SoundEarth Strategies, Inc.
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Seattle, Washington 98102

PHASE II ENVIRONMENTAL SITE ASSESSMENT

Property:
Queen Anne Property
505 3rd Avenue West and 312 West Republican Street
Seattle, Washington

Prepared for:
Re:form LLC
2562 10th Avenue West
Seattle, Washington

Report Date:
June 6, 2019

Phase II Environmental Site Assessment

Queen Anne Property
505 3rd Avenue West and 312 West Republican Street
Seattle, Washington 98119

Prepared for:

Re:form LLC
2562 10th Avenue West
Seattle, Washington 98119

Project No.: 1400-001-03

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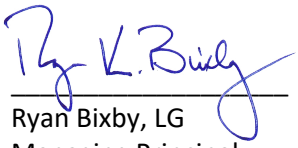

Ryan Bixby, LG
Managing Principal

June 6, 2019

SoundEarth Strategies

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ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
COC	chemical of concern
CVOC	chlorinated volatile organic compound
DRPH	diesel-range petroleum hydrocarbons
Ecology	Washington State Department of Ecology
EPA	US Environmental Protection Agency
ESA	environmental site assessment
F&BI	Friedman & Bruya, Inc.
GRPH	gasoline-range petroleum hydrocarbons
MTCA	Washington State Model Toxics Control Act
NWTPH	Northwest Total Petroleum Hydrocarbon
ORPH	oil-range petroleum hydrocarbons
PID	photoionization detector
the Property	the Queen Anne Property located at 505 3rd Avenue West and 312 West Republican Street in Seattle, Washington
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
SoundEarth	SoundEarth Strategies, Inc.
USCS	Unified Soil Classification System
UST	underground storage tank

EXECUTIVE SUMMARY

SoundEarth Strategies, Inc. (SoundEarth) was commissioned by Re:form LLC to complete a Phase II Environmental Site Assessment (ESA) of the Queen Anne Property located at 505 3rd Avenue and 312 West Republican Street in Seattle, Washington (the Property; Figure 1).

As documented in SoundEarth's Phase I ESA of the Property, dated December 7, 2018, the Property consists of two regular-shaped tax parcels (King County Parcel Nos. 199020-0223 and -0224) that cover a total of approximately 14,400 square feet (0.34 acre) of land.

The Property is currently occupied by the following three buildings:

- King County Parcel No. 199020-0223 (Parcel A), located at 505 3rd Avenue West, is currently occupied by a 1947-vintage, single-story office building (Building 1) that encloses approximately 720 square feet of space. The wood-framed structure has a built-up roof and is heated by roof-mounted natural-gas HVAC units. The parcel is also occupied by a 1951-vintage, single-story office building (Building 2) that encloses approximately 4,278 square feet of space. The masonry-framed structure has a built-up roof and is heated by roof-mounted natural-gas HVAC units.
- King County Parcel No. 199020-0224 (Parcel B), located at 312 West Republican Street, is currently occupied by a 1928-vintage, two-story mixed-use building (Building 3) that encloses approximately 8,040 square feet of space. The masonry-framed structure has a built-up roof and is heated by a hot water system.

Additional improvements include a paved parking located in the southeast portion of Parcel A, as shown on Figure 2.

As documented in SoundEarth's Phase I ESA, an oil-burning furnace was listed on the tax records in Building 2 in at least 1951, and another oil-burning furnace was listed on the tax records in Building 3 on Parcel B in at least 1965. An oil house was constructed on the eastern portion of the Property in 1951. The oil house building was torn down between 1969 and 1980. The heating oil for an oil-burning furnace is typically stored within an aboveground tank or underground tank. No fill ports or vent pipes associated with an underground tank were observed on the Property during the site reconnaissance. Impacts associated with this facility (if any) have not been reported to Washington State Department of Ecology (Ecology); however, the use and storage of heating oil and an oil house on the Property was identified as a recognized environmental condition (REC).

Building 2 on the Property was occupied by the Masterpress printing facility between at least 1986 and 1991 and by a label printing facility between at least 1993 and 2010. Facilities such as these commonly use large quantities of inks in the printing process; petroleum-based solvents and chlorinated solvents are commonly used to clean the equipment used in the printing process. Although no releases of solvents or other chemicals (if any) has been reported to Ecology, the former operation of printing facilities on the Property for a period of approximately 25 years was identified as a REC in Sound Earth's Phase I ESA.

Per the request of Re:form LLC, SoundEarth conducted a Phase II ESA subsurface investigation at the Property to investigate whether the RECs identified in the 2018 Phase I ESA resulted in impacts to the Property. Thirteen soil borings (P01 through P13) were advanced on the Property in suspect areas, including the interior of the former printing facility, the former furnace area, the underground storage tank area, and the former oil house location. Groundwater was encountered in borings P01 through P04 ranging in depths from 8 to 10.9 feet below ground surface (bgs). None of the soil, soil gas, or groundwater

samples collected and analyzed contained detectable concentrations of chlorinated volatile organic compounds. Soil samples collected from borings P07, P08, and P10 contained chemicals of concern such as gasoline-range petroleum hydrocarbons, diesel-range petroleum hydrocarbons, oil-range petroleum hydrocarbons, benzene, toluene, ethylbenzene, or total xylenes at concentrations exceeding the Washington State Model Toxics Control Act Method A cleanup levels. The results of the investigation suggest that the lateral extents of impacts have been defined, based on the absence of petroleum hydrocarbons in soil samples collected from borings P05, P06, P09, P11, and P13. Additional investigation may be necessary in order to define the vertical extent of the impacts but the absence of petroleum impacts in soil and groundwater samples collected from boring PG-1 at a depth of 20 feet bgs suggests that the vertical extent of impacts may be limited and do not appear to be widespread.

1.0 INTRODUCTION

SoundEarth Strategies, Inc. (SoundEarth) has prepared this Phase II Environmental Site Assessment (ESA) on behalf of Re:form LLC, to provide a summary of our findings and conclusions from the subsurface investigation activities conducted at the Property located at 505 3rd Avenue West and 312 West Republican Street in Seattle, Washington (the Property). This Phase II ESA 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.

The purpose of the Phase II ESA was to evaluate the potential risk of impacts to the Property associated with the recognized environmental conditions (RECs) that were identified in SoundEarth's Phase I ESA dated December 7, 2018. The Phase II ESA was conducted in general accordance with the proposal prepared by SoundEarth, dated December 19, 2018.

2.0 PROPERTY CONDITIONS

The Property consists of two rectangular-shaped tax parcels (King County Parcel Nos. 199020-0223 and -0224) that cover a total of approximately 14,400 square feet (0.34 acre) of land.

The Property is currently occupied by the following three buildings:

- King County Parcel No. 199020-0223 (Parcel A), located at 505 3rd Avenue West, is currently occupied by a 1947-vintage, single-story office building (Building 1) that encloses approximately 720 square feet of space. The wood-framed structure has a built-up roof and is heated by roof-mounted natural-gas HVAC units. The parcel is also occupied by a 1951-vintage, single-story office building (Building 2) that encloses approximately 4,278 square feet of space. The masonry-framed structure has a built-up roof and is heated by roof-mounted natural-gas HVAC units.
- King County Parcel No. 199020-0224 (Parcel B), located at 312 West Republican Street, is currently occupied by a 1928-vintage, two-story mixed-use building (Building 3) that encloses approximately 8,040 square feet of space. The masonry-framed structure has a built-up roof and is heated by a hot water system.

Additional improvements include a paved parking located in the southeast portion of Parcel A, as shown on Figure 2.

2.1 PROPERTY BACKGROUND

SoundEarth prepared a Phase I ESA report for the Property dated December 7, 2018. The Phase I ESA indicated that the Property was initially used as a wood yard with a small structure on the southern portion of the Property in at least 1917. The small structure was torn down and in 1928, a two-story, masonry-framed mixed-use building (Building 3) was constructed on Parcel B. The building was occupied by a bakery between at least 1928 and 1950. In 1947, a single-story, wood-framed building (Building 1) was constructed in the southern portion of Parcel A. In 1951, a single-story, masonry-framed building (Building 2) was constructed on the northern portion of Parcel A. A structure that was used as an oil house was constructed on the eastern portion of Parcel A in 1951. The buildings on Parcel A were occupied by a painting contractor between at least 1947 and 1960. The oil house was torn down between 1969 and 1980.

A heating oil underground storage tank (UST) is located in the northwestern portion of Parcel B on the Property, see Figure 2. The UST was identified by Re:form LLC via the Property owner, and located by SoundEarth during a private locate on February 22, 2019.

Based on the available information, the operation of a printing facility, the use and storage of heating oil, and the operation of an oil house on the Property were concluded to be RECs. As such, SoundEarth prepared a scope of work for a Phase II ESA that included the collection of soil, soil gas, and groundwater samples. The following sections describe the results of those investigation activities

2.2 GEOLOGY

The Geologic Map of King County (Booth et al. 2007) indicates that the Property is underlain by Vashon till. These deposits consist of a dense mixture of silt, sand, gravel, and clay, which typically are characterized by relatively low vertical hydraulic conductivity.

Soil observed during the course of this investigation consisted of silty sand to depths of 6 to 13 feet below ground surface (bgs) before transitioning to sandy silt to depths of 7.5 to 20 feet bgs. Groundwater was encountered at depths ranging from 8 to 10.9 feet bgs during the investigation. Soil descriptions were recorded on boring log forms, copies of which are provided as Appendix A.

3.0 PHASE II INVESTIGATION

SoundEarth performed a Phase II ESA subsurface investigation of the Property on January 23, February 22, April 4, and April 8, 2019, to assess potential impacts from the operation of a printing facility, the use and storage of heating oil, and the operation of an oil house on the Property. Field work included advancing 13 push-probe borings (P01 through P13) throughout accessible portions of the Property to collect soil and groundwater samples, advancing two sampling points to collect soil gas samples (SG01 and SG01), and developing a monitoring well (PG-1) installed by PanGeo, Inc. to collect a groundwater sample.

A UST was identified in the northwest portion of Parcel B on the Property, see Figure 2. A fill port was observed adjacent to the west of the UST and the tank was located during a private utility located conducted on February 22, 2019.

Prior to conducting the field activities, private and public utility locate services were conducted to identify the location of underground utilities. The private utility locate was conducted by CNI Locates, LTD of Bonney Lake, Washington. A more detailed discussion of field activities is presented below.

3.1 SOIL SAMPLING

On January 23, 2019, ESN Northwest, Inc., under the direction of a SoundEarth geologist, advanced four push-probe borings (P01 through P04) using a limited access push-probe rig. Borings P01 and P02 were advanced within the interior of the former printing facility (Building 2). Borings P03 and P04 were advanced in areas of concern associated with the former use and storage of heating oil and proximate to the former oil house. Boring locations were advanced to a depth of 20 feet bgs and are shown on Figure 2.

On February 22, 2019, ESN Northwest, Inc., under the direction of a SoundEarth geologist, advanced four push-probe borings (P05 through P08) using a limited access push-probe rig. Boring P08 was advanced within the interior of the mixed-use building (Building 3) and on the eastern side of the heating oil UST

located in the northwest portion of Parcel B on the Property. Borings P05, P06, and P07 were advanced on the northern, western, and southern sides of the UST. Boring locations were advanced to depths of 9 to 12.5 feet bgs and are shown on Figure 2.

On April 4, 2019, SoundEarth observed the installation of a geotechnical monitoring well (PG-1) in the northwest portion of the Property by PanGeo, Inc. Well PG-1 was advanced to a total depth of 40 feet bgs and is shown on Figure 2. A soil sample was collected at 20 feet bgs during the installation of PG-1.

On April 8, 2019, ESN Northwest, Inc., under the direction of a SoundEarth geologist, advanced five push-probe borings (P09 through P13) using a limited access push-probe rig. Borings P09 through P013 were advanced within the interior of the mixed-use building (Building 3). Boring locations were advanced to depths of 5 to 7.5 feet bgs and are shown on Figure 2. Soil samples from boring P12 were not analyzed due to field screening observations indicating no evidence of potential contamination such as visible sheen or odor were present.

Soil was sampled continuously in each push-probe boring in approximately 1.5- to 2.5-foot intervals. Soil samples were described in general accordance with American Society for Testing Materials Method D2488, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), and a Unified Soil Classification System (USCS) group symbol was assigned to each sample. Soil samples were screened in the field for potential evidence of contamination, using visual observations and notations of odor and by conducting headspace analysis using a photoionization detector (PID) to detect the presence of volatile organic vapors. The USCS symbol, visual and olfactory notations for the samples, and PID readings were recorded on boring log forms, copies of which are provided as Appendix A.

Soil samples selected for laboratory analysis were placed directly into laboratory-prepared glassware, in accordance with US Environmental Protection Agency (EPA) guidelines. The samples were placed on ice in a cooler, and delivered to Friedman & Bruya, Inc. (F&BI) of Seattle, Washington, under standard chain-of-custody protocol. Soil cuttings generated during the environmental evaluation were placed in a labeled 16-gallon drum, pending waste profiling and proper disposal. One composite soil sample was collected from the borings and was analyzed for Resource Conservation and Recovery Act (RCRA) 8 metals.

Based on field screening results, sampling depths, and observed soil characteristics, soil samples were submitted for chemical analysis of one or more of the following chemicals of concern (COCs):

- Soil samples from P01, P03, P04, P05, P06, P07, P08, P09, P10, P11, P13, and PG-1 were submitted for gasoline-range petroleum hydrocarbons (GRPH) by Northwest Total Petroleum Hydrocarbon (NWTPH) Method NWTPH-Gx.
- Soil samples from P01, P03, P04, P05, P06, P07, P08, P09, P10, P11, P13, and PG-1 were submitted for diesel-range petroleum hydrocarbons (DRPH) and oil-range petroleum hydrocarbons (ORPH) by Method NWTPH-Dx.
- Soil samples from P01, P03, P04, P05, P06, P07, P08, P09, P10, P11, P13, and PG-1 were submitted for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021B.
- Soil samples from P01, P02, and P08 were submitted for chlorinated volatile organic compounds (CVOCs) by EPA Method 8260C.

In addition, for soil profiling and disposal purposes, one composite soil sample collected from the drums was submitted for analysis of RCRA 8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) by EPA Method 6020B/200.8.

3.2 GROUNDWATER SAMPLING

On January 23, 2019, SoundEarth collected groundwater samples from push-probe borings P01 through P04. Sampling was performed using a peristaltic pump and polyethylene tubing and placed directly into clean, laboratory-prepared sample containers. Each container was labeled with unique sample identification, placed on ice in a cooler, and transported to F&BI laboratory under standard chain-of-custody protocols for laboratory analysis. The groundwater samples were submitted for analysis of selected GRPH, DRPH, ORPH, BTEX, and CVOCs.

Groundwater was not encountered during the advancement of push-probe borings P05 through P13; therefore, no samples were collected.

On April 4, 2019, SoundEarth observed the installation of a PanGeo, Inc. monitoring well (PG-1) located in the northwest portion of the Property. PG-1 was advanced to a total depth of 40 feet bgs where groundwater was encountered at 19 feet bgs. PG-1 was installed as a monitoring well to a total depth of 30 feet bgs, and is shown on Figure 2. SoundEarth developed the well and collected a groundwater sample from PG-1 using a peristaltic pump and polyethylene tubing and placed directly into clean, laboratory-prepared sample containers (PG01-20190408). Each container was labeled with unique sample identification, placed on ice in a cooler, and transported to F&BI laboratory under standard chain-of-custody protocols for laboratory analysis. The groundwater sample was submitted for analysis of selected GRPH, DRPH, ORPH, and BTEX.

3.3 SOIL GAS SAMPLING

On January 23, 2019, SoundEarth completed two soil gas vapor sampling points (SG01 and SG02). The soil gas vapor points were installed below the concrete slab of Building 2 to assess potential vapor intrusion from the former printing facility operations. The soil gas points were installed using a limited-access drill rig. The soil gas points were advanced to approximately just below the concrete slab and a temporary soil gas point was installed. Prior to sampling, the sample point was leak tested and the sample train was purged. The soil gas samples were collected from each temporary point using a 1-liter Summa canister. The samples were submitted to F&BI of Seattle, Washington, for analysis of CVOCs by EPA Method TO-15.

4.0 SUBSURFACE INVESTIGATION RESULTS

This section summarizes the results of the subsurface assessment. The analytical results for the soil samples collected during the investigation at the Property are presented in Tables 1 through 3. The analytical results for the groundwater samples collected during the investigation at the Property are presented in Tables 4 and 5. The analytical results for the soil gas samples collected during the investigation at the Property are presented in Table 6. Descriptive borings logs are included as Appendix A, and the laboratory analytical reports for the samples collected during the assessment are included as Appendix B.

4.1 SOIL RESULTS

Soil samples collected from borings P07 and P08 contained concentrations of petroleum hydrocarbons, including GRPH, DRPH, benzene, toluene, and total xylenes that exceeded their respective MTCA Method A cleanup levels. In addition, GRPH was detected in a soil sample collected from boring P10 at a concentration exceeding the MTCA Method A cleanup level. Petroleum hydrocarbons were not detected at concentrations above the laboratory reporting limits in the soil samples collected from borings P01,

P03, P04, P05, P06, P09, P11, or PG-1. A trace concentration of DRPH was detected in the soil sample collected from boring P13, but the concentration was well below the MTCA Method A cleanup level.

All soil samples analyzed from borings P01, P02, and P08 were below their respective laboratory detection limits for CVOCs.

The composite soil sample collected from the drums containing soil cuttings from borings P01 through P13 was analyzed for RCRA 8 metals and was found to concentrations well below the applicable MTCA Method A cleanup level for each of the RCRA 8 metals.

4.2 GROUNDWATER RESULTS

All groundwater samples analyzed from borings P01 through P04 and PG-1 were below their respective laboratory detection limits for GRPH, ORPH, and CVOCs.

The concentrations of DRPH and BTEX detected in groundwater samples collected from borings P01 through P04 and PG-1 and analyzed for were well below the applicable MTCA Method A cleanup levels.

4.3 SOIL GAS RESULTS

The soil gas samples analyzed from borings SG01 and SG02 were below their respective laboratory detection limits for CVOCs.

5.0 FINDINGS AND CONCLUSIONS

The results of the Phase II investigation indicate that petroleum hydrocarbons, including GRPH, DRPH, and BTEX, are present in soil at concentrations exceeding the MTCA Method A cleanup levels in borings P07, P08, and P10, which are located near the UST beneath in the northwestern portion of Building 3. The source of the petroleum hydrocarbon impacts in soil appears to be the adjacent UST. The lateral extents of petroleum impacts have been defined, based on the absence of petroleum hydrocarbons in soil samples collected from borings P05, P06, P09, P11, and P13. Additional investigation may be necessary in order to define the vertical extent of the impacts, but the absence of petroleum impacts in soil and groundwater samples collected from boring PG-1 at a depth of 20 feet bgs suggests that the vertical extent of impacts may be limited.

Petroleum hydrocarbons and CVOCs were not detected in the soil or groundwater samples collected from borings P01 through P04, advanced on the eastern portion of the Property where the use and storage of heating oil, the operation of an oil house, and the operation of printing facilities has historically occurred. In addition, neither of the soil gas samples collected from the eastern portion of the Property contained elevated concentrations of CVOCs. Based on these laboratory results and the absence of visual or olfactory evidence of impacts in soil and groundwater samples collected from borings P01 through P04, the potential for significant impacts from the use and storage of heating oil, the operation of an oil house, and the former operation of printing facilities on the eastern portion of the Property appears low.

6.0 LIMITATIONS

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

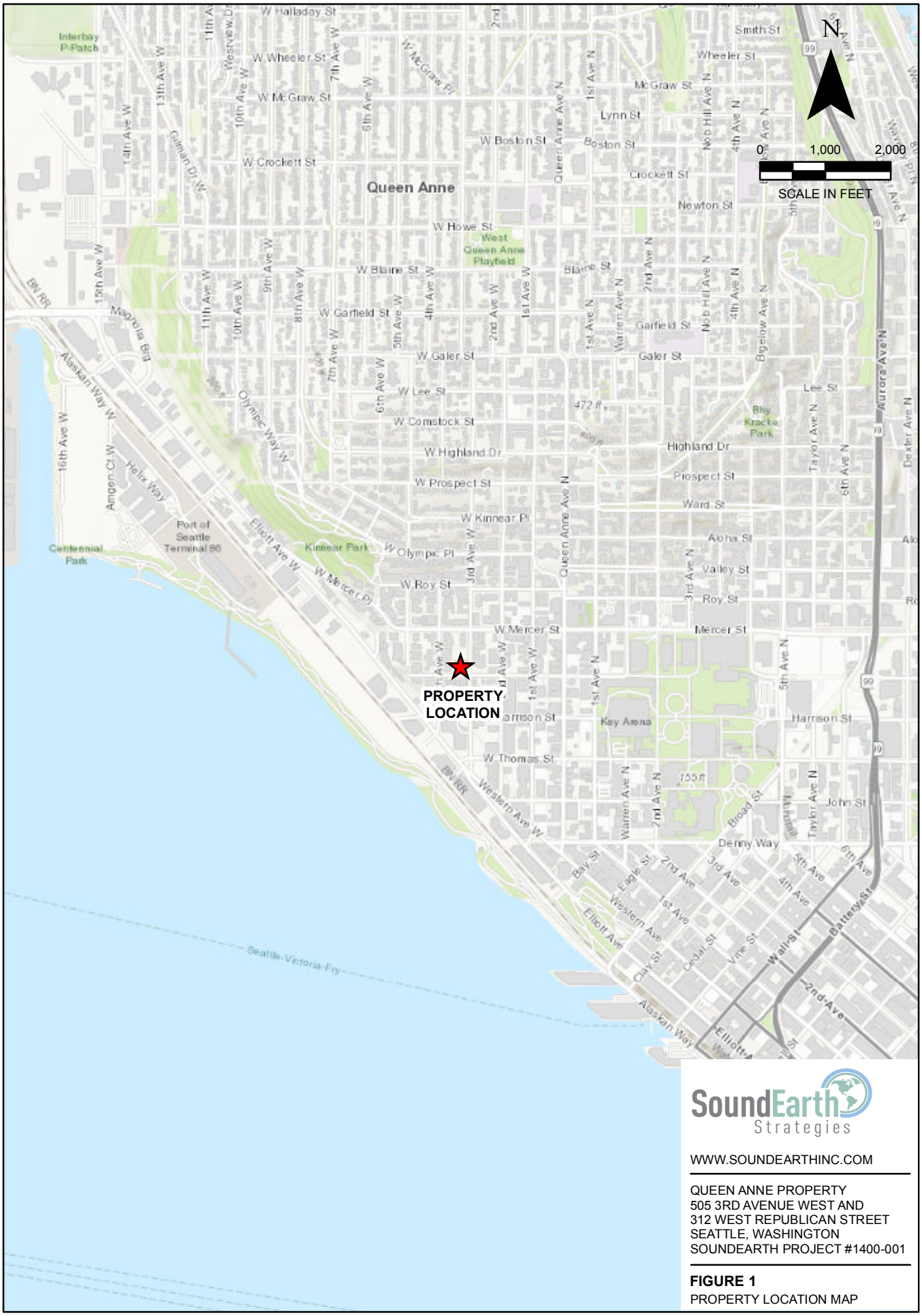
Opinions and recommendations contained in this report are derived, in part, from data gathered by others, and from conditions evaluated when services were performed, and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We do not warrant and are not responsible for the accuracy or validity of work performed by others, nor from the impacts of changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the use of segregated portions of this report.

7.0 REFERENCES

Booth, Derek, Troost, K. Goetz, and A.P. Wisher (Booth et al.). 2007. *The Geologic Map of King County*. U.S. Geological Survey Report. March.

SoundEarth Strategies, Inc. (SoundEarth). 2018. *Phase I Environmental Site Assessment, Queen Anne Property, 505 3rd Avenue West and 312 West Republican Street, Seattle, Washington.* December 7.

FIGURES



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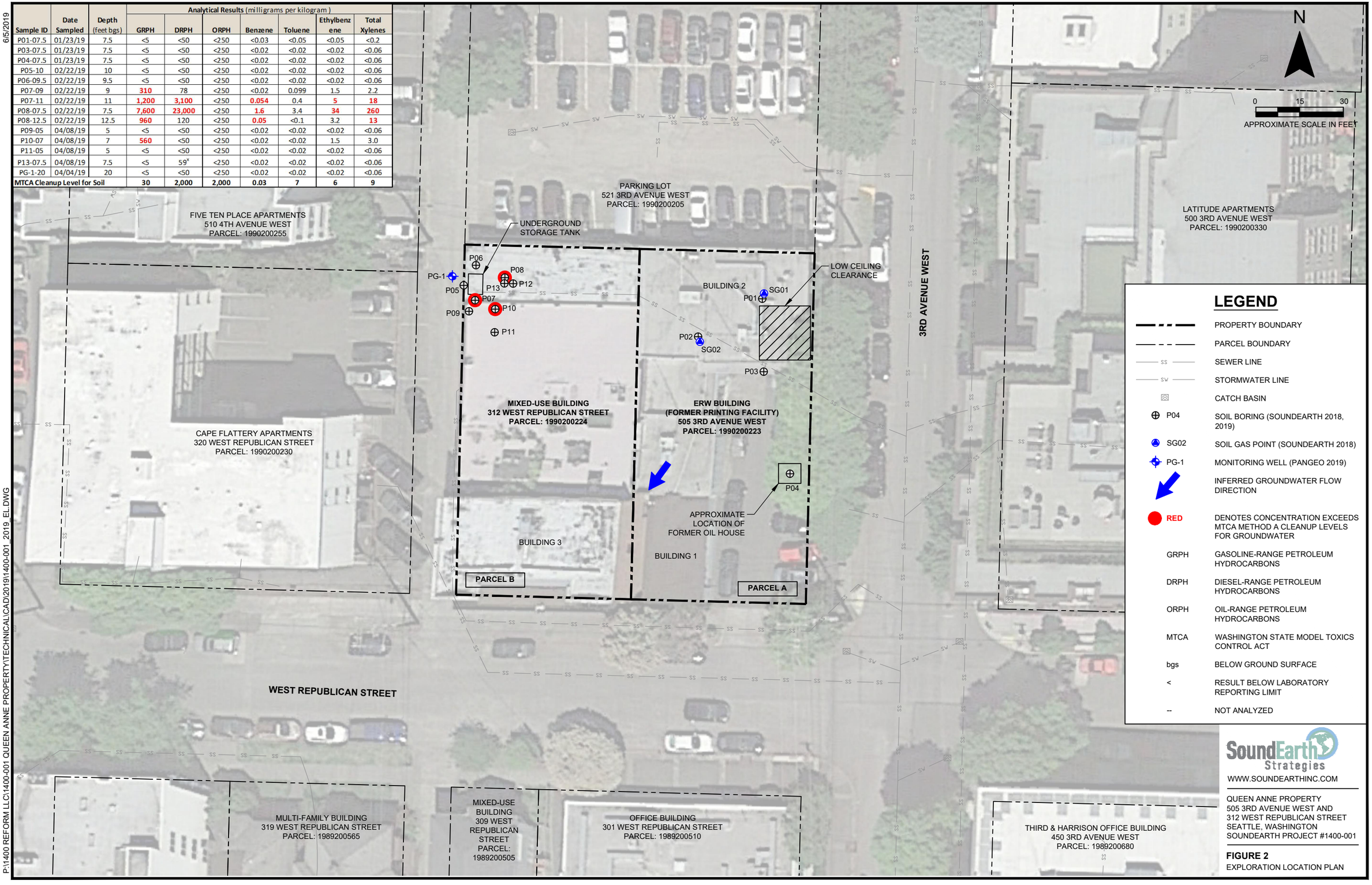
QUEEN ANNE PROPERTY
505 3RD AVENUE WEST AND
312 WEST REPUBLICAN STREET
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #1400-001

FIGURE 1
PROPERTY LOCATION MAP

6/5/2019

Sample ID	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram) GRPH	DRPH	ORPH	Benzene	Toluene	Ethylbenzene	Total Xylenes
P01-07.5	01/23/19	7.5	<5	<50	<250	<0.03	<0.05	<0.05	<0.2
P03-07.5	01/23/19	7.5	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
P04-07.5	01/23/19	7.5	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
P05-10	02/22/19	10	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
P06-09.5	02/22/19	9.5	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
P07-09	02/22/19	9	310	78	<250	<0.02	0.099	1.5	2.2
P07-11	02/22/19	11	1,200	3,100	<250	0.054	0.4	5	18
P08-07.5	02/22/19	7.5	7,600	23,000	<250	1.6	3.4	34	260
P08-12.5	02/22/19	12.5	960	120	<250	0.05	<0.1	3.2	13
P09-05	04/08/19	5	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
P10-07	04/08/19	7	560	<50	<250	<0.02	<0.02	1.5	3.0
P11-05	04/08/19	5	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
P13-07.5	04/08/19	7.5	<5	59[x]	<250	<0.02	<0.02	<0.02	<0.06
PG-1-20	04/04/19	20	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
MTCA Cleanup Level for Soil			30	2,000	2,000	0.03	7	6	9



LEGEND

	PROPERTY BOUNDARY
	PARCEL BOUNDARY
SS	SEWER LINE
SW	STORMWATER LINE
	CATCH BASIN
P04	SOIL BORING (SOUNDEARTH 2018, 2019)
SG02	SOIL GAS POINT (SOUNDEARTH 2018)
PG-1	MONITORING WELL (PANGEO 2019)
	INFERRED GROUNDWATER FLOW DIRECTION
RED	DENOTES CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVELS FOR GROUNDWATER
GRPH	GASOLINE-RANGE PETROLEUM HYDROCARBONS
DRPH	DIESEL-RANGE PETROLEUM HYDROCARBONS
ORPH	OIL-RANGE PETROLEUM HYDROCARBONS
MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT
bgs	BELOW GROUND SURFACE
<	RESULT BELOW LABORATORY REPORTING LIMIT
--	NOT ANALYZED

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QUEEN ANNE PROPERTY
505 3RD AVENUE WEST AND
312 WEST REPUBLICAN STREET
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FIGURE 2
EXPLORATION LOCATION PLAN

P:\1400 REFORM LLC\1400-001 QUEEN ANNE PROPERTY\TECHNICAL\CAD\2019\1400-001_2019_EL.DWG

TABLES

Table 1
Soil Analytical Results for TPH and BTEX
Queen Anne Property
505 3rd Avenue West and 312 West Republican Street
Seattle, Washington

Sample ID	Sampled By	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)						
				GRPH[1]	DRPH[2]	ORPH[2]	Benzene[3]	Toluene[3]	Ethylbenzene[3]	Total Xylenes[3]
P01-07.5	SoundEarth	01/23/19	7.5	<5	<50	<250	<0.03	<0.05	<0.05	<0.2
P03-07.5	SoundEarth	01/23/19	7.5	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
P04-07.5	SoundEarth	01/23/19	7.5	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
P05-10	SoundEarth	02/22/19	10	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
P06-09.5	SoundEarth	02/22/19	9.5	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
P07-09	SoundEarth	02/22/19	9	**310**	78	<250	<0.02	0.099	1.5	2.2
P07-11	SoundEarth	02/22/19	11	**1,200**	**3,100**	<250	**0.054**[j]	0.40	**5.0**	**18**
P08-07.5	SoundEarth	02/22/19	7.5	**7,600**	**23,000**	<250	**1.6**	3.4	**34**	**260**
P08-12.5	SoundEarth	02/22/19	12.5	**960**	120	<250	**0.048**[j]	<0.1	3.2	**13**
PG-1-20	SoundEarth	04/04/19	20	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
P09-05	SoundEarth	04/08/19	5	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
P10-07	SoundEarth	04/08/19	7	**560**	<50	<250	<0.02	<0.02	1.5	3.0
P11-05	SoundEarth	04/08/19	5	<5	<50	<250	<0.02	<0.02	<0.02	<0.06
P13-07.5	SoundEarth	04/08/19	7.5	<5	59[x]	<250	<0.02	<0.02	<0.02	<0.06
MTCA Cleanup Level for Soil[4]				**30**	**2,000**	**2,000**	**0.03**	**7**	**6**	**9**

NOTES:

Red denotes concentration exceeds MTCA cleanup level for soil.

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

[1]Analyzed by Method NWTPH-Gx.

[2]Analyzed by Method NWTPH-Dx.

[3]Analyzed by EPA Method 8021B.

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

Laboratory Notes:

[j]The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

-- = not analyzed/not applicable

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

bgs = below ground surface

BTEX = benzene, toluene, ethylbenzene, and total xylenes

DRPH = diesel-range petroleum hydrocarbons

EPA = US Environmental Protection Agency

GRPH = gasoline-range petroleum hydrocarbons

MTCA = Washington State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbons

SoundEarth = SoundEarth Strategies, Inc.

TPH = total petroleum hydrocarbons

WAC = Washington Administrative Code

Table 2
Soil Analytical Results for Chlorinated VOCs
Queen Anne Property
505 3rd Avenue West and 312 West Republican Street
Seattle, Washington

Sample ID	Sampled By	Date Sampled	Depth (feet bgs)	Analytical Results[1] (milligrams per kilogram)					
				Tetrachloroethene	Trichloroethene	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride
P01-07.5	SoundEarth	01/23/19	7.5	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
P02-07.5	SoundEarth	01/23/19	7.5	<0.025	<0.02	<0.05	<0.05	<0.05	<0.05
P08-07.5	SoundEarth	02/22/19	7.5	<0.05[j]	<0.03[j]	<0.25	<0.25	<0.25	<0.25
MTCA Cleanup Level for Soil				**0.05**[2]	**0.03**[2]	**160**[3]	**1,600**[3]	**4,000**[3]	**0.67**[4]

NOTES:

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

[1]Samples analyzed by EPA Method 8260C.

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

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

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

Laboratory Note:

[j]The analyte concentration is reported blow the lowest calibration standard. The value reported is an estimate.

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

bgs = below ground surface

CLARC = Cleanup Levels and Risk Calculations

EPA = US Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

SoundEarth = SoundEarth Strategies, Inc.

VOC = volatile organic compound

WAC = Washington Administrative Code

Table 3
Soil Analytical Results for RCRA 8 Metals
Queen Anne Property
505 3rd Avenue West and 312 West Republican Street
Seattle, Washington

Sample ID	Date Sampled	Analytical Results[1] (milligrams per kilogram)							
		Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
Drum-001	01/23/19	3.36	--	<1	22.9	12.5	<1	--	--
Drum_004_20190222	02/22/19	3.30	--	<1	25.3	63.1	<1	--	--
Drum-003_20190408	04/08/19	2.14	47.6	<1	14.0	9.96	<1	<1	<1
MTCA Cleanup Level for Soil		**20**[2]	**16,000**[3]	**2**[2]	**2,000**[2]	**250**[2]	**2**[2]	**400**[3]	**400**[3]

NOTES:

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

[1]Samples analyzed by EPA Method 6020B/200.8.

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

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

-- = not analyzed/not applicable

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

CLARC = Cleanup Levels and Risk Calculations

EPA = US Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

WAC = Washington Administrative Code

SoundEarth Strategies

Table 4
Groundwater Analytical Results for TPH and BTEX
Queen Anne Property
505 3rd Avenue West and 312 West Republican Street
Seattle, Washington

Sample ID	Sampled By	Date Sampled	Analytical Results (micrograms per liter)						
			GRPH[1]	DRPH[2]	ORPH[2]	Benzene[3]	Toluene[3]	Ethylbenzene[3]	Total Xylenes[3]
P01-20190123	SoundEarth	01/23/19	<100	<50	<250	0.43	4.0	<1	<3
P02-20190123	SoundEarth	01/23/19	<100	99[X]	<480	0.61	5.4	<1	<3
P03-20190123	SoundEarth	01/23/19	<100	82	<250	<0.35	2.6	<1	<3
P04-20190123	SoundEarth	01/23/19	<100	<50	<250	0.35	3.5	<1	<3
PG01-20190408	SoundEarth	04/08/19	<100	140	<250	<1	<1	<1	<3
MTCA Cleanup Level for Groundwater[4]			**800**	**500**	**500**	**5**	**1,000**	**700**	**1,000**

NOTES:

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

[1]Analyzed by Method NWTPH-Gx.

[2]Analyzed by Method NWTPH-Dx.

[3]Analyzed by EPA Method 8260C.

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

Laboratory Note:

[X]The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

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

BTEX = benzene, toluene, ethylbenzene, and total xylenes

DRPH = diesel-range petroleum hydrocarbons

EPA = US Environmental Protection Agency

GRPH = gasoline-range petroleum hydrocarbons

MTCA = Washington State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbons

SoundEarth = SoundEarth Strategies, Inc.

TPH = total petroleum hydrocarbons

WAC = Washington Administrative Code

Table 5
Groundwater Analytical Results for Chlorinated VOCs
Queen Anne Property
505 3rd Avenue West and 312 West Republican Street
Seattle, Washington

Sample ID	Sampled By	Date Sampled	Analytical Results[1] (micrograms per liter)					
			Tetrachloroethene	Trichloroethene	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride
P01-20190123	SoundEarth	01/23/19	<1	<1	<1	<1	<1	<0.2
P02-20190123	SoundEarth	01/23/19	<1	<1	<1	<1	<1	<0.2
P03-20190123	SoundEarth	01/23/19	<1	<1	<1	<1	<1	<0.2
P04-20190123	SoundEarth	01/23/19	<1	<1	<1	<1	<1	<0.2
MTCA Cleanup Level for Groundwater			**5**[2]	**5**[2]	**16**[3]	**160**[3]	**400**[3]	**0.2**[2]

NOTES:

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

[1]Samples analyzed by EPA Method 8260C.

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

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

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

CLARC = Cleanup Levels and Risk Calculations

EPA = US Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

SoundEarth = SoundEarth Strategies, Inc.

