SoundEarth Strategies, Inc.
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April 29, 2021

Mr. Paul Klansnic
Touchstone SLU LLC & TB TS/RELP LLC
1425 Fourth Avenue, Suite 200
Seattle, Washington 98101

Mr. Frank Jakus
Ponte Gadea Seattle LLC
270 Biscayne Boulevard Way, Suite 201
Miami, Florida 33131-2123

SUBJECT: 2020 GROUNDWATER MONITORING REPORT
Troy Laundry Seattle Site
Cleanup Site ID No. 11690
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington
Project Number: 0731-004-08

Dear Mr. Klansnic and Mr. Jakus:

SoundEarth Strategies, Inc. (SoundEarth) has prepared this report to present the results of the 2020 groundwater monitoring events that were conducted at the Troy Laundry Seattle Site (Site). The Site encompasses the property located at 399 Fairview Avenue North and 300 Boren Avenue North in Seattle, Washington (collectively, the Property), as well as the adjacent rights-of-way (ROWs) located north of the Property (Harrison Street), west of the Property (Boren Avenue North), and south of the Property (Thomas Street). The Site also extends onto the adjacent property to the south, known as the Seattle Times Site, located at 1120 John Street (Cleanup Site ID 14494). The Site location is shown on Figure 1.

The groundwater monitoring events summarized below were conducted, and this report has been prepared, pursuant to Exhibit A (Scope of Work and Schedule) to the Prospective Purchaser Consent Decree (PPCD) No. 19-2-07344-6 SEA entered into by and between the Washington State Department of Ecology (Ecology) and Ponte Gadea Seattle LLC. The purpose of this report is to summarize compliance groundwater monitoring work completed during the calendar year 2020, present the results of groundwater elevation measurements and laboratory analytical results, and provide a statistical trend analysis assessment of chlorinated volatile organic compounds (CVOCs) in groundwater at the Site.

2020 GROUNDWATER MONITORING EVENTS

The 2020 groundwater monitoring events were conducted during the second and fourth quarters (June/July and December, respectively) of 2020, to assess the groundwater quality, flow direction, and gradient of groundwater beneath the Site, and to evaluate the effectiveness of the groundwater

treatment program that has been implemented as part of SoundEarth's Interim Action Plan dated August 21, 2013, which was approved by Ecology on October 10, 2013.

The 2020 monitoring events included collecting groundwater data from all monitoring wells in the compliance well network as set forth in Exhibit A of the PPCD, as well as additional Site wells, consisting of the following:

- The Property: MW17 through MW25, IW04, IW06, IW50, IW61, and IW91
- Seattle Times Site: MW29[1], MW30[1], ONNI-MW-4[2], and ONNI-MW-5[2]
- Harrison Street ROW: MW01, MW26, and MW32[1]. A groundwater sample was not collected from MW33[1] for both 2020 monitoring events as the well was dry, likely attributed to construction-related dewatering activities being performed upgradient and northwest of the Property.
- Boren Avenue ROW: MW04, MW07, MW13, MW27, and MW31[1]
- Thomas Street ROW: MW28
- Terry Avenue North: MW15[3]

This report presents a description of field activities performed during the 2020 groundwater monitoring events and the associated laboratory analytical results. Current and historical groundwater elevations and sample analytical results are presented in Tables 1 through 3.

FIELD ACTIVITIES

Upon arrival at the Site for the second and fourth quarter monitoring events, SoundEarth personnel opened all the monitoring wells prior to sampling to collect groundwater level measurements. Water levels were permitted to equilibrate with atmospheric pressure for a minimum of 1 hour before groundwater level measurements were collected. Groundwater levels were measured relative to the top of well casing to an accuracy of 0.01 feet using an electronic water level meter.

During both monitoring events, groundwater level measurements were collected from monitoring wells MW17 through MW25 and injection wells IW91 located on the Property; monitoring well MW15 located in the Terry Avenue North ROW; monitoring wells MW01, MW26, and MW32 located in the Harrison Street ROW; monitoring wells MW04, MW07, MW13, MW27, and MW31 located in the Boren Avenue North ROW; monitoring well MW28 located in the Thomas Street ROW; and monitoring wells MW29,

[1] Monitoring wells MW29 through MW33 were installed in September 2019 as part of the Supplemental Remedial Investigation, as described in SoundEarth's Supplemental Remedial Investigation Work Plan, dated March 20, 2019. These wells are not sampled under the PPCD but are now part of the Site monitoring well network, and results will be presented in connection with the Progress Reports to ensure that all data associated with the Site are readily available to Ecology.

[2] Monitoring wells ONNI-MW-4 and ONNI-MW-5 are not part of the Site monitoring well network but were sampled during the monitoring events as part of the Remedial Investigation.

[3] MW15 is not sampled under the PPCD, but it is part of the Site monitoring well network, and results will be presented in connection with the Progress Reports to ensure that all data associated with the Site are readily available to Ecology.

MW30, ONNI-MW-4, and ONNI-MW-5 on the Seattle Times Site. Monitoring well MW33 was dry during both monitoring events.

On June 25 through July 1 and December 9 through 12, 2020, groundwater samples were collected from monitoring wells MW01, MW04, MW07, MW13, MW15, MW17 through MW32, IW04, IW06, IW50, IW61, IW91, ONNI-MW-4, and ONNI-MW-5 in accordance with the US Environmental Protection Agency (EPA) *Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures* (April 1996). A groundwater sample was not collected from MW33 for either 2020 monitoring event as the well was dry, likely attributed to construction-related dewatering activities being performed upgradient and northwest of the Property. On February 6, 2020, supplemental sampling of monitoring well ONNI-MW-5 was performed to verify the detection of vinyl chloride during the December 2019 monitoring event.

Purging and sampling of each monitoring well was performed using a bladder pump (monitoring wells MW01, MW04, MW07, MW13, MW15, MW16, MW25 through MW32, ONNI-MW-4, and ONNI-MW-5) or a peristaltic pump (monitoring wells MW17 through MW24 and injection wells IW04, IW06, IW50, IW61, and IW91), and dedicated polyethylene tubing at a maximum flow rate of 270 milliliters per minute. The tubing intake was placed approximately 2 to 3 feet below the surface of the groundwater or mid-screen in each sampled monitoring well. During purging, water quality was monitored using a YSI-brand water quality meter equipped with a flow-through cell. The water quality parameters that were monitored and recorded included temperature, pH, specific conductance, dissolved oxygen, turbidity, and oxidation-reduction potential. Each monitoring well was purged until, at a minimum, the subset of pH, specific conductance, and dissolved oxygen or turbidity had stabilized over at least three successive readings. A field duplicate sample was collected from monitoring well MW25 during the second and fourth quarters for quality assurance/quality control (QA/QC) purposes.

Following purging, groundwater samples were collected from the pump outlet tubing located upstream of the flow-through cell and placed directly into clean, laboratory-prepared sample containers. Each container was labeled with a unique sample identification number, placed on ice in a cooler, and transported to one or more of the following testing laboratories under standard chain-of-custody protocols for laboratory analysis: Friedman & Bruya, Inc. of Seattle, Washington; Fremont Analytical of Seattle, Washington; or SiREM of Knoxville, Tennessee.

The groundwater samples were submitted for analysis of one or more of the following:

- CVOCs, including tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and vinyl chloride (VC) by EPA Method 8260C
- Gasoline-range petroleum hydrocarbons (GRPH) by Northwest Total Petroleum Hydrocarbon (NWTPH) Method NWTPH-Gx
- Diesel-range petroleum hydrocarbons (DRPH) and oil-range petroleum hydrocarbons (ORPH) by Method NWTPH-Dx
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021B

Groundwater samples collected from monitoring wells MW04, MW07, MW18, MW19, MW21, MW22, MW23, MW24, MW25, MW26, MW28, IW04, IW50, and IW61 were analyzed for one or more of the following natural attenuation parameters:

- Methane, ethane, and ethene by Method RSK 175
- Sulfate, nitrate, and alkalinity by Method SM1845/SM2320B
- Total iron and manganese by EPA Method 200.8
- Ferrous iron by Method SM3500
- Total organic carbon by EPA Method 415.1
- Volatile fatty acids by EPA Methods 300.0 and 300.0 Modified

All groundwater sampling data, including results of natural attenuation parameters, will be uploaded to and available from Ecology's EIM system.

Purge water generated during the monitoring events was placed in an appropriately labeled 55-gallon steel drum and temporarily stored on the Property pending receipt of analytical data and proper disposal.

Note: As communicated in the PPCD Third Quarter 2020 Progress Report, starting in December 2020, GRPH, DRPH, and ORPH chemical analyses would be performed for groundwater samples collected from monitoring wells MW13, MW21, MW22, and MW28 only. In addition, BTEX chemical analyses would be discontinued for all wells on the Site going forward.

RESULTS

Groundwater levels and analytical results from the groundwater monitoring and supplemental sampling events are summarized below and presented in Tables 1 through 3. Groundwater elevation contour maps for second and fourth quarter 2020 are presented in Figures 2 and 3. Groundwater analytical results for CVOCs are presented on Figure 4.

Supplemental Sampling, First Quarter 2020

A supplemental groundwater sample was collected on February 6, 2020, for ONNI-MW-5. The groundwater elevation was 12.35 feet North American Vertical Datum of 1988 (NAVD88). The concentrations of PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and VC were below the laboratory reporting limit. The detection of vinyl chloride during the December 2019 monitoring event at a concentration of 0.28 micrograms per liter, above the Washington State Model Toxics Control Act (MTCA) Method A cleanup level, was not duplicated in February 2020.

Second Quarter 2020

Groundwater elevations measured in June 2020 ranged from 5.40 feet NAVD88 (monitoring well MW31) to 11.84 feet NAVD88 (monitoring well IW91). Groundwater elevations were contoured using the water level measurements collected on June 25, 2020 (Figure 2; Table 1). The groundwater contours indicated that groundwater at the Site flowed generally to the northwest with a hydraulic gradient of 0.018 feet per foot, a departure from the flow to the southeast historically observed on the Property. Construction dewatering efforts to the northwest of the Property are influencing groundwater flow across the Site.

Laboratory analytical results from the second quarter 2020 monitoring event were compared to MTCA Method A or B cleanup levels, as applicable, for groundwater and are summarized below (Figure 4; Tables 2 and 3):

- Concentrations of PCE exceeding the MTCA Method A cleanup level were detected in the groundwater samples collected from IW61 located on the Property, MW13 located in the Boren Avenue North ROW, MW28 located in the Thomas Street ROW, and MW29 located on the Seattle Times Site. The concentrations of PCE in the remaining groundwater samples were below the laboratory reporting limit and/or MTCA Method A cleanup level.
- Concentrations of TCE exceeding the MTCA Method A cleanup level were detected in the groundwater samples collected from MW04, MW07, MW27, and MW31 located in the Boren Avenue North ROW; MW26 located in the Harrison Street ROW; MW28 located in the Thomas Street ROW; and MW29 located in the Seattle Times Site. The concentrations of TCE in the remaining groundwater samples were below the laboratory reporting limit and/or MTCA Method A cleanup level.
- Concentrations of cis-1,2-DCE exceeding the MTCA Method B cleanup level were detected in the groundwater samples collected from MW18, MW19, MW22, MW23, MW24, MW25, and IW61 located on the Property; MW28 located in the Thomas Street ROW; and MW29 located in the Seattle Times Site. Concentrations of cis-1,2-DCE in the remaining groundwater samples were below the laboratory reporting limit and/or MTCA Method B cleanup level.
- Concentrations of VC exceeding the MTCA Method A cleanup level were detected in groundwater samples collected from MW18, MW19, MW21, MW22, MW23, MW24, MW25, IW04, IW50, and IW61 located on the Property. Concentrations of VC in the remaining groundwater samples were below the laboratory reporting limit and/or MTCA Method A cleanup level.
- Concentrations of trans-1,2-DCE in the groundwater samples collected from all sampled wells were below the laboratory reporting limit.
- DRPH and/or ORPH concentrations exceeding the applicable MTCA Method A cleanup levels were detected in groundwater samples collected from MW21, MW22, and MW24 located on the Property. These samples were flagged by the laboratory as having a chromatographic pattern that does not match the fuel standard used for quantification. This was likely due to the presence of EOS PRO solution in the samples, which originated from the April–May 2016 injection event. The reported concentrations are not considered reflective of actual groundwater conditions at the Property. Concentrations of DPRH and ORPH in the remaining groundwater samples were below the laboratory reporting limit and/or MTCA Method A cleanup level.
- GRPH concentrations were below the laboratory reporting limit and/or MTCA Method A cleanup level in all groundwater samples collected except MW21.
- Concentrations of BTEX constituents in all groundwater samples collected were below their respective laboratory reporting limits and/or MTCA Method A cleanup levels.

Fourth Quarter 2020

Groundwater elevations measured in December 2020 ranged from 5.09 feet NAVD88 (monitoring well MW31) to 11.19 feet NAVD88 (monitoring well IW91). Groundwater elevations were contoured using the

water level measurements collected on December 9, 2020 (Figure 3; Table 1). The groundwater contours indicated that groundwater at the Site flowed generally to the northwest with a hydraulic gradient of 0.018 feet per foot, a departure from the flow to the southeast historically observed on the Property. Construction dewatering efforts to the northwest of the property continued to influence groundwater flow at the Property.

Laboratory analytical results from the monitoring event were compared to applicable MTCA Method A or B cleanup levels for groundwater and are summarized below (Figure 4; Tables 2 and 3):

- Concentrations of PCE exceeding the MTCA Method A cleanup level were detected in the groundwater samples collected from MW13 located in the Boren Avenue North ROW, MW28 located in the Thomas Street ROW, and MW29 located on the Seattle Times Site. The concentrations of PCE in the remaining groundwater samples were below the laboratory reporting limit and/or MTCA Method A cleanup level.
- Concentrations of TCE exceeding the MTCA Method A cleanup level were detected in the groundwater samples collected from MW04, MW07, MW2,7 and MW31 located in the Boren Avenue North ROW and MW29 located in the Seattle Times Site. The concentrations of TCE in the remaining groundwater samples were below the laboratory reporting limit and/or MTCA Method A cleanup level.
- Concentrations of cis-1,2-DCE exceeding the MTCA Method B cleanup level were detected in the groundwater samples collected from MW19, MW22, MW23, MW24, MW25, and IW61 located on the Property; MW28 located in the Thomas Street ROW; and MW29 located in the Seattle Times Site. Concentrations of cis-1,2-DCE in the remaining groundwater samples were below the laboratory reporting limit and/or MTCA Method B cleanup level.
- Concentrations of VC exceeding the MTCA Method A cleanup level were detected in groundwater samples collected from MW18, MW19, MW21, MW22, MW23, MW24, MW25, IW04, and IW61 located on the Property. Concentrations of VC in the remaining groundwater samples were below the laboratory reporting limit and/or MTCA Method A cleanup level.
- Concentrations of trans-1,2-DCE in the groundwater samples collected from all sampled wells were below the laboratory reporting limit.
- DRPH and/or ORPH concentrations exceeding the applicable MTCA Method A cleanup levels were detected in groundwater samples collected from MW21 and MW22, located on the Property. These samples were flagged by the laboratory as having a chromatographic pattern that does not match the fuel standard used for quantification. This was likely due to the presence of EOS PRO solution in the samples, which originated from the April–May 2016 injection event. The reported concentrations are not considered reflective of actual groundwater conditions at the Property. Concentrations of DPRH and ORPH in the remaining groundwater samples were below the laboratory reporting limit and/or MTCA Method A cleanup level.
- GRPH concentrations were below the laboratory reporting limit and/or MTCA Method A cleanup level in all groundwater samples collected.

DATA QUALITY REVIEW

SoundEarth performed a QA/QC review of the analytical results, which included a review of accuracy and precision of the data supplied by the laboratory. In addition, the relative percent difference (RPD) was calculated for the field duplicate samples collected by SoundEarth from monitoring well MW25. RPDs for all detected analytes were below the acceptable limit of 25 percent. Detections of DRPH and/or ORPH in samples collected from wells MW01, MW04, MW13, MW18, MW19, MW20, MW21, MW22, MW23, MW24, MW25, MW28, and IW91 during the second and/or fourth quarter sampling events were flagged by the laboratory as having a chromatographic pattern that does not match the fuel standard used for quantification. This was due to the presence of EOS PRO solution (a food-grade oil/water emulsion) in the samples originating from the April–May 2016 injection event, and the reported concentrations should not be considered accurate.

All other quality control criteria are acceptable for the groundwater samples; therefore, no action is required, and analytical results are usable to meet the project objectives. Copies of the laboratory analytical reports are provided in Attachment A.

STATISTICAL TREND ANALYSIS OF PLUME STABILITY

Using Ecology's *Guidance on Remediation of Petroleum-Contaminated Groundwater by Natural Attenuation* dated July 2005 (Module 2), SoundEarth evaluated the stability of the contaminated groundwater plume originating from the Property. Chlorinated solvent results (PCE, TCE, cis-1,2-DCE, and VC) for groundwater samples collected between May 2015 and December 2020 (Table 2) were used to evaluate the stability of the plume. The data results from the plume stability analysis are presented in Attachment B.

The stability of the CVOC groundwater plume beneath and downgradient of the Property was evaluated to assess if the plume is expanding, shrinking, or has reached steady state (stable). A shrinking or stable plume indicates that the plume is attenuating as a result of the source removal at the Property and intrinsic biodegradation, as well as groundwater treatment implemented at the Property and in the adjacent ROWs. For the purposes of this report, stability of the CVOC plume originating at the Property is evaluated separately with respect to PCE/TCE and cis-1,2-DCE/VC.

Plume Stability—PCE and TCE

Results from the PCE and TCE stability analyses were evaluated in conjunction with the current footprint of the PCE and TCE components of the CVOC plume (Figure 5) originating at the Property. The trend analyses were performed on groundwater analytical results gathered from May 2015 to December 2020.

The concentrations of PCE and TCE are stable off the Property in the Thomas Street, Boren Avenue North, and Harrison Street ROWs (monitoring wells MW04, MW07, MW13, and MW26 through MW30). These conditions suggest that the extents of PCE and TCE concentrations in the Thomas Street, Boren Avenue North, and Harrison Street ROWs have reached steady state. Steady state indicates that there is currently a balance between the PCE and TCE in groundwater, which have desorbed from soil grains into the dissolved phase, and that mass removal of contaminants from the groundwater has occurred by natural attenuation processes in conjunction with groundwater treatment.

The concentrations of PCE in groundwater at monitoring wells MW13, MW28, and MW29 continues to exceed the cleanup level. The concentrations of PCE in groundwater at monitoring wells MW04, MW07, MW26, and MW27 are below the laboratory reporting limit and/or cleanup level.

The concentrations of TCE in groundwater at monitoring wells MW04, MW07, MW27, and MW29 also exceed the cleanup level. As of the December 2020 sampling event, the concentrations of TCE in groundwater at monitoring wells MW26 and MW28 are below the cleanup level. The concentrations of PCE and TCE in the groundwater at monitoring well MW30 are below the cleanup levels.

Based on trend analysis of analytical results from 2015 to 2020 for injection wells IW04, IW50, and IW61 and monitoring wells MW18 through MW25, which are located on the Property, the PCE and TCE concentrations in these wells are decreasing or there is no discernable trend in the results. Additionally, concentrations of PCE and TCE in injection wells IW50, IW04, and IW61 and monitoring wells MW18 through MW25 are currently below MTCA Method A cleanup levels.

Plume Stability—Cis-1,2-DCE and VC

Results from the cis-1,2-DCE and VC stability analyses were evaluated in conjunction with the current footprint of the cis-1,2-DCE and VC impacts in groundwater (Figure 6). In general, the concentrations of cis-1,2-DCE and/or VC on the Property north of monitoring well MW22 are increasing as expected: residual low-level concentrations of PCE and TCE are likely degrading to these daughter products under reducing conditions in groundwater (i.e., via an anaerobic reductive dechlorination pathway).

South of on-Property monitoring well MW22 and in off-Property monitoring wells located in the Thomas Street ROW and the former Seattle Times Site (at MW23, IW61, MW28, MW29, and MW30), the extent of cis-1,2-DCE and VC in groundwater is generally stable or decreasing. These findings suggest a state of equilibrium has been reached between the degradation of PCE and mineralization of cis-1,2-DCE and VC via anaerobic or aerobic biological degradation pathways. Aerobic conditions are present in groundwater in the vicinity of off-Property monitoring wells MW28 through MW30 and are conducive to the biological degradation (direct oxidation) of cis-1,2-DCE and VC. Concentrations of cis-1,2-DCE and VC in groundwater at monitoring well MW29, located on the northern side of the former Seattle Times Site, are slightly above and below MTCA Method B and A cleanup levels, respectively. Temporal analysis of cis-1,2-DCE groundwater results at monitoring well MW29 predicts, with an 85 percent level of confidence, that the MTCA Method B cleanup level may be achieved by the third quarter of 2021.

In the Boren Avenue North and Harrison Street ROWs, the results from the stability analysis of cis-1,2-DCE at monitoring wells MW04, MW07, MW26, and MW27 indicate the concentrations of cis-1,2-DCE in groundwater are stable. Concentrations of cis-1,2-DCE and VC in monitoring wells MW04, MW07, MW26, and MW27 are below the laboratory reporting limits and/or cleanup levels.

CONCLUSIONS

Groundwater monitoring events completed at the Site in second and fourth quarters of 2020 were conducted pursuant to Exhibit A (Scope of Work and Schedule) to PPCD No. 19-2-07344-6 SEA entered into by and between Ecology and Ponte Gadea Seattle LLC. Under the approved PPCD sampling schedule for the monitoring well network, monitoring wells will continue to be sampled semiannually in the second and fourth quarters of 2021.

Results from analysis of plume stability indicate that the footprint of PCE and TCE in on-Property groundwater decreased considerably following implementation of the groundwater treatment in 2015. As of fourth quarter 2020, concentrations of PCE and TCE are below their current cleanup levels in all on-Property monitoring wells. As predicted, and because of groundwater treatment via anaerobic reductive dechlorination of PCE and TCE, the footprint of the cis-1,2-DCE and VC has increased primarily on-Property. Although concentrations of cis-1,2-DCE and VC continue to exceed their current cleanup levels, it is anticipated that concentrations will decrease when PCE and TCE mass has been depleted.

The transport of PCE and its degradation products in the groundwater from the Troy Property to the Thomas Street ROW and to the former Seattle Times property has been attenuated as a result of groundwater treatment and natural attenuation processes. This is evidenced by the stable footprint of the CVOC plume in the Thomas Street ROW and on the former Seattle Times property over time. The stability of the CVOC plume in this area of the Site indicates that additional investigation is not necessary to define the southern extent of the CVOC plume, which is defined in the Remedial Investigation Report by the absence of detectable concentrations of CVOCs in the groundwater at monitoring wells ONNI-MW-4 and ONNI-MW-5 located on the former Seattle Times property.

CLOSING

SoundEarth appreciates the opportunity to work with you on this project. Please contact the undersigned at 206-306-1900 if you have any questions or require additional information.

Respectfully,

SoundEarth Strategies, Inc.

Sarah Welter
Staff Geologist

Levi Fernandes, PE
Senior Environmental Engineer

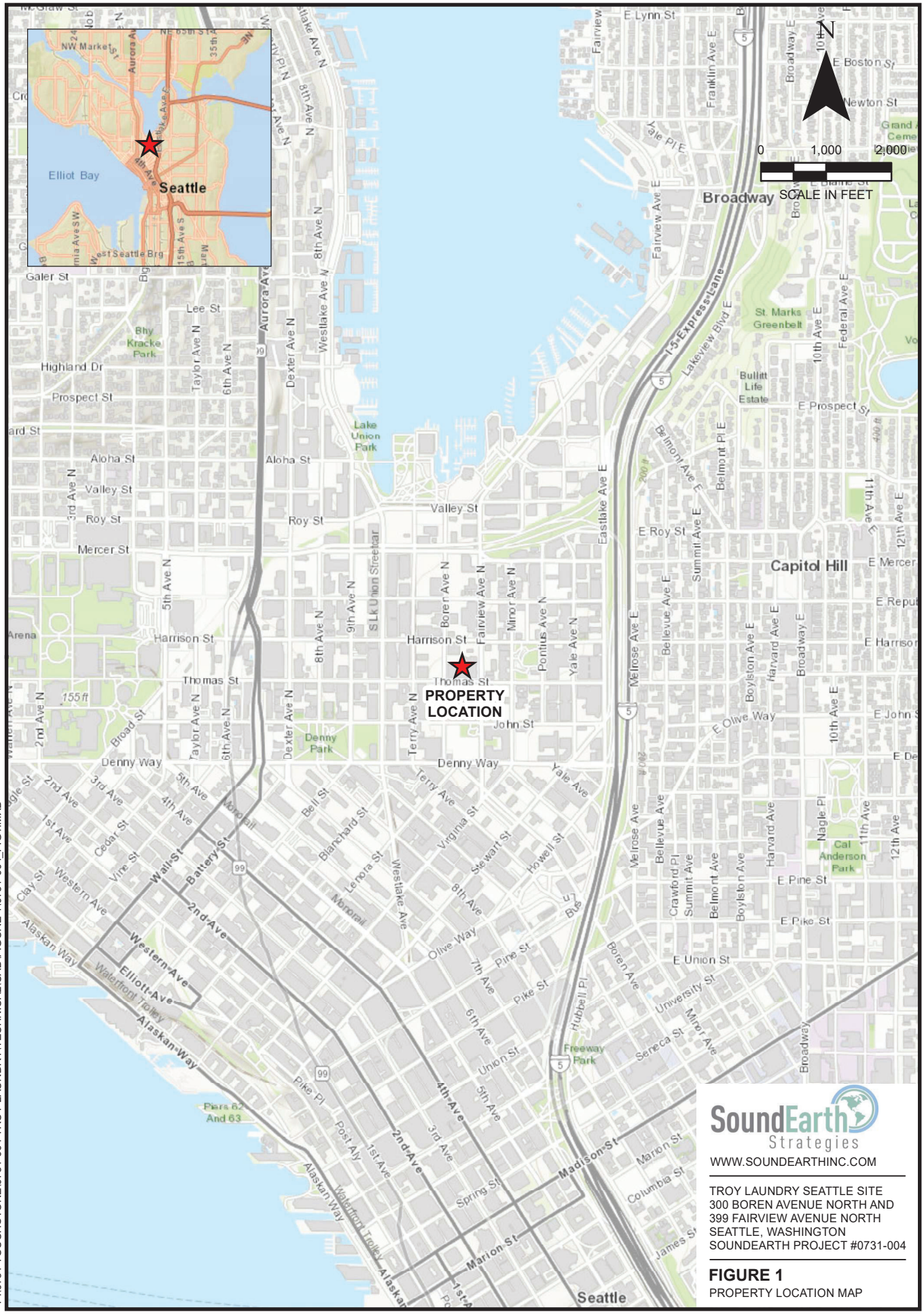
Thomas Cammarata, LG, LHG
Senior Geochemist

Attachments:
Figure 1, Property Location Map
Figure 2, Groundwater Contour Map with Rose Diagram (June 25, 2020)
Figure 3, Groundwater Contour Map with Rose Diagram (December 9, 2020)
Figure 4, Groundwater Analytical Results for Chlorinated Volatile Organic Compounds
Figure 5, Extent of Troy Property PCE and TCE Concentrations in Groundwater – Post-Interim Remedial Action (Q4 2020)
Figure 6, Extent of Troy Property VC/cis-1,2-DCE Concentrations in Groundwater – Post-Interim Remedial Action (Q4 2020)
Table 1, Summary of Groundwater Elevations
Table 2, Groundwater Analytical Results for CVOCs

Table 2A, Groundwater Analytical Results for CVOCs
Table 3, Groundwater Analytical Results for Petroleum Hydrocarbons
Table 4, Natural Attenuation Parameters
Table 5, Geochemical and Water Quality Parameters
Table 6, Groundwater Analytical Results for Volatile Fatty Acids
A, Laboratory Analytical Reports
- Supplemental First Quarter 2020
  - *Friedman & Bruya, Inc. #002090*
- Second Quarter 2020
  - *Friedman & Bruya, Inc. #006467*
  - *Friedman & Bruya, Inc. #006468*
  - *Friedman & Bruya, Inc. #006483*
  - *Friedman & Bruya, Inc. #006484*
  - *Friedman & Bruya, Inc. #007042*
  - *SiREM Lab, #S-5960*
  - *Fremont Analytical, #2006471*
  - *Fremont Analytical, #2006472*
  - *Fremont Analytical, #2006473*
  - *Fremont Analytical, #2007062*
- Fourth Quarter 2020
  - *Friedman & Bruya, Inc. #012203*
  - *Friedman & Bruya, Inc. #012217*
  - *Friedman & Bruya, Inc. #012218*
  - *Friedman & Bruya, Inc. #012225*
  - *SiREM Lab, #S-6918*
  - *Fremont Analytical, #2012217*
  - *Fremont Analytical, #2012231*
  - *Fremont Analytical, #2012233*

B, Plume Stability Analysis Results

FIGURES



SoundEarth Strategies

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TROY LAUNDRY SEATTLE SITE
300 BOREN AVENUE NORTH AND
399 FAIRVIEW AVENUE NORTH
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #0731-004

FIGURE 1
PROPERTY LOCATION MAP

P:\0731 TOUCHSTONE\0731-004 TROY LAUNDRY\TECHNICAL\CAD\FIGURE 1\0731-004_FIG1.MXD

1/29/2021

P:\0731 TOUCHSTONE\0731-004 TROY LAUNDRY\TECHNICAL\CAD\2020\2020 GW REPORT\0731-004_2020_FIG2-CM-Q2.DWG

B56/MW31 (5.40')

B58/MW33 (5.93')

B49/MW15 (7.14')

HARRISON STREET

TERRY AVENUE NORTH

BRAVEHORSE TAVERN

AMAZON BUILDING

SOUTH LAKE UNION HOTEL LLC

BOREN AVENUE NORTH

FAIRVIEW AVENUE NORTH

THOMAS STREET

TROY LAUNDRY PROPERTY

SEATTLE TIMES SITE

HISTORICAL BUILDING FACADE

HISTORICAL BUILDING FACADE

B08/MW01 (11.57')

MW26 (11.38')

B57/MW32 (11.50')

B10/MW03

B11/MW04 (8.77')

B15/MW07 (9.76')

B13/MW06

B31/MW12

B28/MW10

B30/MW11

B26/MW08

B12/MW05

B37/MW13 (11.62')

B27/MW09

B50/MW16

B38/MW14

B55/MW30 (11.85')

B54/MW29 (11.88')

MW17 (11.59')

MW18 (11.53')

MW19 (11.53')

MW20 (11.64')

MW24 (11.61')

MW25 (11.68')

MW27 (11.44')

MW22 (11.72')

MW23 (11.68')

MW28 (11.80')

IW06

IW04

IW50

MW21 (11.75')

IW61

IW91 (11.84')

ONNI MW-4 (8.92')

ONNI MW-5 (9.80')

5.50'

6.50'

7.50'

8.50'

9.50'

10.50'

11.50'

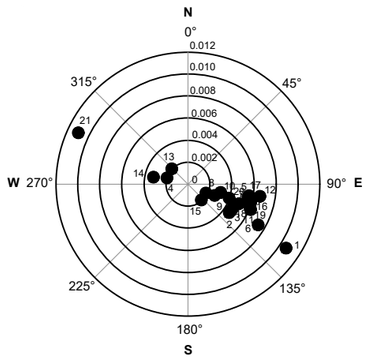
N

0 40 80

APPROXIMATE SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20 — MONITORING WELL
- MW-5 — MONITORING WELL (ENVIRONMENTAL PARTNERS INC)
- IW91 — INJECTION WELL CONVERTED TO MONITORING WELL
- IW61 — INJECTION WELL (SAMPLED)
- DECOMMISSIONED/DESTROYED MONITORING WELL
- INJECTION WELL
- ANGLED INJECTION WELL
- MONUMENT AND HORIZONTAL PIPING FOR INJECTION WELL SCREEN ACCESS
- 1.00-FOOT INTERVAL GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- (9.50') — GROUNDWATER ELEVATION
- GROUNDWATER FLOW DIRECTION (JULY25, 2020)



1	05/31/11
2	10/20/11
3	12/10/12
4	08/29/13
5	05/05/15
6	08/03/15
7	12/07/15
8	03/07/16
9	07/12/16
10	10/18/16
11	01/24/17
12	05/31/17
13	09/21/17
14	12/14/17
15	03/08/18
16	06/28/18
17	09/22/18
18	12/13/18
19	06/13/19
20	12/04/19
21	06/25/20

SoundEarth Strategies

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TROY LAUNDRY SEATTLE SITE
300 BOREN AVENUE NORTH AND
399 FAIRVIEW AVENUE NORTH
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #0731-004

FIGURE 2
GROUNDWATER CONTOUR MAP
WITH ROSE DIAGRAM
(JUNE 25, 2020)

1/29/2021

P:\0731 TOUCHSTONE\0731-004 TROY LAUNDRY\TECHNICAL\CAD\2020\2020 GW REPORT\0731-004_2020_FIG3-CM-Q4.DWG

B56/MW31 (5.40')

6.50'

7.50'

8.50'

9.50'

10.50'

11.50'

B58/MW33 (5.93')

HARRISON STREET

MW26 (11.38')

B08/MW01 (11.57')

B57/ MW32 (11.50')

B10/ MW03

HISTORICAL BUILDING FACADE

IW06

IW04

MW17 (11.59')

B11/MW04 (8.77')

TERRY AVENUE NORTH

B15/ MW07 (9.76')

BOREN AVENUE NORTH

TROY LAUNDRY PROPERTY

MW18 (11.53')

FAIRVIEW AVENUE NORTH

BRAVEHORSE TAVERN

AMAZON BUILDING

B31/ MW12

B13/ MW06

MW19 (11.53')

MW20 (11.64')

B28/ MW10

B30/ MW11

MW24 (11.13')

B26/ MW08

B49/MW15 (7.14')

MW27 (11.44')

MW25 (11.68')

IW50

MW21 (11.75')

B12/ MW05

SOUTH LAKE UNION HOTEL LLC

MW22 (11.72')

B37/MW13 (11.62')

IW61

B27/ MW09

MW23 (11.68')

IW91 (11.84')

HISTORICAL BUILDING FACADE

B38/ MW14

B50/ MW16

THOMAS STREET

MW28 (11.80')

B55/MW30 (11.85')

B54/MW29 (11.88')

SEATTLE TIMES SITE

ONNI MW-4 (8.92')

ONNI MW-5 (9.90')

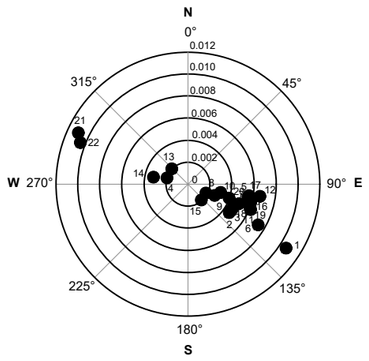
N

0 40 80

APPROXIMATE SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20 — MONITORING WELL
- MW-5 — MONITORING WELL (ENVIRONMENTAL PARTNERS INC)
- IW91 — INJECTION WELL CONVERTED TO MONITORING WELL
- IW61 — INJECTION WELL (SAMPLED)
- DECOMMISSIONED/DESTROYED MONITORING WELL
- INJECTION WELL
- ANGLED INJECTION WELL
- MONUMENT AND HORIZONTAL PIPING FOR INJECTION WELL SCREEN ACCESS
- 1.00-FOOT INTERVAL GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- (9.50') — GROUNDWATER ELEVATION
- GROUNDWATER FLOW DIRECTION (DECEMBER 9, 2020)



1	05/31/11
2	10/20/11
3	12/10/12
4	08/29/13
5	05/05/15
6	08/03/15
7	12/07/15
8	03/07/16
9	07/12/16
10	10/18/16
11	01/24/17
12	05/31/17
13	09/21/17
14	12/14/17
15	03/08/18
16	06/28/18
17	09/22/18
18	12/13/18
19	06/13/19
20	12/04/19
21	06/25/20
22	12/09/20

SoundEarth Strategies

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TROY LAUNDRY SEATTLE SITE
300 BOREN AVENUE NORTH AND
399 FAIRVIEW AVENUE NORTH
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #0731-004

FIGURE 3
GROUNDWATER CONTOUR MAP WITH ROSE DIAGRAM (DECEMBER 9, 2020)

1/22/2021

P:\0731 TOUCHSTONE\0731-004 TROY LAUNDRY\TECHNICAL\CAD\2020\2020 GW REPORT\0731-004_2020_FIG4-GD.DWG

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW31	10/09/19	<1	1.8	<1	<1	<0.2
	12/05/19	<1	3.3	<1	<1	<0.2
	07/01/20	<1	12	<1	<1	<0.2
	12/11/20	<1	17	<1	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW33	10/09/19	<1	<1	<1	<1	<0.2
	12/05/19	<1	<1	<1	<1	<0.2
	06/26/20	Well dry, unable to sample				
	12/10/20	Well dry, unable to sample				

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW04	06/14/19	<1	11	<1	<1	<0.2
	12/05/19	<1	11	<1	<1	<0.2
	06/26/20	<1	10	<1	<1	<0.2
	12/11/20	<1	9	<1	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW18	06/15/19	<1	<1	28	<1	0.44
	12/07/19	<1	<1	28	<1	0.55
	06/27/20	<1	<1	27	<1	1.5
	12/12/20	<1	<1	15	<1	2.4

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW07	06/14/19	3.9	5.9	<1	<1	<0.2
	12/05/19	3.3	5.9	<1	<1	<0.2
	06/30/20	<1	5.8	<1	<1	<0.2
	12/10/20	1.7	18	3.2	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW19	06/15/19	<1	<1	27	<1	0.79
	12/07/19	<1	<1	35	<1	0.98
	06/27/20	<1	<1	41	<1	0.78
	12/12/20	<1	<1	22	<1	2.6

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW15	06/13/19	<1	6.8	<1	<1	<0.2
	12/05/19	<1	4.9	<1	<1	<0.2
	06/26/20	<1	1.2	<1	<1	<0.2
	12/11/20	<1	1.2	<1	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW27	06/14/19	<1	14	2.3	<1	<0.2
	12/05/19	<1	15	2.2	<1	<0.2
	06/26/20	<1	30	2.9	<1	<0.2
	12/10/20	<1	69	3.7	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW25	06/15/19	<1	<1	45	<1	0.54
	12/07/19	<1	<1	40	<1	0.63
	06/27/20	<1	<1	40	<1	0.73
	12/12/20	<1	<1	35	<1	0.43

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW13	06/14/19	7.0	1.1	<1	<1	<0.2
	12/05/19	7.7	1.1	<1	<1	<0.2
	06/26/20	9.1	1.8	<1	<1	<0.2
	12/10/20	7.2	1.6	<1	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW23	06/15/19	<1	<1	25	<1	0.72
	12/07/19	<1	<1	38	<1	0.89
	06/27/20	<1	<1	30	<1	0.76
	12/12/20	<1	<1	30	<1	0.85

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW30	10/08/19	<1	3.6	24	<1	<0.2
	12/04/19	<1	2.0	11	<1	<0.2
	06/26/20	<1	1.0	3.6	<1	<0.2
	12/10/20	<1	2.4	13	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW01	06/14/19	<1	<1	<1	<1	<0.2
	12/05/19	<1	<1	<1	<1	<0.2
	06/26/20	<1	<1	<1	<1	<0.2
	12/11/20	<1	<1	<1	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
IW06	06/15/19	1.7	<1	<1	<1	<0.2
	12/07/19	1.4	<1	<1	<1	<0.2
	06/27/20	<1	<1	5.2	<1	<0.2
	12/12/20	<1	<1	3.3	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW26	06/14/19	<1	20	<1	<1	<0.2
	12/05/19	<1	13	<1	<1	<0.2
	06/26/20	<1	13	<1	<1	<0.2
	12/11/20	<1	4	<1	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW28	10/09/19	8.7	6.1	72	<1	0.31
	12/04/19	8.4	4.9	52	<1	0.27
	06/26/20	9.1	5.1	22	<1	<0.2
	12/11/20	8.3	4.9	19	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
ONNI-MW-5	12/08/19	<1	<1	<1	<1	0.28
	02/06/20	<1	<1	<1	<1	<0.2
	06/25/20	<1	<1	<1	<1	<0.2
	12/09/20	<1	<1	<1	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
ONNI-MW-4	12/08/19	<1	<1	<1	<1	<0.2
	06/25/20	<1	<1	<1	<1	<0.2
	12/10/20	<1	<1	<1	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW32	10/09/19	<1	<1	<1	<1	<0.2
	12/05/19	<1	<1	<1	<1	<0.2
	06/26/20	<1	<1	<1	<1	<0.2
	12/12/20	<1	<1	<1	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
IW04	06/15/19	<1	<1	1.7	<1	1.0
	12/07/19	<1	<1	1.4	<1	1.1
	06/27/20	<1	<1	1.1	<1	0.77
	12/12/20	<1	<1	1	<1	0.64

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW17	06/15/19	<1	3.4	2.2	<1	<0.2
	12/07/19	<1	3.9	2.2	<1	<0.2
	06/27/20	<1	<1	<1	<1	<0.2
	12/12/20	<1	<1	<1	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW20	06/15/19	<1	<1	3.8	<1	<0.2
	12/07/19	<1	<1	3.0	<1	<0.2
	06/27/20	<1	1.2	6.1	<1	<0.2
	12/12/20	<1	1.3	6.0	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW24	06/15/19	<1	<1	84	<1	1.0
	12/07/19	<1	<1	83	<1	0.94
	06/27/20	<1	<1	61	<1	0.76
	12/12/20	<1	<1	45	<1	0.61

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
IW50	06/15/19	5.2	2.0	54	<1	7.1
	12/07/19	4.5	1.6	55	<1	7.4
	06/27/20	3.9	<1	2.7	<1	1.1
	12/12/20	<1	<1	<1	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW21	06/15/19	<1	<1	29	<1	1.1
	12/07/19	<1	<1	34	<1	1.3
	06/27/20	<1	<1	13	<1	0.49
	12/12/20	<1	<1	10	<1	1.80

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
IW91	06/15/19	<1	<1	<1	<1	<0.2
	12/07/19	<1	<1	<1	<1	<0.2
	06/27/20	<1	<1	<1	<1	<0.2
	12/12/20	<1	<1	<1	<1	<0.2

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW22	06/15/19	1.1	1.1	49	<1	1.0
	12/07/19	1.3	1.3	48	<1	1.0
	06/27/20	1.4	1.3	42	<1	0.99
	12/12/20	<1	<1	44	<1	1.1

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
IW61	06/15/19	13	2.4	71	<1	2.9
	12/07/19	6.8	1.7	65	<1	4.0
	06/27/20	5.3	1.1	63	<1	4.5
	12/12/20	<1	<1	30	<1	4.1

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW16	09/22/17	5.4	5.2	78	<1	0.40
	12/29/17	7.2	6.4	150	<1	0.89
	03/09/18	7.3	5.5	80	<1	0.35
	Well Destroyed 2018					

Sample Location	Sample Date	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MW29	10/08/19	8.6	9.4	52	<1	0.64
	12/04/19	16	12	26	<1	0.40
	06/26/20	18	13	16	<1	0.20
	12/10/20	18	13	18	<1	<0.20

B56/MW31
B58/MW33
B08/ MW01
MW26
B09/ MW02
B57/MW32
B10/ MW03
HARRISON STREET
IW06
IW04
MW17
B11/MW04
MW18
TROY LAUNDRY PROPERTY
B15/MW07
BOREN AVENUE NORTH
FAIRVIEW AVENUE NORTH
B31/ MW12
B13/ MW06
MW19
MW20
B28/ MW10
MW24
B30/ MW11
B26/ MW08
B49/MW15
MW27
MW25
IW50
MW21
B12/ MW05
MW22
IW61
IW91
B37/MW13
B27/ MW09
IW23
B38/ MW14
B50/ MW16
THOMAS STREET
MW28
B55/MW30
B54/MW29
SEATTLE TIMES SITE
ONNI MW-4
ONNI MW-5

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0 40 80

APPROXIMATE SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION AREA
- MW20 — MONITORING WELL
- MW-5 — MONITORING WELL (ENVIRONMENTAL PARTNERS INC)
- IW91 — INJECTION WELL CONVERTED TO MONITORING WELL
- IW61 — INJECTION WELL (SAMPLED)
- DECOMMISSIONED/ DESTROYED MONITORING WELL
- INJECTION WELL
- ANGLED INJECTION WELL
- MONUMENT AND HORIZONTAL PIPING FOR INJECTION WELL SCREEN ACCESS
- DCE — DICHLOROETHENE
- PCE — TETRACHLOROETHENE
- TCE — TRICHLOROETHENE
- MTCA — WASHINGTON STATE MODEL TOXICS CONTROL ACT
- < — NOT DETECTED AT A CONCENTRATION EXCEEDING LABORATORY REPORTING LIMIT
- RED — DENOTES CONCENTRATIONS EXCEEDING THE MTCA METHOD CLEANUP LEVEL FOR GROUNDWATER

	Analytical Results (micrograms per liter) PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	Vinyl Chloride
MTCA Method A	5	5	16	160	0.2

SoundEarth Strategies

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TROY LAUNDRY SEATTLE SITE
300 BOREN AVENUE NORTH AND
399 FAIRVIEW AVENUE NORTH
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #0731-004

FIGURE 4
GROUNDWATER ANALYTICAL RESULTS FOR CHLORINATED VOLATILE ORGANIC COMPOUNDS

1/26/2021

P:\0731 TOUCHSTONE\0731-004 TROY LAUNDRY\TECHNICAL\CAD\2020\2020 GW REPORT\0731-004_2020_FIG5_GW_PCE-POST.DWG

B56/MW31

B58/MW33

B08/MW01

MW26

B09/ MW02

B57/MW32

B10/ MW03

HARRISON STREET

HISTORICAL BUILDING FACADE

IW06

IW04

B11/MW04

MW17

B15/MW07

MW18

TERRY AVENUE NORTH

BRAVEHORSE TAVERN

AMAZON BUILDING

BOREN AVENUE NORTH

B31/ MW12

B13/ MW06

MW19

MW20

B28/ MW10

MW24

B30/ MW11

B26/ MW08

IW50

MW21

MW27

B12/ MW05

MW25

B49/MW15

SOUTH LAKE UNION HOTEL LLC

MW22

IW61

B37/MW13

B27/ MW09

MW23

IW91

FAIRVIEW AVENUE NORTH

HISTORICAL BUILDING FACADE

B38/ MW14

B50/ MW16

THOMAS STREET

MW28

B54/MW29

B55/MW30

ONNI MW-4

ONNI MW-5

N

0 40 80

APPROXIMATE SCALE IN FEET

LEGEND

	PROPERTY BOUNDARY
	PARCEL BOUNDARY
	REDEVELOPMENT EXCAVATION AREA
MW20	MONITORING WELL
MW-5	MONITORING WELL (ENVIRONMENTAL PARTNERS INC)
IW91	INJECTION WELL CONVERTED TO MONITORING WELL
IW61	INJECTION WELL (SAMPLED)
	DECOMMISSIONED/DESTROYED MONITORING WELL
	APPROXIMATE EXTENTS OF POST-TREATMENT PCE AND TCE CONCENTRATIONS ABOVE MTCA CLEANUP LEVEL ORIGINATING FROM THE TROY PROPERTY
	DENOTES PCE CONCENTRATION EXCEEDS APPLICABLE MTCA CLEANUP LEVEL
	DENOTES TCE CONCENTRATION EXCEEDS APPLICABLE MTCA CLEANUP LEVEL
CVOC	CHLORINATED VOLATILE ORGANIC COMPOUND
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT

SoundEarth Strategies

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TROY LAUNDRY SEATTLE SITE
300 BOREN AVENUE NORTH AND
399 FAIRVIEW AVENUE NORTH
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #0731-004

FIGURE 5

EXTENT OF TROY PROPERTY PCE AND TCE CONCENTRATIONS IN GROUNDWATER - POST-INTERIM REMEDIAL ACTION (Q4 2020)

1/26/2021

P:\0731 TOUCHSTONE\0731-004 TROY LAUNDRY\TECHNICAL\CAD\2020\2020 GW REPORT\0731-004_2020_FIG6_GW_VC-POST.DWG

N

0 40 80

APPROXIMATE SCALE IN FEET

HARRISON STREET

THOMAS STREET

TERRY AVENUE NORTH

BOREN AVENUE NORTH

FAIRVIEW AVENUE NORTH

HISTORICAL BUILDING FACADE

HISTORICAL BUILDING FACADE

BRAVEHORSE TAVERN

AMAZON BUILDING

SOUTH LAKE UNION HOTEL LLC

B56/MW31

B58/MW33

B08/MW01

MW26

B09/ MW02

B57/MW32

B10/ MW03

B11/MW04

B15/MW07

B49/MW15

MW27

B12/ MW05

B37/MW13

IW06

IW04

MW17

MW18

B31/ MW12

B13/ MW06

MW19

MW20

B28/ MW10

MW24

B30/ MW11

B26/ MW08

MW25

IW50

MW21

IW61

MW22

MW23

B27/ MW09

IW91

B50/ MW16

MW28

B38/ MW14

B54/MW29

B55/MW30

ONNI MW-4

ONNI MW-5

LEGEND

	PROPERTY BOUNDARY
	PARCEL BOUNDARY
	REDEVELOPMENT EXCAVATION AREA
MW20	MONITORING WELL
MW-5	MONITORING WELL (ENVIRONMENTAL PARTNERS INC)
IW91	INJECTION WELL CONVERTED TO MONITORING WELL
IW61	INJECTION WELL (SAMPLED)
	DECOMMISSIONED/DESTROYED MONITORING WELL
	APPROXIMATE EXTENTS OF POST-TREATMENT VC/cis-1,2-DCE CONCENTRATIONS ABOVE MTCA CLEANUP LEVEL ORIGINATING FROM THE TROY PROPERTY
	DENOTES VC/cis-1,2-DCE CONCENTRATIONS EXCEED APPLICABLE MTCA CLEANUP LEVEL
CVOC	CHLORINATED VOLATILE ORGANIC COMPOUND
DCE	DICHLOROETHENE
VC	VINYL CHLORIDE
MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT

SoundEarth Strategies

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TROY LAUNDRY SEATTLE SITE
300 BOREN AVENUE NORTH AND
399 FAIRVIEW AVENUE NORTH
SEATTLE, WASHINGTON
SOUNDEARTH PROJECT #0731-004

FIGURE 6

EXTENT OF TROY PROPERTY VC/cis-1,2-DCE CONCENTRATIONS IN GROUNDWATER - POST-INTERIM REMEDIAL ACTION (Q4 2020)

TABLES

SoundEarth Strategies

Table 1
Summary of Groundwater Elevations
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well	TOC Elevation[(1)] (feet)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Top of Well Screen Elevation (feet NAVD88 approximate)	Bottom of Well Screen Elevation (feet NAVD88 approximate)	Date	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet NAVD88)
Troy Laundry Property								
MW06	74.78	60	75	15	0	05/31/11	58.70	16.08
						10/20/11	58.91	15.87
						12/13/12	58.71	16.07
						08/29/13	60.30	14.48
	DECOMMISSIONED 2013							
MW08	92.88	105	110	-12	-17	10/20/11	77.18	15.70
						08/29/13	78.10	14.78
	DECOMMISSIONED 2013							
MW09	92.92	105	110	-12	-17	10/20/11	77.24	15.68
						08/29/13	78.51	14.41
	DECOMMISSIONED 2013							
MW10	92.73	75	90	18	3	10/20/11	77.14	15.59
						12/13/12	77.01	15.72
						08/29/13	78.28	14.45
	DECOMMISSIONED 2013							
MW11	88.23	68	83	20	5	10/20/11	72.43	15.80
						12/13/12	72.29	15.94
						08/29/13	73.78	14.45
	DECOMMISSIONED 2013							
MW12	74.44	95	100	-21	-26	10/20/11	58.71	15.73
						08/29/13	59.99	14.45
	DECOMMISSIONED 2013							
MW17	35.72	22	37	14	-1	05/05/15	25.26	10.46
						08/03/15	24.82	10.90
						12/07/15	25.49	10.23
						03/07/16	24.98	10.74
						07/12/16	24.61	11.11
						10/18/16	23.14	12.58
						01/24/17	20.84	14.88
						05/31/17	22.75	12.97
						09/21/17	25.73	9.99
						12/14/17	25.14	10.58
						03/08/18	23.04	12.68
						06/28/18	22.00	13.72
						09/19/18	21.64	14.08
						12/13/18	21.42	14.30
						06/13/19	20.93	14.79
						10/09/19	21.30	14.42
						12/04/19	22.04	13.68
						06/25/20	24.13	11.59
						12/09/20	24.74	10.98

SoundEarth Strategies

Table 1
Summary of Groundwater Elevations
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Well	TOC Elevation[(1)] (feet)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Top of Well Screen Elevation (feet NAVD88 approximate)	Bottom of Well Screen Elevation (feet NAVD88 approximate)	Date	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet NAVD88)
MW18	35.34	35	55	0	-20	05/05/15	24.92	10.42
						08/03/15	24.49	10.85
						12/07/15	25.21	10.13
						03/07/16	24.64	10.70
						07/12/16	24.23	11.11
						10/18/16	22.81	12.53
						01/24/17	20.98	14.36
						05/31/17	22.49	12.85
						09/21/17	25.36	9.98
						12/14/17	24.70	10.64
						03/08/18	22.60	12.74
						06/28/18	21.70	13.64
						09/19/18	21.34	14.00
						12/13/18	21.12	14.22
						06/13/19	20.62	14.72
						10/09/19	20.50	14.84
						12/04/19	22.15	13.19
						06/25/20	23.81	11.53
						12/09/20	24.42	10.92
MW19	37.69	35	55	3	-17	05/05/15	27.24	10.45
						08/03/15	26.82	10.87
						12/07/15	27.51	10.18
						03/07/16	26.97	10.72
						07/12/16	26.57	11.12
						10/18/16	25.12	12.57
						01/24/17	22.97	14.72
						05/31/17	24.74	12.95
						09/21/17	27.60	10.09
						12/14/17	26.97	10.72
						03/08/18	24.89	12.80
						06/28/18	24.00	13.69
						09/19/18	23.65	14.04
						12/13/18	25.41	12.28
						06/13/19	22.95	14.74
						10/09/19	27.60	10.09
						12/04/19	23.33	14.36
						06/25/20	26.16	11.53
						12/09/20	26.76	10.93
MW20	35.63	35	55	1	-19	05/05/15	25.24	10.39
						08/03/15	24.44	11.19
						12/07/15	25.50	10.13
						03/07/16	24.94	10.69
						07/12/16	24.62	11.01
						10/18/16	23.13	12.50
						01/24/17	21.32	14.31
						05/31/17	22.70	12.93
						09/21/17	25.53	10.10
						12/14/17	24.91	10.72
						03/08/18	22.89	12.74
						06/28/18	22.01	13.62
						09/19/18	21.67	13.96
						12/13/18	21.43	14.20
						06/13/19	20.95	14.68
						10/09/19	24.25	11.38
						12/04/19	21.45	14.18
						06/25/20	23.99	11.64
						12/09/20	24.63	11.00

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Table 1
Summary of Groundwater Elevations
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Seattle, Washington

Well	TOC Elevation[(1)] (feet)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Top of Well Screen Elevation (feet NAVD88 approximate)	Bottom of Well Screen Elevation (feet NAVD88 approximate)	Date	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet NAVD88)
MW21	35.58	35	55	1	-19	05/05/15	25.21	10.37
						08/03/15	24.82	10.76
						12/07/15	25.49	10.09
						03/07/16	24.90	10.68
						07/12/16	24.56	11.02
						10/18/16	23.00	12.58
						01/24/17	21.54	14.04
						05/31/17	23.37	12.21
						09/21/17	25.96	9.62
						12/14/17	25.20	10.38
						03/08/18	24.10	11.48
						06/28/18	22.89	12.69
						09/19/18	INACCESSIBLE	
						12/13/18	22.59	12.99
						06/13/19	23.70	11.88
						10/09/19	26.52	9.06
						12/04/19	20.50	15.08
						06/25/20	23.83	11.75
						12/09/20	24.60	10.98
MW22	35.47	35	55	0	-20	05/05/15	25.14	10.33
						08/03/15	24.75	10.72
						12/07/15	25.41	10.06
						03/07/16	24.86	10.61
						07/12/16	24.52	10.95
						10/18/16	23.05	12.42
						01/24/17	21.68	13.79
						05/31/17	23.45	12.02
						09/21/17	26.20	9.27
						12/14/17	25.60	9.87
						03/08/18	23.65	11.82
						06/28/18	23.30	12.17
						09/19/18	INACCESSIBLE	
						12/13/18	21.62	13.85
						06/13/19	--	--
						10/09/19	20.73	14.74
						12/04/19	20.18	15.29
						06/25/20	23.75	11.72
						12/09/20	24.39	11.08
MW23	35.43	36	56	-1	-21	05/05/15	25.08	10.35
						08/03/15	24.72	10.71
						12/07/15	25.34	10.09
						03/07/16	24.77	10.66
						07/12/16	24.54	10.89
						10/18/16	22.98	12.45
						01/24/17	21.06	14.37
						05/31/17	22.41	13.02
						09/21/17	25.11	10.32
						12/14/17	24.65	10.78
						03/08/18	22.69	12.74
						06/28/18	21.03	14.40
						09/19/18	21.50	13.93
						12/13/18	21.22	14.21
						06/13/19	20.80	14.63
						10/09/19	22.03	13.40
						12/04/19	21.22	14.21
						06/25/20	23.75	11.68
						12/09/20	24.40	11.03

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Summary of Groundwater Elevations
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Well	TOC Elevation[1] (feet)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Top of Well Screen Elevation (feet NAVD88 approximate)	Bottom of Well Screen Elevation (feet NAVD88 approximate)	Date	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet NAVD88)
MW24	34.88	35	55	0	-20	05/05/15	24.47	10.41
						08/03/15	24.06	10.82
						12/07/15	24.72	10.16
						03/07/16	24.12	10.76
						07/12/16	23.76	11.12
						10/18/16	22.19	12.69
						01/24/17	19.95	14.93
						05/31/17	23.29	11.59
						09/21/17	INACCESSIBLE	
						12/14/17	24.22	10.66
						03/08/18	22.10	12.78
						06/28/18	21.98	12.90
						09/19/18	20.81	14.07
						12/13/18	20.65	14.23
						06/13/19	20.18	14.70
						10/09/19	21.65	13.23
						12/04/19	21.40	13.48
						06/25/20	23.27	11.61
						12/09/20	23.91	10.97
MW25	41.38	35.5	55.5	6	-14	05/05/15	30.85	10.53
						08/03/15	30.60	10.78
						12/07/15	31.30	10.08
						03/07/16	30.71	10.67
						07/12/16	30.44	10.94
						10/18/16	28.95	12.43
						01/24/17	27.07	14.31
						05/31/17	28.24	13.14
						09/21/17	31.09	10.29
						12/14/17	30.52	10.86
						03/08/18	28.54	12.84
						06/28/18	27.69	13.69
						09/19/18	27.32	14.06
						12/13/18	27.12	14.26
						06/13/19	26.64	14.74
						10/09/19	27.79	13.59
						12/04/19	26.63	14.75
						06/25/20	29.70	11.68
						12/09/20	30.33	11.05
IW91	35.82	20	55	16	-19	05/05/15	25.56	10.26
						08/03/15	25.19	10.63
						12/07/15	25.84	9.98
						03/07/16	25.24	10.58
						07/12/16	24.90	10.92
						10/18/16	23.41	12.41
						01/24/17	21.61	14.21
						05/31/17	22.79	13.03
						09/21/17	25.42	10.40
						12/14/17	24.96	10.86
						03/08/18	23.08	12.74
						06/28/18	22.30	13.52
						09/19/18	21.95	13.87
						12/13/18	21.69	14.13
						06/13/19	21.23	14.59
						10/09/19	23.90	11.92
						12/04/19	21.11	14.71
						06/25/20	23.98	11.84
						12/09/20	24.63	11.19

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Well	TOC Elevation[1] (feet)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Top of Well Screen Elevation (feet NAVD88 approximate)	Bottom of Well Screen Elevation (feet NAVD88 approximate)	Date	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet NAVD88)
Boren Avenue North								
MW04	70.69	50	65	21	6	05/27/11	52.22	18.47
						10/20/11	52.82	17.87
						12/10/12	52.88	17.81
						08/29/13	57.25	13.44
	70.82					05/05/15	58.22	12.60
						08/03/15	56.87	13.95
						12/07/15	58.82	12.00
						03/07/16	59.25	11.57
						07/12/16	58.49	12.33
						10/18/16	57.02	13.80
						01/24/17	54.06	16.76
						05/31/17	55.59	15.23
						09/21/17	62.08	8.74
						12/14/17	62.03	8.79
						03/08/18	57.70	13.12
						06/28/18	54.94	15.88
						09/19/18	54.38	16.44
						12/13/18	54.26	16.56
						06/13/19	53.61	17.21
						10/09/19	55.40	15.42
						12/04/19	54.04	16.78
						06/25/20	62.05	8.77
						12/09/20	62.18	8.64
MW05	84.04	65	80	19	4	05/27/11	67.40	16.64
						10/20/11	67.91	16.13
						12/10/12	68.54	15.50
						08/29/13	69.72	14.32
						05/05/15	INACCESSIBLE	
						08/03/15	INACCESSIBLE	
	DECOMMISSIONED 2015							
MW07	74.55	55	70	20	5	05/31/11	56.33	18.22
						10/20/11	56.87	17.68
						12/10/12	56.96	17.59
						08/29/13	60.95	13.60
	74.68					05/05/15	62.69	11.99
						08/03/15	61.67	13.01
						12/07/15	63.19	11.49
						03/07/16	63.22	11.46
						07/12/16	62.82	11.86
						10/18/16	61.26	13.42
						01/24/17	58.41	16.27
						05/31/17	59.90	14.78
						09/21/17	65.17	9.51
						12/14/17	INACCESSIBLE	
						03/08/18	61.76	12.92
						06/28/18	59.45	15.23
						09/19/18	59.07	15.61
						12/13/18	58.87	15.81
						06/13/19	57.93	16.75
						10/09/19	61.02	13.66
						12/04/19	58.38	16.30
						06/30/20	64.92	9.76
						12/09/20	65.28	9.40

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Summary of Groundwater Elevations
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MW13	90.66	70	85	21	-15	10/20/11	74.69	15.97
						12/10/12	75.38	15.28
						08/29/13	76.23	14.43
	90.86					05/05/15	INACCESSIBLE	
						08/03/15	80.07	10.79
						12/07/15	80.73	10.13
						03/07/16	80.07	10.79
						07/12/16	80.03	10.83
						10/18/16	78.16	12.70
						01/24/17	75.56	15.30
						05/31/17	77.40	13.46
						09/21/17	80.46	10.40
						12/14/17	80.19	10.67
						03/08/18	78.13	12.73
						06/28/18	77.01	13.85
						09/19/18	76.68	14.18
						12/13/18	76.52	14.34
						06/13/19	76.00	14.86
						10/09/19	81.45	9.41
						12/04/19	76.00	14.86
						06/25/20	79.24	11.62
						12/09/20	79.98	10.88
MW27	83.82	90	105	-6	-21	12/07/15	73.86	9.96
						03/07/16	73.23	10.59
						07/12/16	73.01	10.81
						10/18/16	71.38	12.44
						01/24/17	69.57	14.25
						05/31/17	70.89	12.93
						09/21/17	73.87	9.95
						12/14/17	73.25	10.57
						03/08/18	71.10	12.72
						06/28/18	70.20	13.62
						09/19/18	69.85	13.97
						12/13/18	69.69	14.13
						06/13/19	69.19	14.63
						10/09/19	70.30	13.52
						12/04/19	69.11	14.71
						06/30/20	72.38	11.44
						12/09/20	73.10	10.72
MW31	60.75	40	60	21	1	10/09/19	46.49	14.26
						12/04/19	44.16	16.59
						06/30/20	55.35	5.40
						12/09/20	55.66	5.09
Terry Avenue North								
MW15	58.79	41	56	18	3	12/10/12	40.78	18.01
						08/29/13	45.37	13.42
	58.89					05/05/15	45.86	13.03
						08/03/15	44.81	14.08
						12/07/15	47.08	11.81
						03/07/16	47.58	11.31
						07/12/16	46.73	12.16
						10/18/16	44.97	13.92
						01/24/17	42.05	16.84
						05/31/17	43.08	15.81
						09/21/17	49.62	9.27
						12/14/17	49.92	8.97
						03/08/18	45.80	13.09
						06/28/18	42.95	15.94
						09/19/18	42.35	16.54
						12/13/18	42.26	16.63
						06/13/19	41.65	17.24
						10/09/19	41.80	17.09
						12/04/19	42.00	16.89
						06/25/20	51.75	7.14
						12/09/20	52.94	5.95

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Thomas Street								
MW14	104.4	90	105	14	-1	10/20/11	88.81	15.59
						12/13/12	88.66	15.74
						08/29/13	89.99	14.41
	DECOMMISSIONED 2013							
MW16	99.02	91	106	8	-7	12/10/12	83.47	15.55
						08/29/13	84.59	14.43
	99.18					05/05/15	88.87	10.31
						08/03/15	88.53	10.65
						12/07/15	89.15	10.03
						03/07/16	88.54	10.64
						07/12/16	88.41	10.77
						10/18/16	86.74	12.44
						01/24/17	84.71	14.47
						05/31/17	86.04	13.14
						09/21/17	88.85	10.33
						12/14/17	88.43	10.75
						03/08/18	86.51	12.67
	WELL DAMAGED 2018							
MW28	99.18	90	105	9	-6	06/13/19	84.54	14.64
						10/08/19	84.75	14.43
						12/04/19	84.48	14.70
						06/25/20	87.38	11.80
						12/09/20	88.10	11.08
Fairview Avenue North								
MW-C	107.75	85	100	23	8	08/29/13	93.32	14.43
						05/05/15	97.64	10.11
Harrison Street								
MW01	68.68	45	60	24	9	05/25/11	50.59	18.09
						10/20/11	51.03	17.65
						12/10/12	51.24	17.44
						08/29/13	54.35	14.33
						05/05/15	58.11	10.71
	68.82					08/03/15	INACCESSIBLE	
						12/07/15	58.60	10.22
						03/07/16	57.69	11.13
	68.65					07/12/16	57.42	11.23
						10/18/16	55.65	13.00
						01/24/17	52.27	16.38
						05/31/17	54.69	13.96
						09/21/17	58.91	9.74
						12/14/17	58.14	10.51
						03/08/18	55.84	12.81
						06/28/18	54.20	14.45
						09/19/18	53.93	14.72
						12/13/18	53.05	15.60
						06/13/19	52.34	16.31
						10/09/19	56.65	12.00
						12/04/19	52.76	15.89
						06/25/20	57.08	11.57
						12/09/20	57.84	10.81
MW02	70.92	55	70	16	1	05/25/11	54.84	16.08
						10/20/11	55.08	15.84
						12/10/12	55.27	15.65
						08/29/13	56.48	14.44
						05/05/15	INACCESSIBLE	
						08/03/15	INACCESSIBLE	
	DECOMMISSIONED 2015							

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MW03	84.65	65	80	20	5	05/27/11	68.75	15.90
						10/20/11	68.97	15.68
						12/10/12	69.21	15.44
						08/29/13	70.21	14.44
						05/05/15	INACCESSIBLE	
						08/03/15	INACCESSIBLE	
	DECOMMISSIONED 2015							
MW26	70.57	75	90	-4	-19	12/07/15	60.42	10.15
						03/07/16	59.82	10.75
						07/12/16	59.52	11.05
						10/18/16	58.10	12.47
						01/24/17	56.10	14.47
						05/31/17	57.79	12.78
						09/21/17	60.94	9.63
						12/14/17	60.11	10.46
						03/08/18	57.79	12.78
						06/28/18	56.83	13.74
						09/19/18	56.50	14.07
						12/13/18	56.34	14.23
						06/13/19	55.82	14.75
						10/09/19	57.28	13.29
						12/04/09	55.80	14.77
						06/25/20	59.19	11.38
						12/09/20	59.85	10.72
MW32	78.38	60	75	18	3	10/09/19	65.80	12.58
						12/04/19	62.63	15.75
						06/25/20	66.88	11.50
						12/09/20	67.40	10.98
MW33	56.62	31	51	26	6	10/09/19	40.30	16.32
						12/04/19	39.93	16.69
						06/30/20	50.69	5.93
						12/09/20	Well dry	
SMW01	49.45	30	40	19	9	08/29/13	36.78	12.67
SMW02	49.26	30	40	19	9	08/29/13	36.67	12.59
SMW06	48.63	30	40	19	9	08/29/13	36.39	12.24
SMW08	49.30	30	40	19	9	08/29/13	36.69	12.61
Westlake Avenue North								
SMW09	48.25	30	40	18	8	08/29/13	35.84	12.41
South-Adjoining Property								
MW29	101.72	82	102	20	0	10/09/19	86.91	14.81
						12/04/19	87.03	14.69
						06/25/20	89.84	11.88
						12/09/20	90.57	11.15
MW30	101.97	84	104	18	-2	10/09/19	87.95	14.02
						12/04/19	87.25	14.72
						06/25/20	90.12	11.85
						12/09/20	91.10	10.87
ONNI-4	106.05	93	105	13	1	06/25/20	97.13	8.92
						12/09/20	97.83	8.22
ONNI-5	105.45	93	105	12	0	02/06/20	93.10	12.35
						06/25/20	95.65	9.80
						12/09/20	96.30	9.15
North-Adjoining Property								
SLU-MW01[2]	53.43	35	45	18	8	08/29/13	40.00	13.43
	DECOMMISSIONED 2013							
SLU-MW02[2]	52.76	30	40	23	13	08/29/13	Dry	--
	DECOMMISSIONED 2013							

NOTES:

[1]TOC elevations surveyed relative to NAVD88.

[2]Groundwater elevation data compiled from reports on file at the Washington State Department of Ecology.

-- = not analyzed, measured, or calculated

NAVD88 = North American Vertical Datum of 1988

TOC = top of casing

SoundEarth Strategies

Table 2
Groundwater Analytical Results for CVOCs
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	PCE[1] (µg/L)	TCE[1] (µg/L)	cis-1-2-DCE[1] (µg/L)	trans-1-2-DCE[1] (µg/L)	Vinyl Chloride[1] (µg/L)
Troy Laundry Property								
MW06	MW06-20110531	05/31/11	SoundEarth	3.1	**8.2**	**150**[ve]	<1	**0.76**
	MW06-20111012	10/12/11	SoundEarth	3.6	**11**	**120**	<1	**0.76**
	MW06-20130909	09/09/13	SoundEarth	3.8	4.5	**150**	<1	**0.93**
	DECOMMISSIONED 2013							
MW08	MW08-20111013	10/13/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW08-20130910	09/10/13	SoundEarth	<1	<1	<1	<1	<0.2
	DECOMMISSIONED 2013							
MW09	MW09-20111013	10/13/11	SoundEarth	<1	**16**	**22**	<1	<0.2
	MW09-20130910	09/10/13	SoundEarth	1.6	**15**	2.0	<1	<0.2
	DECOMMISSIONED 2013							
MW10	MW10-20111012	10/12/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW10-20130909	09/09/13	SoundEarth	<1	<1	<1	<1	<0.2
	DECOMMISSIONED 2013							
MW11	MW11-20111013	10/13/11	SoundEarth	**21**	2.6	5.6	<1	<0.2
	MW11-20130909	09/09/13	SoundEarth	**39**	3.8	3.6	<1	<0.2
	DECOMMISSIONED 2013							
MW12	MW12-20111017	10/17/11	SoundEarth	<1	**19**	1.3	<1	<0.2
	MW12-20130909	09/09/13	SoundEarth	<1	**20**	<1	<1	<0.2
	DECOMMISSIONED 2013							
MW17	MW17-20150506	05/06/15	SoundEarth	<1	2.2	<1	<1	<0.2
	MW17-20150804	08/07/15	SoundEarth	<1	1.5	<1	<1	<0.2
	MW17-20151207	12/07/15	SoundEarth	<1	1.5	<1	<1	<0.2
	MW17-20160308	03/08/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW17-20160714	07/14/16	SoundEarth	<1	1.2	<1	<1	<0.2
	MW17-20161020	10/20/16	SoundEarth	<1	2.1	<1	<1	<0.2
	MW17-20170126	01/26/17	SoundEarth	<1	1.9	<1	<1	<0.2
	MW17-20170601	06/01/17	SoundEarth	<1	2.5	<1	<1	<0.2
	MW17-20170923	09/23/17	SoundEarth	<1	2.1	1.2	<1	<0.2
	MW17-20171216	12/16/17	SoundEarth	<1	2.5	1.7	<1	<0.2
	MW17-20180310	03/10/18	SoundEarth	<1	2.6	1.5	<1	<0.2
	MW17-20180630	06/30/18	SoundEarth	<1	2.8	2.2	<1	<0.2
	MW17-20180922	09/22/18	SoundEarth	<1	2.7	2.0	<1	<0.2
	MW17-20181215	12/15/18	SoundEarth	<1	2.9	2.2	<1	<0.2
	MW17-20190615	06/15/19	SoundEarth	<1	3.4	2.2	<1	<0.2
	MW17-20191207	12/07/19	SoundEarth	<1	3.9	2.2	<1	<0.2
	MW17-20200627	06/27/20	SoundEarth	<1	<1	<1	<1	<0.2
	MW17-20201212	12/12/20	SoundEarth	<1	<1	<1	<1	<0.2
MW18	MW18-20150506	05/06/15	SoundEarth	<1	**46**	5.2	<1	<0.2
	MW18-20150803	08/03/15	SoundEarth	<1	**51**	4.6	<1	<0.2
	MW18-20151208	12/08/15	SoundEarth	<1	**51**	9.9	<1	<0.2
	MW18-20160308	03/08/16	SoundEarth	<1	**44**	8.1	<1	<0.2
	MW18-20160714	07/14/16	SoundEarth	<1	3.3	1.7	<1	<0.2
	MW18-20161020	10/20/16	SoundEarth	<1	**6.5**	4.0	<1	<0.2
	MW18-20170126	01/26/17	SoundEarth	<1	**7.7**	14	<1	**0.25**
	MW18-20170601	06/01/17	SoundEarth	<1	3.3	14	<1	**0.31**
	MW18-20170923	09/23/17	SoundEarth	<1	<1	**22**	<1	**0.38**
	MW18-20171216	12/16/17	SoundEarth	<1	<1	**22**	<1	**0.24**
	MW18-20180310	03/10/18	SoundEarth	<1	<1	**27**	<1	**0.40**
	MW18-20180630	06/30/18	SoundEarth	<1	<1	**27**	<1	**0.43**
	MW18-20180922	09/22/18	SoundEarth	<1	<1	**21**	<1	**0.42**
	MW18-20181215	12/15/18	SoundEarth	<1	<1	**24**	<1	**0.49**
	MW18-20190615	06/15/19	SoundEarth	<1	<1	**28**	<1	**0.44**
	MW18-20191207	12/07/19	SoundEarth	<1	<1	**28**	<1	**0.55**
	MW18-20200627	06/27/20	SoundEarth	<1	<1	**27**	<1	**1.5**
	MW18-20201212	12/12/20	SoundEarth	<1	<1	15	<1	**2.4**
MTCA Cleanup Level				**5**[2]	**5**[2]	**16**[3]	**160**[3]	**0.2**[2]

SoundEarth Strategies

Table 2
Groundwater Analytical Results for CVOCs
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	PCE[1] (µg/L)	TCE[1] (µg/L)	cis-1-2-DCE[1] (µg/L)	trans-1-2-DCE[1] (µg/L)	Vinyl Chloride[1] (µg/L)
MW19	MW19-20150507	05/07/15	SoundEarth	<1	**69**	15	<1	<0.2
	MW19-20150803	08/03/15	SoundEarth	<1	**61**	**20**	<1	<0.2
	MW19-20151207	12/07/15	SoundEarth	<1	**65**	**23**	<1	<0.2
	MW19-20160308	03/08/16	SoundEarth	<1	**52**	**26**	<1	<0.2
	MW19-20160713	07/13/16	SoundEarth	<1	4.6	10	<1	<0.2
	MW19-20161021	10/21/16	SoundEarth	<1	**10**	4.4	<1	**0.40**
	MW19-20170125	01/25/17	SoundEarth	<1	**5.5**	3.9	<1	**0.30**
	MW19-20170601	06/01/17	SoundEarth	<1	**5.7**	3.5	<1	**0.44**
	MW19-20170923	09/23/17	SoundEarth	<1	1.7	3.4	<1	**0.97**
	MW19-20171216	12/16/17	SoundEarth	<1	1.1	13	<1	**0.97**
	MW19-20180310	03/10/18	SoundEarth	<1	<1	12	<1	**0.78**
	MW19-20180630	06/30/18	SoundEarth	<1	<1	12	<1	**0.96**
	MW19-20180922	09/22/18	SoundEarth	<1	<1	16	<1	**0.86**
	MW19-20190615	06/15/19	SoundEarth	<1	<1	**27**	<1	**0.79**
	MW19-20191207	12/07/19	SoundEarth	<1	<1	**35**	<1	**0.98**
	MW19-20200627	06/27/20	SoundEarth	<1	<1	**41**	<1	**0.78**
	MW19-20201212	12/12/20	SoundEarth	<1	<1	**22**	<1	**2.6**
MW20	MW20-20150506	05/06/15	SoundEarth	<1	<1	1.5	<1	<0.2
	MW20-20150803	08/03/15	SoundEarth	<1	<1	1.2	<1	<0.2
	MW20-20151207	12/07/15	SoundEarth	<1	<1	<1	<1	<0.2
	MW20-20160309	03/09/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW20-20160715	07/15/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW20-20161020	10/20/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW20-20170125	01/25/17	SoundEarth	<1	<1	4.1	<1	<0.2
	MW20-20170601	06/01/17	SoundEarth	<1	<1	1.2	<1	<0.2
	MW20-20170924	09/24/17	SoundEarth	<1	<1	9.5	<1	<0.2
	MW20-20171216	12/16/17	SoundEarth	<1	1.3	15	<1	**0.35**
	MW20-20180310	03/10/18	SoundEarth	<1	<1	11	<1	<0.2
	MW20-20180630	06/30/18	SoundEarth	<1	<1	7	<1	<0.2
	MW20-20180922	09/22/18	SoundEarth	<1	<1	5.3	<1	<0.2
	MW20-20181215	12/15/18	SoundEarth	<1	<1	4.4	<1	<0.2
	MW20-20190615	06/15/19	SoundEarth	<1	<1	3.8	<1	<0.2
	MW20-20191207	12/07/19	SoundEarth	<1	<1	3.0	<1	<0.2
	MW20-20200627	06/27/20	SoundEarth	<1	1.2	6.1	<1	<0.2
	MW20-20201212	12/12/20	SoundEarth	<1	1.3	6.0	<1	<0.2
MW21	MW21-20150506	05/06/15	SoundEarth	**5.1**	1.6	7.2	<1	<0.2
	MW21-20150804	08/04/15	SoundEarth	4.9	1.4	4.5	<1	<0.2
	MW21-20151208	12/08/15	SoundEarth	**7.3**	2.0	6.7	<1	<0.2
	MW21-20160309	03/09/16	SoundEarth	**5.3**	1.4	7.9	<1	<0.2
	MW21-20160713	07/13/16	SoundEarth	<1	<1	1.2	<1	<0.2
	MW21-20161020	10/20/16	SoundEarth	<1	<1	1.7	<1	<0.2
	MW21-20170126	01/26/17	SoundEarth	<1	<1	2.4	<1	<0.2
	MW21-20170601	06/01/17	SoundEarth	<1	<1	2.4	<1	<0.2
	MW21-20170923	09/23/17	SoundEarth	<1	<1	3.7	<1	<0.2
	MW21-20171216	12/16/17	SoundEarth	<1	<1	14	<1	**0.49**
	MW21-20180310	03/10/18	SoundEarth	<1	<1	14	<1	**0.43**
	MW21-20180630	06/30/18	SoundEarth	<1	<1	6.0	<1	**0.29**
	MW21-20180922	09/22/18	SoundEarth	<1	<1	6.9	<1	**0.30**
	MW21-20181215	12/15/18	SoundEarth	<1	<1	16	<1	**0.96**
	MW21-20190615	06/15/19	SoundEarth	<1	<1	**29**	<1	**1.1**
	MW21-20191207	12/07/19	SoundEarth	<1	<1	**34**	<1	**1.3**
	MW21-20200627	06/27/20	SoundEarth	<1	<1	13	<1	**0.49**
	MW21-20201212	12/12/20	SoundEarth	<1	<1	10	<1	**1.8**
MTCA Cleanup Level				**5[2]**	**5[2]**	**16[3]**	**160[3]**	**0.2[2]**

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Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	PCE[1] (µg/L)	TCE[1] (µg/L)	cis-1-2-DCE[1] (µg/L)	trans-1-2-DCE[1] (µg/L)	Vinyl Chloride[1] (µg/L)
MW22	MW22-20150506	05/06/15	SoundEarth	11	2.2	27	<1	<0.2
	MW22-20150804	08/04/15	SoundEarth	17	3.0	34	<1	<0.2
	MW22-20151208	12/08/15	SoundEarth	19	3.7	42	<1	<0.2
	MW22-20160308	03/08/16	SoundEarth	28	4.5	52	<1	0.35
	MW22-20160713	07/13/16	SoundEarth	<1	<1	5.5	<1	<0.2
	MW22-20161020	10/20/16	SoundEarth	<1	<1	6.7	<1	0.65
	MW22-20170126	01/26/17	SoundEarth	<1	<1	8.5	<1	0.51
	MW22-20170601	06/01/17	SoundEarth	<1	<1	10	<1	1.5
	MW22-20170923	09/23/17	SoundEarth	<1	<1	18	<1	1.4
	MW22-20171216	12/16/17	SoundEarth	<1	<1	22	<1	1.2
	MW22-20180310	03/10/18	SoundEarth	<1	<1	22	<1	1.3
	MW22-20180630	06/30/18	SoundEarth	<1	<1	28	<1	1.2
	MW22-20180922	09/22/18	SoundEarth	<1	<1	33	<1	0.90
	MW22-20181215	12/15/18	SoundEarth	<1	<1	37	<1	1.2
	MW22-20190615	06/15/19	SoundEarth	1.1	1.1	49	<1	1.0
	MW22-20191207	12/07/19	SoundEarth	1.3	1.3	48	<1	1.0
	MW22-20200627	06/27/20	SoundEarth	1.4	1.3	42	<1	0.99
	MW22-20201212	12/12/20	SoundEarth	<1	<1	44	<1	1.1
MW23	MW23-20150507	05/07/15	SoundEarth	6.1	18	13	<1	<0.2
	MW23-20150804	08/04/15	SoundEarth	6.1	24	20	<1	0.20
	MW23-20151208	12/08/15	SoundEarth	3.8	16	120	<1	0.57
	MW23-20160308	03/08/16	SoundEarth	4.1	14	95	<1	0.64
	MW23-20160714	07/14/16	SoundEarth	<1	1.6	14	<1	2.2
	MW23-20161020	10/20/16	SoundEarth	<1	2.1	9.9	<1	0.48
	MW23-20170126	01/26/17	SoundEarth	<1	2.9	41	<1	1.4
	MW23-20170601	06/01/17	SoundEarth	<1	2.7	23	<1	0.74
	MW23-20170923	09/23/17	SoundEarth	<1	1.7	16	<1	0.50
	MW23-20171216	12/16/17	SoundEarth	<1	1.3	14	<1	0.51
	MW23-20180310	03/10/18	SoundEarth	<1	<1	20	<1	0.52
	MW23-20180630	06/30/18	SoundEarth	<1	<1	14	<1	0.53
	MW23-20180922	09/22/18	SoundEarth	<1	<1	16	<1	0.53
	MW23-20181215	12/15/18	SoundEarth	<1	<1	17	<1	<0.2
	MW23-20190615	06/15/19	SoundEarth	<1	<1	25	<1	0.72
	MW23-20191207	12/07/19	SoundEarth	<1	<1	38	<1	0.89
	MW23-20200627	06/27/20	SoundEarth	<1	<1	30	<1	0.76
	MW23-20201212	12/12/20	SoundEarth	<1	<1	30	<1	0.85
MW24	MW24-20150506	05/06/15	SoundEarth	2.5	31	72	<1	0.26
	MW24-20150804	08/04/15	SoundEarth	5.5	28	75	<1	<0.2
	MW24-20151208	12/08/15	SoundEarth	11	28	54	<1	<0.2
	MW24-20160309	03/09/16	SoundEarth	11	23	45	<1	<0.2
	MW24-20160715	07/15/16	SoundEarth	<1	1.7	12	<1	<0.2
	MW98-20160715 (DUP)			<1	1.8	12	<1	<0.2
	MW24-20161020	10/20/16	SoundEarth	<1	2.7	12	<1	0.26
	MW24-20170125	01/25/17	SoundEarth	<1	3.5	20	<1	0.81
	MW24-20170601	06/01/17	SoundEarth	1.1	4.8	35	<1	1.0
	MW24-20170924	09/24/17	SoundEarth	<1	1.8	33	<1	0.36
	MW24-20171216	12/16/17	SoundEarth	<1	1.3	30	<1	0.38
	MW24-20180310	03/10/18	SoundEarth	<1	<1	25	<1	0.36
	MW24-20180630	06/30/18	SoundEarth	1.5	1.9	41	<1	2.1
	MW24-20180922	09/22/18	SoundEarth	<1	<1	35	<1	0.37
	MW24-20181215	12/15/18	SoundEarth	<1	<1	43	<1	0.51
	MW24-20190615	06/15/19	SoundEarth	<1	<1	84	<1	1.0
	MW24-20191207	12/07/19	SoundEarth	<1	<1	83	<1	0.94
	MW24-20200627	06/27/20	SoundEarth	<1	<1	61	<1	0.76
	MW24-20201212	12/12/20	SoundEarth	<1	<1	45	<1	0.61
MTCA Cleanup Level				**5[2]**	**5[2]**	**16[3]**	**160[3]**	**0.2[2]**

SoundEarth Strategies

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Seattle, Washington

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MW25	MW25-20150507	05/07/15	SoundEarth	<1	68	5.2	<1	<0.2
	MW99-20150507 (DUP)			<1	69	5.3	<1	<0.2
	MW25-20150805	08/05/15	SoundEarth	3.0	75	7.9	<1	<0.2
	MW99-20150805 (DUP)			2.9	73	7.8	<1	<0.2
	MW25-20151209	12/09/15	SoundEarth	11	71	8.4	<1	<0.2
	MW99-20151209 (DUP)			11	72	8.3	<1	<0.2
	MW25-20160308	03/08/16	SoundEarth	24	50	12	<1	<0.2
	MW99-20160308(DUP)			25	50	12	<1	<0.2
	MW25-20160713	07/13/16	SoundEarth	6.1	4.8	23	<1	0.70
	MW25-20161019	10/19/16	SoundEarth	1.8	5.1	15	<1	0.96
	MW99-20161019 (DUP)			1.7	5.0	16	<1	1.0
	MW25-20170125	01/25/17	SoundEarth	1.0	3.6	44	<1	0.89
	MW99-20170125 (DUP)			1.1	3.7	44	<1	0.92
	MW25-20170601	06/01/17	SoundEarth	<1	1.2	15	<1	0.31
	MW99-20170601 (DUP)			<1	1.3	15	<1	0.41
	MW25-20170923	09/23/17	SoundEarth	<1	<1	15	<1	0.40
	MW99-20170923 (DUP)			<1	<1	15	<1	0.34
	MW25-20171216	12/16/17	SoundEarth	<1	<1	23	<1	0.41
	MW99-20171216 (DUP)			<1	<1	23	<1	0.40
	MW25-20180310	03/10/18	SoundEarth	<1	<1	25	<1	0.32
	MW99-20180310 (DUP)			<1	<1	25	<1	0.30
	MW25-20180630	06/30/18	SoundEarth	<1	<1	31	<1	0.52
	MW99-20180630 (DUP)			<1	<1	32	<1	0.49
	MW25-20180922	09/22/18	SoundEarth	<1	<1	37	<1	0.46
	MW99-20180922 (DUP)			<1	<1	36	<1	0.51
	MW25-20181215	12/15/18	SoundEarth	<1	<1	40	<1	0.60
	MW99-20181215 (DUP)			<1	<1	39	<1	0.57
	MW25-20190615	06/15/19	SoundEarth	<1	<1	45	<1	0.54
	MW99-20190615 (DUP)			<1	<1	43	<1	0.50
	MW25-20191207	12/07/19	SoundEarth	<1	<1	40	<1	0.63
	MW99-20191207 (DUP)			<1	<1	36	<1	0.58
	MW25-20200627	6/27/2020	SoundEarth	<1	<1	40	<1	0.73
	MW99-20200627 (DUP)			<1	<1	37	<1	0.67
	MW25-20201212	12/12/20	SoundEarth	<1	<1	35	<1	0.43
	MW99-20201212 (DUP)			<1	<1	34	<1	0.43
IW04	IW04-20150508	05/08/15	SoundEarth	<1	15	1.9	<1	<0.2
	IW04-20160309	03/09/16	SoundEarth	<1	2.5	11	<1	<0.2
	IW04-20160714	07/14/16	SoundEarth	<1	<1	<1	<1	<0.2
	IW04-20161021	10/21/16	SoundEarth	<1	<1	1.8	<1	<0.2
	IW04-20170126	01/26/17	SoundEarth	<1	1.1	4.8	<1	<0.2
	IW04-20170601	06/01/17	SoundEarth	<1	1.2	12	<1	0.21
	IW04-20170923	09/23/17	SoundEarth	<1	<1	14	<1	0.22
	IW04-20171216	12/16/17	SoundEarth	<1	<1	19	<1	0.54
	IW04-20180310	03/10/18	SoundEarth	<1	<1	9.0	<1	0.65
	IW04-20180630	06/30/18	SoundEarth	<1	<1	5.3	<1	0.68
	IW04-20180922	09/22/18	SoundEarth	<1	<1	<1	<1	<0.2
	IW04-20181215	12/15/18	SoundEarth	<1	<1	1.9	<1	1.6
	IW04-20190615	06/15/19	SoundEarth	<1	<1	1.7	<1	1.0
	IW04-20191207	12/07/19	SoundEarth	<1	<1	1.4	<1	1.1
	IW04-20200627	06/27/20	SoundEarth	<1	<1	1.1	<1	0.77
	IW04-20201212	12/12/20	SoundEarth	<1	<1	1.0	<1	0.64
IW06	IW06-20150507	05/07/15	SoundEarth	6.3	13	<1	<1	<0.2
	IW06-20180310	03/10/18	SoundEarth	<1	<1	1.6	<1	<0.2
	IW06-20180630	06/30/18	SoundEarth	<1	<1	<1	<1	<0.2
	IW06-20181215	12/15/18	SoundEarth	1.0	<1	<1	<1	<0.2
	IW06-20190615	06/15/19	SoundEarth	1.7	<1	<1	<1	<0.2
	IW06-20191207	12/07/19	SoundEarth	1.4	<1	<1	<1	<0.2
	IW06-20200627	06/27/20	SoundEarth	<1	<1	5.2	<1	<0.2
	IW06-20201212	12/12/20	SoundEarth	<1	<1	3.3	<1	<0.2
MTCA Cleanup Level				**5[2]**	**5[2]**	**16[3]**	**160[3]**	**0.2[2]**

