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strategy ▪ science ▪ engineering

Two Union Square
601 Union Street, Suite 600
Seattle, WA 98101
tel: 206.292.2078 fax: 206.682.7867

Memorandum

To: Adam Harris, Washington State Department of Ecology

Copies: Steve Tucker, Trans System

From: Brett Beaulieu, LHG

Date: December 14, 2018

Project No: PSTL Longview

Re: **Puget Sound Truck Lines Longview Site—VCP SW1429**
2018 Groundwater Monitoring Results

OVERVIEW

This data report has been prepared to summarize the groundwater monitoring results for the Puget Sound Truck Lines Longview site (Site) in Longview, Washington (Figure 1) and to request an Ecology opinion on the site cleanup as a model remedy. Soil at the Site meets Model Toxics Control Act (MTCA) Method A Unrestricted cleanup levels (CULs), and groundwater contamination has attenuated following source removal but does not yet meet Method A groundwater CULs throughout the property.

The Site is an approximately 3.3-acre parcel located at 146 Industrial Way in Longview, Washington, in an industrial area between the Columbia and Cowlitz Rivers (Figure 1). The Site is currently used by a shipping company with truck storage and maintenance activities. Refer to Figure 2. A site investigation in late 2011 confirmed diesel impacts in soil and groundwater that were likely due to surface spills, leaks, and overfilling associated with a former 10,000-gallon diesel aboveground storage tank (AST). The AST was removed, and soil contaminated with diesel-range organics (DRO) at concentrations greater than MTCA Method A CUL was excavated in 2012. Approximately 2,850 tons of soil was excavated and disposed of at a landfill (3 Kings 2012).

The Site was entered into the Voluntary Cleanup Program (VCP) in October 2014 under the identifier SW1429. Groundwater impacted with DRO was detected following soil cleanup activities. The Site is currently undergoing groundwater monitoring. Four monitoring wells were installed at the edges of the previously excavated area, and a total of 16 quarterly groundwater monitoring events have been completed in accordance with the Groundwater Compliance Sampling and Analysis Plan (SAP; Floyd|Snider 2014a).

Groundwater monitoring has been conducted to provide data for establishing compliance with the MTCA Method A groundwater standard for DRO. Because of the slow pace of post-

remediation attenuation of DRO in groundwater, groundwater monitoring is being discontinued in favor of a conditional point of compliance (CPOC) and an environmental covenant (EC). This report summarizes groundwater sampling and analysis activities and results from the fourth quarter sampling event of 2017 and the first, second, and third quarter sampling events in 2018. The results of previous quarterly monitoring events were presented in previous reports (Floyd|Snider 2014b, 2015, 2016, 2017).

The remainder of this report consists of two parts: a reporting of groundwater monitoring results from December 2017 and 2018, and a summary of how the Site meets the requirements for a No Further Action with EC as a model remedy.

WORK COMPLETED IN 2018

Four quarterly groundwater sampling events were conducted during this reporting period. These sampling events took place on December 7, 2017, March 28, 2018, June 13, 2018, and September 25, 2018. Work was completed in accordance with the SAP, except where noted below. Monitoring wells and other site features are shown on Figure 2.

Water Level Measurement

During groundwater sampling events, water level measurements were collected from all accessible wells prior to well purging. During the March 2018 sampling event, the MW-1 well monument was submerged beneath ponded stormwater, and the well was inaccessible for water level measurements or sampling. Prior to the June 2018 sampling event, the Site was regraded with gravel, and the MW-2 and MW-4 monuments were not able to be located for sampling during the June 2018 sampling event.

Groundwater Sampling and Analysis

Groundwater samples were collected from all four monitoring wells for each sampling event, except as noted above in March 2018, when MW-1 was inaccessible, and in June 2018, when MW-2 and MW-4 were inaccessible. In accordance with the SAP, groundwater samples and field duplicates were collected using standard low-flow sampling methods, submitted to Friedman and Bruya, Inc. (FBI) under standard chain-of-custody procedures, and analyzed by NWTPH-Dx for total petroleum hydrocarbons (TPH).

Investigation-Derived Waste

All water generated during groundwater sampling was collected and transferred to a U.S. Department of Transportation–approved 55-gallon steel drum. The lidded, sealed, and labeled drums are being stored on site until they are full and must be disposed of off site or until groundwater monitoring has concluded.

COMPLIANCE MONITORING RESULTS

Data Validation

For each sampling event in the reporting period, a Compliance Screening (Stages 1 & 2A) data quality review was performed on TPH data resulting from laboratory analysis. The analytical data were validated in accordance with the U.S. Environmental Protection Agency's (USEPA's) *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA 2016).

A total of 17 groundwater samples were submitted in four sample delivery groups (SDGs), FB712120, FB803499, FB806266, and FB809437, to FBI for chemical analysis by NWTPH-Dx for TPH. The analytical holding times were met and the method blanks had no detections. The surrogate, matrix spike (MS), matrix spike duplicate (MSD), laboratory control sample (LCS), and laboratory control sample duplicate (LCSD) recoveries and MS/MSD and LCS/LCSD relative percent differences all met USEPA requirements. Detectable hydrocarbons and/or organics within the diesel and residual hydrocarbon chromatogram ranges were reviewed relative to the provided laboratory standard. The detected hydrocarbons provided an adequate chromatographic match with the laboratory standards for aqueous samples.

Data are determined to be of acceptable quality for use as reported by the laboratory.

Water Level Measurements

Water level measurements and elevations are reported in Table 1. Average water levels for each event are plotted on Figures 3, 4, 5, and 6. Water level elevations fluctuated by approximately 3 feet over the four monitoring events, from a high of greater than 12 feet relative to the North American Vertical Datum of 1988 (NAVD 88) in December and March to a low of approximately 9 feet NAVD 88 in September, which is consistent with groundwater elevations from previous monitoring years.

Water level measurements are consistent with previous potentiometric contours indicating a southerly groundwater flow direction and low horizontal gradients ranging from approximately 0.001 to 0.003 feet per foot.

Groundwater Analytical Results

Analytical results for DRO in groundwater are shown in Table 2 and as time-concentration plots in Figures 3, 4, 5, and 6. The complete analytical data packages are presented in Attachment 1. Analytical results presented in this data report have been submitted to Ecology's Environmental Information Management (EIM) system.

Groundwater results for the reporting period generally continue the downward concentration trend of previous years. Results for three of the four monitoring wells (MW-1, MW-2, and MW-3) have decreased to concentrations less than the MTCA Method A CUL for DRO of 500 micrograms

per liter (µg/L) for four consecutive events. In the most recent event, September 2018, the result for only one of the four monitoring wells sampled exceeded the CUL, and the DRO concentrations in the four wells ranged from 310 to 520 µg/L.

The overall trend of DRO concentrations in groundwater at all four wells is gradually decreasing and relatively stable. The following is a summary of observations for each well:

- **MW-1:** This well was redeveloped in December 2017 to remove sediment that had built up in the well casing. In the sampling events following redevelopment, DRO concentrations dropped slightly and have remained stable. The September 2018 quarterly monitoring result presents the fourth consecutive result showing the well in compliance with the MTCA Method A CUL of 500 µg/L.
- **MW-2**: DRO concentrations continue a decreasing trend and are stable and less than the CUL.
- **MW-3**: This well was partially redeveloped in March 2018 because of sediment buildup in the well casing. DRO concentrations in MW-3 continue a decreasing trend and are less than the CUL. MW-3 is downgradient of the excavation area and is closest to the property boundary.
- **MW-4:** This well was redeveloped in December 2017 to remove sediment that had built up in the well casing. The concentrations of DRO at MW-4 have been relatively stable at less than 600 µg/L since 2014 with an overall decreasing trend and minor variability. In December 2017 and March 2018, the DRO concentrations were less than the CUL; however, the most recent monitoring event in September 2018 shows a slight exceedance of the CUL at 520 µg/L, which is consistent with previous fluctuations.

Based on these results, DRO in groundwater is expected to continue its gradual decrease in concentration until it is consistently less than the CUL in all four wells. The area of impacted groundwater is shrinking, and there are no indications of contaminant migration beyond the property boundary.

SUMMARY OF SITE CONDITIONS SUITABLE FOR NO FURTHER ACTION OPINION

A written opinion by Ecology is requested, as indicated in the accompanying VCP application.[1] The written opinion is being requested for the completed remedial action of excavation of soil and recovery of groundwater contaminated with DRO that was completed in 2012 and subsequent confirmational groundwater monitoring following source removal that was conducted from 2014 through 2018.

[1] The application is being submitted to update Site customer information, with completed forms for withdrawal from the VCP by the former owner of the Site.

The opinion is requested for the Site as a model remedy (Model Remedy 3) that meets soil CULs but does not yet meet groundwater CULs throughout the property.

Site characterization is documented in reports already submitted to Ecology, including a Phase II investigation (Adapt Engineering 2011), a remedial investigation and cleanup report (3 Kings 2012), a SAP (Floyd|Snider 2014a), and groundwater compliance monitoring well installation and monitoring results (Floyd|Snider 2014b).

The cleanup conducted is the default the primary model remedy of source removal, including removal of contaminated soil to the greatest degree possible combined with removal and treatment of petroleum-impacted groundwater and natural attenuation of residual impacts. Details on the cleanup conducted are included in a remedial investigation and cleanup report (3 Kings 2012), including soil confirmational monitoring. Groundwater confirmational monitoring is described in a groundwater SAP (Floyd|Snider 2014a), groundwater compliance monitoring well installation and monitoring results (Floyd|Snider 2014b), and subsequent groundwater monitoring reports (Floyd|Snider 2015, 2016, 2017), including this report. All confirmational sampling results are entered in EIM.

Based on Ecology model remedy guidance (Ecology 2017), additional details are provided below on the eligibility of the Site for a model remedy, a summary of the vapor intrusion (VI) pathway evaluation, an overview of how the draft EC included as Attachment 2 meets requirements, and the specifics of how the Site meets other requirements for Model Remedy 3, including the use of a CPOC and remedy implementation.

Model Remedy Eligibility

The Site meets eligibility criteria for use of a model remedy (Ecology 2017), as summarized below:

- The Site has been adequately characterized to confirm that surface water and sediments have not been impacted, and Method A soil and groundwater CULs do not exceed the source property.
- Contaminants are limited to those associated with petroleum hydrocarbons.
- The Site presents low risk to human health or the environment and no emergency or interim actions are required. No free product is present.
- The Site was found to meet the criteria for a simplified Terrestrial Ecological Evaluation (TEE), which was conducted for the Site in accordance with Washington Administrative Code (WAC) 173-340-7492. The results indicated that no further TEE analysis is required and that MTCA Method A CULs for DRO in soil remain protective of terrestrial wildlife and applicable for the Site (Floyd|Snider 2017).
- The selected remedy was the primary model remedy of source removal, including removal of contaminated soil to the greatest degree possible (approximately 2,580 tons), combined with the removal and treatment of 147,000 gallons of

petroleum-impacted groundwater (3 Kings 2012) and natural attenuation of residual impacts.

- The Site has not caused impacts to water supply wells, and there are no wells present on the property.

Following implementation of the selected model remedy, the Site meets all necessary criteria (Ecology 2017), as summarized below:

- Free product that may have been present in the release area was removed to the greatest degree practicable during the soil excavation.
- Sufficient soil sampling following the excavation was completed to document that soil meets Method A CULs.
- Sufficient groundwater monitoring has been performed to document that there are no off-property impacts greater than Method A CULs and that the on-property plume is receding. A CPOC at the downgradient property boundary, measured at MW-3, is as close as practicable to the former AST source of the diesel release. The CPOC is described in more detail below.
- Soil and groundwater concentrations meet criteria for protection of air cleanup standards in accordance with WAC 173-340-750, including the VI pathway into existing and potential future buildings. The VI pathway evaluation is summarized below.
- Because groundwater concentrations do not meet Method A CULs in all monitoring wells, an EC that meets the provisions in WAC 173-340-450 will be entered for the property to ensure that the remedy remains protective. A draft EC is included for Ecology review as Attachment 2 and described below.
- The cleanup standards applied are Method A Unrestricted soil CULs for DRO, to be met throughout the Site, and Method A groundwater CULs, to be met at a CPOC. These are the default CULs for Model Remedy 3 and were developed in accordance with WAC 173-340-704, WAC 173-340-720, WAC 173-340-740, and other applicable provisions for petroleum sites.
- By meeting the requirements for a model remedy under WAC 173-340-390 as described in guidance (Ecology 2017), the cleanup action meets the minimum requirements for selection of the cleanup action in WAC 173-340-360.