VOC = volatile organic compound

WAC = Washington Administrative Code

Table 6
Summary of Soil Gas Analytical Results
Queen Anne Property
505 3rd Avenue West and 312 West Republican Street
Seattle, Washington

Sample ID	Date Sampled	Analytical Results (micrograms per cubic meter)										
		Tetrachloroethene[(1)]	Trichloroethene[(1)]	Cis-1,2-Dichloroethene[(1)]	Trans-1,2-Dichloroethene[(1)]	1,1-Dichloroethene[(1)]	Vinyl Chloride[(1)]	Chloroethane[(1)]	1,1-Dichloroethane[(1)]	1,2-Dichloroethane[(1)]	1,1,1-Trichloroethane[(1)]	1,1,2-Trichloroethane[(1)]
SG01-20190123	01/23/19	<11	<0.43	<0.63	<0.63	<0.63	<0.41	<4.2	<0.65	<0.065	<0.87	<0.17
SG02-20190123	01/23/19	<12	<0.46	<0.67	<0.67	<0.67	<0.43	<4.5	<0.69	<0.069	<0.93	<0.19
Method B Screening Levels for Sub-Slab Soil Gas		**321[(2)]**	**12.3[(2)]**	**NE**	**NE**	**3,050[(3)]**	**9.33[(2)]**	**NE**	**52.1[(2)]**	**3.21[(2)]**	**76,200[(3)]**	**5.21[(3)]**

NOTES:

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

[(1)]Analyzed by US Environmental Protection Agency Method TO-15.

[(2)]MTCA Method B Deep Soil Gas Screening Level, Cancer, CLARC Master Spreadsheet, April 2015 revisions of Table B-1 from Ecology's Draft Guidance for Evaluating Soil Vapor Intrusion in Washington State, October 2009.

[(3)]MTCA Method B Deep Soil Gas Screening Level, Non-Cancer, CLARC Master Spreadsheet, April 2015 Revisions to Table B-1 from Ecology's Draft Guidance for Evaluating Soil Vapor Intrusion in Washington State, October 2009.

< = not detected at concentration exceeding the laboratory reporting limit

CLARC = Cleanup Levels and Risk Calculation

MTCA = Washington State Model Toxics Control Act

NE = Not Established

APPENDIX A
BORING LOGS

SoundEarth Strategies

Project:	Queen Anne Property
Project Number:	1400-001
Logged by:	LDS
Date Started:	01/23/2019
Surface Conditions:	Concrete
Location N/S:	21' N of S wall inside building
Location E/W:	16.5' W of E wall inside building
Reviewed by:	RKB
Date Completed:	01/23/2019

BORING LOG | P01

Site Address: 505 3rd Avenue West, Seattle, Washington

Water Depth At Time of Drilling: 8 feet bgs

Water Depth After Completion: 10.12 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0							SM		**0.0-0.33 feet bgs: 4" of concrete.**	
			40	0.2	P01-2.5				**0.33-7.0 feet bgs: Silty SAND, trace gravel, tan/gray, no hydrocarbon or solvent odor, moist, trace iron oxide staining (20-75-5).**	
				0.1						
5				0.0	P01-5					
			55							
				0.0	P01-7.5	X	SM		**7.0-7.3 feet bgs: Silty SAND, mottled brown-red, no hydrocarbon or solvent odor, moist (35-65-0).**	
							SM		**7.3-10.0 feet bgs: Silty SAND with gravel, gray, no hydrocarbon or solvent odor (20-65-15).**	
				0.0						
10			90		P01-10		SP-SM		**10.0-13.0 feet bgs: SAND with silt, gray, no hydrocarbon or solvent odor, wet (10-90-0).**	
				0.0						
					P01-12.5					
				0.0			ML		**13.0-20.0 feet bgs: SILT with sand, gray, no hydrocarbon or solvent odor, wet to moist (90-10-0).**	
			100							
15				0.0	P01-15					
					P01-17.5					
			60							
20									**End of boring at 20 feet bgs. Boring backfilled with bentonite chips to surface grade and sealed with concrete.**	

Drilling Co./Driller:	ESN / Casey		**Well/Auger Diameter:**	--	inches	**Notes/Comments:**
Drilling Equipment:	Limited Access Geoprobe		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	Core Tube		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	20	feet bgs	**Surface Seal:**	--		
Total Well Depth:	--	feet bgs	**Annular Seal:**	--		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Queen Anne Property
Project Number:	1400-001
Logged by:	LDS
Date Started:	01/23/2019
Surface Conditions:	Concrete slab
Location N/S:	8' N of S wall inside Building 2
Location E/W:	38.5' W of E wall inside Building 2
Reviewed by:	RKB
Date Completed:	01/23/2019

BORING LOG | P02

Site Address: 505 3rd Avenue West, Seattle, Washington

Water Depth At Time of Drilling: 9 feet bgs

Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0									**0.0-0.33 feet bgs: 4 inches of concrete.**	
			65	0.0	P02-2.5		SM		**0.33-6.0 feet bgs: Silty SAND, trace gravel, gray/brown, no hydrocarbon or solvent odor, moist (20-75-5).**	
				0.0						
5				0.0	P02-5					
			75				SM		**6.0-7.5 feet bgs: Silty SAND, trace gravel, brown-red, no hydrocarbon or solvent odor, moist (30-65-5).**	
				0.0	P02-7.5	X	ML		**7.5-9.0 feet bgs: Sandy SILT, gray, no hydrocarbon or solvent odor, moist, red iron oxide staining (70-30-0).**	
				0.0			SM		**9.0-12.0 feet bgs: Silty SAND, gray-brown, no hydrocarbon or solvent odor, wet, trace iron oxide staining (15-85-0).**	
10			100		P02-10					
				0.0						
					P02-12.5		ML		**12.0-20.0 feet bgs: Sandy SILT, gray, no hydrocarbon or solvent odor, moist to wet (85-15-0).**	
				0.0						
			90							
15				0.0	P02-15					
				0.0						
			70		P02-17.5					
				0.0					**End of boring at 20 feet bgs. Boring backfilled with bentonite chips to surface grade and sealed with concrete.**	
20										

Drilling Co./Driller:	ESN / Casey		**Well/Auger Diameter:**	--	inches	**Notes/Comments:**	
Drilling Equipment:	Limited Access Geoprobe		**Well Screened Interval:**	--	feet bgs		
Sampler Type:	Core Tube		**Screen Slot Size:**	--	inches		
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--			
Total Boring Depth:	20	feet bgs	**Surface Seal:**	--			
Total Well Depth:	--	feet bgs	**Annular Seal:**	--			
State Well ID No.:	--		**Monument Type:**	--			

SoundEarth Strategies

Project:	Queen Anne Property
Project Number:	1400-001
Logged by:	LDS
Date Started:	01/23/2019
Surface Conditions:	Asphalt
Location N/S:	11' S of Building 2
Location E/W:	16' W of E Property Line
Reviewed by:	RKB
Date Completed:	01/23/2019

BORING LOG | P03

Site Address: 505 3rd Avenue West, Seattle, Washington

Water Depth At Time of Drilling: 9.5 feet bgs

Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0									**0.0-0.4 feet bgs: 5 inches of asphalt.**	
			60	0.0	P03-2.5		SM		**0.4-7.0 feet bgs: Silty SAND with gravel, brown, no hydrocarbon or solvent odor, moist (20-70-10).**	
				0.0						
5				0.1	P03-5					
			60							
				0.0	P03-7.5	X	SM		**7.0-8.0 feet bgs: Silty SAND, dark brown, no hydrocarbon or solvent odor, moist (35-65-0).**	
							SM		**8.0-10.5 feet bgs: Silty SAND, gray, no hydrocarbon or solvent odor, moist (20-70-10).**	
				0.0						
10			70		P03-10					
				0.0			SP		**10.5-15.0 feet bgs: Poorly graded SAND with gravel, trace silt, dark gray, no hydrocarbon or solvent odor (5-75-20).**	
					P03-12.5					
				0.0						
			100							
15				0.0	P03-15		ML		**15.0-20.0 feet bgs: SILT with sand, gray, no hydrocarbon or solvent odor, wet (90-10-0).**	
					P03-17.5					
			100						**End of boring at 20 feet bgs. Boring backfilled with bentonite chips to surface grade and sealed with asphalt.**	
				0.0						
20										

Drilling Co./Driller:	ESN / Casey		**Well/Auger Diameter:**	--	inches
Drilling Equipment:	Limited Access Geoprobe		**Well Screened Interval:**	--	feet bgs
Sampler Type:	Core Tube		**Screen Slot Size:**	--	inches
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--	
Total Boring Depth:	20	feet bgs	**Surface Seal:**	--	
Total Well Depth:	--	feet bgs	**Annular Seal:**	--	
State Well ID No.:	--		**Monument Type:**	--	

Notes/Comments:

SoundEarth Strategies

Project:	Queen Anne Property
Project Number:	1400-001
Logged by:	LDS
Date Started:	01/23/2019
Surface Conditions:	Asphalt
Location N/S:	39' S of SE Corner of Building 2
Location E/W:	7' W of SE Corner of Building 2
Reviewed by:	RKB
Date Completed:	01/23/2019

BORING LOG | P04

Site Address: 505 3rd Avenue West, Seattle, Washington

Water Depth At Time of Drilling: 10.9 feet bgs

Water Depth After Completion: -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0							SM		**0.0-0.4 feet bgs: 5 inches of asphalt.**	
			60	0.0	P04-2.5				**0.4-10.0 feet bgs: Silty SAND with gravel, dark gray, no hydrocarbon or solvent odor (20-70-10).**	
				0.0						
5				0.0	P04-5					
			65	0.0	P04-7.5					
				0.0						
10			90		P04-10		SP-SM		**10.0-13.0 feet bgs: SAND with silt, gray-brown, no hydrocarbon or solvent odor, wet (10-90-0).**	
				0.0						
					P04-12.5					
				0.0			ML		**13.0-14.0 feet bgs: Sandy SILT, gray, no hydrocarbon or solvent odor, wet (80-20-0).**	
							SP-SM		**14.0-17.0 feet bgs: SAND with silt, gray-brown, no hydrocarbon or solvent odor, wet (10-90-0).**	
15				0.0	P04-15					
				0.0			ML		**17.0-20.0 feet bgs: Sandy SILT, gray, no hydrocarbon or solvent odor, wet (80-20-0).**	
			95		P04-17.5					
				0.0					**End of boring at 20 feet bgs. Boring backfilled with bentonite ships to surface grade and sealed with asphalt.**	
20										

Drilling Co./Driller:	ESN / Casey		**Well/Auger Diameter:**	--	inches
Drilling Equipment:	Limited Access Geoprobe		**Well Screened Interval:**	--	feet bgs
Sampler Type:	Core Tube		**Screen Slot Size:**	--	inches
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--	
Total Boring Depth:	20	feet bgs	**Surface Seal:**	--	
Total Well Depth:	--	feet bgs	**Annular Seal:**	--	
State Well ID No.:	--		**Monument Type:**	--	

Notes/Comments:

SoundEarth Strategies

Project:	Queen Anne Property
Project Number:	1400-001
Logged by:	CED
Date Started:	02/22/2019
Surface Conditions:	Concrete
Location N/S:	14' S of N property boundary
Location E/W:	0' E/W of W property boundary
Reviewed by:	RKB
Date Completed:	02/22/2019

BORING LOG P05

Site Address: 312 West Republican Street, Seattle, Washington

Water Depth At Time of Drilling -- feet bgs

Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0									**0.0-0.5 feet bgs: Concrete.**	
			50	0.1	P05-02.5		SM		**0.5-9.5 feet bgs: Silty SAND with gravel, tan/brown, no hydrocarbon or solvent odor, moist (30-60-10).**	
				0.1						
5					P05-05					
			95	0.0	P05-7.5					
				0.0						
10			90		P05-10	X	SM		**9.5-11.0 feet bgs: Silty SAND with gravel, gray, no hydrocarbon or solvent odor, moist (40-50-10).**	
									Refusal at 11.5' bgs. Boring backfilled with bentonite chips to surface grade and sealed with concrete.	
15										

Drilling Co./Driller:	ESN / Cole		**Well/Auger Diameter:**	--	inches	**Notes/Comments:**
Drilling Equipment:	Limited Access Geoprobe		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	Core Tube		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	11	feet bgs	**Surface Seal:**	--		
Total Well Depth:	--	feet bgs	**Annular Seal:**	--		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Queen Anne Property
Project Number:	1400-001
Logged by:	CED
Date Started:	02/22/2019
Surface Conditions:	Concrete
Location N/S:	7' S of N property boundary
Location E/W:	4' E of W property boundary
Reviewed by:	RKB
Date Completed:	02/22/2019

BORING LOG | P06

Site Address: 312 West Republican Street, Seattle, Washington

Water Depth At Time of Drilling -- feet bgs

Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0									**0.0-0.5 feet bgs: Concrete.**	
			35	0.0	P06-02.5		SM		**0.5-9.0 feet bgs: Silty SAND with gravel, tan/brown, no hydrocarbon or solvent odor, moist (30-60-10).**	
5					P06-05					
			90	0.0	P06-07.5					
				0.0	P06-09.5	X	ML		**9.0-9.5 feet bgs: Sandy SILT, trace gravel, gray, no hydrocarbon or solvent odor, moist (70-25-5).**	
10									**Refusal at 9.5 feet bgs. Boring backfilled with bentonite chips to surface grade and sealed with concrete.**	
15										

Drilling Co./Driller:	ESN / Cole		**Well/Auger Diameter:**	--	inches	**Notes/Comments:**
Drilling Equipment:	Limited Access Geoprobe		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	Core Tube		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	9.5	feet bgs	**Surface Seal:**	--		
Total Well Depth:	--	feet bgs	**Annular Seal:**	--		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Queen Anne Property
Project Number:	1400-001
Logged by:	CED
Date Started:	02/22/2019
Surface Conditions:	Concrete
Location N/S:	19' S of N property boundary
Location E/W:	4' E of W property boundary
Reviewed by:	RKB
Date Completed:	02/22/2019

BORING LOG | P07

Site Address: 312 West Republican Street, Seattle, Washington

Water Depth At Time of Drilling -- feet bgs

Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0									**0.0-0.5 feet bgs: Concrete.**	
			15	0.0			SM		**0.5-5.0 feet bgs: Silty SAND, trace gravel, tan, no hydrocarbon or solvent odor, moist (40-55-5).**	
5					P07-05		GM		**5.0-9.0 feet bgs: GRAVEL wtih sand and silt, brown, no hydrocarbon or solvent odor, moist [pea gravel] (20-20-60).**	
			10	0.0						
					P07-09	X	ML		**9.0-11.0 feet bgs: Sandy SILT, blue/gray, strong hydrocarbon odor, moist (70-30-0).**	
10			50	45.7	P07-11	X				
									Refusal at 11 feet bgs. Boring backfilled with bentonite chips to surface grade and sealed with concrete.	
15										

Drilling Co./Driller:	ESN / Cole		**Well/Auger Diameter:**	--	inches
Drilling Equipment:	Limited Access Geoprobe		**Well Screened Interval:**	--	feet bgs
Sampler Type:	Core Tube		**Screen Slot Size:**	--	inches
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--	
Total Boring Depth:	11	feet bgs	**Surface Seal:**	--	
Total Well Depth:	--	feet bgs	**Annular Seal:**	--	
State Well ID No.:	--		**Monument Type:**	--	

Notes/Comments:

Samples taken at 5, 9, and 11 feet due to low recovery of soil.

SoundEarth Strategies

Project:	Queen Anne Property
Project Number:	1400-001
Logged by:	CED
Date Started:	02/22/2019
Surface Conditions:	Concrete
Location N/S:	11' S of N property boundary
Location E/W:	14' E of W property boundary
Reviewed by:	RKB
Date Completed:	02/22/2019

BORING LOG | P08

Site Address: 312 West Republican Street, Seattle, Washington

Water Depth At Time of Drilling -- feet bgs

Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0									**0.0-0.5 feet bgs: Concrete.**	
			40	0.3	P08-02.5		SM		**0.5-5.0 feet bgs: Silty SAND with gravel, tan, no hydrocarbon or solvent odor, moist (30-60-10).**	
				0.3						
5					P08-05		SM		**5.0-12.5 feet bgs: Silty SAND with gravel, blue/gray, moderate to strong hydrocarbon odor, moist to dry (30-60-10).**	
			90	62.8	P08-07.5	X				
				69.7						
10			70		P08-10	X				
			90	60.3	P08-12.5					
									Refusal at 12.5 feet bgs. Boring backfilled with bentonite chips to surface grade and sealed with concrete.	
15										

Drilling Co./Driller:	ESN / Cole		**Well/Auger Diameter:**	--	inches	**Notes/Comments:**	
Drilling Equipment:	Limited Access Geoprobe		**Well Screened Interval:**	--	feet bgs		
Sampler Type:	Core Tube		**Screen Slot Size:**	--	inches		
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--			
Total Boring Depth:	12.5	feet bgs	**Surface Seal:**	--			
Total Well Depth:	--	feet bgs	**Annular Seal:**	--			
State Well ID No.:	--		**Monument Type:**	--			

SoundEarth Strategies

Project:	Queen Anne Property
Project Number:	1400-001
Logged by:	CED
Date Started:	04/08/19
Surface Conditions:	Concrete
Location N/S:	4' S of N wall
Location E/W:	2' E of W wall
Reviewed by:	RKB
Date Completed:	04/08/19

BORING LOG | P09

Site Address: 312 West Republican Street, Seattle, Washington

Water Depth At Time of Drilling -- feet bgs

Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0									**0.0-0.33 feet bgs: 4 inches of concrete.**	
			60	0.0	P09-02.5		SM		**0.33-6.0 feet bgs: Silty SAND, tan, no hydrocarbon or solvent odor, wet to dry (40-60-0).**	
				0.0						
5			30	0.0	P09-05	X				
									Refusal at 6 feet bgs. Boring backfilled with bentonite chips to surface grade and sealed with concrete.	
10										

Drilling Co./Driller:	ESN / Cole		**Well/Auger Diameter:**	--	inches	**Notes/Comments:**	
Drilling Equipment:	Limited Access Push Probe		**Well Screened Interval:**	--	feet bgs	Perched groundwater at approximately 3-4 feet bgs.	
Sampler Type:	Core Tube		**Screen Slot Size:**	--	inches		
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--			
Total Boring Depth:	6	feet bgs	**Surface Seal:**	--			
Total Well Depth:	--	feet bgs	**Annular Seal:**	--			
State Well ID No.:	--		**Monument Type:**	--			

SoundEarth Strategies

Project:	Queen Anne Property
Project Number:	1400-001
Logged by:	CED
Date Started:	04/08/19
Surface Conditions:	Concrete
Location N/S:	3' S of N wall
Location E/W:	10' E of W wall
Reviewed by:	RKB
Date Completed:	04/08/19

BORING LOG | P10

Site Address: 312 West Republican Street, Seattle, Washington

Water Depth At Time of Drilling -- feet bgs

Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0									**0.0-0.33 feet bgs: 4 inches of concrete.**	
			50	15.0	P10-02.5		**SM**		**0.33-7.0 feet bgs: Silty SAND, trace gravel, gray/blue, moderate hydrocarbon odor, dry to moist, brick fragments present at the top (35-60-5).**	
5			**30**	37.7	P10-05					
				81.2	P10-07	X				
									Refusal at 7 feet bgs. Boring backfilled with bentonite chips to surface grade and sealed with concrete.	
10										

Drilling Co./Driller:	ESN / Cole		**Well/Auger Diameter:**	--	inches	**Notes/Comments:**
Drilling Equipment:	Limited Access Push Probe		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	Core Tube		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	7	feet bgs	**Surface Seal:**	--		
Total Well Depth:	--	feet bgs	**Annular Seal:**	--		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Queen Anne Property
Project Number:	1400-001
Logged by:	CED
Date Started:	4/8/19
Surface Conditions:	Concrete
Location N/S:	11' S of N wall
Location E/W:	11' E of W wall
Reviewed by:	RKB
Date Completed:	04/08/19

BORING LOG P11 --

Site Address: 312 West Republican Street, Seattle, Washington

Water Depth At Time of Drilling -- feet bgs

Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0									**0.0-0.33 feet bgs: 4 inches of concrete.**	
			50	0.0	P11-02.5		SM		**0.33-6.0 feet bgs: Silty SAND, trace gravel, red/brown/tan, no hydrocarbon or solvent odor, dry (35-60-5).**	
				0.1						
5			40	0.0	P11-05	X				
									Refusal at 6 feet bgs. Boring backfilled with bentonite chips to surface grade and sealed with concrete.	
10										

Drilling Co./Driller:	ESN / Cole		**Well/Auger Diameter:**	--	inches	**Notes/Comments:**	
Drilling Equipment:	Limited Access Push Probe		**Well Screened Interval:**	--	feet bgs		
Sampler Type:	Core Tube		**Screen Slot Size:**	--	inches		
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--			
Total Boring Depth:	6	feet bgs	**Surface Seal:**	--			
Total Well Depth:	--	feet bgs	**Annular Seal:**	--			
State Well ID No.:	--		**Monument Type:**	--			

SoundEarth Strategies

Project:	Queen Anne Property
Project Number:	1400-001
Logged by:	CED
Date Started:	04/08/19
Surface Conditions:	Concrete
Location N/S:	13' S of N wall
Location E/W:	17' E of W wall
Reviewed by:	RKB
Date Completed:	04/08/19

BORING LOG P12 --

Site Address: 312 West Republican Street, Seattle, Washington

Water Depth At Time of Drilling -- feet bgs

Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0							SM		**0.0-0.13 feet bgs: 1.5 inches of concrete.**	
			10	0.0	P12-02.5				**0.13-8.0 feet bgs: Silty SAND with gravel, brown, no hydrocarbon or solvent odor, dry (30-60-10).**	
5			10	0.0	P12-06					
									Refusal at 8 feet bgs. Boring backfilled with bentonite chips to surface grade and sealed with concrete.	
10										

Drilling Co./Driller:	ESN / Cole		**Well/Auger Diameter:**	--	inches	**Notes/Comments:**
Drilling Equipment:	Limited Access Push Probe		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	Core Tube		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	8	feet bgs	**Surface Seal:**	--		
Total Well Depth:	--	feet bgs	**Annular Seal:**	--		
State Well ID No.:	--		**Monument Type:**	--		

SoundEarth Strategies

Project:	Queen Anne Property
Project Number:	1400-001
Logged by:	CED
Date Started:	04/08/19
Surface Conditions:	Concrete
Location N/S:	13' S of N wall
Location E/W:	14' E of W wall
Reviewed by:	RKB
Date Completed:	04/08/19

BORING LOG P13 --

Site Address: 312 West Republican Street, Seattle, Washington

Water Depth At Time of Drilling -- feet bgs

Water Depth After Completion -- feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppm)	Sample ID	Sample Analyzed	Group Symbol	Graphic	Lithologic Description (ASTM texture, density, color, odor, moisture, supplemental descriptors, estimated grain size distribution) Field-estimated grain size distribution by volume (% Fines - % Sand - % Gravel)	Well Detail/ Water Depth
0							SM		**0.0-0.17 feet bgs: 2 inches of concrete.**	
			20	0.0	P13-02.5				**0.17-8.0 feet bgs: Silty SAND with gravel, brown, no hydrocarbon or solvent odor, dry, burned wood and brick fragments present (30-60-10).**	
5					P13-05					
			30	0.0						
					P13-07.5	X				
10									**Refusal at 8 feet bgs. Boring backfilled with bentonite chips to surface grade and sealed with concrete.**	

Drilling Co./Driller:	ESN / Cole		**Well/Auger Diameter:**	--	inches	**Notes/Comments:**
Drilling Equipment:	Limited Access Push Probe		**Well Screened Interval:**	--	feet bgs	
Sampler Type:	Core Tube		**Screen Slot Size:**	--	inches	
Hammer Type/Weight:	--	lbs	**Filter Pack Used:**	--		
Total Boring Depth:	8	feet bgs	**Surface Seal:**	--		
Total Well Depth:	--	feet bgs	**Annular Seal:**	--		
State Well ID No.:	--		**Monument Type:**	--		

APPENDIX B
LABORATORY ANALYTICAL REPORTS

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

3012 16th Avenue West
Seattle, WA 98119-2029
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fbi@isomedia.com
www.friedmanandbruya.com

January 29, 2019

Siera Pleskac, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Pleskac:

Included are the results from the testing of material submitted on January 23, 2019 from the SOU_1400-001_ 20190123, F&BI 901295 project. There are 13 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Logan Schumacher
SOU0129R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 23, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1400-001_ 20190123, F&BI 901295 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
901295 -01	P01-20190123
901295 -02	P02-20190123
901295 -03	P03-20190123
901295 -04	P04-20190123

Several 8260C compounds failed the acceptance criteria in the matrix spike sample. The laboratory control samples met the acceptance criteria, therefore the data were likely due to sample matrix effect.

All other quality control requirements were acceptable.

Date of Report: 01/29/19
Date Received: 01/23/19
Project: SOU_1400-001_ 20190123, F&BI 901295
Date Extracted: 01/24/19
Date Analyzed: 01/24/19

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
P01-20190123 901295-01	<100	81
P02-20190123 901295-02	<100	83
P03-20190123 901295-03	<100	80
P04-20190123 901295-04	<100	83
Method Blank 09-104 MB	<100	80

Date of Report: 01/29/19
Date Received: 01/23/19
Project: SOU_1400-001_ 20190123, F&BI 901295
Date Extracted: 01/25/19
Date Analyzed: 01/25/19

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 41-152)
P01-20190123 901295-01	<50	<250	110
P02-20190123 901295-02 1/1.9	99 x	<480	121
P03-20190123 901295-03	82	<250	113
P04-20190123 901295-04	<50	<250	118
Method Blank 09-213 MB2	<50	<250	130

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	P01-20190123	Client:	SoundEarth Strategies
Date Received:	01/23/19	Project:	SOU_1400-001_ 20190123
Date Extracted:	01/24/19	Lab ID:	901295-01
Date Analyzed:	01/24/19	Data File:	012416.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	91	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	0.43	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	4.0	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	P02-20190123	Client:	SoundEarth Strategies
Date Received:	01/23/19	Project:	SOU_1400-001_ 20190123
Date Extracted:	01/24/19	Lab ID:	901295-02
Date Analyzed:	01/24/19	Data File:	012417.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	91	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	0.61	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	5.4	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	P03-20190123	Client:	SoundEarth Strategies
Date Received:	01/23/19	Project:	SOU_1400-001_ 20190123
Date Extracted:	01/24/19	Lab ID:	901295-03
Date Analyzed:	01/24/19	Data File:	012418.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	93	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	2.6	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	P04-20190123	Client:	SoundEarth Strategies
Date Received:	01/23/19	Project:	SOU_1400-001_ 20190123
Date Extracted:	01/24/19	Lab ID:	901295-04
Date Analyzed:	01/24/19	Data File:	012419.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	93	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	3.5	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1400-001_ 20190123
Date Extracted:	01/24/19	Lab ID:	09-181 mb
Date Analyzed:	01/24/19	Data File:	012409.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	90	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<1	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<1
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<10	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

Date of Report: 01/29/19
Date Received: 01/23/19
Project: SOU_1400-001_ 20190123, F&BI 901295

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

Laboratory Code: 901301-05 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	100	69-134

Date of Report: 01/29/19
Date Received: 01/23/19
Project: SOU_1400-001_ 20190123, F&BI 901295

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	104	104	63-142	0

Date of Report: 01/29/19
Date Received: 01/23/19
Project: SOU_1400-001_ 20190123, F&BI 901295

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

Laboratory Code: 901291-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<1	118	55-137
Chloromethane	ug/L (ppb)	50	<10	113	61-120
Vinyl chloride	ug/L (ppb)	50	<0.2	111	61-139
Bromomethane	ug/L (ppb)	50	<1	121	20-265
Chloroethane	ug/L (ppb)	50	<1	111	55-149
Trichlorofluoromethane	ug/L (ppb)	50	<1	115	71-128
Acetone	ug/L (ppb)	250	<50	103	48-149
1,1-Dichloroethene	ug/L (ppb)	50	<1	114	71-123
Hexane	ug/L (ppb)	50	<1	74	44-139
Methylene chloride	ug/L (ppb)	50	<5	121	61-126
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	106	68-125
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	117	72-122
1,1-Dichloroethane	ug/L (ppb)	50	<1	114 vo	79-113
2,2-Dichloropropane	ug/L (ppb)	50	<1	135	48-157
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	118	63-126
Chloroform	ug/L (ppb)	50	<1	107	77-117
2-Butanone (MEK)	ug/L (ppb)	250	<10	87	70-135
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	96	70-119
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	110	75-121
1,1-Dichloropropene	ug/L (ppb)	50	<1	103	67-121
Carbon tetrachloride	ug/L (ppb)	50	<1	106	70-132
Benzene	ug/L (ppb)	50	<0.35	105	75-114
Trichloroethene	ug/L (ppb)	50	<1	99	73-122
1,2-Dichloropropane	ug/L (ppb)	50	<1	99	80-111
Bromodichloromethane	ug/L (ppb)	50	<1	98	78-117
Dibromomethane	ug/L (ppb)	50	<1	99	73-125
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	93	79-140
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	94	76-120
Toluene	ug/L (ppb)	50	<1	101	73-117
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	86	75-122
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	96	81-116
2-Hexanone	ug/L (ppb)	250	<10	80	74-127
1,3-Dichloropropane	ug/L (ppb)	50	<1	90	80-113
Tetrachloroethene	ug/L (ppb)	50	<1	97	72-113
Dibromochloromethane	ug/L (ppb)	50	<1	95	69-129
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	92	79-120
Chlorobenzene	ug/L (ppb)	50	<1	94	75-115
Ethylbenzene	ug/L (ppb)	50	<1	92	66-124
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	102	76-130
m,p-Xylene	ug/L (ppb)	100	<2	92	63-128
o-Xylene	ug/L (ppb)	50	<1	95	64-129
Styrene	ug/L (ppb)	50	<1	90	56-142
Isopropylbenzene	ug/L (ppb)	50	<1	90	74-122
Bromoform	ug/L (ppb)	50	<1	103	49-138
n-Propylbenzene	ug/L (ppb)	50	<1	76	65-129
Bromobenzene	ug/L (ppb)	50	<1	89	70-121
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	79	60-138
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	96	79-120
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	89	62-125
2-Chlorotoluene	ug/L (ppb)	50	<1	83	40-159
4-Chlorotoluene	ug/L (ppb)	50	<1	81	76-122
tert-Butylbenzene	ug/L (ppb)	50	<1	71 vo	74-125
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	79	59-136
sec-Butylbenzene	ug/L (ppb)	50	<1	63 vo	69-127
p-Isopropyltoluene	ug/L (ppb)	50	<1	66	64-132
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	84	77-113
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	82	75-110
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	87	70-120
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	89	69-129
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	69	66-123
Hexachlorobutadiene	ug/L (ppb)	50	<1	36 vo	53-136
Naphthalene	ug/L (ppb)	50	<1	85	60-145
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	68	59-130

Date of Report: 01/29/19
Date Received: 01/23/19
Project: SOU_1400-001_ 20190123, F&BI 901295

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	117	112	50-157	4
Chloromethane	ug/L (ppb)	50	110	104	62-130	6
Vinyl chloride	ug/L (ppb)	50	108	103	70-128	5
Bromomethane	ug/L (ppb)	50	109	111	62-188	2
Chloroethane	ug/L (ppb)	50	103	102	66-149	1
Trichlorofluoromethane	ug/L (ppb)	50	108	105	70-132	3
Acetone	ug/L (ppb)	250	103	105	44-145	2
1,1-Dichloroethene	ug/L (ppb)	50	113	104	75-119	8
Hexane	ug/L (ppb)	50	111	108	51-153	3
Methylene chloride	ug/L (ppb)	50	121	110	63-132	10
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	102	98	70-122	4
trans-1,2-Dichloroethene	ug/L (ppb)	50	115	107	76-118	7
1,1-Dichloroethane	ug/L (ppb)	50	113	106	77-119	6
2,2-Dichloropropane	ug/L (ppb)	50	121	121	62-141	0
cis-1,2-Dichloroethene	ug/L (ppb)	50	116	110	76-119	5
Chloroform	ug/L (ppb)	50	107	101	78-117	6
2-Butanone (MEK)	ug/L (ppb)	250	91	97	49-147	6
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	99	97	78-114	2
1,1,1-Trichloroethane	ug/L (ppb)	50	107	103	80-116	4
1,1-Dichloropropene	ug/L (ppb)	50	107	104	78-119	3
Carbon tetrachloride	ug/L (ppb)	50	106	102	72-128	4
Benzene	ug/L (ppb)	50	108	104	75-116	4
Trichloroethene	ug/L (ppb)	50	104	101	72-119	3
1,2-Dichloropropane	ug/L (ppb)	50	102	102	79-121	0
Bromodichloromethane	ug/L (ppb)	50	101	100	76-120	1
Dibromomethane	ug/L (ppb)	50	102	101	79-121	1
4-Methyl-2-pentanone	ug/L (ppb)	250	95	100	54-153	5
cis-1,3-Dichloropropene	ug/L (ppb)	50	100	102	76-128	2
Toluene	ug/L (ppb)	50	105	103	79-115	2
trans-1,3-Dichloropropene	ug/L (ppb)	50	91	95	76-128	4
1,1,2-Trichloroethane	ug/L (ppb)	50	100	102	78-120	2
2-Hexanone	ug/L (ppb)	250	84	93	49-147	10
1,3-Dichloropropane	ug/L (ppb)	50	95	98	81-115	3
Tetrachloroethene	ug/L (ppb)	50	109	107	78-109	2
Dibromochloromethane	ug/L (ppb)	50	96	98	63-140	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	97	99	82-118	2
Chlorobenzene	ug/L (ppb)	50	100	99	80-113	1
Ethylbenzene	ug/L (ppb)	50	101	100	83-111	1
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	103	100	76-125	3
m,p-Xylene	ug/L (ppb)	100	101	101	84-112	0
o-Xylene	ug/L (ppb)	50	102	99	81-117	3
Styrene	ug/L (ppb)	50	98	98	83-121	0
Isopropylbenzene	ug/L (ppb)	50	108	105	81-122	3
Bromoform	ug/L (ppb)	50	102	109	40-161	7
n-Propylbenzene	ug/L (ppb)	50	102	100	81-115	2
Bromobenzene	ug/L (ppb)	50	100	100	80-113	0
1,3,5-Trimethylbenzene	ug/L (ppb)	50	103	100	83-117	3
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	103	104	79-118	1
1,2,3-Trichloropropane	ug/L (ppb)	50	95	97	74-116	2
2-Chlorotoluene	ug/L (ppb)	50	102	99	79-112	3
4-Chlorotoluene	ug/L (ppb)	50	100	100	80-116	0
tert-Butylbenzene	ug/L (ppb)	50	102	100	81-119	2
1,2,4-Trimethylbenzene	ug/L (ppb)	50	102	99	81-121	3
sec-Butylbenzene	ug/L (ppb)	50	105	103	83-123	2
p-Isopropyltoluene	ug/L (ppb)	50	106	104	81-122	2
1,3-Dichlorobenzene	ug/L (ppb)	50	106	105	80-115	1
1,4-Dichlorobenzene	ug/L (ppb)	50	103	102	77-112	1
1,2-Dichlorobenzene	ug/L (ppb)	50	106	104	79-115	2
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	91	89	62-133	2
1,2,4-Trichlorobenzene	ug/L (ppb)	50	115	109	75-119	5
Hexachlorobutadiene	ug/L (ppb)	50	113	108	70-116	5
Naphthalene	ug/L (ppb)	50	107	102	72-131	5
1,2,3-Trichlorobenzene	ug/L (ppb)	50	112	108	74-122	4

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

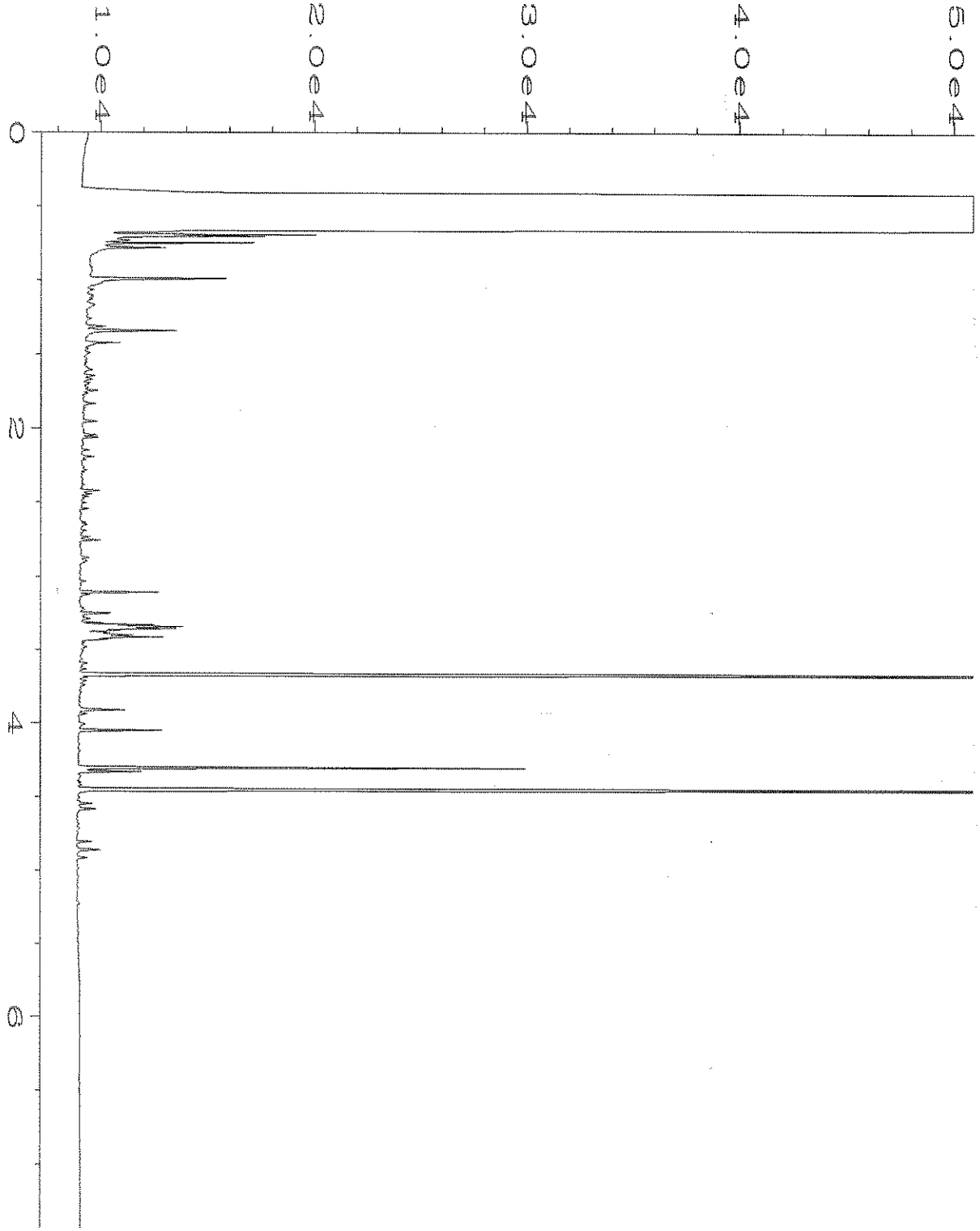
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

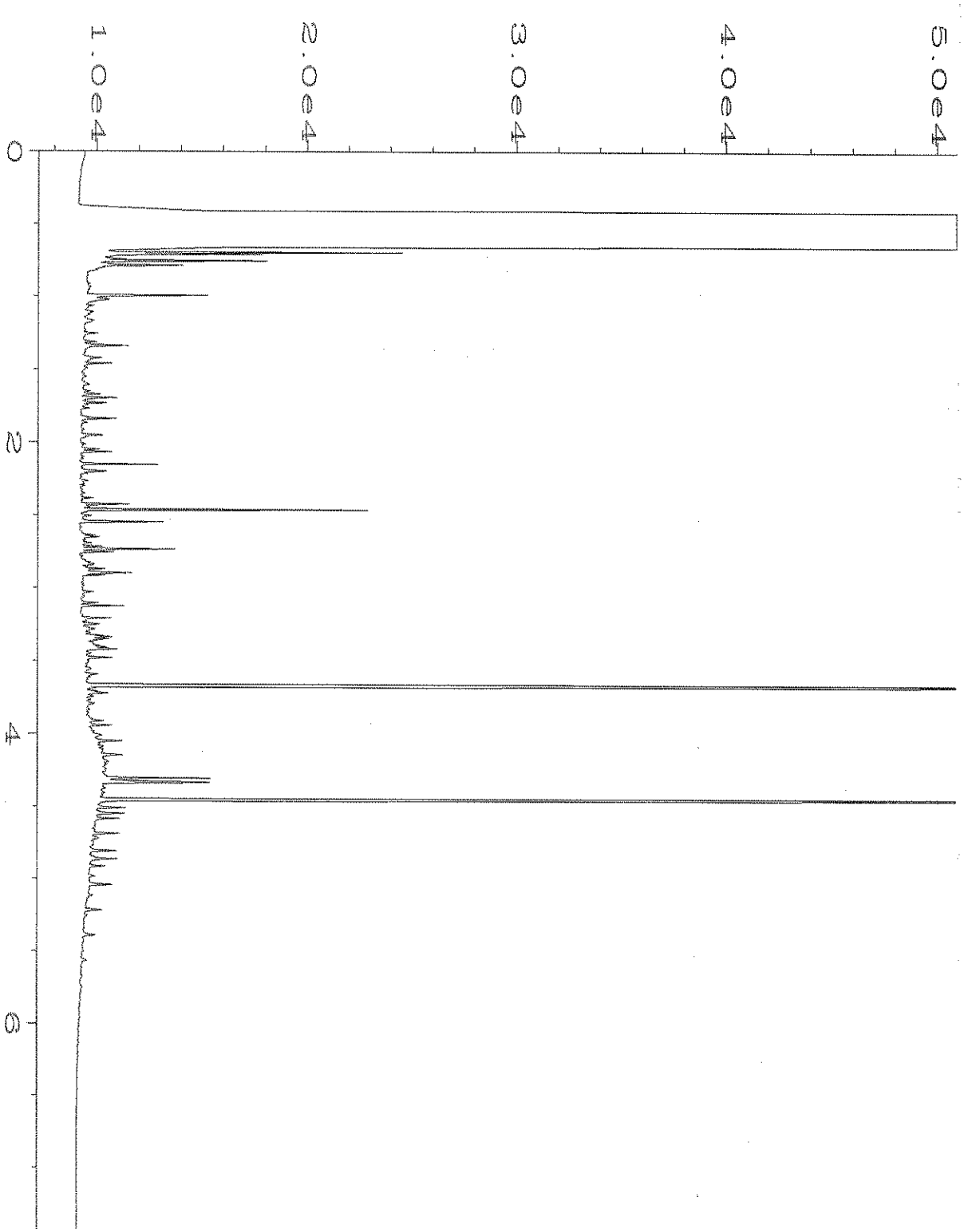
vo - The value reported fell outside the control limits established for this analyte.

