS           mg/kg (ppm)         0.2         75         83           mg/kg (ppm)         0.2         82         89           mg/kg (ppm)         0.2         152 vo         161 vo           mg/kg (ppm)         0.2         50 vo         122           mg/kg (ppm)         0.2         83         88           mg/kg (ppm)         0.2         83         88           mg/kg (ppm)         0.2         92         101	Reporting Units         Spike Level         Percent Recovery LCS         Percent Recovery LCSD         Acceptance Criteria           mg/kg (ppm)         0.2         75         83         70-130           mg/kg (ppm)         0.2         82         89         70-130           mg/kg (ppm)         0.2         152 vo         161 vo         70-130           mg/kg (ppm)         0.2         50 vo         122         70-130           mg/kg (ppm)         0.2         106         98         70-130           mg/kg (ppm)         0.2         83         88         70-130           mg/kg (ppm)         0.2         92         101         70-130

#### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

# 601009

# SAMPLE CHAIN OF CUSTODY

1/4/16 M2 A0,/VS,

Company_SoundEarth Strategies, Inc.       PROJECT NAME/NO.       PO #       Standard (2 Weeks)         Address_2811 Fairview Avenue East, Suite 2000       MADISON TACO TIME       Rush charges authorize	
	d by:
City, State, ZIP_Seattle, Washington 98102       REMARKS       SAMPLE DISPOS         Phone #_(206) 306-1900       Fax #_(206) 306-1907       to 0.01	
ANALYSES REQUESTED	
Sample ID Sample Location Sample Lab ID Date Sampled Time Sampled Matrix # of Jars H LW V V V V V V V V V V V V V V V V V V	Not <b>es</b>
1E 22-N30-120 VIL2-NEO 2.0 OIA-E 1/4/16 0300 50.1 5 1	
1216-14-02.0 VE16-1416 2.0 02A-E 1/4/16 0540 Soil 5 X	
1820-NI3-022 423-NI3 2-0 02A-E 14/16 0843 501 5 X	
1E18-1125 0410 VE1S N?S 410 OH A-E 1/4/14 0925 501 5 X X	
15 N7-640 VE15-17 40 OSA-E 1/4/16 0950 501 5 ×	
	5107
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Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by the Toth.	Clore Tochilm	SUS	114/16	1200
Seattle, WA 98119-2029	Received by:	Ferther	ER	Vy/16	ar
Ph. (206) 285-8282	Relinquisheatsy:	Chegod -			lee_
Fax (206) 283-5044	Received by:				
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Friedman & Bruya, Inc. #601030

#### 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 11, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on January 6, 2016 from the SOU\_1002-003\_20160106, F&BI 601030 project. There are 9 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: Chuck Cacek, Jonathan Loeffler SOU0111R.DOC

#### ENVIRONMENTAL CHEMISTS

#### CASE NARRATIVE

This case narrative encompasses samples received on January 6, 2015 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160106, F&BI 601030 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	SoundEarth Strategies		
601030 -01	VE18-N63-06		

Vinyl chloride and methylene chloride failed below the acceptance criteria in the 8260C matrix spike samples. The vinyl chloride laboratory control sample passed the acceptance criteria, therefore the data were acceptable. The methylene chloride laboratory control sample failed, therefore the data were flagged.

The 8260C laboratory control sample and laboratory control sample duplicate 1,1dichloroethene exceeded the acceptance criteria. 1,1-Dichloroethene was not detected in the samples, therefore the data were acceptable.

All other quality control requirements were acceptable.

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/11/16 Date Received: 01/06/16 Project: SOU\_1002-003\_20160106, F&BI 601030 Date Extracted: 01/06/16 Date Analyzed: 01/06/16

#### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	Gasoline Range	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
VE18-N63-06 601030-01	150	139
Method Blank 06-004 MB2	<2	87

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/11/16 Date Received: 01/06/16 Project: SOU\_1002-003\_20160106, F&BI 601030 Date Extracted: 01/06/16 Date Analyzed: 01/06/16

## 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 48-168)
VE18-N63-06 601030-01	1,300	<250	82
Method Blank 06-039 MB	<50	<250	88

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	VE18-N63-0 01/06/16 01/06/16 01/07/16 Soil mg/kg (ppm	)6 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20160106, F&BI 601030 601030-01 010650.D GCMS9 JS
Sumaratar		0/ Deconverse	Lower	Upper
Surrogates:	14	% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-04	101 98	50 50	150
Toluene-d8			50 50	150
4-Bromofluorobenz	ene	103	50	150
		Concentration		
Compounds:		mg/kg (ppm)		
Vinyl chloride		< 0.01		
Chloroethane		< 0.01		
1,1-Dichloroethene		< 0.01		
Methylene chloride <0.5 jl				
trans-1,2-Dichloroethene <0.01		< 0.01		
		< 0.01		
cis-1,2-Dichloroethene <0.01		< 0.01		
1,2-Dichloroethane (EDC) <0.01				
1,1,1-Trichloroetha	ne	< 0.01		
Trichloroethene		< 0.01		
Tetrachloroethene		< 0.01		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blan Not Applicab 01/06/16 01/07/16 Soil mg/kg (ppm)	le	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20160106, F&BI 601030 06-021 mb 010649.D GCMS9 JS
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	97	50	150
Toluene-d8		98	50	150
4-Bromofluorobenz	ene	98	50	150
	(	Concentration		
Compounds:		mg/kg (ppm)		
Vinyl chloride		< 0.01		
Chloroethane		< 0.01		
1,1-Dichloroethene		< 0.01		
Methylene chloride <0.5 jl				
trans-1,2-Dichloroe	thene	< 0.01		
1,1-Dichloroethane <0.01		< 0.01		
cis-1,2-Dichloroethene <0.01				
1,2-Dichloroethane	(EDC)	< 0.01		
1,1,1-Trichloroetha	ne	< 0.01		
Trichloroethene		< 0.01		
Tetrachloroethene		< 0.01		

## ENVIRONMENTAL CHEMISTS

Date of Report: 01/11/16 Date Received: 01/06/16 Project: SOU\_1002-003\_20160106, F&BI 601030

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: Laboratory Control Sample

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Gasoline	mg/kg (ppm)	20	95	100	61-153	5

### ENVIRONMENTAL CHEMISTS

Date of Report: 01/11/16 Date Received: 01/06/16 Project: SOU\_1002-003\_20160106, F&BI 601030

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 6	301024-01 (Matrix	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	110	112	73-135	2
Laboratory Code: I	Laboratory Contro	ol Sampl	e				
			Percent				
	Reporting	Spike	Recovery	Acceptar	nce		
Analyte	Units	Level	LCS	Criteria	a		
Diesel Extended	mg/kg (ppm)	5,000	114	74-139	)		

### ENVIRONMENTAL CHEMISTS

Date of Report: 01/11/16 Date Received: 01/06/16 Project: SOU\_1002-003\_ 20160106, F&BI 601030

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C SIM

Laboratory Code: 601030-01 (Matrix Spike)

5	1 /		Sample	Percent	
	Reporting	Spike	Result	Recovery	Acceptance
Analyte	Units	Level	(Wet wt)	MS	Criteria
Vinyl chloride	mg/kg (ppm)	0.2	< 0.01	45 vo	50-150
Chloroethane	mg/kg (ppm)	0.2	< 0.01	55	50-150
1,1-Dichloroethene	mg/kg (ppm)	0.2	< 0.01	104	50-150
Methylene chloride	mg/kg (ppm)	0.2	< 0.5	43 vo	50-150
1,1-Dichloroethane	mg/kg (ppm)	0.2	< 0.01	70	50-150
1,1,1-Trichloroethane	mg/kg (ppm)	0.2	< 0.01	58	50-150
Trichloroethene	mg/kg (ppm)	0.2	< 0.01	68	50-150
Tetrachloroethene	mg/kg (ppm)	0.2	< 0.01	63	50-150

Laboratory Code: Laboratory Control Sample

Control Sample					
		Percent	Percent		
Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Units	Level	LCS	LCSD	Criteria	(Limit 0.20)
mg/kg (ppm)	0.2	75	83	70-130	10
mg/kg (ppm)	0.2	82	89	70-130	8
mg/kg (ppm)	0.2	152 vo	161 vo	70-130	6
mg/kg (ppm)	0.2	50 vo	122	70-130	84 vo
mg/kg (ppm)	0.2	106	98	70-130	8
mg/kg (ppm)	0.2	83	88	70-130	6
mg/kg (ppm)	0.2	92	101	70-130	9
mg/kg (ppm)	0.2	99	99	70-130	0
	Reporting Units mg/kg (ppm) mg/kg (ppm) mg/kg (ppm) mg/kg (ppm) mg/kg (ppm) mg/kg (ppm) mg/kg (ppm)	Units         Level           mg/kg (ppm)         0.2           mg/kg (ppm)         0.2	Reporting Units         Spike Level         Percent Recovery LCS           mg/kg (ppm)         0.2         75           mg/kg (ppm)         0.2         82           mg/kg (ppm)         0.2         152 vo           mg/kg (ppm)         0.2         50 vo           mg/kg (ppm)         0.2         83           mg/kg (ppm)         0.2         83           mg/kg (ppm)         0.2         92	Reporting Units         Spike Level         Percent Recovery LCS         Percent Recovery LCS           mg/kg (ppm)         0.2         75         83           mg/kg (ppm)         0.2         82         89           mg/kg (ppm)         0.2         152 vo         161 vo           mg/kg (ppm)         0.2         50 vo         122           mg/kg (ppm)         0.2         83         88           mg/kg (ppm)         0.2         92         101	Reporting Units         Spike Level         Percent Recovery LCS         Percent Recovery LCSD         Acceptance Criteria           mg/kg (ppm)         0.2         75         83         70-130           mg/kg (ppm)         0.2         82         89         70-130           mg/kg (ppm)         0.2         152 vo         161 vo         70-130           mg/kg (ppm)         0.2         50 vo         122         70-130           mg/kg (ppm)         0.2         106         98         70-130           mg/kg (ppm)         0.2         83         88         70-130           mg/kg (ppm)         0.2         92         101         70-130

#### ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 $\ensuremath{\text{ip}}$  - 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.

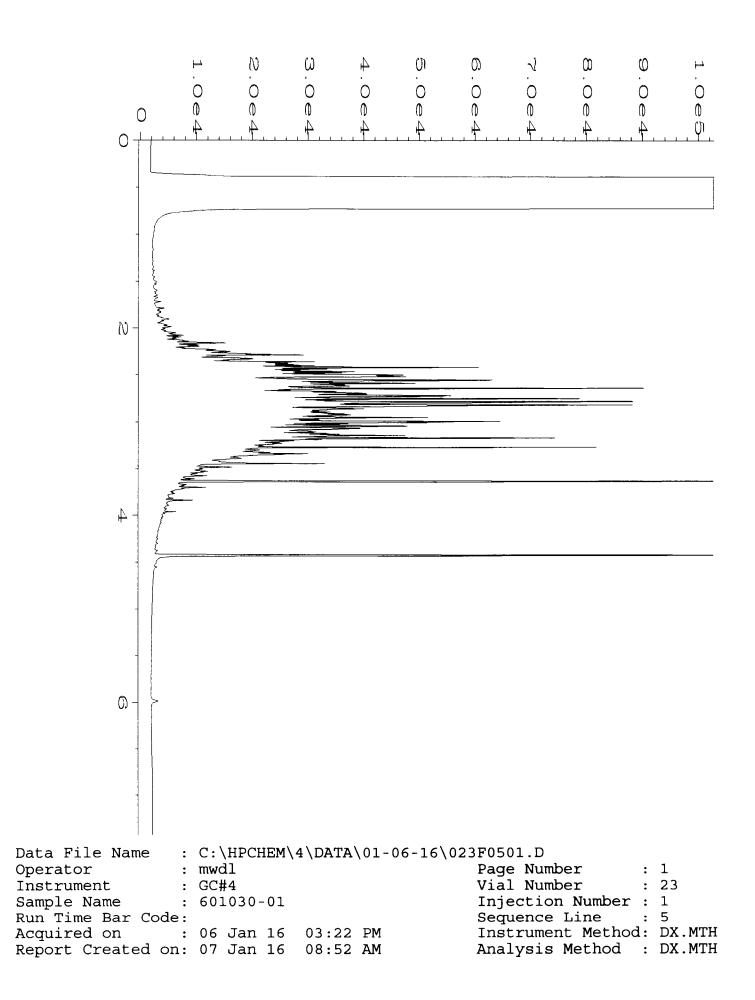
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

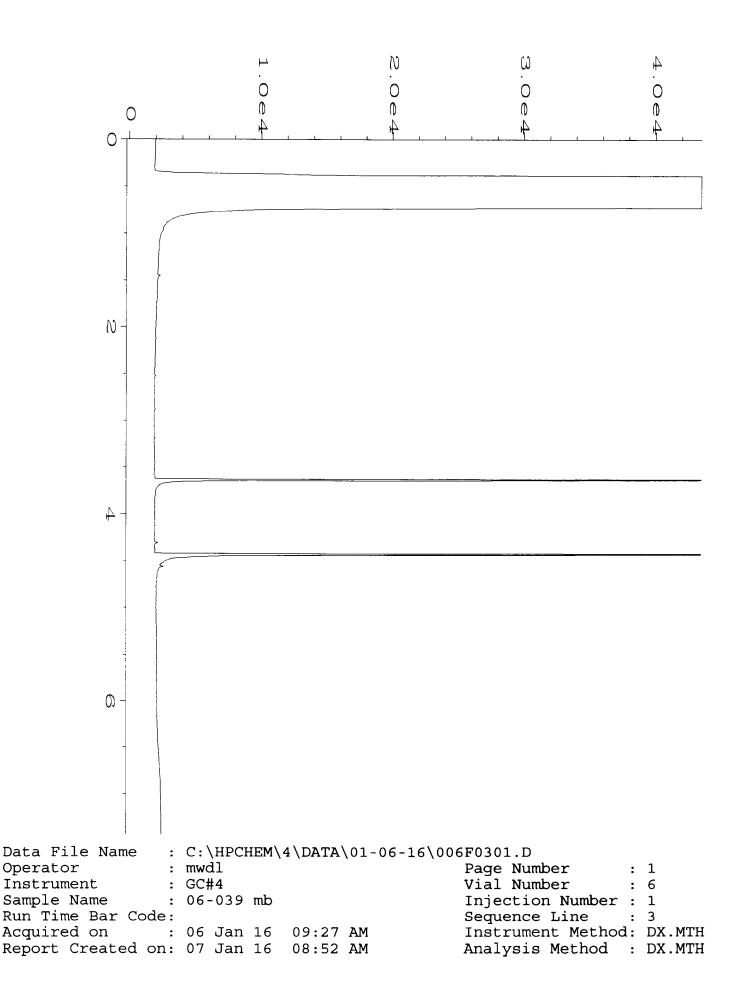
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

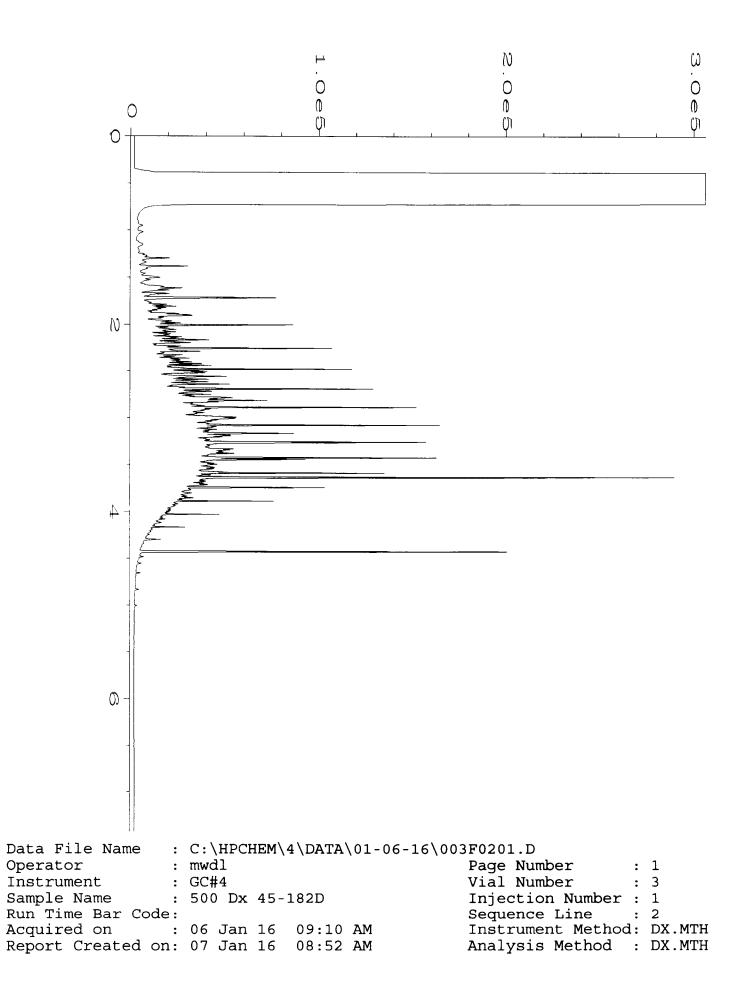
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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.







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Send Report To <u>John Func</u> Jonathan Loeffler	derburk, Chuck Co	acek; cc:		SAMPLERS (S	ignature)	P					Pag	e# TUR	of
Company SoundEarth Strate	egies, Inc.		-	PROJECT NA	ME/NO.	<u> </u>		- F	>0 #		Sto	andaro	d (2 Weeks)
Address_2811 Fairview Avenu	ue East, Suite 2000	)	_	N	ADISON TAC 1002-00					KRUSH 24 h		24 hr. ges authorized by: Cacet	
City, State, ZIP <u>Seattle, Washington 98102</u> Phone # <u>(206) 306-1900</u> Fax # <u>(206) 306-1907</u>		REMARKS GEMS Y / N 1 low level detection limit of 0.01 mg/kg for EDC.					N	SAMPLE DISPOSAL Dispose after 30 days Return samples Will call with instructions					
		T	·	1	 			T				ANAL	SES REQUESTED
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	CVOCs by 826081		, Notes
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Ph. (206) 285-8282 Relinquished by:	1)/~
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Friedman & Bruya, Inc. #601071

#### 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 13, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on January 8, 2016 from the SOU\_1002-003\_20160108, F&BI 601071 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: Chuck Cacek, Jonathan Loeffler SOU0113R.DOC

### ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on January 8, 2015 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160108, F&BI 601071 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
601071 -01	VE22-N44-09

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/13/16 Date Received: 01/08/16 Project: SOU\_1002-003\_20160108, F&BI 601071 Date Extracted: 01/08/16 Date Analyzed: 01/08/16

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 48-168)
VE22-N44-09 601071-01	320	<250	96
Method Blank 06-050 MB	<50	<250	94

### ENVIRONMENTAL CHEMISTS

Date of Report: 01/13/16 Date Received: 01/08/16 Project: SOU\_1002-003\_20160108, F&BI 601071

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx

Laboratory Code:	601046-05 (Matrix	x Spike)					
-		-	Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel	mg/kg (ppm)	500	<50	117	111	73-135	5
Laboratory Code:	Laboratory Contr	ol Samp	le				
			Percent				
		Spike	Recovery	y Accepta	ince		
Analyte	Reporting Units	Level	LCS	Criter	ia		
Diesel	mg/kg (ppm)	500	119	74-13	9		

### ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

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 ${\rm d}$  - 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.

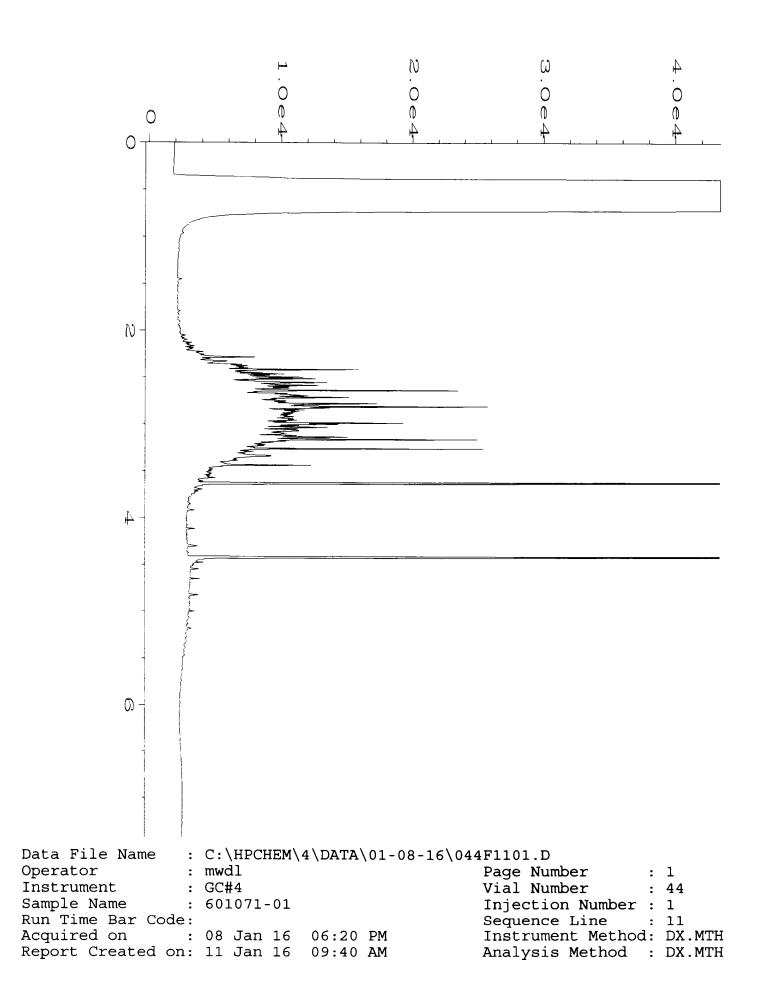
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

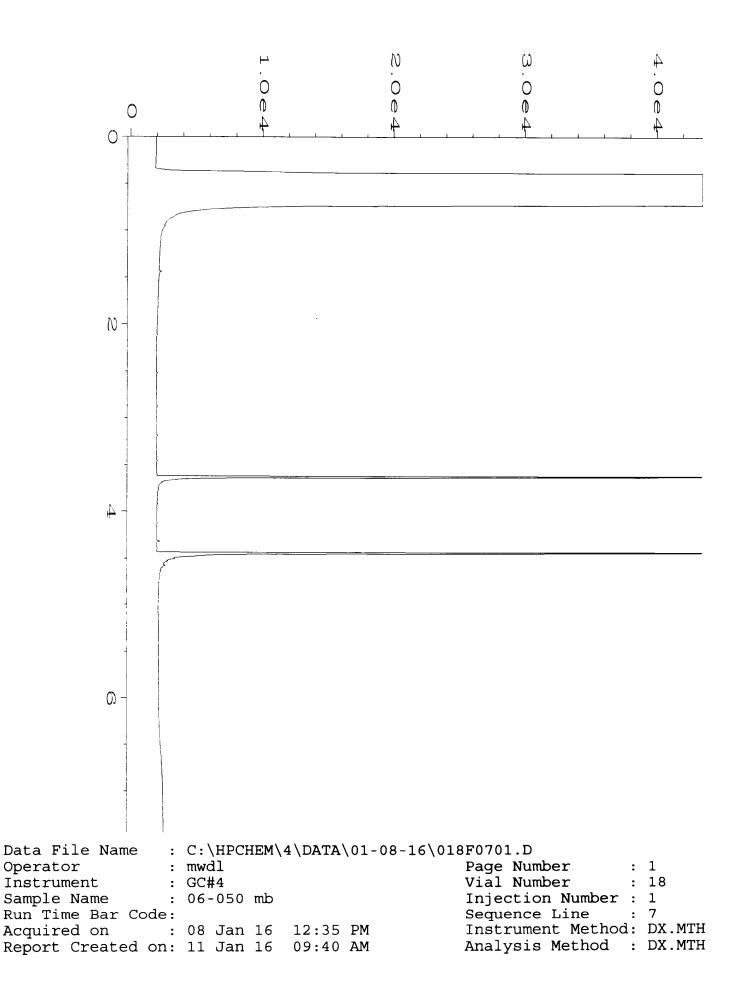
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

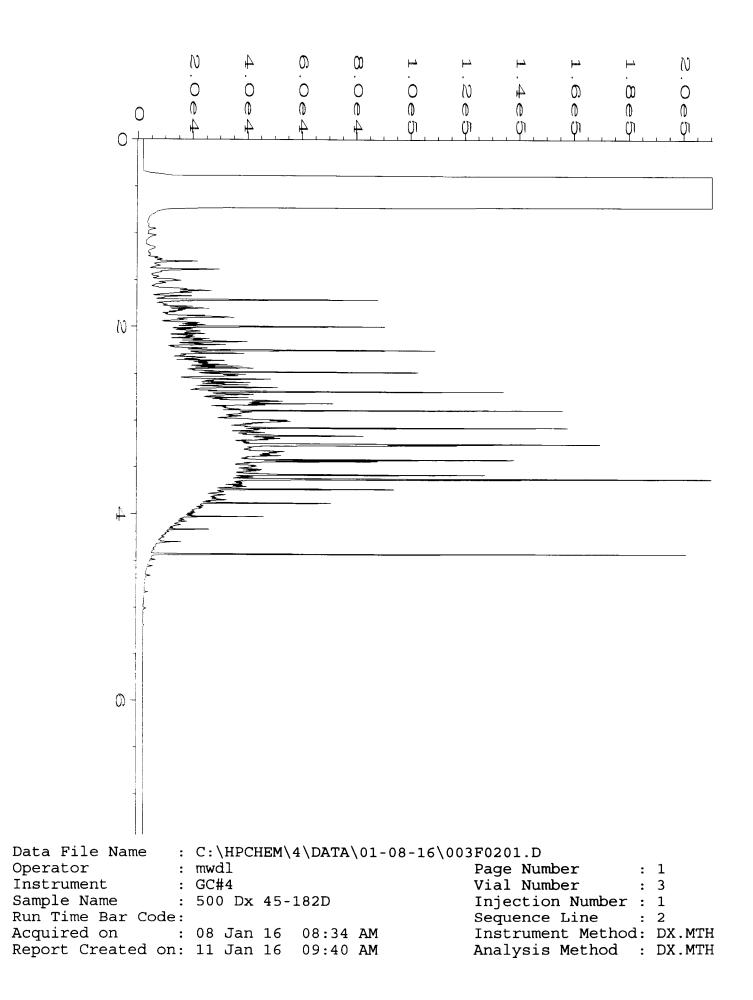
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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.







nd Report To <u>John Fund</u> nathan Loeffler		icek; cc:		SAMPLERS (si	gnature)	Z	_					<u>ge #</u> TURN	NAROUND TIME
ompany <u>SoundEarth Strate</u> ddress <u>2811 Fairview Avenu</u>		·	-	PROJECT NAME/NO. MADISON TACO TIME			• P	0#		Sto KRL Rust	andard JSH charg	l (2 Weeks) 18 hrs les authorized by: h Caceh	
City, State, ZIP <u>Seattle, Wast</u> hone # <u>(206) 306-1900</u> F		907	-		level detect	I 002-003 GEMS Y / N el detection limit of mg/kg for EDC.		Di Re	SAN ispose a sturn sa	APLE DISPOSAL after 30 days			
				<u> </u>	T				1			ANALY	SES REQUESTED
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	CVOCs by 826081	HOLD	Notes
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Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by	JONATHAN LOEFFLER	SOUNDEARTH	1/8/16	1404
Seattle, WA 98119-2029	Received by:	Tom SLAKSHAUF	FEREX OFFILE	19/11	14:04
Ph. (206) 285-8282	Relinquished	TOWN SAKSHAUG	LENEX OFTIF	1/2/1/2	14122
Fax (206) 283-5044	Received by Minu	Nhan phan	FEBI	18/16	1432
				- FEE	

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Friedman & Bruya, Inc. #601072

#### 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 14, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on January 8, 2016 from the SOU\_1002-003\_20160108, F&BI 601072 project. There are 7 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: Chuck Cacek, Jonathan Loeffler SOU0114R.DOC

#### ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on January 8, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160108, F&BI 601072 project. Samples were logged in under the laboratory ID's listed below.

SoundEarth Strategies
UST01-BTM-01-12
UST01-SSW01-11
UST01-WSW01-11
UST01-ESW01-11
UST01-NSW01-11
UST01-ESW02-16

The 8260C calibration standard failed the acceptance criteria for 1,1-dichloroethene. In addition, the laboratory control sample and laboratory control sample duplicate failed below the acceptance criteria. The data were flagged accordingly.

Methylene chloride failed below the acceptance criteria in the matrix spike sample. In addition, the methylene chloride laboratory control sample and laboratory control sample duplicate failed the relative percent difference acceptance criteria. The laboratory control samples met the percent acceptance criteria and methylene chloride was not detected in the samples, therefore the results were acceptable.

All other quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/14/16 Date Received: 01/08/16 Project: SOU\_1002-003\_20160108, F&BI 601072 Date Extracted: 01/08/16 Date Analyzed: 01/08/16

### 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)

Surrogato

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C <sub>25</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 48-168)
UST01-BTM-01-12 601072-01	4,500	<250	97
UST01-SSW01-11 601072-02	5,100	<250	99
UST01-WSW01-11 601072-03	8,000	<250	96
UST01-ESW01-11 601072-04	4,200	<250	103
UST01-NSW01-11 601072-05	150	<250	90
UST01-ESW02-16 601072-06	<50	<250	92
Method Blank 06-050 MB	<50	<250	94

# ENVIRONMENTAL CHEMISTS

# Analysis For Volatile Compounds By EPA Method 8260C SIM

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	UST01-BTN 01/08/16 01/11/16 01/11/16 Soil mg/kg (ppm	M-01-12 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20160108, F&BI 601072 601072-01 011115.D GCMS9 JS
Surrogates:		% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane	d4	95	50	150
Toluene-d8	4	102	50 50	150
4-Bromofluorobenzene		111	50	150
Compounds:		Concentration mg/kg (ppm)		
Vinyl chloride		< 0.01		
Chloroethane		< 0.01		
1,1-Dichloroethene		<0.02 ca		
Methylene chloride		< 0.5		
trans-1,2-Dichloroe	thene	< 0.01		
1,1-Dichloroethane		< 0.01		
cis-1,2-Dichloroethe	ene	< 0.01		
1,2-Dichloroethane	(EDC)	< 0.01		
1,1,1-Trichloroetha	ne	< 0.01		
Trichloroethene <0.		< 0.01		
Tetrachloroethene		< 0.01		

# ENVIRONMENTAL CHEMISTS

# Analysis For Volatile Compounds By EPA Method 8260C SIM

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blan Not Applicab 01/11/16 01/11/16 Soil mg/kg (ppm)	le	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20160108, F&BI 601072 06-059 mb 011109.D GCMS9 JS
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	90	50	150
Toluene-d8		98	50	150
4-Bromofluorobenz	ene	102	50	150
		Concentration		
Compounds:		mg/kg (ppm)		
Vinyl chloride		< 0.01		
Chloroethane		< 0.01		
1,1-Dichloroethene		<0.02 ca		
Methylene chloride		< 0.5		
trans-1,2-Dichloroe	thene	< 0.01		
1,1-Dichloroethane		< 0.01		
cis-1,2-Dichloroethe	ene	< 0.01		
		< 0.01		
1,1,1-Trichloroetha	ne	< 0.01		
Trichloroethene		< 0.01		
Tetrachloroethene		< 0.01		

### ENVIRONMENTAL CHEMISTS

Date of Report: 01/14/16 Date Received: 01/08/16 Project: SOU\_1002-003\_ 20160108, F&BI 601072

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx

Laboratory Code:	601046-05 (Matrix	c Spike)					
-		-	Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel	mg/kg (ppm)	500	<50	117	111	73-135	5
Laboratory Code:	Laboratory Contro	ol Samp					
			Percent				
		Spike	Recovery	y Accepta	ance		
Analyte	Reporting Units	Level	LCS	Criter	ria		
Diesel	mg/kg (ppm)	500	119	74-13	89		

### ENVIRONMENTAL CHEMISTS

### Date of Report: 01/14/16 Date Received: 01/08/16 Project: SOU\_1002-003\_ 20160108, F&BI 601072

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C SIM

Laboratory Code: 601074-01 (Matrix Spike)

	Reporting	Spike	Sample Result	Percent Recovery	Acceptance
Analyte	Units	Level	(Wet wt)	MS	Criteria
Vinyl chloride	mg/kg (ppb)	0.2	< 0.01	52	50-150
Chloroethane	mg/kg (ppb)	0.2	< 0.01	62	50-150
1,1-Dichloroethene	mg/kg (ppb)	0.2	<0.02 ca	80	50-150
Methylene chloride	mg/kg (ppb)	0.2	< 0.5	18 vo	50-150
trans-1,2-Dichloroethene	mg/kg (ppb)	0.2	< 0.01	65	50-150
1,1-Dichloroethane	mg/kg (ppb)	0.2	< 0.01	93	50-150
cis-1,2-Dichloroethene	mg/kg (ppb)	0.2	< 0.01	84	50-150
1,2-Dichloroethane (EDC)	mg/kg (ppb)	0.2	< 0.01	71	50-150
1,1,1-Trichloroethane	mg/kg (ppb)	0.2	< 0.01	80	50-150
Trichloroethene	mg/kg (ppb)	0.2	< 0.01	82	50-150
Tetrachloroethene	mg/kg (ppb)	0.2	< 0.01	94	50-150

Laboratory Code: Laboratory Control Sample

Eaboratory coue. Eaboratory	e entre et Bumpio	-	<b>D</b> .	<b>D</b> .		
			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 0.20)
Vinyl chloride	mg/kg (ppb)	0.2	78	81	70-130	4
Chloroethane	mg/kg (ppb)	0.2	80	85	70-130	6
1,1-Dichloroethene	mg/kg (ppb)	0.2	57 vo ca	60 vo ca	70-130	5
Methylene chloride	mg/kg (ppb)	0.2	83	111	70-130	29 vo
trans-1,2-Dichloroethene	mg/kg (ppb)	0.2	120	111	70-130	8
1,1-Dichloroethane	mg/kg (ppb)	0.2	79	91	70-130	14
cis-1,2-Dichloroethene	mg/kg (ppb)	0.2	92	100	70-130	8
1,2-Dichloroethane (EDC)	mg/kg (ppb)	0.2	79	90	70-130	13
1,1,1-Trichloroethane	mg/kg (ppb)	0.2	96	102	70-130	6
Trichloroethene	mg/kg (ppb)	0.2	91	97	70-130	6
Tetrachloroethene	mg/kg (ppb)	0.2	99	99	70-130	0

### ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

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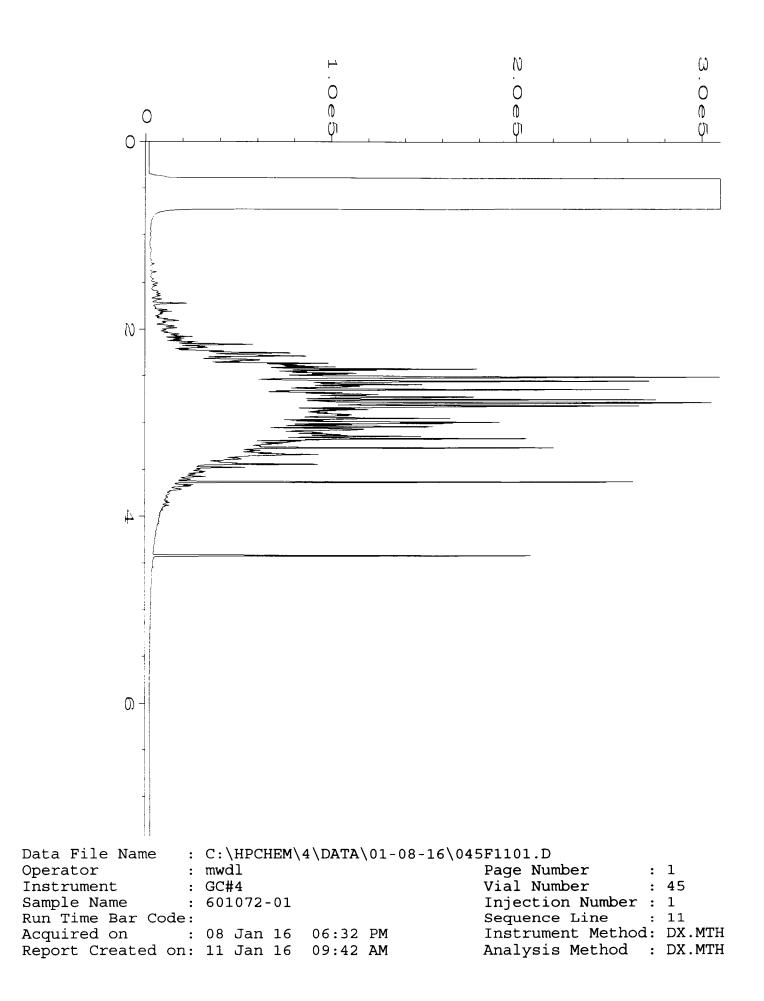
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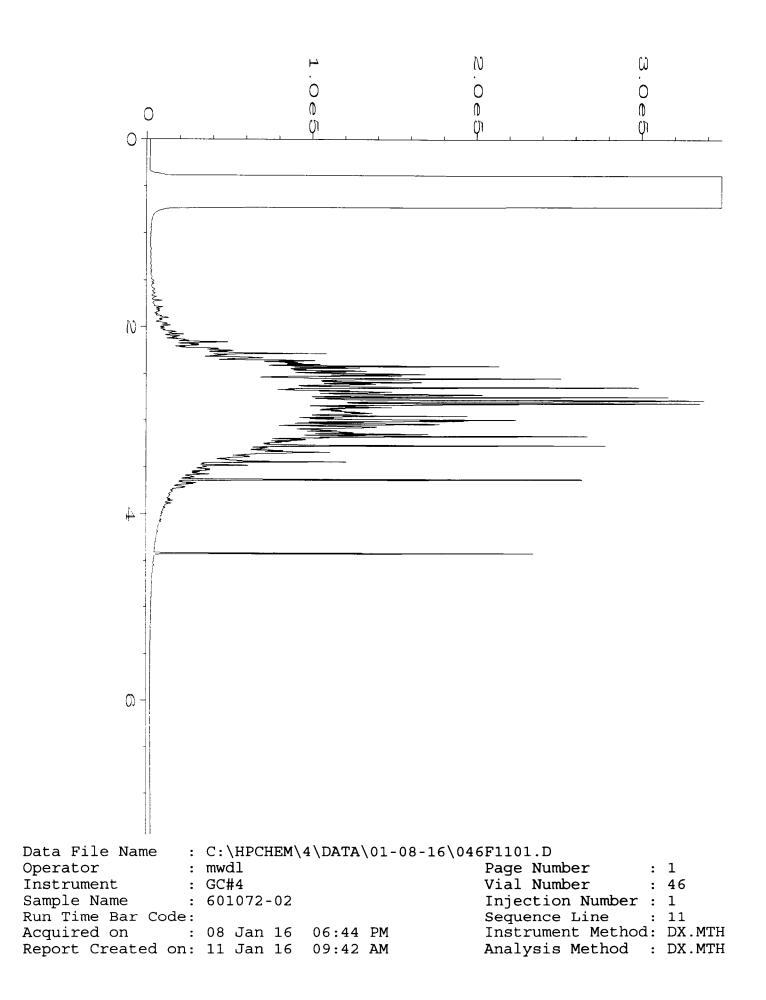
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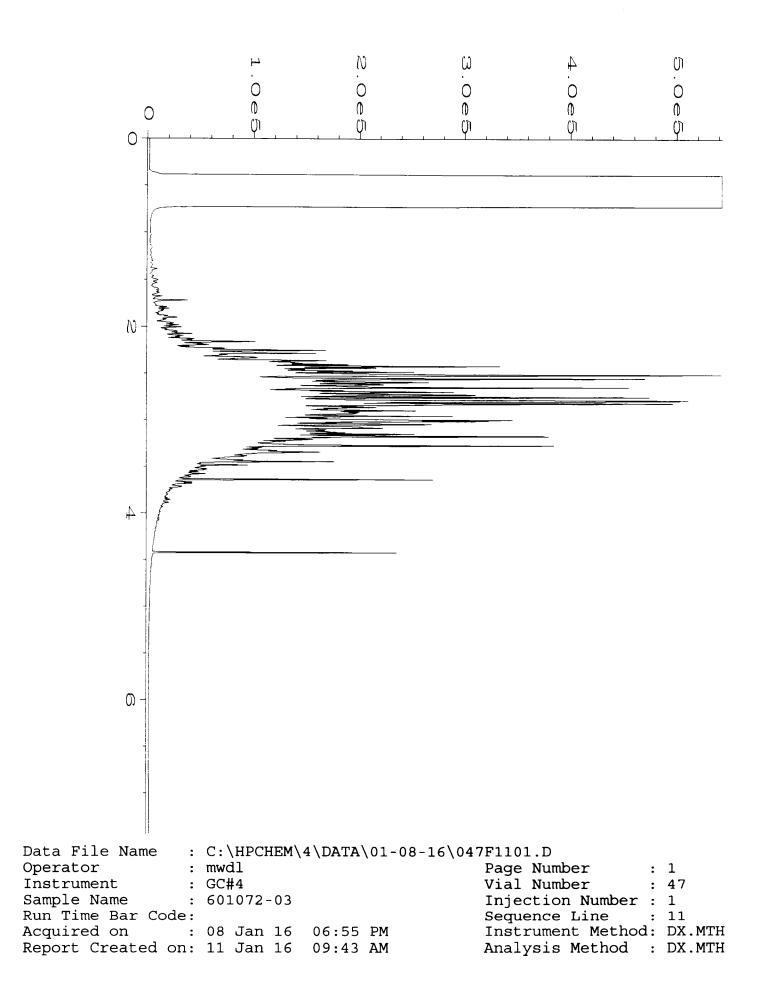
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

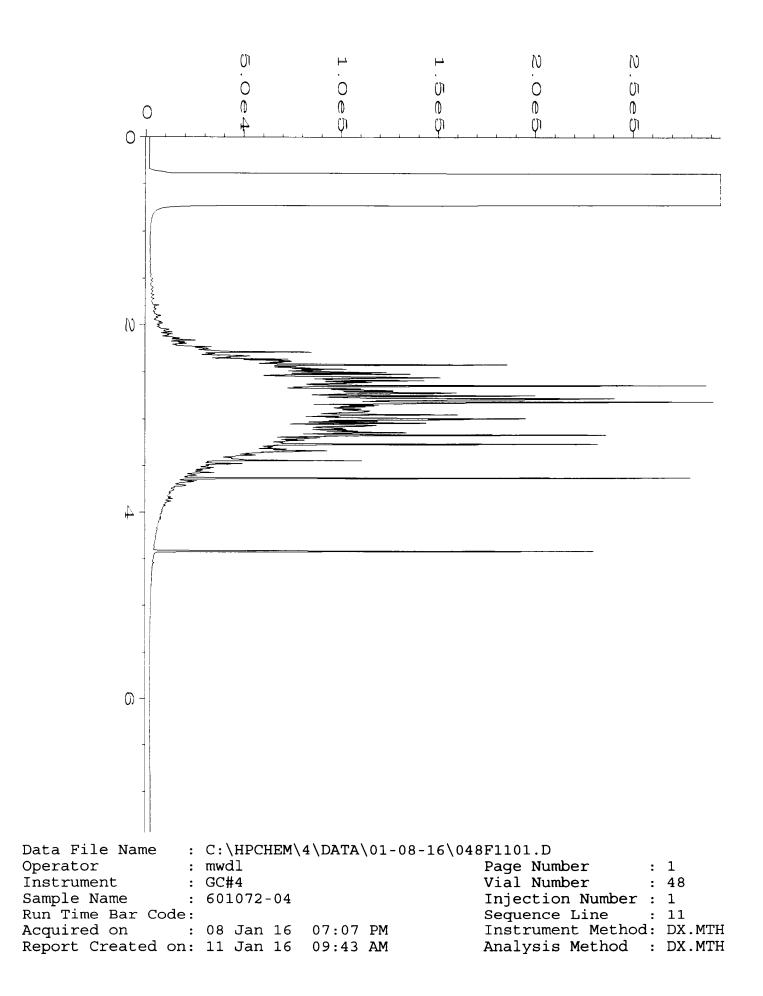
vo - The value reported fell outside the control limits established for this analyte.

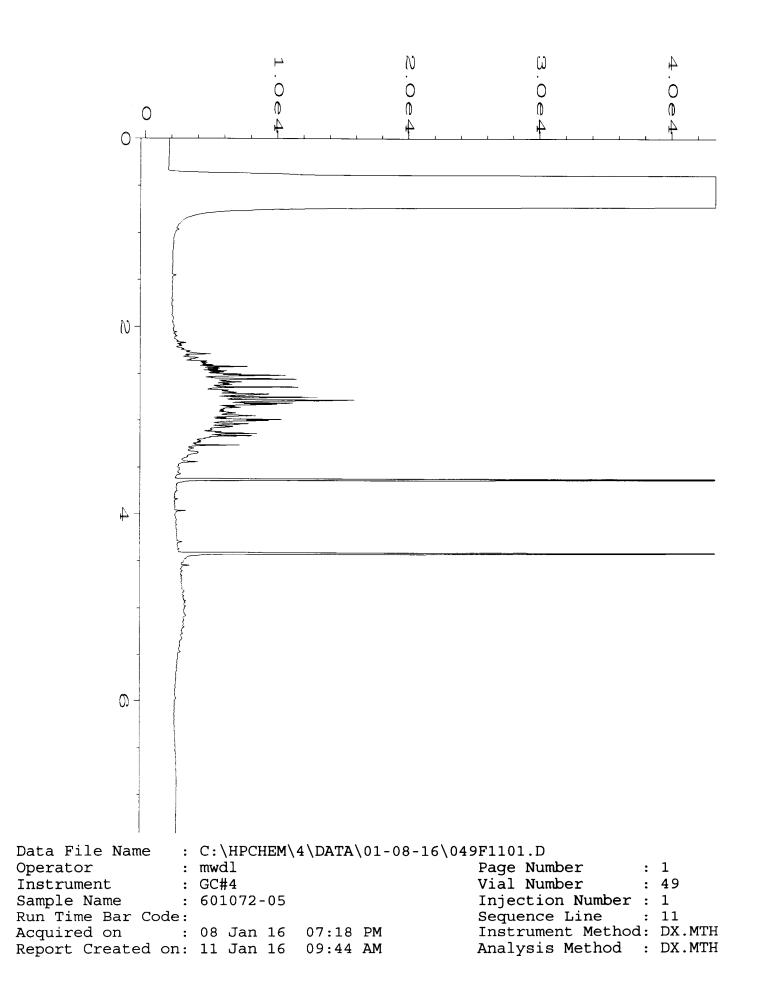
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

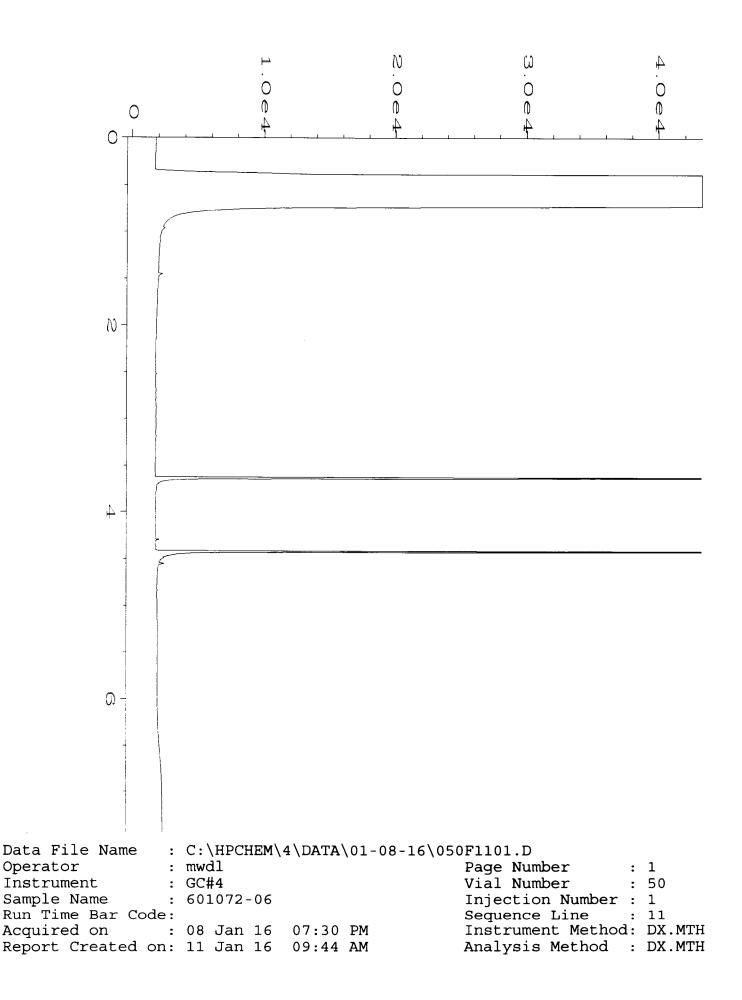


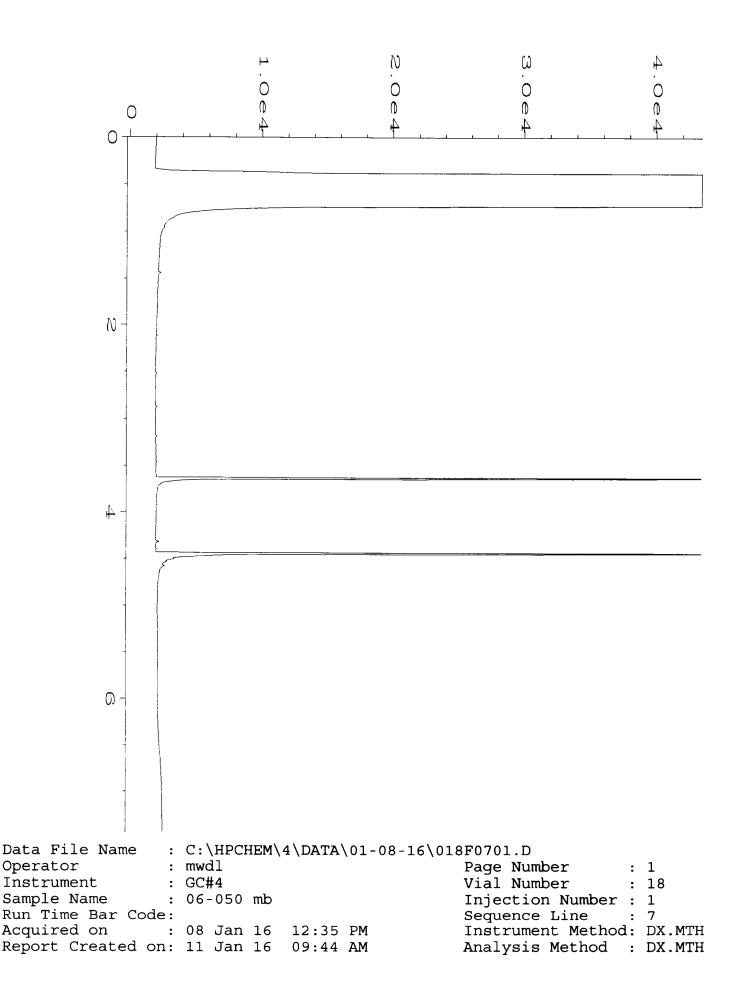


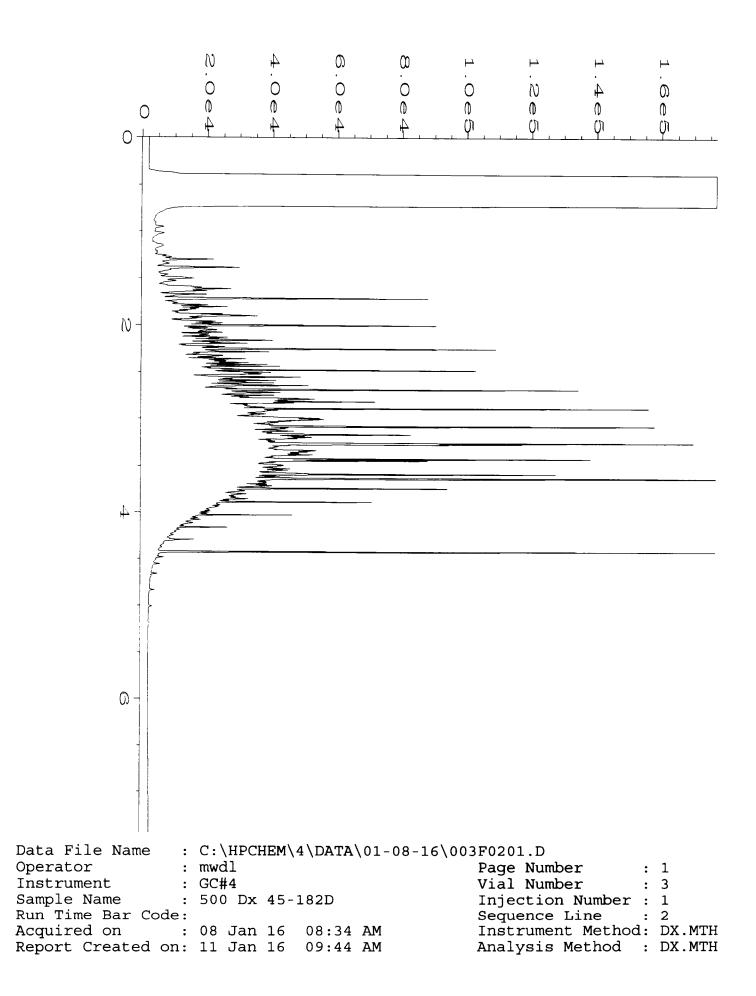












.) 60	1072					USTODY	ME	Ξ Ι	18	116		•	- 1
Send Report To <u>John Func</u> Jonathan Loeffler	lerburk, Chuck Co	icek; cc:		SAMPLERS (si	In for the	Z						<u>ge #</u> TUR	NAROUND TIME
Company_SoundEarth Strate	egies, Inc.		_	PROJECT NA	ME/NO.			• P	0#		Ste	andard	d (2 Weeks)
Address_2811 Fairview Avenue East, Suite 2000			-	MADISON TACO TIME 1002-003						KRUSH <u>48hr</u> Rush charges authorized by: Churck Cacek			
City, State, ZIP <u>Seattle, Was</u>	hington 98102		-	REMARKS									MPLE DISPOSAL
Phone # <u>(206) 306-1900</u>	Fax # <u>(206) 306-1</u>	907		<sup>1</sup> low 0	level detect 01 mg/kg fo	ion limit of rEDC <b>*d</b> ire	1 spage	GEN	AS Y / I		Re	aturn sc	after 30 days amples with instructions
			1		1	r	1		г			ANAL	SES REQUESTED
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by <b>8021B</b>	CVOCs by 826081 F		Notes
USTO1-BTMU1-12	USTOI BTM	12'	101 A-	E1/8/16	1026	SOIL	5	X		<b>–</b>	×		
USTO1-55W01-11	USTOISEN	11'	02	1	1028	1	5	X					
USTOI-WSWOI-11	USTOI WSW	u'	B	<u>+</u>	1031		5	X	<u> </u>		+		
USTOI-ESWOI-11	USTOIESW	111	04	<u>├</u>	1034		5	×					
USTOI-NSWOI-11	USTOI NSW	' (I'	05		1037		5	X			1		
USTOI - ESWO2 - 16	USTOI ESW	16'	06 1	1	1151		5	X					
					all								
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an an ann an		<del></del>											
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Samples received at \_\_\_\_\_°C

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by	JONATHAN LOEFFIER	SOUNDEARTH	1/8/16	1404
Seattle, WA 98119-2029	Received by:	Tom SAKSHAUL	FEDEX OFFILE	1/8/11	14:04
Ph. (206) 285-8282	Relinquished by	SAVS WALL	FEDEX OFFICE	1/2/10	14:27
Fax (206) 283-5044	Received by:	Nhan Phan	Fe BI	1/8/16	1432
				<u>"""""""""""""""""""""""""""""""""""""</u>	4

Friedman & Bruya, Inc. #601073

#### 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 14, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on January 8, 2016 from the SOU\_1002-003\_20160108, F&BI 601073 project. There are 7 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: Chuck Cacek, Jonathan Loeffler SOU0114R.DOC

### ENVIRONMENTAL CHEMISTS

#### CASE NARRATIVE

This case narrative encompasses samples received on January 8, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160108, F&BI 601073 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies				
601073 -01	VE16-N47-08				

The 8260C calibration standard failed the acceptance criteria for 1,1-dichloroethene. In addition, the laboratory control sample and laboratory control sample duplicate failed below the acceptance criteria. The data were flagged accordingly.