Vapor Intrusion

The VI pathway was evaluated through a review of site data (Floyd Snider 2015) in accordance with Ecology guidance (Ecology 2009). This review, which found that there are no potential VI concerns at the Site, has been updated based on Implementation Memorandum No. 14 that gives supplementary guidance for initial VI assessment (Ecology 2016a). The results of the updated

initial VI assessment confirm that there are no potential VI concerns at the Site. In addition, a review of screening levels for constituents considered potential sources of VI concerns was completed based on a 2015 update to Table B-1 of the Ecology guidance.

Environmental Covenant

An EC that meets meet all applicable requirements in WAC 173-340-440 will be recorded with the Register of Deeds in Cowlitz County. The EC will protect human health and the environment for groundwater with DRO concentrations remaining greater than CULs by prohibiting the construction of any water supply well; requiring that any groundwater extracted from the affected area be considered potentially contaminated and be properly managed; and ensuring protection of monitoring wells and site access. A copy of the draft EC is included as Attachment 2.

Appropriateness of Model Remedy 3 and Conditional Point of Compliance

Site conditions are appropriate for use of Model Remedy 3, where, following remediation, the soil meets the Method A CULs for unrestricted land use throughout the Site. As described above, sampling data from the Site indicate that the Method A groundwater CUL for DRO is not met at MW-4. Groundwater monitoring confirms that there are no off-property exceedances and no exceedances at the downgradient property boundary; therefore, a CPOC is protective and appropriate.

The use of a CPOC at the downgradient property boundary is protective of human health and the environment in accordance with Ecology guidance (Ecology 2017) and is justified based on the site conditions meeting the following criteria:

- Enough monitoring data (16 monitoring events between 2014 and 2018) have been collected and sufficiently analyzed to document that contamination does not extend beyond the property boundary and that the plume is stable or receding. Clear indications of the plume receding are seen in time-concentration plots (Figures 3, 4, 5, and 6) that show decreasing trends for all four monitoring wells at the edge of the contaminated area.
- In particular, concentrations of DRO have been less than the MTCA A CUL in the monitoring well at the downgradient edge of the contaminated area, MW-3, for 10 consecutive events. There has not been an exceedance in this monitoring well since June 2015, and there have only ever been two exceedances in this monitoring well in 16 events.
- The CPOCs are as close as practicable to the source of the hazardous substances. The CPOC at the downgradient (southern) property boundary, measured at MW-3, is at the downgradient edge of the original plume and immediately adjacent to the excavated area.

- An EC will be filed to impose groundwater use restrictions on the property, as described above. A copy of the draft EC is included as Attachment 2.

Implementation of the Model Remedy

Ecology guidance (2017 Appendix A) specifies what must be done to implement model remedies. Site remediation addresses these requirements as summarized below:

- Excavation activities extended laterally and vertically until soil concentrations were below the established CULs (3 Kings 2012).
- Confirmation soil samples were collected from appropriate locations on the excavation sidewalls and base, and the samples were submitted to an Ecology-certified laboratory for analysis (3 Kings 2012).
- Confirmation sampling results indicated all confirmation samples were less than the Method A soil CUL for DRO (2,000 mg/kg), and the excavation was backfilled. The direct comparison method for assessing compliance is appropriate for a diesel release from an AST in accordance with Ecology guidance (Ecology 2016b). Subsequent soil sampling during monitoring well installation confirmed that soil DRO concentrations are less than Method A (Floyd|Snider 2014b).
- Subsequent sampling of groundwater quality from soil borings and monitoring wells indicated concentrations greater than the Method A groundwater CUL (500 µg/L). A program of quarterly monitoring was implemented to document attenuation following source removal.
- The requirements for a remedial action report have been met through a remedial investigation and cleanup report prepared following the soil and groundwater cleanup (3 Kings 2012) and in the subsequent annual reports (Floyd|Snider 2014b, 2015, 2016, 2017), including this report. Together with the draft EC (Attachment 2) and submittal of all data to EIM, these reports provide sufficient information for Ecology to determine whether the remedial action meets the substantive requirements of MTCA, the standards for reporting and content described in WAC 173-340-515(3) and (4), and the submittal requirements of WAC 173-340-840.

REFERENCES

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LIST OF ATTACHMENTS

Table 1	Water Level Elevations
Table 2	Groundwater Analytical Results for Diesel-Range Organics
Figure 1	Vicinity Map
Figure 2	Site Map
Figure 3	MW-1 Time Concentration Plot of Diesel-Range Organics in Groundwater
Figure 4	MW-2 Time Concentration Plot of Diesel-Range Organics in Groundwater
Figure 5	MW-3 Time Concentration Plot of Diesel-Range Organics in Groundwater
Figure 6	MW-4 Time Concentration Plot of Diesel-Range Organics in Groundwater
Attachment 1	Laboratory Analytical Data
Attachment 2	Draft Environmental Covenant

Geologist Certification

This document was prepared by Floyd|Snider under the professional supervision of Brett Beaulieu.

12/14/2018

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Name: Brett Beaulieu, LHG
Title: Hydrogeologist

Tables

Table 1
Water Level Elevations

Well	Top of Well Casing (feet NAVD 88)	Depth to Water (feet)	Groundwater Elevation (feet NAVD 88)
September 25, 2018			
MW-1	14.24	5.22	9.02
MW-2	14.08	5.11	8.97
MW-3	14.05	5.22	8.83
MW-4	14.24	5.28	8.96
June 13, 2018			
MW-1	14.24	3.50	10.74
MW-2	14.08	NM (1)	NM (1)
MW-3	14.05	3.46	10.59
MW-4	14.24	NM (1)	NM (1)
March 28, 2018			
MW-1	14.24	NM (1)	NM (1)
MW-2	14.08	2.02	12.06
MW-3	14.05	2.02	12.03
MW-4	14.24	2.16	12.08
December 7, 2017			
MW-1	14.24	2.11	12.13
MW-2	14.08	2.05	12.03
MW-3	14.05	2.11	11.94
MW-4	14.24	2.21	12.03
September 14, 2017			
MW-1	14.24	5.25	8.99
MW-2	14.08	5.18	8.90
MW-3	14.05	5.24	8.81
MW-4	14.24	5.32	8.92
June 14, 2017			
MW-1	14.24	2.85	11.39
MW-2	14.08	2.74	11.34
MW-3	14.05	2.77	11.28
MW-4	14.24	2.90	11.34
March 8, 2017			
MW-1	14.24	NM (1)	NM (1)
MW-2	14.08	2.02	12.06
MW-3	14.05	2.08	11.97
MW-4	14.24	2.16	12.08

Table 1
Water Level Elevations

Well	Top of Well Casing (feet NAVD 88)	Depth to Water (feet)	Groundwater Elevation (feet NAVD 88)
September 8, 2016			
MW-1	14.24	NM (1)	NM (1)
MW-2	14.08	5.85	8.23
MW-3	14.05	5.81	8.24
MW-4	14.24	5.86	8.38
June 23, 2016			
MW-1	14.24	4.33	9.91
MW-2	14.08	4.20	9.88
MW-3	14.05	4.25	9.80
MW-4	14.24	4.30	9.94
March 30, 2016			
MW-1	14.24	2.13	12.11
MW-2	14.08	2.01	12.07
MW-3	14.05	2.08	11.97
MW-4	14.24	2.17	12.07
June 9, 2015			
MW-1	14.24	4.65	9.59
MW-2	14.08	4.54	9.54
MW-3	14.05	4.56	9.49
MW-4	14.24	4.67	9.57
March 17, 2015			
MW-1	14.24	2.46	11.78
MW-2	14.08	2.37	11.71
MW-3	14.05	2.41	11.64
MW-4	14.24	2.49	11.75
December 22, 2014			
MW-1	14.24	1.75	12.49
MW-2	14.08	1.64	12.44
MW-3	14.05	1.76	12.29
MW-4	14.24	1.84	12.40
September 24, 2014			
MW-1	14.24	5.92	8.32
MW-2	14.08	5.74	8.34
MW-3	14.05	5.76	8.29
MW-4	14.24	5.99	8.25

Table 1
Water Level Elevations

Well	Top of Well Casing (feet NAVD 88)	Depth to Water (feet)	Groundwater Elevation (feet NAVD 88)
June 24, 2014			
MW-1	14.24	3.85	10.39
MW-2	14.08	3.76	10.32
MW-3	14.05	3.80	10.25
MW-4	14.24	3.93	10.31
March 19, 2014			
MW-1	14.24	1.14	13.10
MW-2	14.08	1.06	13.02
MW-3	14.05	1.20	12.85
MW-4	14.24	1.23	13.01

Note:

1 Unable to measure. Monitoring well was inaccessible.

Abbreviations:

NAVD 88 North American Vertical Datum of 1988

NM Not measured

Table 2
Groundwater Analytical Results for Diesel-Range Organics

Well	Date	Diesel-Range Organics (µg/L)		Oil-Range Organics (µg/L)	
		By NWTPH-Dx	By NWTPH-Dx with Silica Gel Cleanup	By NWTPH-Dx	By NWTPH-Dx with Silica Gel Cleanup
MW-1	03/19/2014	390	250	na	na
	3/19/2014 (Duplicate)	490	220	na	na
	06/24/2014	390 JM	210	250 U	250 U
	09/24/2014	380 J	230	na	na
	9/24/2014 (Duplicate)	430 J	230	na	na
	12/22/2014	410	210	na	na
	03/17/2015	350	na	na	na
	06/09/2015	530	na	na	na
	03/30/2016	280	na	na	na
	3/30/2016 (Duplicate)	300	na	na	na
	06/23/2016	760	na	na	na
	9/8/2016 (1)	na	na	na	na
	3/8/2017 (1)	na	na	na	na
	06/14/2017	670	na	na	na
	6/14/2017 (Duplicate)	610	na	na	na
	09/14/2017	380 (2)	na	250 U	na
	12/07/2017	300	na	na	na
	3/28/2018 (1)	na	na	na	na
	06/13/2018	250	na	250 U	na
	6/13/2018 (Duplicate)	300	na	250 U	na
	09/25/2018	310	na	250 U	na
MW-2	03/19/2014	700	370	na	na
	06/24/2014	540 JM	270	250 U	250 U
	6/24/2014 (Duplicate)	540 JM	270	250 U	250 U
	09/24/2014	620 J	340	na	na
	12/22/2014	480	280	na	na
	12/22/2014 (Duplicate)	520	310	na	na
	03/17/2015	390	na	na	na
	3/17/2015 (Duplicate)	390	na	na	na
	06/09/2015	660	na	na	na
	6/9/2015 (Duplicate)	670	na	na	na
	03/30/2016	300	na	na	na
	06/23/2016	590	na	na	na
	09/08/2016	440	na	na	na
	9/8/2016 (Duplicate)	380	na	na	na
	03/08/2017	500	na	na	na
	06/14/2017	280	na	na	na
	09/14/2017	400 (2)	na	250 U	na
	9/14/2017 (Duplicate)	350 (2)	na	250 U	na
	12/07/2017	290	na	na	na
	03/28/2018	320	na	na	na
	6/13/2018 (1)	na	na	na	na
	09/25/2018	320	na	250 U	na
	9/25/2018 (Duplicate)	320	na	250 U	na
MW-3	03/19/2014	560	180	na	na
	06/24/2014	470 JM	170	250 U	250 U
	09/24/2014	420 J	170	na	na
	12/22/2014	480	200	na	na
	03/17/2015	310	na	na	na
	06/09/2015	530	na	na	na
	03/30/2016	370	na	na	na
	06/23/2016	400	na	na	na
	09/08/2016	400	na	na	na
	03/08/2017	370	na	na	na
	06/14/2017	280	na	na	na
	09/14/2017	320 (2)	na	250 U	na
	12/07/2017	310	na	na	na
	03/28/2018	320	na	na	na
	06/13/2018	290	na	250 U	na
	09/25/2018	350	na	250 U	na