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



Data File Name : C:\HPCHEM\1\DATA\01-25-19\024F0301.D
Operator : TL
Instrument : GC1
Sample Name : 901295-01
Run Time Bar Code:
Acquired on : 25 Jan 19 02:01 PM
Report Created on: 28 Jan 19 07:46 AM

Page Number : 1
Vial Number : 24
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



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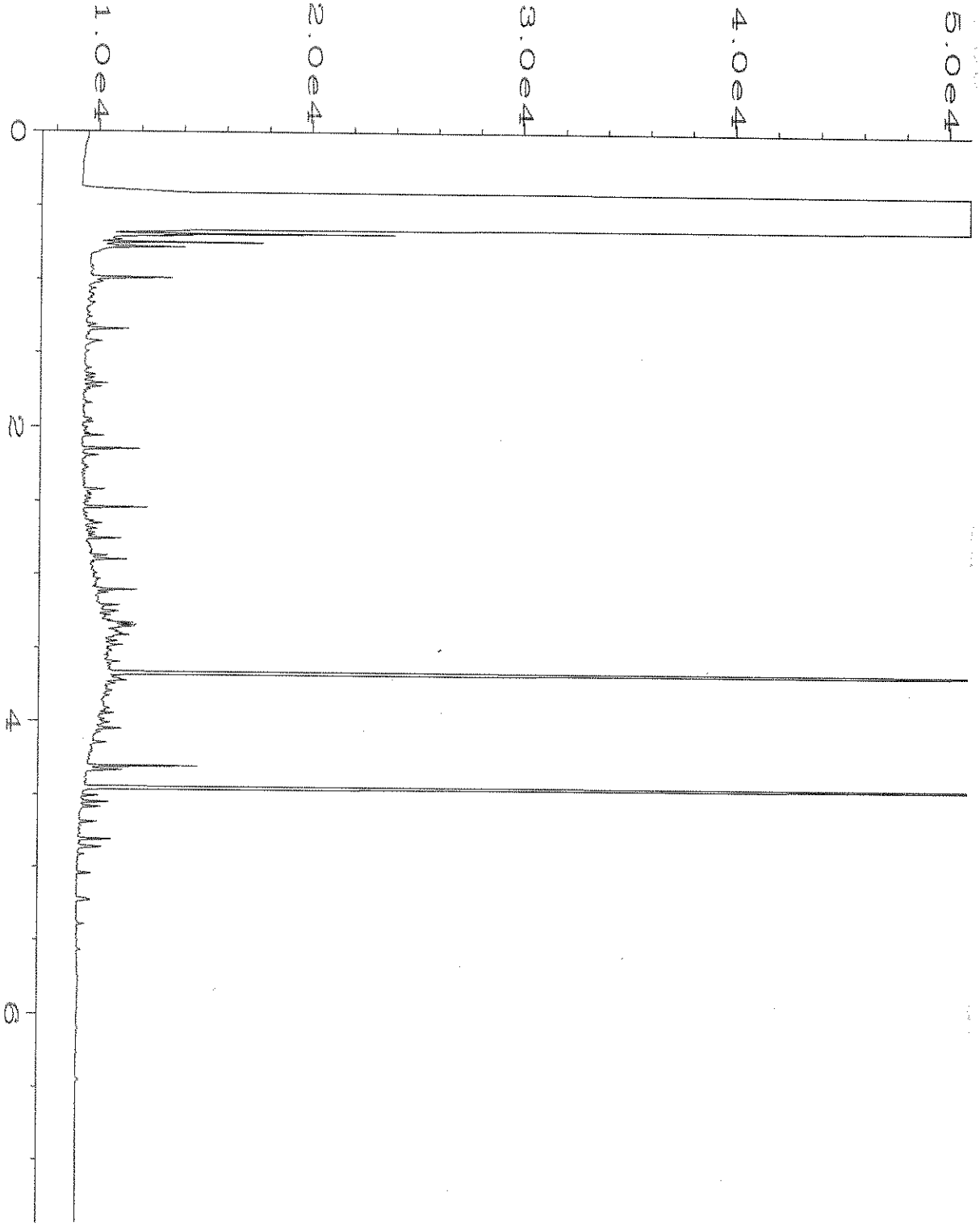
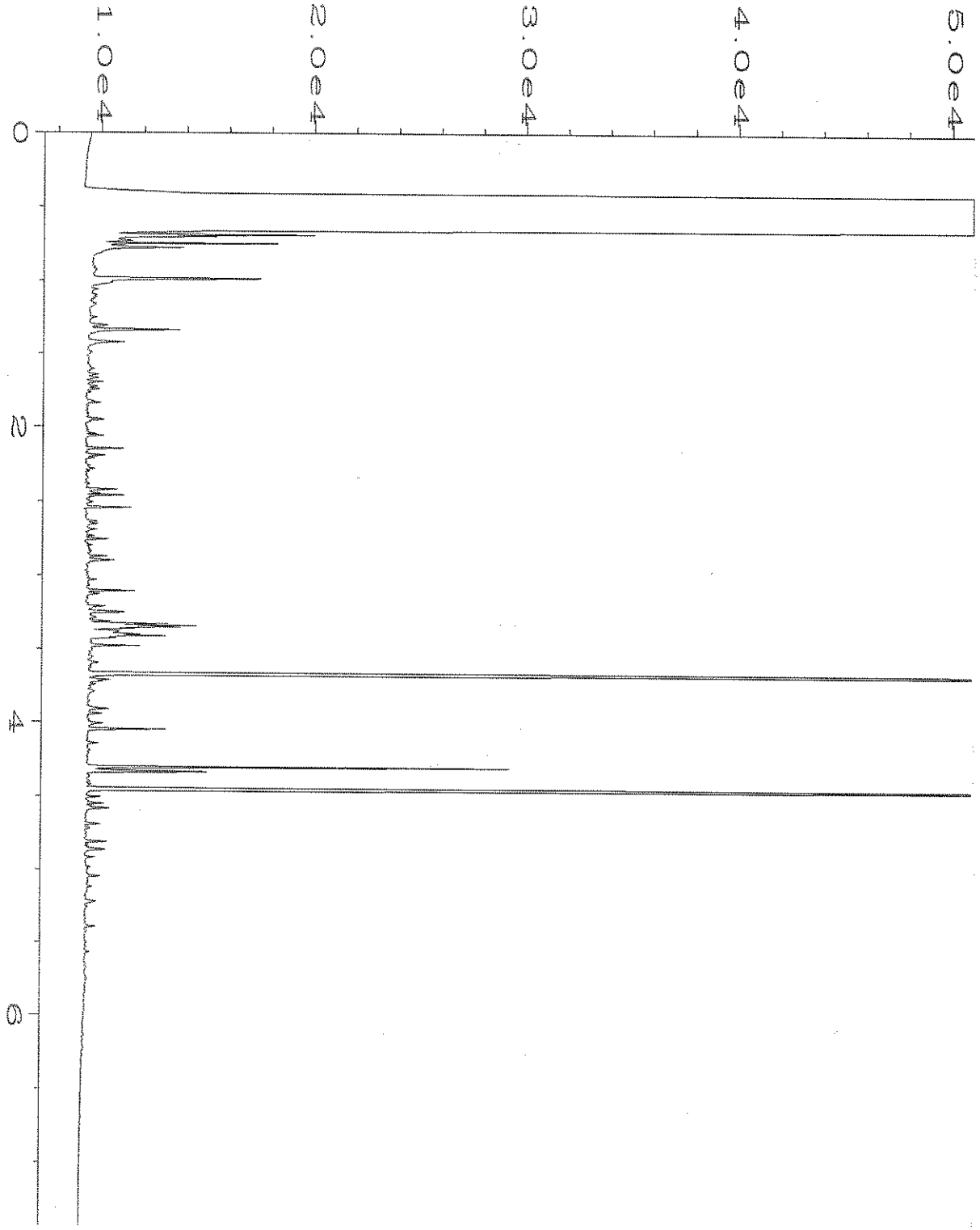
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 25
Sample Name	: 901295-02	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 25 Jan 19 02:12 PM	Instrument Method	: DX.MTH
Report Created on:	28 Jan 19 07:46 AM	Analysis Method	: DX.MTH

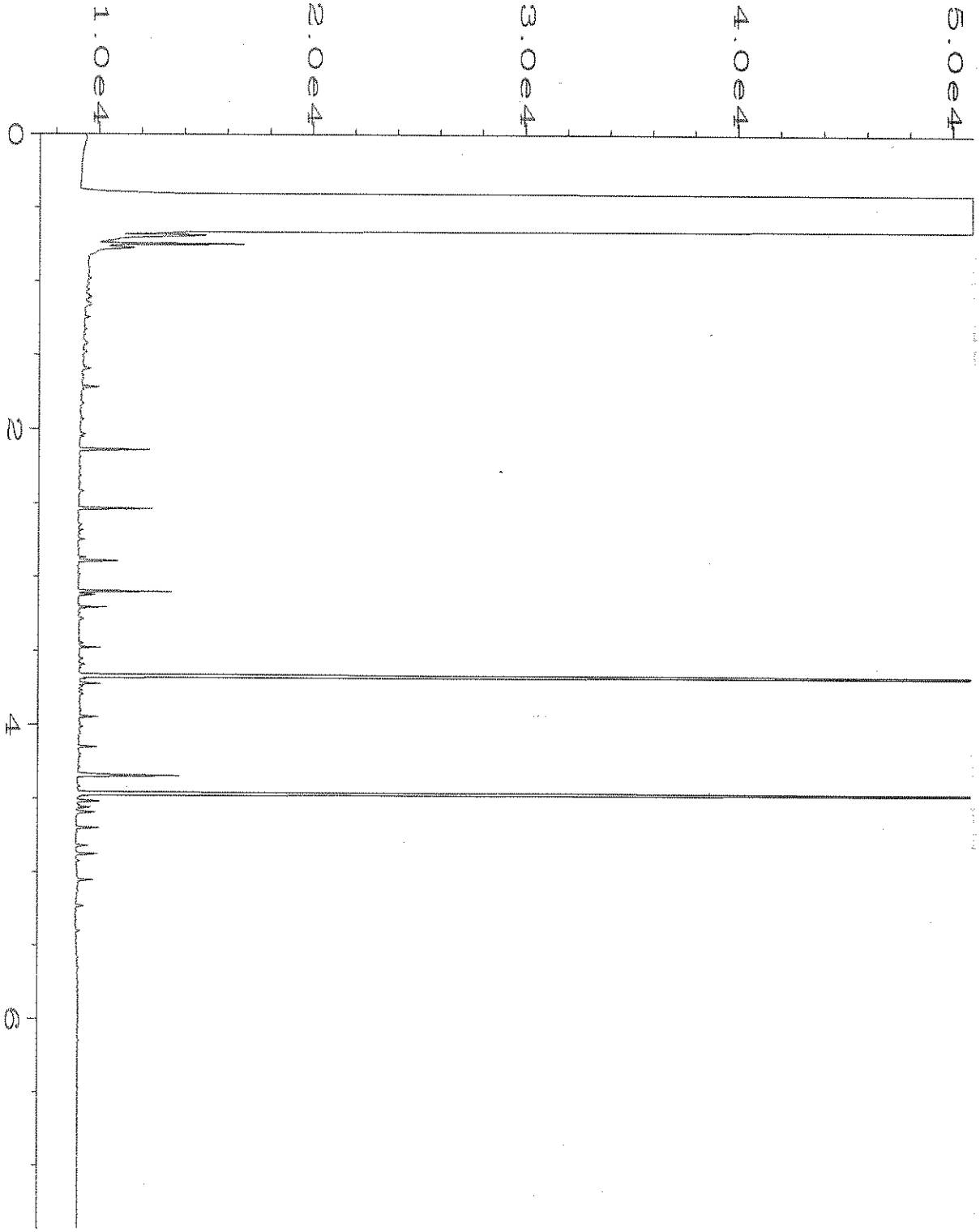


Data File Name : C:\HPCHEM\1\DATA\01-25-19\026F0301.D
Operator : TL
Instrument : GC1
Sample Name : 901295-03
Run Time Bar Code:
Acquired on : 25 Jan 19 02:23 PM
Report Created on: 28 Jan 19 07:46 AM

Page Number : 1
Vial Number : 26
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH

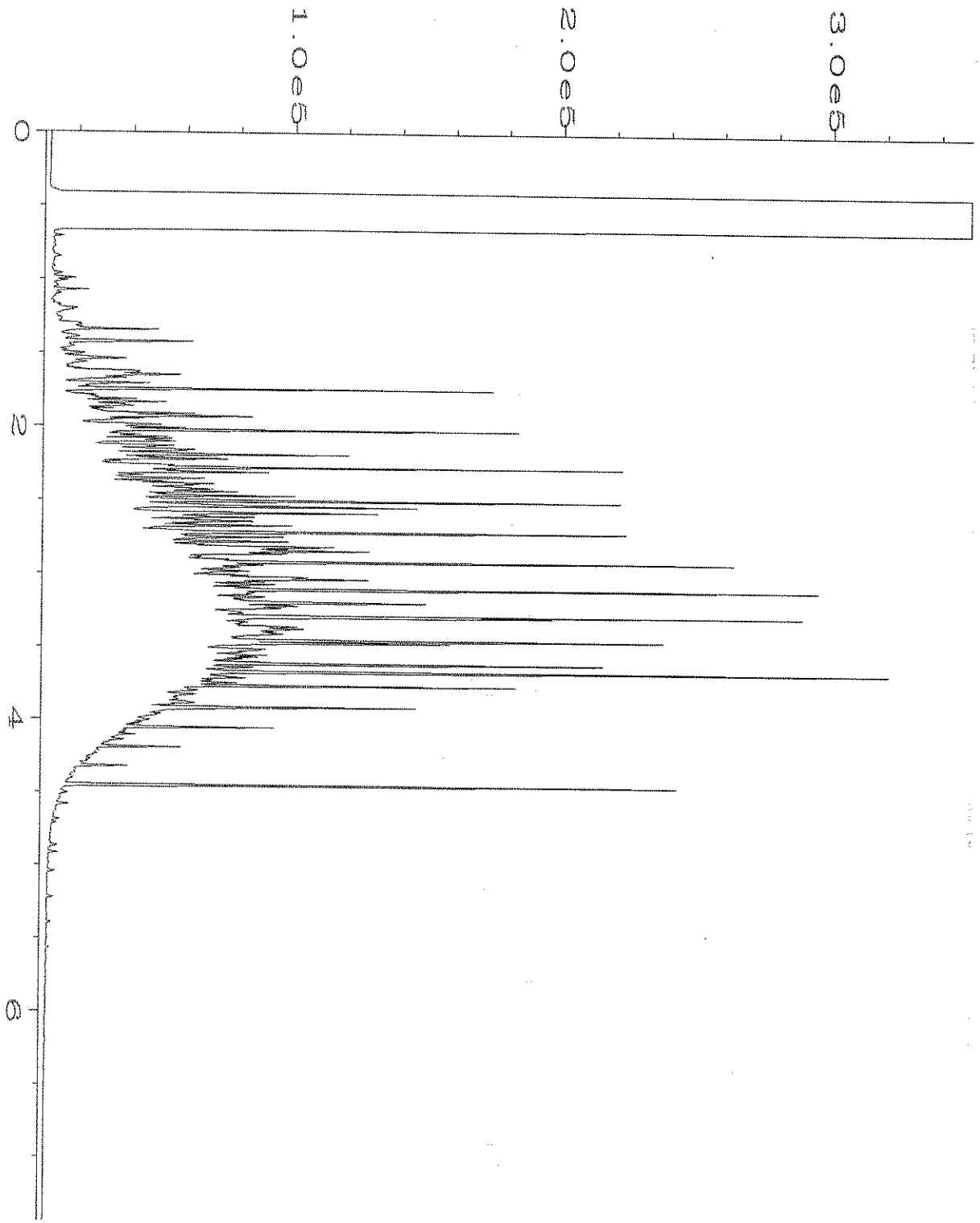


Data File Name	: C:\HPCHEM\1\DATA\01-25-19\027F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 27
Sample Name	: 901295-04	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 25 Jan 19 02:34 PM	Instrument Method	: DX.MTH
Report Created on	: 28 Jan 19 07:47 AM	Analysis Method	: DX.MTH



Data File Name : C:\HPCHEM\1\DATA\01-25-19\023F0301.D
Operator : TL
Instrument : GC1
Sample Name : 09-213 mb2
Run Time Bar Code:
Acquired on : 25 Jan 19 01:52 PM
Report Created on: 28 Jan 19 07:46 AM

Page Number : 1
Vial Number : 23
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\01-25-19\005F0801.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 5
Sample Name	: 1000 Dx 55-96F	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 25 Jan 19 07:26 PM	Instrument Method	: DX.MTH
Report Created on:	28 Jan 19 07:50 AM	Analysis Method	: DX.MTH

90295

SAMPLE CHAIN OF CUSTODY

ME 01/23/19

Page # 1 of 1 BO3

VW4

Send Report to Siera P., Logan S.

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO. 1400-001

PO #

REMARKS Hold ATT

TURNAROUND TIME
Standard (2 Weeks)
RUSH ~~Hold~~
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
PO1-20190123	PO1	—	01 A-G	1/23/19	1025	water	7	X	X		X					X-per SP
PO2-20190123	PO2	—	02		1300			X	X		X					1/24/19
PO3-20190123	PO3	—	03		1535			X	X		X					ME
PO4-20190123	PO4	—	04		1630			X	X		X					

COS 1/23/19

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Logan Schumacher	SoundEarth	1/23/19	1725
Received by:	BISRAT TADESSE	FBI	1/23/19	1730
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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February 1, 2019

Siera Pleskac, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Pleskac:

Included are the results from the testing of material submitted on January 23, 2019 from the SOU_1400-001_20190123, F&BI 901296 project. There are 6 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Logan Schumacher
SOU0201R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 23, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1400-001_20190123, F&BI 901296 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
901296 -01	SG01-20190123
901296 -02	SG02-20190123

The TO-15 laboratory control sample for vinyl chloride exceeded the acceptance criteria. The analyte was not detected in the samples, therefore the data were acceptable.

All other quality control requirements were acceptable.

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG01-20190123	Client:	SoundEarth Strategies
Date Received:	01/23/19	Project:	SOU_1400-001_20190123, F&BI 901296
Date Collected:	01/23/19	Lab ID:	901296-01 1/1.6
Date Analyzed:	01/29/19	Data File:	012824.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration ug/m3	ppbv
Vinyl chloride	<0.41	<0.16
Chloroethane	<4.2	<1.6
1,1-Dichloroethene	<0.63	<0.16
trans-1,2-Dichloroethene	<0.63	<0.16
1,1-Dichloroethane	<0.65	<0.16
cis-1,2-Dichloroethene	<0.63	<0.16
1,2-Dichloroethane (EDC)	<0.065	<0.016
1,1,1-Trichloroethane	<0.87	<0.16
Trichloroethene	<0.43	<0.08
1,1,2-Trichloroethane	<0.17	<0.032
Tetrachloroethene	<11	<1.6

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SG02-20190123	Client:	SoundEarth Strategies
Date Received:	01/23/19	Project:	SOU_1400-001_20190123, F&BI 901296
Date Collected:	01/23/19	Lab ID:	901296-02 1/1.7
Date Analyzed:	01/29/19	Data File:	012825.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	104	70	130

Compounds:	Concentration ug/m3	ppbv
Vinyl chloride	<0.43	<0.17
Chloroethane	<4.5	<1.7
1,1-Dichloroethene	<0.67	<0.17
trans-1,2-Dichloroethene	<0.67	<0.17
1,1-Dichloroethane	<0.69	<0.17
cis-1,2-Dichloroethene	<0.67	<0.17
1,2-Dichloroethane (EDC)	<0.069	<0.017
1,1,1-Trichloroethane	<0.93	<0.17
Trichloroethene	<0.46	<0.085
1,1,2-Trichloroethane	<0.19	<0.034
Tetrachloroethene	<12	<1.7

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1400-001_20190123, F&BI 901296
Date Collected:	Not Applicable	Lab ID:	09-0187 mb
Date Analyzed:	01/28/19	Data File:	012810.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration ug/m3	ppbv
Vinyl chloride	<0.26	<0.1
Chloroethane	<2.6	<1
1,1-Dichloroethene	<0.4	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1
1,1-Dichloroethane	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
1,2-Dichloroethane (EDC)	<0.04	<0.01
1,1,1-Trichloroethane	<0.55	<0.1
Trichloroethene	<0.27	<0.05
1,1,2-Trichloroethane	<0.11	<0.02
Tetrachloroethene	<6.8	<1

Date of Report: 02/01/19
Date Received: 01/23/19
Project: SOU_1400-001_20190123, F&BI 901296

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES FOR VOLATILES BY METHOD TO-15

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	ppbv	5	131 vo	70-130
Chloroethane	ppbv	5	127	70-130
1,1-Dichloroethene	ppbv	5	130	70-130
trans-1,2-Dichloroethene	ppbv	5	127	70-130
1,1-Dichloroethane	ppbv	5	128	70-130
cis-1,2-Dichloroethene	ppbv	5	127	70-130
1,2-Dichloroethane (EDC)	ppbv	5	127	70-130
1,1,1-Trichloroethane	ppbv	5	129	70-130
Trichloroethene	ppbv	5	97	70-130
1,1,2-Trichloroethane	ppbv	5	99	70-130
Tetrachloroethene	ppbv	5	97	70-130

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

901296
[redacted]

SAMPLE CHAIN OF CUSTODY

ME 01/23/19
[redacted]

Page # 1 of 1

Report To Siera P., Logan S.

Company SoundEarth

Address 2811 Fairview Ave E Suite 2000

City, State, ZIP Seattle, WA

Phone ______ Email ______

SAMPLERS (signature) [signature]

PROJECT NAME	PO #
1400-001	
REPORTING LEVEL Hold · Indoor Air · Deep Soil Gas ✓ · Sub Slab/Soil Gas · SVE/Grab	INVOICE TO

TURNAROUND TIME
- Standard
- RUSH Hold

Rush charges authorized by:

SAMPLE DISPOSAL
- Dispose after 30 days
- Archive Samples
- Other

ANALYSIS REQUESTED

Sample Name	Lab ID	Canister ID	Flow Contr. ID	Date Sampled	Field Initial Press. (Hg)	Field Initial Time	Field Final Press. (Hg)	Field Final Time	TO-15 Full Scan	TO-15 BTEXN	TO-15 cVOCs		Notes
													X - per SP 1/24/19 ME
SG01-20190123	01	3669	243	1/23/19	28.6	1140	5.0	1145			X		PID = 1.9
SG02-20190123	02	3378	220	↓	29.5	1418	5.0	1424			X		PID = 1.8

1/23/19 LS

Samples received at 19 °C

Friedman & Bruya, Inc.
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Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	Logan Schomacher	SoundEarth	1/23/19	1725
Received by: [signature]	BISRAT TADESSE	FBI	1/23/19	1730
Relinquished by:				
Received by:				

FORMS\COC\COCTO-15.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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fbi@isomedia.com
www.friedmanandbruya.com

January 30, 2019

Siera Pleskac, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Pleska
Included are the results from the testing of material submitted on January 23, 2019 from the SOU_1400-001_ 20190123, F&BI 901297 project. There are 15 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Logan Schumacher
SOU0130R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on January 23, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1400-001_ 20190123, F&BI 901297 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
901297 -01	P01-02.5
901297 -02	P01-05
901297 -03	P01-07.5
901297 -04	P01-10
901297 -05	P01-12.5
901297 -06	P01-15
901297 -07	P01-17.5
901297 -08	P01-20
901297 -09	P02-0.25
901297 -10	P02-05
901297 -11	P02-07.5
901297 -12	P02-10
901297 -13	P02-12.5
901297 -14	P02-15
901297 -15	P02-17.5
901297 -16	P02-20
901297 -17	P03-02.5
901297 -18	P03-05
901297 -19	P03-07.5
901297 -20	P03-10
901297 -21	P03-12.5
901297 -22	P03-15
901297 -23	P03-17.5
901297 -24	P03-20
901297 -25	P04-02.5
901297 -26	P04-05
901297 -27	P04-07.5
901297 -28	P04-10
901297 -29	P04-12.5
901297 -30	P04-15
901297 -31	P04-17.5
901297 -32	P04-20
901297 -33	Drum-001

All quality control requirements were acceptable.

Date of Report: 01/30/19
Date Received: 01/23/19
Project: SOU_1400-001_ 20190123, F&BI 901297
Date Extracted: 01/28/19
Date Analyzed: 01/28/19

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)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
P01-07.5 901297-03	<5	83
Method Blank 09-110 MB	<5	82

Date of Report: 01/30/19
Date Received: 01/23/19
Project: SOU_1400-001_ 20190123, F&BI 901297
Date Extracted: 01/28/19
Date Analyzed: 01/28/19

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

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
P03-07.5 901297-19	<0.02	<0.02	<0.02	<0.06	<5	80
P04-07.5 901297-27	<0.02	<0.02	<0.02	<0.06	<5	80
Method Blank 09-110 MB	<0.02	<0.02	<0.02	<0.06	<5	80

Date of Report: 01/30/19
Date Received: 01/23/19
Project: SOU_1400-001_ 20190123, F&BI 901297
Date Extracted: 01/25/19
Date Analyzed: 01/25/19

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 56-165)
P01-07.5 901297-03	<50	<250	79
P03-07.5 901297-19	<50	<250	76
P04-07.5 901297-27	<50	<250	77
Method Blank 09-217 MB	<50	<250	77

Analysis For Total Metals By EPA Method 6020B

Client ID:	Drum-001	Client:	SoundEarth Strategies
Date Received:	01/23/19	Project:	SOU_1400-001_ 20190123
Date Extracted:	01/24/19	Lab ID:	901297-33
Date Analyzed:	01/24/19	Data File:	901297-33.067
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.36
Cadmium	<1
Chromium	22.9
Lead	12.5
Mercury	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_1400-001_ 20190123
Date Extracted:	01/24/19	Lab ID:	I9-52 mb
Date Analyzed:	01/24/19	Data File:	I9-52 mb.054
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	P01-07.5	Client:	SoundEarth Strategies
Date Received:	01/23/19	Project:	SOU_1400-001_ 20190123
Date Extracted:	01/25/19	Lab ID:	901297-03
Date Analyzed:	01/25/19	Data File:	012528.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	97	55	145
4-Bromofluorobenzene	95	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	P02-07.5	Client:	SoundEarth Strategies
Date Received:	01/23/19	Project:	SOU_1400-001_ 20190123
Date Extracted:	01/25/19	Lab ID:	901297-11
Date Analyzed:	01/25/19	Data File:	012529.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	99	55	145
4-Bromofluorobenzene	95	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1400-001_ 20190123
Date Extracted:	01/25/19	Lab ID:	09-0183 mb
Date Analyzed:	01/25/19	Data File:	012515.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	62	142
Toluene-d8	100	55	145
4-Bromofluorobenzene	100	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Date of Report: 01/30/19
Date Received: 01/23/19
Project: SOU_1400-001_ 20190123, F&BI 901297

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: 901345-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	100	69-120
Toluene	mg/kg (ppm)	0.5	102	70-117
Ethylbenzene	mg/kg (ppm)	0.5	103	65-123
Xylenes	mg/kg (ppm)	1.5	102	66-120
Gasoline	mg/kg (ppm)	20	120	71-131

Date of Report: 01/30/19
Date Received: 01/23/19
Project: SOU_1400-001_ 20190123, F&BI 901297

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

Laboratory Code: 901297-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	94	94	63-146	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	94	79-144

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Project: SOU_1400-001_ 20190123, F&BI 901297

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 6020B

Laboratory Code: 901308-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	1.35	97	91	75-125	6
Cadmium	mg/kg (ppm)	10	<1	102	98	75-125	4
Chromium	mg/kg (ppm)	50	8.24	99	95	75-125	4
Lead	mg/kg (ppm)	50	1.98	96	91	75-125	5
Mercury	mg/kg (ppm	5	<1	96	98	75-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	103	80-120
Cadmium	mg/kg (ppm)	10	106	80-120
Chromium	mg/kg (ppm)	50	104	80-120
Lead	mg/kg (ppm)	50	103	80-120
Mercury	mg/kg (ppm)	5	102	80-120

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Date Received: 01/23/19
Project: SOU_1400-001_ 20190123, F&BI 901297

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

Laboratory Code: 901297-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	27	21	10-142	25 vo
Chloromethane	mg/kg (ppm)	2.5	<0.5	53	48	10-126	10
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	58	51	10-138	13
Bromomethane	mg/kg (ppm)	2.5	<0.5	74	69	10-163	7
Chloroethane	mg/kg (ppm)	2.5	<0.5	70	63	10-176	11
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	66	61	10-176	8
Acetone	mg/kg (ppm)	12.5	<0.5	81	78	10-163	4
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	70	64	10-160	9
Hexane	mg/kg (ppm)	2.5	<0.25	49	43	10-137	13
Methylene chloride	mg/kg (ppm)	2.5	<0.5	80	79	10-156	1
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	78	79	21-145	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	73	73	14-137	0
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	79	78	19-140	1
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	87	89	10-158	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	35	35	25-135	0
Chloroform	mg/kg (ppm)	2.5	<0.05	80	82	21-145	2
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	83	82	19-147	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	79	82	12-160	4
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	81	82	10-156	1
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	78	77	17-140	1
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	78	80	9-164	3
Benzene	mg/kg (ppm)	2.5	<0.03	79	78	29-129	1
Trichloroethene	mg/kg (ppm)	2.5	<0.02	80	73	21-139	9
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	85	77	30-135	10
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	87	78	23-155	11
Dibromomethane	mg/kg (ppm)	2.5	<0.05	85	75	23-145	12
4-Methyl-2-pentanone	mg/kg(ppm)	12.5	<0.5	83	77	24-155	7
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	85	78	28-144	9
Toluene	mg/kg (ppm)	2.5	<0.05	80	78	35-130	3
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	80	80	26-149	0
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	82	81	10-205	1
2-Hexanone	mg/kg (ppm)	12.5	<0.5	76	76	15-166	0
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	80	79	31-137	1
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	83	82	20-133	1
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	86	86	28-150	0
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	82	80	28-142	2
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	82	81	32-129	1
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	81	81	32-137	0
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	89	88	31-143	1
m,p-Xylene	mg/kg (ppm)	5	<0.1	83	82	34-136	1
o-Xylene	mg/kg (ppm)	2.5	<0.05	80	79	33-134	1
Styrene	mg/kg (ppm)	2.5	<0.05	86	86	35-137	0
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	85	85	31-142	0
Bromoform	mg/kg (ppm)	2.5	<0.05	94	92	21-156	2
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	79	79	23-146	0
Bromobenzene	mg/kg (ppm)	2.5	<0.05	81	81	34-130	0
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	80	80	18-149	0
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	83	83	28-140	0
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	77	79	25-144	3
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	79	79	31-134	0
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	79	79	31-136	0
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	82	82	30-137	0
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	79	80	10-182	1
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	81	81	23-145	0
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	83	84	21-149	1
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	83	83	30-131	0
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	82	81	29-129	1
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	83	83	31-132	0
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	85	84	11-161	1
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	84	84	22-142	0
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	89	89	10-142	0
Naphthalene	mg/kg (ppm)	2.5	<0.05	84	84	14-157	0
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	84	85	20-144	1

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Project: SOU_1400-001_ 20190123, F&BI 901297