Methylene chloride failed below the acceptance criteria in the matrix spike sample. In addition, the methylene chloride laboratory control sample and laboratory control sample duplicate failed the relative percent difference acceptance criteria. The laboratory control samples met the percent acceptance criteria and methylene chloride was not detected in the samples, therefore the results were acceptable.

All other quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/14/16 Date Received: 01/08/16 Project: SOU\_1002-003\_20160108, F&BI 601073 Date Extracted: 01/08/16 Date Analyzed: 01/08/16

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C <sub>10</sub> -C <sub>25</sub> )	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 48-168)
VE16-N47-08 601073-01	10,000	6,200	86
Method Blank 06-050 MB	<50	<250	94

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	VE16-N47-0 01/08/16 01/11/16 01/11/16 Soil mg/kg (ppm)	8 ) Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20160108, F&BI 601073 601073-01 011116.D GCMS9 JS
Surrogates:		% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane	-d4	95	50	150
Toluene-d8	41	99	50 50	150
4-Bromofluorobenz	ene	99	50	150
		Concentration		
Compounds:		mg/kg (ppm)		
Vinyl chloride		< 0.01		
Chloroethane		< 0.01		
1,1-Dichloroethene		<0.02 ca		
Methylene chloride		<0.5		
trans-1,2-Dichloroe	thene	< 0.01		
1,1-Dichloroethane		< 0.01		
cis-1,2-Dichloroethe		< 0.01		
1,2-Dichloroethane		< 0.01		
1,1,1-Trichloroetha	ne	< 0.01		
Trichloroethene		< 0.01		
Tetrachloroethene		< 0.01		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blan Not Applicab 01/11/16 01/11/16 Soil mg/kg (ppm)	le	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20160108, F&BI 601073 06-059 mb 011111.D GCMS9 JS
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	90	50	150
Toluene-d8		98	50	150
4-Bromofluorobenz	ene	102	50	150
	(	Concentration		
Compounds:		mg/kg (ppm)		
Vinyl chloride		<0.01		
Chloroethane		< 0.01		
1,1-Dichloroethene		<0.02 ca		
Methylene chloride		<0.5		
trans-1,2-Dichloroe	thene	< 0.01		
1,1-Dichloroethane		< 0.01		
cis-1,2-Dichloroethe	ene	< 0.01		
1,2-Dichloroethane	(EDC)	< 0.01		
1,1,1-Trichloroetha	ne	< 0.01		
Trichloroethene		< 0.01		
Tetrachloroethene		<0.01		

### ENVIRONMENTAL CHEMISTS

Date of Report: 01/14/16 Date Received: 01/08/16 Project: SOU\_1002-003\_20160108, F&BI 601073

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx

Laboratory Code:	601046-05 (Matrix	c Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel	mg/kg (ppm)	500	<50	117	111	73-135	5
Laboratory Code:	Laboratory Contro	ol Samp	le				
			Percent				
		Spike	Recovery	y Accepta	ince		
Analyte	Reporting Units	Level	LCS	Criter	ia		
Diesel	mg/kg (ppm)	500	119	74-13	9		

### ENVIRONMENTAL CHEMISTS

### Date of Report: 01/14/16 Date Received: 01/08/16 Project: SOU\_1002-003\_ 20160108, F&BI 601073

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C SIM

Laboratory Code: 601074-01 (Matrix Spike)

	,		Sample	Percent	
	Reporting	Spike	Result	Recovery	Acceptance
Analyte	Units	Level	(Wet wt)	MS	Criteria
Vinyl chloride	mg/kg (ppb)	0.2	< 0.01	52	50-150
Chloroethane	mg/kg (ppb)	0.2	< 0.01	62	50-150
1,1-Dichloroethene	mg/kg (ppb)	0.2	<0.02 ca	80	50-150
Methylene chloride	mg/kg (ppb)	0.2	< 0.5	18 vo	50-150
trans-1,2-Dichloroethene	mg/kg (ppb)	0.2	< 0.01	65	50-150
1,1-Dichloroethane	mg/kg (ppb)	0.2	< 0.01	93	50-150
cis-1,2-Dichloroethene	mg/kg (ppb)	0.2	< 0.01	84	50-150
1,2-Dichloroethane (EDC)	mg/kg (ppb)	0.2	< 0.01	71	50-150
1,1,1-Trichloroethane	mg/kg (ppb)	0.2	< 0.01	80	50-150
Trichloroethene	mg/kg (ppb)	0.2	< 0.01	82	50-150
Tetrachloroethene	mg/kg (ppb)	0.2	< 0.01	94	50-150

Laboratory Code: Laboratory Control Sample

Laboratory couct Laboratory	control campio		Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	<b>U</b> nits	Level	LCS	LCSD	Criteria	(Limit 0.20)
Vinyl chloride	mg/kg (ppb)	0.2	78	81	70-130	4
Chloroethane	mg/kg (ppb)	0.2	80	85	70-130	6
1,1-Dichloroethene	mg/kg (ppb)	0.2	57 vo ca	60 vo ca	70-130	5
Methylene chloride	mg/kg (ppb)	0.2	83	111	70-130	29 vo
trans-1,2-Dichloroethene	mg/kg (ppb)	0.2	120	111	70-130	8
1,1-Dichloroethane	mg/kg (ppb)	0.2	79	91	70-130	14
cis-1,2-Dichloroethene	mg/kg (ppb)	0.2	92	100	70-130	8
1,2-Dichloroethane (EDC)	mg/kg (ppb)	0.2	79	90	70-130	13
1,1,1-Trichloroethane	mg/kg (ppb)	0.2	96	102	70-130	6
Trichloroethene	mg/kg (ppb)	0.2	91	97	70-130	6
Tetrachloroethene	mg/kg (ppb)	0.2	99	99	70-130	0

### ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

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

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

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

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

cf - The sample was centrifuged prior to analysis.

 ${\rm d}$  - 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.

 $\ensuremath{\text{ip}}$  - 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.

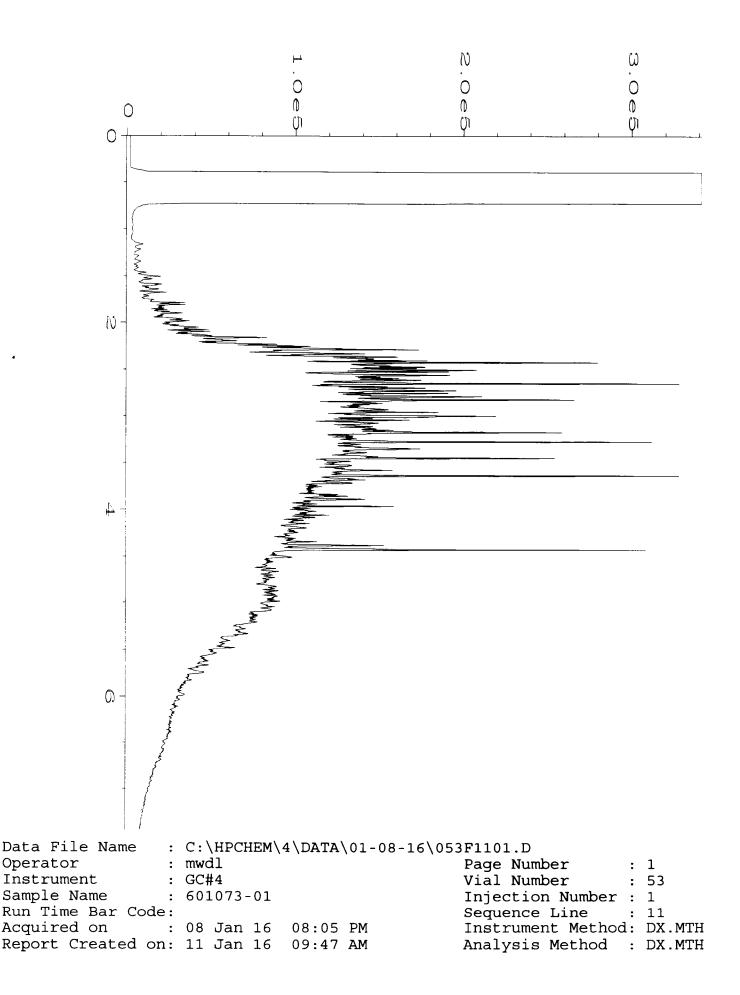
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

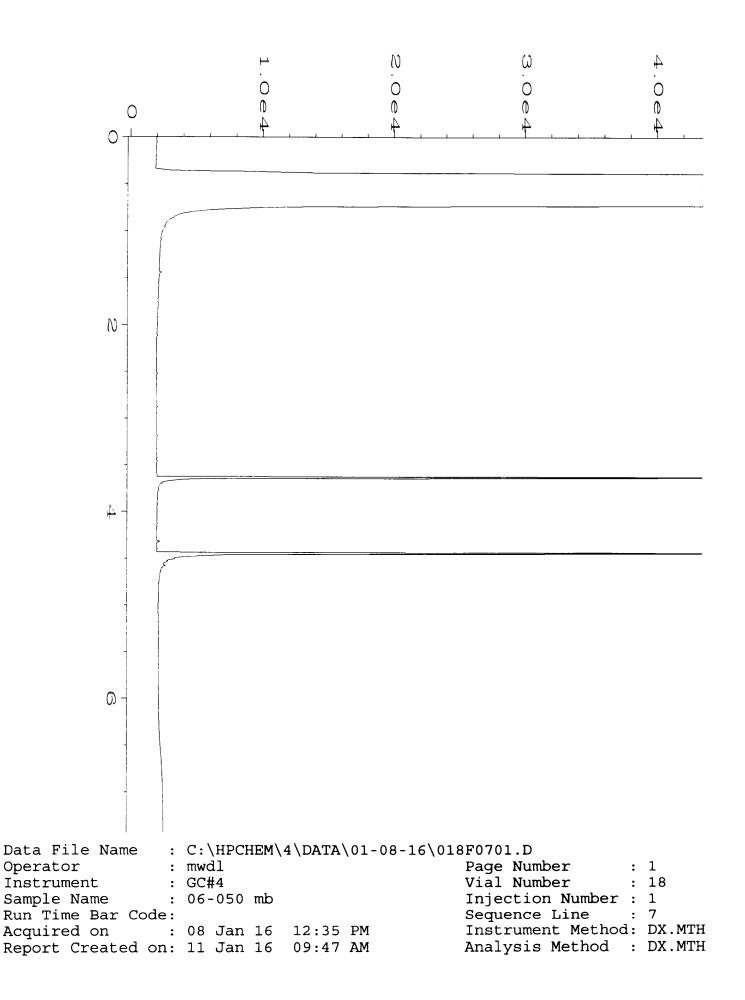
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

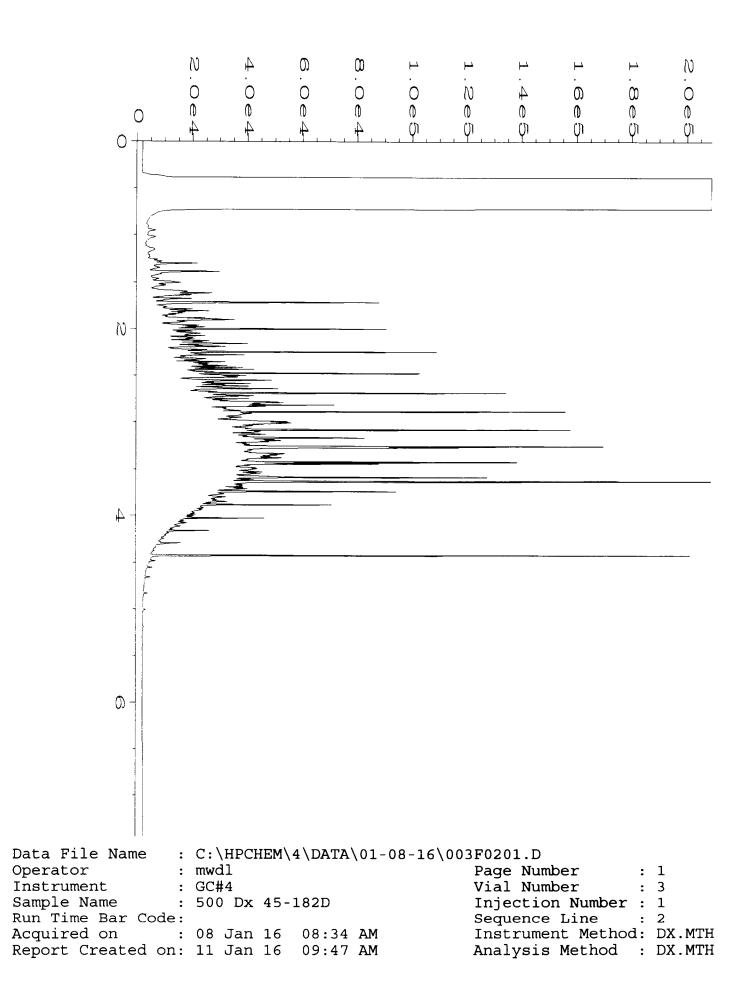
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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.







( <u>GO1073</u> Send Report To <u>John Funderburk, Chuck Cacek; cc:</u> Jonathan Loeffler Company <u>SoundEarth Strategies, Inc.</u> Address <u>2811 Fairview Avenue East, Suite 2000</u> City, State, ZIP <u>Seattle, Washington 98102</u>				ME/NO. ADISON TACO			 P(	0#		Star KRUS Rush a Disr	TURN ndard GH charge  SAM pose a	(2 Weeks) 18 Jury 20 Cece K PLE DISPOSAL Iter 30 days	/U/ ///
<u> (200) 300- (</u>	70/	- [											
••••••				•						A	NALY	SES REQUESTED	
Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	CVOCs by 826081		Notes	
VE16 - N47	8'	01AE	118/16	1127	SOIL	5	×			X			
				H.	1/8/16								
	Urk, Chuck Co 5, Inc. ast, Suite 2000 1ton 98102 #(206) 306-1 Sample Location	Urk, Chuck Cacek; cc: s, Inc. ast, Suite 2000 ton 98102 # (206) 306-1907 Sample Location Sample Depth	T       Jurk, Chuck Cacek; cc:         urk, Chuck Cacek; cc:         s, Inc.         ast, Suite 2000         ast, Suite 2000         ton 98102         #(206) 306-1907         Sample       Sample         Location       Depth         Lob       ID	T       SAMPLERS (signature)         Jrk, Chuck Cacek; cc:       SAMPLERS (signature)         s, Inc.       PROJECT NAT         ast, Suite 2000       M         ton 98102       REMARKS         #_(206) 306-1907       1 low         Sample       Sample         Location       Depth         ID       Date         Sampled       Sampled	Jurk, Chuck Cacek; cc:       SAMPLERS (signature)         Jurk, Chuck Cacek; cc:       PROJECT NAME/NO.         Jurk, Suite 2000       MADISON TACCONSTRUCT         Apple 102       MADISON TACCONSTRUCT         # (206) 306-1907       I low level detection         Sample Location       Sample Depth         Lab       Date         Sample Location       Sample	T       SAMPLERS (signature)         Jrk, Chuck Cacek; cc:       PROJECT NAME/NO.         Sample ton 98102       PROJECT NAME/NO.         # (206) 306-1907       Madison TACO TIME 1002-003         ** (206) 306-1907       * low level detection limit of 0.01 mg/kg for EDC.         Sample Location       Sample Depth         Lob ID       Date Sampled         VE16 - N47       3'         0/A E 1/8/16       1/2.7         Solution       Solution         VE16 - N47       3'         0/A E 1/8/16       1/2.7         Solution       Solution	Jrk, Chuck Cacek; cc:       SAMPLERS (signature)         S. Inc.       PROJECT NAME/NO.         ast. Suite 2000       MADISON TACO TIME         ton 98102       REMARKS         #_(206) 306-1907       I low level detection limit of         0.01 mg/kg for EDC.       0.01 mg/kg for EDC.         Sample       Lab       Date         Sample       Lab       Sampled         ID       Sampled       Time         Matrix       # of         Jars	Jrk. Chuck Cacek; cc:       SAMPLERS (signature)         s. Inc.       PROJECT NAME/NO.         ast. Suite 2000       MADISON TACO TIME         iton 98102       REMARKS         #_ (206) 306-1907       I low level detection limit of         0.01 mg/kg for EDC.       GEM         Sample       Sample         Lab       Date         Sample       Sampled         VE16 - N47       8 <sup>1</sup> 01 <sup>A</sup> E       1/8/16         01 <sup>A</sup> E       1/8/16         ALL       5	SAMPLERS (signature)       SAMPLERS (signature)         s. Inc.       PROJECT NAME/NO.         ast, Suite 2000       PROJECT NAME/NO.         ton 98102       MADISON TACO TIME         # (206) 306-1907       I low level detection limit of         0.01 mg/kg for EDC.       GEMS Y / N         Sample       Sample         Location       Depth         ID       Date         Sampled       Sampled         VE16 - N47       3'         0/A E       1/8/16         Auth       501 L         Source       Sampled         Auth       Source	SAMPLERS (signature)       SAMPLERS (signature)         st. Inc.       PROJECT NAME/NO.         ast, Suite 2000       MADISON TACO TIME         iton 98102       MADISON TACO TIME         #       (206) 306-1907         ' low level detection limit of       0.01 mg/kg for EDC.         Sample       Lab         Location       Depth         ID       Date         Sampled       Sampled         VE16 - N47       3'         O1 * E 1/8/16       1/2 * SO1 L         Auth       Source         Auth       Source	Jrk. Chuck Cacek: cc:       SAMPLERS (signature)       Just. Chuck Cacek: cc:       Just. Chuck Cacek: cc:         S. Inc.       PROJECT NAME/NO.       PO #       Stat Krus         ast. Suite 2000       MADISON TACO TIME       1002-003         iton 98102       REMARKS       GEMS Y / N         * (206) 306-1907       ' low level detection limit of 0.01 mg/kg for EDC.       GEMS Y / N         Sample       Lab       Date       Time         Sample       Lab       Date       Sampled         Location       Depth       ID       Date       Sampled         VE16 - N47       3'       0/A T 1/8/16       1/2 T       SO/L       5       X         ALL       ALL       ALL       ALL       ALL       ALL       ALL	SAMPLERS (signature]         Togot         SAMPLERS (signature]         TURN         Standard         SAMPLERS (signature]         PROJECT NAME/NO.         PO #         Standard         MADISON TACO TIME         1002-003         THE PROJECT NAME/NO.         PO #         MADISON TACO TIME         1002-003         GEMS Y / N         AMALYS         AMALYS         AMAILYS         ANALYS         Sample         Lab         Date         Sample         Lab         Date         Sample         Lab         Date         Sample         Lab         Date         Sample         Addt         Addt         Addt         Sample      <	Jrk, Chuck Cacek; cc:       SAMPLERS (signature)

Samples received at  $2^{\circ}$  °C

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	1/8/16	1404
Seattle, WA 98119-2029	Received by:	Tom SAKSHAUG	FEDEX OFFICE	1/4//6	14:04
Ph. (206) 285-8282	Relinquished by	5 Jon SAKSHAUG	FEDEX OFFICE	18/16	14:32
Fax (206) 283-5044	Received by:	Nhan Phan	FEBI	1/8/16	1432
·		$\mathbf{N}$			

Friedman & Bruya, Inc. #601074

#### 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 14, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on January 8, 2016 from the SOU\_1002-03\_20160108, F&BI 601074 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 c: Chuck Cacek, Jonathan Loeffler SOU0114R.DOC

### ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on January 8, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-03\_ 20160108, F&BI 601074 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
601074 -01	VE16-N24-06
601074 -02	VE18-N26-06

The 8260C calibration standard failed the acceptance criteria for 1,1-dichloroethene. In addition, the laboratory control sample and laboratory control sample duplicate failed below the acceptance criteria. The data were flagged accordingly.

Methylene chloride failed below the acceptance criteria in the matrix spike sample. In addition, the methylene chloride laboratory control sample and laboratory control sample duplicate failed the relative percent difference acceptance criteria. The laboratory control samples met the percent acceptance criteria and methylene chloride was not detected in the samples, therefore the results were acceptable.

All other quality control requirements were acceptable.

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	VE16-N24-0 01/08/16 01/11/16 01/11/16 Soil mg/kg (ppm)	6 Dry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-03_ 20160108, F&BI 601074 601074-01 011117.D GCMS9 JS
Surrogates:		% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane	-d4	92	50	150
Toluene-d8		100	50	150
4-Bromofluorobenz	ene	97	50	150
		Concentration		
Compounds:		mg/kg (ppm)		
Vinyl chloride		< 0.01		
Chloroethane		< 0.01		
1,1-Dichloroethene		<0.02 ca		
Methylene chloride		< 0.5		
trans-1,2-Dichloroe	thene	< 0.01		
1,1-Dichloroethane		< 0.01		
cis-1,2-Dichloroethe	ene	< 0.01		
1,2-Dichloroethane	(EDC)	< 0.01		
1,1,1-Trichloroetha	ne	< 0.01		
Trichloroethene		< 0.01		
Tetrachloroethene		< 0.01		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	VE18-N26-0 01/08/16 01/11/16 01/11/16 Soil mg/kg (ppm)		Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-03_ 20160108, F&BI 601074 601074-02 011118.D GCMS9 JS
Surrogates: 1,2-Dichloroethane Toluene-d8 4-Bromofluorobenz		% Recovery: 95 100 99	Lower Limit: 50 50 50	Upper Limit: 150 150 150
Compounds:		Concentration mg/kg (ppm)		
Vinyl chloride Chloroethane 1,1-Dichloroethene Methylene chloride trans-1,2-Dichloroet 1,1-Dichloroethane cis-1,2-Dichloroethane 1,2-Dichloroethane 1,1,1-Trichloroethane Trichloroethene Tetrachloroethene	thene ene (EDC)	<0.01 <0.02 ca <0.5 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01		

# ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blank Not Applicable 01/11/16 01/11/16 Soil mg/kg (ppm) Dr	ry Weight	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-03_ 20160108, F&BI 601074 06-059 mb 011111.D GCMS9 JS
Sumagatasi	0/	Decovoru	Lower Limit:	Upper Limit:
Surrogates:		Recovery:		
1,2-Dichloroethane	-04	90 98	50 50	150
Toluene-d8			50 50	150
4-Bromofluorobenz	ene	102	50	150
	Co	ncentration		
Compounds:	m	g/kg (ppm)		
Vinyl chloride		< 0.01		
Chloroethane		< 0.01		
1,1-Dichloroethene		<0.02 ca		
Methylene chloride		<0.5		
trans-1,2-Dichloroe	thene	< 0.01		
1,1-Dichloroethane		< 0.01		
cis-1,2-Dichloroethe	ene	< 0.01		
1,2-Dichloroethane	(EDC)	< 0.01		
1,1,1-Trichloroetha	ne	< 0.01		
Trichloroethene		< 0.01		
Tetrachloroethene		< 0.01		

### ENVIRONMENTAL CHEMISTS

### Date of Report: 01/14/16 Date Received: 01/08/16 Project: SOU\_1002-03\_20160108, F&BI 601074

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C SIM

Laboratory Code: 601074-01 (Matrix Spike)

	,		Sample	Percent	
	Reporting	Spike	Result	Recovery	Acceptance
Analyte	Units	Level	(Wet wt)	MS	Criteria
Vinyl chloride	mg/kg (ppb)	0.2	< 0.01	52	50-150
Chloroethane	mg/kg (ppb)	0.2	< 0.01	62	50-150
1,1-Dichloroethene	mg/kg (ppb)	0.2	<0.02 ca	80	50-150
Methylene chloride	mg/kg (ppb)	0.2	< 0.5	18 vo	50-150
trans-1,2-Dichloroethene	mg/kg (ppb)	0.2	< 0.01	65	50-150
1,1-Dichloroethane	mg/kg (ppb)	0.2	< 0.01	93	50-150
cis-1,2-Dichloroethene	mg/kg (ppb)	0.2	< 0.01	84	50-150
1,2-Dichloroethane (EDC)	mg/kg (ppb)	0.2	< 0.01	71	50-150
1,1,1-Trichloroethane	mg/kg (ppb)	0.2	< 0.01	80	50-150
Trichloroethene	mg/kg (ppb)	0.2	< 0.01	82	50-150
Tetrachloroethene	mg/kg (ppb)	0.2	< 0.01	94	50-150

Laboratory Code: Laboratory Control Sample

Laboratory Couct Laboratory	control sample		Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 0.20)
Vinyl chloride	mg/kg (ppb)	0.2	78	81	70-130	4
Chloroethane	mg/kg (ppb)	0.2	80	85	70-130	6
1,1-Dichloroethene	mg/kg (ppb)	0.2	57 vo ca	60 vo ca	70-130	5
Methylene chloride	mg/kg (ppb)	0.2	83	111	70-130	29 vo
trans-1,2-Dichloroethene	mg/kg (ppb)	0.2	120	111	70-130	8
1,1-Dichloroethane	mg/kg (ppb)	0.2	79	91	70-130	14
cis-1,2-Dichloroethene	mg/kg (ppb)	0.2	92	100	70-130	8
1,2-Dichloroethane (EDC)	mg/kg (ppb)	0.2	79	90	70-130	13
1,1,1-Trichloroethane	mg/kg (ppb)	0.2	96	102	70-130	6
Trichloroethene	mg/kg (ppb)	0.2	91	97	70-130	6
Tetrachloroethene	mg/kg (ppb)	0.2	99	99	70-130	0

### ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

Send Report ToJohn Fung Jonathan Loeffler Company_SoundEarth Strate Address_2811 Fairview Aven	egies, Inc.		-	SAMPLERS (si	ME/NO!				0 #		St RI	andar JSH	of RNAROUND TIM d (2 Weeks) d 8 Jury.	
City, State, ZIP <u>Seattle, Wa</u> g	ZIPSeattle, Washington 98102							GEN	4S Y / M	N	Di	SA SA spose sturn s	ges authorized <u>JCK</u> <u>(ACC K</u> MPLE DISPOSAL after 30 days amples with instruction	
			<u> </u>	1		I	1		T		· · · · · ·	ANAL	YSES REQUEST	ED
Sample ID	Sampl <del>e</del> Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 80218	CVOCs by 826081 *	HOLD	Notes	
E16 - N24 - 06	VE16 - N 24	6'	01 A-1	1/7/16	1126	SOIL	5				X		direct spa	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
E18-N26-06	VE18-N2Ú	6'		017/16	1129	SOIL	5	<b> </b>			X		direct spor	ye
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3012 16th Avenue West	Relinquished by:	JONATHAN LOEFFLER	SUNDEARTH	1/8/16	1404
Seattle, WA 98119-2029	Received by:	Tom SLAKSHAUG	FEDEX OFFILE	1/2/16	14:04
Ph. (206) 285-8282	Relinquished by:	Tom SAKSHAUG	FEDEX OFFICE	1/8/16	14:32
Fax (206) 283-5044	Received by: With	Nhan Phan	FEBI	11R/16	1432
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Friedman & Bruya, Inc. #601101

#### 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 15, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on January 11, 2016 from the SOU\_1002-003\_20160111, F&BI 601101 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: Chuck Cacek, Jonathan Loeffler SOU0115R.DOC

### ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on January 11, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160111, F&BI 601101 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	SoundEarth Strategies
601101 -01	VE17-N46-08
601101 -02	VE17-N46-10
601101 -03	VE17-N46-12
601101 -04	VE17-N46-14
601101 -05	VE17-N46-16
601101 -06	VE17-N46-18
601101 -07	VE17-N46-20

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/15/16 Date Received: 01/11/16 Project: SOU\_1002-003\_20160111, F&BI 601101 Date Extracted: 01/12/16 Date Analyzed: 01/12/16

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate (% Recovery) (Limit 56-165)
VE17-N46-12 601101-03	5,700	<250	76
VE17-N46-14 601101-04	5,300	<250	85
VE17-N46-20 601101-07	180	<250	75
Method Blank 06-062 MB	<50	<250	79

### ENVIRONMENTAL CHEMISTS

Date of Report: 01/15/16 Date Received: 01/11/16 Project: SOU\_1002-003\_20160111, F&BI 601101

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 6	601102-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	89	93	63-146	4
Laboratory Code: 1	.aboratory Contr	ol Samp	le				
			Percent				
	Reporting	Spike	Recovery	Accep	tance		
Analyte	Units	Level	LCS	Crite	eria		
Diesel Extended	mg/kg (ppm)	5,000	90	79-1	44		

### ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

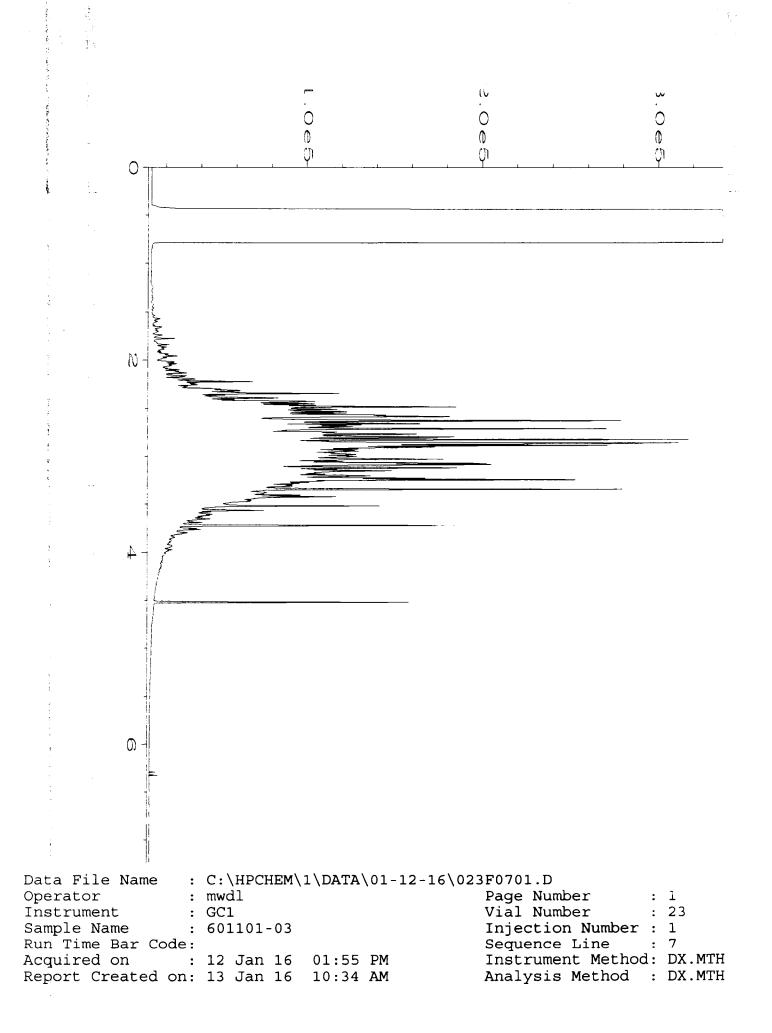
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

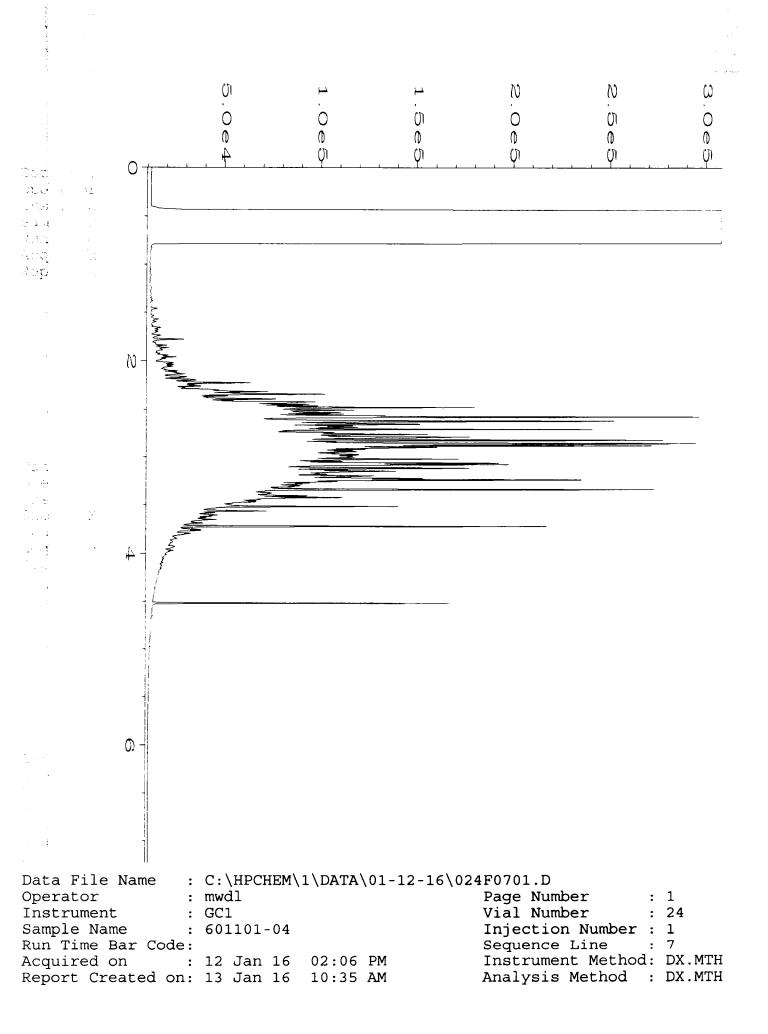
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

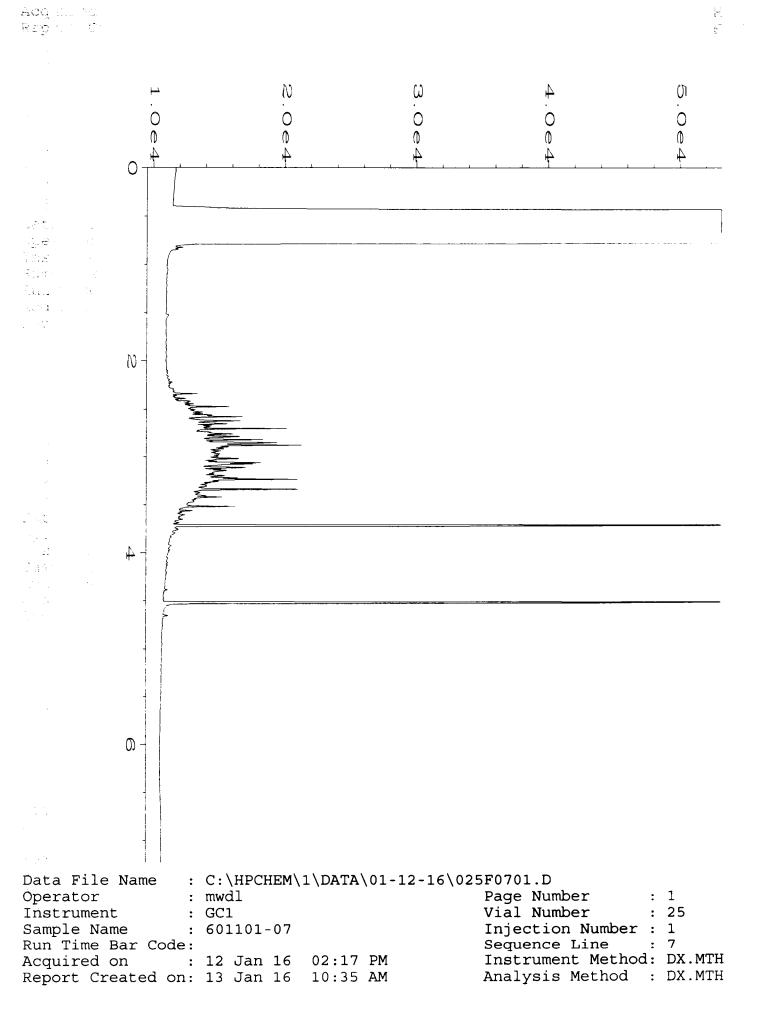
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

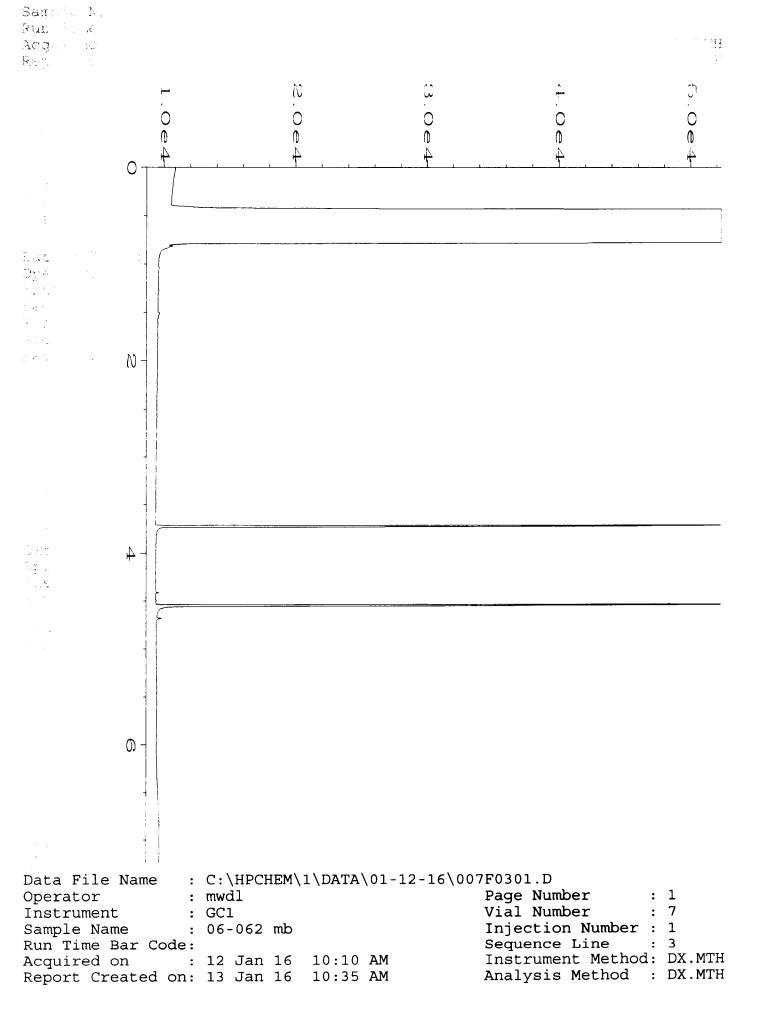
vo - The value reported fell outside the control limits established for this analyte.

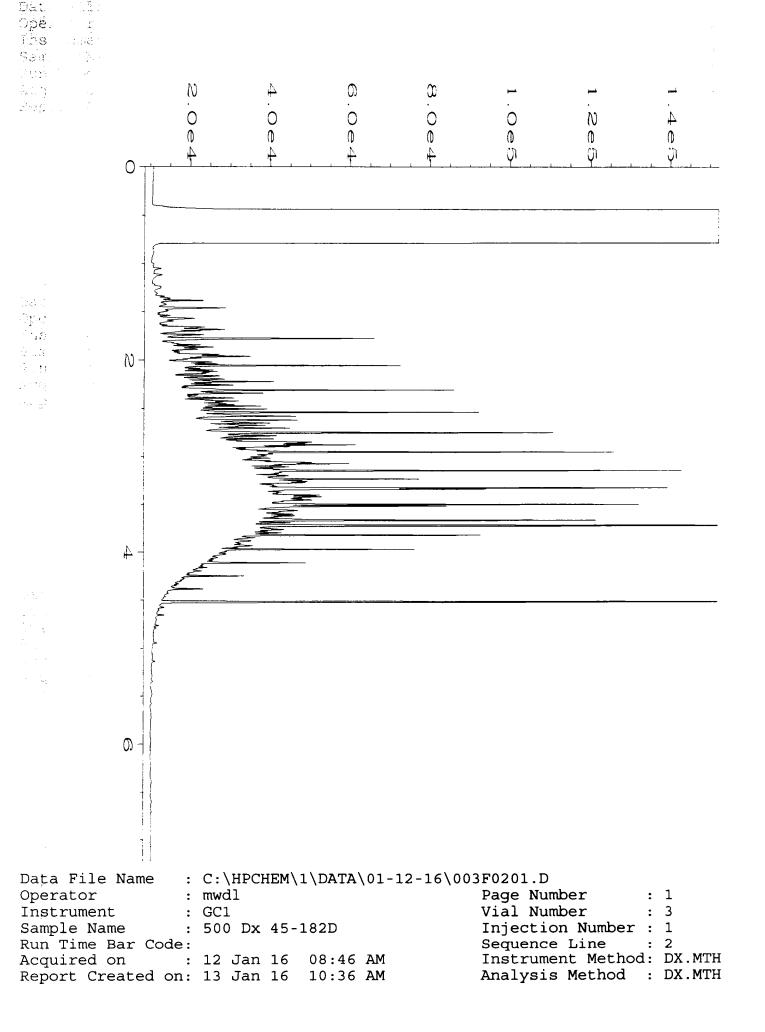
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.











Send Report ToJohn Funderb Jonathan Loeffler Company_SoundEarth Strategie Address_2811 Fairview Avenue E City, State, ZIPSeattle, Washing Phone #_(206) 306-1900Fax	s, Inc. ast, Suite 2000 aton 98102		_	REMARKS #di ! low	anature)	O TIME			01. 0 # 15 Y / I		Pag Sta X RL Rust Di Re	andarc JSH n charg <u>hock</u> SAN spose c eturn sc	of NAROUND TIME (2 Weeks) (2 Weeks)
	I	·····	· · · · ·	T		T	r		Y	r		ANALY	SES REQUESTED
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	CVOCs by 826081 ≭		Notes
VE17-N46-08	VE17-N46		OJA-E	1/11/16		SOIL	5				1		K - Hold evocs
VE17-N46-10	VE17-N46	10'	07				5				X		per CC
VE17-N46-12	VE17 - N46	12'	p3				5	$\times$			X		1/12/16
VE17-N46-14	VE17-N46		04				5	$\times$					MG
VE17-N46-16	VEIT-N46	· 16'	25				5			<b> </b>			
VE17-N46-18	VE17-N46	18'	06				5			-	$  \times$		
VE17-N46-20	VE17-N46	20'	071	<u> </u>			5	$ \times $			X-		
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Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
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Seattle, WA 98119-2029	Received by:	Far(b11)	F=======	1/11/16	17n
Ph. (206) 285-8282	Relipquished by:	fille			
Fax (206) 283-5044	Received by:		Complete re	ceived at 2	۳C

Friedman & Bruya, Inc. #601207

#### 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 26, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on January 19, 2016 from the SOU\_1002-003\_20160119, F&BI 601207 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: Chuck Cacek, Jonathan Loeffler SOU0126R.DOC

### ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on January 19, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160119, F&BI 601207 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	SoundEarth Strategies
601207 -01	UST02-BTM01-12
601207 -02	UST02-WSW01-11
601207 -03	UST02-ESW01-11
601207 -04	UST02-SSW01-11
601207 -05	UST02-NSW01-11

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/26/16 Date Received: 01/19/16 Project: SOU\_1002-003\_20160119, F&BI 601207 Date Extracted: 01/25/16 Date Analyzed: 01/25/16

### 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)

Surrogato

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	<u>(% Recovery)</u> (Limit 56-165)
UST02-BTM01-12 601207-01	3,900	<250	85
UST02-WSW01-11 601207-02	11,000	<250	123
UST02-ESW01-11 601207-03	4,500	<250	80
UST02-SSW01-11 601207-04	18,000	350 x	ip
UST02-NSW01-11 601207-05	730	<250	85
Method Blank <sup>06-145 MB</sup>	<50	<250	96

### ENVIRONMENTAL CHEMISTS

Date of Report: 01/26/16 Date Received: 01/19/16 Project: SOU\_1002-003\_20160119, F&BI 601207

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 6	01292-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	112	118	63-146	5
Laboratory Code: L	aboratory Contr.	ol Samp	le				
			Percent				
	Reporting	Spike	Recovery	Accep	tance		
Analyte	Units	Level	LCS	Crite	eria		
Diesel Extended	mg/kg (ppm)	5,000	112	79-1	44		

### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

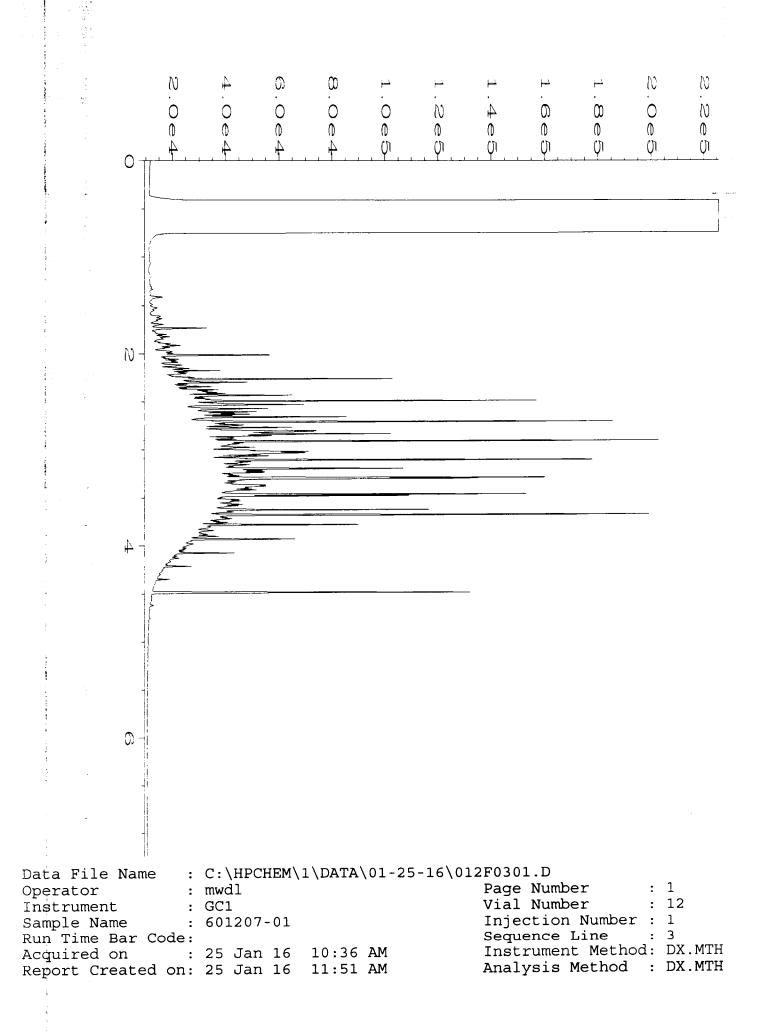
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

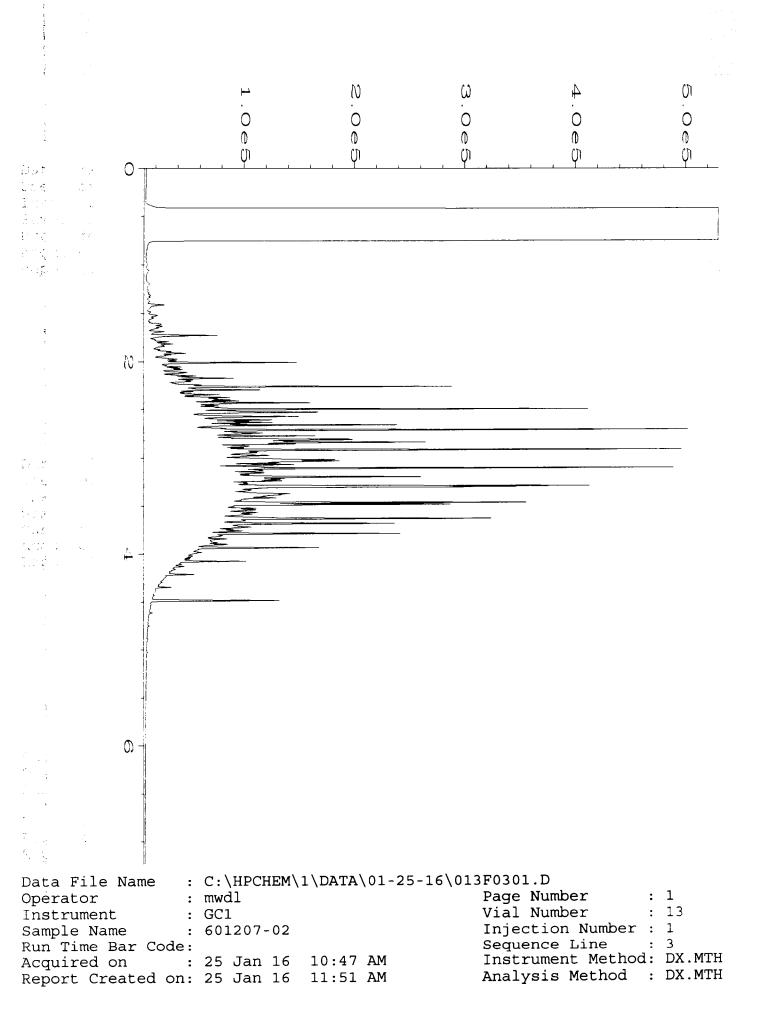
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

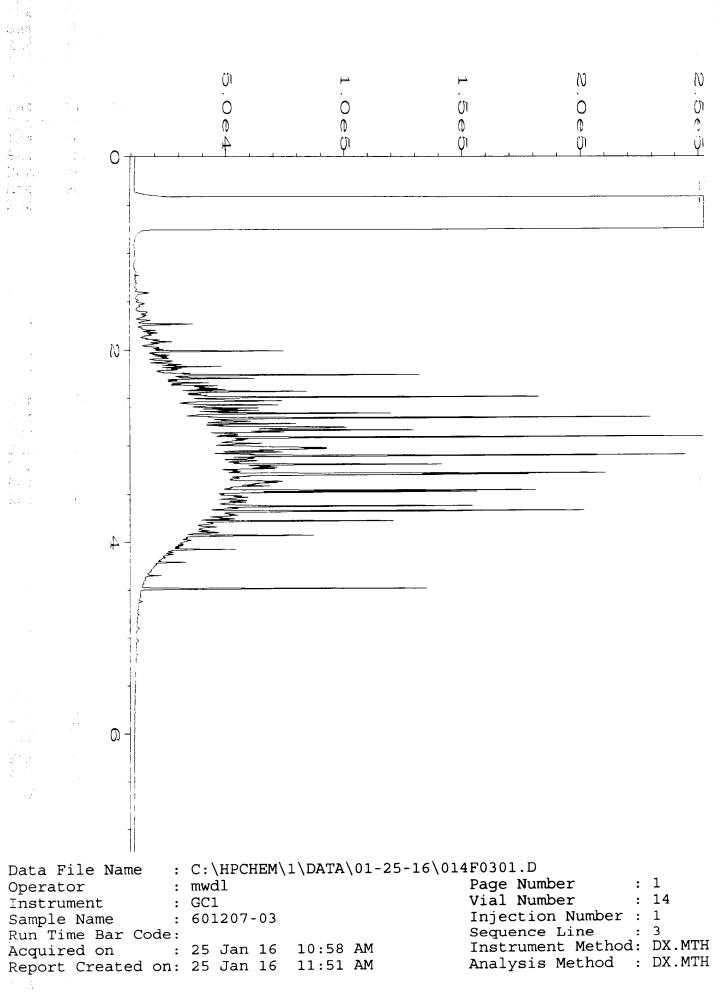
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

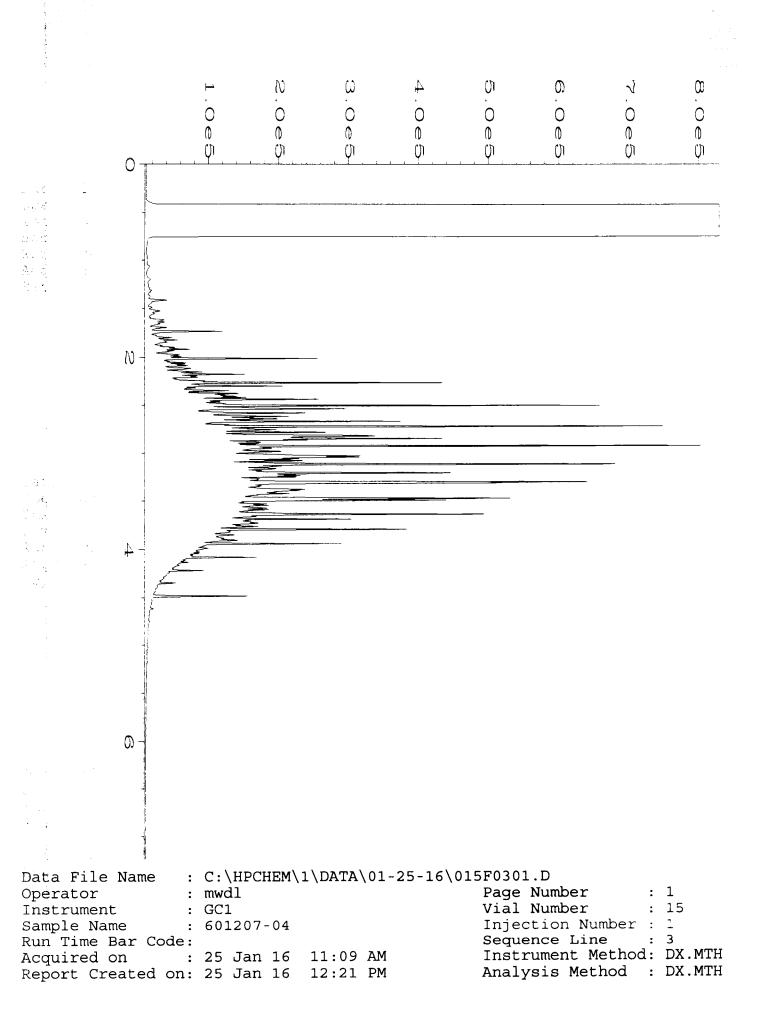
vo - The value reported fell outside the control limits established for this analyte.