Table 2
Groundwater Analytical Results for Diesel-Range Organics

Well	Date	Diesel-Range Organics (µg/L)		Oil-Range Organics (µg/L)	
		By NWTPH-Dx	By NWTPH-Dx with Silica Gel Cleanup	By NWTPH-Dx	By NWTPH-Dx with Silica Gel Cleanup
MW-4	03/19/2014	680	450	na	na
	06/24/2014	560 JM	360 JM	250 U	250 U
	09/24/2014	550 J	380	na	na
	12/22/2014	440	320	na	na
	03/17/2015	460	na	na	na
	06/09/2015	580	na	na	na
	03/30/2016	480	na	na	na
	06/23/2016	600	na	na	na
	09/08/2016	510	na	na	na
	03/08/2017	470	na	na	na
	3/8/2017 (Duplicate)	590	na	na	na
	06/14/2017	490	na	na	na
	09/14/2017	560	na	250 U	na
	12/07/2017	380	na	na	na
	12/7/2017 (Duplicate)	420	na	na	na
	03/28/2018	450	na	na	na
	3/28/2018 (Duplicate)	450	na	na	na
	6/13/2018 (1)	na	na	na	na
	09/25/2018	520	na	250 U	na

Notes:
1 No sample was able to be collected because the monitoring well was inaccessible.
2 Laboratory noted that the sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Abbreviations:
µg/L Micrograms per liter
na Not analyzed

Qualifiers:
J Analyte was detected, the concentration is considered an estimate.
JM Analyte was detected, the concentration is considered an estimate due to poor chromatographic match to standard.
U Analyte was not detected at the given reporting limit.

Figures

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Groundwater Monitoring Results
Puget Sound Truck Lines Site
Longview, Washington

Figure 1
Vicinity Map

I:\GIS\Projects\PSTL-Longview\MXD\Figure 1 Vicinity Map.mxd 10/13/2015

Legend

- Groundwater Monitoring Well Location
- Approximate Groundwater Flow Direction (September 14, 2017)
- Area of Excavation (Approx.)
- Former AST
- Property Boundary

Notes:
- Property boundary created from parcel data obtained from Cowlitz County.
- Orthoimagery obtained from Nearmap, 2018.

Abbreviation:
AST = Above ground storage tank

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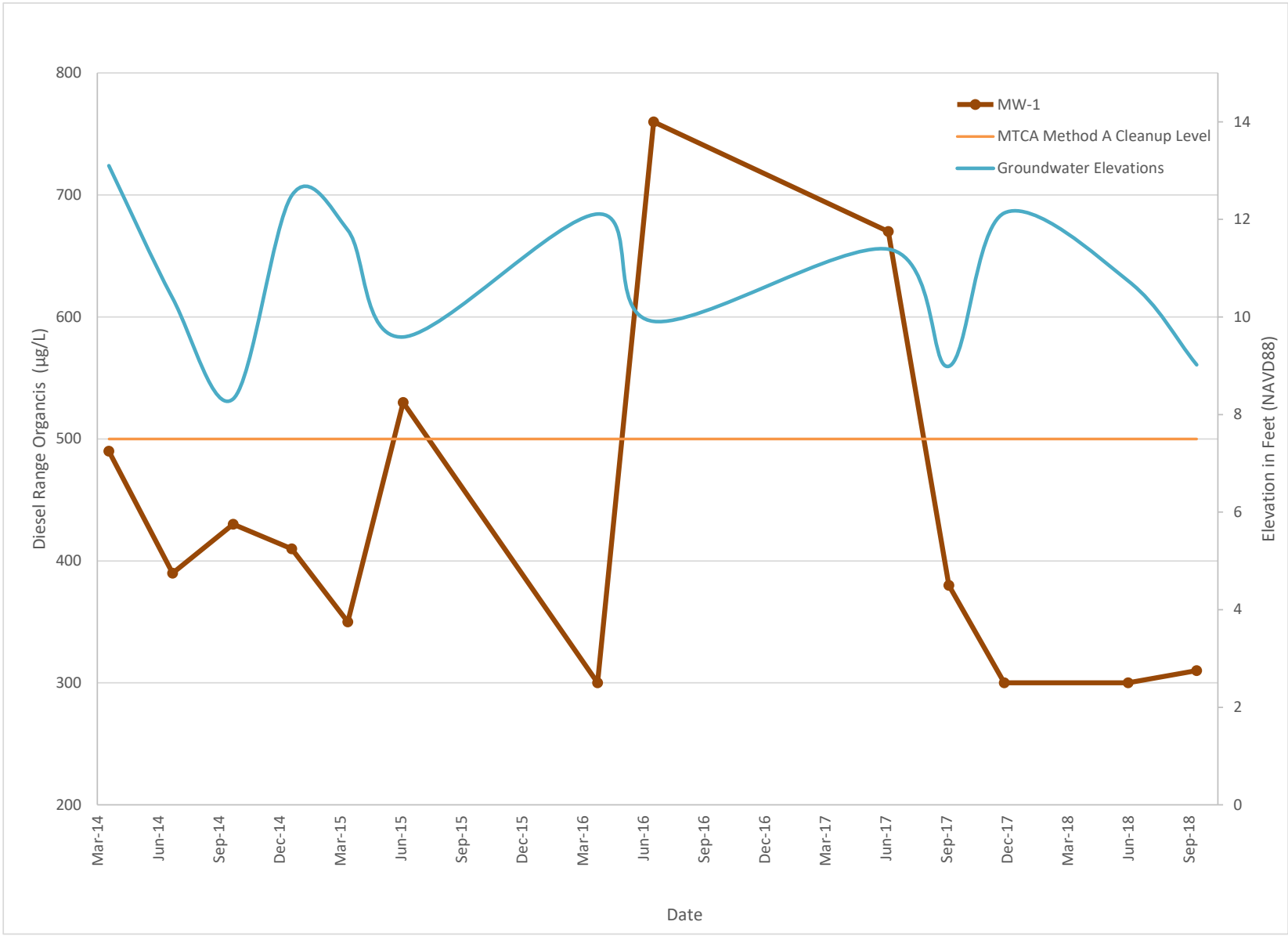
Groundwater Monitoring Results
Puget Sound Truck Lines Site
Longview, Washington

Figure 2
Site Map

I:\GIS\Projects\PSTL-Longview\MXD\Compliance Monitoring Report\2018\Figure 2 Site Map.mxd 11/30/2018



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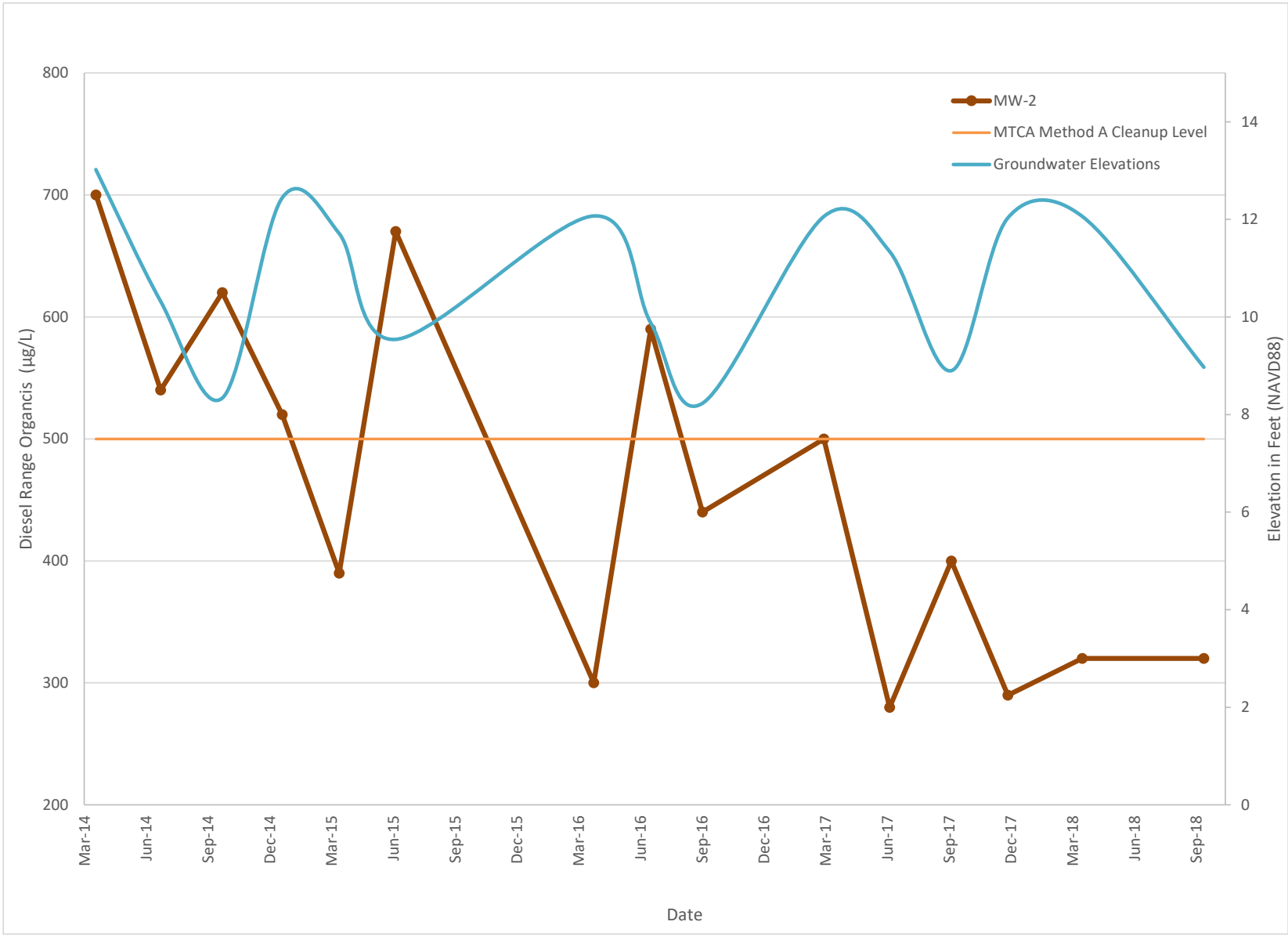
2018 Groundwater Monitoring Results
Puget Sound Truck Lines Site
Longview, Washington