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	52	10-146
Chloromethane	mg/kg (ppm)	2.5	82	27-133
Vinyl chloride	mg/kg (ppm)	2.5	95	22-139
Bromomethane	mg/kg (ppm)	2.5	97	38-114
Chloroethane	mg/kg (ppm)	2.5	107	10-163
Trichlorofluoromethane	mg/kg (ppm)	2.5	115	10-196
Acetone	mg/kg (ppm)	12.5	105	52-141
1,1-Dichloroethene	mg/kg (ppm)	2.5	110	47-128
Hexane	mg/kg (ppm)	2.5	92	43-142
Methylene chloride	mg/kg (ppm)	2.5	111	42-132
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	100	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	109	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	110	68-115
2,2-Dichloropropane	mg/kg (ppm)	2.5	121	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	112	72-113
Chloroform	mg/kg (ppm)	2.5	110	66-120
2-Butanone (MEK)	mg/kg (ppm)	12.5	101	57-123
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	105	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	110	62-131
1,1-Dichloropropene	mg/kg (ppm)	2.5	111	69-128
Carbon tetrachloride	mg/kg (ppm)	2.5	110	60-139
Benzene	mg/kg (ppm)	2.5	107	68-114
Trichloroethene	mg/kg (ppm)	2.5	108	64-117
1,2-Dichloropropane	mg/kg (ppm)	2.5	107	72-127
Bromodichloromethane	mg/kg (ppm)	2.5	111	72-130
Dibromomethane	mg/kg (ppm)	2.5	106	70-120
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	101	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	109	75-136
Toluene	mg/kg (ppm)	2.5	106	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	103	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	103	75-113
2-Hexanone	mg/kg (ppm)	12.5	87	33-152
1,3-Dichloropropane	mg/kg (ppm)	2.5	100	72-130
Tetrachloroethene	mg/kg (ppm)	2.5	112	72-114
Dibromochloromethane	mg/kg (ppm)	2.5	113	74-125
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	101	74-132
Chlorobenzene	mg/kg (ppm)	2.5	106	76-111
Ethylbenzene	mg/kg (ppm)	2.5	107	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	119	69-135
m,p-Xylene	mg/kg (ppm)	5	109	78-122
o-Xylene	mg/kg (ppm)	2.5	105	77-124
Styrene	mg/kg (ppm)	2.5	111	74-126
Isopropylbenzene	mg/kg (ppm)	2.5	112	76-127
Bromoform	mg/kg (ppm)	2.5	119	56-132
n-Propylbenzene	mg/kg (ppm)	2.5	106	74-124
Bromobenzene	mg/kg (ppm)	2.5	107	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	110	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	105	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	99	61-137
2-Chlorotoluene	mg/kg (ppm)	2.5	107	74-121
4-Chlorotoluene	mg/kg (ppm)	2.5	104	75-122
tert-Butylbenzene	mg/kg (ppm)	2.5	113	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	108	76-125
sec-Butylbenzene	mg/kg (ppm)	2.5	110	71-130
p-Isopropyltoluene	mg/kg (ppm)	2.5	111	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	108	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	106	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	110	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	110	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	114	64-135
Hexachlorobutadiene	mg/kg (ppm)	2.5	119	50-153
Naphthalene	mg/kg (ppm)	2.5	115	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	117	63-138

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

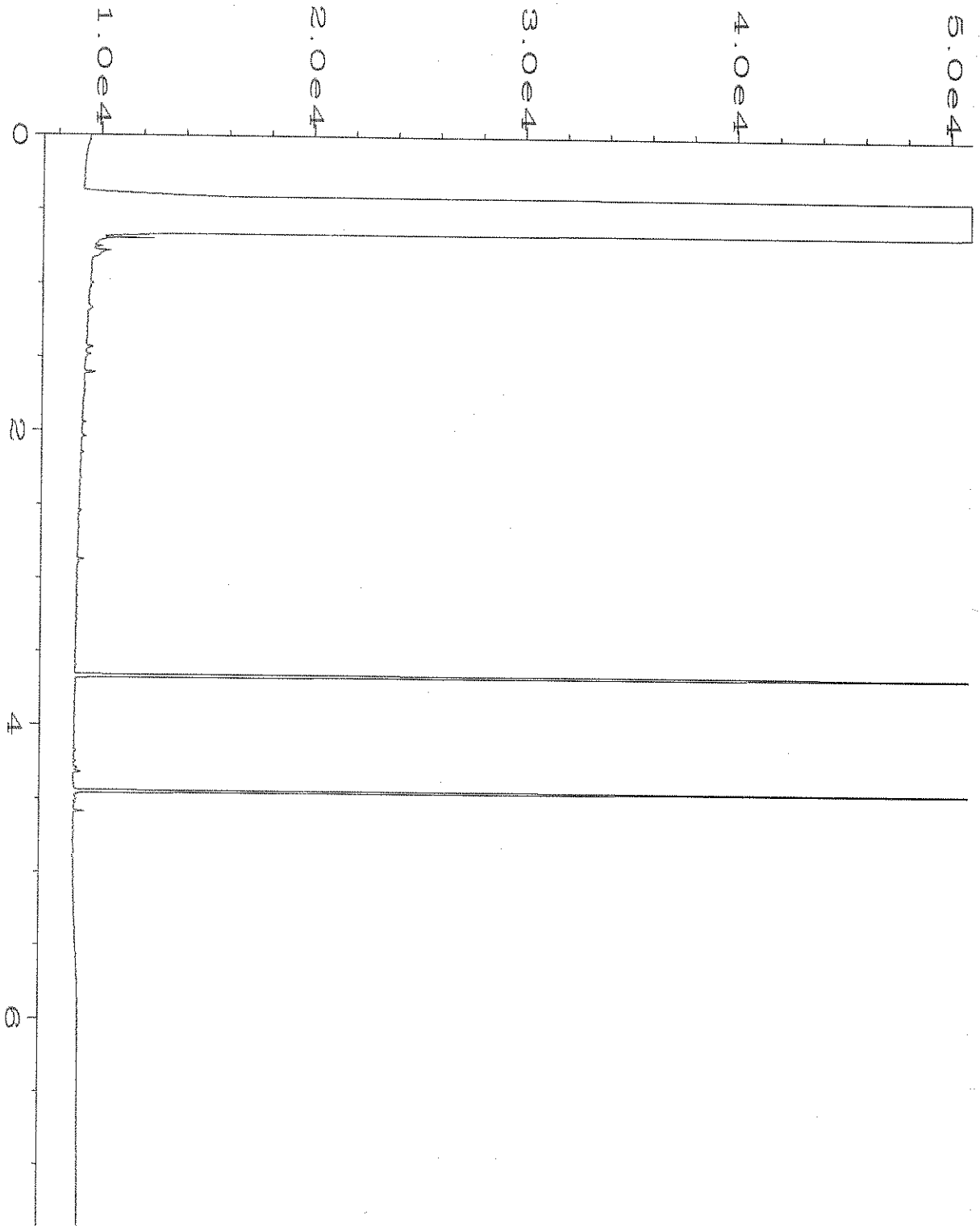
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

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

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



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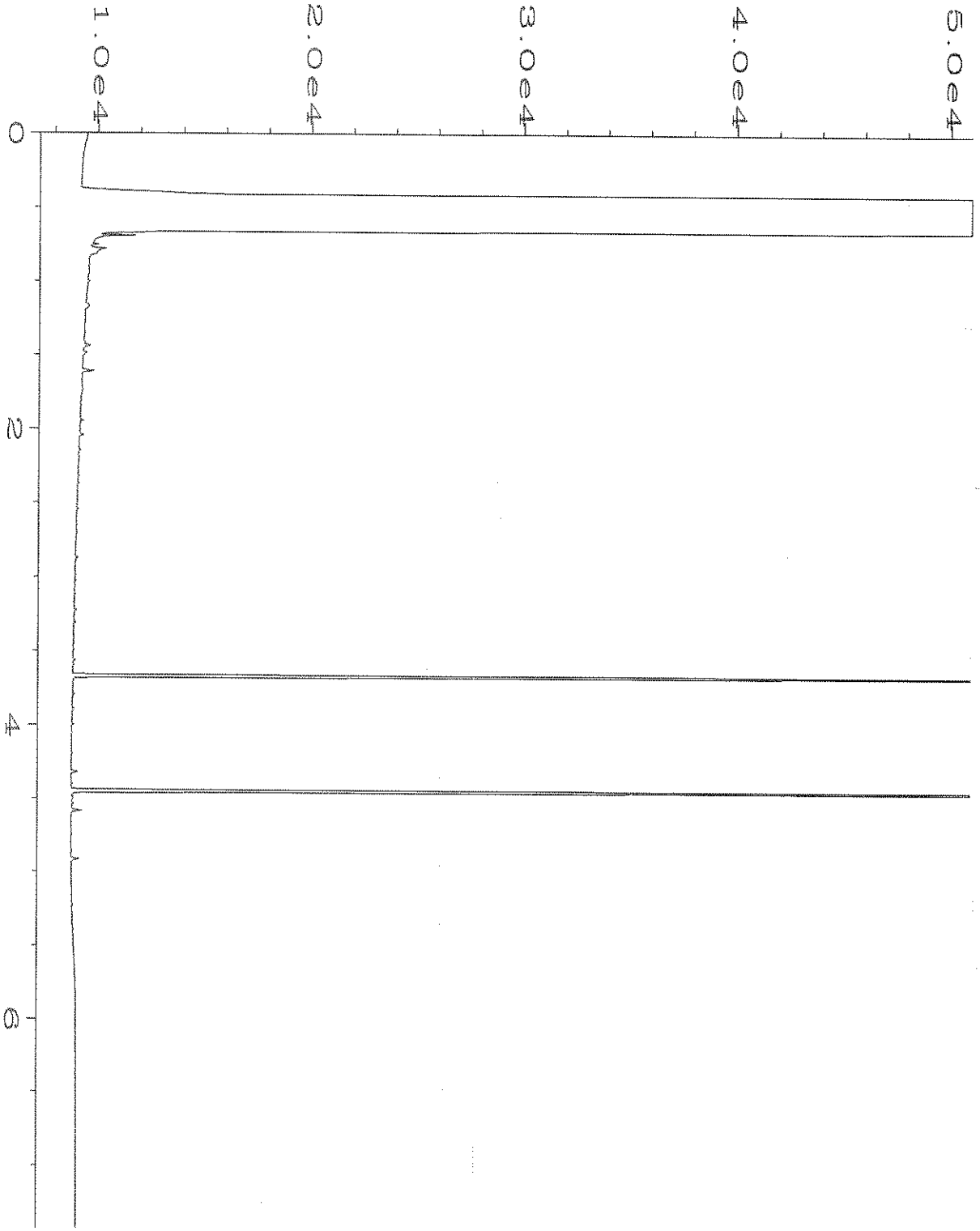
Instrument : GC1
Sample Name : 901297-03
Run Time Bar Code:
Acquired on : 25 Jan 19 08:04 AM
Report Created on: 28 Jan 19 07:58 AM

Page Number : 1
Vial Number : 10
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



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Run Time Bar Code:		Sequence Line	: 3
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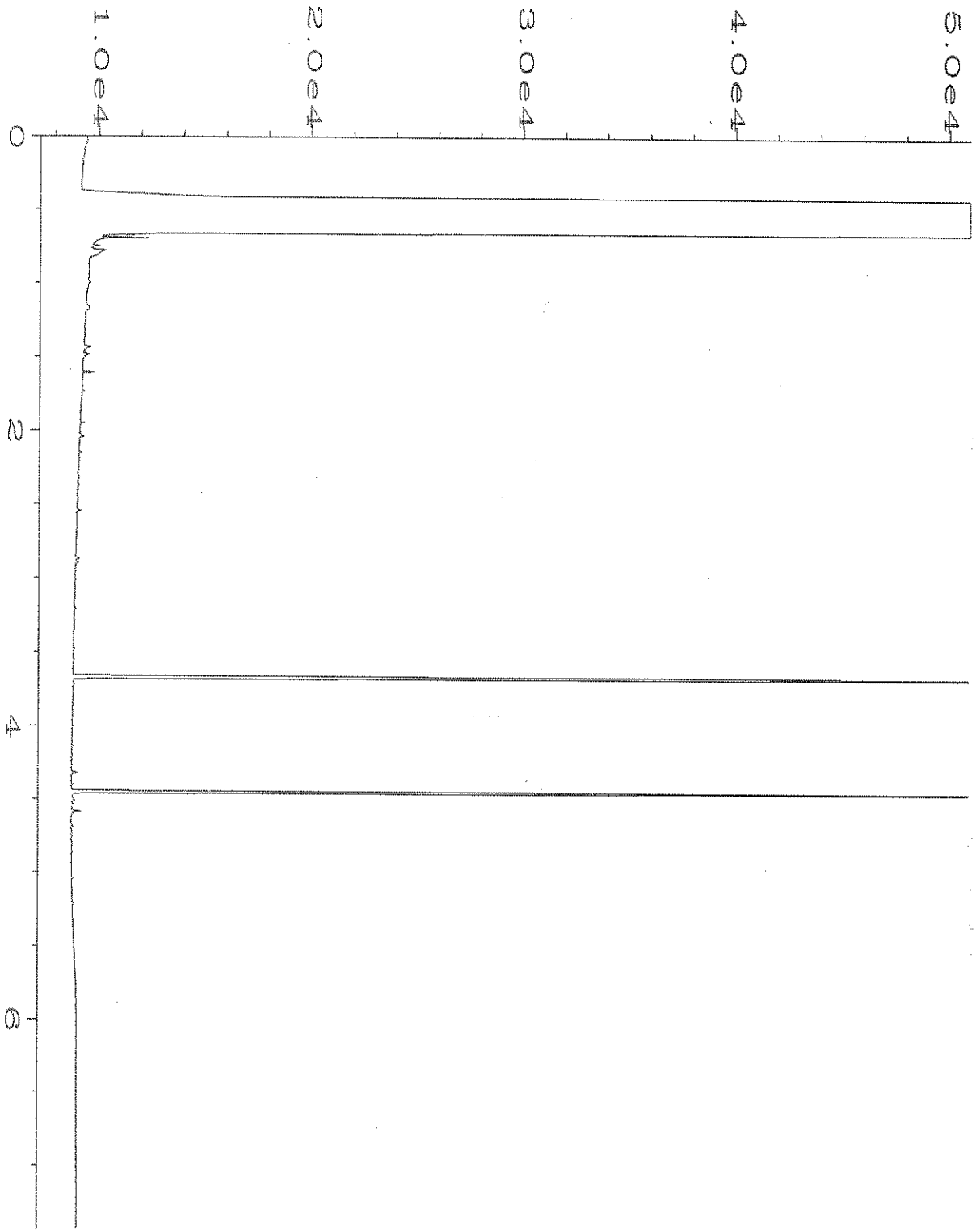
Report Created on	: 28 Jan 19 07:45 AM	Analysis Method	: DX.MTH



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Operator : TL
Instrument : GC1
Sample Name : 901297-19
Run Time Bar Code:
Acquired on : 25 Jan 19 08:27 AM
Report Created on: 28 Jan 19 07:46 AM

Page Number : 1
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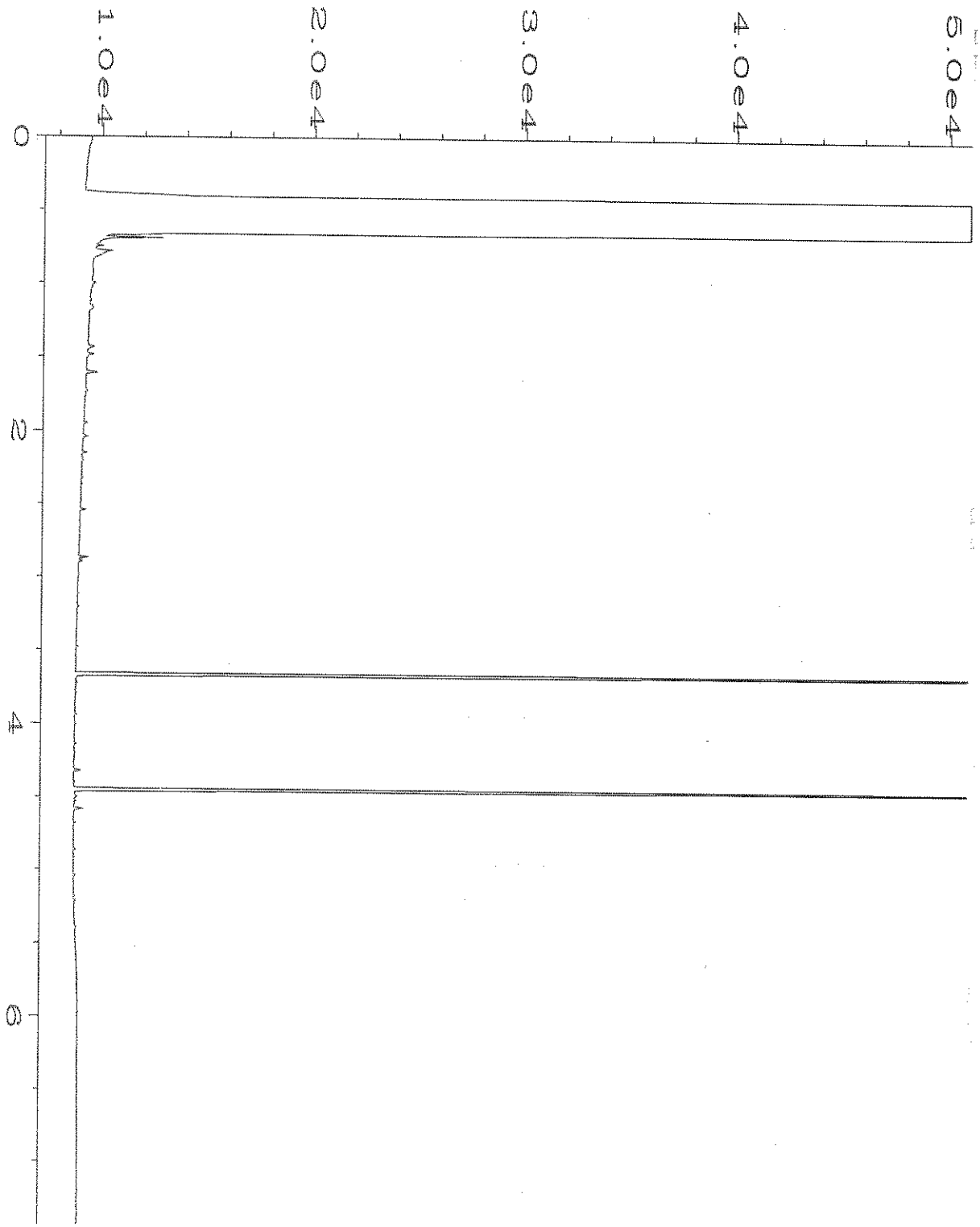
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



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Operator : TL
Instrument : GC1
Sample Name : 901297-27
Run Time Bar Code:
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Report Created on: 28 Jan 19 07:46 AM

Page Number : 1
Vial Number : 13
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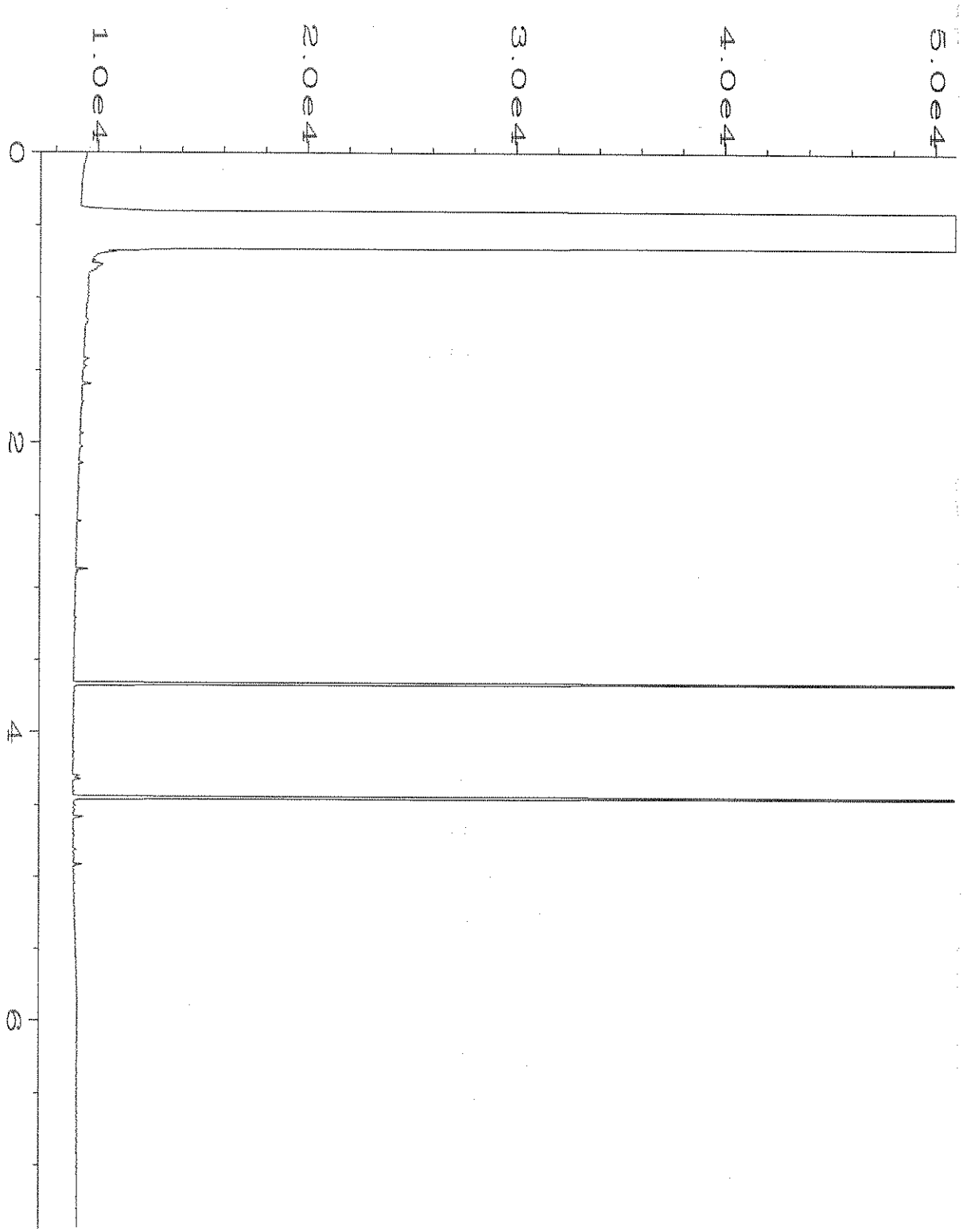
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\1\DATA\01-25-19\014F0301.D
Operator : TL
Instrument : GC1
Sample Name : 901297-33
Run Time Bar Code:
Acquired on : 25 Jan 19 08:49 AM
Report Created on: 28 Jan 19 07:46 AM

Page Number : 1
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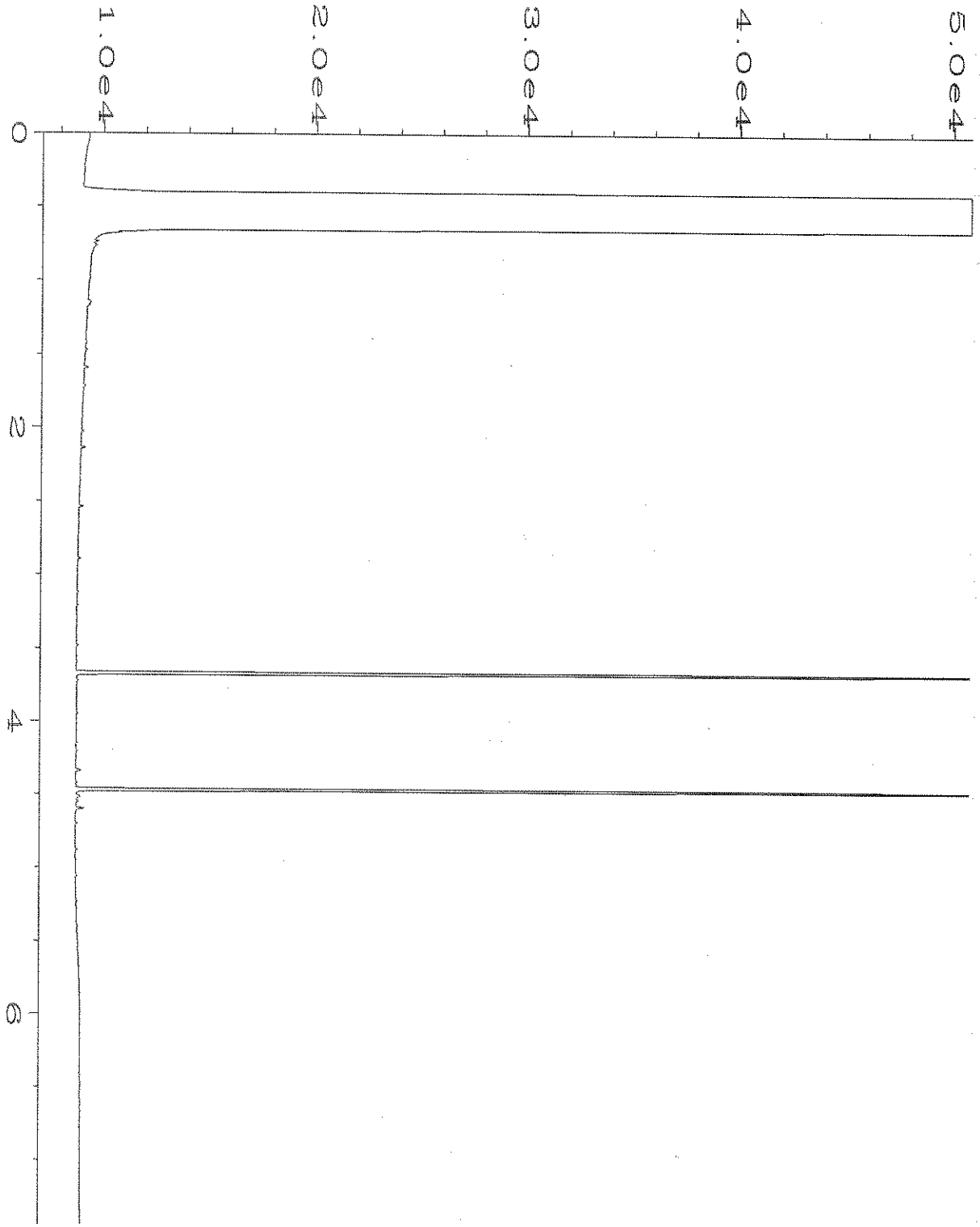
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



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Instrument : GC1
Sample Name : 09-217 mb
Run Time Bar Code:
Acquired on : 25 Jan 19 07:22 AM
Report Created on: 28 Jan 19 07:45 AM

Page Number : 1
Vial Number : 6
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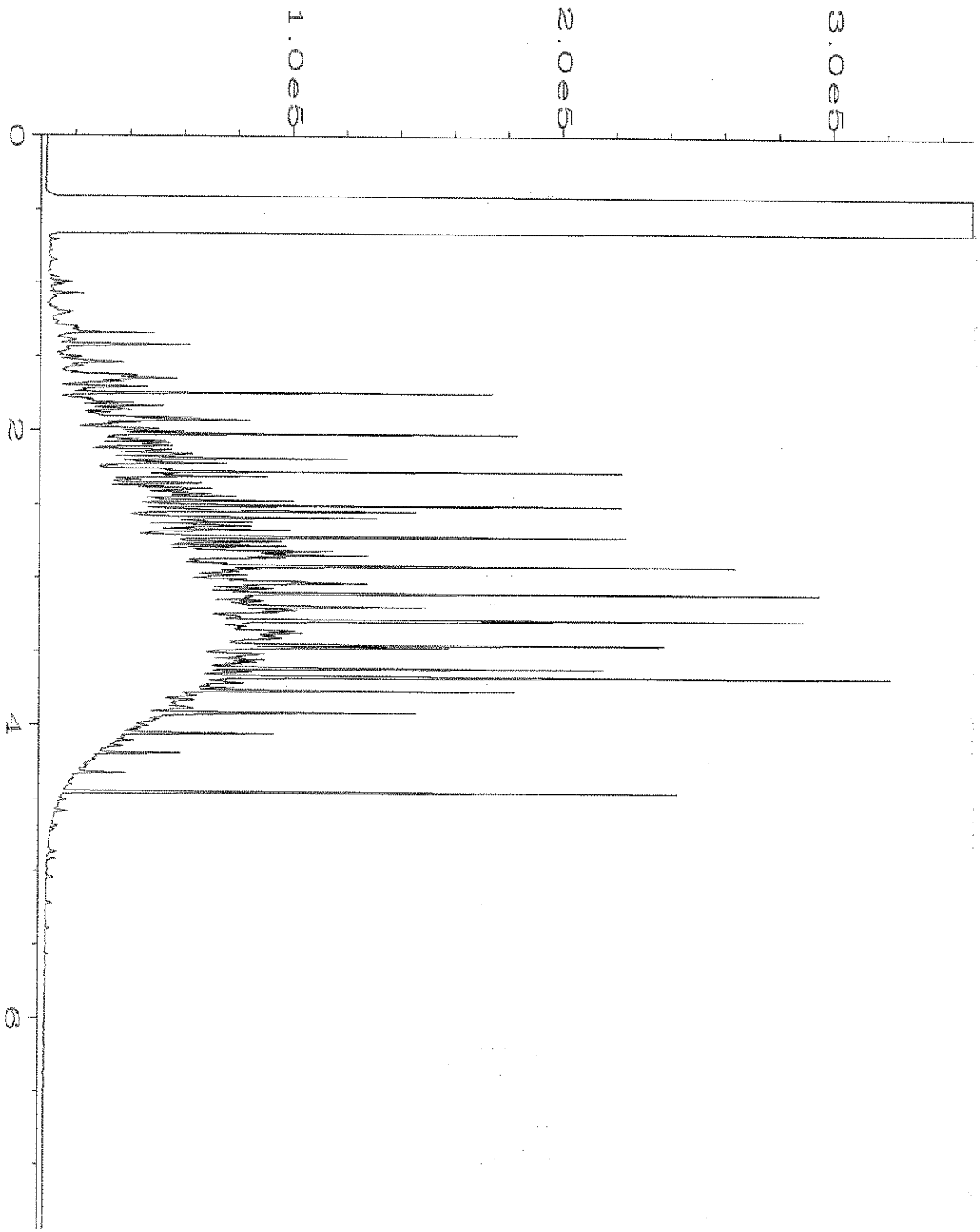
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\01-25-19\005F0801.D		
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Instrument	: GC1	Vial Number	: 5
Sample Name	: 1000 Dx 55-96F	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
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Report Created on:	28 Jan 19 07:50 AM	Analysis Method	: DX.MTH

901297

SAMPLE CHAIN OF CUSTODY

ME 01/23/19

Page # 1 of 4 BTY

Send Report to Siera P., Logan S.

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO. 1400-001

PO #

REMARKS Hold All. PAH to determine analyses required

TURNAROUND TIME
Standard (2 Weeks)
RUSH Hold
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
P01-02.5	P01	2.5	01	1/23/19	0935	Soil	5									X-per SP
P01-05		5	02		0940											1/24/19
P01-07.5		7.5	03		0945			X	X		X					ME
P01-10		10	04		0950											
P01-12.5		12.5	05		0955											
P01-15		15	06		1000											
P01-17.5		17.5	07		1005											
P01-20		20	08		1010											
P02-02.5	P02	2.5	09		1215											
P02-05		5	10		1220											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Logan Schumacher	SoundEarth	1/23/19	1725
Received by:	BISRAT TADESSE	FBI	1/23/19	1730
Relinquished by:				
Received by:				

Samples received at 2 °C

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

901297

SAMPLE CHAIN OF CUSTODY

ME 01/23/19

Page # 2 of 4 BE4

Send Report to Siera P., Logan S.

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO.: 1400-001

PO #:

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
P02-07.5	P02	7.5	11A-E	1/23/19	1225	soil	5				X					
P02-10		10	12		1230											
P02-12.5		12.5	13		1235											
P02-15		15	14		1240											
P02-17.5		17.5	15		1245											
P02-20	↓	20	16		1250											
P03-02.5	P03	2.5	17		1450											
P03-05		5	18		1455											
P03-07.5		7.5	19		1500			X	X	X						
P03-10	↓	10	20	↓	1505	↓	↓									

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Logan Schumacher	SoundEarth	1/23/19	1725
Received by:		BISRAT TADESSE	FBI	1/23/19	1730
Relinquished by:					
Received by:					

Samples received at 2 °C

90 1297

SAMPLE CHAIN OF CUSTODY ME 01/23/19

VSS

Page # 3 of 4 BTY

Send Report to Siera P., Logan S.

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO. 1400-001

PO #

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
P03-12.5	P03	12.5	21A-E	1/23/19	1510	Soil	5									
P03-15		15	22		1515											
P03-17.5		17.5	23		1520											
P03-20		20	24		1525											
P04-02.5	P04	2.5	25		1540											
P04-05		5	26		1545											
P04-07.5		7.5	27		1550			X	X	X						
P04-10		10	28		1555											
P04-12.5		12.5	29		1600											
P04-15		15	30		1605											

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FORMS\COC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Logan Schumacher	SoundEarth	1/23/19	1725
Received by:		BISRAT TADESSE	FBI	1/23/19	1730
Relinquished by:					
Received by:			Samples received at		~~2~~ °C

901297

SAMPLE CHAIN OF CUSTODY

ME 01/23/19

VJS

Page # 4 of 4 BIY

Send Report to Siera P., Logan S.

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO. 1400-001

PO #

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
POH-17.5	POH	17.5	31A-E	1/23/19	1610	Soil	5									
POH-20	↓	20	32	↓	1615	↓	↓									
Dup-001	Dup-001	—	33	↓	1645	↓	1						X			

LDS
1/23/19

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Logan Schumacher	SoundEarth	1/23/19	1725
Received by:	BIBRAT TADESSE	FBI	1/23/19	1730
Relinquished by:				
Received by:				

Samples ~~received~~ at 2 °C

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

March 11, 2019

Siera Pleskac, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Pleskac:

Included is the amended report from the testing of material submitted on February 22, 2019 from the SOU_1400-001_ 20190222, F&BI 902328 project. The tetrachloroethene and trichloroethene reporting limits were lowered to meet MTCA.

