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

M E M O R A N D U M

TO: Washington State Department of Ecology **DATE**: January 3, 2020

FROM: Logan Schumacher, LG, SoundEarth Strategies, Inc.
Thomas Cammarata, LG, LHG, SoundEarth Strategies, Inc.

SUBJECT: **Troy Laundry Seattle Site—PPCD Fourth Quarter 2019 Progress Report**

SoundEarth Strategies, Inc. (SoundEarth) has prepared this Progress Report to summarize activities completed during the Fourth Quarter of 2019 at the Troy Laundry Seattle Site (Site), Cleanup Site ID No. 11690 which encompasses the property located at 300 Boren Avenue North and 399 Fairview Avenue North in Seattle, Washington (Property). The work summarized below was conducted under Prospective Purchaser Consent Decree (PPCD) No. 19-2-07344-6 SEA between the Washington State Department of Ecology (Ecology) and Ponte Gadea Seattle LLC. This Progress Report is provided pursuant to Section IV.H. of the PPCD.

SITE ACTIVITIES—FOURTH QUARTER 2019

The following sections summarize activities completed at the Site during the Fourth Quarter 2019.

Fourth Quarter 2019 Groundwater Monitoring Event

The Fourth Quarter 2019 semiannual groundwater monitoring event was completed between December 4 and 8, 2019. The groundwater monitoring event was conducted pursuant to Exhibit A (Scope of Work and Schedule) to the PPCD.

Groundwater elevations measured on December 4, 2019, ranged from 13.19 feet North American Vertical Datum of 1988 (NAVD88; monitoring well MW18) to 16.89 feet NAVD88 (monitoring well MW15). Groundwater samples were collected on December 4 through December 8, 2019, from all wells in the compliance well network as set forth in Exhibit A (Scope of Work and Schedule), as well as select Site wells, including:

- On-Property: MW17 through MW25, IW04, IW06, IW50, IW61, and IW91
- South-Adjacent Property: MW29, MW30, ONNI-MW-4, and ONNI-MW-5
- Harrison Street ROW: MW01, MW26, MW32, and MW33
- Boren Avenue ROW: MW04, MW07, MW13, MW27, and MW31
- Thomas Street ROW: MW28
- Terry Avenue North: MW15

Groundwater samples from the Fourth Quarter 2019 groundwater monitoring event were submitted to Friedman & Bruya, Inc., of Seattle, Washington, or shipped to SiREM, of Knoxville, Tennessee, on or before December 9, 2019, under standard chain of custody protocols for analysis for chlorinated volatile organic compounds and/or select geochemical parameters.

DEVIATIONS FROM SAMPLING RESULTS NORMS

At the time of this report, the SiREM laboratory analytical results for volatile fatty acids are pending. No other deviations from the sampling results were noted for samples collected during the Fourth Quarter 2019 groundwater monitoring event.

DEVIATIONS FROM REQUIRED TASKS, SCOPE OF WORK, OR SCHEDULE

No deviations from the scope, schedule, or required tasks outlined in the PPCD were noted for the Fourth Quarter 2019.

DATA AND DESCRIPTION OF UNDERLYING SAMPLES COLLECTED

Laboratory analytical reports (raw data) from the Fourth Quarter 2019 groundwater monitoring event are included as Attachment A. Samples from all compliance wells and select Site wells were submitted for analysis for chlorinated volatile organic compounds (CVOCs), including tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, and vinyl chloride by US Environmental Protection Agency (EPA) Method 8260C. Select groundwater samples were additionally analyzed for petroleum hydrocarbons and/or one or more of the following geochemical parameters:

- Gasoline-range petroleum hydrocarbons by Northwest Total Petroleum Hydrocarbon (NWTPH) Method NWTPH-Gx
- Diesel-range petroleum hydrocarbons and oil-range petroleum hydrocarbons by Method NWTPH-Dx
- Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8021B
- Sulfate and nitrate by EPA Method 300.0
- Alkalinity by EPA Method SM 2320B
- Ferrous iron by EPA Method SM3500-Fe B
- Methane, ethene, and ethane by EPA Method RSK 175
- Total organic carbon by EPA Method 415.1
- Volatile fatty acids by EPA Methods 300.0 and 300.0 Modified

PLANNED ACTIVITES—FIRST QUARTER 2020

The following section summarizes activities planned at the Site for the First Quarter 2020 under the PPCD.

2019 Annual Groundwater Monitoring Report

Pursuant to Exhibit A (Scope of Work and Schedule) to the PPCD an annual groundwater monitoring report will be prepared and submitted to Ecology summarizing compliance groundwater monitoring conducted in the Second and Fourth quarters of 2019. This annual report will include a summary of field work performed in 2019, a scaled figure depicting the locations of compliance monitoring wells, an updated groundwater elevation contour map, summary tables of groundwater elevations and laboratory analytical results, a statistical trend analysis assessment for CVOCs in groundwater, and appended laboratory analytical reports. Additionally, all groundwater sampling data will be uploaded to Ecology's EIM system.

Attachments: A, Laboratory Analytical Reports
Friedman & Bruya, Inc. #912081
Friedman & Bruya, Inc. #912082 amended
Friedman & Bruya, Inc. #912134
Friedman & Bruya, Inc. #912135
Fremont Analytical #912135

LDS:cms/dnm

ATTACHMENT A
LABORATORY ANALYTICAL REPORTS

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

December 16, 2019

Tom Cammarata, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cammarata:

Included are the results from the testing of material submitted on December 5, 2019 from the SOU_0731-004-08_ 20191205, F&BI 912081 project. There are 25 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
SOU1216R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 5, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0731-004-08_ 20191205, F&BI 912081 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
912081 -01	MW04-20191205
912081 -02	MW07-20191205
912081 -03	MW13-20191205
912081 -04	MW27-20191205
912081 -05	MW31-20191205
912081 -06	MW15-20191205
912081 -07	MW28-20191204
912081 -08	MW01-20191205
912081 -09	MW26-20191205
912081 -10	MW32-20191205
912081 -11	MW33-20191205

Samples MW04-20191205, MW07-20191205, MW28-20191204, and MW26-20191205 were sent to Fremont Analytical for dissolved gasses, sulfate, nitrate, alkalinity, and ferrous iron analyses. In addition, samples MW07-20191205 and MW26-20191205 were sent to Fremont for TOC analysis. The report will be forwarded to your office upon receipt.

All other quality control requirements were acceptable.

Date of Report: 12/16/19
Date Received: 12/05/19
Project: SOU_0731-004-08_ 20191205, F&BI 912081
Date Extracted: 12/06/19
Date Analyzed: 12/06/19

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)
MW04-20191205 912081-01	<1	<1	<1	<3	<100	77
MW07-20191205 912081-02	<1	<1	<1	<3	<100	76
MW13-20191205 912081-03	<1	<1	<1	<3	<100	79
MW27-20191205 912081-04	<1	<1	<1	<3	<100	77
MW15-20191205 912081-06	<1	<1	<1	<3	<100	78
MW28-20191204 912081-07	<1	<1	<1	<3	150	76
MW01-20191205 912081-08	<1	<1	<1	<3	<100	76
MW26-20191205 912081-09	<1	<1	<1	<3	<100	78
Method Blank 09-2912 MB	<1	<1	<1	<3	<100	77

Date of Report: 12/16/19
Date Received: 12/05/19
Project: SOU_0731-004-08_ 20191205, F&BI 912081
Date Extracted: 12/06/19
Date Analyzed: 12/06/19 and 12/09/19

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 41-152)
MW04-20191205 912081-01	<50	<250	99
MW07-20191205 912081-02	<50	<250	95
MW13-20191205 912081-03	<50	<250	93
MW27-20191205 912081-04	<50	<250	84
MW15-20191205 912081-06	78 x	<250	88
MW28-20191204 912081-07	98 x	<250	88
MW01-20191205 912081-08	<50	<250	88
MW26-20191205 912081-09	680 x	<250	104
Method Blank 09-2981 MB	<50	<250	90

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW04-20191205	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/06/19	Lab ID:	912081-01
Date Analyzed:	12/06/19	Data File:	912081-01.111
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	254
Manganese	7.59

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW07-20191205	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/06/19	Lab ID:	912081-02
Date Analyzed:	12/06/19	Data File:	912081-02.133
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	203
Manganese	5.89

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW28-20191204	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/06/19	Lab ID:	912081-07
Date Analyzed:	12/06/19	Data File:	912081-07.134
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	1,550
Manganese	651

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW26-20191205	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/06/19	Lab ID:	912081-09
Date Analyzed:	12/06/19	Data File:	912081-09.135
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	4,830
Manganese	906

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/06/19	Lab ID:	I9-771 mb
Date Analyzed:	12/06/19	Data File:	I9-771 mb.105
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW04-20191205	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/11/19	Lab ID:	912081-01
Date Analyzed:	12/11/19	Data File:	121157.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	104	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	11
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW07-20191205	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/11/19	Lab ID:	912081-02
Date Analyzed:	12/11/19	Data File:	121158.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	5.9
Tetrachloroethene	3.3

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW13-20191205	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/11/19	Lab ID:	912081-03
Date Analyzed:	12/11/19	Data File:	121159.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.1
Tetrachloroethene	7.7

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW27-20191205	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/09/19	Lab ID:	912081-04
Date Analyzed:	12/11/19	Data File:	121064.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	2.2
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	15
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW31-20191205	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/09/19	Lab ID:	912081-05
Date Analyzed:	12/11/19	Data File:	121065.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	3.3
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW15-20191205	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/09/19	Lab ID:	912081-06
Date Analyzed:	12/11/19	Data File:	121066.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	4.9
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW28-20191204	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/09/19	Lab ID:	912081-07
Date Analyzed:	12/11/19	Data File:	121067.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.27
Chloroethane	<1
1,1-Dichloroethene	1.1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	52
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	4.9
Tetrachloroethene	8.4

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW01-20191205	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/09/19	Lab ID:	912081-08
Date Analyzed:	12/11/19	Data File:	121068.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW26-20191205	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/09/19	Lab ID:	912081-09
Date Analyzed:	12/11/19	Data File:	121069.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	13
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW32-20191205	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/09/19	Lab ID:	912081-10
Date Analyzed:	12/11/19	Data File:	121070.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW33-20191205	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/09/19	Lab ID:	912081-11
Date Analyzed:	12/11/19	Data File:	121071.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/09/19	Lab ID:	09-2995 mb
Date Analyzed:	12/10/19	Data File:	121010.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 12/16/19
Date Received: 12/05/19
Project: SOU_0731-004-08_ 20191205, F&BI 912081

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: 912081-01 (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	102	65-118
Toluene	ug/L (ppb)	50	98	72-122
Ethylbenzene	ug/L (ppb)	50	102	73-126
Xylenes	ug/L (ppb)	150	93	74-118
Gasoline	ug/L (ppb)	1,000	100	69-134

Date of Report: 12/16/19
Date Received: 12/05/19
Project: SOU_0731-004-08_ 20191205, F&BI 912081

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	92	104	63-142	12

Date of Report: 12/16/19
Date Received: 12/05/19
Project: SOU_0731-004-08_ 20191205, F&BI 912081

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

Laboratory Code: 912081-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Iron	ug/L (ppb)	100	254	126	112	70-130	12
Manganese	ug/L (ppb)	20	7.59	101	99	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	99	85-115
Manganese	ug/L (ppb)	20	96	85-115

Date of Report: 12/16/19
Date Received: 12/05/19
Project: SOU_0731-004-08_ 20191205, F&BI 912081

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

Laboratory Code: 912081-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	102	61-139
Chloroethane	ug/L (ppb)	50	<1	100	55-149
1,1-Dichloroethene	ug/L (ppb)	50	<1	97	71-123
Methylene chloride	ug/L (ppb)	50	7.1	98	61-126
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	101	72-122
1,1-Dichloroethane	ug/L (ppb)	50	<1	105	79-113
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	103	63-126
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	106	70-119
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	102	75-121
Trichloroethene	ug/L (ppb)	50	11	101 b	73-122
Tetrachloroethene	ug/L (ppb)	50	<1	101	40-155

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	101	101	70-128	0
Chloroethane	ug/L (ppb)	50	100	98	66-149	2
1,1-Dichloroethene	ug/L (ppb)	50	97	98	72-121	1
Methylene chloride	ug/L (ppb)	50	112	114	63-132	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	102	102	76-118	0
1,1-Dichloroethane	ug/L (ppb)	50	104	106	77-119	2
cis-1,2-Dichloroethene	ug/L (ppb)	50	101	104	76-119	3
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	107	105	75-116	2
1,1,1-Trichloroethane	ug/L (ppb)	50	99	102	80-116	3
Trichloroethene	ug/L (ppb)	50	102	98	72-119	4
Tetrachloroethene	ug/L (ppb)	50	101	99	78-109	2

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

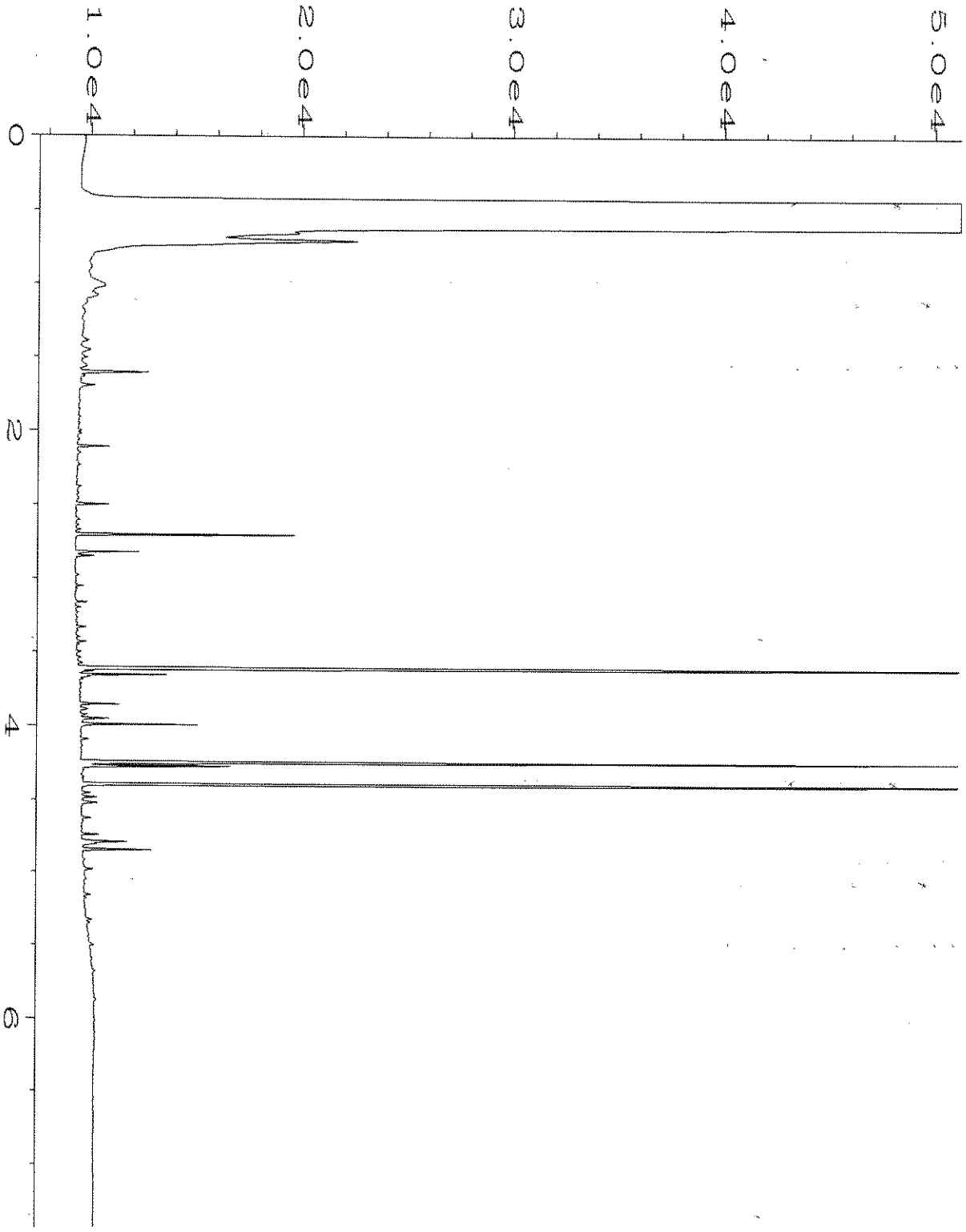
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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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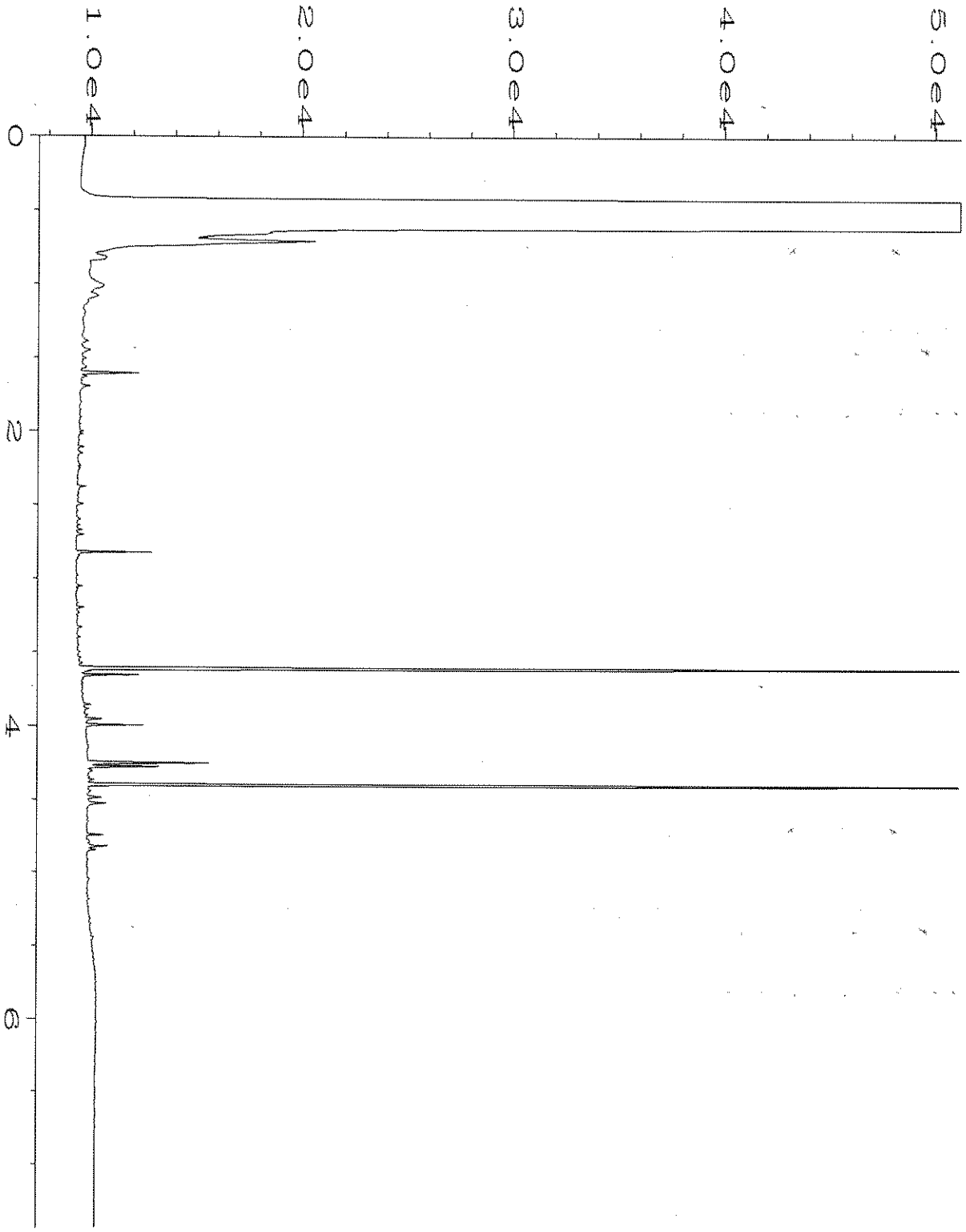
Operator : TL
Instrument : GC1
Sample Name : 912081-01
Run Time Bar Code:
Acquired on : 06 Dec 19 04:56 PM
Report Created on: 09 Dec 19 09:21 AM