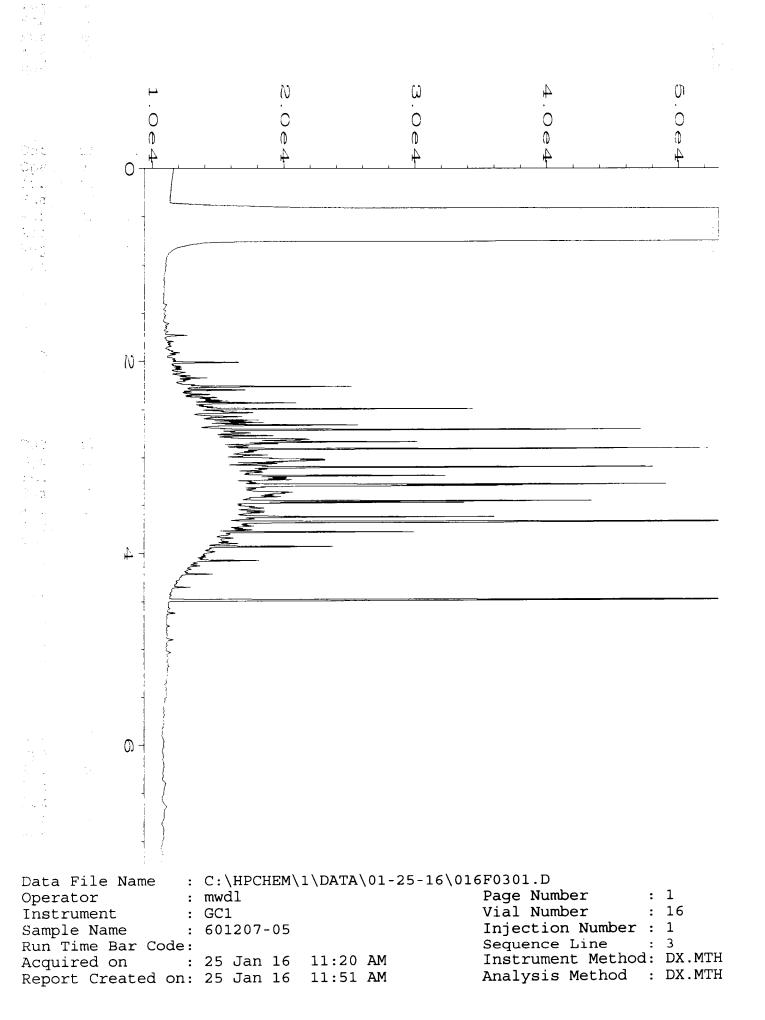
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



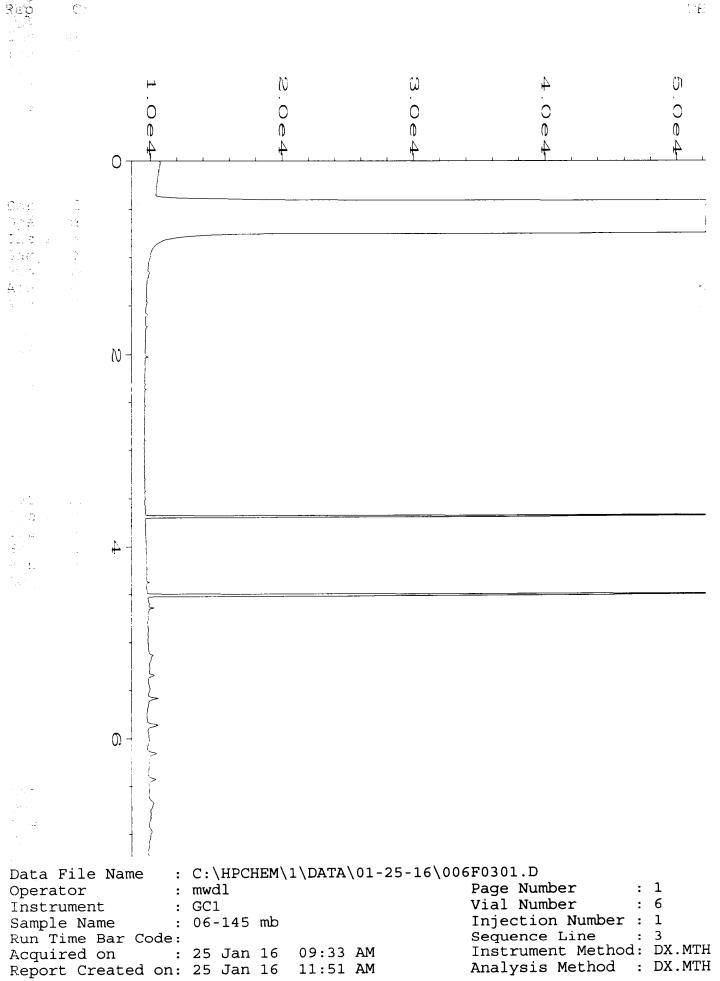




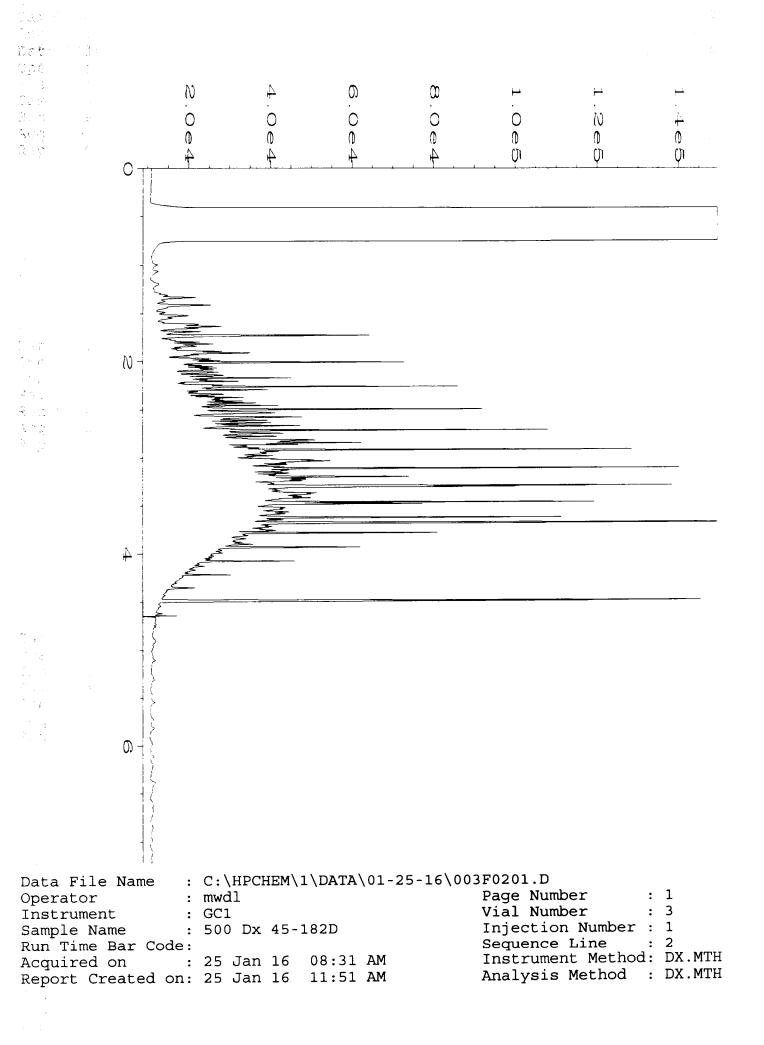




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Send Report ToJohn Funderburk. Chuck Cacek: cc:Jonathan Loeffler Company_SoundEarth Strategies. Inc Address_2811 Fairview Avenue East, Suite 2000 City, State, ZIPSeattle, Washington 98102 Phone #(206) 306-1900Fax #(206) 306-1907				SAMI	PLERS (SIC	ME/NON TAC	C TIME		ME	0#	9-16	Ste	TUR andaro JSH	d (2 Weeks)
			1002-003 					GEMS Y / N			SAMPLE DISPOSAL Dispose after 30 days Return samples Will call with instructions			
Sample ID	Sample Location	Sample Depth	Laib ID		Date mpled	Time Sampled	Maintx	t of jars	XQ-HALIMAN	NWTPH-Gx	BTEX by AC218	CVOCs by E2608		Notes
USTOZ-BTMOI-12	USTOZ-BIMO	12'	GIAE	17	19/16	1026	SOL	5	$\mathbf{x}$			+	<u>├</u> ──	X-246 TAT
USTOZ-WSWOI-II	USTOZ-WSWOI	11'	02		1	1029	SOIL	5	Ń		f	1		ource 1/24/16
USTOZ - ESWOI-11	USTOZ-ESUOI	11'	03			1030	SOIL	5	Ń		1	1		
USTO2 -55WOI-11	USTC2.55WO	11'	04			1033	SOIL	5	$\mathbf{\Sigma}$					<b>/</b>
USTOZ-NSWOI-II	USTOZ - NSWO	<u> </u>	05 V			1035	SOIL	5	$\bowtie$			<b>†</b>		
						111		<b> </b>						
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Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by	JENATHAN LOEFFLER	SOUNDEARTH	1/19/16	1347
Seattle, WA 98119-2029	Received by: M M / M		FO BT	1/19/16	1342
Ph. (206) 285-8282	Relinquished by:	Alan phan	10 1-	11/10	1970
Fax (206) 283-5044	Received by:				
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Friedman & Bruya, Inc. #601264

#### 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 26, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on January 21, 2016 from the SOU\_1002-003\_20160121, F&BI 601264 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: Chuck Cacek, Jonathan Loefffler SOU0126R.DOC

### ENVIRONMENTAL CHEMISTS

# CASE NARRATIVE

This case narrative encompasses samples received on January 21, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160121, F&BI 601264 project. Samples were logged in under the laboratory ID's listed below.

<u>SoundEarth Strategies</u>
UST03-BTM01-15
UST03-BTM02-15
UST03-SSW01-14
UST03-NSW01-14
UST03-WSW01-14
UST03-ESW01-14

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 01/26/16 Date Received: 01/21/16 Project: SOU\_1002-003\_20160121, F&BI 601264 Date Extracted: 01/25/16 Date Analyzed: 01/25/16

### 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)

Surrogato

			Surrogate
<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	<u>(% Recovery)</u> (Limit 56-165)
	$(C_{10}-C_{25})$	$(C_{25}^{-}C_{36}^{-})$	(Linnt 50-105)
UST03-BTM01-15 601264-01	1,600	1,000	87
UST03-BTM02-15 601264-02	5,900	330	91
UST03-SSW01-14 601264-03	520	360	84
UST03-NSW01-14 601264-04	<50	<250	84
UST03-WSW01-14 601264-05	<50	<250	85
UST03-ESW01-14 601264-06	<50	<250	85
Method Blank 06-145 MB	<50	<250	96

### ENVIRONMENTAL CHEMISTS

Date of Report: 01/26/16 Date Received: 01/21/16 Project: SOU\_1002-003\_20160121, F&BI 601264

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 6	01292-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	112	118	63-146	5
Laboratory Code: 1	.aboratory Contr	ol Samp	le				
			Percent				
	Reporting	Spike	Recovery	Accep	tance		
Analyte	Units	Level	LCS	Crite	eria		
Diesel Extended	mg/kg (ppm)	5,000	112	79-1	44		

### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

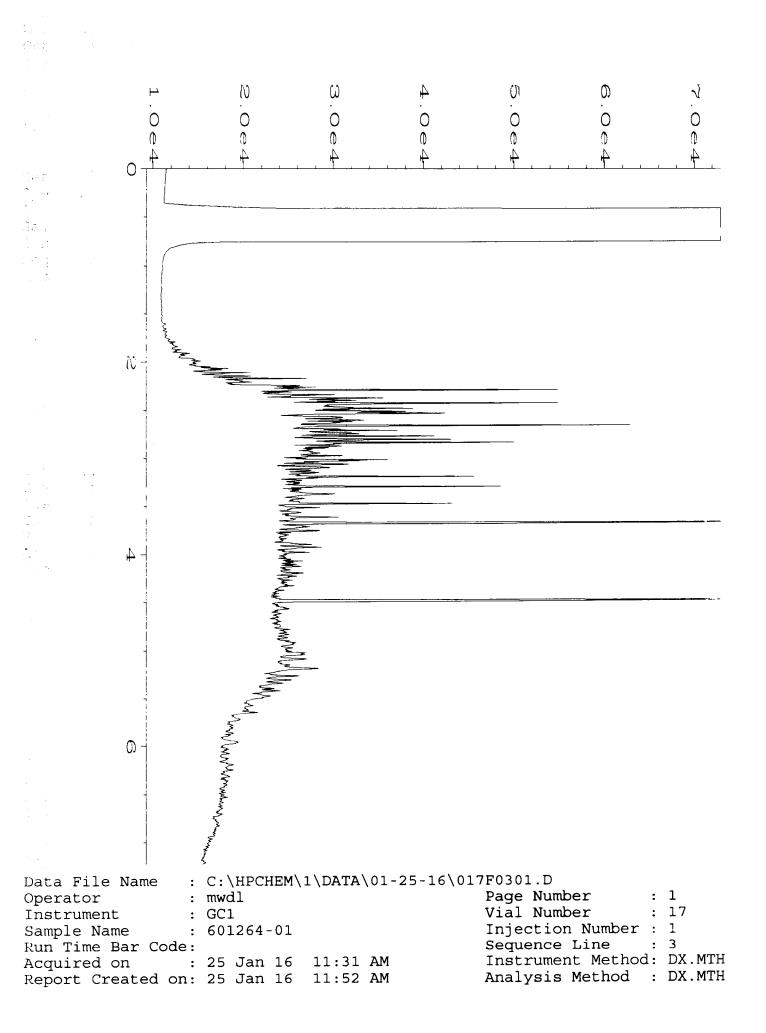
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

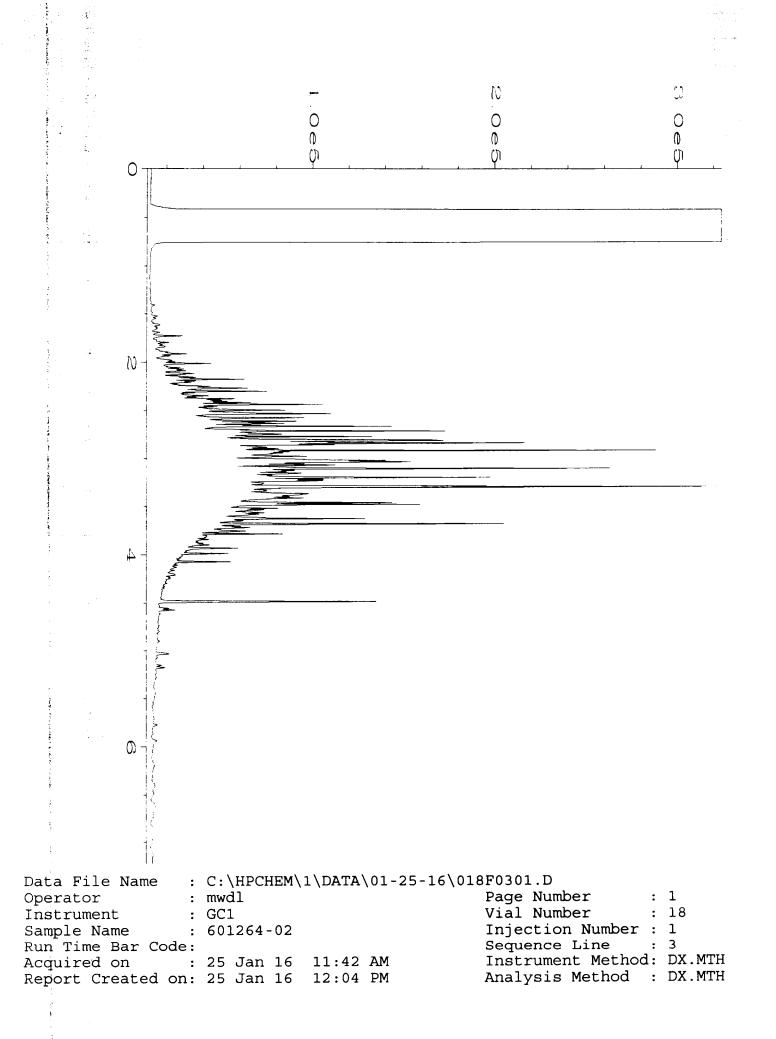
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

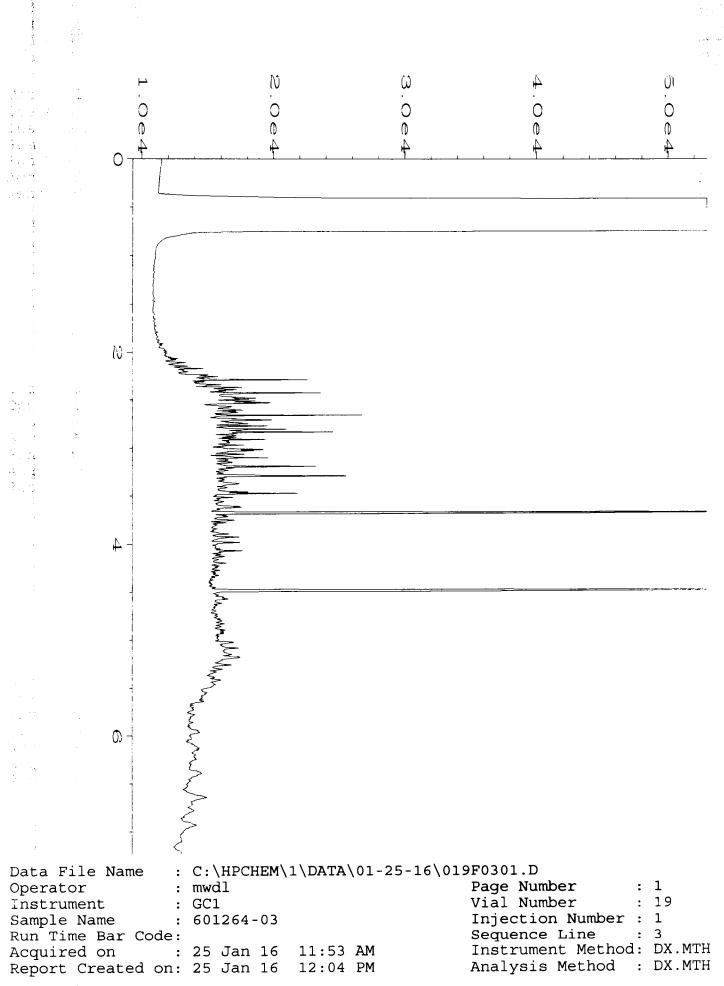
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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

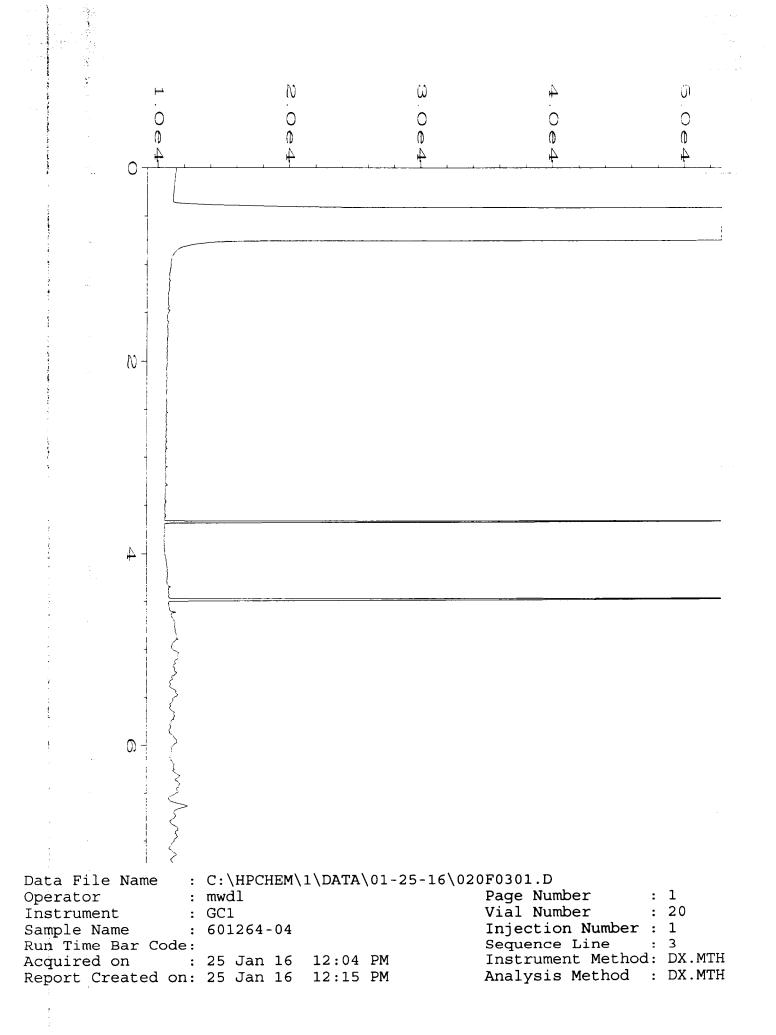
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

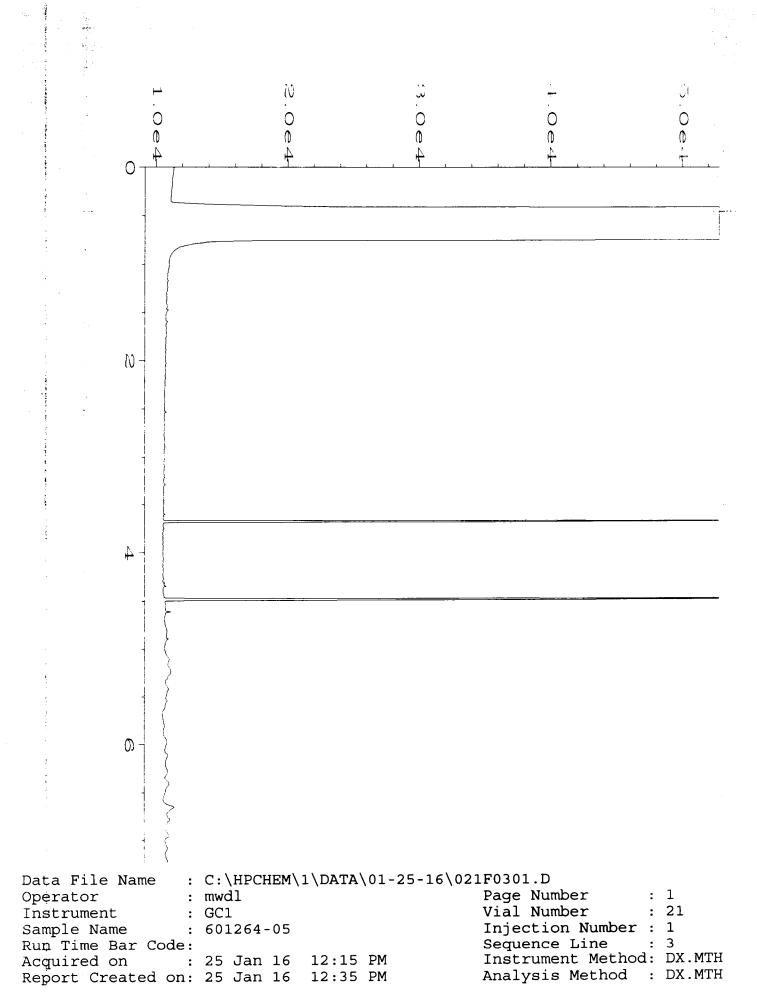


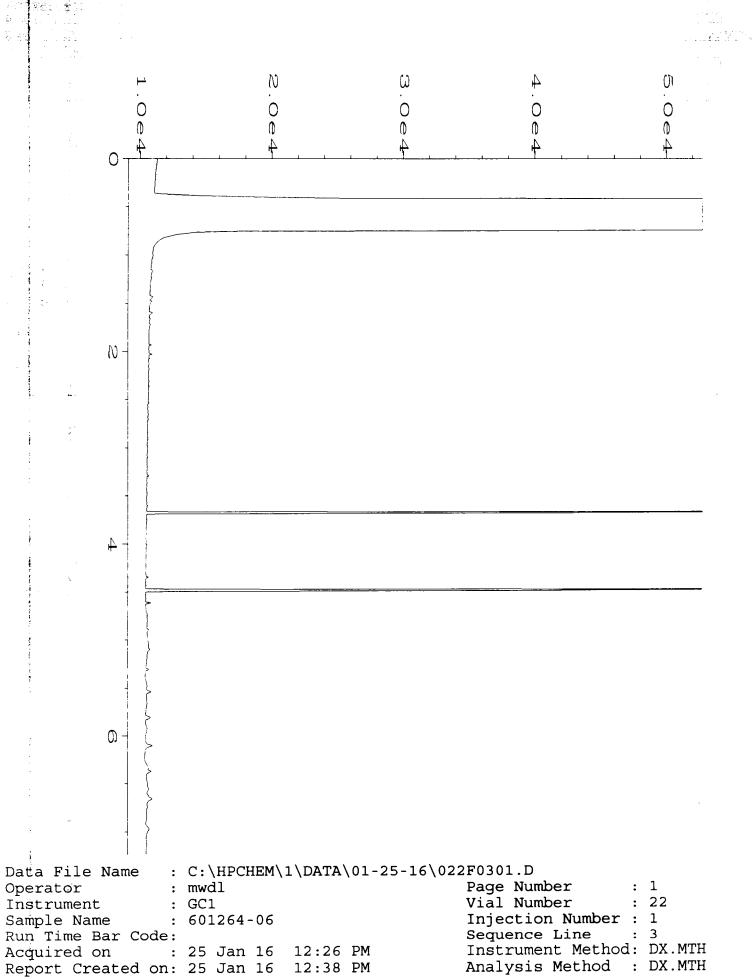


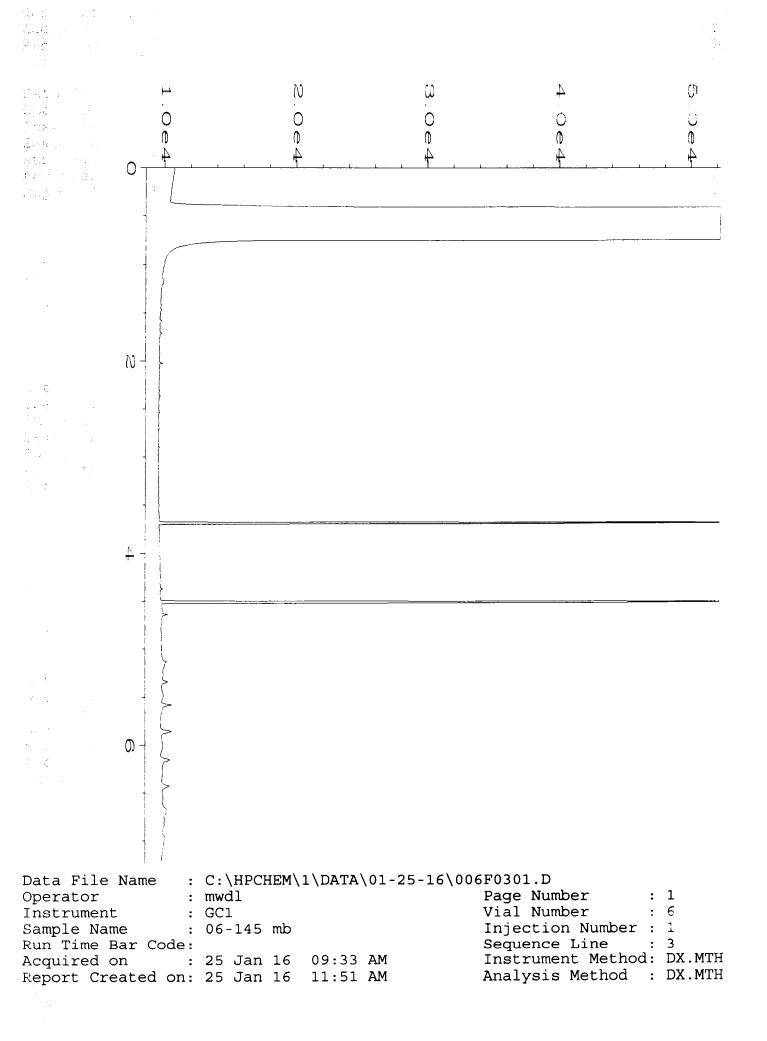


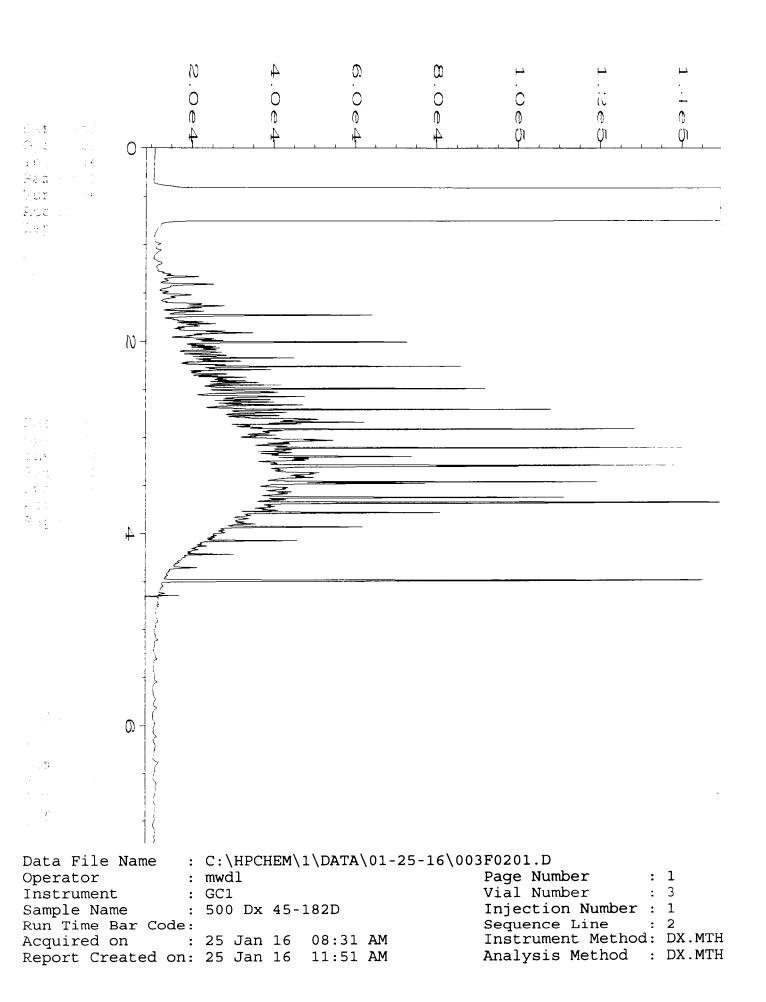
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6012 Send Report To_John Fund Jonathan Loeffler Company_SoundEarth Strate Address_2811 Fairview Avenu City, State, ZIP_Seattle, Wast Phone #_(206) 306-1900F	elDurk, Chuck Co pales, Inc. le East, Suite 2000 hington 98102	)	-	REMARKS	Jan	O TIME					Si R Rus D R	landar USH h char SA ispose eturn s	AD. of AD. VS RNAROUND TIME od (2 Weeks) ges authorized by: MPLE DISPOSAL after 30 days amples with instructions
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Friedman & Bruya, Inc.	SIGNATURE				
3012 16th Avenue West	Relinquished by:	PRINT NAME	COMPANY	DATE	TIME
Seattle, WA 981 19-2029		JANATHAN LOEFFLER	SANDEARTH	1/21/16	1550
	Received by:	T SII			
Ph. (206) 285-8282	Relinquished by:	Jan Shlown	fbī	1/21/16	
Fax (206) 283-5044	Received by:				

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Friedman & Bruya, Inc. #602114

#### 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

February 22, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on February 8, 2016 from the SOU\_1002-003\_20160208, F&BI 602114 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: Chuck Cacek, Jonathan Loeffler SOU0222R.DOC

### ENVIRONMENTAL CHEMISTS

# CASE NARRATIVE

This case narrative encompasses samples received on February 8, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160208, F&BI 602114 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
602114 -01	DW04-15
602114 -02	DW04-25
602114 -03	DW04-35

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 02/22/16 Date Received: 02/08/16 Project: SOU\_1002-003\_20160208, F&BI 602114 Date Extracted: 02/18/16 Date Analyzed: 02/18/16

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 53-144)
DW04-15 602114-01	<50	<250	94
DW04-25 602114-02	<50	<250	96
DW04-35 602114-03	<50	<250	85
Method Blank <sup>06-319 MB</sup>	<50	<250	82

### ENVIRONMENTAL CHEMISTS

Date of Report: 02/22/16 Date Received: 02/08/16 Project: SOU\_1002-003\_20160208, F&BI 602114

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code:	602291-07 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	92	99	64-133	7
Laboratory Code:	Laboratory Contr	ol Samp	le				
			Percent	-			
	Reporting	Spike	Recovery	y Accep	tance		
Analyte	Units	Level	LCS	Crite	eria		
Diesel Extended	mg/kg (ppm)	5,000	102	58-1	47		

### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

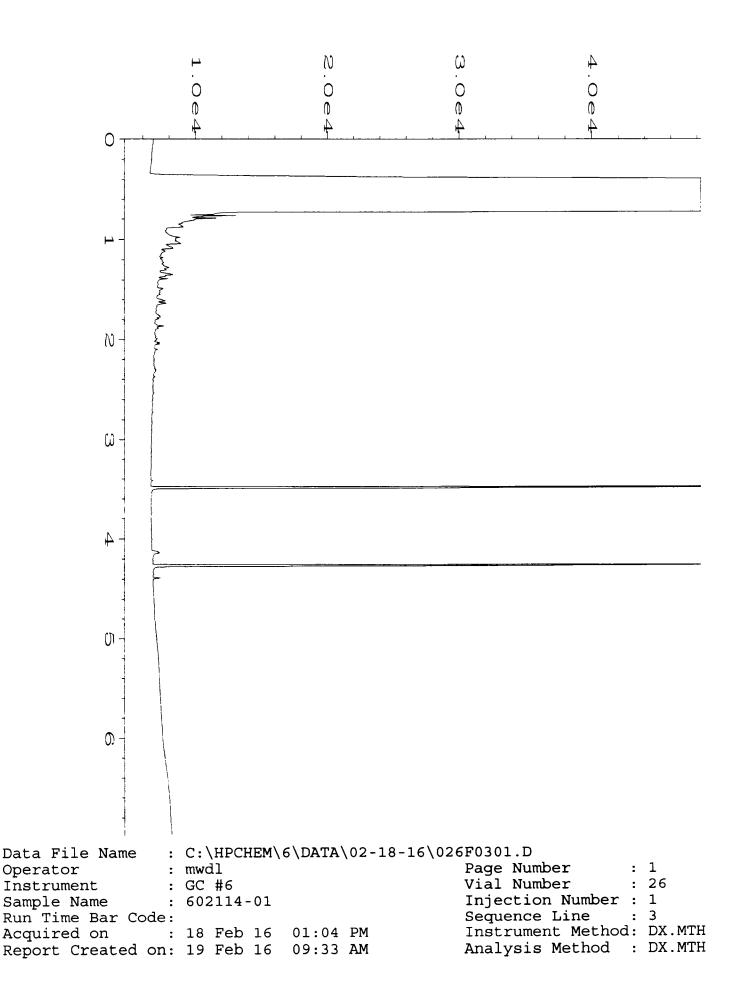
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

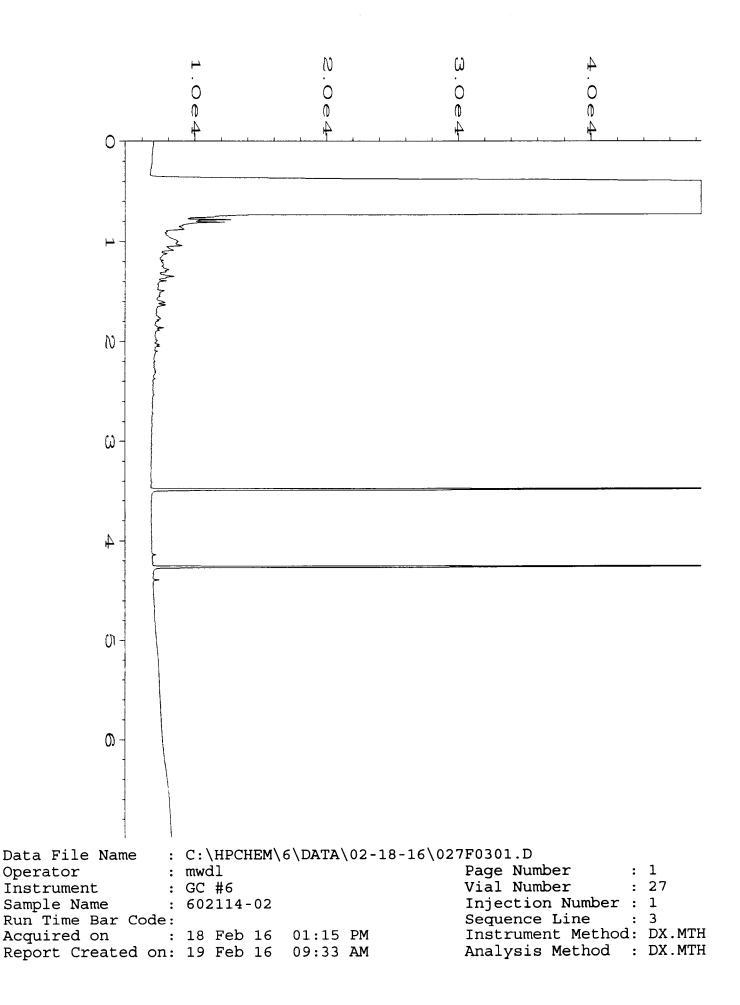
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

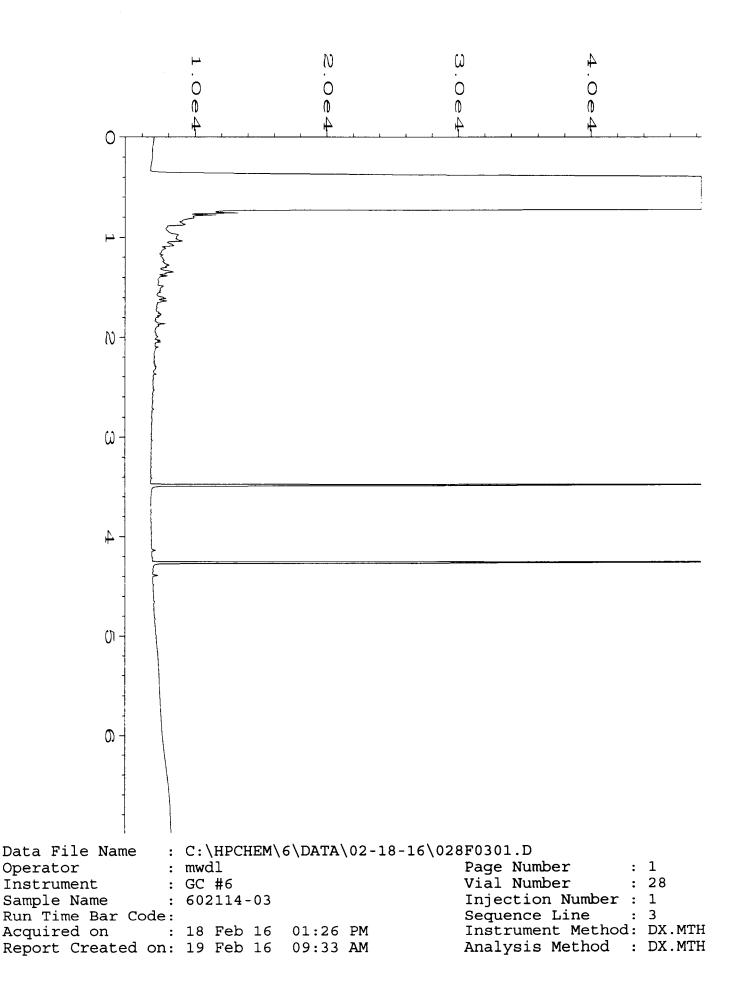
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

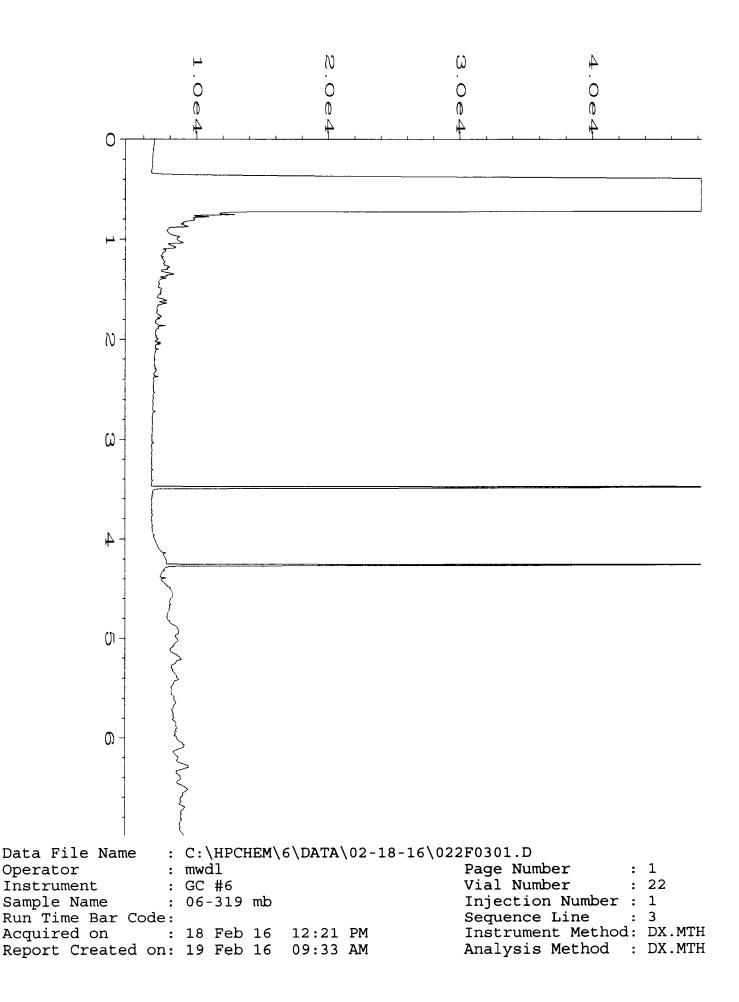
vo - The value reported fell outside the control limits established for this analyte.

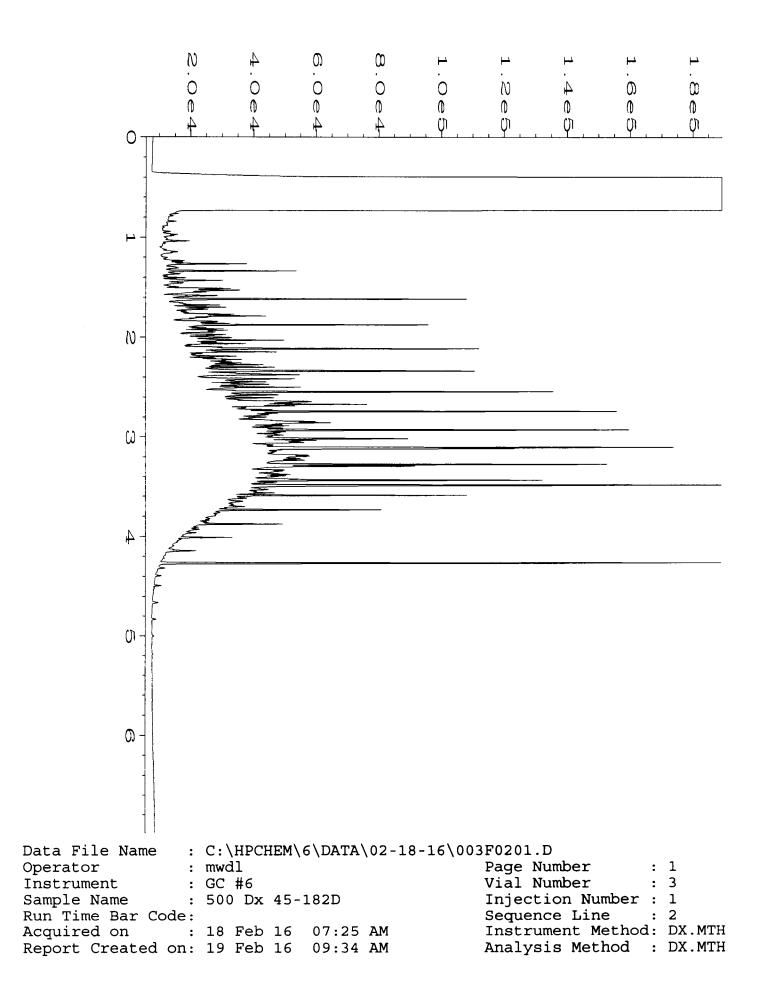
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.











Jonathan Loeffler Company <u>SoundEarth Strate</u> Address <u>2811 Fairview Aven</u> City, State, ZiP <u>Seattle, Was</u>	FoJohn Funderburk. Chuck Cacek: cc:         offler         sundEarth Strategies. Inc.         P         Fairview Avenue East. Suite 2000         PSeattle. Washington 98102         R         306-1900       Fax #(206) 306-1907				SAMPLE CHAIN OF CUSTODY SAMPLERS (signurure) Charles (signurure) PROJECT NAME/NO. MADISON TACO TIME 1002-003 REMARKS 1 low level detection limit of 0.01 mg/kg for EDC. Direct Sparge Method				9/02 /N	8 ///o         Page #or         TURNAROUND TIME         Standard (2 Weeks)         RUSH         Rush charges authorized by:         SAMPLE DISPOSAL         Dispose after 30 days         Return samples         Will call with instructions				⊈, 
					7								LYSES REQUESTED	
Sample ID	Sample Location	Sample Depih	Lato ID	Date Sampled	Time Sample d	Maintx	# of jars	NWTPH-Dx	NWTPH-Gx	STEX by BO218	CVOCs by E2400		Notes X-per CC 2/18/11 NS.	
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Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
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Seattle, WA 98119-2029	Received by:	Jon Shimam		101-0110	1/10
Ph. (206) 285-8282	Relinquished by:	Jan Onimarn	FD T.		r
Fax (206) 283-5044	Received by:				

Friedman & Bruya, Inc. #602204

#### 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

February 16, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on February 12, 2016 from the SOU\_1002-003\_20160212, F&BI 602204 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: Chuck Cacek, Jonathan Loeffler SOU0216R.DOC

## ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on February 12, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160212, F&BI 602204 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
602204 -01	VE48-WSW01-11

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 02/16/16 Date Received: 02/12/16 Project: SOU\_1002-003\_20160212, F&BI 602204 Date Extracted: 02/12/16 Date Analyzed: 02/12/16

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 56-165)
VE48-WSW01-11 602204-01	<50	<250	88
Method Blank 06-273 MB	<50	<250	84

### ENVIRONMENTAL CHEMISTS

Date of Report: 02/16/16 Date Received: 02/12/16 Project: SOU\_1002-003\_20160212, F&BI 602204

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 6	02198-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	420	88	85	63-146	3
Laboratory Code: I	aboratory Contr.	ol Samp	le				
			Percent				
	Reporting	Spike	Recovery	Accep	tance		
Analyte	Units	Level	LCS	Crite	eria		
Diesel Extended	mg/kg (ppm)	5,000	90	79-1	44		

#### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

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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.