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
SOU0307R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

March 7, 2019

Siera Pleskac, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Pleskac:

Included are the additional results from the testing of material submitted on February 22, 2019 from the SOU_1400-001_ 20190222, F&BI 902328 project. There are 6 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
SOU0307R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 22, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1400-001_ 20190222, F&BI 902328 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
902328 -01	P05-02.5
902328 -02	P05-05
902328 -03	P05-07.5
902328 -04	P05-10
902328 -05	P06-02.5
902328 -06	P06-05
902328 -07	P06-07.5
902328 -08	P06-09.5
902328 -09	P07-05
902328 -10	P07-09
902328 -11	P07-11
902328 -12	P08-02.5
902328 -13	P08-05
902328 -14	P08-07.5
902328 -15	P08-10
902328 -16	P08-12.5
902328 -17	Drum_004_20190222
902328 -18	P05-11

The 8260C matrix spike and matrix spike duplicate failed the relative percent difference for several compounds. In addition, the 8260C laboratory control sample exceeded the acceptance criteria for 2-butanone. The analytes were not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	P08-07.5	Client:	SoundEarth Strategies
Date Received:	02/22/19	Project:	SOU_1400-001_ 20190222
Date Extracted:	03/05/19	Lab ID:	902328-14 1/5
Date Analyzed:	03/05/19	Data File:	030538.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	103	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<2.5	1,3-Dichloropropane	<0.25
Chloromethane	<2.5	Tetrachloroethene	<0.05 j
Vinyl chloride	<0.25	Dibromochloromethane	<0.25
Bromomethane	<2.5	1,2-Dibromoethane (EDB)	<0.25
Chloroethane	<2.5	Chlorobenzene	<0.25
Trichlorofluoromethane	<2.5	Ethylbenzene	11
Acetone	<2.5	1,1,1,2-Tetrachloroethane	<0.25
1,1-Dichloroethene	<0.25	m,p-Xylene	47
Hexane	<1.2	o-Xylene	24
Methylene chloride	<2.5	Styrene	<0.25
Methyl t-butyl ether (MTBE)	<0.25	Isopropylbenzene	5.3
trans-1,2-Dichloroethene	<0.25	Bromoform	<0.25
1,1-Dichloroethane	<0.25	n-Propylbenzene	12
2,2-Dichloropropane	<0.25	Bromobenzene	<0.25
cis-1,2-Dichloroethene	<0.25	1,3,5-Trimethylbenzene	19
Chloroform	<0.25	1,1,2,2-Tetrachloroethane	<0.25
2-Butanone (MEK)	<2.5	1,2,3-Trichloropropane	<0.25
1,2-Dichloroethane (EDC)	<0.25	2-Chlorotoluene	<0.25
1,1,1-Trichloroethane	<0.25	4-Chlorotoluene	<0.25
1,1-Dichloropropene	<0.25	tert-Butylbenzene	0.28
Carbon tetrachloride	<0.25	1,2,4-Trimethylbenzene	67
Benzene	0.75	sec-Butylbenzene	5.7
Trichloroethene	<0.03 j	p-Isopropyltoluene	5.4
1,2-Dichloropropane	<0.25	1,3-Dichlorobenzene	<0.25
Bromodichloromethane	<0.25	1,4-Dichlorobenzene	<0.25
Dibromomethane	<0.25	1,2-Dichlorobenzene	<0.25
4-Methyl-2-pentanone	<2.5	1,2-Dibromo-3-chloropropane	<2.5
cis-1,3-Dichloropropene	<0.25	1,2,4-Trichlorobenzene	<1.2
Toluene	2.0	Hexachlorobutadiene	<1.2
trans-1,3-Dichloropropene	<0.25	Naphthalene	31
1,1,2-Trichloroethane	<0.25	1,2,3-Trichlorobenzene	<1.2
2-Hexanone	<2.5		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1400-001_ 20190222
Date Extracted:	03/05/18	Lab ID:	09-0443 mb
Date Analyzed:	03/05/19	Data File:	030509.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	105	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Date of Report: 03/07/19
Date Received: 02/22/19
Project: SOU_1400-001_ 20190222, F&BI 902328

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

Laboratory Code: 903050-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	10	10	10-56	0
Chloromethane	mg/kg (ppm)	2.5	<0.5	34	31	10-90	9
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	34	31	10-91	9
Bromomethane	mg/kg (ppm)	2.5	<0.5	45	41	10-110	9
Chloroethane	mg/kg (ppm)	2.5	<0.5	46	40	10-101	14
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	37	34	10-95	8
Acetone	mg/kg (ppm)	12.5	<0.5	75	80	11-141	6
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	55	50	22-107	10
Hexane	mg/kg (ppm)	2.5	<0.25	35	37	10-95	6
Methylene chloride	mg/kg (ppm)	2.5	<0.5	75	73	14-128	3
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	73	70	17-134	4
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	63	60	13-112	5
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	66	65	23-115	2
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	59	55	18-117	7
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	73	68	25-120	7
Chloroform	mg/kg (ppm)	2.5	<0.05	70	69	29-117	1
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	82	101	20-133	21 vo
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	71	77	22-124	8
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	68	64	27-112	6
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	68	71	26-107	4
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	63	62	28-126	2
Benzene	mg/kg (ppm)	2.5	<0.03	69	72	26-114	4
Trichloroethene	mg/kg (ppm)	2.5	<0.02	75	80	30-112	6
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	78	86	31-119	10
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	77	83	31-131	7
Dibromomethane	mg/kg (ppm)	2.5	<0.05	72	80	27-124	11
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	96	108	16-147	12
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	80	95	28-137	17
Toluene	mg/kg (ppm)	2.5	<0.05	73	78	34-112	7
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	77	93	30-136	19
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	80	92	32-126	14
2-Hexanone	mg/kg (ppm)	12.5	<0.5	88	110	17-147	22 vo
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	76	90	29-125	17
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	74	78	25-114	5
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	80	88	32-143	10
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	79	94	32-126	17
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	77	84	37-113	9
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	75	79	34-115	5
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	80	81	35-126	1
m,p-Xylene	mg/kg (ppm)	5	<0.1	77	82	25-125	6
o-Xylene	mg/kg (ppm)	2.5	<0.05	76	78	27-126	3
Styrene	mg/kg (ppm)	2.5	<0.05	79	87	39-121	10
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	78	79	34-123	1
Bromoform	mg/kg (ppm)	2.5	<0.05	83	94	18-155	12
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	77	81	31-120	5
Bromobenzene	mg/kg (ppm)	2.5	<0.05	80	87	40-115	8
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	79	81	24-130	2
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	80	87	27-148	8
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	79	89	33-123	12
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	78	82	39-110	5
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	78	86	39-111	10
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	83	87	36-116	5
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	80	82	35-116	2
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	82	85	33-118	4
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	81	83	32-119	2
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	77	83	38-111	7
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	74	83	39-109	11
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	77	79	40-111	3
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	76	76	47-127	0
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	75	72	31-121	4
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	71	72	24-128	1
Naphthalene	mg/kg (ppm)	2.5	<0.05	82	77	24-139	6
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	74	71	35-117	4

Date of Report: 03/07/19
Date Received: 02/22/19
Project: SOU_1400-001_ 20190222, F&BI 902328

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	43	10-76
Chloromethane	mg/kg (ppm)	2.5	59	34-98
Vinyl chloride	mg/kg (ppm)	2.5	64	42-107
Bromomethane	mg/kg (ppm)	2.5	68	46-113
Chloroethane	mg/kg (ppm)	2.5	66	47-115
Trichlorofluoromethane	mg/kg (ppm)	2.5	69	53-112
Acetone	mg/kg (ppm)	12.5	101	39-147
1,1-Dichloroethene	mg/kg (ppm)	2.5	78	65-110
Hexane	mg/kg (ppm)	2.5	94	55-107
Methylene chloride	mg/kg (ppm)	2.5	87	50-127
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	83	72-122
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	81	71-113
1,1-Dichloroethane	mg/kg (ppm)	2.5	82	74-109
2,2-Dichloropropane	mg/kg (ppm)	2.5	72	64-151
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	85	73-110
Chloroform	mg/kg (ppm)	2.5	84	76-110
2-Butanone (MEK)	mg/kg (ppm)	12.5	123 vo	60-121
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	94	73-111
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	84	72-116
1,1-Dichloropropene	mg/kg (ppm)	2.5	94	72-112
Carbon tetrachloride	mg/kg (ppm)	2.5	82	67-123
Benzene	mg/kg (ppm)	2.5	91	72-106
Trichloroethene	mg/kg (ppm)	2.5	102	72-107
1,2-Dichloropropane	mg/kg (ppm)	2.5	104	74-115
Bromodichloromethane	mg/kg (ppm)	2.5	100	75-126
Dibromomethane	mg/kg (ppm)	2.5	95	76-116
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	126	80-128
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	114	71-138
Toluene	mg/kg (ppm)	2.5	94	74-111
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	110	77-135
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	106	77-116
2-Hexanone	mg/kg (ppm)	12.5	128	70-129
1,3-Dichloropropane	mg/kg (ppm)	2.5	105	75-115
Tetrachloroethene	mg/kg (ppm)	2.5	97	73-111
Dibromochloromethane	mg/kg (ppm)	2.5	103	64-152
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	111	77-117
Chlorobenzene	mg/kg (ppm)	2.5	98	76-109
Ethylbenzene	mg/kg (ppm)	2.5	93	75-112
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	93	76-125
m,p-Xylene	mg/kg (ppm)	5	96	77-115
o-Xylene	mg/kg (ppm)	2.5	91	76-115
Styrene	mg/kg (ppm)	2.5	103	76-119
Isopropylbenzene	mg/kg (ppm)	2.5	93	76-120
Bromoform	mg/kg (ppm)	2.5	108	50-174
n-Propylbenzene	mg/kg (ppm)	2.5	95	77-115
Bromobenzene	mg/kg (ppm)	2.5	103	76-112
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	95	77-121
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	98	74-121
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	102	74-116
2-Chlorotoluene	mg/kg (ppm)	2.5	96	75-113
4-Chlorotoluene	mg/kg (ppm)	2.5	100	77-115
tert-Butylbenzene	mg/kg (ppm)	2.5	101	77-123
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	96	77-119
sec-Butylbenzene	mg/kg (ppm)	2.5	99	78-120
p-Isopropyltoluene	mg/kg (ppm)	2.5	97	77-120
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	99	76-112
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	96	74-109
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	93	75-114
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	93	68-122
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	86	75-122
Hexachlorobutadiene	mg/kg (ppm)	2.5	85	74-130
Naphthalene	mg/kg (ppm)	2.5	91	73-122
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	85	75-117

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

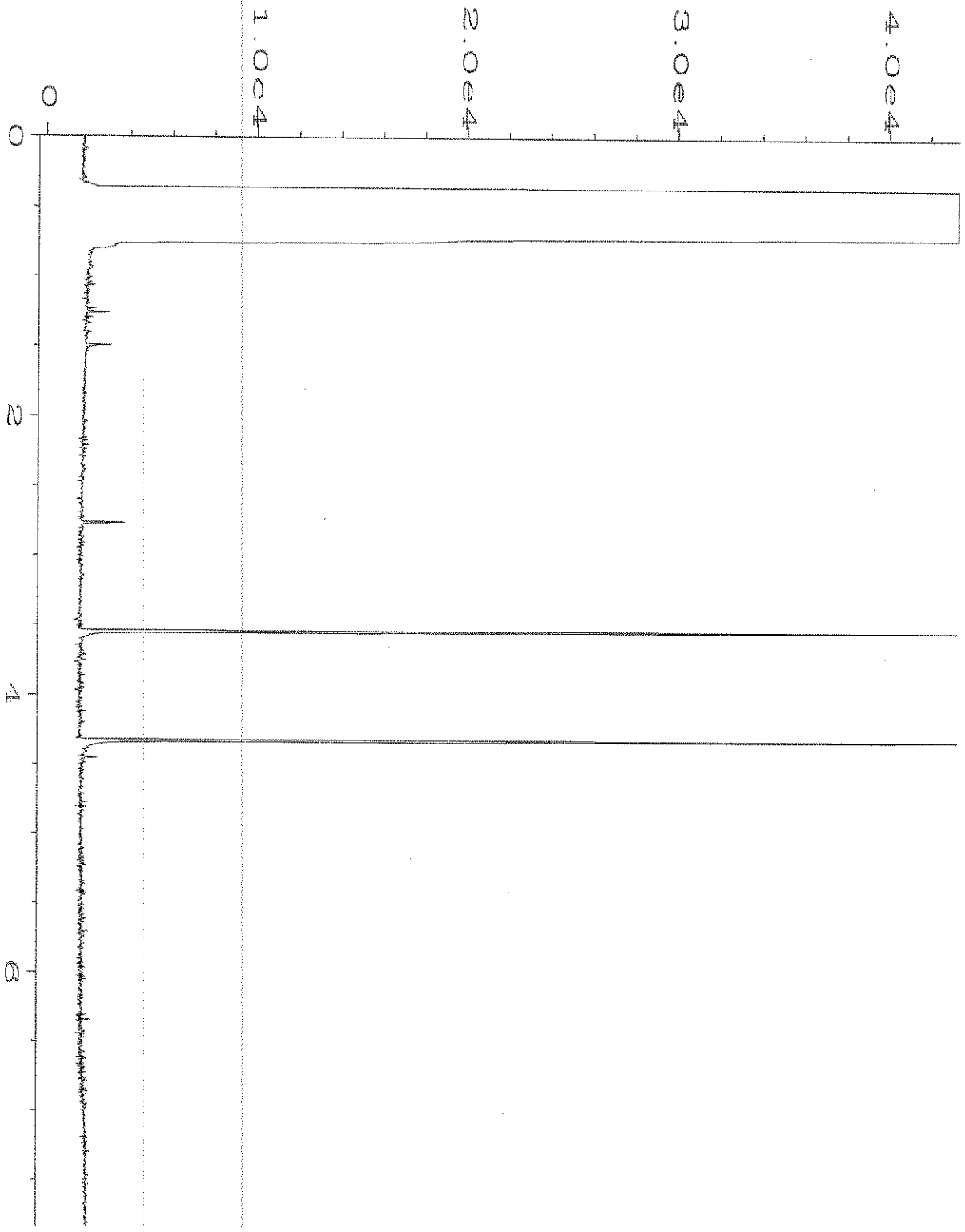
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

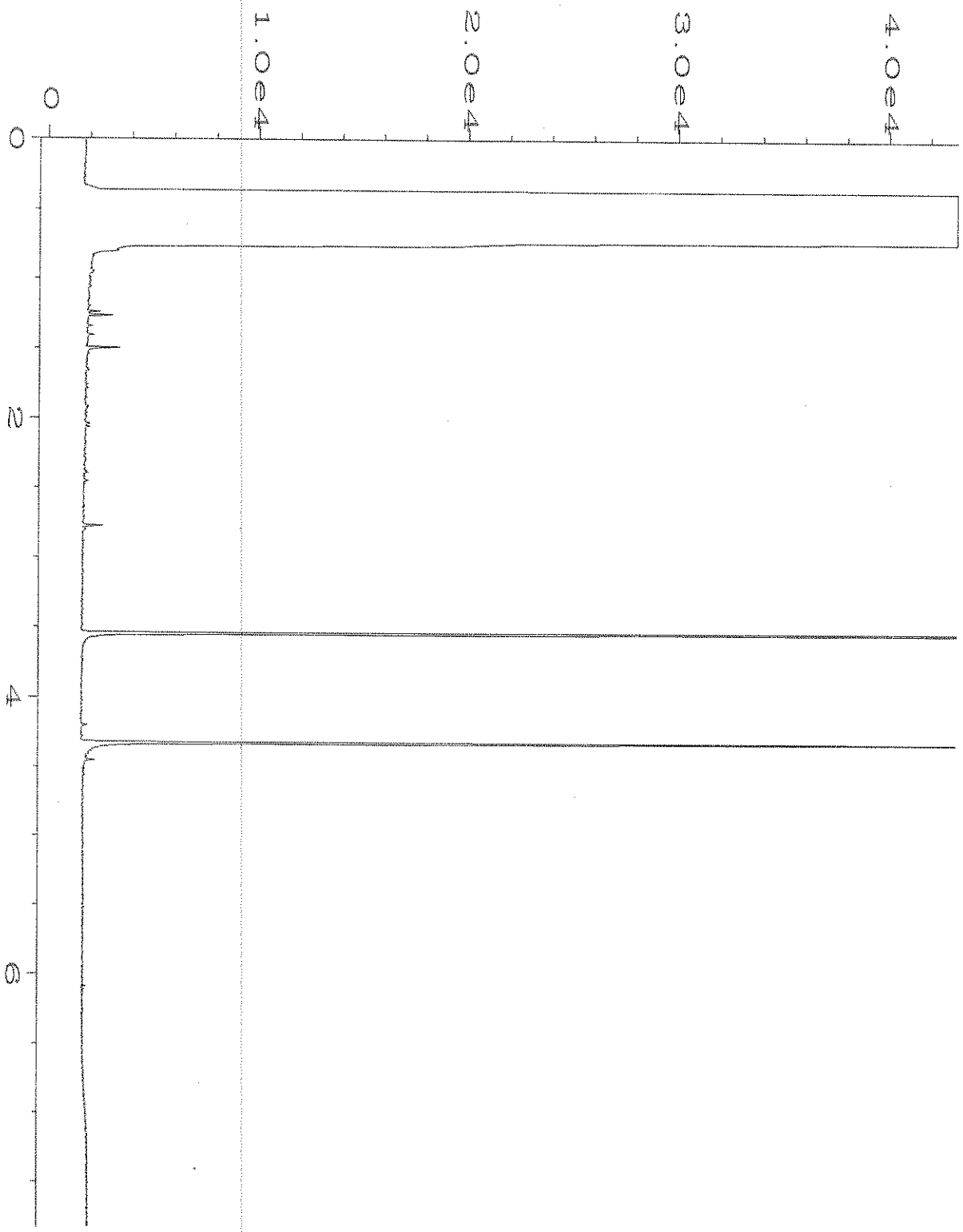
vo - The value reported fell outside the control limits established for this analyte.

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



Data File Name : C:\HPCHEM\4\DATA\02-25-19\015F0301.D
Operator : TL
Instrument : GC#4
Sample Name : 902328-04
Run Time Bar Code:
Acquired on : 25 Feb 19 10:39 AM
Report Created on: 25 Feb 19 01:19 PM

Page Number : 1
Vial Number : 15
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



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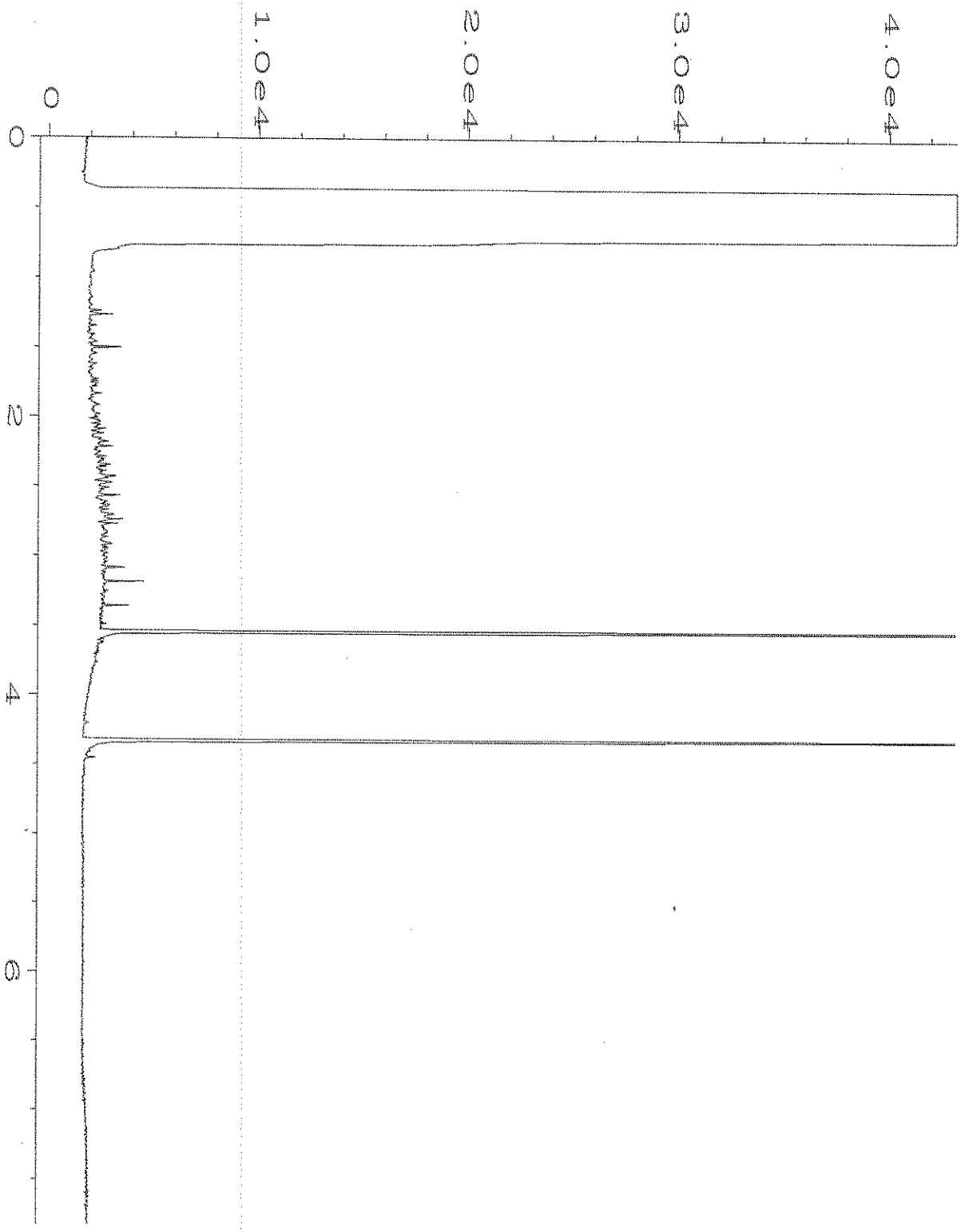
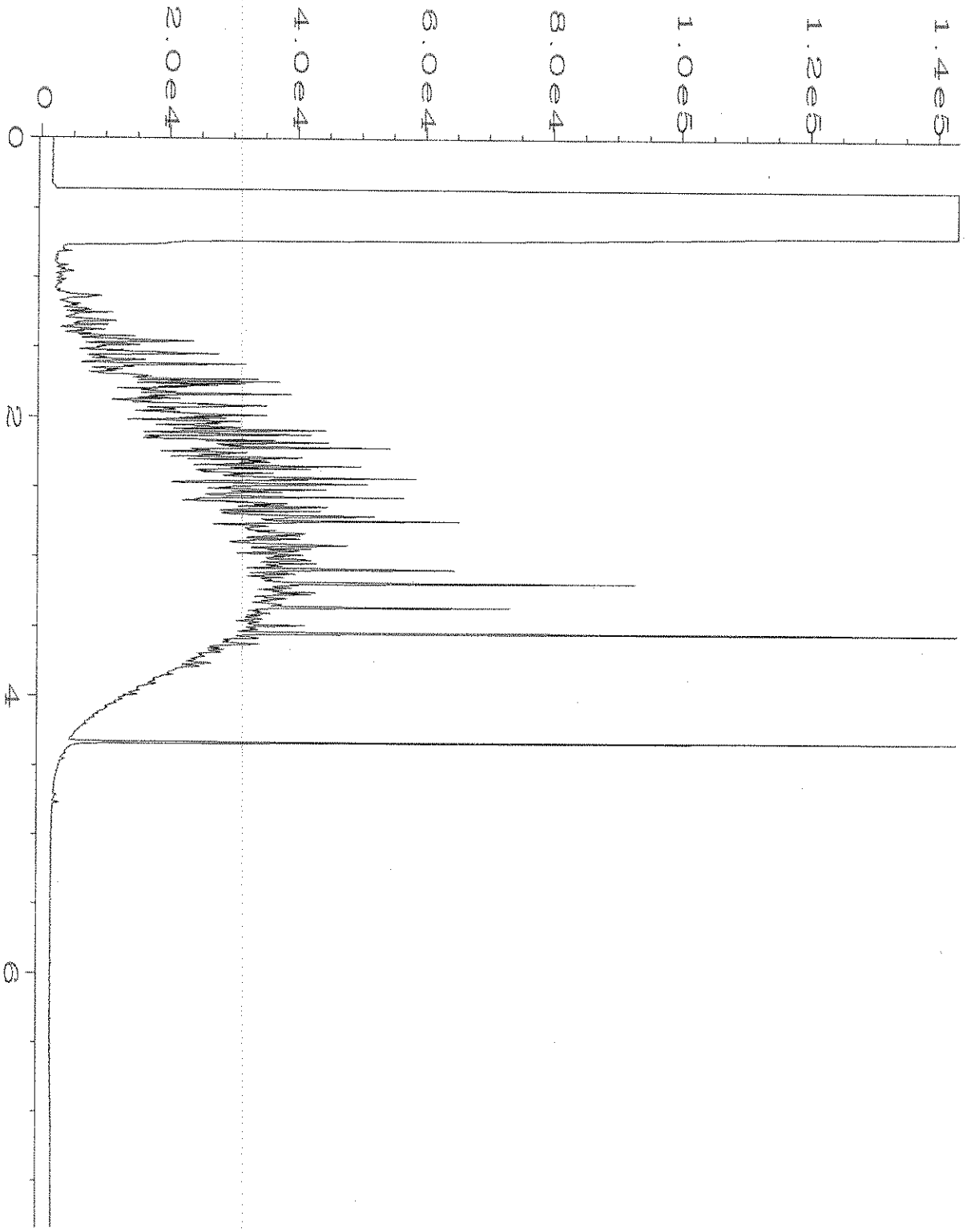
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 16
Sample Name	: 902328-08	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 25 Feb 19 10:51 AM	Instrument Method	: DX.MTH
Report Created on	: 25 Feb 19 01:19 PM	Analysis Method	: DX.MTH



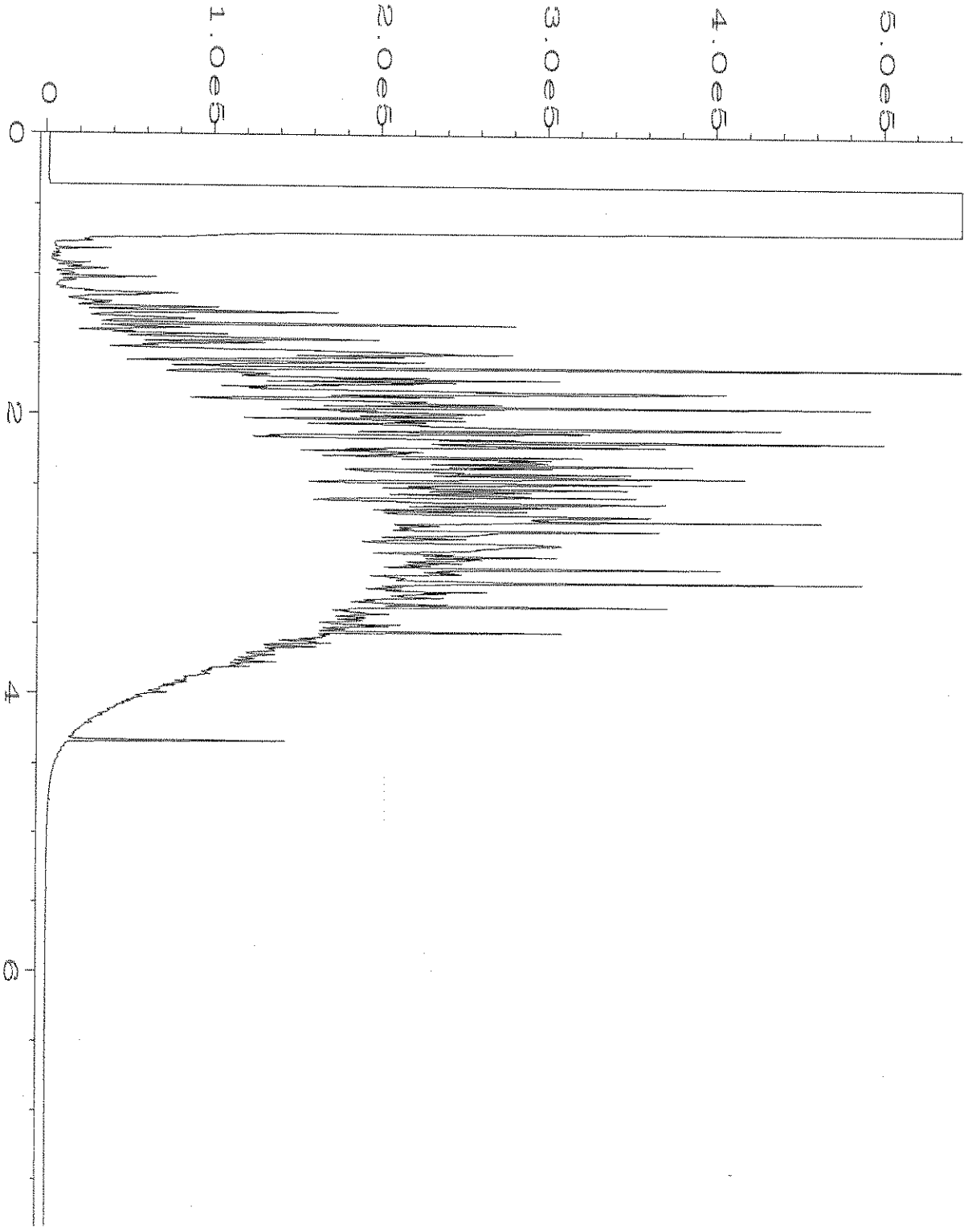
Data File Name : C:\HPCHEM\4\DATA\02-25-19\017F0301.D
Operator : TL
Instrument : GC#4
Sample Name : 902328-10
Run Time Bar Code:
Acquired on : 25 Feb 19 11:03 AM
Report Created on: 25 Feb 19 01:19 PM

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



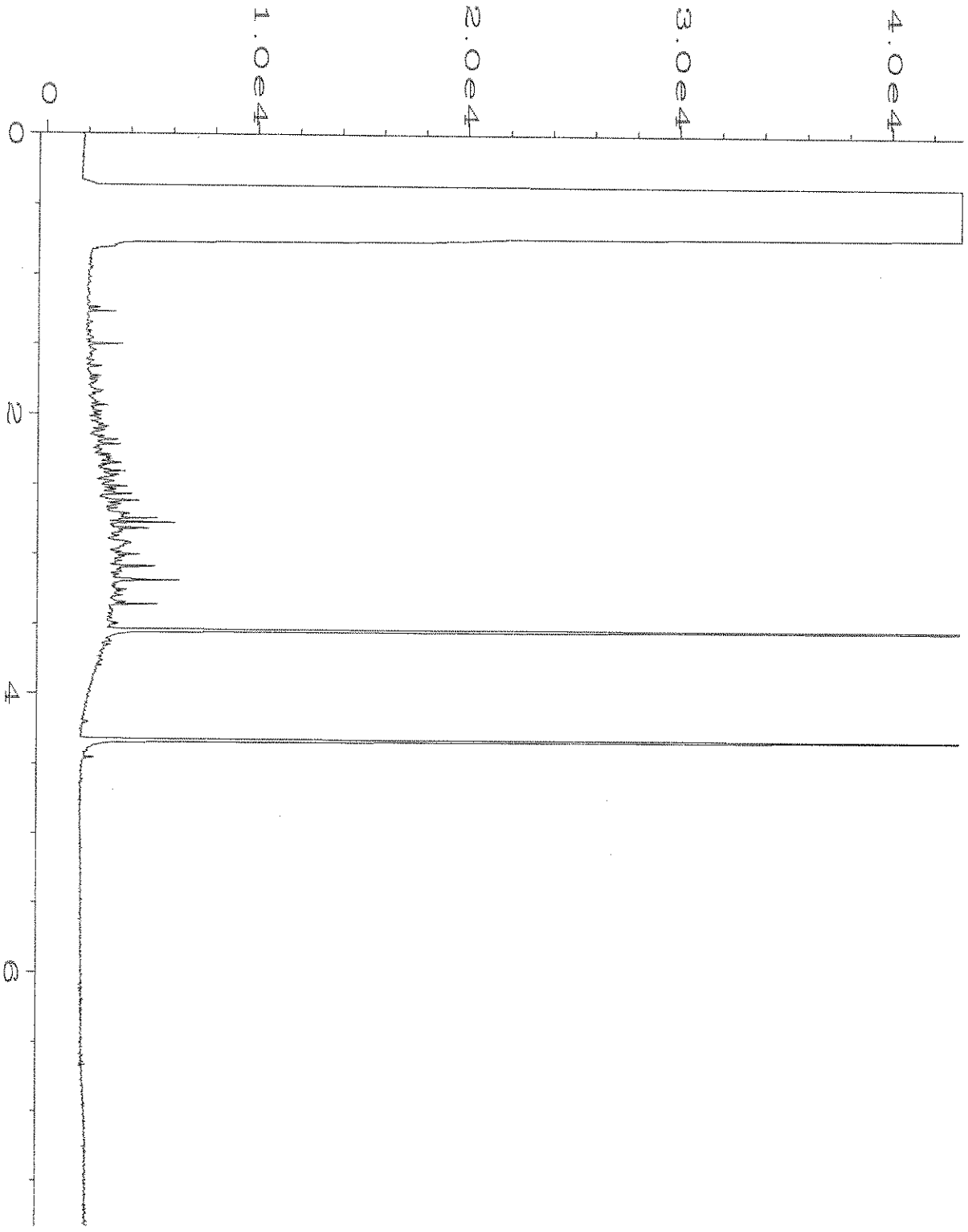
Data File Name : C:\HPCHEM\4\DATA\02-25-19\018F0301.D
Operator : TL
Instrument : GC#4
Sample Name : 902328-11
Run Time Bar Code:
Acquired on : 25 Feb 19 11:15 AM
Report Created on: 25 Feb 19 01:19 PM

Page Number : 1
Vial Number : 18
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH

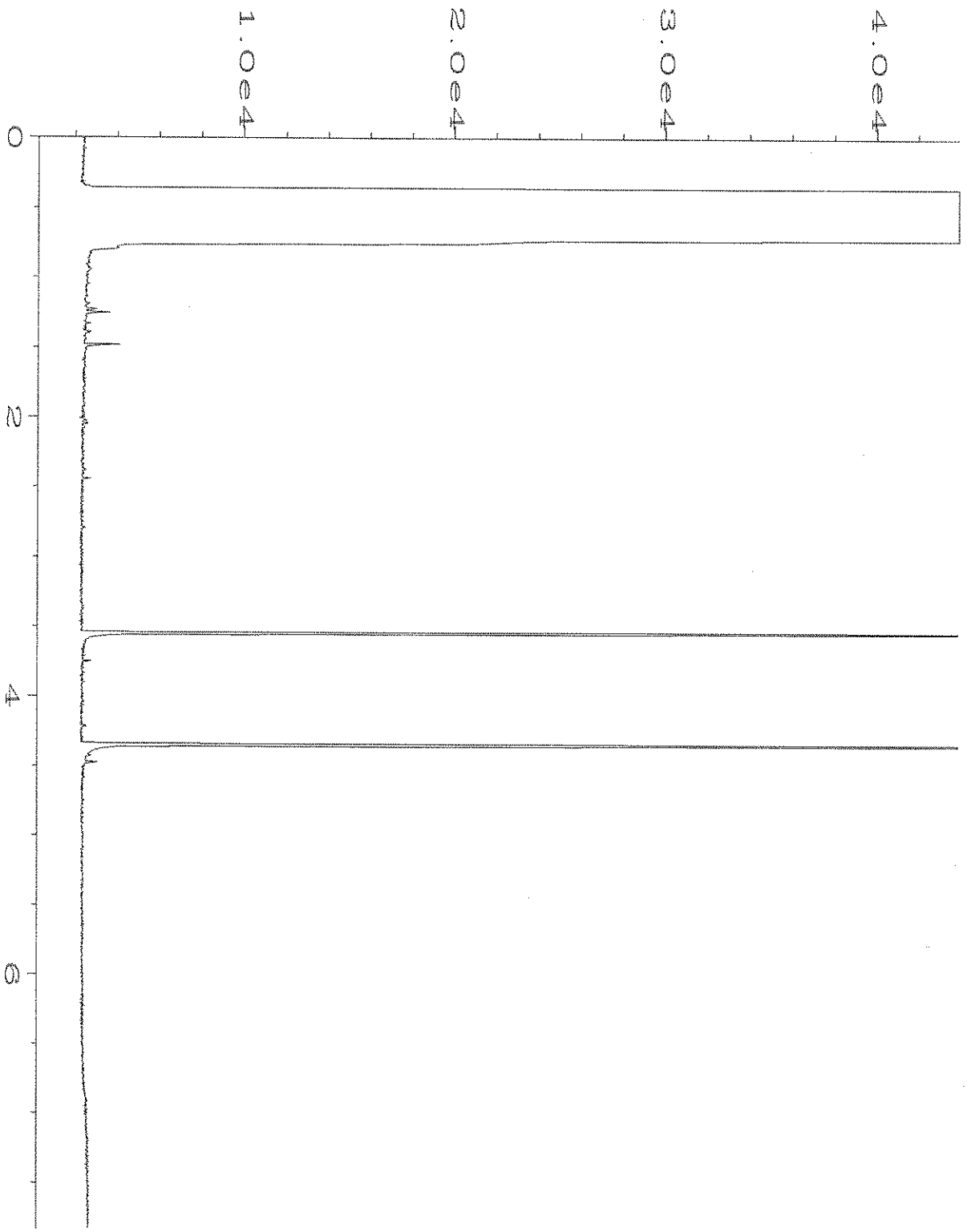


Data File Name : C:\HPCHEM\4\DATA\02-25-19\019F0301.D
Operator : TL
Instrument : GC#4
Sample Name : 902328-14
Run Time Bar Code:
Acquired on : 25 Feb 19 11:27 AM
Report Created on: 25 Feb 19 01:20 PM

Page Number : 1
Vial Number : 19
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH

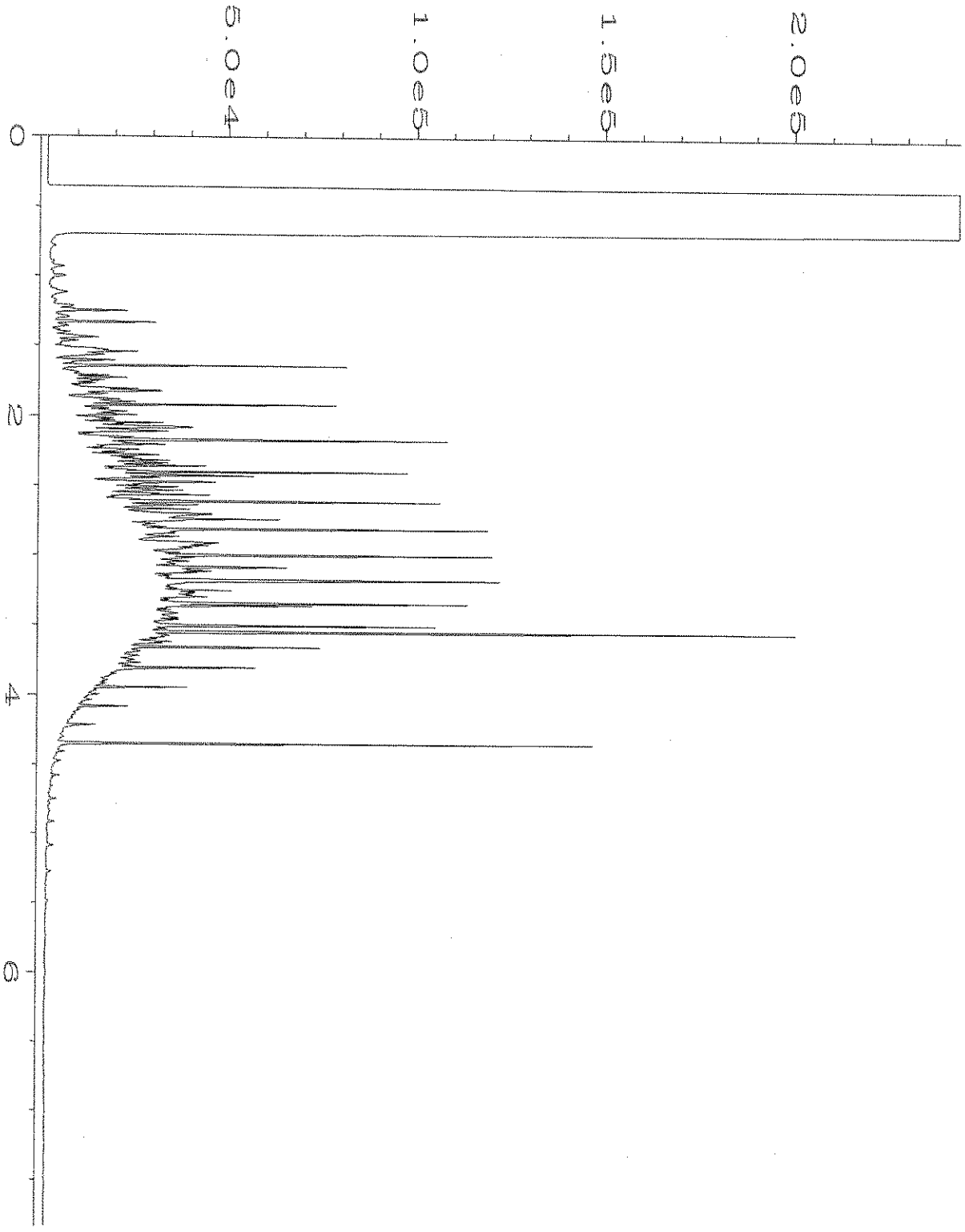


Data File Name	: C:\HPCHEM\4\DATA\02-25-19\020F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 20
Sample Name	: 902328-16	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 25 Feb 19 11:39 AM	Instrument Method	: DX.MTH
Report Created on	: 25 Feb 19 01:20 PM	Analysis Method	: DX.MTH



Data File Name : C:\HPCHEM\4\DATA\02-25-19\006F0301.D
Operator : TL
Instrument : GC#4
Sample Name : 09-406 mb
Run Time Bar Code:
Acquired on : 25 Feb 19 08:54 AM
Report Created on: 25 Feb 19 01:20 PM

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\4\DATA\02-25-19\003F0201.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 3
Sample Name	: 500 Dx 56-21E	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 25 Feb 19 06:34 AM	Instrument Method	: DX.MTH
Report Created on	: 25 Feb 19 01:21 PM	Analysis Method	: DX.MTH

902328

SAMPLE CHAIN OF CUSTODY

ME 02-22-19

D03/3 VS4

Page # 1 of 3

Send Report to Sierra

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO. 1400-001

PO #

REMARKS

Hold all Samples

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
P05-02.5	P05	2.5	01	2/22/19	0900	Soil	5									* HOLD
P05-05		5	02		0905											ALL
P05-~~7.5~~07.5		7.5	03		0910											SAMPLES
P05-10		10	04		0915			X	X	X						X - per SP
P06-02.5	P06	2.5	05		0940											2/22/19
P06-05		5	06		0945											ME
P06-07.5		7.5	07		0950											
P06-09.5		9.5	08		0955			X	X	X						
P07-05	P07	5	09		1020											
P07-09	P07	9	10		1025			X	X	X						PID=505

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Caroline Dickey	SES	2/22/19	2370
Received by:	Liz Webber-Bye	F'B1	2/22/19	2371
Relinquished by:				
Received by:		Samples received at 4 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

SAMPLE CHAIN OF CUSTODY

902328

ME 02-22-19

Page # 2 of 3

Send Report to Siera P...