Page Number : 1
Vial Number : 35
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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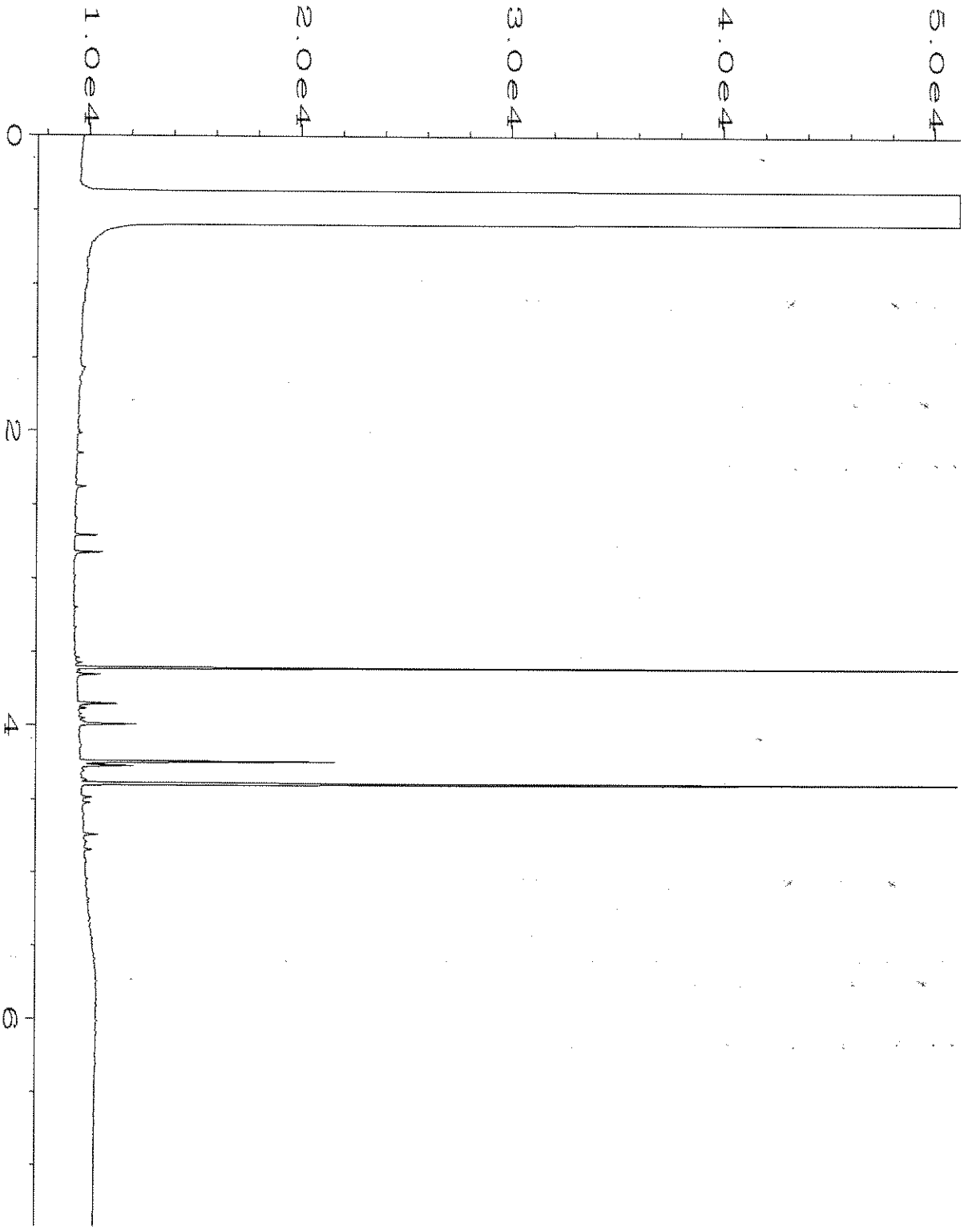
Operator : TL
Instrument : GC1
Sample Name : 912081-02
Run Time Bar Code:
Acquired on : 06 Dec 19 05:07 PM
Report Created on: 09 Dec 19 09:21 AM

Page Number : 1
Vial Number : 36
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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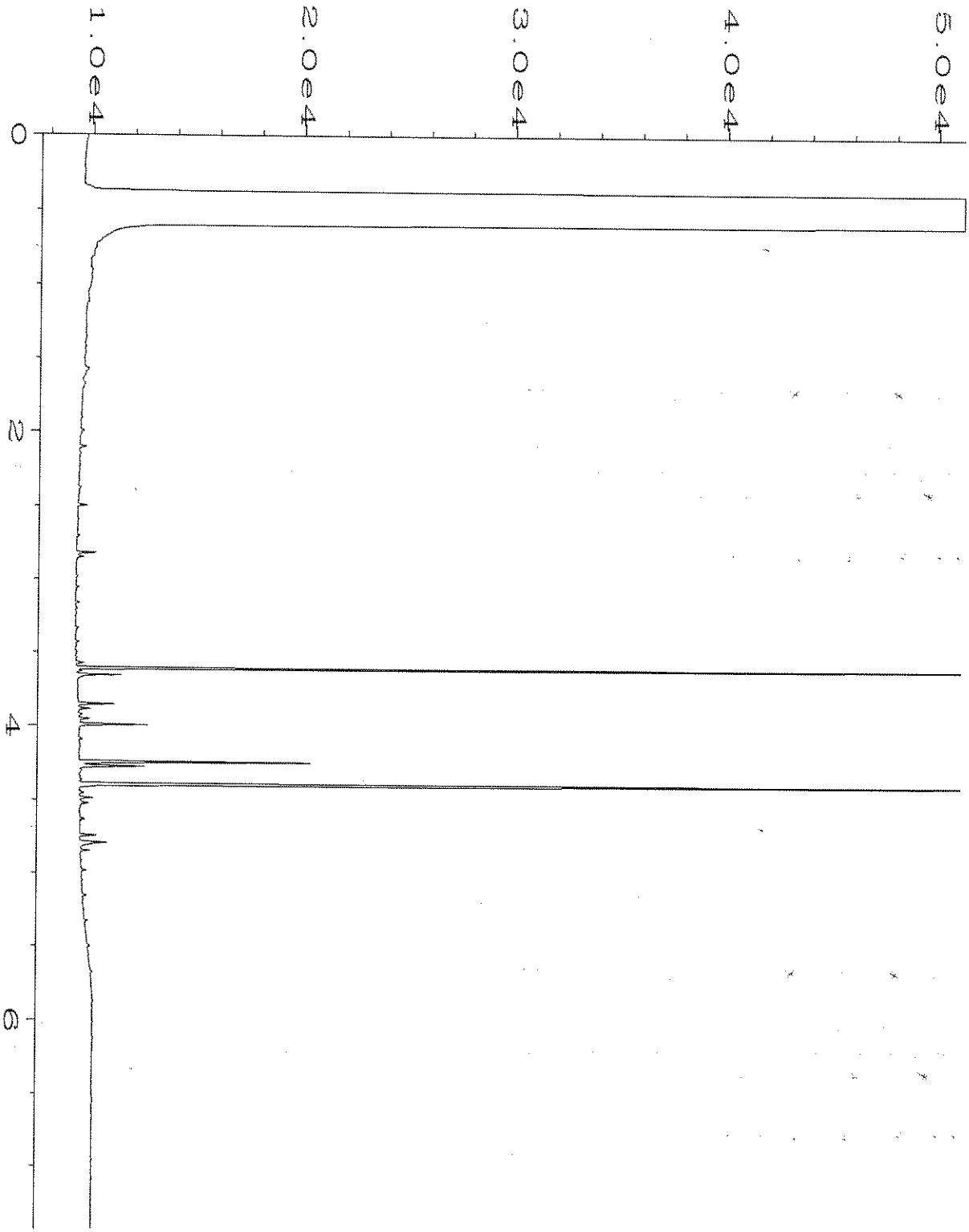
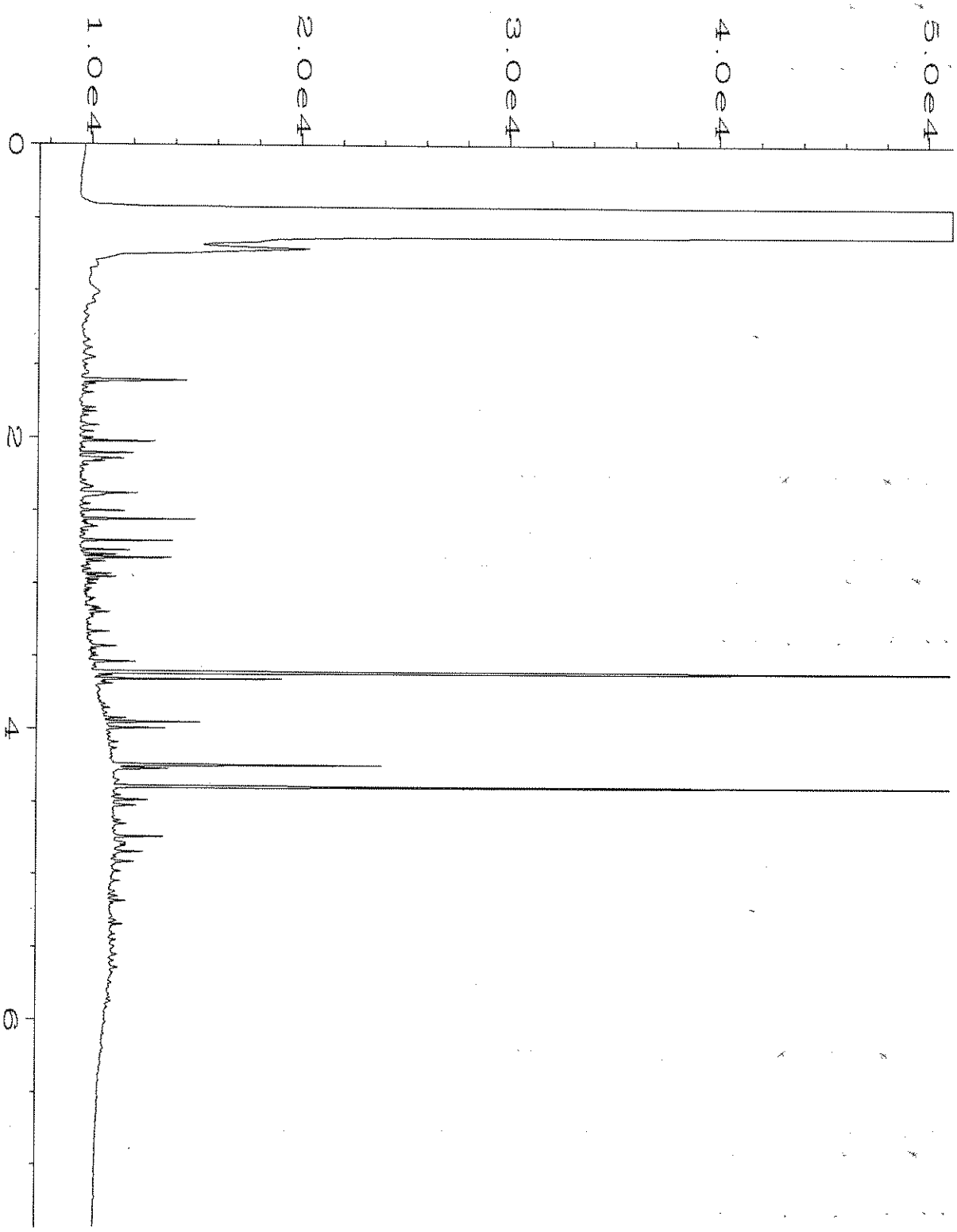
Operator : TL
Instrument : GC1
Sample Name : 912081-03
Run Time Bar Code:
Acquired on : 06 Dec 19 05:19 PM
Report Created on: 09 Dec 19 09:21 AM

Page Number : 1
Vial Number : 37
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



Data File Name : C:\HPCHEM\1\DATA\12-06-19\038F0901.D
Operator : TL
Instrument : GC1
Sample Name : 912081-04
Run Time Bar Code:
Acquired on : 06 Dec 19 05:30 PM
Report Created on: 09 Dec 19 09:21 AM

Page Number : 1
Vial Number : 38
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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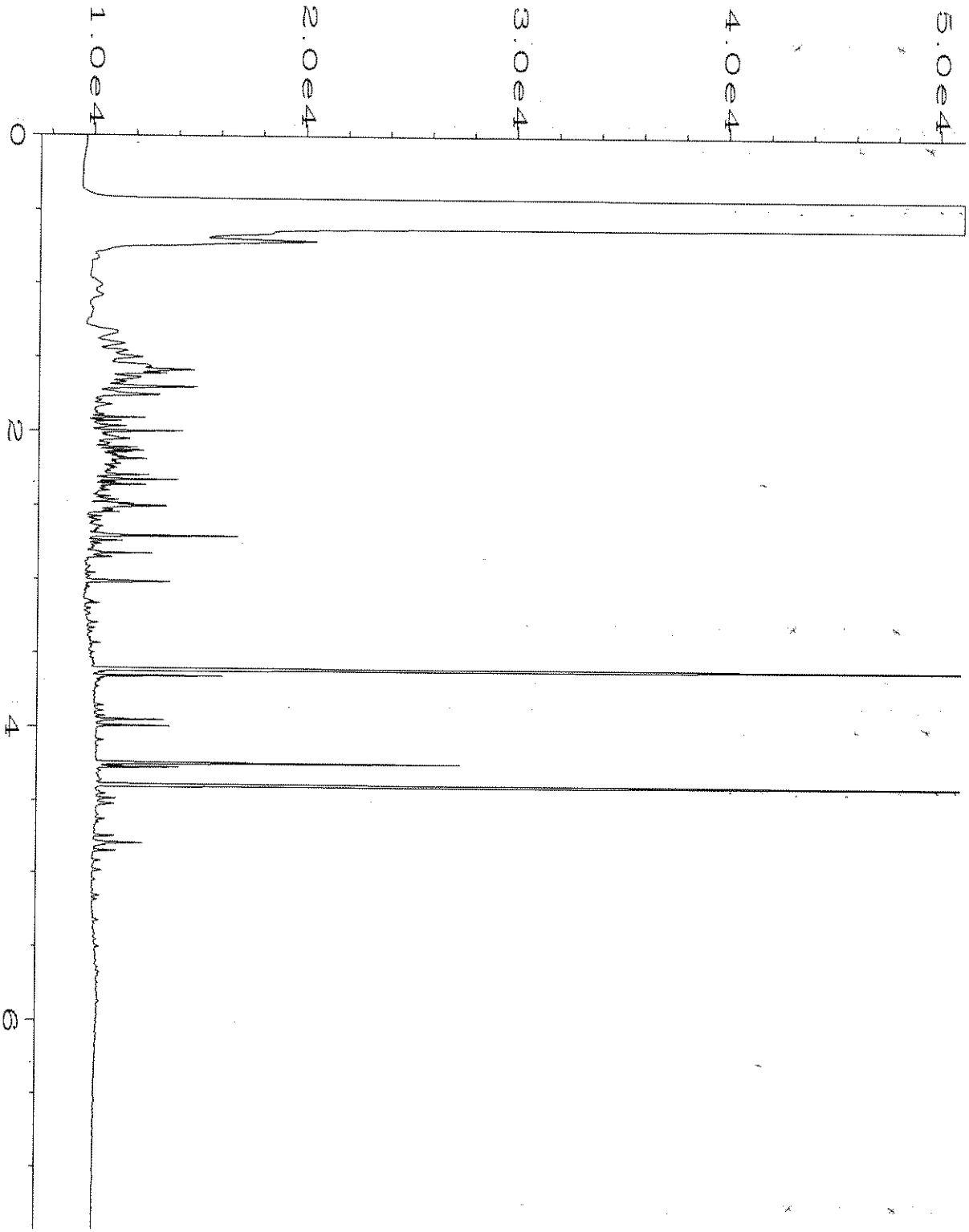
Operator : TL
Instrument : GC1
Sample Name : 912081-06
Run Time Bar Code:
Acquired on : 06 Dec 19 05:42 PM
Report Created on: 09 Dec 19 09:21 AM

Page Number : 1
Vial Number : 39
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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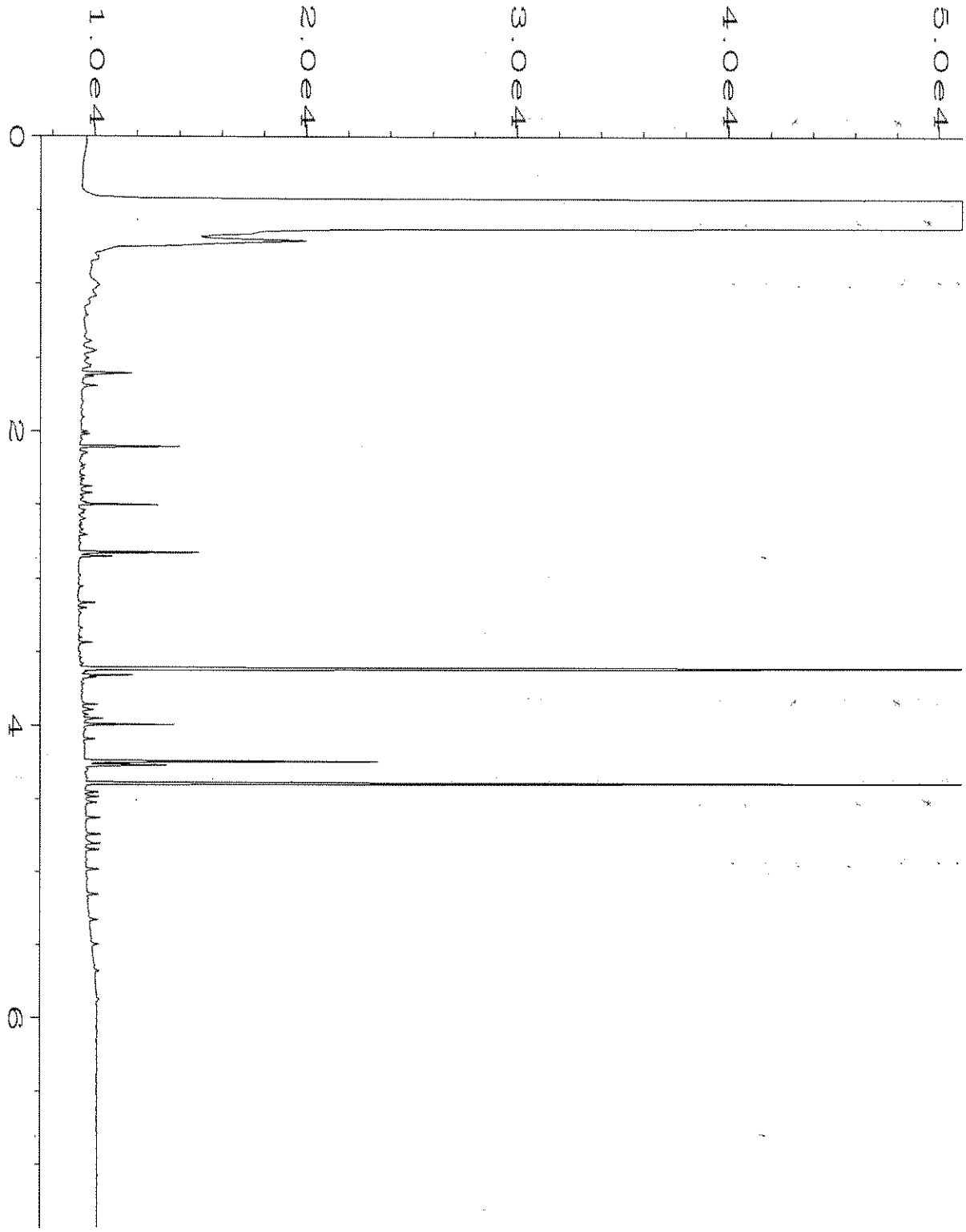
Operator : TL
Instrument : GC1
Sample Name : 912081-07
Run Time Bar Code:
Acquired on : 06 Dec 19 05:53 PM
Report Created on: 09 Dec 19 09:22 AM