Figure 3
MW-1 Time Concentration Plot of
Diesel-Range Organics in Groundwater



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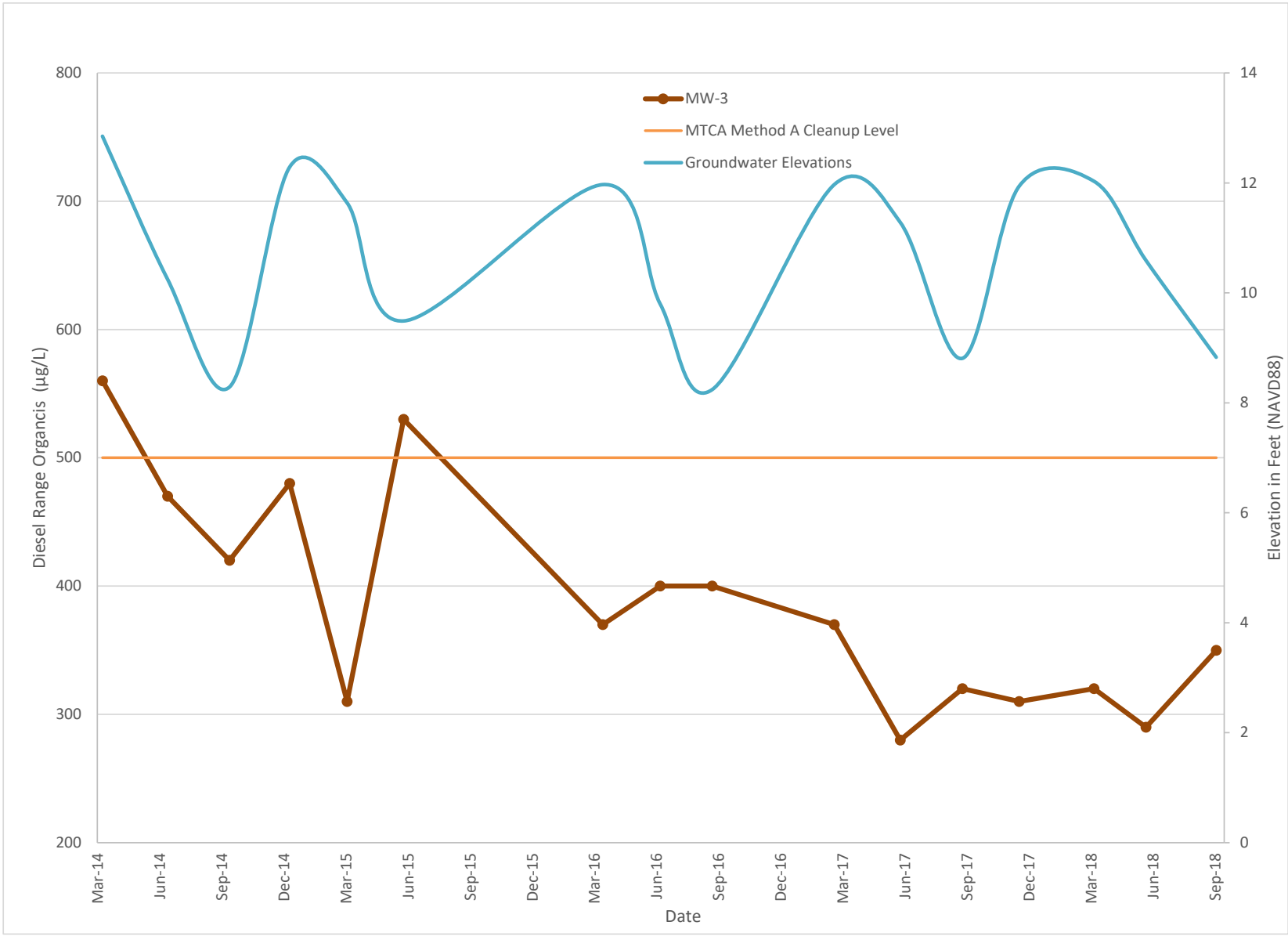
2018 Groundwater Monitoring Results
Puget Sound Truck Lines Site
Longview, Washington

Figure 4
MW-2 Time Concentration Plot of
Diesel-Range Organics in Groundwater



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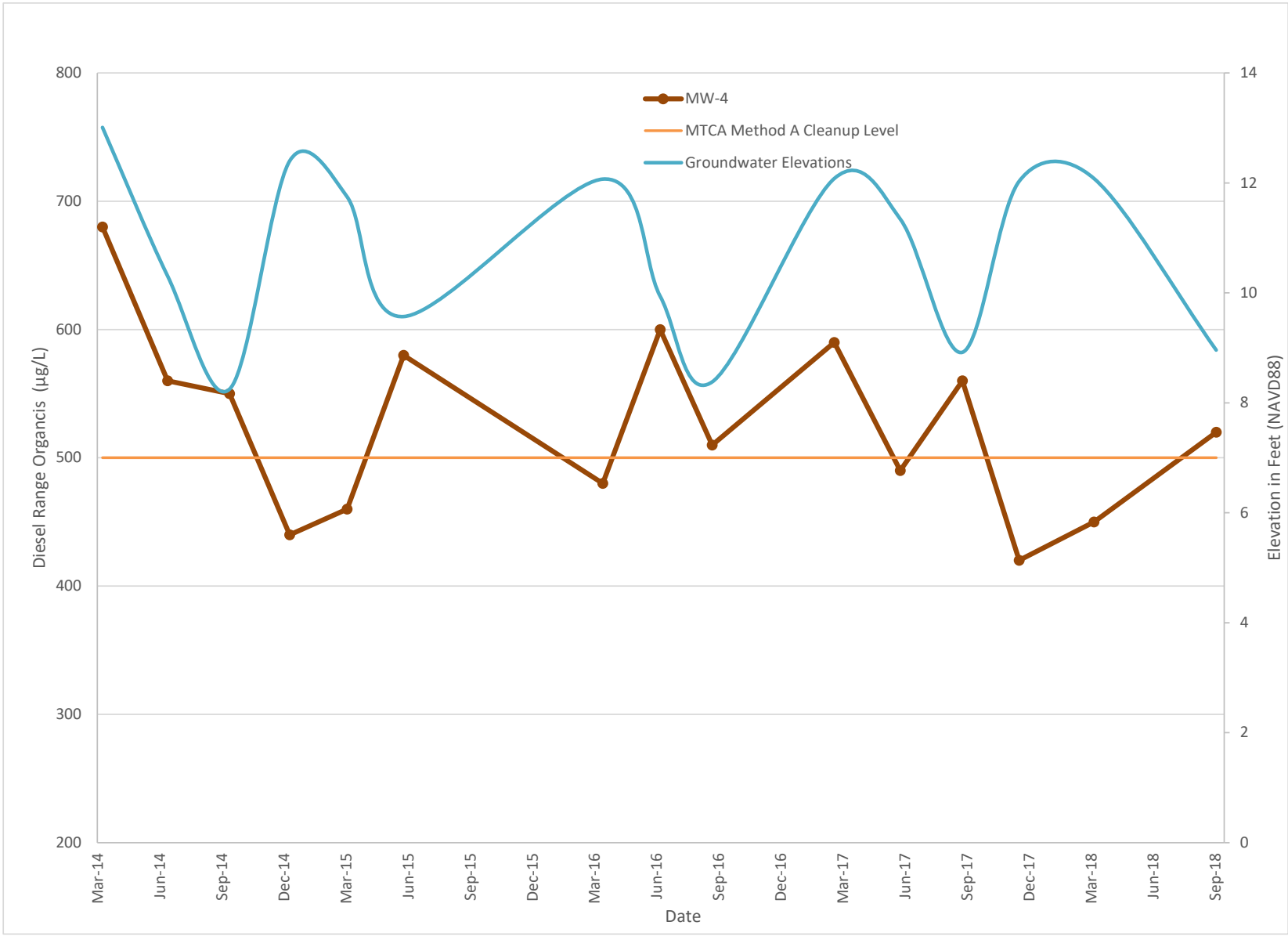
2018 Groundwater Monitoring Results
Puget Sound Truck Lines Site
Longview, Washington

Figure 5
MW-3 Time Concentration Plot of
Diesel-Range Organics in Groundwater



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2018 Groundwater Monitoring Results
Puget Sound Truck Lines Site
Longview, Washington

Figure 6
MW-4 Time Concentration Plot of
Diesel-Range Organics in Groundwater

Attachment 1
Laboratory Analytical Data

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 14, 2017

Brett Beaulieu, Project Manager
Floyd-Snider
Two Union Square, Suite 600
601 Union St
Seattle, WA 98101

Dear Mr Beaulieu:

Included are the results from the testing of material submitted on December 8, 2017 from the PSTL-Longview, F&BI 712120 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
FDS1214R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on December 8, 2017 by Friedman & Bruya, Inc. from the Floyd-Snider PSTL-Longview, F&BI 712120 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Floyd-Snider
712120 -01	MW-2-4-14
712120 -02	MW-3-4-14
712120 -03	MW-4-5-15
712120 -04	MW-14-5-15
712120 -05	MW-1-4-14

Per the client request, the samples were allowed to settle for three days. They were then decanted prior to extraction, leaving the sediment layer behind.

All quality control requirements were acceptable.

Date of Report: 12/14/17
Date Received: 12/08/17
Project: PSTL-Longview, F&BI 712120
Date Extracted: 12/12/17
Date Analyzed: 12/12/17

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Surrogate (% Recovery) (Limit 41-152)
MW-2-4-14 712120-01	290	100
MW-3-4-14 712120-02	310	97
MW-4-5-15 712120-03	380	95
MW-14-5-15 712120-04	420	93
MW-1-4-14 712120-05	300	99
Method Blank 07-2790 MB	<50	75

Date of Report: 12/14/17
Date Received: 12/08/17
Project: PSTL-Longview, F&BI 712120

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

Laboratory Code: 712120-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel	ug/L (ppb)	2,500	310	94	93	50-150	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel	ug/L (ppb)	2,500	84	76	63-142	10

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

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

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

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

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

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

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

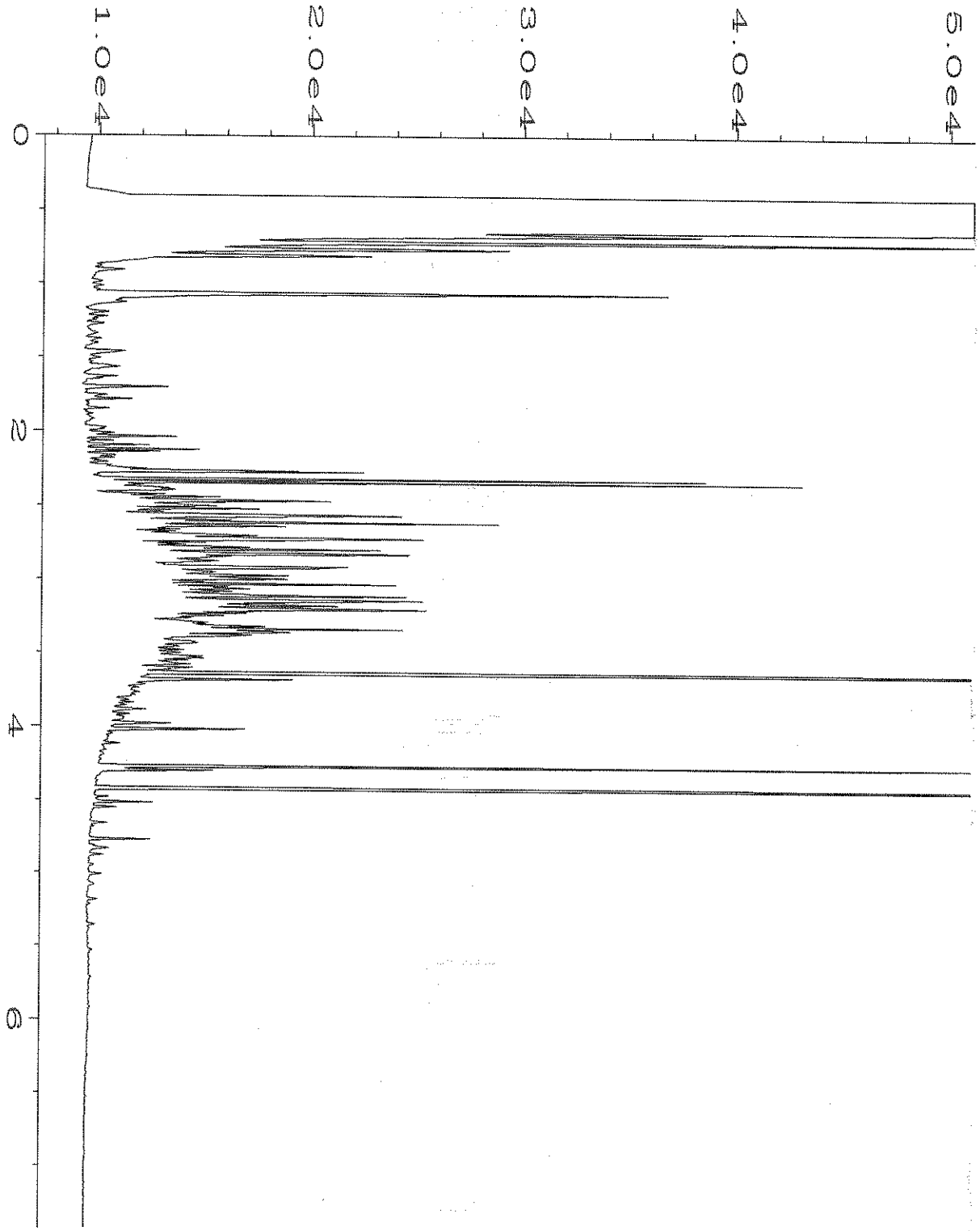
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