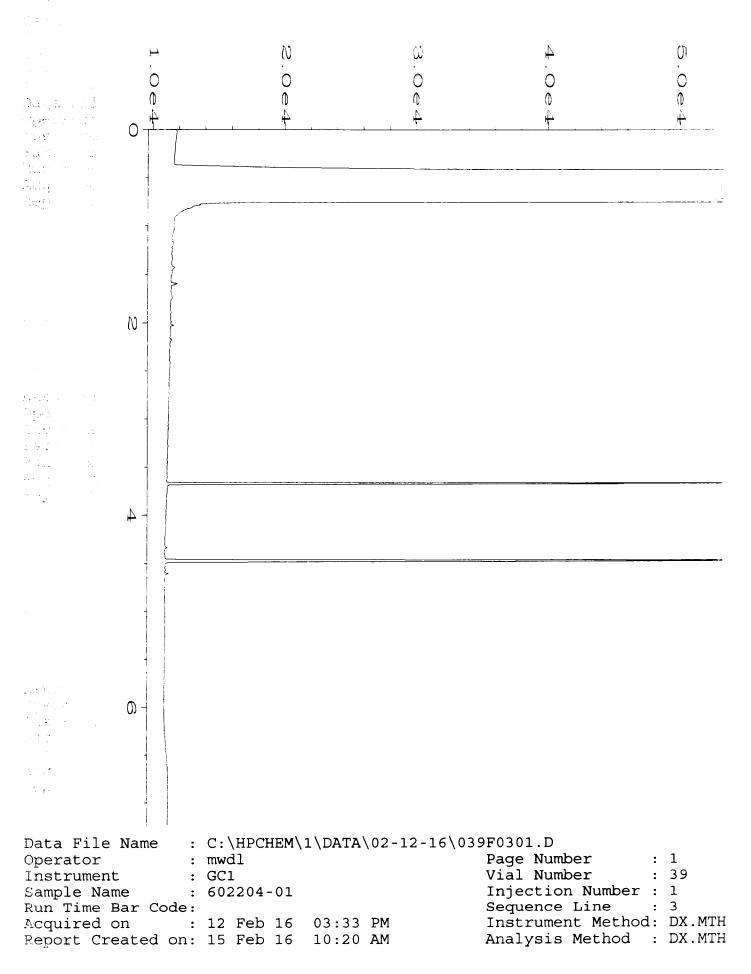
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

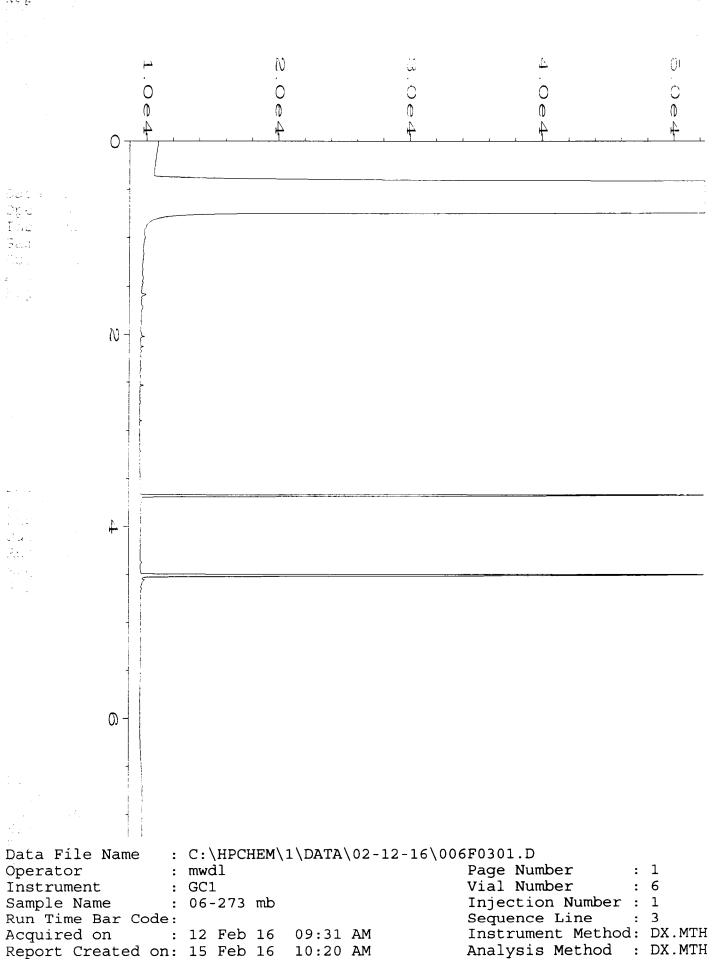
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

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.

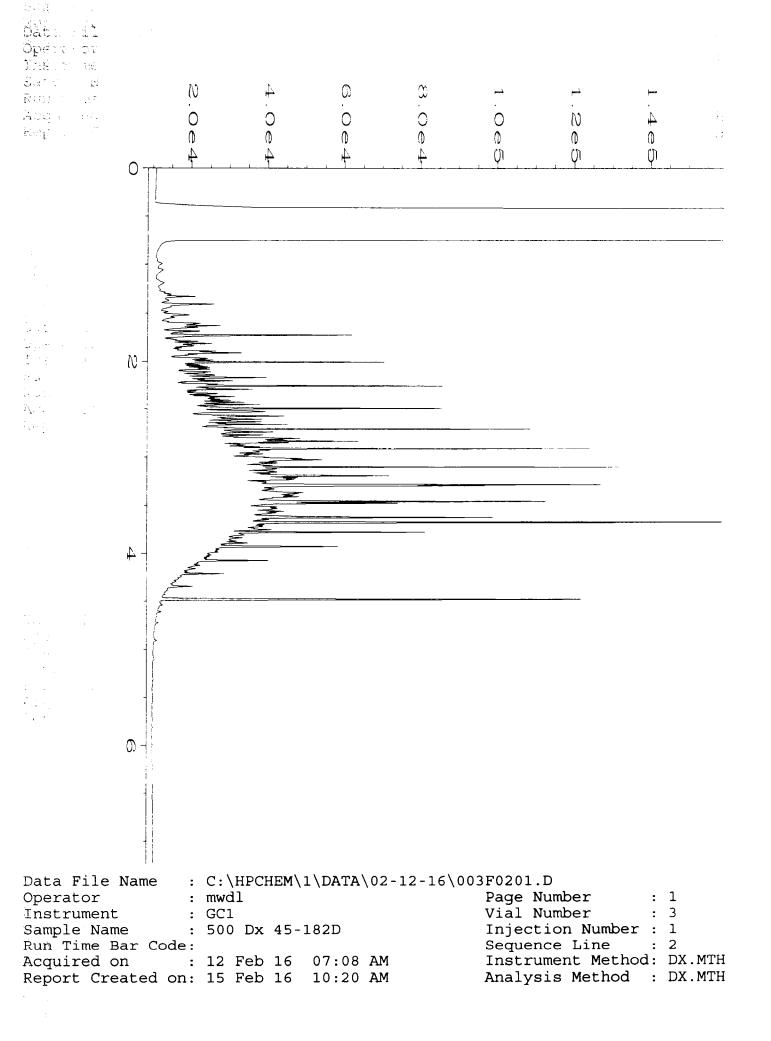
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.





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Send Report ToJohn Funderb Jonathan Loeffler Company_SoundEarth Strategie Address_2811 Fairview Avenue E	purk, Chuck Cacek; co s, Inc. ast, Suite 2000		SAMPL			~	ME	02 PO #			Stand RUSH_ ush ch	URNA ard (2 24 arges	ROUND TIME	15 / E
City, State, ZIP <u>Seattle, Washing</u> Phone # <u>(206) 306-1900</u> Fax	REMARKS <sup>1</sup> low level detection limit of 0.01 mg/kg for EDC. Direct Sparge Method					EMS Y	Chack Cacek         SAMPLE DISPOSAL         Dispose after 30 days         Return samples         Will call with instructions							
Sample ID	Sampl <del>e</del> Location	Sample Depth	Lab ID	Date Sampled	Time Sample d	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	CVOCs by 82608		YSES REQUESTE Notes	Đ
VE48-WSW01-11	USTOZ tank county	<u> </u>	014.5	2/11/16	1000	SOIL	5	X						
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Samples received at <u>\_\_\_\_</u>°C

Friedman & Draw to a			Samples rec	ceived at $\_$	°C
Friedman & Bruya, Inc. 3012 16th Avenue West	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
	Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	2/12/16	1010
Seattle, WA 98119-2029	Received by: Engel Report	Elizabeth Radford	FBR	2/10/10	f
Ph. (206) 285-8282	Relinquished by	Elizabeth Kadford	1 4 0	412/16	1010
Fax (206) 283-5044	Received by:		-		

Friedman & Bruya, Inc. #602286

#### 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

February 22, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on February 17, 2016 from the SOU\_1002-003\_20160217, F&BI 602286 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: Chuck Cacek, Jonathan Loeffler SOU0222R.DOC

## ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on February 17, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160217, F&BI 602286 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
602286 -01	VE7-N7-19
602286 -02	FD01-20160216

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 02/22/16 Date Received: 02/17/16 Project: SOU\_1002-003\_20160217, F&BI 602286 Date Extracted: 02/18/16 Date Analyzed: 02/18/16

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 53-144)
VE7-N7-19 602286-01	4,100	<250	86
FD01-20160216 602286-02	6,400	<250	92
Method Blank <sup>06-319 MB</sup>	<50	<250	92

### ENVIRONMENTAL CHEMISTS

Date of Report: 02/22/16 Date Received: 02/17/16 Project: SOU\_1002-003\_20160217, F&BI 602286

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code:	602291-07 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	92	99	64-133	7
Laboratory Code:	Laboratory Contr	ol Samp	le				
			Percent	-			
	Reporting	Spike	Recovery	y Accep	tance		
Analyte	Units	Level	LCS	Crite	eria		
Diesel Extended	mg/kg (ppm)	5,000	102	58-1	47		

### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

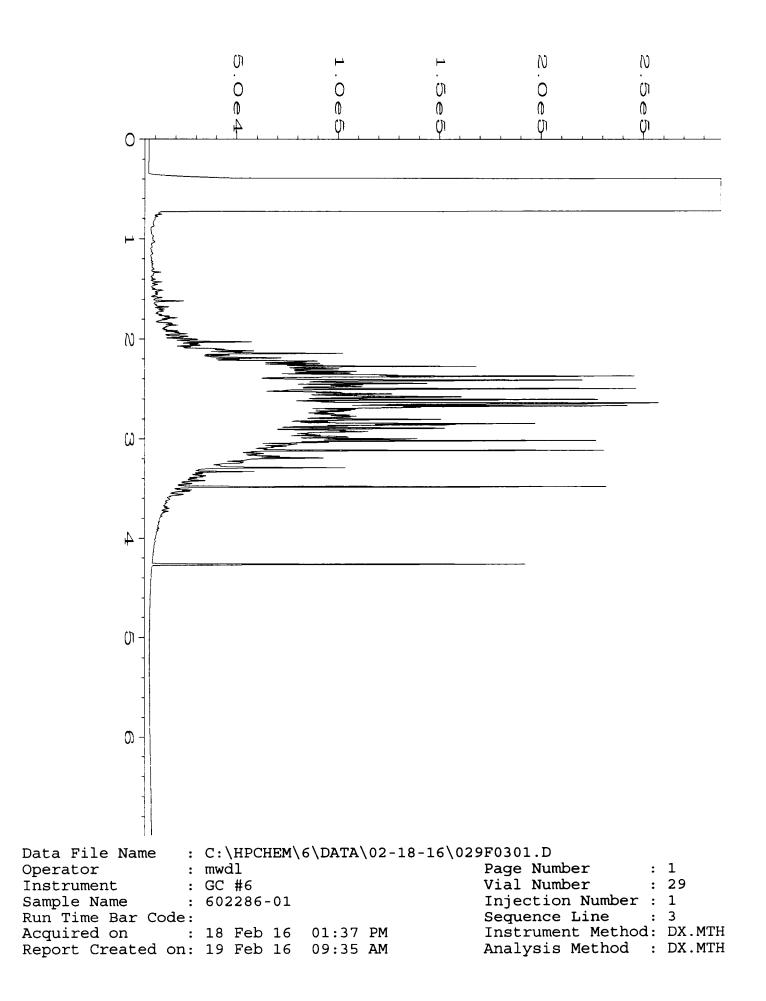
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

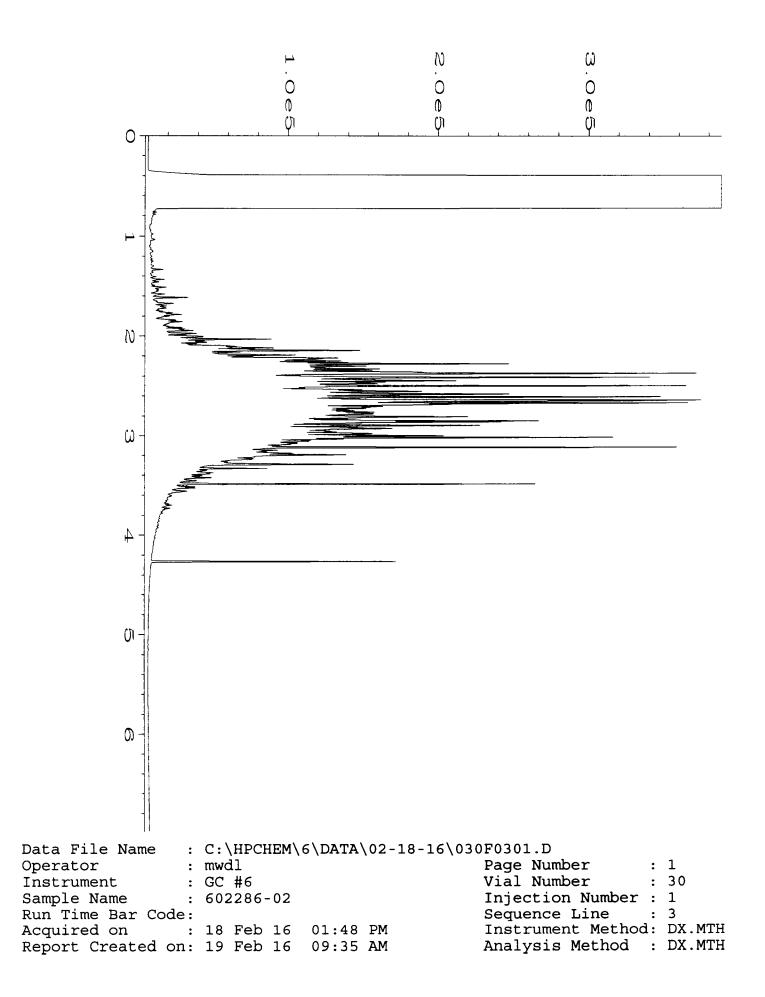
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

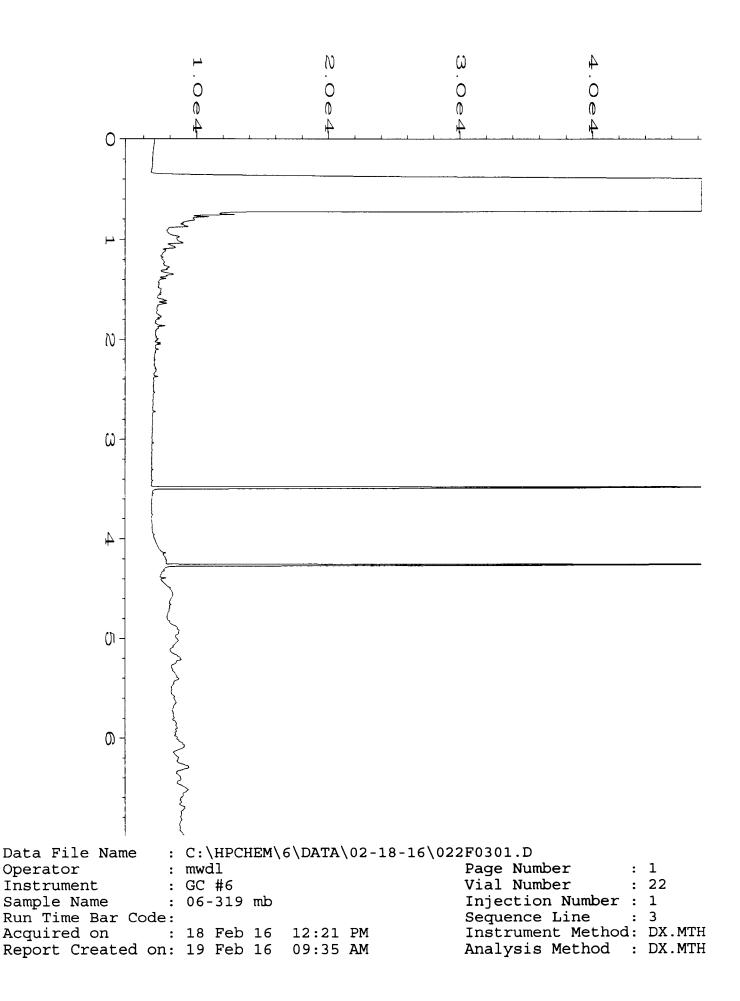
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

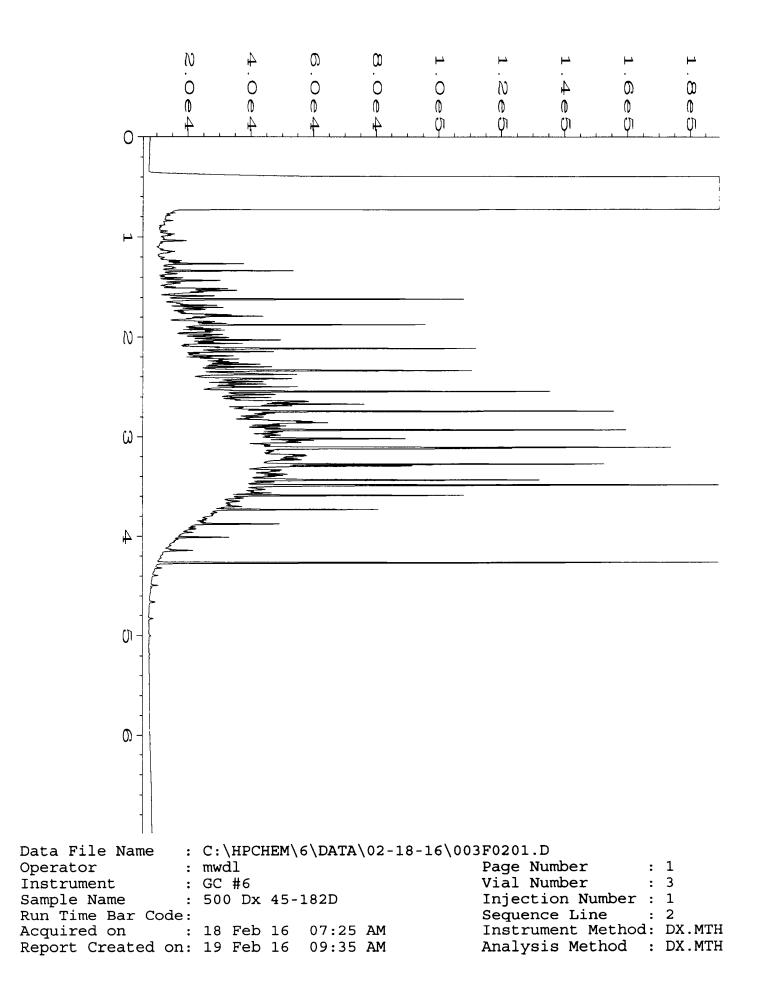
vo - The value reported fell outside the control limits established for this analyte.

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









602286		S	SAMPLE	CHAIN O	F CUSTO	DY	MĘ	02	2 - 1	7-1	6	ì	$col$
Send Report To <u>John Funderbur</u> Jonathan Loeffler	rk, Chuck Cacek; co	<u>c:</u>	SAMPLE		hat	/					age # Tl	JRNAF	
Company_SoundEarth Strategies,	Inç.		PROJEC				<b>·</b>	PO #		X			Weeks)
Address_2811 Fairview Avenue Ea	st, Suite 2000				I TACO TIME 12-003	E				R	RUSH_ ush cho		authorized by:
City, State, ZIP <u>Seattle, Washingt</u> e Phone # <u>(206) 306-1900</u> Fax #	on 98102 (206) 306-1907	REMARKS       GEMS Y / N       SAMPLE D         1907       I low level detection limit of       Dispose after 30         0.01 mg/kg for EDC. Direct Sparge Method       Will call with inst					bles						
	r	T	1	r		і			· · · · ·		A	NAL	SES REQUESTED
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampie d	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	CVOCs by 826081		Notes
VE7 - N7 - 19	VE7-N7	19'	01	2/16/16	1100	SOIL	Τ	×					
FD01 - 20160216	•		02/	2/16/16	i130	SOIL	1	×					
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Samples received at  $\underline{\Psi}^{\circ}C$ 

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by:	JONATHANY LOEFFLER	SOUNDEARTH	2/17/16	12.05
Seattle, WA 98119-2029	Received by:	Ht. Htangsten	Forne	2/17/1/	12005
Ph. (206) 285-8282	Relinquished by.			1.00	
Fax (206) 283-5044	Received by:				

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Friedman & Bruya, Inc. #602327

#### 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

February 23, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on February 19, 2016 from the SOU\_1002-03\_20160219, F&BI 602327 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: Chuck Cacek, Jonathan Loeffler SOU0223R.DOC

### ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on February 19, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-03\_ 20160219, F&BI 602327 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
602327 -01	VE3-N6-18
602327 -02	VE3-N12-19
602327 -03	VE7-N13-19
602327 -04	VE9-N12-19
602327 -05	VE44-N10-18
602327 -06	VE5-N7-18

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 02/23/16 Date Received: 02/19/16 Project: SOU\_ 1002-03\_ 20160219, F&BI 602327 Date Extracted: 02/19/16 Date Analyzed: 02/19/16

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 53-144)
VE3-N6-18 602327-01	<50	<250	86
VE3-N12-19 602327-02	<50	<250	96
VE7-N13-19 602327-03	<50	<250	94
VE9-N12-19 602327-04	<50	<250	98
VE44-N10-18 602327-05	<50	<250	96
VE5-N7-18 602327-06	<50	<250	85
Method Blank <sup>06-326 MB</sup>	<50	<250	87

### ENVIRONMENTAL CHEMISTS

Date of Report: 02/23/16 Date Received: 02/19/16 Project: SOU\_ 1002-03\_ 20160219, F&BI 602327

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code:	602327-01 (Matri	x Spike)						
			Sample	Percent	Percent			
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD	
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)	
Diesel Extended	mg/kg (ppm)	5,000	<50	100	95	64-133	5	
Laboratory Code: Laboratory Control Sample								
			Percent					
	Reporting	Spike	Recovery	y Accep	tance			
Analyte	Units	Level	LCS	Crite	eria			
Diesel Extended	mg/kg (ppm)	5,000	93	58-1	47			

### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

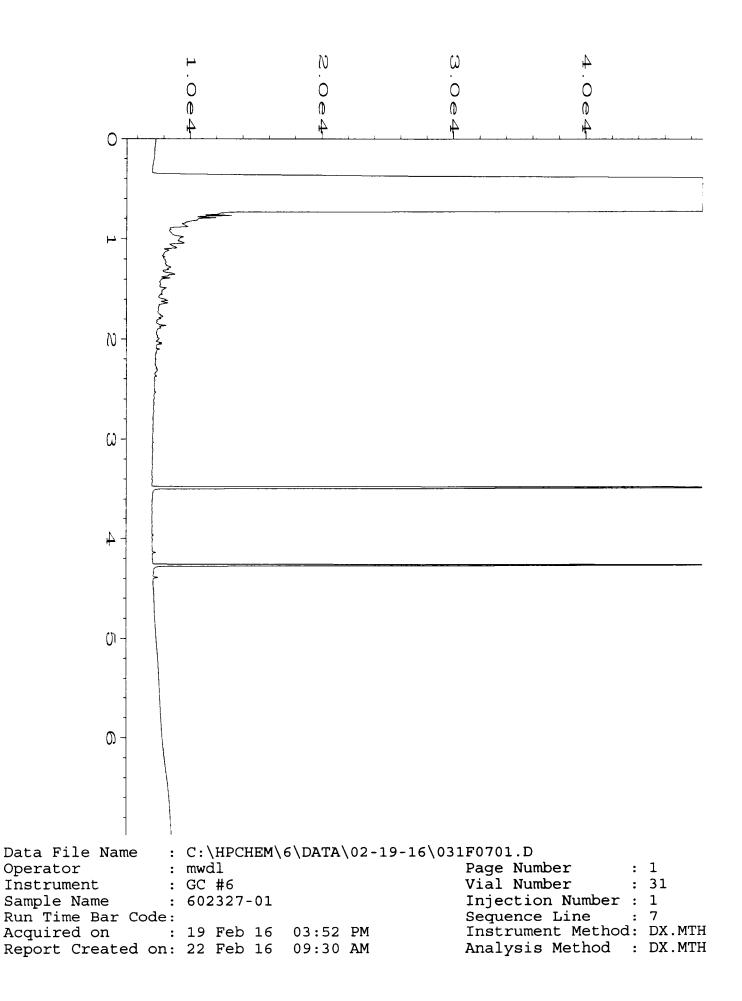
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

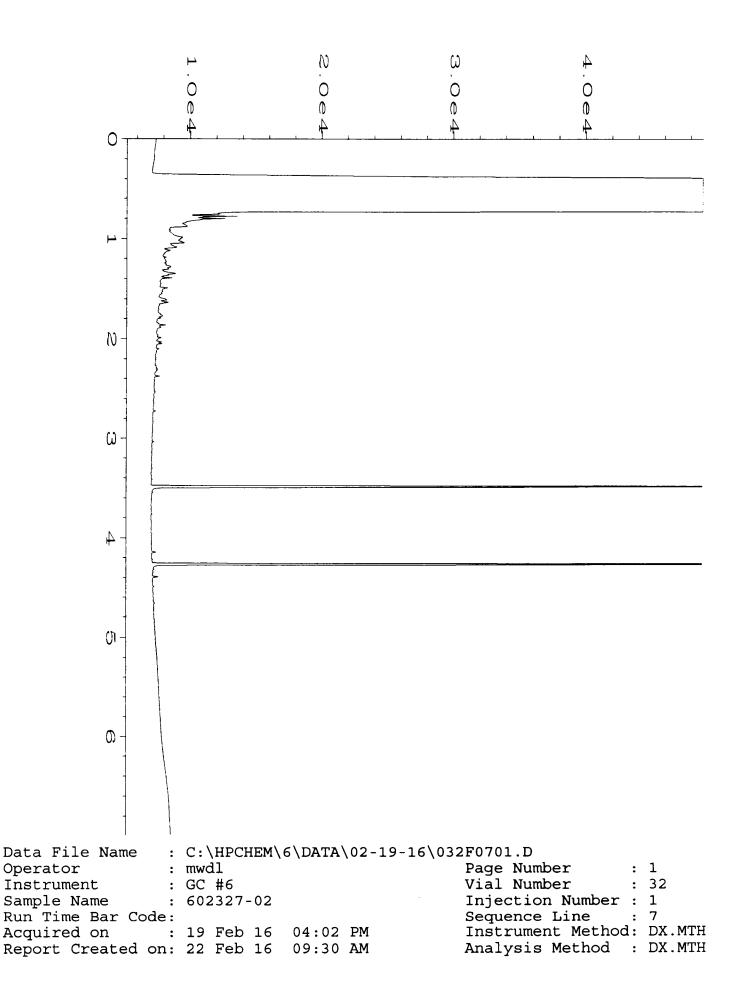
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

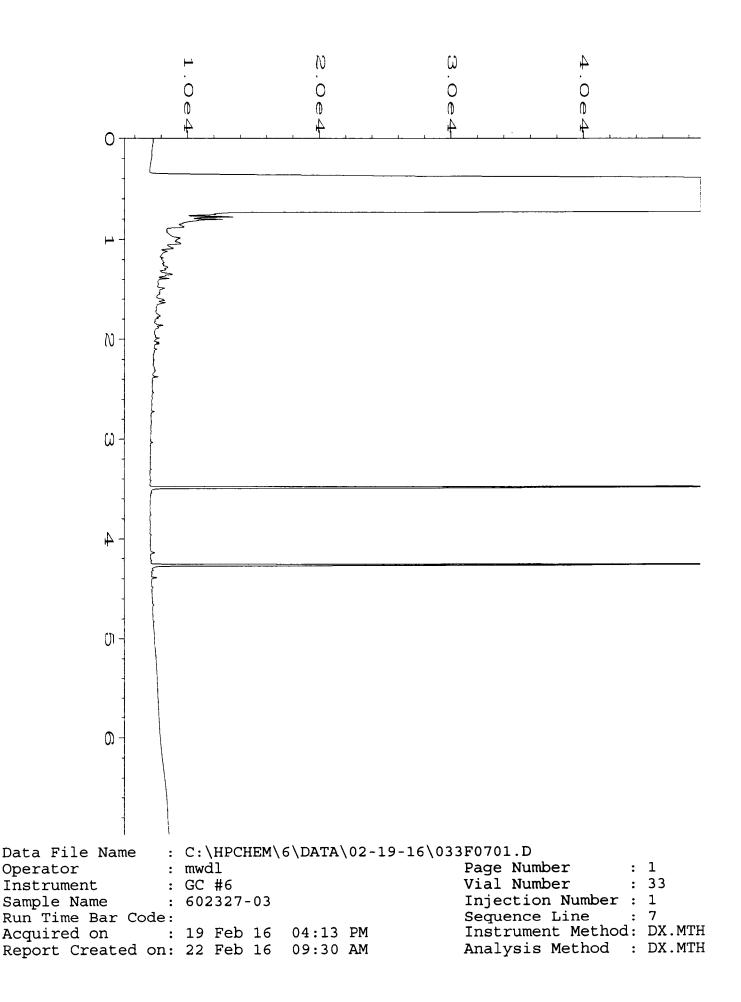
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

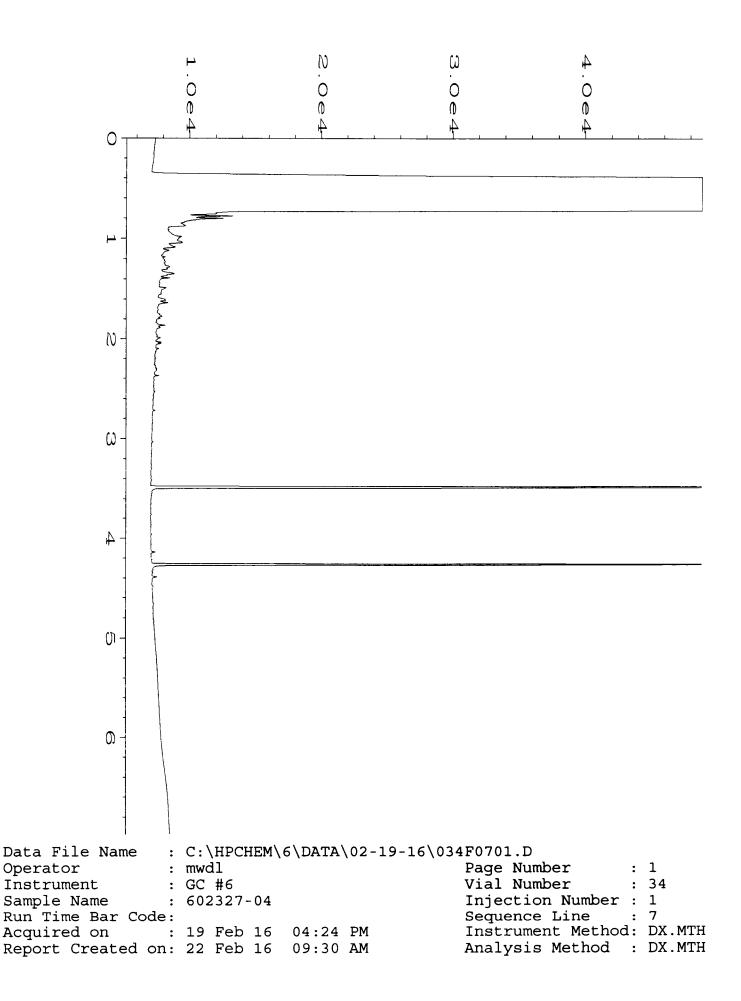
vo - The value reported fell outside the control limits established for this analyte.

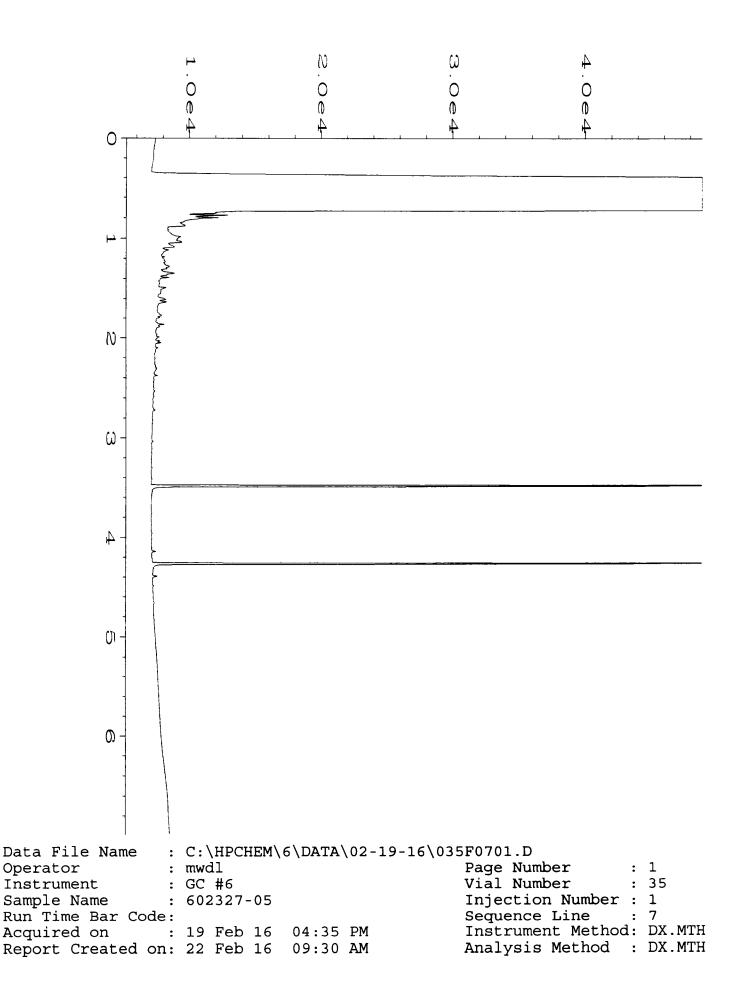
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

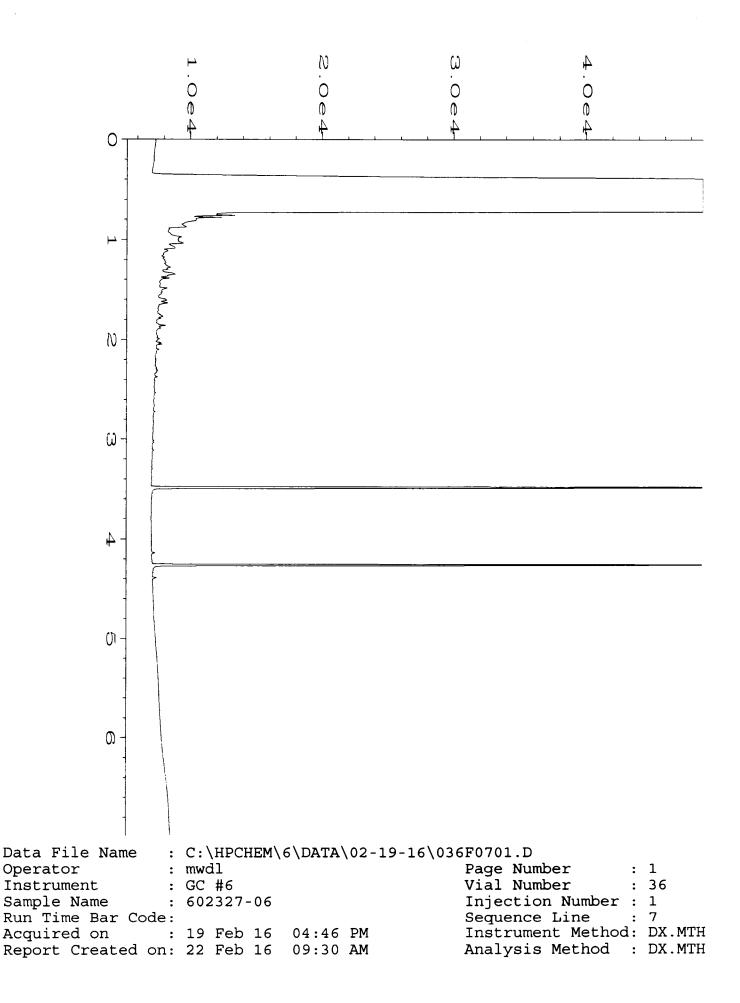


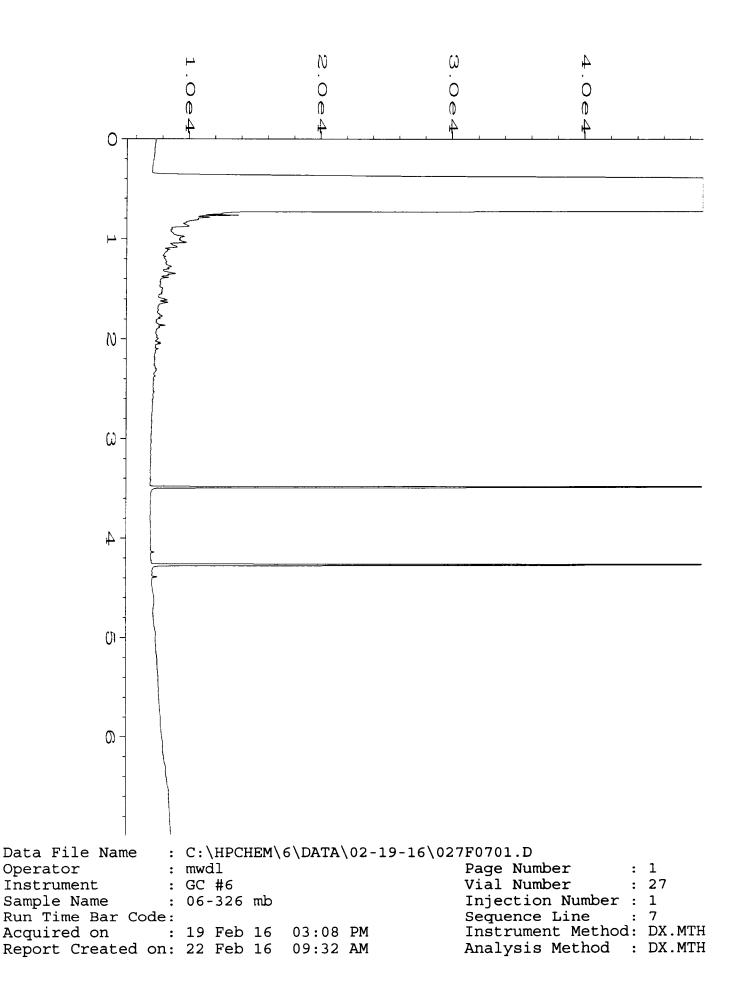


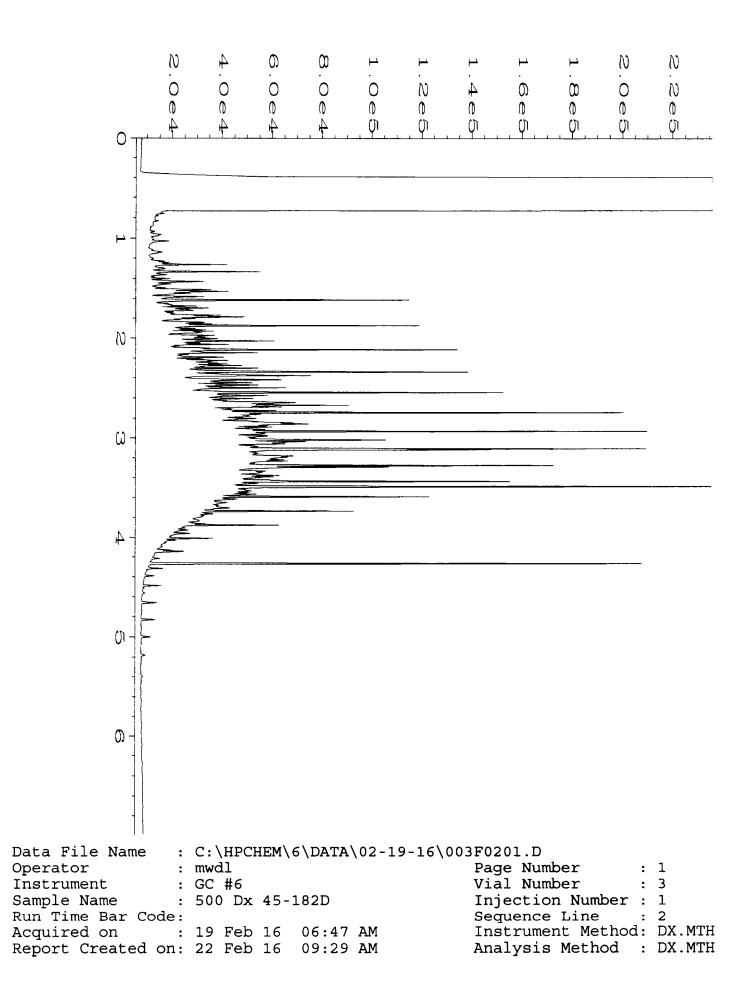












Send Report To				RS (signature			ME	0 à	2/1	9/	ago #	IRNAR	OUND TIME
Company <u>SoundEarth Strategie</u> Address <u>2811 Fairview Avenue</u>	East, Suite 2000			100	1 TACO TIME 02-003			PO #		R	ush cha Chua	rges o	Weeks) <u>w TAT</u> authorized by: <u>with K</u>
City, State, ZIP <u>Seattle, Washin</u> Phone # <u>(206) 306-1900</u> Fax	( # (206) 306-1907		REMAR	KS 1 low level d g/kg for EDC.		-		EMS Y	/ N		Dispos Return	e aftei samp	E DISPOSAL r 30 days iles instructions
											A	NALY	SES REQUESTED
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	CVOCs by 82608		Notes
VE3-NG-18	VE3 - NG	18'	ALA-E	2/14/16	0988	SCIL	5	X		1			
VE3-N12-19	VE3-NIZ	191			6000	<u> </u>	5	×			-		
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VE9 - N12 - 19	VE9-NIZ	19'	DA	1 1	1050	11	5	X					
VE44-NIC-18	VE44-NID	18'	05	1 1	1450		5	X		1			
VE5 - N7 - 18	VES - N7	18'	8		1130 	到	5	×					
				- PA	2/14/	10							

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by	JONATHAN LOEFFLER	SoundEarth	2/19/16	1300
Seattle, WA 98119-2029	Received by:	Janes \$1079	FEB	2/17	1300
Ph. (206) 285-8282	Relinquished by:			-	
Fax (206) 283-5044	Received by:		Samples received a	t <u>2</u> °C	

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Friedman & Bruya, Inc. #602328

#### 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

February 23, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on February 19, 2016 from the SOU\_1002-003\_20160219, F&BI 602328 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: Chuck Cacek, Jonathan Loeffler SOU0223R.DOC

## ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on February 19, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160219, F&BI 602328 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
602328 -01	VE3-N3-11

All quality control requirements were acceptable.

### ENVIRONMENTAL CHEMISTS

Date of Report: 02/23/16 Date Received: 02/19/16 Project: SOU\_ 1002-003\_ 20160219, F&BI 602328 Date Extracted: 02/19/16 Date Analyzed: 02/19/16

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 53-144)
VE3-N3-11 602328-01	<50	<250	91
Method Blank <sup>06-324 MB</sup>	<50	<250	84

### ENVIRONMENTAL CHEMISTS

Date of Report: 02/23/16 Date Received: 02/19/16 Project: SOU\_ 1002-003\_ 20160219, F&BI 602328

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code:	602311-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	94	99	64-133	5
Laboratory Code:	Laboratory Contr	ol Samp	le				
			Percent	-			
	Reporting	Spike	Recover	y Accep	tance		
Analyte	Units	Level	LCS	Crite	eria		
Diesel Extended	mg/kg (ppm)	5,000	89	58-1	47		

### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

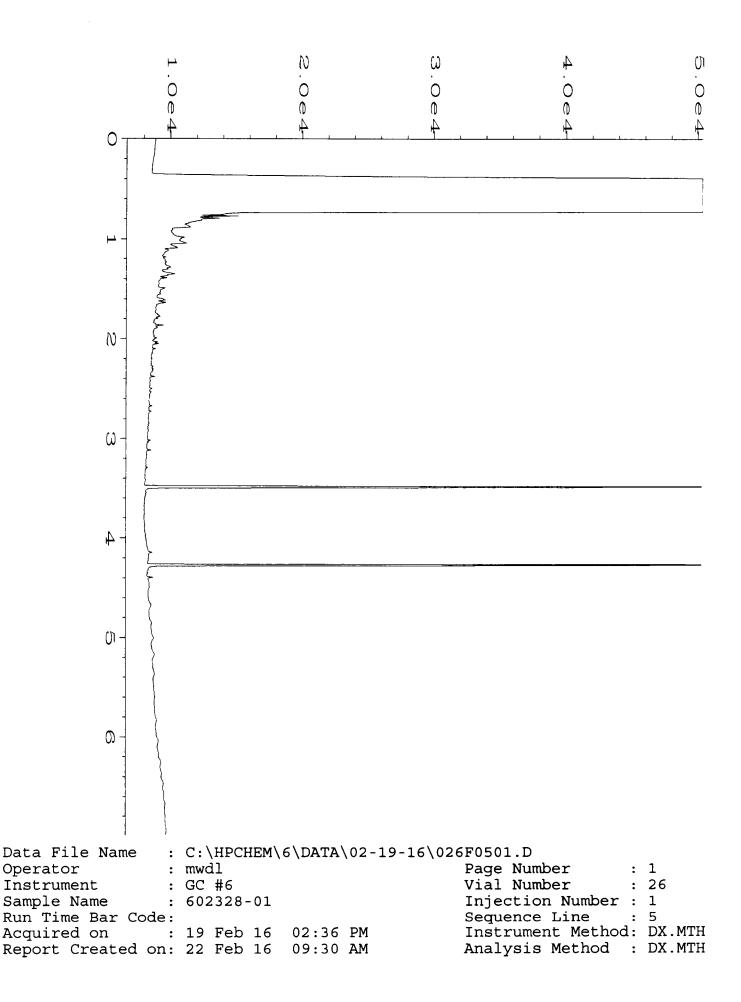
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

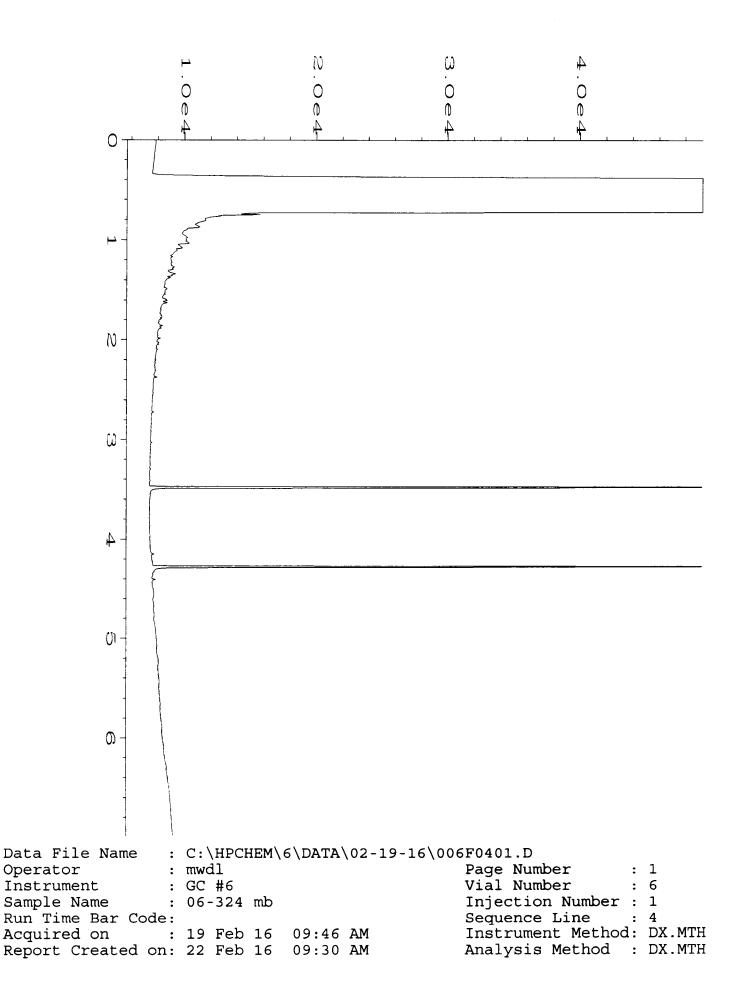
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

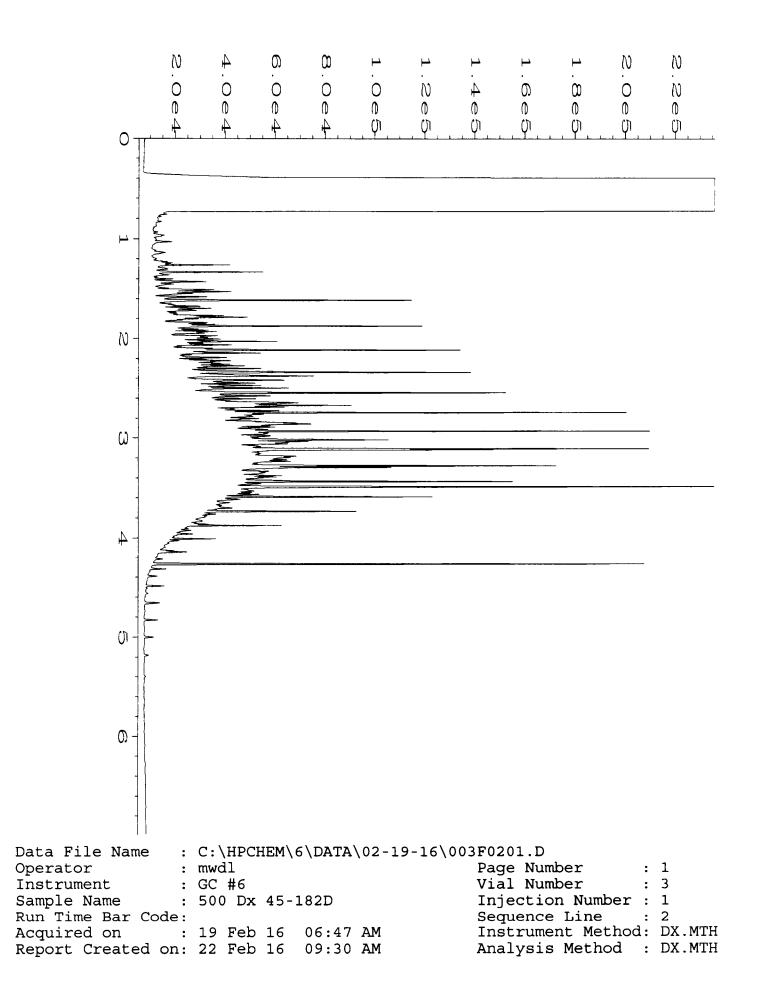
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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.