SoundEarth Strategies

Table 2
Groundwater Analytical Results for CVOCs
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	PCE[1] (µg/L)	TCE[1] (µg/L)	cis-1-2-DCE[1] (µg/L)	trans-1-2-DCE[1] (µg/L)	Vinyl Chloride[1] (µg/L)
IW50	IW50-20150803	08/03/15	SoundEarth	4.1	8.1	**44**	<1	<0.2
	IW50-20151208	12/08/15	SoundEarth	<1	<1	**140**	<1	**1.8**
	IW50-20160309	03/09/16	SoundEarth	<1	<1	**110**	<1	**1.9**
	IW50-20160715	07/15/16	SoundEarth	3.7	<1	**38**	<1	**2.5**
	IW50-20161021	10/21/16	SoundEarth	3.7	<1	**23**	<1	**1.0**
	IW50-20170126	01/26/17	SoundEarth	**13**	2.1	**34**	<1	**0.74**
	IW50-20170602	06/02/17	SoundEarth	<1	<1	**81**	<1	**0.95**
	IW50-20170924	09/24/17	SoundEarth	<1	<1	**26**	<1	**2.6**
	IW50-20171216	12/16/17	SoundEarth	<1	<1	15	<1	**2.2**
	IW50-20180310	03/10/18	SoundEarth	<1	<1	8.0	<1	**3.6**
	IW50-20180630	06/30/18	SoundEarth	<1	<1	4.5	<1	**2.5**
	IW50-20180922	09/22/18	SoundEarth	<1	<1	5.1	<1	**2.9**
	IW50-20181215	12/15/18	SoundEarth	1.6	<1	15	<1	**4.5**
	IW50-20190615	06/15/19	SoundEarth	**5.2**	2.0	**54**	<1	**7.1**
	IW50-20191207	12/07/19	SoundEarth	4.5	1.6	**55**	<1	**7.4**
	IW50-20200627	06/27/20	SoundEarth	3.9	<1	2.7	<1	**1.1**
	IW50-20201212	12/12/20	SoundEarth	<1	<1	<1	<1	<0.2
IW61	IW61-20151208	12/08/15	SoundEarth	**10**	2.8	**120**	<1	**0.86**
	IW61-20160309	03/09/16	SoundEarth	**23**	4.2	**140**	<1	**1.7**
	IW61-20160714	07/14/16	SoundEarth	**8.3**	1.6	**24**	<1	**1.6**
	IW61-20161021	10/21/16	SoundEarth	**9.5**	2.8	**34**	<1	**0.96**
	IW61-20170126	01/26/17	SoundEarth	**8.3**	2.9	**32**	<1	**0.96**
	IW61-20170602	06/02/17	SoundEarth	**9.9**	3.4	**41**	<1	**1.3**
	IW61-20170923	09/23/17	SoundEarth	**12**	3.2	**45**	<1	**1.2**
	IW61-20171216	12/16/17	SoundEarth	**15**	3.2	**65**	<1	**1.2**
	IW61-20180310	03/10/18	SoundEarth	**15**	2.7	**71**	<1	**1.1**
	IW61-20180323*	03/23/18	SoundEarth	**15**	2.9	**82**	<1	**1.3**
	IW61-20180630	06/30/18	SoundEarth	**16**	2.5	**67**	<1	**1.7**
	IW61-20180922	09/22/18	SoundEarth	**13**	2.1	**63**	<1	**1.8**
	IW61-20181215	12/15/18	SoundEarth	**15**	2.1	**58**	<1	**2.0**
	IW61-20190615	06/15/19	SoundEarth	**13**	2.4	**71**	<1	**2.9**
	IW61-20191207	12/07/19	SoundEarth	**6.8**	1.7	**65**	<1	**4.0**
	IW61-20200627	06/27/20	SoundEarth	**5.3**	1.1	**63**	<1	**4.5**
	IW61-20201212	12/12/20	SoundEarth	<1	<1	**30**	<1	**4.1**[ca]
IW91	IW91-20150506	05/06/15	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20150804	08/04/15	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20151208	12/08/15	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20160309	03/09/16	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20160714	07/14/16	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20161020	10/20/16	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20170126	01/26/17	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20170601	06/01/17	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20170923	09/23/17	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20171216	12/16/17	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20180310	03/10/18	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20180630	06/30/18	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20180922	09/22/18	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20181215	12/15/18	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20190615	06/15/19	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20191207	12/07/19	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20200627	06/27/20	SoundEarth	<1	<1	<1	<1	<0.2
	IW91-20201212	12/12/20	SoundEarth	<1	<1	<1	<1	<0.2
MTCA Cleanup Level				**5**[2]	**5**[2]	**16**[3]	**160**[3]	**0.2**[2]

Table 2
Groundwater Analytical Results for CVOCs
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	PCE[1] (µg/L)	TCE[1] (µg/L)	cis-1-2-DCE[1] (µg/L)	trans-1-2-DCE[1] (µg/L)	Vinyl Chloride[1] (µg/L)
Boren Avenue North								
MW04	MW04-20110527	05/27/11	SoundEarth	<1	15	<1	<1	<0.2
	MW04-20111012	10/12/11	SoundEarth	<1	15	<1	<1	<0.2
	MW04-20130909	09/09/13	SoundEarth	<1	22	15	<1	<0.2
	MW04-20150508	05/08/15	SoundEarth	1.4	13	4.2	<1	<0.2
	MW04-20150806	08/06/15	SoundEarth	<1	6.9	1.0	<1	<0.2
	MW04-20151209	12/09/15	SoundEarth	<1	9.2	<1	<1	<0.2
	MW04-20160308	03/08/16	SoundEarth	<1	9.6	1.1	<1	<0.2
	MW04-20160713	07/13/16	SoundEarth	1.0	8.9	1.3	<1	<0.2
	MW04-20161019	10/19/16	SoundEarth	<1	5.5	<1	<1	<0.2
	MW04-20170124	01/24/17	SoundEarth	<1	9.4	<1	<1	<0.2
	MW04-20170531	05/31/17	SoundEarth	<1	9.3	<1	<1	<0.2
	MW04-20170921	09/21/17	SoundEarth	<1	5.7	3.2	<1	<0.2
	MW04-20171214	12/14/17	SoundEarth	<1	8.0	2.4	<1	<0.2
	MW04-20180309	03/09/18	SoundEarth	<1	8.6	<1	<1	<0.2
	MW04-20180629	06/29/18	SoundEarth	<1	9.4	<1	<1	<0.2
	MW04-20180920	09/20/18	SoundEarth	<1	9.4	<1	<1	<0.2
	MW04-20181214	12/14/18	SoundEarth	<1	10	<1	<1	<0.2
	MW04-20190614	06/14/19	SoundEarth	<1	11	<1	<1	<0.2
	MW04-20191205	12/05/19	SoundEarth	<1	11	<1	<1	<0.2
	MW04-20200626	06/26/20	SoundEarth	<1	10	<1	<1	<0.2
	MW04-20201211	12/11/20	SoundEarth	<1	9.2	<1	<1	<0.2
MW05	MW05-20110527	05/27/11	SoundEarth	39	16	1.8	<1	<0.2
	MW05-20111012	10/12/11	SoundEarth	29	14	1.5	<1	<0.2
	MW05-20130910	09/10/13	SoundEarth	21	13	1.9	<1	<0.2
	DECOMMISSIONED 2015							
MW07	MW07-20110531	05/31/11	SoundEarth	1.4	12	2.3	<1	<0.2
	MW07-20111012	10/12/11	SoundEarth	2.2	11	1.8	<1	<0.2
	MW07-20130909	09/09/13	SoundEarth	1.5	33	5.4	<1	<0.2
	MW07-20150508	05/08/15	SoundEarth	2.5	15	4.8	<1	<0.2
	MW07-20150805	08/05/15	SoundEarth	1.8	12	3.2	<1	<0.2
	MW07-20151209	12/09/15	SoundEarth	2.3	14	4.1	<1	<0.2
	MW07-20160308	03/08/16	SoundEarth	2.6	13	3.8	<1	<0.2
	MW07-20160713	07/13/16	SoundEarth	3.0	18	5.7	<1	<0.2
	MW07-20161019	10/19/16	SoundEarth	3.5	13	2.3	<1	<0.2
	MW07-20170124	01/24/17	SoundEarth	4.8	8.1	<1	<1	<0.2
	MW07-20170531	05/31/17	SoundEarth	4.7	8.6	<1	<1	<0.2
	MW07-20180308	03/08/18	SoundEarth	2.6	11	1.1	<1	<0.2
	MW07-20180629	06/29/18	SoundEarth	3.3	7.3	<1	<1	<0.2
	MW07-20180920	09/20/18	SoundEarth	2.8	6.0	<1	<1	<0.2
	MW07-20181214	12/14/18	SoundEarth	3.3	6.7	<1	<1	<0.2
	MW07-20190614	06/14/19	SoundEarth	3.9	5.9	<1	<1	<0.2
	MW07-20191205	12/05/19	SoundEarth	3.3	5.9	<1	<1	<0.2
	MW07-20200630	06/30/20	SoundEarth	<1	5.8	<1	<1	<0.2
	MW07-20201210	12/10/20	SoundEarth	1.7	18	3.2	<1	<0.2
MTCA Cleanup Level				**5[2]**	**5[2]**	**16[3]**	**160[3]**	**0.2[2]**

SoundEarth Strategies

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Groundwater Analytical Results for CVOCs
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	PCE[1] (µg/L)	TCE[1] (µg/L)	cis-1-2-DCE[1] (µg/L)	trans-1-2-DCE[1] (µg/L)	Vinyl Chloride[1] (µg/L)
MW13	MW13-20111020	10/20/11	SoundEarth	5.1	1.2	<1	<1	<0.2
	MW13-20130910	09/10/13	SoundEarth	11	1.4	<1	<1	<0.2
	MW13-20150511	05/11/15	SoundEarth	4.6[cf]	1.7[cf]	<1[cf]	<1[cf]	<0.2[cf]
	MW13-20150805	08/05/15	SoundEarth	5.4	2.3	<1	<1	<0.2
	MW13-20151215	12/15/15	SoundEarth	5.6	1.6	<1	<1	<0.2
	MW13-20160307	03/07/16	SoundEarth	6.6	1.6	<1	<1	<0.2
	MW13-20160712	07/12/16	SoundEarth	6.5	1.6	<1	<1	<0.2
	MW13-20161019	10/19/16	SoundEarth	10	2.2	<1	<1	<0.2
	MW13-20170124	01/24/17	SoundEarth	6.4	1.0	<1	<1	<0.2
	MW13-20170531	05/31/17	SoundEarth	10	1.5	<1	<1	<0.2
	MW13-20170921	09/21/17	SoundEarth	8.4	1.8	<1	<1	<0.2
	MW13-20171214	12/14/17	SoundEarth	5.2	1.4	<1	<1	<0.2
	MW13-20180308	03/08/18	SoundEarth	8.0	1.4	<1	<1	<0.2
	MW13-20180629	06/29/18	SoundEarth	4.4	<1	<1	<1	<0.2
	MW13-20180920	09/20/18	SoundEarth	6.5	1.3	<1	<1	<0.2
	MW13-20181214	12/14/18	SoundEarth	7.8	1.4	<1	<1	<0.2
	MW13-20190614	06/14/19	SoundEarth	7.0	1.1	<1	<1	<0.2
	MW13-20191205	12/05/19	SoundEarth	7.7	1.1	<1	<1	<0.2
	MW13-20200626	06/26/20	SoundEarth	9.1	1.8	<1	<1	<0.2
	MW13-20201210	12/10/20	SoundEarth	7.2	1.6	<1	<1	<0.2
MW27	MW27-20151210	12/10/15	SoundEarth	<1	21	2.5	<1	<0.2
	MW27-20160307	03/07/16	SoundEarth	<1	21	3.8	<1	<0.2
	MW27-20160713	07/13/16	SoundEarth	<1	18	4.5	<1	<0.2
	MW27-20161019	10/19/16	SoundEarth	<1	23	4.8	<1	<0.2
	MW27-20170124	01/24/17	SoundEarth	<1	33	13	<1	<0.2
	MW27-20170531	05/31/17	SoundEarth	<1	18	5.5	<1	<0.2
	MW27-20170921	09/21/17	SoundEarth	<1	16	4.0	<1	<0.2
	MW27-20171214	12/14/17	SoundEarth	<1	81	4.4	<1	<0.2
	MW27-20171229	12/29/17	SoundEarth	<1	60	3.5	<1	<0.2
	MW27-20180308	03/08/18	SoundEarth	<1	13	<1	<1	<0.2
	MW27-20180628	06/28/18	SoundEarth	<1	37	3.4	<1	<0.2
	MW27-20180920	09/20/18	SoundEarth	<1	21	3.7	<1	<0.2
	MW27-20181214	12/14/18	SoundEarth	<1	17	4.3	<1	<0.2
	MW27-20190614	06/14/19	SoundEarth	<1	14	2.3	<1	<0.2
	MW27-20191205	12/05/19	SoundEarth	<1	15	2.2	<1	<0.2
	MW27-20200626	06/26/20	SoundEarth	<1	30	2.9	<1	<0.2
	MW27-20201210	12/10/20	SoundEarth	<1	69	3.7	<1	<0.2
MW31	MW31-20191009	10/09/19	SoundEarth	<1	1.8	<1	<1	<0.2
	MW31-20191205	12/05/19	SoundEarth	<1	3.3	<1	<1	<0.2
	MW31-20200701	07/01/20	SoundEarth	<1	12	<1	<1	<0.2
	MW31-20201211	12/11/20	SoundEarth	<1	17	<1	<1	<0.2
Terry Avenue North								
MW15	MW15-20121211	12/11/12	SoundEarth	<1	8.2	<1	<1	<0.2
	MW15-20121221	12/21/12	SoundEarth	<1	7.2	<1	<1	<0.2
	MW15-20130910	09/10/13	SoundEarth	<1	8.6	<1	<1	<0.2
	MW15-20150508	05/08/15	SoundEarth	<1	6.5	<1	<1	<0.2
	MW15-20150805	08/05/15	SoundEarth	<1	5.3	<1	<1	<0.2
	MW15-20151209	12/09/15	SoundEarth	<1	6.8	<1	<1	<0.2
	MW15-20160308	03/08/16	SoundEarth	<1	6.7	<1	<1	<0.2
	MW15-20160713	07/13/16	SoundEarth	<1	5.8	<1	<1	<0.2
	MW15-20161018	10/18/16	SoundEarth	<1	5.3	<1	<1	<0.2
	MW15-20170125	01/25/17	SoundEarth	<1	7.4	<1	<1	<0.2
	MW15-20170531	05/31/17	SoundEarth	<1	7.9	<1	<1	<0.2
	MW15-20170922	09/22/17	SoundEarth	<1	3.9	<1	<1	<0.2
	MW15-20171215	12/15/17	SoundEarth	<1	3.0	<1	<1	<0.2
	MW15-20180309	03/09/18	SoundEarth	<1	3.3	<1	<1	<0.2
	MW15-20180629	06/29/18	SoundEarth	<1	5.1	<1	<1	<0.2
	MW15-20180920	09/20/18	SoundEarth	<1	6.9	<1	<1	<0.2
	MW15-20181214	12/14/18	SoundEarth	<1	7.0	<1	<1	<0.2
	MW15-20190613	06/13/19	SoundEarth	<1	6.8	<1	<1	<0.2
	MW15-20191205	12/05/19	SoundEarth	<1	4.9	<1	<1	<0.2
	MW15-20200626	06/26/20	SoundEarth	<1	1.2	<1	<1	<0.2
	MW15-20201211	12/11/20	SoundEarth	<1	<1	<1	<1	<0.2
MTCA Cleanup Level				**5[2]**	**5[2]**	**16[3]**	**160[3]**	**0.2[2]**

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Groundwater Analytical Results for CVOCs
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	PCE[1] (µg/L)	TCE[1] (µg/L)	cis-1-2-DCE[1] (µg/L)	trans-1-2-DCE[1] (µg/L)	Vinyl Chloride[1] (µg/L)
Thomas Street								
MW14	MW14-20111020	10/20/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW14-20130911	09/11/13	SoundEarth	<1	<1	<1	<1	<0.2
	DECOMMISSIONED 2013							
MW16	MW16-20121211	12/11/12	SoundEarth	**16**	**12**	**220**	<1	**0.69**
	MW16-20130911	09/11/13	SoundEarth	**6.4**	**5.0**	**610**	<1	**1.9**
	MW16-20150508	05/08/15	SoundEarth	**7.5**	**7.6**	**640**	<1	**2.8**
	MW16-20150805	08/05/15	SoundEarth	**7.8**	**7.3**	**550**	<1	**2.4**
	MW16-20151210	12/10/15	SoundEarth	**5.3**	4.5	**510**	<1	**3.2**
	MW16-20160308	03/08/16	SoundEarth	3.7	2.0	**190**	<1	**1.3**
	MW16-20160712	07/12/16	SoundEarth	<1	<1	**160**	<1	**2.0**
	MW16-20161019	10/19/16	SoundEarth	5.0	**5.4**	**170**	<1	**1.2**
	MW16-20170125	01/25/17	SoundEarth	**6.4**	**6.8**	**220**	<1	**0.98**
	MW16-20170531	05/31/17	SoundEarth	**5.7**	4.4	**100**	<1	**0.49**
	MW16-20170922	09/22/17	SoundEarth	**5.4**	**5.2**	**78**	<1	**0.40**
	MW16-20171229	12/29/17	SoundEarth	**7.2**	**6.4**	**150**	<1	**0.89**
	MW16-20180309	03/09/18	SoundEarth	**7.3**	**5.5**	**80**	<1	**0.35**
	WELL DAMAGED 2018							
MW28	MW28-20190315	03/15/19	SoundEarth	**7.7**	4.7	**67**	<1	**0.47**
	MW28-20190613	06/13/19	SoundEarth	**9.0**	**5.7**	**80**	<1	**0.35**
	MW28-20191009	10/09/19	SoundEarth	**8.7**	**6.1**	**72**	<1	**0.31**
	MW28-20191204	12/04/19	SoundEarth	**8.4**	**4.9**	**52**	<1	**0.27**
	MW28-20200626	06/26/20	SoundEarth	**9.1**	**5.1**	**22**	<1	<0.2
	MW28-20201211	12/11/20	SoundEarth	**8.3**	4.9	**19**	<1	<0.2
Fairview Avenue North								
MW-C	MW-C-20130911	09/11/13	SoundEarth	<1	<1	<1	<1	<0.2
Harrison Street								
MW01	MW01-20110525	05/25/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20111011	10/11/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20130910	09/10/13	SoundEarth	<1	1.4	<1	<1	<0.2
	MW01-20150806	08/06/15	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20160308	03/08/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20160712	07/12/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20161018	10/18/16	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20170124	01/24/17	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20170531	05/31/17	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20171214	12/14/17	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20180309	03/09/18	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20180628	06/28/18	SoundEarth	<1	1.1	<1	<1	<0.2
	MW01-20180920	09/20/18	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20181214	12/14/18	SoundEarth	<1	1.1	<1	<1	<0.2
	MW01-20190614	06/14/19	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20191205	12/05/19	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20200626	06/26/20	SoundEarth	<1	<1	<1	<1	<0.2
	MW01-20201211	12/11/20	SoundEarth	<1	<1	<1	<1	<0.2
MW02	MW02-20110525	05/25/11	SoundEarth	<1	**5.2**	<1	<1	<0.2
	MW02-20111011	10/11/11	SoundEarth	<1	3.0	<1	<1	<0.2
	MW02-20130911	09/11/13	SoundEarth	<1	3.6	<1	<1	<0.2
	DECOMMISSIONED 2015							
MW03	MW03-20110527	05/27/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW03-20111011	10/11/11	SoundEarth	<1	<1	<1	<1	<0.2
	MW03-20130911	09/11/13	SoundEarth	<1	<1	<1	<1	<0.2
	DECOMMISSIONED 2015							
MTCA Cleanup Level				**5[2]**	**5[2]**	**16[3]**	**160[3]**	**0.2[2]**

Table 2
Groundwater Analytical Results for CVOCs
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	PCE[1] (µg/L)	TCE[1] (µg/L)	cis-1-2-DCE[1] (µg/L)	trans-1-2-DCE[1] (µg/L)	Vinyl Chloride[1] (µg/L)
MW26	MW26-20151210	12/10/15	SoundEarth	<1	11	<1	<1	<0.2
	MW26-20160307	03/07/16	SoundEarth	<1	10	<1	<1	<0.2
	MW26-20160712	07/12/16	SoundEarth	<1	12	<1	<1	<0.2
	MW26-20161018	10/18/16	SoundEarth	<1	12	<1	<1	<0.2
	MW26-20170124	01/24/17	SoundEarth	<1	13	<1	<1	<0.2
	MW26-20170531	05/31/17	SoundEarth	<1	7.9	<1	<1	<0.2
	MW26-20170921	09/21/17	SoundEarth	<1	7.1	<1	<1	<0.2
	MW26-20171214	12/14/17	SoundEarth	<1	15	1.4	<1	<0.2
	MW26-20180309	03/09/18	SoundEarth	<1	6.0	<1	<1	<0.2
	MW26-20180628	06/28/18	SoundEarth	<1	18	<1	<1	<0.2
	MW26-20180920	09/20/18	SoundEarth	<1	18	<1	<1	<0.2
	MW26-20181214	12/14/18	SoundEarth	<1	20	<1	<1	<0.2
	MW26-20190614	06/14/19	SoundEarth	<1	20	<1	<1	<0.2
	MW26-20191205	12/05/19	SoundEarth	<1	13	<1	<1	<0.2
	MW26-20200626	06/26/20	SoundEarth	<1	13	<1	<1	<0.2
	MW26-20201211	12/11/20	SoundEarth	<1	4.0	<1	<1	<0.2
MW32	MW32-20191009	10/09/19	SoundEarth	<1	<1	<1	<1	<0.2
	MW32-20191205	12/05/19	SoundEarth	<1	<1	<1	<1	<0.2
	MW32-20200626	06/26/20	SoundEarth	<1	<1	<1	<1	<0.2
	MW32-20201212	12/12/20	SoundEarth	<1	<1	<1	<1	<0.2
MW33	MW33-20191009	10/09/19	SoundEarth	<1	<1	<1	<1	<0.2
	MW33-20191205	12/05/19	SoundEarth	<1	<1	<1	<1	<0.2
	--	06/26/20	SoundEarth	Well dry, unable to sample				
	--	12/10/20	SoundEarth	Well dry, unable to sample				
SMW06	SMW06-20130910	09/10/13	SoundEarth	<1	<1	<1	<1	<0.2
Westlake Avenue North								
SMW09	SMW09-20130910	09/10/13	SoundEarth	<1	<1	<1	<1	<0.2
South-Adjoining Property								
MW29	MW29-20191008	10/08/19	SoundEarth	8.6	9.4	52	<1	0.64
	MW29-20191204	12/04/19	SoundEarth	16	12	26	<1	0.40
	MW29-20200626	06/26/20	SoundEarth	18	13	16	<1	0.20
	MW29-20201210	12/10/20	SoundEarth	18	13	18	<1	<0.2
MW30	MW30-20191008	10/08/19	SoundEarth	<1	3.6	24	<1	<0.2
	MW30-20191204	12/04/19	SoundEarth	<1	2.0	11	<1	<0.2
	MW30-20200626	06/26/20	SoundEarth	<1	1.0	3.6	<1	<0.2
	MW30-20201210	12/10/20	SoundEarth	<1	2.4	13	<1	<0.2
ONNI-MW-4	ONNI-MW-4-20191208	12/08/19	SoundEarth	<1	<1	<1	<1	<0.2
	ONNI-MW-4-20200625	06/25/20	SoundEarth	<1	<1	<1	<1	<0.2
	ONNI-MW-4-20201210	12/10/20	SoundEarth	<1	<1	<1	<1	<0.2
ONNI-MW-5	ONNI-MW-5-20191208	12/08/19	SoundEarth	<1	<1	<1	<1	0.28
	ONNI-MW-5-20200206	02/06/20	SoundEarth	<1	<1	<1	<1	<0.2
	ONNI-MW-5-20200625	06/25/20	SoundEarth	<1	<1	<1	<1	<0.2
	ONNI-MW-5-20201209	12/09/20	SoundEarth	<1	<1	<1	<1	<0.2
North-Adjoining Property								
SLU-MW01	MW01-20120229	02/29/12[4]	SoundEarth	<1	<1	<1	<1	<0.2
	DECOMMISSIONED 2013							
SLU-MW02	MW02-20120229	02/29/12[4]	SoundEarth	<1	<1	<1	<1	<0.2
	DECOMMISSIONED 2013							
MTCA Cleanup Level				**5[2]**	**5[2]**	**16[3]**	**160[3]**	**0.2[2]**

NOTES:

Red denotes concentrations exceeding the MTCA Method cleanup level for groundwater.

[1]Analyzed by EPA Method 8260C, 8021B, or 8240.

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

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

[4]Sample data compiled from reports on file at the Washington State Department of Ecology.

Laboratory Notes:

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

[cf]The sample was centrifuged prior to analysis.

[ve]Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

[*]The sample was collected with a passive diffusion bag.

< = not detected at a concentration exceeding laboratory reporting limit

µg/L = micrograms per liter

CLARC = Cleanup Levels and Risk Calculations

CVOC = chlorinated volatile organic compound

DCE = dichloroethene

EPA = US Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

PCE = tetrachloroethene

SoundEarth = SoundEarth Strategies, Inc.

TCE = trichloroethene

WAC = Washington Administrative Code

Table 2A
Groundwater Analytical Results for CVOCs
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Groundwater CVOCs Analytical Results[1]

Sampling Event		On-Property Wells																											
		MW17				MW18				MW19				MW20				MW21				MW22				MW23			
Year	Quarter	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC
2015	2																												
	3																												
	4																												
2016	1																												
	3																												
	4																												
2017	1																												
	2																												
	3																												
	4																												
2018	1																												
	2																												
	3																												
	4																												
2019	2																												
	4																												
2020	2																												
	4																												

Sampling Event		On-Property Wells																											
		MW24				MW25				IW04				IW06				IW50				IW61				IW91			
Year	Quarter	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC
2015	2																												
	3																												
	4																												
2016	1																												
	3																												
	4																												
2017	1																												
	2																												
	3																												
	4																												
2018	1																												
	2																												
	3																												
	4																												
2019	2																												
	4																												
2020	2																												
	4																												

Sampling Event		Boren Avenue North																				Terry Avenue North				Thomas Street			
		MW04				MW07				MW13				MW27				MW31				MW15				MW16[3]			
Year	Quarter	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC
2015	2																												
	3																												
	4																												
2016	1																												
	3																												
	4																												
2017	1																												
	2																												
	3																												
	4																												
2018	1																												
	2																												
	3																												
	4																												
2019	2																												
	4																												
2020	2																												
	4																												

Sampling Event		Thomas Street				Harrison Street																South-Adjoining Property								ONNI Property							
		MW28[3]				MW01				MW26				MW32				MW33				MW29				MW30				ONNI-MW-4				ONNI-MW-5			
Year	Quarter	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC	PCE	TCE	DCE[2]	VC
2015	2																																				
	3																																				
	4																																				
2016	1																																				
	3																																				
	4																																				
2017	1																																				
	2																																				
	3																																				
	4																																				
2018	1																																				
	2																																				
	3																																				
	4																																				
2019	2																																				
	4																																				
2020	2																																				
	4																																				

NOTES:

Denotes CVOC concentration does not exceed the Applicable MTCA cleanup level.

Denotes CVOC concentration exceeds the applicable MTCA cleanup level.

Denotes well not sampled and/or inaccessible.

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

No trans-1,2-DCE has been detected above the reporting limit for samples collected at this site.

[1]Samples analyzed by EPA Method 8260C.

[2]DCE refers to the greater concentration of cis-1,2-DCE.

[3]Monitoring well MW16 destroyed during ROW construction in 2018, and replacement well MW28 installed.

CVOC = chlorinated volatile organic compound
DCE = dichloroethene
EPA = US Environmental Protection Agency
MTCA = Washington State Model Toxics Control Act
PCE = tetrachloroethene

ROW = right-of-way
TCE = trichloroethene
VC = vinyl chloride
VOC = volatile organic compound

SoundEarth Strategies

Table 3
Groundwater Analytical Results for Petroleum Hydrocarbons
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH[1] (µg/L)	ORPH[1] (µg/L)	GRPH[2] (µg/L)	Benzene[3] (µg/L)	Toluene[3] (µg/L)	Ethylbenzene[3] (µg/L)	Total Xylenes[3] (µg/L)
Troy Laundry Property										
MW06	MW06-20110531	05/31/11	SoundEarth	330[x]	<250	<100	<1	<1	<1	<3
	MW06-20111011	10/10/11	SoundEarth	83[x]	<250	<100	<1	<1	<1	<3
	MW06-20130909	09/09/13	SoundEarth	150[x]	<250	<100	<1	<1	<1	<3
	DECOMMISSIONED 2013									
MW08	MW08-20111013	10/13/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW08-20130910	09/10/13	SoundEarth	120[x]	<250	<100	<1	<1	<1	<3
	DECOMMISSIONED 2013									
MW09	MW09-20111013	10/13/11	SoundEarth	240[x]	<250	1,400	<1	<1	2.7	10
	MW09-20130910	09/10/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	DECOMMISSIONED 2013									
MW10	MW10-20111012	10/12/11	SoundEarth	68[x]	<250	<100	<1	<1	<1	<3
	MW10-20130909	09/09/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	DECOMMISSIONED 2013									
MW11	MW11-20111013	10/13/11	SoundEarth	110[x]	<250	<100	<1	<1	<1	<3
	MW11-20130909	09/09/13	SoundEarth	97[x]	<250	<100	<1	<1	<1	<3
	DECOMMISSIONED 2013									
MW12	MW12-20111017	10/17/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW12-20130909	09/09/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	DECOMMISSIONED 2013									
MW17	MW17-20150506	05/06/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20150804	08/04/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20151207	12/07/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20160308	03/08/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20160714	07/14/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20161020	10/20/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20170126	01/26/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20170601	06/01/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20170923	09/23/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20171216	12/16/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW17-20180310	03/10/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW17-20180630	06/30/18	SoundEarth	<60	<300	<100	<1	<1	<1	<3
	MW17-20180922	09/22/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW17-20181215	12/15/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW17-20190615	06/15/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW17-20191207	12/07/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW17-20200627	06/27/20	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW17-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4] [5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**

SoundEarth Strategies

Table 3
Groundwater Analytical Results for Petroleum Hydrocarbons
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH[1] (µg/L)	ORPH[1] (µg/L)	GRPH[2] (µg/L)	Benzene[3] (µg/L)	Toluene[3] (µg/L)	Ethylbenzene[3] (µg/L)	Total Xylenes[3] (µg/L)
MW18	MW18-20150506	05/06/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW18-20150803	08/03/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW18-20151208	12/08/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW18-20160308	03/08/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW18-20160714	07/14/16	SoundEarth	31,000 x, ip	5,100 x, ip	<100	<0.35	<1	<1	<3
	MW18-20161020	10/20/16	SoundEarth	61,000 x, ip	<8,400 x, ip	1,100 x	<0.35	<1	<1	<3
	MW18-20170126	01/26/17	SoundEarth	22,000 x, ip	3,500 x, ip	840	<0.35	<1	<1	<3
	MW18-20170601	06/01/17	SoundEarth	77,000 x, ip	1,600 x, ip	470	<0.35	<1	<1	<3
	MW18-20170923	09/23/17	SoundEarth	34,000 x	<3,500	210	<0.35	<1	<1	<3
	MW18-20171216	12/16/17	SoundEarth	18,000 x, ip	<2,500 ip	380	<0.35	<1	<1	<3
	MW18-20180310	03/10/18	SoundEarth	6,000 x	<2,500	390	<1	1.3	<1	<3
	MW18-20180630	06/30/18	SoundEarth	12,000 x	1,600 x	230	<1	1.3	<1	12
	MW18-20180922	09/22/18	SoundEarth	1,400 x, ip	<2,500 ip	290	<1	<1	<1	6.9
	MW18-20181215	12/15/18	SoundEarth	1,600 x	490 x	<100	<1	<1	<1	<3
	MW18-20190615	06/15/19	SoundEarth	1,100 x	830 x	<100	<1	<1	<1	<3
	MW18-20191207	12/07/19	SoundEarth	830 x	480 x	<100	<1	<1	<1	<3
	MW18-20200627	06/27/20	SoundEarth	260 x	<250	<100	<1	<1	<1	<3
	MW18-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--
MW19	MW19-20150507	05/07/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW19-20150803	08/03/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW19-20151207	12/07/15	SoundEarth	85 x	<250	<100	<0.35	<1	<1	<3
	MW19-20160308	03/08/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW19-20160713	07/13/16	SoundEarth	21,000 x, ip	4,100 x, ip	<100	<0.35	<1	<1	<3
	MW19-20161021	10/21/16	SoundEarth	18,000 x, ip	2,300 x, ip	<100	<0.35	<1	<1	<3
	MW19-20170125	01/25/17	SoundEarth	29,000 x	4,400 x	210 x	<0.35	<1	<1	<3
	MW19-20170601	06/01/17	SoundEarth	31,000 x, ip	3,400 x, ip	180	<0.35	<1	<1	<3
	MW19-20170923	09/23/17	SoundEarth	27,000 x, ip	<3,000 ip	150	<0.35	<1	<1	<3
	MW19-20171216	12/16/17	SoundEarth	9,700 x, ip	<2,500 ip	470	<0.35	<1	<1	<3
	MW19-20180310	03/10/18	SoundEarth	1,600 x	<2,500	250	<1	<1	<1	<3
	MW19-20180630	06/30/18	SoundEarth	13,000 x	820 x	310	<1	<1	<1	9.6
	MW19-20180922	09/22/18	SoundEarth	3,300 x, ip	<2,500 ip	300	<1	<1	<1	5.0
	MW19-20190615	06/15/19	SoundEarth	650 x	430 x	<100	<1	<1	<1	<3
	MW19-20191207	12/07/19	SoundEarth	610 x	690 x	<100	<1	<1	<1	<3
	MW19-20200627	06/27/20	SoundEarth	150 x	380 x	<100	<1	<1	<1	<3
	MW19-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4] [5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**

SoundEarth Strategies

Table 3
Groundwater Analytical Results for Petroleum Hydrocarbons
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH[1] (µg/L)	ORPH[1] (µg/L)	GRPH[2] (µg/L)	Benzene[3] (µg/L)	Toluene[3] (µg/L)	Ethylbenzene[3] (µg/L)	Total Xylenes[3] (µg/L)
MW20	MW20-20150506	05/06/15	SoundEarth	120[x]	<250	<100	<0.35	<1	<1	<3
	MW20-20150803	08/03/15	SoundEarth	140[x]	<250	<100	<0.35	<1	<1	<3
	MW20-20151207	12/07/15	SoundEarth	84[x]	<250	<100	<0.35	<1	<1	<3
	MW20-20160309	03/09/16	SoundEarth	130[x]	<300	<100	<0.35	<1	<1	<3
	MW20-20160715	07/15/16	SoundEarth	150[x]	<250	<100	<0.35	<1	<1	<3
	MW20-20161020	10/20/16	SoundEarth	110[x]	<250	<100	<0.35	<1	<1	<3
	MW20-20170125	01/25/17	SoundEarth	64[x]	<250	<100	<0.35	<1	<1	<3
	MW20-20170601	06/01/17	SoundEarth	94[x]	<250	<100	<0.35	<1	<1	<3
	MW20-20170924	09/24/17	SoundEarth	130[x]	<300	<100	<0.35	<1	<1	<3
	MW20-20171216	12/16/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW20-20180310	03/10/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW20-20180630	06/30/18	SoundEarth	120[x]	<250	<100	<1	<1	<1	<3
	MW20-20180922	09/22/18	SoundEarth	100[x]	<250	<100	<1	<1	<1	<3
	MW20-20181215	12/15/18	SoundEarth	72[x]	<250	<100	<1	<1	<1	<3
	MW20-20190615	06/15/19	SoundEarth	140[x]	<250	<100	<1	<1	<1	<3
	MW20-20191207	12/07/19	SoundEarth	80[x]	<250	<100	<1	<1	<1	<3
	MW20-20200627	06/27/20	SoundEarth	91[x]	<250	<100	<1	<1	<1	<3
	MW20-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--
MW21	MW21-20150506	05/06/15	SoundEarth	160[x]	<250	<100	<0.35	<1	<1	<3
	MW21-20150804	08/04/15	SoundEarth	150[x]	<250	<100	<0.35	<1	<1	<3
	MW21-20151208	12/08/15	SoundEarth	110[x]	<250	<100	<0.35	<1	<1	<3
	MW21-20160309	03/09/16	SoundEarth	120[x]	<250	<100	<0.35	<1	<1	<3
	MW21-20160713	07/13/16	SoundEarth	**12,000**[x]	**2,700**[x]	<100	<0.35	<1	<1	<3
	MW21-20161020	10/20/16	SoundEarth	**77,000**[x, ip]	**8,600**[x, ip]	<100	<0.35	<1	<1	<3
	MW21-20170126	01/26/17	SoundEarth	**16,000**[x, ip]	**10,000**[x, ip]	<100	<0.35	<1	<1	<3
	MW21-20170601	06/01/17	SoundEarth	**48,000**[x, ip]	**18,000**[x, ip]	130	<0.35	<1	<1	<3
	MW21-20170923	09/23/17	SoundEarth	**67,000**[x, ip]	**7,700**[x, ip]	220	<0.35	<1	<1	<3
	MW21-20171216	12/16/17	SoundEarth	**27,000**[x]	**<2,500**	390	<0.35	<1	<1	<3
	MW21-20180310	03/10/18	SoundEarth	**23,000**[x]	**<2,500**	130	<1	<1	<1	<3
	MW21-2018630	06/30/18	SoundEarth	**65,000**[x, ip]	**5,200**[x, ip]	670	<1	3.0	11	11
	MW21-20180922	09/22/18	SoundEarth	**53,000**[x, ip]	**8,600**[x, ip]	400	<1	<1	<1	3.4
	MW21-20181215	12/15/18	SoundEarth	**47,000**[x]	**2,100**[x]	180	<1	<1	<1	6.5
	MW21-20190615	06/15/19	SoundEarth	**6,400**[x]	**<2,500**	<100	<1	<1	<1	3.8
	MW21-20191207	12/07/19	SoundEarth	**21,000**[x]	**2,100**[x]	300	<1	<1	<1	4.8
	MW21-20200627	06/27/20	SoundEarth	**120,000**[x]	**3,500**[x, ip]	**1,100**	1.8	5.9	<1	19
	MW21-20201212	12/12/20	SoundEarth	**36,000**[x]	**6,500**[x]	460	--	--	--	--
MTCA Cleanup Level				**500**[4]	**500**[4]	**1,000/800**[4] [5]	**5**[4]	**1,000**[4]	**700**[4]	**1,000**[4]

SoundEarth Strategies

Table 3
Groundwater Analytical Results for Petroleum Hydrocarbons
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH[1] (µg/L)	ORPH[1] (µg/L)	GRPH[2] (µg/L)	Benzene[3] (µg/L)	Toluene[3] (µg/L)	Ethylbenzene[3] (µg/L)	Total Xylenes[3] (µg/L)
MW22	MW22-20150506	05/06/15	SoundEarth	97[x]	<250	<100	<0.35	<1	<1	<3
	MW22-20150804	08/05/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW22-20151208	12/08/15	SoundEarth	69[x]	<300	<100	<0.35	<1	<1	<3
	MW22-20160308	03/08/16	SoundEarth	110[x]	<250	<100	<0.35	<1	<1	<3
	MW22-20160713	07/13/16	SoundEarth	8,000[x, ip]	2,100[x, ip]	140	<0.35	<1	<1	<3
	MW22-20161020	10/20/16	SoundEarth	29,000[x, ip]	7,500[x, ip]	130	<0.35	<1	<1	<3
	MW22-20170126	01/26/17	SoundEarth	13,000[x, ip]	13,000[x, ip]	730	<0.35	<1	<1	<3
	MW22-20170601	06/01/17	SoundEarth	59,000[x]	8,700[x]	660	<0.35	<1	<1	<3
	MW22-20170923	09/23/17	SoundEarth	85,000[x,ip]	<2,500[ip]	390	<0.35	<1	<1	<3
	MW22-20171216	12/16/17	SoundEarth	58,000[x,ip]	<3,000[ip]	1,800	<0.35	<1	<1	<3
	MW22-20180310	03/10/18	SoundEarth	50,000[x]	<2,500	530	<0.35	<1	<1	10
	MW22-20180630	06/30/18	SoundEarth	86,000[x, ip]	4,500[x, ip]	620	<1	<1	<1	34
	MW22-20180922	09/22/18	SoundEarth	73,000[x, ip]	6,800[x, ip]	320	<1	<1	<1	21
	MW22-20181215	12/15/18	SoundEarth	49,000[x]	7,700[x]	180	<1	<1	<1	14
	MW22-20190615	06/15/19	SoundEarth	24,000[x]	4,600[x]	170	<1	<1	<1	21
	MW22-20191207	12/07/19	SoundEarth	40,000[x]	3,400[x]	810	<1	<1	<1	74
	MW22-20200627	06/27/20	SoundEarth	25,000[x]	1,100[x]	340	<1	<1	<1	4.3
	MW22-20201212	12/12/20	SoundEarth	12,000[x]	4,100[x]	570	--	--	--	--
MW23	MW23-20150507	05/07/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW23-20150804	08/04/15	SoundEarth	520[x]	<250	<100	<0.35	<1	<1	<3
	MW23-20151208	12/08/15	SoundEarth	190[x]	<300	<100	<0.35	<1	<1	<3
	MW23-20160308	03/08/16	SoundEarth	410[x]	<250	<100	<0.35	<1	<1	<3
	MW23-20160714	07/14/16	SoundEarth	26,000[x, ip]	1,500[x, ip]	190	<0.35	<1	<1	<3
	MW23-20161020	10/20/16	SoundEarth	80,000[x, ip]	<5,000[ip]	350	<0.35	<1	<1	<3
	MW23-20170126	01/26/17	SoundEarth	14,000[x, ip]	5,600[x, ip]	240	<0.35	<1	<1	<3
	MW23-20170601	06/01/17	SoundEarth	140,000[x, ip]	4,000[x, ip]	210	<0.35	<1	<1	<3
	MW23-20170923	09/23/17	SoundEarth	140,000[x]	<2,500	170	<0.35	<1	<1	<3
	MW23-20171216	12/16/17	SoundEarth	110,000[x, ip]	<2,500[ip]	2,200	<0.35	<1	<1	<3
	MW23-20180310	03/10/18	SoundEarth	11,000[x]	<2,500	600	<1	<1	<1	4.6
	MW23-20180630	06/30/18	SoundEarth	30,000[x]	1,000[x]	540	<1	<1	<1	31
	MW23-20180922	09/22/18	SoundEarth	19,000[x, ip]	<2,600[ip]	150	<1	<1	<1	11
	MW23-20181215	12/15/18	SoundEarth	14,000[x]	500[x]	180	<1	<1	<1	7.1
	MW23-20190615	06/15/19	SoundEarth	3,400[x]	<2,500	260	<1	<1	<1	7.1
	MW23-20191207	12/07/19	SoundEarth	1,400[x]	790[x]	<100	<1	<1	<1	<3
	MW23-20200627	06/27/20	SoundEarth	360[x]	<250	<100	<1	<1	<1	<3
	MW23-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4] [5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**

Table 3
Groundwater Analytical Results for Petroleum Hydrocarbons
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH[1] (µg/L)	ORPH[1] (µg/L)	GRPH[2] (µg/L)	Benzene[3] (µg/L)	Toluene[3] (µg/L)	Ethylbenzene[3] (µg/L)	Total Xylenes[3] (µg/L)
MW24	MW24-20150506	05/06/15	SoundEarth	93[x]	<250	<100	<0.35	<1	<1	<3
	MW24-20150804	08/04/15	SoundEarth	94[x]	<250	<100	<0.35	<1	<1	<3
	MW24-20151208	12/08/15	SoundEarth	240[x]	<250	<100	<0.35	<1	<1	<3
	MW24-20160309	03/09/16	SoundEarth	130[x]	<250	<100	<0.35	<1	<1	<3
	MW24-20160715	07/15/16	SoundEarth	13,000[x, ip]	1,400[x, ip]	<100	<0.35	<1	<1	<3
	MW98-20160715 (DUP)		SoundEarth	11,000[x, ip]	1,900[x, ip]	<100	<0.35	<1	<1	<3
	MW24-20161020	10/20/16	SoundEarth	3,200[x,ip]	1,900[x,ip]	<100	<0.35	<1	<1	<3
	MW24-20170125	01/25/17	SoundEarth	12,000[x]	2,000[x]	<100	<0.35	<1	<1	<3
	MW24-20170601	06/01/17	SoundEarth	510,000[x, ip]	27,000[x, ip]	<100	<0.35	<1	<1	<3
	MW24-20170601	09/24/17	SoundEarth	39,000[x, ip]	<3,000[ip]	250	<0.35	<1	<1	<3
	MW24-20171216	12/16/17	SoundEarth	10,000[x]	<3,000	990	<0.35	<1	<1	<3
	MW24-20180310	03/10/18	SoundEarth	990[x]	<2,500	460	<1	<1	<1	3.7
	MW24-20180630	06/30/18	SoundEarth	75,000[x, ip]	7,700[x,ip]	2,700	<1	3.6	6.5	110
	MW24-20180922	09/22/18	SoundEarth	7,800[x, ip]	<2,500[ip]	190	<1	<1	<1	7.5
	MW24-20181215	12/15/18	SoundEarth	20,000[x]	2,700[x]	<100	<1	<1	<1	<3
	MW24-20190615	06/15/19	SoundEarth	6,400[x]	<2,500	<100	<1	<1	<1	<3
	MW24-20191207	12/07/19	SoundEarth	7,100[x]	1,400[x]	<100	<1	<1	<1	<3
	MW24-20200627	06/27/20	SoundEarth	700[x, ip]	570[x, ip]	<100	<1	<1	<1	<3
	MW24-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4] [5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**

SoundEarth Strategies

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Troy Laundry Seattle Site
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Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH[1] (µg/L)	ORPH[1] (µg/L)	GRPH[2] (µg/L)	Benzene[3] (µg/L)	Toluene[3] (µg/L)	Ethylbenzene[3] (µg/L)	Total Xylenes[3] (µg/L)
MW25	MW25-20150507	05/07/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW99-20150507 (DUP)			<50	<250	<100	<0.35	<1	<1	<3
	MW25-20150805	08/05/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW99-20150805 (DUP)			<50	<250	<100	<0.35	<1	<1	<3
	MW25-20151209	12/09/15	SoundEarth	86[x]	<250	<100	<0.35	<1	<1	<3
	MW99-20151209 (DUP)			100[x]	<300	<100	<0.35	<1	<1	<3
	MW25-20160308	03/08/16	SoundEarth	190[x]	<250	<100	<0.35	<1	<1	<3
	MW99-20160308(DUP)			160[x]	<250	<100	<0.35	<1	<1	<3
	MW25-20160713	07/13/16	SoundEarth	**43,000**[x]	**5,000**[x]	110	<0.35	<1	<1	<3
	MW25-20161019	10/19/16	SoundEarth	**26,000**[x]	**1,500**[x]	160	--	--	--	--
	MW99-20161019(DUP)			**29,000**[x]	**1,600**[x]	160	--	--	--	--
	MW25-20170125	01/25/17	SoundEarth	**8,200**[x]	340[x]	120[x]	<0.35	<1	<1	<3
	MW99-20170125(DUP)			**6,900**[x]	350[x]	150[x]	<0.35	<1	<1	<3
	MW25-20170601	06/01/17	SoundEarth	**50,000**[x, ip]	**<1,000**[ip]	370	<0.35	<1	<1	<3
	MW99-20170601(DUP)			**46,000**[x, ip]	**<1,000**[ip]	410	<0.35	<1	<1	<3
	MW25-20170923	09/23/17	SoundEarth	**12,000**[x, ip]	**<2,500**[ip]	270	<0.35	<1	<1	<3
	MW99-20170923(DUP)			**13,000**[x, ip]	**<2,500**[ip]	220	<0.35	<1	<1	<3
	MW25-20171216	12/16/17	SoundEarth	**4,000**[x, ip]	**<3,000**[ip]	580	<0.35	<1	<1	<3
	MW99-20171216 (DUP)			**4,000**[x, ip]	**<3,000**[ip]	700	<0.35	<1	<1	<3
	MW25-20180310	03/10/18	SoundEarth	**3,300**[x]	**<2,500**	490	<1	<1	<1	4.7
	MW99-20180310 (DUP)			**3,800**[x]	**<2,500**	510	<1	<1	<1	4.5
	MW25-20180630	06/30/18	SoundEarth	**5,300**[x, ip]	**630**[x, ip]	490	<1	<1	<1	31
	MW99-20180630 (DUP)			**5,500**[x, ip]	410[x, ip]	340	<1	<1	<1	26
	MW25-20180922	09/22/18	SoundEarth	**1,500**[x, ip]	**<2,500**[ip]	300	<1	<1	<1	17
	MW99-20180922 (DUP)			**1,900**[x, ip]	**<2,500**[ip]	160	<1	<1	<1	13
	MW25-20181215	12/15/18	SoundEarth	**1,100**[x]	<250	<100	<1	<1	<1	<3
	MW99-20181215 (DUP)			**960**[x]	<250	<100	<1	<1	<1	<3
	MW25-20190615	06/15/19	SoundEarth	**1,000**[x]	**<2,500**	<100	<1	<1	<1	<3
	MW99-20190615 (DUP)			**1,100**[x]	**<2,500**	<100	<1	<1	<1	<3
	MW25-20191207	12/07/19	SoundEarth	240[x]	<250	<100	<1	<1	<1	<3
	MW99-20191207 (DUP)			300[x]	<250	<100	<1	<1	<1	<3
	MW25-20200627	06/27/20	SoundEarth	130[x]	<250	<100	<1	<1	<1	<3
	MW99-20200627 (DUP)			190[x]	<250	<100	<1	<1	<1	<3
	MW25-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--
	MW99-20201212 (DUP)			--	--	--	--	--	--	--
MTCA Cleanup Level				**500**[(4)]	**500**[(4)]	**1,000/800**[(4)(5)]	**5**[(4)]	**1,000**[(4)]	**700**[(4)]	**1,000**[(4)]

SoundEarth Strategies

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Sample Location	Sample Identification	Sample Date	Sampled By	DRPH[1] (µg/L)	ORPH[1] (µg/L)	GRPH[2] (µg/L)	Benzene[3] (µg/L)	Toluene[3] (µg/L)	Ethylbenzene[3] (µg/L)	Total Xylenes[3] (µg/L)
IW04	IW04-20150508	05/08/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW04-20170601	06/01/17	SoundEarth	--	--	--	<0.35	<1	<1	<3
IW06	IW06-20150507	05/07/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
IW50	IW50-20150803	08/03/15	SoundEarth	5,000[x]	<250	<100	<0.35	<1	<1	<3
	IW50-20160715	07/15/16	SoundEarth	39,000[x]	1,900[x]	640	<0.35	<1	<1	<3
IW91	IW91-20150506	05/06/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20150804	08/04/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20151208	12/08/15	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	IW91-20160309	03/09/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20160714	07/14/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20161020	10/20/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20170126	01/26/17	SoundEarth	200[x]	<300	<100	<0.35	<1	<1	<3
	IW91-20170601	06/01/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20170923	09/23/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20171216	12/16/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	IW91-20180310	03/10/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	IW91-20180630	06/30/18	SoundEarth	<60	<300	<100	<1	<1	<1	<3
	IW91-20180922	09/22/18	SoundEarth	<60	<300	<100	<1	<1	<1	<3
	IW91-20181215	12/15/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	IW91-20190615	06/15/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	IW91-20191207	12/07/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	IW91-20200627	6/27/2020	SoundEarth	60[x]	<250	<100	<1	<1	<1	<3
	IW91-20201212	12/12/20	SoundEarth	--	--	--	--	--	--	--
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4][5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**

SoundEarth Strategies

Table 3
Groundwater Analytical Results for Petroleum Hydrocarbons
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH[1] (µg/L)	ORPH[1] (µg/L)	GRPH[2] (µg/L)	Benzene[3] (µg/L)	Toluene[3] (µg/L)	Ethylbenzene[3] (µg/L)	Total Xylenes[3] (µg/L)
Boren Avenue North										
MW04	MW04-20110527	05/27/11	SoundEarth	<50	<250	<100	<1	1.3	<1	<3
	MW04-20111012	10/12/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20130909	09/09/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20150508	05/08/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW04-20150806	08/06/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW04-20151209	12/09/15	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW04-20160308	03/08/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW04-20160713	07/13/16	SoundEarth	<56	<280	<100	<0.35	<1	<1	<3
	MW04-20161019	10/19/16	SoundEarth	<50	<250	<100	--	--	--	--
	MW04-20170124	01/24/17	SoundEarth	150[x]	<250	<100	<0.35	<1	<1	<3
	MW04-20170531	05/31/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW04-20170921	09/21/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW04-20171214	12/14/17	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW04-20180309	03/09/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20180629	06/29/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20190614	06/14/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20191205	12/05/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW04-20200626	06/26/20	SoundEarth	130[x]	<250	<100	<1	<1	<1	<3
	MW04-20201211	12/11/20	SoundEarth	--	--	--	--	--	--	--
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4] [5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**
MW05	MW05-20110527	05/27/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW05-20111012	10/12/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW05-20130910	09/10/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	DECOMMISSIONED 2015									
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4][5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**

SoundEarth Strategies

Table 3
Groundwater Analytical Results for Petroleum Hydrocarbons
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH[1] (µg/L)	ORPH[1] (µg/L)	GRPH[2] (µg/L)	Benzene[3] (µg/L)	Toluene[3] (µg/L)	Ethylbenzene[3] (µg/L)	Total Xylenes[3] (µg/L)
MW07	MW07-20110531	05/31/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW07-20111012	10/12/11	SoundEarth	240[x]	<250	<100	<1	<1	<1	<3
	MW07-20130909	09/09/13	SoundEarth	120[x]	<250	<100	<1	<1	<1	<3
	MW07-20150508	05/08/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW07-20150805	08/05/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW07-20151209	12/09/15	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW07-20160308	03/08/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW07-20160713	07/13/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW07-20161019	10/19/16	SoundEarth	76[x]	<250	<100	--	--	--	--
	MW07-20170124	01/24/17	SoundEarth	120[x]	<250	<100	<0.35	<1	<1	<3
	MW07-20170531	05/31/17	SoundEarth	54[x]	<250	<100	<0.35	<1	<1	<3
	MW07-20180308	03/08/18	SoundEarth	<50	<250	<100	<1	<1	<1	<1
	MW07-20180629	06/29/18	SoundEarth	<60	<300	<100	<1	<1	<1	<3
	MW07-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW07-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW07-20190614	06/14/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW07-20191205	12/05/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW07-20200630	06/30/20	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW07-20201210	12/10/20	SoundEarth	--	--	--	--	--	--	--
MW13	MW13-20111020	10/20/11	SoundEarth	150[x]	<250	<100	<1	<1	<1	<3
	MW13-20130910	09/10/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20150511	05/11/15	SoundEarth	<70	<350	<100	<0.35[cf]	<1[cf]	<1[cf]	<3[cf]
	MW13-20150805	08/05/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20151215	12/15/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20160307	03/07/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20160712	07/12/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20161019	10/19/16	SoundEarth	<50	<250	<100	--	--	--	--
	MW13-20170124	01/24/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20170531	05/31/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20170921	09/21/17	SoundEarth	120[x]	<300	<100	<0.35	<1	<1	<3
	MW13-20171214	12/14/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW13-20180308	03/08/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20180629	06/29/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20190614	06/14/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20191205	12/05/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20200626	06/26/20	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW13-20201210	12/10/20	SoundEarth	80[x]	<250	<100	<1	<1	<1	<3
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4] [5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**

SoundEarth Strategies

Table 3
Groundwater Analytical Results for Petroleum Hydrocarbons
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH[1] (µg/L)	ORPH[1] (µg/L)	GRPH[2] (µg/L)	Benzene[3] (µg/L)	Toluene[3] (µg/L)	Ethylbenzene[3] (µg/L)	Total Xylenes[3] (µg/L)
MW27	MW27-20151210	12/10/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW27-20160307	03/07/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW27-20160713	07/13/16	SoundEarth	<52	<260	<100	<0.35	<1	<1	<3
	MW27-20161019	10/19/16	SoundEarth	<50	<250	<100	--	--	--	--
	MW27-20170124	01/24/17	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW27-20170531	05/31/17	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW27-20170921	09/21/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW27-20171214	12/14/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW27-20180308	03/08/18	SoundEarth	540[x]	<250	<100	<1	<1	<1	<3
	MW27-20180628	06/28/18	SoundEarth	<60	<300	<100	<1	<1	<1	<3
	MW27-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW27-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW27-20190614	06/14/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW27-20191205	12/05/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW27-20200626	6/26/2020	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW27-20201210	12/10/2020	SoundEarth	--	--	--	--	--	--	--
Terry Avenue North										
MW15	MW15-20121211	12/11/12	SoundEarth	--	--	<100	<0.35	<1	<1	<3
	MW15-20130910	09/10/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW15-20150508	05/08/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20150805	08/05/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20151209	12/09/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20160308	03/08/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20160713	07/13/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20161018	10/18/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20170125	01/25/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20170531	05/31/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20170922	09/22/17	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW15-20171215	12/15/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW15-20180309	03/09/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW15-20180629	06/29/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW15-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW15-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW15-20190613	06/13/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW15-20191205	12/05/19	SoundEarth	78[x]	<250	<100	<1	<1	<1	<3
	MW15-20200626	06/26/20	SoundEarth	<52	<250	<100	<1	<1	<1	<3
	MW15-20201211	12/11/2020	SoundEarth	--	--	--	--	--	--	--
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4] [5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**

Table 3
Groundwater Analytical Results for Petroleum Hydrocarbons
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH[1] (µg/L)	ORPH[1] (µg/L)	GRPH[2] (µg/L)	Benzene[3] (µg/L)	Toluene[3] (µg/L)	Ethylbenzene[3] (µg/L)	Total Xylenes[3] (µg/L)
Thomas Street										
MW14	MW14-20111020	10/20/11	SoundEarth	160[x]	<250	<100	<1	<1	<1	<3
	MW14-20130911	09/11/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	DECOMMISSIONED									
MW16	MW16-20121211	12/11/12	SoundEarth	420[x]	<250	640	<0.35	<1	<1	1.1
	MW16-20130911	09/11/13	SoundEarth	170[x]	<250	110	<1	<1	<1	<3
	MW16-20150508	05/08/15	SoundEarth	150[x]	<250	<100	<0.35	<1	<1	<3
	MW16-20150805	08/05/15	SoundEarth	210[x]	<250	<100	<0.35	<1	<1	<3
	MW16-20151210	12/10/15	SoundEarth	420[x]	<250	110	<0.35	<1	<1	<3
	MW16-20160308	03/08/16	SoundEarth	410[x]	<250	140	<0.35	<1	<1	<3
	MW16-20160712	07/12/16	SoundEarth	510[x]	<250	130	<0.35	<1	<1	<3
	MW16-20161019	10/19/16	SoundEarth	310[x]	<250	<100	--	--	--	--
	MW16-20170125	01/25/17	SoundEarth	140[x]	<250	<100	<0.35	<1	<1	<3
	MW16-20170531	05/31/17	SoundEarth	740[x]	<250	140	<0.35	<1	<1	<3
	MW16-20170922	09/22/17	SoundEarth	570	<250	130	<0.35	<1	<1	<3
	MW16-20171229	12/29/17	SoundEarth	160[x]	<250	120	<0.35	<1	<1	<3
	MW16-20180309	03/09/18	SoundEarth	260[x]	<250	120	<1	<1	<1	<3
	WELL DAMAGED 2018									
MW28	MW28-20190613	06/13/19	SoundEarth	140[x]	<250	160	<1	<1	<1	<3
	MW28-20191205	12/05/19	SoundEarth	98[x]	<250	150	<1	<1	<1	<3
	MW28-20200626	6/26/2020	SoundEarth	120[x]	<250	140	<1	<1	<1	<3
	MW28-20201211	12/11/2020	SoundEarth	<50	<250	<100	<1	<1	<1	<3
Fairview Avenue North										
MW-C	MW-C-20130911	09/11/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4] [5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**

Table 3
Groundwater Analytical Results for Petroleum Hydrocarbons
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH[1] (µg/L)	ORPH[1] (µg/L)	GRPH[2] (µg/L)	Benzene[3] (µg/L)	Toluene[3] (µg/L)	Ethylbenzene[3] (µg/L)	Total Xylenes[3] (µg/L)
Harrison Street										
MW01	MW01-20110525	05/25/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20111011	10/11/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20130910	09/10/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20150806	08/06/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW01-20160308	03/08/16	SoundEarth	<65	<330	<100	<0.35	<1	<1	<3
	MW01-20160712	07/12/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW01-20161018	10/18/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW01-20170124	01/24/17	SoundEarth	<25	<125	<100	<0.35	<1	<1	<3
	MW01-20170531	05/31/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW01-20171214	12/14/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW01-20180309	03/09/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20180628	06/28/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20190614	06/14/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20191205	12/05/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW01-20200626	06/26/20	SoundEarth	57[x]	<250	<100	<1	<1	<1	<3
	MW01-20201211	12/11/20	SoundEarth	--	--	--	--	--	--	--
MW02	MW02-20110525	05/25/11	SoundEarth	100[x]	<250	<100	<1	<1	<1	<3
	MW02-20111011	10/11/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW02-20130911	09/11/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	DECOMMISSIONED 2015									
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4] [5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**
MW03	MW03-20110527	05/27/11	SoundEarth	130[x]	<250	<100	<1	<1	<1	<3
	MW03-20111011	10/11/11	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW03-20130911	09/11/13	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	DECOMMISSIONED 2015									
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4] [5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**

Table 3
Groundwater Analytical Results for Petroleum Hydrocarbons
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Sample Location	Sample Identification	Sample Date	Sampled By	DRPH[1] (µg/L)	ORPH[1] (µg/L)	GRPH[2] (µg/L)	Benzene[3] (µg/L)	Toluene[3] (µg/L)	Ethylbenzene[3] (µg/L)	Total Xylenes[3] (µg/L)
MW26	MW26-20151210	12/10/15	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW26-20160307	03/07/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW26-20160712	07/12/16	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW26-20161018	10/18/16	SoundEarth	59[x]	<250	<100	<0.35	<1	<1	<3
	MW26-20170124	01/24/17	SoundEarth	<60	<300	<100	<0.35	<1	<1	<3
	MW26-20170531	05/31/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW26-20170921	09/21/17	SoundEarth	130[x]	<250	<100	<0.35	<1	<1	<3
	MW26-20171214	12/14/17	SoundEarth	<50	<250	<100	<0.35	<1	<1	<3
	MW26-20180309	03/09/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW26-20180628	06/28/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW26-20180920	09/20/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW26-20181214	12/14/18	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW26-20190614	06/14/19	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW26-20191205	12/05/19	SoundEarth	680[x]	<250	<100	<1	<1	<1	<3
	MW26-20200626	06/26/20	SoundEarth	<50	<250	<100	<1	<1	<1	<3
	MW26-20201211	12/11/20	SoundEarth	--	--	--	--	--	--	--
SMW06	SMW06-20130910	09/10/13	SoundEarth	130[x]	<250	400	<1	<1	3.5	3.7
Westlake Avenue North										
SMW09	SMW09-20130910	09/10/13	SoundEarth	79[x]	<250	<100	<1	<1	<1	<3
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4] [5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**
North-Adjoining Property										
SLU-MW01	MW01-20120229	02/29/12[6]	SoundEarth	150	<250	--	--	--	--	--
	DECOMMISSIONED 2013									
SLU-MW02	MW02-20120229	02/29/12[6]	SoundEarth	<50	<250	--	--	--	--	--
	DECOMMISSIONED 2013									
MTCA Cleanup Level				**500[4]**	**500[4]**	**1,000/800[4][5]**	**5[4]**	**1,000[4]**	**700[4]**	**1,000[4]**

NOTES:

Red denotes concentrations exceeding the MTCA Method cleanup level for groundwater.

[1]Analyzed by Method NWTPH-Dx. The supply well samples collected in August 2010 were passed through a silica gel column prior to analysis to remove organic interference.

[2]Analyzed by EPA Method 418.1 or Method NWTPH-Gx.

[3]Analyzed by EPA Method 8260C, 8021B or 8240.

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

[5]1,000 µg/L when benzene is not present and 800 µg/L when benzene is present.

[6]Sample data compiled from reports on file at the Washington State Department of Ecology.

Laboratory Notes:

[cf]The sample was centrifuged prior to analysis.

[ip]Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

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

-- = not analyzed, measured, or calculated

< = not detected at a concentration exceeding laboratory reporting limit

µg/L = micrograms per liter

DRPH = diesel-range petroleum hydrocarbons

EPA = US Environmental Protection Agency

GRPH = gasoline-range petroleum hydrocarbons

MTCA = Washington State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = heavy oil-range petroleum hydrocarbons

SoundEarth = SoundEarth Strategies, Inc.

WAC = Washington Administrative Code

SoundEarth Strategies

Table 4
Natural Attenuation Parameters
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well Identification	Sample Identification	Sample Date	Analytical Results										
			Dissolved Oxygen[1] (mg/L)	Chloride[2] (mg/L)	Nitrate[2] (mg/L)	Total Manganese[3] (µg/L)	Total Iron[3] (mg/L)	Ferrous Iron[4] (mg/L)	Ferric Iron[5] (mg/L)	Sulfate[2] (mg/L)	Methane[6] (µg/L)	Ethane[6] (µg/L)	Ethene[6] (µg/L)
Troy Laundry Property													
MW18	MW18-20150506	05/06/15	1.99	16.2	5.44	83.7	0.0919	0.0400	0.0519	47.0	<5	<10	<10
	MW18-20150803	08/03/15	2.66	--	--	--	--	--	--	--	--	--	--
	MW18-20151208	12/08/15	1.64	--	--	--	--	--	--	43.6	<5	<10	<10
	MW18-20160714	07/14/16	0.47	--	--	--	--	--	--	1.54	170	<10	<10
	MW18-20170126	01/26/17	1.50	--	--	--	--	--	--	--	2,200	<10	<10
	MW18-20170601	06/01/17	0.58	19.2[D]	--	--	--	--	--	--	3,500	<10	<10
	MW18-20170923	09/23/17	0.48	15.4[D]	--	--	--	--	--	--	3,900	<10	<10
	MW18-20171216	12/16/17	0.77	21.5[D]	--	--	--	--	--	--	2,400	<10	<10
	MW18-20180310	03/10/18	0.38	19.0[D]	--	--	--	--	--	--	4,700	<10	<10
	MW18-20180630	06/30/18	0.68	17.0[D]	--	--	--	--	--	--	6,300	<10	<10
	MW18-20180922	09/22/18	0.19	17.4[D]	--	--	--	--	--	--	4,200[ve]	<10	<10
	MW18-20181215	12/15/18	0.62	--	<1.00[D,H]	10,800	12.300	<0.0500[H]	--	<3.00[D]	6,400	<10	<10
	MW18-20190615	06/15/19	0.30	--	<0.100[H]	10,100	13.500	8.35[DH]	--	0.422[H]	5,290[D]	<809[D]	<757[D]
	MW18-20191207	12/07/19	0.69	--	<0.100[H]	9,660	13.800	15.6[DH]	--	<0.300	2,230[D]	<16.2	<15.1
	MW18-20200627	06/27/20	0.18	--	<0.100[H]	8,960	14.300	19.9[DH]	--	0.479	5,520[D]	<16.2	<15.1
	MW18-20201212	12/12/20	2.98	--	<0.100[H]	7,980	12.900	17.6[DH]	--	6.23	8,780[D]	<16.2	<15.1
MW19	MW19-20150507	05/07/15	1.75	15.9	4.98	71.6	0.156	<0.0300	0.156	50.3	<5	<10	<10
	MW19-20150803	08/03/15	2.33	--	--	--	--	--	--	--	--	--	--
	MW19-20190615	06/15/19	0.28	--	<0.100[H]	11,400	10.000	7.81[DH]	--	0.380[H]	2,530[D]	<324[D]	<303[D]
	MW19-20191207	12/07/19	0.54	--	<0.100[H]	9,030	13.300	12.6[DH]	--	<0.300	6,520[D]	<16.2	<15.1
	MW19-20200627	06/27/20	0.27	--	<0.100[H]	14,000	18.100	24.3[DH]	--	0.550	3,410[D]	<16.2	<15.1
	MW19-20201212	12/12/20	11.88*	--	<0.100[H]	14,400	16.700	22.3[DH]	--	1.15	9,010[D]	<16.2	<15.1
MW21	MW21-20170601	06/01/17	0.54	26.2[D]	--	--	--	--	--	--	3,500	<10	<10
	MW21-20170923	09/23/17	0.69	33.5[D]	--	--	--	--	--	--	4,000	<10	<10
	MW21-20171216	12/16/17	2.67	85.7[D]	--	--	--	--	--	--	4,800	<10	<10
	MW21-20180310	03/10/18	0.71	89.2[D]	--	--	--	--	--	--	5,400	<10	<10
	MW21-20180630	06/30/18	0.34	124[D]	--	--	--	--	--	--	4,400	<10	<10
	MW21-20180922	09/22/18	0.33	97.8[D]	--	--	--	--	--	--	2,800[ve]	<10	<10
	MW21-20181215	12/15/18	1.57	--	--	--	--	--	--	--	4,800	<10	<10
	MW21-20190615	06/15/19	0.19	--	--	--	--	--	--	--	2,460[D]	<809[D]	<757[D]
	MW21-20191207	12/07/19	0.77	--	--	--	--	--	--	--	3,980[D]	<16.2	<15.1
	MW21-20200627	06/27/20	0.17	--	--	--	--	--	--	--	1,790[D]	<16.2	<15.1
	MW21-20201212	12/12/20	0.20	--	--	--	--	--	--	--	7,520[D]	<16.2	<15.1

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300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well Identification	Sample Identification	Sample Date	Analytical Results										
			Dissolved Oxygen[1] (mg/L)	Chloride[2] (mg/L)	Nitrate[2] (mg/L)	Total Manganese[3] (µg/L)	Total Iron[3] (mg/L)	Ferrous Iron[4] (mg/L)	Ferric Iron[5] (mg/L)	Sulfate[2] (mg/L)	Methane[6] (µg/L)	Ethane[6] (µg/L)	Ethene[6] (µg/L)
MW23	MW23-20150507	05/07/15	2.19	30.9	8.84	173	0.262	0.0800	0.182	49.2	<5	<10	<10
	MW23-20150804	08/04/15	0.73	--	--	--	--	--	--	--	--	--	--
	MW23-20170601	06/01/17	0.49	25.8[D]	--	--	--	--	--	--	2,600	<10	<10
	MW23-20170923	09/23/17	0.46	10.5[D]	--	--	--	--	--	--	1,700	<10	<10
	MW23-20171216	12/16/17	0.84	30.9[D]	--	--	--	--	--	--	3,700	<10	<10
	MW23-20180310	03/10/18	2.25	26.1[D]	--	--	--	--	--	--	3,900	<10	<10
	MW23-20180630	06/30/18	0.70	21.1[D]	--	--	--	--	--	--	3,400	<10	<10
	MW23-20180922	09/22/18	0.31	20.3[D]	--	--	--	--	--	--	4,600[ve]	<10	<10
	MW23-20181215	12/15/18	0.79	--	<1.00[D,H]	32,300	14.300	3.95[D,H]	--	<3.00[D]	3,800	<10	<10
	MW23-20190615	06/15/19	0.50	--	<0.100[H]	26,700	12.300	13.0[DH]	--	0.378[H]	2,900[D]	<809[D]	<757[D]
	MW23-20191207	12/07/19	2.12	--	<0.200[DH]	22,100	14.600	7.41[DH]	--	0.762[D]	5,370[D]	<16.2	<15.1
	MW23-20200627	06/27/20	0.18	--	<0.100[H]	16,500	9.070	12.6[DH]	--	0.508	4,590[D]	<16.2	<15.1
	MW23-20201212	12/12/20	0.29	--	<0.200[DH]	15,200	12.700	16.8[DH]	--	0.634[D]	10,100[D]	<16.2	<15.1
MW24	MW24-20150506	05/06/15	1.04	16.7	1.93	18.2	0.0714	0.0300	0.0414	16.3	<5	<10	<10
	MW24-20150804	08/04/15	0.45	--	--	--	--	--	--	--	--	--	--
	MW24-20151208	12/08/15	1.00	--	--	--	--	--	--	15.8	<5	<10	<10
	MW24-20160715	07/15/16	0.29	--	--	--	--	--	--	1.56	13[jl]	<10	<10
	MW24-20170125	01/25/17	1.10	--	--	--	--	--	--	<1.50	2,100	<10	<10
	MW24-20170601	06/01/17	0.38	16.0[D]	--	--	--	--	--	--	4,500	<10	<10
	MW24-20170924	09/24/17	0.27	19.4[D]	--	--	--	--	--	--	2,800	<10	<10
	MW24-20171216	12/16/17	2.69	22.4[D]	--	--	--	--	--	--	3,600	<10	<10
	MW24-20180310	03/10/18	0.70	20.2[D]	--	--	--	--	--	--	3,900[ve]	<10	<10
	MW24-20180630	06/30/18	0.44	13.6[D]	--	--	--	--	--	--	1,800	<10	<10
	MW24-20180630	06/30/18	3.20	30.4[D]	--	--	--	--	--	--	1,300	<10	<10
	MW24-20181215	12/15/18	0.44	--	<1.00[D,H]	17,400	11.300	1.53[H]	--	<3.00[D]	3,600	<10	<10
	MW24-20190615	06/15/19	0.29	--	<0.100[H]	21,900	11.600	11.1[DH]	--	0.348[H]	2,660[D]	<809[D]	<757[D]
	MW24-20191207	12/07/19	0.66	--	<0.100[H]	20,700	10.700	10.6[DH]	--	<0.300	3,960[D]	<16.2	<15.1
	MW24-20200627	06/27/20	0.26	--	<0.100[H]	21,900	9.830	15.9[DH]	--	0.309	5,460[D]	<16.2	<15.1
	MW24-20201212	12/12/20	2.03	--	<0.100[H]	20,900	13.500	17.8[DH]	--	0.300	4,170[D]	<16.2	<15.1

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MW25	MW25-20150507	05/07/15	2.87	21.8	8.32	190	1.850	0.190[RA]	1.66	56.7	<5	<10	<10
	MW25-20150805	08/06/15	1.47	--	--	--	--	--	--	--	--	--	--
	MW25-20181215	12/15/18	0.69	--	<1.00[D,H]	14,600	9.970	<0.0500[H]	--	<3.00[D]	8,900	<10	<10
	MW25-20190615	06/15/19	0.59	--	<0.100[H]	9,560	12.300	7.60[DH]	--	0.380[H]	9,670[DE]	<324[D]	<303[D]
	MW25-20191207	12/07/19	0.63	--	<0.100[H]	6,850	13.500	13.8[DH]	--	<0.300	7,480[D]	<16.2	<15.1
	MW25-20200627	06/27/20	0.23	--	<0.100[H]	5,290	15.100	20.1[DH]	--	0.473	10,200[D]	<16.2	<15.1
	MW25-20201212	12/12/20	23.36*	--	<0.100[H]	7,390	16.200	21.6[DH]	--	0.342	5,690[D]	<16.2	<15.1
IW04	IW04-20150508	05/08/15	6.28*	10.8	3.75	12.0	0.230	<0.0300	0.230	34.1	<5	<10	<10
	IW04-20181215	12/15/18	0.64	--	1.03[D,H]	11,800	19.700	0.169[H]	--	8.89[D]	--	--	--
	IW04-20190615	06/15/19	0.24	--	<0.100[H]	12,900	17.900	0.0865[H]	--	0.759	--	--	--
	IW04-20191207	12/07/19	0.98	--	<0.200[DH]	11,700	15.600	<0.0500	--	0.912[D]	--	--	--
	IW04-20200627	06/27/20	5.31*	--	<0.100[H]	10,600	16.400	25.3[DH]	--	0.492	--	--	--
	IW04-20201212	12/12/20	2.00	--	<0.100[H]	11,100	16.500	18.5[DH]	--	0.347	--	--	--
IW50	IW50-20170602	06/02/17	0.60	29.9[D]	--	--	--	--	--	--	3,700	<10	<10
	IW50-20170924	09/24/17	0.24	16.1[D]	--	--	--	--	--	--	3,200	<10	<10
	IW50-20171216	12/16/17	2.71	20.5[D]	--	--	--	--	--	--	5,900	<10	<10
	IW50-20180310	03/10/18	0.40	20.5[D]	--	--	--	--	--	--	5,100	<10	<10
	IW50-20180630	06/30/18	0.31	23.8[D]	--	--	--	--	--	--	2,700	<10	<10
	IW50-20180922	09/22/18	0.66	22.3[D]	--	--	--	--	--	--	4,000[ve]	<10	<10
	IW50-20181215	12/15/18	1.28	--	<1.00[D,H]	11,900	10.300	1.88[H]	--	12.1[D]	6,100	<10	<10
	IW50-20190615	06/15/19	0.38	--	<0.100[H]	9,670	7.550	7.08[DH]	--	11.0	3,110[D]	<324[D]	<303[D]
	IW50-20191207	12/07/19	1.02	--	<0.100[H]	8,090	7.170	7.46[DH]	--	11.0	4,120[D]	<16.2	<15.1
	IW50-20200627	06/27/20	8.61*	--	0.232[H]	15,800	16.900	25.0[DH]	--	2.47	3,690[D]	<16.2	<15.1
	IW50-20201212	12/12/20	0.24	--	<0.400[DH]	13,200	18.000	24.2[DH]	--	1.34[D]	13.500[D]	<16.2	<15.1
IW61	IW61-20170602	06/02/17	0.49	7.18[D]	--	--	--	--	--	--	4,900	<10	<10
	IW61-20170923	09/23/17	0.79	9.25[D]	--	--	--	--	--	--	4,400	<10	<10
	IW61-20171216	12/16/17	0.79	11.0[D]	--	--	--	--	--	--	3,000	<10	<10
	IW61-20180310	03/10/18	1.28	17.8[D]	--	--	--	--	--	--	3,400	<10	<10
	IW61-20180630	06/30/18	0.39	15.3[D]	--	--	--	--	--	--	2,900	<10	<10
	IW61-20180922	09/22/18	0.17	11.4[D]	--	--	--	--	--	--	5,400[ve]	<10	<10
	IW61-20181215	12/15/18	0.73	--	<1.00[D,H]	20,100	50.500	8.83[D,H]	--	<3.00[D]	5,500	<10	<10
	IW61-20190615	06/15/19	0.32	--	<0.100[H]	11,800	25.500	30.5[DH]	--	0.338	2,440[D]	<324[D]	<303[D]
	IW61-20191207	12/07/19	0.82	--	<0.100[H]	11,000	22.300	24.8[DH]	--	<0.300	3,860[D]	<16.2	<15.1
	IW61-20200627	06/27/20	0.23	--	<0.100[H]	10,300	24.400	38.1[DH]	--	0.615	3,100[D]	<16.2	<15.1
	IW61-20201212	12/12/20	0.34	--	<0.100[H]	12,600	25.700	32.8[DH]	--	<0.300	4,580[D]	<16.2	<15.1

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Boren Avenue North													
MW04	MW04-20110527	05/27/11	6.24	--	--	--	--	--	--	--	--	--	--
	MW04-20111012	10/12/11	6.17	--	--	--	--	--	--	--	--	--	--
	MW04-20130909	09/09/13	5.49	--	--	--	--	--	--	--	--	--	--
	MW04-20150508	05/08/15	0.433	29.9	16.7	3.32	0.0667	<0.0300	0.0667	45.6	<5	<10	<10
	MW04-20150806	08/06/15	6.09	--	--	--	--	--	--	--	--	--	--
	MW04-20181214	12/14/18	4.83	--	17.9[D,H]	22.9	0.506	0.0677[H]	--	43.2[D]	<5	<10	<10
	MW04-20190614	06/14/19	4.15	--	14.8[D,H]	15.9	0.327	0.129	--	46.7[D]	<8.63	<16.2	<15.1
	MW04-20191205	12/05/19	7.97	--	24.4[D,H]	7.59	0.254	<0.0500	--	41.4[D]	<8.63	<16.2	<15.1
	MW04-20200626	06/26/20	7.78	--	6.32[D,H]	3.63	0.158	<0.0500[H]	--	40.7[D]	107	<16.2	<15.1
	MW04-20201211	12/11/20	6.63	--	7.14[D,H]	11.6	0.388	<0.0500[H]	--	40.0[D]	<8.63	<16.2	<15.1
MW07	MW07-20110531	05/31/11	5.70	--	--	--	--	--	--	--	--	--	--
	MW07-20111012	10/12/11	2.92	--	--	--	--	--	--	--	--	--	--
	MW07-20130909	09/09/13	2.71	--	--	--	--	--	--	--	--	--	--
	MW07-20150508	05/08/15	4.79	34.5	30.1	18.2	0.0825	<0.0300	0.0825	41.1	<5	<10	<10
	MW07-20150805	08/05/15	4.65	--	--	--	--	--	--	--	--	--	--
	MW07-20170531	05/31/17	4.45	27.9[D]	--	--	--	--	--	--	<5	<10	<10
	MW07-20180308	03/08/18	7.75	23.3[D]	--	--	--	--	--	--	<5	<10	<10
	MW07-20180629	06/29/18	7.38	32.5[D]	--	--	--	--	--	--	<5	<10	<10
	MW07-20180920	09/20/18	8.76	28.7[D]	--	--	--	--	--	--	<5	<10	<10
	MW07-20181214	12/14/18	7.57	--	26.5[D,H]	13.5	0.117	0.0959[H]	--	56.1[D]	<5	<10	<10
	MW07-20190614	06/14/19	7.91	--	29.1[D,H]	9.26	0.225	0.0818	--	51.0[D]	<8.63	<16.2	<15.1
	MW07-20191205	12/05/19	6.85	--	34.9[D,H]	5.89	203	0.0654[H]	--	49.6[D]	<8.63	<16.2	<15.1
	MW07-20200630	06/30/20	4.95	--	--	6.24	0.111	<0.0500[H]	--	41.7[D]	<8.63	<16.2	<15.1
	MW07-20201210	12/10/20	1.39	--	13.4[D,H]	3.91	0.0926	<0.0500[H]	--	30.7[D]	328[D]	<16.2	<15.1
MW13	MW13-20111020	10/20/11	2.12	--	--	--	--	--	--	--	--	--	--
	MW13-20130910	09/10/13	3.67	--	--	--	--	--	--	--	--	--	--
	MW13-20150511	05/11/15	4.71	32.9	5.07	2.770	73.200	4.60	68.60	44.5	<5	<10	<10
	MW13-20150805	08/05/15	3.91	--	--	--	--	--	--	--	--	--	--

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Table 4
Natural Attenuation Parameters
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well Identification	Sample Identification	Sample Date	Analytical Results										
			Dissolved Oxygen[1] (mg/L)	Chloride[2] (mg/L)	Nitrate[2] (mg/L)	Total Manganese[3] (µg/L)	Total Iron[3] (mg/L)	Ferrous Iron[4] (mg/L)	Ferric Iron[5] (mg/L)	Sulfate[2] (mg/L)	Methane[6] (µg/L)	Ethane[6] (µg/L)	Ethene[6] (µg/L)
Thomas Street													
MW16	MW16-20130911	09/11/13	3.64	--	--	--	--	--	--	--	--	--	--
	MW16-20150508	05/08/15	0.68	27.6	0.694	484	0.488	0.0700	0.4180	7.28	<5	<10	<10
	MW16-20150805	08/05/15	0.40	--	--	--	--	--	--	--	--	--	--
	MW16-20151210	12/10/15	0.73	--	--	--	--	--	--	8.09	<5	<10	<10
	MW16-20160712	07/12/16	0.47	--	--	--	--	--	--	4.57	2,500[ve]	<10	<10
	MW16-20170125	01/25/17	0.46	--	--	--	--	--	--	14.2	530	<10	<10
	MW16-20170531	05/31/17	0.65	11.6[D]	--	--	--	--	--	--	25	<10	<10
	MW16-20170922	09/22/17	0.72	10.2[D]	--	--	--	--	--	--	8	<10	<10
	MW16-20171229	12/29/17	2.13	15.2[D]	--	--	--	--	--	--	340	<10	<10
	MW16-20180309	03/09/18	0.23	11.8[D]	--	--	--	--	--	--	6.5	<10	<10
	WELL DAMAGED 2018												
MW28	MW28-20190613	06/13/19	1.08	--	<0.500[D,H]	1,140	1.100	1.02[H]	--	2.10[D]	15.3	<16.2	<15.1
	MW28-20191204	12/04/19	0.24	--	<0.200[D,H]	651	1.550	1.26[H]	--	<0.600[D]	59	<16.2	<15.1
	MW28-20200626	06/26/20	0.55	--	<0.200[D,H]	452	1.450	1.48[H]	--	0.391	43.8	<16.2	<15.1
	MW28-20201211	12/11/20	1.47	--	<0.200[D,H]	470	0.576	0.359[H]	--	0.748[D]	72.3	<16.2	<15.1
MW26	MW26-20181214	12/14/18	0.62	--	5.06[D,H]	35.4	0.134	0.133[H]	--	34.2[D]	1,500	<10	<10
	MW26-20190614	06/14/19	0.59	--	7.10[D,H]	62.1	0.29	0.136	--	45.0[D]	4,120[D]	<324[D]	<303[D]
	MW26-20191205	12/05/19	0.7	--	1.74[D]	906	4.830	6.12[D,H]	--	27.8[D]	3.80[D]	<16.2	<15.1
	MW26-20200626	06/26/20	0.19	--	0.208[H]	806	0.656	0.595[H]	--	37.4[D]	1,340[D]	<16.2	<15.1
	MW26-20201211	12/11/20	0.64	--	<0.100[H]	605	0.230	0.195[H]	--	19.5[D]	263[D]	<16.2	<15.1

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Natural Attenuation Parameters
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well Identification	Sample Identification	Sample Date	Analytical Results										
			Dissolved Oxygen[1] (mg/L)	Chloride[2] (mg/L)	Nitrate[2] (mg/L)	Total Manganese[3] (µg/L)	Total Iron[3] (mg/L)	Ferrous Iron[4] (mg/L)	Ferric Iron[5] (mg/L)	Sulfate[2] (mg/L)	Methane[6] (µg/L)	Ethane[6] (µg/L)	Ethene[6] (µg/L)
MW22	MW22-20181215	12/15/18	0.67	--	1.09^{D,H}	13,000	6.010	4.06^{D,H}	--	<3.00^{D}	4,900	<10	<10
	MW22-20190615	06/15/19	0.38	--	<1.00^{H}	11,400	11.200	11.6^{D,H}	--	<0.300^{H}	3,090^{D}	<809^{D}	<757^{D}
	MW22-20191207	12/07/19	2.02	--	<0.200^{DH}	10,900	8.010	7.41	--	0.762^{D}	5,370^{D}	<16.2	<15.1
	MW22-20200627	06/27/20	0.40	--	<0.200^{DH}	9,810	8.000	11.0^{DH}	--	<0.600^{D}	1,780^{D}	<16.2	<15.1
	MW22-20201212	12/12/20	0.31	--	<0.200^{DH}	10,800	15.000	22.0^{DH}	--	<0.600^{D}	6,290^{D}	<16.2	<15.1

NOTES:

Analyses performed by Friedman & Bruya, Inc. or Fremont Analytical Inc. of Seattle, Washington.

[1]Parameter is measured in the field using water quality meter with flow-through cell. The reported value is the last reading prior to sampling groundwater.

[2]Analyzed by EPA Method 300.0.

[3]Analyzed by EPA Method 200.8.

[4]Analyzed by Standard Method 3500-Fe B.

[5]Ferric iron concentration = total iron concentration – ferrous iron concentration.

[6]Analyzed by Method RSK-175.

Laboratory Notes:

[D]Dilution was required.

[H]Holding times for preparation or analysis exceeded.

[JI] The analyte result in the laboratory control sample is out of control limits. The reported concentrations is an estimate.

[RA] Indicates reanalysis with background correction for turbidity.

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

* Anomalous reading, attributed to meter error.