Page Number : 1
Vial Number : 40
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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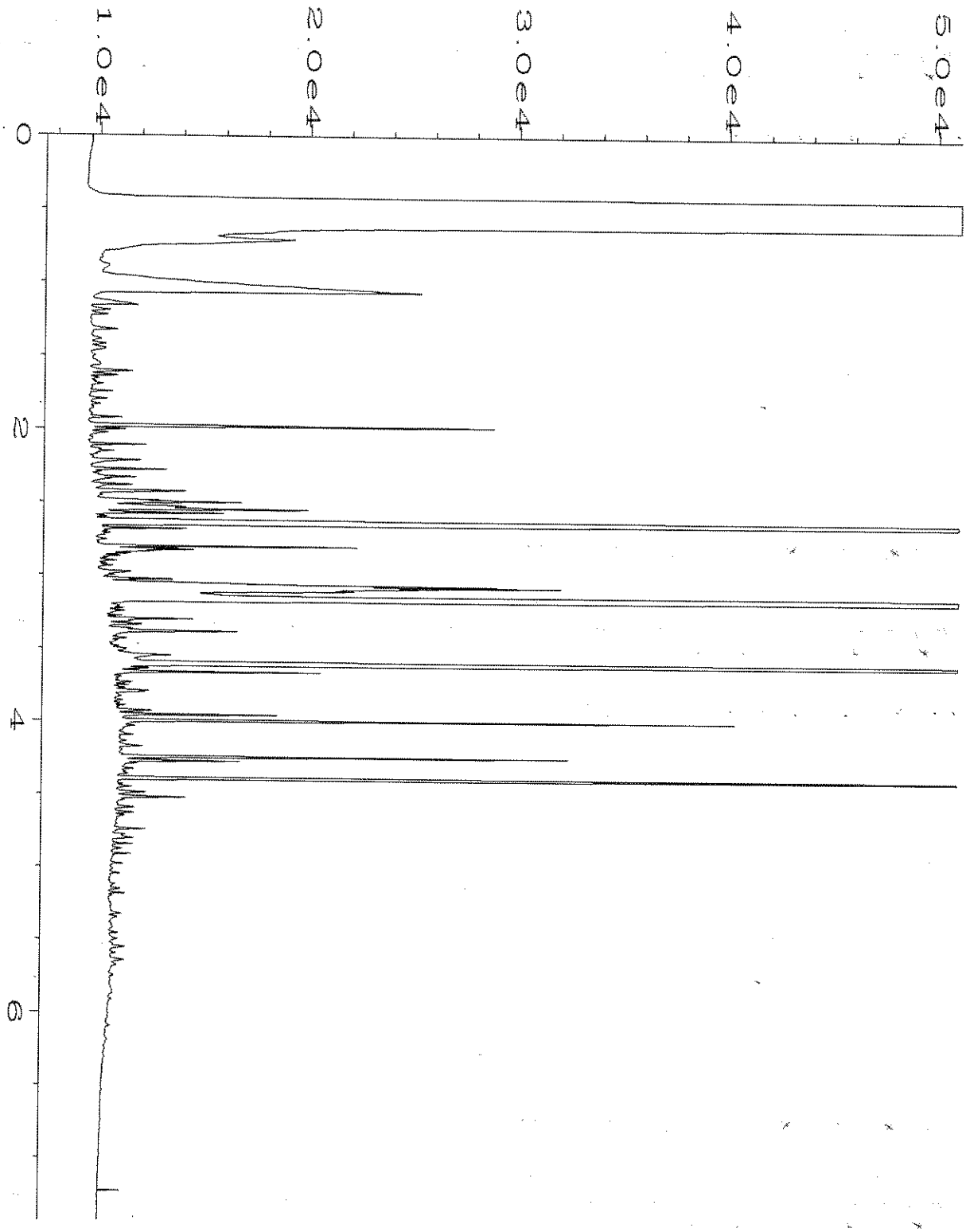
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 41
Sample Name	: 912081-08	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 9
Acquired on	: 06 Dec 19 06:05 PM	Instrument Method	: DX.MTH
Report Created on	: 09 Dec 19 09:22 AM	Analysis Method	: DEFAULT.MTH



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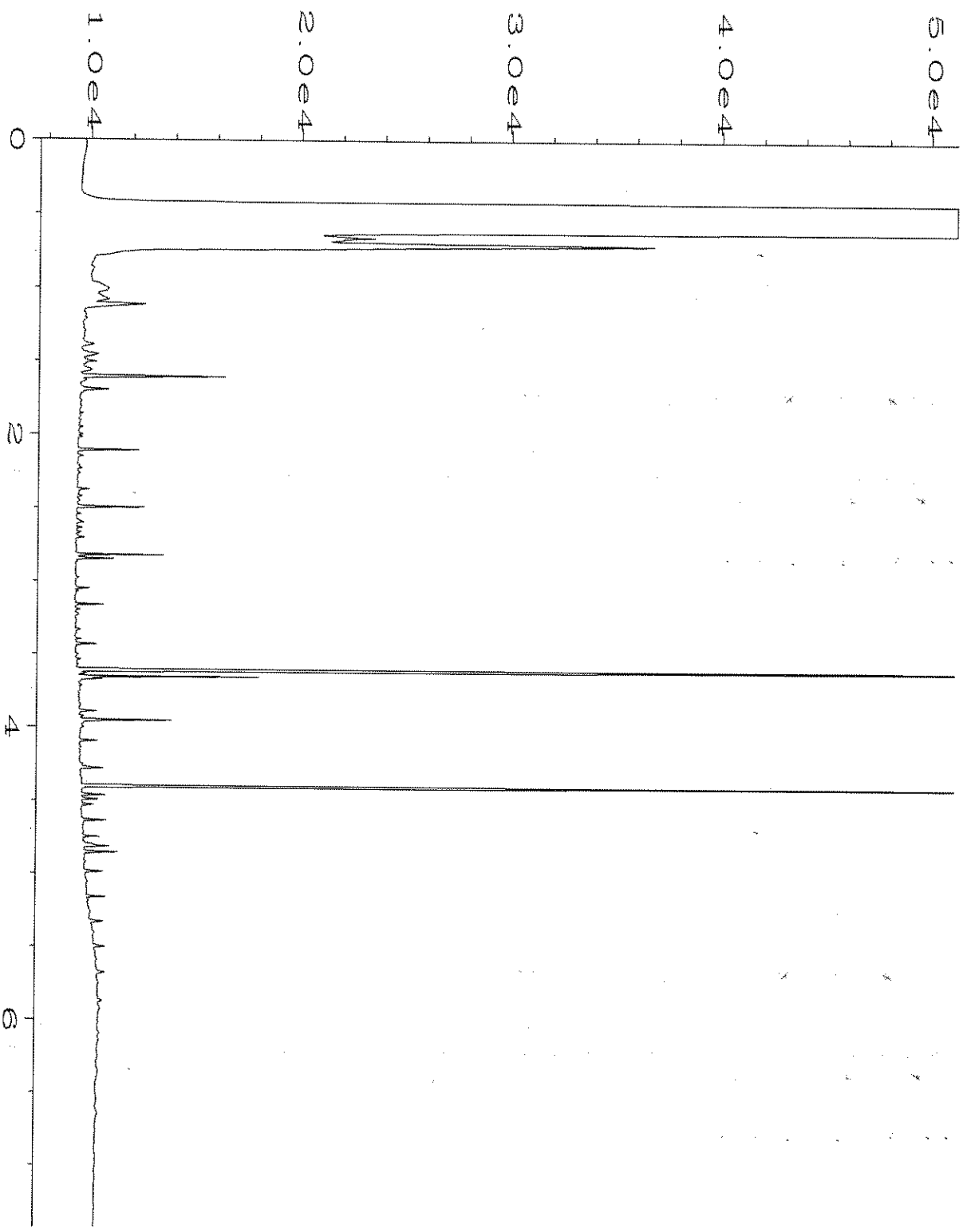
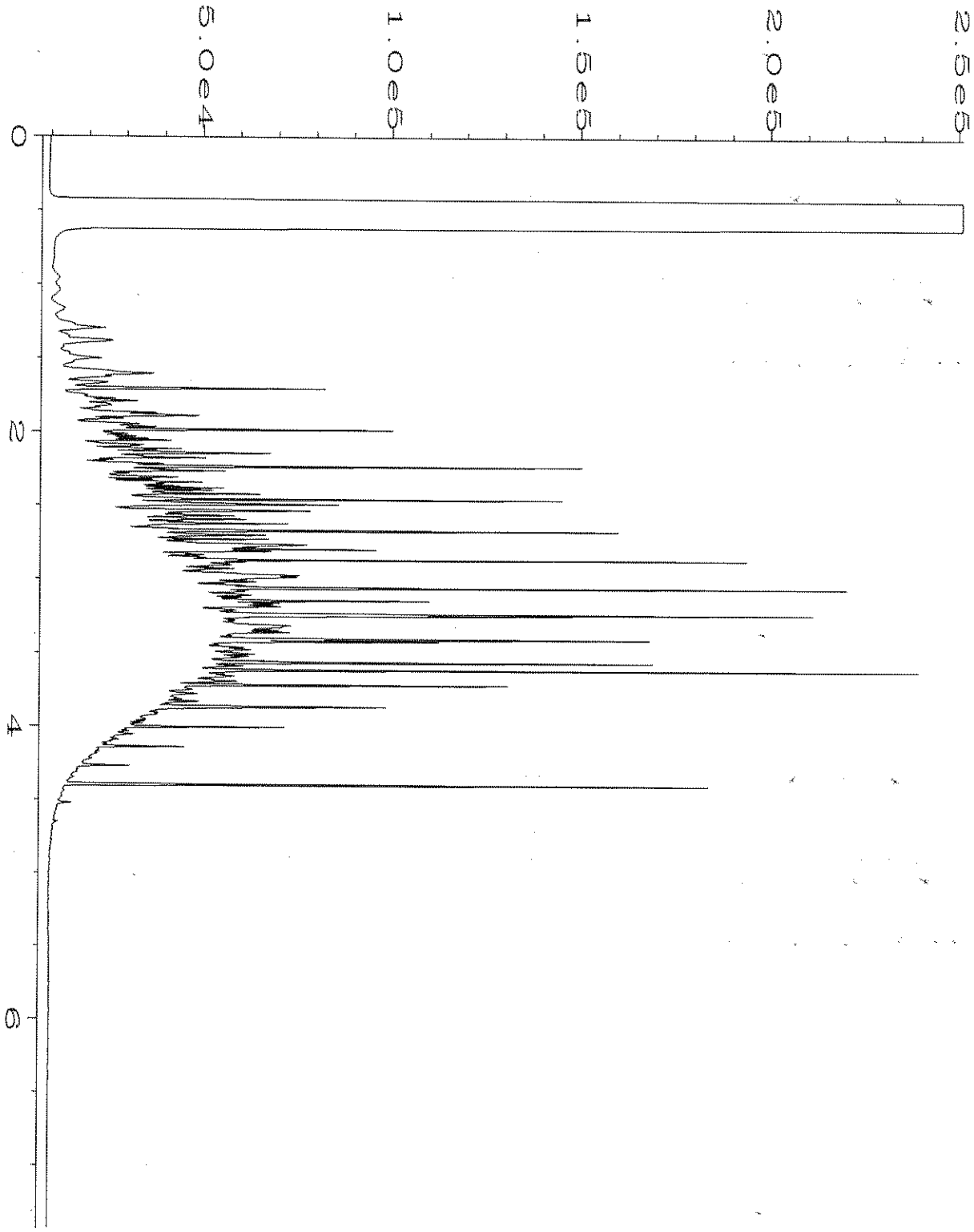
Operator : TL
Instrument : GC1
Sample Name : 912081-09
Run Time Bar Code:
Acquired on : 06 Dec 19 06:16 PM
Report Created on: 09 Dec 19 09:22 AM

Page Number : 1
Vial Number : 42
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



Data File Name : C:\HPCHEM\1\DATA\12-06-19\032F0901.D
Operator : TL
Instrument : GC1
Sample Name : 09-2981 mb
Run Time Bar Code:
Acquired on : 06 Dec 19 04:22 PM
Report Created on: 09 Dec 19 09:22 AM

Page Number : 1
Vial Number : 32
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



Data File Name	: C:\HPCHEM\1\DATA\12-06-19\005F1201.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 5
Sample Name	: 1000 Dx 58-146C	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 12
Acquired on	: 06 Dec 19 08:10 PM	Instrument Method	: DX.MTH
Report Created on	: 09 Dec 19 09:20 AM	Analysis Method	: DEFAULT.MTH

912081

SAMPLE CHAIN OF CUSTODY

ME 12-05-19

Page # 1 / 1 VW4 05

Send Report To Tom Cammarata cc: Logan Schumacher

Company SoundEarth Strategies

Address 2811 Fairview Ave E, Suite 2000

City, State, ZIP Seattle, WA 98102

SAMPLERS (signature) Sarah Welter

PROJECT NAME/NO. Troy Laundry Property

PO # 0731-004-08

REMARKS On prop

EIM Y CS 12/12/19 mc

TURNAROUND TIME

AI 3

(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	GRPH by NWTPH-Gx	BTEX by EPA 8021B	DRPH/ORPH by NWTPH-Dx	cVOCs by EPA 8260C	Methane, Ethane, Ethene by RSK175	Sulfate, Nitrate, Alkalinity by SM1845/SM2320B	Total Fe and Mn by EPA 200.8	Fe 2+ by SM 3500	TOC By EPA 415.1	Notes
MW04-20191205	MW04	-	01A-M	12/5/19	1141	W	13	X	X	X	X	X	X	X	X		
MW07-20191205	MW07	-	02A-N	12/5/19	1240	W	14	X	X	X	X	X	X	X	X	X	
MW13-20191205	MW13	-	03A-G	12/5/19	0920	W	7	X	X	X	X						
MW27-20191205	MW27		04	12/5/19	0907	W	7	X	X	X	X						
MW31-20191205	MW31		05A-C	12/5/19	1133	W	3				X						
MW15-20191205	MW15		06A-G	12/5/19	1347	W	7	X	X	X	X						
MW28-20191204	MW28		07A-M	12/4/19	1443	W	13	X	X	X	X	X	X	X	X		
MW01-20191205	MW01		08A-G	12/5/19	1003	W	7	X	X	X	X						
MW26-20191205	MW26		09A-N	12/5/19	1048	W	14	X	X	X	X	X	X	X	X	X	
MW32-20191205	MW32		10A-C	12/5/19	1021	W	3				X						
MW33-20191205	MW33		11	12/5/19	1340	W	3				X						

Samples received at 3 °C

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 Welter	Sarah Welter	SES	12/6/19	1515
Received by:		DAVID	FEDEX	12-5-19	15:15
Relinquished by:					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

December 16, 2019

Tom Cammarata, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

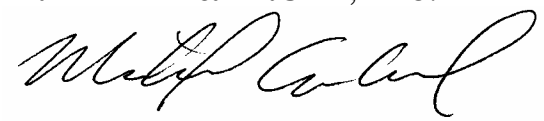
Dear Mr Cammarata:

Included is the amended report from the testing of material submitted on December 5, 2019 from the SOU_0731-004-08_ 20191205, F&BI 912082 project. Per your request, the project ID was updated.

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
SOU1213R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Eric Young, B.S.

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Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

December 13, 2019

Tom Cammarata, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cammarata:

Included are the results from the testing of material submitted on December 5, 2019 from the SOU_0731-004-08_ 20191205, F&BI 912082 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: Logan Schumacher
SOU1213R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 5, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0731-004-08_ 20191205, F&BI 912082 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
912082 -01	MW29-20191204
912082 -02	MW30-20191204

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW29-20191204	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/09/19	Lab ID:	912082-01
Date Analyzed:	12/10/19	Data File:	120958.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.40
Chloroethane	<1
1,1-Dichloroethene	1.6
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	26
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	12
Tetrachloroethene	16

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW30-20191204	Client:	SoundEarth Strategies
Date Received:	12/05/19	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/09/19	Lab ID:	912082-02
Date Analyzed:	12/10/19	Data File:	120959.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	11
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	2.0
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-08_ 20191205
Date Extracted:	12/09/19	Lab ID:	09-2967 mb
Date Analyzed:	12/09/19	Data File:	120910.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 12/13/19
Date Received: 12/05/19
Project: SOU_0731-004-08_ 20191205, F&BI 912082

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

Laboratory Code: 912074-12 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	100	61-139
Chloroethane	ug/L (ppb)	50	<1	96	55-149
1,1-Dichloroethene	ug/L (ppb)	50	<1	93	71-123
Methylene chloride	ug/L (ppb)	50	<5	121	61-126
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	95	72-122
1,1-Dichloroethane	ug/L (ppb)	50	<1	97	79-113
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	97	63-126
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	104	70-119
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	97	75-121
Trichloroethene	ug/L (ppb)	50	<1	100	73-122
Tetrachloroethene	ug/L (ppb)	50	<1	99	40-155

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	100	102	70-128	2
Chloroethane	ug/L (ppb)	50	100	94	66-149	6
1,1-Dichloroethene	ug/L (ppb)	50	91	91	72-121	0
Methylene chloride	ug/L (ppb)	50	99	99	63-132	0
trans-1,2-Dichloroethene	ug/L (ppb)	50	97	98	76-118	1
1,1-Dichloroethane	ug/L (ppb)	50	98	99	77-119	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	96	98	76-119	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	109	109	75-116	0
1,1,1-Trichloroethane	ug/L (ppb)	50	100	101	80-116	1
Trichloroethene	ug/L (ppb)	50	101	102	72-119	1
Tetrachloroethene	ug/L (ppb)	50	101	101	78-109	0

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

912082

SAMPLE CHAIN OF CUSTODY ME 12-05-19

Page # 1 of 1

Send Report To Tom Cammarata cc: Logan Schumacher

Company SoundEarth Strategies

Address 2811 Fairview Ave E, Suite 2000

City, State, ZIP Seattle, WA 98102

SAMPLERS (signature) Sarah Walter

PROJECT NAME/NO.: Troy Laundry Property

PO # 0731-004-08

REMARKS: off prop

EIM YES per 12/12/19 mb

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	GRPH by NWTPH-Gx	BTEX by EPA 8021B	DRPH/ORPH by NWTPH-Dx	cVOCs by EPA 8260C	Methane, Ethane, Ethene by RSK175	Sulfate, Nitrate, Alkalinity by SM1845/SM2320B	Total Fe and Mn by EPA 200.8	Fe 2+ by SM 3500	TOC By EPA 415.1	Notes
MW29-20191204	MW29	—	01A	12/4/19	1307	W	3				X						
MW30-20191204	MW30	—	02T	12/4/19	1353	W	3				X						