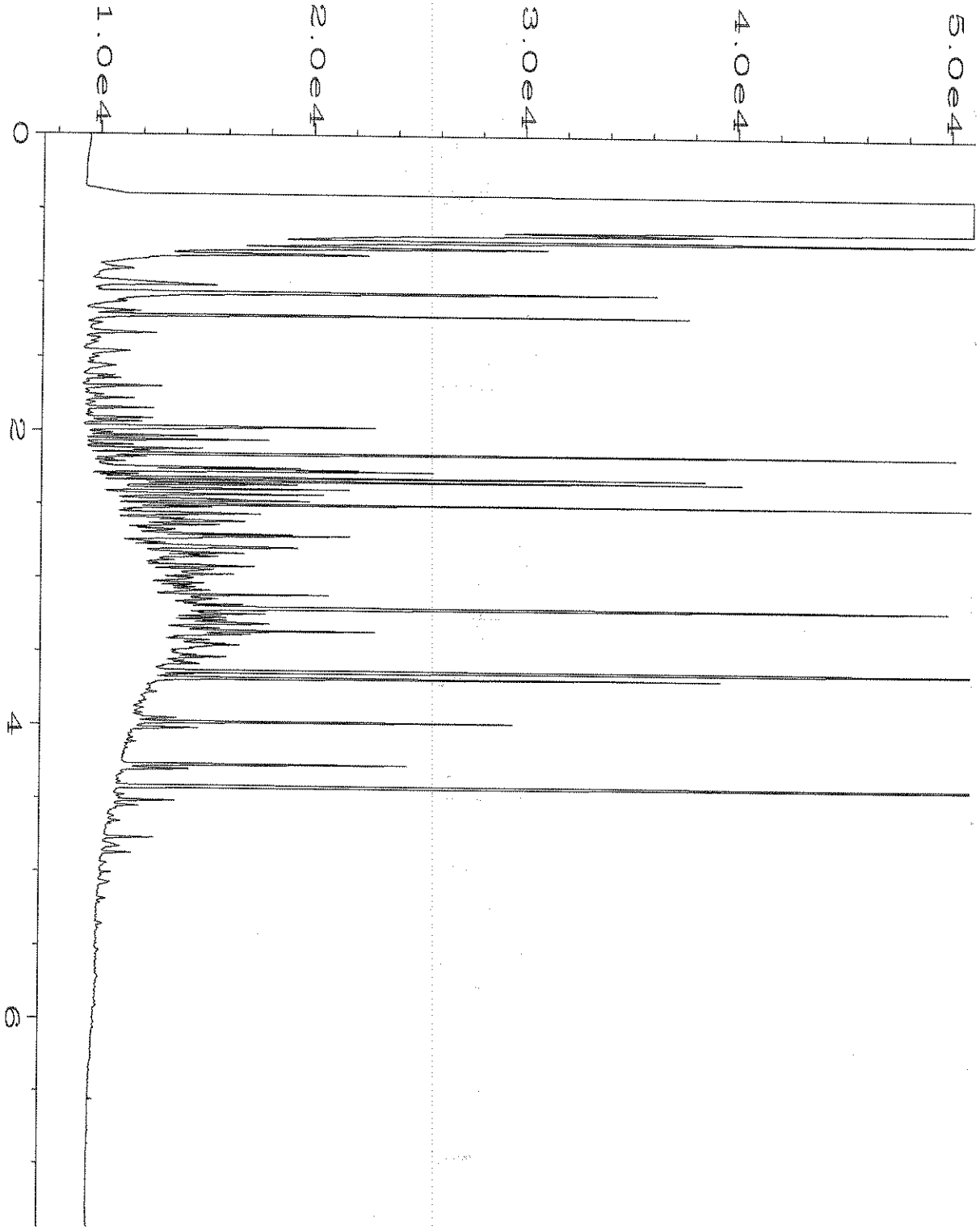
vo - The value reported fell outside the control limits established for this analyte.

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



Data File Name : C:\HPCHEM\1\DATA\12-12-17\035F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 712120-01
Run Time Bar Code:
Acquired on : 12 Dec 17 06:27 PM
Report Created on: 13 Dec 17 10:05 AM

Page Number : 1
Vial Number : 35
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH



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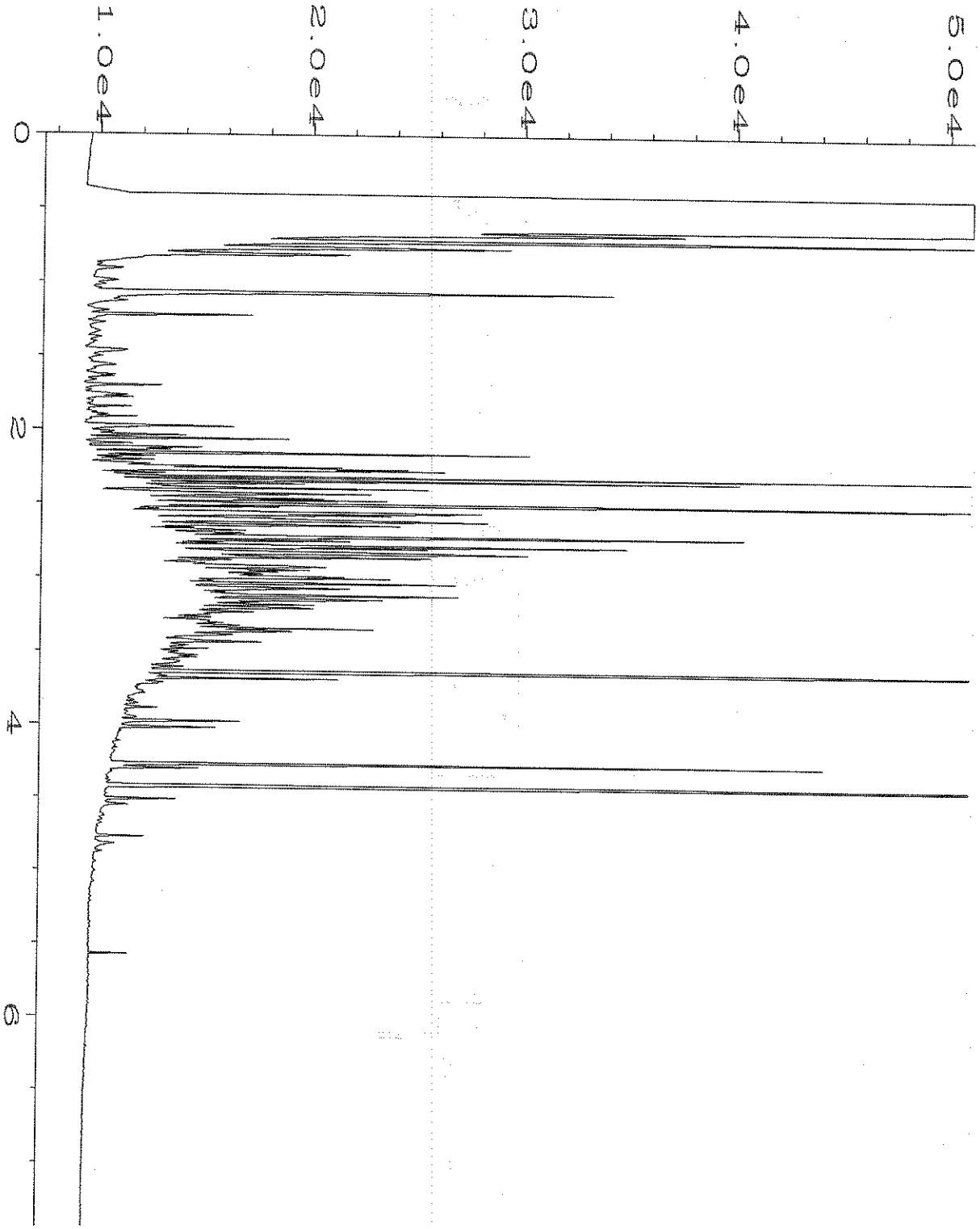
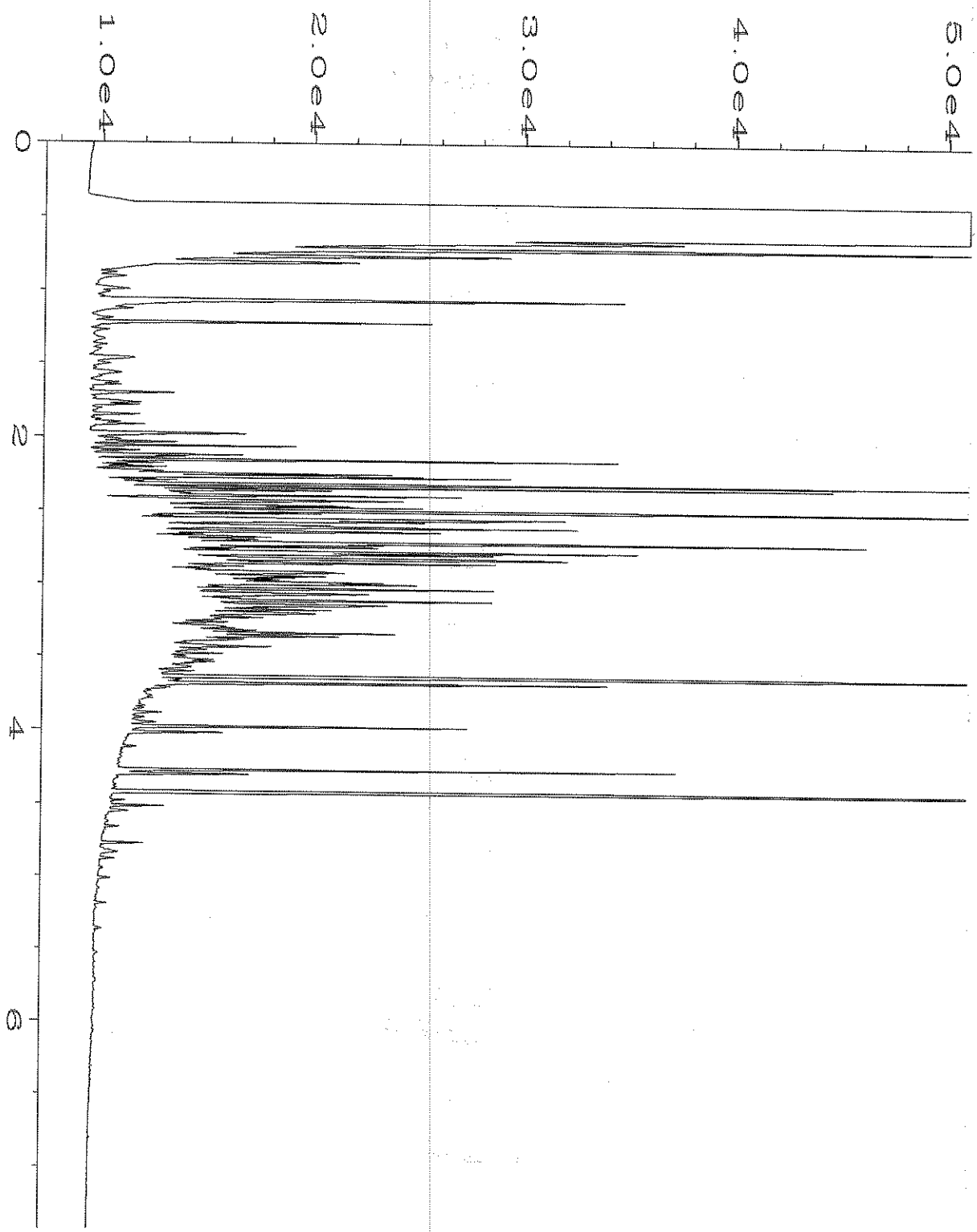
Operator : mwdl
Instrument : GC1
Sample Name : 712120-02
Run Time Bar Code:
Acquired on : 12 Dec 17 06:38 PM
Report Created on: 13 Dec 17 10:05 AM