-- = not measured/ not applicable

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

µg/L = micrograms per liter

EPA = US Environmental Protection Agency

mg/L = milligrams per liter

Table 5
Geochemical and Water Quality Parameters
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well Identification	Sample Identification	Sample Date	pH[1]	ORP[1] (mV)	Dissolved Oxygen[1] (mg/L)	Specific Conductivity[1] (mS/cm)	Turbidity[1] (NTU)	Temperature[1] (°C)	Alkalinity[2] (mg/L $CaCO_3$)	Total Organic Carbon[3] (mg/L)
Troy Laundry Property										
MW17	MW17-20150506	05/06/15	6.87	169.0	3.30	0.387	1.01	14.53	--	--
	MW17-20150804	08/04/15	6.17	129.0	4.45	0.477	2.61	15.52	--	--
	MW17-20151207	12/07/15	6.89	221.5	4.12	0.398	3.3	14.60	--	--
	MW17-20160308	03/08/16	6.67	160	1.39	0.365	0.8	14.30	--	--
	MW17-20160714	07/14/16	6.62	51.1	3.59	0.355	1.19	14.36	--	--
	MW17-20161020	10/20/16	6.75	203.3	0.84	0.384	2.72	14.44	--	--
	MW17-20170126	01/26/17	6.66	-40.7	0.57	0.386	2.24	14.14	--	--
	MW17-20170601	06/01/17	6.50	-147.6	0.54	0.375	12.61	14.48	--	--
	MW17-20170923	09/23/17	6.34	170.4	0.31	0.509	3.96	15.13	--	--
	MW17-20171216	12/16/17	6.82	22.3	0.26	0.501	3.37	12.60	--	--
	MW17-20180310	03/10/18	6.82	22.3	0.26	0.501	3.37	12.60	--	--
	MW17-20180630	06/30/18	6.85	14.8	1.07	0.723	8.60	14.87	--	--
	MW17-20180922	09/22/18	6.79	16.9	0.17	0.71	9.38	15.20	--	--
	MW17-20181215	12/15/18	6.58	18.8	0.41	0.677	6.70	14.77	--	--
	MW17-20190615	06/15/19	6.67	83.8	0.36	0.634	3.81	14.90	--	--
	MW17-20191207	12/07/19	6.62	-9.8	1.34	0.581	2.12	11.32	--	--
	MW17-20200627	06/27/20	6.68	-82.3	3.82	0.537	9.64	15.00	--	--
	MW17-20201212	12/12/20	6.58	-19.6	1.09	0.526	9.28	14.38	--	--

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Table 5
Geochemical and Water Quality Parameters
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well Identification	Sample Identification	Sample Date	pH[1]	ORP[1] (mV)	Dissolved Oxygen[1] (mg/L)	Specific Conductivity[1] (mS/cm)	Turbidity[1] (NTU)	Temperature[1] (°C)	Alkalinity[2] (mg/L $CaCO_3$)	Total Organic Carbon[3] (mg/L)
MW18	MW18-20150506	05/06/15	6.52	172.5	1.99	0.480	0.88	14.34	142	<0.500
	MW18-20150803	08/03/15	5.75	82.2	2.66	0.598	2.74	15.70	--	--
	MW18-20151208	12/08/15	7.74	115.6	1.64	0.594	1.85	14.08	--	--
	MW18-20160308	03/08/16	6.41	156.7	1.30	0.469	1.3	14.26	--	1.01
	MW18-20160608	06/08/16	6.66	8.8	1.5	--	--	--	--	--
	MW18-20160616	06/16/16	6.2	0.8	1.4	--	--	--	--	--
	MW18-20160623	06/23/16	5.87	-57.9	0.43	--	--	--	--	--
	MW18-20160629	06/29/16	5.43	-33	1.08	--	--	--	--	--
	MW18-20160706	07/06/16	5.29	-33.7	1.8	--	--	--	--	--
	MW18-20160714	07/14/16	5.43	8.7	0.47	0.883	9.3	14.89	--	2,300
	MW18-20160825	08/25/16	4.97	38.9	0.55	--	--	--	--	--
	MW18-20161020	10/20/16	5.46	65.5	0.79	1.220	7.69	14.83	--	1,900
	MW18-20170126	01/26/17	5.65	7.2	1.50	0.956	8.1	13.85	--	823
	MW18-20170601	06/01/17	6.19	-167.3	0.58	1.284	6.02	15.21	--	1,090[D]
	MW18-20170923	09/23/17	6.13	48.1	0.48	1.014	55.7	16.37	--	253[D]
	MW18-20171216	12/16/17	6.52	-21.2	0.77	0.911	40.9	12.04	--	173[D]
	MW18-20180310	03/10/18	6.18	-8.0	0.38	0.833	27.1	14.73	--	108[D]
	MW18-20180630	06/30/18	6.30	-31.9	0.68	1.008	12.4	15.49	--	47.2[D]
	MW18-20180922	09/22/18	6.31	-18.7	0.19	1.000	20.8	16.10	--	37.8[D]
	MW18-20181215	12/15/18	6.6	-4.0	0.62	0.980	9.34	15.39	533	16.9
	MW18-20190615	06/15/19	6.23	69.2	0.30	1.043	10.98	15.71	531	10.6
	MW18-20191207	12/07/19	5.82	-137.4	0.69	0.870	15.0	15.00	497	9.61[B]
	MW18-20200627	06/27/20	6.41	-85.1	0.18	0.950	9.46	15.70	536	5.95
	MW18-20201212	12/12/20	6.21	-88.1	2.98	0.889	4.65	14.98	451	4.30

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Table 5
Geochemical and Water Quality Parameters
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well Identification	Sample Identification	Sample Date	pH[1]	ORP[1] (mV)	Dissolved Oxygen[1] (mg/L)	Specific Conductivity[1] (mS/cm)	Turbidity[1] (NTU)	Temperature[1] (°C)	Alkalinity[2] (mg/L $CaCO_3$)	Total Organic Carbon[3] (mg/L)
MW19	MW19-20150507	05/07/15	6.68	156.1	1.75	0.502	1.27	14.44	144	<0.500
	MW19-20150803	08/03/15	5.67	222.2	2.33	0.523	5.8	15.47	--	--
	MW19-20151207	12/07/15	7.08	95.6	0.99	0.685	4.29	14.64	--	--
	MW19-20160308	03/08/16	6.27	154.7	1.29	0.613	0.84	14.73	--	--
	MW19-20160713	07/13/16	5.62	5.7	0.32	0.821	1017	15.59	--	--
	MW19-20160825	08/25/16	4.82	31.4	0.73	--	--	--	--	--
	MW19-20161021	10/21/16	5.62	27.0	0.15	1.404	3.00	15.59	--	--
	MW19-20170125	01/25/17	5.40	-10.4	0.40	1.120	7.98	14.40	--	--
	MW19-20170601	06/01/17	5.34	-148.6	0.53	0.963	4.02	15.99	--	--
	MW19-20170923	09/23/17	5.47	169.2	0.77	0.816	17.8	18.07	--	--
	MW19-20171216	12/16/17	6.39	-30.9	0.58	0.602	4.92	13.43	--	--
	MW19-20180310	03/10/18	6.06	-14.3	0.26	0.542	14.0	15.36	--	--
	MW19-20180630	06/30/18	6.15	-22.7	0.86	0.744	9.95	16.54	--	--
	MW19-20180922	09/22/18	6.23	-26.7	0.16	0.800	37.30	16.90	--	--
	MW19-20190615	06/15/19	6.24	40.6	0.28	1.060	11.4	16.41	556	--
	MW19-20191207	12/07/19	5.57	-134.0	0.54	0.785	--	15.75	473	--
	MW19-20200627	06/27/20	6.40	-70.4	0.27	1.000	39.1	16.60	570	--
	MW19-20201212	12/12/20	9.26	-275.8	11.88*	0.100	4.9	15.79	412	--
MW20	MW20-20150506	05/06/15	6.91	287.1	0.59	0.678	0.00	13.68	--	--
	MW20-20150803	08/03/15	6.11	175.6	1.11	0.784	9.4	14.45	--	--
	MW20-20151207	12/07/15	6.86	228.5	0.85	0.716	9.0	13.81	--	--
	MW20-20160309	03/09/16	6.72	66.1	0.41	0.711	1.2	13.81	--	--
	MW20-20160715	07/15/16	6.71	201.4	0.64	0.726	2.14	14.28	--	--
	MW20-20161020	10/20/16	6.96	92.0	0.92	0.731	1.90	14.30	--	--
	MW20-20170125	01/25/17	6.82	-0.1	0.67	0.732	0.56	0.67	--	--
	MW20-20170601	06/01/17	6.68	-175.7	0.85	0.735	3.07	14.38	--	--
	MW20-20170924	09/24/17	6.63	177.6	0.57	0.779	2.12	15.25	--	--
	MW20-20171216	12/16/17	6.36	47.0	0.27	0.895	2.14	12.31	--	--
	MW20-20180310	03/10/18	6.71	61.4	0.26	0.855	6.07	14.16	--	--
	MW20-20180630	06/30/18	6.71	21.7	1.64	0.884	3.18	15.06	--	--
	MW20-20180922	09/22/18	6.80	13.9	0.19	0.85	3.18	15.10	--	--
	MW20-20181215	12/15/18	6.61	28.0	0.37	0.827	0.73	14.56	--	--
	MW20-20190615	06/15/19	6.72	95.1	0.50	0.928	1.70	14.94	--	--
	MW20-20191207	12/07/19	6.66	-14.9	1.23	0.883	0.99	11.37	--	--
	MW20-20200627	06/27/20	6.66	-58.2	1.60	0.97	2.15	14.90	--	--
	MW20-20201212	12/12/20	6.79	135.9	0.42	1.131	1.63	14.39	--	--

Table 5
Geochemical and Water Quality Parameters
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Well Identification	Sample Identification	Sample Date	pH[1]	ORP[1] (mV)	Dissolved Oxygen[1] (mg/L)	Specific Conductivity[1] (mS/cm)	Turbidity[1] (NTU)	Temperature[1] (°C)	Alkalinity[2] (mg/L $CaCO_3$)	Total Organic Carbon[3] (mg/L)
MW21	MW21-20150506	05/06/15	6.58	295.0	0.45	0.675	0.00	14.06	--	--
	MW21-20150804	08/04/15	6.09	77.5	0.68	0.98	2.61	15.13	--	--
	MW21-20151208	12/08/15	7.91	96.8	0.78	1.486	0.83	14.03	--	--
	MW21-20160309	03/09/16	5.03	137.3	1.84	0.879	1.28	14.19	--	2.29
	MW21-20160608	06/08/16	6.28	-0.5	2.46	--	--	--	--	--
	MW21-20160616	06/16/16	--	--	--	--	--	--	--	--
	MW21-20160623	06/23/16	--	--	--	--	--	--	--	--
	MW21-20160629	06/29/16	5.5	52.6	1.95	--	--	--	--	--
	MW21-20160706	07/06/16	5.27	47.1	2.16	--	--	--	--	--
	MW21-20160713	07/13/16	5.41	61.2	0.45	1.104	10.3	14.73	--	1,800
	MW21-20160825	08/25/16	4.97	67.9	0.48	--	--	--	--	--
	MW21-20161020	10/20/16	5.64	71.7	1.26	1.268	>2000	14.61	--	1,800
	MW21-20170126	01/26/17	5.78	-22.0	0.50	0.846	3.59	13.78	--	884
	MW21-20170601	06/01/17	5.69	246.8	0.54	0.920	5.90	14.94	--	755[D]
	MW21-20170923	09/23/17	5.36	14.9	0.69	1.180	4.42	14.67	--	871[D]
	MW21-20171216	12/16/17	5.54	26.3	2.67	1.146	6.00	14.81	--	722[D]
	MW21-20180310	03/10/18	5.27	58.1	0.71	1.102	4.29	14.43	--	466[D]
	MW21-20180630	06/30/18	5.18	49.5	0.34	1.546	4.05	14.94	--	718[D]
	MW21-20180922	09/22/18	5.72	97.2	0.33	1.090	6.84	16.00	--	549[D]
	MW21-20181215	12/15/18	5.67	-20.1	1.57	1.041	6.10	15.41	--	124[D]
	MW21-20190615	6/15/19	5.84	1.0	0.19	1.023	2.81	15.27	--	163[D]
	MW21-20191207	12/7/19	5.55	-142.2	0.77	0.913	7.64	14.81	--	110[BE]
	MW21-20200627	6/27/20	5.26	83.0	0.17	0.930	61.80	15.80	--	--
	MW21-20201212	12/12/20	5.8	157.2	0.20	0.934	15.30	14.84	--	191[D]

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MW22	MW22-20150506	05/06/15	6.34	280.6	0.30	0.707	0.00	14.4	--	--
	MW22-20150804	08/04/15	6.29	103.9	0.96	0.794	6.8	15.05	--	--
	MW22-20151208	12/08/15	5.91	212.8	2.18	0.702	0.4	14.49	--	--
	MW22-20160308	03/08/16	6.34	153.8	0.54	0.579	0.81	14.46	--	--
	MW22-20160608	06/08/16	6	-3.2	1.55	--	--	--	--	--
	MW22-20160616	06/16/16	4.99	95.2	1.65	--	--	--	--	--
	MW22-20160623	06/23/16	5.1	64	0.68	--	--	--	--	--
	MW22-20160629	06/29/16	5.22	84.8	1.85	--	--	--	--	--
	MW22-20160706	07/06/16	5.17	26.1	1.88	--	--	--	--	--
	MW22-20160713	07/13/16	5.55	88.1	0.42	1.276	7.26	14.85	--	--
	MW22-20160825	08/25/16	5.06	21.2	0.42	--	--	--	--	--
	MW22-20161020	10/20/16	5.48	108.8	0.24	1.408	8.66	14.86	--	--
	MW22-20170126	1/26/2017	5.55	21.2	0.27	1.19	4.83	14.23	--	--
	MW22-20170601	06/01/17	5.67	239.2	0.62	1.118	5.32	15.32	--	--
	MW22-20170923	09/23/17	5.38	104.1	0.27	1.29	3.52	15.12	--	--
	MW22-20171216	12/16/17	5.44	84.2	0.64	1.186	7.21	14.83	--	--
	MW22-20180310	03/10/18	5.32	82	6.61	0.868	4.57	14.44	--	--
	MW22-20180630	06/30/18	5.47	41.9	0.23	1.128	5.12	15.74	--	--
	MW22-20180922	09/22/18	5.94	73.1	0.38	0.82	5.67	17.00	--	--
	MW22-20181215	12/15/18	5.67	18.4	0.67	0.817	8.6	15.50	269	388[D]
	MW22-20190615	06/15/19	5.68	106.8	0.38	0.858	7.40	15.63	273	286[D]
	MW22-20191207	12/07/19	5.69	-76.4	2.02	0.803	71.20	12.14	283	255[BE]
	MW22-20200627	06/27/20	5.82	3.4	0.40	0.72	83.30	15.90	182	206[D]
	MW22-20201212	12/12/20	6.01	154.5	0.31	0.817	25.80	14.97	500	95.5[D]

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Well Identification	Sample Identification	Sample Date	pH[1]	ORP[1] (mV)	Dissolved Oxygen[1] (mg/L)	Specific Conductivity[1] (mS/cm)	Turbidity[1] (NTU)	Temperature[1] (°C)	Alkalinity[2] (mg/L $CaCO_3$)	Total Organic Carbon[3] (mg/L)
MW23	MW23-20150507	05/07/15	6.09	223.7	2.19	0.452	0.00	14.65	106	<0.500
	MW23-20150804	08/04/15	6.40	105.5	0.73	0.582	6.8	15.42	--	--
	MW23-20151208	12/08/15	5.80	197	2.12	0.548	12.6	15.10	--	--
	MW23-20160308	03/08/16	6.30	92.5	0.49	0.575	1.2	14.78	--	3.14
	MW23-20160608	06/08/16	5.14	66.9	3.15	--	--	--	--	--
	MW23-20160616	06/16/16	4.77	109.5	2.00	--	--	--	--	--
	MW23-20160623	06/23/16	4.75	58.8	0.94	--	--	--	--	--
	MW23-20160629	06/29/16	4.73	92.3	2.40	--	--	--	--	--
	MW23-20160706	07/06/16	4.74	42	2.04	--	--	--	--	--
	MW23-20160714	07/14/16	5.26	38	0.23	1.339	8.0	15.06	--	2,300
	MW23-20160825	08/25/16	4.68	64.2	0.69	--	--	--	--	--
	MW23-20161020	10/20/16	5.38	45.5	0.20	1.637	2.53	15.12	--	2,300
	MW23-20170126	01/26/17	5.71	-43.40	14.39	0.88	8.03	14.39	--	520.00
	MW23-20170601	06/01/17	5.80	232.1	0.49	1.542	5.60	15.60	--	1,620[D]
	MW23-20170923	09/23/17	5.69	-4.4	0.46	1.362	7.30	15.45	--	1,160[D]
	MW23-20171216	12/16/17	5.96	-6.3	0.84	0.973	18.0	15.23	--	865[D]
	MW23-20180310	03/10/18	5.85	-1.4	2.25	0.802	34.1	14.92	--	127[D]
	MW23-20180630	06/30/18	6.15	-82.6	0.70	1.228	178.0	15.80	--	198[D]
	MW23-20180922	09/22/18	6.52	11.1	0.31	0.950	17.5	17.00	--	159[D]
	MW23-20181215	12/15/18	6.30	-72.9	0.79	1.118	40.8	15.89	600	148[D]
	MW23-20190615	06/15/19	6.20	89.0	0.50	1.219	20.0	15.96	639	60.7[D]
	MW23-20191207	12/07/19	6.24	-42.8	2.12	1.070	33.3	12.50	614	17.4[B]
	MW23-20200627	06/27/20	6.13	-21.8	0.18	0.950	7.24	16.00	481	6.41
	MW23-20201212	12/12/20	6.33	136.3	0.29	0.885	12.60	15.16	436	7.90

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MW24	MW24-20150506	05/06/15	6.03	182.9	1.04	0.454	1.81	14.91	172	1.12
	MW24-20150804	08/04/15	5.80	83.7	0.45	0.563	2.89	16.05	--	--
	MW24-20151208	12/08/15	7.62	120.8	1.00	0.685	1.29	15.10	--	--
	MW24-20160309	03/09/16	6.27	113.7	0.38	0.589	1	15.07	--	2.19
	MW24-20160608	06/08/16	6.73	-69.2	2.34	--	--	--	--	--
	MW24-20160616	06/16/16	5.92	-3	1.59	--	--	--	--	--
	MW24-20160623	06/23/16	5.83	-20	0.87	--	--	--	--	--
	MW24-20160629	06/29/16	5.83	36.1	1.54	--	--	--	--	--
	MW24-20160706	07/06/16	5.67	19.7	1.54	--	--	--	--	--
	MW24-20160715	07/15/16	6.00	31.9	0.29	1.142	8	15.39	--	1,000
	MW24-20160825	08/25/16	5.30	30.5	0.24	--	--	--	--	--
	MW24-20161020	10/20/16	5.93	27.5	0.94	1.440	3.56	15.22	--	640
	MW24-20170125	01/25/17	5.49	-33.5	1.10	0.917	589	14.56	--	375
	MW24-20170601	06/01/17	5.75	240.7	0.38	0.998	3034	15.38	--	1,470[D]
	MW24-20170924	09/24/17	5.54	76.3	0.27	0.641	122	16.06	--	390[D]
	MW24-20171216	12/16/17	5.93	-33.4	2.69	0.579	50.2	14.83	--	233[D]
	MW24-20180310	03/10/18	5.73	17.4	0.70	0.614	72.4	14.77	--	22.1[D]
	MW24-20180630	06/30/18	5.60	-43.1	0.44	1.393	15.1	15.81	--	770[D]
	MW24-20180922	09/22/18	6.08	18.9	3.20	0.760	92.4	17.10	--	45.5[D]
	MW24-20181215	12/15/18	6.08	-0.7	0.44	0.735	72.8	15.44	358	52.2[D]
	MW24-20190615	06/15/19	5.93	-2.8	0.29	0.798	7.68	16.00	414	20.5
	MW24-20191207	12/07/19	5.66	-139.0	0.66	0.779	20.4	15.21	434	12.6[B]
	MW24-20200627	06/27/20	6.24	-47.0	0.26	0.86	15.9	15.90	468	8.44
	MW24-20201212	12/12/20	6.08	-26.1	2.03	0.809	4.85	15.09	436	6.95

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MW25	MW25-20150507	05/07/15	6.31	140.5	2.87	0.498	76.5	14.54	112	<0.500
	MW25-20150805	08/05/15	5.67	158.1	1.47	0.667	2.3	15.16	--	--
	MW25-20151209	12/09/15	7.94	114.9	1.55	0.881	7.6	15.12	--	--
	MW25-20160308	03/08/16	6.25	171.8	0.79	0.524	1.2	15.05	--	--
	MW25-20160713	07/13/16	5.60	-13.5	0.29	0.933	>2,000	15.39	--	--
	MW25-20161019	10/19/16	5.40	22.2	0.18	1.304	9.14	15.48	--	--
	MW25-20170125	01/25/17	5.77	-134.5	0.37	0.712	4.18	14.68	--	--
	MW25-20170601	06/01/17	5.81	-136.3	0.31	1.140	4.82	15.67	--	--
	MW25-20170923	09/23/17	6.17	66.3	0.37	1.103	14.6	16.86	--	--
	MW25-20171216	12/16/17	6.61	-35.3	0.50	1.052	8.68	13.67	--	--
	MW25-20180310	03/10/18	6.22	-19.9	0.32	0.890	9.10	15.52	--	--
	MW25-20180630	06/30/18	6.48	-55.4	0.67	1.381	13.10	16.15	--	--
	MW25-20180922	09/22/18	6.48	-51.4	0.09	1.380	17.50	16.20	--	--
	MW25-20181215	12/15/18	6.42	-2.4	0.69	1.306	5.21	15.84	745	18.4
	MW25-20190615	06/15/19	6.22	-48.1	0.59	1.067	3.92	16.27	575	25.8
	MW25-20191207	12/07/19	6.16	-16.5	0.63	0.810	7.61	17.58	424	6.87[B]
	MW25-20200627	06/27/20	6.2	-37.5	0.23	0.657	14.6	16.20	322	5.21
	MW25-20201212	12/12/20	6.25	-52.3	23.36*	0.806	15.0	15.50	412	9.57
IW04	IW04-20150508	05/08/15	6.58	160.2	6.28*	0.322	15.1	14.80	88.0	<0.500
	IW04-20160309	03/09/16	6.08	-18.6	0.55	0.579	3.5	14.18	--	--
	IW04-20160714	07/14/16	5.17	58.2	0.43	1.401	19.8	14.76	--	--
	IW04-20161021	10/21/16	5.30	27.5	0.10	1.575	7.71	15.01	--	--
	IW04-20170126	01/26/17	5.40	-18.0	0.71	1.288	17.7	14.11	--	--
	IW04-20170601	06/01/17	5.78	-151.8	0.62	0.809	12.7	14.99	--	--
	IW04-20170923	09/23/17	5.99	2.7	0.84	1.189	21.7	18.00	--	--
	IW04-20171216	12/16/17	6.37	-47.8	0.37	0.940	18.8	13.01	--	--
	IW04-20180310	03/10/18	6.22	-40.3	0.82	0.792	56.3	14.77	--	--
	IW04-20180630	06/30/18	6.29	-59.3	0.89	0.914	18	15.59	--	--
	IW04-20180922	09/22/18	6.13	26.1	0.21	0.318	5.1	16.20	--	--
	IW04-20181215	12/15/18	6.32	-26.6	0.64	0.969	14.7	15.27	478	157[D]
	IW04-20190615	06/15/19	6.32	-60.8	0.24	1.112	13.2	15.48	611	148[D]
	IW04-20191207	12/07/19	6.41	-24.1	0.98	1.059	22.6	11.91	595	94.8[BE]
	IW04-20200627	06/27/20	6.12	-0.8	5.31*	0.960	9.17	15.40	517	88.7[D]
	IW04-20201212	12/12/20	9.08	-194.2	2.00	0.910	11.48	15.07	500	90.3[D]

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IW06	IW06-20150507	05/07/15	6.70	262.1	7.55*	0.224	17.83	15.02	--	--
	IW06-20180310	03/10/18	5.97	-162.5	0.34	0.284	8.41	14.84	--	--
	IW06-20180630	06/30/18	6.25	-95.9	0.67	0.312	6.99	15.87	--	--
	IW06-20180922	09/22/18	6.35	-55.9	0.17	0.92	43.3	16.20	--	--
	IW06-20181215	12/15/18	6.20	-9.7	0.43	0.297	5.60	15.51	--	--
	IW06-20190615	06/15/19	5.96	67.7	0.58	0.471	11.50	15.81	--	--
	IW06-20191207	12/07/19	6.45	-4.5	0.88	0.446	0.21	12.05	--	--
	IW06-20200627	06/27/20	6.07	-41.9	5.72*	0.749	12.1	15.50	--	--
	IW06-20201212	12/12/20	8.35	-201.9	1.95	0.541	3.66	15.24	--	--
IW07	IW07-20160825	08/25/16	5.15	-11.4	0.61	--	--	--	--	--
IW15	IW15-20160608	06/08/16	5.19	86.6	2.75	--	--	--	--	--
	IW15-20160616	06/16/16	7.59	70.1	1.95	--	--	--	--	--
	IW15-20160623	06/23/16	5.07	16.6	1.05	--	--	--	--	--
	IW15-20160629	06/29/16	5.11	47.3	1.38	--	--	--	--	--
	IW15-20160706	07/06/16	5.09	28.6	1.55	--	--	--	--	--
	IW15-20160825	08/25/16	4.96	35.9	0.58	--	--	--	--	--
	IW15-20161021	10/21/16	5.42	-16.6	0.12	2.065	3.75	15.46	--	--
	IW15-20170602	06/02/17	5.65	-217.5	0.49	1.00	9.42	15.68	--	--
IW38	IW38-20160608	06/08/16	5.53	57.9	2.4	--	--	--	--	--
	IW38-20160616	06/16/16	5.05	91.4	2	--	--	--	--	--
	IW38-20160623	06/23/16	5.1	39	0.73	--	--	--	--	--
	IW38-20160629	06/29/16	5.13	80.6	1.45	--	--	--	--	--
	IW38-20160706	07/06/16	5.06	49.1	1.65	--	--	--	--	--
	IW38-20160825	08/25/16	4.8	73.4	0.29	--	--	--	--	--
	IW38-20161021	10/21/16	5.06	77.7	0.59	2.07	2.19	15.40	--	--
	IW38-20170602	06/02/17	5.72	-234.3	0.46	0.838	2.80	15.69	--	--

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IW50	IW50-20151208	12/08/15	7.44	122.1	0.56	0.984	2.68	14.71	--	--
	IW50-20160309	03/09/16	3.46	149.7	0.70	0.726	3.01	14.52	--	115
	IW50-20160715	07/15/16	5.45	40.6	0.44	1.35	4.77	14.80	--	1,100
	IW50-20161021	10/21/16	5.69	43.7	0.83	2.055	11.8	14.79	--	1,600
	IW50-20170126	01/26/17	6.43	-59.5	0.80	1.058	43.2	14.46	--	391
	IW50-20170602	06/02/17	6.34	198.5	0.60	0.688	17.4	14.98	--	85.2[D]
	IW50-20170923	09/23/17	6.29	-103.0	0.24	1.004	24.1	15.29	--	214[D]
	IW50-20171216	12/16/17	6.30	-72.4	2.71	1.048	106	14.99	--	224[D]
	IW50-20180310	03/10/18	6.34	-43.1	0.40	1.038	76.8	14.81	--	55.0[D]
	IW50-20180630	06/30/18	6.41	-115.4	0.31	1.204	11.35	15.21	--	41.9[D]
	IW50-20180922	09/22/18	6.65	-37.4	0.66	0.76	5.81	17.40	--	29.6[D]
	IW50-20181215	12/15/18	6.35	-120.3	1.28	0.681	4.74	15.50	338	12.2
	IW50-20190615	06/15/19	6.26	65.8	0.38	0.670	5.18	15.86	299	7.56
	IW50-20191207	12/07/19	6.24	-30.3	1.02	0.618	5.33	12.31	288	6.72[B]
	IW50-20200627	06/27/20	6.08	-13.8	8.61*	0.939	4.91	15.70	497	18.2
	IW50-20201212	12/12/20	6.43	91.8	0.24	1.071	14.1	15.24	544	13.7
IW57	IW57-20160608	06/08/16	4.46	138.7	5.59	--	--	--	--	--
	IW57-20160616	06/16/16	4.51	109.9	2.28	--	--	--	--	--
	IW57-20160623	06/23/16	4.48	56.2	1.88	--	--	--	--	--
	IW57-20160629	06/29/16	4.45	105.5	2.41	--	--	--	--	--
	IW57-20160706	07/06/16	4.56	41.7	2.68	--	--	--	--	--
	IW57-20160825	08/25/16	4.52	38.0	1.01	--	--	--	--	--
	IW57-20161021	10/21/16	5.44	28.9	0.81	2.085	4.16	14.85	--	--
	IW57-20170602	06/02/17	5.76	-242.1	0.33	0.808	22.5	15.25	--	--

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IW61	IW61-20151208	12/08/16	4.27	200.3	3.34	0.655	24.2	14.25	--	--
	IW61-20160309	03/09/16	6.12	-17.9	1.40	0.65	30.1	14.35	--	114
	IW61-20160714	07/14/16	5.31	39.7	0.56	1.624	52.4	15.38	--	2,900
	IW61-20161021	10/21/16	5.63	48.5	0.81	2.283	4.53	15.09	--	3,000
	IW61-20170126	01/26/17	5.89	-47.9	0.41	1.326	1.96	14.27	--	1,300
	IW61-20170602	06/02/17	6.00	219.6	0.49	0.812	7.57	15.42	--	908[D]
	IW61-20170923	09/23/17	5.28	-9.6	0.79	2.264	7.67	15.55	--	1,490[D]
	IW61-20171216	12/16/17	6.07	-66.1	0.79	1.158	510	15.28	--	765[D]
	IW61-20180310	03/10/18	5.80	-1.5	1.28	0.911	185	14.39	--	432[D]
	IW61-20180630	06/30/18	6.02	-92.1	0.39	1.127	22.0	15.72	--	406[D]
	IW61-20180922	09/22/18	6.38	-3.8	0.17	0.75	13.5	16.50	--	228[D]
	IW61-20181215	12/15/18	6.82	-45.1	0.73	1.171	22.0	15.96	494	628[D]
	IW61-20190615	06/15/19	5.94	-21.1	0.32	0.913	12.60	15.97	429	140[D]
	IW61-20191207	12/07/19	5.61	-131.0	0.82	0.819	37.2	15.39	444	103[BE]
	IW61-20200627	06/27/20	6.09	-45.1	0.23	0.859	13.2	16.20	419	55.4[D]
	IW61-20201212	12/12/20	6.22	115.9	0.34	0.960	60.0	15.01	471	60.6[D]
IW64	IW64-20160608	06/08/16	5.22	69.8	3.25	--	--	--	--	--
	IW64-20160616	06/16/16	4.97	94.3	2.27	--	--	--	--	--
	IW64-20160623	06/23/16	5.04	41.5	1.15	--	--	--	--	--
	IW64-20160629	06/29/16	5.09	80.3	2.25	--	--	--	--	--
	IW64-20160706	07/06/16	5.03	36.4	2.05	--	--	--	--	--
	IW64-20160825	08/25/16	5.03	37.0	0.87	--	--	--	--	--
	IW64-20161021	10/21/16	5.70	33.2	0.99	1.980	32.0	15.22	--	--
	IW64-20170602	06/02/17	5.86	-242.4	0.34	0.981	12.6	15.10	--	--

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Geochemical and Water Quality Parameters
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Well Identification	Sample Identification	Sample Date	pH[1]	ORP[1] (mV)	Dissolved Oxygen[1] (mg/L)	Specific Conductivity[1] (mS/cm)	Turbidity[1] (NTU)	Temperature[1] (°C)	Alkalinity[2] (mg/L $CaCO_3$)	Total Organic Carbon[3] (mg/L)
IW91	IW91-20150506	05/06/15	6.54	171.4	1.57	0.300	0.19	14.35	--	--
	IW91-20150804	08/04/15	6.11	143.7	2.26	0.363	1.91	14.66	--	--
	IW91-20151208	12/08/15	5.88	218.9	5.23	0.342	8.2	14.18	--	--
	IW91-20160309	03/09/16	6.87	209.2	3.99	0.325	2.98	14.15	--	--
	IW91-20160714	07/14/16	6.79	118	5.51	0.299	0.81	14.60	--	--
	IW91-20161020	10/20/16	6.62	143.2	0.25	0.509	6.69	14.68	--	--
	IW91-20170126	01/26/17	6.93	-65.2	0.35	0.461	3.99	14.17	--	--
	IW91-20170601	06/01/17	6.92	192.4	1.90	0.442	3.57	14.54	--	--
	IW91-20170923	09/23/17	6.92	173.0	2.21	0.433	5.16	14.64	--	--
	IW91-20171216	12/16/17	7.09	223.6	2.10	0.337	23.0	14.49	--	--
	IW91-20180310	03/10/18	6.68	196.6	5.81	0.385	20.1	14.55	--	--
	IW91-20180630	06/30/18	6.67	22.4	12.00	0.563	2.52	14.34	--	--
	IW91-20180922	09/22/18	7.00	199.8	5.59	0.462	2.17	15.70	--	--
	IW91-20181215	12/15/18	6.94	12.5	6.43	0.524	0.97	14.99	--	--
	IW91-20190615	06/15/19	6.51	25.1	9.86	0.557	2.27	15.30	--	--
	IW91-20191207	12/07/19	6.63	-131.6	4.45	0.585	1.98	14.62	--	--
	IW91-20200627	06/27/20	6.72	11.7	22.14*	0.457	4.02	15.30	--	--
	IW91-20201212	12/12/20	7.39	177.9	10.84*	0.553	12.70	15.02	--	--
AIW02	AIW02-20160825	08/25/16	4.88	15.3	0.77	--	--	--	--	--
AIW05	AIW05-20160825	08/25/16	4.89	31.5	1.77	--	--	--	--	--
MW31	MW31-20191009	10/09/19	9.75	100.2	4.02	0.2	16.2	15.02	--	--
	MW31-20191205	12/05/19	6.45	4.1	6.75	0.2	13.6	11.29	--	--
	MW31-20200630	6/30/2020	6.12	232.7	4.32	0.311	2,491[4]	16.06	--	--
	MW31-20201211	12/11/20	6.77	146.9	3.77	0.343	2,950[4]	12.14	--	--

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Well Identification	Sample Identification	Sample Date	pH[1]	ORP[1] (mV)	Dissolved Oxygen[1] (mg/L)	Specific Conductivity[1] (mS/cm)	Turbidity[1] (NTU)	Temperature[1] (°C)	Alkalinity[2] (mg/L $CaCO_3$)	Total Organic Carbon[3] (mg/L)
Boren Avenue North										
MW04	MW04-20110527	05/27/11	6.93	11	6.24	0.330	122	15.09	--	--
	MW04-20111012	10/12/11	6.46	201.6	6.17	0.252	25.1	15.0	--	--
	MW04-20130909	09/09/13	6.15	-136.0	5.49	0.305	>200	17.6	--	--
	MW04-20150508	05/08/15	6.76	287.3	0.433	0.433	0.00	17.03	54.0	<0.500
	MW04-20150806	08/06/15	6.39	111.2	6.09	0.350	0.9	18.01	--	--
	MW04-20151209	12/09/15	6.49	221.3	7.48	0.344	1.1	16.74	--	--
	MW04-20160308	03/08/16	6.60	136.4	3.56	0.292	1.46	16.11	--	--
	MW04-20160713	07/13/16	6.48	-1.3	0.99	0.392	1.06	16.78	--	--
	MW04-20161019	10/19/16	7.18	190.7	3.15	0.300	4.06	15.98	--	--
	MW04-20170124	01/24/17	6.91	-1.1	2.95	0.237	3.22	14.74	--	--
	MW04-20170531	05/31/17	6.93	219.6	7.11	0.453	6.06	15.70	--	--
	MW04-20170921	09/21/17	6.71	120.3	8.65	0.460	6.82	15.49	--	--
	MW04-20171214	12/14/17	7.13	237.0	8.36	0.465	3.01	13.12	--	--
	MW04-20180309	03/09/18	6.60	159.4	1.80	0.290	3.01	14.96	--	--
	MW04-20180629	06/29/18	6.61	132.9	4.55	0.351	1.50	15.78	--	--
	MW04-20180920	09/20/18	6.55	189.1	7.07	0.387	1.27	15.80	--	--
	MW04-20181214	12/14/18	6.47	38.2	4.83	0.388	0.73	14.58	41.0	--
	MW04-20190614	06/14/19	6.58	100.0	4.15	0.386	3.98	16.50	66.3	--
	MW04-20191205	12/05/19	6.68	-64.1	7.97	0.463	2.67	14.07	45.8	--
	MW04-20200626	06/26/20	6.37	185.2	7.78	0.391	7.72	16.70	115	--
	MW04-20201211	12/11/20	9.57	-11.2	6.63	0.409	4.75	12.10	103	--

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Geochemical and Water Quality Parameters
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Well Identification	Sample Identification	Sample Date	pH[1]	ORP[1] (mV)	Dissolved Oxygen[1] (mg/L)	Specific Conductivity[1] (mS/cm)	Turbidity[1] (NTU)	Temperature[1] (°C)	Alkalinity[2] (mg/L $CaCO_3$)	Total Organic Carbon[3] (mg/L)
MW07	MW07-20110531	05/31/11	6.63	26	5.70	0.281	--	14.71	--	--
	MW07-20111012	10/12/11	6.36	166.4	2.92	0.181	14.9	15.2	--	--
	MW07-20130909	09/09/13	6.48	124.5	2.71	0.373	17.1	18.0	--	--
	MW07-20150508	05/08/15	5.94	304.5	4.79	0.491	5.34	17.19	39.0	<0.500
	MW07-20150805	08/05/15	6.22	84.4	4.65	0.597	0.96	18.43	--	--
	MW07-20151209	12/09/15	6.59	210.8	3.10	0.446	4.4	16.86	--	--
	MW07-20160308	03/08/16	6.42	252.3	3.78	0.375	8.12	15.00	--	0.862
	MW07-20160713	07/13/16	6.44	222.8	0.77	0.330	1.01	16.82	--	0.83
	MW07-20161019	10/19/16	6.79	120.8	2.96	0.328	4.00	16.24	--	1.70
	MW07-20170124	01/24/17	6.68	-36.8	4.92	0.275	12.21	13.47	--	4.25
	MW07-20170531	05/31/17	6.32	-76.4	4.45	0.474	7.21	15.95	--	4.58
	MW07-20180308	03/08/18	6.47	124.4	7.75	0.374	2.75	14.33	--	0.877
	MW07-20180629	06/29/18	6.32	176.2	7.38	0.509	1.43	16.31	--	1.80
	MW07-20180920	09/20/18	6.42	198.7	8.76	0.486	6.50	16.30	--	0.963
	MW07-20181214	12/14/18	6.32	55.0	7.57	0.465	3.86	15.59	25.5	0.942
	MW07-20190614	06/14/19	6.12	115.9	7.91	0.469	5.23	15.86	23.4	0.869
	MW07-20191205	12/05/19	6.41	-71.1	6.85	0.531	6.35	14.45	20.5	0.736
	MW07-20200630	06/30/20	6.41	125.4	4.95	0.414	4.14	15.88	--	0.789
	MW07-20201210	12/10/20	6.41	131.6	1.39	0.439	3.36	15.00	83.3	0.969
MW13	MW13-20111020	10/20/11	7.10	138.0	2.12	1.04	21.8	15.9	--	--
	MW13-20130910	09/10/13	6.50	34.9	3.67	0.256	>200	18.4	--	--
	MW13-20150511	05/11/15	6.83	107.0	4.71	0.367	131.0	17.13	40.0	<0.500
	MW13-20150805	08/05/15	6.50	97.7	3.91	0.400	>200	17.82	--	--
	MW13-20151215	12/15/15	8.72	91.8	3.61	0.384	51.2	15.53	--	--
	MW13-20160307	03/07/16	6.80	190.3	2.94	0.348	4.06	15.83	--	--
	MW13-20160712	07/12/16	6.67	82.4	4.29	0.386	6.65	17.75	--	--
	MW13-20161019	10/19/16	6.50	161.4	4.95	0.339	33.4	16.74	--	--
	MW13-20170124	01/24/17	6.78	-58.5	4.44	0.359	8.68	14.96	--	--
	MW13-20170531	05/31/17	6.59	-84.5	2.38	0.353	8.31	16.32	--	--
	MW13-20170921	09/21/17	6.27	351.8	6.20	0.337	89.7	15.74	--	--
	MW13-20171214	12/14/17	6.83	122.5	3.81	0.363	overrange	12.39	--	--
	MW13-20180308	03/08/18	6.57	186.2	5.98	0.331	40.5	15.22	--	--
	MW13-20180629	06/29/18	6.68	76.4	3.66	0.396	18.2	16.34	--	--
	MW13-20180920	09/20/18	6.64	157.6	4.38	312.500	26.7	16.20	--	--
	MW13-20181214	12/14/18	6.49	22.2	3.30	0.320	38.0	14.93	--	--
	MW13-20190614	06/14/19	6.41	106.2	4.31	0.315	9.63	15.83	--	--
	MW13-20191205	12/05/19	6.28	-0.2	7.31	0.214	18.60	11.38	--	--
	MW13-20200626	06/26/20	6.57	211.1	7.12	0.334	26.40	15.70	--	--
	MW13-20201210	12/10/20	6.65	194.4	5.39	0.354	9.24	14.63	--	--

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MW27	MW27-20151210	12/10/15	6.75	217.6	5.56	0.417	4.5	16.74	--	--
	MW27-20160309	03/07/16	6.51	214.9	3.31	0.406	3.12	16.09	--	114
	MW27-20160713	07/13/16	6.47	78.8	2.60	0.414	5.17	17.36	--	--
	MW27-20161019	10/19/16	6.66	97.6	0.89	0.420	0.77	16.82	--	--
	MW27-20170124	01/24/17	6.55	113.9	0.68	0.617	4.01	0.68	--	--
	MW27-20170531	05/31/17	6.89	195.9	1.96	0.377	1.98	16.42	--	--
	MW27-20170921	09/21/17	6.51	126.3	2.39	0.365	2.27	15.64	--	--
	MW27-20171214	12/14/17	6.42	92.3	0.32	0.532	0.41	15.82	--	--
	MW27-20180308	03/08/18	6.46	-24.8	0.54	0.289	12.4	14.35	--	--
	MW27-20180628	06/28/18	6.32	-12.8	0.77	0.455	1.30	16.40	--	--
	MW27-20180920	09/20/18	6.42	40.9	0.21	0.388	1.34	16.80	--	--
	MW27-20181214	12/14/18	6.32	39.7	1.58	0.359	0.85	15.52	--	--
	MW27-20190614	06/14/19	6.44	49.6	3.22	0.360	1.47	15.92	--	--
	MW27-20191205	12/05/19	6.75	-69.3	5.25	0.372	1.68	14.20	--	--
	MW27-20200626	6/26/2020	6.20	197.9	0.32	0.442	3.42	16.10	--	--
	MW27-20201210	12/10/20	6.37	163.2	2.04	0.475	4.18	15.13	--	--
Terry Avenue North										
MW15	MW15-20150508	05/08/15	6.09	167.7	8.25	0.135	4.07	15.35	--	--
	MW15-20150805	08/05/15	6.16	134.1	8.64	0.163	0.5	15.90	--	--
	MW15-20151209	12/09/15	7.33	164.8	7.53	0.169	2.57	14.58	--	--
	MW15-20160308	03/08/16	6.19	181.1	7.26	0.197	2.63	14.44	--	--
	MW15-20160713	07/13/16	6.28	196.9	4.62	0.341	1.28	15.40	--	--
	MW15-20161018	10/18/16	6.41	192.6	4.75	0.289	6.48	15.35	--	--
	MW15-20170125	01/25/17	6.14	70.2	4.21	0.159	1.78	1.88	--	--
	MW15-20170531	05/31/17	5.67	-48.0	9.71	0.126	7.01	15.22	--	--
	MW15-20170922	09/22/17	5.81	382.3	7.69	0.156	1.72	15.06	--	--
	MW15-20171215	12/15/17	6.50	117.0	5.31	0.251	4.84	12.66	--	--
	MW15-20171215	12/15/17	6.50	117.0	5.31	0.251	4.84	12.66	--	--
	MW15-20180309	03/09/18	6.30	44.5	0.36	0.359	6.01	14.13	--	--
	MW15-20180629	06/29/18	6.14	36.2	4.13	0.228	11.55	14.39	--	--
	MW15-20180920	09/20/18	5.88	169.7	7.66	0.273	14.3	15.70	--	--
	MW15-20181214	12/14/18	6.00	46.7	6.24	0.238	5.61	14.60	--	--
	MW15-20190613	06/13/19	5.97	128.9	5.70	0.154	5.95	16.27	--	--
	MW15-20191205	12/05/19	6.84	-85.7	4.43	0.235	29.20	13.62	--	--
	MW15-20200626	6/26/2020	6.17	134.0	3.24	0.433	3.86	15.90	--	--
	MW15-20201211	12/11/20	6.35	102.6	4.9	0.599	3.13	14.02	--	--

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Thomas Street										
MW16	MW16-20130911	09/11/13	7.22	48.0	3.64	0.686	162.0	19.04	--	--
	MW16-20150508	05/08/15	6.40	145.4	0.68	0.676	22.1	15.59	266	0.961
	MW16-20150805	08/05/15	6.10	34.4	0.40	0.771	1.45	16.37	--	--
	MW16-20151210	12/10/15	7.80	114.5	0.73	0.789	1.34	14.90	--	--
	MW16-20160308	03/08/16	6.60	15.7	0.89	0.753	0.72	14.65	--	--
	MW16-20160712	07/12/16	6.68	-90.8	0.47	0.928	0.47	17.38	--	--
	MW16-20161019	10/19/16	6.49	-56.3	0.41	0.788	8.32	15.66	--	9.4
	MW16-20170125	01/25/17	6.57	112.90	0.46	0.70	1.98	14.20	--	13.50
	MW16-20170531	05/31/17	6.71	-106.2	0.65	0.985	3.81	16.63	--	46.0[D]
	MW16-20170922	09/22/17	6.62	189.4	0.72	0.995	1.35	16.96	--	92.1[D]
	MW16-20171229	12/29/17	6.87	96.9	2.13	0.830	1.95	14.11	--	93.5[D]
	MW16-20180309	03/09/18	6.70	68.4	0.23	0.941	7.98	15.28	--	1.87
	WELL DAMAGED 2018									
MW28	MW28-20190613	6/13/2019	6.62	81.3	1.08	0.867	4.22	18.72	424	--
	MW28-20191009	10/9/2019	8.1	87.4	1.58	0.789	5.72	16.13	--	--
	MW28-20191204	12/4/2019	6.68	161.5	0.24	0.79	7.72	15.49	391	--
	MW28-20200626	6/26/2020	6.70	-71.0	0.55	0.734	6.51	16.60	351	--
	MW28-20201211	12/11/2020	6.89	158.9	1.47	0.634	18.9	14.37	304	--
Harrison Street										
MW01	MW01-20150806	08/06/15	5.71	126.9	9.20	0.308	3.41	21.37	--	--
	MW01-20160308	03/08/16	6.63	157.2	7.20	0.215	--	13.07	--	--
	MW01-20160712	07/12/16	6.69	157.7	7.48	0.225	24.9	17.28	--	--
	MW01-20161018	10/18/16	6.73	125.0	8.01	0.228	3.90	15.31	--	--
	MW01-20170124	01/24/17	6.72	144.0	8.00	0.222	2.27	13.25	--	--
	MW01-20170531	05/31/17	6.15	-30.9	8.24	0.262	8.66	15.17	--	--
	MW01-20171214	12/14/17	6.23	73.1	4.89	0.253	26.8	11.21	--	--
	MW01-20180309	03/09/18	6.34	185.7	5.40	0.219	5.27	12.87	--	--
	MW01-20180628	06/28/18	6.37	112.2	3.85	0.255	2.32	15.93	--	--
	MW01-20180920	09/20/18	6.35	179.8	5.91	0.260	2.82	16.10	--	--
	MW01-20181214	12/14/18	6.45	114.3	6.46	0.244	2.90	14.44	--	--
	MW01-20190614	06/14/19	6.30	111.2	8.19	0.288	1.73	15.45	--	--
	MW01-20191205	12/05/19	6.65	-80.8	7.20	0.325	2.61	13.81	--	--
	MW01-20200626	06/26/20	6.29	170.2	6.86	0.381	23.7	16.60	--	--
	MW01-20201211	12/11/20	6.36	187.7	11.11	0.442	4.4	14.11	--	--

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MW26	MW26-20151210	12/10/15	8.26	142.3	4.58	0.359	34.8	14.39	--	--
	MW26-20160307	03/07/16	6.54	108.6	0.93	0.234	3.21	14.20	--	--
	MW26-20160712	07/12/16	6.28	101.8	5.39	0.313	1.30	16.08	--	--
	MW26-20161018	10/18/16	6.39	181.0	5.55	0.312	7.52	14.69	--	--
	MW26-20170124	01/24/17	6.49	75.0	0.88	0.316	2.67	13.80	--	--
	MW26-20170531	05/31/17	6.50	213.1	0.86	0.23	2.97	14.82	--	--
	MW26-20170921	09/21/17	6.15	182.7	0.35	0.268	5.98	14.91	--	--
	MW26-20171214	12/14/17	6.06	163.4	0.32	0.354	2.66	12.65	--	--
	MW26-20180309	03/09/18	6.39	166.2	0.28	0.281	8.47	13.37	--	--
	MW26-20180628	06/28/18	6.21	68.0	0.28	0.379	8.52	15.44	--	--
	MW26-20180920	09/20/18	6.23	174.5	0.28	0.359	3.98	15.90	--	--
	MW26-20181214	12/14/18	6.23	23.8	0.62	0.196	5.96	13.96	103	1.23
	MW26-20190614	06/14/19	6.27	83.0	0.59	0.370	6.41	15.73	78.0	1.13
	MW26-20191205	12/05/19	6.58	-107.00	0.70	0.279	7.07	14.04	103	21.2[B]
	MW26-20200626	06/26/20	6.17	10.50	0.19	0.369	7.84	15.50	124	1.39
	MW26-20201211	12/11/20	6.46	184.90	0.64	0.196	4.67	13.27	93.1	1.02
MW32	MW32-20191009	10/09/19	6.16	-39.9	2.22	0.208	9.71	13.35	--	--
	MW32-20191205	12/05/19	5.92	-9.0	2.26	0.167	23.6	10.44	--	--
	MW32-20200626	06/26/20	5.98	118.9	3.54	0.251	6.92	15.20	--	--
	MW32-20201212	12/12/20	6.48	169.0	5.04	0.334	36.6	14.48	--	--
MW33	MW33-20191009	10/09/19	8.03	97.2	4	0.257	7.3	15.85	--	--
	MW33-20191205	12/05/19	6.38	-25.6	6	0.170	3.43	11.28	--	--
	--	06/26/20	Well dry, unable to sample							
	--	12/10/20	Well dry, unable to sample							

SoundEarth Strategies

Table 5
Geochemical and Water Quality Parameters
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well Identification	Sample Identification	Sample Date	pH[1]	ORP[1] (mV)	Dissolved Oxygen[1] (mg/L)	Specific Conductivity[1] (mS/cm)	Turbidity[1] (NTU)	Temperature[1] (°C)	Alkalinity[2] (mg/L $CaCO_3$)	Total Organic Carbon[3] (mg/L)
South-Adjoining Property										
MW29	MW29-20191008	10/08/19	6.55	-146.2	1.67	0.777	32	14.09	--	--
	MW29-20191204	12/04/19	6.28	155.3	0.56	0.937	9.23	15.10	--	--
	MW29-20200625	06/25/20	6.59	33.2	0.70	0.960	9.70	16.70	--	--
	MW29-20201210	12/10/20	6.69	81.3	1.58	0.872	5.87	15.03	--	--
MW30	MW30-20191008	10/08/19	2.98	133.8	2.30	0.495	158	15.29	--	--
	MW30-20191204	12/04/19	5.88	173.1	0.4	0.440	13.9	14.30	--	--
	MW30-20200625	06/25/20	6.12	61.9	5.92	0.488	22.7	20.10	--	--
	MW30-20201210	12/10/20	6.17	125	2.18	0.475	38.0	14.36	--	--
ONNI-MW-4	ONNI-MW-4-20191208	12/08/19	6.46	-157.2	1.40	0.469	49.0	13.69	--	--
	ONNI-MW-4-20200625	06/25/20	6.97	-12.1	4.20	0.507	91.0	16.70	--	--
	ONNI-MW-4-20201210	12/10/20	7.06	182	1.99	0.472	245.0	13.15	--	--
ONNI-MW-5	ONNI-MW-5-20191208	12/08/19	6.92	-176.5	1.7	0.423	45.0	12.75	--	--
	ONNI-MW-5-20200206	02/06/20	7.11	-38.1	1.17	0.368	20.5	14.79	--	--
	ONNI-MW-5-20200625	06/25/20	7.24	33.1	2.12	0.436	39.3	15.70	--	--
	ONNI-MW-5-20201209	12/09/20	7.21	131.6	0.38	0.405	15.0	14.81	--	--

NOTES:

Analyses performed by Friedman & Bruya, Inc., Fremont Analytical Inc., or Aquatic Research Inc., of Seattle, Washington; or Amtest Inc. of Kirkland, Washington.

[1]Parameter is measured in the field using water quality meter with flow-through cell. The reported value is the last reading prior to sampling groundwater.

[2]Analyzed by SM 2320B.

[3]Analyzed by SM 5310C.

[4]Elevated turbidity measurement as groundwater was purged from the base of the well.

Laboratory Notes:

[D]Dilution was required.

[B]Analyte detected in the associated Method Blank.

*Anomalous reading, attributed to meter error.

-- = not measured/ not applicable

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

°C = degrees Celius

$CaCO_3$ = calcium carbonate

mg/L = milligrams per liter

mV = millivolts

NTU = nephelometric turbidity unit

ORP = oxidation-reduction potential

SM = Standard Method

SoundEarth Strategies

Table 6
Groundwater Analytical Results for Volatile Fatty Acids
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well Identification	Sample Identificiation	Sample Date	Lactate[1] (mg/L)	Acetate[1] (mg/L)	Propionate[1] (mg/L)	Formate[1] (mg/L)	Butyrate[1] (mg/L)	Pyruvate[1] (mg/L)	Lactic[2] (mg/L)	Acetic[3] (mg/L)	Total Organic Carbon[4] (mg/L)
MW07	MW07-20160308	03/08/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	0.862
	MW07-20160713	07/16/16	--	--	--	--	--	--	<20	<20[X,D]	0.83
	MW07-20161019	10/19/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	1.7
	MW07-20170124	01/24/17	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	4.25
	MW07-20170531	05/31/17	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	4.58
	MW07-20180308	03/08/18	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	0.877
	MW07-20180629	06/29/18	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	1.80
	MW07-20180920	09/20/18	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	0.963
	MW07-20190614	06/14/19	--	--	--	--	--	--	--	--	0.869
	MW07-20201210	12/10/20	--	--	--	--	--	--	--	--	0.969
MW16	MW16-20161019	10/19/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	9.4
	MW16-20170125	01/25/17	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	13.5
	MW16-20170531	05/31/17	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	46.0[D]
	MW16-20170922	09/22/17	<0.39	1.1	<0.31	2	<0.41	<0.69	--	--	92.1[D]
	MW16-20171229	12/29/17	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	93.5[D]
	MW16-20180309	03/09/18	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	1.87
	WELL DAMAGED 2018										
MW18	MW18-20150506	05/06/15	--	--	--	--	--	--	--	--	<0.500
	MW18-20160308	03/08/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	1.01
	MW18-20160714	07/14/16	--	--	--	--	--	--	<100	64[X,D]	2,300
	MW18-20161020	10/20/16	<7.8	959	494	<4.4	131	<14	--	--	1,900
	MW18-20170126	01/26/17	<7.8	830	200	<4.4	121	<14	--	--	823
	MW18-20170601	06/01/17	<7.8	512	300	<4.4	115	<14	--	--	1,090[D]
	MW18-20170923	09/23/17	<0.39	25	232	<0.22	<0.41	2	--	--	253[D]
	MW18-20171216	12/16/17	<0.39	<0.54	81	0.79	<0.41	<0.69	--	--	173[D]
	MW18-20180310	03/10/18	<0.39	193	79	0.55	1.6	1.7	--	--	108[D]
	MW18-20180630	06/30/18	<0.39	28	53	<0.22	<0.41	<0.69	--	--	47.2[D]
	MW18-20180922	09/22/18	<0.39	26	5.4	<0.22	<0.41	<0.69	--	--	37.8[D]
	MW18-20190615	06/15/19	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	11
	MW18-20191207	12/07/19	<0.39	10	<0.31	<0.22	<0.41	<0.69	--	--	--
	MW18-20200627	06/27/20	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	5.95
	MW18-20201212	12/12/20	<0.69	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	4.30

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Table 6
Groundwater Analytical Results for Volatile Fatty Acids
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well Identification	Sample Identificiation	Sample Date	Lactate[1] (mg/L)	Acetate[1] (mg/L)	Propionate[1] (mg/L)	Formate[1] (mg/L)	Butyrate[1] (mg/L)	Pyruvate[1] (mg/L)	Lactic[2] (mg/L)	Acetic[3] (mg/L)	Total Organic Carbon[4] (mg/L)
MW21	MW21-20160309	03/09/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	2.29
	MW21-20160713	07/13/16	--	--	--	--	--	--	<100	<100[X,D]	1,800
	MW21-20161020	10/20/16	<7.8	509	1,032	<4.4	43	<14	--	--	1,800
	MW21-20170126	01/26/17	<0.39	201	311	1.1	31	0.91	--	--	884
	MW21-20170601	06/01/17	<7.8	682	393	<4.4	88	<14	--	--	755[D]
	MW21-20170924	09/24/17	<7.8	880	507	<4.4	148	<14	--	--	871[D]
	MW21-20171216	12/16/17	<7.8	630	151	45	148	13	--	--	722[D]
	MW21-20180310	03/10/18	<0.39	490	124	1.0	73	16	--	--	466[D]
	MW21-20180630	06/30/18	<7.8	811	278	<4.4	151	28	--	--	718[D]
	MW21-20180922	09/22/18	<0.39	460	173	<0.22	114	<0.69	--	--	549[D]
	MW21-20190615	06/15/19	<0.39	140	66	<0.22	12	4	--	--	163[D]
	MW21-20191207	12/07/19	<0.39	116	7.2	<0.22	13	12	--	--	--
	MW21-20200627	06/27/20	<0.39	249	144	20	79	19	--	--	--
	MW21-20201212	12/12/20	<0.69	157	89	0.72	36	9.1	--	--	191[D]
MW22	MW22-20190615	06/15/19	<0.39	270	150	<0.22	39	13	--	--	286[D]
	MW22-20191207	12/07/19	<0.39	418	134	<0.22	42	13	--	--	--
	MW22-20200627	06/27/20	<0.39	283	56	<0.22	21	7.3	--	--	206[D]
	MW22-20201212	12/12/20	<0.69	142	22	<0.22	8.8	1.2	--	--	95.5[D]
MW23	MW23-20150507	05/07/15	--	--	--	--	--	--	--	--	<0.500
	MW23-20160308	03/08/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	3.14
	MW23-20160714	07/14/16	--	--	--	--	--	--	<100	<100[X]	2,300
	MW23-20161020	10/20/16	<7.8	986	1,229	<4.4	144	<14	--	--	2,300
	MW23-20170126	01/26/17	<7.8	613	256	<4.4	57	<14	--	--	520
	MW23-20170601	06/01/17	<7.8	1,300	656	<4.4	280	<14	--	--	1,620[D]
	MW23-20170923	09/23/17	<7.8	705	388	<4.4	295	59	--	--	1,160[D]
	MW23-20171216	12/16/17	<0.39	131	176	8.0	106	31	--	--	865[D]
	MW23-20180310	03/10/18	<0.39	25	151	2.8	<0.41	7.2	--	--	127[D]
	MW23-20180630	06/30/18	<0.39	52	213	<0.22	<0.41	8.5	--	--	198[D]
	MW23-20180922	09/22/18	<0.39	26	230	<0.22	<0.41	<0.69	--	--	159[D]
	MW23-20190615	06/15/19	<0.39	19	86	<0.22	0.42	1.8	--	--	60.7[D]
	MW23-20191207	12/07/19	<0.39	24	<0.31	2.7	<0.41	<0.69	--	--	--
	MW23-20200627	06/27/20	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	6.41
	MW23-20201212	12/12/20	<0.69	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	7.90

SoundEarth Strategies

Table 6
Groundwater Analytical Results for Volatile Fatty Acids
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well Identification	Sample Identificiation	Sample Date	Lactate[1] (mg/L)	Acetate[1] (mg/L)	Propionate[1] (mg/L)	Formate[1] (mg/L)	Butyrate[1] (mg/L)	Pyruvate[1] (mg/L)	Lactic[2] (mg/L)	Acetic[3] (mg/L)	Total Organic Carbon[4] (mg/L)
MW24	MW24-20150506	05/06/15	--	--	--	--	--	--	--	--	1.12
	MW24-20160309	03/09/16	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	2.19
	MW24-20160715	07/15/16	--	--	--	--	--	--	<100	56.7[X,D]	1,000
	MW24-20161020	10/20/16	<7.8	1,431	143	<4.4	20	<14	--	--	640
	MW24-20170126	01/26/17	<7.8	901	133	<4.4	34	<14	--	--	375
	MW24-20170601	06/01/17	<7.8	1,036	204	78	251	<14	--	--	1,470[D]
	MW24-20170924	09/24/17	<0.39	28	140	4.2	38	7.9	--	--	390[D]
	MW24-20171216	12/16/17	<0.39	12	70	1.2	2.0	0.80	--	--	233[D]
	MW24-20180310	03/10/18	<0.39	8.0	10	<0.22	<0.41	<0.69	--	--	22.1[D]
	MW24-20180630	06/30/18	<7.8	681	164	<4.4	123	<13.8	--	--	770[D]
	MW24-20180922	09/22/18	<0.39	26	10	<0.22	1	<0.69	--	--	45.5[D]
	MW24-20190615	06/15/19	<0.39	39	5.6	<0.22	0.46	<0.69	--	--	20.5
	MW24-20191207	12/07/19	5.7	29	<0.31	3.0	<0.41	<0.69	--	--	--
	MW24-20200627	06/27/20	<0.39	<0.54	0.60	<0.22	<0.41	<0.69	--	--	8.44
	MW24-20201212	12/12/20	<0.69	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	6.95
MW25	MW25-20150507	05/07/15	--	--	--	--	--	--	--	--	<0.500
	MW25-20190615	06/15/19	<0.39	45	1.3	<0.22	1.3	<0.69	--	--	25.80
	MW25-20191207	12/07/19	<0.39	21	<0.31	2.9	<0.41	<0.69	--	--	--
	MW25-20200627	06/27/20	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	5.21
	MW25-20201212	12/12/20	<0.69	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	9.57
IW04	IW04-20150508	05/08/15	--	--	--	--	--	--	--	--	<0.500
	IW04-20190615	06/15/19	<0.39	31	6.1	<0.22	3.2	0.42	--	--	148[D]
	IW04-20191207	12/07/19	<0.39	25	<0.31	3.3	<0.41	<0.69	--	--	--
	IW04-20200627	06/27/20	<0.39	8.2	1.5	<0.22	1.5	<0.69	--	--	88.7[D]
	IW04-20201212	12/12/20	<0.69	6.2	3.1	<0.22	2.1	<0.69	--	--	90.3[D]
IW50	IW50-20160309	03/09/16	<0.39	358	82	1.1	22	<0.69	--	--	115
	IW50-20160715	07/15/16	--	--	--	--	--	--	<100	<100[X,D]	1,100
	IW50-20161021	10/21/16	<7.8	1,492	683	8.2	476	<14	--	--	1,600
	IW50-20170126	01/26/17	<0.39	73	102	4.0	61	9.4	--	--	391
	IW50-20170602	06/02/17	<0.39	39	5.2	<0.22	1.3	<0.69	--	--	85.2[D]
	IW50-20170924	09/24/17	<0.39	87	108	<0.22	4.2	2.5	--	--	214[D]
	IW50-20171216	12/16/17	`	43	8.0	<0.22	<0.41	<0.69	--	--	224[D]
	IW50-20180310	03/10/18	<0.39	41	3.1	<0.22	0.79	<0.69	--	--	55.0[D]
	IW50-20180630	06/30/18	<0.39	4.9	<0.31	<0.22	<0.41	<0.69	--	--	41.9[D]
	IW50-20180922	09/22/18	<0.39	2.3	<0.31	<0.22	<0.41	<0.69	--	--	29.6[D]
	IW50-20190615	06/15/19	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69	--	--	7.56
	IW50-20191207	12/07/19	<0.39	18	<0.31	3.3	<0.41	<0.69	--	--	--
	IW50-20200627	06/27/20	<0.39	2.8	<0.31	<0.22	<0.41	<0.69	--	--	18.2
	IW50-20201212	12/12/20	<0.69	1.6	<0.31	<0.22	<0.41	<0.69	--	--	13.7

Table 6
Groundwater Analytical Results for Volatile Fatty Acids
Troy Laundry Seattle Site
300 Boren Avenue North and 399 Fairview Avenue North
Seattle, Washington

Well Identification	Sample Identificiation	Sample Date	Lactate[1] (mg/L)	Acetate[1] (mg/L)	Propionate[1] (mg/L)	Formate[1] (mg/L)	Butyrate[1] (mg/L)	Pyruvate[1] (mg/L)	Lactic[2] (mg/L)	Acetic[3] (mg/L)	Total Organic Carbon[4] (mg/L)
IW61	IW61-20160309	03/09/16	<0.39	368	51	0.69	28	<0.69	--	--	114
	IW61-20160713	07/13/16	--	--	--	--	--	--	<100	217[X,D]	2,900
	IW61-20161021	10/21/16	<7.8	1,543	538	122	837	<14	--	--	3,000
	IW61-20170126	01/26/17	<7.8	612	253	38	363	<14	--	--	1,300
	IW61-20170602	06/02/17	<0.39	171	118	<0.22	189	<0.69	--	--	908[D]
	IW6120170923	09/23/17	<7.8	2,589	231	37	705	19	--	--	1,490[D]
	IW61-20171216	12/16/17	<0.39	235	151	45	148	13	--	--	765[D]
	IW61-20180310	03/10/18	<0.39	184	176	31	92	16	--	--	432[D]
	IW61-20180630	06/30/18	<0.39	111	200	<0.22	44	14	--	--	406[D]
	IW61-20180922	09/22/18	<0.39	71	170	14	21	<0.69	--	--	228[D]
	IW61-20190615	06/15/19	<0.39	88	72	<0.22	4.4	0.58	--	--	140[D]
	IW61-20191207	12/07/19	<0.39	98	7.2	1.8	5	<0.69	--	--	--
	IW61-20200627	06/27/20	<0.39	13	0.62	<0.22	<0.41	<0.69	--	--	55.4[D]
	IW61-20201212	12/12/20	<0.69	5.1	<0.31	0.60	<0.41	<0.69	--	--	60.6[D]

NOTES:

Analyses performed by SiREM in Guelph, ON or AmTEST Lab oratories in Kirkland, Washington.

[1]Analyzed by Ion Chromatography.

[2]Analyzed by EPA Method 300.0.

[3]Analyzed by EPA Method 300.0 modified.

[4]Analyzed by SM 5310C or EPA Method 300.0 modified.

Laboratory Notes:

[D]The reported value is from a dilution.

-- = not measured/ not applicable

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

EPA = US Environmental Protection Agency

mg/L = milligrams per liter

SM = Standard Method

ATTACHMENT A
LABORATORY ANALYTICAL REPORTS

Supplemental First Quarter 2020

FRIEDMAN & BRUYA, INC.

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February 12, 2020

Logan Schumacher, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Schumacher:

Included are the results from the testing of material submitted on February 6, 2020 from the SOU_0731-004-08_ 20200206, F&BI 002090 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Jonathan Loeffler
SOU0212R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 6, 2020 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0731-004-08_ 20200206, F&BI 002090 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
002090 -01	ONNI-MW-5-20200206

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	ONNI-MW-5-20200206	Client:	SoundEarth Strategies
Date Received:	02/06/20	Project:	SOU_0731-004-08_ 20200206
Date Extracted:	02/07/20	Lab ID:	002090-01
Date Analyzed:	02/07/20	Data File:	020727.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	105	50	150
4-Bromofluorobenzene	106	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-08_ 20200206
Date Extracted:	02/07/20	Lab ID:	00-326 mb
Date Analyzed:	02/07/20	Data File:	020726.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	103	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 02/12/20
Date Received: 02/06/20
Project: SOU_0731-004-08_ 20200206, F&BI 002090

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

Laboratory Code: 002055-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	0.23	111	36-166
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	114	72-129
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	119	71-127
Trichloroethene	ug/L (ppb)	50	<1	119	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	103	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	109	109	70-128	0
trans-1,2-Dichloroethene	ug/L (ppb)	50	102	104	76-118	2
cis-1,2-Dichloroethene	ug/L (ppb)	50	104	105	76-119	1
Trichloroethene	ug/L (ppb)	50	96	99	72-119	3
Tetrachloroethene	ug/L (ppb)	50	96	98	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.

SAMPLE CHAIN OF CUSTODY

002090 ME 02/06/20 VWI

Page # 1 of 1

Send Report To Logan Schumacher, Jonathan Loeffler

Company SoundEarth Strategies

Address 2811 Fairview Ave E, Suite 2000

City, State, ZIP Seattle, WA 98102

SAMPLERS *(signature)*

PROJECT NAME/NO.: Troy Laundry Property

PO #: 0731-004-08

REMARKS: *cVOCs = PCE, TCE, Cis/Trans-DCE, and VC

EIM Y

TURNAROUND TIME

Standard (2 Weeks)

RUSH 3 DAY TAT

Rush charges authorized by: LOGAN SCHUMACHER

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-5-20200206	ONNI MW-5	—	01A	2/6/20	1540	WATER	3				X						

2/6/20

Samples received at 2 °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:		JONATHAN LOEFFLER	SOUNDEARTH	2/6/20	1650
Received by:		Isaac Lessig	FB1	2/6/20	1650
Relinquished by:					
Received by:					

Second Quarter 2020

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 9, 2020

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 June 26, 2020 from the SOU_0731-004-05_ 20200626, F&BI 006467 project. There are 23 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: Sarah Welter
SOU0709R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 26, 2020 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0731-004-05_ 20200626, F&BI 006467 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
006467 -01	MW29-20200625
006467 -02	MW30-20200625
006467 -03	MW13-20200626
006467 -04	MW04-20200626
006467 -05	MW27-20200626
006467 -06	MW26-20200626
006467 -07	MW32-20200626
006467 -08	MW01-20200626
006467 -09	MW15-20200626
006467 -10	MW28-20200626
006467 -11	Trip Blank

Samples MW04-20200626, MW26-20200626, and MW28-20200626 were sent to Fremont Analytical for sulfate, nitrate, alkalinity, and ferrous iron analyses. In addition, sample MW26-20200626 was sent to Fremont for TOC analysis. The report is enclosed.

All quality control requirements were acceptable.

Date of Report: 07/09/20
Date Received: 06/26/20
Project: SOU_0731-004-05_ 20200626, F&BI 006467
Date Extracted: 06/29/20
Date Analyzed: 06/29/20

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)
MW13-20200626 006467-03	<1	<1	<1	<3	<100	87
MW04-20200626 006467-04	<1	<1	<1	<3	<100	88
MW27-20200626 006467-05	<1	<1	<1	<3	<100	88
MW26-20200626 006467-06	<1	<1	<1	<3	<100	88
MW01-20200626 006467-08	<1	<1	<1	<3	<100	86
MW15-20200626 006467-09	<1	<1	<1	<3	<100	88
MW28-20200626 006467-10	<1	<1	<1	<3	140	87
Method Blank 00-1326 MB	<1	<1	<1	<3	<100	92

Date of Report: 07/09/20
Date Received: 06/26/20
Project: SOU_0731-004-05_ 20200626, F&BI 006467
Date Extracted: 06/29/20
Date Analyzed: 06/29/20

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)
MW13-20200626 006467-03	<50	<250	110
MW04-20200626 006467-04	130 x	<250	117
MW27-20200626 006467-05	<50	<250	104
MW26-20200626 006467-06	<50	<250	105
MW01-20200626 006467-08	57 x	<250	113
MW15-20200626 006467-09	<52	<250	120
MW28-20200626 006467-10	120 x	<250	111
Method Blank 00-1485 MB	<50	<250	112

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW04-20200626	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/29/20	Lab ID:	006467-04
Date Analyzed:	06/29/20	Data File:	006467-04.058
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	158
Manganese	3.63

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW26-20200626	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/29/20	Lab ID:	006467-06
Date Analyzed:	06/29/20	Data File:	006467-06.080
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	656
Manganese	806

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW28-20200626	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/29/20	Lab ID:	006467-10
Date Analyzed:	06/29/20	Data File:	006467-10.081
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	1,450
Manganese	452

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/29/20	Lab ID:	I0-374 mb
Date Analyzed:	06/29/20	Data File:	I0-374 mb.053
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 8260D

Client Sample ID:	MW29-20200625	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	006467-01
Date Analyzed:	06/30/20	Data File:	063017.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	106	63	127
4-Bromofluorobenzene	107	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.20
Chloroethane	<1
1,1-Dichloroethene	1.2
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	16
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	13
Tetrachloroethene	18

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW30-20200625	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	006467-02
Date Analyzed:	06/30/20	Data File:	063018.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	107	63	127
4-Bromofluorobenzene	102	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	3.6
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.0
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW13-20200626	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	006467-03
Date Analyzed:	06/30/20	Data File:	063019.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	106	63	127
4-Bromofluorobenzene	103	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	1.8
Tetrachloroethene	9.1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW04-20200626	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	006467-04
Date Analyzed:	06/30/20	Data File:	063014.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	107	63	127
4-Bromofluorobenzene	102	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	10
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW27-20200626	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	006467-05
Date Analyzed:	06/30/20	Data File:	063021.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	107	63	127
4-Bromofluorobenzene	103	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	2.9
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	30
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW26-20200626	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	006467-06
Date Analyzed:	06/30/20	Data File:	063022.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	106	63	127
4-Bromofluorobenzene	103	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	13
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW32-20200626	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	006467-07
Date Analyzed:	06/30/20	Data File:	063023.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	107	63	127
4-Bromofluorobenzene	102	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 8260D

Client Sample ID:	MW01-20200626	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	006467-08
Date Analyzed:	06/30/20	Data File:	063024.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	107	63	127
4-Bromofluorobenzene	102	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 8260D

Client Sample ID:	MW15-20200626	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	006467-09
Date Analyzed:	06/30/20	Data File:	063025.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	107	63	127
4-Bromofluorobenzene	102	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	1.2
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW28-20200626	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	006467-10
Date Analyzed:	06/30/20	Data File:	063026.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	105	63	127
4-Bromofluorobenzene	111	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	22
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	5.1
Tetrachloroethene	9.1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	00-1448 mb
Date Analyzed:	06/30/20	Data File:	063010.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	106	63	127
4-Bromofluorobenzene	102	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: 07/09/20
Date Received: 06/26/20
Project: SOU_0731-004-05_ 20200626, F&BI 006467

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: 006412-01 (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	83	65-118
Toluene	ug/L (ppb)	50	86	72-122
Ethylbenzene	ug/L (ppb)	50	91	73-126
Xylenes	ug/L (ppb)	150	88	74-118
Gasoline	ug/L (ppb)	1,000	102	69-134

Date of Report: 07/09/20
Date Received: 06/26/20
Project: SOU_0731-004-05_ 20200626, F&BI 006467

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: 07/09/20
Date Received: 06/26/20
Project: SOU_0731-004-05_ 20200626, F&BI 006467

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

Laboratory Code: 006480-01 (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	103	106	114	70-130	7
Manganese	ug/L (ppb)	20	60.7	104	100	70-130	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	94	85-115
Manganese	ug/L (ppb)	20	95	85-115

Date of Report: 07/09/20
Date Received: 06/26/20
Project: SOU_0731-004-05_ 20200626, F&BI 006467

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

Laboratory Code: 006467-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	112	36-166
Chloroethane	ug/L (ppb)	50	<1	107	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	109	60-136
Methylene chloride	ug/L (ppb)	50	<5	104	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	106	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	105	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	99	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	90	48-149
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	105	60-146
Trichloroethene	ug/L (ppb)	50	10	99	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	100	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	115	119	50-154	3
Chloroethane	ug/L (ppb)	50	110	113	58-146	3
1,1-Dichloroethene	ug/L (ppb)	50	111	114	67-136	3
Methylene chloride	ug/L (ppb)	50	105	106	39-148	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	107	110	68-128	3
1,1-Dichloroethane	ug/L (ppb)	50	107	110	74-135	3
cis-1,2-Dichloroethene	ug/L (ppb)	50	102	104	74-136	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	92	93	66-129	1
1,1,1-Trichloroethane	ug/L (ppb)	50	105	108	74-142	3
Trichloroethene	ug/L (ppb)	50	101	102	67-133	1
Tetrachloroethene	ug/L (ppb)	50	100	101	76-121	1

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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.

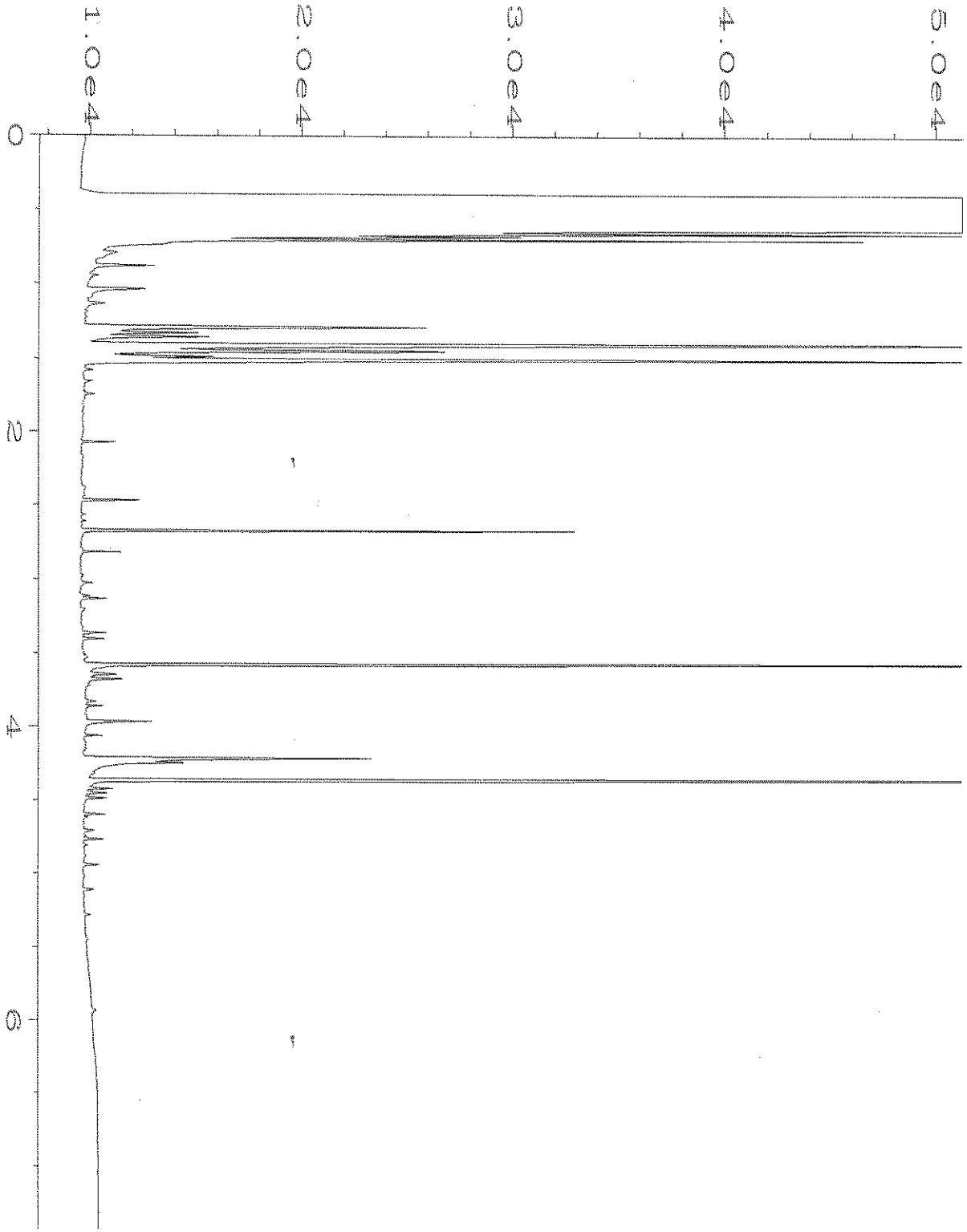
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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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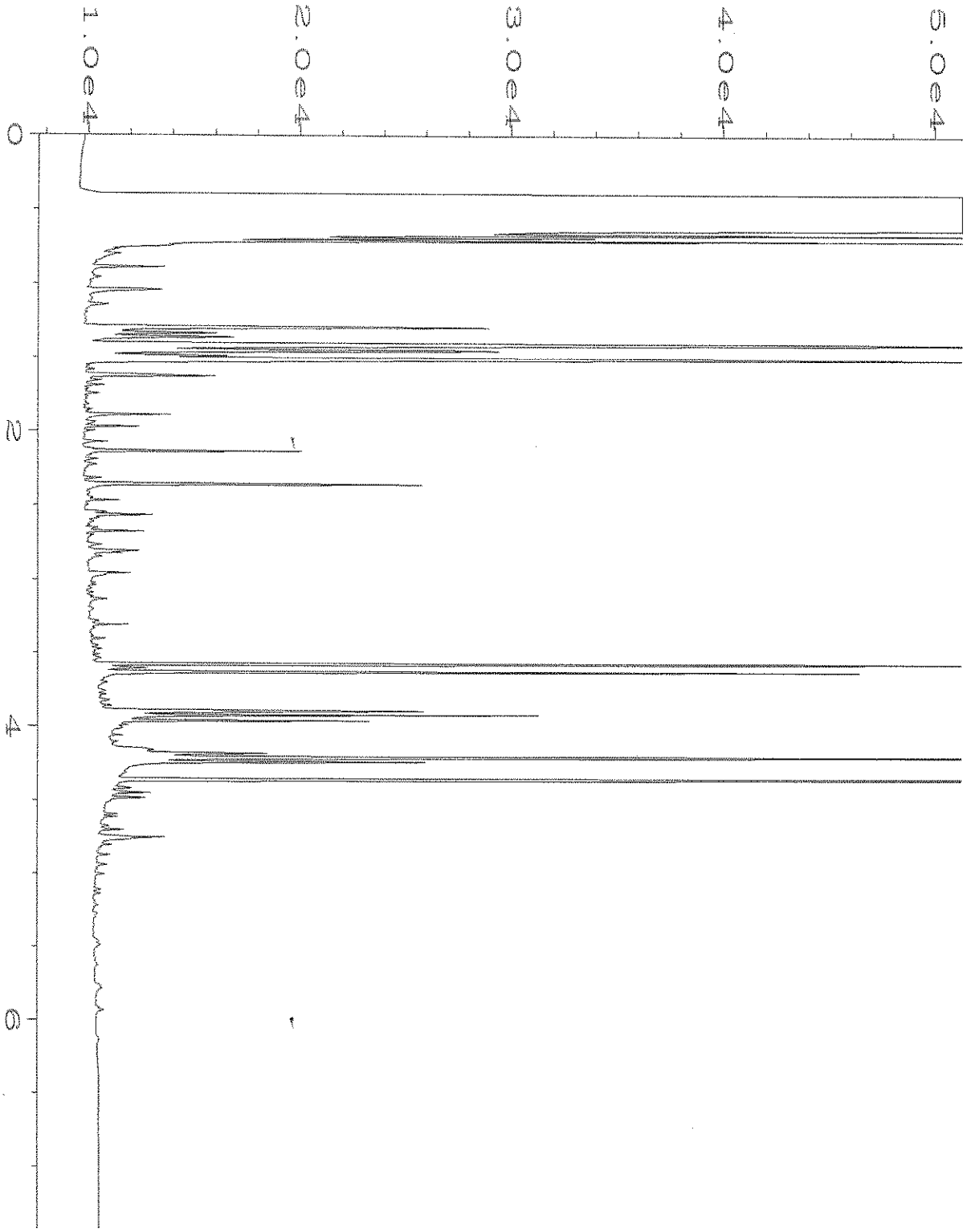
Operator : TL
Instrument : GC1
Sample Name : 006467-03
Run Time Bar Code:
Acquired on : 29 Jun 20 12:36 PM
Report Created on: 30 Jun 20 07:58 AM

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



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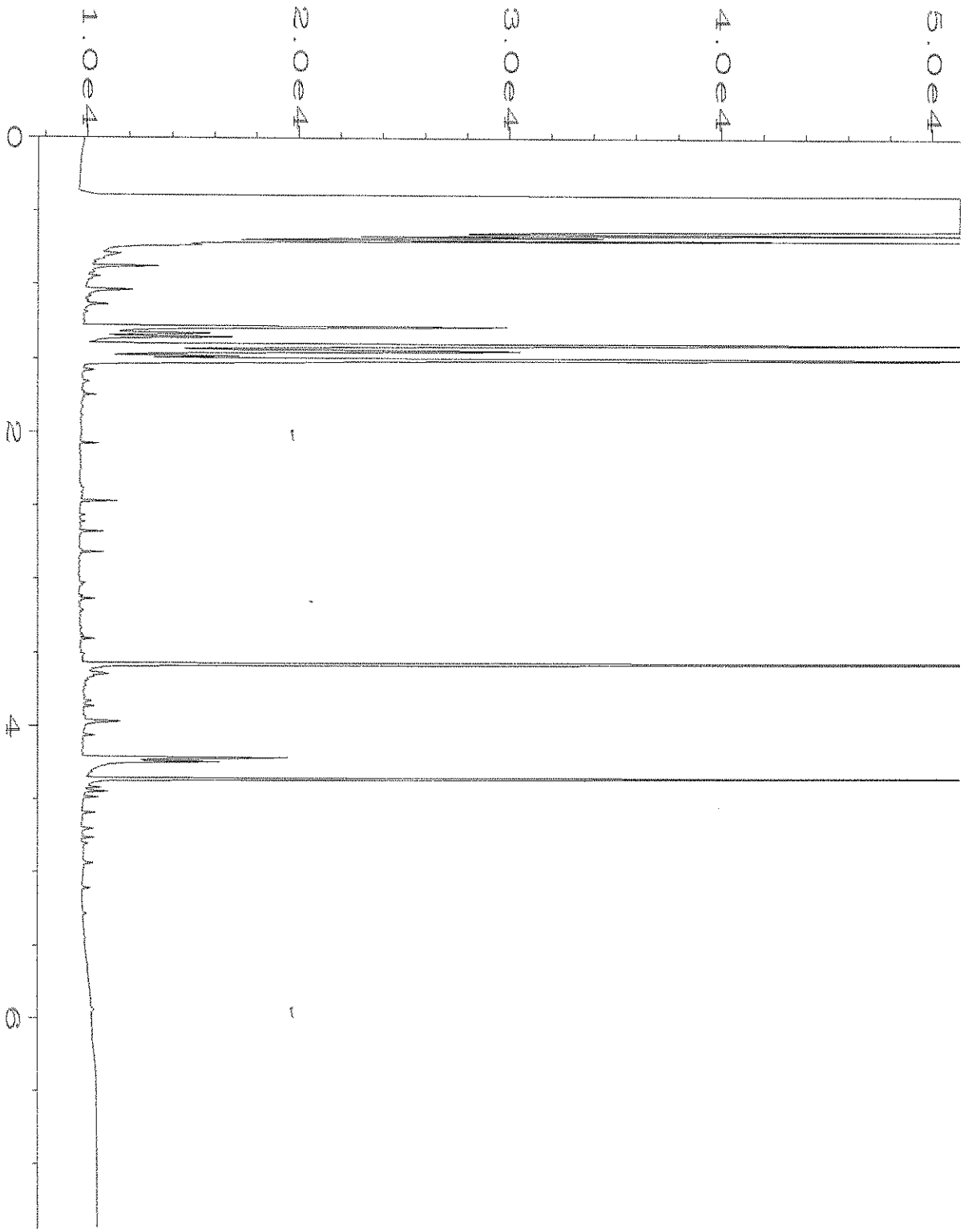
Operator : TL
Instrument : GC1
Sample Name : 006467-04
Run Time Bar Code:
Acquired on : 29 Jun 20 12:48 PM
Report Created on: 30 Jun 20 07:58 AM

Page Number : 1
Vial Number : 14
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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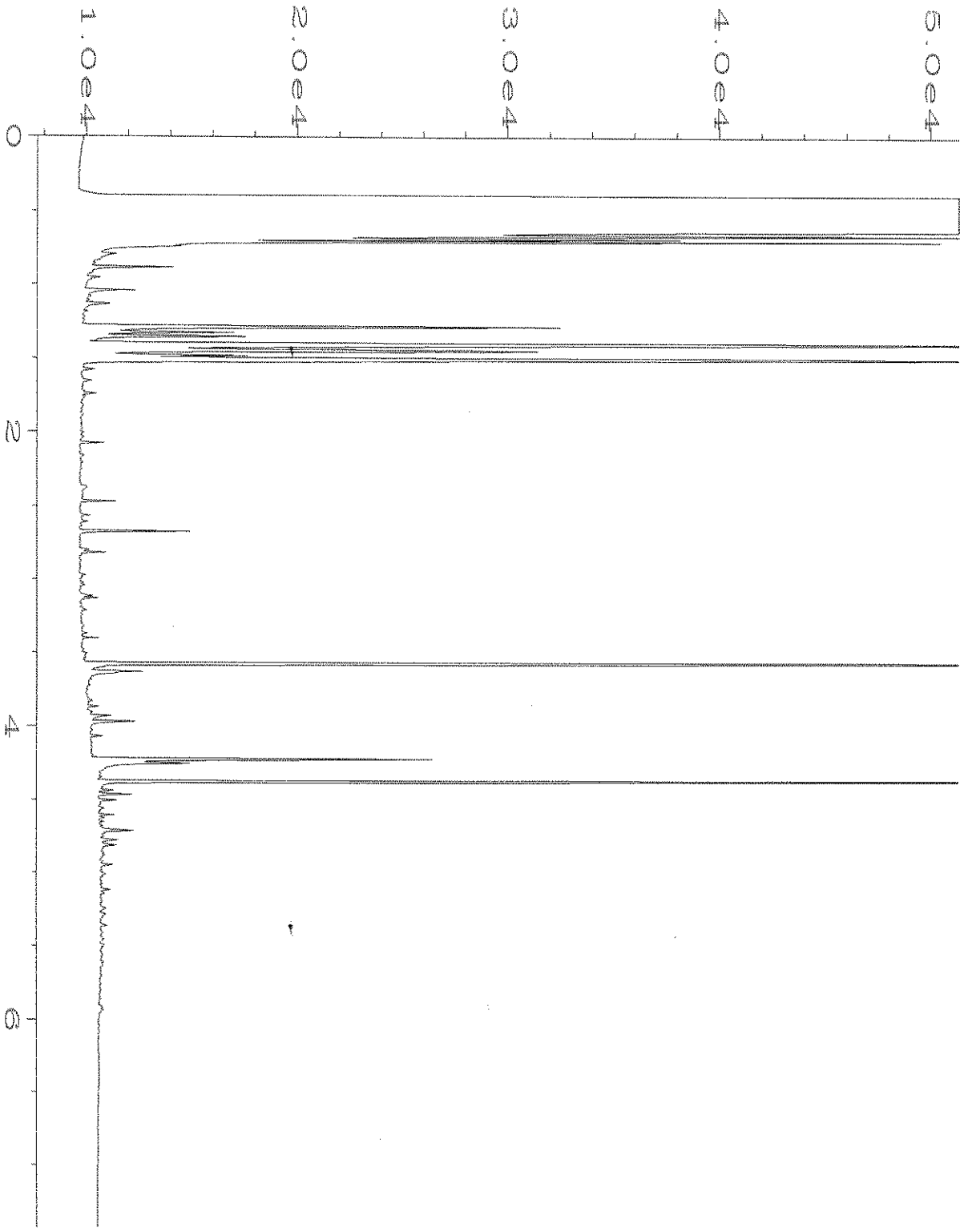
Operator : TL
Instrument : GC1
Sample Name : 006467-05
Run Time Bar Code:
Acquired on : 29 Jun 20 01:00 PM
Report Created on: 30 Jun 20 07:58 AM