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Send Report ToJonn Funderby Jonathan Loeffler		<u>;c:</u>	SAMPLE	ERS (signurure	that	<					age #	JRNAR	
Company_SoundEarth Strategies	, Inc.		PROJE	CT NAME/NO.				PO #		$\left  \right _{\mathcal{I}}$	Stando	ord (2	Weeks)
Address_2811 Fairview Avenue Ec	ast, Suite 2000				I TACO TIMI 2-003	E				Ru	RUSH_ ush cho	araes (	authorized by:
City, State, ZIP <u>Seattle, Washing</u> Phone # <u>(206) 306-1900</u> Fax #				KS I low level de g/kg for EDC.				EMS Y	/ N		S Dispos Return	AMPL e afte samp	E DISPOSAL or 30 days
			1						··· ···	1	4	NAL	SES REQUESTED
Sample ID	Sampl <del>e</del> Location	Sample Depth	Lab ID	Date Sampled	Time Sample d	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	CVOCs by 8260B1		Notes
VE3-N3-11	VE3-N3	11'	٥	2/14/16	0400	SUIL	1	×					
				Stf	2/19/14								

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by	JONATHAN LOEFFUGR	SOUNDEARTH	2/14/16	1300
Seattle, WA 98119-2029	Received by my	Janes Brux	FZB	2/19	1300
Ph. (206) 285-8282	Relinquished by:			<u>-                                    </u>	
Fax (206) 283-5044	Received by:		Samples received	at _2°	C

Friedman & Bruya, Inc. #602353

#### 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

February 24, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on February 22, 2016 from the SOU\_1002-003\_20160222, F&BI 602353 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 c: Chuck Cacek, Jonathan Loeffler SOU0224R.DOC

### ENVIRONMENTAL CHEMISTS

# CASE NARRATIVE

This case narrative encompasses samples received on February 22, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160222, F&BI 602353 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	SoundEarth Strategies
602353 -01	TP102-17
602353 -02	TP102-10
602353 -03	TP102-05
602353 -04	TP103-06
602353 -05	TP103-10
602353 -06	TP103-17
602353 -07	TP104-17
602353 -08	TP104-10
602353 -09	TP104-05

All quality control requirements were acceptable.

### ENVIRONMENTAL CHEMISTS

Date of Report: 02/24/16 Date Received: 02/22/16 Project: SOU\_1002-003\_20160222, F&BI 602353 Date Extracted: 02/22/16 Date Analyzed: 02/22/16

### 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)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate ( <u>% Recovery)</u> (Limit 50-150)
TP102-17 602353-01	< 0.02	< 0.02	< 0.02	< 0.06	<2	90
TP103-17 602353-06	< 0.02	< 0.02	<0.02	< 0.06	<2	92
TP104-17 602353-07	< 0.02	< 0.02	<0.02	< 0.06	<2	92
Method Blank 06-339 MB	< 0.02	< 0.02	< 0.02	< 0.06	<2	86

#### ENVIRONMENTAL CHEMISTS

Date of Report: 02/24/16 Date Received: 02/22/16 Project: SOU\_1002-003\_20160222, F&BI 602353 Date Extracted: 02/22/16 Date Analyzed: 02/22/16

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 56-165)
TP102-17 602353-01	<50	<250	90
TP102-10 602353-02	<50	<250	81
TP102-05 602353-03	<50	<250	80
TP103-06 602353-04	<50	<250	89
TP103-10 602353-05	<50	<250	81
TP103-17 602353-06	<50	<250	80
TP104-17 602353-07	<50	<250	80
TP104-10 602353-08	<50	<250	82
TP104-05 602353-09	<50	<250	80
Method Blank 06-340 MB	<50	<250	84

### ENVIRONMENTAL CHEMISTS

Date of Report: 02/24/16 Date Received: 02/22/16 Project: SOU\_1002-003\_20160222, F&BI 602353

## 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: 602354-04 (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)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

		Percent				
	Reporting	Spike	Recovery	Acceptance		
Analyte	Units	Level	LCS	Criteria		
Benzene	mg/kg (ppm)	0.5	81	69-120		
Toluene	mg/kg (ppm)	0.5	87	70-117		
Ethylbenzene	mg/kg (ppm)	0.5	88	65-123		
Xylenes	mg/kg (ppm)	1.5	86	66-120		
Gasoline	mg/kg (ppm)	20	95	71-131		

### ENVIRONMENTAL CHEMISTS

Date of Report: 02/24/16 Date Received: 02/22/16 Project: SOU\_1002-003\_20160222, F&BI 602353

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 6	02346-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	90	90	63-146	0
Laboratory Code: I	.aboratory Contr	ol Samp	le				
			Percent				
	Reporting	Spike	Recovery	Accep	tance		
Analyte	Units	Level	LCS	Crite	eria		
Diesel Extended	mg/kg (ppm)	5,000	89	79-1	44		

### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

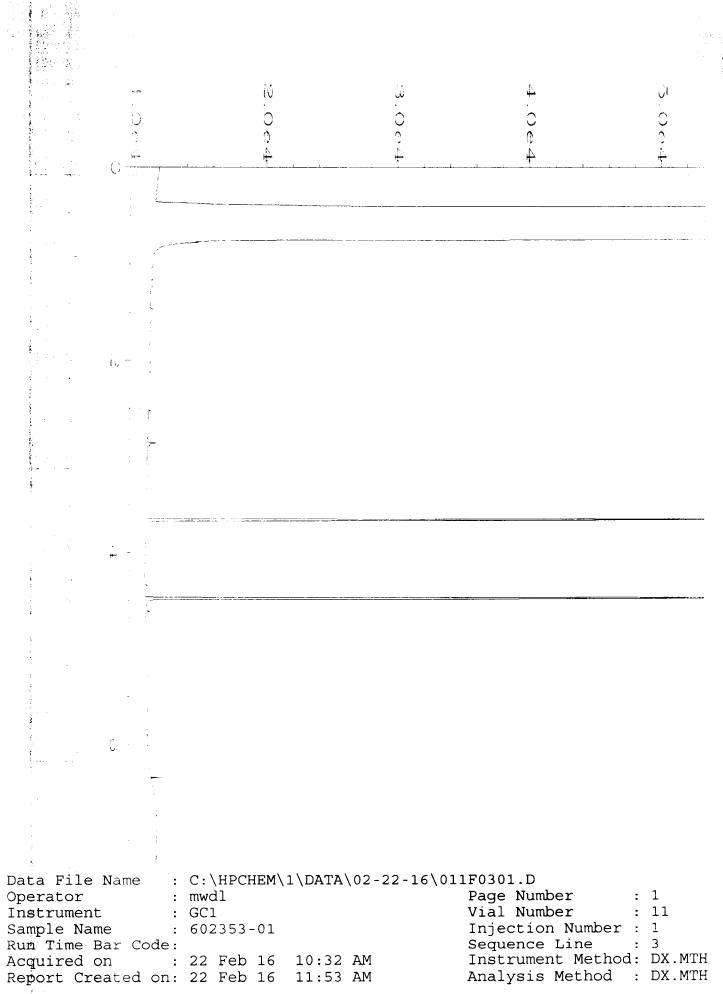
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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.

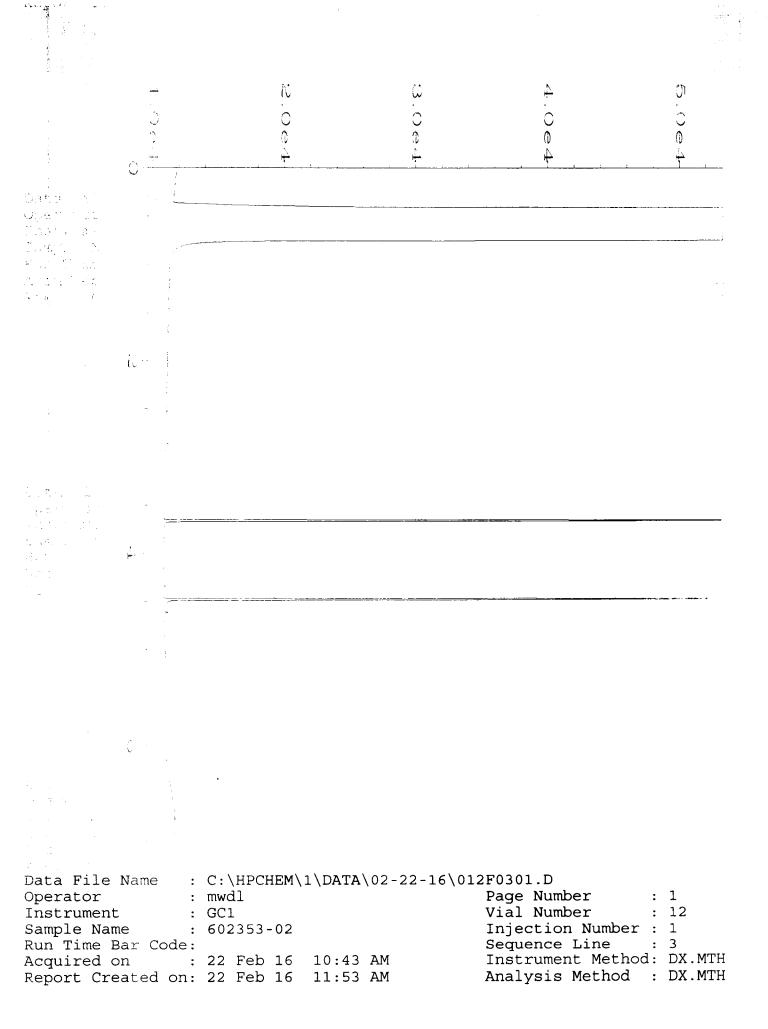
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

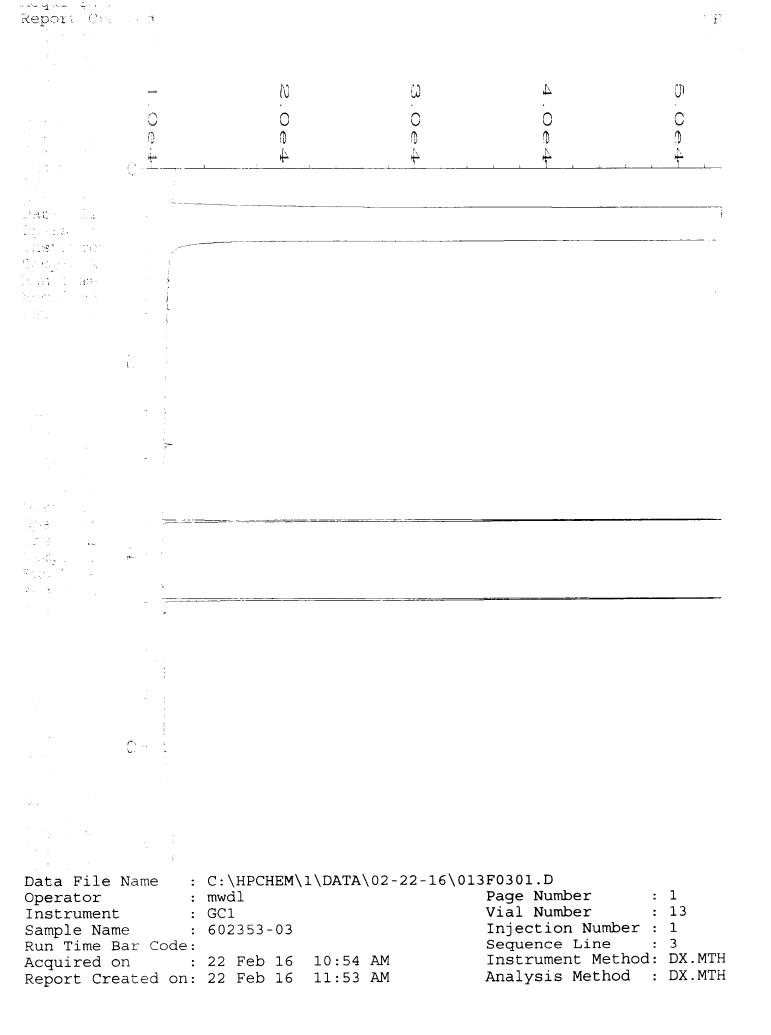
vo - The value reported fell outside the control limits established for this analyte.

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



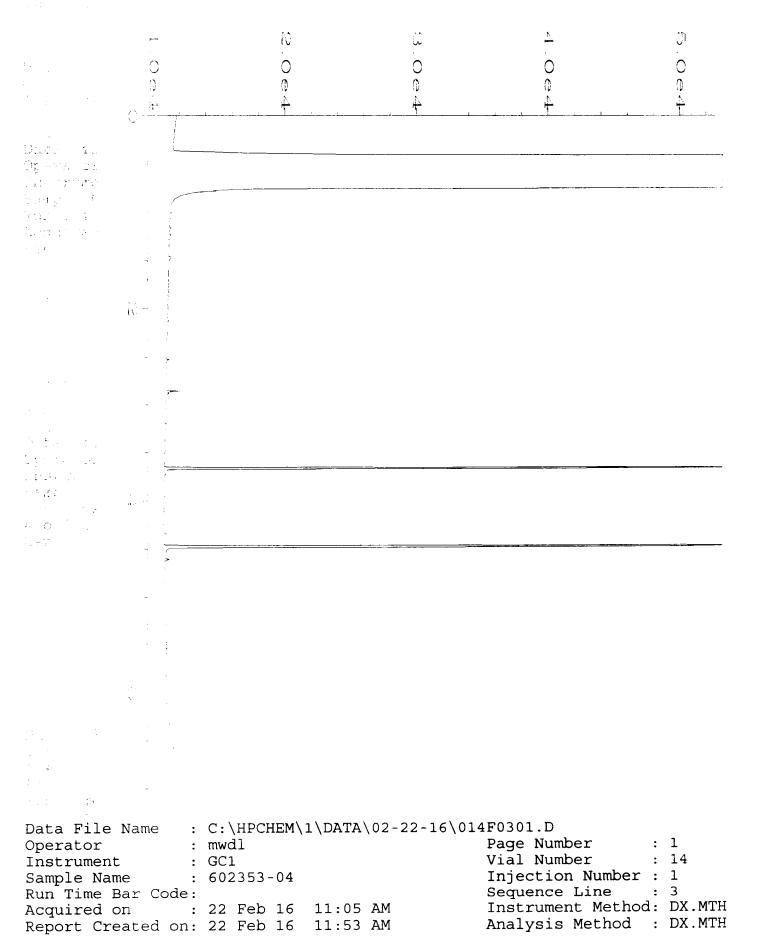
nake ali in transformer Transformer Transformer



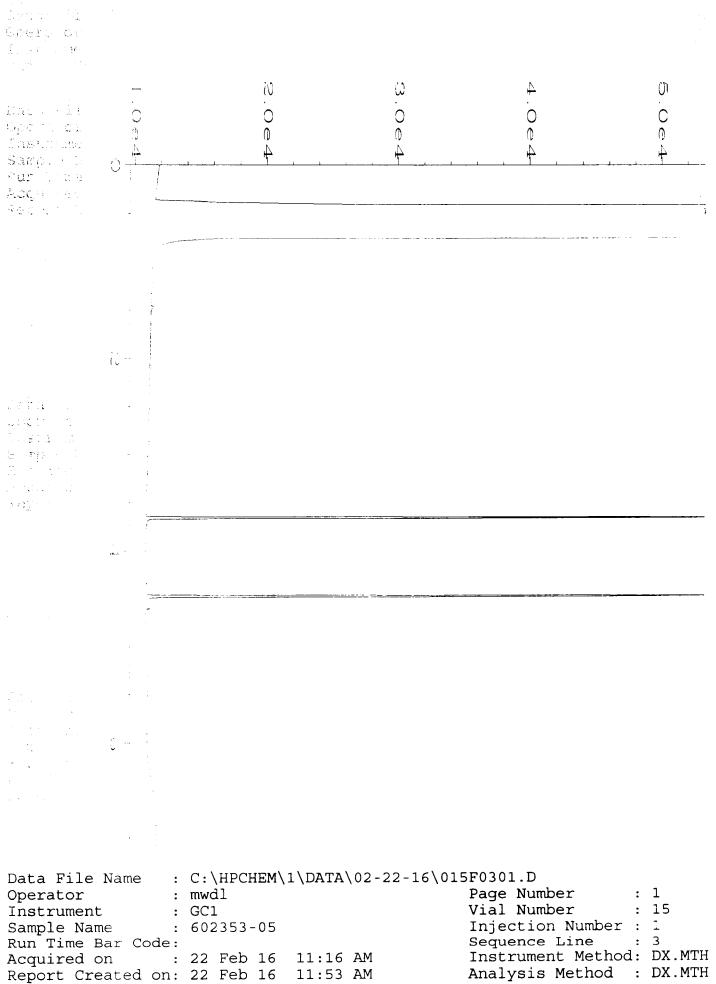


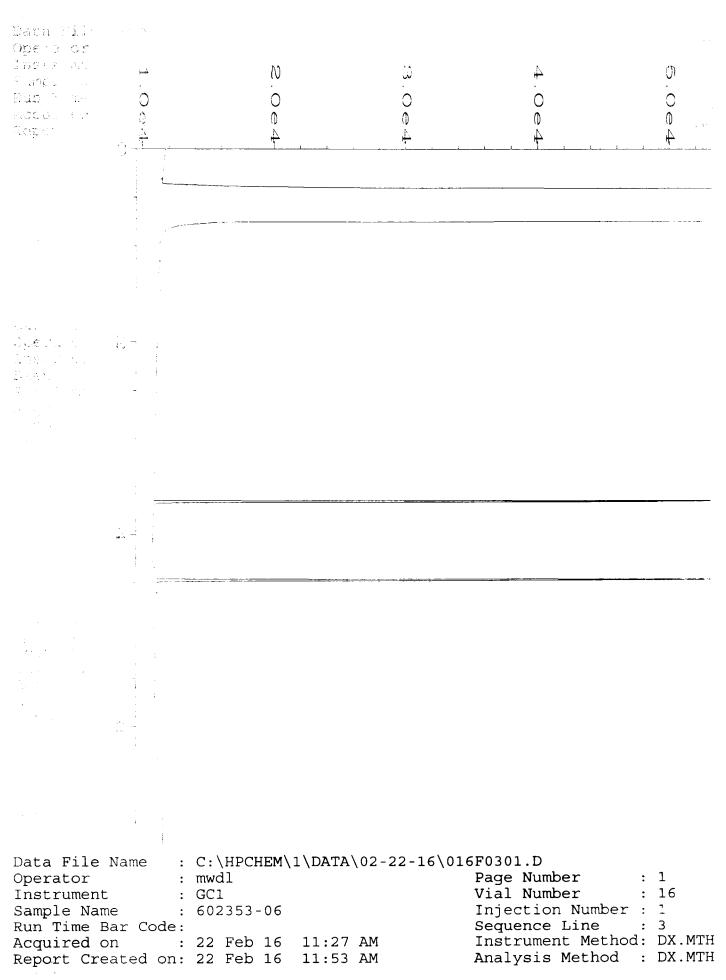




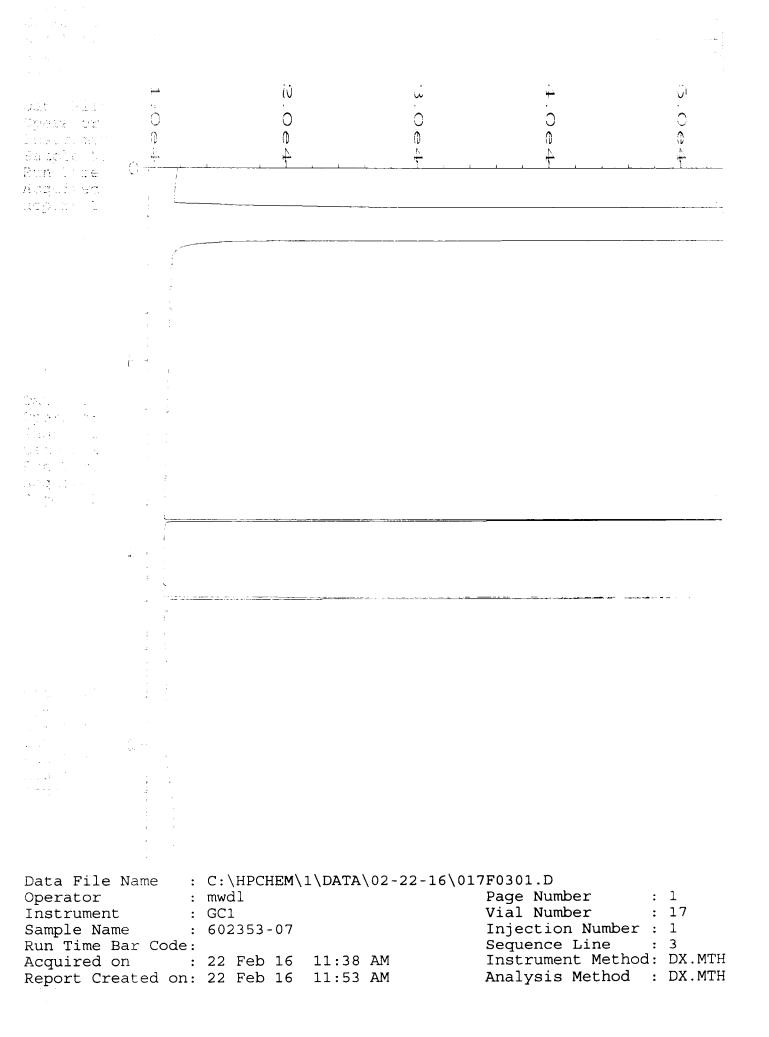


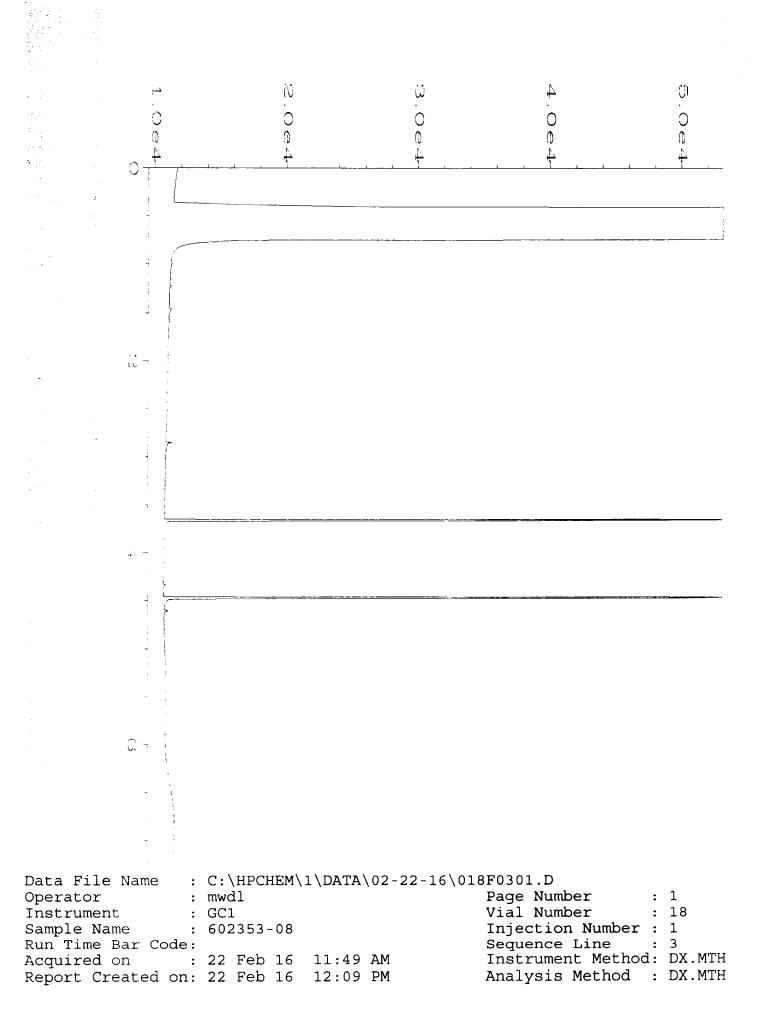
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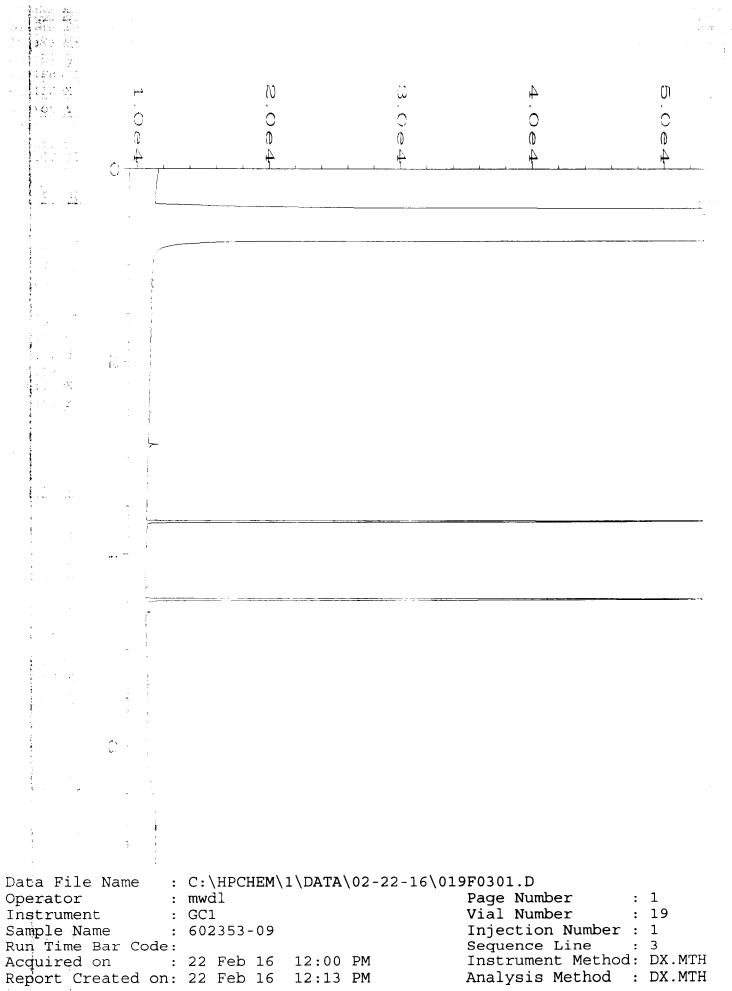




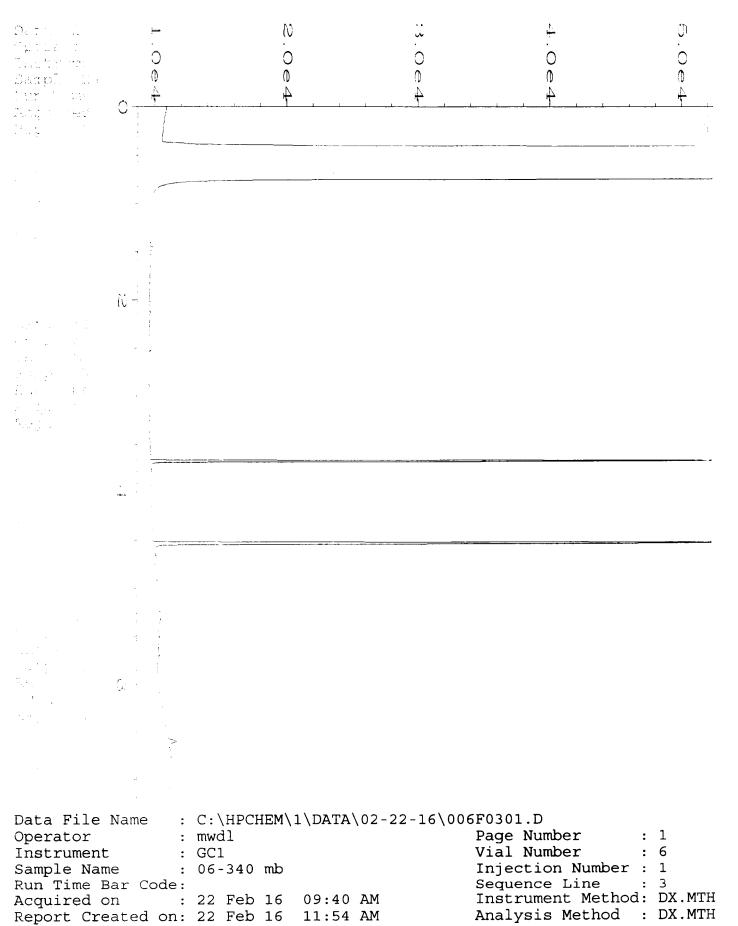
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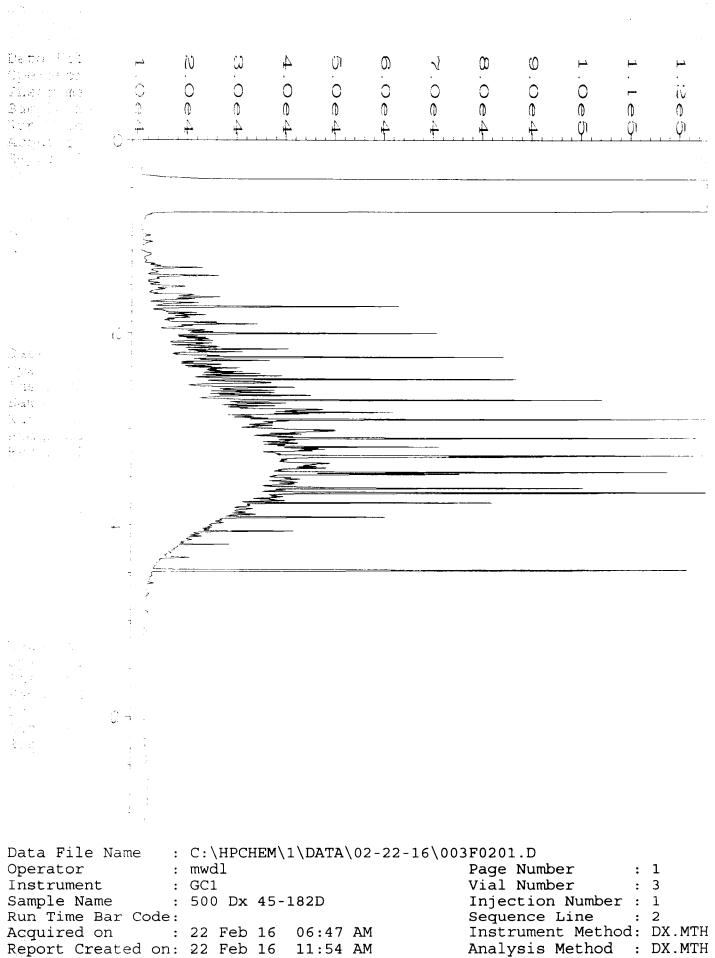












(	60234 8NP) 602353
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Send Report To\_\_\_\_John Funderburk, Chuck Cacek; cc:\_ Jonathan Loeffler

Company\_SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue East, Suite 2000

City, State, ZIP\_\_Seattle, Washington 98102\_\_

Phone #\_(206) 306-1900 Fax #\_(206) 306-1907

SAMPLE CHAIN OF CUSTODY ME	5 02/22/16	1 ( 1153/
SAMPLERS (signo, ure)		Page #OI TURNAROUND TIME Same day
PROJECT NAME/NO. MADISON TACO TIME 1002-003	PO #	Standard (2 Weeks) X RUSH Rush charges authorized by: Chuck Cacet
REMARKS <sup>1</sup> low level detection limit of 0.01 mg/kg for EDC. Direct Sparge Method	GEMS Y / N	SAMPLE DISPOSAL Dispose after 30 days Return samples Will call with instructions

							-		ANALYSES REQUESTED				SES REQUESTED
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-GX	BTEX by 8021B	CVOCs by 82608 <sup>1</sup>		Notes
TP102-17	TPIOZ	17'	CAA.G	2/20/16	0841	SOIL	5	×	×	*			+ pr cc 2/22/14
TP102-10	TPIOZ	10'	02		0843			X					lu s
TP102-05	TPIDZ	5'	03		0845			X					
TP103-06	TP103	6'	DY		0902			X					
TP103-10	TP103	10'	65		0922		Ι	X					
TP103-17	TP103	17'	06		0925			X	*	*			
TP104-17	TP104	17'	07		0956	Π		X	*	*			
TP104-10	TP104	10'	08		0958			X					
TP104-05	TP104	5'	oal	╞	1000	T	L	X			-		
					84	2/20	116						

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by	JONATHAN LOEFFLER	SOUNDEARTH	2/22/16	0805
Seattle, WA 98119-2029	Received by: Martus	Nhan Phan	FEBI	2/22/16	0805
Ph. (206) 285-8282	Relinquished by:				
Fax (206) 283-5044	Received by:		Samples recei	ved at <u>4</u>	_°C

Friedman & Bruya, Inc. #602354

#### 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

February 24, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on February 22, 2016 from the SOU\_1002-003\_20160222, F&BI 602354 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 c: Chuck Cacek, Jonathan Loeffler SOU0224R.DOC

## ENVIRONMENTAL CHEMISTS

# CASE NARRATIVE

This case narrative encompasses samples received on February 22, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160222, F&BI 602354 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	SoundEarth Strategies
602354 -01	TP101-10
602354 -02	TP101-05
602354 -03	TP101-07
602354 -04	TP101-16

All quality control requirements were acceptable.

### ENVIRONMENTAL CHEMISTS

Date of Report: 02/24/16 Date Received: 02/22/16 Project: SOU\_1002-003\_20160222, F&BI 602354 Date Extracted: 02/22/16 Date Analyzed: 02/22/16

### 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)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate ( <u>% Recovery)</u> (Limit 50-150)
TP101-16 602354-04	<0.02	<0.02	<0.02	< 0.06	<2	91
Method Blank 06-339 MB	< 0.02	< 0.02	< 0.02	< 0.06	<2	86

#### ENVIRONMENTAL CHEMISTS

Date of Report: 02/24/16 Date Received: 02/22/16 Project: SOU\_1002-003\_20160222, F&BI 602354 Date Extracted: 02/22/16 Date Analyzed: 02/22/16

### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND RESIDUAL RANGE USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Residual Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 53-144)
TP101-10 602354-01	<50	<250	87
TP101-07 602354-03	<50	<250	97
TP101-16 602354-04	<50	<250	86
Method Blank <sup>06-343 MB</sup>	<50	<250	97

#### ENVIRONMENTAL CHEMISTS

Date of Report: 02/24/16 Date Received: 02/22/16 Project: SOU\_ 1002-003\_ 20160222, F&BI 602354

## 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: 602354-04 (Duplicate)

		Sample	Duplicate	
	Reporting	Result	Result	RPD
Analyte	Units	(Wet Wt)	(Wet Wt)	(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)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	0.5	81	69-120
Toluene	mg/kg (ppm)	0.5	87	70-117
Ethylbenzene	mg/kg (ppm)	0.5	88	65-123
Xylenes	mg/kg (ppm)	1.5	86	66-120
Gasoline	mg/kg (ppm)	20	95	71-131

#### ENVIRONMENTAL CHEMISTS

Date of Report: 02/24/16 Date Received: 02/22/16 Project: SOU\_ 1002-003\_ 20160222, F&BI 602354

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code:	602354-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	96	90	64-133	6
Laboratory Code:	Laboratory Contr	ol Samp	le				
			Percent				
	Reporting	Spike	Recovery	y Accep	tance		
Analyte	Units	Level	LCS	Crite	eria		
Diesel Extended	mg/kg (ppm)	5,000	90	58-1	47		

#### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

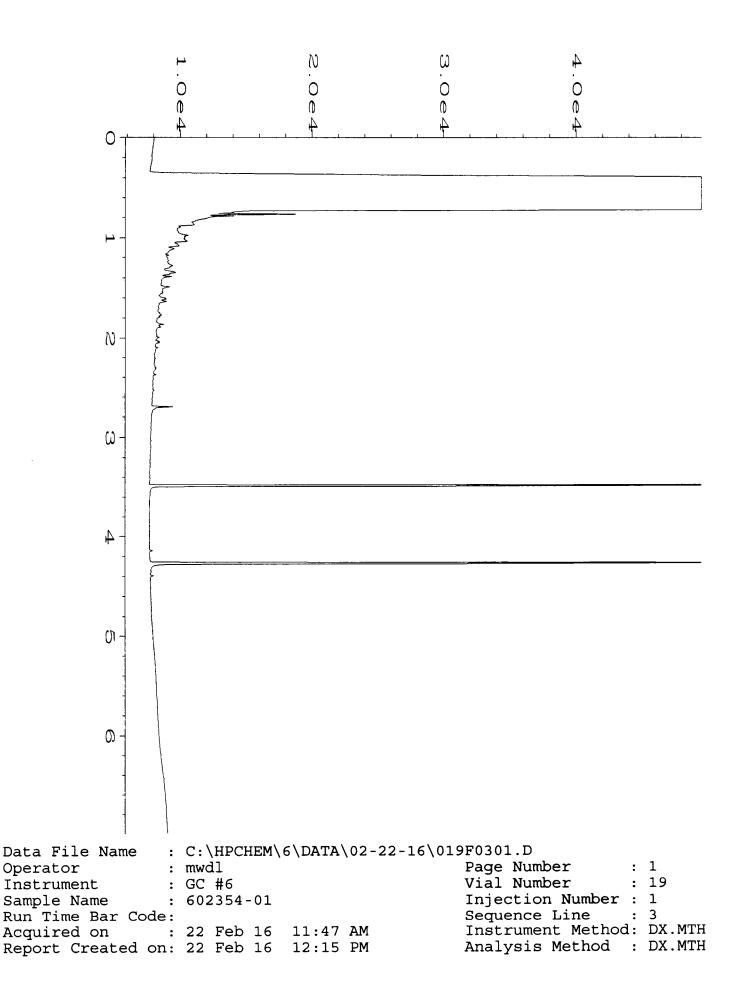
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

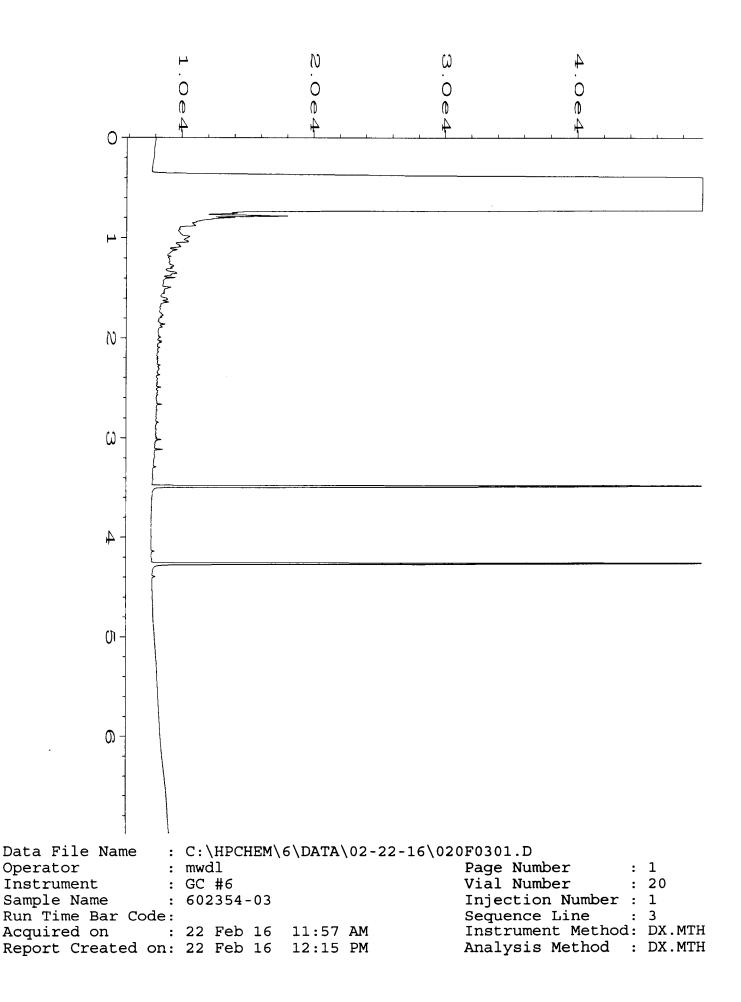
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

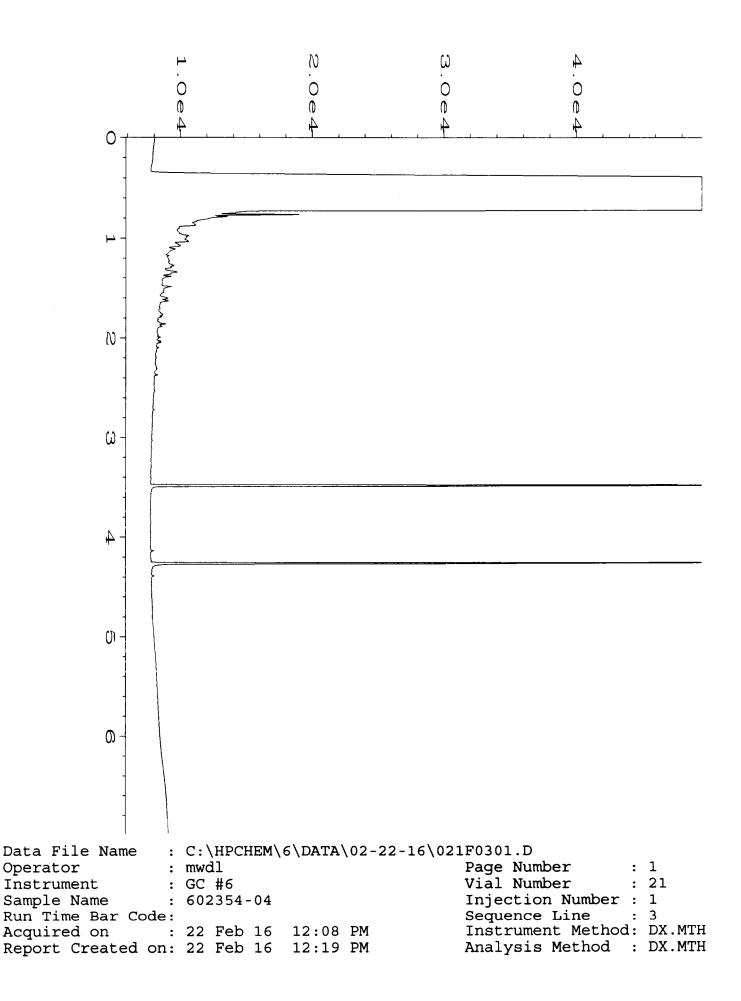
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

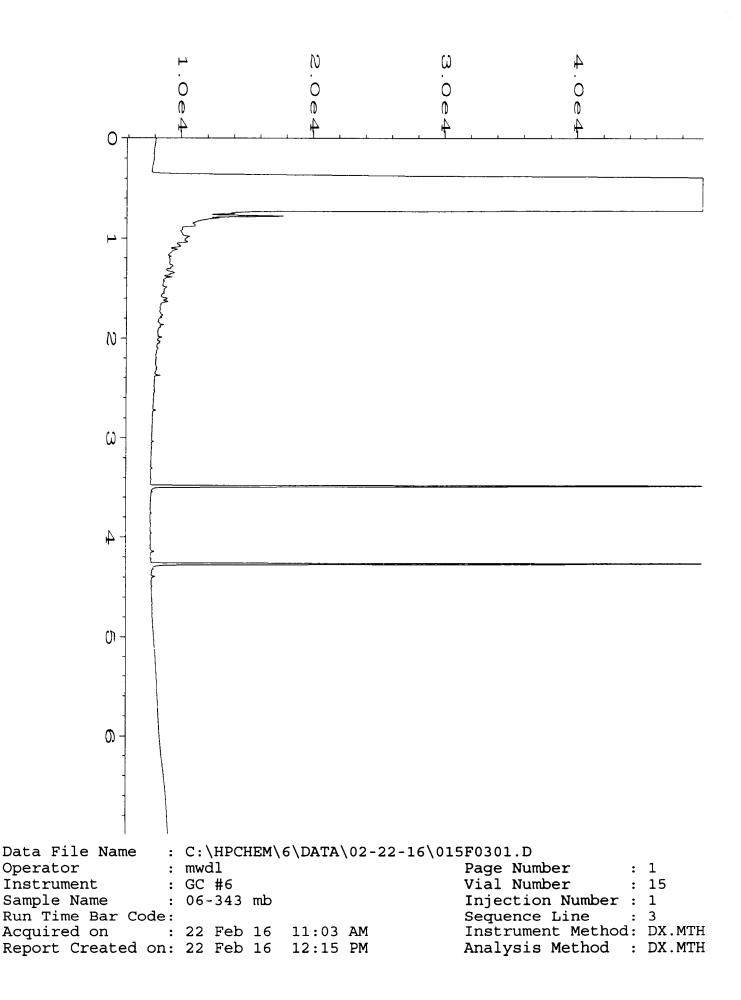
vo - The value reported fell outside the control limits established for this analyte.

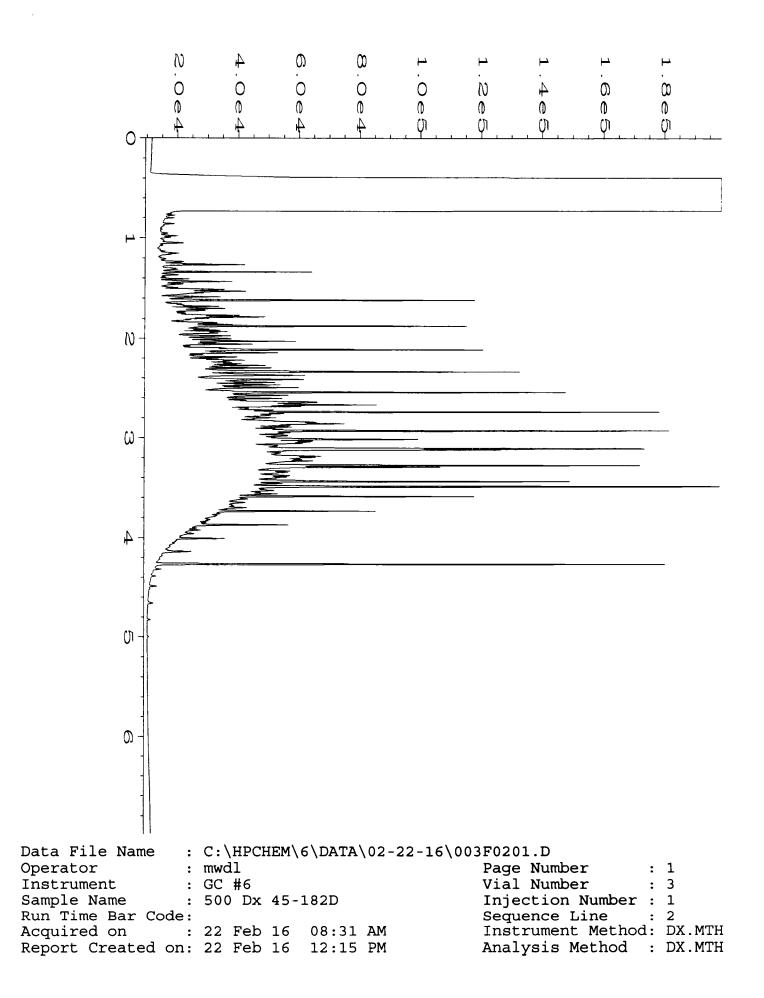
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.











60235	4	S	SAMPLE	CHAIN'O	F CUSTOD	n YC	ME	02)2	2/16			1	( VSI	
Send Report To <u>John Funderbu</u> Jonathan Loeffler		<u>c:</u>	SAMPLE	RS (signature,							age # TL	JRNAF	ROUND TIME	
Company_SoundEarth Strategies	s, Inc.		PROJEC	CT NAME/NO.				PO #			Stando	ord (2	weeks) Sameday per	
Address 2811 Fairview Avenue E	ast, Suite 2000				TACO TIME					Ru	ush cho	araes	authorized by: 1/171/16	
City, State, ZIP <u>Seattle, Washing</u>	ton 98102		REMAR	KS			G	EMS Y	/ N	1 [	SAMPLE DISPOSAL Dispose after 30 days			
Phone # <u>(206) 306-1900</u> Fax =	#(206) 306-1907			<sup>1</sup> low level de g/kg for EDC.			d l				Return Will co		ples n instructions	
· · · · · · · · · · · · · · · · · · ·		-T		····			·····		<b></b>		4	NAL	YSES REQUESTED	
Sample ID	Sampl <del>e</del> Location	Sample Depth	Lab ID	Date Sampled	Tim <del>e</del> Sampled	Matrix	# of jars	NWTPH-DX	NWTPH-GX	BTEX by 80218	CVOCs by 826081		Notes	
TP101 - 10	TPIOI	10'	OLA-R	2/19/16	1407	Soll	5	X					2/22/16 mg.	
TP101-05	TPIOI	5'	07 1	2/19/16	1410	SOIL	5							
TP101-07	TPIOI	7'	03	2/19/16		SOIL	5	X						
TP101-16	TPIOL	16'	01	2/19/16	1425	SOIL	5	×	*	*				
					$dd^2$	20/16								
					0	Tip		<u> </u>						

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by	JONATHAN LOEFFLER	SOUNDEARTH	2/22/16	0805
Seattle, WA 98119-2029	Received by horacu	Nhan Phan	FLBT	2/22/16	2805
Ph. (206) 285-8282	Relinquished by			,,,,,	
Fax (206) 283-5044	Received by:		Samples received	at <u>4</u> °	C

Friedman & Bruya, Inc. #603027

#### 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

March 4, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on March 2, 2016 from the SOU\_1002-003\_20160302, F&BI 603027 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: Chuck Cacek, Jonathan Loeffler SOU0304R.DOC

## ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on March 2, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160302, F&BI 603027 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	<u>SoundEarth Strategies</u>
603027 -01	VE3-N3-16
603027 -02	VE4-N5-17

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 03/04/16 Date Received: 03/02/16 Project: SOU\_1002-003\_20160302, F&BI 603027 Date Extracted: 03/02/16 Date Analyzed: 03/02/16

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 56-165)
VE3-N3-16 603027-01	<50	<250	98
VE4-N5-17 603027-02	<50	<250	97
Method Blank 06-409 MB2	<50	<250	113

### ENVIRONMENTAL CHEMISTS

Date of Report: 03/04/16 Date Received: 03/02/16 Project: SOU\_ 1002-003\_ 20160302, F&BI 603027

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 6	603022-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	111	101	63-146	9
Laboratory Code: I	.aboratory Contr	ol Samp	le				
			Percent				
	Reporting	Spike	Recovery	Accep	tance		
Analyte	Units	Level	LCS	Crite	eria		
Diesel Extended	mg/kg (ppm)	5,000	108	79-1	44		

#### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

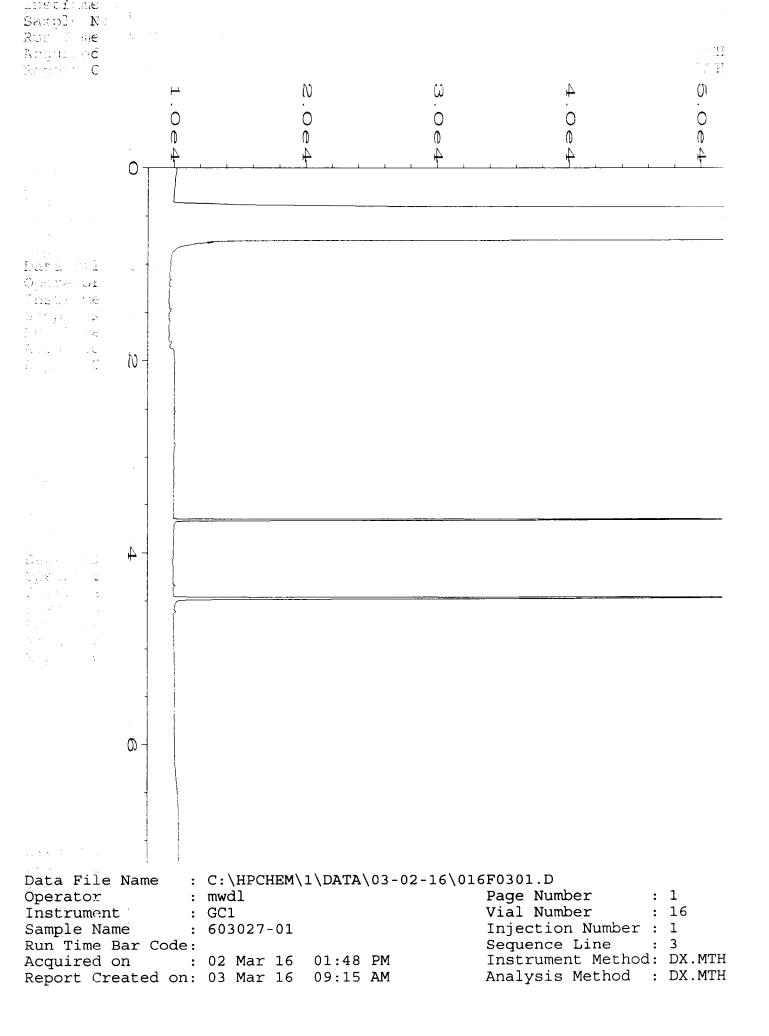
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

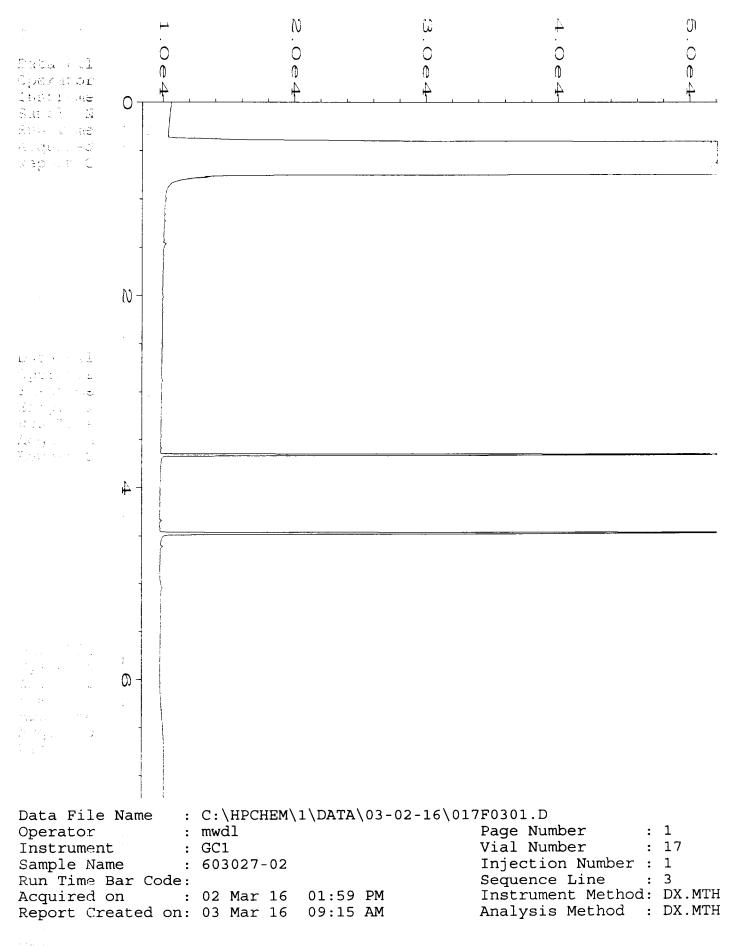
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

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

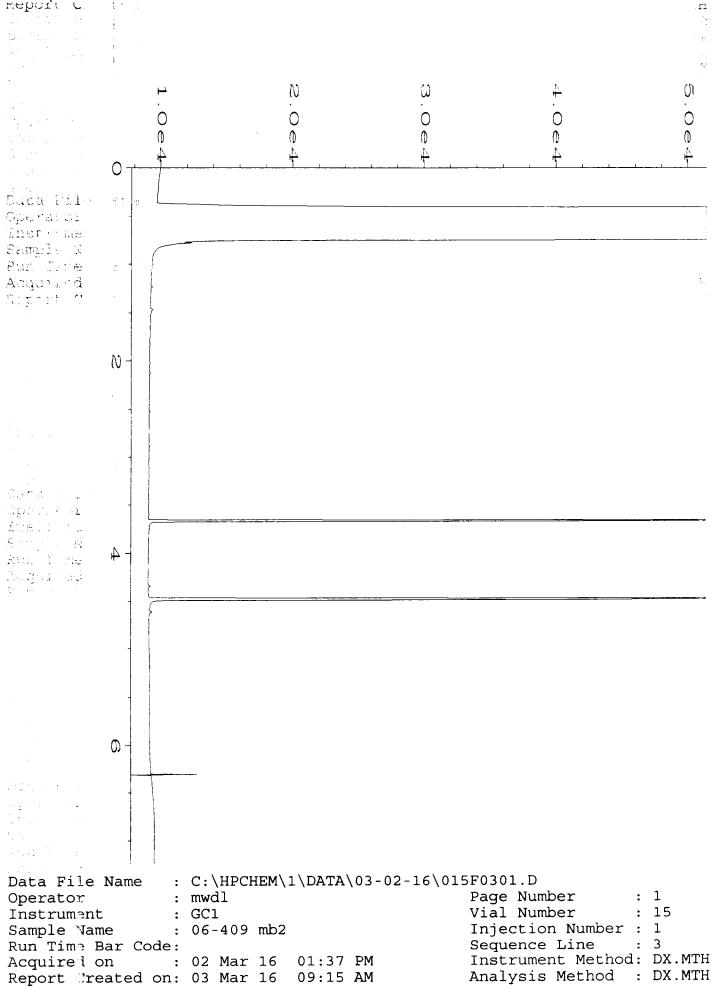
vo - The value reported fell outside the control limits established for this analyte.