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO. 1400-001

PO #

REMARKS Hold All Samples

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
P07-11	P07	11	11 A-E	2/22/19	1025	Soil	5	X	X	X						◆ per SP 2-day 3/4/19 ML HOLD Sample based on P07-10
P08-02.5	P08	2.5	12		1125											ALL SAMPLES
P08-05		5	13		1130											
P08-07.5		7.5	14		1135			X	X	X	◆					PID = 505
P08-10		10	15		1140											60s
P08-12.5		12.5	16		1145			X	X	X						50s

CDD 2/22/19

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Caroline Dicney	SES	2/22/19	1437
Received by:	Liz Webber	FTBI	2/22/19	1437
Relinquished by:				
Received by:		Samples received at 4 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

902328

SAMPLE CHAIN OF CUSTODY

ME 02-22-19

D03/154

Page # 3 of 3

Send Report to Siera P...

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS *(signature)*

PROJECT NAME/NO. 1400-001

PO #

REMARKS Hold SAMPLE

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
Dnm_004-20190222	Dnm 004	—	17	2/22/19	1100	Soil	1						X			
POS-11			18A-E	2/22/19	920	Soil	4									Sample added in Lab EWB 2/22

CED 2/22/19

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by:	Caroline Dickey	SES	2/22/19	1432
Seattle, WA 98119-2029	Received by:	Liz Webber-Bye	F&B	2/22/19	1437
Ph. (206) 285-8282	Relinquished by:				
Fax (206) 283-5044	Received by:		Samples received at 4 °C		

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

March 7, 2019

Siera Pleskac, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Pleskac:

Included are the additional results from the testing of material submitted on February 22, 2019 from the SOU_1400-001_ 20190222, F&BI 902328 project. There are 6 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
SOU0307R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 22, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_1400-001_ 20190222, F&BI 902328 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
902328 -01	P05-02.5
902328 -02	P05-05
902328 -03	P05-07.5
902328 -04	P05-10
902328 -05	P06-02.5
902328 -06	P06-05
902328 -07	P06-07.5
902328 -08	P06-09.5
902328 -09	P07-05
902328 -10	P07-09
902328 -11	P07-11
902328 -12	P08-02.5
902328 -13	P08-05
902328 -14	P08-07.5
902328 -15	P08-10
902328 -16	P08-12.5
902328 -17	Drum_004_20190222
902328 -18	P05-11

The 8260C matrix spike and matrix spike duplicate failed the relative percent difference for several compounds. In addition, the 8260C laboratory control sample exceeded the acceptance criteria for 2-butanone. The analytes were not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	P08-07.5	Client:	SoundEarth Strategies
Date Received:	02/22/19	Project:	SOU_1400-001_ 20190222
Date Extracted:	03/05/19	Lab ID:	902328-14 1/5
Date Analyzed:	03/05/19	Data File:	030538.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	103	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<2.5	1,3-Dichloropropane	<0.25
Chloromethane	<2.5	Tetrachloroethene	<0.12
Vinyl chloride	<0.25	Dibromochloromethane	<0.25
Bromomethane	<2.5	1,2-Dibromoethane (EDB)	<0.25
Chloroethane	<2.5	Chlorobenzene	<0.25
Trichlorofluoromethane	<2.5	Ethylbenzene	11
Acetone	<2.5	1,1,1,2-Tetrachloroethane	<0.25
1,1-Dichloroethene	<0.25	m,p-Xylene	47
Hexane	<1.2	o-Xylene	24
Methylene chloride	<2.5	Styrene	<0.25
Methyl t-butyl ether (MTBE)	<0.25	Isopropylbenzene	5.3
trans-1,2-Dichloroethene	<0.25	Bromoform	<0.25
1,1-Dichloroethane	<0.25	n-Propylbenzene	12
2,2-Dichloropropane	<0.25	Bromobenzene	<0.25
cis-1,2-Dichloroethene	<0.25	1,3,5-Trimethylbenzene	19
Chloroform	<0.25	1,1,2,2-Tetrachloroethane	<0.25
2-Butanone (MEK)	<2.5	1,2,3-Trichloropropane	<0.25
1,2-Dichloroethane (EDC)	<0.25	2-Chlorotoluene	<0.25
1,1,1-Trichloroethane	<0.25	4-Chlorotoluene	<0.25
1,1-Dichloropropene	<0.25	tert-Butylbenzene	0.28
Carbon tetrachloride	<0.25	1,2,4-Trimethylbenzene	67
Benzene	0.75	sec-Butylbenzene	5.7
Trichloroethene	<0.1	p-Isopropyltoluene	5.4
1,2-Dichloropropane	<0.25	1,3-Dichlorobenzene	<0.25
Bromodichloromethane	<0.25	1,4-Dichlorobenzene	<0.25
Dibromomethane	<0.25	1,2-Dichlorobenzene	<0.25
4-Methyl-2-pentanone	<2.5	1,2-Dibromo-3-chloropropane	<2.5
cis-1,3-Dichloropropene	<0.25	1,2,4-Trichlorobenzene	<1.2
Toluene	2.0	Hexachlorobutadiene	<1.2
trans-1,3-Dichloropropene	<0.25	Naphthalene	31
1,1,2-Trichloroethane	<0.25	1,2,3-Trichlorobenzene	<1.2
2-Hexanone	<2.5		

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_1400-001_ 20190222
Date Extracted:	03/05/18	Lab ID:	09-0443 mb
Date Analyzed:	03/05/19	Data File:	030509.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	105	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	<0.025
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.5	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.5 ca	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.5	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.1
Hexane	<0.25	o-Xylene	<0.05
Methylene chloride	<0.5	Styrene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Isopropylbenzene	<0.05
trans-1,2-Dichloroethene	<0.05	Bromoform	<0.05
1,1-Dichloroethane	<0.05	n-Propylbenzene	<0.05
2,2-Dichloropropane	<0.05	Bromobenzene	<0.05
cis-1,2-Dichloroethene	<0.05	1,3,5-Trimethylbenzene	<0.05
Chloroform	<0.05	1,1,2,2-Tetrachloroethane	<0.05
2-Butanone (MEK)	<0.5	1,2,3-Trichloropropane	<0.05
1,2-Dichloroethane (EDC)	<0.05	2-Chlorotoluene	<0.05
1,1,1-Trichloroethane	<0.05	4-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	tert-Butylbenzene	<0.05
Carbon tetrachloride	<0.05	1,2,4-Trimethylbenzene	<0.05
Benzene	<0.03	sec-Butylbenzene	<0.05
Trichloroethene	<0.02	p-Isopropyltoluene	<0.05
1,2-Dichloropropane	<0.05	1,3-Dichlorobenzene	<0.05
Bromodichloromethane	<0.05	1,4-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,2-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dibromo-3-chloropropane	<0.5
cis-1,3-Dichloropropene	<0.05	1,2,4-Trichlorobenzene	<0.25
Toluene	<0.05	Hexachlorobutadiene	<0.25
trans-1,3-Dichloropropene	<0.05	Naphthalene	<0.05
1,1,2-Trichloroethane	<0.05	1,2,3-Trichlorobenzene	<0.25
2-Hexanone	<0.5		

Date of Report: 03/07/19
Date Received: 02/22/19
Project: SOU_1400-001_ 20190222, F&BI 902328

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

Laboratory Code: 903050-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	10	10	10-56	0
Chloromethane	mg/kg (ppm)	2.5	<0.5	34	31	10-90	9
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	34	31	10-91	9
Bromomethane	mg/kg (ppm)	2.5	<0.5	45	41	10-110	9
Chloroethane	mg/kg (ppm)	2.5	<0.5	46	40	10-101	14
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	37	34	10-95	8
Acetone	mg/kg (ppm)	12.5	<0.5	75	80	11-141	6
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	55	50	22-107	10
Hexane	mg/kg (ppm)	2.5	<0.25	35	37	10-95	6
Methylene chloride	mg/kg (ppm)	2.5	<0.5	75	73	14-128	3
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	73	70	17-134	4
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	63	60	13-112	5
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	66	65	23-115	2
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	59	55	18-117	7
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	73	68	25-120	7
Chloroform	mg/kg (ppm)	2.5	<0.05	70	69	29-117	1
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	82	101	20-133	21 vo
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	71	77	22-124	8
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	68	64	27-112	6
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	68	71	26-107	4
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	63	62	28-126	2
Benzene	mg/kg (ppm)	2.5	<0.03	69	72	26-114	4
Trichloroethene	mg/kg (ppm)	2.5	<0.02	75	80	30-112	6
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	78	86	31-119	10
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	77	83	31-131	7
Dibromomethane	mg/kg (ppm)	2.5	<0.05	72	80	27-124	11
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	96	108	16-147	12
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	80	95	28-137	17
Toluene	mg/kg (ppm)	2.5	<0.05	73	78	34-112	7
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	77	93	30-136	19
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	80	92	32-126	14
2-Hexanone	mg/kg (ppm)	12.5	<0.5	88	110	17-147	22 vo
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	76	90	29-125	17
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	74	78	25-114	5
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	80	88	32-143	10
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	79	94	32-126	17
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	77	84	37-113	9
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	75	79	34-115	5
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	80	81	35-126	1
m,p-Xylene	mg/kg (ppm)	5	<0.1	77	82	25-125	6
o-Xylene	mg/kg (ppm)	2.5	<0.05	76	78	27-126	3
Styrene	mg/kg (ppm)	2.5	<0.05	79	87	39-121	10
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	78	79	34-123	1
Bromoform	mg/kg (ppm)	2.5	<0.05	83	94	18-155	12
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	77	81	31-120	5
Bromobenzene	mg/kg (ppm)	2.5	<0.05	80	87	40-115	8
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	79	81	24-130	2
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	80	87	27-148	8
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	79	89	33-123	12
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	78	82	39-110	5
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	78	86	39-111	10
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	83	87	36-116	5
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	80	82	35-116	2
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	82	85	33-118	4
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	81	83	32-119	2
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	77	83	38-111	7
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	74	83	39-109	11
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	77	79	40-111	3
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	76	76	47-127	0
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	75	72	31-121	4
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	71	72	24-128	1
Naphthalene	mg/kg (ppm)	2.5	<0.05	82	77	24-139	6
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	74	71	35-117	4

Date of Report: 03/07/19
Date Received: 02/22/19
Project: SOU_1400-001_ 20190222, F&BI 902328

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	43	10-76
Chloromethane	mg/kg (ppm)	2.5	59	34-98
Vinyl chloride	mg/kg (ppm)	2.5	64	42-107
Bromomethane	mg/kg (ppm)	2.5	68	46-113
Chloroethane	mg/kg (ppm)	2.5	66	47-115
Trichlorofluoromethane	mg/kg (ppm)	2.5	69	53-112
Acetone	mg/kg (ppm)	12.5	101	39-147
1,1-Dichloroethene	mg/kg (ppm)	2.5	78	65-110
Hexane	mg/kg (ppm)	2.5	94	55-107
Methylene chloride	mg/kg (ppm)	2.5	87	50-127
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	83	72-122
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	81	71-113
1,1-Dichloroethane	mg/kg (ppm)	2.5	82	74-109
2,2-Dichloropropane	mg/kg (ppm)	2.5	72	64-151
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	85	73-110
Chloroform	mg/kg (ppm)	2.5	84	76-110
2-Butanone (MEK)	mg/kg (ppm)	12.5	123 vo	60-121
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	94	73-111
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	84	72-116
1,1-Dichloropropene	mg/kg (ppm)	2.5	94	72-112
Carbon tetrachloride	mg/kg (ppm)	2.5	82	67-123
Benzene	mg/kg (ppm)	2.5	91	72-106
Trichloroethene	mg/kg (ppm)	2.5	102	72-107
1,2-Dichloropropane	mg/kg (ppm)	2.5	104	74-115
Bromodichloromethane	mg/kg (ppm)	2.5	100	75-126
Dibromomethane	mg/kg (ppm)	2.5	95	76-116
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	126	80-128
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	114	71-138
Toluene	mg/kg (ppm)	2.5	94	74-111
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	110	77-135
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	106	77-116
2-Hexanone	mg/kg (ppm)	12.5	128	70-129
1,3-Dichloropropane	mg/kg (ppm)	2.5	105	75-115
Tetrachloroethene	mg/kg (ppm)	2.5	97	73-111
Dibromochloromethane	mg/kg (ppm)	2.5	103	64-152
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	111	77-117
Chlorobenzene	mg/kg (ppm)	2.5	98	76-109
Ethylbenzene	mg/kg (ppm)	2.5	93	75-112
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	93	76-125
m,p-Xylene	mg/kg (ppm)	5	96	77-115
o-Xylene	mg/kg (ppm)	2.5	91	76-115
Styrene	mg/kg (ppm)	2.5	103	76-119
Isopropylbenzene	mg/kg (ppm)	2.5	93	76-120
Bromoform	mg/kg (ppm)	2.5	108	50-174
n-Propylbenzene	mg/kg (ppm)	2.5	95	77-115
Bromobenzene	mg/kg (ppm)	2.5	103	76-112
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	95	77-121
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	98	74-121
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	102	74-116
2-Chlorotoluene	mg/kg (ppm)	2.5	96	75-113
4-Chlorotoluene	mg/kg (ppm)	2.5	100	77-115
tert-Butylbenzene	mg/kg (ppm)	2.5	101	77-123
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	96	77-119
sec-Butylbenzene	mg/kg (ppm)	2.5	99	78-120
p-Isopropyltoluene	mg/kg (ppm)	2.5	97	77-120
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	99	76-112
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	96	74-109
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	93	75-114
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	93	68-122
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	86	75-122
Hexachlorobutadiene	mg/kg (ppm)	2.5	85	74-130
Naphthalene	mg/kg (ppm)	2.5	91	73-122
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	85	75-117

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

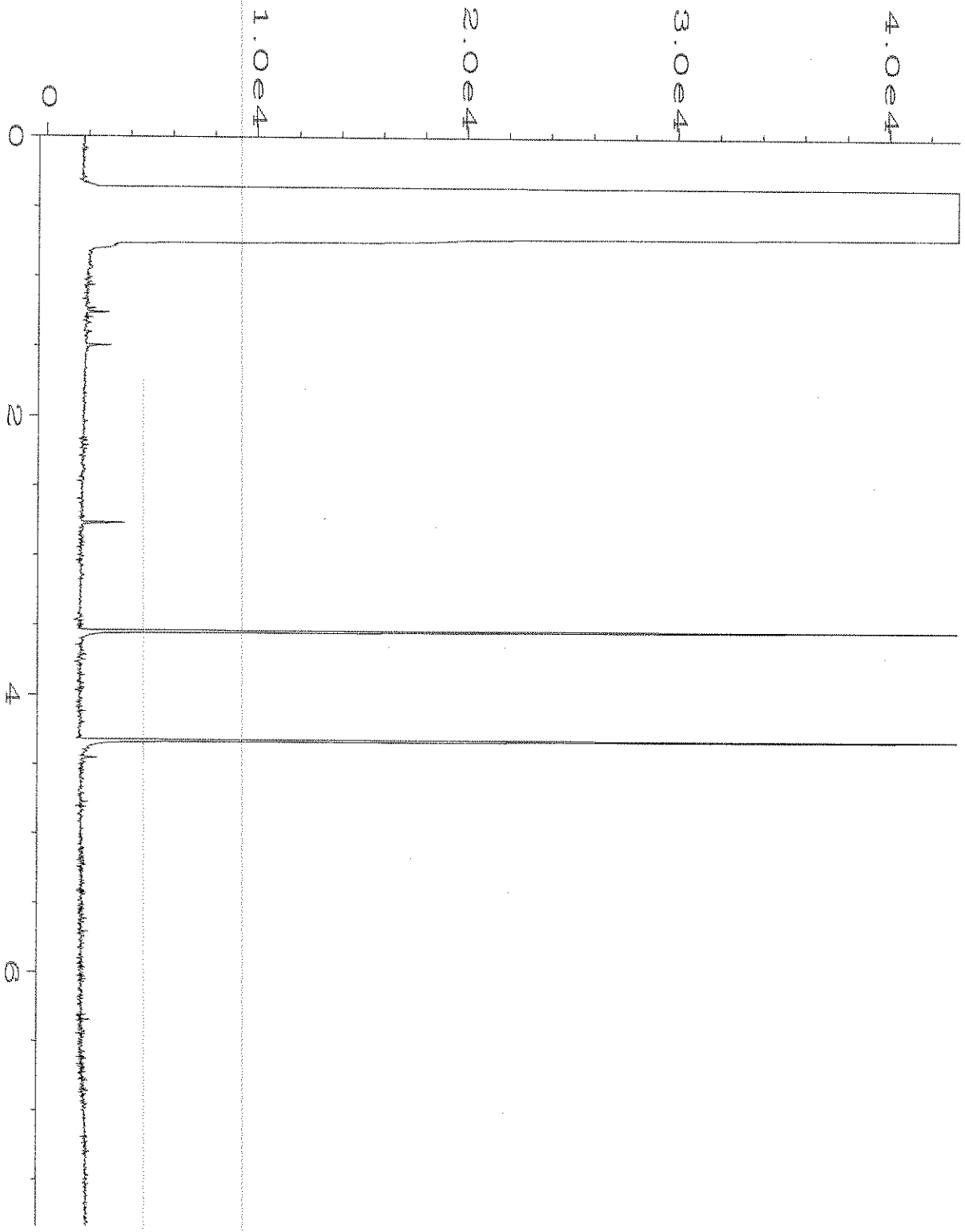
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

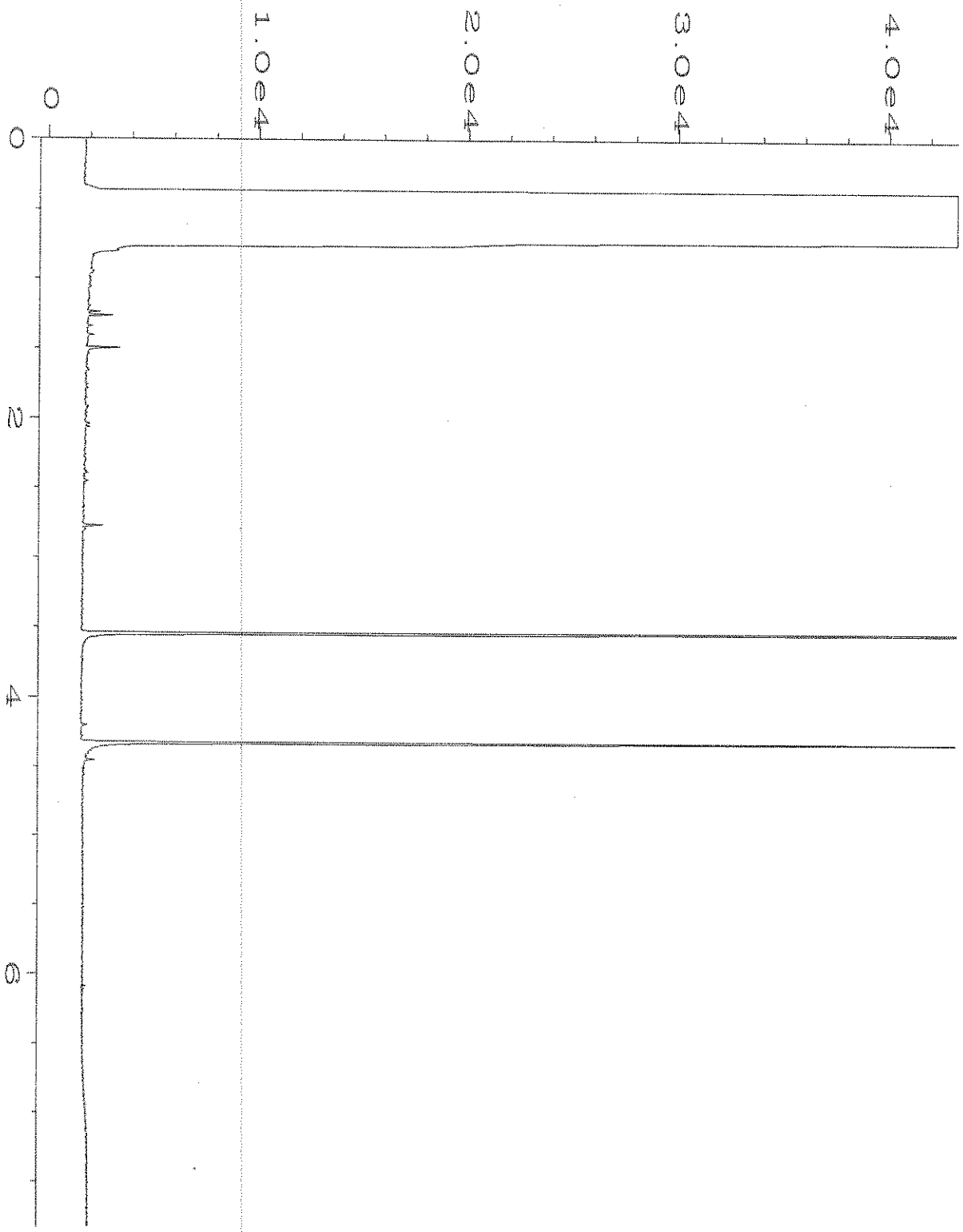
vo - The value reported fell outside the control limits established for this analyte.

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

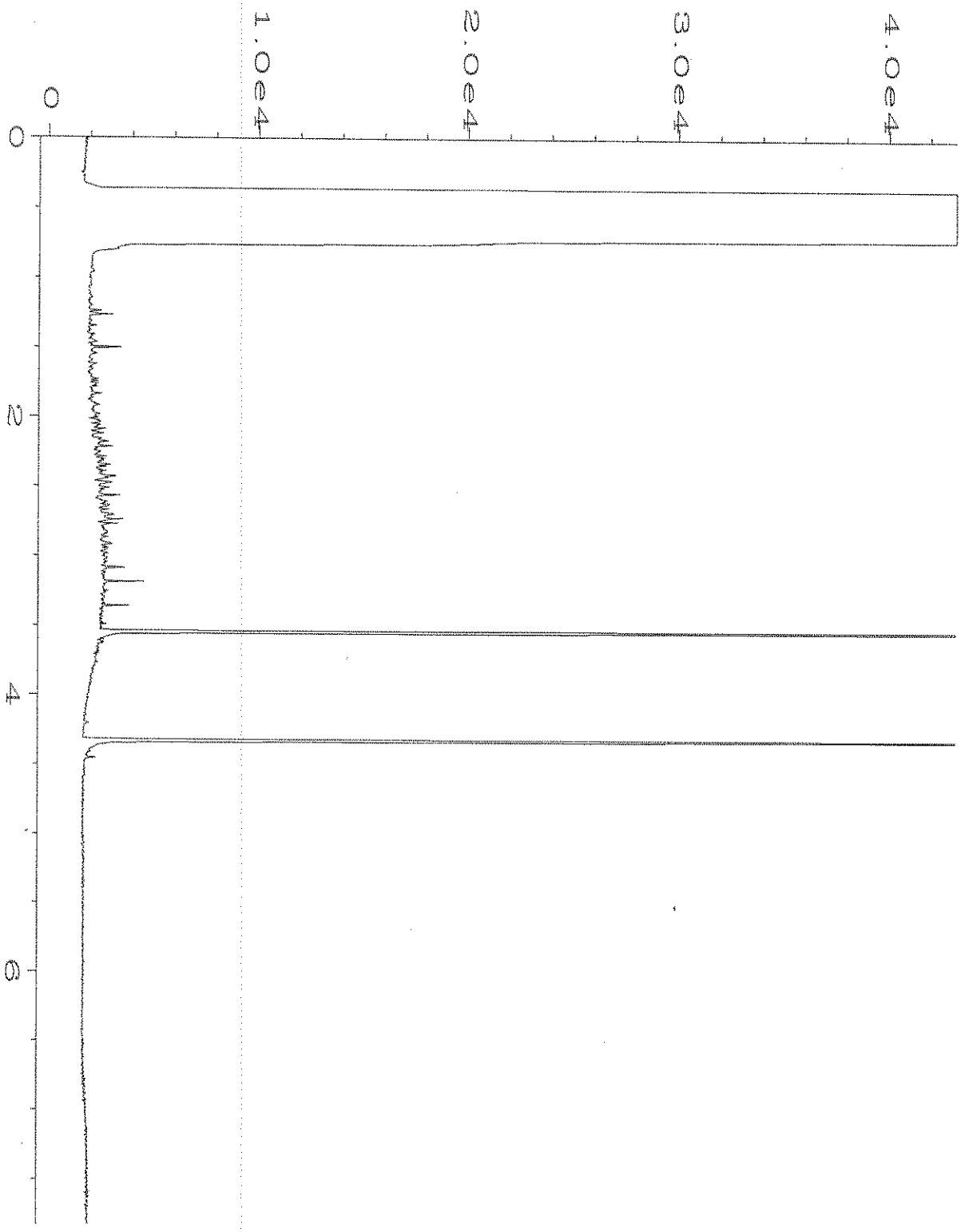


Data File Name : C:\HPCHEM\4\DATA\02-25-19\015F0301.D
Operator : TL
Instrument : GC#4
Sample Name : 902328-04
Run Time Bar Code:
Acquired on : 25 Feb 19 10:39 AM
Report Created on: 25 Feb 19 01:19 PM

Page Number : 1
Vial Number : 15
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH

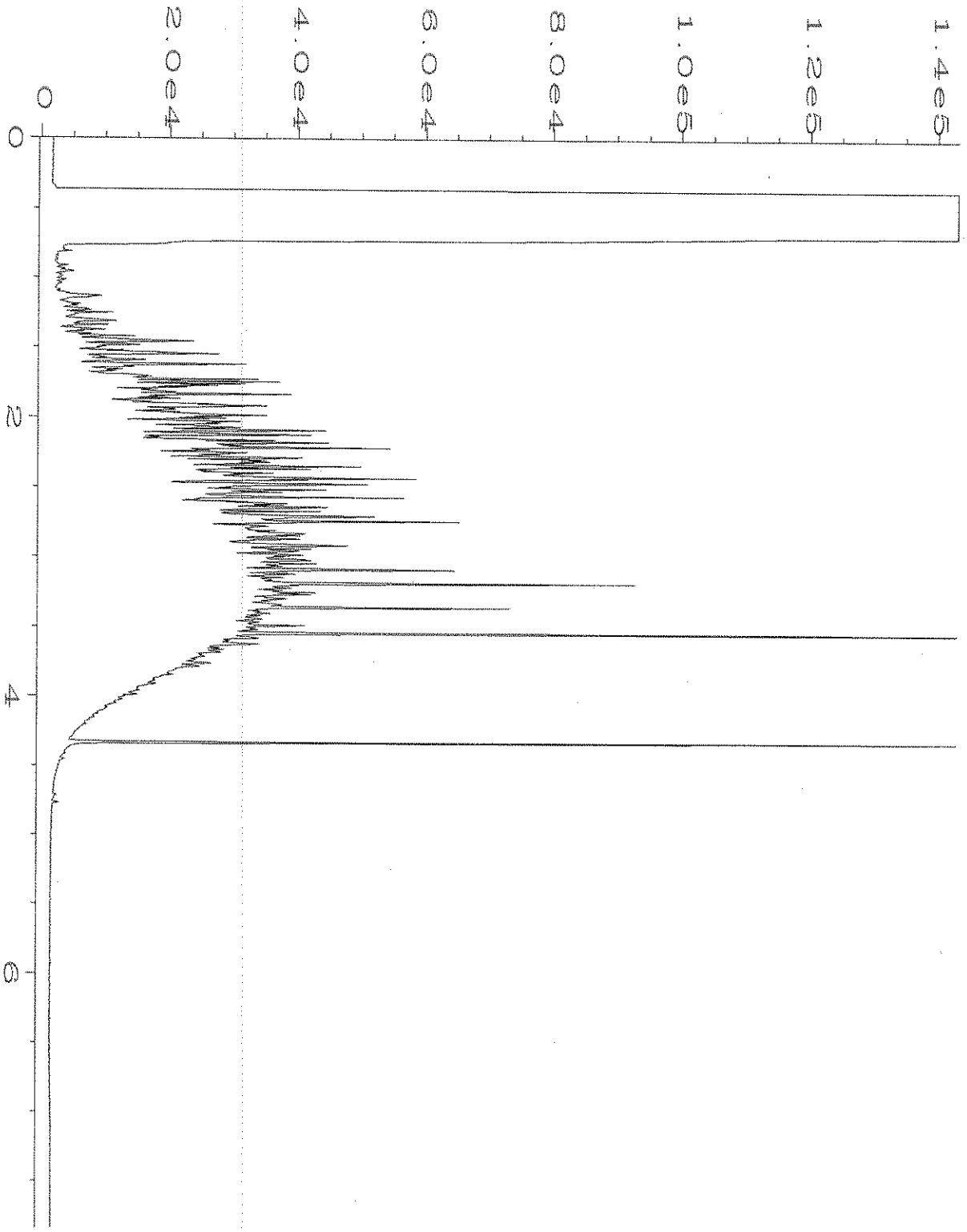


Data File Name	: C:\HPCHEM\4\DATA\02-25-19\016F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 16
Sample Name	: 902328-08	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 25 Feb 19 10:51 AM	Instrument Method	: DX.MTH
Report Created on	: 25 Feb 19 01:19 PM	Analysis Method	: DX.MTH



Data File Name : C:\HPCHEM\4\DATA\02-25-19\017F0301.D
Operator : TL
Instrument : GC#4
Sample Name : 902328-10
Run Time Bar Code:
Acquired on : 25 Feb 19 11:03 AM
Report Created on: 25 Feb 19 01:19 PM

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



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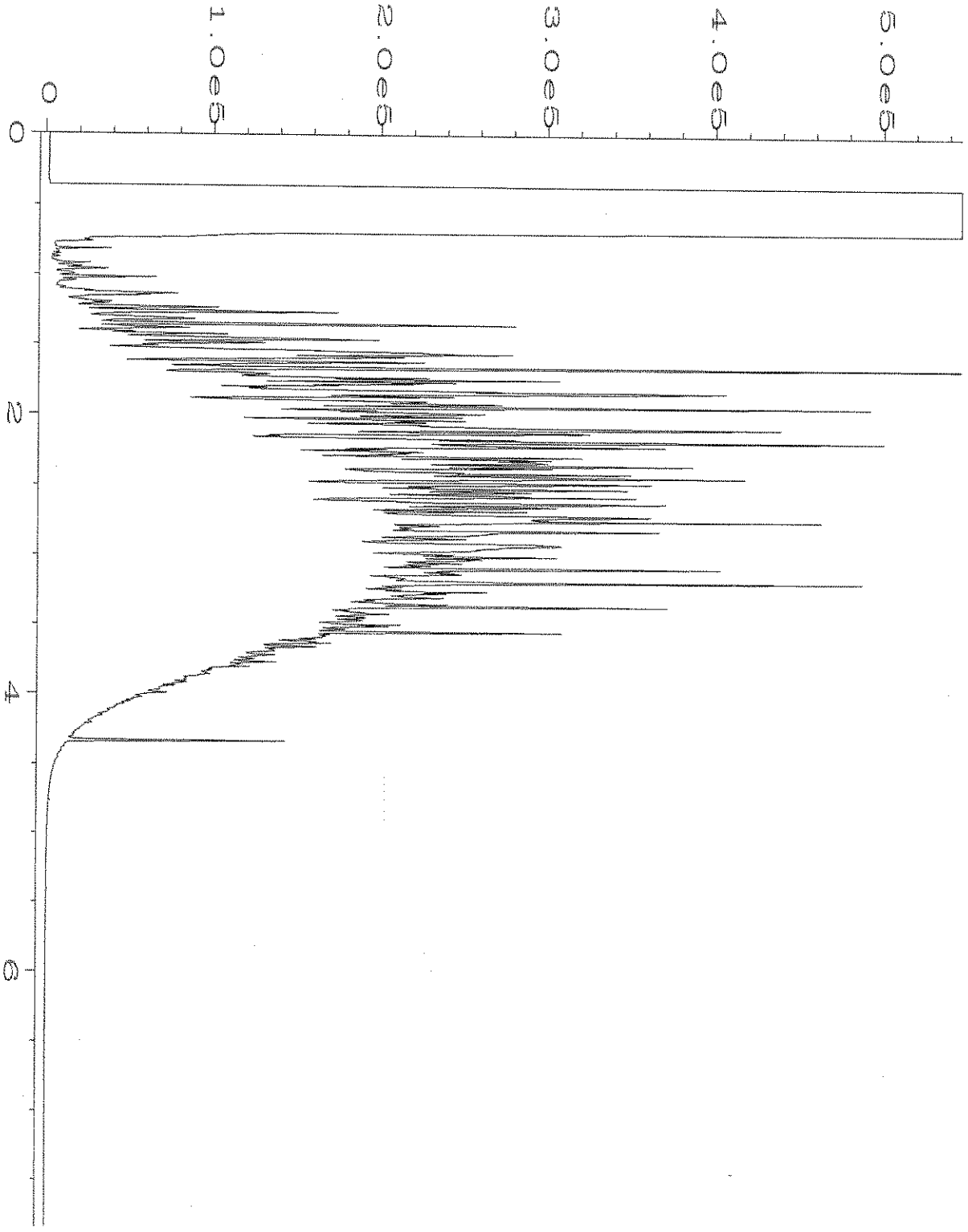
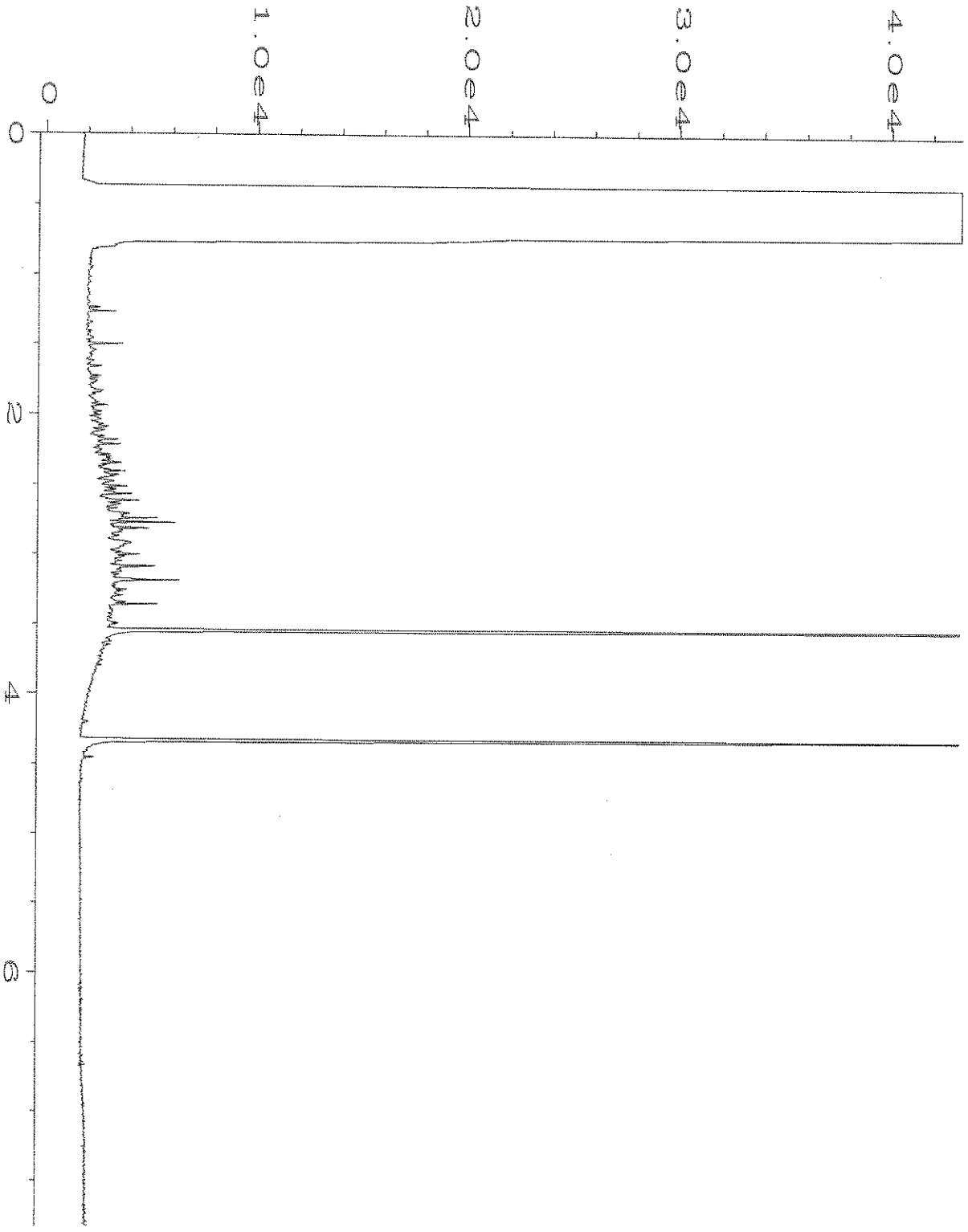
Operator : TL
Instrument : GC#4
Sample Name : 902328-11
Run Time Bar Code:
Acquired on : 25 Feb 19 11:15 AM
Report Created on: 25 Feb 19 01:19 PM