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



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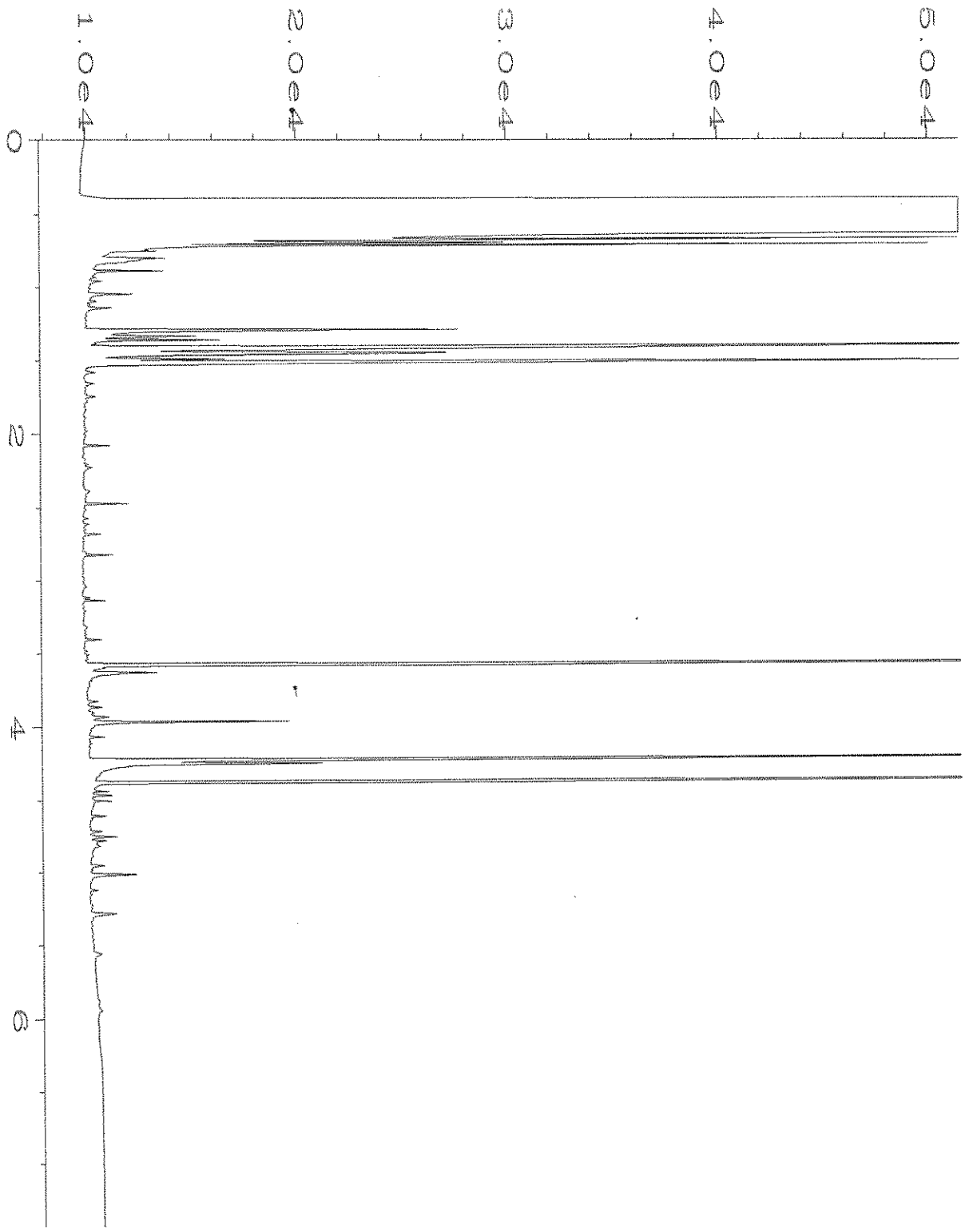
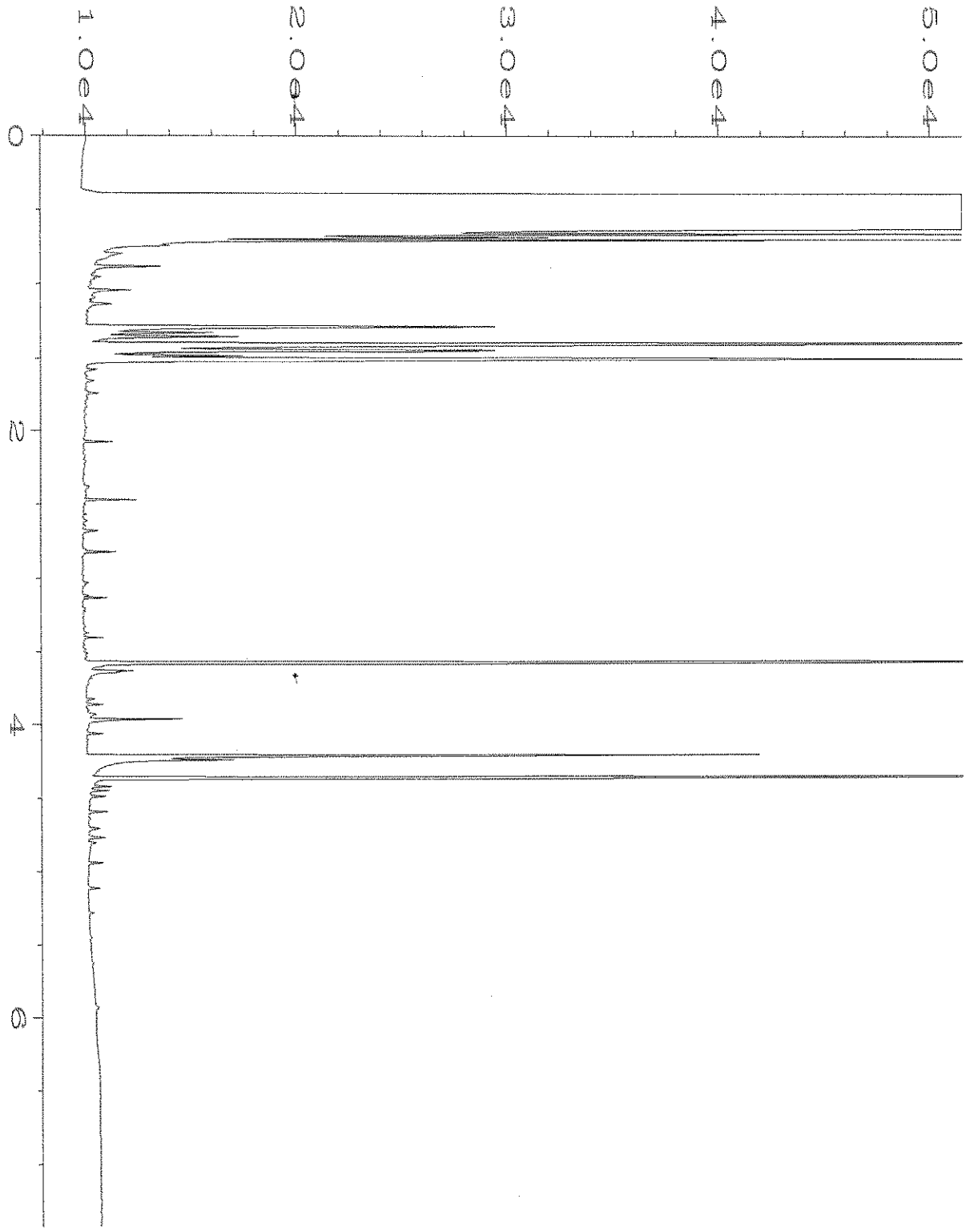
Operator : TL
Instrument : GC1
Sample Name : 006467-06
Run Time Bar Code:
Acquired on : 29 Jun 20 01:12 PM
Report Created on: 30 Jun 20 07:58 AM

Page Number : 1
Vial Number : 16
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



Data File Name : C:\HPCHEM\1\DATA\06-29-20\017F0301.D
Operator : TL
Instrument : GC1
Sample Name : 006467-08
Run Time Bar Code:
Acquired on : 29 Jun 20 01:24 PM
Report Created on: 30 Jun 20 07:58 AM

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



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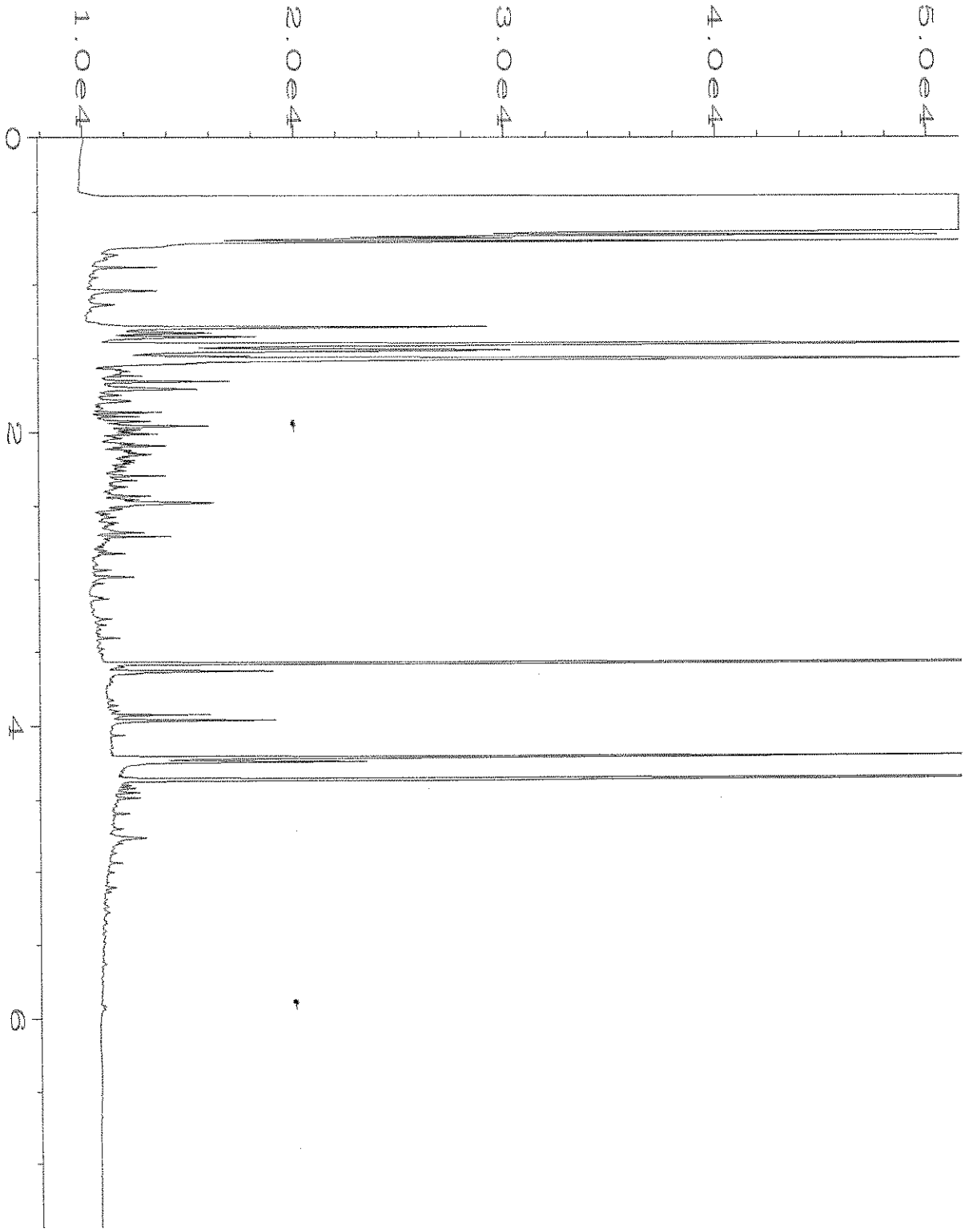
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 18
Sample Name	: 006467-09	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 29 Jun 20 01:36 PM	Instrument Method	: DX.MTH
Report Created on	: 30 Jun 20 07:58 AM	Analysis Method	: DEFAULT.MTH



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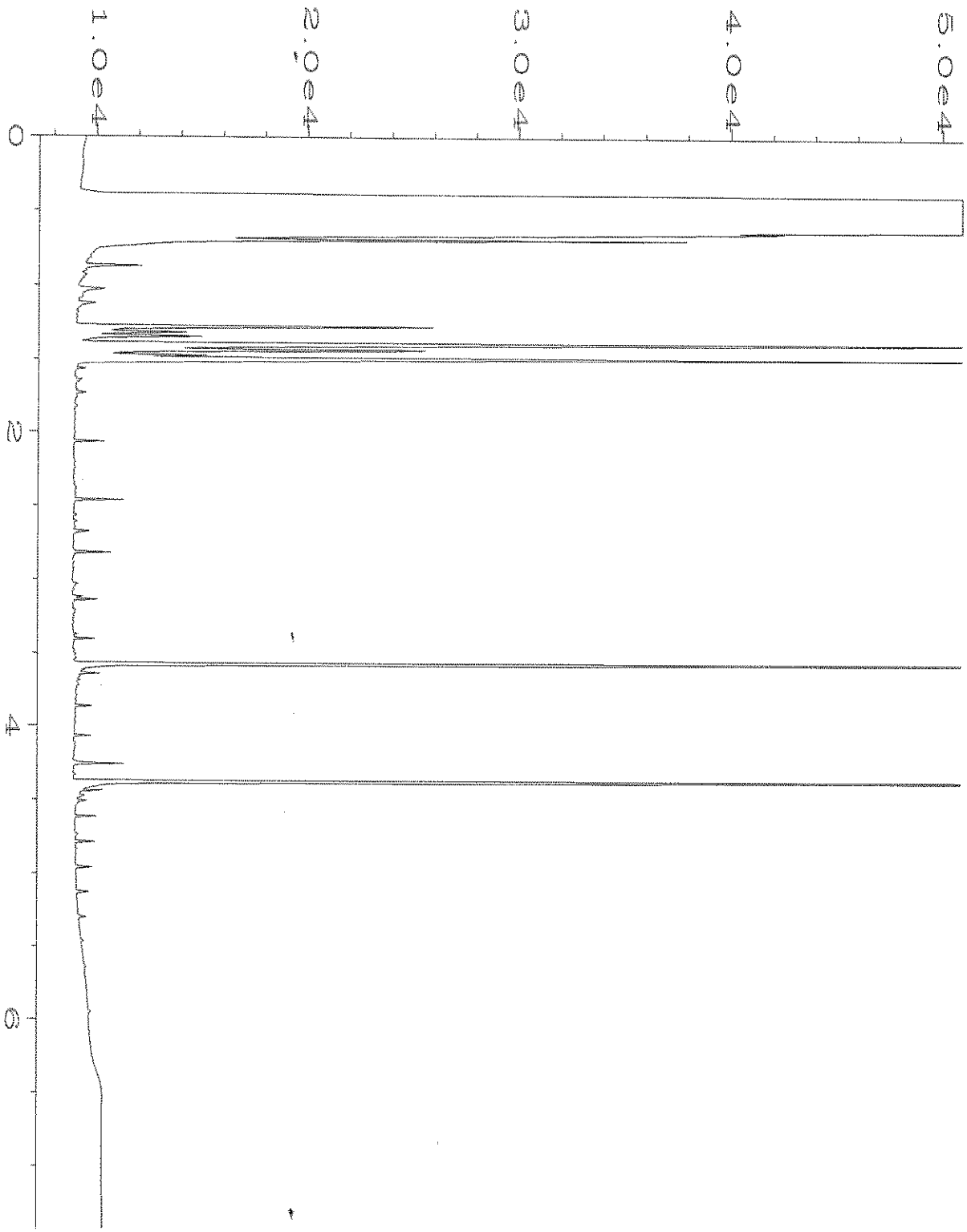
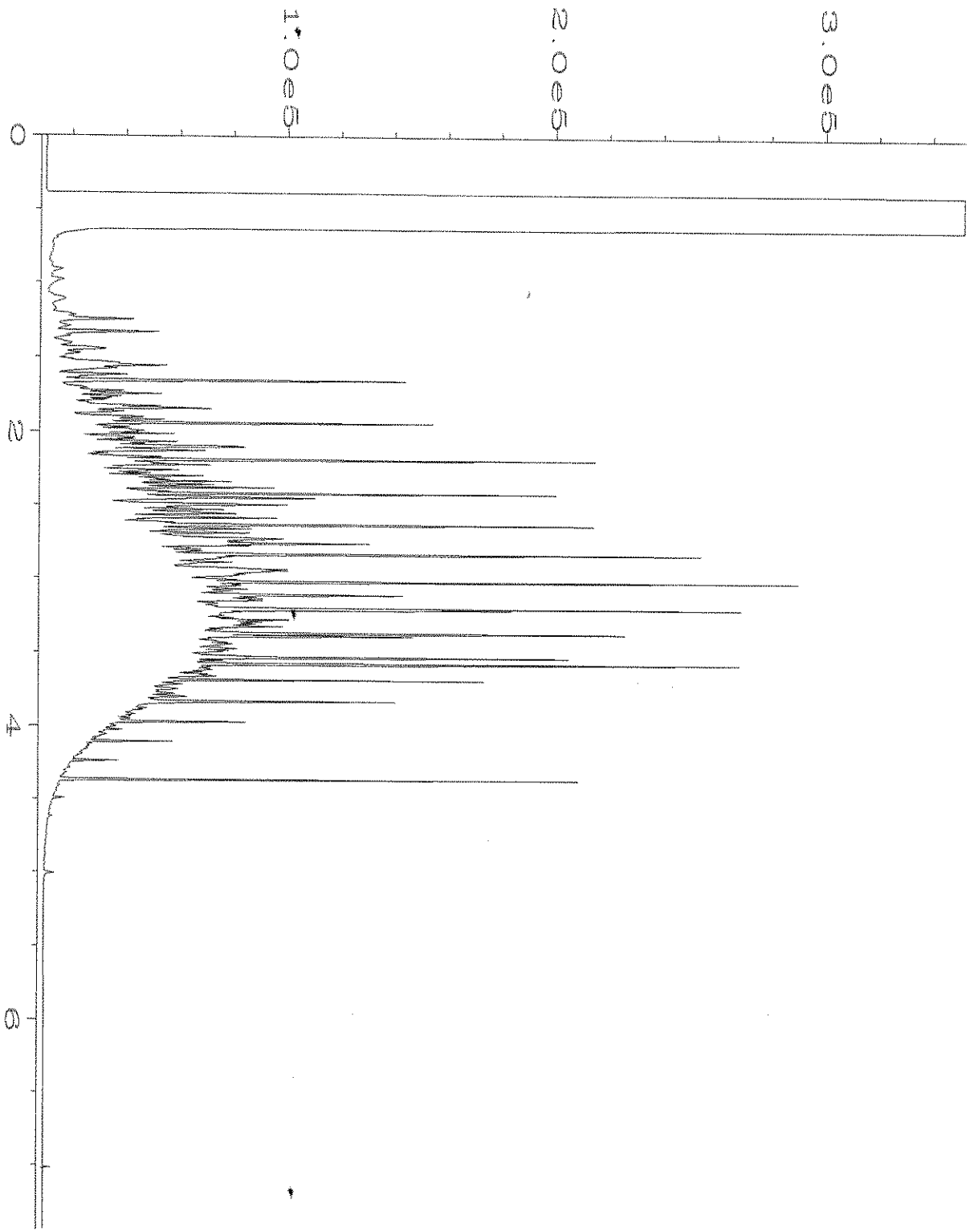
Operator : TL
Instrument : GC1
Sample Name : 006467-10
Run Time Bar Code:
Acquired on : 29 Jun 20 01:48 PM
Report Created on: 30 Jun 20 07:58 AM

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



Data File Name	: C:\HPCHEM\1\DATA\06-29-20\006F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 6
Sample Name	: 00-1485 mb	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 29 Jun 20 11:15 AM	Instrument Method	: DX.MTH
Report Created on	: 30 Jun 20 07:58 AM	Analysis Method	: DEFAULT.MTH



Data File Name	: C:\HPCHEM\1\DATA\06-29-20\005F0401.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 5
Sample Name	: 1000 Dx 60-170B	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 4
Acquired on	: 29 Jun 20 02:12 PM	Instrument Method	: DX.MTH
Report Created on	: 30 Jun 20 07:59 AM	Analysis Method	: DEFAULT.MTH

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

RE: 006467
Work Order Number: 2006471

July 08, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 3 sample(s) on 6/29/2020 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: *07/08/2020*

CLIENT: Friedman & Bruya
Project: 006467
Work Order: 2006471

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2006471-001	MW04-20200626	06/26/2020 9:55 AM	06/29/2020 1:13 PM
2006471-002	MW26-20200626	06/26/2020 11:15 AM	06/29/2020 1:13 PM
2006471-003	MW28-20200626	06/26/2020 3:20 PM	06/29/2020 1:13 PM

Case Narrative

WO#: **2006471**
Date: **7/8/2020**

CLIENT: Friedman & Bruya
Project: 006467

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: **2006471**
Date Reported: **7/8/2020**

Client: Friedman & Bruya
Collection Date: 6/26/2020 9:55:00 AM
Project: 006467
Lab ID: 2006471-001
Matrix: Water
Client Sample ID: **MW04-20200626**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R60188		Analyst: WC
Methane	0.107	0.00863		mg/L	1	6/30/2020 9:24:00 AM
Ethene	ND	0.0151		mg/L	1	6/30/2020 9:24:00 AM
Ethane	ND	0.0162		mg/L	1	6/30/2020 9:24:00 AM
Ion Chromatography by EPA Method 300.0				Batch ID: 28881		Analyst: SS
Nitrate (as N)	6.32	0.500	HD	mg/L	5	7/6/2020 7:35:00 PM
Sulfate	40.7	1.50	D	mg/L	5	7/6/2020 7:35:00 PM
Total Alkalinity by SM 2320B				Batch ID: R60340		Analyst: WF
Alkalinity, Total (As CaCO3)	115	2.50		mg/L	1	7/7/2020 1:25:41 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R60194		Analyst: SS
Ferrous Iron	ND	0.0500	H	mg/L	1	6/30/2020 1:39:04 PM

Analytical Report

Work Order: **2006471**
Date Reported: **7/8/2020**

Client: Friedman & Bruya
Collection Date: 6/26/2020 11:15:00 AM
Project: 006467
Lab ID: 2006471-002
Matrix: Water
Client Sample ID: **MW26-20200626**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R60188		Analyst: WC
Methane	1.34	0.0863	D	mg/L	10	6/30/2020 10:24:00 AM
Ethene	ND	0.0151		mg/L	1	6/30/2020 9:28:00 AM
Ethane	ND	0.0162		mg/L	1	6/30/2020 9:28:00 AM
Ion Chromatography by EPA Method 300.0				Batch ID: 28881		Analyst: SS
Nitrate (as N)	0.208	0.100	H	mg/L	1	7/2/2020 6:16:00 PM
Sulfate	37.4	3.00	D	mg/L	10	7/6/2020 7:58:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R60285		Analyst: SS
Total Organic Carbon	1.39	0.500		mg/L	1	7/2/2020 11:06:00 PM
Total Alkalinity by SM 2320B				Batch ID: R60340		Analyst: WF
Alkalinity, Total (As CaCO3)	124	2.50		mg/L	1	7/7/2020 1:25:41 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R60194		Analyst: SS
Ferrous Iron	0.595	0.0500	H	mg/L	1	6/30/2020 1:39:04 PM

Analytical Report

Work Order: **2006471**
Date Reported: **7/8/2020**

Client: Friedman & Bruya
Project: 006467
Lab ID: 2006471-003
Client Sample ID: **MW28-20200626**

Collection Date: 6/26/2020 3:20:00 PM
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R60188		Analyst: WC
Methane	0.0438	0.00863		mg/L	1	6/30/2020 9:30:00 AM
Ethene	ND	0.0151		mg/L	1	6/30/2020 9:30:00 AM
Ethane	ND	0.0162		mg/L	1	6/30/2020 9:30:00 AM
Ion Chromatography by EPA Method 300.0				Batch ID: 28881		Analyst: SS
Nitrate (as N)	ND	0.200	DH	mg/L	2	7/2/2020 6:39:00 PM
Sulfate	0.391	0.300		mg/L	1	7/7/2020 11:50:00 PM
Total Alkalinity by SM 2320B				Batch ID: R60340		Analyst: WF
Alkalinity, Total (As CaCO3)	351	2.50		mg/L	1	7/7/2020 1:25:41 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R60194		Analyst: SS
Ferrous Iron	1.48	0.0500	H	mg/L	1	6/30/2020 1:39:04 PM

Work Order: 2006471
CLIENT: Friedman & Bruya
Project: 006467

QC SUMMARY REPORT

Total Alkalinity by SM 2320B

Sample ID: **MB-R60340**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **7/7/2020**	RunNo: **60340**
Client ID: **MBLKW**	Batch ID: **R60340**		Analysis Date: **7/7/2020**	SeqNo: **1208553**

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-R60340**	SampType: **LCS**	Units: **mg/L**	Prep Date: **7/7/2020**	RunNo: **60340**
Client ID: **LCSW**	Batch ID: **R60340**		Analysis Date: **7/7/2020**	SeqNo: **1208554**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	103	2.50	100.0	0	103	94.3	116				

Sample ID: **2006471-001BDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **7/7/2020**	RunNo: **60340**
Client ID: **MW04-20200626**	Batch ID: **R60340**		Analysis Date: **7/7/2020**	SeqNo: **1208556**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	117	2.50						114.6	2.11	20	

Sample ID: **2006473-003CDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **7/7/2020**	RunNo: **60340**
Client ID: **BATCH**	Batch ID: **R60340**		Analysis Date: **7/7/2020**	SeqNo: **1208568**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	507	2.50						516.8	1.90	20	

Date: *7/8/2020*

Work Order: 2006471
CLIENT: Friedman & Bruya
Project: 006467

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **MB-R60194**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **MBLKW**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205310**

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-R60194**	SampType: **LCS**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **LCSW**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205311**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.457	0.0500	0.4000	0	114	85	115				

Sample ID: **2006471-001DDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **MW04-20200626**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205313**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.0602	0.0500						0.04380	31.5	20	H

Sample ID: **2006471-001DMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **MW04-20200626**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205314**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.591	0.0500	0.4000	0.04380	137	70	130				SH

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: **2006471-001DMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **MW04-20200626**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205315**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.618	0.0500	0.4000	0.04380	143	70	130	0.5914	4.34	20	SH

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2006471
CLIENT: Friedman & Bruya
Project: 006467

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **2006473-001DDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **BATCH**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205327**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	39.3	1.25						38.15	2.96	20	DH

Sample ID: **2006473-001DMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **BATCH**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205328**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	51.9	1.25	10.00	38.15	138	70	130				DSH

NOTES:
S - Analyte concentration was too high for accurate spike recovery(ies).

Work Order: 2006471
CLIENT: Friedman & Bruya
Project: 006467

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **MB-28881**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **MBLKW**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208056**

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-28881**	SampType: **LCS**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **LCSW**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208058**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.709	0.100	0.7500	0	94.5	90	110				
Sulfate	3.61	0.300	3.750	0	96.3	90	110				

Sample ID: **2006460-006BDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **BATCH**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208064**

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	4.23	0.300						4.230	0.0946	20	

Sample ID: **2006460-006BMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **BATCH**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208065**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.746	0.100	0.7500	0.07500	89.5	80	120				H
Sulfate	8.06	0.300	3.750	4.230	102	80	120				

Sample ID: **2006460-006BMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **BATCH**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208066**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.755	0.100	0.7500	0.07500	90.7	80	120	0.7460	1.20	20	H

Work Order: 2006471
CLIENT: Friedman & Bruya
Project: 006467

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **2006460-006BMSD** SampType: **MSD** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60309**
Client ID: **BATCH** Batch ID: **28881** Analysis Date: **7/2/2020** SeqNo: **1208066**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	8.08	0.300	3.750	4.230	103	80	120	8.056	0.322	20	

Sample ID: **2007026-001CDUP** SampType: **DUP** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60309**
Client ID: **BATCH** Batch ID: **28881** Analysis Date: **7/2/2020** SeqNo: **1208089**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.120	0.100						0.1210	0.830	20	
Sulfate	10.6	0.300						10.46	0.818	20	

Sample ID: **2007026-001CMS** SampType: **MS** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60309**
Client ID: **BATCH** Batch ID: **28881** Analysis Date: **7/3/2020** SeqNo: **1208090**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.803	0.100	0.7500	0.1210	90.9	80	120				
Sulfate	14.4	0.300	3.750	10.46	106	80	120				

Work Order: 2006471
CLIENT: Friedman & Bruya
Project: 006467

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **MB-R60285** SampType: **MBLK** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **MBLKW** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207559**

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-R60285** SampType: **LCS** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **LCSW** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207560**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.00	0.500	5.000	0	99.9	90.2	120				

Sample ID: **2006438-001ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **BATCH** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207562**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	96.4	0.500						96.37	0.0425	20	E

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

Sample ID: **2006438-001AMS** SampType: **MS** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **BATCH** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207563**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	102	0.500	5.000	96.37	108	86.4	121				E

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

Sample ID: **2006438-001AMSD** SampType: **MSD** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **BATCH** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207564**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	102	0.500	5.000	96.37	110	86.4	121	101.8	0.0992	30	E

Work Order: 2006471
CLIENT: Friedman & Bruya
Project: 006467

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **2006438-001AMSD** SampType: **MSD** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **BATCH** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207564**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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

Sample ID: **2006473-003EDUP** SampType: **DUP** Units: **mg/L** Prep Date: **7/3/2020** RunNo: **60285**
Client ID: **BATCH** Batch ID: **R60285** Analysis Date: **7/3/2020** SeqNo: **1207577**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	90.4	0.500						90.31	0.0830	20	E

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

Sample ID: **2006473-003EMS** SampType: **MS** Units: **mg/L** Prep Date: **7/3/2020** RunNo: **60285**
Client ID: **BATCH** Batch ID: **R60285** Analysis Date: **7/3/2020** SeqNo: **1207578**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	94.6	0.500	5.000	90.31	86.5	86.4	121				E

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

Work Order: 2006471
CLIENT: Friedman & Bruya
Project: 006467

QC SUMMARY REPORT

Dissolved Gases by RSK-175

Sample ID: **MB-R60188** SampType: **MBLK** Units: **mg/L** Prep Date: **6/30/2020** RunNo: **60188**
Client ID: **MBLKW** Batch ID: **R60188** Analysis Date: **6/30/2020** SeqNo: **1205568**

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-R60188** SampType: **LCS** Units: **mg/L** Prep Date: **6/30/2020** RunNo: **60188**
Client ID: **LCSW** Batch ID: **R60188** Analysis Date: **6/30/2020** SeqNo: **1205567**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	1,060	0.00863	1,000	0	106	70	130				
Ethene	1,030	0.0151	1,000	0	103	70	130				
Ethane	1,060	0.0162	1,000	0	106	70	130				

Sample ID: **2006471-001AREP** SampType: **REP** Units: **mg/L** Prep Date: **6/30/2020** RunNo: **60188**
Client ID: **MW04-20200626** Batch ID: **R60188** Analysis Date: **6/30/2020** SeqNo: **1205537**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	0.108	0.00863						0.1066	1.05	30	
Ethene	ND	0.0151						0		30	
Ethane	ND	0.0162						0		30	

Sample ID: **2006472-005AREP** SampType: **REP** Units: **mg/L** Prep Date: **6/30/2020** RunNo: **60188**
Client ID: **BATCH** Batch ID: **R60188** Analysis Date: **6/30/2020** SeqNo: **1205551**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	6.91	0.00863						5.522	22.3	30	E
Ethene	ND	0.0151						0		30	
Ethane	ND	0.0162						0		30	

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

Sample Log-In Check List

Client Name:	**FB**	Work Order Number:	**2006471**
Logged by:	**Carissa True**	Date Received:	**6/29/2020 1:13:00 PM**

Chain of Custody

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

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 Present	☑
6.	Was an attempt made to cool the samples?	Yes	☑	No ☐	NA	☐
7.	Were all items received at a temperature of >2°C to 6°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: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler 1	4.1
Cooler 2	5.9
Sample 1	3.8
Sample 2	5.6

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

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

200647I

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 merdahl@friedmanandbruya.com

SUBCONTRACTER Fremont

PROJECT NAME/NO.	PO #
006467	A-280

REMARKS

Please Email Results

TURNAROUND TIME

☒ Standard TAT

☐ 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	RSK, Methane, Ethane, Ethene	Sulfate, Nitrate	Alkalinity	Ferrous Iron	TOC			Notes
MW04-20200626		6/26/20	0955	water					X	X	X	X				
MW26-20200626			1115						X	X	X	X	X			
MW28-20200626			1520						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	6/29/20	0830
Received by:		Sara Becker-Meyer	F&B	6/29/20	1313
Relinquished by:					
Received by:					

~~006445~~ (NP) 006467 Sarah Walter

SAMPLE CHAIN OF CUSTODY

Send Report To ~~Tom~~ Tom Cammarata cc: ~~Logan Schumacher~~

Company SoundEarth Strategies

Address 2811 Fairview Ave E, Suite 2000

City, State, ZIP Seattle, WA 98102

SAMPLERS (signature) ME 06/26/20

PROJECT NAME/NO.: Troy Laundry Property

PO #: 0731-004-05

REMARKS

EIM Y

Page # 1 of 1

TURNAROUND TIME: VW4

Standard (2 Weeks) D04

RUSH

Rush charges authorized by: ALB

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
MW29-20200625	MW29	—	01 AC	6/25/20	1240	W	3				X						
MW30-20200625	MW30	—	02 AC	6/25/20	1330	W	3				X						
MW13-20200626	MW13	—	03 AG	6/26/20	0850	W	7	X	X	X	X						
MW04-20200626	MW04	—	04 AM		0955	W	13	X	X	X	X	X	X	X	X		
MW27-20200626	MW27	—	05 AG		0935	W	7	X	X	X	X						
MW26-20200626	MW26	—	06 AN		1115	W	14	X	X	X	X	X	X	X	X	X	
MW32-20200626	MW32	—	07 AC		1230	W	3				X						
MW01-20200626	MW01	—	08 AG		1235	W	7	X	X	X	X						
MW15-20200626	MW15	—	09 AG		1400	W	7	X	X	X	X						
MW28-20200626	MW28	—	10 AM		1520	W	13	X	X	X	X	X	X	X	X		
Trip Blank 6/24/20			11														
										ATM		6/26/20					

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:		Audrey Michniak	SES	6/26/20	
Received by:		Khai Hoang	FBT	6/26/20	16:07
Relinquished by:					
Received by:			Samples received at	4	°C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 7, 2020

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 June 26, 2020 from the SOU_0731-004-05_ 20200626, F&BI 006468 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: Sarah Welter
SOU0707R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 26, 2020 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0731-004-05_ 20200626, F&BI 006468 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
006468 -01	ONNI-MW-4-20200625
006468 -02	ONNI-MW-5-20200625
006468 -03	Trip Blank

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	ONNI-MW-4-20200625	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	006468-01
Date Analyzed:	06/30/20	Data File:	063015.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	106	63	127
4-Bromofluorobenzene	103	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 8260D

Client Sample ID:	ONNI-MW-5-20200625	Client:	SoundEarth Strategies
Date Received:	06/26/20	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	006468-02
Date Analyzed:	06/30/20	Data File:	063016.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	106	63	127
4-Bromofluorobenzene	104	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 8260D

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-05_ 20200626
Date Extracted:	06/30/20	Lab ID:	00-1448 mb
Date Analyzed:	06/30/20	Data File:	063010.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	106	63	127
4-Bromofluorobenzene	102	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: 07/07/20
Date Received: 06/26/20
Project: SOU_0731-004-05_ 20200626, F&BI 006468

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

Laboratory Code: 006467-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	112	36-166
Chloroethane	ug/L (ppb)	50	<1	107	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	109	60-136
Methylene chloride	ug/L (ppb)	50	<5	104	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	106	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	105	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	99	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	90	48-149
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	105	60-146
Trichloroethene	ug/L (ppb)	50	10	99	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	100	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	115	119	50-154	3
Chloroethane	ug/L (ppb)	50	110	113	58-146	3
1,1-Dichloroethene	ug/L (ppb)	50	111	114	67-136	3
Methylene chloride	ug/L (ppb)	50	105	106	39-148	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	107	110	68-128	3
1,1-Dichloroethane	ug/L (ppb)	50	107	110	74-135	3
cis-1,2-Dichloroethene	ug/L (ppb)	50	102	104	74-136	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	92	93	66-129	1
1,1,1-Trichloroethane	ug/L (ppb)	50	105	108	74-142	3
Trichloroethene	ug/L (ppb)	50	101	102	67-133	1
Tetrachloroethene	ug/L (ppb)	50	100	101	76-121	1

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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

~~006468~~ KH) 006468 Sarah Welter

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) ME 06/26/20

Page # 1) 1 VW

PROJECT NAME/NO.	PO #
Troy Laundry Property	0731-004-05
REMARKS	EIM Y

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
ONNI-MW-4-20200625	ONNI-MW	—	01A-C	6/25/20	1253	W	3				X						
ONNI-MW-5-20200625	ONNI-MW-5	—	02	6/25/20	1435	W	3				X						
Trip Blank 6/29 PMB			03AB			W	2										
								AHM									
								6/25/20									
																	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:	Andrew Michniak	SES	6/26/20	
Received by:	Khoi Hoang	FBE	6/26/20	16:07
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

July 10, 2020

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 June 29, 2020 from the SOU_0731-004-05_ 20200629, F&BI 006483 project. There are 18 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: Sarah Welter, Logan Schumacher
SOU0710R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 29, 2020 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0731-004-05_ 20200629, F&BI 006483 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
006483 -01	IW61-20200627
006483 -02	IW91-20200627
006483 -03	IW50-20200627
006483 -04	IW04-20200627
006483 -05	IW06-20200627
006483 -06	Trip Blank

Samples IW61-20200627, IW50-20200627, and IW04-20200627 were sent to Fremont Analytical for sulfate, nitrate, alkalinity, TOC and ferrous iron analyses. In addition, samples IW61-20200627 and IW50-20200627 were sent to Fremont for dissolved gasses analyses. The report is enclosed.

All quality control requirements were acceptable.

Date of Report: 07/10/20
Date Received: 06/29/20
Project: SOU_0731-004-05_ 20200629, F&BI 006483
Date Extracted: 06/30/20
Date Analyzed: 06/30/20

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)
IW91-20200627 006483-02	<1	<1	<1	<3	<100	89
Method Blank 00-1328 MB	<1	<1	<1	<3	<100	90

Date of Report: 07/10/20
Date Received: 06/29/20
Project: SOU_0731-004-05_ 20200629, F&BI 006483
Date Extracted: 06/30/20
Date Analyzed: 06/30/20

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)
IW91-20200627 006483-02	60 x	<250	87
Method Blank 00-1485 MB2	<50	<250	99

Analysis For Total Metals By EPA Method 200.8

Client ID:	IW61-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_0731-004-05_ 20200629
Date Extracted:	06/30/20	Lab ID:	006483-01 x100
Date Analyzed:	07/02/20	Data File:	006483-01 x100.042
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	24,400
Manganese	10,300

Analysis For Total Metals By EPA Method 200.8

Client ID:	IW50-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_0731-004-05_ 20200629
Date Extracted:	06/30/20	Lab ID:	006483-03 x100
Date Analyzed:	07/02/20	Data File:	006483-03 x100.121
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	16,900
Manganese	15,800

Analysis For Total Metals By EPA Method 200.8

Client ID:	IW04-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_0731-004-05_ 20200629
Date Extracted:	06/30/20	Lab ID:	006483-04 x100
Date Analyzed:	07/02/20	Data File:	006483-04 x100.049
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	16,400
Manganese	10,600

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0731-004-05_ 20200629
Date Extracted:	06/30/20	Lab ID:	I0-374 mb2
Date Analyzed:	06/30/20	Data File:	I0-374 mb2.048
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 8260D

Client Sample ID:	IW61-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006483-01
Date Analyzed:	07/01/20	Data File:	070132.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	98	63	127
4-Bromofluorobenzene	107	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	4.5
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	63
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.1
Tetrachloroethene	5.3

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	IW91-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006483-02
Date Analyzed:	07/01/20	Data File:	070133.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	97	63	127
4-Bromofluorobenzene	101	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 8260D

Client Sample ID:	IW50-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006483-03
Date Analyzed:	07/01/20	Data File:	070134.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	95	63	127
4-Bromofluorobenzene	99	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	2.7
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	3.9

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	IW04-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006483-04
Date Analyzed:	07/01/20	Data File:	070135.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	97	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.77
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	IW06-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006483-05
Date Analyzed:	07/01/20	Data File:	070136.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	57	121
Toluene-d8	96	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	5.2
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	00-1449 mb
Date Analyzed:	07/01/20	Data File:	070112.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	101	63	127
4-Bromofluorobenzene	104	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: 07/10/20
Date Received: 06/29/20
Project: SOU_0731-004-05_ 20200629, F&BI 006483

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: 006483-02 (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	106	65-118
Toluene	ug/L (ppb)	50	105	72-122
Ethylbenzene	ug/L (ppb)	50	107	73-126
Xylenes	ug/L (ppb)	150	105	74-118
Gasoline	ug/L (ppb)	1,000	104	69-134

Date of Report: 07/10/20
Date Received: 06/29/20
Project: SOU_0731-004-05_ 20200629, F&BI 006483

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: 07/10/20
Date Received: 06/29/20
Project: SOU_0731-004-05_ 20200629, F&BI 006483

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

Laboratory Code: 006480-01 (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	103	106	114	70-130	7
Manganese	ug/L (ppb)	20	60.7	104	100	70-130	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	94	85-115
Manganese	ug/L (ppb)	20	95	85-115

Date of Report: 07/10/20
Date Received: 06/29/20
Project: SOU_0731-004-05_ 20200629, F&BI 006483

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

Laboratory Code: 006484-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	0.66	106	36-166
Chloroethane	ug/L (ppb)	50	<1	96	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	103	60-136
Methylene chloride	ug/L (ppb)	50	<5	96	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	99	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	97	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	30	95 b	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	79	48-149
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	92	60-146
Trichloroethene	ug/L (ppb)	50	<1	91	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	103	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	117	125	50-154	7
Chloroethane	ug/L (ppb)	50	112	119	58-146	6
1,1-Dichloroethene	ug/L (ppb)	50	111	119	67-136	7
Methylene chloride	ug/L (ppb)	50	107	115	39-148	7
trans-1,2-Dichloroethene	ug/L (ppb)	50	106	113	68-128	6
1,1-Dichloroethane	ug/L (ppb)	50	106	113	74-135	6
cis-1,2-Dichloroethene	ug/L (ppb)	50	102	107	74-136	5
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	89	93	66-129	4
1,1,1-Trichloroethane	ug/L (ppb)	50	105	110	74-142	5
Trichloroethene	ug/L (ppb)	50	99	105	67-133	6
Tetrachloroethene	ug/L (ppb)	50	96	103	76-121	7

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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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info@fremontanalytical.com

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

RE: 006483
Work Order Number: 2006473

July 08, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 3 sample(s) on 6/29/2020 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: *07/08/2020*

CLIENT: Friedman & Bruya
Project: 006483
Work Order: 2006473

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2006473-001	IW61-20200627	06/27/2020 10:05 AM	06/29/2020 1:14 PM
2006473-002	IW50-20200627	06/27/2020 11:55 AM	06/29/2020 1:14 PM
2006473-003	IW04-20200627	06/27/2020 1:00 PM	06/29/2020 1:14 PM

Case Narrative

WO#: **2006473**
Date: **7/8/2020**

CLIENT: Friedman & Bruya
Project: 006483

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: **2006473**
Date Reported: **7/8/2020**

Client: Friedman & Bruya
Collection Date: 6/27/2020 10:05:00 AM
Project: 006483
Lab ID: 2006473-001
Matrix: Water
Client Sample ID: IW61-20200627

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R60188		Analyst: WC
Methane	3.10	0.173	D	mg/L	20	6/30/2020 10:57:00 AM
Ethene	ND	0.0151		mg/L	1	6/30/2020 10:08:00 AM
Ethane	ND	0.0162		mg/L	1	6/30/2020 10:08:00 AM
Ion Chromatography by EPA Method 300.0				Batch ID: 28881		Analyst: SS
Nitrate (as N)	ND	0.100	H	mg/L	1	7/6/2020 11:02:00 PM
Sulfate	0.615	0.300		mg/L	1	7/6/2020 11:02:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R60285		Analyst: SS
Total Organic Carbon	55.4	1.00	D	mg/L	2	7/6/2020 1:45:00 PM
Total Alkalinity by SM 2320B				Batch ID: R60340		Analyst: WF
Alkalinity, Total (As CaCO3)	419	2.50		mg/L	1	7/7/2020 1:25:41 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R60194		Analyst: SS
Ferrous Iron	38.1	1.25	DH	mg/L	25	6/30/2020 1:39:04 PM

Analytical Report

Work Order: **2006473**
Date Reported: **7/8/2020**

Client: Friedman & Bruya
Collection Date: 6/27/2020 11:55:00 AM
Project: 006483
Lab ID: 2006473-002
Matrix: Water
Client Sample ID: IW50-20200627

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R60188		Analyst: WC
Methane	3.69	0.863	D	mg/L	100	6/30/2020 11:02:00 AM
Ethene	ND	0.0151		mg/L	1	6/30/2020 10:10:00 AM
Ethane	ND	0.0162		mg/L	1	6/30/2020 10:10:00 AM
Ion Chromatography by EPA Method 300.0				Batch ID: 28881		Analyst: SS
Nitrate (as N)	0.232	0.100	H	mg/L	1	7/6/2020 11:25:00 PM
Sulfate	2.47	0.300		mg/L	1	7/6/2020 11:25:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R60285		Analyst: SS
Total Organic Carbon	18.2	0.500		mg/L	1	7/3/2020 3:20:00 AM
Total Alkalinity by SM 2320B				Batch ID: R60340		Analyst: WF
Alkalinity, Total (As CaCO3)	497	2.50		mg/L	1	7/7/2020 1:25:41 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R60194		Analyst: SS
Ferrous Iron	25.0	1.25	DH	mg/L	25	6/30/2020 1:39:04 PM

Analytical Report

Work Order: **2006473**
Date Reported: **7/8/2020**

Client: Friedman & Bruya
Collection Date: 6/27/2020 1:00:00 PM
Project: 006483
Lab ID: 2006473-003
Matrix: Water
Client Sample ID: IW04-20200627

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Ion Chromatography by EPA Method 300.0				Batch ID: 28881		Analyst: SS
Nitrate (as N)	ND	0.100	H	mg/L	1	7/6/2020 11:48:00 PM
Sulfate	0.492	0.300		mg/L	1	7/6/2020 11:48:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R60285		Analyst: SS
Total Organic Carbon	88.7	2.00	D	mg/L	4	7/6/2020 2:06:00 PM
Total Alkalinity by SM 2320B				Batch ID: R60340		Analyst: WF
Alkalinity, Total (As CaCO3)	517	2.50		mg/L	1	7/7/2020 1:25:41 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R60194		Analyst: SS
Ferrous Iron	25.3	1.25	DH	mg/L	25	6/30/2020 1:39:04 PM

Work Order: 2006473
CLIENT: Friedman & Bruya
Project: 006483

QC SUMMARY REPORT

Total Alkalinity by SM 2320B

Sample ID: **MB-R60340**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **7/7/2020**	RunNo: **60340**
Client ID: **MBLKW**	Batch ID: **R60340**		Analysis Date: **7/7/2020**	SeqNo: **1208553**

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-R60340**	SampType: **LCS**	Units: **mg/L**	Prep Date: **7/7/2020**	RunNo: **60340**
Client ID: **LCSW**	Batch ID: **R60340**		Analysis Date: **7/7/2020**	SeqNo: **1208554**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	103	2.50	100.0	0	103	94.3	116				

Sample ID: **2006471-001BDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **7/7/2020**	RunNo: **60340**
Client ID: **BATCH**	Batch ID: **R60340**		Analysis Date: **7/7/2020**	SeqNo: **1208556**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	117	2.50						114.6	2.11	20	

Sample ID: **2006473-003CDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **7/7/2020**	RunNo: **60340**
Client ID: **IW04-20200627**	Batch ID: **R60340**		Analysis Date: **7/7/2020**	SeqNo: **1208568**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	507	2.50						516.8	1.90	20	

Work Order: 2006473
CLIENT: Friedman & Bruya
Project: 006483

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **MB-R60194**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **MBLKW**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205310**

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-R60194**	SampType: **LCS**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **LCSW**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205311**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.457	0.0500	0.4000	0	114	85	115				

Sample ID: **2006471-001DDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **BATCH**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205313**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.0602	0.0500						0.04380	31.5	20	H

Sample ID: **2006471-001DMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **BATCH**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205314**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.591	0.0500	0.4000	0.04380	137	70	130				SH

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: **2006471-001DMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **BATCH**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205315**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.618	0.0500	0.4000	0.04380	143	70	130	0.5914	4.34	20	SH

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2006473
CLIENT: Friedman & Bruya
Project: 006483

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **2006473-001DDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **IW61-20200627**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205327**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	39.3	1.25						38.15	2.96	20	DH

Sample ID: **2006473-001DMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **IW61-20200627**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205328**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	51.9	1.25	10.00	38.15	138	70	130				DSH

NOTES:
S - Analyte concentration was too high for accurate spike recovery(ies).

Work Order: 2006473
CLIENT: Friedman & Bruya
Project: 006483

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **MB-28881**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **MBLKW**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208056**

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-28881**	SampType: **LCS**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **LCSW**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208058**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.709	0.100	0.7500	0	94.5	90	110				
Sulfate	3.61	0.300	3.750	0	96.3	90	110				

Sample ID: **2006460-006BDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **BATCH**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208064**

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	4.23	0.300						4.230	0.0946	20	

Sample ID: **2006460-006BMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **BATCH**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208065**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.746	0.100	0.7500	0.07500	89.5	80	120				H
Sulfate	8.06	0.300	3.750	4.230	102	80	120				

Sample ID: **2006460-006BMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **BATCH**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208066**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.755	0.100	0.7500	0.07500	90.7	80	120	0.7460	1.20	20	H

Work Order: 2006473
CLIENT: Friedman & Bruya
Project: 006483

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **2006460-006BMSD**	SampType: **MSD**			Units: **mg/L**		Prep Date: **7/2/2020**			RunNo: **60309**	
Client ID: **BATCH**	Batch ID: **28881**					Analysis Date: **7/2/2020**			SeqNo: **1208066**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	8.08	0.300	3.750	4.230	103	80	120	8.056	0.322	20	

Sample ID: **2007026-001CDUP**	SampType: **DUP**			Units: **mg/L**		Prep Date: **7/2/2020**			RunNo: **60309**	
Client ID: **BATCH**	Batch ID: **28881**					Analysis Date: **7/2/2020**			SeqNo: **1208089**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.120	0.100						0.1210	0.830	20	
Sulfate	10.6	0.300						10.46	0.818	20	

Sample ID: **2007026-001CMS**	SampType: **MS**			Units: **mg/L**		Prep Date: **7/2/2020**			RunNo: **60309**	
Client ID: **BATCH**	Batch ID: **28881**					Analysis Date: **7/3/2020**			SeqNo: **1208090**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.803	0.100	0.7500	0.1210	90.9	80	120				
Sulfate	14.4	0.300	3.750	10.46	106	80	120				

Work Order: 2006473
CLIENT: Friedman & Bruya
Project: 006483

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **MB-R60285** SampType: **MBLK** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **MBLKW** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207559**

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-R60285** SampType: **LCS** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **LCSW** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207560**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.00	0.500	5.000	0	99.9	90.2	120				

Sample ID: **2006438-001ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **BATCH** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207562**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	96.4	0.500						96.37	0.0425	20	E

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

Sample ID: **2006438-001AMS** SampType: **MS** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **BATCH** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207563**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	102	0.500	5.000	96.37	108	86.4	121				E

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

Sample ID: **2006438-001AMSD** SampType: **MSD** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **BATCH** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207564**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	102	0.500	5.000	96.37	110	86.4	121	101.8	0.0992	30	E

Work Order: 2006473
CLIENT: Friedman & Bruya
Project: 006483

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **2006438-001AMSD** SampType: **MSD** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **BATCH** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207564**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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

Sample ID: **2006473-003EDUP** SampType: **DUP** Units: **mg/L** Prep Date: **7/3/2020** RunNo: **60285**
Client ID: **IW04-20200627** Batch ID: **R60285** Analysis Date: **7/3/2020** SeqNo: **1207577**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	90.4	0.500						90.31	0.0830	20	E

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

Sample ID: **2006473-003EMS** SampType: **MS** Units: **mg/L** Prep Date: **7/3/2020** RunNo: **60285**
Client ID: **IW04-20200627** Batch ID: **R60285** Analysis Date: **7/3/2020** SeqNo: **1207578**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	94.6	0.500	5.000	90.31	86.5	86.4	121				E

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

Work Order: 2006473
CLIENT: Friedman & Bruya
Project: 006483

QC SUMMARY REPORT

Dissolved Gases by RSK-175

Sample ID: **MB-R60188** SampType: **MBLK** Units: **mg/L** Prep Date: **6/30/2020** RunNo: **60188**
Client ID: **MBLKW** Batch ID: **R60188** Analysis Date: **6/30/2020** SeqNo: **1205568**

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-R60188** SampType: **LCS** Units: **mg/L** Prep Date: **6/30/2020** RunNo: **60188**
Client ID: **LCSW** Batch ID: **R60188** Analysis Date: **6/30/2020** SeqNo: **1205567**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	1,060	0.00863	1,000	0	106	70	130				
Ethene	1,030	0.0151	1,000	0	103	70	130				
Ethane	1,060	0.0162	1,000	0	106	70	130				

Sample ID: **2006471-001AREP** SampType: **REP** Units: **mg/L** Prep Date: **6/30/2020** RunNo: **60188**
Client ID: **BATCH** Batch ID: **R60188** Analysis Date: **6/30/2020** SeqNo: **1205537**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	0.108	0.00863						0.1066	1.05	30	
Ethene	ND	0.0151						0		30	
Ethane	ND	0.0162						0		30	

Sample ID: **2006472-005AREP** SampType: **REP** Units: **mg/L** Prep Date: **6/30/2020** RunNo: **60188**
Client ID: **BATCH** Batch ID: **R60188** Analysis Date: **6/30/2020** SeqNo: **1205551**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	6.91	0.00863						5.522	22.3	30	E
Ethene	ND	0.0151						0		30	
Ethane	ND	0.0162						0		30	

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

Sample Log-In Check List

Client Name:	**FB**	Work Order Number:	**2006473**
Logged by:	**Carissa True**	Date Received:	**6/29/2020 1:14:00 PM**

Chain of Custody

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

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 Present	☑
6.	Was an attempt made to cool the samples?	Yes	☑	No ☐	NA	☐
7.	Were all items received at a temperature of >2°C to 6°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: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler 1	4.1
Cooler 2	5.9
Sample 1	3.8
Sample 2	5.6

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

SUBCONTRACT SAMPLE CHAIN OF CUSTODY 2006473

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 merdahl@friedmanandbruya.com

SUBCONTRACTER Fremont

PROJECT NAME/NO.	PO #
006483	A-280

REMARKS

Please Email Results

TURNAROUND TIME

☒ Standard TAT

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

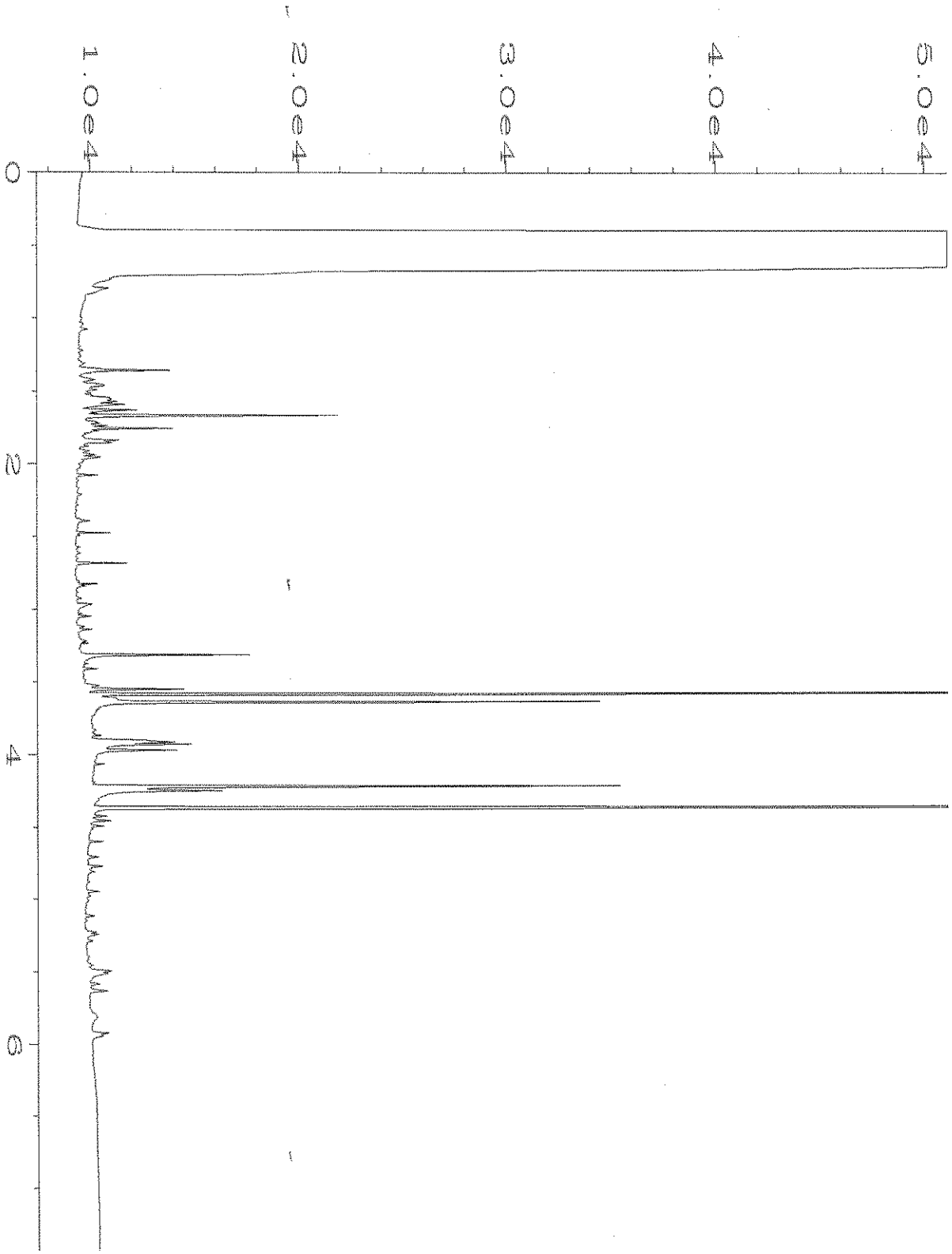
☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Dioxins/Furans	EPH	VPH	RSK, MEE	Sulfide/Sulfate	Alkalinity	Ferrous Iron	TOC			Notes
IW61-20200627		6/27/20	1005	H_2O					X	X	X	X	X			
IW50-20200627		↓	1155	|					X	X	X	X	X			
IW04-20200627		↓	1300	|						X	X	X	X			

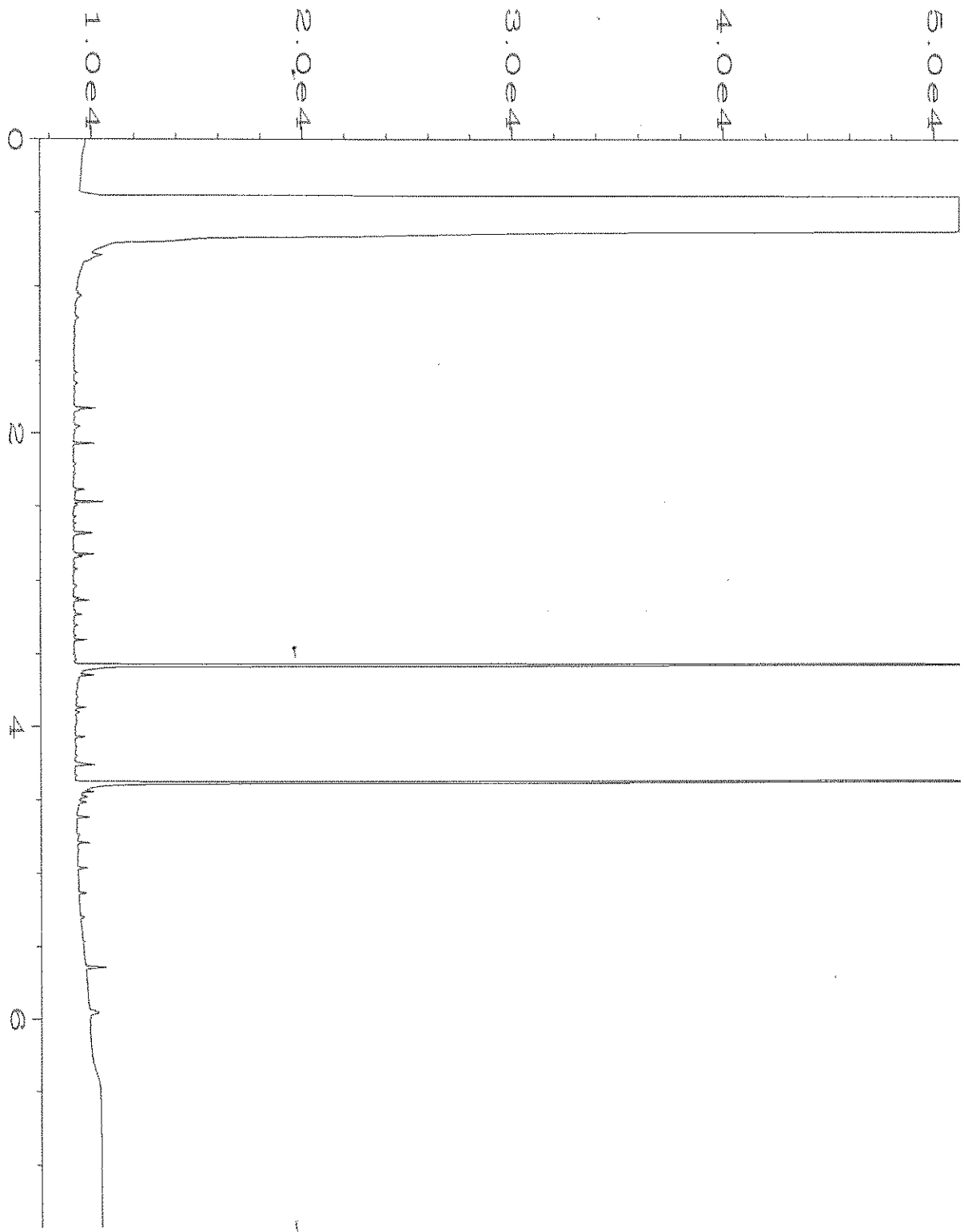
Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Michael Erdahl	Friedman & Bruya	6/29/20	12:15
Received by:		Sora Becker-Meyer	FAI	6/29/20	1314
Relinquished by:					
Received by:					

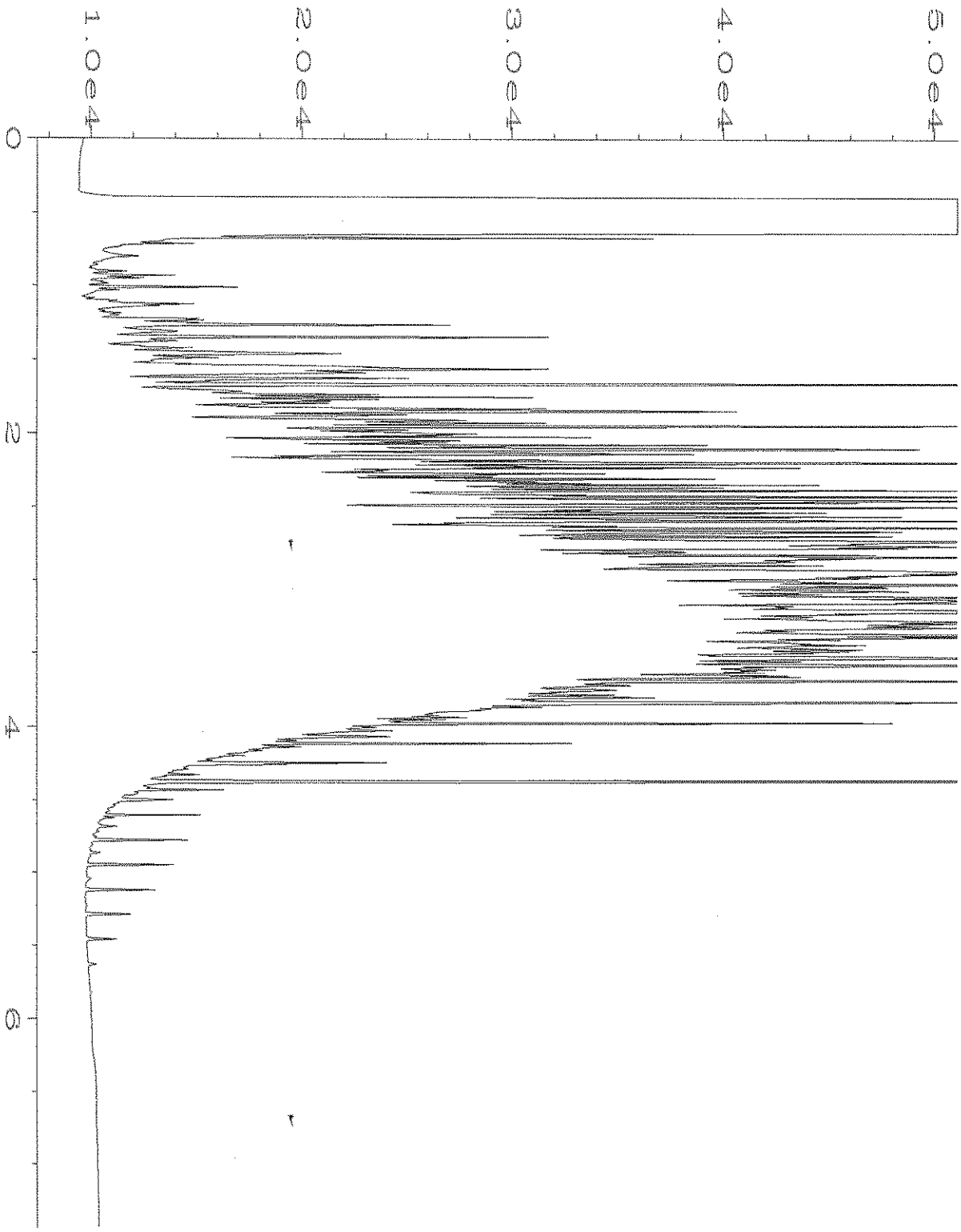


Data File Name : C:\HPCHEM\1\DATA\06-30-20\008F0301.D
Operator : TL
Instrument : GC1
Sample Name : 006483-02
Run Time Bar Code:
Acquired on : 30 Jun 20 11:53 AM
Report Created on: 01 Jul 20 07:36 AM

Page Number : 1
Vial Number : 8
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\06-30-20\006F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 6
Sample Name	: 00-1485 mb2	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 30 Jun 20 11:32 AM	Instrument Method	: DX.MTH
Report Created on	: 01 Jul 20 07:48 AM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\06-30-20\003F0201.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 3
Sample Name	: 500 Dx 60-170C	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 30 Jun 20 05:53 AM	Instrument Method	: DX.MTH
Report Created on	: 01 Jul 20 07:36 AM	Analysis Method	: DX.MTH

SAMPLE CHAIN OF CUSTODY

006483

ME 06/29/20

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): [signature]

PROJECT NAME/NO.: Troy Laundry Property

PO #: 0731-004-05

REMARKS: EIM Y

TURNAROUND TIME: AT 3 Day

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
MW61-20200627	MW61	—	01 AF	6/27/20	1605	W	12				X	X	X	X	X	X	
MW91-20200627	MW91	—	02 AF	6/27/20	1105	W	7	X	X	X	X						
MW50-20200627	MW50	—	03 AF	6/27/20	1155	W	12				X	X	X	X	X	X	
MW04-20200627	MW04	—	04 AF	6/27/20	1300	W	9				X		X	X	X	X	
MW06-20200627	MW06	—	05 AF	6/27/20	1400	W	3				X						
Trip Blank			06 AB	—	—	W	2										Added at lab (NP) 6/29/20

AHM 06/27/20

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]	Sarah Wette	6/29/20	SFB.	
Received by:	[signature]	CHRIS KNOWLES	FDR-OFFICE	6/29	9:30a
Relinquished by:					
Received by:	[signature]	Nhan Phan	FedEx	6/29/20	10:15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 10, 2020

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 June 29, 2020 from the SOU_ 0731-004-05_ 20200629, F&BI 006484 project. There are 26 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: Sarah Welter, Logan Schumacher
SOU0710R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 29, 2020 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_ 0731-004-05_ 20200629, F&BI 006484 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
006484 -01	MW23-20200627
006484 -02	MW22-20200627
006484 -03	MW21-20200627
006484 -04	MW24-20200627
006484 -05	MW20-20200627
006484 -06	MW17-20200627
006484 -07	MW18-20200627
006484 -08	MW25-20200627
006484 -09	MW99-20200627
006484 -10	MW19-20200627

Samples MW23-20200627, MW22-20200627, MW24-20200627, MW18-20200627, MW25-20200627, and MW19-20200627 were sent to Fremont Analytical for sulfate, nitrate, alkalinity, and ferrous iron analyses. In addition, samples MW23-20200627, MW22-20200627, MW21-20200627, MW24-20200627, MW18-20200627, MW25-20200627, and MW19-20200627 were sent to Fremont for dissolved gasses analyses. In addition, samples MW23-20200627, MW22-20200627, MW24-20200627, MW18-20200627, and MW25-20200627 were sent to Fremont Analytical for TOC analysis. The report is enclosed.

All quality control requirements were acceptable.

Date of Report: 07/10/20
Date Received: 06/29/20
Project: SOU_ 0731-004-05_ 20200629, F&BI 006484
Date Extracted: 06/30/20
Date Analyzed: 06/30/20

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)
MW23-20200627 006484-01	<1	<1	<1	<3	<100	90
MW22-20200627 006484-02	<1	<1	<1	4.3	340	91
MW21-20200627 006484-03	1.8	5.9	<1	19	1,100	93
MW24-20200627 006484-04	<1	<1	<1	<3	<100	90
MW20-20200627 006484-05	<1	<1	<1	<3	<100	93
MW17-20200627 006484-06	<1	<1	<1	<3	<100	92
MW18-20200627 006484-07	<1	<1	<1	<3	<100	93
MW25-20200627 006484-08	<1	<1	<1	<3	<100	91
MW99-20200627 006484-09	<1	<1	<1	<3	<100	90
MW19-20200627 006484-10	<1	<1	<1	<3	<100	90
Method Blank 00-1328 MB	<1	<1	<1	<3	<100	90

Date of Report: 07/10/20
Date Received: 06/29/20
Project: SOU_ 0731-004-05_ 20200629, F&BI 006484
Date Extracted: 06/30/20
Date Analyzed: 06/30/20 and 07/01/20

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)
MW23-20200627 006484-01	360 x	<250	107
MW22-20200627 006484-02	25,000 x	1,100 x	79
MW21-20200627 006484-03 1/10	120,000 x	3,500 x	ip
MW24-20200627 006484-04	700 x	570 x	ip
MW20-20200627 006484-05	91 x	<250	107
MW17-20200627 006484-06	<50	<250	102
MW18-20200627 006484-07	260 x	<250	98
MW25-20200627 006484-08	130 x	<250	102
MW99-20200627 006484-09	190 x	<250	115
MW19-20200627 006484-10	150 x	380 x	109
Method Blank 00-1529 MB	<50	<250	107

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW23-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-01 x100
Date Analyzed:	07/02/20	Data File:	006484-01 x100.122
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	9,070
Manganese	16,500

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW22-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-02 x100
Date Analyzed:	07/02/20	Data File:	006484-02 x100.054
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	8,000
Manganese	9,810

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW24-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-04 x100
Date Analyzed:	07/02/20	Data File:	006484-04 x100.123
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	9,830
Manganese	21,900

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW18-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-07 x100
Date Analyzed:	07/02/20	Data File:	006484-07 x100.057
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	14,300
Manganese	8,960

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW25-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-08 x100
Date Analyzed:	07/02/20	Data File:	006484-08 x100.063
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	15,100
Manganese	5,290

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW19-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-10 x100
Date Analyzed:	07/02/20	Data File:	006484-10 x100.064
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	18,100
Manganese	14,000

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	I0-386 mb
Date Analyzed:	07/01/20	Data File:	I0-386 mb.169
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 8260D

Client Sample ID:	MW23-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-01
Date Analyzed:	07/01/20	Data File:	070122.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	102	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.76
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	30
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW22-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-02
Date Analyzed:	07/01/20	Data File:	070123.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	97	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.99
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	42
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.3
Tetrachloroethene	1.4

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW21-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-03
Date Analyzed:	07/01/20	Data File:	070124.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	97	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.49
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	13
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW24-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-04
Date Analyzed:	07/01/20	Data File:	070125.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	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.76
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	61
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW20-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-05
Date Analyzed:	07/01/20	Data File:	070126.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	95	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	6.1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.2
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW17-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-06
Date Analyzed:	07/01/20	Data File:	070127.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	97	63	127
4-Bromofluorobenzene	100	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 8260D

Client Sample ID:	MW18-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-07
Date Analyzed:	07/01/20	Data File:	070128.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	95	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	1.5
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	27
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW25-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-08
Date Analyzed:	07/01/20	Data File:	070129.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	57	121
Toluene-d8	94	63	127
4-Bromofluorobenzene	98	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.73
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 8260D

Client Sample ID:	MW99-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-09
Date Analyzed:	07/01/20	Data File:	070130.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	96	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.67
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	37
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW19-20200627	Client:	SoundEarth Strategies
Date Received:	06/29/20	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	006484-10
Date Analyzed:	07/01/20	Data File:	070131.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	96	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.78
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	41
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_ 0731-004-05_ 20200629
Date Extracted:	07/01/20	Lab ID:	00-1449 mb
Date Analyzed:	07/01/20	Data File:	070112.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	101	63	127
4-Bromofluorobenzene	104	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: 07/10/20
Date Received: 06/29/20
Project: SOU_ 0731-004-05_ 20200629, F&BI 006484

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: 006483-02 (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	106	65-118
Toluene	ug/L (ppb)	50	105	72-122
Ethylbenzene	ug/L (ppb)	50	107	73-126
Xylenes	ug/L (ppb)	150	105	74-118
Gasoline	ug/L (ppb)	1,000	104	69-134

Date of Report: 07/10/20
Date Received: 06/29/20
Project: SOU_ 0731-004-05_ 20200629, F&BI 006484

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	88	96	63-142	9

Date of Report: 07/10/20
Date Received: 06/29/20
Project: SOU_ 0731-004-05_ 20200629, F&BI 006484

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

Laboratory Code: 006519-01 (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	412	124	129	70-130	4
Manganese	ug/L (ppb)	20	49.2	109	109	75-125	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	94	85-115
Manganese	ug/L (ppb)	20	99	85-115

Date of Report: 07/10/20
Date Received: 06/29/20
Project: SOU_ 0731-004-05_ 20200629, F&BI 006484

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

Laboratory Code: 006484-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	0.66	106	36-166
Chloroethane	ug/L (ppb)	50	<1	96	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	103	60-136
Methylene chloride	ug/L (ppb)	50	<5	96	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	99	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	97	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	30	95 b	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	79	48-149
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	92	60-146
Trichloroethene	ug/L (ppb)	50	<1	91	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	103	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	117	125	50-154	7
Chloroethane	ug/L (ppb)	50	112	119	58-146	6
1,1-Dichloroethene	ug/L (ppb)	50	111	119	67-136	7
Methylene chloride	ug/L (ppb)	50	107	115	39-148	7
trans-1,2-Dichloroethene	ug/L (ppb)	50	106	113	68-128	6
1,1-Dichloroethane	ug/L (ppb)	50	106	113	74-135	6
cis-1,2-Dichloroethene	ug/L (ppb)	50	102	107	74-136	5
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	89	93	66-129	4
1,1,1-Trichloroethane	ug/L (ppb)	50	105	110	74-142	5
Trichloroethene	ug/L (ppb)	50	99	105	67-133	6
Tetrachloroethene	ug/L (ppb)	50	96	103	76-121	7

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

RE: 006484
Work Order Number: 2006472

July 08, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 7 sample(s) on 6/29/2020 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: *07/08/2020*

CLIENT: Friedman & Bruya
Project: 006484
Work Order: 2006472

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2006472-001	MW23-20200627	06/27/2020 8:50 AM	06/29/2020 1:14 PM
2006472-002	MW22-20200627	06/27/2020 9:32 AM	06/29/2020 1:14 PM
2006472-003	MW21-20200627	06/29/2020 11:30 AM	06/29/2020 1:14 PM
2006472-004	MW24-20200627	06/27/2020 12:45 PM	06/29/2020 1:14 PM
2006472-005	MW18-20200627	06/27/2020 3:10 PM	06/29/2020 1:14 PM
2006472-006	MW25-20200627	06/27/2020 3:45 PM	06/29/2020 1:14 PM
2006472-007	MW19-20200627	06/27/2020 4:24 PM	06/29/2020 1:14 PM

Case Narrative

WO#: **2006472**
Date: **7/8/2020**

CLIENT: Friedman & Bruya
Project: 006484

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: **2006472**
Date Reported: **7/8/2020**

Client: Friedman & Bruya
Collection Date: 6/27/2020 8:50:00 AM
Project: 006484
Lab ID: 2006472-001
Matrix: Water
Client Sample ID: **MW23-20200627**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R60188		Analyst: WC
Methane	4.59	0.863	D	mg/L	100	6/30/2020 10:34:00 AM
Ethene	ND	0.0151		mg/L	1	6/30/2020 9:32:00 AM
Ethane	ND	0.0162		mg/L	1	6/30/2020 9:32:00 AM
Ion Chromatography by EPA Method 300.0				Batch ID: 28881		Analyst: SS
Nitrate (as N)	ND	0.100	H	mg/L	1	7/6/2020 8:21:00 PM
Sulfate	0.508	0.300		mg/L	1	7/6/2020 8:21:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R60285		Analyst: SS
Total Organic Carbon	6.41	0.500		mg/L	1	7/2/2020 11:38:00 PM
Total Alkalinity by SM 2320B				Batch ID: R60340		Analyst: WF
Alkalinity, Total (As CaCO3)	481	2.50		mg/L	1	7/7/2020 1:25:41 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R60194		Analyst: SS
Ferrous Iron	12.6	1.25	DH	mg/L	25	6/30/2020 1:39:04 PM

Analytical Report

Work Order: **2006472**
Date Reported: **7/8/2020**

Client: Friedman & Bruya
Collection Date: 6/27/2020 9:32:00 AM
Project: 006484
Lab ID: 2006472-002
Matrix: Water
Client Sample ID: MW22-20200627

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R60188		Analyst: WC
Methane	1.78	0.0863	D	mg/L	10	6/30/2020 10:37:00 AM
Ethene	ND	0.0151		mg/L	1	6/30/2020 9:34:00 AM
Ethane	ND	0.0162		mg/L	1	6/30/2020 9:34:00 AM
Ion Chromatography by EPA Method 300.0				Batch ID: 28881		Analyst: SS
Nitrate (as N)	ND	0.200	DH	mg/L	2	7/2/2020 7:26:00 PM
Sulfate	ND	0.600	D	mg/L	2	7/2/2020 7:26:00 PM
NOTES: Diluted due to high levels of non-target analytes.						
Total Organic Carbon by SM 5310C				Batch ID: R60285		Analyst: SS
Total Organic Carbon	206	5.00	D	mg/L	10	7/6/2020 1:11:00 PM
Total Alkalinity by SM 2320B				Batch ID: R60340		Analyst: WF
Alkalinity, Total (As CaCO3)	182	2.50		mg/L	1	7/7/2020 1:25:41 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R60194		Analyst: SS
Ferrous Iron	11.0	1.25	DH	mg/L	25	6/30/2020 1:39:04 PM

Analytical Report

Work Order: **2006472**
Date Reported: **7/8/2020**

Client: Friedman & Bruya
Project: 006484
Lab ID: 2006472-003
Client Sample ID: **MW21-20200627**

Collection Date: 6/29/2020 11:30:00 AM
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R60188		Analyst: WC
Methane	1.79	0.0863	D	mg/L	10	6/30/2020 10:40:00 AM
Ethene	ND	0.0151		mg/L	1	6/30/2020 9:37:00 AM
Ethane	ND	0.0162		mg/L	1	6/30/2020 9:37:00 AM

Analytical Report

Work Order: **2006472**
Date Reported: **7/8/2020**

Client: Friedman & Bruya
Collection Date: 6/27/2020 12:45:00 PM
Project: 006484
Lab ID: 2006472-004
Matrix: Water
Client Sample ID: **MW24-20200627**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R60188		Analyst: WC
Methane	5.46	0.863	D	mg/L	100	6/30/2020 11:06:00 AM
Ethene	ND	0.0151		mg/L	1	6/30/2020 9:39:00 AM
Ethane	ND	0.0162		mg/L	1	6/30/2020 9:39:00 AM
Ion Chromatography by EPA Method 300.0				Batch ID: 28881		Analyst: SS
Nitrate (as N)	ND	0.100	H	mg/L	1	7/6/2020 8:44:00 PM
Sulfate	0.309	0.300		mg/L	1	7/6/2020 8:44:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R60285		Analyst: SS
Total Organic Carbon	8.44	0.500		mg/L	1	7/3/2020 1:33:00 AM
Total Alkalinity by SM 2320B				Batch ID: R60340		Analyst: WF
Alkalinity, Total (As CaCO3)	468	2.50		mg/L	1	7/7/2020 1:25:41 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R60194		Analyst: SS
Ferrous Iron	15.9	1.25	DH	mg/L	25	6/30/2020 1:39:04 PM

Analytical Report

Work Order: **2006472**
Date Reported: **7/8/2020**

Client: Friedman & Bruya
Collection Date: 6/27/2020 3:10:00 PM
Project: 006484
Lab ID: 2006472-005
Matrix: Water
Client Sample ID: **MW18-20200627**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R60188		Analyst: WC
Methane	5.52	0.863	D	mg/L	100	6/30/2020 11:08:00 AM
Ethene	ND	0.0151		mg/L	1	6/30/2020 9:56:00 AM
Ethane	ND	0.0162		mg/L	1	6/30/2020 9:56:00 AM
Ion Chromatography by EPA Method 300.0				Batch ID: 28881		Analyst: SS
Nitrate (as N)	ND	0.100	H	mg/L	1	7/6/2020 9:07:00 PM
Sulfate	0.479	0.300		mg/L	1	7/6/2020 9:07:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R60285		Analyst: SS
Total Organic Carbon	5.95	0.500		mg/L	1	7/3/2020 2:05:00 AM
Total Alkalinity by SM 2320B				Batch ID: R60340		Analyst: WF
Alkalinity, Total (As CaCO3)	536	2.50		mg/L	1	7/7/2020 1:25:41 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R60194		Analyst: SS
Ferrous Iron	19.9	1.25	DH	mg/L	25	6/30/2020 1:39:04 PM

Analytical Report

Work Order: **2006472**
Date Reported: **7/8/2020**

Client: Friedman & Bruya
Collection Date: 6/27/2020 3:45:00 PM
Project: 006484
Lab ID: 2006472-006
Matrix: Water
Client Sample ID: **MW25-20200627**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R60188		Analyst: WC
Methane	10.2	0.863	D	mg/L	100	6/30/2020 11:11:00 AM
Ethene	ND	0.0151		mg/L	1	6/30/2020 10:03:00 AM
Ethane	ND	0.0162		mg/L	1	6/30/2020 10:03:00 AM
Ion Chromatography by EPA Method 300.0				Batch ID: 28881		Analyst: SS
Nitrate (as N)	ND	0.100	H	mg/L	1	7/6/2020 9:30:00 PM
Sulfate	0.473	0.300		mg/L	1	7/6/2020 9:30:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R60285		Analyst: SS
Total Organic Carbon	5.21	0.500		mg/L	1	7/3/2020 2:36:00 AM
Total Alkalinity by SM 2320B				Batch ID: R60340		Analyst: WF
Alkalinity, Total (As CaCO3)	322	2.50		mg/L	1	7/7/2020 1:25:41 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R60194		Analyst: SS
Ferrous Iron	20.1	1.25	DH	mg/L	25	6/30/2020 1:39:04 PM

Analytical Report

Work Order: **2006472**
Date Reported: **7/8/2020**

Client: Friedman & Bruya
Collection Date: 6/27/2020 4:24:00 PM
Project: 006484
Lab ID: 2006472-007
Matrix: Water
Client Sample ID: **MW19-20200627**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R60188		Analyst: WC
Methane	3.41	0.863	D	mg/L	100	6/30/2020 10:52:00 AM
Ethene	ND	0.0151		mg/L	1	6/30/2020 10:07:00 AM
Ethane	ND	0.0162		mg/L	1	6/30/2020 10:07:00 AM
Ion Chromatography by EPA Method 300.0				Batch ID: 28881		Analyst: SS
Nitrate (as N)	ND	0.100	H	mg/L	1	7/6/2020 9:53:00 PM
Sulfate	0.550	0.300		mg/L	1	7/6/2020 9:53:00 PM
Total Alkalinity by SM 2320B				Batch ID: R60340		Analyst: WF
Alkalinity, Total (As CaCO3)	570	2.50		mg/L	1	7/7/2020 1:25:41 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R60194		Analyst: SS
Ferrous Iron	24.3	1.25	DH	mg/L	25	6/30/2020 1:39:04 PM

Work Order: 2006472
CLIENT: Friedman & Bruya
Project: 006484

QC SUMMARY REPORT

Total Alkalinity by SM 2320B

Sample ID: **MB-R60340**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **7/7/2020**	RunNo: **60340**
Client ID: **MBLKW**	Batch ID: **R60340**		Analysis Date: **7/7/2020**	SeqNo: **1208553**

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-R60340**	SampType: **LCS**	Units: **mg/L**	Prep Date: **7/7/2020**	RunNo: **60340**
Client ID: **LCSW**	Batch ID: **R60340**		Analysis Date: **7/7/2020**	SeqNo: **1208554**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	103	2.50	100.0	0	103	94.3	116				

Sample ID: **2006471-001BDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **7/7/2020**	RunNo: **60340**
Client ID: **BATCH**	Batch ID: **R60340**		Analysis Date: **7/7/2020**	SeqNo: **1208556**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	117	2.50						114.6	2.11	20	

Sample ID: **2006473-003CDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **7/7/2020**	RunNo: **60340**
Client ID: **BATCH**	Batch ID: **R60340**		Analysis Date: **7/7/2020**	SeqNo: **1208568**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	507	2.50						516.8	1.90	20	

Work Order: 2006472
CLIENT: Friedman & Bruya
Project: 006484

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **MB-R60194**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **MBLKW**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205310**

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-R60194**	SampType: **LCS**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **LCSW**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205311**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.457	0.0500	0.4000	0	114	85	115				

Sample ID: **2006471-001DDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **BATCH**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205313**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.0602	0.0500						0.04380	31.5	20	H

Sample ID: **2006471-001DMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **BATCH**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205314**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.591	0.0500	0.4000	0.04380	137	70	130				SH

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: **2006471-001DMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **BATCH**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205315**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.618	0.0500	0.4000	0.04380	143	70	130	0.5914	4.34	20	SH

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2006472
CLIENT: Friedman & Bruya
Project: 006484

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **2006473-001DDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **BATCH**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205327**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	39.3	1.25						38.15	2.96	20	DH

Sample ID: **2006473-001DMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **6/30/2020**	RunNo: **60194**
Client ID: **BATCH**	Batch ID: **R60194**		Analysis Date: **6/30/2020**	SeqNo: **1205328**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	51.9	1.25	10.00	38.15	138	70	130				DSH

NOTES:
S - Analyte concentration was too high for accurate spike recovery(ies).