Page Number : 1
Vial Number : 36
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH



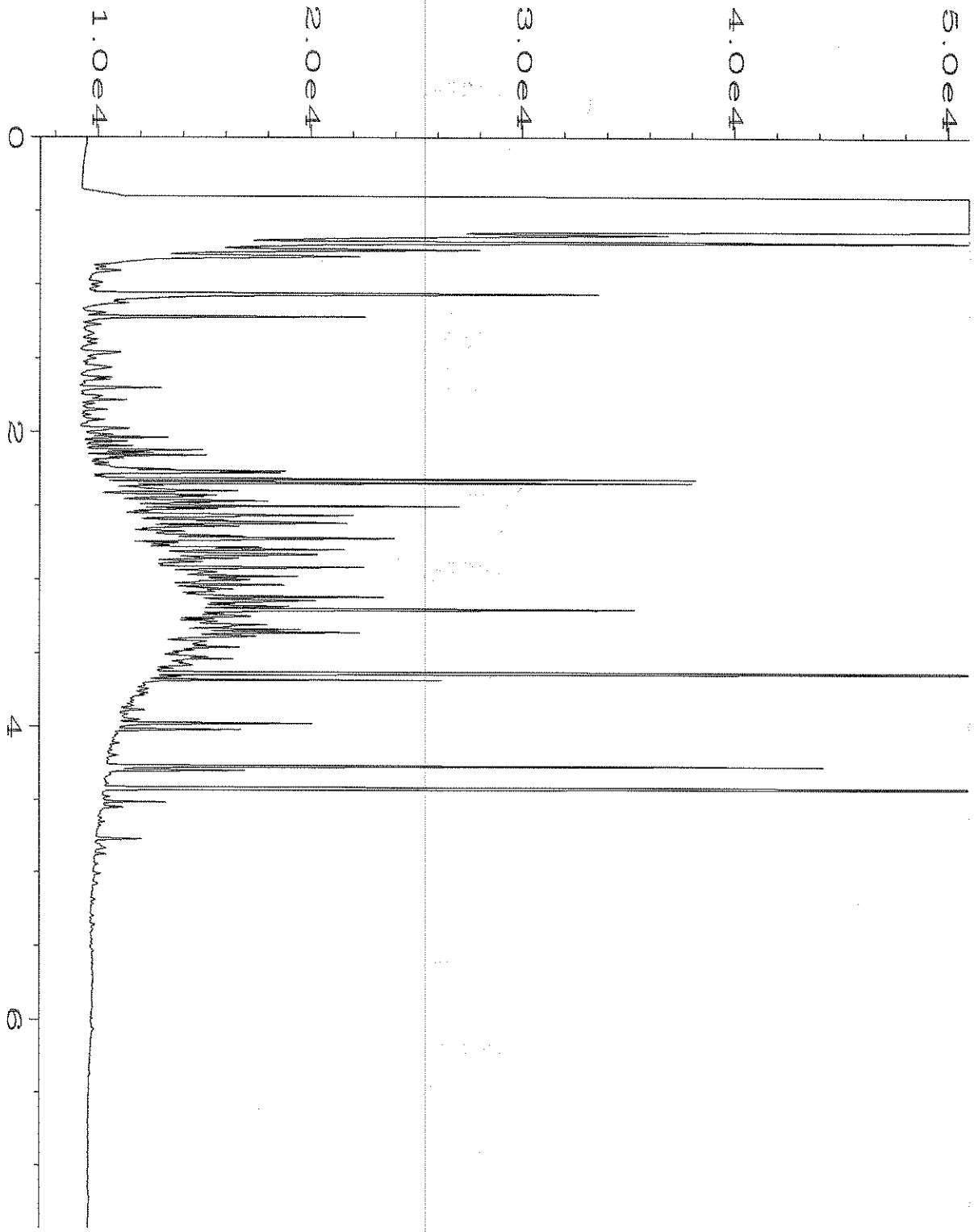
Data File Name : C:\HPCHEM\1\DATA\12-12-17\037F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 712120-03
Run Time Bar Code:
Acquired on : 12 Dec 17 06:49 PM
Report Created on: 13 Dec 17 10:06 AM

Page Number : 1
Vial Number : 37
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\1\DATA\12-12-17\038F1001.D
Operator : mwdl
Instrument : GC1
Sample Name : 712120-04
Run Time Bar Code:
Acquired on : 12 Dec 17 07:00 PM
Report Created on: 13 Dec 17 10:10 AM

Page Number : 1
Vial Number : 38
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\1\DATA\12-12-17\039F1001.D
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Instrument : GC1
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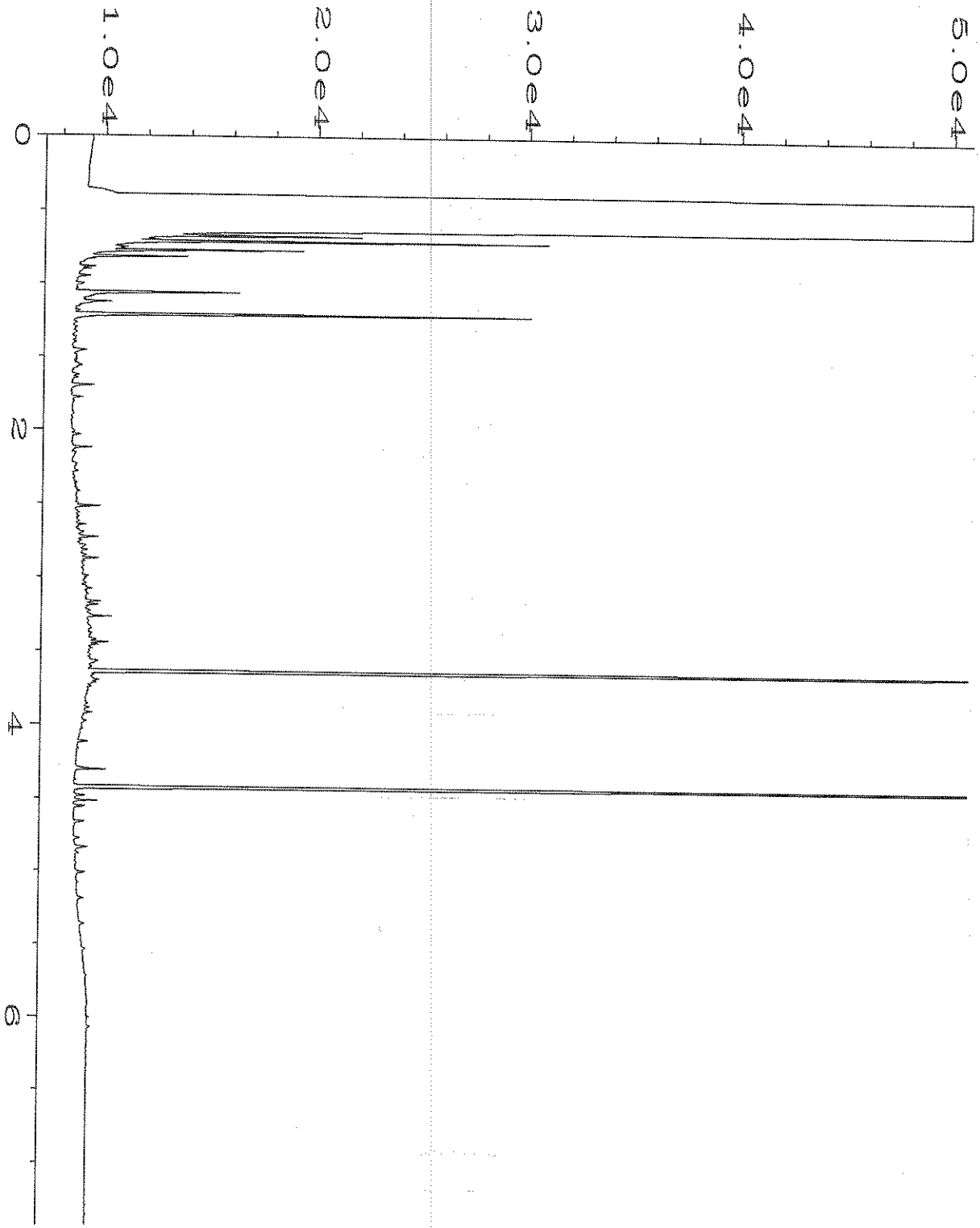
Run Time Bar Code:
Acquired on : 12 Dec 17 07:12 PM
Report Created on: 13 Dec 17 10:06 AM

Page Number : 1
Vial Number : 39
Injection Number : 1
Sequence Line : 10
Instrument Method: DX.MTH
Analysis Method : DX.MTH



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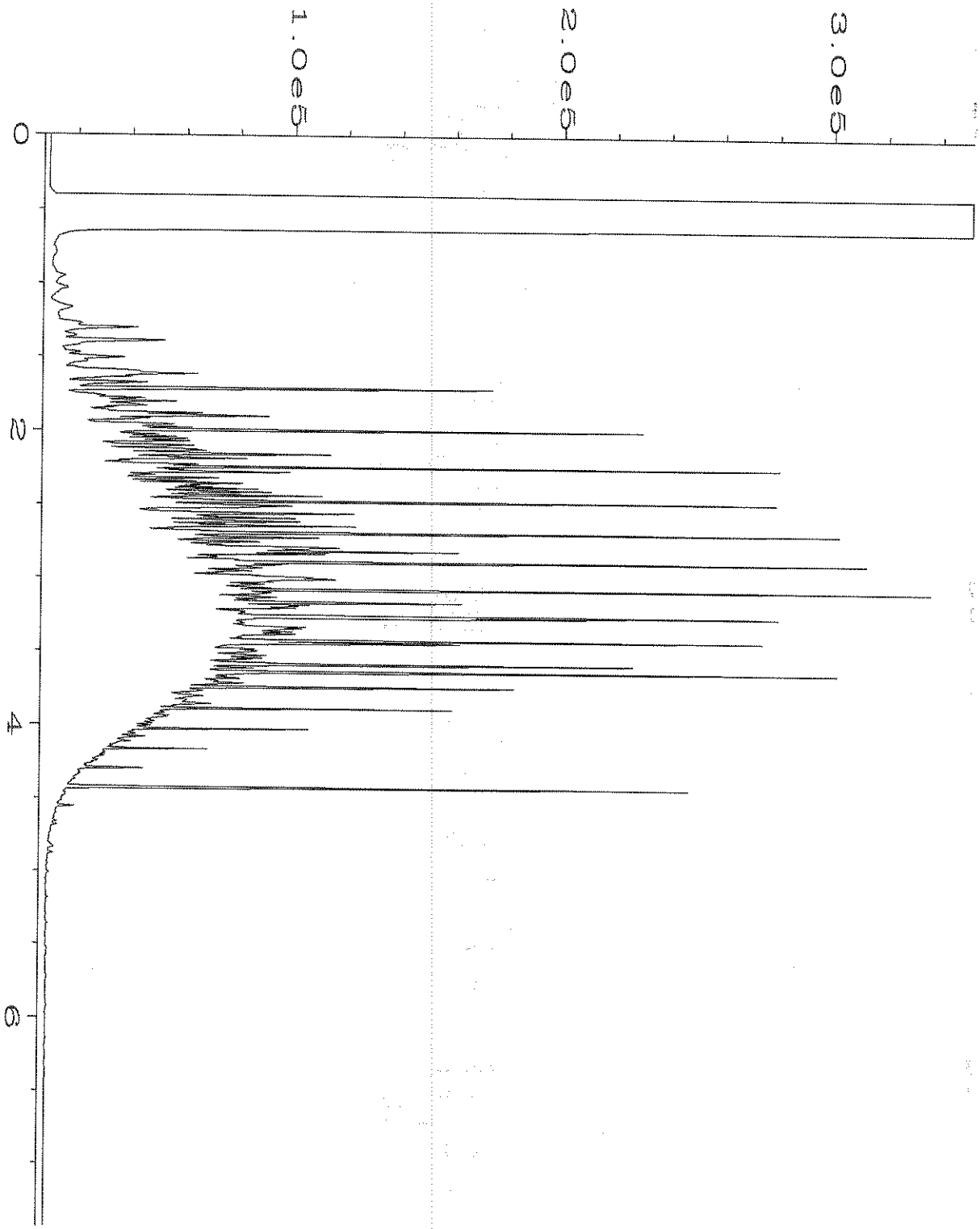
Operator : mwdl
Instrument : GC1
Sample Name : 07-2790 mb
Run Time Bar Code:
Acquired on : 12 Dec 17 01:27 PM
Report Created on: 13 Dec 17 10:04 AM