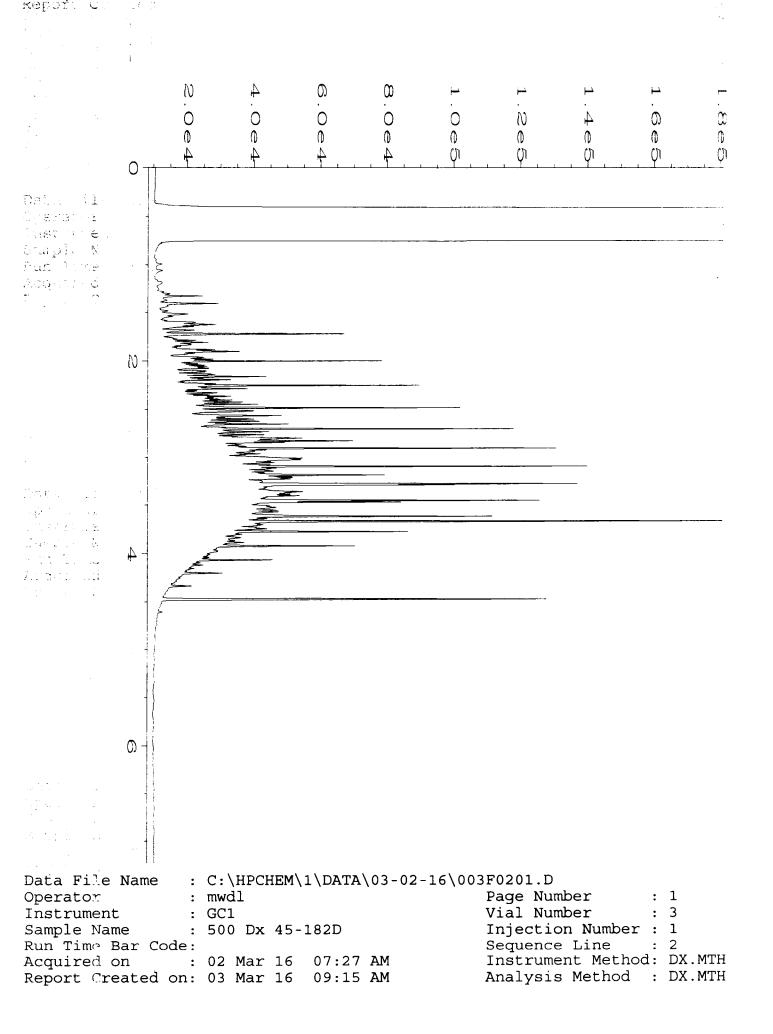
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.





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603027		9	SAMPLE	CHAIN O	F CUSTO	Y	ME	03/	02/1	6		1	( <b>1</b> / <i>I</i> / <i>I</i> /
Send Report To <u>John Funderbur</u> Jonathan Loeffler		<u>2:</u>	SAMPLE		"that	0				-	'age # T		
Company_SoundEarth Strategies,	Inc.		PROJEC	T NAME/NO.	0			PO #			Stand	ard (2	Weeks)
Address_2811 Fairview Avenue Ea	ist, Suite 2000				NTACO TIME 02-003					R	RUSH_ Ush cha	arges	authorized by: Cacelc
City, State, ZIP_ <u>Seattle, Washingt</u>	on 98102		REMARI		2-005					1	S	SAMPL	LE DISPOSAL
Phone # <u>(206) 306-1900</u> Fax #	(206) 306-1907			<sup>1</sup> low level d g/kg for EDC.				EMS Y	/ N		Return	n samj	er 30 days ples n instructions
	I		1		T	<u>, , , , , , , , , , , , , , , , , , , </u>	r		· · · · · · · · · · · · · · · · · · ·		4	NAL	YSES REQUESTED
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	CVOCs by 826081		Notes
VE3-N3-16	VE3-N3	16'	OINE	3/1/16	1145	SOIL	5	X		<b></b>			
VE4-N5-17	VE4 - N5	17'	02 V	3/1/16	1234	SOIL	5	X					
					H								
				0	NJ-	3/1/16							
								/					
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Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by	JONATHAN LOEFFLER	SOUNDEARTH	3/2/16	0937
Seattle, WA 98119-2029	Received by: man Guns	Nohan Phan	EBT	3/2/16	0937.
Ph. (206) 285-8282	Relinquished by:				- (-)
Fax (206) 283-5044	Received by:		Samples received	at 4 °C	

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Friedman & Bruya, Inc. #603105

#### 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

March 8, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on March 7, 2016 from the SOU\_1002-003\_20160307, F&BI 603105 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: Chuck Cacek, Jonathan Loeffler SOU0308R.DOC

### ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on March 7, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160307, F&BI 603105 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
603105 -01	UST02-WSW03-18
603105 -02	UST03-BTM03-21
603105 -03	UST02-WSW04-18
603105 -04	UST02-WSW05-18
603105 -05	UST02-WSW06-23
603105 -06	UST02-SSW02-23
603105 -07	UST02-BTM02-23
603105 -08	UST02-ESW02-23

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 03/08/16 Date Received: 03/07/16 Project: SOU\_1002-003\_20160307, F&BI 603105 Date Extracted: 03/07/16 Date Analyzed: 03/07/16

### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 56-165)
UST02-WSW03-18 603105-01	<50	<250	105
UST03-BTM03-21 603105-02	<50	<250	99
UST02-WSW04-18 603105-03	<50	<250	98
UST02-WSW05-18 603105-04	<50	<250	99
UST02-SSW02-23 603105-06	<50	<250	99
UST02-BTM02-23 603105-07	<50	<250	88
Method Blank <sup>06-437 MB</sup>	<50	<250	98

### ENVIRONMENTAL CHEMISTS

Date of Report: 03/08/16 Date Received: 03/07/16 Project: SOU\_1002-003\_20160307, F&BI 603105

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 6	03105-01 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	112	103	63-146	8
Laboratory Code: Laboratory Control Sample							
			Percent				
	Reporting	Spike	Recovery	Accep	tance		
Analyte	Units	Level	LCS	Crite	eria		
Diesel Extended	mg/kg (ppm)	5,000	102	79-1	44		

#### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

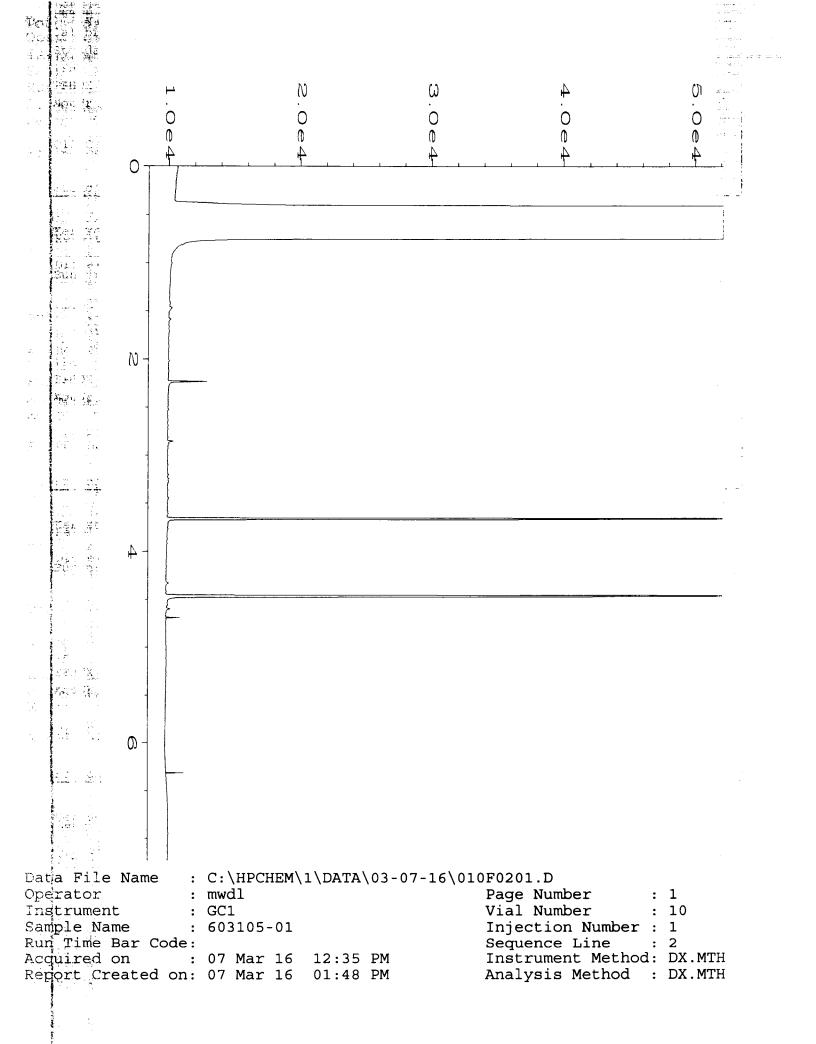
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

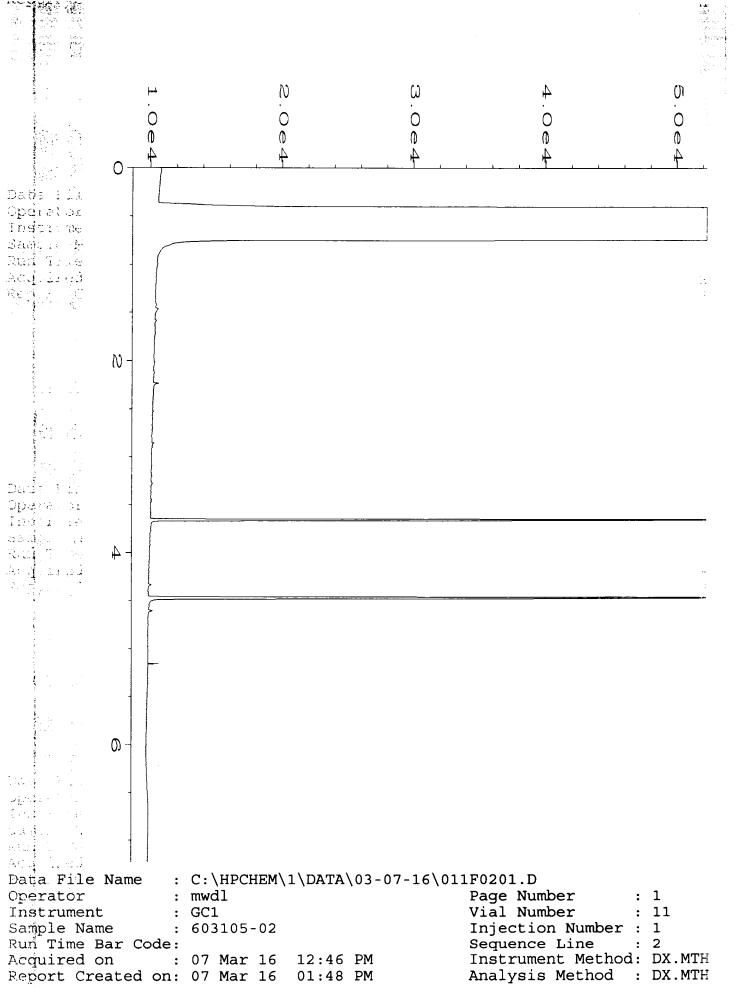
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

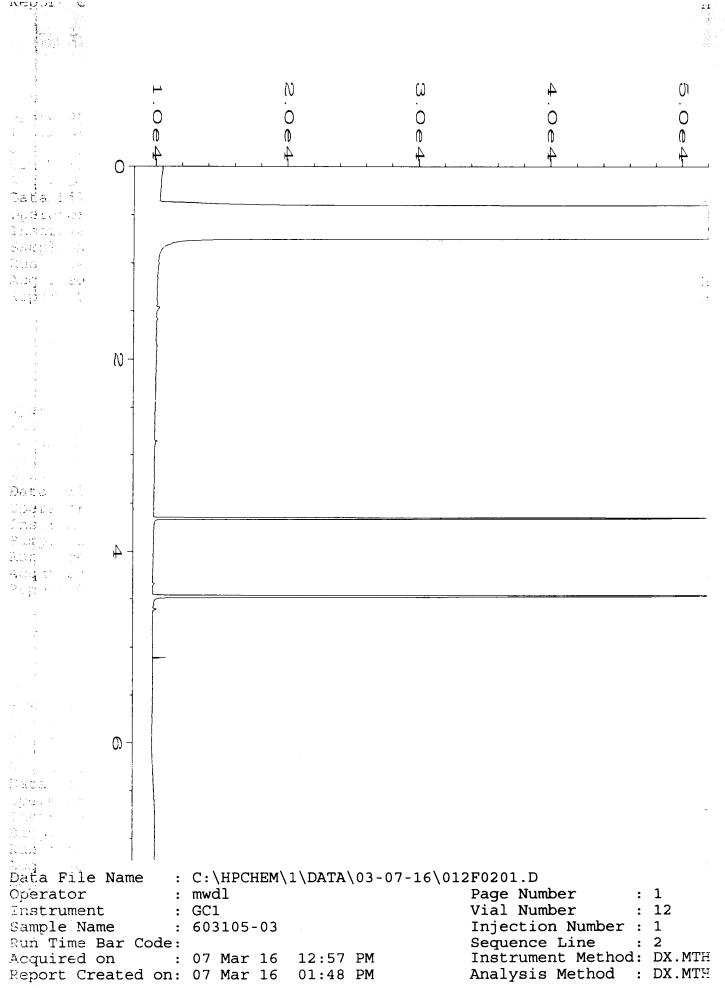
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

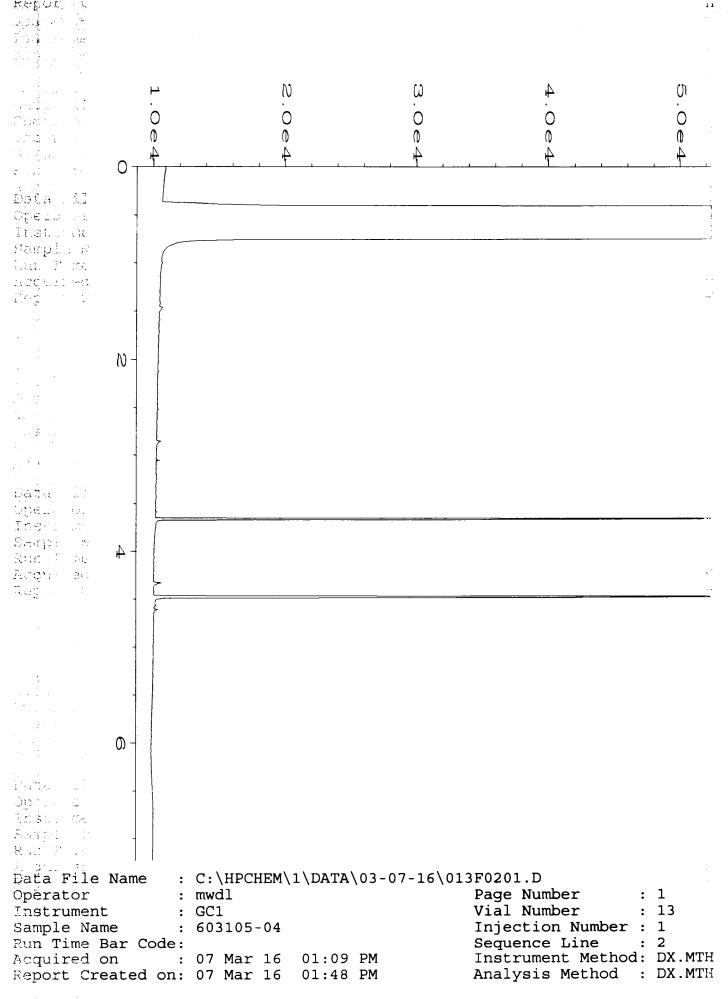
vo - The value reported fell outside the control limits established for this analyte.

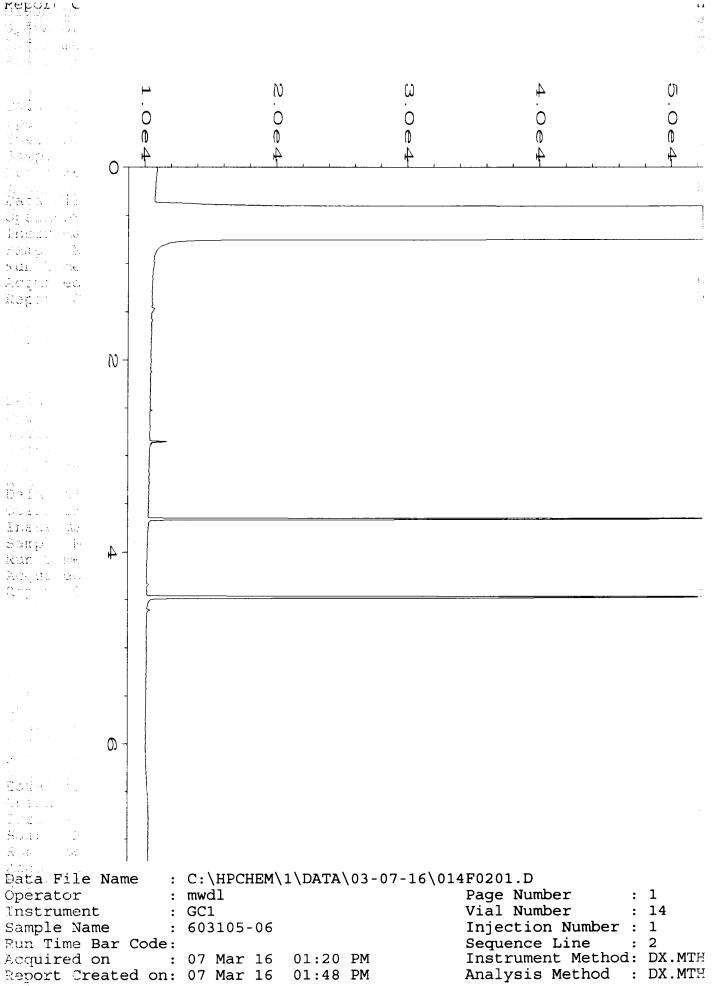
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

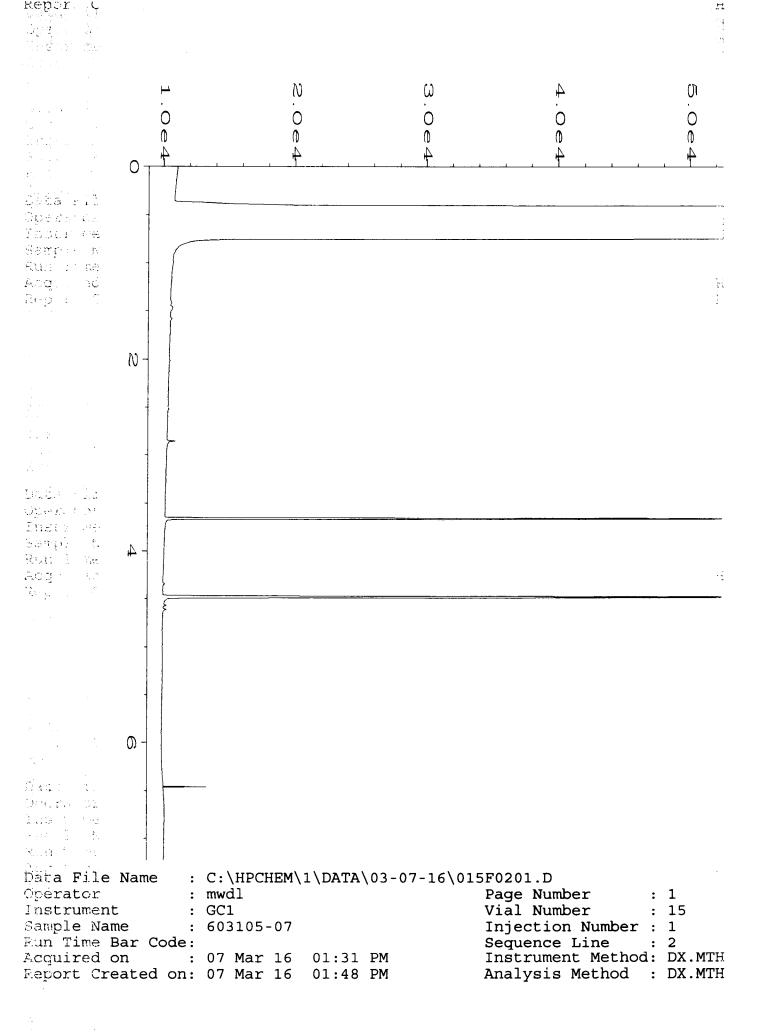


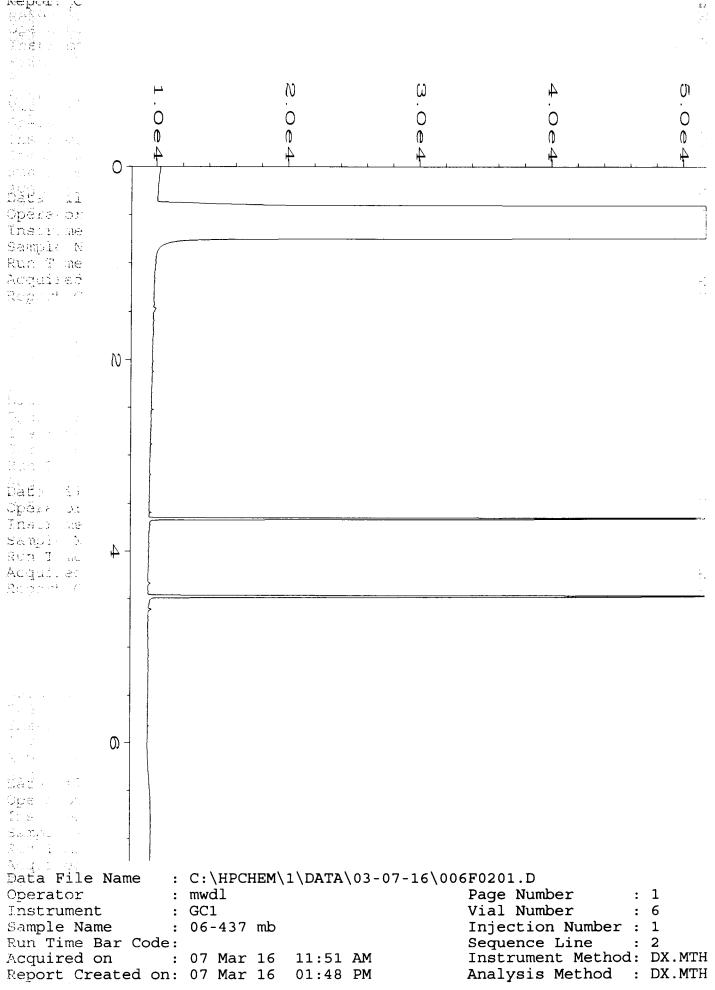




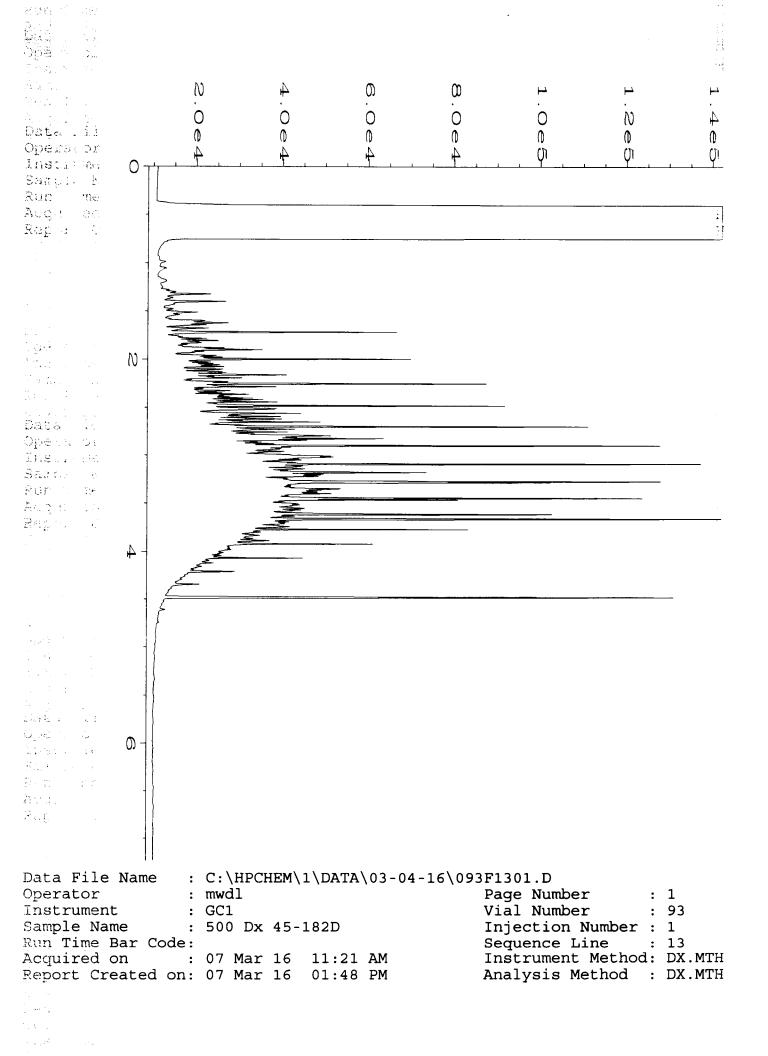








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603105	and .	603105
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Send Report To\_\_\_\_John Funderburk, Chuck Cacek; cc:

Company\_SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue East, Suite 2000

Phone #\_(206) 306-1900 Fax # (206) 306-1907

City, State, ZIP Seattle, Washington 98102

Jonathan Loeffler

	ME 03/0	f/16 ) ] D
SAMPLERS (signuiure)		TURNAROUND TIME
PROJECT NAME/NO.	PO #	Standard (2 Weeks) SRUSH Z4 M TAT
MADISON TACO TIME 1002-003		Rush charges authorized by: Chuck Cacek
REMARKS	GEMS Y / N	SAMPLE DISPOSAL Dispose after 30 days

- - las las

Return samples

Will call with instructions

**ANALYSES REQUESTED** 3TEX by 80218 NWTPH-Gx CVOCs by 82608 NWTPH-Dx Sample Sample Lab Date Time # of Sample ID Matrix Notes Ľ Location Depth ID Sampled Sampled jars 2 OT USTO2 WSW 18 314/16 X UST02-WSW03-18 0910 SOIL 21' 02 USTO 3 - BTM03 -21 USTU3 BTM 0915 X X USTOZ-W5W04-18 03 USTOZ USU 18' 0940 ł 04 Х UST02-WSW05-18 USTOZ WSW 18' 0952 1 05 USTOZ - WSW06-23 USTO2 WSW 23 1010 1 Х 06 USTO2-55W02-23 USTUZ SSW × 23' 1015 1 23' × USTO2-BTM02-23 USTOZ BTM 07 1018 08 USTOZ-ESWOZ-23 USTUZ ESW 23' 1022 1 X 31 14/16 0

SAMPLE CHAIN OF CUSTODY

<sup>1</sup> low level detection limit of

0.01 mg/kg for EDC. Direct Sparge Method

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by:	JONATHAN LUEFFLER	SOUNDEARTH	3/4/16	0928
Seattle, WA 98119-2029	Received	Michael Ercluhl	Fibre	Ŧ	L
Ph. (206) 285-8282	Refinquished by:				
Fax (206) 283-5044	Received by:		Samples received	at _2	C

Friedman & Bruya, Inc. #603160

#### 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

March 11, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on March 9, 2016 from the SOU\_1002-003\_20160309, F&BI 603160 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 c: Chuck Cacek, Jonathan Loeffler SOU0311R.DOC

## ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on March 9, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160309, F&BI 603160 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
603160 -01	VE43-N2-24
603160 -02	VE40-N2-22

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 03/11/16 Date Received: 03/09/16 Project: SOU\_1002-003\_20160309, F&BI 603160 Date Extracted: 03/09/16 Date Analyzed: 03/09/16

#### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate ( <u>% Recovery)</u> (Limit 50-150)
VE43-N2-24 603160-01	< 0.02	< 0.02	< 0.02	< 0.06	<2	85
VE40-N2-22 603160-02	< 0.02	< 0.02	<0.02	< 0.06	<2	91
Method Blank 06-427 MB	< 0.02	< 0.02	<0.02	< 0.06	<2	90

#### ENVIRONMENTAL CHEMISTS

Date of Report: 03/11/16 Date Received: 03/09/16 Project: SOU\_1002-003\_20160309, F&BI 603160 Date Extracted: 03/09/16 Date Analyzed: 03/09/16

### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 48-168)
VE43-N2-24 603160-01	<50	<250	90
VE40-N2-22 603160-02	<50	<250	89
Method Blank <sup>06-468 MB</sup>	<50	<250	89

### ENVIRONMENTAL CHEMISTS

Date of Report: 03/11/16 Date Received: 03/09/16 Project: SOU\_ 1002-003\_ 20160309, F&BI 603160

## 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: 603144-03 (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)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	0.5	80	69-120
Toluene	mg/kg (ppm)	0.5	87	70-117
Ethylbenzene	mg/kg (ppm)	0.5	86	65-123
Xylenes	mg/kg (ppm)	1.5	85	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

### ENVIRONMENTAL CHEMISTS

Date of Report: 03/11/16 Date Received: 03/09/16 Project: SOU\_ 1002-003\_ 20160309, F&BI 603160

## QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 6	303151-01 (Matrix	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	110	111	73-135	1
Laboratory Code: 1	Laboratory Contr	ol Sampl	e				
			Percent				
	Reporting	Spike	Recovery	Acceptan	ice		
Analyte	Units	Level	LCS	Criteria	a		
Diesel Extended	mg/kg (ppm)	5,000	116	74-139	)		

### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

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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.

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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.

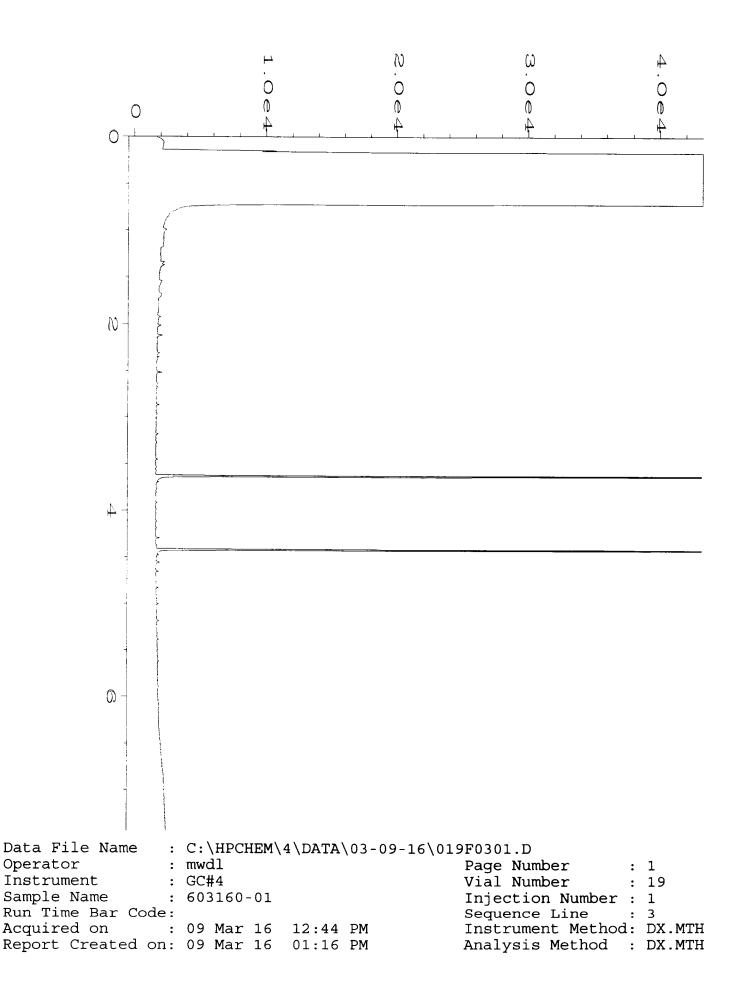
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

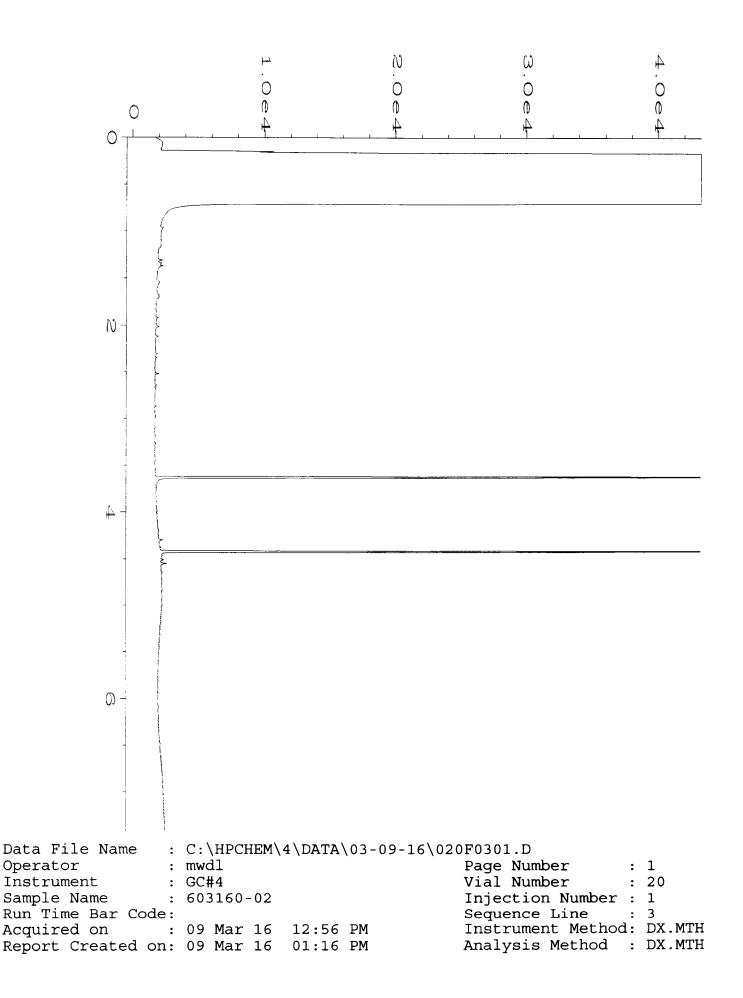
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

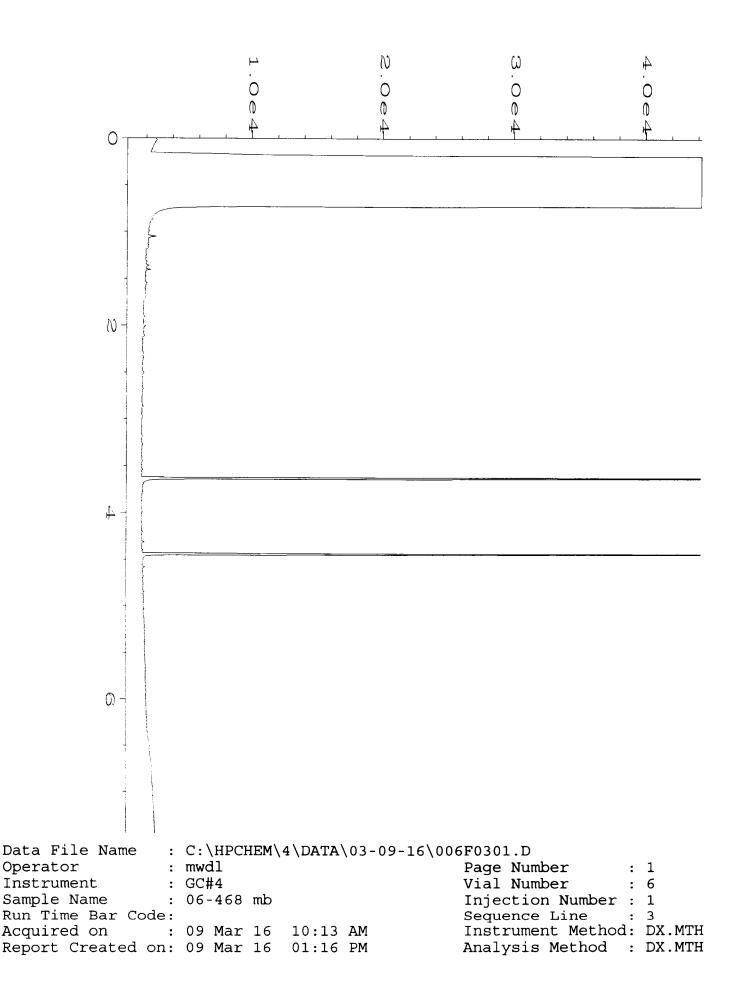
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

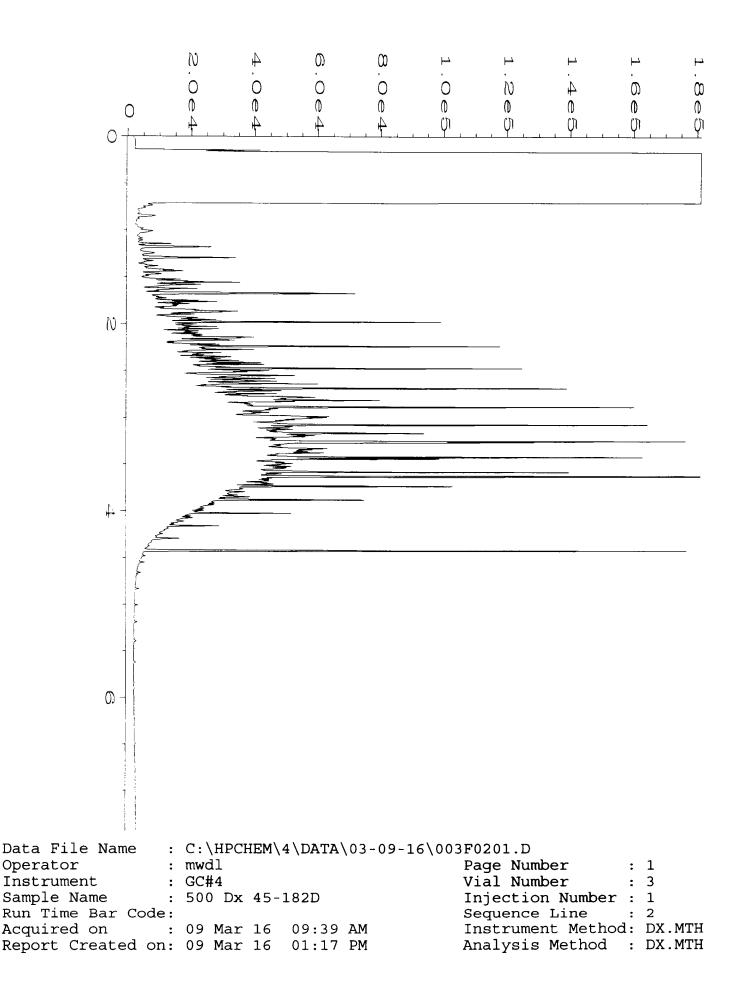
vo - The value reported fell outside the control limits established for this analyte.

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









( 60316	0	:	SAMPL	E CHAIN C	OF CUSTO	DY N	1E 3	191	16		DC	52/	151
Send Report To <u>John Fundert</u> Jonathan Loeffler	Chuck Cacek; c	<u>:C:</u>	SAMPL	ERS (signu, ure						] [	Page #		ROUND TIME
	Company <u>SoundEarth Strategies, Inc.</u> Address <u>2811 Fairview Avenue East, Suite 2000</u>			PROJECT NAME/NO. MADISON TACO TIME						R	RUSH_ ush ch	<u>24</u> arges	2 Weeks) <u>hrAT</u> authorized by: Give K
City, State, ZIP <u>Seattle, Washington 98102</u> Phone # <u>(206) 306-1900</u> Fax # <u>(206) 306-1907</u>			1002-003 REMARKS <sup>1</sup> low level detection limit of 0.01 mg/kg for EDC. Direct Sparge Method					EMS Y	/ N		Dispos Return	SAMPI se afte n sam	LE DISPOSAL er 30 days
			<u>т —                                   </u>				T					ANAL	YSES REQUESTED
Sample ID	Sampl <del>e</del> Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 80218	CVOCs by 826081		Notes
VE43-NZ-24	VE43-N2	24'	01A-6	3/9/16	0800	SOIL	5	X	×	X		1	
VE40 - N2 - 22	VE40-N2	22'	02 1	3/9/16	0825	SOIL	5	×	×	×	***		
													-
,				SHA	3/9/16								

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by	JONATHAN LOEFFLER	SOUNDEARTH	3/9/16	1009
Seattle, WA 98119-2029	Received by: 12 h	product - Langer - Trans	E'BT .	7/4/10	1009
Ph. (206) 285-8282	Relinquished by: /		Contraction M.C.		
Fax (206) 283-5044	Received by:				
	···		Samples reco	eived at 4	°C

Friedman & Bruya, Inc. #603175

#### 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

March 11, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on March 9, 2016 from the SOU\_1002-003\_20160309, F&BI 603175 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 c: Chuck Cacek, Jonathan Loeffler SOU0311R.DOC

## ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on March 9, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160309, F&BI 603175 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
603175 -01	SP01-01
603175 -02	VE5-N3-24

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 03/11/16 Date Received: 03/09/16 Project: SOU\_1002-003\_20160309, F&BI 603175 Date Extracted: 03/09/16 Date Analyzed: 03/09/16

#### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate ( <u>% Recovery)</u> (Limit 50-150)
VE5-N3-24 603175-02	<0.02	< 0.02	<0.02	< 0.06	<2	86
Method Blank 06-427 MB	< 0.02	< 0.02	< 0.02	< 0.06	<2	90

#### ENVIRONMENTAL CHEMISTS

Date of Report: 03/11/16 Date Received: 03/09/16 Project: SOU\_1002-003\_20160309, F&BI 603175 Date Extracted: 03/10/16 Date Analyzed: 03/10/16

### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate <u>(% Recovery)</u> (Limit 53-144)
SP01-01 603175-01	<50	<250	95
VE5-N3-24 603175-02	<50	<250	95
Method Blank <sup>06-473 MB2</sup>	<50	<250	92

### ENVIRONMENTAL CHEMISTS

Date of Report: 03/11/16 Date Received: 03/09/16 Project: SOU\_1002-003\_20160309, F&BI 603175

## 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: 603144-03 (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)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	0.5	80	69-120
Toluene	mg/kg (ppm)	0.5	87	70-117
Ethylbenzene	mg/kg (ppm)	0.5	86	65-123
Xylenes	mg/kg (ppm)	1.5	85	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

### ENVIRONMENTAL CHEMISTS

Date of Report: 03/11/16 Date Received: 03/09/16 Project: SOU\_1002-003\_20160309, F&BI 603175

## QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code:	603172-03 (Matri	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	112	106	64-133	6
Laboratory Code:	Laboratory Contr	ol Samp	le				
			Percent				
	Reporting	Spike	Recovery	y Accep	tance		
Analyte	Units	Level	LCS	Crite	eria		
Diesel Extended	mg/kg (ppm)	5,000	119	58-1	47		

### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

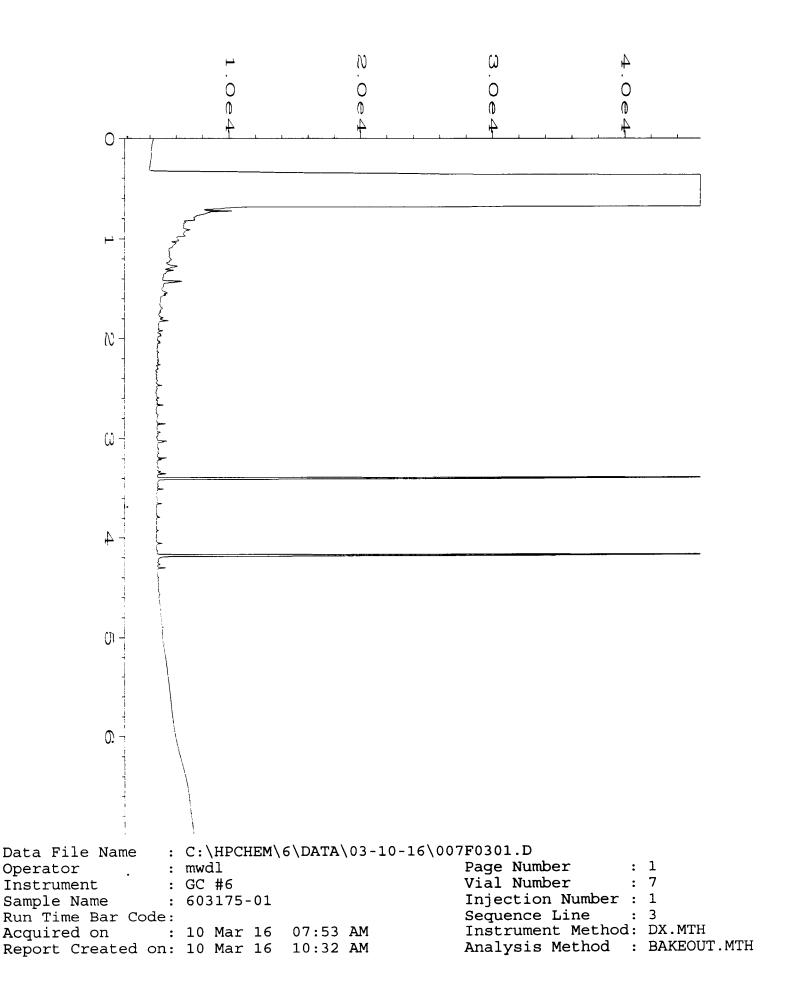
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

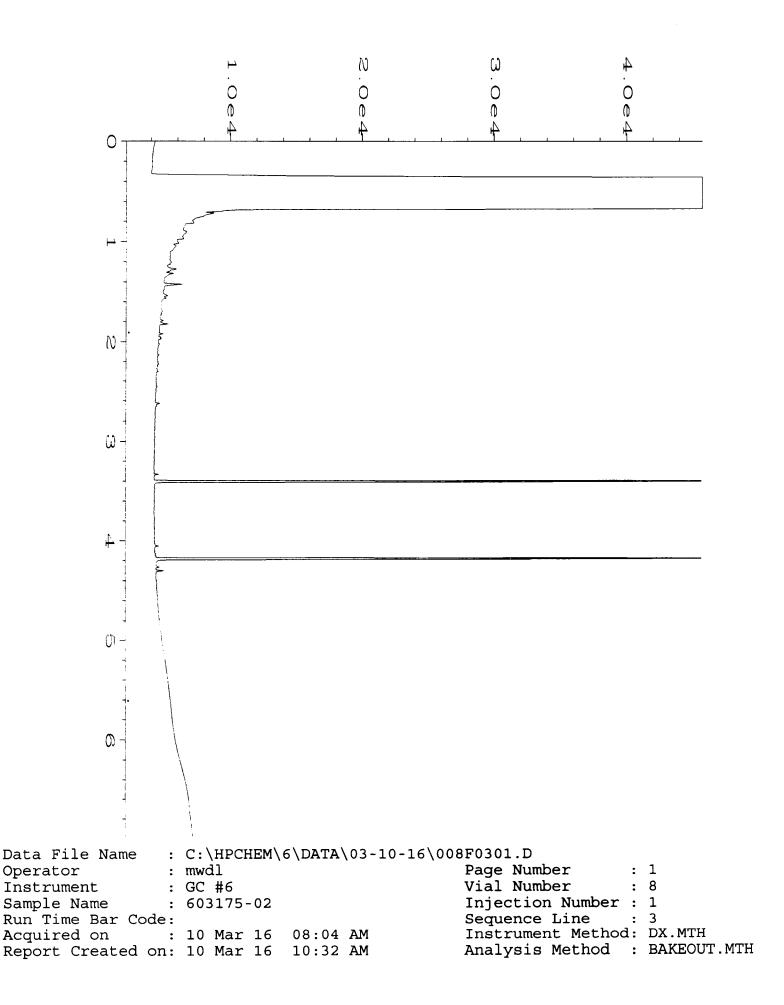
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

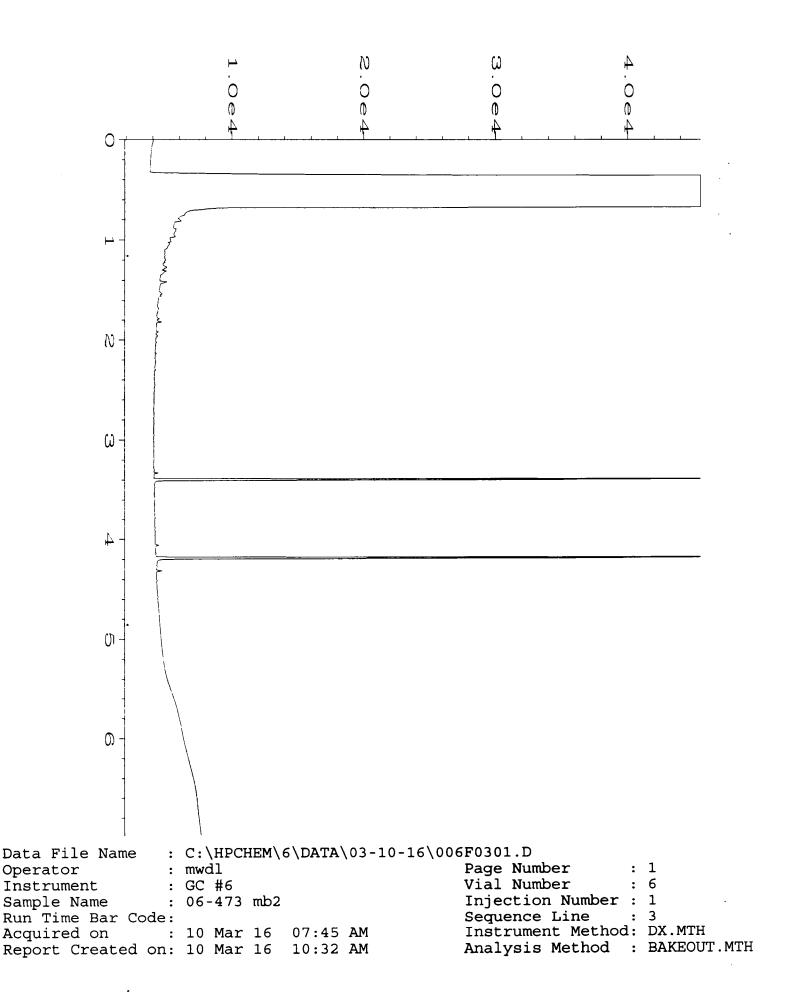
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

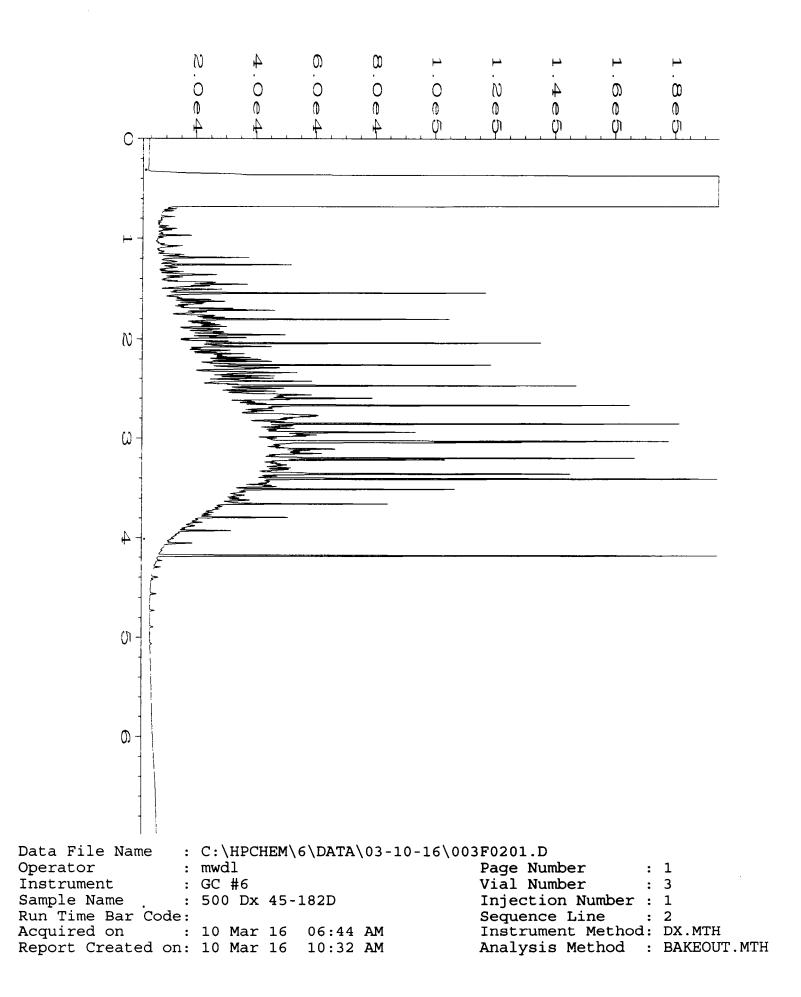
vo - The value reported fell outside the control limits established for this analyte.