Work Order: 2006472
CLIENT: Friedman & Bruya
Project: 006484

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **MB-28881**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **MBLKW**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208056**

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-28881**	SampType: **LCS**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **LCSW**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208058**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.709	0.100	0.7500	0	94.5	90	110				
Sulfate	3.61	0.300	3.750	0	96.3	90	110				

Sample ID: **2006460-006BDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **BATCH**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208064**

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	4.23	0.300						4.230	0.0946	20	

Sample ID: **2006460-006BMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **BATCH**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208065**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.746	0.100	0.7500	0.07500	89.5	80	120				H
Sulfate	8.06	0.300	3.750	4.230	102	80	120				

Sample ID: **2006460-006BMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60309**
Client ID: **BATCH**	Batch ID: **28881**		Analysis Date: **7/2/2020**	SeqNo: **1208066**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.755	0.100	0.7500	0.07500	90.7	80	120	0.7460	1.20	20	H

Work Order: 2006472
CLIENT: Friedman & Bruya
Project: 006484

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **2006460-006BMSD** SampType: **MSD** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60309**
Client ID: **BATCH** Batch ID: **28881** Analysis Date: **7/2/2020** SeqNo: **1208066**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	8.08	0.300	3.750	4.230	103	80	120	8.056	0.322	20	

Sample ID: **2007026-001CDUP** SampType: **DUP** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60309**
Client ID: **BATCH** Batch ID: **28881** Analysis Date: **7/2/2020** SeqNo: **1208089**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.120	0.100						0.1210	0.830	20	
Sulfate	10.6	0.300						10.46	0.818	20	

Sample ID: **2007026-001CMS** SampType: **MS** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60309**
Client ID: **BATCH** Batch ID: **28881** Analysis Date: **7/3/2020** SeqNo: **1208090**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.803	0.100	0.7500	0.1210	90.9	80	120				
Sulfate	14.4	0.300	3.750	10.46	106	80	120				

Work Order: 2006472
CLIENT: Friedman & Bruya
Project: 006484

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **MB-R60285** SampType: **MBLK** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **MBLKW** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207559**

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-R60285** SampType: **LCS** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **LCSW** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207560**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.00	0.500	5.000	0	99.9	90.2	120				

Sample ID: **2006438-001ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **BATCH** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207562**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	96.4	0.500						96.37	0.0425	20	E

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

Sample ID: **2006438-001AMS** SampType: **MS** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **BATCH** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207563**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	102	0.500	5.000	96.37	108	86.4	121				E

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

Sample ID: **2006438-001AMSD** SampType: **MSD** Units: **mg/L** Prep Date: **7/2/2020** RunNo: **60285**
Client ID: **BATCH** Batch ID: **R60285** Analysis Date: **7/2/2020** SeqNo: **1207564**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	102	0.500	5.000	96.37	110	86.4	121	101.8	0.0992	30	E

Work Order: 2006472
CLIENT: Friedman & Bruya
Project: 006484

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **2006438-001AMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **7/2/2020**	RunNo: **60285**
Client ID: **BATCH**	Batch ID: **R60285**		Analysis Date: **7/2/2020**	SeqNo: **1207564**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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

Sample ID: **2006473-003EDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **7/3/2020**	RunNo: **60285**
Client ID: **BATCH**	Batch ID: **R60285**		Analysis Date: **7/3/2020**	SeqNo: **1207577**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	90.4	0.500						90.31	0.0830	20	E

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

Sample ID: **2006473-003EMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **7/3/2020**	RunNo: **60285**
Client ID: **BATCH**	Batch ID: **R60285**		Analysis Date: **7/3/2020**	SeqNo: **1207578**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	94.6	0.500	5.000	90.31	86.5	86.4	121				E

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

Work Order: 2006472
CLIENT: Friedman & Bruya
Project: 006484

QC SUMMARY REPORT

Dissolved Gases by RSK-175

Sample ID: **MB-R60188** SampType: **MBLK** Units: **mg/L** Prep Date: **6/30/2020** RunNo: **60188**
Client ID: **MBLKW** Batch ID: **R60188** Analysis Date: **6/30/2020** SeqNo: **1205568**

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-R60188** SampType: **LCS** Units: **mg/L** Prep Date: **6/30/2020** RunNo: **60188**
Client ID: **LCSW** Batch ID: **R60188** Analysis Date: **6/30/2020** SeqNo: **1205567**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	1,060	0.00863	1,000	0	106	70	130				
Ethene	1,030	0.0151	1,000	0	103	70	130				
Ethane	1,060	0.0162	1,000	0	106	70	130				

Sample ID: **2006471-001AREP** SampType: **REP** Units: **mg/L** Prep Date: **6/30/2020** RunNo: **60188**
Client ID: **BATCH** Batch ID: **R60188** Analysis Date: **6/30/2020** SeqNo: **1205537**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	0.108	0.00863						0.1066	1.05	30	
Ethene	ND	0.0151						0		30	
Ethane	ND	0.0162						0		30	

Sample ID: **2006472-005AREP** SampType: **REP** Units: **mg/L** Prep Date: **6/30/2020** RunNo: **60188**
Client ID: **MW18-20200627** Batch ID: **R60188** Analysis Date: **6/30/2020** SeqNo: **1205551**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	6.91	0.00863						5.522	22.3	30	E
Ethene	ND	0.0151						0		30	
Ethane	ND	0.0162						0		30	

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

Sample Log-In Check List

Client Name:	**FB**	Work Order Number:	**2006472**
Logged by:	**Carissa True**	Date Received:	**6/29/2020 1:14:00 PM**

Chain of Custody

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

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 Present ☑
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°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: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler 1	4.1
Cooler 2	5.9
Sample 1	3.8
Sample 2	5.6

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

SUBCONTRACT SAMPLE CHAIN OF CUSTODY 2006472

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 merdahl@friedmanandbruya.com

SUBCONTRACTER Fremont

PROJECT NAME/NO.	PO #
006484	A-281

REMARKS

Please Email Results

TURNAROUND TIME

☒ Standard TAT

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

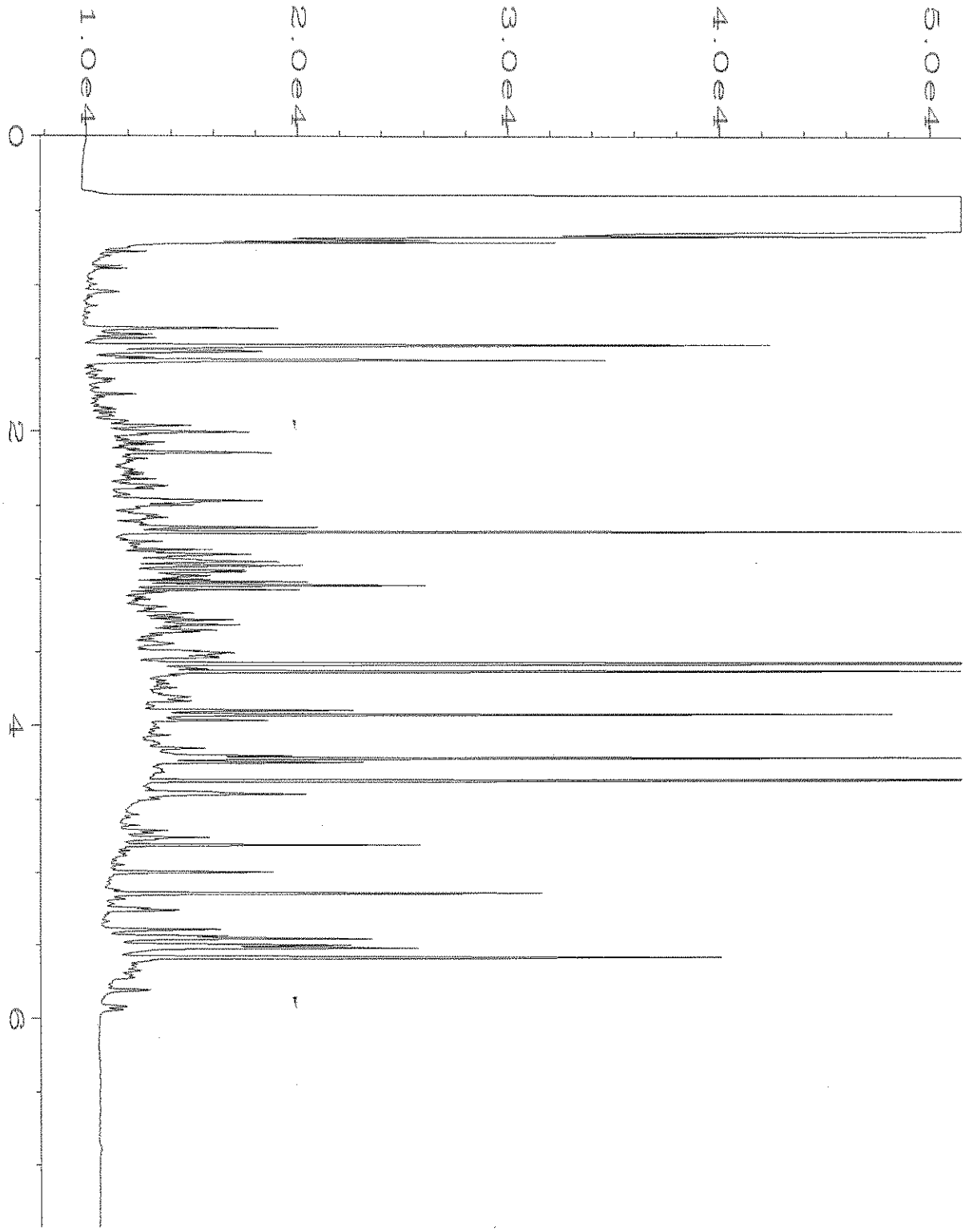
☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Dioxins/Furans	EPH	VPH	RSK, MEE	Sulfate+Nitrate	Alkalinity	Ferrous Iron	TOC			Notes
MW23-20200627		6/27/20	0850	water					X	X	X	X	X			
MW22-20200627			0932						X	X	X	X	X			
MW21-20200627			1130						X							
MW24-20200627			1245						X	X	X	X	X			
MW18-20200627			1510						X	X	X	X	X			
MW25-20200627			1545						X	X	X	X	X			
MW19-20200627			1624						X	X	X	X				

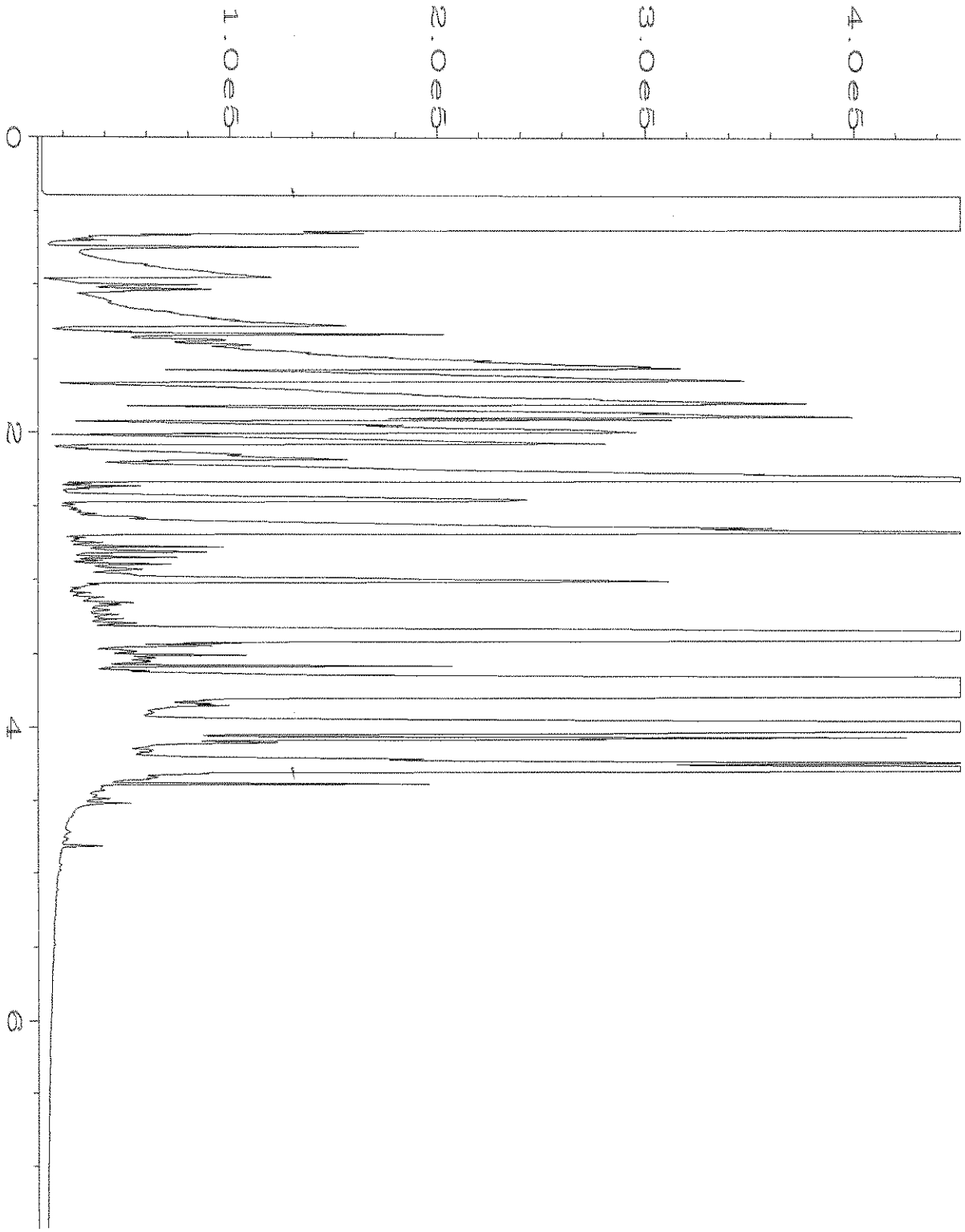
Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Michael Erdahl	Friedman & Bruya	6/29/20	1272
Received by:		Sara Becker-Mayer	FAI	6/29/20	1314
Relinquished by:					
Received by:					



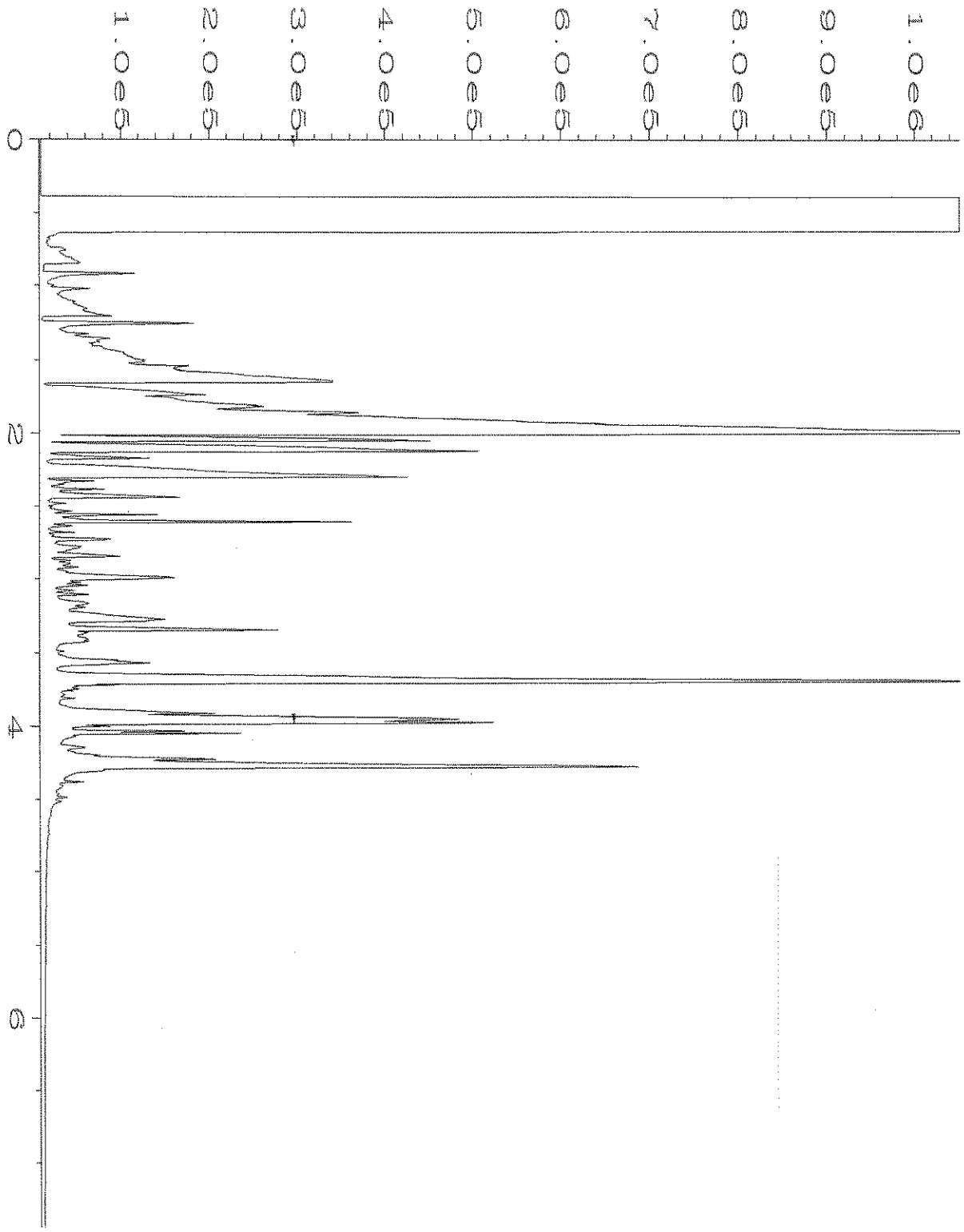
Data File Name : C:\HPCHEM\1\DATA\06-30-20\017F0501.D
Operator : TL
Instrument : GC1
Sample Name : 006484-01
Run Time Bar Code:
Acquired on : 30 Jun 20 03:05 PM
Report Created on: 01 Jul 20 07:33 AM

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 5
Instrument Method: DX.MTH
Analysis Method : DX.MTH



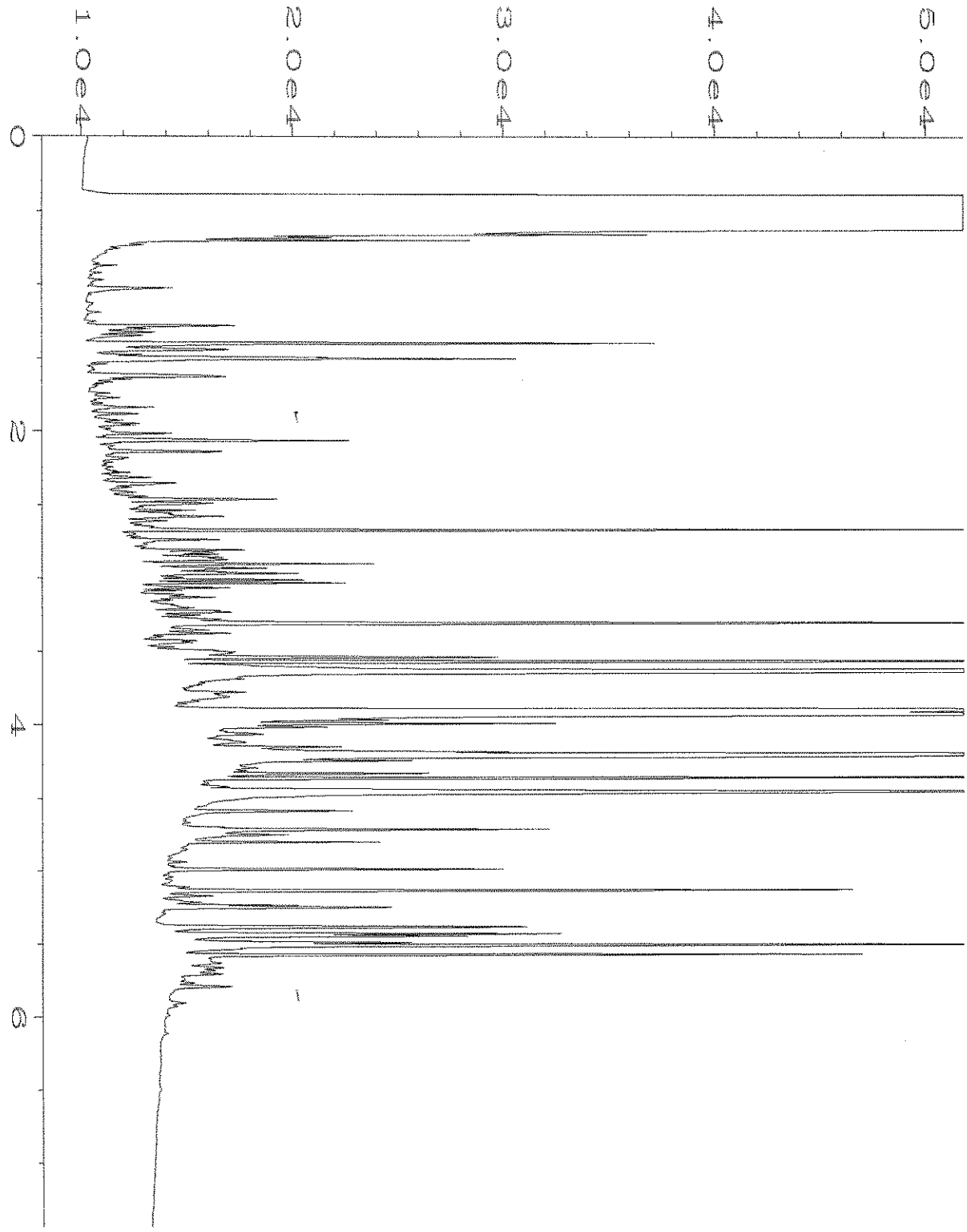
Data File Name : C:\HPCHEM\1\DATA\06-30-20\018F0501.D
Operator : TL
Instrument : GC1
Sample Name : 006484-02
Run Time Bar Code:
Acquired on : 30 Jun 20 03:17 PM
Report Created on: 01 Jul 20 07:34 AM

Page Number : 1
Vial Number : 18
Injection Number : 1
Sequence Line : 5
Instrument Method: DX.MTH
Analysis Method : DX.MTH

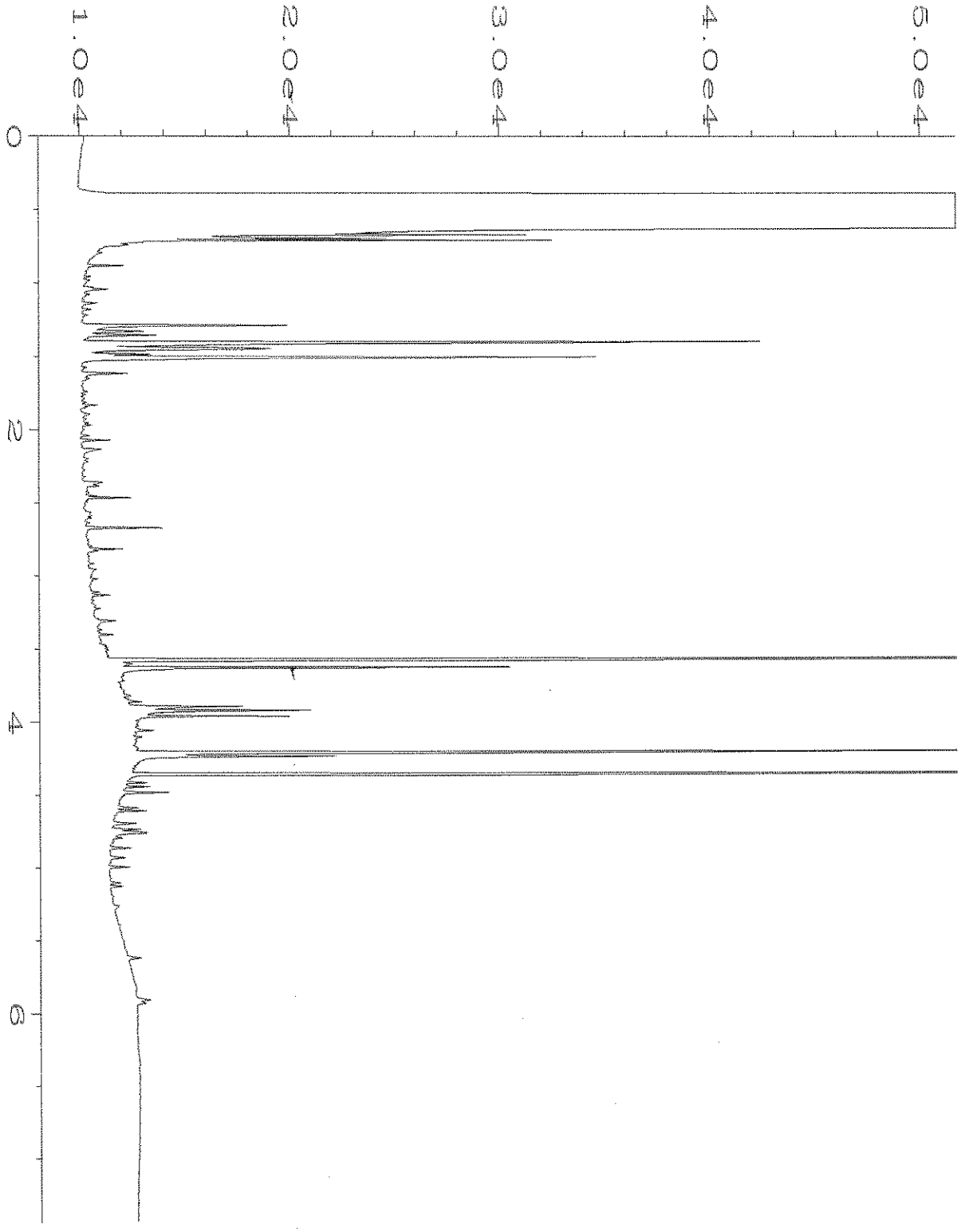


Data File Name : C:\HPCHEM\1\DATA\07-01-20\006F0301.D
Operator : TL
Instrument : GC1
Sample Name : 006484-03 1/10
Run Time Bar Code:
Acquired on : 01 Jul 20 11:06 AM
Report Created on: 02 Jul 20 08:07 AM

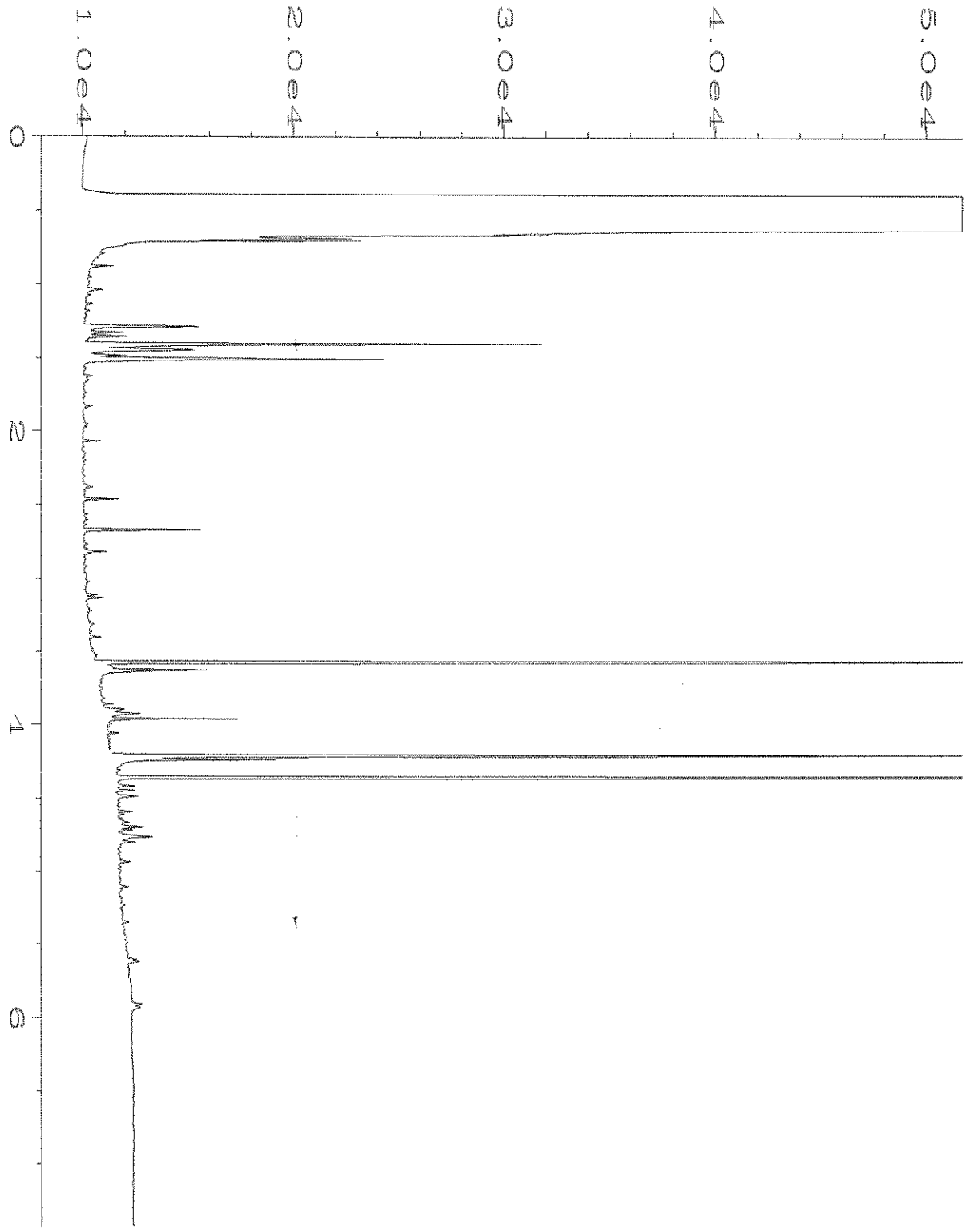
Page Number : 1
Vial Number : 6
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\06-30-20\020F0501.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 20
Sample Name	: 006484-04	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 5
Acquired on	: 30 Jun 20 03:40 PM	Instrument Method	: DX.MTH
Report Created on	: 01 Jul 20 07:35 AM	Analysis Method	: DX.MTH

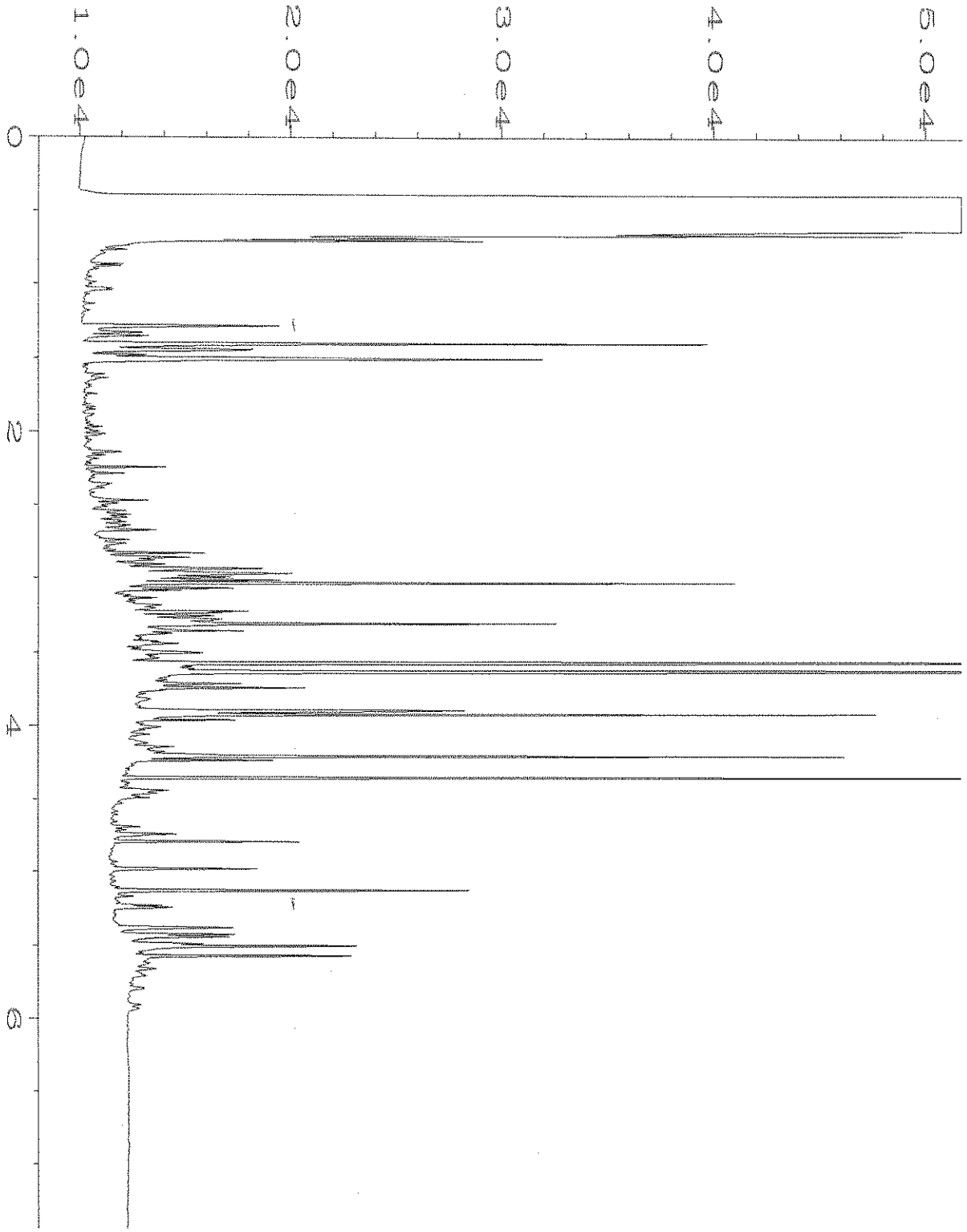


Data File Name	: C:\HPCHEM\1\DATA\06-30-20\021F0501.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 21
Sample Name	: 006484-05	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 5
Acquired on	: 30 Jun 20 03:52 PM	Instrument Method	: DX.MTH
Report Created on	: 01 Jul 20 07:35 AM	Analysis Method	: DX.MTH

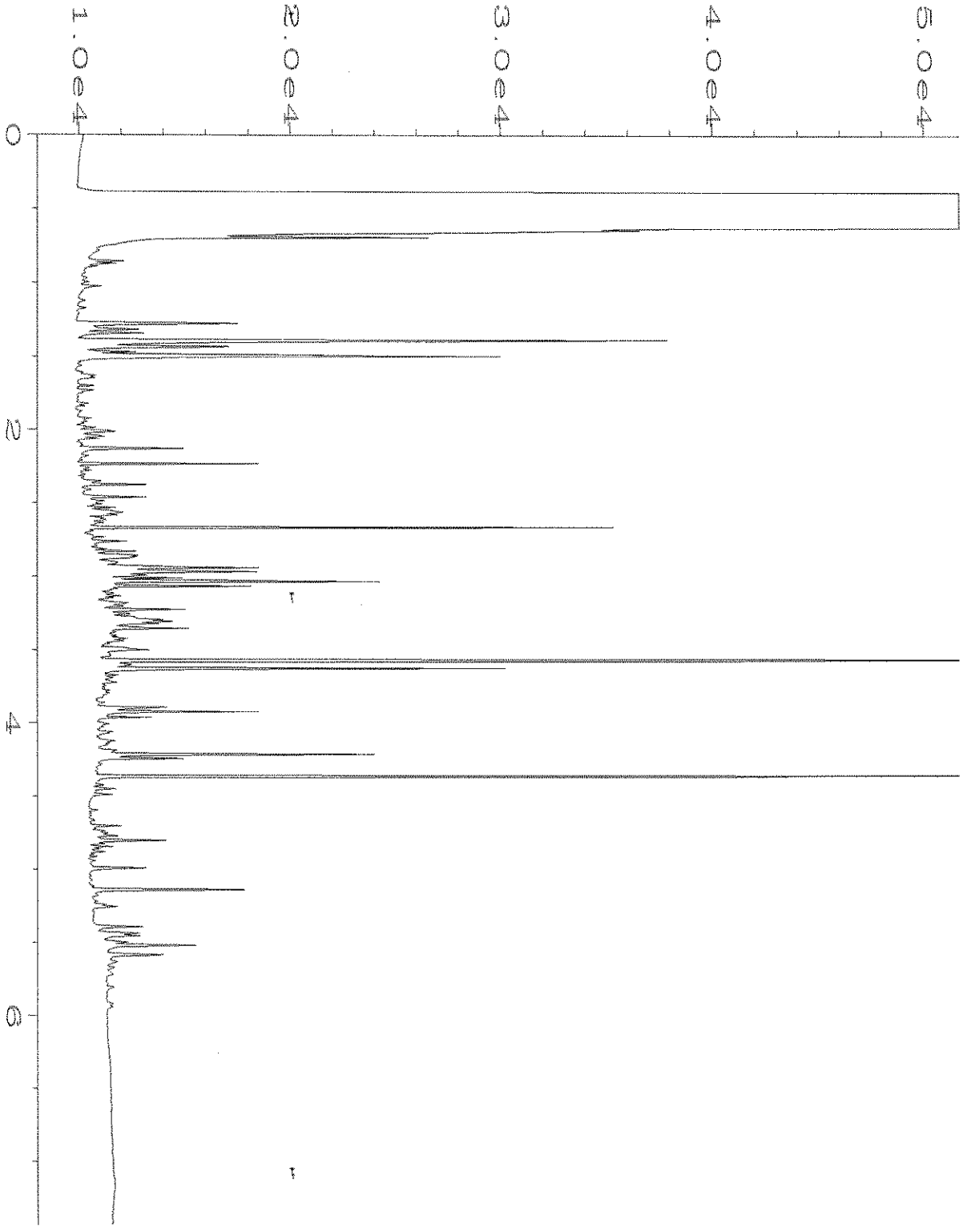


Data File Name : C:\HPCHEM\1\DATA\06-30-20\022F0501.D
Operator : TL
Instrument : GC1
Sample Name : 006484-06
Run Time Bar Code:
Acquired on : 30 Jun 20 04:03 PM
Report Created on: 01 Jul 20 07:36 AM

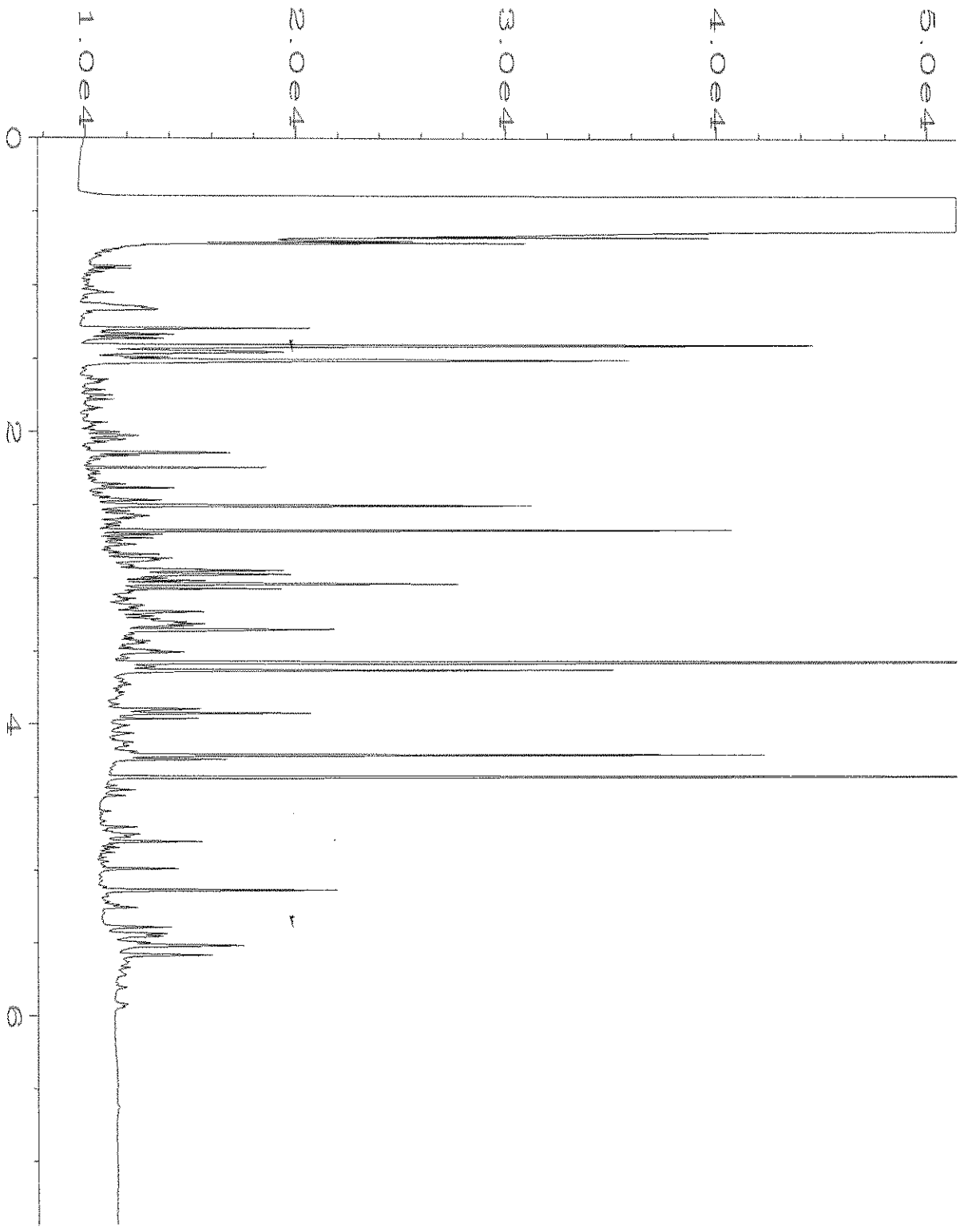
Page Number : 1
Vial Number : 22
Injection Number : 1
Sequence Line : 5
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\06-30-20\023F0501.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 23
Sample Name	: 006484-07	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 5
Acquired on	: 30 Jun 20 04:15 PM	Instrument Method	: DX.MTH
Report Created on	: 01 Jul 20 07:36 AM	Analysis Method	: DX.MTH

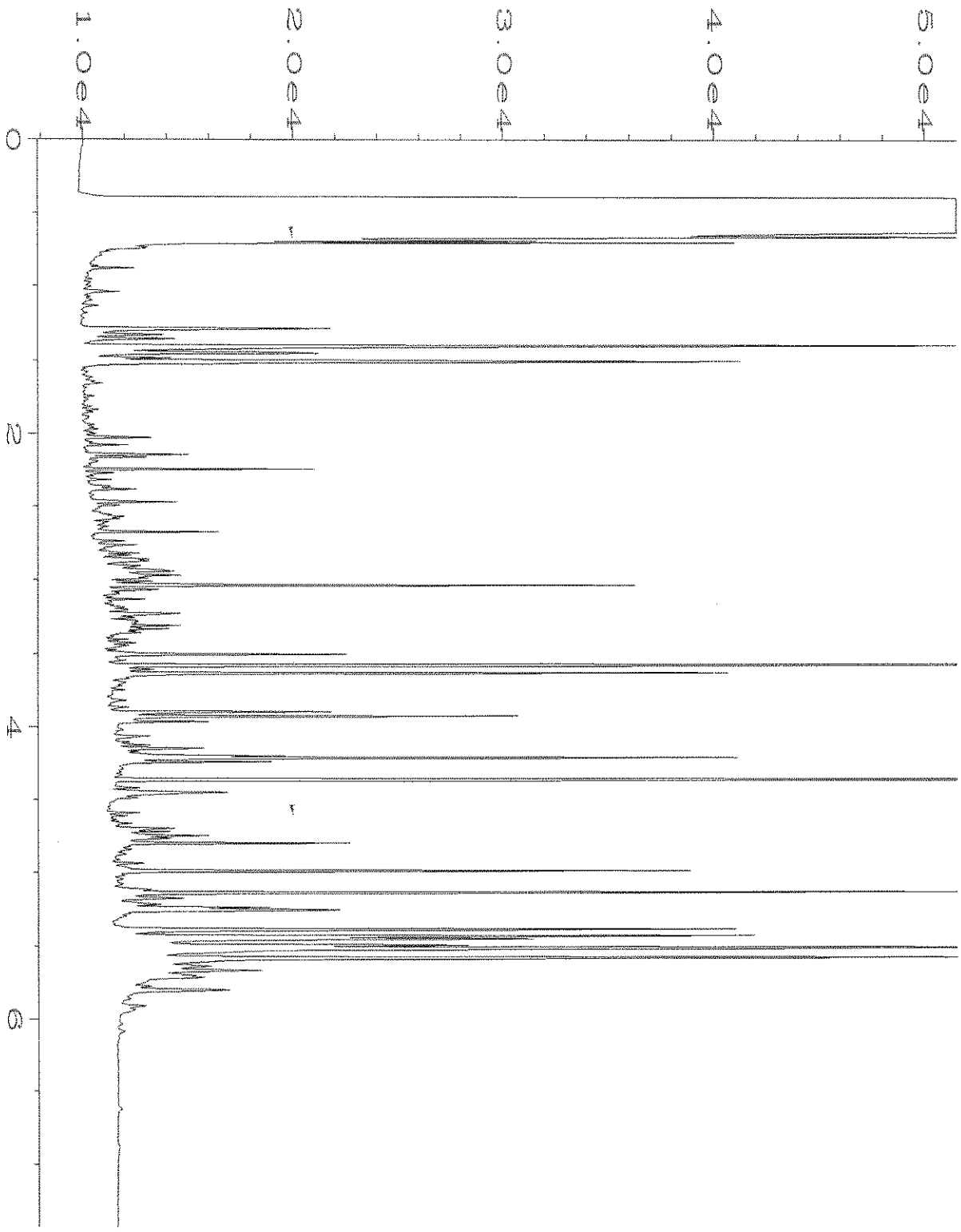


Data File Name	: C:\HPCHEM\1\DATA\06-30-20\024F0701.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 24
Sample Name	: 006484-08	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 7
Acquired on	: 30 Jun 20 05:13 PM	Instrument Method	: DX.MTH
Report Created on	: 01 Jul 20 07:36 AM	Analysis Method	: DX.MTH

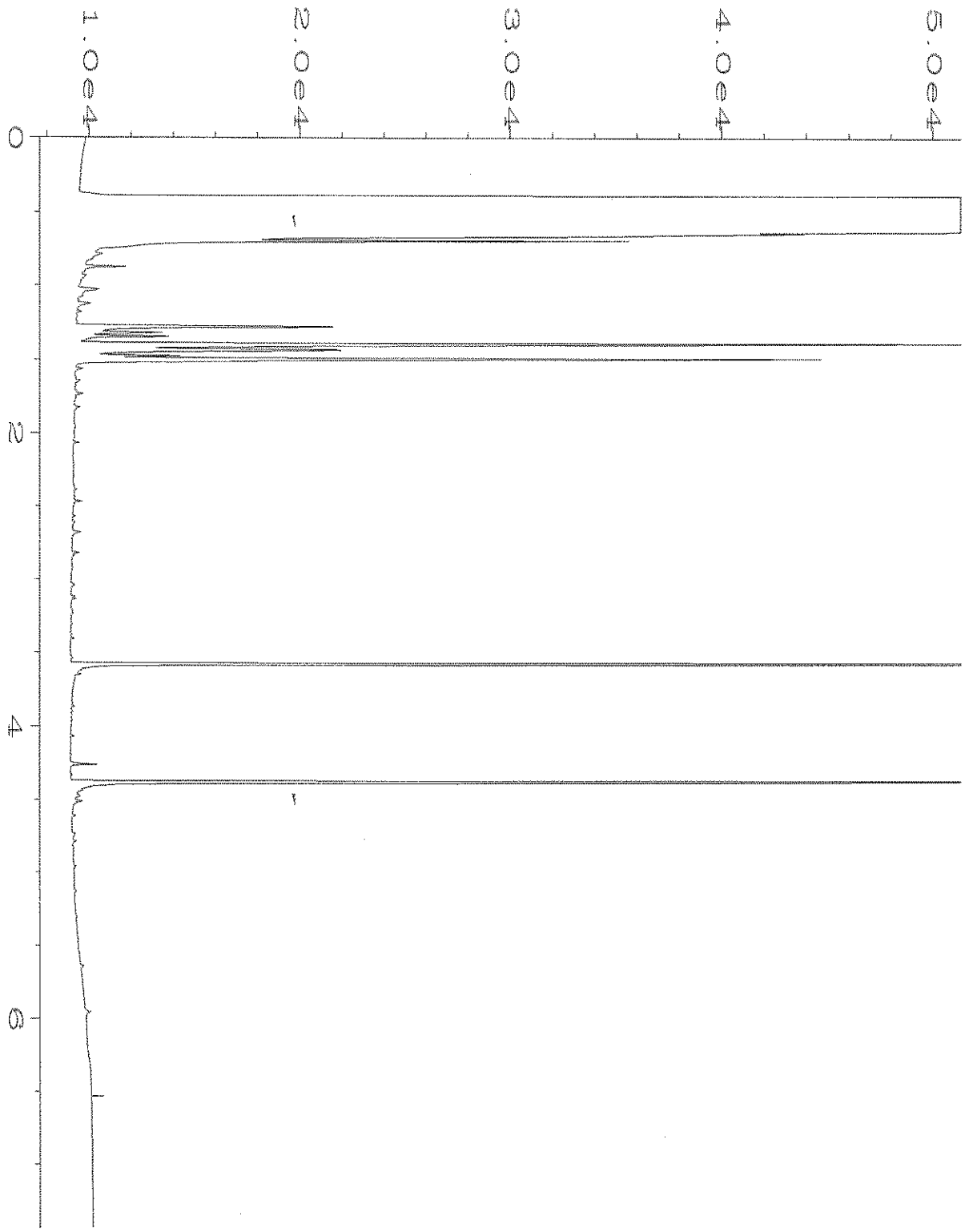


Data File Name : C:\HPCHEM\1\DATA\06-30-20\025F0701.D
Operator : TL
Instrument : GC1
Sample Name : 006484-09
Run Time Bar Code:
Acquired on : 30 Jun 20 05:22 PM
Report Created on: 01 Jul 20 07:36 AM

Page Number : 1
Vial Number : 25
Injection Number : 1
Sequence Line : 7
Instrument Method: DX.MTH
Analysis Method : DX.MTH

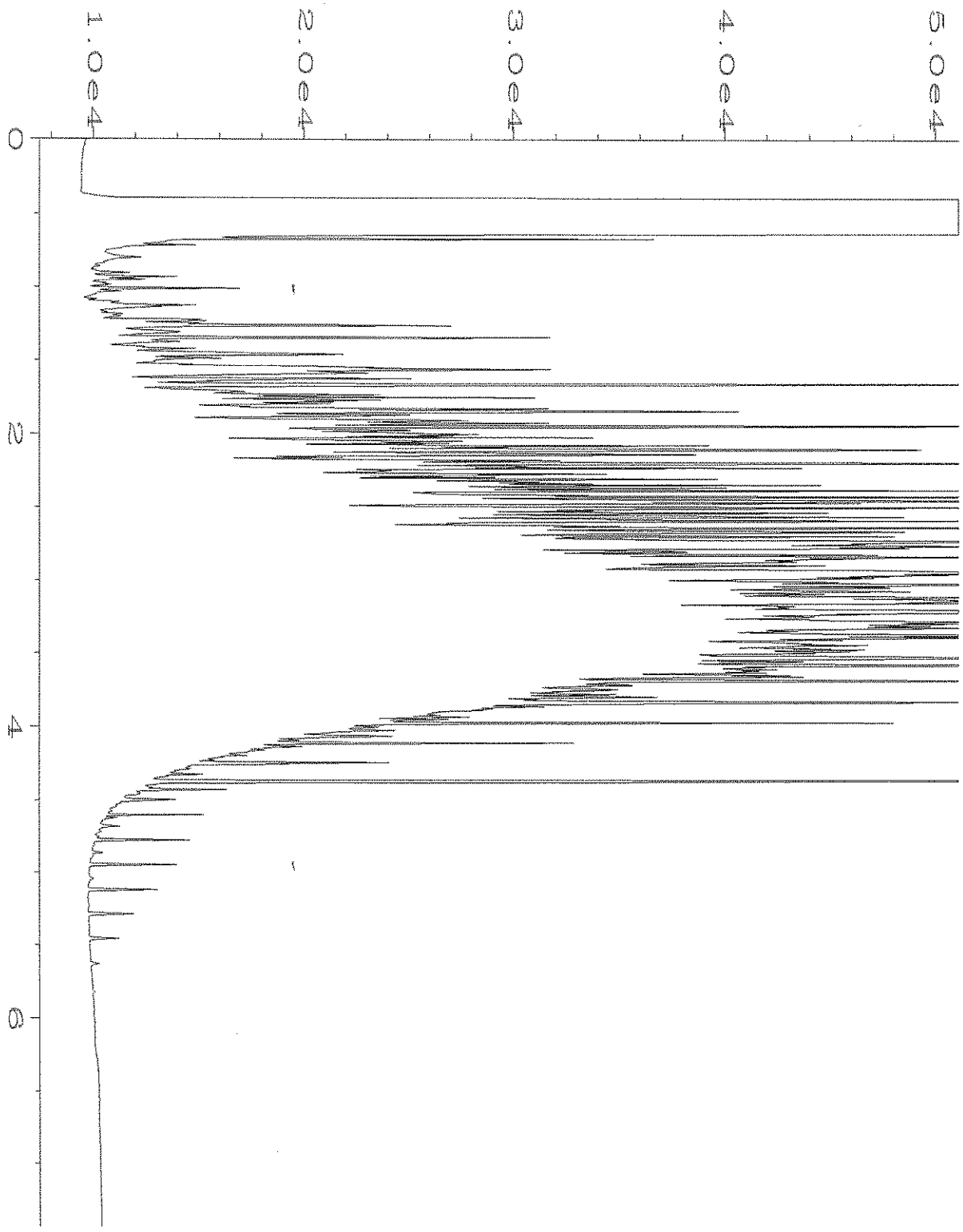


Data File Name	: C:\HPCHEM\1\DATA\06-30-20\026F0701.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 26
Sample Name	: 006484-10	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 7
Acquired on	: 30 Jun 20 05:34 PM	Instrument Method	: DX.MTH
Report Created on	: 01 Jul 20 07:36 AM	Analysis Method	: DX.MTH



Data File Name : C:\HPCHEM\1\DATA\06-30-20\014F0501.D
Operator : TL
Instrument : GC1
Sample Name : 00-1529 mb
Run Time Bar Code:
Acquired on : 30 Jun 20 02:33 PM
Report Created on: 01 Jul 20 07:36 AM

Page Number : 1
Vial Number : 14
Injection Number : 1
Sequence Line : 5
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\1\DATA\06-30-20\003F0201.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 3
Sample Name	: 500 Dx 60-170C	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 2
Acquired on	: 30 Jun 20 05:53 AM	Instrument Method	: DX.MTH
Report Created on	: 01 Jul 20 07:36 AM	Analysis Method	: DX.MTH

SAMPLE CHAIN OF CUSTODY

006484

ME 06/29/20

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)

PROJECT NAME/NO.: Troy Laundry Property

PO #: 0731-004-05

REMARKS

EIM Y

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
MW23-20200627	MW23	–	01	6/27/20	0850	W	16	X	X	X	X	X	X	X	X	X	
MW22-20200627	MW22	–	02	6/27/20	0932	W	16	X	X	X	X	X	X	X	X	X	
MW21-20200627	MW21	–	03	6/27/20	1130	W	13	X	X	X	X	X				X	
MW24-20200627	MW24	–	04	6/27/20	1245	W	16	X	X	X	X	X	X	X	X	X	
MW20-20200627	MW20	–	05	6/27/20	1342	W	7	X	X	X	X						
MW17-20200627	MW17	–	06	6/27/20	1423	W	7	X	X	X	X						
MW18-20200627	MW18	–	07	6/27/20	1510	W	16	X	X	X	X	X	X	X	X	X	
MW25-20200627	MW25	–	08	6/27/20	1545	W	16	X	X	X	X	X	X	X	X	X	
MW99-20200627	MW99	–	09	6/27/20	1200	W	7	X	X	X	X						
MW19-20200627	MW19	–	10	6/27/20	1624	W	13	X	X	X	X	X	X	X	X		

AHM 6/27/20

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	6/29/20	SB	
Received by:	CHRIS KNOWLES		FDX-OFFICE	6/29	9:30a
Relinquished by:					
Received by:		Nhan Phan	FCBJ	6/29/20	10:15

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

July 14, 2020

Sarah Welter, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms Welter:

Included are the results from the testing of material submitted on July 2, 2020 from the SOU_0731-004-05_ 20200702, F&BI 007042 project. There are 13 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Tom Cammarata
SOU0714R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on July 2, 2020 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0731-004-05_ 20200702, F&BI 007042 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
007042 -01	MW07-20200630
007042 -02	MW31-20200701

Sample MW07-20200630 was sent to Fremont Analytical for sulfate, TOC, dissolved gasses and ferrous iron analyses. The report is enclosed.

All quality control requirements were acceptable.

Date of Report: 07/14/20
Date Received: 07/02/20
Project: SOU_0731-004-05_ 20200702, F&BI 007042
Date Extracted: 07/07/20
Date Analyzed: 07/08/20

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)
MW07-20200630 007042-01	<1	<1	<1	<3	<100	88
Method Blank 00-1334 MB	<1	<1	<1	<3	<100	87

Date of Report: 07/14/20
Date Received: 07/02/20
Project: SOU_0731-004-05_ 20200702, F&BI 007042
Date Extracted: 07/07/20
Date Analyzed: 07/07/20

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 51-134)
MW07-20200630 007042-01	<50	<250	93
Method Blank 00-1558 MB	<50	<250	79

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW07-20200630	Client:	SoundEarth Strategies
Date Received:	07/02/20	Project:	SOU_0731-004-05_ 20200702
Date Extracted:	07/06/20	Lab ID:	007042-01
Date Analyzed:	07/06/20	Data File:	007042-01.043
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	111
Manganese	6.24

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0731-004-05_ 20200702
Date Extracted:	07/06/20	Lab ID:	I0-400 mb
Date Analyzed:	07/06/20	Data File:	I0-400 mb.041
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 8260D

Client Sample ID:	MW07-20200630	Client:	SoundEarth Strategies
Date Received:	07/02/20	Project:	SOU_0731-004-05_ 20200702
Date Extracted:	07/07/20	Lab ID:	007042-01
Date Analyzed:	07/08/20	Data File:	070747.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	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	5.8
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW31-20200701	Client:	SoundEarth Strategies
Date Received:	07/02/20	Project:	SOU_0731-004-05_ 20200702
Date Extracted:	07/07/20	Lab ID:	007042-02
Date Analyzed:	07/08/20	Data File:	070748.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	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	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	12
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-05_ 20200702
Date Extracted:	07/07/20	Lab ID:	00-1493 mb
Date Analyzed:	07/07/20	Data File:	070709.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	<0.2
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: 07/14/20
Date Received: 07/02/20
Project: SOU_0731-004-05_ 20200702, F&BI 007042

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: 007049-01 (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	115	65-118
Toluene	ug/L (ppb)	50	113	72-122
Ethylbenzene	ug/L (ppb)	50	114	73-126
Xylenes	ug/L (ppb)	150	112	74-118
Gasoline	ug/L (ppb)	1,000	107	69-134

Date of Report: 07/14/20
Date Received: 07/02/20
Project: SOU_0731-004-05_ 20200702, F&BI 007042

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	112	92	58-134	20

Date of Report: 07/14/20
Date Received: 07/02/20
Project: SOU_0731-004-05_ 20200702, F&BI 007042

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

Laboratory Code: 007042-01 (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	111	100	102	70-130	2
Manganese	ug/L (ppb)	20	6.24	97	97	70-130	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	96	85-115
Manganese	ug/L (ppb)	20	94	85-115

Date of Report: 07/14/20
Date Received: 07/02/20
Project: SOU_0731-004-05_ 20200702, F&BI 007042

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

Laboratory Code: 007049-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	90	36-166
Chloroethane	ug/L (ppb)	50	<1	101	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	93	60-136
Methylene chloride	ug/L (ppb)	50	<5	88	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	95	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	94	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	95	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	86	48-149
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	98	60-146
Trichloroethene	ug/L (ppb)	50	<1	86	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	90	10-226

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	91	50-154
Chloroethane	ug/L (ppb)	50	104	58-146
1,1-Dichloroethene	ug/L (ppb)	50	94	67-136
Methylene chloride	ug/L (ppb)	50	88	39-148
trans-1,2-Dichloroethene	ug/L (ppb)	50	95	68-128
1,1-Dichloroethane	ug/L (ppb)	50	96	74-135
cis-1,2-Dichloroethene	ug/L (ppb)	50	97	74-136
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	89	66-129
1,1,1-Trichloroethane	ug/L (ppb)	50	101	74-142
Trichloroethene	ug/L (ppb)	50	88	67-133
Tetrachloroethene	ug/L (ppb)	50	90	76-121

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.

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

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

RE: 007042
Work Order Number: 2007062

July 13, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 1 sample(s) on 7/6/2020 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 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: *07/13/2020*

CLIENT: Friedman & Bruya
Project: 007042
Work Order: 2007062

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2007062-001	MW07-20200630	06/30/2020 3:54 PM	07/06/2020 10:26 AM

Case Narrative

WO#: **2007062**
Date: **7/13/2020**

CLIENT: Friedman & Bruya
Project: 007042

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: **2007062**
Date Reported: **7/13/2020**

Client: Friedman & Bruya
Collection Date: 6/30/2020 3:54:00 PM
Project: 007042
Lab ID: 2007062-001
Matrix: Water
Client Sample ID: MW07-20200630

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R60426		Analyst: WC
Methane	ND	0.00863		mg/L	1	7/13/2020 9:04:00 AM
Ethene	ND	0.0151		mg/L	1	7/13/2020 9:04:00 AM
Ethane	ND	0.0162		mg/L	1	7/13/2020 9:04:00 AM
Ion Chromatography by EPA Method 300.0				Batch ID: 28903		Analyst: SS
Sulfate	41.7	1.50	D	mg/L	5	7/8/2020 11:36:00 AM
Total Organic Carbon by SM 5310C				Batch ID: R60400		Analyst: SS
Total Organic Carbon	0.789	0.500		mg/L	1	7/9/2020 7:40:00 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R60369		Analyst: SS
Ferrous Iron	ND	0.0500	H	mg/L	1	7/8/2020 4:10:00 PM

Work Order: 2007062
CLIENT: Friedman & Bruya
Project: 007042

QC SUMMARY REPORT

Dissolved Gases by RSK-175

Sample ID: **LCS-R60426** SampType: **LCS** Units: **mg/L** Prep Date: **7/13/2020** RunNo: **60426**
Client ID: **LCSW** Batch ID: **R60426** Analysis Date: **7/13/2020** SeqNo: **1210595**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	857	0.00863	1,000	0	85.7	70	130				
Ethene	868	0.0151	1,000	0	86.8	70	130				
Ethane	858	0.0162	1,000	0	85.8	70	130				

Sample ID: **MB-R60426** SampType: **MBLK** Units: **mg/L** Prep Date: **7/13/2020** RunNo: **60426**
Client ID: **MBLKW** Batch ID: **R60426** Analysis Date: **7/13/2020** SeqNo: **1210596**

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: **2007062-001DREP** SampType: **REP** Units: **mg/L** Prep Date: **7/13/2020** RunNo: **60426**
Client ID: **MW07-20200630** Batch ID: **R60426** Analysis Date: **7/13/2020** SeqNo: **1210592**

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	

Work Order: 2007062
CLIENT: Friedman & Bruya
Project: 007042

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **MB-R60369**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **7/8/2020**	RunNo: **60369**
Client ID: **MBLKW**	Batch ID: **R60369**		Analysis Date: **7/8/2020**	SeqNo: **1209171**

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-R60369**	SampType: **LCS**	Units: **mg/L**	Prep Date: **7/8/2020**	RunNo: **60369**
Client ID: **LCSW**	Batch ID: **R60369**		Analysis Date: **7/8/2020**	SeqNo: **1209172**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.437	0.0500	0.4000	0	109	85	115				

Sample ID: **2007062-001CDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **7/8/2020**	RunNo: **60369**
Client ID: **MW07-20200630**	Batch ID: **R60369**		Analysis Date: **7/8/2020**	SeqNo: **1209174**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.0504	0.0500						0.02741	59.0	20	H

Sample ID: **2007062-001CMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **7/8/2020**	RunNo: **60369**
Client ID: **MW07-20200630**	Batch ID: **R60369**		Analysis Date: **7/8/2020**	SeqNo: **1209175**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.516	0.0500	0.4000	0.02741	122	70	130				H

Sample ID: **2007062-001CMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **7/8/2020**	RunNo: **60369**
Client ID: **MW07-20200630**	Batch ID: **R60369**		Analysis Date: **7/8/2020**	SeqNo: **1209176**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.532	0.0500	0.4000	0.02741	126	70	130	0.5160	3.13	20	H

Work Order: 2007062
CLIENT: Friedman & Bruya
Project: 007042

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **MB-28903**	SampType: **MBLK**			Units: **mg/L**		Prep Date: **7/7/2020**			RunNo: **60365**		
Client ID: **MBLKW**	Batch ID: **28903**					Analysis Date: **7/7/2020**			SeqNo: **1209078**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.300									

Sample ID: **LCS-28903**	SampType: **LCS**			Units: **mg/L**		Prep Date: **7/7/2020**			RunNo: **60365**		
Client ID: **LCSW**	Batch ID: **28903**					Analysis Date: **7/7/2020**			SeqNo: **1209079**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.70	0.300	3.750	0	98.8	90	110				

Sample ID: **2006502-002ADUP**	SampType: **DUP**			Units: **mg/L**		Prep Date: **7/7/2020**			RunNo: **60365**		
Client ID: **BATCH**	Batch ID: **28903**					Analysis Date: **7/7/2020**			SeqNo: **1209089**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	4.76	0.300						4.765	0.147	20	

Sample ID: **2006502-002AMS**	SampType: **MS**			Units: **mg/L**		Prep Date: **7/7/2020**			RunNo: **60365**		
Client ID: **BATCH**	Batch ID: **28903**					Analysis Date: **7/7/2020**			SeqNo: **1209090**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	8.59	0.300	3.750	4.765	102	80	120				

Sample ID: **2006502-002AMSD**	SampType: **MSD**			Units: **mg/L**		Prep Date: **7/7/2020**			RunNo: **60365**		
Client ID: **BATCH**	Batch ID: **28903**					Analysis Date: **7/7/2020**			SeqNo: **1209091**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	8.67	0.300	3.750	4.765	104	80	120	8.587	1.01	20	

Work Order: 2007062
CLIENT: Friedman & Bruya
Project: 007042

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **2007062-001ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **7/7/2020** RunNo: **60365**
Client ID: **MW07-20200630** Batch ID: **28903** Analysis Date: **7/7/2020** SeqNo: **1209102**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	44.4	0.300						44.38	0	20	E

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

Sample ID: **2007062-001AMS** SampType: **MS** Units: **mg/L** Prep Date: **7/7/2020** RunNo: **60365**
Client ID: **MW07-20200630** Batch ID: **28903** Analysis Date: **7/7/2020** SeqNo: **1209103**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	48.2	0.300	3.750	44.38	101	80	120				E

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

Work Order: 2007062
CLIENT: Friedman & Bruya
Project: 007042

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **MB-R60400**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **7/9/2020**	RunNo: **60400**
Client ID: **MBLKW**	Batch ID: **R60400**		Analysis Date: **7/9/2020**	SeqNo: **1209825**

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-R60400**	SampType: **LCS**	Units: **mg/L**	Prep Date: **7/9/2020**	RunNo: **60400**
Client ID: **LCSW**	Batch ID: **R60400**		Analysis Date: **7/9/2020**	SeqNo: **1209827**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.12	0.500	5.000	0	102	90.2	120				

Sample ID: **2007062-001BDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **7/9/2020**	RunNo: **60400**
Client ID: **MW07-20200630**	Batch ID: **R60400**		Analysis Date: **7/9/2020**	SeqNo: **1209844**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	0.795	0.500						0.7890	0.758	20	

Sample ID: **2007062-001BMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **7/9/2020**	RunNo: **60400**
Client ID: **MW07-20200630**	Batch ID: **R60400**		Analysis Date: **7/9/2020**	SeqNo: **1209847**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.72	0.500	5.000	0.7890	98.7	86.4	121				

Sample ID: **2007062-001BMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **7/9/2020**	RunNo: **60400**
Client ID: **MW07-20200630**	Batch ID: **R60400**		Analysis Date: **7/9/2020**	SeqNo: **1209848**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.57	0.500	5.000	0.7890	95.7	86.4	121	5.723	2.66	30	

Sample Log-In Check List

Client Name:	**FB**	Work Order Number:	**2007062**
Logged by:	**Clare Griggs**	Date Received:	**7/6/2020 10:26:00 AM**

Chain of Custody

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

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 Present ☑
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°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 ☐ H2SO4
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: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler	2.5
Sample	5.1

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

SUBCONTRACT SAMPLE CHAIN OF CUSTODY 2007062

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 merdahl@friedmanandbruya.com

SUBCONTRACTER Fremont

PROJECT NAME/NO.	PO #
007042	A-293

REMARKS

Please Email Results

TURNAROUND TIME

☒ Standard TAT

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

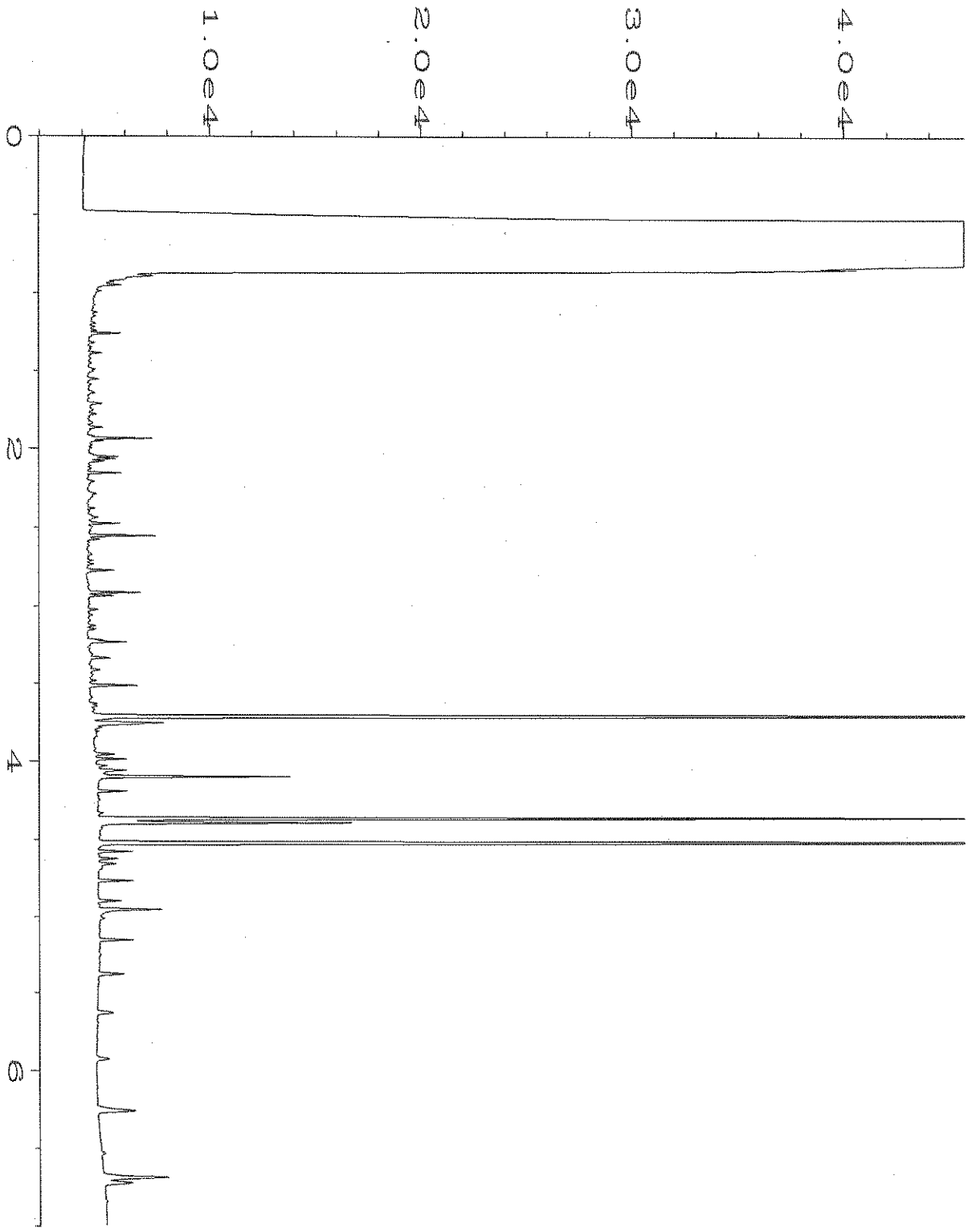
☐ Return samples

☐ Will call with instructions

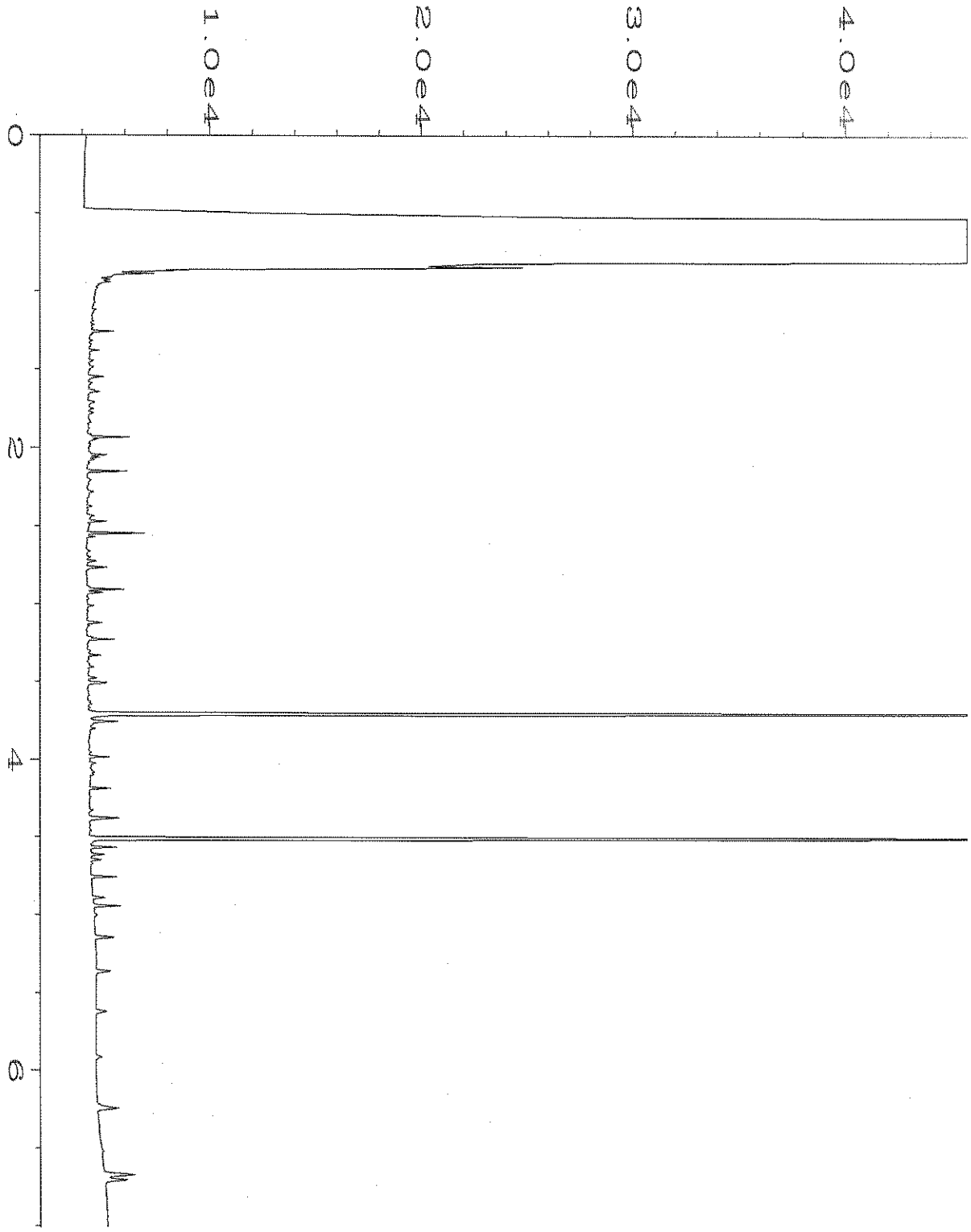
Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Dioxins/Furans	EPH	VPH	TOC	Methane, Ethane, Ethene RSK	Sulfate	Ferrous Iron				Notes
MW07-20200630		6/30/20	1554	H_2O					x	x	x	x				

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

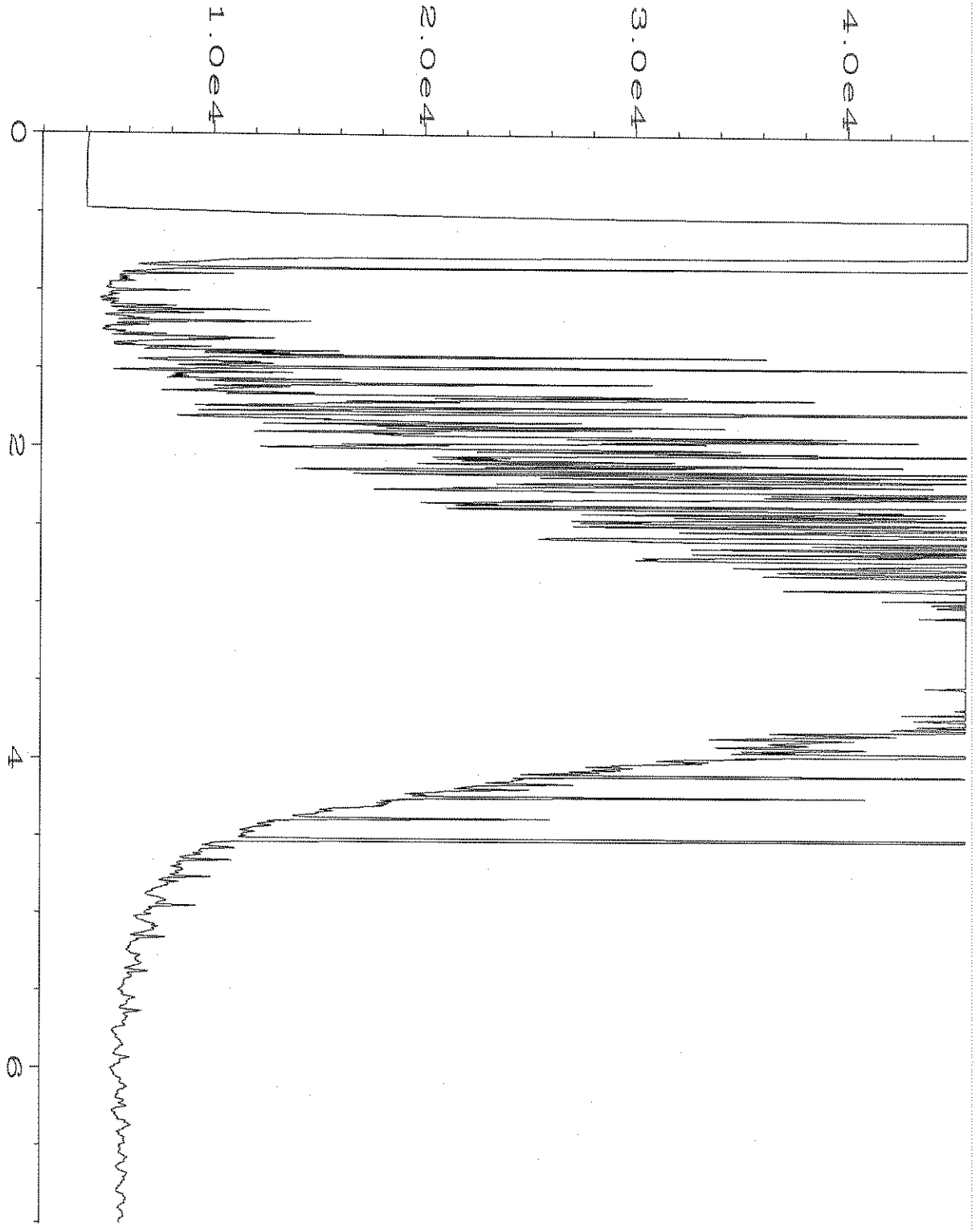
	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Michael Erdahl	Friedman & Bruya	7/6/20	8:21 AM
Received by:		Makenzie Meinhardt	FAR	7/6/20	1026
Relinquished by:					
Received by:					



Data File Name	: C:\HPCHEM\6\DATA\07-07-20\035F0701.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 35
Sample Name	: 007042-01	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 7
Acquired on	: 07 Jul 20 05:07 PM	Instrument Method	: DX.MTH
Report Created on	: 08 Jul 20 08:45 AM	Analysis Method	: DX.MTH



Data File Name	: C:\HPCHEM\6\DATA\07-07-20\032F0701.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 32
Sample Name	: 00-1558 mb	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 7
Acquired on	: 07 Jul 20 04:33 PM	Instrument Method	: DX.MTH
Report Created on	: 08 Jul 20 08:45 AM	Analysis Method	: DX.MTH



Data File Name : C:\HPCHEM\6\DATA\07-07-20\003F0801.D
Operator : TL
Instrument : GC6
Sample Name : 500 Dx 60-170C
Run Time Bar Code:
Acquired on : 07 Jul 20 05:40 PM
Report Created on: 08 Jul 20 08:45 AM

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DX.MTH

007042

SAMPLE C. IN OF CUSTODY

ME 07/02/20

Page # 1 of 1

Send Report To ~~Logan Schumacher~~ Sarah Walter, Tom Gammarota

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 # 0731-004-05

REMARKS
*cVOCs = PCE, TCE, Cis/Trans-DCE, and VC

EIM Y

TURNAROUND TIME
Standard (2 Weeks) ~~AIS~~ VW2
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	Total Fe & Mn ~~TOC by 1664~~	TOC By EPA 415.1	Methane, Ethane, and Ethene by RSK175	Sulfate by EPA 300.0	Fe 2+	Notes
MW07-20200630	MW07	-	01 A-N	6/30/20	1554	W	14	X	X	X	X	X	X	X	X	X	
MW31-20200701	MW31	-	02 A-C	7/1/20	1307	W	3				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 Walter	Sarah Walter	SES	7/2/20	1608
Received by:		Eric Hour	F&B	7/2/20	1608
Relinquished by:					
Received by:					

SiREM
Leading Science · Lasting Solutions

130 Stone Rd. W
Guelph, ON N1G 3Z2
(519) 822-2265

Analytical Results

Client: SoundEarth Strategies, Inc.
Client Project Number: 0731-004
Date Samples Received: July 1, 2020
Date Samples Analyzed: July 7, 2020

SiREM File Reference: S-5960

Client Sample ID	SiREM Reference ID	Client Sample Date	Sample Dilution Factor	Lactate	Acetate	Propionate	Formate	Butyrate	Pyruvate
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW8-20200627	20-1313	01-Jul-20	50	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69
MW21-20200627	20-1314	01-Jul-20	50	<0.39	249	144	20	79	19
MW22-20200627	20-1315	01-Jul-20	50	<0.39	283	56	<0.22	21	7.3
MW23-20200627	20-1316	01-Jul-20	50	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69
MW24-20200627	20-1317	01-Jul-20	50	<0.39	<0.54	0.60	<0.22	<0.41	<0.69
MW25-20200627	20-1319	01-Jul-20	50	<0.39	<0.54	<0.31	<0.22	<0.41	<0.69
IW04-20200627	20-1320	01-Jul-20	50	<0.39	8.2	1.5	<0.22	1.5	<0.69
IW50-20200627	20-1321	01-Jul-20	50	<0.39	2.8	<0.31	<0.22	<0.41	<0.69
IW61-20200627	20-1322	01-Jul-20	50	<0.39	13	0.62	<0.22	<0.41	<0.69
		QL	50	0.39	0.54	0.31	0.22	0.41	0.69

Comments:
Method: Ion Chromatography
QL = Quantitation limit
< = compound analysed for but not detected, associated value is QL. Sample QL is corrected for dilution.

Analyst:

Rachel Hallman
Laboratory Technician

Results approved:

Michael Healey, B.Sc.
Treatability and SP3™ Services Coordinator

Date: 16-Jul-20

SiREM

Chain-of-Custody Form

siremlab.com

180A Market Place Blvd
Knoxville, TN 37922
1-866-251-1747

Lab # 8-5960

*Project Name: Troy Laundry Property	*Project #: 0731-004
*Project Manager: Levi Fernandes, Sarah Heller	*Company: SoundEarth Strategies Inc.
*Email Address: l.fernandes@soundearthinc.com	
Address (Street): 2811 Fairview Ave. E Suite 2000	
City: Seattle / State/Province: WA / Country: 98102	
*Phone #: 206-306-1910	
*Sampler's Signature: Susan Thomas	*Sampler's Printed Name: Susan Thomas

Client Sample ID	Sampling Date	Sampling Time	Matrix	# of Containers	Volatile Fatty Acids	Other Information
MW18-20200627	7-1-2020	1500	Centrifuge Vials	2	X	
MW21-20200627	7-1-2020			2	X	
MW 22-20200627	7-1-2020			2	X	
MW 23-20200627	7-1-2020			2	X	
MW 24-20200627	7-1-2020			2	X	
MW 25-20200627	7-1-2020			2	X	
IW04-20200627	7-1-2020			2	X	
IW 50-20200627	7-1-2020			2	X	
IW 61-20200627	7-1-2020	↓	↓	2	X	

Analysis: Gene-Trac DHC; Gene-Trac FGA; Gene-Trac DHB; Gene-Trac DHGM; Gene-Trac SRB; Dissolved hydrocarbon gases; Treatability Study

Preservative Key
0. None
1. HCL
2. Other
3. Other
4. Other
5. Other
6. Other

Billing Information
P.O. #
*Bill To:

Turnaround Time Requested
Normal ☐
Rush ☐

For Lab Use Only
Cooler Condition: Good
Cooler Temperature: -4/0c
Custody Seals: Yes ☐ No ☑

For Lab Use Only
Proposal #:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Susan Thomas	Signature: Jordan Linkletter	Signature:	Signature:	Signature:	Signature:
Printed Name: Susan Thomas	Printed Name: Jordan Linkletter	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Firm: SiREM	Firm: SiREM	Firm:	Firm:	Firm:	Firm:
Date/Time: 7-1-2020 1600	Date/Time: 7/2/20 1:30pm	Date/Time:	Date/Time:	Date/Time:	Date/Time:

Distribution: White - return to Originator; Yellow - Lab Copy; Pink - Retained by Client

* Mandatory Fields

SiREM

Chain-of-Custody Form

siremlab.com

COPY

180A Market Place Blvd.
Knoxville, TN 37922
(865) 330-0037

Lab # S-5960

Project Name	Tray Laundry Property
Project #	0731-004
Project Manager	Levi Fernandes, Sarah Welter
Email	LFernandes@soundearthinc.com
Company	SoundEarth Strategies, Inc.
Address	2811 Fairview Ave E Suite 2000, Seattle, WA 98102
Phone #	206-396-1910
Sampler's Signature	
Sampler's Printed Name	Audrey Michniak

Analysis

Preservative

Client Sample ID	Lab ID	Sampling Date	Sampling Time	Matrix	# of Containers	Volatile Fatty Acids	vials #	Other Information
MW18-20200627		6/27/20	1510	W	2	X	1	
MW21-20200627		6/27/20	1130	W	2	X	2	
MW22-20200627		6/27/20	0932	W	2	X	3	
MW23-20200627		6/27/20	0850	W	2	X	4	
MW24-20200627		6/27/20	1245	W	2	X	5	
MW25-20200627		6/27/20	1545	W	2	X	6	
~~MW~~ TW04-20200627		6/27/20	1300	W	2	X	7	
TW50-20200627		6/27/20	1155	W	2	X	8	
IW61-20200627		6/27/20	1005	W	2	X	9	

AHM 6/27/20

Preservative Key
0. None
1. HCL
2. Other
3. Other
4. Other
5. Other
6. Other

Sample Receipt

Cooler Condition: Good - ice melted

Cooler Temperature: 13.0°C

Custody Seals: Yes ☐ No ☑

Invoice Information

P.O. # 0731-004

Bill To:

For Lab Use Only

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Sarah Welter	Signature: Susan Thomas	Signature:	Signature: Jordan Linkletter	Signature:	Signature:
Printed Name: Sarah Welter	Printed Name: Susan Thomas	Printed Name:	Printed Name: Jordan Linkletter	Printed Name:	Printed Name:
Firm: SES	Firm: SiREM	Firm:	Firm: SiREM	Firm:	Firm:
Date/Time: 6/29/20 1000	Date/Time: 7-1-2020 1200	Date/Time:	Date/Time: 7/2/20 1:30pm	Date/Time:	Date/Time:

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

Fourth Quarter 2020

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 23, 2020

Levi Fernandes, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Fernandes:

Included are the results from the testing of material submitted on December 11, 2020 from the SOU_0731-004-08_ 20201211, F&BI 012203 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: Sarah Welter
SOU1223R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 11, 2020 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0731-004-08_ 20201211, F&BI 012203 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
012203 -02	MW29-20201210
012203 -03	MW30-20201210
012203 -04	MW13-20201210
012203 -05	MW27-20201210
012203 -07	MW07-20201210
012203 -08	MW28-20201211
012203 -09	MW04-20201211
012203 -10	MW26-20201211
012203 -11	MW31-20201211
012203 -12	MW01-20201211
012203 -13	MW15-20201211

Samples MW28-20201211, MW04-20201211, MW26-20201211, and MW07-20201211 were sent to Fremont Analytical for dissolved gasses, sulfate, nitrate, alkalinity, and ferrous iron analysis. In addition, samples MW26-20201211 and MW07-20201211 were sent for TOC analysis. The report is enclosed.

All quality control requirements were acceptable.