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



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Instrument	: GC1	Vial Number	: 5
Sample Name	: 1000 Dx 49-188D	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 11
Acquired on	: 12 Dec 17 08:41 PM	Instrument Method	: DX.MTH
Report Created on	: 13 Dec 17 10:07 AM	Analysis Method	: DX.MTH

7/2120

SAMPLE CHAIN OF CUSTODY ME 12/8/17 COS

Page # 1 of 1

Report To Brett Beaulieu
Company Floyd Snider
Address 601 Union St, Suite 600
City, State, ZIP Seattle, WA 98101
Phone 292-2078 Email Brett.Beaulieu@FloydSnider.com

SAMPLERS (*signature*)

PROJECT NAME: PSTL - Longview

PO #

REMARKS: ★ Will need to be decanted or centrifuged → Please call Brett to decide what method to use

INVOICE TO

TURNAROUND TIME
- [X] Standard Turnaround
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [X] Dispose after 30 days
- [ ] Archive Samples
- [ ] Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM					Notes
						ANALYSES REQUESTED											
MW-2-4-14	01	12/7/17	1125	GW	1		X										
MW-3-4-14	02	↓	1220	GW	1		X										
MW-4-5-15	03		1505	GW	1		X										★
MW-14-5-15	04		1305	GW	1		X										★
MW-1-4-14	05A-C		1420	GW	3		X										MS/MSD★

Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Pamela Osterhout	Floyd Snider	12/8/17	0815
Received by:	Nhan Phan	FLBT	12/8/17	0815
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
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Eric Young, B.S.

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

October 2, 2018

Brett Beaulieu, Project Manager
Floyd-Snider
Two Union Square, Suite 600
601 Union St
Seattle, WA 98101

Dear Mr Beaulieu:

Included are the results from the testing of material submitted on September 26, 2018 from the PSTL-Longview, F&BI 809437 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
FDS1002R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 26, 2018 by Friedman & Bruya, Inc. from the Floyd-Snider PSTL-Longview, F&BI 809437 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Floyd-Snider
809437 -01	MW3-GW-4-14
809437 -02	MW1-GW-4-14
809437 -03	MW12-GW-4-14
809437 -04	MW2-GW-4-14
809437 -05	MW4-GW-5-15

All quality control requirements were acceptable.

Date of Report: 10/02/18
Date Received: 09/26/18
Project: PSTL-Longview, F&BI 809437
Date Extracted: 09/27/18
Date Analyzed: 09/27/18

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 51-134)
MW3-GW-4-14 809437-01	350	<250	90
MW1-GW-4-14 809437-02	310	<250	88
MW12-GW-4-14 809437-03	320	<250	83
MW2-GW-4-14 809437-04	320	<250	84
MW4-GW-5-15 809437-05	520	<250	88
Method Blank 08-2168 MB	<50	<250	85

Date of Report: 10/02/18
Date Received: 09/26/18
Project: PSTL-Longview, F&BI 809437

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

Laboratory Code: 809437-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	370	100	100	52-149	0

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	108	108	58-134	0

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

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

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

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

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

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

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

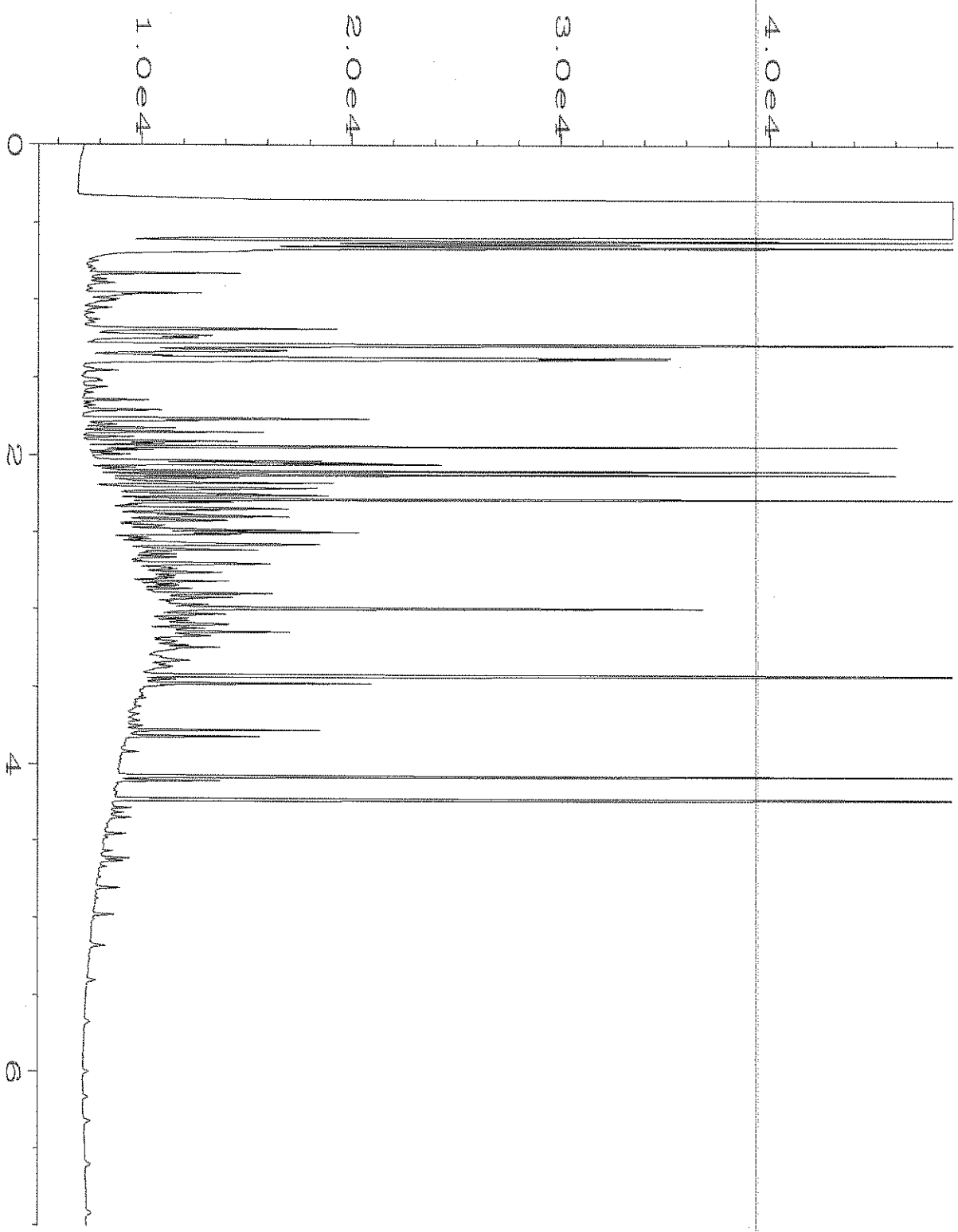
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

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

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



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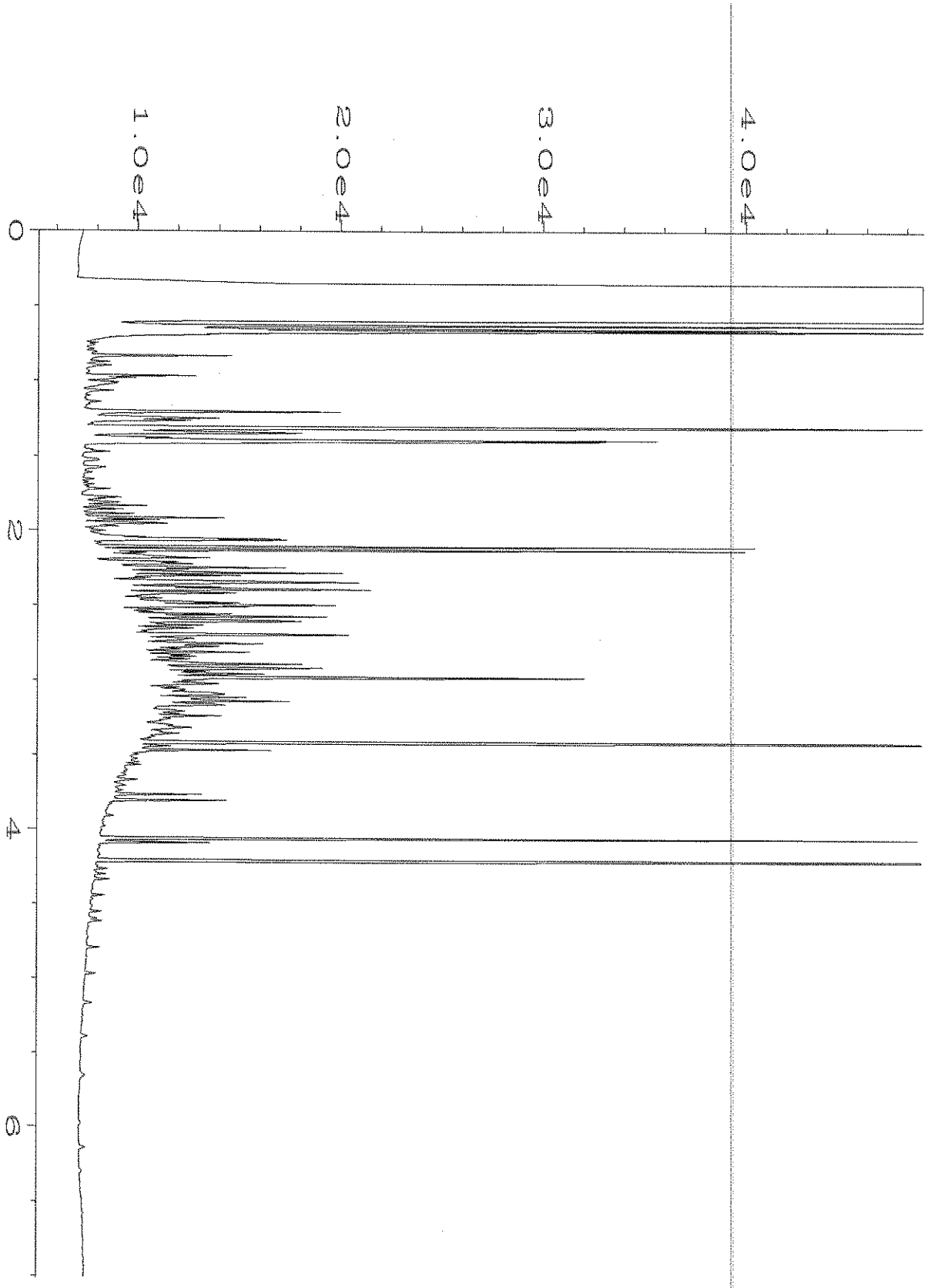
Instrument	: GC6	Vial Number	: 22
Sample Name	: 809437-01	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 7
Acquired on	: 27 Sep 18 03:29 PM	Instrument Method	: DX.MTH
Report Created on	: 28 Sep 18 09:02 AM	Analysis Method	: DX.MTH