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









603	175	:	SAMPL	E CHAIN O	F CUSTO	Y	Me	C	03-	09	-16	i	V51 /c
Send Report ToJohn Funderburk, Chuck Cacek; cc: Jonathan Loeffler			SAMPLERS (signature),					Page #01 TURNAROUND TIME					
Company <u>SoundEarth Stra</u>	ptegies, Inc.		PROJECT NAME/NO.			T	PO #			Stand	ard (2 Wee	ks)	
Address <u>2811 Fairview Avenue East, Suite 2000</u> City, State, ZIP <u>Seattle, Washington 98102</u> Phone # <u>(206) 306-1900</u> Fax # <u>(206) 306-1907</u>			MADISON TACO TIME 1002-003 REMARKS <sup>1</sup> low level detection limit of 0.01 mg/kg for EDC. Direct Sparge Method				GEMS Y / N			Standard (2 Weeks) KUSH <u>24 W TAT</u> Rush charges authorized by: <u>Chark Cacek</u> SAMPLE DISPOSAL Dispose after 30 days Return samples Will call with instructions			
			T		T	·····			 1		/	ANALYSES	REQUESTED
Sample ID	Sampl <del>e</del> Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-GX	BTEX by 8021B	CVOCs by 82608 <sup>1</sup>		Notes
SP01-01	SPOI		01	3/9/16	1230	SOIL	1	×			<u> </u>		
1E5-N3-24	VE5-N3	24'	02-A-E	3/9/16	1333	SOIL	5	*	×	×			
							No						
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Friedman & Bruya, Inc. 3012 16th Avenue West	SIGNATU	RE			PRINTNAME			COMPANY				DATE	TIME
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Seattle, WA 98119-2029	Received by:	100		Mut	-Langs	.ten		FBLuc				3/9/16	1636
Ph. (206) 285-8282	Relinquished by:												
Fax (206) 283-5044	Received by:							· <u>· · · · · · · · · · · · · · · · · · ·</u>					

Friedman & Bruya, Inc. #603241

#### 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

March 17, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on March 14, 2016 from the SOU\_1002-003\_ 20160314, F&BI 603241 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 c: Chuck Cacek, Jonathan Loeffler SOU0317R.DOC

## ENVIRONMENTAL CHEMISTS

## CASE NARRATIVE

This case narrative encompasses samples received on March 14, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160314, F&BI 603241 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
603241 -01	VE6-N11-25
603241 -02	VE7-N11-25
603241 -03	VE38-N5-22

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 03/17/16 Date Received: 03/14/16 Project: SOU\_ 1002-003\_ 20160314, F&BI 603241 Date Extracted: 03/15/16 Date Analyzed: 03/15/16

#### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate ( <u>% Recovery)</u> (Limit 50-150)
VE6-N11-25 603241-01	< 0.02	< 0.02	< 0.02	< 0.06	<2	94
VE7-N11-25 603241-02	< 0.02	< 0.02	< 0.02	< 0.06	<2	94
VE38-N5-22 603241-03	<0.02	< 0.02	<0.02	< 0.06	<2	92
Method Blank 06-435 MB2	< 0.02	< 0.02	< 0.02	< 0.06	<2	91

#### ENVIRONMENTAL CHEMISTS

Date of Report: 03/17/16 Date Received: 03/14/16 Project: SOU\_1002-003\_20160314, F&BI 603241 Date Extracted: 03/15/16 Date Analyzed: 03/15/16

### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 48-168)
VE6-N11-25 603241-01	<50	<250	100
VE7-N11-25 603241-02	<50	<250	102
VE38-N5-22 603241-03	<50	<250	98
Method Blank 06-487 MB2	<50	<250	117

### ENVIRONMENTAL CHEMISTS

Date of Report: 03/17/16 Date Received: 03/14/16 Project: SOU\_ 1002-003\_ 20160314, F&BI 603241

## 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: Laboratory Control Sample

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Benzene	mg/kg (ppm)	0.5	96	92	69-120	4
Toluene	mg/kg (ppm)	0.5	103	99	70-117	4
Ethylbenzene	mg/kg (ppm)	0.5	104	101	65-123	3
Xylenes	mg/kg (ppm)	1.5	102	99	66-120	3
Gasoline	mg/kg (ppm)	20	95	95	71-131	0

### ENVIRONMENTAL CHEMISTS

Date of Report: 03/17/16 Date Received: 03/14/16 Project: SOU\_ 1002-003\_ 20160314, F&BI 603241

### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 6	603215-01 (Matrix	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	99	101	73-135	2
Laboratory Code: 1	Laboratory Contro	ol Sampl	e				
			Percent				
	Reporting	Spike	Recovery	Acceptar	nce		
Analyte	Units	Level	LCS	Criteria	a		
Diesel Extended	mg/kg (ppm)	5,000	98	74-139	)		

### ENVIRONMENTAL CHEMISTS

## **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

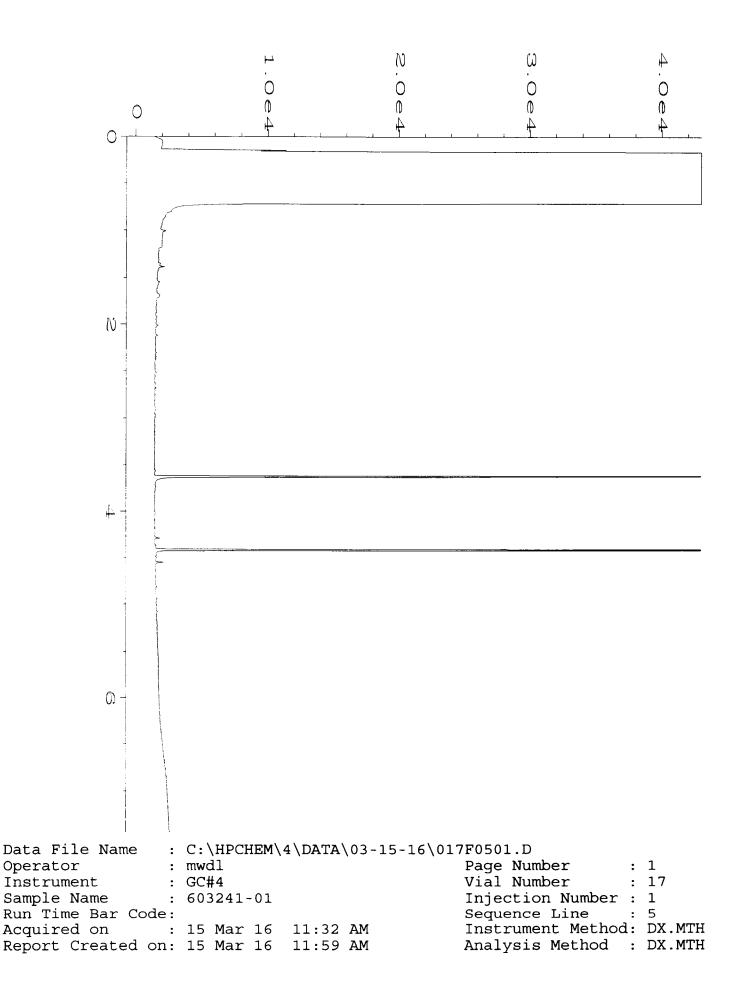
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

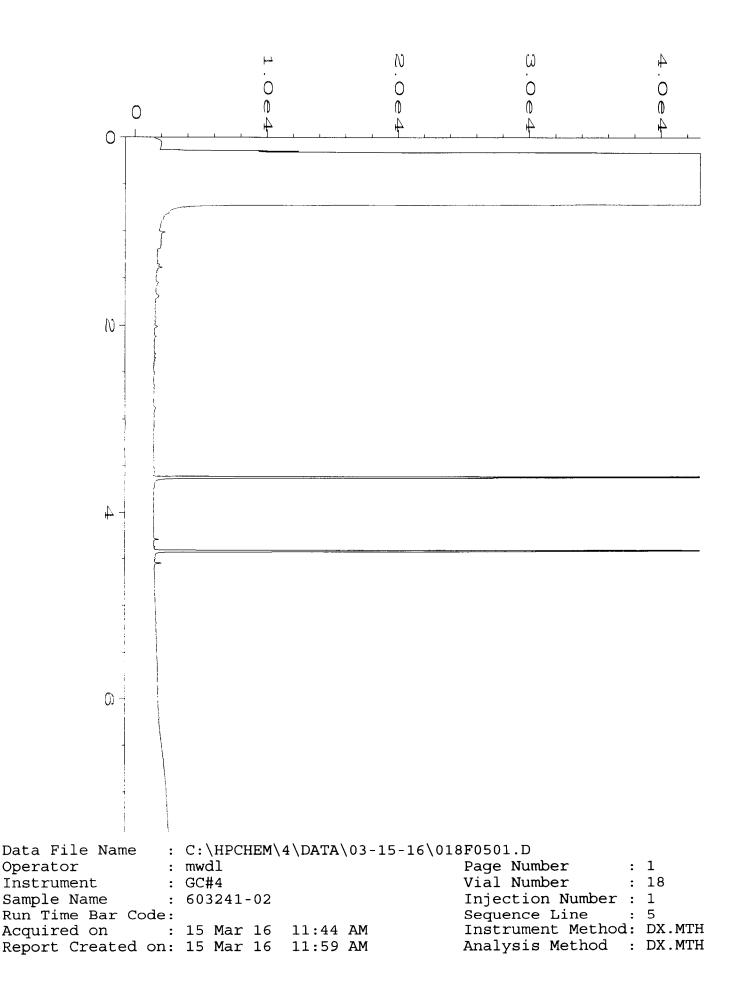
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

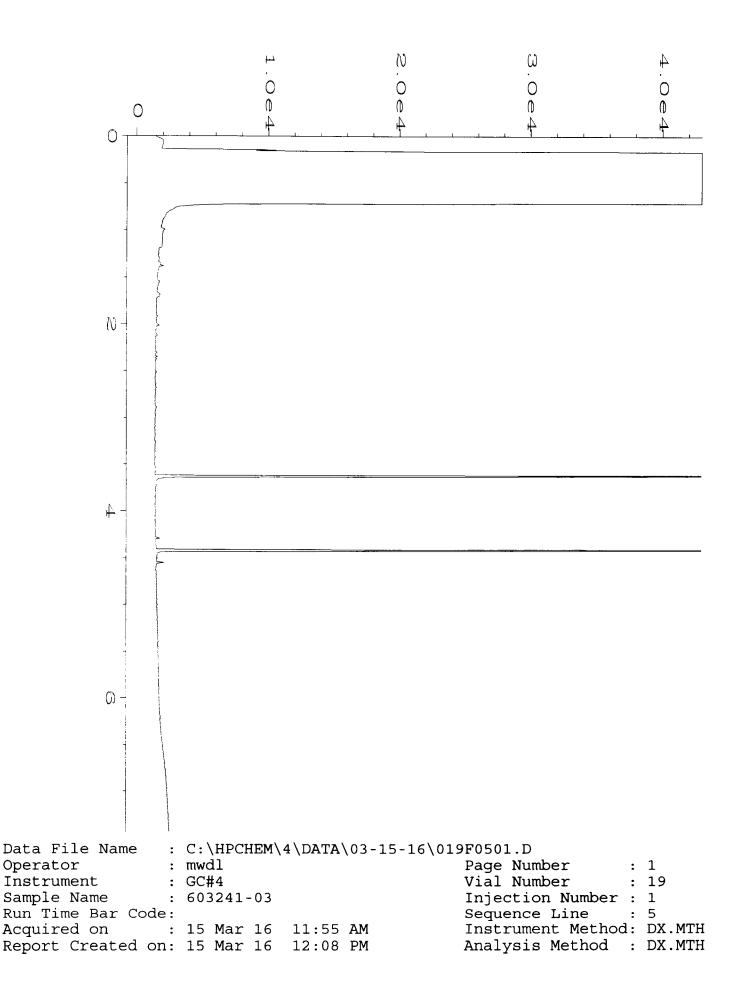
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

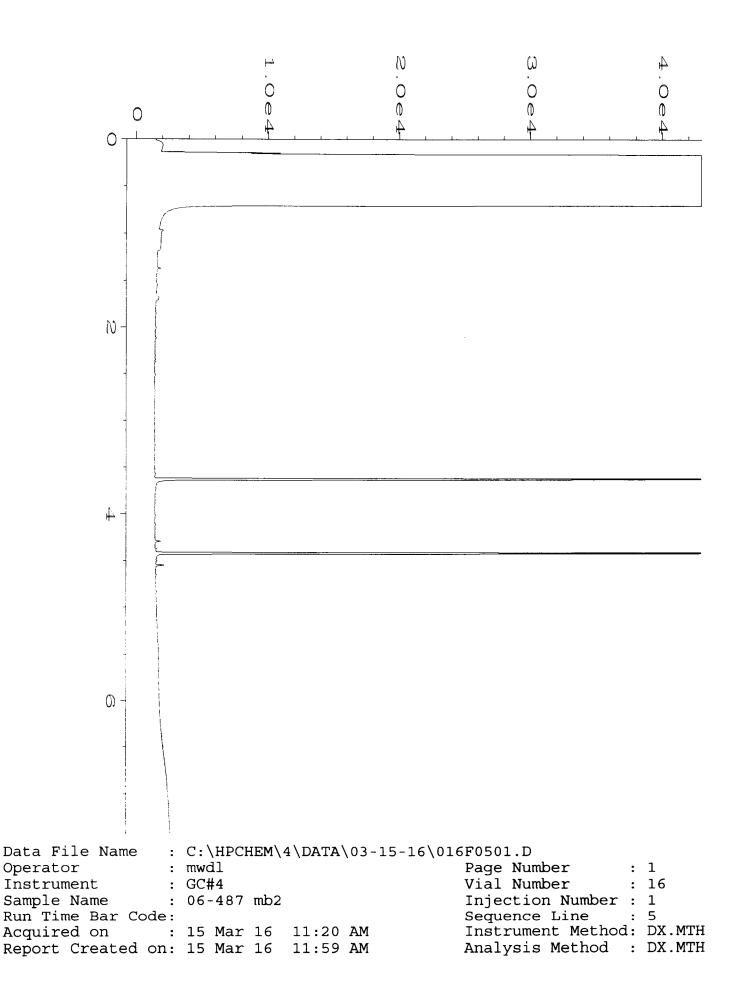
vo - The value reported fell outside the control limits established for this analyte.

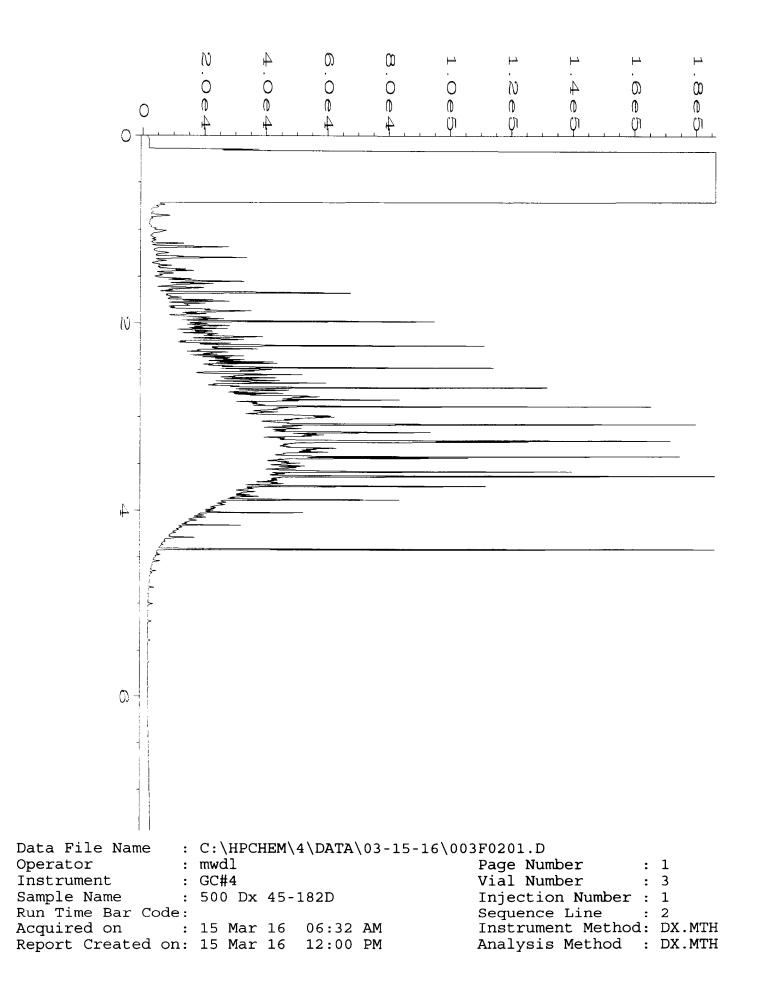
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.











( 60324	1/	:	SAMPLE	E CHAIN C		DY	M	5	03/	114	116	•	US,	
Send Report To <u>John Fund</u> Jonathan Loeffler		<u>c:</u>	SAMPLE	ERS (signa, ure	1	<u> </u>					Page #		ROUND TIME	
Company_SoundEarth Strate	agies, Inc.		PROJEC	PROJECT NAME/NO. PO #						-	Standard (2 Weeks) KRUSH_24hr TAT			
Address 2811 Fairview Avenue East, Suite 2000					N TACO TIME 02-003					R	RUSH <u>29 hr (A)</u> Rush charges authorized by: <u>Chuck</u> Cucck			
City, State, ZIP <u>Seattle, Was</u> Phone # <u>(206) 306-1900</u> F		REMARKS <sup>1</sup> low level detection limit of 0.01 mg/kg for EDC. Direct Sparge Method						SAMPLE DISPOSAL Dispose after 30 days Return samples Will call with instructions						
						<u>.</u>		Γ					YSES REQUESTED	
Sample ID	Sampl <del>e</del> Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	CVOCs by 826081		Notes	
VEG - N11 - 25	VEG -NII	25	OIA-E	3/14/16	1136	SCIL	5	×	×	×	ł			
VE7-N11-25	VET-NII	25'	02	3/14/16	1141	SCIL	5	X	×	×				
VE38-N5-22	VE38-N5	"22"	03 V	3/14/16	1423	SOIL	5	X	×	×				
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Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by	JON LOEFFLER	SEUNDEARTH	3/14/16	1712
Seattle, WA 98119-2029	Received by:	VINILL	ERI	2/14/16	717-
Ph. (206) 285-8282	Relinquished by:			<u> 14 4</u>	100
Fax (206) 283-5044	Received by:		Samples rec	eived at <u></u> 3	_°C

Friedman & Bruya, Inc. #604326

#### 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 22, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on April 18, 2016 from the SOU\_1002-003\_ 20160418, F&BI 604326 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 c: Chuck Cacek, Jonathan Loeffler SOU0422R.DOC

# ENVIRONMENTAL CHEMISTS

# CASE NARRATIVE

This case narrative encompasses samples received on April 18, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160418, F&BI 604326 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
604326 -01	VE41-N8-24
604326 -02	VE9-N6-31
604326 -03	VE8-N8-35
604326 -04	VE7-N7-34
604326 -05	VE6-N10-35
604326 -06	VE7-N11-35
604326 -07	VE6-N12-33

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 04/22/16 Date Received: 04/18/16 Project: SOU\_1002-003\_20160418, F&BI 604326 Date Extracted: 04/20/16 Date Analyzed: 04/20/16

#### 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)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate ( <u>% Recovery)</u> (Limit 50-150)
VE41-N8-24 604326-01	< 0.02	< 0.02	< 0.02	< 0.06	<2	81
VE9-N6-31 604326-02	< 0.02	< 0.02	< 0.02	< 0.06	<2	83
VE8-N8-35 604326-03	< 0.02	< 0.02	< 0.02	< 0.06	<2	81
VE7-N7-34 604326-04	< 0.02	< 0.02	< 0.02	<0.06	<2	82
VE6-N10-35 604326-05	< 0.02	< 0.02	< 0.02	<0.06	<2	82
VE7-N11-35 604326-06	<0.02	< 0.02	< 0.02	<0.06	<2	81
VE6-N12-33 604326-07	<0.02	< 0.02	< 0.02	< 0.06	<2	77
Method Blank 06-776 MB2	< 0.02	< 0.02	< 0.02	< 0.06	<2	81

#### ENVIRONMENTAL CHEMISTS

Date of Report: 04/22/16 Date Received: 04/18/16 Project: SOU\_1002-003\_20160418, F&BI 604326 Date Extracted: 04/19/16 Date Analyzed: 04/19/16

#### 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)

<u>Sample ID</u> Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C36)	Surrogate <u>(% Recovery)</u> (Limit 48-168)
VE41-N8-24 604326-01	<50	<250	86
VE9-N6-31 604326-02	<50	<250	102
VE8-N8-35 604326-03	<50	<250	97
VE7-N7-34 604326-04	<50	<250	91
VE6-N10-35 604326-05	<50	<250	90
VE7-N11-35 604326-06	<50	<250	91
VE6-N12-33 604326-07	<50	<250	98
Method Blank 06-769 MB	<50	<250	110

#### ENVIRONMENTAL CHEMISTS

Date of Report: 04/22/16 Date Received: 04/18/16 Project: SOU\_1002-003\_20160418, F&BI 604326

### 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: 604332-05 (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)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	0.5	86	66-121
Toluene	mg/kg (ppm)	0.5	85	72-128
Ethylbenzene	mg/kg (ppm)	0.5	88	69-132
Xylenes	mg/kg (ppm)	1.5	87	69-131
Gasoline	mg/kg (ppm)	20	95	61-153

#### ENVIRONMENTAL CHEMISTS

Date of Report: 04/22/16 Date Received: 04/18/16 Project: SOU\_1002-003\_20160418, F&BI 604326

#### QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code:	604321-01 (Matrix	x Spike)					
			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	10,000	<50	115	109	73-135	5
Laboratory Code:	Laboratory Contr	ol Sampl	e				
			Percent				
	Reporting	Spike	Recovery	Acceptar	nce		
Analyte	Units	Level	LCS	Criteria	a		
Diesel Extended	mg/kg (ppm)	10,000	111	74-139	)		

#### ENVIRONMENTAL CHEMISTS

# **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

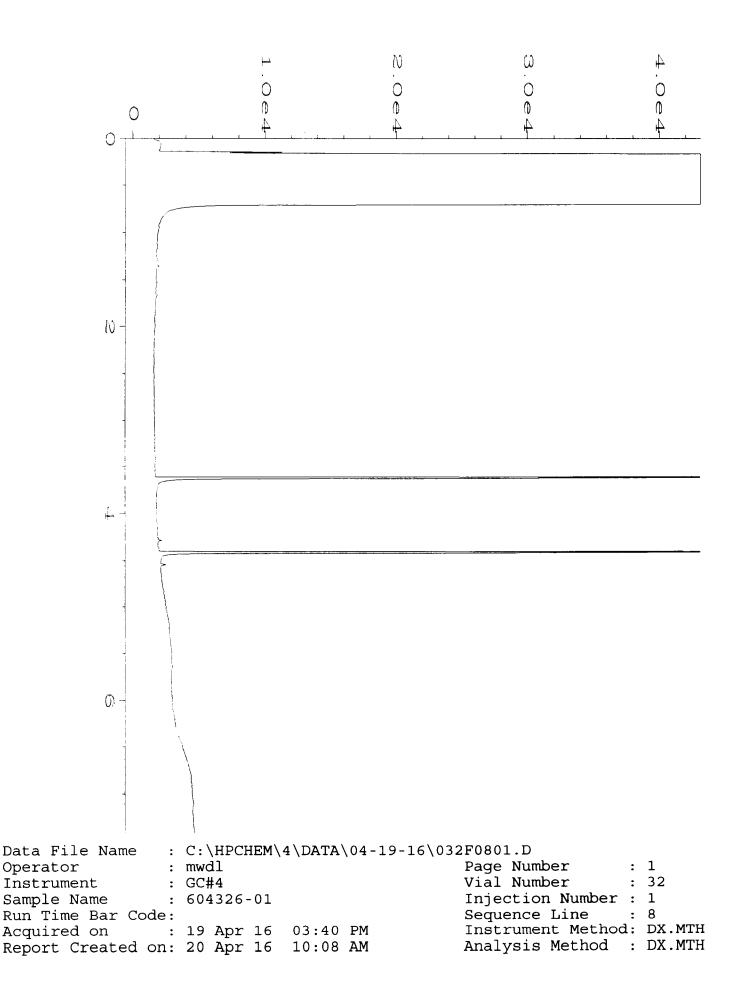
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

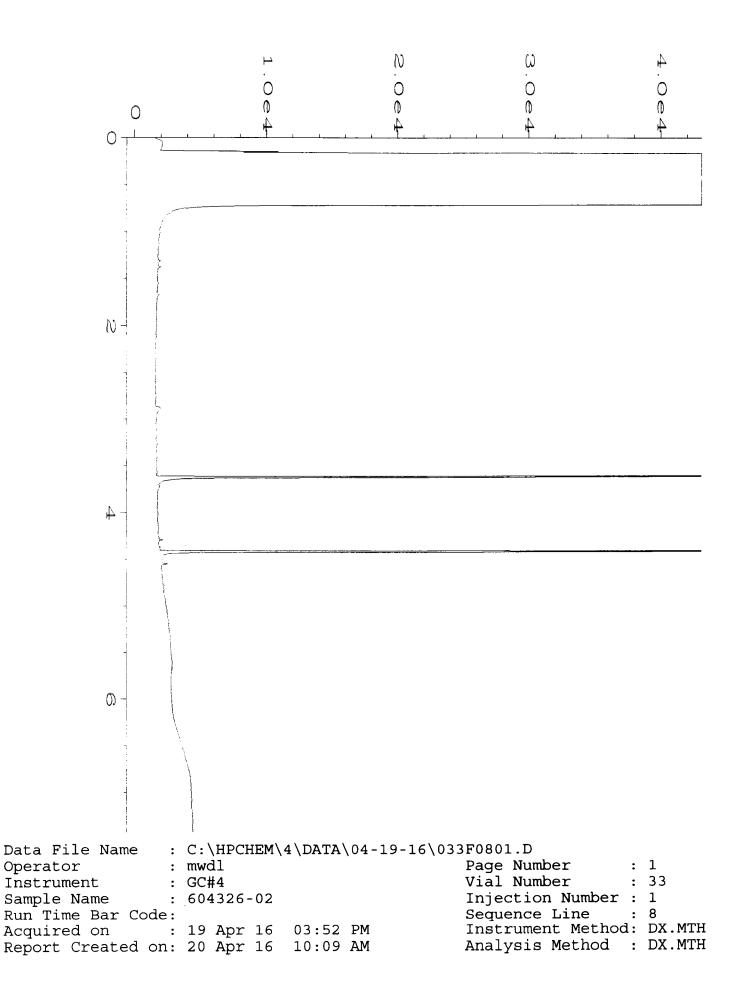
pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

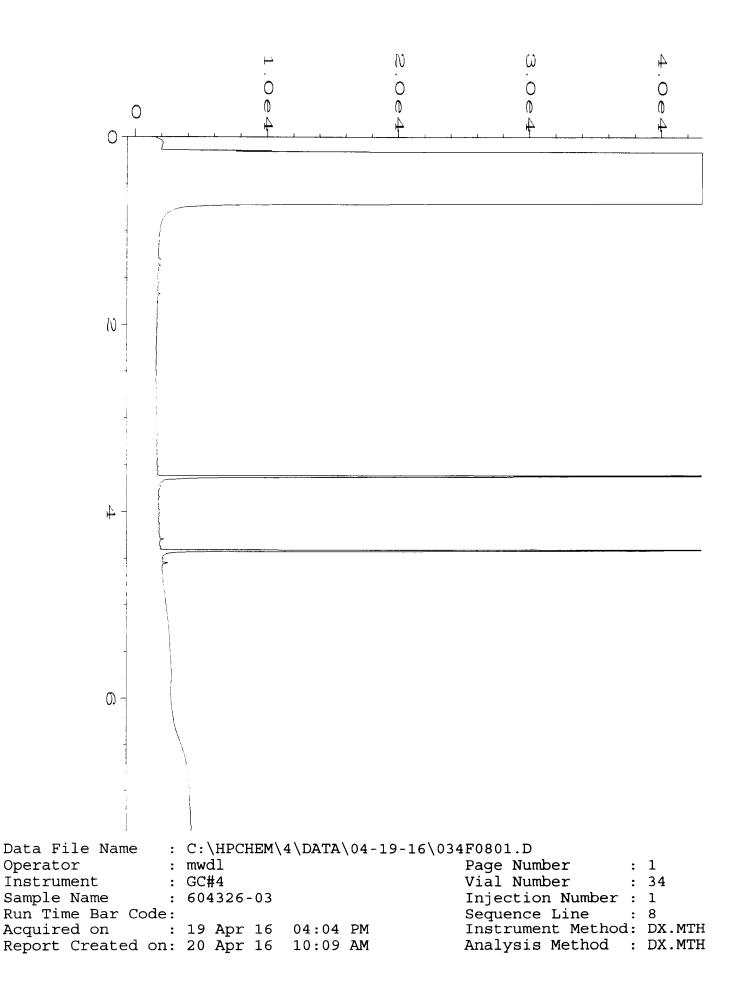
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

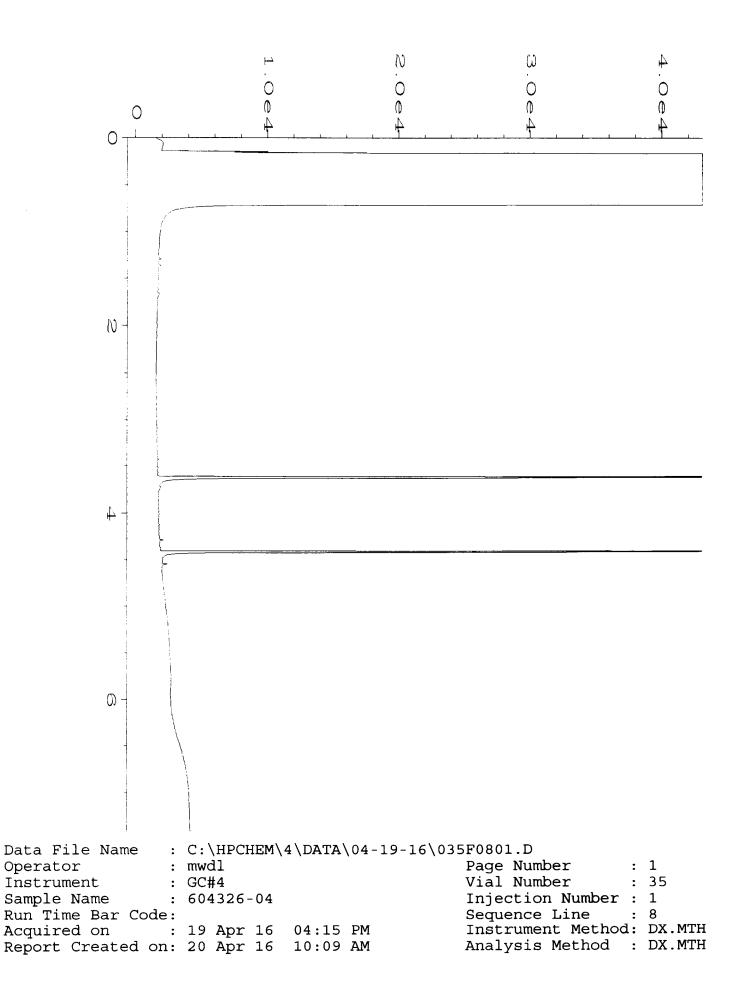
vo - The value reported fell outside the control limits established for this analyte.

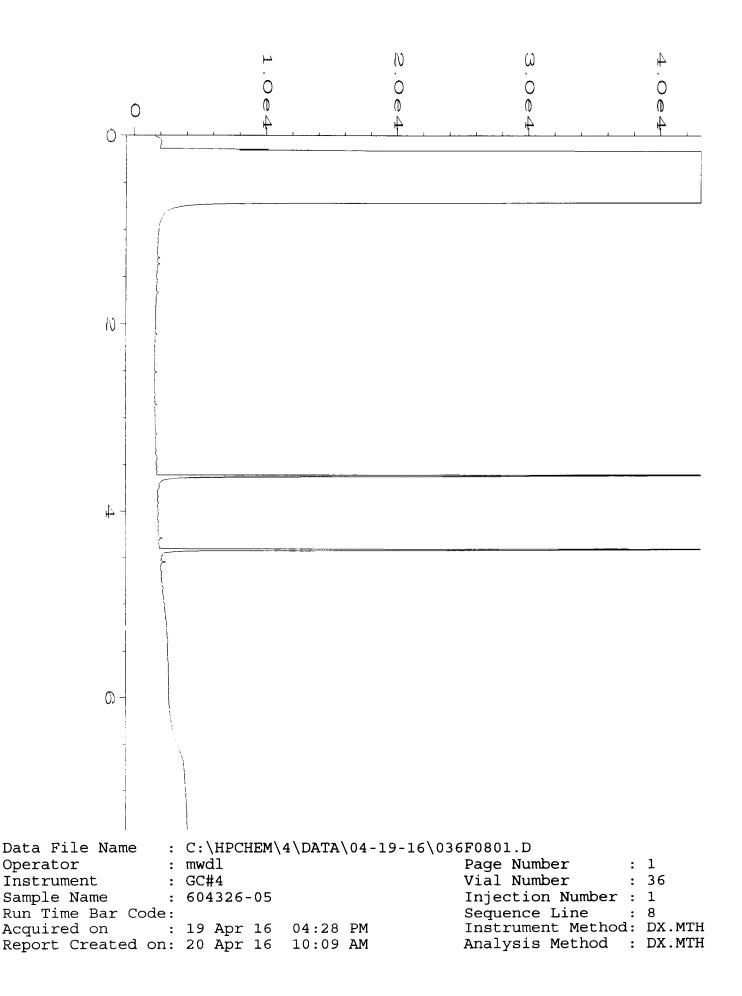
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

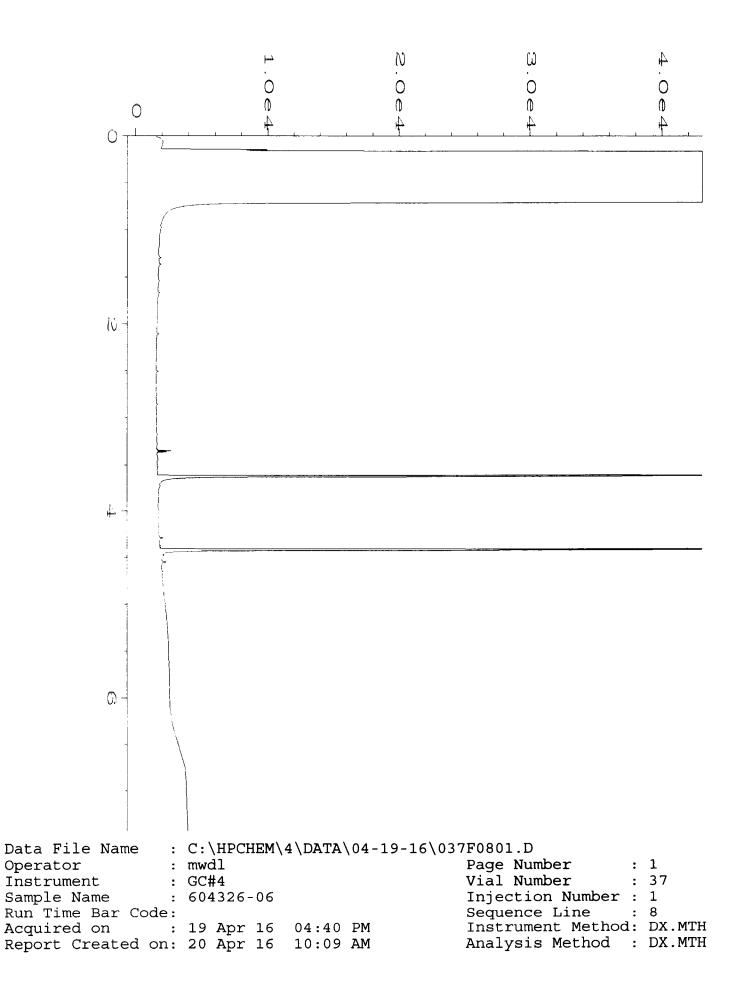


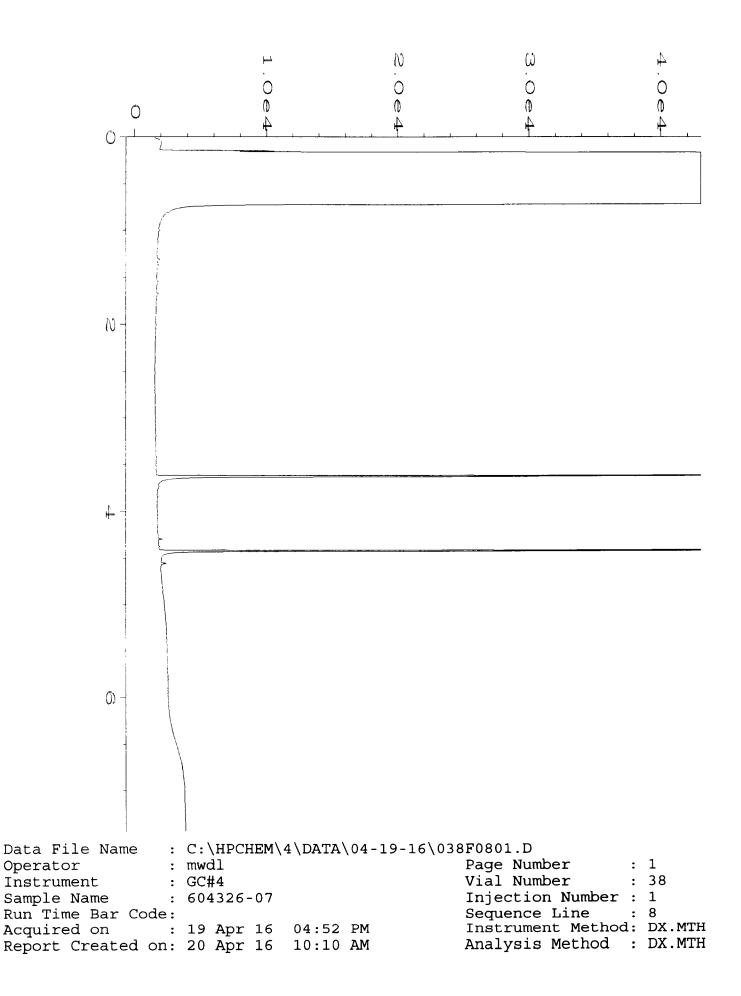


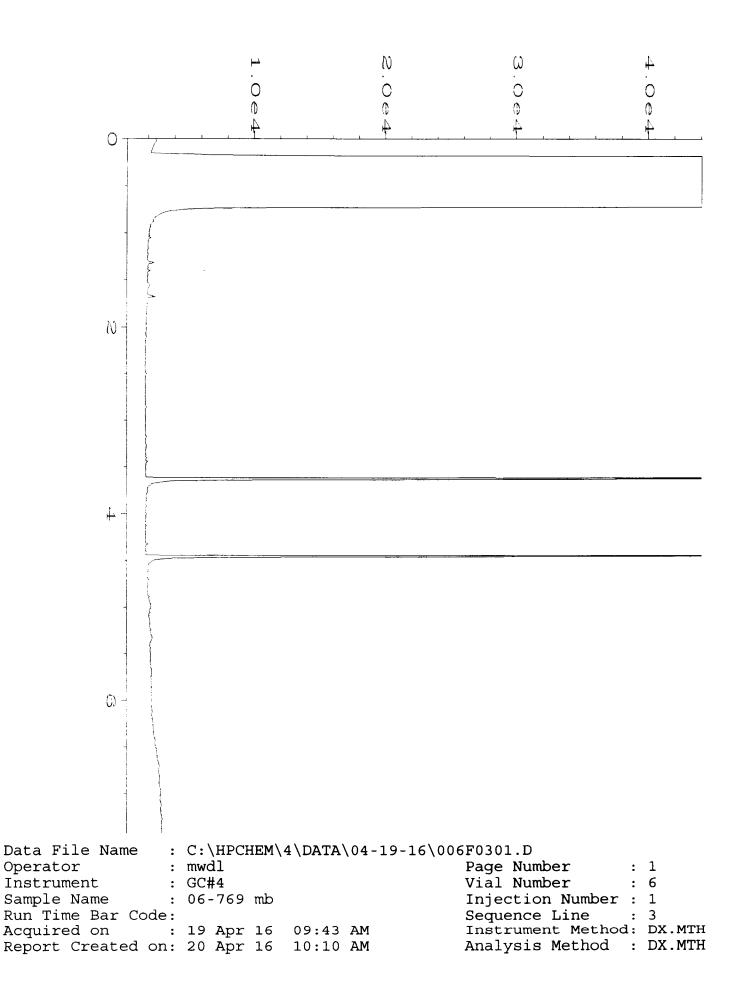


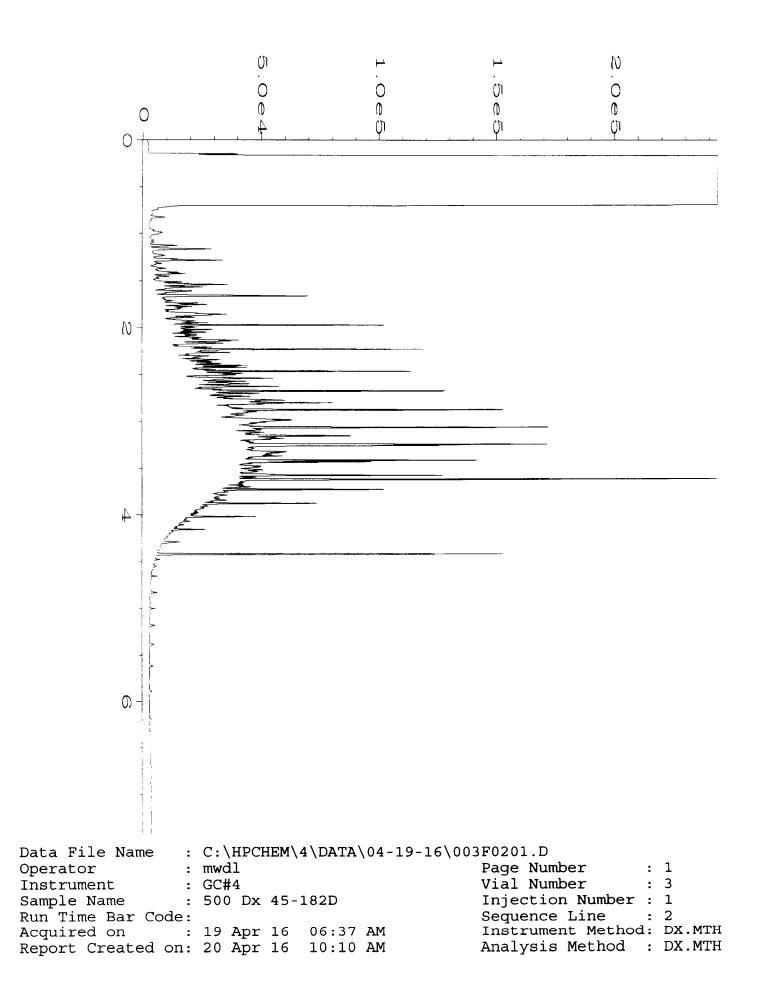












Send Report To		·C.	SAMPLE	RS (signuture	1-1		-				age # Tl	JRNAR		
Jonathan Loeffler			=	Som	the									
Company SoundEarth Strategie	es, Inc.		PROJEC	T NAME/NO.				PO #	i		Stando RUSH		Weeks)	
Address 2811 Fairview Avenue	·	÷		I TACO TIME 12-003								authorized by		
City, State, ZIP <u>Seattle, Washin</u>	aton 98102		REMARI	<s< td=""><td></td><td></td><td></td><td></td><td></td><td>] [</td><td></td><td></td><td>E DISPOSAL</td></s<>						] [			E DISPOSAL	
Phone #_(206) 306-1900Fa>	< # <u>(206) 306-1907</u>			low level d				GEMS Y / N			Dispose after 30 days Return samples Will call with instructions			
			0.01 mg	/kg for EDC.	Direct Sparg	e Method	· · · · · · · · · · · · · · · · · · ·			J L				
		-T	T		T	11	<u> </u>		<b>-</b>	<u> </u>	4	NALY	SES REQUES	
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-GX	BTEX by 80218	CVOCs by 826081		Note	
VE41-N8-24	VE41-N8	24'	MIA.E	4/15/16	1447	SOIL	5	×	X	†×-				
VE9-N6-31	VE9-NG	31'	02 T	1	1454	İ	5	×	X	X				
VE8-N8-35	VEB-NB	35'	03		1502		5	X	X	$\times$				
VE7-N7-34	VE7-N7	34'	04		1507		5	×	X	メ				
VE6-NI0-35	VE6 - NIO	35'	05		1515		5	×	$\times$	×				
VE7-N11-35	VET-NI/	35	06		1518		5	×	$ \times $	×	<u> </u>			
VEG-N12-33	VE6-N12	33'	071	<u> </u>	1522	1	5	×	×	×	<u> </u>			
				•						+	+		·	
				Add	11		<u>.</u>			1	-		4 °C	
				DH	4/15/16				5	ampl	es rec	eiveu	al	
<u> </u>													(	

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by:	JUNATHAN LOEFFLER	SOUNDEARTH	4/18/16	1633
Seattle, WA 98119-2029	Received by	Ferdore	TER	4/18/16	1633
Ph. (206) 285-8282	Relinquished by:				
Fax (206) 283-5044	Received by:				•

# APPENDIX D DEWATERING WELL BORING LOGS

Sc	DU	nd St	<b>Earl</b>	pies Bies WW WW Ref	oject: oject Number: ogged by: ate Started: urface Conditio ell Location N/s ell Location E/ eviewed by: ate Completed:	1002- JSL 02/06 ns: Expo S: N: CCC	sed Soil	-ime	BORING LOG DWC LOG DWC Site Address: 1420 East Ma Seattle, Wash Water Depth At Time of Drilling 2 Water Depth After Completion	dison ington 8 feet bgs
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic	Description	Well Detail/ Water Depth
0								Drill cuttings 0 to 5 feet 1 (bgs): Moist, silty SAND no hydrocarbon odor (20	with some gravel, gray,	
5								Drill cutting 5 to 10 feet l with some gravel, gray, 1 65-15).	bgs: Moist, silty SAND no hydrocarbon odor (20·	
- 10 - - - 15								Drill cuttings 10 to 15 fea with some gravel, gray, 1 65-15).	et bgs: Moist, silty SAND no hydrocarbon odor (20	
Drillin Drillin Samp Hamn Total	ig Equ ler Ty ner Ty Borin Well I	vpe/We g Dept Depth:	nt:	Kulchin/Alan Solid-stem auge None  40.3 40.3	rig Wel Scru Ibs Filte feet bgs Sur feet bgs Ann	I/Auger D I Screene een Slot S er Pack Us face Seal: aular Seal	d Interval: Size: sed: :	12/30 inches 20.3-40.3 feet bg 0.03 inches Pea Gravel Soil Soil	s Lithologic descriptions bas	eet below Madison utheast corner of ted with 3 feet of