Date of Report: 12/23/20
Date Received: 12/11/20
Project: SOU_0731-004-08_ 20201211, F&BI 012203
Date Extracted: 12/18/20
Date Analyzed: 12/21/20

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)
MW13-20201210 012203-04	<1	<1	<1	<3	<100	82
MW28-20201211 012203-08	<1	<1	<1	<3	<100	81
Method Blank 00-2719 MB	<1	<1	<1	<3	<100	94

Date of Report: 12/23/20
Date Received: 12/11/20
Project: SOU_0731-004-08_ 20201211, F&BI 012203
Date Extracted: 12/15/20
Date Analyzed: 12/15/20

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)
MW13-20201210 012203-04	80 x	<250	98
MW28-20201211 012203-08	<50	<250	112
Method Blank 00-2851 MB	<50	<250	96

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW07-20201210	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-07
Date Analyzed:	12/14/20	Data File:	012203-05.052
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	92.6
Manganese	3.91

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW28-20201211	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-08
Date Analyzed:	12/15/20	Data File:	012203-07.069
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	576
Manganese	470

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW04-20201211	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-09
Date Analyzed:	12/15/20	Data File:	012203-08.070
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	388
Manganese	11.6

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW26-20201211	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-10
Date Analyzed:	12/15/20	Data File:	012203-09.071
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	230
Manganese	605

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	I0-768 mb
Date Analyzed:	12/14/20	Data File:	I0-768 mb.046
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 8260D

Client Sample ID:	MW29-20201210	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-02
Date Analyzed:	12/14/20	Data File:	121427.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

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

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	18
Trichloroethene	13
Tetrachloroethene	18

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW30-20201210	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-03
Date Analyzed:	12/14/20	Data File:	121428.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

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

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	13
Trichloroethene	2.4
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW13-20201210	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-04
Date Analyzed:	12/14/20	Data File:	121436.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	105	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	1.6
Tetrachloroethene	7.2

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW27-20201210	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-05
Date Analyzed:	12/14/20	Data File:	121429.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

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

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	3.7
Trichloroethene	69
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW07-20201210	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-07
Date Analyzed:	12/14/20	Data File:	121430.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	50	150
Toluene-d8	103	50	150
4-Bromofluorobenzene	104	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	3.2
Trichloroethene	18
Tetrachloroethene	1.7

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW28-20201211	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-08
Date Analyzed:	12/14/20	Data File:	121432.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

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

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	19
Trichloroethene	4.9
Tetrachloroethene	8.3

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW04-20201211	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-09
Date Analyzed:	12/14/20	Data File:	121433.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

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

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	9.2
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW26-20201211	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-10
Date Analyzed:	12/14/20	Data File:	121434.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	50	150
Toluene-d8	92	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	4.0
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW31-20201211	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-11
Date Analyzed:	12/14/20	Data File:	121435.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

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

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	17
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW01-20201211	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-12
Date Analyzed:	12/14/20	Data File:	121437.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	106	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW15-20201211	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012203-13
Date Analyzed:	12/14/20	Data File:	121438.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

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
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	00-2817 mb
Date Analyzed:	12/14/20	Data File:	121408.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

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

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 12/23/20
Date Received: 12/11/20
Project: SOU_0731-004-08_ 20201211, F&BI 012203

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: 012249-01 (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	116	65-118
Toluene	ug/L (ppb)	50	107	72-122
Ethylbenzene	ug/L (ppb)	50	106	73-126
Xylenes	ug/L (ppb)	150	104	74-118
Gasoline	ug/L (ppb)	1,000	101	69-134

Date of Report: 12/23/20
Date Received: 12/11/20
Project: SOU_0731-004-08_ 20201211, F&BI 012203

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	100	96	63-142	4

Date of Report: 12/23/20
Date Received: 12/11/20
Project: SOU_0731-004-08_ 20201211, F&BI 012203

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

Laboratory Code: 012203-05 (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	83.1	101	105	70-130	4
Manganese	ug/L (ppb)	20	4.07	101	103	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	97	85-115
Manganese	ug/L (ppb)	20	97	85-115

Date of Report: 12/23/20
Date Received: 12/11/20
Project: SOU_0731-004-08_ 20201211, F&BI 012203

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

Laboratory Code: 012215-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	10	<0.2	110	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	113	50-150
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	110	50-150
Trichloroethene	ug/L (ppb)	10	<1	108	50-150
Tetrachloroethene	ug/L (ppb)	10	<1	101	50-150

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)	10	101	107	70-130	6
trans-1,2-Dichloroethene	ug/L (ppb)	10	101	105	70-130	4
cis-1,2-Dichloroethene	ug/L (ppb)	10	100	105	70-130	5
Trichloroethene	ug/L (ppb)	10	98	101	70-130	3
Tetrachloroethene	ug/L (ppb)	10	103	98	70-130	5

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The 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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info@fremontanalytical.com

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

RE: 012203
Work Order Number: 2012217

December 22, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 4 sample(s) on 12/14/2020 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: *12/22/2020*

CLIENT: Friedman & Bruya
Project: 012203
Work Order: 2012217

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2012217-001	MW07-20201210	12/10/2020 2:55 PM	12/14/2020 11:29 AM
2012217-002	MW28-20201211	12/11/2020 9:30 AM	12/14/2020 11:29 AM
2012217-003	MW04-20201211	12/11/2020 9:38 AM	12/14/2020 11:29 AM
2012217-004	MW26-20201211	12/10/2020 11:20 AM	12/14/2020 11:29 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2012217**
Date: **12/22/2020**

CLIENT: Friedman & Bruya
Project: 012203

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
DUP - Sample Duplicate
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
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Analytical Report

Work Order: **2012217**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/10/2020 2:55:00 PM
Project: 012203
Lab ID: 2012217-001
Matrix: Water
Client Sample ID: **MW07-20201210**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R64152		Analyst: MS
Methane	0.328	0.0863	D	mg/L	10	12/16/2020 1:34:00 PM
Ethene	ND	0.0151		mg/L	1	12/16/2020 1:01:00 PM
Ethane	ND	0.0162		mg/L	1	12/16/2020 1:01:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 30756		Analyst: TN
Nitrate (as N)	13.4	1.00	DH	mg/L	10	12/18/2020 2:11:29 PM
Sulfate	30.7	3.00	D	mg/L	10	12/18/2020 2:11:29 PM
Total Organic Carbon by SM 5310C				Batch ID: R64149		Analyst: TN
Total Organic Carbon	0.969	0.500		mg/L	1	12/17/2020 2:14:00 PM
Total Alkalinity by SM 2320B				Batch ID: R64182		Analyst: WF
Alkalinity, Total (As CaCO3)	83.3	2.50		mg/L	1	12/21/2020 11:31:19 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R64070		Analyst: SS
Ferrous Iron	ND	0.0500	H	mg/L	1	12/16/2020 9:30:00 AM

Analytical Report

Work Order: **2012217**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/11/2020 9:30:00 AM
Project: 012203
Lab ID: 2012217-002
Matrix: Water
Client Sample ID: **MW28-20201211**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R64152		Analyst: MS
Methane	0.0723	0.00863		mg/L	1	12/16/2020 1:07:00 PM
Ethene	ND	0.0151		mg/L	1	12/16/2020 1:07:00 PM
Ethane	ND	0.0162		mg/L	1	12/16/2020 1:07:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 30756		Analyst: TN
Nitrate (as N)	ND	0.200	DH	mg/L	2	12/18/2020 12:24:00 AM
Sulfate	0.748	0.600	D	mg/L	2	12/18/2020 12:24:00 AM
NOTES: Diluted due to matrix.						
Total Alkalinity by SM 2320B				Batch ID: R64182		Analyst: WF
Alkalinity, Total (As CaCO3)	304	2.50		mg/L	1	12/21/2020 11:31:19 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R64070		Analyst: SS
Ferrous Iron	0.359	0.0500	H	mg/L	1	12/16/2020 9:30:00 AM

Analytical Report

Work Order: **2012217**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/11/2020 9:38:00 AM
Project: 012203
Lab ID: 2012217-003
Matrix: Water
Client Sample ID: **MW04-20201211**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R64152		Analyst: MS
Methane	ND	0.00863		mg/L	1	12/16/2020 1:09:00 PM
Ethene	ND	0.0151		mg/L	1	12/16/2020 1:09:00 PM
Ethane	ND	0.0162		mg/L	1	12/16/2020 1:09:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 30756		Analyst: TN
Nitrate (as N)	7.14	0.400	DH	mg/L	4	12/18/2020 2:11:29 PM
Sulfate	40.0	1.20	D	mg/L	4	12/18/2020 2:11:29 PM
Total Alkalinity by SM 2320B				Batch ID: R64182		Analyst: WF
Alkalinity, Total (As CaCO3)	103	2.50		mg/L	1	12/21/2020 11:31:19 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R64070		Analyst: SS
Ferrous Iron	ND	0.0500	H	mg/L	1	12/16/2020 9:30:00 AM

Analytical Report

Work Order: **2012217**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/10/2020 11:20:00 AM
Project: 012203
Lab ID: 2012217-004
Matrix: Water
Client Sample ID: **MW26-20201211**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R64152		Analyst: MS
Methane	0.263	0.0863	D	mg/L	10	12/16/2020 1:36:00 PM
Ethene	ND	0.0151		mg/L	1	12/16/2020 1:11:00 PM
Ethane	ND	0.0162		mg/L	1	12/16/2020 1:11:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 30756		Analyst: TN
Nitrate (as N)	ND	0.100	H	mg/L	1	12/18/2020 1:10:00 AM
Sulfate	19.5	0.600	D	mg/L	2	12/18/2020 2:11:29 PM
Total Organic Carbon by SM 5310C				Batch ID: R64149		Analyst: TN
Total Organic Carbon	1.02	0.500		mg/L	1	12/17/2020 3:39:00 PM
Total Alkalinity by SM 2320B				Batch ID: R64182		Analyst: WF
Alkalinity, Total (As CaCO3)	93.1	2.50		mg/L	1	12/21/2020 11:31:19 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R64070		Analyst: SS
Ferrous Iron	0.195	0.0500	H	mg/L	1	12/16/2020 9:30:00 AM

Work Order: 2012217
CLIENT: Friedman & Bruya
Project: 012203

QC SUMMARY REPORT

Total Alkalinity by SM 2320B

Sample ID: **MB-R64182**	SampType: **MBLK**			Units: **mg/L**		Prep Date: **12/21/2020**		RunNo: **64182**		
Client ID: **MBLKW**	Batch ID: **R64182**					Analysis Date: **12/21/2020**		SeqNo: **1289695**		
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-R64182**	SampType: **LCS**			Units: **mg/L**		Prep Date: **12/21/2020**		RunNo: **64182**		
Client ID: **LCSW**	Batch ID: **R64182**					Analysis Date: **12/21/2020**		SeqNo: **1289696**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	102	2.50	100.0	0	102	99.6	108				

Sample ID: **2012217-001BDUP**	SampType: **DUP**			Units: **mg/L**		Prep Date: **12/21/2020**		RunNo: **64182**		
Client ID: **MW07-20201210**	Batch ID: **R64182**					Analysis Date: **12/21/2020**		SeqNo: **1289698**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	88.2	2.50						83.30	5.71	20	

Work Order: 2012217
CLIENT: Friedman & Bruya
Project: 012203

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **MB-R64070** SampType: **MBLK** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64070**
Client ID: **MBLKW** Batch ID: **R64070** Analysis Date: **12/16/2020** SeqNo: **1287430**

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-R64070** SampType: **LCS** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64070**
Client ID: **LCSW** Batch ID: **R64070** Analysis Date: **12/16/2020** SeqNo: **1287431**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.434	0.0500	0.4000	0	109	85	115				

Sample ID: **2012217-001CDUP** SampType: **DUP** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64070**
Client ID: **MW07-20201210** Batch ID: **R64070** Analysis Date: **12/16/2020** SeqNo: **1287433**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	ND	0.0500						0		20	H

Sample ID: **2012217-001CMS** SampType: **MS** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64070**
Client ID: **MW07-20201210** Batch ID: **R64070** Analysis Date: **12/16/2020** SeqNo: **1287434**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.496	0.0500	0.4000	0	124	70	130				H

Sample ID: **2012217-001CMSD** SampType: **MSD** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64070**
Client ID: **MW07-20201210** Batch ID: **R64070** Analysis Date: **12/16/2020** SeqNo: **1287435**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.519	0.0500	0.4000	0	130	70	130	0.4963	4.52	20	H

Work Order: 2012217
CLIENT: Friedman & Bruya
Project: 012203

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **2012233-001DDUP** SampType: **DUP** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64070**
Client ID: **BATCH** Batch ID: **R64070** Analysis Date: **12/16/2020** SeqNo: **1287448**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	32.4	1.25						32.82	1.26	20	DH

Sample ID: **2012233-001DMS** SampType: **MS** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64070**
Client ID: **BATCH** Batch ID: **R64070** Analysis Date: **12/16/2020** SeqNo: **1287449**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	44.6	1.25	10.00	32.82	118	70	130				DH

Work Order: 2012217
CLIENT: Friedman & Bruya
Project: 012203

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **MB-30756** SampType: **MBLK** Units: **mg/L** Prep Date: **12/17/2020** RunNo: **64140**
Client ID: **MBLKW** Batch ID: **30756** Analysis Date: **12/17/2020** SeqNo: **1288834**

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-30756** SampType: **LCS** Units: **mg/L** Prep Date: **12/17/2020** RunNo: **64140**
Client ID: **LCSW** Batch ID: **30756** Analysis Date: **12/17/2020** SeqNo: **1288835**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.705	0.100	0.7500	0	94.0	90	110				
Sulfate	3.54	0.300	3.750	0	94.5	90	110				

Sample ID: **2012199-001BDUP** SampType: **DUP** Units: **mg/L** Prep Date: **12/17/2020** RunNo: **64140**
Client ID: **BATCH** Batch ID: **30756** Analysis Date: **12/17/2020** SeqNo: **1288838**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	1.54	1.00						1.570	1.93	20	DH
Sulfate	97.5	3.00						124.8	24.5	20	DR

NOTES:
R - High RPD observed. The method is in control as indicated by the LCS.

Sample ID: **2012199-001BMS** SampType: **MS** Units: **mg/L** Prep Date: **12/17/2020** RunNo: **64140**
Client ID: **BATCH** Batch ID: **30756** Analysis Date: **12/17/2020** SeqNo: **1288839**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	8.35	1.00	7.500	1.570	90.4	80	120				DH
Sulfate	129	3.00	37.50	124.8	10.4	80	120				DS

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Work Order: 2012217
CLIENT: Friedman & Bruya
Project: 012203

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **2012199-001BMSD** SampType: **MSD** Units: **mg/L** Prep Date: **12/17/2020** RunNo: **64140**
Client ID: **BATCH** Batch ID: **30756** Analysis Date: **12/17/2020** SeqNo: **1288840**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	8.38	1.00	7.500	1.570	90.8	80	120	8.350	0.359	20	DH
Sulfate	130	3.00	37.50	124.8	14.0	80	120	128.6	1.05	20	DS

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: **2012213-001BDUP** SampType: **DUP** Units: **mg/L** Prep Date: **12/17/2020** RunNo: **64140**
Client ID: **BATCH** Batch ID: **30756** Analysis Date: **12/17/2020** SeqNo: **1288851**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.427	0.100						0.4270	0	20	H
Sulfate	6.06	0.300						6.075	0.231	20	

Sample ID: **2012213-001BMS** SampType: **MS** Units: **mg/L** Prep Date: **12/17/2020** RunNo: **64140**
Client ID: **BATCH** Batch ID: **30756** Analysis Date: **12/17/2020** SeqNo: **1288852**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	1.16	0.100	0.7500	0.4270	97.9	80	120				H
Sulfate	10.2	0.300	3.750	6.075	111	80	120				

Work Order: 2012217
CLIENT: Friedman & Bruya
Project: 012203

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **MB-R64149**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **12/17/2020**	RunNo: **64149**
Client ID: **MBLKW**	Batch ID: **R64149**		Analysis Date: **12/17/2020**	SeqNo: **1289110**

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-R64149**	SampType: **LCS**	Units: **mg/L**	Prep Date: **12/17/2020**	RunNo: **64149**
Client ID: **LCSW**	Batch ID: **R64149**		Analysis Date: **12/17/2020**	SeqNo: **1289111**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.24	0.500	5.000	0	105	90	118				

Sample ID: **2012217-001ADUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **12/17/2020**	RunNo: **64149**
Client ID: **MW07-20201210**	Batch ID: **R64149**		Analysis Date: **12/17/2020**	SeqNo: **1289113**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	0.959	0.500						0.9690	1.04	20	B

Sample ID: **2012217-001AMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **12/17/2020**	RunNo: **64149**
Client ID: **MW07-20201210**	Batch ID: **R64149**		Analysis Date: **12/17/2020**	SeqNo: **1289114**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.89	0.500	5.000	0.9690	98.4	80.9	124				

Sample ID: **2012217-001AMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **12/17/2020**	RunNo: **64149**
Client ID: **MW07-20201210**	Batch ID: **R64149**		Analysis Date: **12/17/2020**	SeqNo: **1289115**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.74	0.500	5.000	0.9690	95.4	80.9	124	5.891	2.60	30	

Work Order: 2012217
CLIENT: Friedman & Bruya
Project: 012203

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **2012233-002ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **12/17/2020** RunNo: **64149**
Client ID: **BATCH** Batch ID: **R64149** Analysis Date: **12/17/2020** SeqNo: **1289141**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	94.5	0.500						94.31	0.198	20	E

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

Sample ID: **2012233-002AMS** SampType: **MS** Units: **mg/L** Prep Date: **12/17/2020** RunNo: **64149**
Client ID: **BATCH** Batch ID: **R64149** Analysis Date: **12/17/2020** SeqNo: **1289126**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	96.8	0.500	5.000	94.31	50.5	80.9	124				ES

NOTES:
S - Analyte concentration was too high for accurate spike recovery(ies).
E - Estimated value. The amount exceeds the linear working range of the instrument.

Work Order: 2012217
CLIENT: Friedman & Bruya
Project: 012203

QC SUMMARY REPORT

Dissolved Gases by RSK-175

Sample ID: **LCS-R64512** SampType: **LCS** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64152**
Client ID: **LCSW** Batch ID: **R64152** Analysis Date: **12/16/2020** SeqNo: **1289202**

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	1,020	0.0151	1,000	0	102	70	130				
Ethane	1,020	0.0162	1,000	0	102	70	130				

Sample ID: **MB-R64152** SampType: **MBLK** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64152**
Client ID: **MBLKW** Batch ID: **R64152** Analysis Date: **12/16/2020** SeqNo: **1289203**

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: **2012217-001DREP** SampType: **REP** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64152**
Client ID: **MW07-20201210** Batch ID: **R64152** Analysis Date: **12/16/2020** SeqNo: **1289174**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	0.329	0.00863						0.3708	11.8	30	E
Ethene	ND	0.0151						0		30	
Ethane	ND	0.0162						0		30	

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

Sample Log-In Check List

Client Name:	**FB**	Work Order Number:	**2012217**
Logged by:	**Gabrielle Coeuille**	Date Received:	**12/14/2020 11:29:00 AM**

Chain of Custody

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

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 Present ☑
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°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:	12/15/2020
By Whom:	Gabrielle Coeuille	Via:	☑ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	Nitrate received out of hold. Ok to run?		
Client Instructions:	Proceed.		

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample 1	1.6

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

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

20122-17

Page # 1 of 1

Send Report To: Michael Erdahl
Company: Friedman & Bruya Inc.
Address: 3012 16th Ave W, Seattle WA 98119
Phone #: (206) 285-8282
Email: merdahl@friedmanandbruya.com

SUBCONTRACTOR: Fremont
PROJECT NUMBER: 012203
PO #: A-488
REMARKS: Email Results

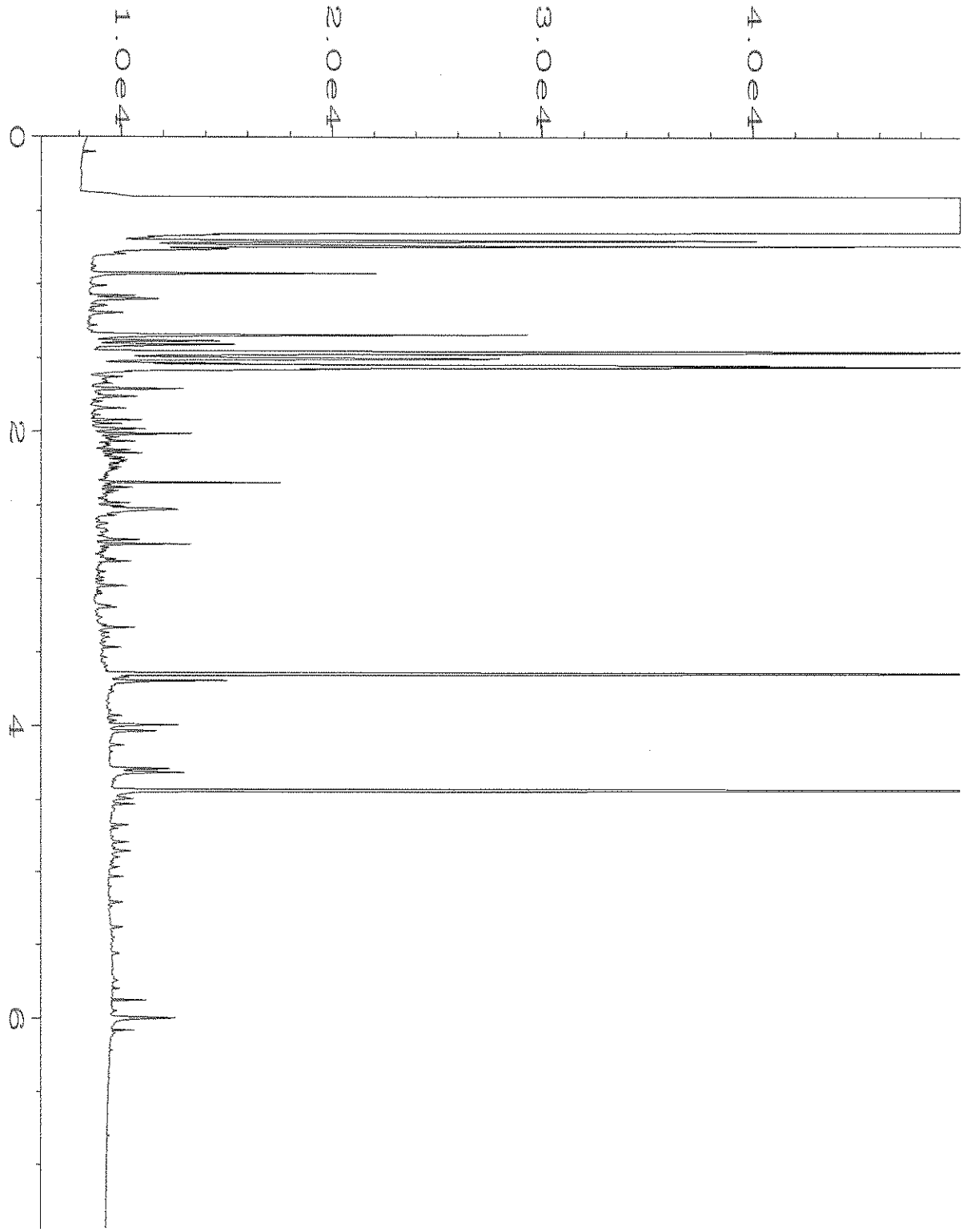
TURNAROUND TIME
☒ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by:

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

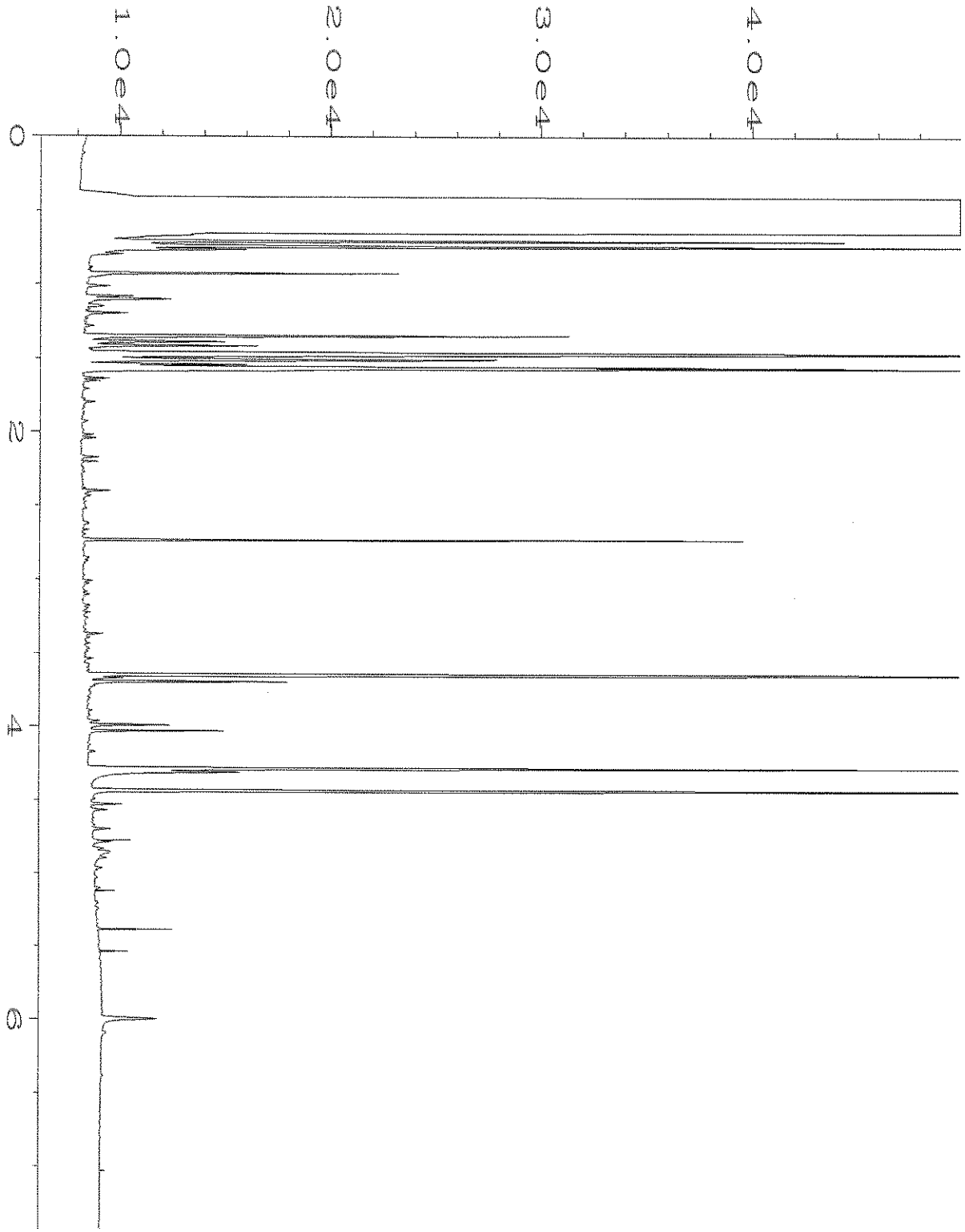
Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Total Organic Carbon (TOC)	COD	BOD	Chloride	Sulfate	Sulfide	Methane, Ethane, Ethene	Nitrate, Alkalinity	Fe 2+	Cr VI	Notes
MW07-20201210		12/10/20	1455	water	6	x				x		x	x	x		
MW28-20201211		12/11/20	0930		5					x		x	x	x		
MW04-20201211			0938		5					x		x	x	x		
MW26-20201211			1120		6	x				x		x	x	x		

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Ann Webber-Bruya	Friedman and Bruya	12/14/20	0930
Received by:	Courtney Johnson	FAE	12/14/20	1129
Relinquished by:				
Received by:				

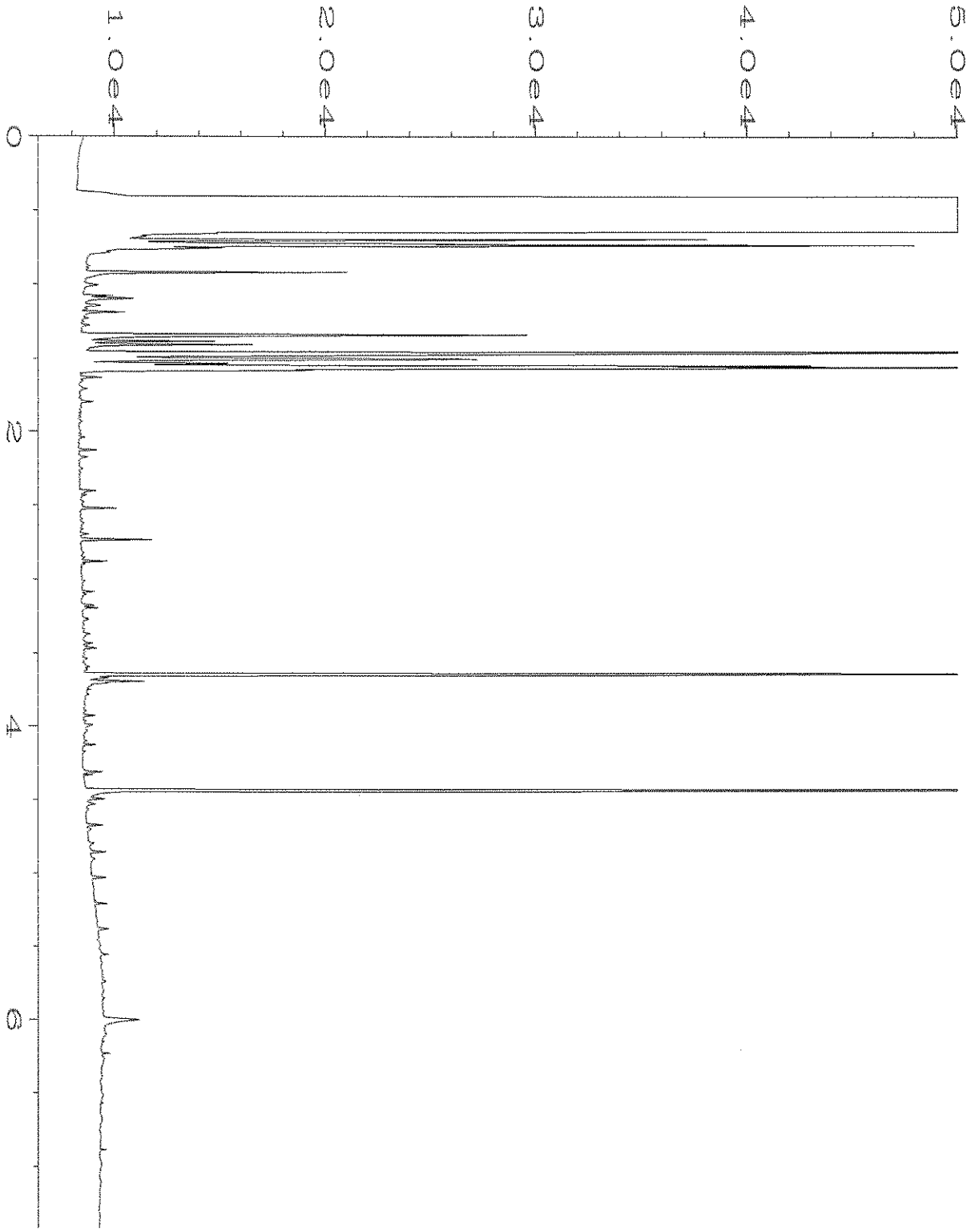


Data File Name	: C:\HPCHEM\1\DATA\12-15-20\016F1101.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 16
Sample Name	: 012203-07	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 11
Acquired on	: 15 Dec 20 02:25 PM	Instrument Method	: DX.MTH
Report Created on	: 16 Dec 20 09:21 AM	Analysis Method	: DEFAULT.MTH



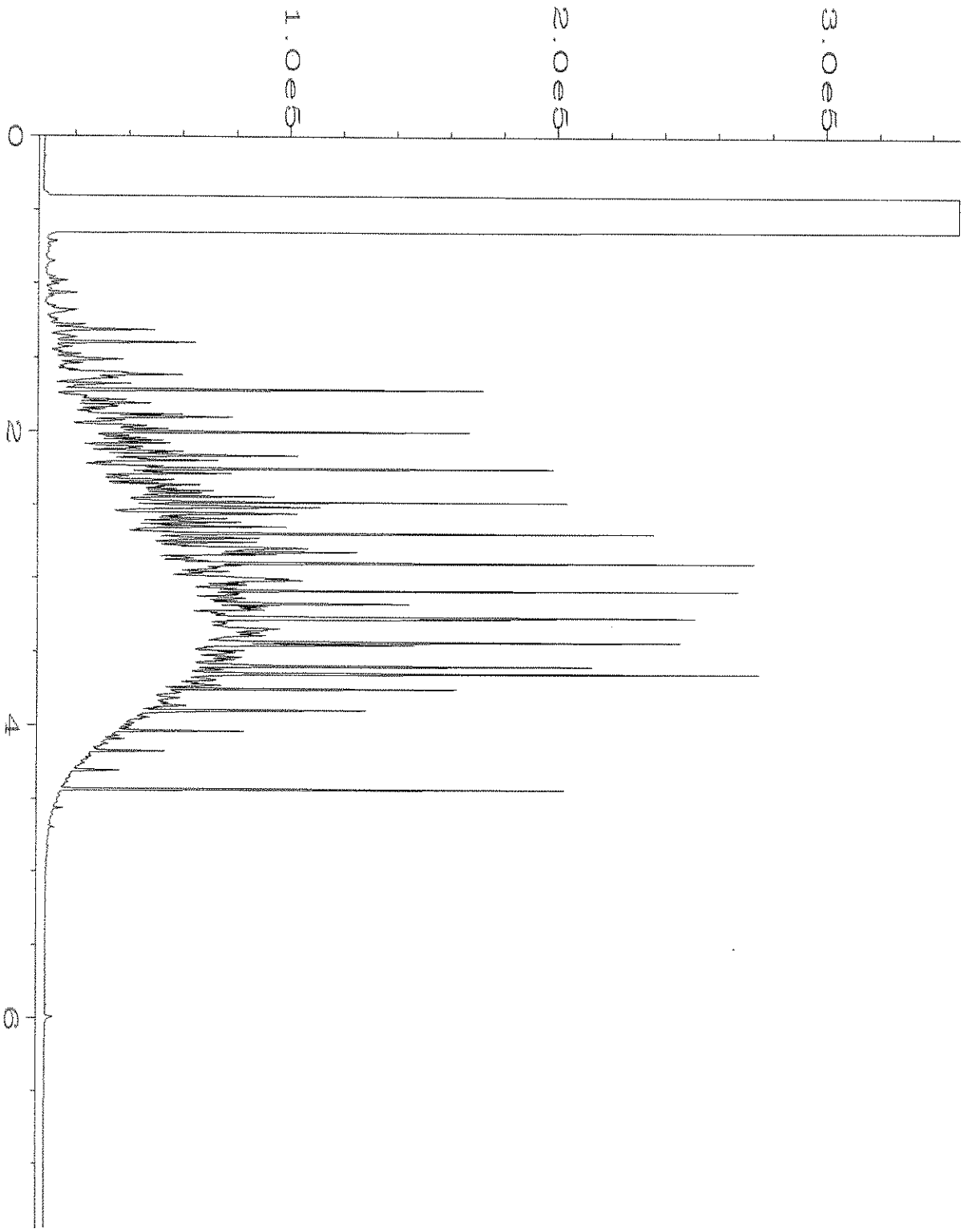
Data File Name : C:\HPCHEM\1\DATA\12-15-20\017F1101.D
Operator : TL
Instrument : GC1
Sample Name : 012203-11
Run Time Bar Code:
Acquired on : 15 Dec 20 02:34 PM
Report Created on: 16 Dec 20 09:21 AM

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 11
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



Data File Name : C:\HPCHEM\1\DATA\12-15-20\013F0901.D
Operator : TL
Instrument : GC1
Sample Name : 00-2851 mb
Run Time Bar Code:
Acquired on : 15 Dec 20 01:25 PM
Report Created on: 16 Dec 20 09:21 AM

Page Number : 1
Vial Number : 13
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



Data File Name	: C:\HPCHEM\1\DATA\12-15-20\005F1001.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 5
Sample Name	: 1000 Dx 61-146H	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 10
Acquired on	: 15 Dec 20 02:10 PM	Instrument Method	: DX.MTH
Report Created on	: 16 Dec 20 09:22 AM	Analysis Method	: DEFAULT.MTH

012203

SAMPLE CHAIN OF CUSTODY

ME 12/11/20 AI3/VW5/EO3

Send Report To Logan Schumacher cc Sarah Walter / Levi Fernands

Company SoundEarth Strategies

Address 2811 Fairview Ave E, Suite 2000

City, State, ZIP Seattle, WA 98102

SAMPLERS (signature) Sarah Walter

PROJECT NAME/NO.	PO #
Troy Laundry Property	0731-004-08
REMARKS *cVOCs = PCE, TCE, Cis/Trans-DCE, and VC	EIM Y

Page # 1 of 1

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
MW29-20201210	MW29	–	02A-C	12/10/20	1030	W	3				X						
MW30-20201210	MW30	–	03		1125		3				X						
MW13-20201210	MW13	–	04		1228		5	X		X	X						
MW27-20201210	MW27	–	05A-C		1405		3				X						
MW07-20201210	MW07	–	07A-C		1455		10				X	X	X	X	X	X	
MW28-20201211	MW28	–	08A-D	12/11/20	0930		11	X		X	X	X	X	X	X		
MW04-20201211	MW04	–	09A-C		0938		9				X	X	X	X	X		
MW26-20201211	MW26	–	10A-C		1120		10				X	X	X	X	X	X	
MW31-20201211	MW31	–	11A-E		1010		3				X						
MW01-20201211	MW01	–	12A-C		1235		3				X						
MW15-20201211	MW15	–	13		1402		3				X						Samples received at ___ °C
										(2)							

* add'l COC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Walter	Sarah Walter	SES	12/14/20	1000
Received by: Hoang	HOANG NGUYEN	FMS	12/11/20	15:59
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

December 23, 2020

Levi Fernandes, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

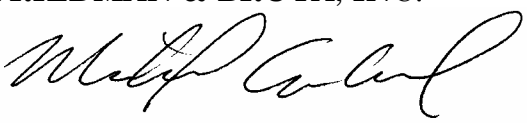
Dear Mr Fernandes:

Included are the results from the testing of material submitted on December 11, 2020 from the SOU_0731-004-08_ 20201211, F&BI 012225 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: Sarah Welter
SOU1223R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 11, 2020 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0731-004-08_ 20201211, F&BI 012225 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
012225 -01	ONNI-MW-5-20201209
012225 -02	ONNI-MW-4-20201210

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	ONNI-MW-5-20201209	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012225-01
Date Analyzed:	12/14/20	Data File:	121426.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	50	150
Toluene-d8	103	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	ONNI-MW-4-20201210	Client:	SoundEarth Strategies
Date Received:	12/11/20	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	012225-02
Date Analyzed:	12/14/20	Data File:	121431.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	50	150
Toluene-d8	103	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-08_ 20201211
Date Extracted:	12/14/20	Lab ID:	00-2817 mb
Date Analyzed:	12/14/20	Data File:	121408.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

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

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 12/23/20
Date Received: 12/11/20
Project: SOU_0731-004-08_ 20201211, F&BI 012225

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

Laboratory Code: 012215-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	10	<0.2	110	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	113	50-150
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	110	50-150
Trichloroethene	ug/L (ppb)	10	<1	108	50-150
Tetrachloroethene	ug/L (ppb)	10	<1	101	50-150

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)	10	101	107	70-130	6
trans-1,2-Dichloroethene	ug/L (ppb)	10	101	105	70-130	4
cis-1,2-Dichloroethene	ug/L (ppb)	10	100	105	70-130	5
Trichloroethene	ug/L (ppb)	10	98	101	70-130	3
Tetrachloroethene	ug/L (ppb)	10	103	98	70-130	5

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SAMPLE CHAIN OF CUSTODY

ME 12/11/20 VWS

012225 Lev: Fernandez

Send Report To Legan Schumacher cc Sarah Walter

Company SoundEarth Strategies

Address 2811 Fairview Ave E, Suite 2000

City, State, ZIP Seattle, WA 98102

SAMPLERS (signature) Sarah Walter

PROJECT NAME/NO.	PO #
Troy Laundry Property	0731-004-08
REMARKS *cVOCs = PCE, TCE, Cis/Trans-DCE, and VC	EIM Y

Page # 1 of 1

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
GWNI-MW-5-20201209	GWNI-MW-5	—	026C	12/9/20	1630	W	3				X						
GWNI-MW-4-20201210	GWNI-MW-4		026	12/10/20	1610	W	3				X						

Samples received at ____ °C

*updated COC

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	12/14/20	1000
Received by:	Hoang	HOANG NGUYEN	FBI	12/11/20	15:59
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 28, 2020

Levi Fernandes, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

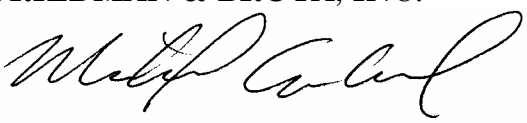
Dear Mr Fernandes:

Included are the results from the testing of material submitted on December 14, 2020 from the SOU_0731-004-08_ 20201214, F&BI 012217 project. There are 14 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: Sarah Welter
SOU1228R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 14, 2020 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0731-004-08_ 20201214, F&BI 012217 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
012217 -01	IW91-20201212
012217 -02	IW01-20201212
012217 -03	IW04-20201212
012217 -04	IW06-20201212
012217 -05	IW50-20201212

Samples IW01-20201212, IW04-20201212, and IW50-20201212 were sent to Fremont Analytical for TOC, sulfate, nitrate, alkalinity, and ferrous iron analysis. In addition, samples IW01-20201212 and IW50-20201212 were sent for dissolved gasses analysis. The report is enclosed.

The 8260D calibration standard failed the acceptance criteria for vinyl chloride in sample IW01-20201212. The data were flagged accordingly.

All other quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	IW01-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/15/20	Lab ID:	012217-02 x100
Date Analyzed:	12/16/20	Data File:	012217-02 x100.048
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	25,700
Manganese	12,600

Analysis For Total Metals By EPA Method 200.8

Client ID:	IW04-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/15/20	Lab ID:	012217-03 x100
Date Analyzed:	12/16/20	Data File:	012217-03 x100.049
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	16,500
Manganese	11,100

Analysis For Total Metals By EPA Method 200.8

Client ID:	IW50-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/15/20	Lab ID:	012217-05 x100
Date Analyzed:	12/16/20	Data File:	012217-05 x100.050
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	18,000
Manganese	13,200

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/15/20	Lab ID:	I0-775 mb
Date Analyzed:	12/15/20	Data File:	I0-775 mb.125
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 8260D

Client Sample ID:	IW91-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012217-01
Date Analyzed:	12/14/20	Data File:	121410.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	50	150
Toluene-d8	104	50	150
4-Bromofluorobenzene	104	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	IW01-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012217-02
Date Analyzed:	12/14/20	Data File:	121411.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	107	50	150
4-Bromofluorobenzene	131	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	4.1 ca
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	30
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	IW04-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012217-03
Date Analyzed:	12/14/20	Data File:	121407.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JCM

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

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.64
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	1.0
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	IW06-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012217-04
Date Analyzed:	12/14/20	Data File:	121408.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	3.3
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	IW50-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012217-05
Date Analyzed:	12/15/20	Data File:	121516.D
Matrix:	Water	Instrument:	GCMS13
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	103	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	00-2757 mb
Date Analyzed:	12/14/20	Data File:	121409.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	113	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 12/28/20
Date Received: 12/14/20
Project: SOU_0731-004-08_ 20201214, F&BI 012217

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

Laboratory Code: 012217-02 (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	22,500	0 b	0 b	70-130	0 b
Manganese	ug/L (ppb)	20	10,500	0 b	0 b	70-130	0 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	101	85-115
Manganese	ug/L (ppb)	20	95	85-115

Date of Report: 12/28/20
Date Received: 12/14/20
Project: SOU_0731-004-08_ 20201214, F&BI 012217

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

Laboratory Code: 012217-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	10	<0.2	135	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	108	50-150
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	107	50-150
Trichloroethene	ug/L (ppb)	10	<1	108	50-150
Tetrachloroethene	ug/L (ppb)	10	<1	106	50-150

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)	10	117	126	70-130	7
trans-1,2-Dichloroethene	ug/L (ppb)	10	94	103	70-130	9
cis-1,2-Dichloroethene	ug/L (ppb)	10	94	101	70-130	7
Trichloroethene	ug/L (ppb)	10	94	106	70-130	12
Tetrachloroethene	ug/L (ppb)	10	95	106	70-130	11

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

RE: 012217
Work Order Number: 2012233

December 22, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 3 sample(s) on 12/14/2020 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: *12/22/2020*

CLIENT: Friedman & Bruya
Project: 012217
Work Order: 2012233

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2012233-001	IW61-202012	12/12/2020 12:12 PM	12/14/2020 3:50 PM
2012233-002	IW04-202012	12/12/2020 2:10 PM	12/14/2020 3:50 PM
2012233-003	IW50-202012	12/12/2020 3:35 PM	12/14/2020 3:50 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **2012233**
Date: **12/22/2020**

CLIENT: Friedman & Bruya
Project: 012217

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
DUP - Sample Duplicate
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
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Analytical Report

Work Order: **2012233**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/12/2020 12:12:00 PM
Project: 012217
Lab ID: 2012233-001
Matrix: Water
Client Sample ID: IW61-202012

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R64152		Analyst: MS
Methane	4.58	0.216	D	mg/L	25	12/16/2020 2:03:00 PM
Ethene	ND	0.0151		mg/L	1	12/16/2020 1:30:00 PM
Ethane	ND	0.0162		mg/L	1	12/16/2020 1:30:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 30775		Analyst: TN
Nitrate (as N)	ND	0.100	H	mg/L	1	12/20/2020 3:48:00 AM
Sulfate	ND	0.300		mg/L	1	12/20/2020 3:48:00 AM
Total Organic Carbon by SM 5310C				Batch ID: R64149		Analyst: TN
Total Organic Carbon	60.6	2.00	D	mg/L	4	12/18/2020 8:11:00 PM
Total Alkalinity by SM 2320B				Batch ID: R64198		Analyst: TN
Alkalinity, Total (As CaCO3)	471	2.50		mg/L	1	12/22/2020 12:33:23 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R64070		Analyst: SS
Ferrous Iron	32.8	1.25	DH	mg/L	25	12/16/2020 9:30:00 AM

Analytical Report

Work Order: **2012233**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/12/2020 2:10:00 PM
Project: 012217
Lab ID: 2012233-002
Matrix: Water
Client Sample ID: IW04-202012

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Ion Chromatography by EPA Method 300.0				Batch ID: 30775		Analyst: TN
Nitrate (as N)	ND	0.100	H	mg/L	1	12/20/2020 4:12:00 AM
Sulfate	0.347	0.300		mg/L	1	12/20/2020 4:12:00 AM
Total Organic Carbon by SM 5310C				Batch ID: R64149		Analyst: TN
Total Organic Carbon	90.3	2.00	D	mg/L	4	12/18/2020 8:30:00 PM
Total Alkalinity by SM 2320B				Batch ID: R64198		Analyst: TN
Alkalinity, Total (As CaCO3)	500	2.50		mg/L	1	12/22/2020 12:33:23 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R64070		Analyst: SS
Ferrous Iron	18.5	1.25	DH	mg/L	25	12/16/2020 9:30:00 AM

Analytical Report

Work Order: **2012233**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/12/2020 3:35:00 PM
Project: 012217
Lab ID: 2012233-003
Matrix: Water
Client Sample ID: IW50-202012

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R64152		Analyst: MS
Methane	13.5	0.432	D	mg/L	50	12/16/2020 1:58:00 PM
Ethene	ND	0.0151		mg/L	1	12/16/2020 1:32:00 PM
Ethane	ND	0.0162		mg/L	1	12/16/2020 1:32:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 30775		Analyst: TN
Nitrate (as N)	ND	0.400	DH	mg/L	4	12/20/2020 4:35:00 AM
Sulfate	1.34	1.20	D	mg/L	4	12/20/2020 4:35:00 AM
NOTES: Diluted due to matrix.						
Total Organic Carbon by SM 5310C				Batch ID: R64149		Analyst: TN
Total Organic Carbon	13.7	0.500		mg/L	1	12/17/2020 9:45:00 PM
Total Alkalinity by SM 2320B				Batch ID: R64198		Analyst: TN
Alkalinity, Total (As CaCO3)	544	2.50		mg/L	1	12/22/2020 12:33:23 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R64070		Analyst: SS
Ferrous Iron	24.2	1.25	DH	mg/L	25	12/16/2020 9:30:00 AM

Work Order: 2012233
CLIENT: Friedman & Bruya
Project: 012217

QC SUMMARY REPORT

Total Alkalinity by SM 2320B

Sample ID: **MB-R64198**	SampType: **MBLK**			Units: **mg/L**		Prep Date: **12/22/2020**		RunNo: **64198**		
Client ID: **MBLKW**	Batch ID: **R64198**					Analysis Date: **12/22/2020**		SeqNo: **1289969**		
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-R64198**	SampType: **LCS**			Units: **mg/L**		Prep Date: **12/22/2020**		RunNo: **64198**		
Client ID: **LCSW**	Batch ID: **R64198**					Analysis Date: **12/22/2020**		SeqNo: **1289970**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	106	2.50	100.0	0	106	99.6	108				

Sample ID: **2012233-003BDUP**	SampType: **DUP**			Units: **mg/L**		Prep Date: **12/22/2020**		RunNo: **64198**		
Client ID: **IW50-202012**	Batch ID: **R64198**					Analysis Date: **12/22/2020**		SeqNo: **1289974**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	544	2.50						543.9	0	20	

Work Order: 2012233
CLIENT: Friedman & Bruya
Project: 012217

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **MB-R64070**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **MBLKW**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287430**

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-R64070**	SampType: **LCS**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **LCSW**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287431**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.434	0.0500	0.4000	0	109	85	115				

Sample ID: **2012217-001CDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **BATCH**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287433**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	ND	0.0500						0		20	H

Sample ID: **2012217-001CMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **BATCH**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287434**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.496	0.0500	0.4000	0	124	70	130				H

Sample ID: **2012217-001CMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **BATCH**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287435**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.519	0.0500	0.4000	0	130	70	130	0.4963	4.52	20	H

Work Order: 2012233
CLIENT: Friedman & Bruya
Project: 012217

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **2012233-001DDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **IW61-202012**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287448**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	32.4	1.25						32.82	1.26	20	DH

Sample ID: **2012233-001DMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **IW61-202012**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287449**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	44.6	1.25	10.00	32.82	118	70	130				DH

Work Order: 2012233
CLIENT: Friedman & Bruya
Project: 012217

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **LCS-30775** SampType: **LCS** Units: **mg/L** Prep Date: **12/19/2020** RunNo: **64153**
Client ID: **LCSW** Batch ID: **30775** Analysis Date: **12/19/2020** SeqNo: **1289321**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.761	0.100	0.7500	0	101	90	110				
Sulfate	3.83	0.300	3.750	0	102	90	110				

Sample ID: **MB-30775** SampType: **MBLK** Units: **mg/L** Prep Date: **12/19/2020** RunNo: **64153**
Client ID: **MBLKW** Batch ID: **30775** Analysis Date: **12/19/2020** SeqNo: **1289322**

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: **2012230-001ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **12/19/2020** RunNo: **64153**
Client ID: **BATCH** Batch ID: **30775** Analysis Date: **12/19/2020** SeqNo: **1289215**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.353	0.100						0.3580	1.41	20	H
Sulfate	6.38	0.300						6.383	0.0940	20	

Sample ID: **2012230-001AMS** SampType: **MS** Units: **mg/L** Prep Date: **12/19/2020** RunNo: **64153**
Client ID: **BATCH** Batch ID: **30775** Analysis Date: **12/19/2020** SeqNo: **1289216**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	1.07	0.100	0.7500	0.3580	95.1	80	120				H
Sulfate	10.4	0.300	3.750	6.383	108	80	120				

Work Order: 2012233
CLIENT: Friedman & Bruya
Project: 012217

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **2012230-001AMSD** SampType: **MSD** Units: **mg/L** Prep Date: **12/19/2020** RunNo: **64153**
Client ID: **BATCH** Batch ID: **30775** Analysis Date: **12/19/2020** SeqNo: **1289217**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	1.09	0.100	0.7500	0.3580	97.1	80	120	1.071	1.39	20	H
Sulfate	10.6	0.300	3.750	6.383	113	80	120	10.44	1.68	20	

Sample ID: **2012231-002ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **12/19/2020** RunNo: **64153**
Client ID: **BATCH** Batch ID: **30775** Analysis Date: **12/20/2020** SeqNo: **1289225**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	ND	0.200						0		20	DH
Sulfate	ND	0.600						0		20	D

Sample ID: **2012231-002AMS** SampType: **MS** Units: **mg/L** Prep Date: **12/19/2020** RunNo: **64153**
Client ID: **BATCH** Batch ID: **30775** Analysis Date: **12/20/2020** SeqNo: **1289226**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	1.58	0.200	1.500	0.1120	97.9	80	120				DH
Sulfate	6.00	0.600	7.500	0	80.0	80	120				D

Work Order: 2012233
CLIENT: Friedman & Bruya
Project: 012217

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **MB-R64149**	SampType: **MBLK**			Units: **mg/L**		Prep Date: **12/17/2020**		RunNo: **64149**		
Client ID: **MBLKW**	Batch ID: **R64149**					Analysis Date: **12/17/2020**		SeqNo: **1289110**		
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-R64149**	SampType: **LCS**			Units: **mg/L**		Prep Date: **12/17/2020**		RunNo: **64149**		
Client ID: **LCSW**	Batch ID: **R64149**					Analysis Date: **12/17/2020**		SeqNo: **1289111**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.24	0.500	5.000	0	105	90	118				

Sample ID: **2012217-001ADUP**	SampType: **DUP**			Units: **mg/L**		Prep Date: **12/17/2020**		RunNo: **64149**		
Client ID: **BATCH**	Batch ID: **R64149**					Analysis Date: **12/17/2020**		SeqNo: **1289113**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	0.959	0.500						0.9690	1.04	20	

Sample ID: **2012217-001AMS**	SampType: **MS**			Units: **mg/L**		Prep Date: **12/17/2020**		RunNo: **64149**		
Client ID: **BATCH**	Batch ID: **R64149**					Analysis Date: **12/17/2020**		SeqNo: **1289114**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.89	0.500	5.000	0.9690	98.4	80.9	124				

Sample ID: **2012217-001AMSD**	SampType: **MSD**			Units: **mg/L**		Prep Date: **12/17/2020**		RunNo: **64149**		
Client ID: **BATCH**	Batch ID: **R64149**					Analysis Date: **12/17/2020**		SeqNo: **1289115**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.74	0.500	5.000	0.9690	95.4	80.9	124	5.891	2.60	30	

Work Order: 2012233
CLIENT: Friedman & Bruya
Project: 012217

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **2012233-002ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **12/17/2020** RunNo: **64149**
Client ID: **IW04-202012** Batch ID: **R64149** Analysis Date: **12/17/2020** SeqNo: **1289141**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	94.5	0.500						94.31	0.198	20	E

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

Sample ID: **2012233-002AMS** SampType: **MS** Units: **mg/L** Prep Date: **12/17/2020** RunNo: **64149**
Client ID: **IW04-202012** Batch ID: **R64149** Analysis Date: **12/17/2020** SeqNo: **1289126**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	96.8	0.500	5.000	94.31	50.5	80.9	124				ES

NOTES:
S - Analyte concentration was too high for accurate spike recovery(ies).
E - Estimated value. The amount exceeds the linear working range of the instrument.

Work Order: 2012233
CLIENT: Friedman & Bruya
Project: 012217

QC SUMMARY REPORT

Dissolved Gases by RSK-175

Sample ID: **LCS-R64512** SampType: **LCS** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64152**
Client ID: **LCSW** Batch ID: **R64152** Analysis Date: **12/16/2020** SeqNo: **1289202**

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	1,020	0.0151	1,000	0	102	70	130				
Ethane	1,020	0.0162	1,000	0	102	70	130				

Sample ID: **MB-R64152** SampType: **MBLK** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64152**
Client ID: **MBLKW** Batch ID: **R64152** Analysis Date: **12/16/2020** SeqNo: **1289203**

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: **2012217-001DREP** SampType: **REP** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64152**
Client ID: **BATCH** Batch ID: **R64152** Analysis Date: **12/16/2020** SeqNo: **1289174**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	0.329	0.00863						0.3708	11.8	30	E
Ethene	ND	0.0151						0		30	
Ethane	ND	0.0162						0		30	

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

Sample Log-In Check List

Client Name:	**FB**	Work Order Number:	**2012233**
Logged by:	**Carissa True**	Date Received:	**12/14/2020 3:50:00 PM**

Chain of Custody

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

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 Present ☑
6.	Was an attempt made to cool the samples?	Yes	☑	No	☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°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:	12/15/2020
By Whom:	Carissa True	Via:	☑ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	Out of hold		
Client Instructions:	Proceed		

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample 1	1.7
Sample 2	0.9

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

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2012233

Page # 1 of 1

Send Report To: Michael Erdahl
Company: Friedman & Bruya Inc.
Address: 3012 16th Ave W, Seattle WA 98119
Phone #: (206) 285-8282
Email: merdahl@friedmanandbruya.com

SUBCONTRACTOR: Fremont
PROJECT NUMBER: 012217
PO #: A-497
REMARKS: Email Results

TURNAROUND TIME
☒ Standard (2 Weeks)
☐ 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: Total Organic Carbon (TOC)	COD	BOD	Chloride	Sulfate	Sulfide	Methane, Ethane, Ethene	Nitrate, Alkalinity	Fe 2+	Cr VI	Notes
IW01-20201212		12/12/20	1212	water	6	x				x		✓	x	x		
IW04-20201212		"	1410	"	3	x				x			x	x		
IW50-20201212		"	1535	"	6	x				x		x	x	x		

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

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Ann Webber-Bruya	Friedman and Bruya	12/14	1350
Received by:		Claire Anderson	FBI	12/14	1545
Relinquished by:					
Received by:					

012217

SAMPLE CHAIN OF CUSTODY

ME 12/14/20

VW3/AT3

Page # 1 of 1

Levi Fernandes

Send Report To ~~Logan Schumacher~~ cc Sarah Walter

Company SoundEarth Strategies

Address 2811 Fairview Ave E, Suite 2000

City, State, ZIP Seattle, WA 98102

SAMPLERS (signature) Sarah Walter

PROJECT NAME/NO.	PO #
Troy Laundry Property	0731-004-08
REMARKS *cVOCs = PCE, TCE, Cis/Trans-DCE, and VC	EIM Y

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
IW91-20201212	IW91	—	01 A-C	12/12/20	1019	W	3				Y						
IW61-20201212	IW61	—	02 A-J		1212		10				X	X	X	X	X	X	
IW04-20201212	IW04	—	03 A-G		1410		7				X		X	X	X	X	
IW06-20201212	IW06	—	04 A-C		1505		3				X						
IW50-20201212	IW50	—	05 A-J		1535		10				X	X	X	X	X	Y	

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Sarah Walter	Sarah Walter	SES	12/14/20	1204
Received by:	Khan Phan	FEBT	12/14/20	1224
Relinquished by:				
Received by:		Samples received at 4 °C		

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

December 23, 2020

Levi Fernandes, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr Fernandes:

Included are the results from the testing of material submitted on December 14, 2020 from the SOU_0731-004-08_ 20201214, F&BI 012218 project. There are 27 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: Sarah Welter
SOU1223R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 14, 2020 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0731-004-08_ 20201214, F&BI 012218 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SoundEarth Strategies
012218 -01	MW25-20201212
012218 -02	MW22-20201212
012218 -03	MW19-20201212
012218 -04	MW99-20201212
012218 -05	MW18-20201212
012218 -06	MW17-20201212
012218 -07	MW23-20201212
012218 -08	MW21-20201212
012218 -09	MW24-20201212
012218 -10	MW20-20201212
012218 -11	MW32-20201212

Samples MW25-20201212, MW22-20201212, MW19-20201212, MW18-20201212, MW23-20201212, and MW24-20201212 were sent to Fremont Analytical for dissolved gasses, sulfate, nitrate, alkalinity, and ferrous iron analyses. In addition, samples MW25-20201212, MW22-20201212, MW18-20201212, MW20-20201212, MW21-20201212, and MW24-20201212 were sent for TOC analysis and MW 21-20201212 for dissolved gasses. The report is enclosed.

All quality control requirements were acceptable.

Date of Report: 12/23/20
Date Received: 12/14/20
Project: SOU_0731-004-08_ 20201214, F&BI 012218
Date Extracted: 12/18/20
Date Analyzed: 12/18/20

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 51-134)
MW22-20201212 012218-02	570	93
MW21-20201212 012218-08	460	96
Method Blank 00-2719 MB	<100	99

Date of Report: 12/23/20
Date Received: 12/14/20
Project: SOU_0731-004-08_ 20201214, F&BI 012218
Date Extracted: 12/15/20
Date Analyzed: 12/15/20

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)
MW22-20201212 012218-02	12,000 x	4,100 x	82
MW21-20201212 012218-08	36,000 x	6,500 x	105
Method Blank 00-2851 MB	<50	<250	96

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW25-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/15/20	Lab ID:	012218-01 x100
Date Analyzed:	12/16/20	Data File:	012218-01 x100.036
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	16,200
Manganese	7,390

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW22-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/15/20	Lab ID:	012218-02 x100
Date Analyzed:	12/16/20	Data File:	012218-02 x100.037
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	15,000
Manganese	10,800

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW19-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/15/20	Lab ID:	012218-03 x100
Date Analyzed:	12/16/20	Data File:	012218-03 x100.038
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	16,700
Manganese	14,400

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW18-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/15/20	Lab ID:	012218-05 x100
Date Analyzed:	12/16/20	Data File:	012218-05 x100.039
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	12,900
Manganese	7,980

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW23-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/15/20	Lab ID:	012218-07 x100
Date Analyzed:	12/16/20	Data File:	012218-07 x100.046
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	12,700
Manganese	15,200

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW24-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/15/20	Lab ID:	012218-09 x100
Date Analyzed:	12/16/20	Data File:	012218-09 x100.047
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	13,500
Manganese	20,900

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/15/20	Lab ID:	I0-768 mb2
Date Analyzed:	12/15/20	Data File:	I0-768 mb2.063
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 8260D

Client Sample ID:	MW25-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012218-01
Date Analyzed:	12/14/20	Data File:	121409.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.43
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	35
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW22-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012218-02
Date Analyzed:	12/14/20	Data File:	121410.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	1.1
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	44
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW19-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012218-03
Date Analyzed:	12/14/20	Data File:	121411.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	57	121
Toluene-d8	98	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	2.6
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	22
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW99-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012218-04
Date Analyzed:	12/14/20	Data File:	121412.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JCM

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

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.43
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	34
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW18-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012218-05
Date Analyzed:	12/14/20	Data File:	121413.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	2.4
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	15
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW17-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012218-06
Date Analyzed:	12/14/20	Data File:	121417.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	50	150
Toluene-d8	107	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW23-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012218-07
Date Analyzed:	12/14/20	Data File:	121414.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.85
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	30
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW21-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012218-08
Date Analyzed:	12/14/20	Data File:	121415.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	1.8
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	10
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW24-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012218-09
Date Analyzed:	12/14/20	Data File:	121416.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	96	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.61
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	45
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW20-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012218-10
Date Analyzed:	12/14/20	Data File:	121418.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	86	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	6.0
Trichloroethene	1.3
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	MW32-20201212	Client:	SoundEarth Strategies
Date Received:	12/14/20	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	012218-11
Date Analyzed:	12/15/20	Data File:	121417.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260D

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0731-004-08_ 20201214
Date Extracted:	12/14/20	Lab ID:	00-2757 mb
Date Analyzed:	12/14/20	Data File:	121409.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	JCM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	113	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
trans-1,2-Dichloroethene	<1
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 12/23/20
Date Received: 12/14/20
Project: SOU_0731-004-08_ 20201214, F&BI 012218

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

Laboratory Code: 012249-01 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	101	69-134

Date of Report: 12/23/20
Date Received: 12/14/20
Project: SOU_0731-004-08_ 20201214, F&BI 012218

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	100	96	63-142	4

Date of Report: 12/23/20
Date Received: 12/14/20
Project: SOU_0731-004-08_ 20201214, F&BI 012218

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

Laboratory Code: 012203-05 (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	83.1	101	105	70-130	4
Manganese	ug/L (ppb)	20	4.07	101	103	70-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	97	85-115
Manganese	ug/L (ppb)	20	97	85-115

Date of Report: 12/23/20
Date Received: 12/14/20
Project: SOU_0731-004-08_ 20201214, F&BI 012218

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

Laboratory Code: 012217-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	10	<0.2	135	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	108	50-150
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	107	50-150
Trichloroethene	ug/L (ppb)	10	<1	108	50-150
Tetrachloroethene	ug/L (ppb)	10	<1	106	50-150

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)	10	117	126	70-130	7
trans-1,2-Dichloroethene	ug/L (ppb)	10	94	103	70-130	9
cis-1,2-Dichloroethene	ug/L (ppb)	10	94	101	70-130	7
Trichloroethene	ug/L (ppb)	10	94	106	70-130	12
Tetrachloroethene	ug/L (ppb)	10	95	106	70-130	11

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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info@fremontanalytical.com

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

RE: 012218
Work Order Number: 2012231

December 22, 2020

Attention Michael Erdahl:

Fremont Analytical, Inc. received 7 sample(s) on 12/14/2020 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: *12/22/2020*

CLIENT: Friedman & Bruya
Project: 012218
Work Order: 2012231

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2012231-001	MW25-20201212	12/12/2020 10:05 AM	12/14/2020 3:50 PM
2012231-002	MW22-20201212	12/12/2020 11:03 AM	12/14/2020 3:50 PM
2012231-003	MW19-20201212	12/12/2020 11:25 AM	12/14/2020 3:50 PM
2012231-004	MW18-20201212	12/12/2020 12:12 PM	12/14/2020 3:50 PM
2012231-005	MW23-20201212	12/12/2020 1:18 PM	12/14/2020 3:50 PM
2012231-006	MW21-20201212	12/12/2020 2:50 PM	12/14/2020 3:50 PM
2012231-007	MW24-20201212	12/12/2020 4:02 PM	12/14/2020 3:50 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original

Case Narrative

WO#: **2012231**
Date: **12/22/2020**

CLIENT: Friedman & Bruya
Project: 012218

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
DUP - Sample Duplicate
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
REP - Sample Replicate
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Analytical Report

Work Order: **2012231**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/12/2020 10:05:00 AM
Project: 012218
Lab ID: 2012231-001
Matrix: Water
Client Sample ID: **MW25-20201212**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R64152		Analyst: MS
Methane	5.69	0.432	D	mg/L	50	12/16/2020 1:38:00 PM
Ethene	ND	0.0151		mg/L	1	12/16/2020 1:13:00 PM
Ethane	ND	0.0162		mg/L	1	12/16/2020 1:13:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 30775		Analyst: TN
Nitrate (as N)	ND	0.100	H	mg/L	1	12/19/2020 11:57:00 PM
Sulfate	0.342	0.300		mg/L	1	12/19/2020 11:57:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R64149		Analyst: TN
Total Organic Carbon	9.57	0.500		mg/L	1	12/17/2020 4:13:00 PM
Total Alkalinity by SM 2320B				Batch ID: R64182		Analyst: WF
Alkalinity, Total (As CaCO3)	412	2.50		mg/L	1	12/21/2020 11:31:19 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R64070		Analyst: SS
Ferrous Iron	21.6	1.25	DH	mg/L	25	12/16/2020 9:30:00 AM

Analytical Report

Work Order: **2012231**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/12/2020 11:03:00 AM
Project: 012218
Lab ID: 2012231-002
Matrix: Water
Client Sample ID: **MW22-20201212**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R64152		Analyst: MS
Methane	6.29	0.432	D	mg/L	50	12/16/2020 1:40:00 PM
Ethene	ND	0.0151		mg/L	1	12/16/2020 1:15:00 PM
Ethane	ND	0.0162		mg/L	1	12/16/2020 1:15:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 30775		Analyst: TN
Nitrate (as N)	ND	0.200	DH	mg/L	2	12/20/2020 1:07:00 AM
Sulfate	ND	0.600	D	mg/L	2	12/20/2020 1:07:00 AM
Total Organic Carbon by SM 5310C				Batch ID: R64149		Analyst: TN
Total Organic Carbon	95.5	2.00	D	mg/L	4	12/18/2020 7:17:00 PM
Total Alkalinity by SM 2320B				Batch ID: R64182		Analyst: WF
Alkalinity, Total (As CaCO3)	500	2.50		mg/L	1	12/21/2020 11:31:19 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R64070		Analyst: SS
Ferrous Iron	22.0	1.25	DH	mg/L	25	12/16/2020 9:30:00 AM

Analytical Report

Work Order: **2012231**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/12/2020 11:25:00 AM
Project: 012218
Lab ID: 2012231-003
Matrix: Water
Client Sample ID: **MW19-20201212**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R64152		Analyst: MS
Methane	9.01	0.432	D	mg/L	50	12/16/2020 1:45:00 PM
Ethene	ND	0.0151		mg/L	1	12/16/2020 1:17:00 PM
Ethane	ND	0.0162		mg/L	1	12/16/2020 1:17:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 30775		Analyst: TN
Nitrate (as N)	ND	0.100	H	mg/L	1	12/20/2020 2:16:00 AM
Sulfate	1.15	0.300		mg/L	1	12/20/2020 2:16:00 AM
Total Alkalinity by SM 2320B				Batch ID: R64182		Analyst: WF
Alkalinity, Total (As CaCO3)	412	2.50		mg/L	1	12/21/2020 11:31:19 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R64070		Analyst: SS
Ferrous Iron	22.3	1.25	DH	mg/L	25	12/16/2020 9:30:00 AM

Analytical Report

Work Order: **2012231**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/12/2020 12:12:00 PM
Project: 012218
Lab ID: 2012231-004
Matrix: Water
Client Sample ID: **MW18-20201212**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R64152		Analyst: MS
Methane	8.78	0.432	D	mg/L	50	12/16/2020 1:47:00 PM
Ethene	ND	0.0151		mg/L	1	12/16/2020 1:22:00 PM
Ethane	ND	0.0162		mg/L	1	12/16/2020 1:22:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 30775		Analyst: TN
Nitrate (as N)	ND	0.100	H	mg/L	1	12/20/2020 2:39:00 AM
Sulfate	6.23	0.300		mg/L	1	12/20/2020 2:39:00 AM
Total Organic Carbon by SM 5310C				Batch ID: R64149		Analyst: TN
Total Organic Carbon	4.30	0.500		mg/L	1	12/17/2020 6:17:00 PM
Total Alkalinity by SM 2320B				Batch ID: R64182		Analyst: WF
Alkalinity, Total (As CaCO3)	451	2.50		mg/L	1	12/21/2020 11:31:19 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R64070		Analyst: SS
Ferrous Iron	17.6	1.25	DH	mg/L	25	12/16/2020 9:30:00 AM

Analytical Report

Work Order: **2012231**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/12/2020 1:18:00 PM
Project: 012218
Lab ID: 2012231-005
Matrix: Water
Client Sample ID: **MW23-20201212**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R64152		Analyst: MS
Methane	10.1	0.432	D	mg/L	50	12/16/2020 1:49:00 PM
Ethene	ND	0.0151		mg/L	1	12/16/2020 1:24:00 PM
Ethane	ND	0.0162		mg/L	1	12/16/2020 1:24:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 30775		Analyst: TN
Nitrate (as N)	ND	0.200	DH	mg/L	2	12/20/2020 3:02:00 AM
Sulfate	0.634	0.600	D	mg/L	2	12/20/2020 3:02:00 AM
Total Organic Carbon by SM 5310C				Batch ID: R64149		Analyst: TN
Total Organic Carbon	7.90	0.500		mg/L	1	12/17/2020 6:48:00 PM
Total Alkalinity by SM 2320B				Batch ID: R64182		Analyst: WF
Alkalinity, Total (As CaCO3)	436	2.50		mg/L	1	12/21/2020 11:31:19 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R64070		Analyst: SS
Ferrous Iron	16.8	1.25	DH	mg/L	25	12/16/2020 9:30:00 AM

Analytical Report

Work Order: **2012231**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/12/2020 2:50:00 PM
Project: 012218
Lab ID: 2012231-006
Matrix: Water
Client Sample ID: **MW21-20201212**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R64152		Analyst: MS
Methane	7.52	0.432	D	mg/L	50	12/16/2020 1:51:00 PM
Ethene	ND	0.0151		mg/L	1	12/16/2020 1:26:00 PM
Ethane	ND	0.0162		mg/L	1	12/16/2020 1:26:00 PM
Total Organic Carbon by SM 5310C				Batch ID: R64149		Analyst: TN
Total Organic Carbon	191	5.00	D	mg/L	10	12/18/2020 7:37:00 PM

Analytical Report

Work Order: **2012231**
Date Reported: **12/22/2020**

Client: Friedman & Bruya
Collection Date: 12/12/2020 4:02:00 PM
Project: 012218
Lab ID: 2012231-007
Matrix: Water
Client Sample ID: **MW24-20201212**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Dissolved Gases by RSK-175				Batch ID: R64152		Analyst: MS
Methane	4.17	0.432	D	mg/L	50	12/16/2020 1:54:00 PM
Ethene	ND	0.0151		mg/L	1	12/16/2020 1:28:00 PM
Ethane	ND	0.0162		mg/L	1	12/16/2020 1:28:00 PM
Ion Chromatography by EPA Method 300.0				Batch ID: 30775		Analyst: TN
Nitrate (as N)	ND	0.100	H	mg/L	1	12/20/2020 3:25:00 AM
Sulfate	ND	0.300		mg/L	1	12/20/2020 3:25:00 AM
Total Organic Carbon by SM 5310C				Batch ID: R64149		Analyst: TN
Total Organic Carbon	6.95	0.500		mg/L	1	12/17/2020 7:43:00 PM
Total Alkalinity by SM 2320B				Batch ID: R64182		Analyst: WF
Alkalinity, Total (As CaCO3)	436	2.50		mg/L	1	12/21/2020 11:31:19 PM
Ferrous Iron by SM3500-Fe B				Batch ID: R64070		Analyst: SS
Ferrous Iron	17.8	1.25	DH	mg/L	25	12/16/2020 9:30:00 AM

Work Order: 2012231
CLIENT: Friedman & Bruya
Project: 012218

QC SUMMARY REPORT

Total Alkalinity by SM 2320B

Sample ID: **MB-R64182**	SampType: **MBLK**			Units: **mg/L**		Prep Date: **12/21/2020**		RunNo: **64182**		
Client ID: **MBLKW**	Batch ID: **R64182**					Analysis Date: **12/21/2020**		SeqNo: **1289695**		
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-R64182**	SampType: **LCS**			Units: **mg/L**		Prep Date: **12/21/2020**		RunNo: **64182**		
Client ID: **LCSW**	Batch ID: **R64182**					Analysis Date: **12/21/2020**		SeqNo: **1289696**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	102	2.50	100.0	0	102	99.6	108				

Sample ID: **2012217-001BDUP**	SampType: **DUP**			Units: **mg/L**		Prep Date: **12/21/2020**		RunNo: **64182**		
Client ID: **BATCH**	Batch ID: **R64182**					Analysis Date: **12/21/2020**		SeqNo: **1289698**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	88.2	2.50						83.30	5.71	20	

Work Order: 2012231
CLIENT: Friedman & Bruya
Project: 012218

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **MB-R64070**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **MBLKW**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287430**

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-R64070**	SampType: **LCS**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **LCSW**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287431**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.434	0.0500	0.4000	0	109	85	115				

Sample ID: **2012217-001CDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **BATCH**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287433**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	ND	0.0500						0		20	H

Sample ID: **2012217-001CMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **BATCH**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287434**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.496	0.0500	0.4000	0	124	70	130				H

Sample ID: **2012217-001CMSD**	SampType: **MSD**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **BATCH**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287435**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	0.519	0.0500	0.4000	0	130	70	130	0.4963	4.52	20	H

Work Order: 2012231
CLIENT: Friedman & Bruya
Project: 012218

QC SUMMARY REPORT

Ferrous Iron by SM3500-Fe B

Sample ID: **2012233-001DDUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **BATCH**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287448**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	32.4	1.25						32.82	1.26	20	DH

Sample ID: **2012233-001DMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **12/16/2020**	RunNo: **64070**
Client ID: **BATCH**	Batch ID: **R64070**		Analysis Date: **12/16/2020**	SeqNo: **1287449**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ferrous Iron	44.6	1.25	10.00	32.82	118	70	130				DH

Work Order: 2012231
CLIENT: Friedman & Bruya
Project: 012218

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **LCS-30775**	SampType: **LCS**	Units: **mg/L**	Prep Date: **12/19/2020**	RunNo: **64153**
Client ID: **LCSW**	Batch ID: **30775**		Analysis Date: **12/19/2020**	SeqNo: **1289321**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.761	0.100	0.7500	0	101	90	110				
Sulfate	3.83	0.300	3.750	0	102	90	110				

Sample ID: **MB-30775**	SampType: **MBLK**	Units: **mg/L**	Prep Date: **12/19/2020**	RunNo: **64153**
Client ID: **MBLKW**	Batch ID: **30775**		Analysis Date: **12/19/2020**	SeqNo: **1289322**

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: **2012230-001ADUP**	SampType: **DUP**	Units: **mg/L**	Prep Date: **12/19/2020**	RunNo: **64153**
Client ID: **BATCH**	Batch ID: **30775**		Analysis Date: **12/19/2020**	SeqNo: **1289215**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	0.353	0.100						0.3580	1.41	20	H
Sulfate	6.38	0.300						6.383	0.0940	20	

Sample ID: **2012230-001AMS**	SampType: **MS**	Units: **mg/L**	Prep Date: **12/19/2020**	RunNo: **64153**
Client ID: **BATCH**	Batch ID: **30775**		Analysis Date: **12/19/2020**	SeqNo: **1289216**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	1.07	0.100	0.7500	0.3580	95.1	80	120				H
Sulfate	10.4	0.300	3.750	6.383	108	80	120				

Work Order: 2012231
CLIENT: Friedman & Bruya
Project: 012218

QC SUMMARY REPORT

Ion Chromatography by EPA Method 300.0

Sample ID: **2012230-001AMSD** SampType: **MSD** Units: **mg/L** Prep Date: **12/19/2020** RunNo: **64153**
Client ID: **BATCH** Batch ID: **30775** Analysis Date: **12/19/2020** SeqNo: **1289217**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	1.09	0.100	0.7500	0.3580	97.1	80	120	1.071	1.39	20	H
Sulfate	10.6	0.300	3.750	6.383	113	80	120	10.44	1.68	20	

Sample ID: **2012231-002ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **12/19/2020** RunNo: **64153**
Client ID: **MW22-20201212** Batch ID: **30775** Analysis Date: **12/20/2020** SeqNo: **1289225**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	ND	0.200						0		20	DH
Sulfate	ND	0.600						0		20	D

Sample ID: **2012231-002AMS** SampType: **MS** Units: **mg/L** Prep Date: **12/19/2020** RunNo: **64153**
Client ID: **MW22-20201212** Batch ID: **30775** Analysis Date: **12/20/2020** SeqNo: **1289226**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrate (as N)	1.58	0.200	1.500	0.1120	97.9	80	120				DH
Sulfate	6.00	0.600	7.500	0	80.0	80	120				D

Work Order: 2012231
CLIENT: Friedman & Bruya
Project: 012218

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **MB-R64149**	SampType: **MBLK**			Units: **mg/L**		Prep Date: **12/17/2020**		RunNo: **64149**		
Client ID: **MBLKW**	Batch ID: **R64149**					Analysis Date: **12/17/2020**		SeqNo: **1289110**		
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-R64149**	SampType: **LCS**			Units: **mg/L**		Prep Date: **12/17/2020**		RunNo: **64149**		
Client ID: **LCSW**	Batch ID: **R64149**					Analysis Date: **12/17/2020**		SeqNo: **1289111**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.24	0.500	5.000	0	105	90	118				

Sample ID: **2012217-001ADUP**	SampType: **DUP**			Units: **mg/L**		Prep Date: **12/17/2020**		RunNo: **64149**		
Client ID: **BATCH**	Batch ID: **R64149**					Analysis Date: **12/17/2020**		SeqNo: **1289113**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	0.959	0.500						0.9690	1.04	20	

Sample ID: **2012217-001AMS**	SampType: **MS**			Units: **mg/L**		Prep Date: **12/17/2020**		RunNo: **64149**		
Client ID: **BATCH**	Batch ID: **R64149**					Analysis Date: **12/17/2020**		SeqNo: **1289114**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.89	0.500	5.000	0.9690	98.4	80.9	124				

Sample ID: **2012217-001AMSD**	SampType: **MSD**			Units: **mg/L**		Prep Date: **12/17/2020**		RunNo: **64149**		
Client ID: **BATCH**	Batch ID: **R64149**					Analysis Date: **12/17/2020**		SeqNo: **1289115**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	5.74	0.500	5.000	0.9690	95.4	80.9	124	5.891	2.60	30	

Work Order: 2012231
CLIENT: Friedman & Bruya
Project: 012218

QC SUMMARY REPORT

Total Organic Carbon by SM 5310C

Sample ID: **2012233-002ADUP** SampType: **DUP** Units: **mg/L** Prep Date: **12/17/2020** RunNo: **64149**
Client ID: **BATCH** Batch ID: **R64149** Analysis Date: **12/17/2020** SeqNo: **1289141**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	94.5	0.500						94.31	0.198	20	E

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

Sample ID: **2012233-002AMS** SampType: **MS** Units: **mg/L** Prep Date: **12/17/2020** RunNo: **64149**
Client ID: **BATCH** Batch ID: **R64149** Analysis Date: **12/17/2020** SeqNo: **1289126**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	96.8	0.500	5.000	94.31	50.5	80.9	124				ES

NOTES:
S - Analyte concentration was too high for accurate spike recovery(ies).
E - Estimated value. The amount exceeds the linear working range of the instrument.

Work Order: 2012231
CLIENT: Friedman & Bruya
Project: 012218

QC SUMMARY REPORT

Dissolved Gases by RSK-175

Sample ID: **LCS-R64512** SampType: **LCS** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64152**
Client ID: **LCSW** Batch ID: **R64152** Analysis Date: **12/16/2020** SeqNo: **1289202**

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	1,020	0.0151	1,000	0	102	70	130				
Ethane	1,020	0.0162	1,000	0	102	70	130				

Sample ID: **MB-R64152** SampType: **MBLK** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64152**
Client ID: **MBLKW** Batch ID: **R64152** Analysis Date: **12/16/2020** SeqNo: **1289203**

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: **2012217-001DREP** SampType: **REP** Units: **mg/L** Prep Date: **12/16/2020** RunNo: **64152**
Client ID: **BATCH** Batch ID: **R64152** Analysis Date: **12/16/2020** SeqNo: **1289174**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	0.329	0.00863						0.3708	11.8	30	E
Ethene	ND	0.0151						0		30	
Ethane	ND	0.0162						0		30	

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

Sample Log-In Check List

Client Name:	**FB**	Work Order Number:	**2012231**
Logged by:	**Carissa True**	Date Received:	**12/14/2020 3:50:00 PM**

Chain of Custody

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

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 Present ☑
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all items received at a temperature of >2°C to 6°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:	12/15/2020
By Whom:	Carissa True	Via:	☑ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	Out of hold		
Client Instructions:	Proceed		

19. Additional remarks:

Item Information

Item #	Temp ºC
Sample 1	1.7
Sample 2	0.9

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

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2013 201221

Page # 1 of 1

Send Report To: Michael Erdahl

Company: Friedman & Bruya Inc.

Address: 3012 16th Ave W, Seattle WA 98119

Phone #: (206) 285-8282

Email: merdahl@friedmanandbruya.com

SUBCONTRACTOR: Fremont

PROJECT NUMBER: 012218

PO #: A-497

REMARKS: Email Results

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH

Rush charges authorized by:

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Total Organic Carbon (TOC)	COD	BOD	Chloride	Sulfate	Sulfide	Methane, Ethane, Ethene	Nitrate, Alkalinity	Fe 2+	Cr VI	Notes
MW25-20201212		12/12/20	1005	water	6	x				x		x	x	x		
MW22-20201212			1103		6	x				x		x	x	x		
MW19-20201212			1125		6					x		x	x	x		
MW18-20201212			1212		6	x				x		x	x	x		
MW23-20201212			1318		6	x				x		x	x	x		
MW21-20201212			1450		5	x						x				
MW24-20201212			1602		6	x				x		x	x	x		

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Ann Webber-Bruya	Friedman and Bruya	12/14	1350
Received by:		Claire Mcclurg	FAI	12/14	1545
Relinquished by:					
Received by:					

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

012218

SAMPLE CHAIN OF CUSTODY

ME 12/14/20 VWS/AI6/ EO3

Page # 1 of 1

Send Report To ~~Logan Schumacher~~ Levi Fernandes & Sarah Walter

Company SoundEarth Strategies

Address 2811 Fairview Ave E, Suite 2000

City, State, ZIP Seattle, WA 98102

SAMPLERS (signature) Sarah Walter

PROJECT NAME/NO.	PO #
Troy Laundry Property	0731-004-08
REMARKS *cVOCs = PCE, TCE, Cis/Trans-DCE, and VC	EIM Y

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
MW25-20201212	MW25	—	01A-J	12/12/20	1005	W	10				X	X	X	X	X	X	
MW22-20201212	MW22	—	02A-L		1103		12	X		X	X	X	X	X	X	X	
MW19-20201212	MW19	—	03A-I		1125		9				X	X	X	X	X		
MW99-20201212	MW99	—	04A-C		1200		3				X						
MW18-20201212	MW18	—	05A-J		1212		10				X	X	X	X	X	X	
MW17-20201212	MW17	—	06A-C		1310		3				X						
MW23-20201212	MW23	—	07A-J		1318		10				X	X	X	X	X	X	
MW21-20201212	MW21	—	08A-I		1450		9	X		X	X	X				X	
MW24-20201212	MW24	—	09A-J		1602		10				X	X	X	X	X	V	
MW20-20201212	MW20	—	10A-C		1620		3				X						
~~MW32-20201212~~	~~MW32~~	—	11A-C		1820	I	3				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 Walter	Sarah Walter	SES	12/13/20	1204
Received by:	Nhan Phan	FedEx	12/14/20 (NP)	1224
Relinquished by:				
Received by:				

SiREM
Leading Science · Lasting Solutions

130 Stone Rd. W
Guelph, ON N1G 3Z2
(519) 822-2265

Analytical Results

Client: SoundEarth Strategies, Inc.
Client Project Number: 0731-004
Date Samples Received: December 15, 2020
Date Samples Analyzed: December 18, 2020

SiREM File Reference: S-6918

Client Sample ID	SiREM Reference ID	Client Sample Date	Sample Dilution Factor	Lactate	Acetate	Propionate	Formate	Butyrate	Pyruvate
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW25-20201212	20-5358	12-Dec-20	50	<0.69	<0.54	<0.31	<0.22	<0.41	<0.69
MW22-20201212	20-5359	12-Dec-20	50	<0.69	142	22	<0.22	8.8	1.2
IW61-20201212	20-5360	12-Dec-20	50	<0.69	5.1	<0.31	0.60	<0.41	<0.69
MW18-20201212	20-5361	12-Dec-20	50	<0.69	<0.54	<0.31	<0.22	<0.41	<0.69
MW23-20201212	20-5362	12-Dec-20	50	<0.69	<0.54	<0.31	<0.22	<0.41	<0.69
IW04-20201212	20-5363	12-Dec-20	50	<0.69	6.2	3.1	<0.22	2.1	<0.69
MW21-20201212	20-5364	12-Dec-20	50	<0.69	157	89	0.72	36	9.1
IW50-20201212	20-5365	12-Dec-20	50	<0.69	1.6	<0.31	<0.22	<0.41	<0.69
MW24-20201212	20-5366	12-Dec-20	50	<0.69	<0.54	<0.31	<0.22	<0.41	<0.69
		QL	50	0.39	0.54	0.31	0.22	0.41	0.69

Comments:
Method: Ion Chromatography - Electrical Conductivity Detection
QL = Quantitation limit
< = compound analysed for but not detected, associated value is QL. Sample QL is corrected for dilution.

Analyst:

Rachel Hallman
Laboratory Technician

Results approved:

Michael Healey, B.Sc.
Treatability and SP3™ Services Coordinator

Date: 22-Dec-20

SiREM

Chain-of-Custody Form

siremlab.com

180B Market Place Blvd
Knoxville, TN 37922
1-865-291-4718 or 1-866-251-1747

Lab # S-6918

*Project Name: Troy Laundry	*Project #: 0731-004
*Project Manager: Levi Ferrandes/Sarah Welter	*Company: Sound Earth Strategies
*Email Address: swelter@soundearthinc.com	
Address (Street): 2811 Fairview Avenue Suite 2000	
City: Seattle / State/Province: WA / Country: USA	
*Phone #: 296-306-1900	
*Sampler's Signature: Susan Thomas / *Sampler's Printed Name: Susan Thomas	

Analysis

Client Sample ID	Sampling Date	Sampling Time	Matrix	# of Containers	Gene-Trac DHC	Gene-Trac PCA	Gene-Trac DHB	Gene-Trac DHGM	Gene-Trac SRB	Volatile Fatty Acids	Dissolved hydrocarbon gases	Treatability Study					Other Information
MW25-20201212	12-15-2020	1600	Vials	2						X							
MW22-20201212				2						X							
IW61-20201212				2						X							
MW18-20201212				2						X							
MW23-20201212				2						X							
FW04-20201212				2						X							
MW21-20201212				2						X							
FW50-20201212				2						X							
MW24-20201212				2						X							

Preservative Key
0. None
1. HCL
2. Other
3. Other
4. Other
5. Other
6. Other

Billing Information
P.O. #: 0731-004
*Bill To: Sound Earth Strategies

Turnaround Time Requested
Normal ☑
Rush ☐

For Lab Use Only
Cooler Condition:
Cooler Temperature:
Custody Seals: Yes ☐ No ☐

For Lab Use Only
Proposal #:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Susan Thomas	Signature:	Signature:	Signature:	Signature:	Signature:
Printed Name: Susan Thomas	Printed Name:	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Firm: SiREM	Firm:	Firm:	Firm:	Firm:	Firm:
Date/Time: 12-16-2020 1500	Date/Time:	Date/Time:	Date/Time:	Date/Time:	Date/Time:

Distribution: White - return to Originator; Yellow - Lab Copy; Pink - Retained by Client

* Mandatory Fields

SiREM

Chain-of-Custody Form

siremlab.com

COPY

180A Market Place Blvd.
Knoxville, TN 37922
(865) 330-0037

Lab # S-6918

Project Name	Troy Laundry
Project #	0731-004
Project Manager	Levi Fernandez / Sarah Welter
Email	swelter@soundearthinc.com
Company	Sound Earth Strategies
Address	2811 Fairview Ave E suite 2000
	Seattle, WA 98102
Phone #	206-306-1900
Sampler's Signature	Sarah Welter
Sampler's Printed Name	Sarah Welter

Analysis

Preservative

Volatile Fatty Acids

Vials #5

Preservative Key
0. None
1. HCL
2. Other
3. Other
4. Other
5. Other
6. Other

Client Sample ID	Lab ID	Sampling Date	Sampling Time	Matrix	# of Containers	0	Other Information
MW25-20201212		12/12/20	1005	W	2	X	1
MW22-20201212			1103			X	2
IW41-20201212			1212			X	3
MW18-20201212			1212			X	4
MW23-20201212			1318			X	5
IW04-20201212			1410			X	6
MW21-20201212			1450			X	7
IW50-20201212			1535			X	8
MW24-20201212			1602			X	9

Sample Receipt

Cooler Condition: Good-wet ice

Cooler Temperature: 12.0°C

Custody Seals: Yes ☐ No ☑

Invoice Information

P.O. # 0731-004

Bill To: Sound Earth Strategies

For Lab Use Only

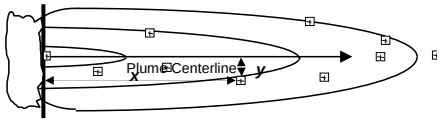
Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Sarah Welter	Signature: Susan Thomas	Signature: Kimena Vmar	Signature:	Signature:	Signature:
Printed Name: Sarah Welter	Printed Name: Susan Thomas	Printed Name: Kimena Vmar	Printed Name:	Printed Name:	Printed Name:
Firm: SES	Firm: SiREM	Firm: SiREM	Firm:	Firm:	Firm:
Date/Time: 12/14/20 1400	Date/Time: 12-15-2020 1130	Date/Time: 12-18-20 17:45	Date/Time:	Date/Time:	Date/Time:

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

ATTACHMENT B
PLUME STABILITY ANALYSIS RESULTS

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		IW04														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/8/15	0		15														
#2	3/9/16	306		2.5														
#3	7/14/16	433		0.5														
#4	10/21/16	532		0.5														
#5	1/26/17	629		1.1														
#6	6/1/17	755		1.2														
#7	9/23/17	869		0.5														
#8	12/16/17	953		0.5														
#9	3/10/18	1037		0.5														
#10	6/30/18	1149		0.5														
#11	9/22/18	1233		0.5														
#12	12/15/18	1317		0.5														
#13	6/15/19	1499		0.5														
#14	12/7/19	1674		0.5														
#15	6/27/20	1877		0.5														
#16	12/12/20	2045		0.5														
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	1.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		306																
#3		433																
#4		532																
#5		629																
#6		755																
#7		869																
#8		953																
#9	3/10/18	1037																
#10	6/30/18	1149																
#11	9/22/18	1233																
#12	12/15/18	1317																
#13	6/15/19	1499																
#14	12/7/19	1674																
#15	6/27/20	1877																
#16	12/12/20	2045																
#17																		
#18																		
#19																		
#20																		

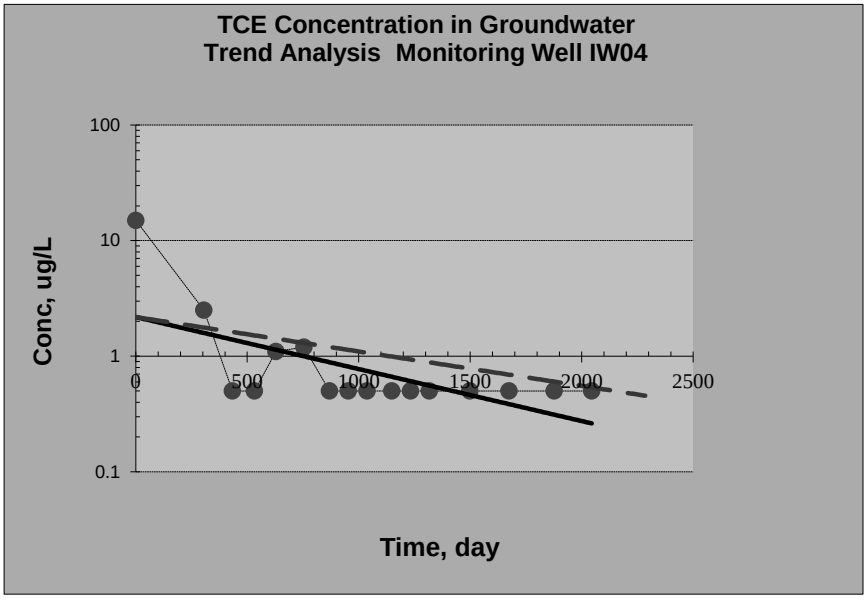
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**IW04**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.322%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.378* @50% C.L.;	*0.250*	@85% C.L.
Half Life for k_{point}, yr	*1.834* @50% C.L.;	*2.771*	@85% C.L.