Page Number : 1
Vial Number : 18
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH

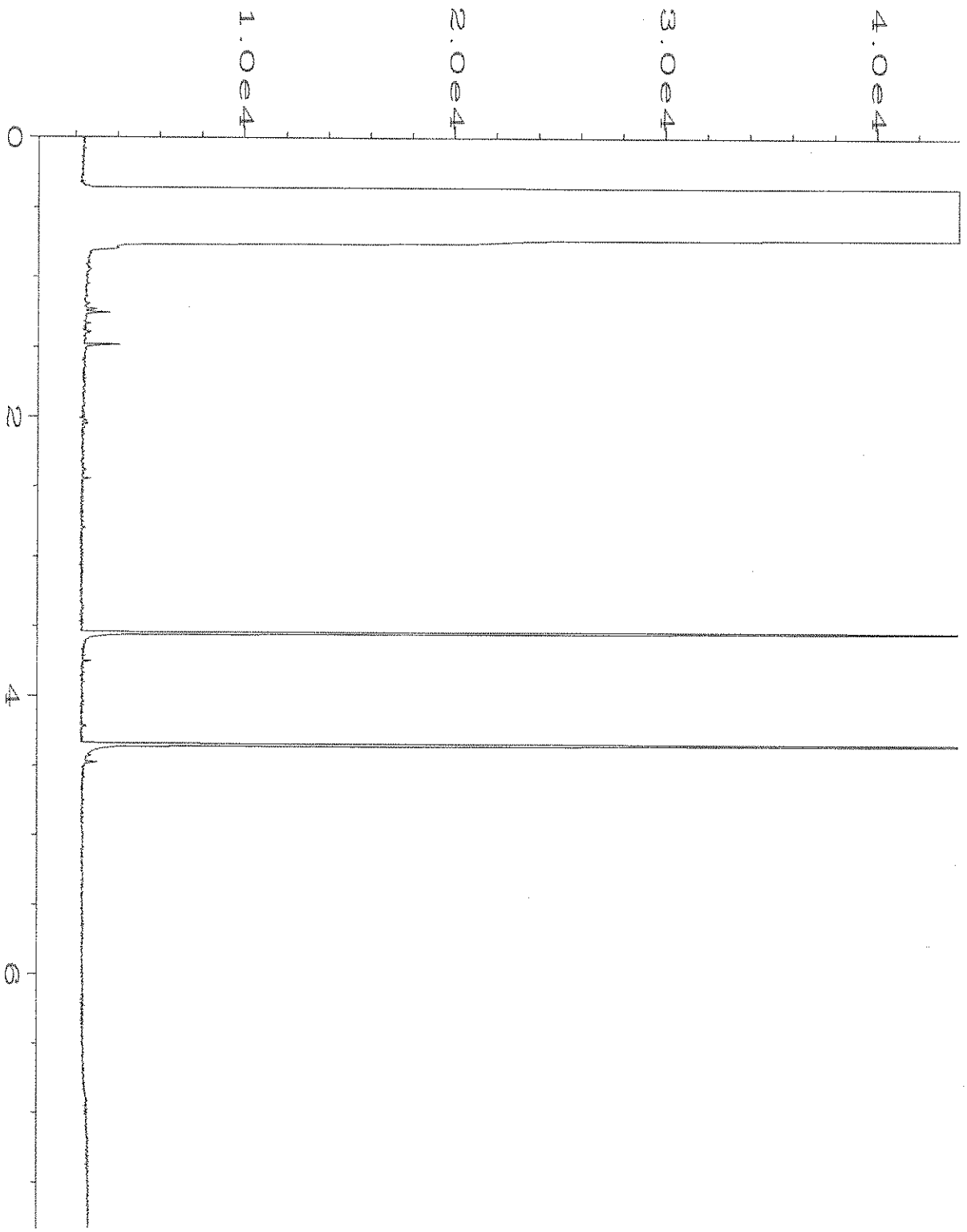


Data File Name : C:\HPCHEM\4\DATA\02-25-19\019F0301.D
Operator : TL
Instrument : GC#4
Sample Name : 902328-14
Run Time Bar Code:
Acquired on : 25 Feb 19 11:27 AM
Report Created on: 25 Feb 19 01:20 PM

Page Number : 1
Vial Number : 19
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH

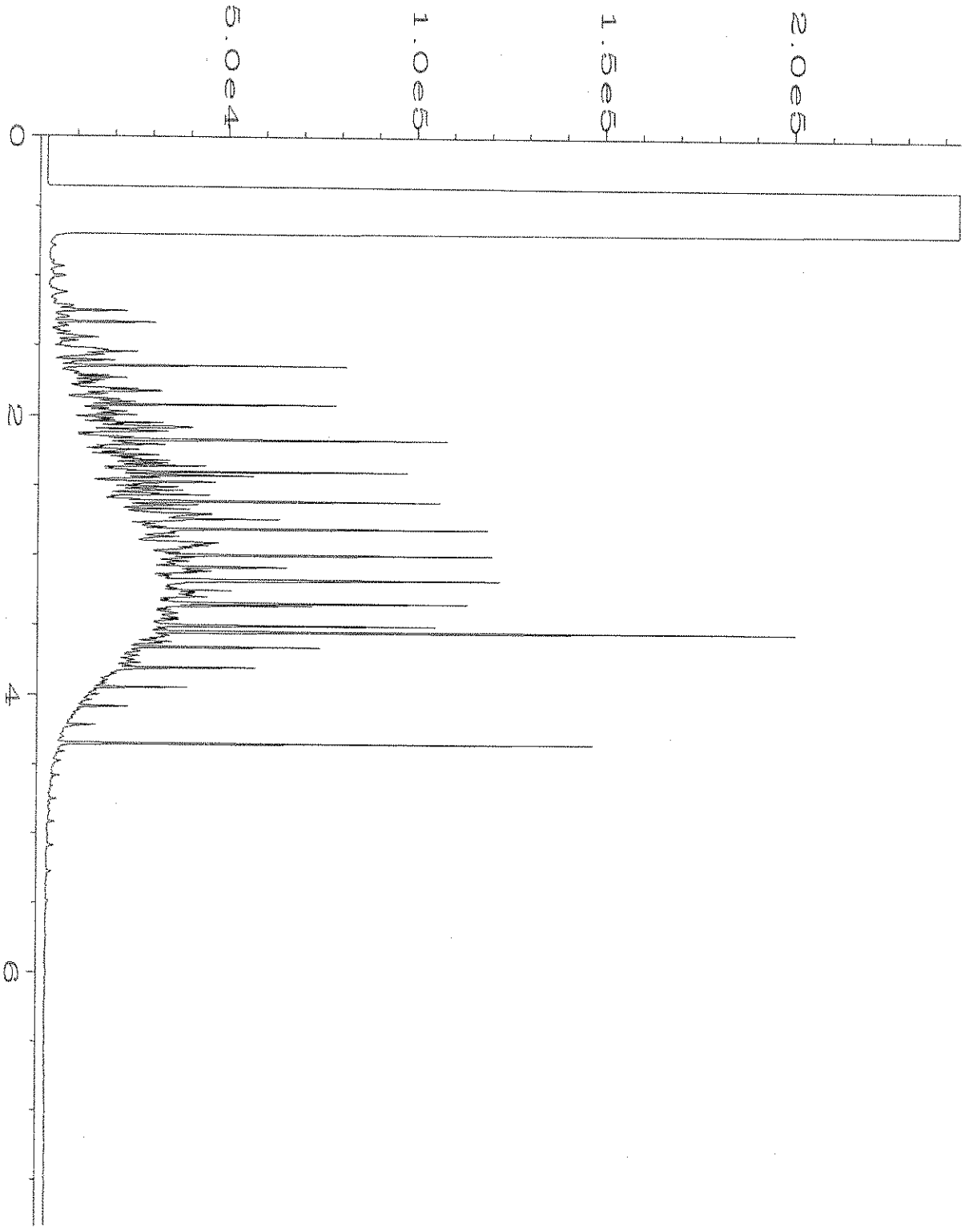


Data File Name	: C:\HPCHEM\4\DATA\02-25-19\020F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 20
Sample Name	: 902328-16	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 25 Feb 19 11:39 AM	Instrument Method	: DX.MTH
Report Created on	: 25 Feb 19 01:20 PM	Analysis Method	: DX.MTH



Data File Name : C:\HPCHEM\4\DATA\02-25-19\006F0301.D
Operator : TL
Instrument : GC#4
Sample Name : 09-406 mb
Run Time Bar Code:
Acquired on : 25 Feb 19 08:54 AM
Report Created on: 25 Feb 19 01:20 PM

Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\4\DATA\02-25-19\003F0201.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 3
Sample Name	: 500 Dx 56-21E	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 25 Feb 19 06:34 AM	Instrument Method	: DX.MTH
Report Created on	: 25 Feb 19 01:21 PM	Analysis Method	: DX.MTH

902328

SAMPLE CHAIN OF CUSTODY

ME 02-22-19

D03/3 VS4

Page # 1 of 3

Send Report to Sierra

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO. 1400-001

PO #

REMARKS

Hold all Samples

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
P05-02.5	P05	2.5	01	2/22/19	0900	Soil	5									* HOLD
P05-05		5	02		0905											ALL
P05-~~7.5~~07.5		7.5	03		0910											SAMPLES
P05-10		10	04		0915			X	X	X						X - per SP
P06-02.5	P06	2.5	05		0940											2/22/19
P06-05		5	06		0945											ME
P06-07.5		7.5	07		0950											
P06-09.5		9.5	08		0955			X	X	X						
P07-05	P07	5	09		1020											
P07-09	P07	9	10		1025			X	X	X						PID=505

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Caroline Dickey	SES	2/22/19	2370
Received by:	Liz Webber-Bye	F'B1	2/22/19	2371
Relinquished by:				
Received by:		Samples received at 4 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

SAMPLE CHAIN OF CUSTODY

902328

ME 02-22-19

Page # 2 of 3

Send Report to Siera P...

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO. 1400-001

PO #

REMARKS Hold All Samples

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
P07-11	P07	11	11 A-E	2/22/19	1025	Soil	5	X	X	X						◆ per SP 2-day 3/4/19 ML HOLD Sample based on P07-10
P08-02.5	P08	2.5	12		1125											ALL SAMPLES
P08-05		5	13		1130											
P08-07.5		7.5	14		1135			X	X	X	◆					PID = 505
P08-10		10	15		1140											60s
P08-12.5		12.5	16		1145			X	X	X						50s

CDD 2/22/19

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Caroline Dicney	SES	2/22/19	1437
Received by:	Liz Webber	FTBI	2/22/19	1437
Relinquished by:				
Received by:		Samples received at 4 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

902328

SAMPLE CHAIN OF CUSTODY

ME 02-22-19

D03/154

Page # 3 of 3

Send Report to Siera P...

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS *(signature)*

PROJECT NAME/NO. 1400-001

PO #

REMARKS Hold SAMPLE

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
Dnm_004-20190222	Dnm 004	—	17	2/22/19	1100	Soil	1						X			
POS-11			18A-E	2/22/19	920	Soil	4									Sample added in Lab EWB 2/22

CED 2/22/19

Friedman & Bruya, Inc.	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
3012 16th Avenue West	Relinquished by:	Caroline Dickey	SES	2/22/19	1432
Seattle, WA 98119-2029	Received by:	Liz Webber-Bye	F&B	2/22/19	1437
Ph. (206) 285-8282	Relinquished by:				
Fax (206) 283-5044	Received by:		Samples received at 4 °C		

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

April 12, 2019

Siera Pleskac, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

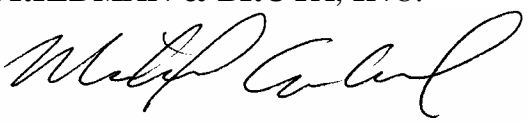
Dear Ms Pleskac:

Included are the results from the testing of material submitted on April 4, 2019 from the SOU_ 1400-001_ 20190404, F&BI 904105 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
SOU0412R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 4, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1400-001_ 20190404, F&BI 904105 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
904105 -01	PG-1-2.5
904105 -02	PG-1-05
904105 -03	PG-1-7.5
904105 -04	PG-1-10
904105 -05	PG-1-15
904105 -06	PG-1-20
904105 -07	PG-1-25
904105 -08	PG-1-30
904105 -09	PG-1-35
904105 -10	PG-1-40

All quality control requirements were acceptable.

Date of Report: 04/12/19
Date Received: 04/04/19
Project: SOU_ 1400-001_ 20190404, F&BI 904105
Date Extracted: 04/09/19
Date Analyzed: 04/09/19

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 56-165)
PG-1-20 904105-06	<50	<250	99
Method Blank 09-757 MB	<50	<250	96

Date of Report: 04/12/19
Date Received: 04/04/19
Project: SOU_ 1400-001_ 20190404, F&BI 904105

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

Laboratory Code: 904165-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	69	101	93	63-146	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	86	79-144

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

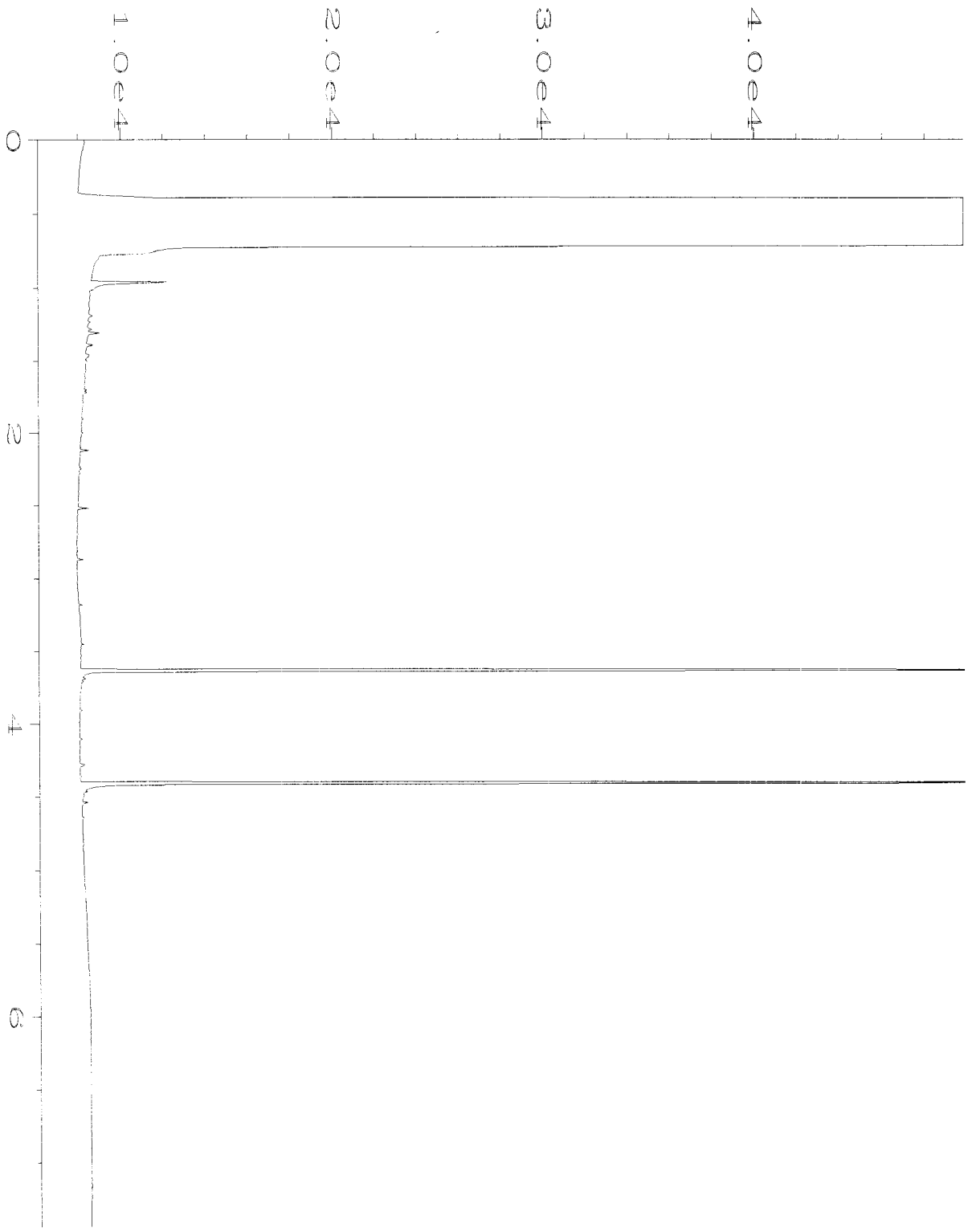
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

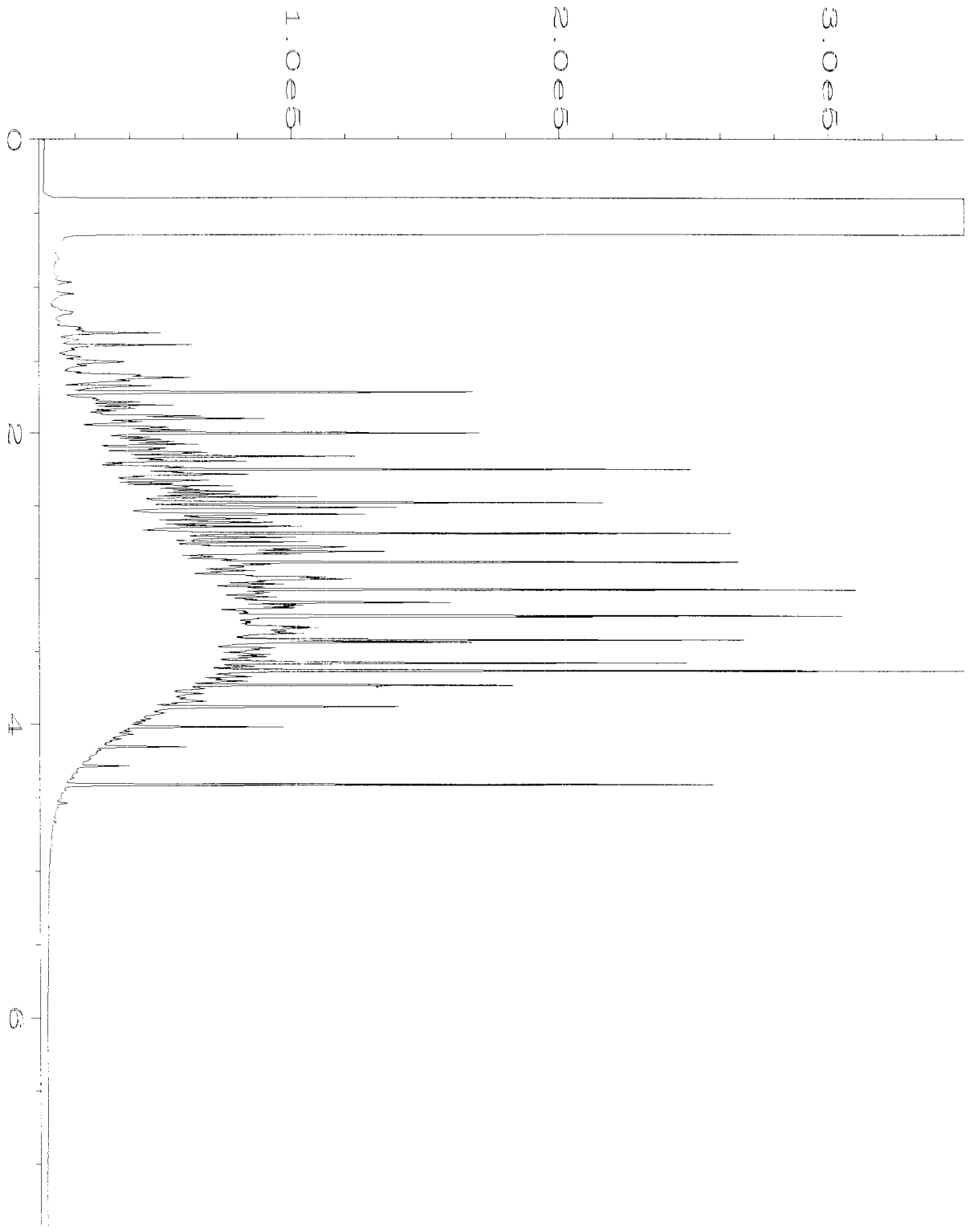
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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

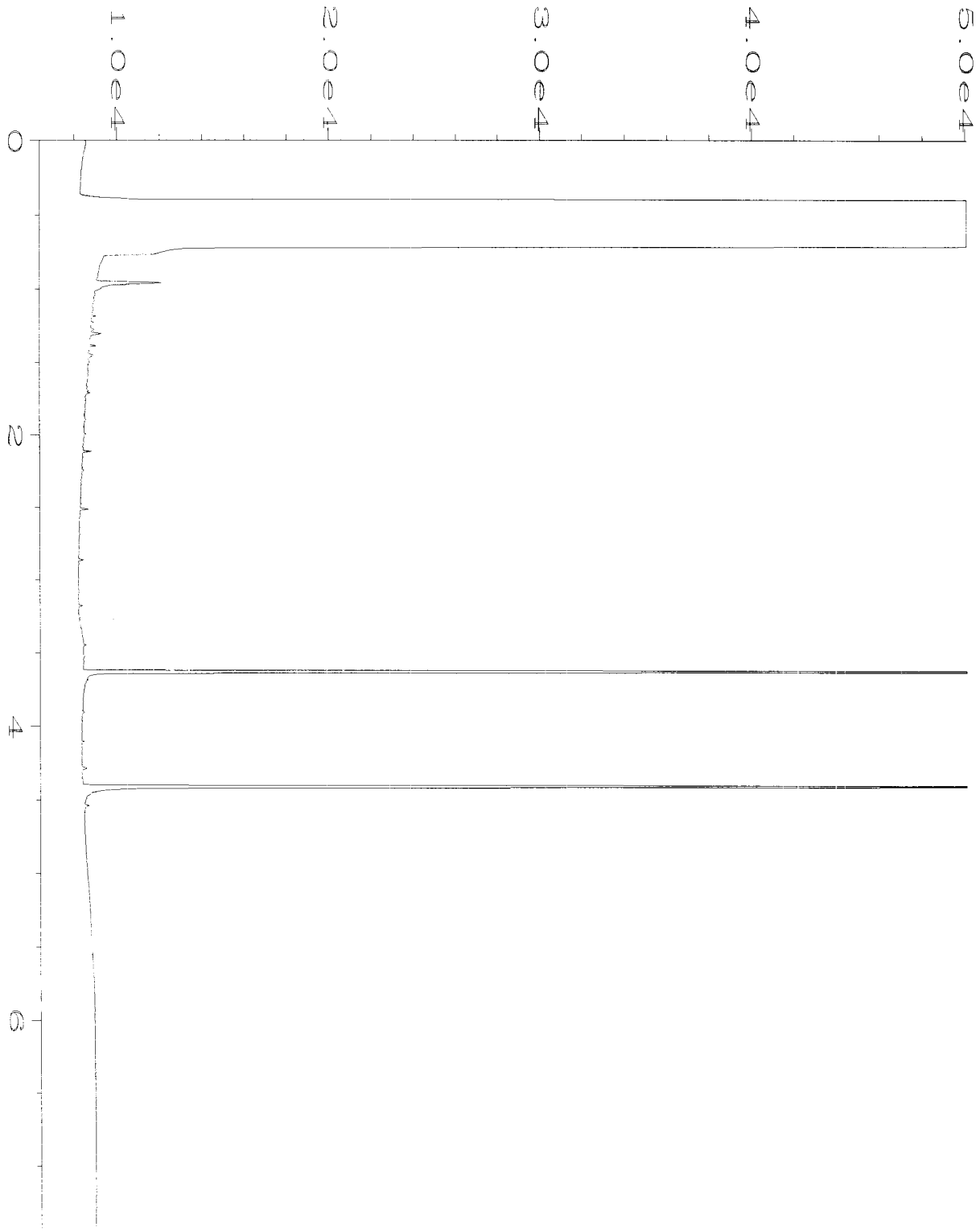
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Data File Name	: C:\HPCHEM\1\DATA\04-09-19\038F0801.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 38
Sample Name	: 904105-06	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 09 Apr 19 04:44 PM	Instrument Method	: DX.MTH
Report Created on:	10 Apr 19 09:32 AM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\04-09-19\005F0701.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 5
Sample Name	: 1000 Dx 56-131C	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 7
Acquired on	: 09 Apr 19 02:56 PM	Instrument Method	: DX.MTH
Report Created on	: 10 Apr 19 09:30 AM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\04-09-19\030F0801.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 30
Sample Name	: 09-757 mb	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 09 Apr 19 03:13 PM	Instrument Method	: DX.MTH
Report Created on	: 10 Apr 19 09:29 AM	Analysis Method	: DX.MTH

904105

SAMPLE CHAIN OF CUSTODY

ME 04/04/19 VS3/B03

Page # 1 of 1

Send Report to Siera P...

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E. Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) Sarah Walter

PROJECT NAME/NO. 1400-001

PO #

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes (✓ per SP 4/9/19)
PG-1-2.5	PG-1	2.5	01 A-E	4/4/19	0935	S	5									HOLD
PG-1-05		05	02		0940											
PG-1-7.5		7.5	03		0945											
PG-1-10		10	04		0955											
PG-1-15		15	05		1000											
PG-1-20		20	06		1015			✓								
PG-1-25		25	07		1030											
PG-1-30		30	08		1045											
PG-1-35		35	09		1100											
PG-1-40		40	10		1115											

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Sarah Walter	Sarah Walter	SES	4/4/19	1233
Received by:	Liz Webber-Bruya	Liz Webber-Bruya	F?B	4/4/19	1233
Relinquished by:					
Received by:			Samples received at 4 °C		

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

April 19, 2019

Siera Pleskac, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Pleskac:

Included are the additional results from the testing of material submitted on April 4, 2019 from the SOU_ 1400-001_ 20190404, F&BI 904105 project. There are 4 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
SOU0419R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 4, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1400-001_ 20190404, F&BI 904105 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
904105 -01	PG-1-2.5
904105 -02	PG-1-05
904105 -03	PG-1-7.5
904105 -04	PG-1-10
904105 -05	PG-1-15
904105 -06	PG-1-20
904105 -07	PG-1-25
904105 -08	PG-1-30
904105 -09	PG-1-35
904105 -10	PG-1-40

All quality control requirements were acceptable.

Date of Report: 04/19/19
Date Received: 04/04/19
Project: SOU_ 1400-001_ 20190404, F&BI 904105
Date Extracted: 04/15/19
Date Analyzed: 04/15/19

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

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-132)
PG-1-20 904105-06	<0.02	<0.02	<0.02	<0.06	<5	77
Method Blank 09-541 MB	<0.02	<0.02	<0.02	<0.06	<5	107

Date of Report: 04/19/19
Date Received: 04/04/19
Project: SOU_ 1400-001_ 20190404, F&BI 904105

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: 904257-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	95	69-120
Toluene	mg/kg (ppm)	0.5	101	70-117
Ethylbenzene	mg/kg (ppm)	0.5	105	65-123
Xylenes	mg/kg (ppm)	1.5	104	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

904105

SAMPLE CHAIN OF CUSTODY

ME 04/04/19 VS3/B03

Page # 1 of 1

Send Report to Siera P...

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature) Sarah Walter

PROJECT NAME/NO. 1400-001

PO #

REMARKS

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
PG-1-2.5	PG-1	2.5	01 A-E	4/4/19	0935	S	5									HOLD
PG-1-05		05	02		0940											
PG-1-7.5		7.5	03		0945											
PG-1-10		10	04		0955											
PG-1-15		15	05		1000											
PG-1-20		20	06		1015			✓	⊗	⊗						
PG-1-25		25	07		1030											
PG-1-30		30	08		1045											
PG-1-35		35	09		1100											
PG-1-40		40	10		1115											

✓ per SP
⊗ per SP
4/9/19 ME

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Walter	Sarah Walter	SES	4/4/19	1233
Received by: Liz Dimm-Bruya	Liz Webber-Bruya	F?B	4/4/19	1233
Relinquished by:				
Received by:		Samples received at 4 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

April 15, 2019

Siera Pleskac, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Pleskac:

Included are the results from the testing of material submitted on April 8, 2019 from the SOU_ 1400-001_ 20190408, F&BI 904165 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Caroline Dickey
SOU0415R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 8, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1400-001_ 20190408, F&BI 904165 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
904165 -01	P09-02.5
904165 -02	P09-05
904165 -03	P10-02.5
904165 -04	P10-05
904165 -05	P10-07
904165 -06	P11-02.5
904165 -07	P11-05
904165 -08	P12-02.5
904165 -09	P12-06
904165 -10	P13-02.5
904165 -11	P13-03
904165 -12	P13-07.5

All quality control requirements were acceptable.

Date of Report: 04/15/19
Date Received: 04/08/19
Project: SOU_ 1400-001_ 20190408, F&BI 904165
Date Extracted: 04/10/19
Date Analyzed: 04/10/19

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

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

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-132)
P09-05 904165-02	<0.02	<0.02	<0.02	<0.06	<5	76
P10-07 904165-05	<0.02	<0.02	1.5	3.0	560	114
P11-05 904165-07	<0.02	<0.02	<0.02	<0.06	<5	78
P13-07.5 904165-12	<0.02	<0.02	<0.02	<0.06	<5	78
Method Blank 09-534 MB	<0.02	<0.02	<0.02	<0.06	<5	76

Date of Report: 04/15/19
Date Received: 04/08/19
Project: SOU_ 1400-001_ 20190408, F&BI 904165
Date Extracted: 04/09/19
Date Analyzed: 04/09/19

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 56-165)
P09-05 904165-02	<50	<250	107
P10-07 904165-05	<50	<250	105
P11-05 904165-07	<50	<250	105
P13-07.5 904165-12	59 x	<250	92
Method Blank 09-757 MB	<50	<250	96

Date of Report: 04/15/19
Date Received: 04/08/19
Project: SOU_ 1400-001_ 20190408, F&BI 904165

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: 904193-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	84	66-121
Toluene	mg/kg (ppm)	0.5	91	72-128
Ethylbenzene	mg/kg (ppm)	0.5	88	69-132
Xylenes	mg/kg (ppm)	1.5	96	69-131
Gasoline	mg/kg (ppm)	20	105	61-153

Date of Report: 04/15/19
Date Received: 04/08/19
Project: SOU_ 1400-001_ 20190408, F&BI 904165

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

Laboratory Code: 904165-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	69	101	93	63-146	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	86	79-144

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

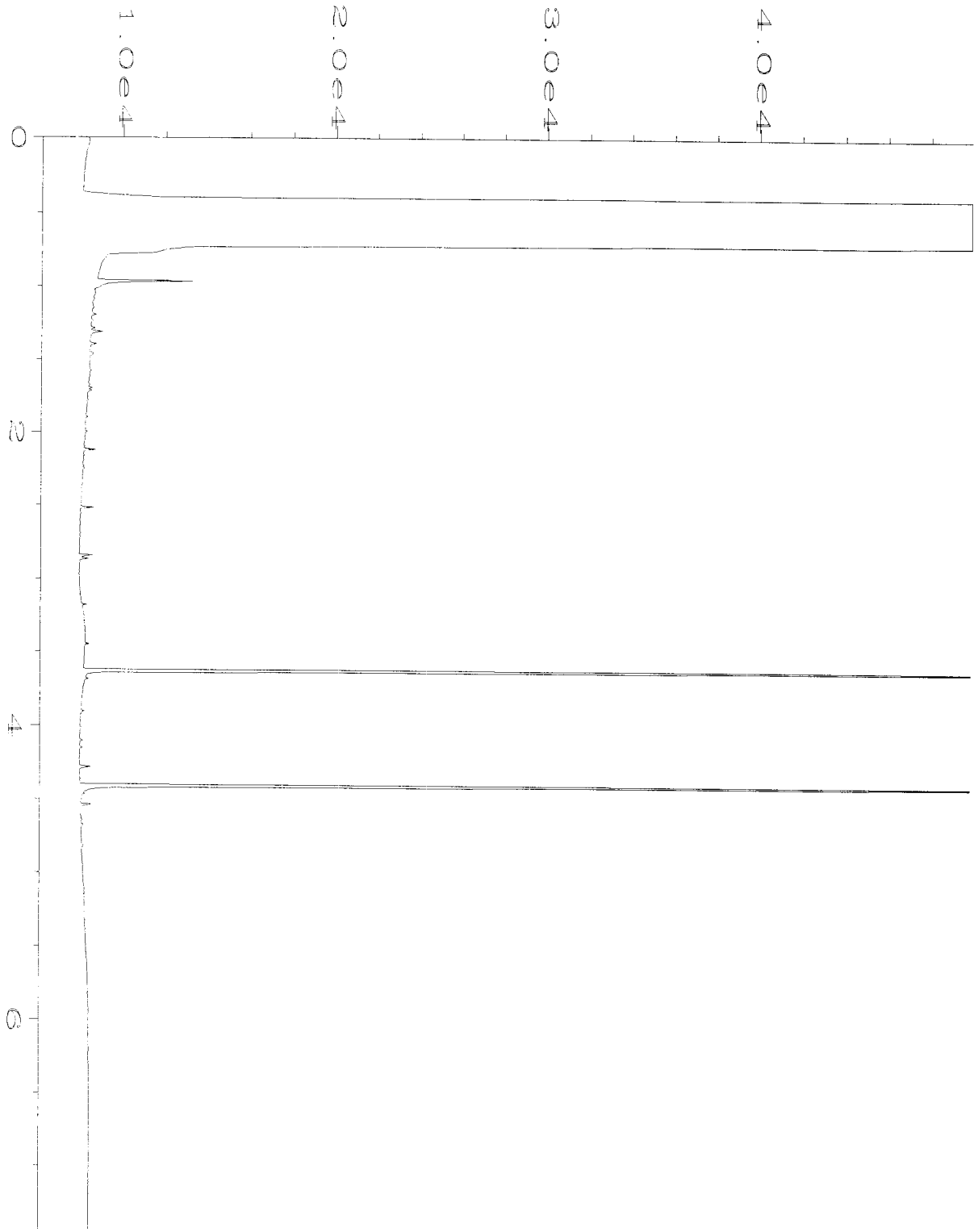
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

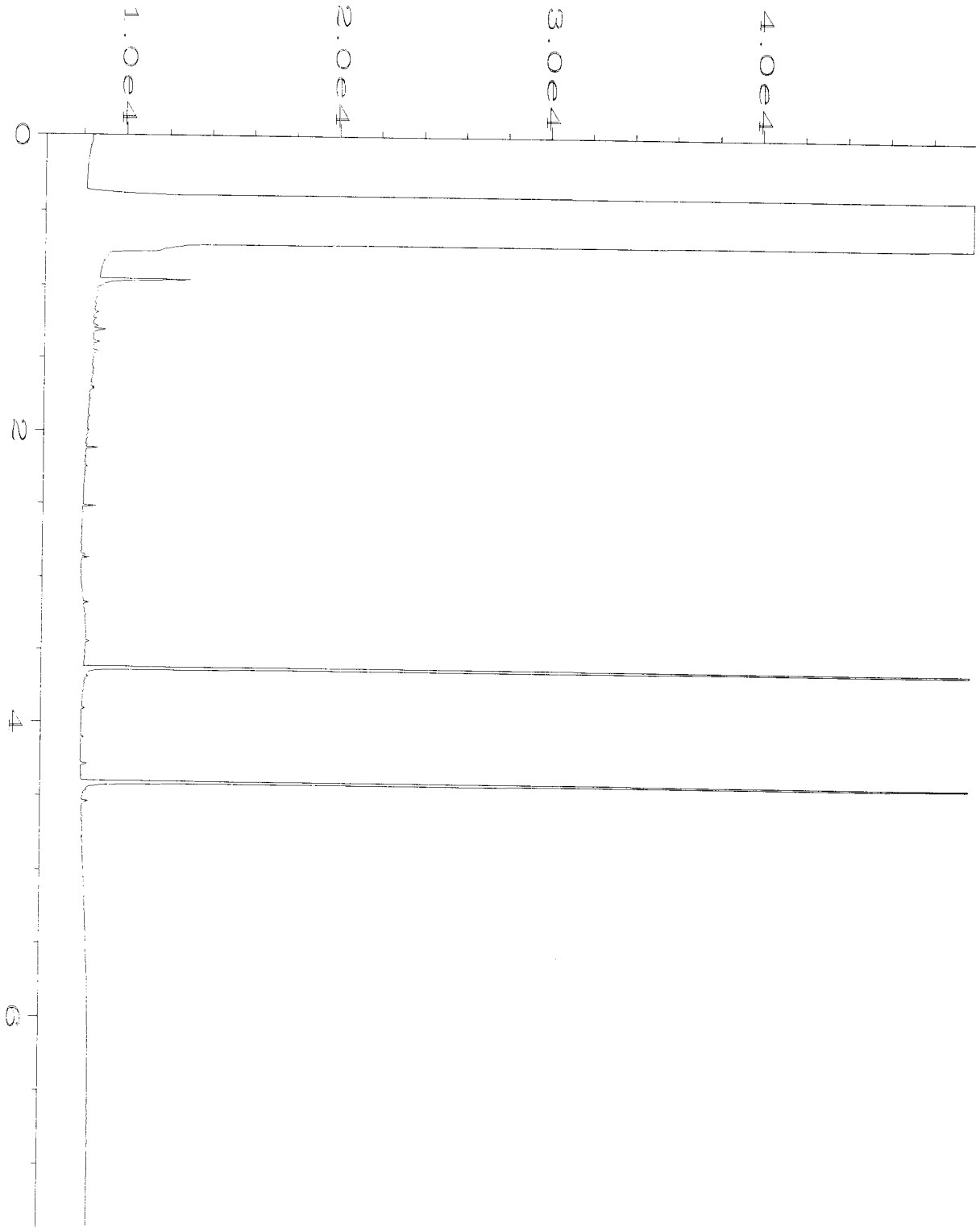
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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