None

1 of 3

Page:

State Well ID No.:

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So	U		<b>Ear</b> rate	gies R R	roject: roject Number: ogged by: ate Started: urface Conditio 'ell Location N/ 'ell Location E/ eviewed by: ate Completed:	1002- JSL 02/06 ons: Expos S: W: CCC	sed Soil		BORING LOG DW0 <sup>4</sup> Site Address: 1420 East Mad Seattle, Washir Water Depth At Time of Drilling 28 Water Depth After Completion	l ison ngton
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic D	escription	Well Detail/ Water Depth
15								Drill cuttings 15 to 20 feet with some gravel, gray, no 65-10). Drill cuttings 20 to 25 feet	bydrocarbon odor (25-	
								SAND with some gravel, g odor (25-65-10). Wet soil lense from 21 to 2 Drill cuttings 25 to 28 feet with some gravel, gray, no 70-10).	22 feet bgs. bgs: Moist, silty SAND	
								Wet at 28 feet bgs. Drill cuttings 28 to 30 feet some silt, gray, no hydroc		
Drillin Sampl Hamm	g Eq ler Ty ler Ty Borin	ype/We	nt: eight: th:	Kulchin/Alan Solid-stem auge None  40.3 40.3	r rig We Scr Ibs Filt feet bgs Sur	II/Auger Di II Screened een Slot S er Pack Us face Seal: nular Seal:	d Interval lize: sed:	12/30 inches 20.3-40.3 feet bgs 0.03 inches Pea Gravel Soil Soil	Notes/Comments: Lithologic descriptions base cuttings. Well installed 5 fer Street sidewalk on the sout the Property. Well complete stick-up above ground surfa	et below Madison heast corner of ed with 3 feet of

Monument Type:

None

2 of 3

Page:

State Well ID No.:

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So	DUI		<b>Eart</b>	ies Pr La Da Su W W Ra	oject: oject Number: ogged by: ate Started: urface Conditic ell Location N/ ell Location E/ eviewed by: ate Completed:	1002- JSL 02/06 0ns: Expo S: W: CCC	sed Soil	-ime	BORING LOG DW Site Address: 1420 East I Seattle, Wa Water Depth At Time of Drilling Water Depth After Completion	Madison Ishington 28 feet bgs
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample	USCS Class	Graphic	Lithologic	Description	Well Detail/ Water Depth
30								Drill cuttings 30 to 35 fee some silt, gray, no hydro Drill cuttings 35 to 40 fee some silt, gray, no hydro	et bgs: Wet, SAND with	
Drillin Samp Hamn Total Total	ng Equ ler Ty ner Ty Boring Well [	/Drille lipmer pe: pe/We g Dept Depth: D No :	nt: S N Sight:	Kulchin/Alan Solid-stem auger Jone - 0.3 0.3	rig We Scr Ibs Filt feet bgs Sur feet bgs Ann	II/Auger D II Screene een Slot S er Pack Us face Seal: nular Seal	d Interval: Size: sed: :	Boring terminated at 40.3 twelve-inch-diameter devidenth of 40.3 feet bgs, so feet bgs with pea gravel native soil seal from 0 to with three feet of stick-up 12/30 inches 20.3-40.3 feet bgs 0.03 inches Pea Gravel Soil Soil	Notes/Comments:	a b s, ed e. based on soil 5 feet below Madison southeast corner of pleted with 3 feet of

None

Page:

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State Well ID No.:

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Sc	DU	nd Sti	<b>Earl</b>	Jies Pr Lc Da Su W W Re	oject: oject Number: ogged by: ate Started: urface Conditio ell Location N/ ell Location E/ eviewed by: ate Completed	1002- JSL 02/06 0ns: Expo S: W: CCC	sed Soil	"ime	<b>/02</b> 02 adison shington 31 feet bgs feet bgs	
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic	Description	Well Detail/ Water Depth
0 - -								Drill cuttings 0 to 4 feet (bgs): Moist, silty SANE numerous brick fragme brown, no hydrocarbon	) with some gravel, ents and organic debris,	
- 5								Drill cutting 4 to 10 feet with some gravel, gray, 70-10).	bgs: Moist, silty SAND no hydrocarbon odor (20	<b>-</b>
- - 10 - - -								Drill cuttings 10 to 15 fe with some gravel, gray, 70-10).	eet bgs: Moist, silty SAND no hydrocarbon odor (20	- -
Drillir Samp Hamn Total Total	Drilling Co./Driller: K Drilling Equipment: S			40	rig We Scr Ibs Filt feet bgs Sur feet bgs An	II/Auger D II Screene reen Slot S er Pack Us rface Seal: nular Seal:	d Interval bize: sed:	12/30 inches 20-40 feet by 0.03 inches Pea Gravel Soil Soil	gs Lithologic descriptions ba	feet below Madison outheast corner of leted with 3 feet of

None

Page:

1 of 3

State Well ID No.:

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Sc	DUI	nd Sti	Far	gies	Project: Project Numł Logged by: Date Started: Surface Cond Well Location Well Location Reviewed by Date Comple	ber: 100 JSL : 02// ditions: Exp n N/S: n E/W: : CC	06/16 bosed Soil	Time	BORING LOG DW0 Site Address: 1420 East Mar Seattle, Wash Water Depth At Time of Drilling 3 Water Depth After Completion	2 dison ington 1 feet bgs
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm	Samp			Lithologic	Description	Well Detail/ Water Depth
								with some gravel, gray, 70-10). Wet soil lense from 22 f	eet bgs: Moist, silty SAND no hydrocarbon odor (20- to 23 feet bgs.	
Drillin Samp Hamn Total Total	Drilling Co./Driller: Kulchin/Ala			 40	ger rig Ibs feet bgs feet bgs	Well/Auger Well Screer Screen Slot Filter Pack Surface Sea Annular Sea Monument	ned Interva Size: Used: al: al:	12/30 inches 20-40 feet by 0.03 inches Pea Gravel Soil Soil None	gs Lithologic descriptions bas cuttings. Well installed 4 fe Street sidewalk on the sou the Property. Well complet stick-up above ground sur	eet below Madison theast corner of red with 3 feet of

Sound Ear		JSL           od:         02/06/16           nditions:         Exposed Sc           ion N/S:            ion E/W:            by:         CCC	Site Address: 1420 East	ashington 31 feet bgs
Depth (feet bgs) Interval Blow Count Recovery	PID (ppmv) I[		Lithologic Description	Well Detail/ Water Depth
			Drill cuttings 30 to 35 feet bgs: Wet, SAND with some silt, gray, no hydrocarbon odor (10-90-0) Drill cuttings 35 to 40 feet bgs: Wet, SAND with some silt, gray, no hydrocarbon odor (10-90-0)	
40 	Kulchin/Alan Solid-stem auger rig None Ibs 40 feet bgs 40 feet bgs	Well/Auger Diamete Well Screened Inter Screen Slot Size: Filter Pack Used: Surface Seal: Annular Seal:		a et ve h h h h h h h h h h h h h h h h h h

So	DUI	nd Str	ar	gies vv	roject: logged by: late Started: late Started: late Condit Vell Location I Vell Location I vell Location I leviewed by: late Complete	er: 1002 JSL 02/06 tions: Expo N/S: E/W: CCC	osed Soil	Time	BORING LOG Site Address: 1420 Seat Water Dept Time of Dril Water Dept After Comp	tle, Washin h At Iling h	son
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv	Sample) ID	e USCS Class	Graphic	Lithologic	Description		Well Detail/ Water Depth
0								Drill cuttings 0 to 4 feet (bgs): Moist, silty SAND numerous brick fragmen dark brown, no hydroca (FILL).	with some gravel, nts and organic de rbon odor (40-50-1	bris, 0)	
5								with some gravel, gray, 60-15).	no hydrocarbon o	dor (25-	
								Drill cuttings 10 to 15 fe with some gravel, gray, 70-10).			
Drillin Drillin Samp Hamn Total	Drilling Equipment: Sampler Type: Hammer Type/Weight: Total Boring Depth:			Kulchin/Alan Solid-stem auge None  40 40	er rig W S Ibs F feet bgs S feet bgs A	/ell/Auger D /ell Screene creen Slot S ilter Pack U urface Seal nnular Seal lonument T	ed Interval Size: sed: :	12/30 inches 20-40 feet by 0.03 inches Pea Gravel Soil Soil None	JS Lithologic descri cuttings. Well in: Street sidewalk	ptions base stalled 4 fee on the south iller noted po pouring of fi	t below Madison least corner of etroleum odor in

So	DU	nd <sub>St</sub>	<b>Ear</b> rate	gies y	Project: Project Numbe ogged by: Date Started: Gurface Condit Vell Location I Vell Location I Reviewed by: Date Complete	r: 1002 JSL 02/00 vions: Expo v/S: E/W: CCC	osed Soil	Гime		ashington feet bgs
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv	) Sample ) ID	e USCS Class	Graphic	Lithologic	Description	Well Detail/ Water Depth
15   20 								with some gravel, gray, 70-10). Drill cutting 20 to 25 fee	eet bgs: Moist, silty SAN , no hydrocarbon odor ( et bgs: Moist, SAND with ray, no hydrocarbon odo	
25								Drill cuttings 25 to 30 fe SAND with some silt, g (10-90-0).	eet bgs: Moist to wet, ray, no hydrocarbon od	
Drillin Drillin Samp Hamn Total Total	Drilling Co./Driller: Kulchi			 40 40	er rig W S Ibs F feet bgs S feet bgs A	/ell/Auger D /ell Screene creen Slot S ilter Pack U urface Seal nnular Seal lonument T	ed Interval Size:  sed: : :	12/30 inches 20-40 feet b 0.03 inches Pea Gravel Soil Soil None	gs Lithologic descriptions	based on soil 4 feet below Madison southeast corner of ted petroleum odor in

So	DU		<b>Ear</b>	gies v v	roject: roject Number ogged by: late Started: urface Condition /ell Location N. /ell Location E. eviewed by: late Completed	: 1002 JSL 02/06 Dons: Expo /S: /W: CCC	osed Soil	Fime .	BORING LOG DW0 Site Address: 1420 East Mac Seattle, Wash Water Depth At Time of Drilling	3 tison ngton feet bgs
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv	Sample ID	USCS Class	Graphic	Lithologic	Description	Well Detail/ Water Depth
30								Drill cuttings 30 to 40 fer some silt, gray, no hydro	et bgs: Moist, SAND with ocarbon odor (10-90-0).	
-									watering well DW03 to a eened from 20 to 40 feet n 17 to 40 feet bgs, native et bgs, and finished with	
Drillir Samp Hamn Total Total	Drilling Co./Driller: Kulchin/			 40	er rig We Sc Ibs Fil feet bgs Su feet bgs An	ell/Auger D ell Screene reen Slot S ter Pack U rface Seal nular Seal nular Seal	ed Interval Size: sed: :	12/30 inches 20-40 feet bg 0.03 inches Pea Gravel Soil Soil None	Lithologic descriptions bas cuttings. Well installed 4 fe Street sidewalk on the sou the Property. Driller noted borehole during pouring of	et below Madison theast corner of petroleum odor in

Sc	DUI	nd E Stra	art	Pri Lo Da E S Su Wa Re	oject: oject Number: gged by: te Started: rface Condition ell Location N/ ell Location E/ viewed by: te Completed	: 1002-0 AFH 02/08, Ons: Expos /S: /W: CCC	ed Soil	Fime	Si	BORING LOG       DW04         Site Address:       1420 East Madis Seattle, Washing         Water Depth At Time of Drilling       23         Water Depth After Completion			ison ngton	
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Litholo	gic De	scription		Well [ Water	Detail/ <sup>·</sup> Depth	
0								Drill cuttings 0 to 5 f (bgs): Moist, silty SA hydrocarbon odor (2	AND wit	h some gravel	ace no	00000000		
5				0.0				Drill cutting 5 to 10 f with some gravel, no 15).						
10 — - - -				0.3	DW04-15			Drill cuttings 10 to 1 with some gravel, gr 65-15).						
Drillin Samp Hamn	ig Equ ler Typ ner Typ Boring Well D	pe/Weig g Depth: Pepth:	So No ht:	ulchin/Alan blid-stem auger one	rig We Sci Ibs Filt feet bgs Su feet bgs An	ell/Auger Di ell Screened reen Slot S ter Pack Us rface Seal: nular Seal:	l Interval ize: ed:	: 16-36 fee	ches et bgs ches	Notes/Comm Lithologic descri cuttings. Well co stick-up above o	ptions base mpleted wit	h 2.5 fee	t of	

None

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State Well ID No.:

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So	JU		<b>Eart</b>	ies Pr Lo Da Su Wa Re	oject: oject Number: ogged by: inface Condition ell Location N/ ell Location E/ eviewed by: inte Completed:	1002-0 AFH 02/08/ 0ns: Expos S: W: CCC	/16 ed Soil	Time BORING DW04 DW04 Site Address: 1420 East Madison Seattle, Washington Water Depth At Time of Drilling 23 feet bgs Water Depth After Completion feet bgs
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description Well Detail/
15								Drill cuttings 15 to 20 feet bgs: Moist, silty SAND with some gravel, no hydrocarbon odor (20-65- 15).
20 — _ _				0.2				Drill cutting 20 to 25 feet bgs: Moist to wet, silty SAND with some gravel, light brown, no hydrocarbon odor (20-65-15).
_								Soil cuttings become wet between 23 and 25 feet bgs.
25				0.4	DW04-25			Drill cuttings 25 to 30 feet bgs: Wet, SAND with some silt and trace gravel, gray-brown, no hydrocarbon odor (15-80-5).
Drilling Co./Driller:       Kulchin/Alan       Well/Auger Diameter:       12/30       inches       Notes/Comments:         Drilling Equipment:       Solid-stem auger rig       Well Screened Interval:       16-36       feet bgs       Lithologic descriptions based on soil         Sampler Type:       None       Filter Pack Used:       Pea Gravel       Lithologic descriptions based on soil         Total Boring Depth:       36       feet bgs       Surface Seal:       Soil								

Filter	lbs
Surfa	feet bgs
Annu	feet bgs
Monu	

Total Well Depth:

State Well ID No.:

36

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ace Seal: ılar Seal: ument Type: Soil Soil None

Page:

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SoundEarth Project: Project Num Logged by: Date Started							1002- AFH 02/08		ime	BORING LOG		son
		Sti	rateg	ies su w	urface Cono ell Location		Expo	sed Soil		Seatt	le, Washin n At	
					ell Location eviewed by:		 CCC			Time of Drill	ing <sup>23</sup> 1	feet bgs
	_			Da	ate Comple	ted:	02/08			After Compl	etion	feet bgs
Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Samp ID		SCS ass	Graphic	Lithologic	Description		Well Detail/ Water Depth
30												
- - 35				0.5	DW04-35				Drill cuttings 30 to 35 fea some silt, gray-brown, n 85-0).	et bgs: Wet, SAND o hydrocarbon od	with or (15-	
35				0.4					Drill cuttings 35 to 36 fee some silt and trace grav hydrocarbon odor (15-80	el, gray-brown, no	with	
									Boring terminated at 36 twelve-inch-diameter de depth of 36 feet bgs, scr bgs with pea gravel from finished with two and a l ground surface.	feet bgs. Complete watering well DW0 eened from 16 to 3 o to 36 feet bgs, a	4 to a 6 feet and	
40												
_												
45		<u> </u>		1	1							
Drillin Samp Hamn Total Total	Total Boring Depth: 36			ger rig Well/Auger Diameter: Well Screened Interva Screen Slot Size: Ibs Filter Pack Used: feet bgs Surface Seal: Annular Seal: Monument Type:			d Interval: bize: sed:	ral: 16-36 feet bgs 0.03 inches Pea Gravel Soil Soil			n 2.5 feet of	
1										Page:	<u> </u>	

# **APPENDIX E**

# DEWATERING SYSTEM DRAINAGE AS-BUILT DESIGN



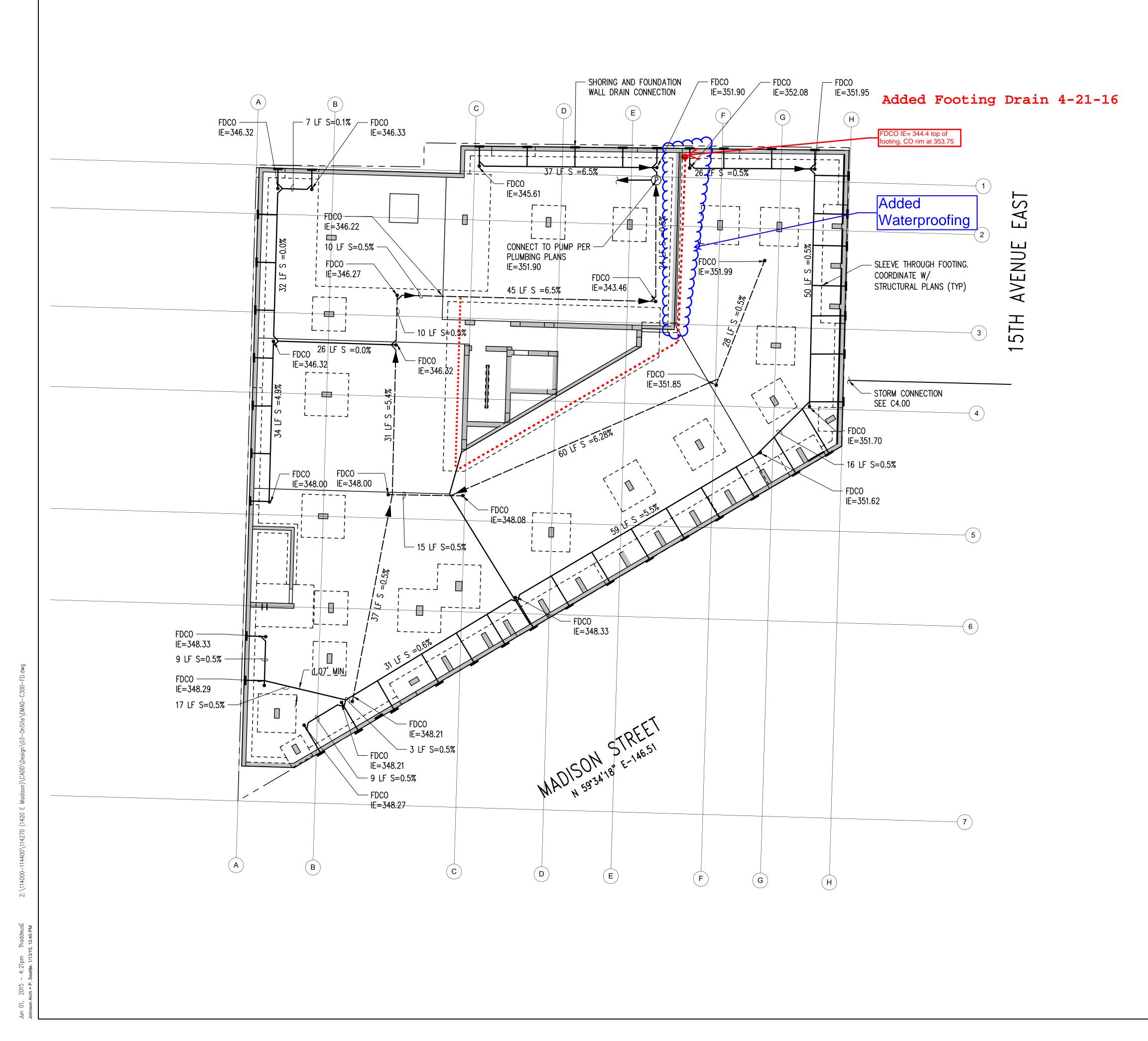
#### W.G. Clark Construction Co.

408 Aurora Avenue North Seattle WA 98109

### **Request For Information** 0084

Printed On: Apr 22, 2016 Page: 1 of 1

Subject:	SOG Additional Footing Drains and Waterproofing	Date: Apr 22, 2016
Project:	Broadcast Apartments	<b>Job:</b> 769
Address:	1420 East Madison	Required: Apr 29, 2016
	Seattle WA 98122	Estimated Cost Impact:
Phone:	Fax:	Estimated Days
To:	Trent Mummery	
	1420 East Madison Street LLC	
From:	Matt Sullivan	
	W.G. Clark Construction Co.	
Co-	Contact:	Co-Author RFI
Reference:		
Location		Est. Cost TBD
Document Returned to		Log Comment RFI Notice Sent
Request:		
	Per Owner request, additional footing drains and waterp	proofing to be added at the SOG walls per the attached document.
	The footing drains and waterproofing are required base	on water levels encountered during site excavation.
Suggestion:		
<b>A</b>		
Answer:	Accept Suggestion	
Answered By:		
Answered by:		Signed:
Date:		
Distribution:		
Contact	Company	
Jeff Oaklief	Johnson Architecture & Planning	
Steve Johnson	Johnson Architecture & Planning	
Veronica Park	Johnson Architecture & Planning	
Greg Jasper	W.G. Clark Construction Co.	
Jim Lindholm	W.G. Clark Construction Co.	
Rob Fitzgerald	W.G. Clark Construction Co.	

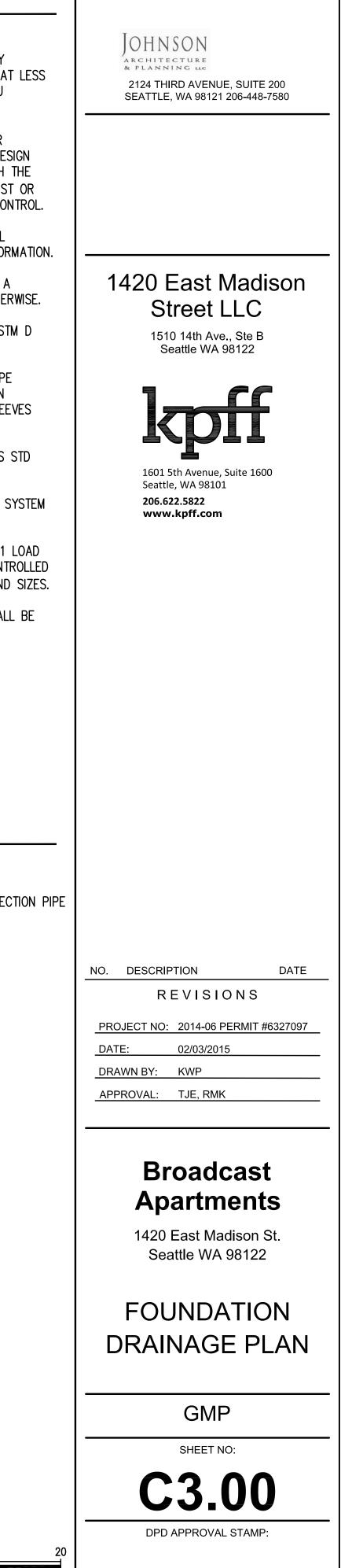


# NOTES:

- 1. SEE SHORING FOR DESIGN OF SHORING SYSTEM.
- SUBSURFACE DRAIN SYSTEM IS INTENDED AS PRECAUTIONARY. ANY GROUNDWATER COLLECTED WILL BE INCIDENTAL AND IS EXPECTED AT LESS THAN 2 GPM. AS SUCH FLOW CONTROL IS NOT REQUIRES PER SPU DIRECTOR'S RULE 2010–13.
- 3. THIS PLAN MEETS THE MINIMUM REQUIREMENTS FOR GROUNDWATER CONTROL AS RECOMMENDED IN THE GEOTECHNICAL ENGINEERING DESIGN REPORT BY AESI. THE CONTRACTOR SHALL VERIFY LOCATIONS WITH THE OWNER'S GEOTECHNICAL REPRESENTATIVE IN THE FIELD, AND ADJUST OR INCREASE THEM TO OBTAIN FULL COVERAGE FOR GROUNDWATER CONTROL.
- 4. FOUNDATIONS, FOOTING, AND SHORING ARE SHOWN FOR GRAPHICAL REPRESENTATIONS ONLY. SEE STRUCTURAL AND SHORING FOR INFORMATION.
- 5. INVERT ELEVATIONS FOR PIPES BELOW SLAB ON GRADE SHALL BE A MINIMUM 22 INCHES BELOW BOTTOM OF SLAB, UNLESS NOTED OTHERWISE.
- 6. PIPE UNDER BUILDING SLABS SHALL BE SCHEDULE 40 PVC PER ASTM D 2665.
- 7. CONTRACTOR SHALL PROVIDE SLEEVES, AS REQUIRED, FOR PVC PIPE CROSSING THROUGH OR UNDER CONCRETE WALLS AND FOUNDATION ELEMENTS. CONTRACTOR SHALL COORDINATE THE LOCATION OF SLEEVES WITH THE STRUCTURAL ENGINEER.
- 8. TRENCHING AND BEDDING FOR SERVICE DRAINS SHALL BE PER COS STD PLANS 284 AND 285.
- 9. ROOF DRAINS SHALL BE TIGHT LINED INTO A SEPARATE DRAINAGE SYSTEM BY PLUMBING.
- 10. EXCAVATIONS FOR DRAINAGE SYSTEM THAT EXTEND BELOW THE 1:1 LOAD ZONE OF THE ADJACENT FOOTING SHALL BE BACKFILLED WITH CONTROLLED DENSITY FILL (CDF). SEE STRUCTURAL FOR FOOTING LOCATIONS AND SIZES.
- 11. ALL STORM DRAIN CATCH BASIN AND MANHOLE OUTLET PIPES SHALL BE FITTED WITH OUTLET TRAPS PER COS STD PLAN 267.

# LEGEND

	4" SOLID WALL DRAIN COLLECTION PIPE
	4" PERFORATED SCHEDULE 40 PVC COLLEC
•	FOUNDATION DRAIN CLEANOUT (FDCO)
P	SUMP PUMP, SEE PLUMBING





1 inch = 10 feet

two business days before you dig

Approved, thanks.

Trent Mummery The Metropolitan Companies 206-234-6543 <u>www.metropolitancos.com</u>

From: Matt Sullivan [mailto:MSullivan@wgclark.com]
Sent: Monday, April 25, 2016 10:16 AM
To: Trent Mummery <trent@metropolitancos.com>
Subject: FW: 769WGCMS RFI 0084 SOG Additional Footing Drains and Waterproofing

Trent,

RFI for the added SOG footing drains and waterproofing as discussed at last week's OAC.

Let me know if you have any questions.

Thanks,

#### **Matt Sullivan**

Project Engineer

W.G. CLARK CONSTRUCTION CO. | P (206)812-3854 C (206)330-6834 | www.wgclark.com

From: Hikuu I/O [mailto:hikuuio@hikuucloud.com]

Sent: Monday, April 25, 2016 10:15 AM

To: Matt Sullivan <<u>MSullivan@wgclark.com</u>>

Subject: 769WGCMS RFI 0084 SOG Additional Footing Drains and Waterproofing

#### **RFI 0084**

Fror	n Matt Sullivan
Т	o Matt Sullivan
C	
Projec	t Broadcast Apartments
Subjec	t SOG Additional Footing Drains and Waterproofing
Subject: Date Required: Cost Impact: Cost Amount: Question:	SOG Additional Footing Drains and Waterproofing 2016-05-02 Potentially Per Owner request, additional footing drains and waterproofing to be added at the SOG walls per the attached document.

The footing drains and waterproofing are required based on water levels encountered during site excavation.

#### Suggestion: Answer:

<u>Click here</u> to access this RFI on-line, or simply reply to this email with your comments and any required attachments.

Note: Please ensure that you leave **"769WGCMS RFI 0084"** in the subject line of all emails you send related to this RFI. Replies must be **above** the original message. Attachments will also be accepted.

## APPENDIX F

## LABORATORY ANALYTICAL REPORTS FOR GROUNDWATER

Friedman & Bruya, Inc. #602242

#### 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

February 23, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on February 15, 2016 from the SOU\_1002-003\_20160215, F&BI 602242 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 c: Chuck Cacek, Jonathan Loeffler SOU0223R.DOC

#### ENVIRONMENTAL CHEMISTS

#### CASE NARRATIVE

This case narrative encompasses samples received on February 15, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160215, F&BI 602242 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	SoundEarth Strategies
602242 -01	DW02-20160215
602242 -02	DW03-20160215

The 8260C trichloroethene laboratory control sample exceeded the acceptance criteria. This analyte was not detected in the samples, therefore the data were acceptable.

All other quality control requirements were acceptable.

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	DW02-20160 02/15/16 02/16/16 02/16/16 Water ug/L (ppb)	0215	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies F&BI 602242 602242-01 021606.D GCMS9 JS
Surrogates: 1,2-Dichloroethane Toluene-d8 4-Bromofluorobenz		% Recovery: 100 103 102	Lower Limit: 85 91 76	Upper Limit: 117 108 126
Compounds:		Concentration ug/L (ppb)		
Vinyl chloride Chloroethane 1,1-Dichloroethene Methylene chloride trans-1,2-Dichloroe 1,1-Dichloroethane cis-1,2-Dichloroeth 1,2-Dichloroethane 1,1,1-Trichloroethane Trichloroethene Tetrachloroethene	e ethene ene (EDC)	<0.2 <1 <1 <5 <1 <1 <1 5.7 <1 <1 <1		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	DW03-2016 02/15/16 02/16/16 02/16/16 Water ug/L (ppb)	0215	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies F&BI 602242 602242-02 021607.D GCMS9 JS
Surrogates: 1,2-Dichloroethane Toluene-d8 4-Bromofluorobenz		% Recovery: 101 105 101	Lower Limit: 85 91 76	Upper Limit: 117 108 126
Compounds:		Concentration ug/L (ppb)		
Vinyl chloride Chloroethane 1,1-Dichloroethene Methylene chloride trans-1,2-Dichloroe 1,1-Dichloroethane cis-1,2-Dichloroethane 1,2-Dichloroethane 1,1,1-Trichloroethane Trichloroethene Tetrachloroethene	e ethene ene (EDC)	< 0.2 < 1 < 1 < 5 < 1 < 1		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blar Not Applicat 02/16/16 02/16/16 Water ug/L (ppb)		Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies F&BI 602242 06-0251 mb 021605.D GCMS9 JS
Surrogates:		% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane	-d4	101	85	117
Toluene-d8		103	91	108
4-Bromofluorobenz	ene	101	76	126
		Concentration		
Compounds:		ug/L (ppb)		
Vinyl chloride		< 0.2		
Chloroethane		<1		
1,1-Dichloroethene	:	<1		
Methylene chloride		<5		
trans-1,2-Dichloroe	ethene	<1		
1,1-Dichloroethane		<1		
cis-1,2-Dichloroeth	ene	<1		
1,2-Dichloroethane	(EDC)	<1		
1,1,1-Trichloroetha		<1		
Trichloroethene		<1		
Tetrachloroethene		<1		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 02/23/16 Date Received: 02/15/16 Project: SOU\_1002-003\_20160215, F&BI 602242

#### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 602242-01 (Matrix Spike)

5	1 /				
				Percent	
	Reporting	Spike	Sample	Recovery	Acceptance
Analyte	Units	Level	Result	MS	Criteria
Vinyl chloride	ug/L (ppb)	50	< 0.2	114	61-139
Chloroethane	ug/L (ppb)	50	<1	110	55-149
1,1-Dichloroethene	ug/L (ppb)	50	<1	108	71-123
Methylene chloride	ug/L (ppb)	50	<5	113	61-126
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	106	72-122
1,1-Dichloroethane	ug/L (ppb)	50	<1	104	79-113
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	106	63-126
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	5.7	96	70-119
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	115	75-121
Trichloroethene	ug/L (ppb)	50	<1	109	75-109
Tetrachloroethene	ug/L (ppb)	50	<1	98	72-113

Laboratory Code: Laboratory Control Sample

Laboratory coue. Laboratory con	I I		Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Vinyl chloride	ug/L (ppb)	50	112	109	70-119	3
Chloroethane	ug/L (ppb)	50	108	107	66-149	1
1,1-Dichloroethene	ug/L (ppb)	50	106	105	75-119	1
Methylene chloride	ug/L (ppb)	50	117	116	63-132	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	104	103	76-118	1
1,1-Dichloroethane	ug/L (ppb)	50	104	101	80-116	3
cis-1,2-Dichloroethene	ug/L (ppb)	50	105	103	80-112	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	95	92	79-109	3
1,1,1-Trichloroethane	ug/L (ppb)	50	115	112	80-116	3
Trichloroethene	ug/L (ppb)	50	109 vo	106	77-108	3
Tetrachloroethene	ug/L (ppb)	50	97	96	78-109	1

#### ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

Send Report ToJohn Funderby Jonathan Loeffler Company_SoundEarth Strategies Address_2811 Fairview Avenue Ed City, State, ZIPSeattle, Washing Phone #_(206) 306-1900Fax #	s, Inc. ast, Suite 2000 ton 98102		SAMPLE PROJEC	100	el NTACO TIME 02-003 etection lim			PO #	······		Stando (RUSH_ ush cho <u>Ch</u> S, Dispose Return	ard (2 V 2 arges a <u>v. K</u> AMPLE e after sampl	of OUND TIME Weeks) <u>Lut TAT</u> Juthorized by: <u>Cacek</u> DISPOSAL 30 days les instructions
	······································										A	NALY	SES REQUESTED
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sample d	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	CVOCs by 82608		Notes
DW02-20160215	DWOZ		O'A.D	2/15/16	1434	H,O	Ч	<b> </b>			X		
DW03-20160215	DW03		02 A.D	2/15/16	1525	H <sub>2</sub> U	ų.				$\overline{\mathbf{X}}$		
					H					<u></u>			

.

Friedman & Bruya, Inc.	SIGNATURE Q	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by:	JONATHAN LOEFFLER	SOUNDEARTH	2/15/16	1627
Seattle, WA 98119-2029	Received by:	VINH	FBI	2/15/4	1628
Ph. (206) 285-8282	Relinquished by:				<u> </u>
Fax (206) 283-5044	Received by:		Samples received	at <u>6</u> °C	

Friedman & Bruya, Inc. #604418

#### 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 29, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on April 25, 2016 from the SOU\_1002-003\_ 20160425, F&BI 604418 project. There are 5 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: Chuck Cacek, Jonathan Loeffler SOU0429R.DOC

#### ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on April 25, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160425, F&BI 604418 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
604418 -01	DW02-20160422

All quality control requirements were acceptable.

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	ate Received:04/25/16ate Extracted:04/25/16ate Analyzed:04/25/16atrix:Water		Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20160425 604418-01 042520.D GCMS4 JS		
			Lower	Upper		
Surrogates:		% Recovery:	Limit:	Limit:		
1,2-Dichloroethane	-d4	94	50	150		
Toluene-d8		100	50	150		
4-Bromofluorobenz	ene	101	50	150		
Compounds:		Concentration ug/L (ppb)				
1,2-Dichloroethane	(EDC)	<0.1				

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	ceived: Not Applicable tracted: 04/25/16		Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_20160425 06-0799 mb 042519.D GCMS4 JS
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane	-d4	92	50	150
Toluene-d8		99	50	150
4-Bromofluorobenz	ene	101	50	150
Compounds:		Concentration ug/L (ppb)		
1,2-Dichloroethane	(EDC)	<0.1		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 04/29/16 Date Received: 04/25/16 Project: SOU\_1002-003\_ 20160425, F&BI 604418

#### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C SIM

Laboratory Code: Laboratory Control Sample

Laboratory coue. Laboratory	concror compre	-	Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
1,2-Dichloroethane (EDC)	ug/L (ppb)	2	102	100	70-130	2

#### ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

( <u><u>604418</u> Send Reported Jonn Funderbu Jonathan Loeffler Company SoundEarth Strategies, Address 2811 Fairview Avenue Ec City, State, ZIP_Seattle, Washingt Phone #_(206) 306-1900Fax #</u>	, Inc. ast, Suite 2000 ton 98102		SAMPLE	100 KS			ME	<u>ОЧ</u> РО # ЕМЅ Y		F R	Stand (RUSH_ ush ch <u>Chuc</u> Dispos	URNAI arges <u>k (u</u> SAMPL se afte	( OT ROUND TIME Weeks) Ary TAT authorized by: Cek LE DISPOSAL er 30 days
			0.01 mg	<sup>1</sup> low level de g/kg for EDC.			d				Return samples Will call with instructions		
	Τ	1		ı — — —		<u>г                                     </u>	<u> </u>					ANAL	YSES REQUESTED
Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sample d	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 80218	CVOCs by 82608 <sup>1</sup>	EDC by 8260C	Notes
DW02-20160422	DW02	<u> </u>	OA_C	4/22/16	1427	H20	4					$\times$	
											<u> </u>		
			$\leftarrow$										
					1P								
				$\mathcal{T}$	4 4/2	2/16							
							$\geq$						
									$\searrow$	<u> </u>			
											$\leftarrow$		

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by:	JONATHAN LOEFFLER	SUNDEARTH	4/23/16	
Seattle, WA 98119-2029	Received by: manau	- Nhan phan	TAT	1111	
Ph. (206) 285-8282	Relinquished by:	Nhan Phan	teB1	1/05/16	0800
. ,					
Fax (206) 283-5044	Received by:		Samples received	at 2.	c

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Friedman & Bruya, Inc. #605181

#### ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Arina Podnozova, B.S. Eric Young, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

May 19, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on May 11, 2016 from the SOU\_1002-003-05\_ 20160511, F&BI 605181 project. There are 7 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: Chuck Cacek, Jonathan Loeffler SOU0519R.DOC

#### ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on May 11, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003-05\_ 20160511, F&BI 605181 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
605181 -01	DW03-20160510
605181 -02	DW02-20160510
605181 -03	DW05-20160510

All quality control requirements were acceptable.

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	DW03-2016 05/11/16 05/11/16 05/11/16 Water ug/L (ppb)	0510	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003-05_ 20160511 605181-01 051128.D GCMS4 JS
Surrogates: 1,2-Dichloroethane Toluene-d8 4-Bromofluorobenz		% Recovery: 102 104 102	Lower Limit: 57 63 60	Upper Limit: 121 127 133
Compounds:		Concentration ug/L (ppb)		
Vinyl chloride Chloroethane 1,1-Dichloroethene Methylene chloride trans-1,2-Dichloroet 1,1-Dichloroethane cis-1,2-Dichloroethane 1,2-Dichloroethane 1,1,1-Trichloroethane Trichloroethene Tetrachloroethene	e ethene ene (EDC)	<0.2 <1 <1 <5 <1 <1 <1 <1 <1 <1 <1 <1		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	DW02-2016 05/11/16 05/11/16 05/11/16 Water ug/L (ppb)	0510	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003-05_ 20160511 605181-02 051129.D GCMS4 JS
Surrogates: 1,2-Dichloroethane Toluene-d8 4-Bromofluorobenz		% Recovery: 101 103 102	Lower Limit: 57 63 60	Upper Limit: 121 127 133
Compounds:		Concentration ug/L (ppb)		
Vinyl chloride Chloroethane 1,1-Dichloroethene Methylene chloride trans-1,2-Dichloroet 1,1-Dichloroethane cis-1,2-Dichloroethane 1,2-Dichloroethane 1,1,1-Trichloroethane Trichloroethene Tetrachloroethene	e ethene ene (EDC)	<0.2 <1 <1 <5 <1 <1 <1 <1 <1 <1 <1 <1		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	DW05-2016 05/11/16 05/11/16 05/11/16 Water ug/L (ppb)	0510	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003-05_ 20160511 605181-03 051130.D GCMS4 JS
Surrogates: 1,2-Dichloroethane Toluene-d8 4-Bromofluorobenz		% Recovery: 100 103 100	Lower Limit: 57 63 60	Upper Limit: 121 127 133
Compounds:		Concentration ug/L (ppb)		
Vinyl chloride Chloroethane 1,1-Dichloroethene Methylene chloride trans-1,2-Dichloroet 1,1-Dichloroethane cis-1,2-Dichloroethane 1,2-Dichloroethane 1,1,1-Trichloroethane Trichloroethene Tetrachloroethene	e ethene ene e (EDC)	<0.2 <1 <1 <5 <1 <1 <1 <1 <1 <1 <1 <1 <1		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Bla Not Applica 05/11/16 05/11/16 Water ug/L (ppb)		Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003-05_ 20160511 06-909 mb 051111.D GCMS4 JS
Surrogates: 1,2-Dichloroethane Toluene-d8 4-Bromofluorobenz		% Recovery: 101 103 101	Lower Limit: 57 63 60	Upper Limit: 121 127 133
Compounds:		Concentration ug/L (ppb)		
Vinyl chloride Chloroethane 1,1-Dichloroethene Methylene chloride trans-1,2-Dichloroethane cis-1,2-Dichloroethane 1,2-Dichloroethane 1,1,1-Trichloroethane Trichloroethene Tetrachloroethene	e ethene ene e (EDC)	<0.2 <1 <1 <5 <1 <1 <1 <1 <1 <1 <1 <1 <1		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 05/19/16 Date Received: 05/11/16 Project: SOU\_1002-003-05\_ 20160511, F&BI 605181

#### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 605163-01 (Matrix Spike)

J X	Reporting	Spike	Sample	Percent Recovery	Acceptance
Analyte	Units	Level	Result	MS	Criteria
Vinyl chloride	ug/L (ppb)	50	0.69	115	36-166
Chloroethane	ug/L (ppb)	50	<1	123	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	100	60-136
Methylene chloride	ug/L (ppb)	50	<5	104	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	102	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	101	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	103	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	94	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	98	60-146
Trichloroethene	ug/L (ppb)	50	<1	98	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	94	10-226

Laboratory Code: Laboratory Control Sample

Laboratory couct Laboratory c	F		Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Vinyl chloride	ug/L (ppb)	50	114	116	50-154	2
Chloroethane	ug/L (ppb)	50	127	126	58-146	1
1,1-Dichloroethene	ug/L (ppb)	50	104	105	67-136	1
Methylene chloride	ug/L (ppb)	50	113	112	39-148	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	108	108	68-128	0
1,1-Dichloroethane	ug/L (ppb)	50	107	106	79-121	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	110	109	80-123	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	99	99	73-132	0
1,1,1-Trichloroethane	ug/L (ppb)	50	104	105	83-130	1
Trichloroethene	ug/L (ppb)	50	104	104	80-120	0
Tetrachloroethene	ug/L (ppb)	50	97	98	76-121	1

#### ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

Company_SoundEarth Strategies, Inc.         Address 2811 Edivide Avenue East, Suite 2000         City, State, ZIP_Seattle, Washington 98102         Phone # (206) 306-1907         Phone # (206) 306-1907         Sample ID         Sample ID         Sample ID         Sample ID         Sample ID         Divo 3         DI AP 5/10/16         Address 10         DI AP 5/10/16         DI AP 5/10/16         PO #	Send Report To Jonathan Loeffler	ourk, Chuck Cacek;			E CHAIN O ERS (signature						] F	Page # TL	JRNAR	of
GEMS Y / N         GEMS Y / N         Dispose after 30 days: Return samples Will call with instructions         Sample Location       Sample Depth       Lab       Date Sampled       Time Sampled       Matrix       # of $\frac{1}{2}$ ANALYSES REQUEST         Notes         Sample Location       Date Depth       Time Date Dot       Matrix       # of $\frac{1}{2}$ A       ANALYSES REQUEST         Dispose after 30 days: Return samples Will call with instructions         Date Dot       Time Sampled       Matrix       # of $\frac{1}{2}$ A         Dispose after 30 days: Return samples Will call with instructions         ANALYSES REQUEST         Dispose after 30 days: Return samples Will call with instructions         Dispose after 30 days: Return samples Will call with instructions         Dispose after 30 days: Return samples         Dispose after 30 days: Return samples	Company_SoundEarth Strategies, Inc.			MADISON TACO TIME					}					
Sample IDSample LocationSample DepthLab IDDate SampledTime SampledMatrix# of fars $\frac{x}{4}$ $\frac{y}{42}$ $\frac{x}{4}$ $\frac{y}{42}$ $\frac{x}{4}$ $\frac{y}{42}$ NotesDw03 - 20160510Dw03 Dw0201 Ap $5/10/16$ 1945 $H_2O$ H×Dw02 - 20160510Dw02 Dw0502120001H××Dw05 - 20160510Dw05 Dw0503/2 20/202/212030 4×Dw05 - 20160510Dw05 20/2 20/2 20/2 20/2 20/2 20/2 20/2 20/2 20/2 20/2 20/2 20/2 20/2				REMAR	KS			G	EMS Y	/ N		Dispos Return	e afte samp	r 30 days bles
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$\frac{DWO2 - 20160510}{DWO5 - 20160510}  \frac{DWO2}{DW05} = 02  2000  4  x$	DW03-20160510	DW03		DIAD	5/10/16	1945	H20	Ц	1			X	- 1	
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Samples received at <u>5</u>°C

Friedman & Bruya, Inc. SIGNATURE PRINT NAME COMPANY DATE TIME 3012 16th Avenue West Relinquished by JON LOEFFICER SOUNDEARTH 5/11/16 0938 Seattle, WA 98119-2029 Nhan Received by: Phan FEBT 0938 Thu V M Ph. (206) 285-8282 Relinquished by: Fax (206) 283-5044 Received by:

Friedman & Bruya, Inc. #605325

#### ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Arina Podnozova, B.S. Eric Young, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

May 24, 2016

John Funderburk, Project Manager SoundEarth Strategies 2811 Fairview Ave. East, Suite 2000 Seattle, WA 98102

Dear Mr. Funderburk:

Included are the results from the testing of material submitted on May 17, 2016 from the SOU\_1002-003\_20160517, F&BI 605325 project. There are 7 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: Chuck Cacek, Jonathan Loeffler SOU0524R.DOC

#### ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on May 17, 2016 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_1002-003\_ 20160517, F&BI 605325 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
605325 -01	DW05-20160517
605325 -02	DW02-20160517
605325 -03	DW03-20160517

All quality control requirements were acceptable.

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	DW05-2016 05/17/16 05/18/16 05/18/16 Water ug/L (ppb)	0517	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20160517, F&BI 605325 605325-01 051817.D GCMS4 JS
Surrogates: 1,2-Dichloroethane Toluene-d8 4-Bromofluorobenz		% Recovery: 100 108 104	Lower Limit: 57 63 60	Upper Limit: 121 127 133
Compounds:		Concentration ug/L (ppb)		
Vinyl chloride Chloroethane 1,1-Dichloroethene Methylene chloride trans-1,2-Dichloroethane cis-1,2-Dichloroethane 1,2-Dichloroethane 1,1,1-Trichloroethane Trichloroethene Tetrachloroethene	thene ene (EDC)	<0.2 <1 <1 <5 <1 <1 <1 <1 <1 <1 <1 <1 <1		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	DW02-2016 05/17/16 05/18/16 05/18/16 Water ug/L (ppb)	0517	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20160517, F&BI 605325 605325-02 051818.D GCMS4 JS
Surrogates:		% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane	d4	104	57	121
Toluene-d8	-44	104	63	127
4-Bromofluorobenzo	ene	107	60	133
4 DI UNIUNUUUUUUUUUU		102	00	100
		Concentration		
Compounds:		ug/L (ppb)		
Vinyl chloride		<0.2		
Chloroethane		<1		
1,1-Dichloroethene		<1		
Methylene chloride		<5		
trans-1,2-Dichloroe	thene	<1		
1,1-Dichloroethane		<1		
cis-1,2-Dichloroethe	ene	<1		
1,2-Dichloroethane	(EDC)	<1		
1,1,1-Trichloroetha	ne	<1		
Trichloroethene		<1		
Tetrachloroethene		<1		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	DW03-2016 05/17/16 05/18/16 05/18/16 Water ug/L (ppb)	0517	Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20160517, F&BI 605325 605325-03 051819.D GCMS4 JS
Surrogates: 1,2-Dichloroethane	-d4	% Recovery: 101	Lower Limit: 57	Upper Limit: 121
Toluene-d8		107	63	127
4-Bromofluorobenz	ene	103	60	133
Compounds:		Concentration ug/L (ppb)		
Vinyl chloride		<0.2		
Chloroethane		<1		
1,1-Dichloroethene		<1		
Methylene chloride trans-1,2-Dichloroe		<5 <1		
1,1-Dichloroethane	thene	<1 <1		
cis-1,2-Dichloroethe	ene	<1		
1,2-Dichloroethane	(EDC)	<1		
1,1,1-Trichlor oetha	ne	<1		
Trichloroethene		<1		
Tetrachloroethene		<1		

### ENVIRONMENTAL CHEMISTS

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blar Not Applical 05/18/16 05/18/16 Water ug/L (ppb)		Client: Project: Lab ID: Data File: Instrument: Operator:	SoundEarth Strategies SOU_1002-003_ 20160517, F&BI 605325 06-972 mb 051808.D GCMS4 JS
			Lower	Upper
Surrogates:		% Recovery:	Limit:	Limit:
1,2-Dichloroethane-	-d4	101	57	121
Toluene-d8		107	63	127
4-Bromofluorobenz	ene	103	60	133
Compounds:		Concentration ug/L (ppb)		
Vinyl chloride		<0.2		
Chloroethane		<1		
1,1-Dichloroethene		<1		
Methylene chloride		<5		
trans-1,2-Dichloroe	thene	<1		
1,1-Dichloroethane		<1		
cis-1,2-Dichloroethe	ene	<1		
1,2-Dichloroethane	(EDC)	<1		
1,1,1-Trichloroetha	ne	<1		
Trichloroethene		<1		
Tetrachloroethene		<1		

#### ENVIRONMENTAL CHEMISTS

Date of Report: 05/24/16 Date Received: 05/17/16 Project: SOU\_1002-003\_20160517, F&BI 605325

#### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 605307-01 (Matrix Spike)

, , , , , , , , , , , , , , , , , , ,	Reporting	Spike	Sample	Percent Recovery	Acceptance
Analyte	<b>Ú</b> nits	Level	Result	MS	Criteria
Vinyl chloride	ug/L (ppb)	50	< 0.2	96	36-166
Chloroethane	ug/L (ppb)	50	<1	109	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	91	60-136
Methylene chloride	ug/L (ppb)	50	<5	99	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	95	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	95	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	99	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	89	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	94	60-146
Trichloroethene	ug/L (ppb)	50	<1	96	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	93	10-226

Laboratory Code: Laboratory Control Sample

	<b>r</b>		Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Vinyl chloride	ug/L (ppb)	50	109	111	50-154	2
Chloroethane	ug/L (ppb)	50	120	124	58-146	3
1,1-Dichloroethene	ug/L (ppb)	50	102	104	67-136	2
Methylene chloride	ug/L (ppb)	50	109	113	39-148	4
trans-1,2-Dichloroethene	ug/L (ppb)	50	103	107	68-128	4
1,1-Dichloroethane	ug/L (ppb)	50	103	106	79-121	3
cis-1,2-Dichloroethene	ug/L (ppb)	50	107	111	80-123	4
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	96	100	73-132	4
1,1,1-Trichloroethane	ug/L (ppb)	50	102	105	83-130	3
Trichloroethene	ug/L (ppb)	50	103	106	80-120	3
Tetrachloroethene	ug/L (ppb)	50	92	97	76-121	5

#### ENVIRONMENTAL CHEMISTS

### **Data Qualifiers & Definitions**

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

 ${\bf b}$  - 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.

 ${\rm d}$  - 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.

 $\ensuremath{\text{ip}}$  - 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.

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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.

Send Report To <u>Jonnt onderbu</u> Jonathan Loeffler Company <u>SoundEarth Strategies</u> Address <u>2811 Fairview Avenue Ec</u> City, State, ZIP <u>Seattle, Washingt</u> Phone # <u>(206) 306-1900</u> Fax #	Inc. 1st, Suite 2000 1on 98102		SAMPLE PROJEC	100	TACO TIME			<u>ро</u> # Емѕ у		Page #ur TURNAROUND TIME Standard (2 Weeks) ➤RUSHClacyTAT Rush charges authorized by: Cuce_K: SAMPLE DISPOSAL Dispose after 30 days Return samples Will call with instructions				
				т — т — т — т — т — т — т — т — т — т —	r	··················						ANAL	YSES REQUESTED	
Sample ID	Sampl <del>e</del> Location	Sample Depth	Lab ID	Date Sampled	Time Sample d	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	CVOCs by 826085		Notes	
DW05-20160517	DWCS	·	01 A-D	5/17/16		HZO	Ч				×			
DW02-20160517 DW03-20160517	DW02 DW03		02 03		1536		4				$\times$			
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Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by:	JONATHAN LOEFFLER	SOLNDEARTH	5/17/16	1811
Seattle, WA 98119-2029	Received by:	Jen Shinnan	FBÉT		1
Ph. (206) 285-8282	Relinquished by:				<u> </u>
Fax (206) 283-5044	Received by:				