Samples received at 3 °C

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	12/5/19	1515
Received by:		D & VO	FedEx	12-5-19	1515
Relinquished by:					
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

December 17, 2019

Tom Cammarata, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

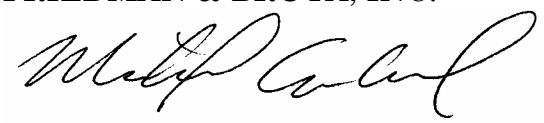
Dear Mr Cammarata:

Included are the results from the testing of material submitted on December 9, 2019 from the SOU_0731-004-07_ 20191209, F&BI 912134 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: Logan Schumacher
SOU1217R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 9, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0731-004-07_ 20191209, F&BI 912134 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
912134 -01	ONNI-MW-4-20191208
912134 -02	ONNI-MW-5-20191208

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	ONNI-MW-4-20191208	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-07_ 20191209
Date Extracted:	12/11/19	Lab ID:	912134-01
Date Analyzed:	12/12/19	Data File:	121214.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	98	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	ONNI-MW-5-20191208	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-07_ 20191209
Date Extracted:	12/11/19	Lab ID:	912134-02
Date Analyzed:	12/12/19	Data File:	121215.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.28
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-07_ 20191209
Date Extracted:	12/11/19	Lab ID:	09-3000 mb
Date Analyzed:	12/12/19	Data File:	121210.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	98	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 12/17/19
Date Received: 12/09/19
Project: SOU_0731-004-07_ 20191209, F&BI 912134

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

Laboratory Code: 912135-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	0.98	105	36-166
Chloroethane	ug/L (ppb)	50	<1	114	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	93	60-136
Methylene chloride	ug/L (ppb)	50	<5	101	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	102	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	101	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	35	91 b	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	99	48-149
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	100	60-146
Trichloroethene	ug/L (ppb)	50	<1	90	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	98	10-226

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	110	102	50-154	8
Chloroethane	ug/L (ppb)	50	120	110	58-146	9
1,1-Dichloroethene	ug/L (ppb)	50	101	93	67-136	8
Methylene chloride	ug/L (ppb)	50	110	103	39-148	7
trans-1,2-Dichloroethene	ug/L (ppb)	50	109	101	68-128	8
1,1-Dichloroethane	ug/L (ppb)	50	108	101	79-121	7
cis-1,2-Dichloroethene	ug/L (ppb)	50	104	98	80-123	6
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	107	102	73-132	5
1,1,1-Trichloroethane	ug/L (ppb)	50	106	99	81-125	7
Trichloroethene	ug/L (ppb)	50	97	92	79-113	5
Tetrachloroethene	ug/L (ppb)	50	104	101	76-121	3

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SAMPLE CHAIN OF CUSTODY

912134

ME 12/9/19

Send Report To Tom Cammarata cc: Logan Schumacher

Company SoundEarth Strategies

Address 2811 Fairview Ave E, Suite 2000

City, State, ZIP Seattle, WA 98102

SAMPLERS (signature) [signature]

PROJECT NAME/NO. Troy Laundry Property

PO # 0731-004-~~05~~ 07

REMARKS EIM Y per LS 12/12/19 ME

Page # 1 | VW3

TURNAROUND TIME C04

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	GRPH by NWTPH-Gx	BTEX by EPA 8021B	DRPH/ORPH by NWTPH-Dx	cVOCs by EPA 8260C	Methane, Ethane, Ethene by RSK175	Sulfate, Nitrate, Alkalinity by SM1845/SM2320B	Total Fe and Mn by EPA 200.8	Fe 2+ by SM 3500	TOC By EPA 415.1	Notes
ONNI-MW-4-20191208	ONNI-MW-4	—	01	12/8/19	1152	H2O	7				X						
ONNI-MW-5-20191208	ONNI-MW-5	—	02	12/8/19	1259	H2O	7				X						
					CJT 12/8/19												
																	Samples received at 4 °C

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: [signature]	Clare Tochilin	SoundEarth	12/9/19	855
Received by: [signature]	WILSON YANGUAS	FEDEX	12.9.19	855
Relinquished by:				
Received by: [signature]	Nhan Phan	FEBI	12/9/19	1045

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

December 18, 2019

Tom Cammarata, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Cammarata:

Included are the results from the testing of material submitted on December 9, 2019 from the SOU_0731-004-08_ 20191209, F&BI 912135 project. There are 36 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
SOU1218R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 9, 2019 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0731-004-08_ 20191209, F&BI 912135 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
912135 -01	MW17-20191207
912135 -02	MW18-20191207
912135 -03	MW19-20191207
912135 -04	MW20-20191207
912135 -05	MW21-20191207
912135 -06	MW22-20191207
912135 -07	MW23-20191207
912135 -08	MW24-20191207
912135 -09	MW25-20191207
912135 -10	IW04-20191207
912135 -11	IW06-20191207
912135 -12	IW50-20191207
912135 -13	IW61-20191207
912135 -14	IW91-20191207
912135 -15	MW99-20191207

Samples MW18-2019120, MW19-20191207, MW22-20191207, MW23-20191207, MW24-20191207, MW25-20191207, IW04-20191207, IW50-20191207, and IW61-20191207 were sent to Fremont Analytical for sulfate, nitrate, alkalinity, and ferrous iron analyses. In addition, sample MW21-20191207 was sent to Fremont for dissolved gasses and TOC analyses. The report is enclosed.

All quality control requirements were acceptable.

Date of Report: 12/18/19
Date Received: 12/09/19
Project: SOU_0731-004-08_ 20191209, F&BI 912135
Date Extracted: 12/09/19
Date Analyzed: 12/10/19 and 12/11/19

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)
MW17-20191207 912135-01	<1	<1	<1	<3	<100	77
MW18-20191207 912135-02	<1	<1	<1	<3	<100	78
MW19-20191207 912135-03	<1	<1	<1	<3	<100	77
MW20-20191207 912135-04	<1	<1	<1	<3	<100	77
MW21-20191207 912135-05	<1	<1	<1	4.8	300	79
MW22-20191207 912135-06	<1	<1	<1	74	810	80
MW23-20191207 912135-07	<1	<1	<1	<3	<100	59
MW24-20191207 912135-08	<1	<1	<1	<3	<100	77
MW25-20191207 912135-09	<1	<1	<1	<3	<100	80
IW91-20191207 912135-14	<1	<1	<1	<3	<100	80

Date of Report: 12/18/19
Date Received: 12/09/19
Project: SOU_0731-004-08_ 20191209, F&BI 912135
Date Extracted: 12/09/19
Date Analyzed: 12/10/19 and 12/11/19

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)
MW99-20191207 912135-15	<1	<1	<1	<3	<100	79
Method Blank 09-2914 MB	<1	<1	<1	<3	<100	79

Date of Report: 12/18/19
Date Received: 12/09/19
Project: SOU_0731-004-08_ 20191209, F&BI 912135
Date Extracted: 12/10/19
Date Analyzed: 12/10/19

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)
MW17-20191207 912135-01	<50	<250	84
MW18-20191207 912135-02	830 x	480 x	ip
MW19-20191207 912135-03	610 x	690 x	86
MW20-20191207 912135-04	80 x	<250	80
MW21-20191207 912135-05	21,000 x	2,100 x	ip
MW22-20191207 912135-06	40,000 x	3,400 x	79
MW23-20191207 912135-07	1,400 x	790 x	ip
MW24-20191207 912135-08	7,100 x	1,400 x	62
MW25-20191207 912135-09	240 x	<250	89
IW91-20191207 912135-14	<50	<250	84

Date of Report: 12/18/19
Date Received: 12/09/19
Project: SOU_0731-004-08_ 20191209, F&BI 912135
Date Extracted: 12/10/19
Date Analyzed: 12/10/19

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)
MW99-20191207 912135-15	300 x	<250	85
Method Blank 09-3003 MB	<50	<250	81

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW18-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/10/19	Lab ID:	912135-02 x10
Date Analyzed:	12/12/19	Data File:	912135-02 x10.039
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	13,800
Manganese	9,660

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW19-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/10/19	Lab ID:	912135-03 x10
Date Analyzed:	12/12/19	Data File:	912135-03 x10.040
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	13,300
Manganese	9,030

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW22-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/10/19	Lab ID:	912135-06 x100
Date Analyzed:	12/13/19	Data File:	912135-06 x100.163
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	8,010
Manganese	10,900

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW23-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/10/19	Lab ID:	912135-07 x100
Date Analyzed:	12/13/19	Data File:	912135-07 x100.164
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	14,600
Manganese	22,100

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW24-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/10/19	Lab ID:	912135-08 x100
Date Analyzed:	12/13/19	Data File:	912135-08 x100.167
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	10,700
Manganese	20,700

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW25-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/10/19	Lab ID:	912135-09 x10
Date Analyzed:	12/12/19	Data File:	912135-09 x10.103
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	13,500
Manganese	6,850

Analysis For Total Metals By EPA Method 200.8

Client ID:	IW04-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/10/19	Lab ID:	912135-10 x100
Date Analyzed:	12/13/19	Data File:	912135-10 x100.168
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	15,600
Manganese	11,700

Analysis For Total Metals By EPA Method 200.8

Client ID:	IW50-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/10/19	Lab ID:	912135-12 x10
Date Analyzed:	12/12/19	Data File:	912135-12 x10.105
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	7,170
Manganese	8,090

Analysis For Total Metals By EPA Method 200.8

Client ID:	IW61-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/10/19	Lab ID:	912135-13 x100
Date Analyzed:	12/13/19	Data File:	912135-13 x100.169
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	22,300
Manganese	11,000

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/10/19	Lab ID:	I9-776 mb2
Date Analyzed:	12/10/19	Data File:	I9-776 mb2.094
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW17-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-01
Date Analyzed:	12/12/19	Data File:	121216.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	98	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	2.2
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	3.9
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW18-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-02
Date Analyzed:	12/12/19	Data File:	121217.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	97	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.55
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	28
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW19-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-03
Date Analyzed:	12/12/19	Data File:	121218.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	98	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.98
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	35
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW20-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-04
Date Analyzed:	12/12/19	Data File:	121219.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	3.0
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW21-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-05
Date Analyzed:	12/12/19	Data File:	121220.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	94	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	1.3
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	34
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW22-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-06
Date Analyzed:	12/12/19	Data File:	121221.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	96	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	1.0
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	48
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.3
Tetrachloroethene	1.3

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW23-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-07
Date Analyzed:	12/12/19	Data File:	121222.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	98	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.89
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	38
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW24-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-08
Date Analyzed:	12/12/19	Data File:	121223.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	98	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.94
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	83
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW25-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-09
Date Analyzed:	12/12/19	Data File:	121224.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	94	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.63
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	40
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	IW04-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-10
Date Analyzed:	12/12/19	Data File:	121225.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	95	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	1.1
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.4
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	IW06-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-11
Date Analyzed:	12/12/19	Data File:	121226.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	97	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	1.4

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	IW50-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-12
Date Analyzed:	12/12/19	Data File:	121227.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	96	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	7.4
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	55
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.6
Tetrachloroethene	4.5

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	IW61-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-13
Date Analyzed:	12/12/19	Data File:	121228.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	4.0
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	65
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.7
Tetrachloroethene	6.8

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	IW91-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-14
Date Analyzed:	12/12/19	Data File:	121229.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	95	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW99-20191207	Client:	SoundEarth Strategies
Date Received:	12/09/19	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	912135-15
Date Analyzed:	12/12/19	Data File:	121230.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	95	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.58
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	36
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-08_ 20191209
Date Extracted:	12/11/19	Lab ID:	09-3000 mb
Date Analyzed:	12/12/19	Data File:	121210.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	98	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 12/18/19
Date Received: 12/09/19
Project: SOU_0731-004-08_ 20191209, F&BI 912135

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

Laboratory Code: 912124-01 (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	96	72-122
Ethylbenzene	ug/L (ppb)	50	100	73-126
Xylenes	ug/L (ppb)	150	93	74-118
Gasoline	ug/L (ppb)	1,000	99	69-134

Date of Report: 12/18/19
Date Received: 12/09/19
Project: SOU_0731-004-08_ 20191209, F&BI 912135

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	96	88	63-142	9

Date of Report: 12/18/19
Date Received: 12/09/19
Project: SOU_0731-004-08_ 20191209, F&BI 912135

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

Laboratory Code: 912133-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Iron	ug/L (ppb)	100	159	106	94	70-130	12
Manganese	ug/L (ppb)	20	4.66	100	98	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	95	85-115
Manganese	ug/L (ppb)	20	95	85-115

Date of Report: 12/18/19
Date Received: 12/09/19
Project: SOU_0731-004-08_ 20191209, F&BI 912135

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

Laboratory Code: 912135-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	0.98	105	36-166
Chloroethane	ug/L (ppb)	50	<1	114	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	93	60-136
Methylene chloride	ug/L (ppb)	50	<5	101	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	102	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	101	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	35	91 b	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	99	48-149
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	100	60-146
Trichloroethene	ug/L (ppb)	50	<1	90	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	98	10-226

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	110	102	50-154	8
Chloroethane	ug/L (ppb)	50	120	110	58-146	9
1,1-Dichloroethene	ug/L (ppb)	50	101	93	67-136	8
Methylene chloride	ug/L (ppb)	50	110	103	39-148	7
trans-1,2-Dichloroethene	ug/L (ppb)	50	109	101	68-128	8
1,1-Dichloroethane	ug/L (ppb)	50	108	101	79-121	7
cis-1,2-Dichloroethene	ug/L (ppb)	50	104	98	80-123	6
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	107	102	73-132	5
1,1,1-Trichloroethane	ug/L (ppb)	50	106	99	81-125	7
Trichloroethene	ug/L (ppb)	50	97	92	79-113	5
Tetrachloroethene	ug/L (ppb)	50	104	101	76-121	3

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

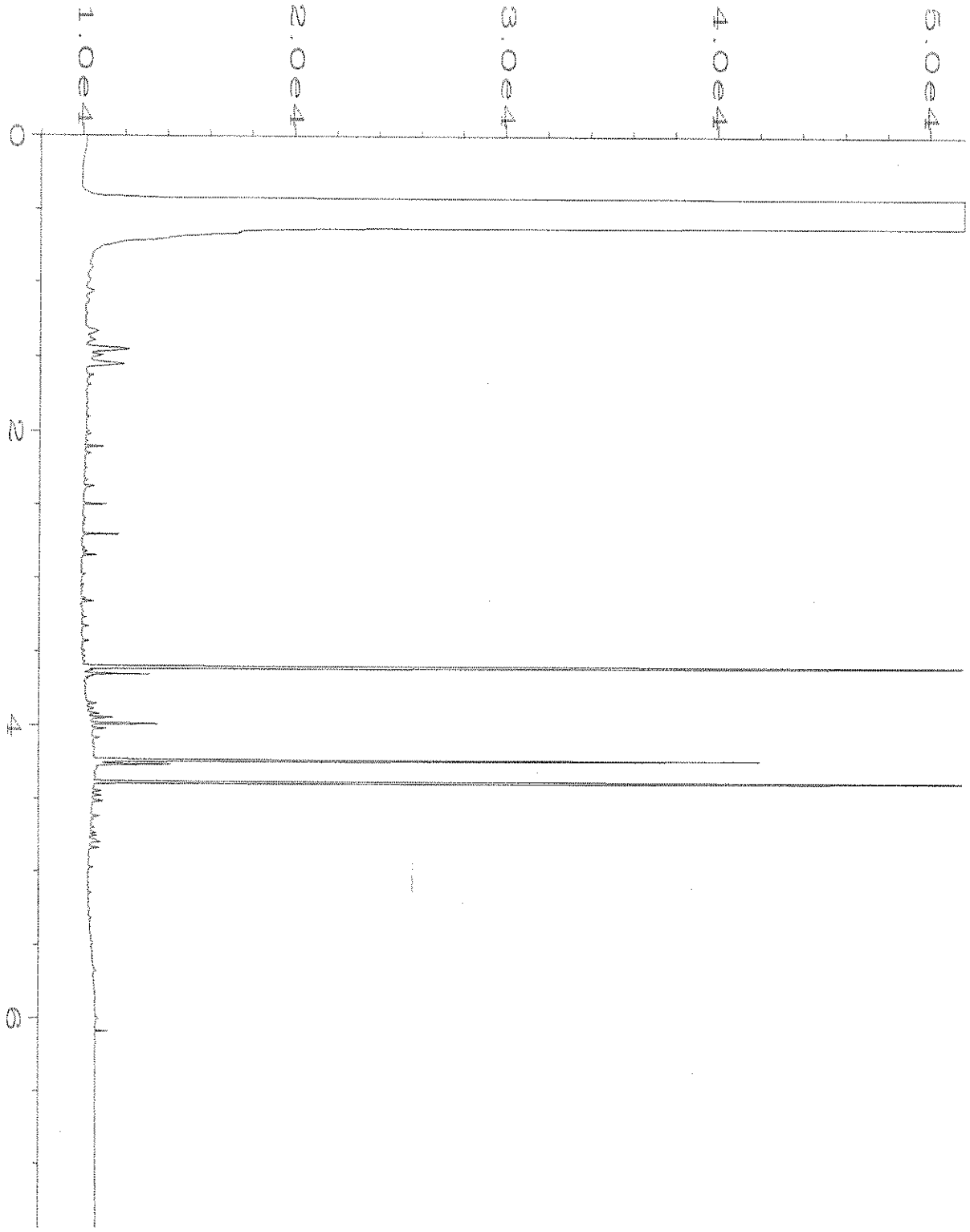
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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.