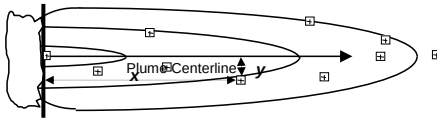


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*cis-1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		IW04														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/8/15	0		1.9														
#2	3/9/16	306		11														
#3	7/14/16	433		0.5														
#4	10/21/16	532		1.8														
#5	1/26/17	629		4.8														
#6	6/1/17	755		12														
#7	9/23/17	869		14														
#8	12/16/17	953		19														
#9	3/10/18	1037		9														
#10	6/30/18	1149		5.3														
#11	9/22/18	1233		0.5														
#12	12/15/18	1317		1.9														
#13	6/15/19	1499		1.7														
#14	12/7/19	1674		1.4														
#15	6/27/20	1877		1.1														
#16	12/12/20	2045		0.5														
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	5.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

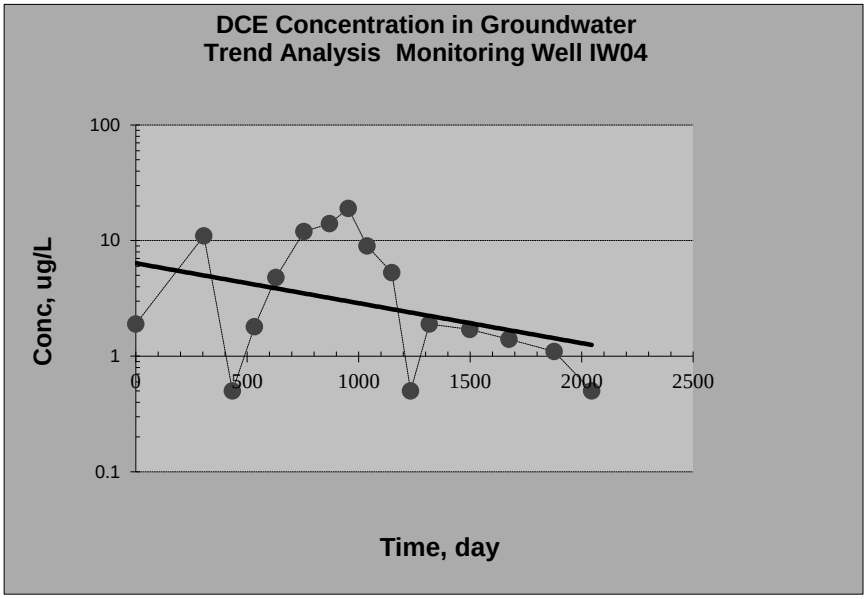
Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		306																
#3		433																
#4		532																
#5		629																
#6		755																
#7		869																
#8		953																
#9	3/10/18	1037																
#10	6/30/18	1149																
#11	9/22/18	1233																
#12	12/15/18	1317																
#13	6/15/19	1499																
#14	12/7/19	1674																
#15	6/27/20	1877																
#16	12/12/20	2045																
#17																		
#18																		
#19																		
#20																		

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *cis-1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**IW04**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*83.895%*		
Plume Stability?	UD	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.	
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.	

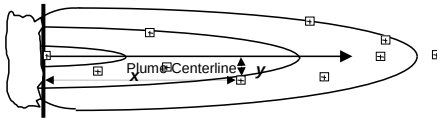


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*VC*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		IW04														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/8/15	0		0.1														
#2	3/9/16	306		0.1														
#3	7/14/16	433		0.1														
#4	10/21/16	532		0.1														
#5	1/26/17	629		0.1														
#6	6/1/17	755		0.21														
#7	9/23/17	869		0.22														
#8	12/16/17	953		0.54														
#9	3/10/18	1037		0.65														
#10	6/30/18	1149		0.68														
#11	9/22/18	1233		0.1														
#12	12/15/18	1317		1.6														
#13	6/15/19	1499		1														
#14	12/7/19	1674		1.1														
#15	6/27/20	1877		0.77														
#16	12/12/20	2045		0.64														
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		306																
#3		433																
#4		532																
#5		629																
#6		755																
#7		869																
#8		953																
#9	3/10/18	1037																
#10	6/30/18	1149																
#11	9/22/18	1233																
#12	12/15/18	1317																
#13	6/15/19	1499																
#14	12/7/19	1674																
#15	6/27/20	1877																
#16	12/12/20	2045																
#17																		
#18																		
#19																		
#20																		

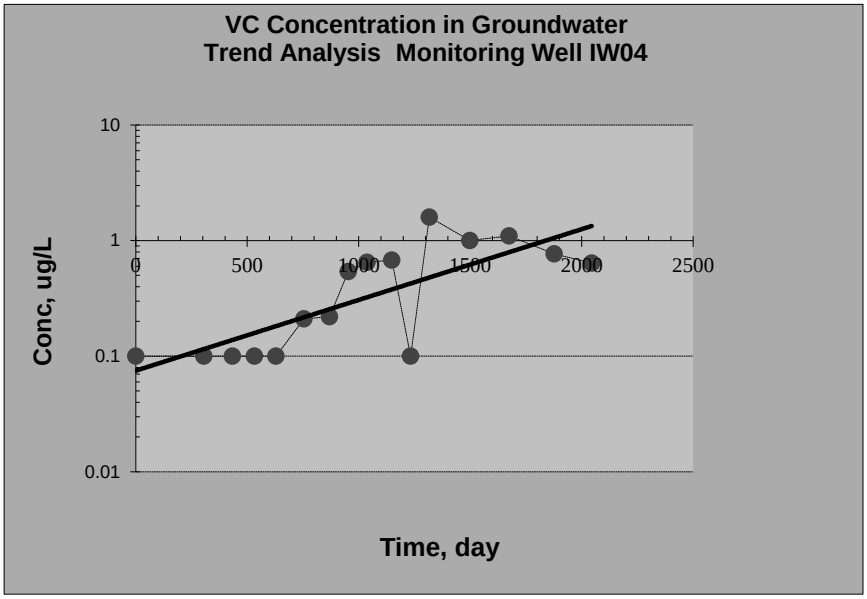
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *VC*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**IW04**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.958%*	
Plume Stability?	Expanding ; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.

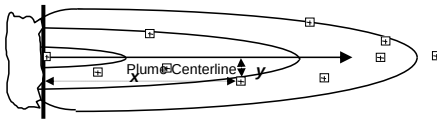


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*PCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		IW50														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	08/03/15	0		4.1														
#2	12/08/15	127		0.5														
#3	03/09/16	219		0.5														
#4	07/15/16	347		3.7														
#5	10/21/16	445		3.7														
#6	01/26/17	542		13														
#7	06/02/17	669		0.5														
#8	09/24/17	783		0.5														
#9	12/16/17	866		0.5														
#10	03/10/18	950		0.5														
#11	06/30/18	1062		0.5														
#12	09/22/18	1146		0.5														
#13	12/15/18	1230		1.6														
#14	06/15/19	1412		5.2														
#15	12/07/19	1587		4.5														
#16	06/27/20	1790		3.9														
#17	12/12/20	1958		0.5														
#18																		
#19																		
#20																		
Average Concentration			na	2.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

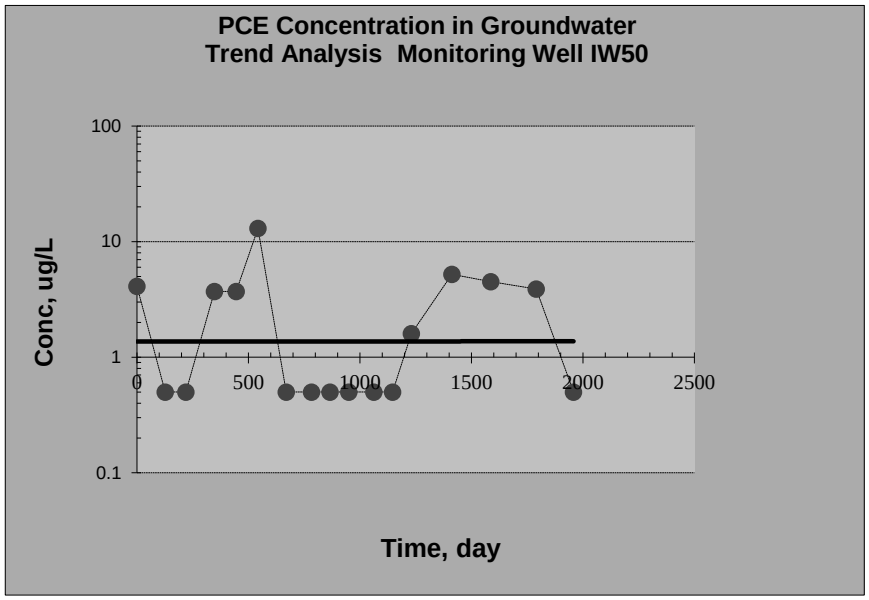
Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		127																
#3		219																
#4		347																
#5		445																
#6		542																
#7		669																
#8		783																
#9	12/16/17	866																
#10	3/10/18	950																
#11	6/30/18	1062																
#12	9/22/18	1146																
#13	12/15/18	1230																
#14	6/15/19	1412																
#15	12/7/19	1587																
#16	6/27/20	1790																
#17	12/12/20	1958																
#18																		
#19																		
#20																		

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *PCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**IW50**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*0.311%*		
Plume Stability?	UD	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.	
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.	

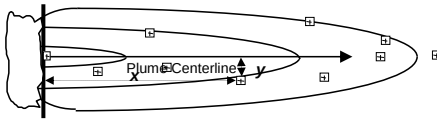


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		IW50														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	8/3/15	0		8.1														
#2	12/8/15	127		0.5														
#3	3/9/16	219		0.5														
#4	7/15/16	347		0.5														
#5	10/21/16	445		0.5														
#6	1/26/17	542		2.1														
#7	6/2/17	669		0.5														
#8	9/24/17	783		0.5														
#9	12/16/17	866		0.5														
#10	3/10/18	950		0.5														
#11	6/30/18	1062		0.5														
#12	9/22/18	1146		0.5														
#13	12/15/18	1230		0.5														
#14	6/15/19	1412		2														
#15	12/7/19	1587		1.6														
#16	6/27/20	1790		0.5														
#17	12/12/20	1958		0.5														
#18																		
#19																		
#20																		
Average Concentration			na	1.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	8.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

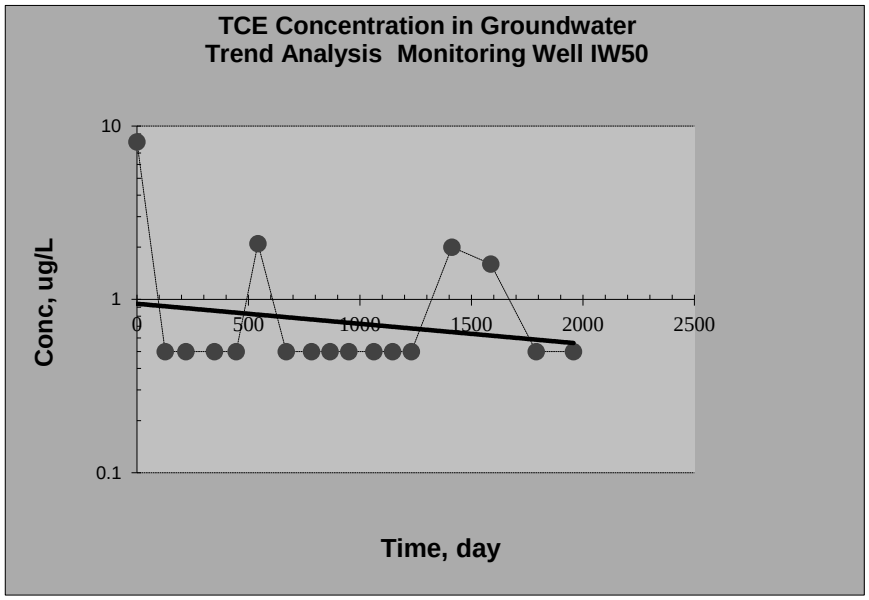
Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		127																
#3		219																
#4		347																
#5		445																
#6		542																
#7		669																
#8		783																
#9	12/16/17	866																
#10	3/10/18	950																
#11	6/30/18	1062																
#12	9/22/18	1146																
#13	12/15/18	1230																
#14	6/15/19	1412																
#15	12/7/19	1587																
#16	6/27/20	1790																
#17	12/12/20	1958																
#18																		
#19																		
#20																		

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**IW50**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*54.072%*		
Plume Stability?	UD	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.	
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.	

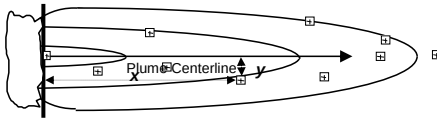


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*cis-1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		IW50														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	8/3/15	0		44														
#2	12/8/15	127		140														
#3	3/9/16	219		110														
#4	7/15/16	347		38														
#5	10/21/16	445		23														
#6	1/26/17	542		34														
#7	6/2/17	669		81														
#8	9/24/17	783		26														
#9	12/16/17	866		15														
#10	3/10/18	950		8														
#11	6/30/18	1062		4.5														
#12	9/22/18	1146		5.1														
#13	12/15/18	1230		15														
#14	6/15/19	1412		54														
#15	12/7/19	1587		55														
#16	6/27/20	1790		2.7														
#17	12/12/20	1958		0.5														
#18																		
#19																		
#20																		
Average Concentration			na	38.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		127																
#3		219																
#4		347																
#5		445																
#6		542																
#7		669																
#8		783																
#9	12/16/17	866																
#10	3/10/18	950																
#11	6/30/18	1062																
#12	9/22/18	1146																
#13	12/15/18	1230																
#14	6/15/19	1412																
#15	12/7/19	1587																
#16	6/27/20	1790																
#17	12/12/20	1958																
#18																		
#19																		
#20																		

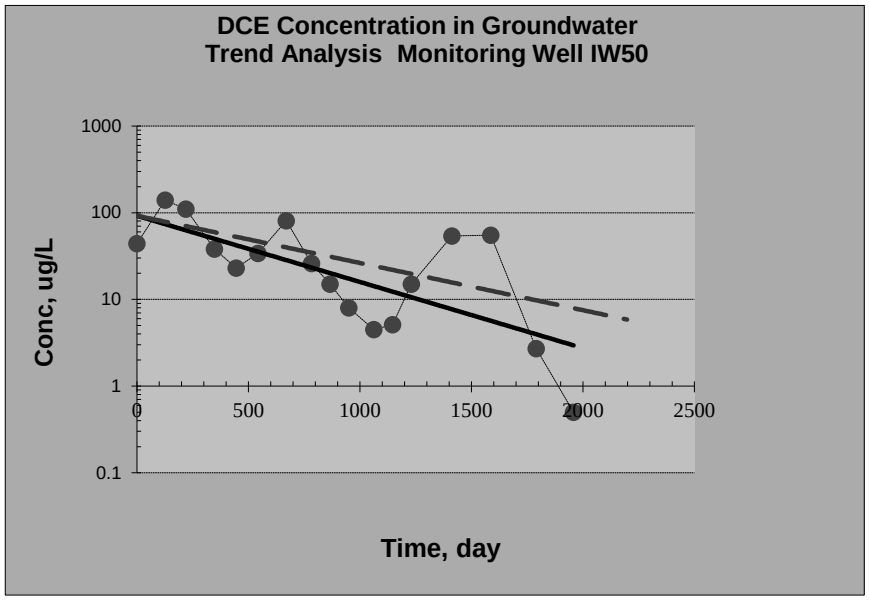
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *cis-1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**IW50**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.802%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.642* @50% C.L.;	*0.458*	@85% C.L.
Half Life for k_{point}, yr	*1.080* @50% C.L.;	*1.514*	@85% C.L.

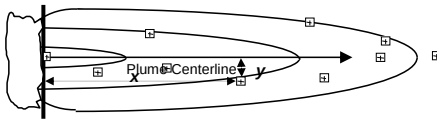


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*VC*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		IW50														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	8/3/15	0		0.1														
#2	12/8/15	127		1.8														
#3	3/9/16	219		1.9														
#4	7/15/16	347		2.5														
#5	10/21/16	445		1														
#6	1/26/17	542		0.74														
#7	6/2/17	669		0.95														
#8	9/24/17	783		2.6														
#9	12/16/17	866		2.2														
#10	3/10/18	950		3.6														
#11	6/30/18	1062		2.5														
#12	9/22/18	1146		2.9														
#13	12/15/18	1230		4.5														
#14	6/15/19	1412		7.1														
#15	12/7/19	1587		7.4														
#16	6/27/20	1790		1.1														
#17	12/12/20	1958		0.1														
#18																		
#19																		
#20																		
Average Concentration			na	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	7.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		127																
#3		219																
#4		347																
#5		445																
#6		542																
#7		669																
#8		783																
#9	12/16/17	866																
#10	3/10/18	950																
#11	6/30/18	1062																
#12	9/22/18	1146																
#13	12/15/18	1230																
#14	6/15/19	1412																
#15	12/7/19	1587																
#16	6/27/20	1790																
#17	12/12/20	1958																
#18																		
#19																		
#20																		

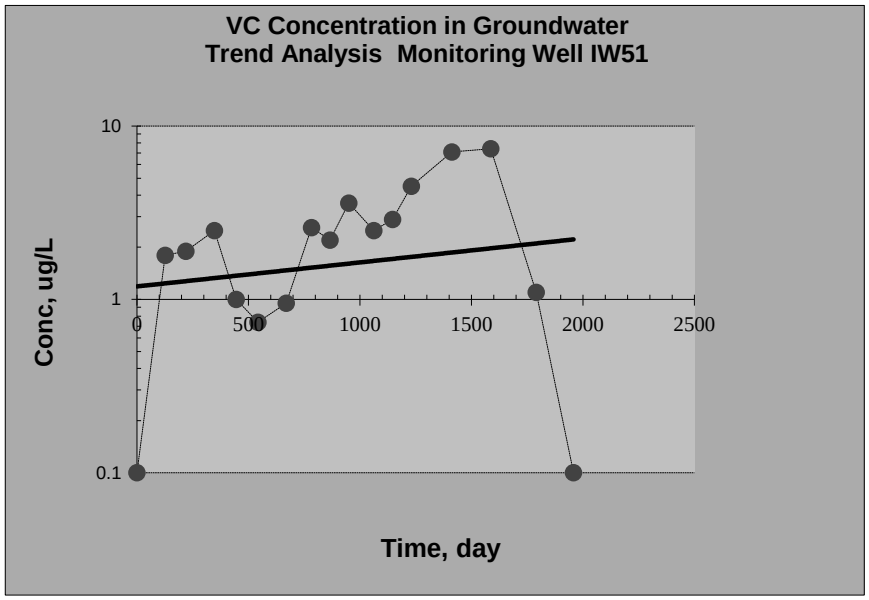
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *VC*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**IW50**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*43.843%*	
Plume Stability?	Stable	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.116* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*5.954* @50% C.L.;	*NA* @85% C.L.

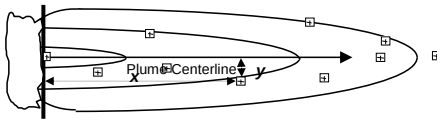


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*PCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		IW61														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	12/8/15	0		10														
#2	3/9/16	92		23														
#3	7/14/16	219		8.3														
#4	10/21/16	318		9.5														
#5	1/26/17	415		8.3														
#6	6/2/17	542		9.9														
#7	9/23/17	655		12														
#8	12/16/17	739		15														
#9	3/10/18	823		15														
#10	3/23/18	836		15														
#11	6/30/18	935		16														
#12	9/22/18	1019		13														
#13	12/15/18	1103		15														
#14	6/15/19	1285		13														
#15	12/7/19	1460		6.8														
#16	6/27/20	1663		5.3														
#17	12/12/20	1831		0.5														
#18																		
#19																		
#20																		
Average Concentration			na	11.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

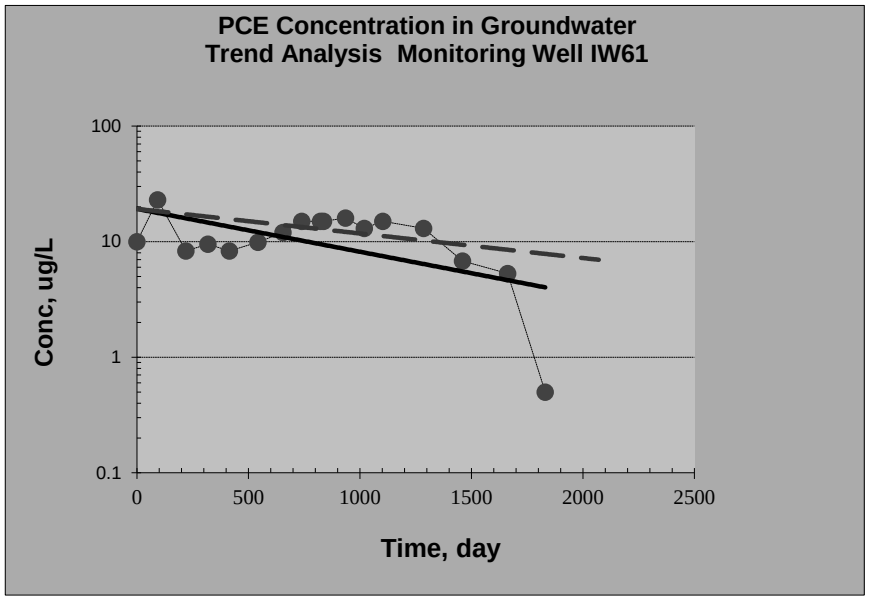
Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		92																
#3		219																
#4		318																
#5		415																
#6		542																
#7		655																
#8		739																
#9	3/10/18	823																
#10	3/23/18	836																
#11	6/30/18	935																
#12	9/22/18	1019																
#13	12/15/18	1103																
#14	6/15/19	1285																
#15	12/7/19	1460																
#16	6/27/20	1663																
#17	12/12/20	1831																
#18																		
#19																		
#20																		

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *PCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**IW61**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*97.596%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.312* @50% C.L.;	*0.179* @85% C.L.	
Half Life for k_{point}, yr	*2.224* @50% C.L.;	*3.879* @85% C.L.	

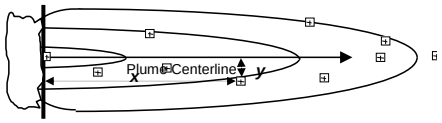


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		IW61														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	12/8/15	0		2.8														
#2	3/9/16	92		4.2														
#3	7/14/16	219		1.6														
#4	10/21/16	318		2.8														
#5	1/26/17	415		2.9														
#6	6/2/17	542		3.4														
#7	9/23/17	655		3.2														
#8	12/16/17	739		3.2														
#9	3/10/18	823		2.7														
#10	3/23/18	836		2.9														
#11	6/30/18	935		2.5														
#12	9/22/18	1019		2.1														
#13	12/15/18	1103		2.1														
#14	6/15/19	1285		2.4														
#15	12/7/19	1460		1.7														
#16	6/27/20	1663		1.1														
#17	12/12/20	1831		0.5														
#18																		
#19																		
#20																		
Average Concentration			na	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		92																
#3		219																
#4		318																
#5		415																
#6		542																
#7		655																
#8		739																
#9	3/10/18	823																
#10	3/23/18	836																
#11	6/30/18	935																
#12	9/22/18	1019																
#13	12/15/18	1103																
#14	6/15/19	1285																
#15	12/7/19	1460																
#16	6/27/20	1663																
#17	12/12/20	1831																
#18																		
#19																		
#20																		

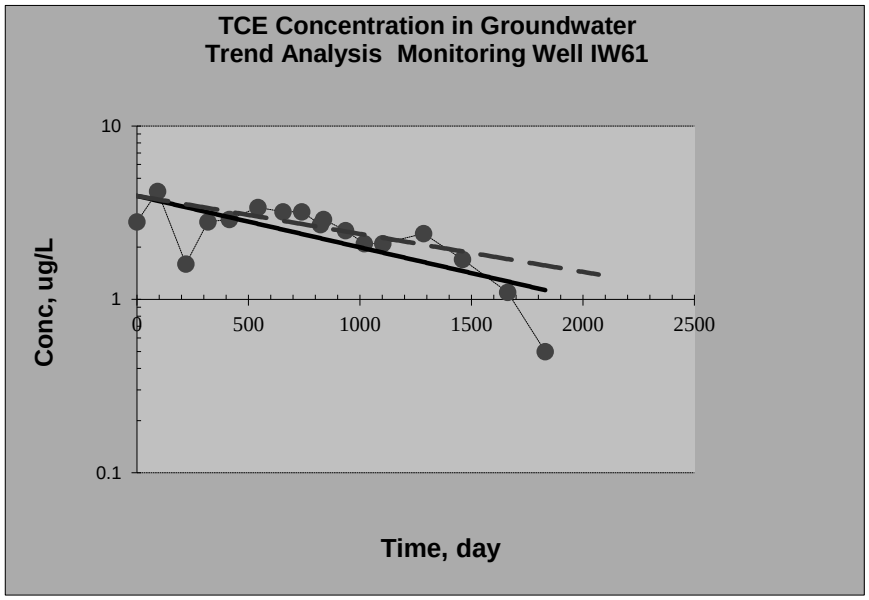
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**IW61**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.904%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.250* @50% C.L.;	*0.184*	@85% C.L.
Half Life for k_{point}, yr	*2.778* @50% C.L.;	*3.763*	@85% C.L.

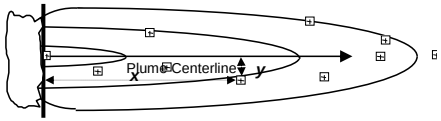


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*cis-1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		IW61														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	12/8/15	0		120														
#2	3/9/16	92		140														
#3	7/14/16	219		24														
#4	10/21/16	318		34														
#5	1/26/17	415		32														
#6	6/2/17	542		41														
#7	9/23/17	655		45														
#8	12/16/17	739		65														
#9	3/10/18	823		71														
#10	3/23/18	836		82														
#11	6/30/18	935		67														
#12	9/22/18	1019		63														
#13	12/15/18	1103		58														
#14	6/15/19	1285		71														
#15	12/7/19	1460		65														
#16	6/27/20	1663		63														
#17	12/12/20	1831		30														
#18																		
#19																		
#20																		
Average Concentration			na	63.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		92																
#3		219																
#4		318																
#5		415																
#6		542																
#7		655																
#8		739																
#9	3/10/18	823																
#10	3/23/18	836																
#11	6/30/18	935																
#12	9/22/18	1019																
#13	12/15/18	1103																
#14	6/15/19	1285																
#15	12/7/19	1460																
#16	6/27/20	1663																
#17	12/12/20	1831																
#18																		
#19																		
#20																		

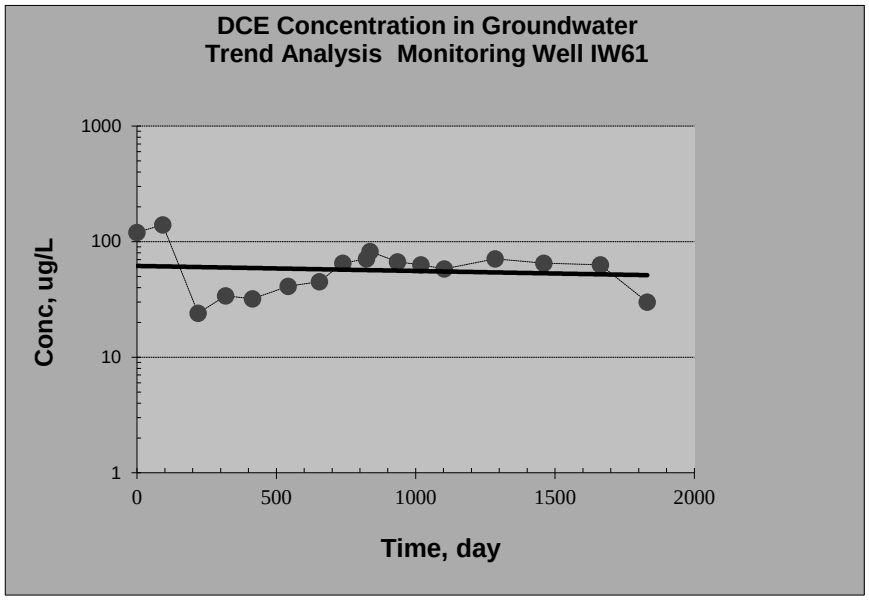
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *cis-1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**IW61**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*33.507%*	
Plume Stability?	Stable	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.037* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*18.915* @50% C.L.;	*NA* @85% C.L.

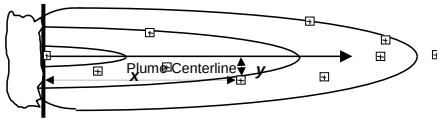


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*VC*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		IW61														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	12/8/15	0		0.86														
#2	3/9/16	92		1.7														
#3	7/14/16	219		1.6														
#4	10/21/16	318		0.96														
#5	1/26/17	415		0.96														
#6	6/2/17	542		1.3														
#7	9/23/17	655		1.2														
#8	12/16/17	739		1.2														
#9	3/10/18	823		1.1														
#10	3/23/18	836		1.3														
#11	6/30/18	935		1.7														
#12	9/22/18	1019		1.8														
#13	12/15/18	1103		2														
#14	6/15/19	1285		2.9														
#15	12/7/19	1460		4														
#16	6/27/20	1663		4.5														
#17	12/12/20	1831		4.1														
#18																		
#19																		
#20																		
Average Concentration			na	2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		92																
#3		219																
#4		318																
#5		415																
#6		542																
#7		655																
#8		739																
#9	3/10/18	823																
#10	3/23/18	836																
#11	6/30/18	935																
#12	9/22/18	1019																
#13	12/15/18	1103																
#14	6/15/19	1285																
#15	12/7/19	1460																
#16	6/27/20	1663																
#17	12/12/20	1831																
#18																		
#19																		
#20																		

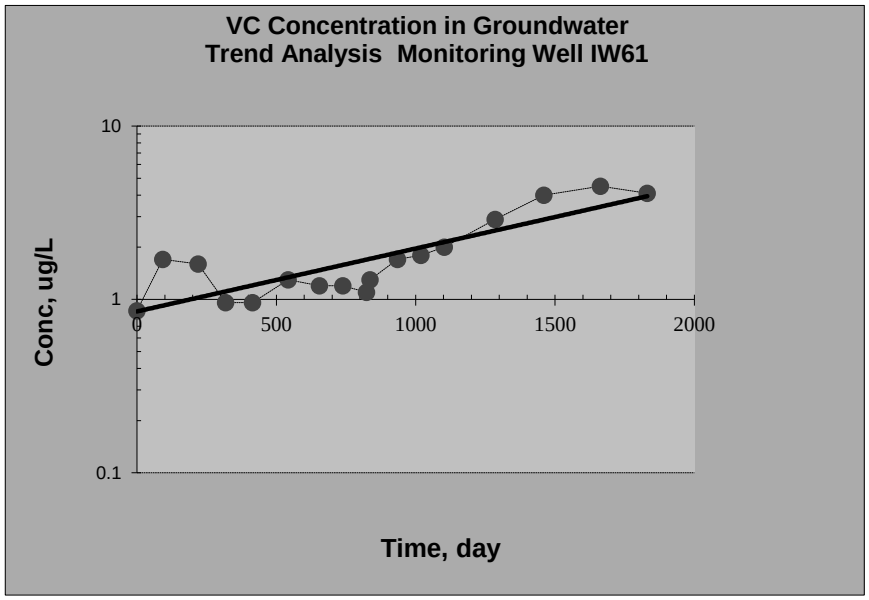
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *VC*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**IW61**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.998%*	
Plume Stability?	Expanding ; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.

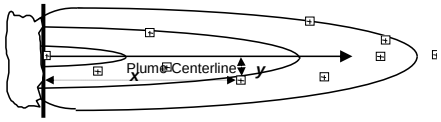


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW04														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	05/27/11	0		15														
#2	10/12/11	138		15														
#3	09/09/13	836		22														
#4	05/08/15	1442		13														
#5	08/06/15	1532		6.9														
#6	12/09/15	1657		9.2														
#7	03/08/16	1747		9.6														
#8	07/13/16	1874		8.9														
#9	10/19/16	1972		5.5														
#10	01/24/17	2069		9.4														
#11	05/31/17	2196		9.3														
#12	09/21/17	2309		5.7														
#13	12/14/17	2393		8														
#14	03/09/18	2478		8.6														
#15	06/29/18	2590		9.4														
#16	09/20/18	2673		9.4														
#17	12/14/18	2758		10														
#18	06/14/19	2940		11														
#19	12/05/19	3114		11														
#20	06/26/20	3318		10														
Average Concentration			na	10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

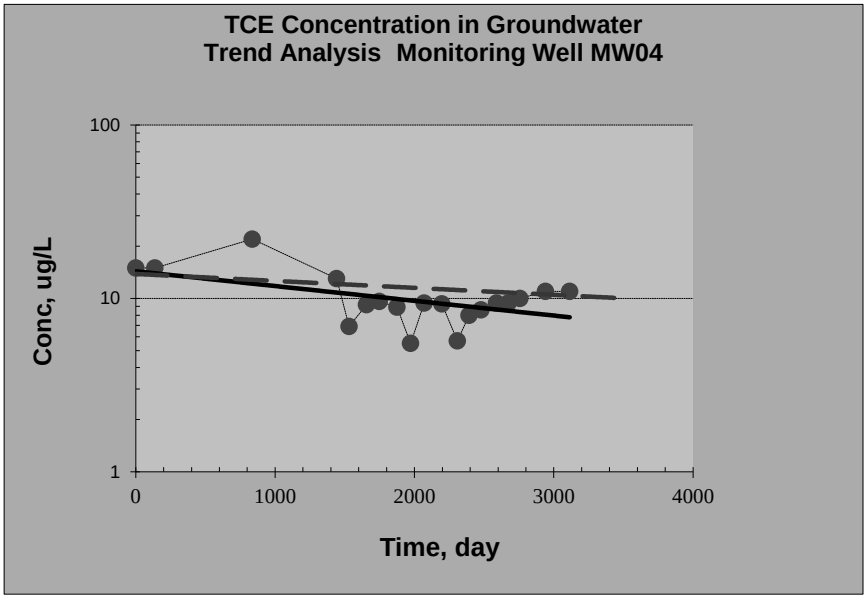
Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		138																
#3		836																
#4		1442																
#5		1532																
#6		1657																
#7		1747																
#8		1874																
#9	10/19/16	1972																
#10	1/24/17	2069																
#11	5/31/17	2196																
#12	9/21/17	2309																
#13	12/14/17	2393																
#14	3/9/18	2478																
#15	6/29/18	2590																
#16	9/20/18	2673																
#17	12/14/18	2758																
#18	6/14/19	2940																
#19	12/5/19	3114																
#20	6/26/20	3318																

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW04**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*96.739%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.062* @50% C.L.;	*0.034* @85% C.L.	
Half Life for k_{point}, yr	*11.098* @50% C.L.;	*20.560* @85% C.L.	

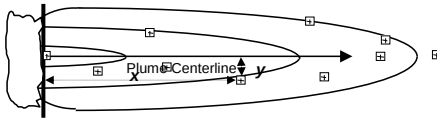


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*PCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW07														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	05/31/11	0		1.4														
#2	10/12/11	134		2.2														
#3	09/09/13	832		1.5														
#4	05/08/15	1438		2.5														
#5	08/05/15	1527		1.8														
#6	12/09/15	1653		2.3														
#7	03/08/16	1743		2.6														
#8	07/13/16	1870		3														
#9	10/19/16	1968		3.5														
#10	01/24/17	2065		4.8														
#11	05/31/17	2192		4.7														
#12	03/08/18	2473		2.6														
#13	06/29/18	2586		3.3														
#14	09/20/18	2669		2.8														
#15	12/14/18	2754		3.3														
#16	06/14/19	2936		3.9														
#17	12/05/19	3110		3.3														
#18	06/30/20	3318		0.5														
#19	12/10/20	3481		1.7														
#20																		
Average Concentration			na	2.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		134																
#3		832																
#4		1438																
#5		1527																
#6		1653																
#7		1743																
#8		1870																
#9	10/19/16	1968																
#10	1/24/17	2065																
#11	5/31/17	2192																
#12	3/8/18	2473																
#13	6/29/18	2586																
#14	9/20/18	2669																
#15	12/14/18	2754																
#16	6/14/19	2936																
#17	12/5/19	3110																
#18	6/30/20	3318																
#19	12/10/20	3481																
#20		0																

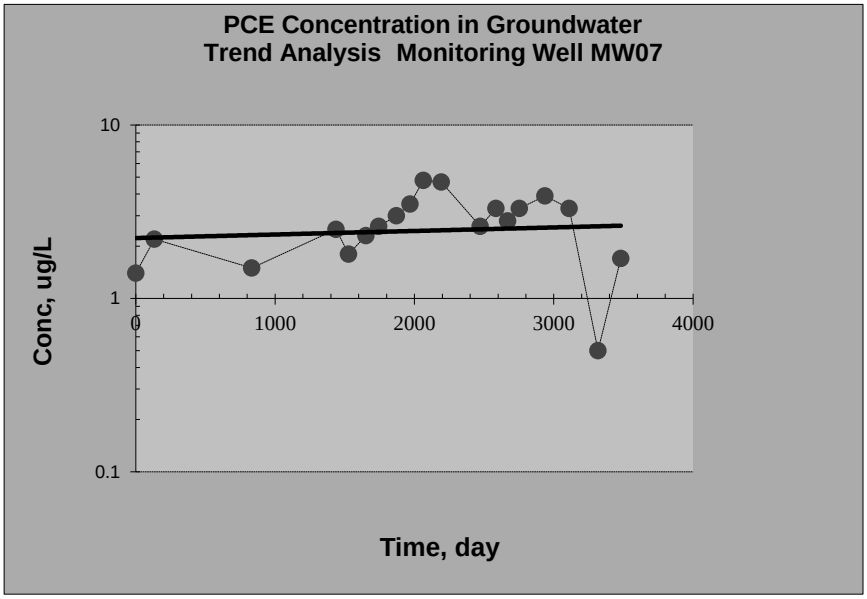
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *PCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW07**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*28.119%*	
Plume Stability?	Stable	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.017* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*40.354* @50% C.L.;	*NA* @85% C.L.

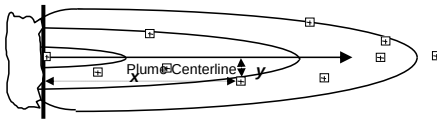


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW07														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	05/31/11	0		12														
#2	10/12/11	134		11														
#3	09/09/13	832		33														
#4	05/08/15	1438		15														
#5	08/05/15	1527		12														
#6	12/09/15	1653		14														
#7	03/08/16	1743		13														
#8	07/13/16	1870		18														
#9	10/19/16	1968		13														
#10	01/24/17	2065		8.1														
#11	05/31/17	2192		8.6														
#12	03/08/18	2473		11														
#13	06/29/18	2586		7.3														
#14	09/20/18	2669		6														
#15	12/14/18	2754		6.7														
#16	06/14/19	2936		5.9														
#17	12/05/19	3110		5.9														
#18	06/30/20	3318		5.8														
#19	12/10/20	3481		18														
#20																		
Average Concentration			na	11.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	5.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		134																
#3		832																
#4		1438																
#5		1527																
#6		1653																
#7		1743																
#8		1870																
#9	10/19/16	1968																
#10	1/24/17	2065																
#11	5/31/17	2192																
#12	3/8/18	2473																
#13	6/29/18	2586																
#14	9/20/18	2669																
#15	12/14/18	2754																
#16	6/14/19	2936																
#17	12/5/19	3110																
#18	6/30/20	3318																
#19	12/10/20	3481																
#20																		

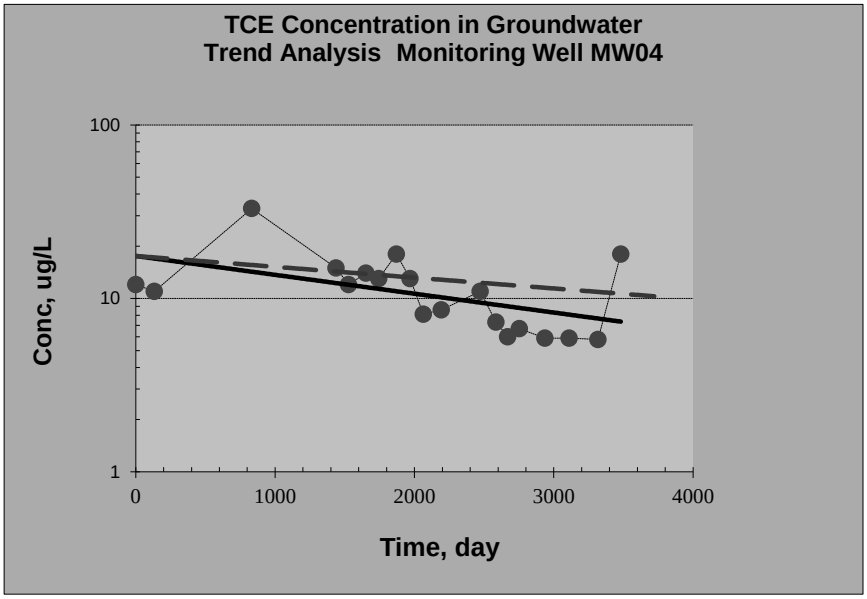
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW07**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*97.729%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.091* @50% C.L.;	*0.052*	@85% C.L.
Half Life for k_{point}, yr	*7.585* @50% C.L.;	*13.214*	@85% C.L.

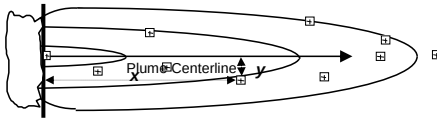


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*PCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW13														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	8/5/15	0		5.4														
#2	12/15/15	132		5.6														
#3	3/7/16	215		6.6														
#4	7/12/16	342		6.5														
#5	10/19/16	441		10														
#6	1/24/17	538		6.4														
#7	5/31/17	665		10														
#8	9/21/17	778		8.4														
#9	12/14/17	862		5.2														
#10	3/8/18	946		8														
#11	6/29/18	1059		4.4														
#12	9/20/18	1142		6.5														
#13	12/14/18	1227		7.8														
#14	6/14/19	1409		7														
#15	12/5/19	1583		7.7														
#16	6/26/20	1787		9.1														
#17	12/10/20	1954		7.2														
#18																		
#19																		
#20																		
Average Concentration			na	7.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		132																
#3		215																
#4		342																
#5		441																
#6		538																
#7		665																
#8		778																
#9	12/14/17	862																
#10	3/8/18	946																
#11	6/29/18	1059																
#12	9/20/18	1142																
#13	12/14/18	1227																
#14	6/14/19	1409																
#15	12/5/19	1583																
#16	6/26/20	1787																
#17	12/10/20	1954																
#18																		
#19																		
#20																		

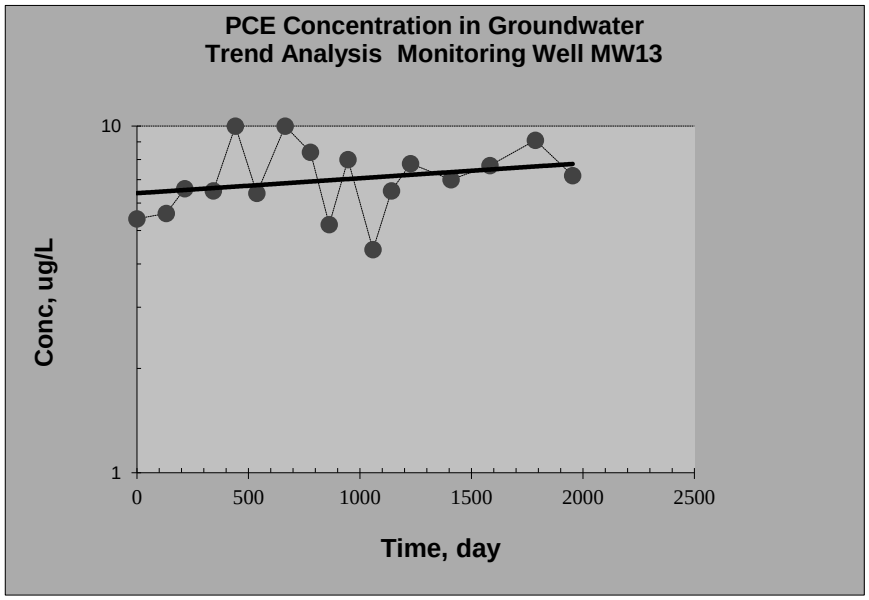
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *PCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW13**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*67.148%*		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.036* @50% C.L.;	*NA* @85% C.L.	
Half Life for k_{point}, yr	*19.100* @50% C.L.;	*NA* @85% C.L.	

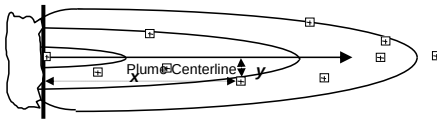


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW13														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	8/5/15	0		2.3														
#2	12/15/15	132		1.6														
#3	3/7/16	215		1.6														
#4	7/12/16	342		1.6														
#5	10/19/16	441		2.2														
#6	1/24/17	538		1														
#7	5/31/17	665		1.5														
#8	9/21/17	778		1.8														
#9	12/14/17	862		1.4														
#10	3/8/18	946		1.4														
#11	6/29/18	1059		0.5														
#12	9/20/18	1142		1.3														
#13	12/14/18	1227		1.4														
#14	6/14/19	1409		1.1														
#15	12/5/19	1583		1.1														
#16	6/26/20	1787		1.8														
#17	12/10/20	1954		1.6														
#18																		
#19																		
#20																		
Average Concentration			na	1.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	2.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		132																
#3		215																
#4		342																
#5		441																
#6		538																
#7		665																
#8		778																
#9	12/14/17	862																
#10	3/8/18	946																
#11	6/29/18	1059																
#12	9/20/18	1142																
#13	12/14/18	1227																
#14	6/14/19	1409																
#15	12/5/19	1583																
#16	6/26/20	1787																
#17	12/10/20	1954																
#18																		
#19																		
#20																		

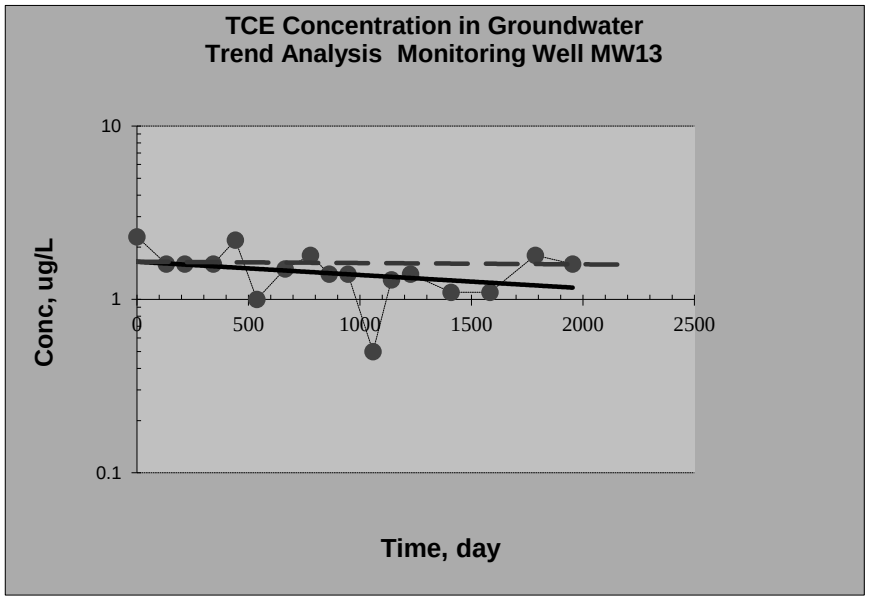
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW13**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*74.672%*		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.064* @50% C.L.;	*0.006*	@85% C.L.
Half Life for k_{point}, yr	*10.790* @50% C.L.;	*109.636*	@85% C.L.

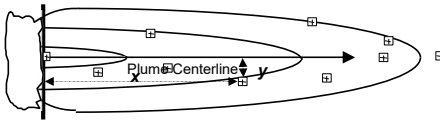


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*307 Fairview Ave North*
Additional Description:	*Seattle*
Hazardous Substance	*DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit			MW16													
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	05/08/15	0			**640**													
#2	08/05/15	89			**550.0**													
#3	12/10/15	216			**510.0**													
#4	03/08/16	305			**190.0**													
#5	07/12/16	431			160.0													
#6	10/19/16	530			170.0													
#7	01/25/17	628			220.0													
#8	05/31/17	754			**100.0**													
#9	09/22/17	868			**78.0**													
#10	12/29/17	966			150.0													
#11	03/09/18	1036			**80.0**													
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	N/A	258.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	NA	640	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	NA	78	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

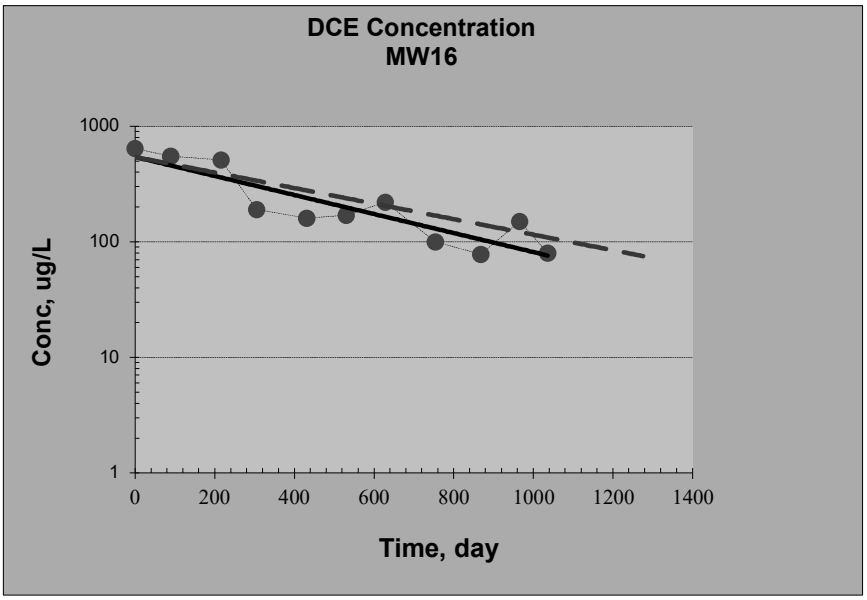
Well Location:			NA	NA	MW16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sampling Event	Date sampled	Day	Unit of elevation is feet.																
#1	12/6/08	0		95.29	92.17	94.91	94.97												
#2	9/27/09	89		93.39	93.3	93.17	93.41												
#3	4/11/11	216		96.99	96.85	96.55	96.75												
#4	9/13/12	305		94.11	94.04	93.7	93.82												
#5	4/5/13	431		95.48	95.32	94.97	95.05												
#6		530																	
#7		628																	
#8		754																	
#9	9/22/17	868																	
#10	12/29/17	966																	
#11	3/9/18	1036																	
#12																			
#13																			
#14																			
#15																			
#16																			
#17																			
#18																			
#19																			
#20																			

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *307 Fairview Ave North*
Additional Description: *Seattle*
Hazardous Substance *DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW16**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*99.980%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.691* @50% C.L.;	*0.565* @85% C.L.	
Half Life for k_{point}, yr	*1.003* @50% C.L.;	*1.226* @85% C.L.	

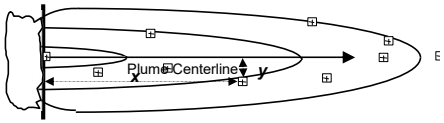


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	**1-Jan-98**
Plot #2:	Sampling date #2	**6-Jun-98**
Plot #3:	Sampling date #3	**8-Nov-98**
Plot #4:	Sampling date #4	**10-May-99**
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*307 Fairview Ave North*
Additional Description:	*Seattle*
Hazardous Substance	*PCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit			MW16													
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	05/08/15	0			**7.5**													
#2	08/05/15	89			**7.8**													
#3	12/10/15	216			**5.3**													
#4	03/08/16	305			**3.7**													
#5	07/12/16	431			0.5													
#6	10/19/16	530			5.0													
#7	01/25/17	628			6.4													
#8	05/31/17	754			**5.7**													
#9	09/22/17	868			**5.4**													
#10	12/29/17	966			7.2													
#11	03/09/18	1036			**7.3**													
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	N/A	5.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	NA	7.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:			NA	NA	MW16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sampling Event	Date sampled	Day	Unit of elevation is feet.															
#1	12/6/08	0		95.29	92.17	94.91	94.97											
#2	9/27/09	89		93.39	93.3	93.17	93.41											
#3	4/11/11	216		96.99	96.85	96.55	96.75											
#4	9/13/12	305		94.11	94.04	93.7	93.82											
#5	4/5/13	431		95.48	95.32	94.97	95.05											
#6		530																
#7		628																
#8		754																
#9	9/22/17	868																
#10	12/29/17	966																
#11	3/9/18	1036																
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		

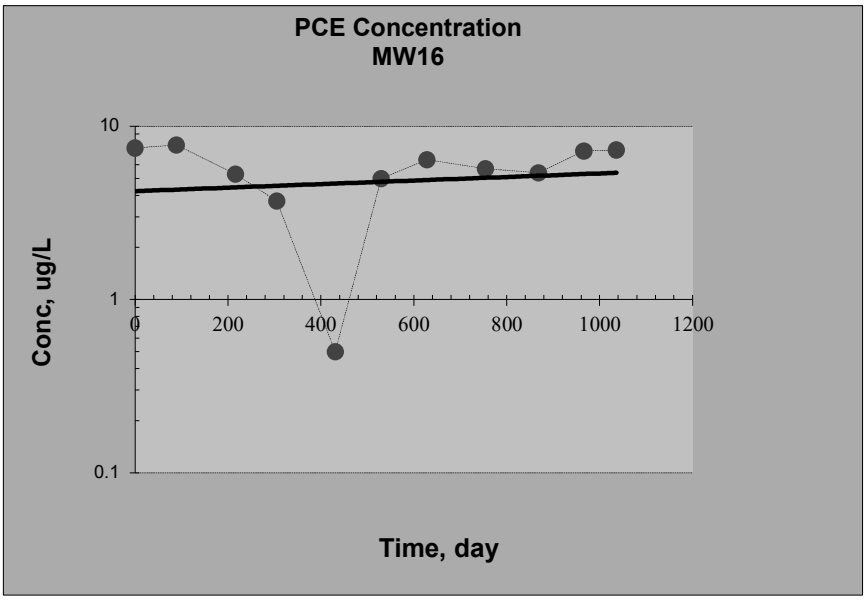
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *307 Fairview Ave North*
Additional Description: *Seattle*
Hazardous Substance *PCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW16**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*24.600%*	
Plume Stability?	Stable	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.086* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*8.046* @50% C.L.;	*NA* @85% C.L.

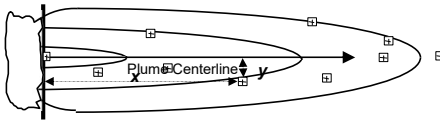


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	**1-Jan-98**
Plot #2:	Sampling date #2	**6-Jun-98**
Plot #3:	Sampling date #3	**8-Nov-98**
Plot #4:	Sampling date #4	**10-May-99**
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*307 Fairview Ave North*
Additional Description:	*Seattle*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit			MW16													
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	05/08/15	0			**7.6**													
#2	08/05/15	89			**7.3**													
#3	12/10/15	216			**4.5**													
#4	03/08/16	305			**2.0**													
#5	07/12/16	431			0.5													
#6	10/19/16	530			5.4													
#7	01/25/17	628			6.8													
#8	05/31/17	754			**4.4**													
#9	09/22/17	868			**5.2**													
#10	12/29/17	966			6.4													
#11	03/09/18	1036			**5.5**													
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	N/A	5.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	NA	7.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

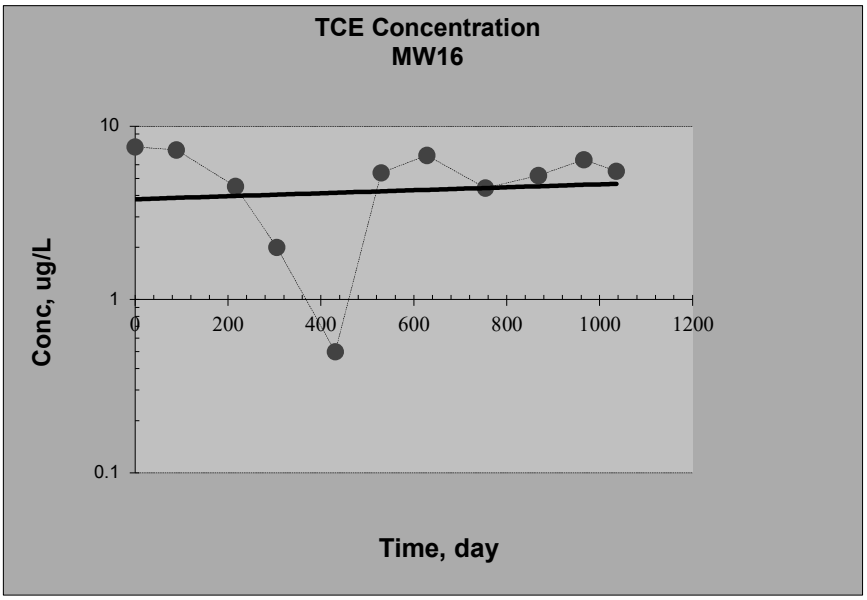
Well Location:			NA	NA	MW16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sampling Event	Date sampled	Day	Unit of elevation is feet.															
#1	12/6/08	0		95.29	92.17	94.91	94.97											
#2	9/27/09	89		93.39	93.3	93.17	93.41											
#3	4/11/11	216		96.99	96.85	96.55	96.75											
#4	9/13/12	305		94.11	94.04	93.7	93.82											
#5	4/5/13	431		95.48	95.32	94.97	95.05											
#6		530																
#7		628																
#8		754																
#9	9/22/17	868																
#10	12/29/17	966																
#11	3/9/18	1036																
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *307 Fairview Ave North*
Additional Description: *Seattle*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW16**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*20.282%*		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.072* @50% C.L.;	*NA* @85% C.L.	
Half Life for k_{point}, yr	*9.614* @50% C.L.;	*NA* @85% C.L.	

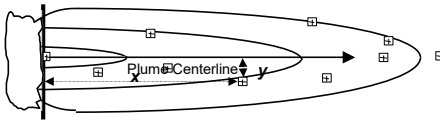


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	**1-Jan-98**
Plot #2:	Sampling date #2	**6-Jun-98**
Plot #3:	Sampling date #3	**8-Nov-98**
Plot #4:	Sampling date #4	**10-May-99**
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*307 Fairview Ave North*
Additional Description:	*Seattle*
Hazardous Substance	*VC*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit			MW16													
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	05/08/15	0			**2.8**													
#2	08/05/15	89			**2.4**													
#3	12/10/15	216			**3.2**													
#4	03/08/16	305			**1.3**													
#5	07/12/16	431			2.0													
#6	10/19/16	530			1.2													
#7	01/25/17	628			1.0													
#8	05/31/17	754			**0.5**													
#9	09/22/17	868			**0.4**													
#10	12/29/17	966			0.9													
#11	03/09/18	1036			**0.4**													
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	N/A	1.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	NA	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	NA	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

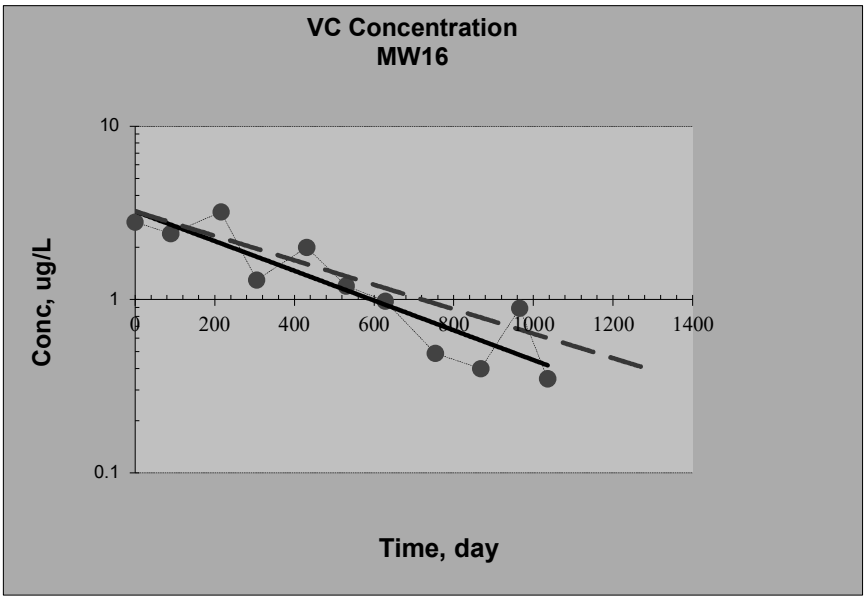
Well Location:			NA	NA	MW16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sampling Event	Date sampled	Day	Unit of elevation is feet.															
#1	12/6/08	0		95.29	92.17	94.91	94.97											
#2	9/27/09	89		93.39	93.3	93.17	93.41											
#3	4/11/11	216		96.99	96.85	96.55	96.75											
#4	9/13/12	305		94.11	94.04	93.7	93.82											
#5	4/5/13	431		95.48	95.32	94.97	95.05											
#6		530																
#7		628																
#8		754																
#9	9/22/17	868																
#10	12/29/17	966																
#11	3/9/18	1036																
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *307 Fairview Ave North*
Additional Description: *Seattle*
Hazardous Substance *VC*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW16**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*99.983%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.721* @50% C.L.;	*0.593* @85% C.L.	
Half Life for k_{point}, yr	*0.962* @50% C.L.;	*1.169* @85% C.L.	

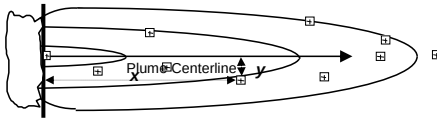


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	**1-Jan-98**
Plot #2:	Sampling date #2	**6-Jun-98**
Plot #3:	Sampling date #3	**8-Nov-98**
Plot #4:	Sampling date #4	**10-May-99**
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW18														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/6/15	0		46														
#2	8/3/15	89		51														
#3	12/8/15	216		51														
#4	3/8/16	307		44														
#5	7/14/16	435		3.3														
#6	10/20/16	533		6.5														
#7	1/26/17	631		7.7														
#8	6/1/17	757		3.3														
#9	9/23/17	871		0.5														
#10	12/16/17	955		0.5														
#11	3/10/18	1039		0.5														
#12	6/30/18	1151		0.5														
#13	9/22/18	1235		0.5														
#14	12/15/18	1319		0.5														
#15	6/15/19	1501		0.5														
#16	12/7/19	1676		0.5														
#17	6/27/20	1879		0.5														
#18	12/12/20	2047		0.5														
#19																		
#20																		
Average Concentration			na	12.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		89																
#3		216																
#4		307																
#5		435																
#6		533																
#7		631																
#8		757																
#9	9/23/17	871																
#10	12/16/17	955																
#11	3/10/18	1039																
#12	6/30/18	1151																
#13	9/22/18	1235																
#14	12/15/18	1319																
#15	6/15/19	1501																
#16	12/7/19	1676																
#17	6/27/20	1879																
#18	12/12/20	2047																
#19																		
#20																		

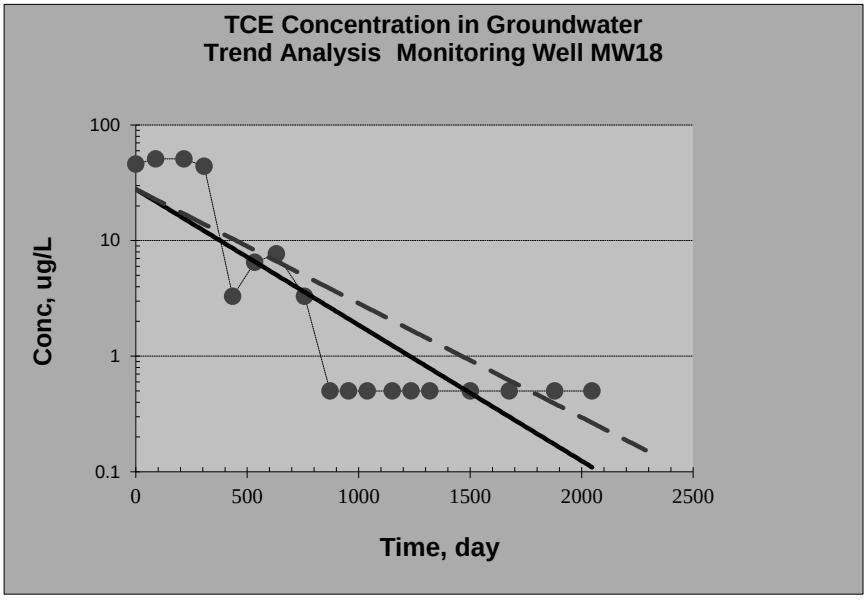
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW18**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.999%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.988* @50% C.L.;	*0.830*	@85% C.L.
Half Life for k_{point}, yr	*0.702* @50% C.L.;	*0.836*	@85% C.L.

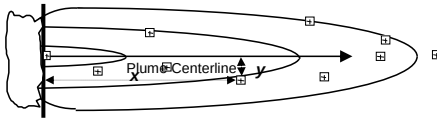


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*cis-1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW18														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/6/15	0		5.2														
#2	8/3/15	89		4.6														
#3	12/8/15	216		9.9														
#4	3/8/16	307		8.1														
#5	7/14/16	435		1.7														
#6	10/20/16	533		4														
#7	1/26/17	631		14														
#8	6/1/17	757		14														
#9	9/23/17	871		22														
#10	12/16/17	955		22														
#11	3/10/18	1039		27														
#12	6/30/18	1151		27														
#13	9/22/18	1235		21														
#14	12/15/18	1319		24														
#15	6/15/19	1501		28														
#16	12/7/19	1676		28														
#17	6/27/20	1879		27														
#18	12/12/20	2047		15														
#19																		
#20																		
Average Concentration			na	16.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		89																
#3		216																
#4		307																
#5		435																
#6		533																
#7		631																
#8		757																
#9	9/23/17	871																
#10	12/16/17	955																
#11	3/10/18	1039																
#12	6/30/18	1151																
#13	9/22/18	1235																
#14	12/15/18	1319																
#15	6/15/19	1501																
#16	12/7/19	1676																
#17	6/27/20	1879																
#18	12/12/20	2047																
#19																		
#20																		

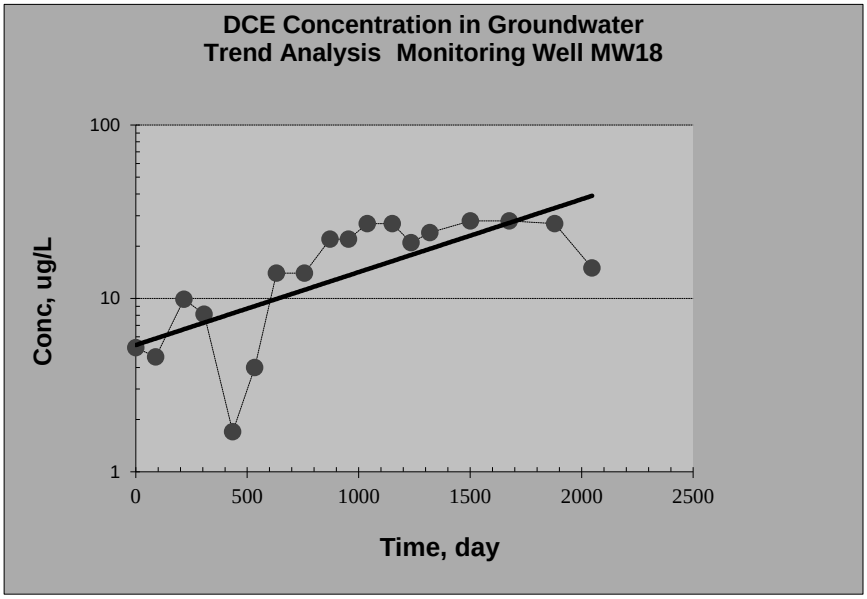
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *cis-1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW18**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.908%*	
Plume Stability?	Expanding ; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.

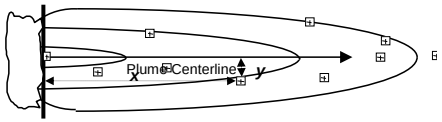


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*VC*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW18															
Dist from source, x-direction		ft																	
Off-centerline dist, y-direction		ft																	
Sampling Event	Date sampled	day	Unit of concentration is ug/L																
#1	5/6/15	0		0.1															
#2	8/3/15	89		0.1															
#3	12/8/15	216		0.1															
#4	3/8/16	307		0.1															
#5	7/14/16	435		0.1															
#6	10/20/16	533		0.1															
#7	1/26/17	631		0.25															
#8	6/1/17	757		0.31															
#9	9/23/17	871		0.38															
#10	12/16/17	955		0.24															
#11	3/10/18	1039		0.4															
#12	6/30/18	1151		0.43															
#13	9/22/18	1235		0.42															
#14	12/15/18	1319		0.49															
#15	6/15/19	1501		0.44															
#16	12/7/19	1676		0.55															
#17	6/27/20	1879		1.5															
#18	12/12/20	2047		2.4															
#19																			
#20																			
Average Concentration			na	0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																			
Sampling Event	Date sampled	Day																	
#1		0																	
#2		89																	
#3		216																	
#4		307																	
#5		435																	
#6		533																	
#7		631																	
#8		757																	
#9	9/23/17	871																	
#10	12/16/17	955																	
#11	3/10/18	1039																	
#12	6/30/18	1151																	
#13	9/22/18	1235																	
#14	12/15/18	1319																	
#15	6/15/19	1501																	
#16	12/7/19	1676																	
#17	6/27/20	1879																	
#18	12/12/20	2047																	
#19																			
#20																			

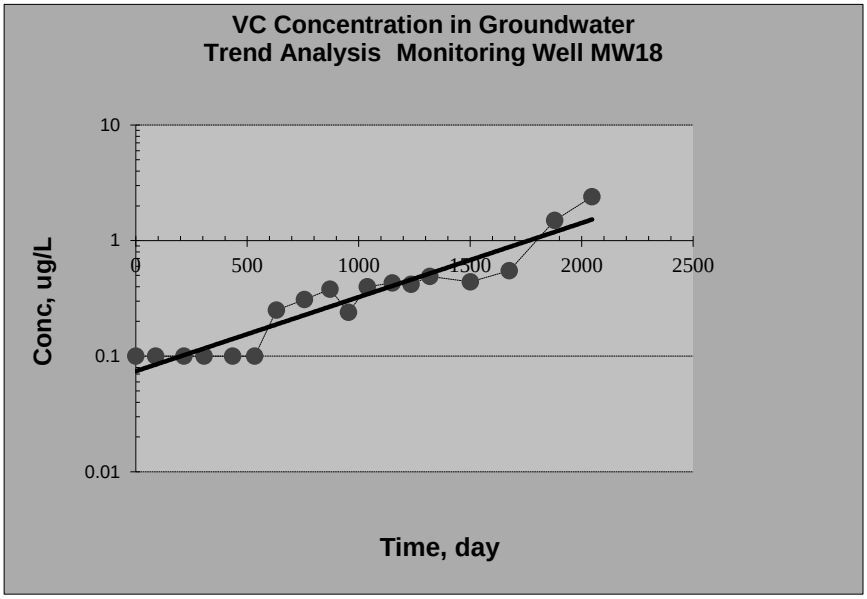
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *VC*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW18**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*100.000%*	
Plume Stability?	Expanding ; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.

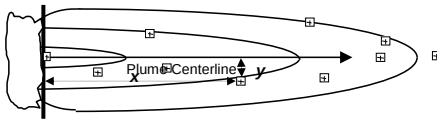


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW19														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/7/15	0		69														
#2	8/3/15	88		61														
#3	12/7/15	214		65														
#4	3/8/16	306		52														
#5	7/13/16	433		4.6														
#6	10/21/16	533		10														
#7	1/25/17	629		5.5														
#8	6/1/17	756		5.7														
#9	9/23/17	870		1.7														
#10	12/16/17	954		1.1														
#11	3/10/18	1038		0.5														
#12	6/30/18	1150		0.5														
#13	9/22/18	1234		0.5														
#14	6/15/19	1500		0.5														
#15	12/7/19	1675		0.5														
#16	6/27/20	1878		0.5														
#17	12/12/20	2046		0.5														
#18																		
#19																		
#20																		
Average Concentration			na	16.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	69	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		88																
#3		214																
#4		306																
#5		433																
#6		533																
#7		629																
#8		756																
#9	9/23/17	870																
#10	12/16/17	954																
#11	3/10/18	1038																
#12	6/30/18	1150																
#13	9/22/18	1234																
#14	6/15/19	1500																
#15	12/7/19	1675																
#16	6/27/20	1878																
#17	12/12/20	2046																
#18																		
#19																		
#20																		

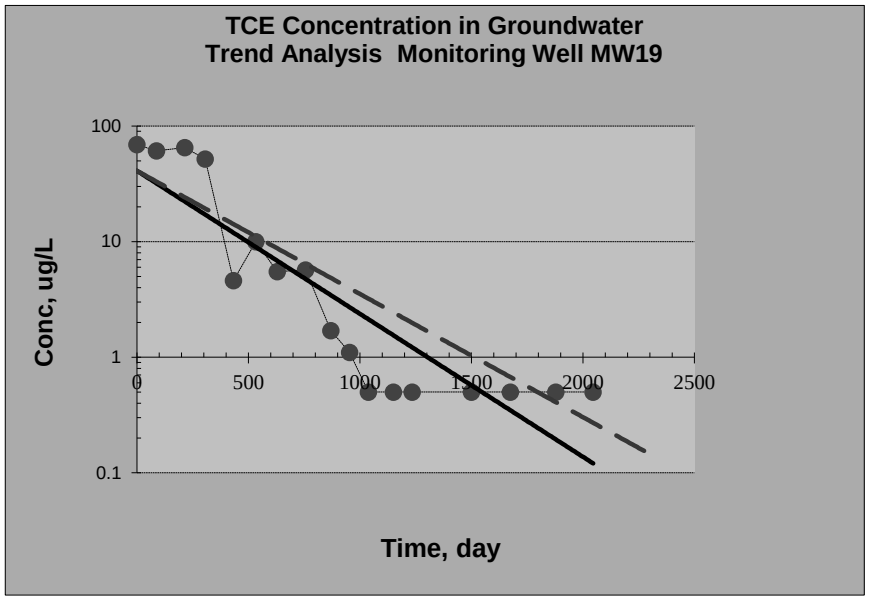
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW19**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*100.000%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*1.040* @50% C.L.;	*0.896*	@85% C.L.
Half Life for k_{point}, yr	*0.667* @50% C.L.;	*0.774*	@85% C.L.

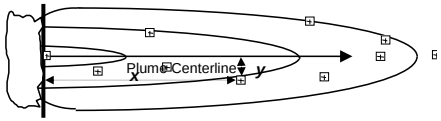


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*cis-1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW19														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/7/15	0		15														
#2	8/3/15	88		20														
#3	12/7/15	214		23														
#4	3/8/16	306		26														
#5	7/13/16	433		10														
#6	10/21/16	533		4.4														
#7	1/25/17	629		3.9														
#8	6/1/17	756		3.5														
#9	9/23/17	870		3.4														
#10	12/16/17	954		13														
#11	3/10/18	1038		12														
#12	6/30/18	1150		12														
#13	9/22/18	1234		16														
#14	6/15/19	1500		27														
#15	12/7/19	1675		35														
#16	6/27/20	1878		41														
#17	12/12/20	2046		22														
#18																		
#19																		
#20																		
Average Concentration			na	16.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	41	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	3.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		88																
#3		214																
#4		306																
#5		433																
#6		533																
#7		629																
#8		756																
#9	9/23/17	870																
#10	12/16/17	954																
#11	3/10/18	1038																
#12	6/30/18	1150																
#13	9/22/18	1234																
#14	6/15/19	1500																
#15	12/7/19	1675																
#16	6/27/20	1878																
#17	12/12/20	2046																
#18																		
#19																		
#20																		

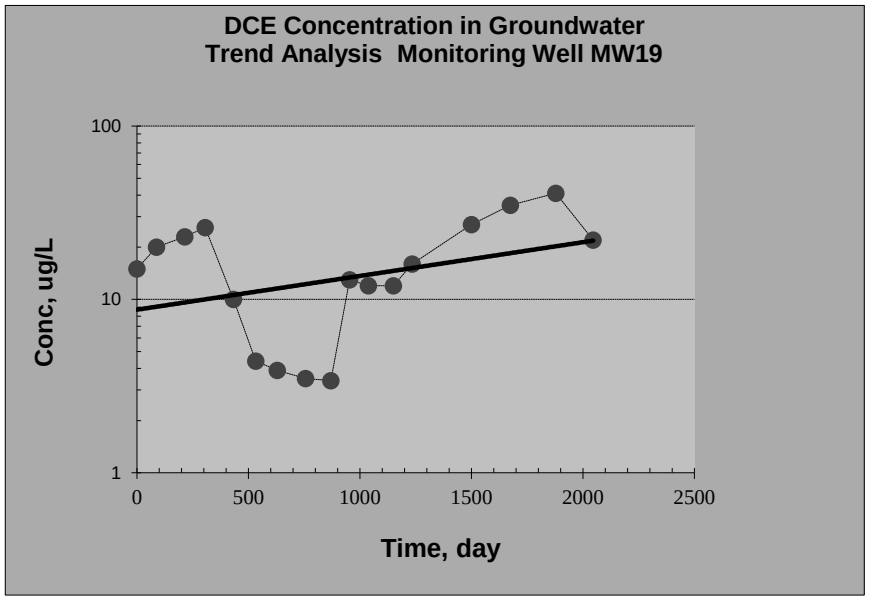
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *cis-1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW19**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*82.541%*		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.164* @50% C.L.;	*0.041*	@85% C.L.
Half Life for k_{point}, yr	*4.236* @50% C.L.;	*17.055*	@85% C.L.

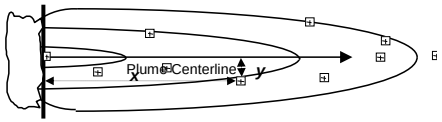


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*VC*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW19														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/7/15	0		0.1														
#2	8/3/15	88		0.1														
#3	12/7/15	214		0.1														
#4	3/8/16	306		0.1														
#5	7/13/16	433		0.1														
#6	10/21/16	533		0.4														
#7	1/25/17	629		0.3														
#8	6/1/17	756		0.44														
#9	9/23/17	870		0.97														
#10	12/16/17	954		0.97														
#11	3/10/18	1038		0.78														
#12	6/30/18	1150		0.96														
#13	9/22/18	1234		0.86														
#14	6/15/19	1500		0.79														
#15	12/7/19	1675		0.98														
#16	6/27/20	1878		0.78														
#17	12/12/20	2046		2.6														
#18																		
#19																		
#20																		
Average Concentration			na	0.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	2.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

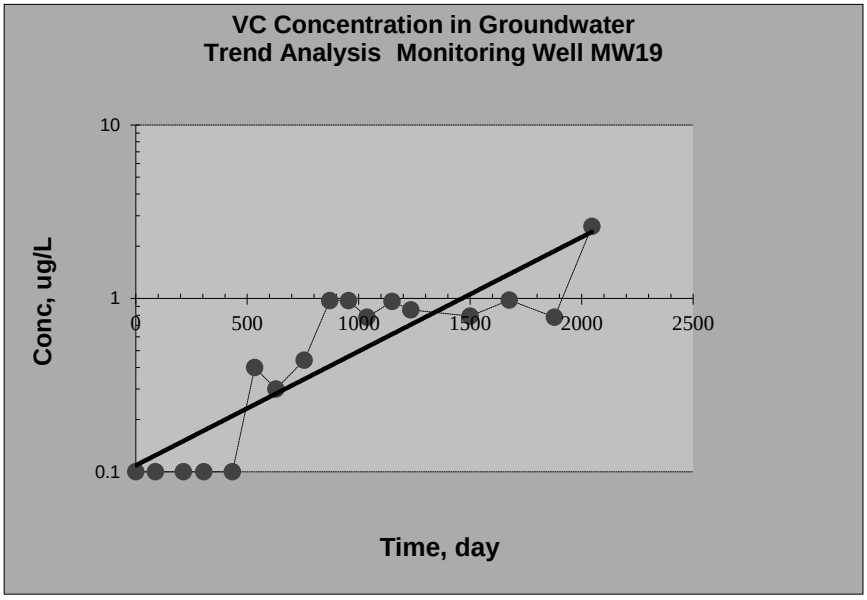
Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		88																
#3		214																
#4		306																
#5		433																
#6		533																
#7		629																
#8		756																
#9	9/23/17	870																
#10	12/16/17	954																
#11	3/10/18	1038																
#12	6/30/18	1150																
#13	9/22/18	1234																
#14	6/15/19	1500																
#15	12/7/19	1675																
#16	6/27/20	1878																
#17	12/12/20	2046																
#18																		
#19																		
#20																		

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *VC*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW19**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*100.000%*		
Plume Stability?	Expanding	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.	
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.	

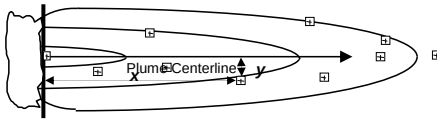


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*cis-1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW20														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/6/15	0		1.5														
#2	8/3/15	89		1.2														
#3	12/7/15	215		0.5														
#4	3/9/16	308		0.5														
#5	7/15/16	436		0.5														
#6	10/20/16	533		0.5														
#7	1/25/17	630		4.1														
#8	6/1/17	757		1.2														
#9	9/24/17	872		9.5														
#10	12/16/17	955		15														
#11	3/10/18	1039		11														
#12	6/30/18	1151		7														
#13	9/22/18	1235		5.3														
#14	12/15/18	1319		4.4														
#15	6/15/19	1501		3.8														
#16	12/7/19	1676		3														
#17	6/27/20	1879		6.1														
#18	12/12/20	2047		6														
#19																		
#20																		
Average Concentration			na	4.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

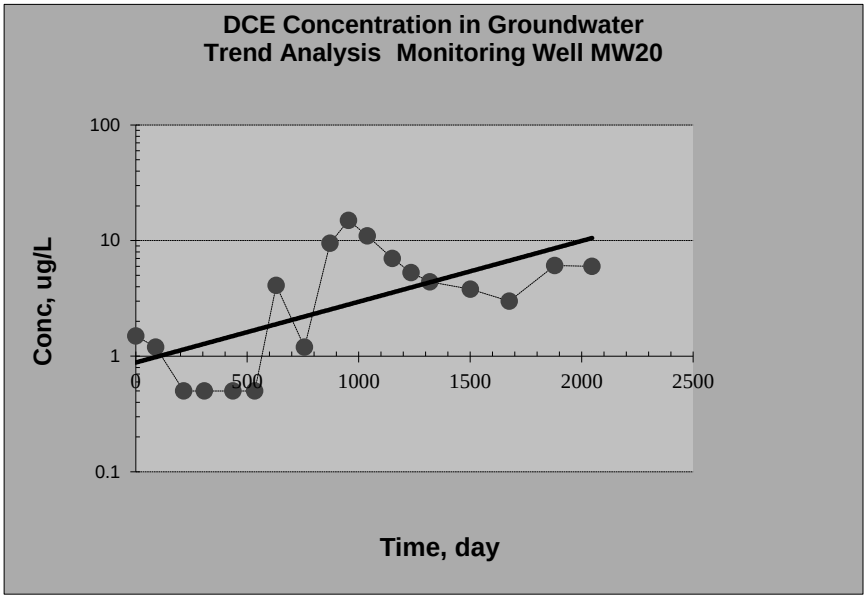
Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		89																
#3		215																
#4		308																
#5		436																
#6		533																
#7		630																
#8		757																
#9	9/24/17	872																
#10	12/16/17	955																
#11	3/10/18	1039																
#12	6/30/18	1151																
#13	9/22/18	1235																
#14	12/15/18	1319																
#15	6/15/19	1501																
#16	12/7/19	1676																
#17	6/27/20	1879																
#18	12/12/20	2047																
#19																		
#20																		

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *cis-1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW20**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*99.571%*		
Plume Stability?	Expanding	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.	
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.	

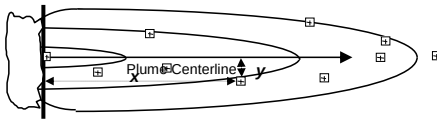


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*PCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW21														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/6/15	0		5.1														
#2	8/4/15	90		4.9														
#3	12/8/15	216		7.3														
#4	3/9/16	308		5.3														
#5	7/13/16	434		0.5														
#6	10/20/16	533		0.5														
#7	1/26/17	631		0.5														
#8	6/1/17	757		0.5														
#9	9/23/17	871		0.5														
#10	12/16/17	955		0.5														
#11	3/10/18	1039		0.5														
#12	6/30/18	1151		0.5														
#13	9/22/18	1235		0.5														
#14	12/15/18	1319		0.5														
#15	6/15/19	1501		0.5														
#16	12/7/19	1676		0.5														
#17	6/27/20	1879		0.5														
#18	12/12/20	2047		0.5														
#19																		
#20																		
Average Concentration			na	1.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	7.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		216																
#4		308																
#5		434																
#6		533																
#7		631																
#8		757																
#9	9/23/17	871																
#10	12/16/17	955																
#11	3/10/18	1039																
#12	6/30/18	1151																
#13	9/22/18	1235																
#14	12/15/18	1319																
#15	6/15/19	1501																
#16	12/7/19	1676																
#17	6/27/20	1879																
#18	12/12/20	2047																
#19																		
#20																		

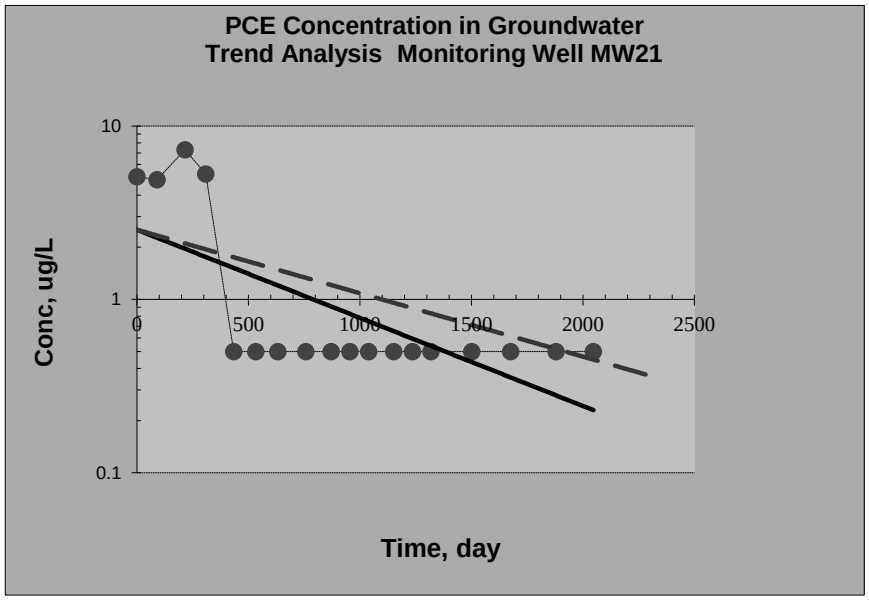
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *PCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW21**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.848%*	
Plume Stability?	Shrinking	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.427* @50% C.L.;	*0.307* @85% C.L.
Half Life for k_{point}, yr	*1.623* @50% C.L.;	*2.254* @85% C.L.