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



Data File Name	: C:\HPCHEM\1\DATA\04-09-19\034F0801.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 34
Sample Name	: 904165-02	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 09 Apr 19 03:57 PM	Instrument Method	: DX.MTH
Report Created on	: 10 Apr 19 09:31 AM	Analysis Method	: DX.MTH



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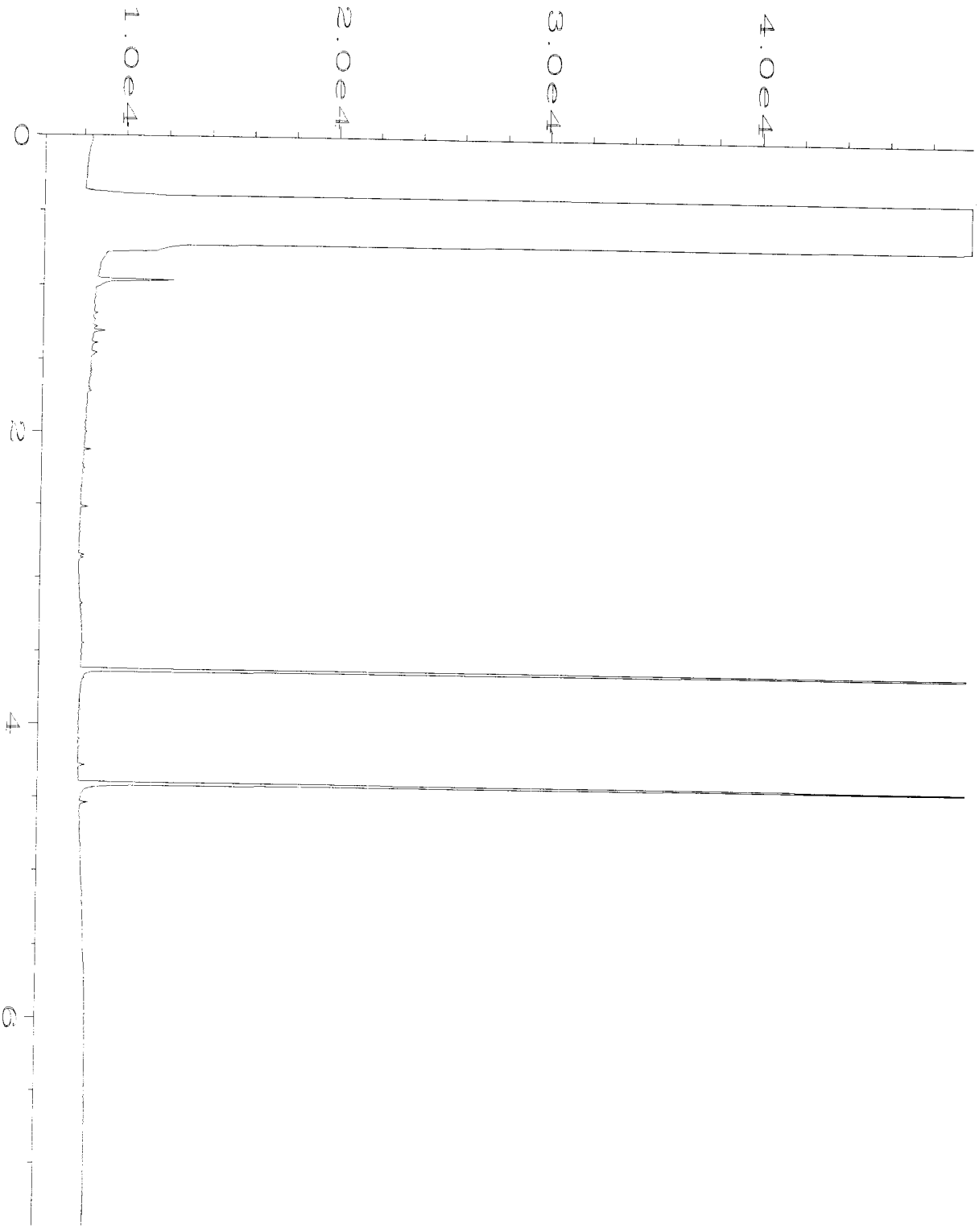
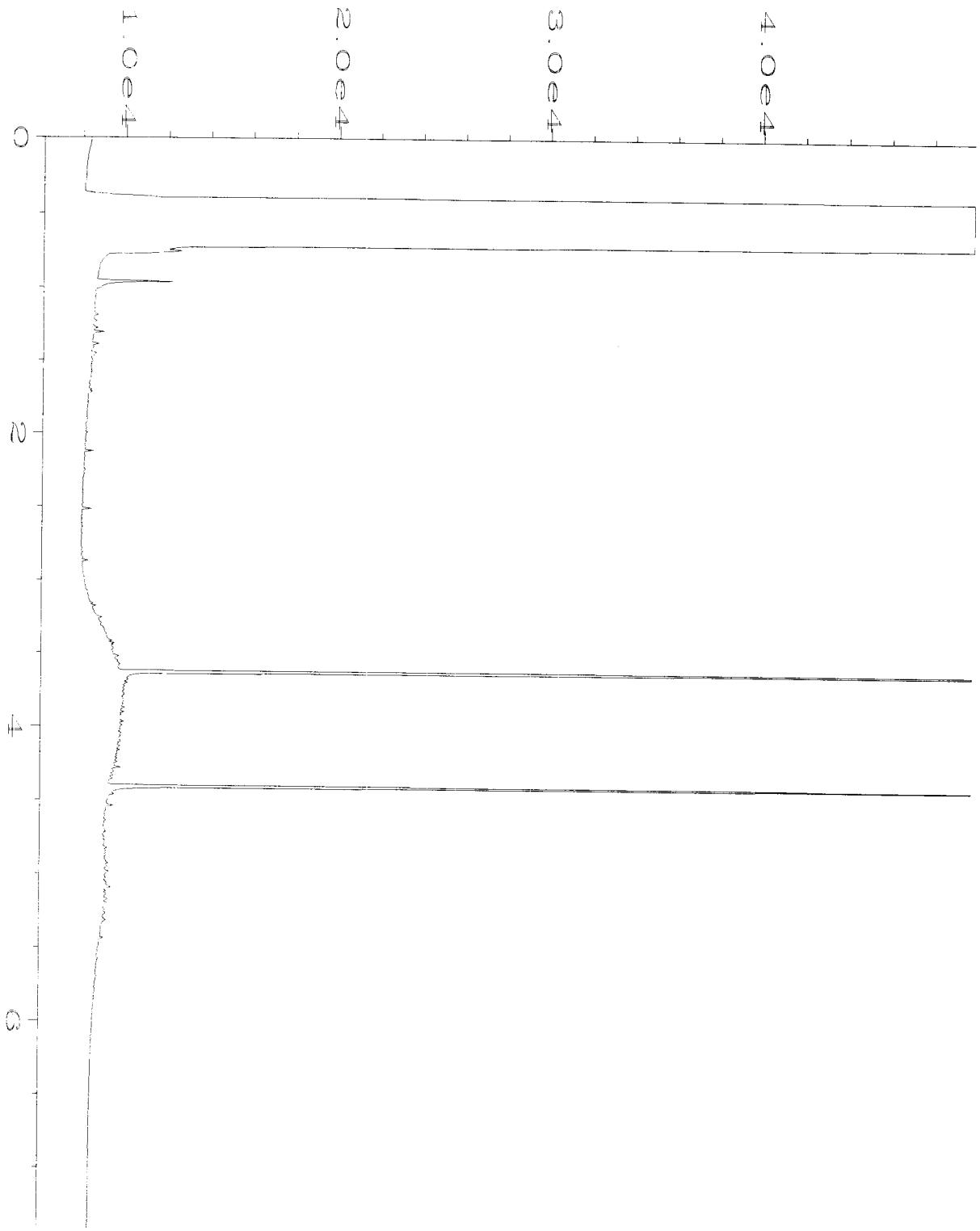
Operator : TL
Instrument : GC1
Sample Name : 904165-05
Run Time Bar Code:
Acquired on : 09 Apr 19 04:09 PM
Report Created on: 10 Apr 19 09:31 AM

Page Number : 1
Vial Number : 35
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH



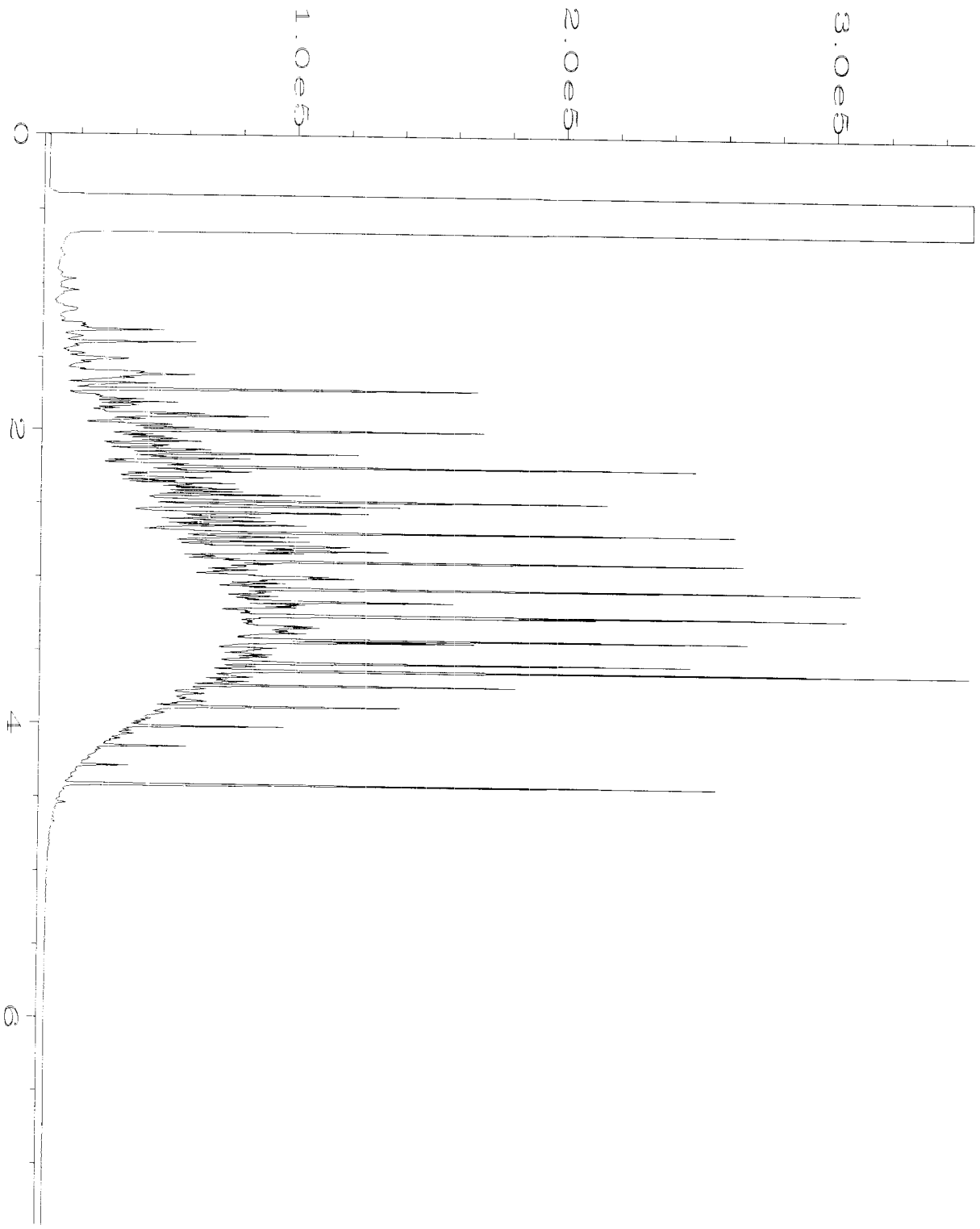
Data File Name : C:\HPCHEM\1\DATA\04-09-19\036F0801.D
Operator : TL
Instrument : GC1
Sample Name : 904165-07
Run Time Bar Code:
Acquired on : 09 Apr 19 04:20 PM
Report Created on: 10 Apr 19 09:31 AM

Page Number : 1
Vial Number : 36
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH



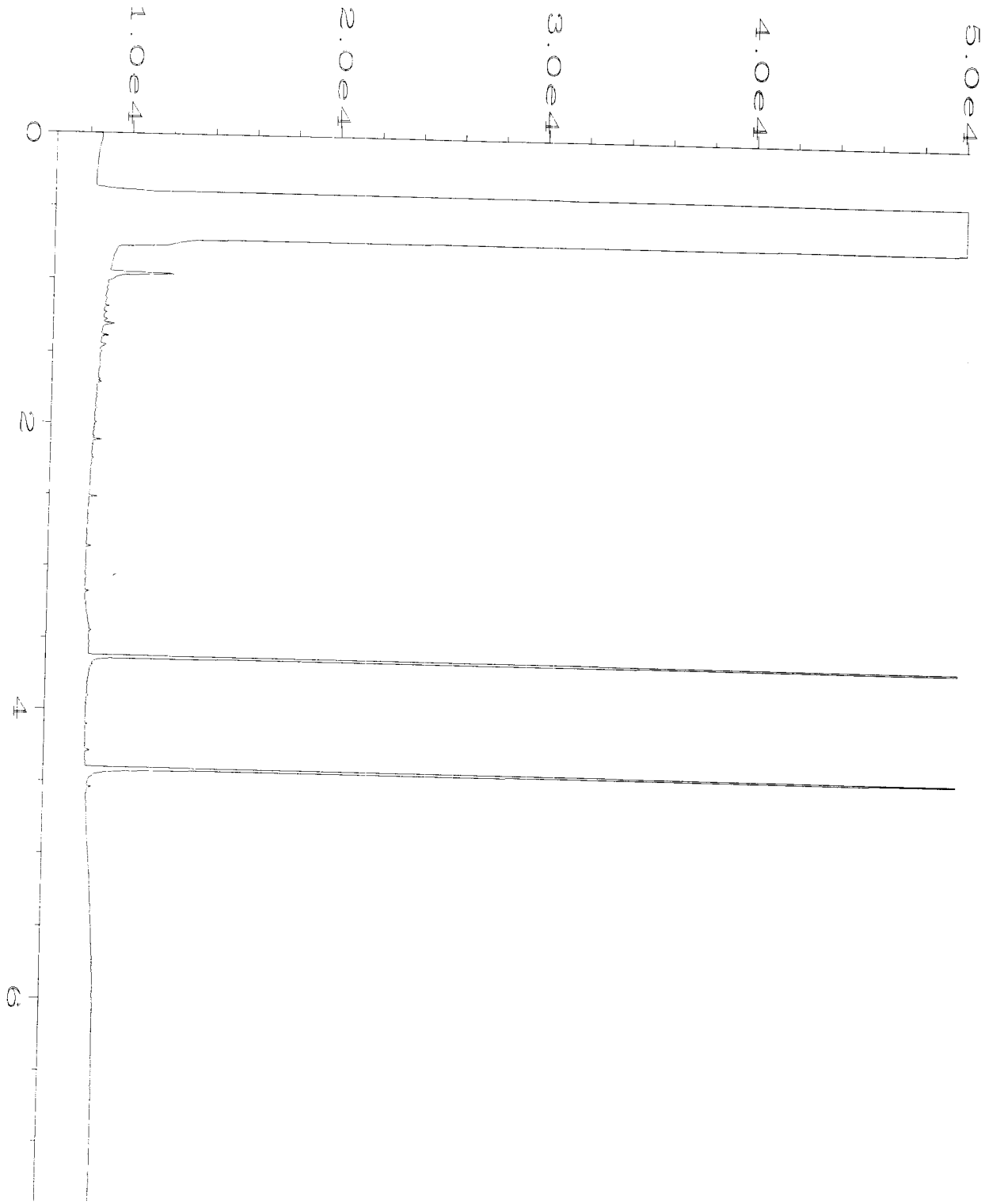
Data File Name : C:\HPCHEM\1\DATA\04-09-19\037F0801.D
Operator : TL
Instrument : GC1
Sample Name : 904165-12
Run Time Bar Code:
Acquired on : 09 Apr 19 04:32 PM
Report Created on: 10 Apr 19 09:32 AM

Page Number : 1
Vial Number : 37
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\1\DATA\04-09-19\005F0701.D
Operator : TL
Instrument : GC1
Sample Name : 1000 Dx 56-131C
Run Time Bar Code:
Acquired on : 09 Apr 19 02:56 PM
Report Created on: 10 Apr 19 09:30 AM

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 7
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\1\DATA\04-09-19\030F0801.D
Operator : TL
Instrument : GC1
Sample Name : 09-757 mb
Run Time Bar Code:
Acquired on : 09 Apr 19 03:13 PM
Report Created on: 10 Apr 19 09:29 AM

Page Number : 1
Vial Number : 30
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH

SAMPLE CHAIN OF CUSTODY

904165

ME 04-08-19

B031
VS2

Page # 1 of 2

Send Report to ~~Sierra Pleskac~~, Caroline Dickey

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO.: 1400-001

PO #:

REMARKS: Hold all samples, pending analysis request from PM

TURNAROUND TIME
X Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			√-per SP 4/9 SP Notes
P09-02.5	P09	2.5	01 AB	4/8/19	0935	Soil	5									HOLD
P09-05	P09	5	02		0945			✓	✓	✓						ALL
P10-02.5	P10	2.5	03		1005											SAMPLES
P10-05	P10	5	04		1015											SP 4/9
P10-07 ~~X~~	P10	7	05		1025			✓	✓	✓						
P11-02.5	P11	2.5	06		1050											
P11-05	P11	5	07		1100			✓	✓	✓						
P12-02.5	P12	2.5	08		1150											jars labeled P12-04
P12-06	P12	6	09		1200											
P13-02.5	P13	2.5	10		1215											

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Caroline Dickey	SES	4/8/19	
Received by:		Isaac Lessig	FBI	4/8/19	4:05
Relinquished by:					
Received by:			Samples received at 4 °C		

SAMPLE CHA OF CUSTODY

ME 04-08-19 Page # 2 of 2 B031 152

90465

Send Report to ~~Stera Pleskac, Caroline~~ Dickey

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS (signature)

PROJECT NAME/NO. 1400-001

PO #

REMARKS Hold all samples, pending analysis request from PM.

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
P13-05	P13	5	1, AE	4/8/19	1225	Soil	5									
P13-07.5	P13	7.5	12		1235	Soil	5	✓	✓	✓						

CD 4/8/19

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Caroline Dickey	SES	4/8/19	
Received by:	Isaac Lessig	FBI	4/8/19	4:05
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

April 18, 2019

Siera Pleskac, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

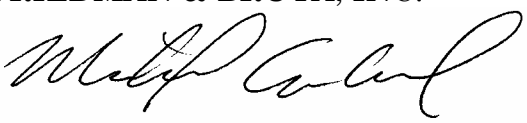
Dear Ms Pleskac:

Included are the results from the testing of material submitted on April 8, 2019 from the SOU_ 1400-001_ 20190408, F&BI 904167 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Caroline Dickey
SOU0418R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 8, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 1400-001_ 20190408, F&BI 904167 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
904167 -01	DRUM-003-20190408

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	DRUM-003-20190408	Client:	SoundEarth Strategies
Date Received:	04/08/19	Project:	SOU_ 1400-001_ 20190408, F&BI 904167
Date Extracted:	04/15/19	Lab ID:	904167-01
Date Analyzed:	04/15/19	Data File:	904167-01.095
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.14
Barium	47.6
Cadmium	<1
Chromium	14.0
Lead	9.96
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 1400-001_ 20190408, F&BI 904167
Date Extracted:	04/15/19	Lab ID:	I9-251 mb
Date Analyzed:	04/15/19	Data File:	I9-251 mb.093
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<5
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Date of Report: 04/18/19
Date Received: 04/08/19
Project: SOU_ 1400-001_ 20190408, F&BI 904167

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

Laboratory Code: 904167-01 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<5	98	88	70-130	11
Barium	mg/kg (ppm)	50	44.8	114	103	70-130	10
Cadmium	mg/kg (ppm)	10	<5	106	102	70-130	4
Chromium	mg/kg (ppm)	50	<25	100	93	70-130	7
Lead	mg/kg (ppm)	50	9.03	107	104	70-130	3
Mercury	mg/kg (ppm	5	<5	117	100	70-130	16
Selenium	mg/kg (ppm)	5	<5	92	82	70-130	11
Silver	mg/kg (ppm)	10	<5	100	98	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	101	85-115
Barium	mg/kg (ppm)	50	108	85-115
Cadmium	mg/kg (ppm)	10	103	85-115
Chromium	mg/kg (ppm)	50	106	85-115
Lead	mg/kg (ppm)	50	106	85-115
Mercury	mg/kg (ppm)	5	108	85-115
Selenium	mg/kg (ppm)	5	103	85-115
Silver	mg/kg (ppm)	10	98	85-115

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

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

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

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

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

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

SAMPLE CHA[illegible] OF CUSTODY

ME 04/08/19

Page # 1 of 1 BOI

(NP) ~~904165~~ 904167

Send Report to Siera Pleskac, Caroline Dickey

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS *(signature)*

PROJECT NAME/NO. 1400-001

PO #

REMARKS Hold sample, pending request from PM.

TURNAROUND TIME
Standard (2 Weeks)
RUSH
Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
DMW_003_20190408	—	—	01 AB	4/8/19	1235	SOIL	2									HOLD SAMPLE
								CD	4/8/19							

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Caroline Dickey	SES	4/8/19	
Received by:	Leonie Lessig	FBI	4/8/19	4:05
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

April 15, 2019

Siera Pleskac, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

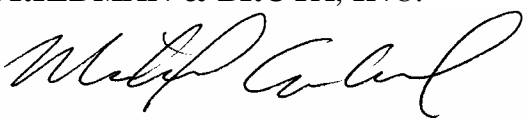
Dear Ms Pleskac:

Included are the results from the testing of material submitted on April 8, 2019 from the SOU_ 1400-001_ 20190408, F&BI 904168 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Caroline Dickey
SOU0415R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 8, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies 1400-001 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
904168 -01	PG01-20190408

All quality control requirements were acceptable.

Date of Report: 04/15/19
Date Received: 04/08/19
Project: SOU_ 1400-001_ 20190408, F&BI 904168
Date Extracted: 04/10/19
Date Analyzed: 04/10/19

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 52-124)
PG01-20190408 904168-01	<1	<1	<1	<3	<100	75
Method Blank 09-535 MB	<1	<1	<1	<3	<100	78

Date of Report: 04/15/19
Date Received: 04/08/19
Project: SOU_ 1400-001_ 20190408, F&BI 904168
Date Extracted: 04/09/19
Date Analyzed: 04/09/19

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 51-134)
PG01-20190408 904168-01	140	<250	107
Method Blank 09-754 MB	<50	<250	109

Date of Report: 04/15/19
Date Received: 04/08/19
Project: SOU_ 1400-001_ 20190408, F&BI 904168

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 904168-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	100	65-118
Toluene	ug/L (ppb)	50	97	72-122
Ethylbenzene	ug/L (ppb)	50	93	73-126
Xylenes	ug/L (ppb)	150	98	74-118
Gasoline	ug/L (ppb)	1,000	99	69-134

Date of Report: 04/15/19
Date Received: 04/08/19
Project: SOU_ 1400-001_ 20190408, F&BI 904168

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	88	100	58-134	13

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

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

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

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

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

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

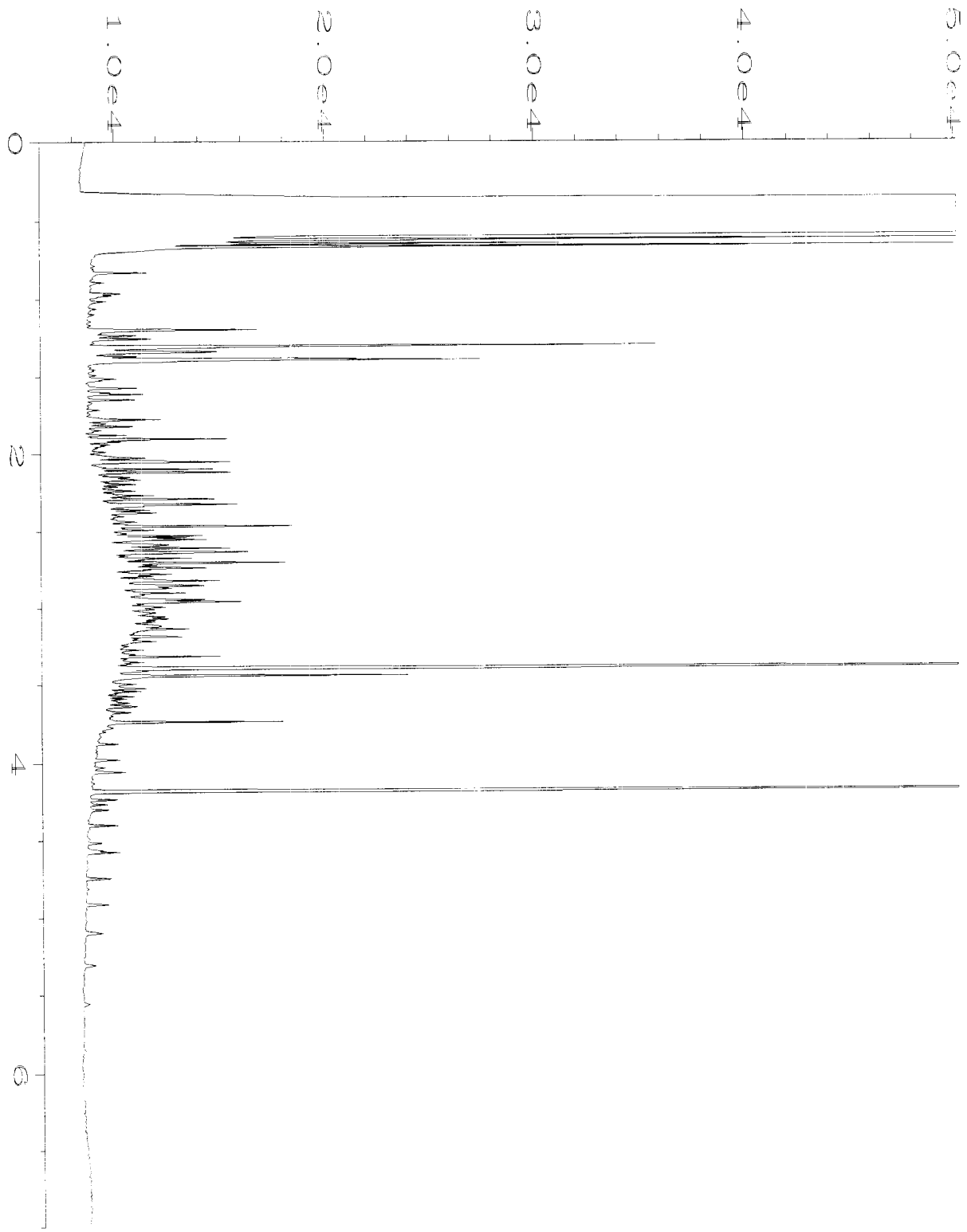
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

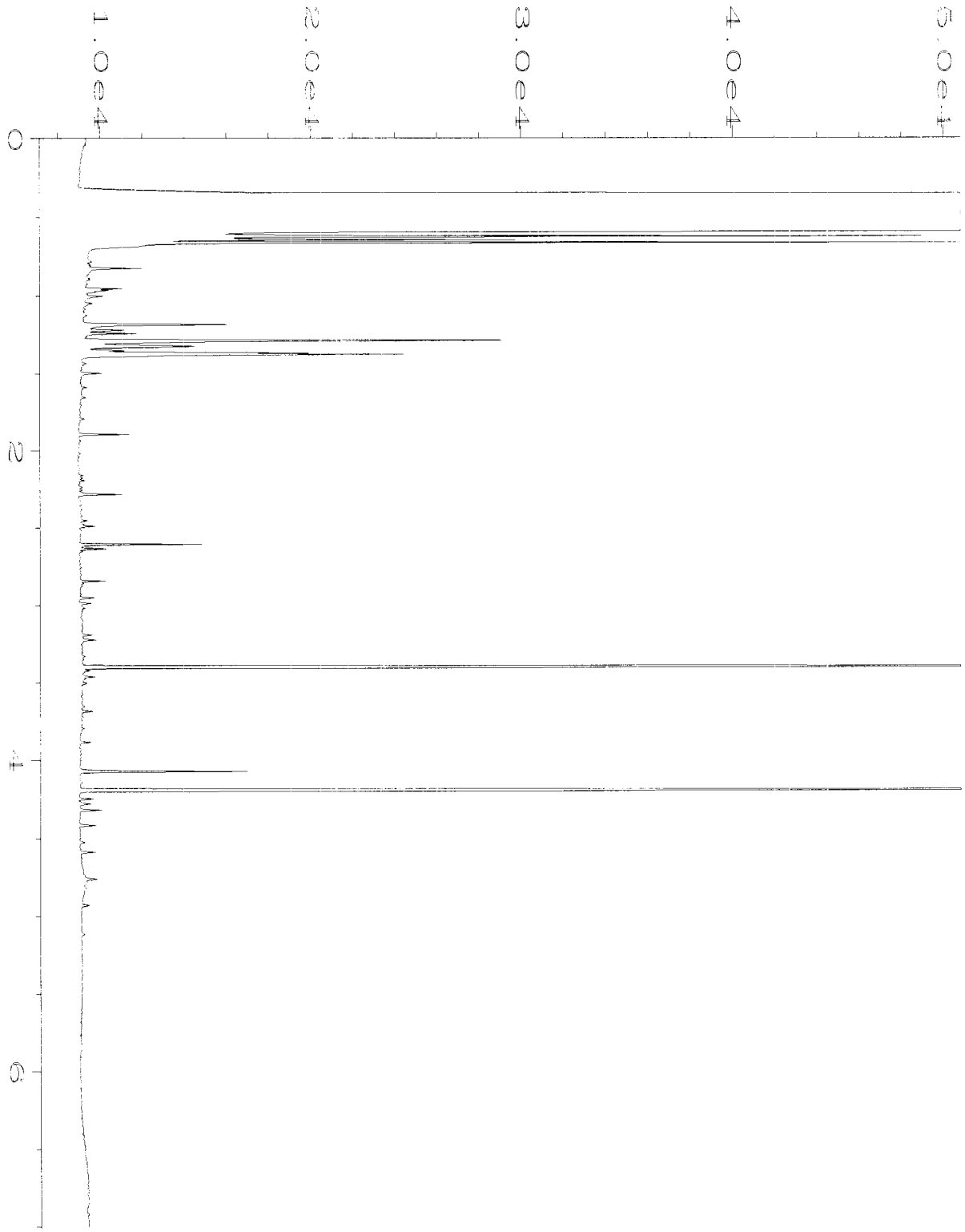
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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

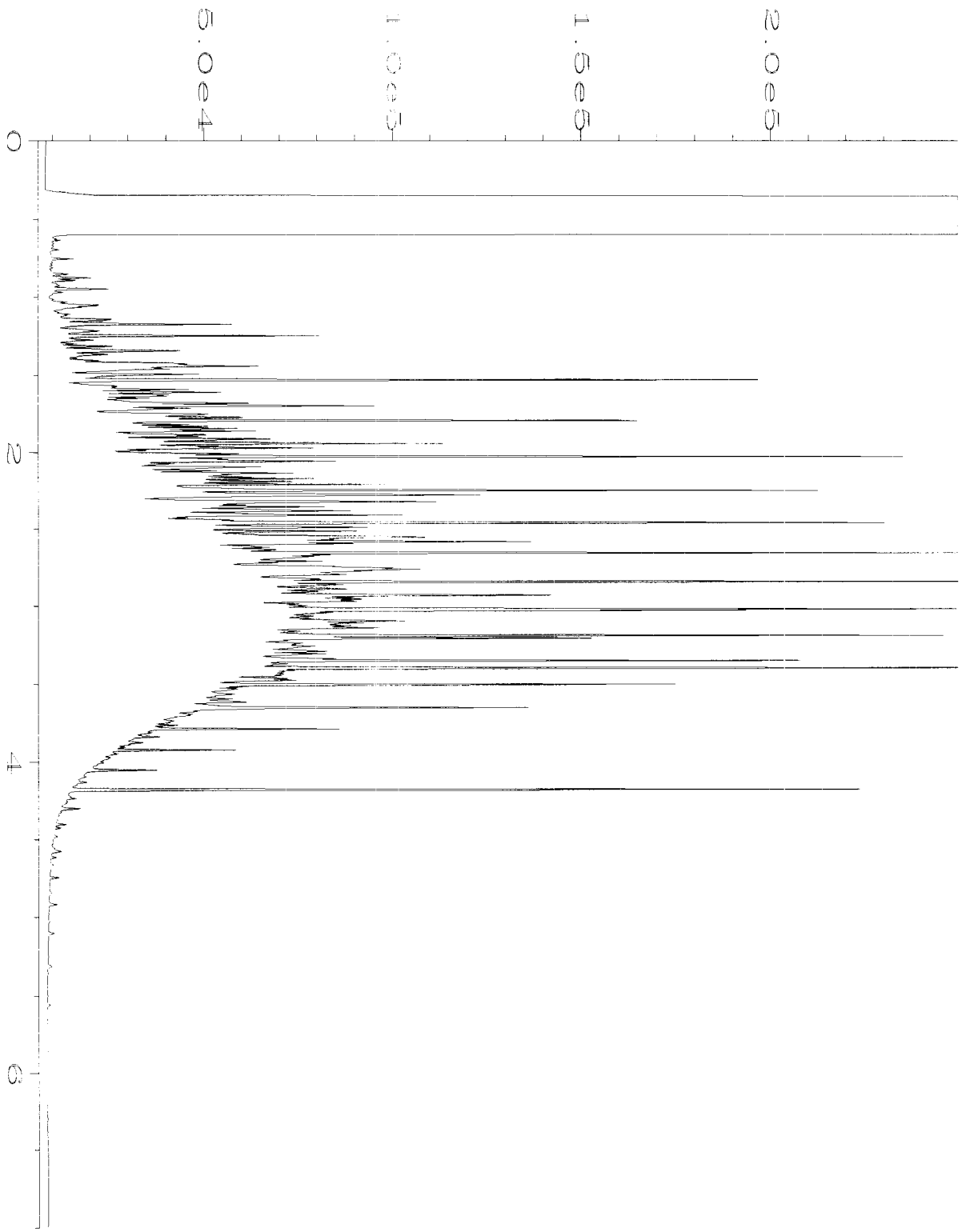
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Data File Name	: C:\HPCHEM\6\DATA\04-09-19\026F0501.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 26
Sample Name	: 904168-01	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 5
Acquired on	: 09 Apr 19 02:53 PM	Instrument Method	: DX.MTH
Report Created on:	10 Apr 19 08:23 AM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\6\DATA\04-09-19\022F0501.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 22
Sample Name	: 09-754 mb	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 5
Acquired on	: 09 Apr 19 02:12 PM	Instrument Method	: DX.MTH
Report Created on	: 10 Apr 19 08:22 AM	Analysis Method	: DX.MTH



Data File Name : C:\HPCHEM\6\DATA\04-09-19\005F0902.D

Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 5
Sample Name	: 1000 Dx 56-131C	Injection Number	: 2
Run Time Bar Code:		Sequence Line	: 9
Acquired on	: 09 Apr 19 04:29 PM	Instrument Method	: DX.MTH
Report Created on	: 10 Apr 19 08:23 AM	Analysis Method	: DX.MTH

SAMPLE CHA[illegible] OF CUSTODY

(NP) ~~904165~~ ~~904168~~ ME 04/08/19

Page # 1 of 1 VB VW1

Send Report to Siera Pleskac, Caroline Dickey

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

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

SAMPLERS *(signature)*	
PROJECT NAME/NO. 1400-001	PO #
REMARKS	

TURNAROUND TIME
- [X] Standard (2 Weeks) B02
- [ ] RUSH

Rush charges authorized by:

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

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	MTCA 5 Metals by 200.0/6020			Notes
PG01-20190408	PG01	–	01 A-E	4/8/19	1404	H2O	5	X	X	X						
						(FB)	4/8/19									

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Caroline Dickey	SES	4/8/19	
Received by:		Isaac Lessig	FBI	4/8/19	4:05
Relinquished by:					
Received by:			Samples received at 4 °C		

FORMS\COC\COC.DOC