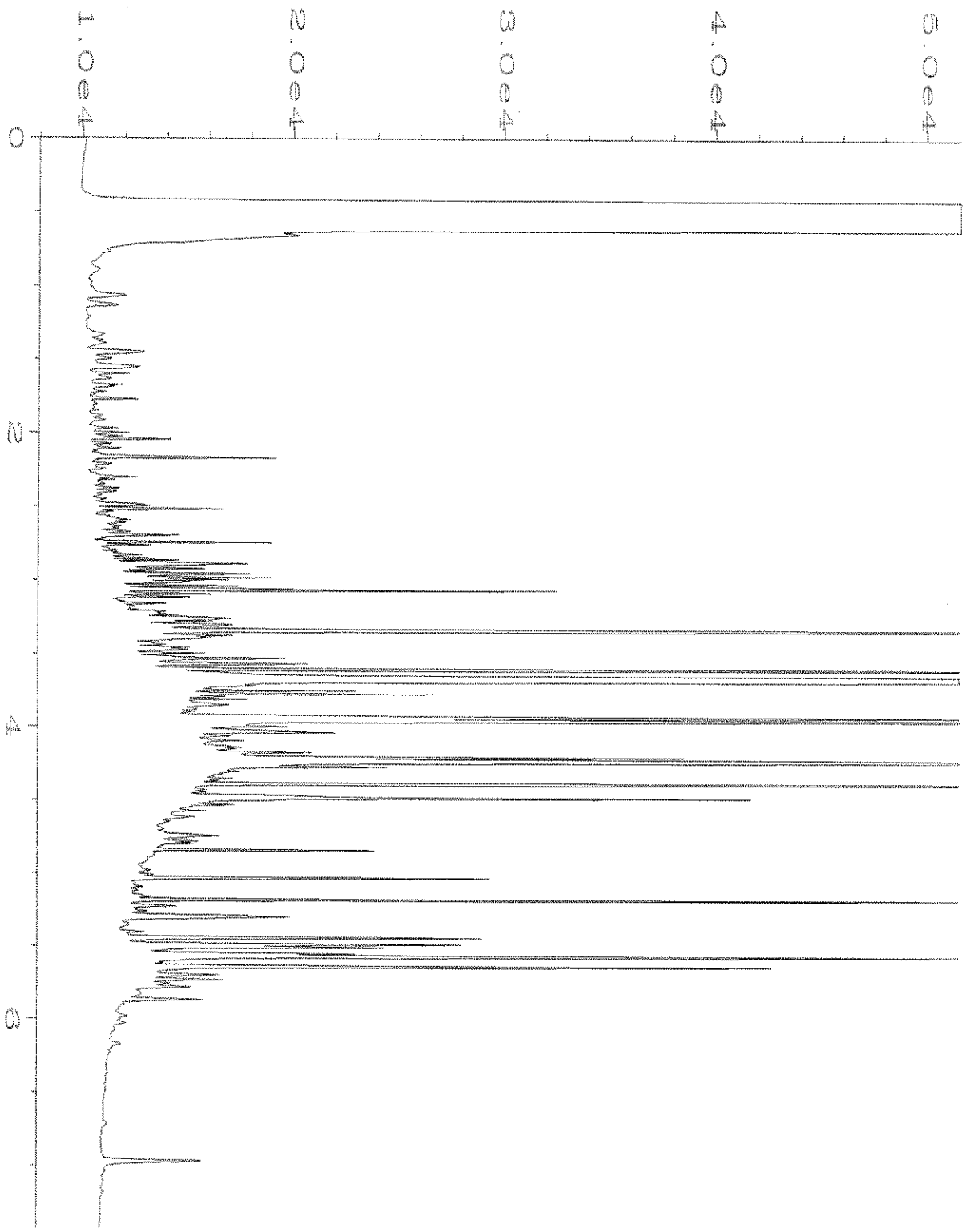
vo - The value reported fell outside the control limits established for this analyte.

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

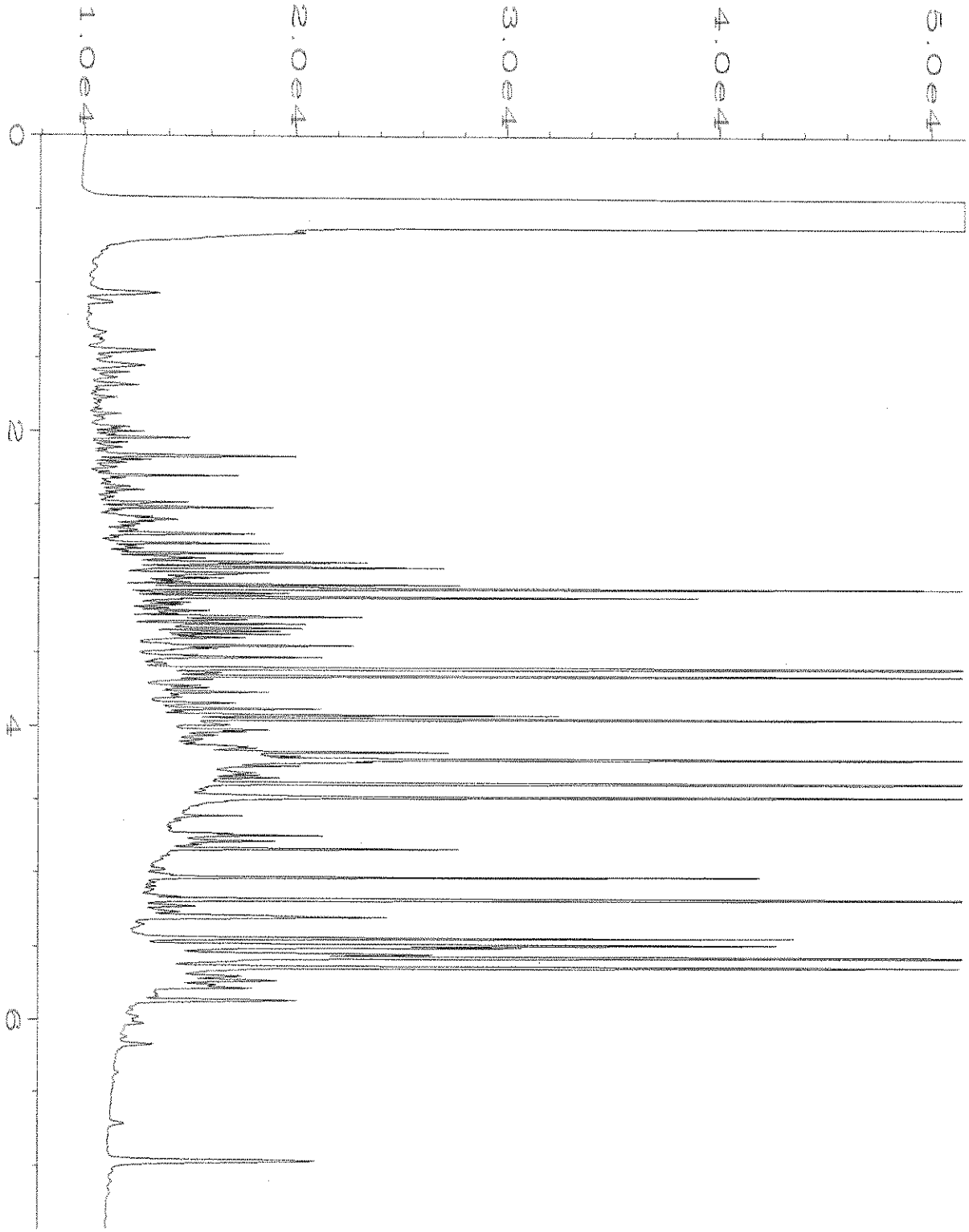


Data File Name : C:\HPCHEM\1\DATA\12-10-19\044F1001.D
Operator : TL
Instrument : GC1
Sample Name : 912135-01
Run Time Bar Code:
Acquired on : 10 Dec 19 06:28 PM
Report Created on: 11 Dec 19 09:37 AM

Page Number : 1
Vial Number : 44
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH

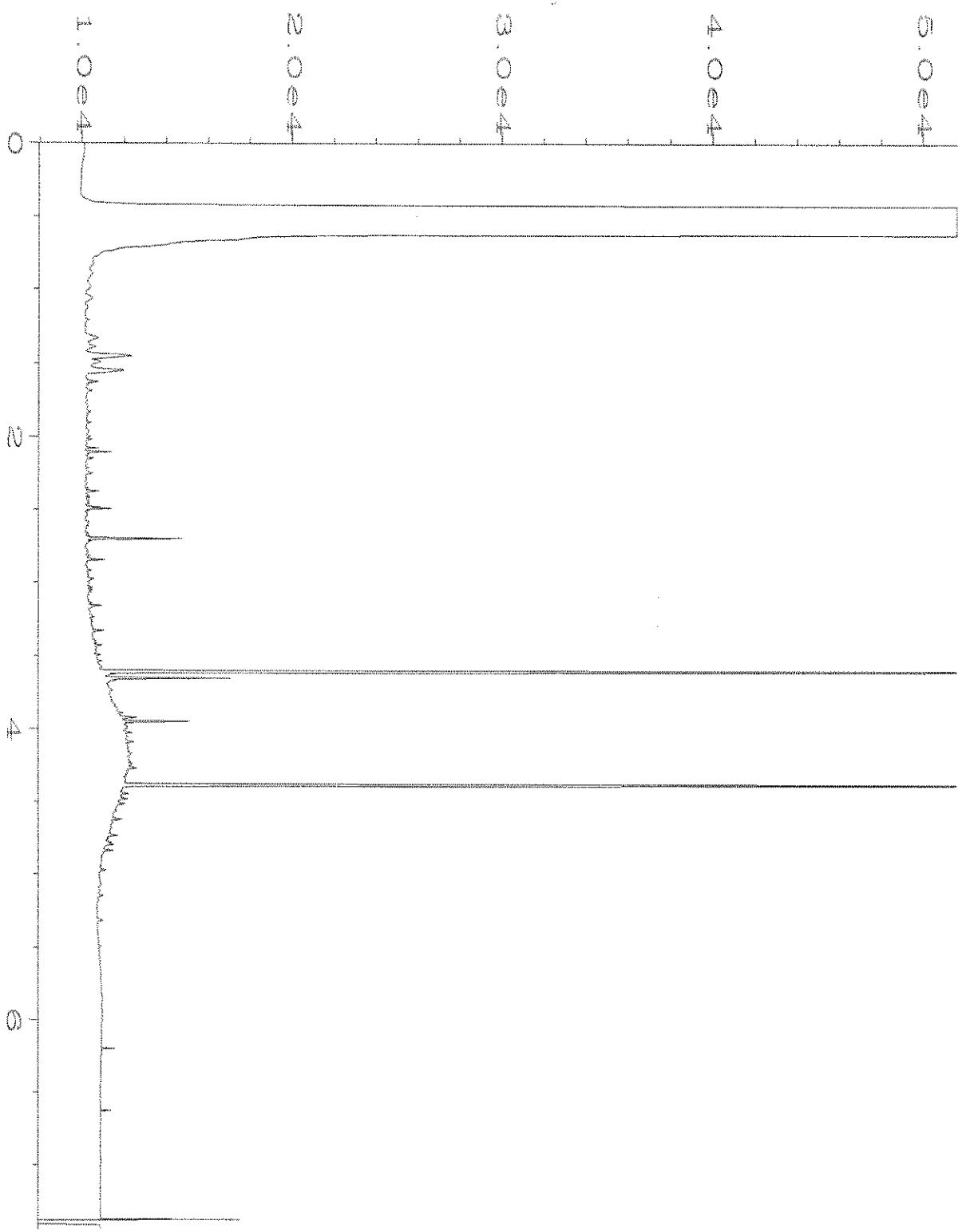


Data File Name	: C:\HPCHEM\1\DATA\12-10-19\045F1001.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 45
Sample Name	: 912135-02	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 10 Dec 19 06:39 PM	Instrument Method	: DX.MTH
Report Created on	: 11 Dec 19 09:37 AM	Analysis Method	: DX.MTH

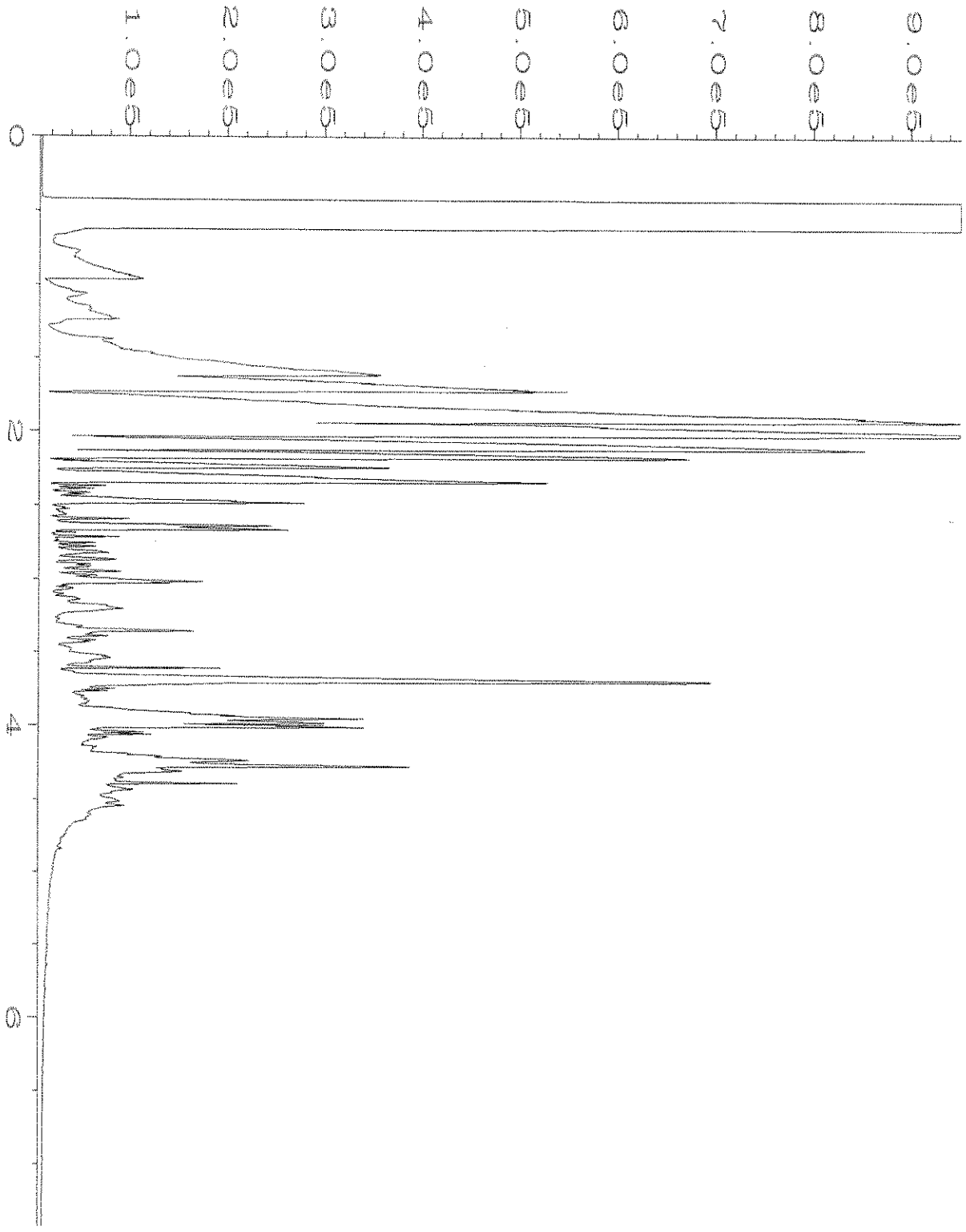


Data File Name : C:\HPCHEM\1\DATA\12-10-19\046F1001.D
Operator : TL
Instrument : GC1
Sample Name : 912135-03
Run Time Bar Code:
Acquired on : 10 Dec 19 06:50 PM
Report Created on: 11 Dec 19 09:37 AM

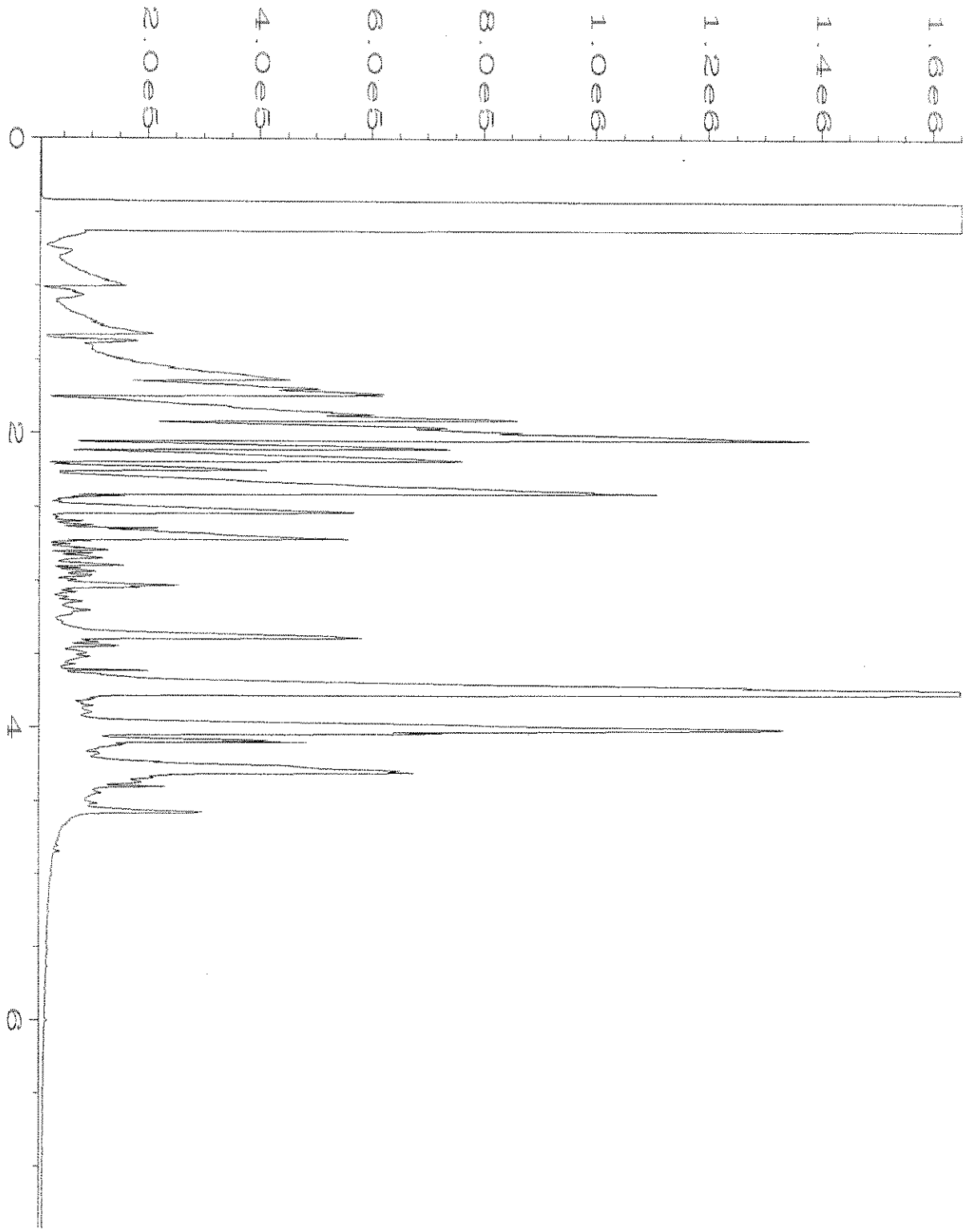
Page Number : 1
Vial Number : 46
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH



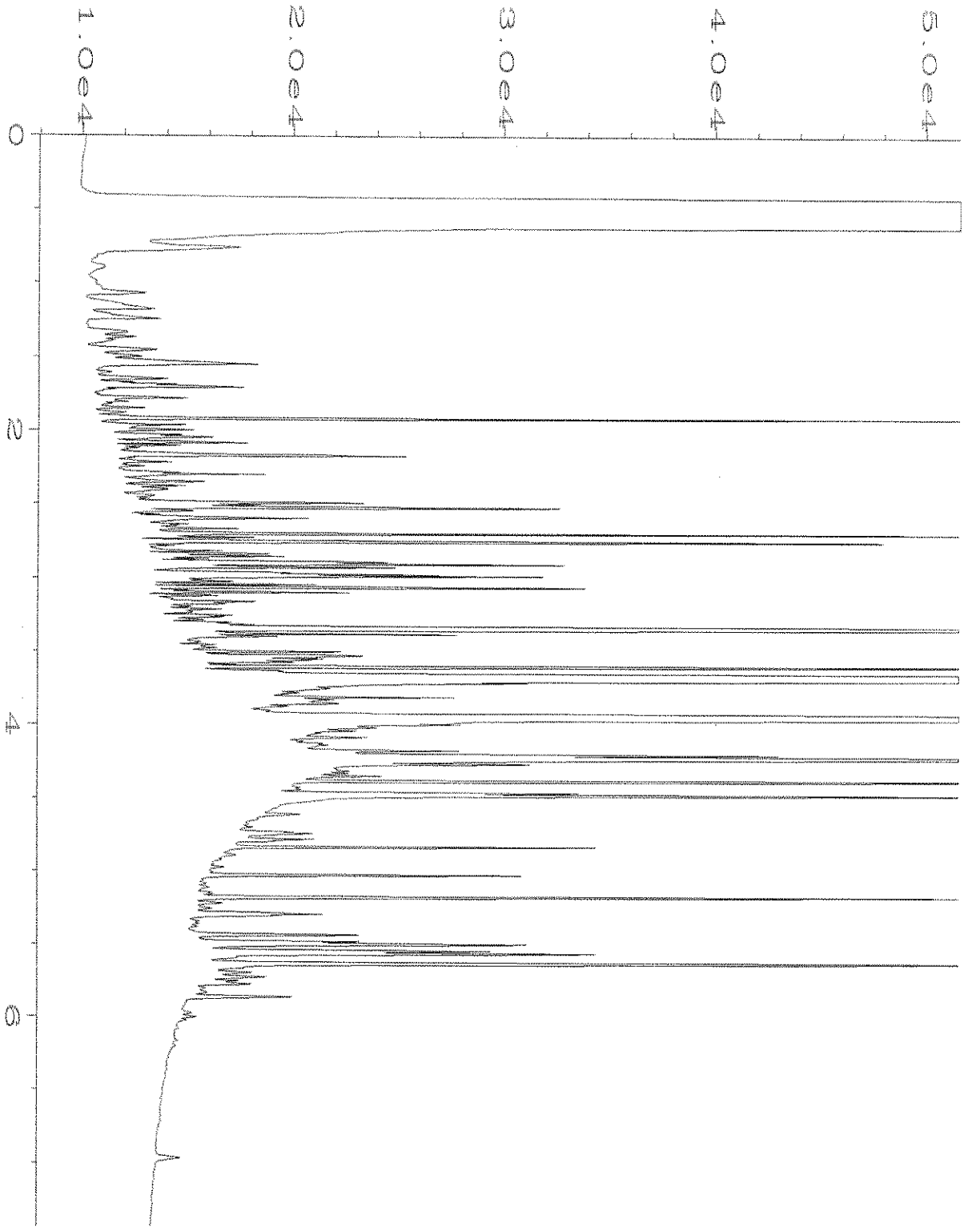
Data File Name	: C:\HPCHEM\1\DATA\12-10-19\047F1001.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 47
Sample Name	: 912135-04	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 10 Dec 19 07:02 PM	Instrument Method	: DX.MTH
Report Created on	: 11 Dec 19 09:38 AM	Analysis Method	: DX.MTH



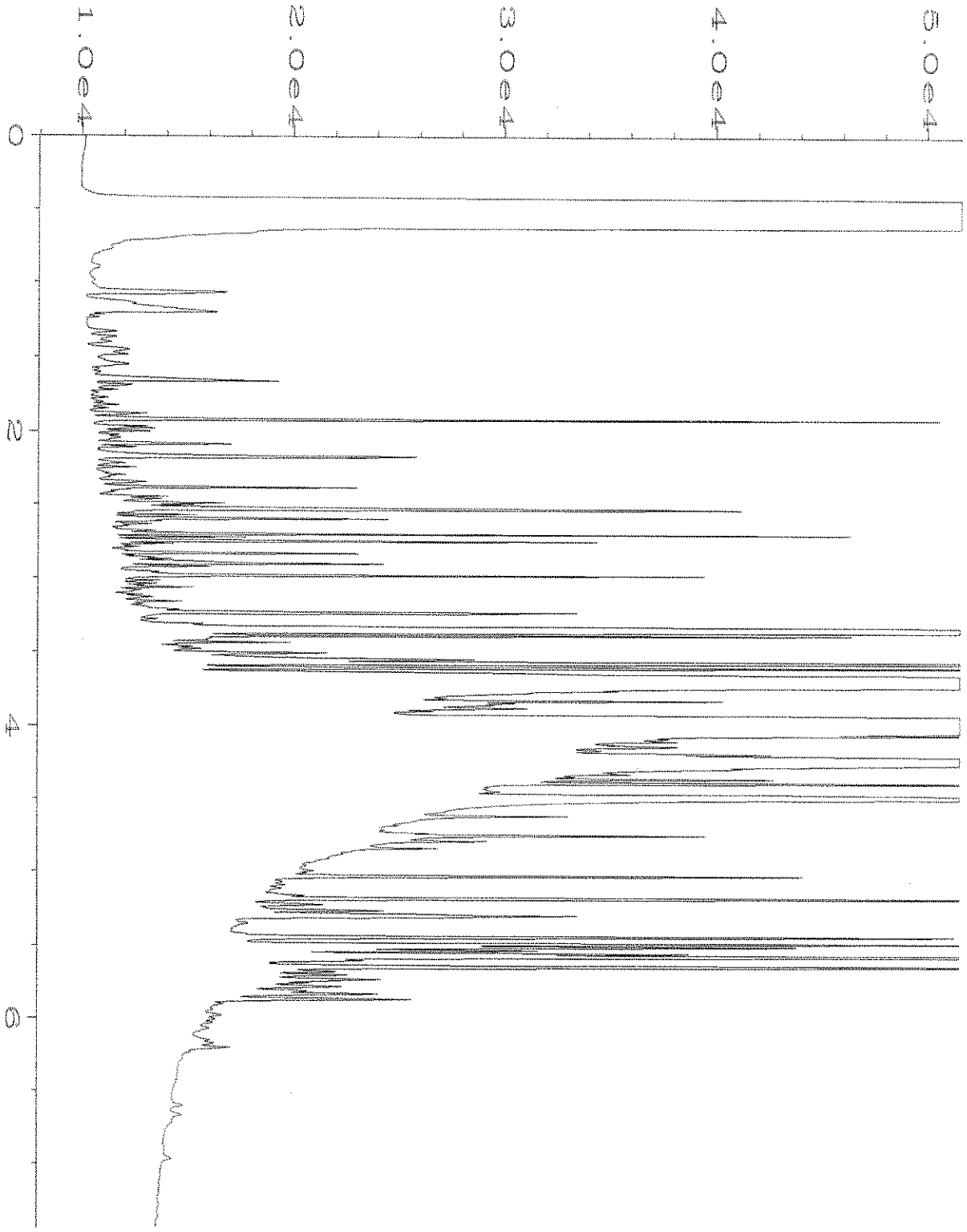
Data File Name	: C:\HPCHEM\1\DATA\12-10-19\048F1001.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 48
Sample Name	: 912135-05	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 10 Dec 19 07:13 PM	Instrument Method	: DX.MTH
Report Created on	: 11 Dec 19 09:38 AM	Analysis Method	: DX.MTH



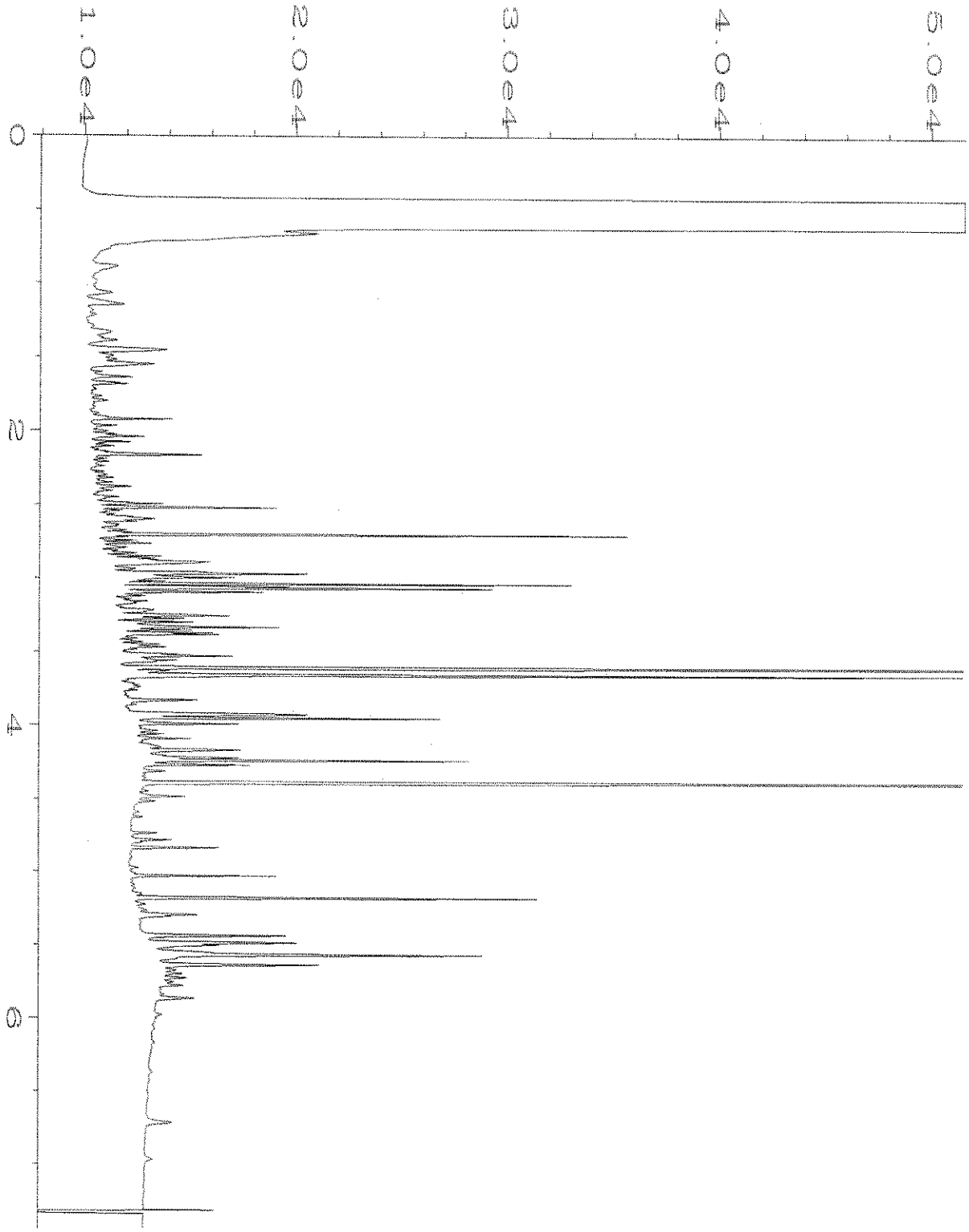
Data File Name	: C:\HPCHEM\1\DATA\12-10-19\049F1001.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 49
Sample Name	: 912135-06	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 10 Dec 19 07:24 PM	Instrument Method	: DX.MTH
Report Created on	: 11 Dec 19 09:39 AM	Analysis Method	: DX.MTH



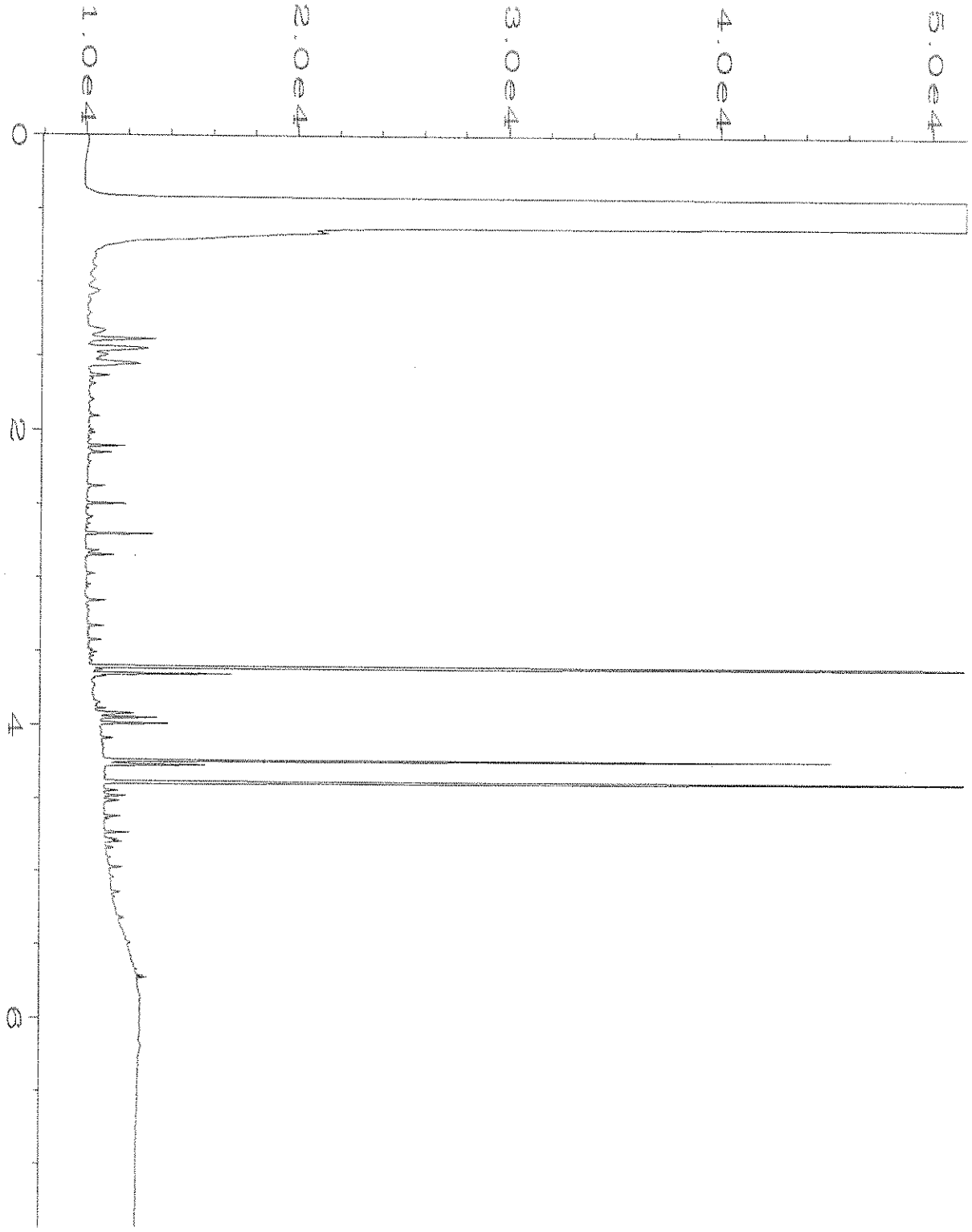
Data File Name	: C:\HPCHEM\1\DATA\12-10-19\050F1001.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 50
Sample Name	: 912135-07	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 10 Dec 19 07:36 PM	Instrument Method	: DX.MTH
Report Created on	: 11 Dec 19 09:39 AM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\12-10-19\051F1001.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 51
Sample Name	: 912135-08	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 10 Dec 19 07:47 PM	Instrument Method	: DX.MTH
Report Created on	: 11 Dec 19 09:39 AM	Analysis Method	: DX.MTH

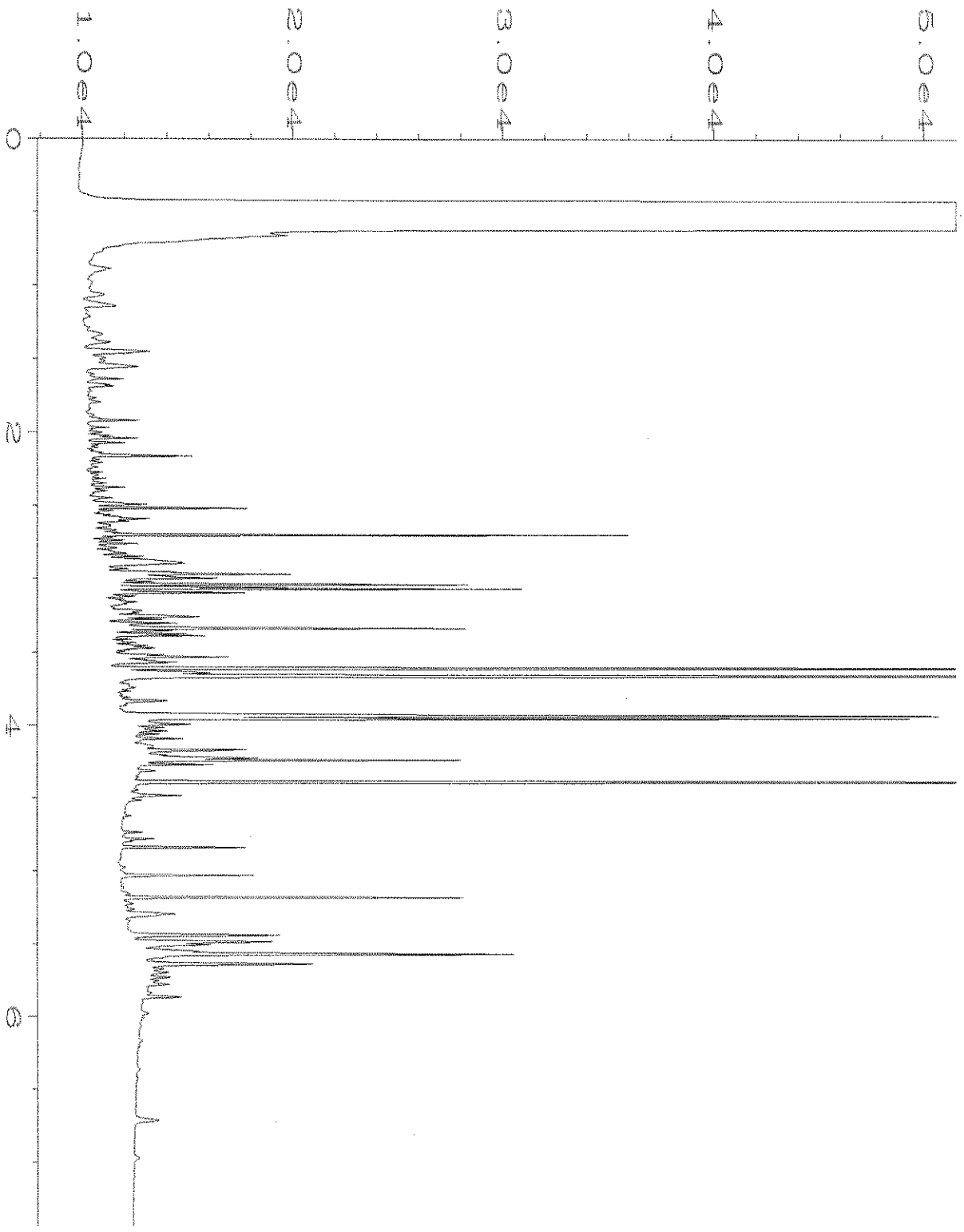


Data File Name	: C:\HPCHEM\1\DATA\12-10-19\052F1001.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 52
Sample Name	: 912135-09	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 10 Dec 19 07:58 PM	Instrument Method	: DX.MTH
Report Created on	: 11 Dec 19 09:39 AM	Analysis Method	: DX.MTH