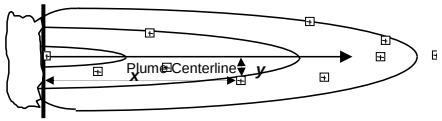


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW21														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/6/15	0		1.6														
#2	8/4/15	90		1.4														
#3	12/8/15	216		2														
#4	3/9/16	308		1.4														
#5	7/13/16	434		0.5														
#6	10/20/16	533		0.5														
#7	1/26/17	631		0.5														
#8	6/1/17	757		0.5														
#9	9/23/17	871		0.5														
#10	12/16/17	955		0.5														
#11	3/10/18	1039		0.5														
#12	6/30/18	1151		0.5														
#13	9/22/18	1235		0.5														
#14	12/15/18	1319		0.5														
#15	6/15/19	1501		0.5														
#16	12/7/19	1676		0.5														
#17	6/27/20	1879		0.5														
#18	12/12/20	2047		0.5														
#19																		
#20																		
Average Concentration			na	0.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		216																
#4		308																
#5		434																
#6		533																
#7		631																
#8		757																
#9	9/23/17	871																
#10	12/16/17	955																
#11	3/10/18	1039																
#12	6/30/18	1151																
#13	9/22/18	1235																
#14	12/15/18	1319																
#15	6/15/19	1501																
#16	12/7/19	1676																
#17	6/27/20	1879																
#18	12/12/20	2047																
#19																		
#20																		

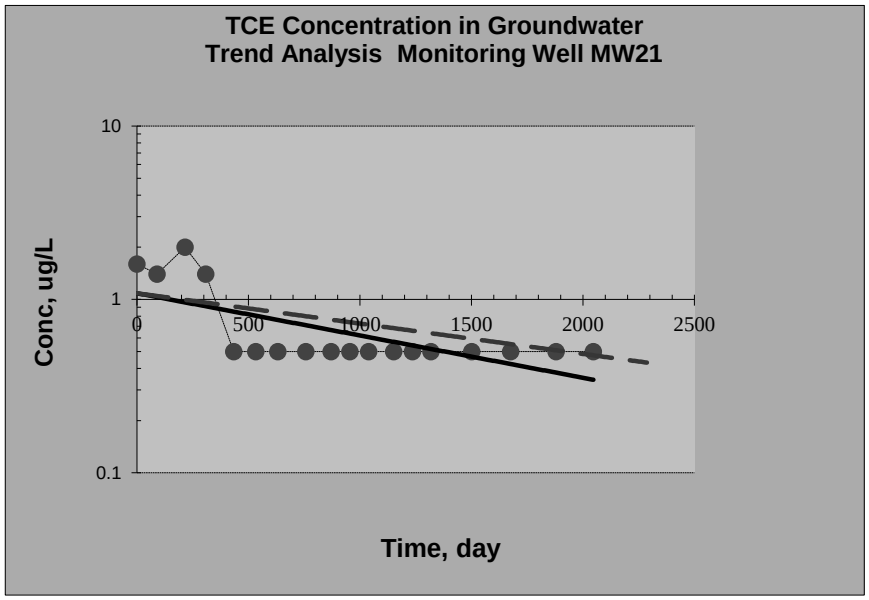
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW21**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.839%*	
Plume Stability?	Shrinking	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.205* @50% C.L.;	*0.147* @85% C.L.
Half Life for k_{point}, yr	*3.384* @50% C.L.;	*4.715* @85% C.L.

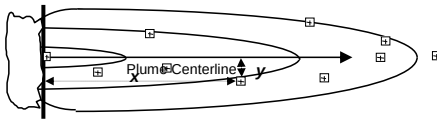


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*cis-1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW21														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/6/15	0		7.2														
#2	8/4/15	90		4.5														
#3	12/8/15	216		6.7														
#4	3/9/16	308		7.9														
#5	7/13/16	434		1.2														
#6	10/20/16	533		1.7														
#7	1/26/17	631		2.4														
#8	6/1/17	757		2.4														
#9	9/23/17	871		3.7														
#10	12/16/17	955		14														
#11	3/10/18	1039		14														
#12	6/30/18	1151		6														
#13	9/22/18	1235		6.9														
#14	12/15/18	1319		16														
#15	6/15/19	1501		29														
#16	12/7/19	1676		34														
#17	6/27/20	1879		13														
#18	12/12/20	2047		10														
#19																		
#20																		
Average Concentration			na	10.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

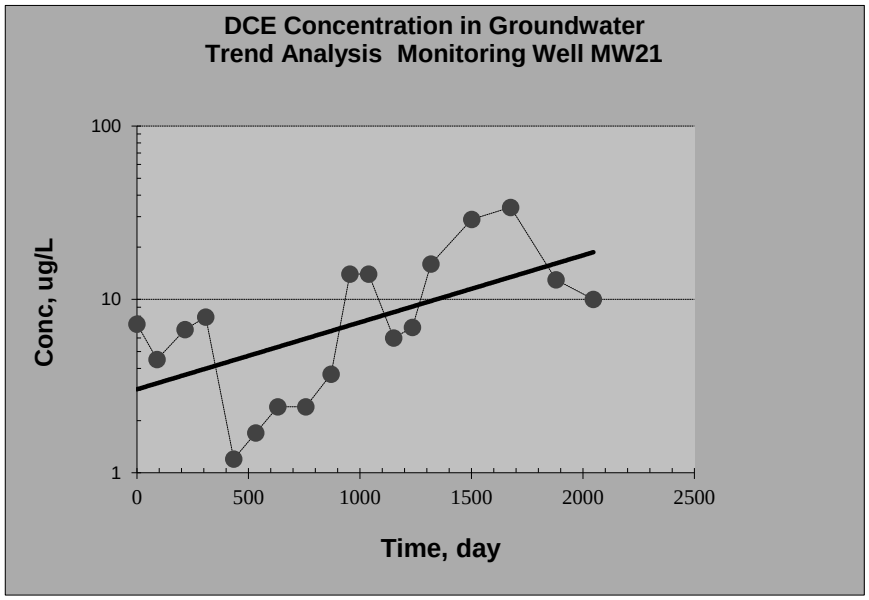
Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		216																
#4		308																
#5		434																
#6		533																
#7		631																
#8		757																
#9	9/23/17	871																
#10	12/16/17	955																
#11	3/10/18	1039																
#12	6/30/18	1151																
#13	9/22/18	1235																
#14	12/15/18	1319																
#15	6/15/19	1501																
#16	12/7/19	1676																
#17	6/27/20	1879																
#18	12/12/20	2047																
#19																		
#20																		

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *cis-1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW21**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*98.898%*		
Plume Stability?	Expanding	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.	
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.	

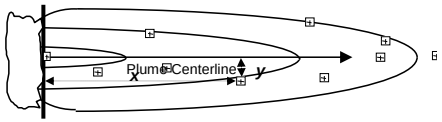


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*VC*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW21														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/6/15	0		0.1														
#2	8/4/15	90		0.1														
#3	12/8/15	216		0.1														
#4	3/9/16	308		0.1														
#5	7/13/16	434		0.1														
#6	10/20/16	533		0.1														
#7	1/26/17	631		0.1														
#8	6/1/17	757		0.1														
#9	9/23/17	871		0.1														
#10	12/16/17	955		0.49														
#11	3/10/18	1039		0.43														
#12	6/30/18	1151		0.29														
#13	9/22/18	1235		0.3														
#14	12/15/18	1319		0.96														
#15	6/15/19	1501		1.1														
#16	12/7/19	1676		1.3														
#17	6/27/20	1879		0.49														
#18	12/12/20	2047		1.8														
#19																		
#20																		
Average Concentration			na	0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		216																
#4		308																
#5		434																
#6		533																
#7		631																
#8		757																
#9	9/23/17	871																
#10	12/16/17	955																
#11	3/10/18	1039																
#12	6/30/18	1151																
#13	9/22/18	1235																
#14	12/15/18	1319																
#15	6/15/19	1501																
#16	12/7/19	1676																
#17	6/27/20	1879																
#18	12/12/20	2047																
#19																		
#20																		

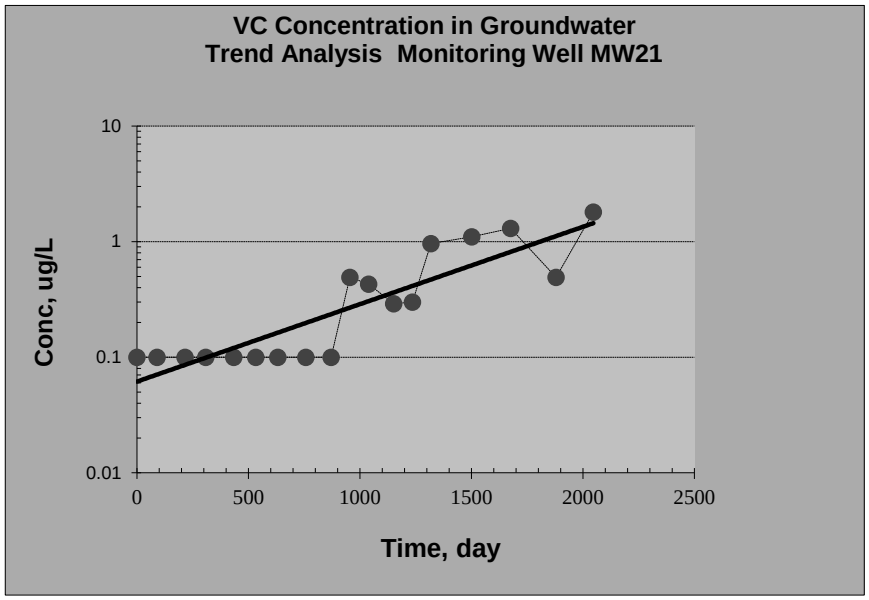
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *VC*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW21**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*100.000%*	
Plume Stability?	Expanding ; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.

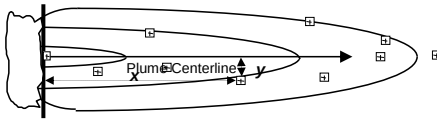


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*PCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW22														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/6/15	0		11														
#2	8/4/15	90		17														
#3	12/8/15	216		19														
#4	3/8/16	307		28														
#5	7/13/16	434		0.5														
#6	10/20/16	533		0.5														
#7	1/26/17	631		0.5														
#8	6/1/17	757		0.5														
#9	9/23/17	871		0.5														
#10	12/16/17	955		0.5														
#11	3/10/18	1039		0.5														
#12	6/30/18	1151		0.5														
#13	9/22/18	1235		0.5														
#14	12/15/18	1319		0.5														
#15	6/15/19	1501		1.1														
#16	12/7/19	1676		1.3														
#17	6/27/20	1879		1.4														
#18	12/12/20	2047		0.5														
#19																		
#20																		
Average Concentration			na	4.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		216																
#4		307																
#5		434																
#6		533																
#7		631																
#8		757																
#9	9/23/17	871																
#10	12/16/17	955																
#11	3/10/18	1039																
#12	6/30/18	1151																
#13	9/22/18	1235																
#14	12/15/18	1319																
#15	6/15/19	1501																
#16	12/7/19	1676																
#17	6/27/20	1879																
#18	12/12/20	2047																
#19																		
#20																		

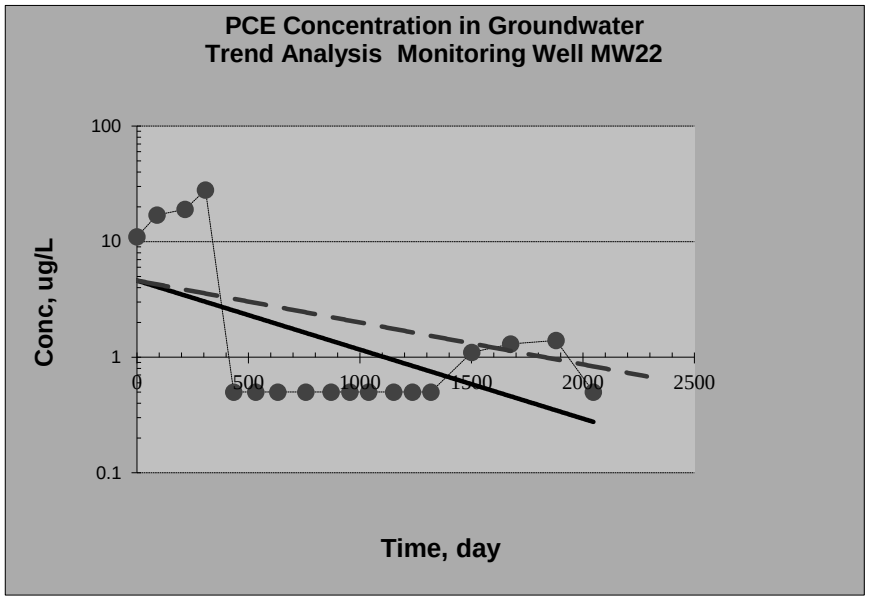
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *PCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW22**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*98.489%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.502* @50% C.L.;	*0.305*	@85% C.L.
Half Life for k_{point}, yr	*1.381* @50% C.L.;	*2.274*	@85% C.L.

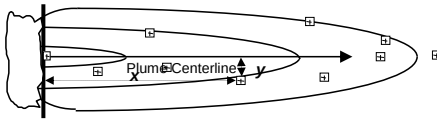


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW22														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/6/15	0		2.2														
#2	8/4/15	90		3														
#3	12/8/15	216		3.7														
#4	3/8/16	307		4.5														
#5	7/13/16	434		0.5														
#6	10/20/16	533		0.5														
#7	1/26/17	631		0.5														
#8	6/1/17	757		0.5														
#9	9/23/17	871		0.5														
#10	12/16/17	955		0.5														
#11	3/10/18	1039		0.5														
#12	6/30/18	1151		0.5														
#13	9/22/18	1235		0.5														
#14	12/15/18	1319		0.5														
#15	6/15/19	1501		1.1														
#16	12/7/19	1676		1.3														
#17	6/27/20	1879		1.3														
#18	12/12/20	2047		0.5														
#19																		
#20																		
Average Concentration			na	1.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		216																
#4		307																
#5		434																
#6		533																
#7		631																
#8		757																
#9	9/23/17	871																
#10	12/16/17	955																
#11	3/10/18	1039																
#12	6/30/18	1151																
#13	9/22/18	1235																
#14	12/15/18	1319																
#15	6/15/19	1501																
#16	12/7/19	1676																
#17	6/27/20	1879																
#18	12/12/20	2047																
#19																		
#20																		

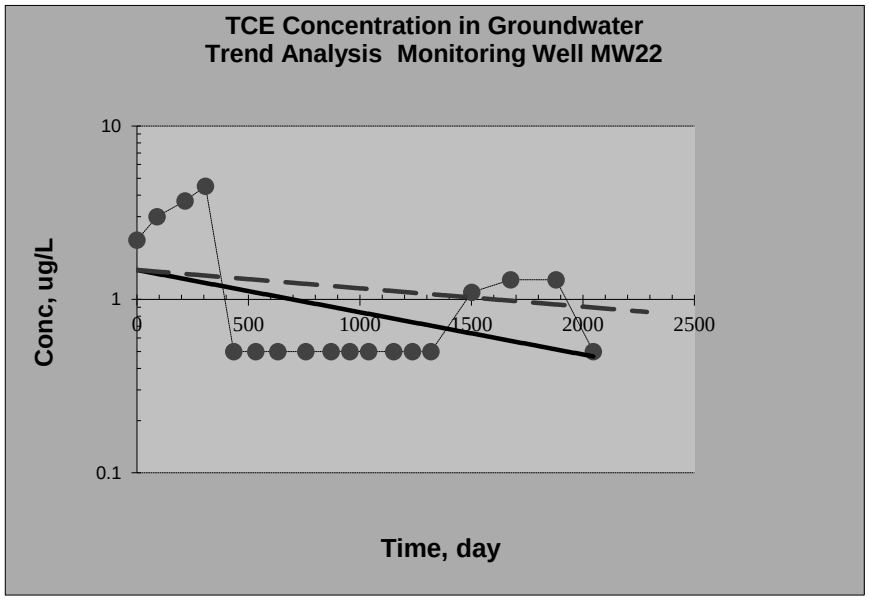
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW22**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*92.298%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.205* @50% C.L.;	*0.089*	@85% C.L.
Half Life for k_{point}, yr	*3.382* @50% C.L.;	*7.785*	@85% C.L.

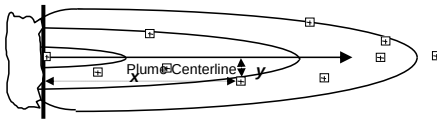


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*cis-1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW22														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/7/15	0		13														
#2	8/4/15	89		20														
#3	12/8/15	215		120														
#4	3/8/16	306		95														
#5	7/14/16	434		14														
#6	10/20/16	532		9.9														
#7	1/26/17	630		41														
#8	6/1/17	756		23														
#9	9/23/17	870		16														
#10	12/16/17	954		14														
#11	3/10/18	1038		20														
#12	6/30/18	1150		14														
#13	9/22/18	1234		16														
#14	12/15/18	1318		17														
#15	6/15/19	1500		25														
#16	12/7/19	1675		38														
#17	6/27/20	1878		42														
#18	12/12/20	2046		44														
#19																		
#20																		
Average Concentration			na	32.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	9.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		89																
#3		215																
#4		306																
#5		434																
#6		532																
#7		630																
#8		756																
#9	9/23/17	870																
#10	12/16/17	954																
#11	3/10/18	1038																
#12	6/30/18	1150																
#13	9/22/18	1234																
#14	12/15/18	1318																
#15	6/15/19	1500																
#16	12/7/19	1675																
#17	6/27/20	1878																
#18	12/12/20	2046																
#19																		
#20																		

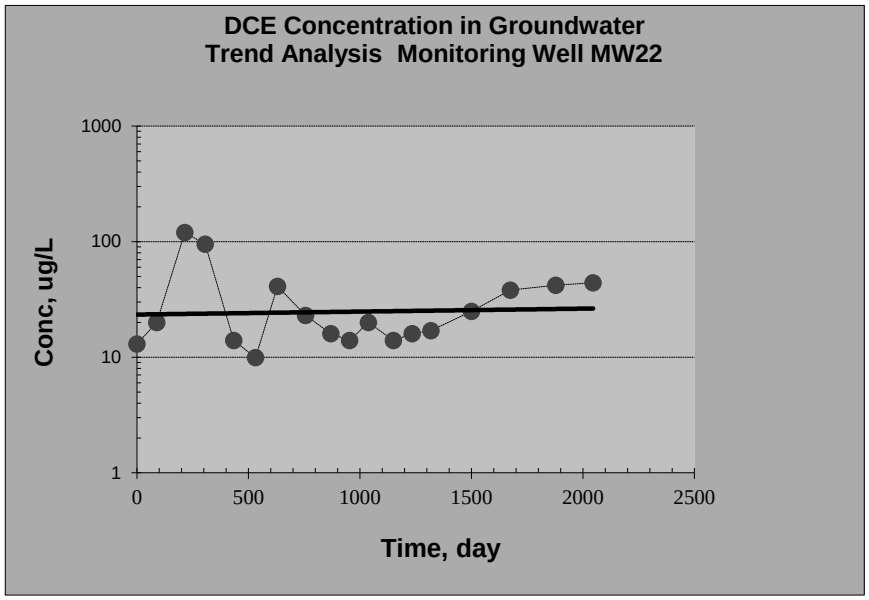
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *cis-1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW22**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*16.158%*	
Plume Stability?	Stable	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.021* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*32.245* @50% C.L.;	*NA* @85% C.L.

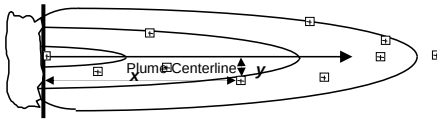


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*VC*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW22														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/7/15	0		0.1														
#2	8/4/15	89		0.2														
#3	12/8/15	215		0.57														
#4	3/8/16	306		0.64														
#5	7/14/16	434		2.2														
#6	10/20/16	532		0.48														
#7	1/26/17	630		1.4														
#8	6/1/17	756		0.74														
#9	9/23/17	870		0.5														
#10	12/16/17	954		0.51														
#11	3/10/18	1038		0.52														
#12	6/30/18	1150		0.53														
#13	9/22/18	1234		0.53														
#14	12/15/18	1318		0.1														
#15	6/15/19	1500		0.72														
#16	12/7/19	1675		0.89														
#17	6/27/20	1878		0.99														
#18	12/12/20	2046		1.1														
#19																		
#20																		
Average Concentration			na	0.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

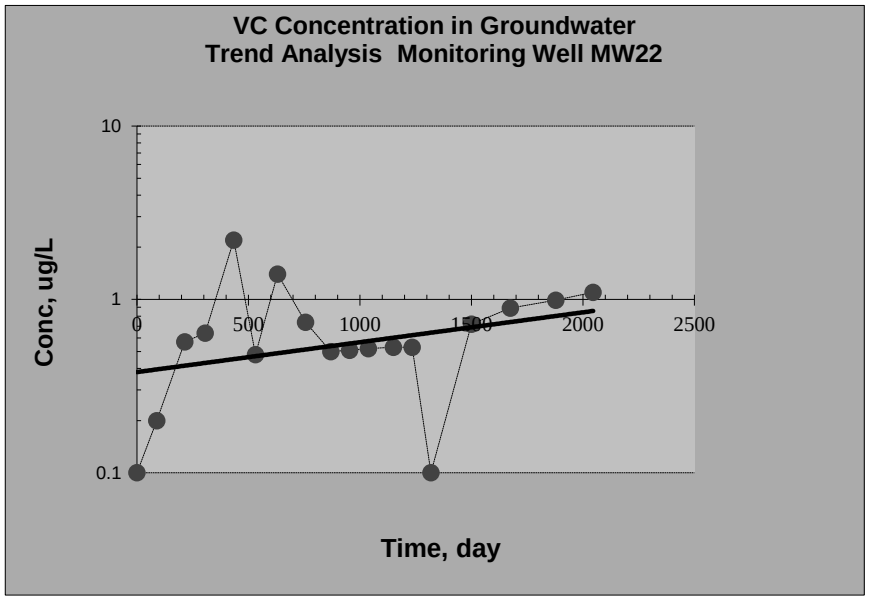
Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		89																
#3		215																
#4		306																
#5		434																
#6		532																
#7		630																
#8		756																
#9	9/23/17	870																
#10	12/16/17	954																
#11	3/10/18	1038																
#12	6/30/18	1150																
#13	9/22/18	1234																
#14	12/15/18	1318																
#15	6/15/19	1500																
#16	12/7/19	1675																
#17	6/27/20	1878																
#18	12/12/20	2046																
#19																		
#20																		

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *VC*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW22**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*77.694%*		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.145* @50% C.L.;	*0.023* @85% C.L.	
Half Life for k_{point}, yr	*4.787* @50% C.L.;	*30.549* @85% C.L.	

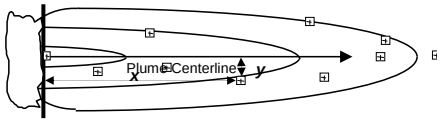


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*VC*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW23														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/7/15	0		0.1														
#2	8/4/15	89		0.2														
#3	12/8/15	215		0.57														
#4	3/8/16	306		0.64														
#5	7/14/16	434		2.2														
#6	10/20/16	532		0.48														
#7	1/26/17	630		1.4														
#8	6/1/17	756		0.74														
#9	9/23/17	870		0.5														
#10	12/16/17	954		0.51														
#11	3/10/18	1038		0.52														
#12	6/30/18	1150		0.53														
#13	9/22/18	1234		0.53														
#14	12/15/18	1318		0.1														
#15	6/15/19	1500		0.72														
#16	12/7/19	1675		0.89														
#17	6/27/20	1878		0.76														
#18	12/12/20	2046		0.85														
#19																		
#20																		
Average Concentration			na	0.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		89																
#3		215																
#4		306																
#5		434																
#6		532																
#7		630																
#8		756																
#9	9/23/17	870																
#10	12/16/17	954																
#11	3/10/18	1038																
#12	6/30/18	1150																
#13	9/22/18	1234																
#14	12/15/18	1318																
#15	6/15/19	1500																
#16	12/7/19	1675																
#17	6/27/20	1878																
#18	12/12/20	2046																
#19																		
#20																		

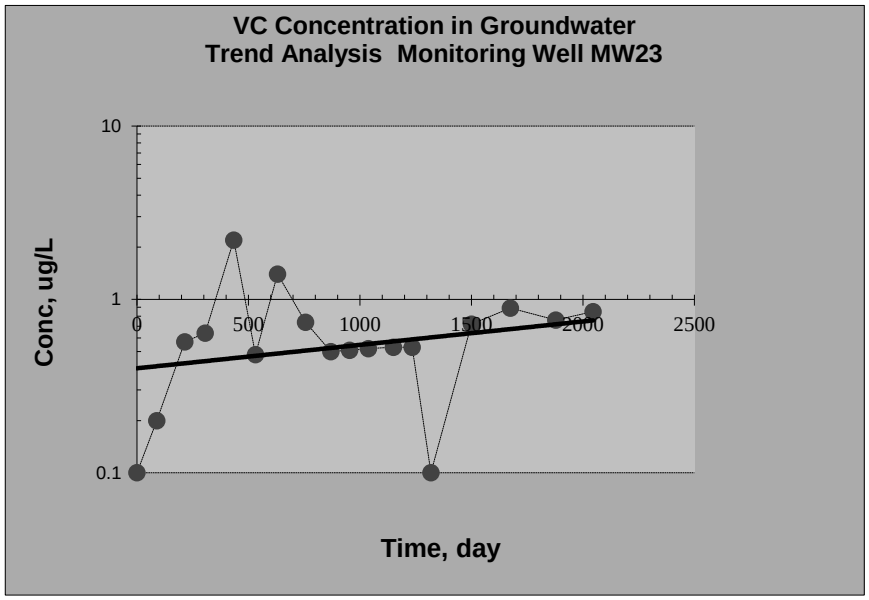
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *VC*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW23**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*66.897%*	
Plume Stability?	Stable	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.114* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*6.104* @50% C.L.;	*NA* @85% C.L.

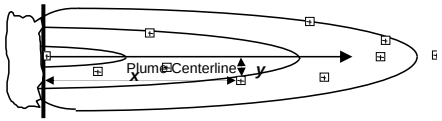


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*PCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW24														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/6/15	0		2.5														
#2	8/4/15	90		5.5														
#3	12/8/15	216		11														
#4	3/9/16	308		11														
#5	7/15/16	436		0.5														
#6	10/20/16	533		0.5														
#7	1/25/17	630		0.5														
#8	6/1/17	757		0.5														
#9	9/24/17	872		1.1														
#10	12/16/17	955		0.5														
#11	3/10/18	1039		0.5														
#12	6/30/18	1151		0.5														
#13	9/22/18	1235		1.5														
#14	12/15/18	1319		0.5														
#15	6/15/19	1501		0.5														
#16	12/7/19	1676		0.5														
#17	6/27/20	1879		0.5														
#18	12/12/20	2047		0.5														
#19																		
#20																		
Average Concentration			na	2.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		216																
#4		308																
#5		436																
#6		533																
#7		630																
#8		757																
#9	9/24/17	872																
#10	12/16/17	955																
#11	3/10/18	1039																
#12	6/30/18	1151																
#13	9/22/18	1235																
#14	12/15/18	1319																
#15	6/15/19	1501																
#16	12/7/19	1676																
#17	6/27/20	1879																
#18	12/12/20	2047																
#19																		
#20																		

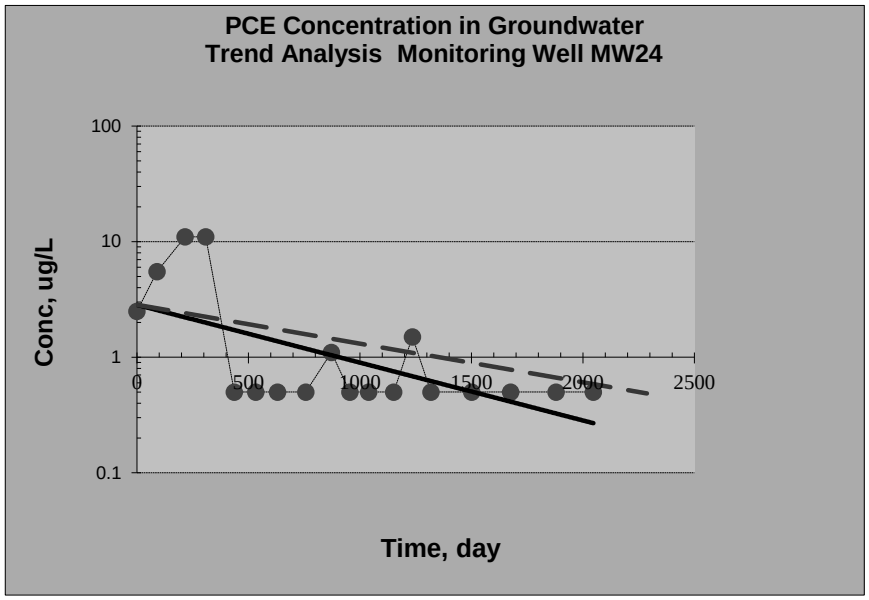
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *PCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW24**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.488%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.420* @50% C.L.;	*0.282*	@85% C.L.
Half Life for k_{point}, yr	*1.649* @50% C.L.;	*2.461*	@85% C.L.

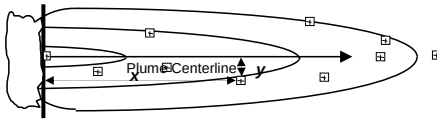


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW24														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/6/15	0		31														
#2	8/4/15	90		28														
#3	12/8/15	216		28														
#4	3/9/16	308		23														
#5	7/15/16	436		1.7														
#6	10/20/16	533		2.7														
#7	1/25/17	630		3.5														
#8	6/1/17	757		4.8														
#9	9/24/17	872		1.8														
#10	12/16/17	955		1.3														
#11	3/10/18	1039		0.5														
#12	6/30/18	1151		1.9														
#13	9/22/18	1235		0.5														
#14	12/15/18	1319		0.5														
#15	6/15/19	1501		0.5														
#16	12/7/19	1676		0.5														
#17	6/27/20	1879		0.5														
#18	12/12/20	2047		0.5														
#19																		
#20																		
Average Concentration			na	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		216																
#4		308																
#5		436																
#6		533																
#7		630																
#8		757																
#9	9/24/17	872																
#10	12/16/17	955																
#11	3/10/18	1039																
#12	6/30/18	1151																
#13	9/22/18	1235																
#14	12/15/18	1319																
#15	6/15/19	1501																
#16	12/7/19	1676																
#17	6/27/20	1879																
#18	12/12/20	2047																
#19																		
#20																		

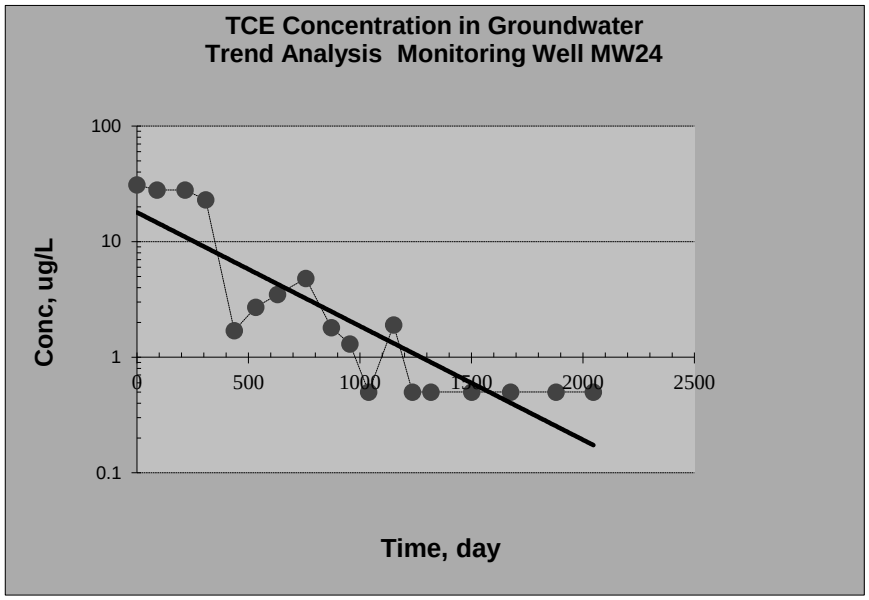
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW24**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*NA*	
Plume Stability?	NA	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.

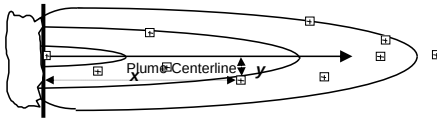


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*cis-1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW24														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/6/15	0		72														
#2	8/4/15	90		75														
#3	12/8/15	216		54														
#4	3/9/16	308		45														
#5	7/15/16	436		12														
#6	10/20/16	533		12														
#7	1/25/17	630		20														
#8	6/1/17	757		35														
#9	9/24/17	872		33														
#10	12/16/17	955		30														
#11	3/10/18	1039		25														
#12	6/30/18	1151		41														
#13	9/22/18	1235		35														
#14	12/15/18	1319		43														
#15	6/15/19	1501		84														
#16	12/7/19	1676		83														
#17	6/27/20	1879		61														
#18	12/12/20	2047		45														
#19																		
#20																		
Average Concentration			na	44.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		216																
#4		308																
#5		436																
#6		533																
#7		630																
#8		757																
#9	9/24/17	872																
#10	12/16/17	955																
#11	3/10/18	1039																
#12	6/30/18	1151																
#13	9/22/18	1235																
#14	12/15/18	1319																
#15	6/15/19	1501																
#16	12/7/19	1676																
#17	6/27/20	1879																
#18	12/12/20	2047																
#19																		
#20																		

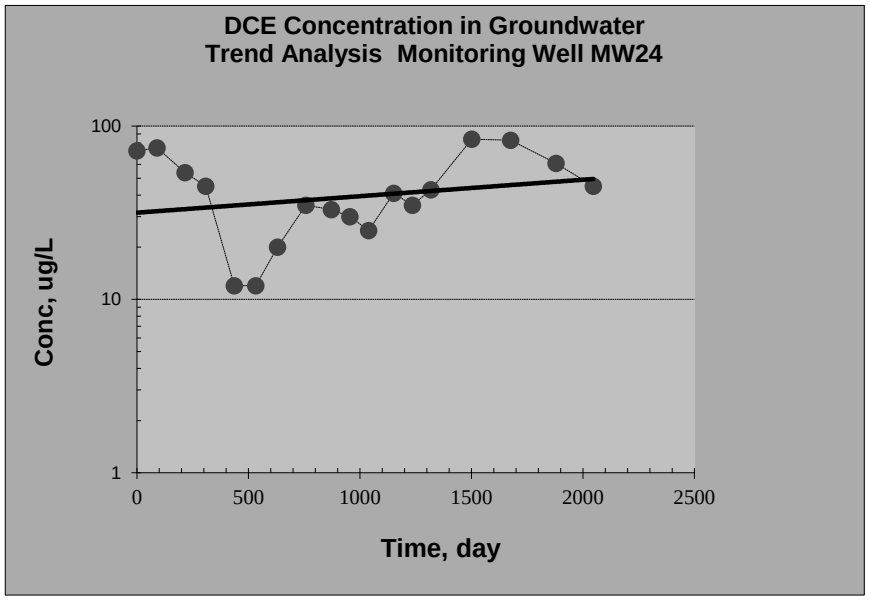
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *cis-1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW24**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*63.556%*	
Plume Stability?	Stable	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.080* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*8.681* @50% C.L.;	*NA* @85% C.L.

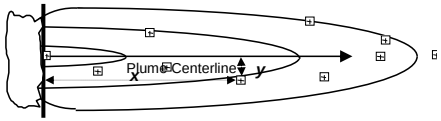


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle,Washington*
Hazardous Substance	*VC*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW24														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/6/15	0		0.26														
#2	8/4/15	90		0.1														
#3	12/8/15	216		0.1														
#4	3/9/16	308		0.1														
#5	7/15/16	436		0.1														
#6	10/20/16	533		0.26														
#7	1/25/17	630		0.81														
#8	6/1/17	757		1														
#9	9/24/17	872		0.36														
#10	12/16/17	955		0.38														
#11	3/10/18	1039		0.36														
#12	6/30/18	1151		2.1														
#13	9/22/18	1235		0.37														
#14	12/15/18	1319		0.51														
#15	6/15/19	1501		1														
#16	12/7/19	1676		0.94														
#17	6/27/20	1879		0.76														
#18	12/12/20	2047		0.61														
#19																		
#20																		
Average Concentration			na	0.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		216																
#4		308																
#5		436																
#6		533																
#7		630																
#8		757																
#9	9/24/17	872																
#10	12/16/17	955																
#11	3/10/18	1039																
#12	6/30/18	1151																
#13	9/22/18	1235																
#14	12/15/18	1319																
#15	6/15/19	1501																
#16	12/7/19	1676																
#17	6/27/20	1879																
#18	12/12/20	2047																
#19																		
#20																		

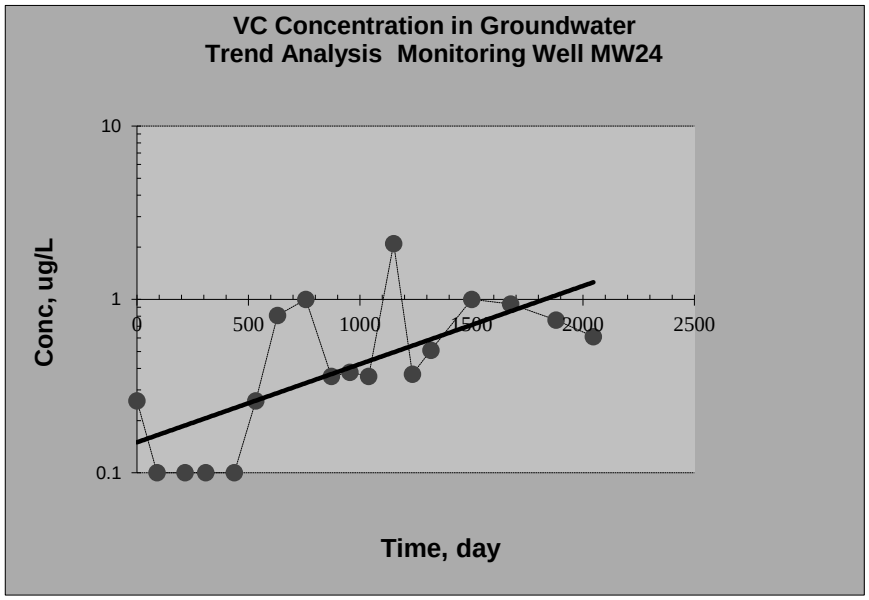
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle,Washington*
Hazardous Substance *VC*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW24**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.843%*	
Plume Stability?	Expanding ; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.

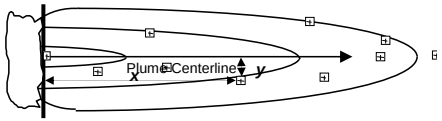


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*PCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW25														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/7/15	0		0.5														
#2	8/5/15	90		3.0														
#3	12/9/15	216		**11**														
#4	3/8/16	306		**24**														
#5	7/13/16	433		**6.1**														
#6	10/19/16	531		1.8														
#7	1/25/17	629		1.0														
#8	6/1/17	756		0.5														
#9	9/23/17	870		0.5														
#10	12/16/17	954		0.5														
#11	3/10/18	1038		0.5														
#12	6/30/18	1150		0.5														
#13	9/22/18	1234		0.5														
#14	12/15/18	1318		0.5														
#15	6/15/19	1500		0.5														
#16	12/7/19	1675		0.5														
#17	6/27/20	1878		0.5														
#18	12/12/20	2046		0.5														
#19																		
#20																		
Average Concentration			na	2.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		216																
#4		306																
#5		433																
#6		531																
#7		629																
#8		756																
#9	9/23/17	870																
#10	12/16/17	954																
#11	3/10/18	1038																
#12	6/30/18	1150																
#13	9/22/18	1234																
#14	12/15/18	1318																
#15	6/15/19	1500																
#16	12/7/19	1675																
#17	6/27/20	1878																
#18	12/12/20	2046																
#19																		
#20																		

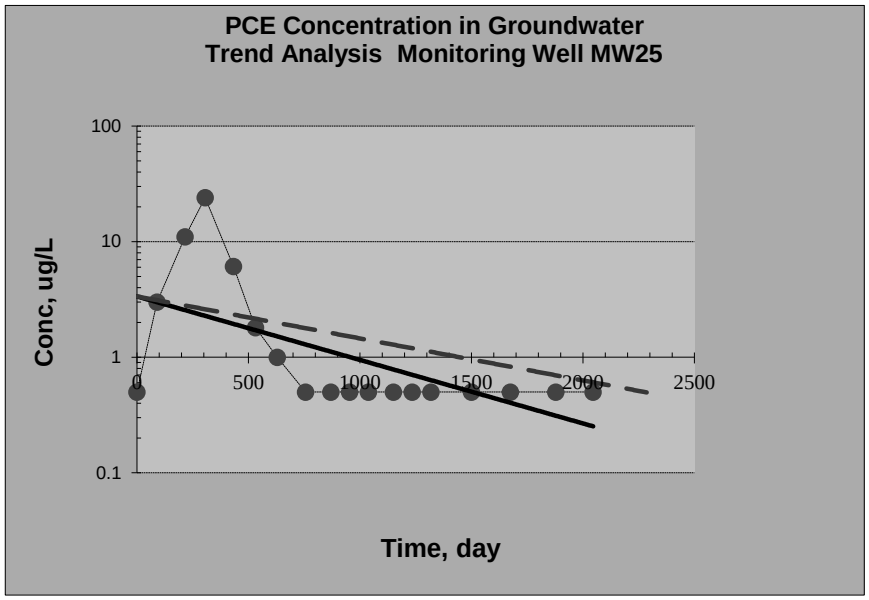
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *PCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW25**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.387%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.462* @50% C.L.;	*0.305*	@85% C.L.
Half Life for k_{point}, yr	*1.501* @50% C.L.;	*2.270*	@85% C.L.

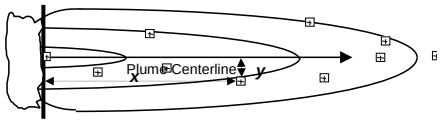


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW25														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/7/15	0		0.5														
#2	8/5/15	90		3.0														
#3	12/9/15	216		**11**														
#4	3/8/16	306		**24**														
#5	7/13/16	433		**6.1**														
#6	10/19/16	531		1.8														
#7	1/25/17	629		1.0														
#8	6/1/17	756		0.5														
#9	9/23/17	870		0.5														
#10	12/16/17	954		0.5														
#11	3/10/18	1038		0.5														
#12	6/30/18	1150		0.5														
#13	9/22/18	1234		0.5														
#14	12/15/18	1318		0.5														
#15	6/15/19	1500		0.5														
#16	12/7/19	1675		0.5														
#17	6/27/20	1878		0.5														
#18	12/12/20	2046		0.5														
#19																		
#20																		
Average Concentration			na	2.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		216																
#4		306																
#5		433																
#6		531																
#7		629																
#8		756																
#9	9/23/17	870																
#10	12/16/17	954																
#11	3/10/18	1038																
#12	6/30/18	1150																
#13	9/22/18	1234																
#14	12/15/18	1318																
#15	6/15/19	1500																
#16	12/7/19	1675																
#17	6/27/20	1878																
#18	12/12/20	2046																
#19																		
#20																		

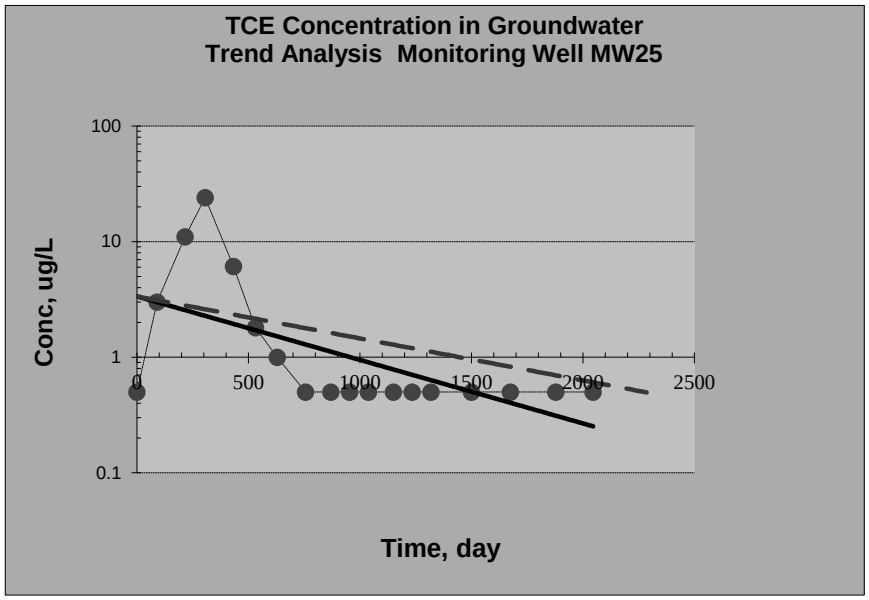
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW25**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.387%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.462* @50% C.L.;	*0.305*	@85% C.L.
Half Life for k_{point}, yr	*1.501* @50% C.L.;	*2.270*	@85% C.L.

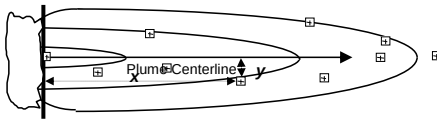


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*cis-1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW25														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	5/7/15	0		5.2														
#2	8/5/15	90		7.9														
#3	12/9/15	216		8.4														
#4	3/8/16	306		12														
#5	7/13/16	433		23														
#6	10/19/16	531		15														
#7	1/25/17	629		44														
#8	6/1/17	756		15														
#9	9/23/17	870		15														
#10	12/16/17	954		23														
#11	3/10/18	1038		25														
#12	6/30/18	1150		31														
#13	9/22/18	1234		37														
#14	12/15/18	1318		40														
#15	6/15/19	1500		45														
#16	12/7/19	1675		40														
#17	6/27/20	1878		40														
#18	12/12/20	2046		35														
#19																		
#20																		
Average Concentration			na	25.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

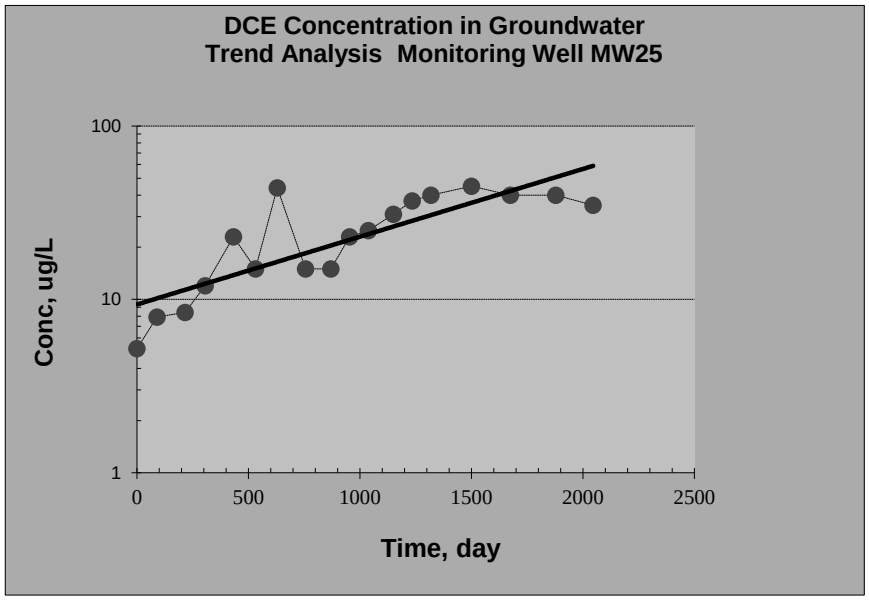
Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		216																
#4		306																
#5		433																
#6		531																
#7		629																
#8		756																
#9	9/23/17	870																
#10	12/16/17	954																
#11	3/10/18	1038																
#12	6/30/18	1150																
#13	9/22/18	1234																
#14	12/15/18	1318																
#15	6/15/19	1500																
#16	12/7/19	1675																
#17	6/27/20	1878																
#18	12/12/20	2046																
#19																		
#20																		

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *cis-1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW25**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*99.997%*		
Plume Stability?	Expanding	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.	
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.	

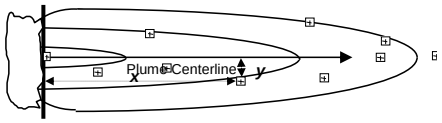


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*VC*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW25														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	7/13/16	0		0.7														
#2	10/19/16	98		0.96														
#3	1/25/17	196		0.89														
#4	6/1/17	323		0.31														
#5	9/23/17	437		0.4														
#6	12/16/17	521		0.41														
#7	3/10/18	605		0.32														
#8	6/30/18	717		0.52														
#9	9/22/18	801		0.46														
#10	12/15/18	885		0.6														
#11	6/15/19	1067		0.54														
#12	12/7/19	1242		0.63														
#13	6/27/20	1445		0.73														
#14	12/12/20	1613		0.43														
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	0.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	0.96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		98																
#3		196																
#4		323																
#5		437																
#6		521																
#7		605																
#8		717																
#9	9/22/18	801																
#10	12/15/18	885																
#11	6/15/19	1067																
#12	12/7/19	1242																
#13	6/27/20	1445																
#14	12/12/20	1613																
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		

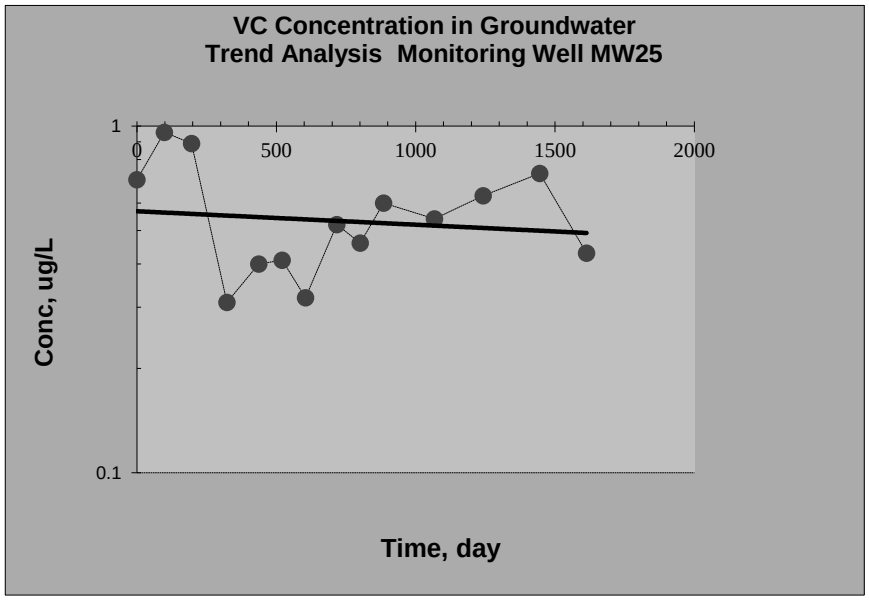
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *VC*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW25**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*33.454%*	
Plume Stability?	Stable	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.033* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*21.235* @50% C.L.;	*NA* @85% C.L.

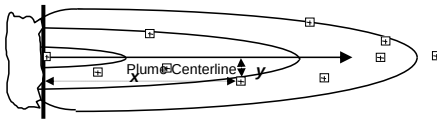


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW26														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	12/10/15	0		11														
#2	03/07/16	88		10														
#3	07/12/16	215		12														
#4	10/18/16	313		12														
#5	01/24/17	411		13														
#6	05/31/17	538		7.9														
#7	09/21/17	651		7.1														
#8	12/14/17	735		15														
#9	03/09/18	820		6														
#10	06/28/18	931		18														
#11	09/20/18	1015		18														
#12	12/14/18	1100		20														
#13	06/14/19	1282		20														
#14	12/05/19	1456		13														
#15	06/26/20	1660		13														
#16	12/11/20	1828		4														
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	12.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		88																
#3		215																
#4		313																
#5		411																
#6		538																
#7		651																
#8		735																
#9	3/9/18	820																
#10	6/28/18	931																
#11	9/20/18	1015																
#12	12/14/18	1100																
#13	6/14/19	1282																
#14	12/5/19	1456																
#15	6/26/20	1660																
#16	12/11/20	1828																
#17																		
#18																		
#19																		
#20																		

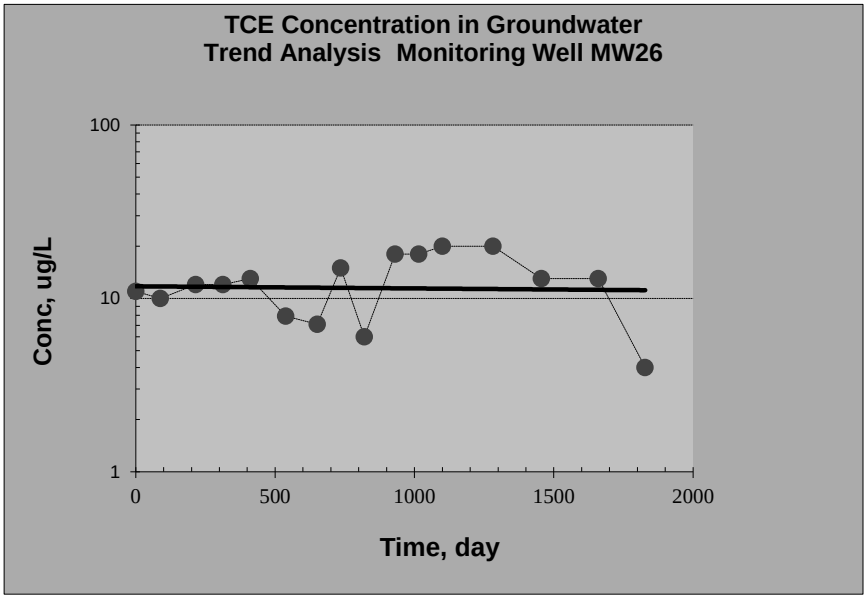
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW26**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*10.136%*	
Plume Stability?	Stable	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.010* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*66.996* @50% C.L.;	*NA* @85% C.L.

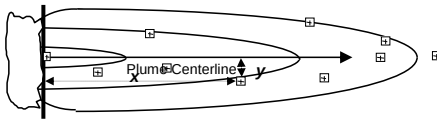


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW27														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	12/10/15	0		21														
#2	03/07/16	88		21														
#3	07/13/16	216		18														
#4	10/19/16	314		23														
#5	01/24/17	411		33														
#6	05/31/17	538		18														
#7	09/21/17	651		16														
#8	12/14/17	735		81														
#9	12/29/17	750		60														
#10	03/08/18	819		13														
#11	06/28/18	931		37														
#12	09/20/18	1015		21														
#13	12/14/18	1100		17														
#14	06/14/19	1282		14														
#15	12/05/19	1456		15														
#16	06/26/20	1660		30														
#17	12/10/20	1827		69														
#18																		
#19																		
#20																		
Average Concentration			na	29.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	81	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		88																
#3		216																
#4		314																
#5		411																
#6		538																
#7		651																
#8		735																
#9	12/29/17	750																
#10	3/8/18	819																
#11	6/28/18	931																
#12	9/20/18	1015																
#13	12/14/18	1100																
#14	6/14/19	1282																
#15	12/5/19	1456																
#16	6/26/20	1660																
#17	12/10/20	1827																
#18																		
#19																		
#20																		

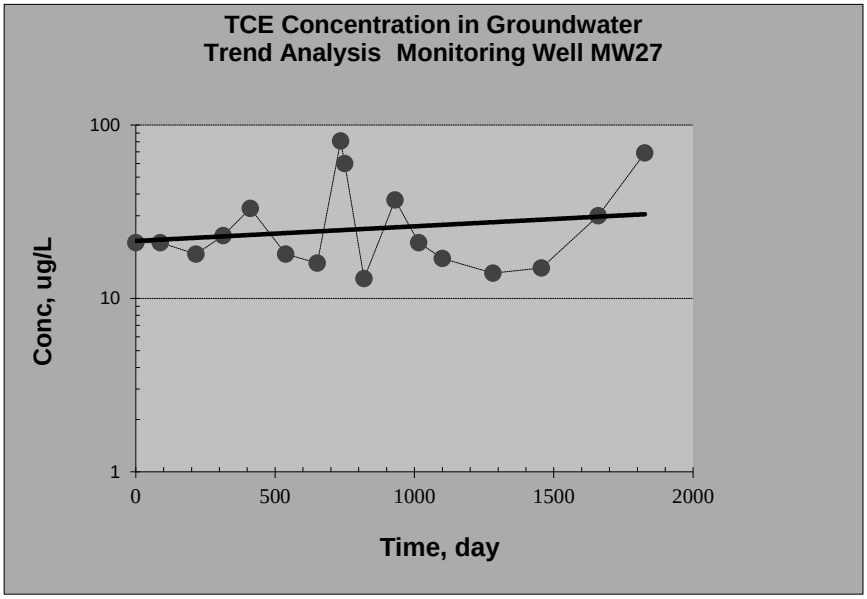
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW27**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*51.944%*		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.071* @50% C.L.;	*NA* @85% C.L.	
Half Life for k_{point}, yr	*9.775* @50% C.L.;	*NA* @85% C.L.	

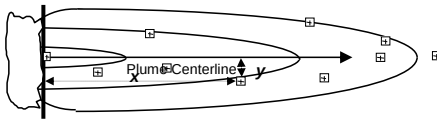


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*cis 1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW27														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	12/10/15	0		2.5														
#2	03/07/16	88		3.8														
#3	07/13/16	216		4.5														
#4	10/19/16	314		4.8														
#5	01/24/17	411		13														
#6	05/31/17	538		5.5														
#7	09/21/17	651		4														
#8	12/14/17	735		4.4														
#9	12/29/17	750		3.5														
#10	03/08/18	819		0.5														
#11	06/28/18	931		3.4														
#12	09/20/18	1015		3.7														
#13	12/14/18	1100		4.3														
#14	06/14/19	1282		2.3														
#15	12/05/19	1456		2.2														
#16	06/26/20	1660		2.9														
#17	12/10/20	1827		3.7														
#18																		
#19																		
#20																		
Average Concentration			na	4.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		88																
#3		216																
#4		314																
#5		411																
#6		538																
#7		651																
#8		735																
#9	12/29/17	750																
#10	3/8/18	819																
#11	6/28/18	931																
#12	9/20/18	1015																
#13	12/14/18	1100																
#14	6/14/19	1282																
#15	12/5/19	1456																
#16	6/26/20	1660																
#17	12/10/20	1827																
#18																		
#19																		
#20		0																

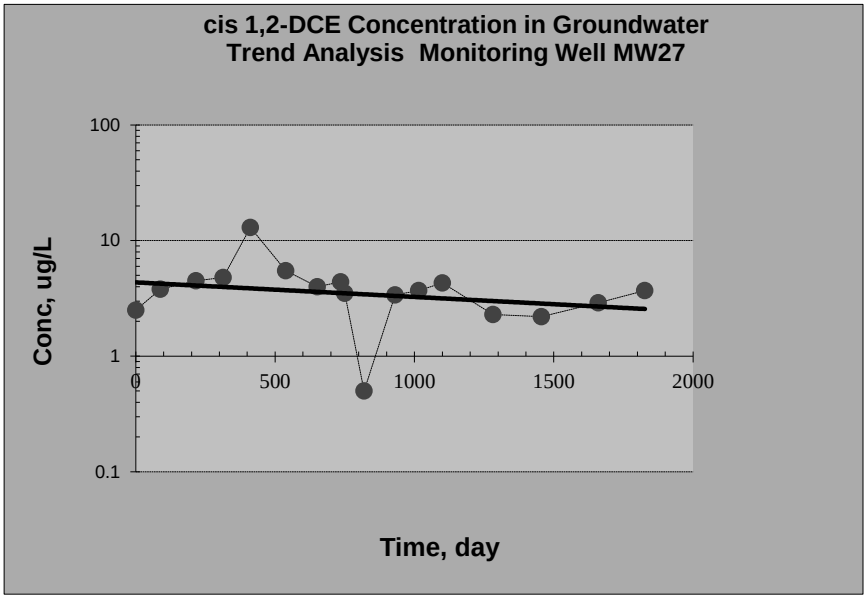
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *cis 1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW27**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*65.221%*	
Plume Stability?	Stable	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.106* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*6.548* @50% C.L.;	*NA* @85% C.L.

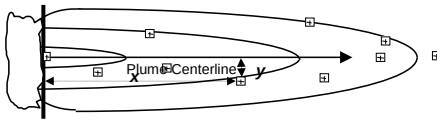


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*PCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW28														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	3/15/19	0		7.7														
#2	6/13/19	90		9														
#3	10/9/19	208		8.7														
#4	12/4/19	264		8.4														
#5	6/26/20	469		9.1														
#6	12/11/20	637		8.3														
#7																		
#8																		
#9																		
#10																		
#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	8.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	9.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	7.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		208																
#4		264																
#5		469																
#6		637																
#7																		
#8																		
#9																		
#10																		
#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
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#18																		
#19																		
#20																		

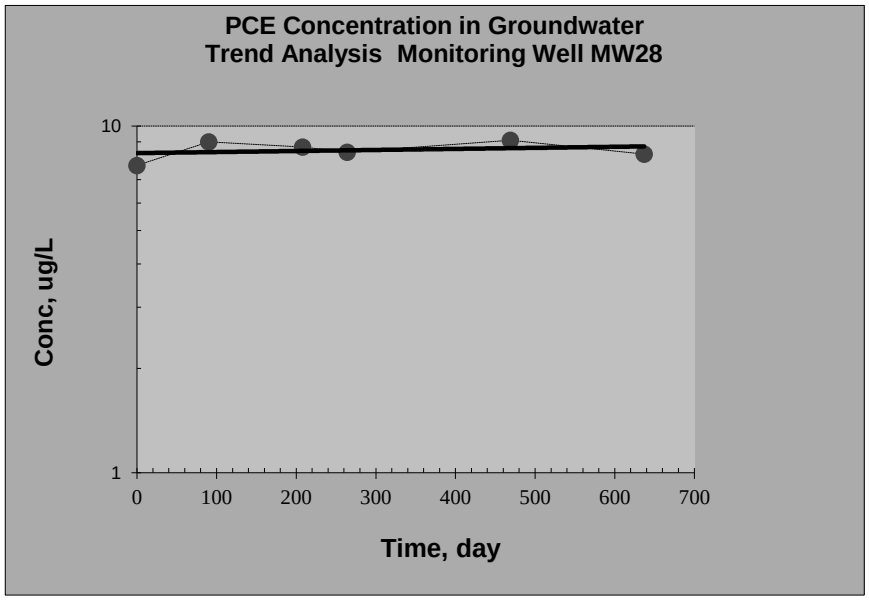
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *PCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW28**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*39.514%*	
Plume Stability?	Stable	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.025* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*27.219* @50% C.L.;	*NA* @85% C.L.

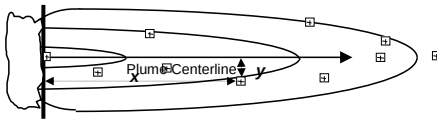


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW28														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	3/15/19	0		4.7														
#2	6/13/19	90		5.7														
#3	10/9/19	208		6.1														
#4	12/4/19	264		4.9														
#5	6/26/20	469		5.1														
#6	12/11/20	637		4.9														
#7																		
#8																		
#9																		
#10																		
#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	5.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	6.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	4.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

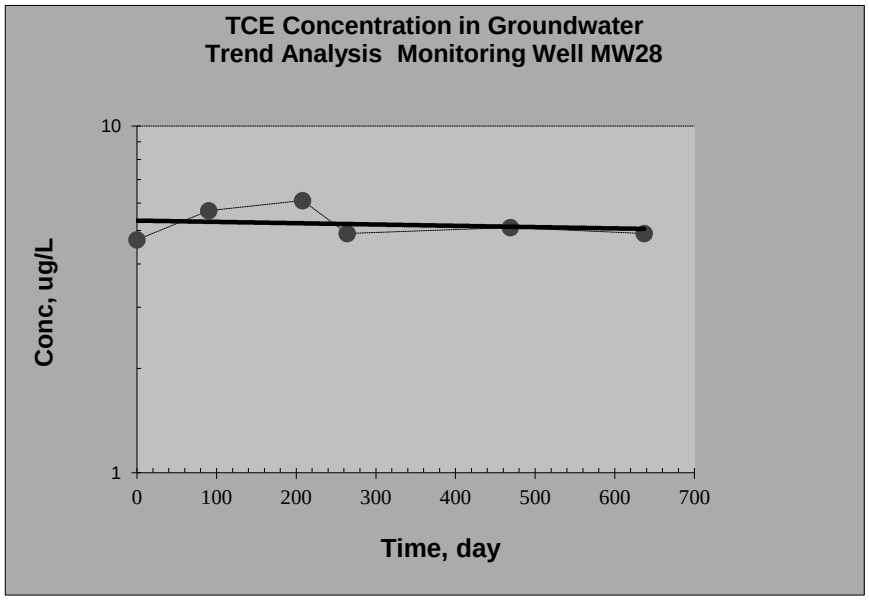
Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		208																
#4		264																
#5		469																
#6		637																
#7																		
#8																		
#9																		
#10																		
#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		

Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW28**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*30.052%*		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.032* @50% C.L.;	*NA* @85% C.L.	
Half Life for k_{point}, yr	*21.907* @50% C.L.;	*NA* @85% C.L.	

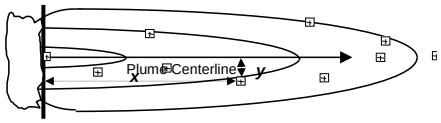


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*cis-1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW28														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	3/15/19	0		67														
#2	6/13/19	90		80														
#3	10/9/19	208		75														
#4	12/4/19	264		52														
#5	6/26/20	469		22														
#6	12/11/20	637		19														
#7																		
#8																		
#9																		
#10																		
#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	52.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		208																
#4		264																
#5		469																
#6		637																
#7																		
#8																		
#9																		
#10																		
#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		

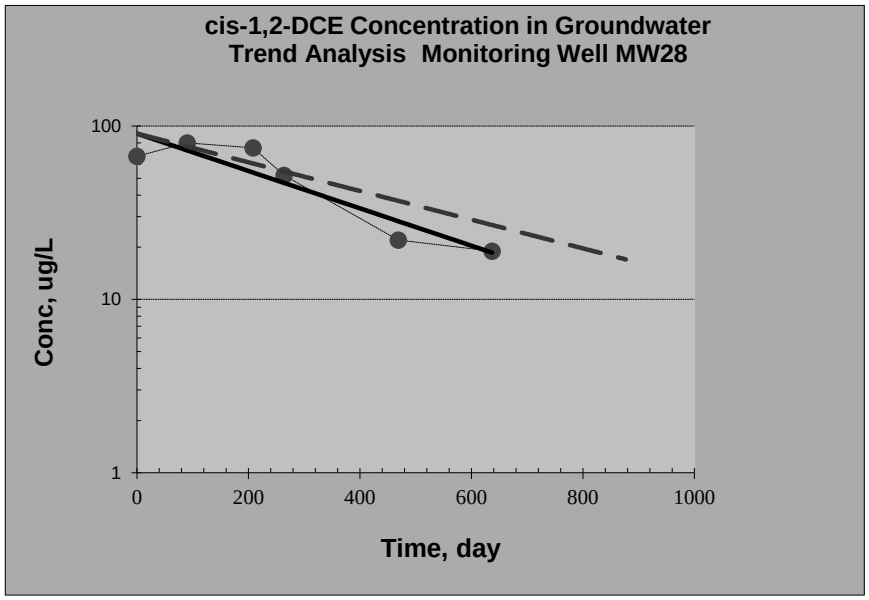
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *cis-1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW28**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.240%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.906* @50% C.L.;	*0.696*	@85% C.L.
Half Life for k_{point}, yr	*0.765* @50% C.L.;	*0.996*	@85% C.L.

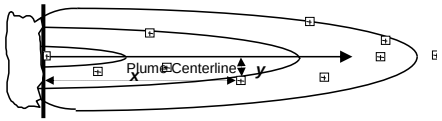


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*VC*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW28														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	3/15/19	0		0.47														
#2	6/13/19	90		0.36														
#3	10/9/19	208		0.31														
#4	12/4/19	264		0.29														
#5	6/26/20	469		0.1														
#6	12/11/20	637		0.1														
#7																		
#8																		
#9																		
#10																		
#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	0.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	0.47	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		90																
#3		208																
#4		264																
#5		469																
#6		637																
#7																		
#8																		
#9																		
#10																		
#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		

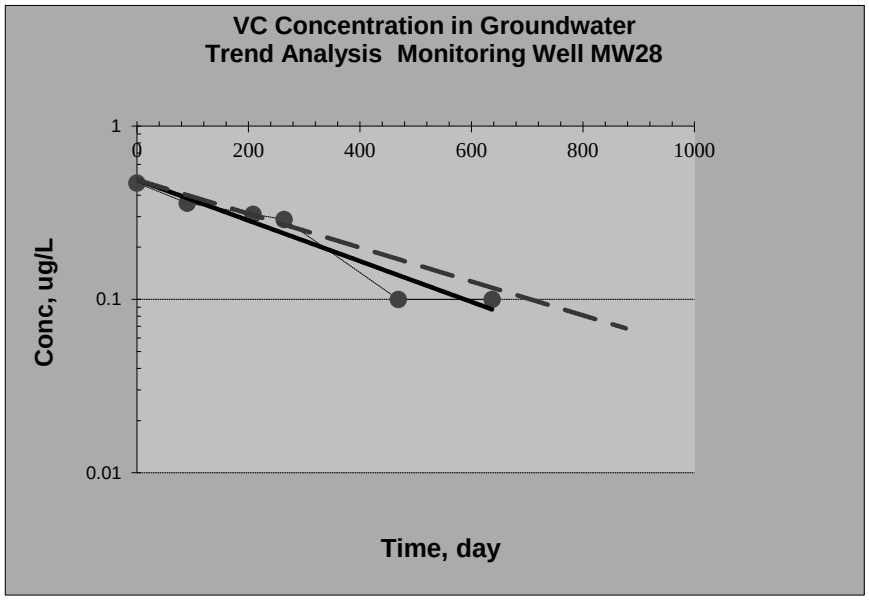
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *VC*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW28**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.769%*		
Plume Stability?	Shrinking	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.987* @50% C.L.;	*0.821*	@85% C.L.
Half Life for k_{point}, yr	*0.703* @50% C.L.;	*0.844*	@85% C.L.

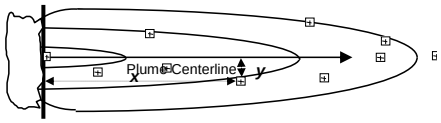


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*PCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW29														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	10/08/19	0		8.6														
#2	12/04/19	57		16														
#3	06/26/20	262		18														
#4	12/20/20	439		18														
#5																		
#6																		
#7																		
#8																		
#9																		
#10																		
#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	15.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	8.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		57																
#3		262																
#4		439																
#5																		
#6																		
#7																		
#8																		
#9																		
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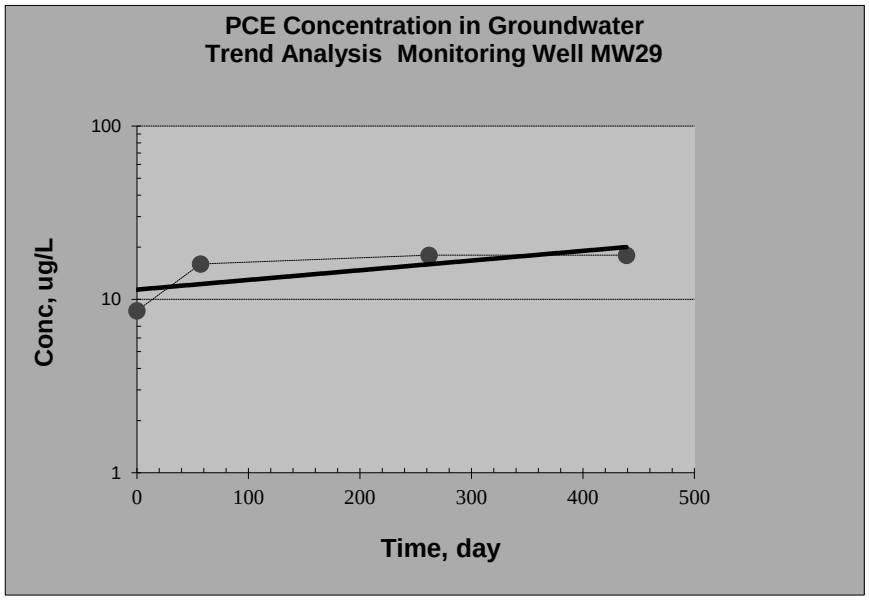
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *PCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW29**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*72.939%*		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.469* @50% C.L.;	*0.080*	@85% C.L.
Half Life for k_{point}, yr	*1.477* @50% C.L.;	*8.628*	@85% C.L.

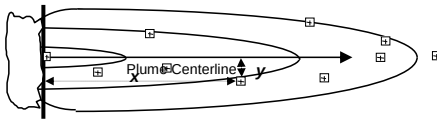


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW29														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	10/8/19	0		9.4														
#2	12/4/19	57		12														
#3	6/26/20	262		13														
#4	12/10/20	429		13														
#5																		
#6																		
#7																		
#8																		
#9																		
#10																		
#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	11.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	9.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		57																
#3		262																
#4		429																
#5																		
#6																		
#7																		
#8																		
#9																		
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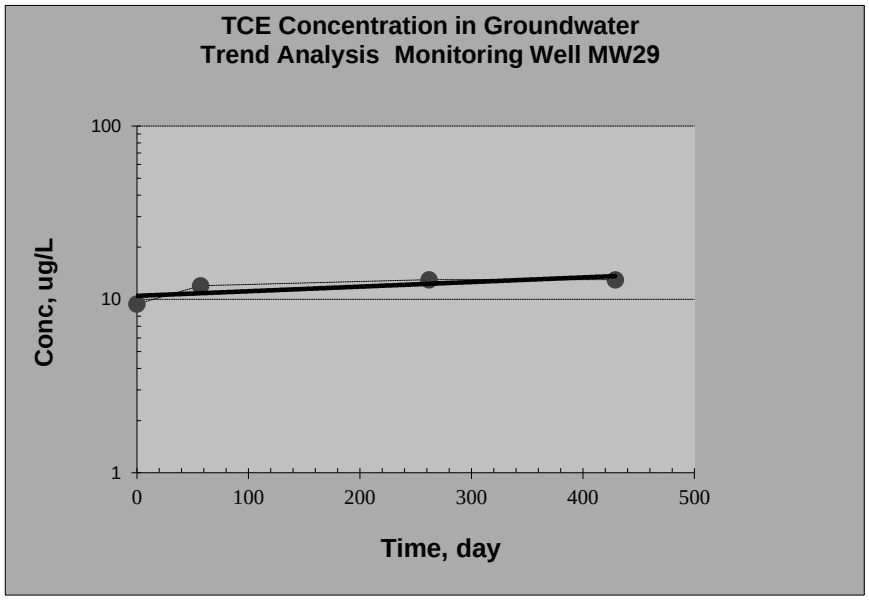
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW29**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*78.436%*		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.223* @50% C.L.;	*0.067*	@85% C.L.
Half Life for k_{point}, yr	*3.103* @50% C.L.;	*10.304*	@85% C.L.

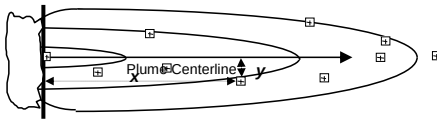


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*cis-1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW29														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	10/8/19	0		52														
#2	12/4/19	57		26														
#3	6/26/20	262		16														
#4	12/10/20	429		18														
#5																		
#6																		
#7																		
#8																		
#9																		
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#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	28.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	52	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		57																
#3		262																
#4		429																
#5																		
#6																		
#7																		
#8																		
#9																		
#10																		
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#19																		
#20																		

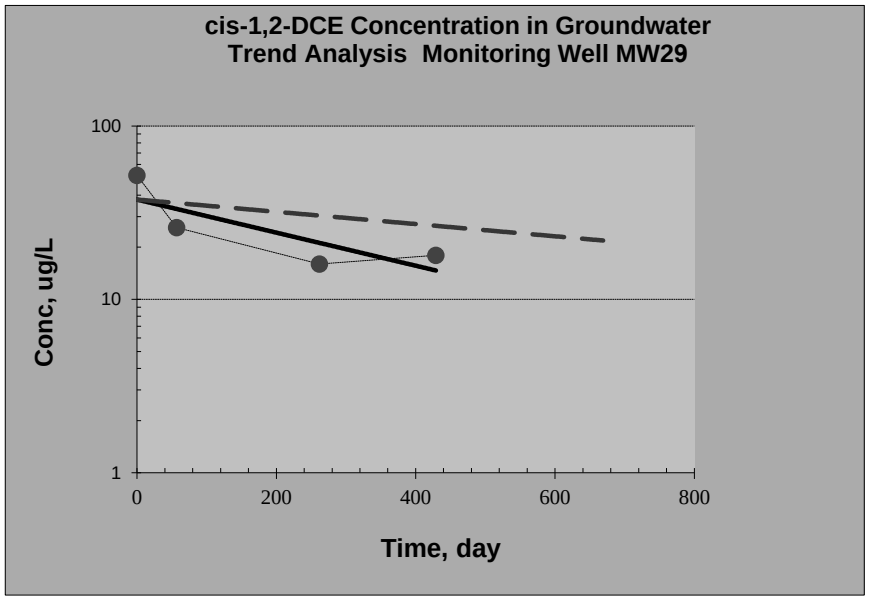
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *cis-1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW29**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*81.436%*	
Plume Stability?	Stable	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.802* @50% C.L.;	*0.297* @85% C.L.
Half Life for k_{point}, yr	*0.864* @50% C.L.;	*2.335* @85% C.L.

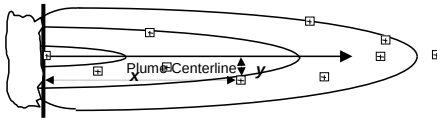


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*VC*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW29														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	10/8/19	0		0.64														
#2	12/4/19	57		0.4														
#3	6/26/20	262		0.2														
#4	12/10/20	429		0.1														
#5																		
#6																		
#7																		
#8																		
#9																		
#10																		
#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	0.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	0.64	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		57																
#3		262																
#4		429																
#5																		
#6																		
#7																		
#8																		
#9																		
#10																		
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#12																		
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#19																		
#20																		

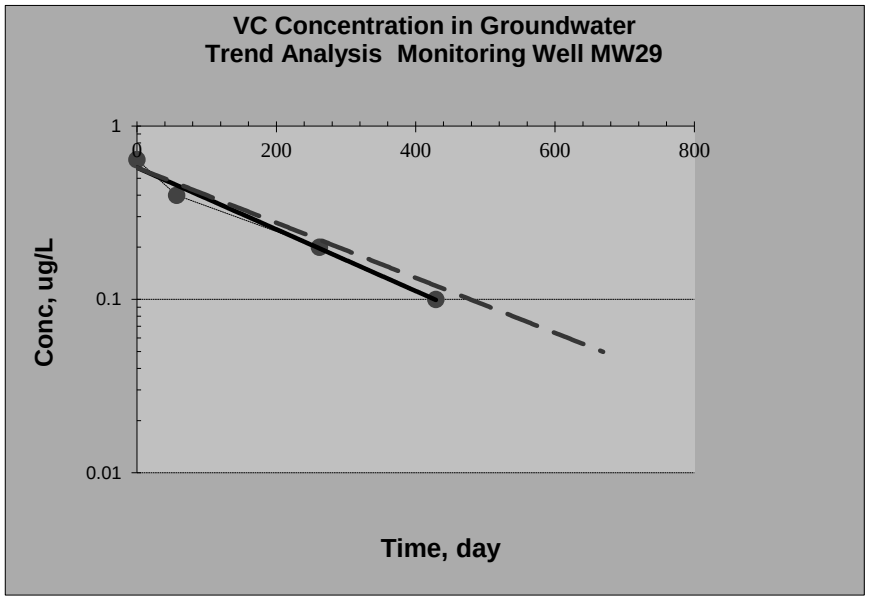
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *VC*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW29**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*99.274%*	
Plume Stability?	Shrinking	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*1.495* @50% C.L.;	*1.335* @85% C.L.
Half Life for k_{point}, yr	*0.464* @50% C.L.;	*0.519* @85% C.L.

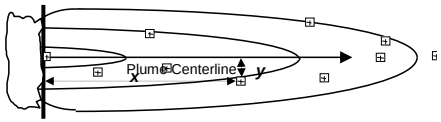


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW30														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	10/8/19	0		3.6														
#2	12/4/19	57		2														
#3	6/26/20	262		1														
#4	12/10/20	429		2.4														
#5																		
#6																		
#7																		
#8																		
#9																		
#10																		
#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	2.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		57																
#3		262																
#4		429																
#5																		
#6																		
#7																		
#8																		
#9																		
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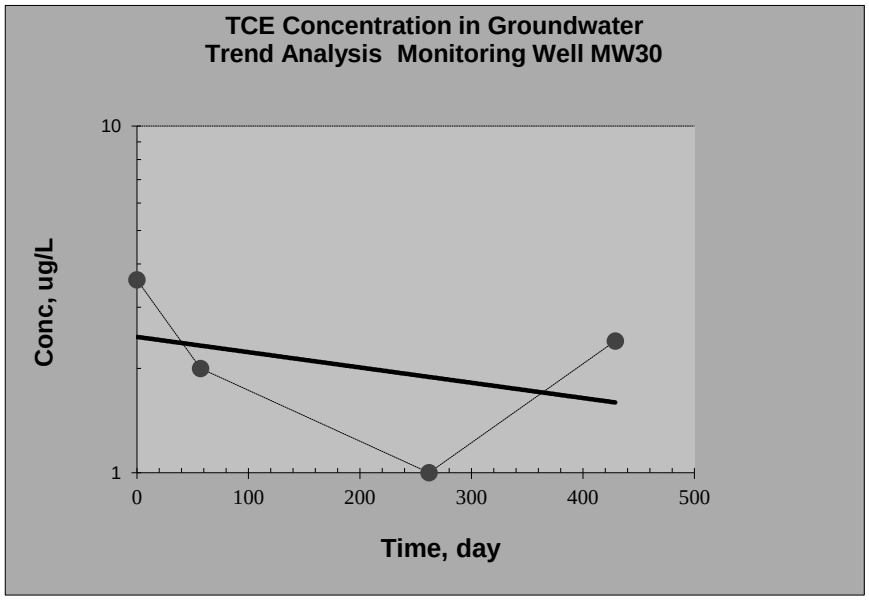
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW30**	Confidence Level (Decision Criteria)?	85.0%

Confidence Level calculated with log-linear regression is?	*37.331%*	
Plume Stability?	Stable	; Decision Criteria is 85%.
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.370* @50% C.L.;	*NA* @85% C.L.
Half Life for k_{point}, yr	*1.871* @50% C.L.;	*NA* @85% C.L.

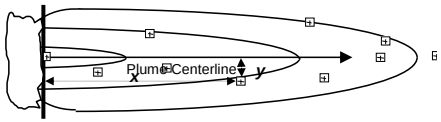


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*cis-1,2-DCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW30														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	10/8/19	0		24														
#2	12/4/19	57		11														
#3	6/26/20	262		3.6														
#4	12/10/20	429		13														
#5																		
#6																		
#7																		
#8																		
#9																		
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#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	12.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		57																
#3		262																
#4		429																
#5																		
#6																		
#7																		
#8																		
#9																		
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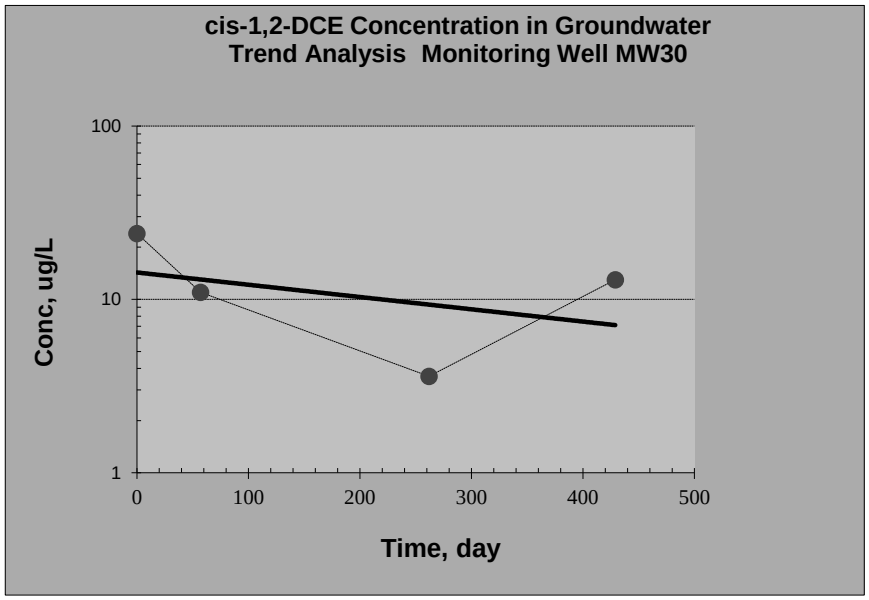
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *cis-1,2-DCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW30**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*40.545%*		
Plume Stability?	Stable	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*0.595* @50% C.L.;	*NA* @85% C.L.	
Half Life for k_{point}, yr	*1.165* @50% C.L.;	*NA* @85% C.L.	

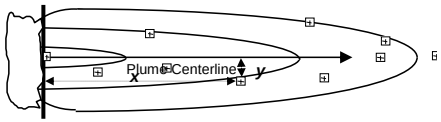


2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1:	Sampling date #1	
Plot #2:	Sampling date #2	
Plot #3:	Sampling date #3	
Plot #4:	Sampling date #4	
Plot #5:	Sampling date #5	
Plot #6:	Sampling date #6	

Module 2: Inputs: Enter Historical Ground Water Data

Site Name:	*Troy Laundry Property*
Site Address:	*300 Boren Ave North Fairview Ave North*
Additional Description:	*Seattle.Washington*
Hazardous Substance	*TCE*



1. Monitoring Well information: Contaminant Concentration at a well: Note: relationship of "y/x ≤ 0.33" is preferred

Well Location:		Unit		MW31														
Dist from source, x-direction		ft																
Off-centerline dist, y-direction		ft																
Sampling Event	Date sampled	day	Unit of concentration is ug/L															
#1	10/9/19	0		1.8														
#2	12/5/19	57		3.3														
#3	7/1/20	266		12														
#4	12/11/20	429		17														
#5																		
#6																		
#7																		
#8																		
#9																		
#10																		
#11																		
#12																		
#13																		
#14																		
#15																		
#16																		
#17																		
#18																		
#19																		
#20																		
Average Concentration			na	8.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Concentration			NA	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum Concentration			NA	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2. Groundwater Elevation:

Well Location:																		
Sampling Event	Date sampled	Day																
#1		0																
#2		57																
#3		266																
#4		429																
#5																		
#6																		
#7																		
#8																		
#9																		
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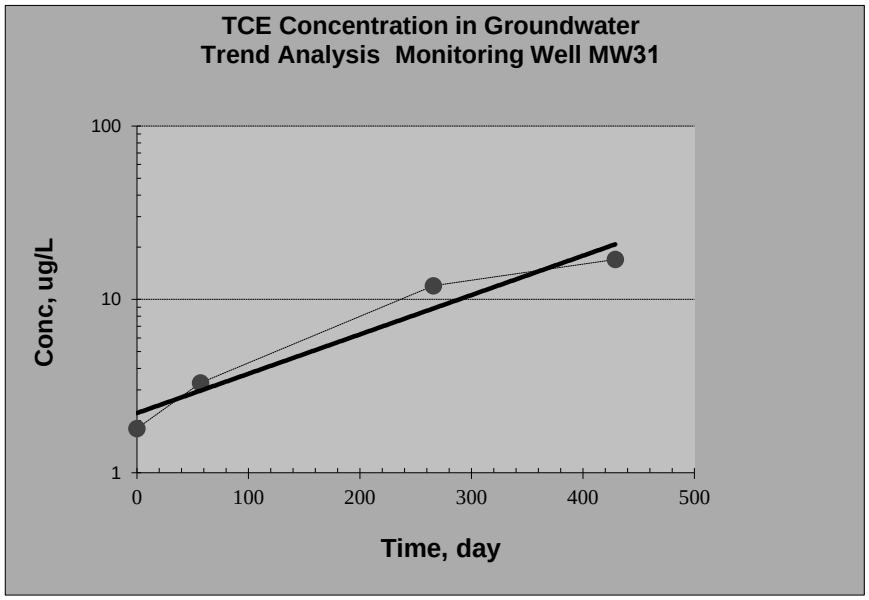
Module 2: Graphical Presentation of Historical Ground Water Data: (Well to Well Analysis)

Site Name: *Troy Laundry Property*
Site Address: *300 Boren Ave North Fairview Ave North*
Additional Description: *Seattle.Washington*
Hazardous Substance *TCE*

1. Temporal Trend at a Well (Concentration vs. Time & Groundwater Elevation : well-to-well analysis)

Name of Sampling Well?	**MW31**	Confidence Level (Decision Criteria)?	85.0%
Confidence Level calculated with log-linear regression is?	*97.225%*		
Plume Stability?	Expanding	; Decision Criteria is 85%.	
Slope: Point decay rate constant (k_{point}), yr^{-1}	*NA* @50% C.L.;	*NA* @85% C.L.	
Half Life for k_{point}, yr	*NA* @50% C.L.;	*NA* @85% C.L.	



2. Spatial and Temporal Trend along Overall Plume Length for Multiple Wells:

Plot #1: Sampling date #1	
Plot #2: Sampling date #2	
Plot #3: Sampling date #3	
Plot #4: Sampling date #4	
Plot #5: Sampling date #5	
Plot #6: Sampling date #6	