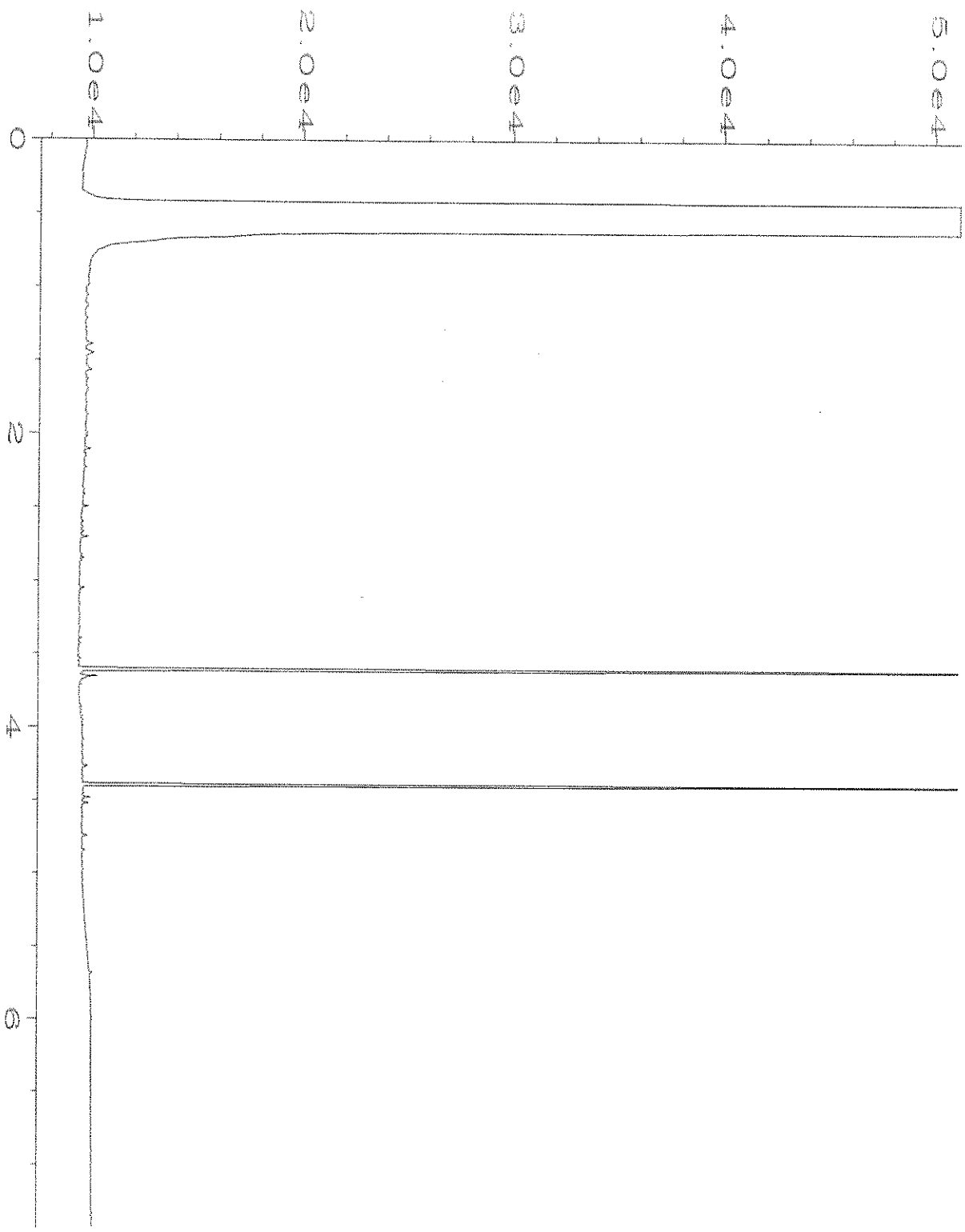


Data File Name : C:\HPCHEM\1\DATA\12-10-19\053F1001.D
Operator : TL
Instrument : GC1
Sample Name : 912135-14
Run Time Bar Code:
Acquired on : 10 Dec 19 08:10 PM
Report Created on: 11 Dec 19 10:05 AM

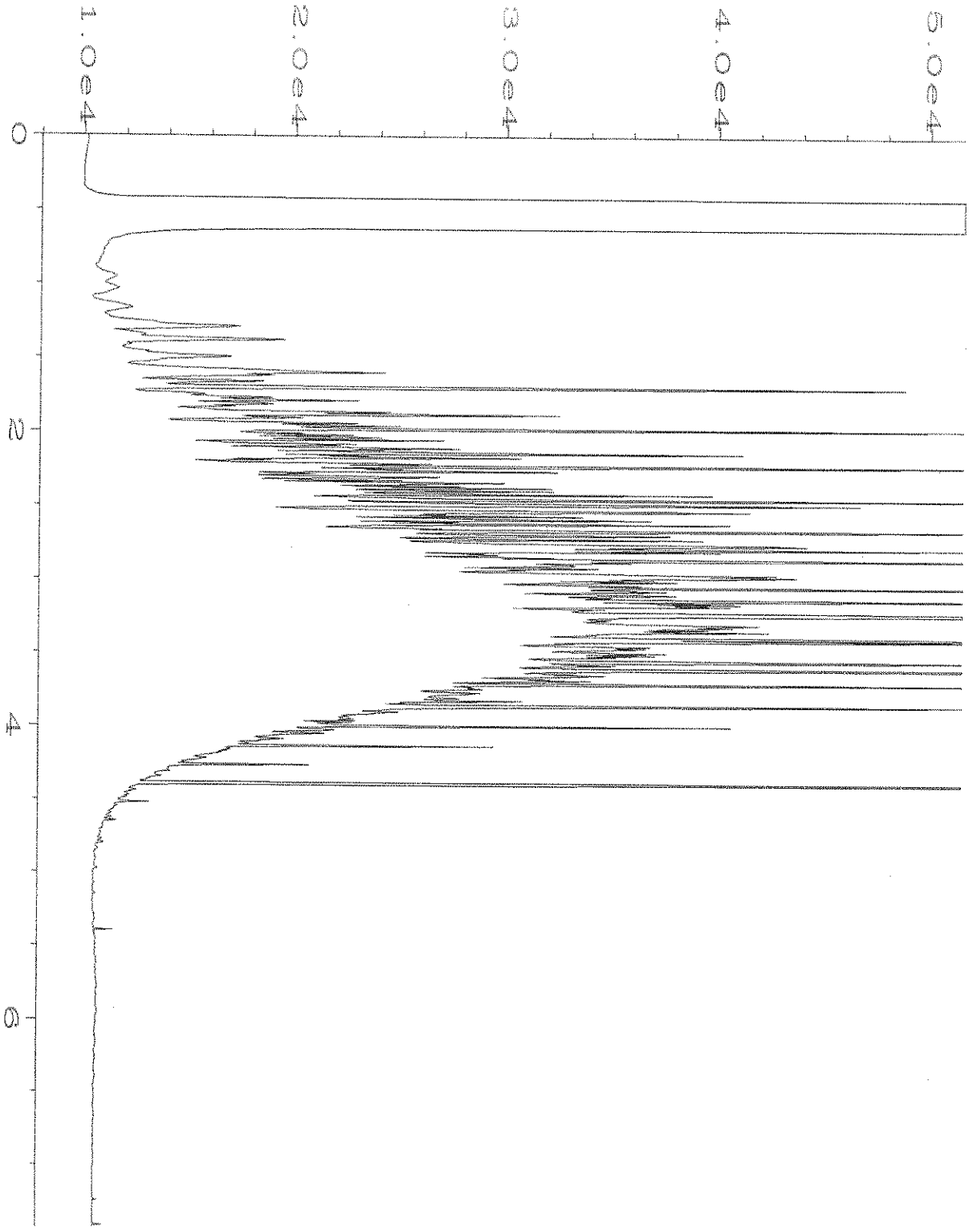
Page Number : 1
Vial Number : 53
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\12-10-19\054F1001.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 54
Sample Name	: 912135-15	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 10 Dec 19 08:21 PM	Instrument Method	: DX.MTH
Report Created on	: 11 Dec 19 09:40 AM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\12-10-19\026F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 26
Sample Name	: 09-3003 mb	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 10 Dec 19 01:35 PM	Instrument Method	: DX.MTH
Report Created on	: 11 Dec 19 10:08 AM	Analysis Method	: DX.MTH



Data File Name : C:\HPCHEM\1\DATA\12-10-19\003F0901.D
Operator : TL
Instrument : GC1
Sample Name : 500 Dx 58-146B
Run Time Bar Code:
Acquired on : 10 Dec 19 05:42 PM
Report Created on: 11 Dec 19 10:08 AM

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DX.MTH

3600 Fremont Ave. N.
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F: (206) 352-7178
info@fremontanalytical.com

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

RE: 912135
Work Order Number: 1912112

December 18, 2019

Attention Michael Erdahl:

Fremont Analytical, Inc. received 10 sample(s) on 12/9/2019 for the analyses presented in the following report.

Dissolved Gases by RSK-175
Ferrous Iron by SM3500-Fe B
Ion Chromatography by EPA Method 300.0
Total Alkalinity by SM 2320B
Total Organic Carbon by SM 5310C

This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

Date: *12/18/2019*

CLIENT: Friedman & Bruya
Project: 912135
Work Order: 1912112

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1912112-001	MW18-20191207	12/07/2019 2:37 PM	12/09/2019 1:50 PM
1912112-002	MW19-20191207	12/07/2019 4:10 PM	12/09/2019 1:50 PM
1912112-003	MW21-20191207	12/07/2019 11:42 AM	12/09/2019 1:50 PM
1912112-004	MW22-20191207	12/07/2019 9:25 AM	12/09/2019 1:50 PM
1912112-005	MW23-20191207	12/07/2019 10:45 AM	12/09/2019 1:50 PM
1912112-006	MW24-20191207	12/07/2019 1:12 PM	12/09/2019 1:50 PM
1912112-007	MW25-20191207	12/07/2019 4:55 PM	12/09/2019 1:50 PM
1912112-008	IW04-20191207	12/07/2019 2:40 PM	12/09/2019 1:50 PM
1912112-009	IW50-20191207	12/07/2019 12:05 PM	12/09/2019 1:50 PM
1912112-010	IW61-20191207	12/07/2019 10:40 AM	12/09/2019 1:50 PM

Case Narrative

WO#: **1912112**

Date: **12/18/2019**

CLIENT: Friedman & Bruya
Project: 912135

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

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

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

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

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

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

Analytical Report

Work Order: **1912112**
Date Reported: **12/18/2019**

Client: Friedman & Bruya
Collection Date: 12/7/2019 2:37:00 PM
Project: 912135
Lab ID: 1912112-001
Matrix: Water
Client Sample ID: **MW18-20191207**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R55983		Analyst: AD
Methane	2.23	0.173	D	mg/L	20	12/3/2020 7:17:00 PM
Ethene	ND	0.0151		mg/L	1	12/3/2020 6:11:00 PM
Ethane	ND	0.0162		mg/L	1	12/3/2020 6:11:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 26765		Analyst: TN
Nitrate (as N)	ND	0.100	H	mg/L	1	12/10/2019 4:04:00 PM
Sulfate	ND	0.300		mg/L	1	12/10/2019 4:04:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R56004		Analyst: SS
Total Organic Carbon	9.61	0.500	B	mg/L	1	12/13/2019 7:07:00 PM
Total Alkalinity by SM 2320B				Batch ID: R56026		Analyst: WF
Alkalinity, Total (As CaCO3)	497	2.50		mg/L	1	12/16/2019 1:02:24 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R55828		Analyst: SS
Ferrous Iron	15.6	0.500	DH	mg/L	10	12/9/2019 3:10:20 PM

NOTES:
B - Detection in sample is 10x greater than detection in Method Blank and CCB. No further action required.

Analytical Report

Work Order: **1912112**
Date Reported: **12/18/2019**

Client: Friedman & Bruya
Project: 912135
Lab ID: 1912112-002
Client Sample ID: **MW19-20191207**

Collection Date: 12/7/2019 4:10:00 PM
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R55983		Analyst: AD
Methane	6.52	0.863	D	mg/L	100	12/3/2020 7:20:00 PM
Ethene	ND	0.0151		mg/L	1	12/3/2020 6:14:00 PM
Ethane	ND	0.0162		mg/L	1	12/3/2020 6:14:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 26765		Analyst: TN
Nitrate (as N)	ND	0.100	H	mg/L	1	12/11/2019 1:06:00 PM
Sulfate	ND	0.300		mg/L	1	12/11/2019 1:06:00 PM
Total Alkalinity by SM 2320B				Batch ID: R56026		Analyst: WF
Alkalinity, Total (As CaCO3)	473	2.50		mg/L	1	12/16/2019 1:02:24 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R55828		Analyst: SS
Ferrous Iron	12.6	0.500	DH	mg/L	10	12/9/2019 3:10:20 PM

Analytical Report

Work Order: **1912112**
Date Reported: **12/18/2019**

Client: Friedman & Bruya
Collection Date: 12/7/2019 11:42:00 AM
Project: 912135
Lab ID: 1912112-003
Matrix: Water
Client Sample ID: **MW21-20191207**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R55983		Analyst: AD
Methane	3.98	0.173	D	mg/L	20	12/3/2020 6:55:00 PM
Ethene	ND	0.0151		mg/L	1	12/3/2020 6:16:00 PM
Ethane	ND	0.0162		mg/L	1	12/3/2020 6:16:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R56080		Analyst: SS
Total Organic Carbon	110	2.00	D	mg/L	4	12/17/2019 11:58:00 PM

Analytical Report

Work Order: **1912112**
Date Reported: **12/18/2019**

Client: Friedman & Bruya
Project: 912135
Lab ID: 1912112-004
Client Sample ID: **MW22-20191207**

Collection Date: 12/7/2019 9:25:00 AM
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R55983		Analyst: AD
Methane	5.37	0.863	D	mg/L	100	12/3/2020 7:23:00 PM
Ethene	ND	0.0151		mg/L	1	12/3/2020 6:19:00 PM
Ethane	ND	0.0162		mg/L	1	12/3/2020 6:19:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 26765		Analyst: TN
Nitrate (as N)	ND	0.200	HD	mg/L	2	12/10/2019 6:04:00 PM
Sulfate	0.762	0.600	D	mg/L	2	12/10/2019 6:04:00 PM
NOTES: Diluted due to matrix.						
Total Organic Carbon by SM 5310C				Batch ID: R56080		Analyst: SS
Total Organic Carbon	318	5.00	D	mg/L	10	12/18/2019 2:06:00 AM
Total Alkalinity by SM 2320B				Batch ID: R56026		Analyst: WF
Alkalinity, Total (As CaCO3)	283	2.50		mg/L	1	12/16/2019 1:02:24 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R55828		Analyst: SS
Ferrous Iron	7.41	0.500	DH	mg/L	10	12/9/2019 3:10:20 PM

Analytical Report

Work Order: **1912112**
Date Reported: **12/18/2019**

Client: Friedman & Bruya
Collection Date: 12/7/2019 10:45:00 AM
Project: 912135
Lab ID: 1912112-005
Matrix: Water
Client Sample ID: **MW23-20191207**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R55983		Analyst: AD
Methane	2.57	0.173	D	mg/L	20	12/3/2020 7:00:00 PM
Ethene	ND	0.0151		mg/L	1	12/3/2020 6:23:00 PM
Ethane	ND	0.0162		mg/L	1	12/3/2020 6:23:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 26765		Analyst: TN
Nitrate (as N)	ND	0.200	HD	mg/L	2	12/10/2019 6:27:00 PM
Sulfate	0.876	0.600	D	mg/L	2	12/10/2019 6:27:00 PM
NOTES: Diluted due to matrix.						
Total Organic Carbon by SM 5310C				Batch ID: R56004		Analyst: SS
Total Organic Carbon	17.4	0.500	B	mg/L	1	12/13/2019 9:53:00 PM
NOTES: B - Detection in sample is 10x greater than detection in Method Blank and CCB. No further action required.						
Total Alkalinity by SM 2320B				Batch ID: R56026		Analyst: WF
Alkalinity, Total (As CaCO3)	614	2.50		mg/L	1	12/16/2019 1:02:24 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R55828		Analyst: SS
Ferrous Iron	13.8	0.500	DH	mg/L	10	12/9/2019 3:10:20 PM

Analytical Report

Work Order: **1912112**
Date Reported: **12/18/2019**

Client: Friedman & Bruya
Collection Date: 12/7/2019 1:12:00 PM
Project: 912135
Lab ID: 1912112-006
Matrix: Water
Client Sample ID: **MW24-20191207**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R55983		Analyst: AD
Methane	3.96	0.863	D	mg/L	100	12/3/2020 7:26:00 PM
Ethene	ND	0.0151		mg/L	1	12/3/2020 6:25:00 PM
Ethane	ND	0.0162		mg/L	1	12/3/2020 6:25:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 26765		Analyst: TN
Nitrate (as N)	ND	0.100	H	mg/L	1	12/11/2019 1:29:00 PM
Sulfate	ND	0.300		mg/L	1	12/11/2019 1:29:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R56004		Analyst: SS
Total Organic Carbon	12.6	0.500	B	mg/L	1	12/13/2019 10:25:00 PM
Total Alkalinity by SM 2320B				Batch ID: R56026		Analyst: WF
Alkalinity, Total (As CaCO3)	434	2.50		mg/L	1	12/16/2019 1:02:24 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R55828		Analyst: SS
Ferrous Iron	10.6	0.500	DH	mg/L	10	12/9/2019 3:10:20 PM

NOTES:
B - Detection in sample is 10x greater than detection in Method Blank and CCB. No further action required.

Analytical Report

Work Order: **1912112**
Date Reported: **12/18/2019**

Client: Friedman & Bruya
Project: 912135
Lab ID: 1912112-007
Client Sample ID: **MW25-20191207**

Collection Date: 12/7/2019 4:55:00 PM
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R55983		Analyst: AD
Methane	7.48	0.863	D	mg/L	100	12/3/2020 7:28:00 PM
Ethene	ND	0.0151		mg/L	1	12/3/2020 6:31:00 PM
Ethane	ND	0.0162		mg/L	1	12/3/2020 6:31:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 26765		Analyst: TN
Nitrate (as N)	ND	0.100	H	mg/L	1	12/11/2019 1:53:00 PM
Sulfate	ND	0.300		mg/L	1	12/11/2019 1:53:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R56004		Analyst: SS
Total Organic Carbon	6.87	0.500	B	mg/L	1	12/13/2019 10:58:00 PM
Total Alkalinity by SM 2320B				Batch ID: R56026		Analyst: WF
Alkalinity, Total (As CaCO3)	424	2.50		mg/L	1	12/16/2019 1:02:24 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R55828		Analyst: SS
Ferrous Iron	13.8	0.500	DH	mg/L	10	12/9/2019 3:10:20 PM

NOTES:
B - Detection in sample is 10x greater than detection in Method Blank and CCB. No further action required.

Analytical Report

Work Order: **1912112**
Date Reported: **12/18/2019**

Client: Friedman & Bruya
Collection Date: 12/7/2019 2:40:00 PM
Project: 912135
Lab ID: 1912112-008
Matrix: Water
Client Sample ID: **IW04-20191207**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Ion Chromatography by EPA Method 300.0				Batch ID: 26765		Analyst: TN
Nitrate (as N)	ND	0.200	DH	mg/L	2	12/10/2019 8:23:00 PM
Sulfate	0.912	0.600	D	mg/L	2	12/10/2019 8:23:00 PM
NOTES: Diluted due to matrix.						
Total Organic Carbon by SM 5310C				Batch ID: R56080		Analyst: SS
Total Organic Carbon	94.8	2.00	D	mg/L	4	12/18/2019 1:43:00 PM
Total Alkalinity by SM 2320B				Batch ID: R56026		Analyst: WF
Alkalinity, Total (As CaCO3)	595	2.50		mg/L	1	12/16/2019 1:02:24 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R55828		Analyst: SS
Ferrous Iron	ND	0.0500	H	mg/L	1	12/9/2019 3:10:20 PM

Analytical Report

Work Order: **1912112**
Date Reported: **12/18/2019**

Client: Friedman & Bruya
Collection Date: 12/7/2019 12:05:00 PM
Project: 912135
Lab ID: 1912112-009
Matrix: Water
Client Sample ID: **IW50-20191207**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R55983		Analyst: AD
Methane	4.12	0.863	D	mg/L	100	12/3/2020 7:31:00 PM
Ethene	ND	0.0151		mg/L	1	12/3/2020 6:43:00 PM
Ethane	ND	0.0162		mg/L	1	12/3/2020 6:43:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 26765		Analyst: TN
Nitrate (as N)	ND	0.100	H	mg/L	1	12/10/2019 8:46:00 PM
Sulfate	11.0	0.300		mg/L	1	12/10/2019 8:46:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R56004		Analyst: SS
Total Organic Carbon	6.72	0.500	B	mg/L	1	12/14/2019 12:13:00 AM
Total Alkalinity by SM 2320B				Batch ID: R56026		Analyst: WF
Alkalinity, Total (As CaCO3)	288	2.50		mg/L	1	12/16/2019 1:02:24 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R55828		Analyst: SS
Ferrous Iron	7.46	0.500	DH	mg/L	10	12/9/2019 3:10:20 PM

NOTES:
B - Detection in sample is 10x greater than detection in Method Blank and CCB. No further action required.

Analytical Report

Work Order: **1912112**
Date Reported: **12/18/2019**

Client: Friedman & Bruya
Collection Date: 12/7/2019 10:40:00 AM
Project: 912135
Lab ID: 1912112-010
Matrix: Water
Client Sample ID: **IW61-20191207**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R55983		Analyst: AD
Methane	3.86	0.863	D	mg/L	100	12/3/2020 7:34:00 PM
Ethene	ND	0.0151		mg/L	1	12/3/2020 6:47:00 PM
Ethane	ND	0.0162		mg/L	1	12/3/2020 6:47:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 26765		Analyst: TN
Nitrate (as N)	ND	0.100	H	mg/L	1	12/11/2019 2:16:00 PM
Sulfate	ND	0.300		mg/L	1	12/11/2019 2:16:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R56080		Analyst: SS
Total Organic Carbon	101	2.00	D	mg/L	4	12/18/2019 2:38:00 AM
Total Alkalinity by SM 2320B				Batch ID: R56026		Analyst: WF
Alkalinity, Total (As CaCO3)	444	2.50		mg/L	1	12/16/2019 1:02:24 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R55828		Analyst: SS
Ferrous Iron	24.8	1.00	DH	mg/L	20	12/9/2019 3:10:20 PM

Work Order: 1912112
CLIENT: Friedman & Bruya
Project: 912135

QC SUMMARY REPORT

Total Alkalinity by SM 2320B

Sample ID: **MB-R56026**	SampType: **MBLK**			Units: **mg/L**		Prep Date: **12/16/2019**			RunNo: **56026**	
Client ID: **MBLKW**	Batch ID: **R56026**					Analysis Date: **12/16/2019**			SeqNo: **1115663**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	ND	2.50									

Sample ID: **LCS-R56026**	SampType: **LCS**			Units: **mg/L**		Prep Date: **12/16/2019**			RunNo: **56026**	
Client ID: **LCSW**	Batch ID: **R56026**					Analysis Date: **12/16/2019**			SeqNo: **1115664**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	101	2.50	100.0	0	101	94.3	116				

Sample ID: **1912112-001DDUP**	SampType: **DUP**			Units: **mg/L**		Prep Date: **12/16/2019**			RunNo: **56026**	
Client ID: **MW18-20191207**	Batch ID: **R56026**					Analysis Date: **12/16/2019**			SeqNo: **1115666**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	502	2.50						497.2	0.977	20	

Work Order: 1912112
CLIENT: Friedman & Bruya
Project: 912135

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **MB-R55828**	SampType: **MBLK**			Units: **mg/L**		Prep Date: **12/9/2019**			RunNo: **55828**		
Client ID: **MBLKW**	Batch ID: **R55828**					Analysis Date: **12/9/2019**			SeqNo: **1111270**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	ND	0.0500									

Sample ID: **LCS-R55828**	SampType: **LCS**			Units: **mg/L**		Prep Date: **12/9/2019**			RunNo: **55828**		
Client ID: **LCSW**	Batch ID: **R55828**					Analysis Date: **12/9/2019**			SeqNo: **1111271**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.373	0.0500	0.4000	0	93.2	85	115				

Sample ID: **1912112-001CDUP**	SampType: **DUP**			Units: **mg/L**		Prep Date: **12/9/2019**			RunNo: **55828**		
Client ID: **MW18-20191207**	Batch ID: **R55828**					Analysis Date: **12/9/2019**			SeqNo: **1111273**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	14.4	0.500						15.63	8.29	20	DH

Sample ID: **1912112-001CMS**	SampType: **MS**			Units: **mg/L**		Prep Date: **12/9/2019**			RunNo: **55828**		
Client ID: **MW18-20191207**	Batch ID: **R55828**					Analysis Date: **12/9/2019**			SeqNo: **1111274**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	18.5	0.500	4.000	15.63	72.8	70	130				DH

Sample ID: **1912112-001CMSD**	SampType: **MSD**			Units: **mg/L**		Prep Date: **12/9/2019**			RunNo: **55828**		
Client ID: **MW18-20191207**	Batch ID: **R55828**					Analysis Date: **12/9/2019**			SeqNo: **1111275**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	18.2	0.500	4.000	15.63	63.4	70	130	18.54	2.05	20	SDH

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.

Work Order: 1912112
CLIENT: Friedman & Bruya
Project: 912135

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **MB-26765**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **12/10/2019**	RunNo: **55928**
Client ID: **MBLKW**	Batch ID: **26765**		Analysis Date: **12/10/2019**	SeqNo: **1113330**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	ND	0.100									
Sulfate	ND	0.300									

Sample ID: **LCS-26765**	SampType: **LCS**	Units: **mg/L**	Prep Date: **12/10/2019**	RunNo: **55928**
Client ID: **LCSW**	Batch ID: **26765**		Analysis Date: **12/10/2019**	SeqNo: **1113332**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.710	0.100	0.7500	0	94.7	90	110				
Sulfate	3.50	0.300	3.750	0	93.3	90	110				

Sample ID: **1912112-001DDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **12/10/2019**	RunNo: **55928**
Client ID: **MW18-20191207**	Batch ID: **26765**		Analysis Date: **12/10/2019**	SeqNo: **1113334**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	ND	0.100						0		20	H
Sulfate	ND	0.300						0		20	

Sample ID: **1912112-001DMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **12/10/2019**	RunNo: **55928**
Client ID: **MW18-20191207**	Batch ID: **26765**		Analysis Date: **12/10/2019**	SeqNo: **1113335**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.699	0.100	0.7500	0.05900	85.3	80	120				H
Sulfate	3.61	0.300	3.750	0.2530	89.5	80	120				

Sample ID: **1912112-001DMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **12/10/2019**	RunNo: **55928**
Client ID: **MW18-20191207**	Batch ID: **26765**		Analysis Date: **12/10/2019**	SeqNo: **1113336**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.657	0.100	0.7500	0.05900	79.7	80	120	0.6990	6.19	20	SH

Work Order: 1912112
CLIENT: Friedman & Bruya
Project: 912135

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **1912112-001DMSD** SampType: **MSD** Units: **mg/L** Prep Date: **12/10/2019** RunNo: **55928**
Client ID: **MW18-20191207** Batch ID: **26765** Analysis Date: **12/10/2019** SeqNo: **1113336**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.39	0.300	3.750	0.2530	83.8	80	120	3.608	6.11	20	

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range (Nitrate).

Sample ID: **1912128-002ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **12/10/2019** RunNo: **55928**
Client ID: **BATCH** Batch ID: **26765** Analysis Date: **12/10/2019** SeqNo: **1113349**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	5.68	0.100						5.668	0.141	20	E
Sulfate	12.5	0.300						12.47	0.144	20	

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.

Sample ID: **1912128-002AMS** SampType: **MS** Units: **mg/L** Prep Date: **12/10/2019** RunNo: **55928**
Client ID: **BATCH** Batch ID: **26765** Analysis Date: **12/10/2019** SeqNo: **1113350**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	6.48	0.100	0.7500	5.668	108	80	120				E
Sulfate	16.3	0.300	3.750	12.47	102	80	120				E

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.

Work Order: 1912112
CLIENT: Friedman & Bruya
Project: 912135

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **MB-R56004**	SampType: **MBLK**			Units: **mg/L**		Prep Date: **12/13/2019**			RunNo: **56004**	
Client ID: **MBLKW**	Batch ID: **R56004**					Analysis Date: **12/13/2019**			SeqNo: **1115168**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	0.568	0.500									

Sample ID: **LCS-R56004**	SampType: **LCS**			Units: **mg/L**		Prep Date: **12/13/2019**			RunNo: **56004**	
Client ID: **LCSW**	Batch ID: **R56004**					Analysis Date: **12/13/2019**			SeqNo: **1115169**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.60	0.500	5.000	0	112	88.3	117				B

Sample ID: **1912078-001CDUP**	SampType: **DUP**			Units: **mg/L**		Prep Date: **12/13/2019**			RunNo: **56004**	
Client ID: **BATCH**	Batch ID: **R56004**					Analysis Date: **12/13/2019**			SeqNo: **1115171**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	0.948	0.500						0.9470	0.106	20	B

Sample ID: **1912078-001CMS**	SampType: **MS**			Units: **mg/L**		Prep Date: **12/13/2019**			RunNo: **56004**	
Client ID: **BATCH**	Batch ID: **R56004**					Analysis Date: **12/13/2019**			SeqNo: **1115172**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.92	0.500	5.000	0.9470	99.5	66	142				B

Sample ID: **1912078-001CMSD**	SampType: **MSD**			Units: **mg/L**		Prep Date: **12/13/2019**			RunNo: **56004**	
Client ID: **BATCH**	Batch ID: **R56004**					Analysis Date: **12/13/2019**			SeqNo: **1115173**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.97	0.500	5.000	0.9470	101	66	142	5.923	0.841	30	B

Work Order: 1912112
CLIENT: Friedman & Bruya
Project: 912135

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **1912112-010BDUP** SampType: **DUP** Units: **mg/L** Prep Date: **12/14/2019** RunNo: **56004**
Client ID: **IW61-20191207** Batch ID: **R56004** Analysis Date: **12/14/2019** SeqNo: **1115187**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	103	0.500						102.7	0.0643	20	EB

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.

Sample ID: **1912112-010BMS** SampType: **MS** Units: **mg/L** Prep Date: **12/14/2019** RunNo: **56004**
Client ID: **IW61-20191207** Batch ID: **R56004** Analysis Date: **12/14/2019** SeqNo: **1115188**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	108	0.500	5.000	102.7	106	66	142				EB

NOTES:
E - Estimated value. The amount exceeds the linear working range of the instrument.

Sample ID: **MB-R56080** SampType: **MBLK** Units: **mg/L** Prep Date: **12/17/2019** RunNo: **56080**
Client ID: **MBLKW** Batch ID: **R56080** Analysis Date: **12/17/2019** SeqNo: **1117211**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	ND	0.500									

Sample ID: **LCS-R56080** SampType: **LCS** Units: **mg/L** Prep Date: **12/17/2019** RunNo: **56080**
Client ID: **LCSW** Batch ID: **R56080** Analysis Date: **12/17/2019** SeqNo: **1117212**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.45	0.500	5.000	0	109	88.3	117				

Sample ID: **1912112-003BDUP** SampType: **DUP** Units: **mg/L** Prep Date: **12/18/2019** RunNo: **56080**
Client ID: **MW21-20191207** Batch ID: **R56080** Analysis Date: **12/18/2019** SeqNo: **1117214**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	108	2.00						110.4	1.86	20	D

Work Order: 1912112
CLIENT: Friedman & Bruya
Project: 912135

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **1912112-003BMS** SampType: **MS** Units: **mg/L** Prep Date: **12/18/2019** RunNo: **56080**
Client ID: **MW21-20191207** Batch ID: **R56080** Analysis Date: **12/18/2019** SeqNo: **1117215**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	128	2.00	20.00	110.4	85.8	66	142				D

Sample ID: **1912112-003BMSD** SampType: **MSD** Units: **mg/L** Prep Date: **12/18/2019** RunNo: **56080**
Client ID: **MW21-20191207** Batch ID: **R56080** Analysis Date: **12/18/2019** SeqNo: **1117216**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	129	2.00	20.00	110.4	93.4	66	142	127.6	1.18	30	D

Work Order: 1912112
CLIENT: Friedman & Bruya
Project: 912135

QC SUMMARY REPORT

Dissolved Gases by RSK-175

Sample ID: **MB-R55983**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **12/3/2020**	RunNo: **55983**
Client ID: **MBLKW**	Batch ID: **R55983**		Analysis Date: **12/3/2020**	SeqNo: **1114567**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	ND	0.00863									
Ethene	ND	0.0151									
Ethane	ND	0.0162									

Sample ID: **LCS-R55983**	SampType: **LCS**	Units: **mg/L**	Prep Date: **12/3/2020**	RunNo: **55983**
Client ID: **LCSW**	Batch ID: **R55983**		Analysis Date: **12/3/2020**	SeqNo: **1114566**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	1,040	0.00863	1,000	0	104	70	130				
Ethene	1,050	0.0151	1,000	0	105	70	130				
Ethane	1,060	0.0162	1,000	0	106	70	130				

Sample ID: **1912078-001EREP**	SampType: **REP**	Units: **mg/L**	Prep Date: **12/3/2020**	RunNo: **55983**
Client ID: **BATCH**	Batch ID: **R55983**		Analysis Date: **12/3/2020**	SeqNo: **1114530**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	ND	0.00863						0		30	
Ethene	ND	0.0151						0		30	
Ethane	ND	0.0162						0		30	

Sample Log-In Check List

Client Name:	**FB**	Work Order Number:	**1912112**
Logged by:	**Carissa True**	Date Received:	**12/9/2019 1:50:00 PM**

Chain of Custody

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

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☑	Not Required ☐
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all items received at a temperature of >0°C to 10.0°C *	Yes ☑	No ☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes ☐	No ☑	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
14.	Does paperwork match bottle labels?	Yes ☑	No ☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
16.	Is it clear what analyses were requested?	Yes ☑	No ☐	
17.	Were all holding times able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

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

Person Notified:	Michael Erdahl	Date:	12/10/2019
By Whom:	Carissa True	Via:	☐ eMail ☑ Phone ☐ Fax ☐ In Person
Regarding:	No amber volume for "IW04-" (sample 8), Out of hold		
Client Instructions:	Take from 250ml poly for ferrous iron, Proceed		

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler 1	5.5
Sample 1	6.3

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

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

1912112

Page # 1 of 1

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER Fremont

PROJECT NAME/NO. 912135

PO # A-501

REMARKS

Please Email Results

TURNAROUND TIME

☒ Standard ~~(2 Weeks)~~ 1 week

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Dioxins/Furans	EPH	VPH	Methan, Ethen, Ethene	Alkalinity Sulfate Nitrate	Ferous Iron	TOC				Notes
MW18-20191207		12/7/19	1437	H_2O					X	X	X	X				
MW19-20191207		12/7/19	1610	H_2O					X	X	X					
MW21-20191207		12/7/19	1142	H_2O					X			X				
MW22-20191207		12/7/19	0925	H_2O					X	X	X	X				
MW23-20191207		12/7/19	1045						X	X	X	X				
MW24-20191207		12/7/19	1312						X	X	X	X				
MW25-20191207		12/7/19	1655						X	X	X	X				
IW04-20191207		12/7/19	1440							X	X	X				
IW50-20191207		12/7/19	1205						X	X	X	X				
IW61-20191207		12/7/19	1040						X	X	X	X				

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:		Michael Erdahl	Friedman & Bruya	12/9/19	12:11
Received by:			FAX	12/9/19	1350
Relinquished by:					
Received by:					

912135

SAMPLE CHAIN OF CUSTODY

ME 12/9/19 VWS/ COC/ 2 AIS

Send Report To Tom Cammarata cc: Logan Schumacher

Company SoundEarth Strategies

Address 2811 Fairview Ave E, Suite 2000

City, State, ZIP Seattle, WA 98102

SAMPLERS (sig.) Sarah Welte

Page # 1

PROJECT NAME/NO.: Troy Laundry Property

PO # 0731-004-08 (final pg 2 of 2)

REMARKS: EIM Y 12/2/19 mC

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	GRPH by NWTPH-Gx	BTEX by EPA 8021B	DRPH/ORPH by NWTPH-Dx	cVOCs by EPA 8260C	Methane, Ethane, Ethene by RSK175	Sulfate, Nitrate, Alkalinity by SM1545/SM2320B	Total Fe and Mn by EPA 200.8	Fe 2+ by SM 3500	TOC By EPA 415.1	Notes
MW17-20191207	MW17	–	01 AE	12/7/19	1350	W	7	X	X	X	X						
MW18-20191207	MW18	–	02 AN	12/7/19	1437	W	14	X	X	X	X	X	X	X	X	X	
MW19-20191207	MW19	–	03 AM	12/7/19	1618	W	13	X	X	X	X	X	X	✓	X		
MW20-20191207	MW20	–	04 AG	12/7/19	1310	W	7	X	X	X	X						
MW21-20191207	MW21	–	05 AK	12/7/19	1142	W	13	X	X	X	X	X				X	
MW22-20191207	MW22	–	06 AN	12/7/19	0925	W	14	X	X	X	X	X	X	X	X	X	
MW23-20191207	MW23	–	07	12/7/19	1045	W	14	X	X	X	X	X	X	X	X	X	
MW24-20191207	MW24	–	08	12/7/19	1312	W	14	X	X	X	X	X	X	X	X	X	
MW25-20191207	MW25	–	09 V	12/7/19	1655	W	14	X	X	X	X	X	X	X	X	X	
IW04-20191207	IW04	–	10 AG	12/7/19	1440	W	7				X		X	X	V	X	
IW06-20191207	IW06	–	11 AC	12/7/19	1610	W	3				X						
IW50-20191207	IW50	–	12 AJ	12/7/19	1205	W	16				X	X	X	X	X	X	
IW61-20191207	IW61	–	13 V	12/7/19	1040	W	10				X	X	X	X	X	X	

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 Welte	Sarah Welte	SES	12/9/19	85
Received by:		WILSON YANEGAS	FBI	12.9.19	855
Relinquished by:			Samples received at 4 °C		
Received by:	Nhan Pham	Nhan Pham	FCBJ	12/9/19	1045

SAMPLE CHAIN OF CUSTODY

912135

ME 12/9/19

Page # 2 of 2

Send Report To Tom Cammarata cc: Logan Schumacher

Company SoundEarth Strategies

Address 2811 Fairview Ave E, Suite 2000

City, State, ZIP Seattle, WA 98102

SAMPLERS (sig. ...re) Sarah Welter

PROJECT NAME/NO.: Troy Laundry Property

PO # 0731-004-09

REMARKS: EIM Y

TURNAROUND TIME VWS

Standard (2 Weeks) COY

RUSH

Rush charges authorized by: AT 5

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	GRPH by NWTPH-Gx	BTEX by EPA 8021B	DRPH/ORPH by NWTPH-Dx	cVOCs by EPA 8260C	Methane, Ethane, Ethene by RSK175	Sulfate, Nitrate, Alkalinity by SM1845/SM2320B	Total Fe and Mn by EPA 200.8	Fe^{2+} by SM 3500	TOC By EPA 415.1	Notes
IW91-20191207	IW91	–	14 A-G	12/7/19	0940	W	7	X	X	X	X						
MW99-20191207	MW99	–	15 A-G	12/7/19	1200	W	7	X	X	X	X						

Samples received at 4 °C

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 Welter	Sarah Welter	SES	12/9/19	1245
Received by:		WILSON YANGUAS	FEDEX	12.9.19	856
Relinquished by:					
Received by:		Nham Phan	FEBI	12/9/19	1045