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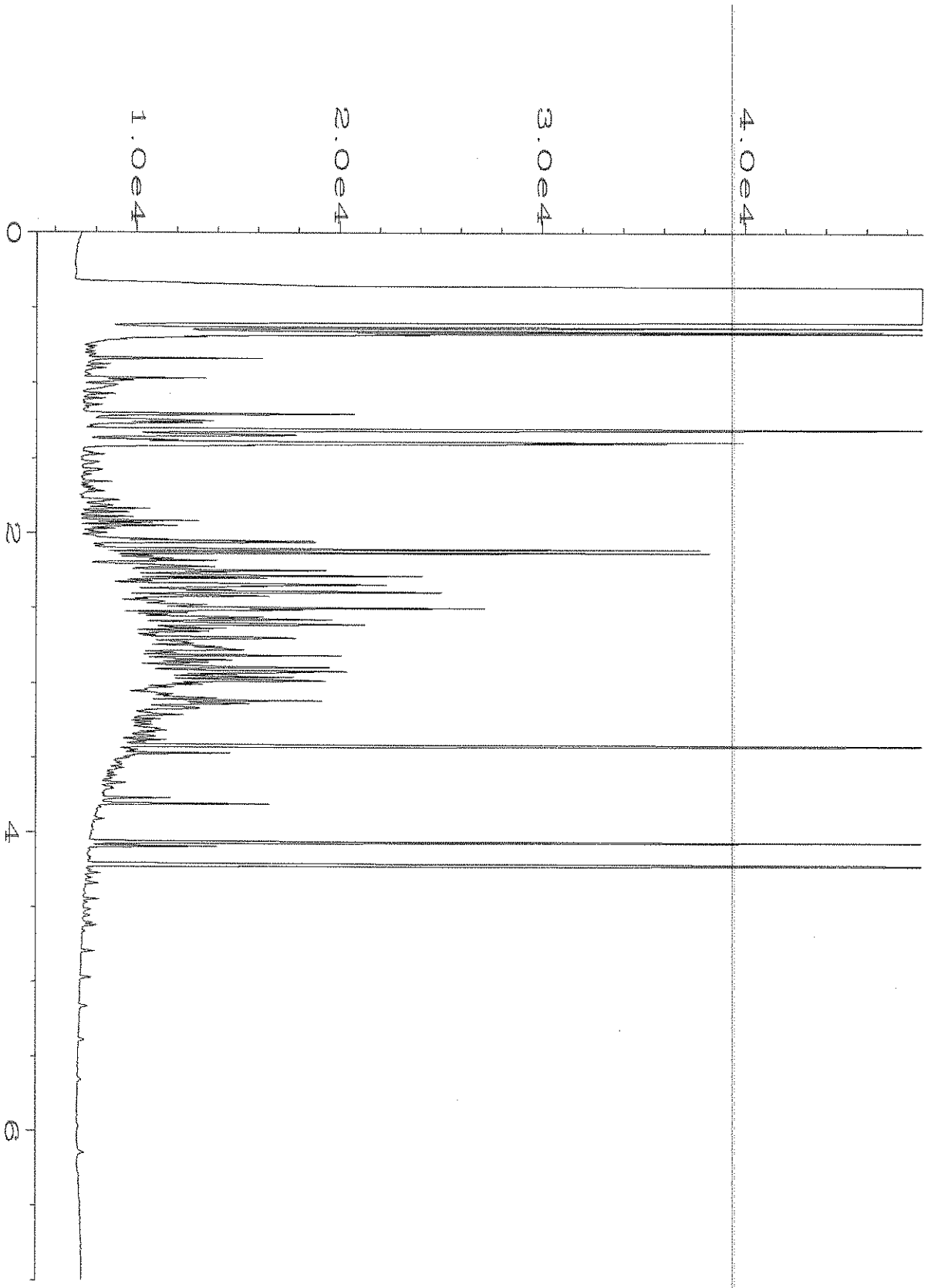
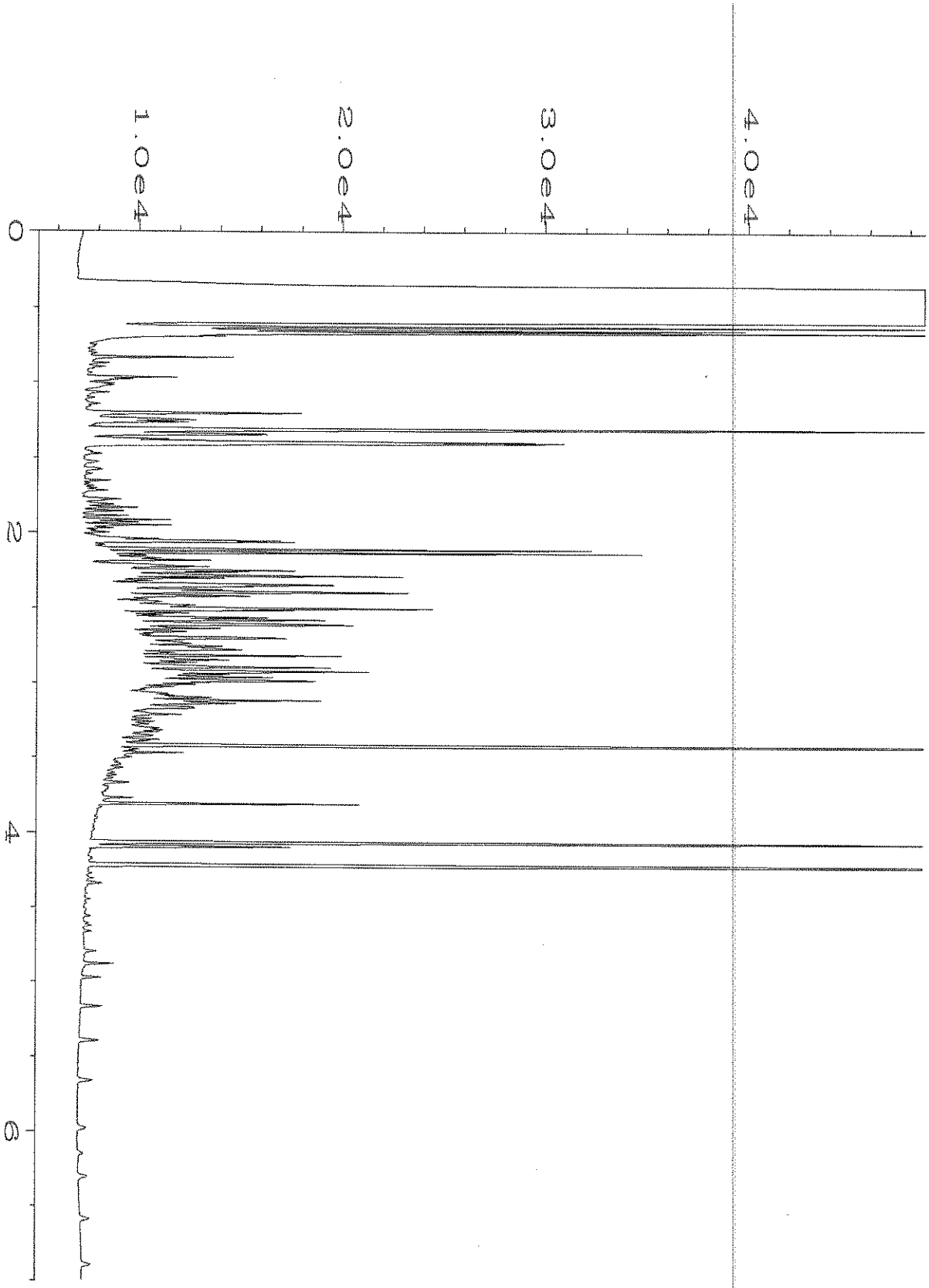
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 25
Sample Name	: 809437-02	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 7
Acquired on	: 27 Sep 18 04:00 PM	Instrument Method	: DX.MTH
Report Created on	: 28 Sep 18 09:03 AM	Analysis Method	: DX.MTH



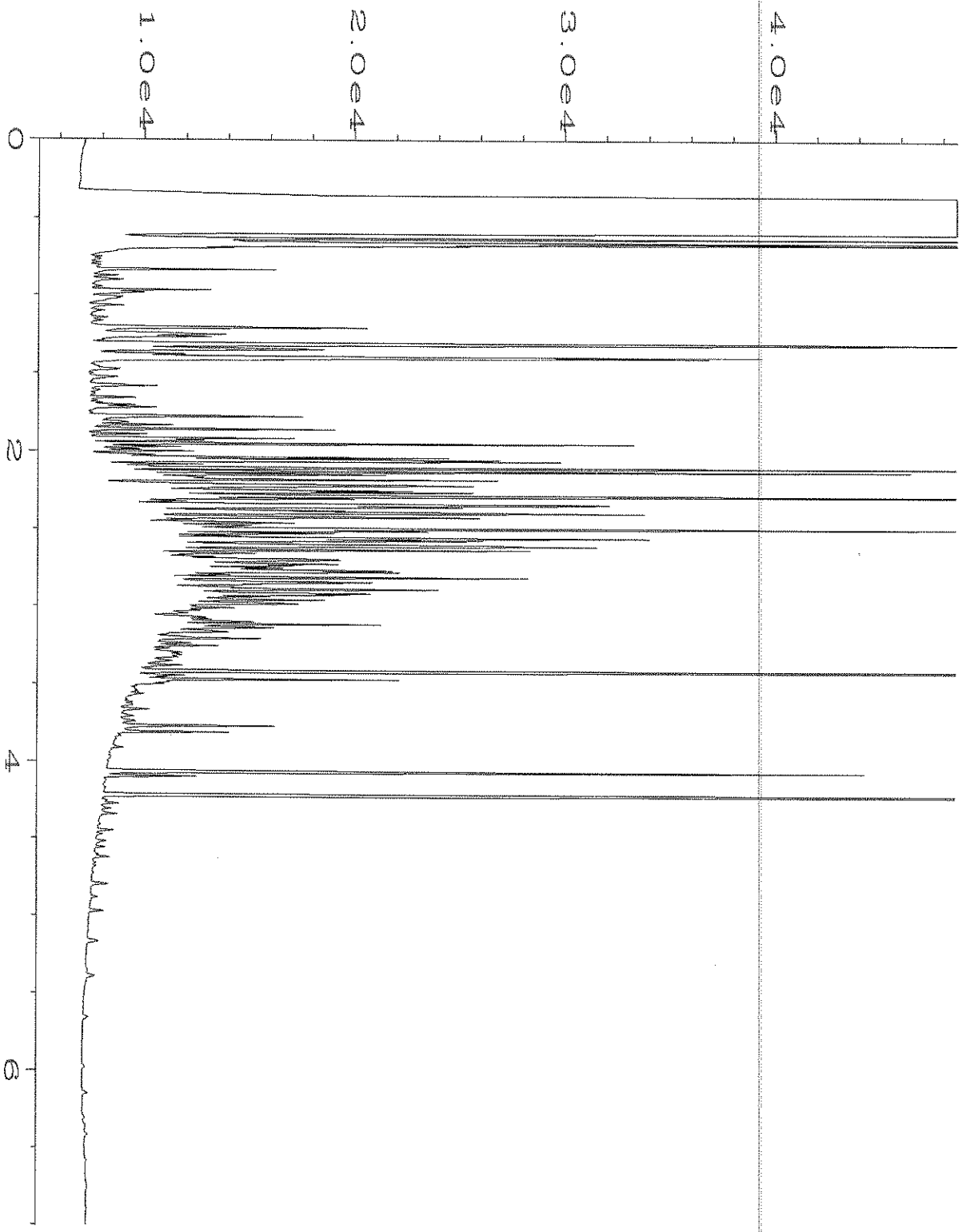
Data File Name : C:\HPCHEM\6\DATA\09-27-18\026F0701.D
Operator : TL
Instrument : GC6
Sample Name : 809437-03
Run Time Bar Code:
Acquired on : 27 Sep 18 04:11 PM
Report Created on: 28 Sep 18 09:03 AM

Page Number : 1
Vial Number : 26
Injection Number : 1
Sequence Line : 7
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\09-27-18\027F0701.D
Operator : TL
Instrument : GC6
Sample Name : 809437-04
Run Time Bar Code:
Acquired on : 27 Sep 18 04:22 PM
Report Created on: 28 Sep 18 09:03 AM

Page Number : 1
Vial Number : 27
Injection Number : 1
Sequence Line : 7
Instrument Method: DX.MTH
Analysis Method : DX.MTH



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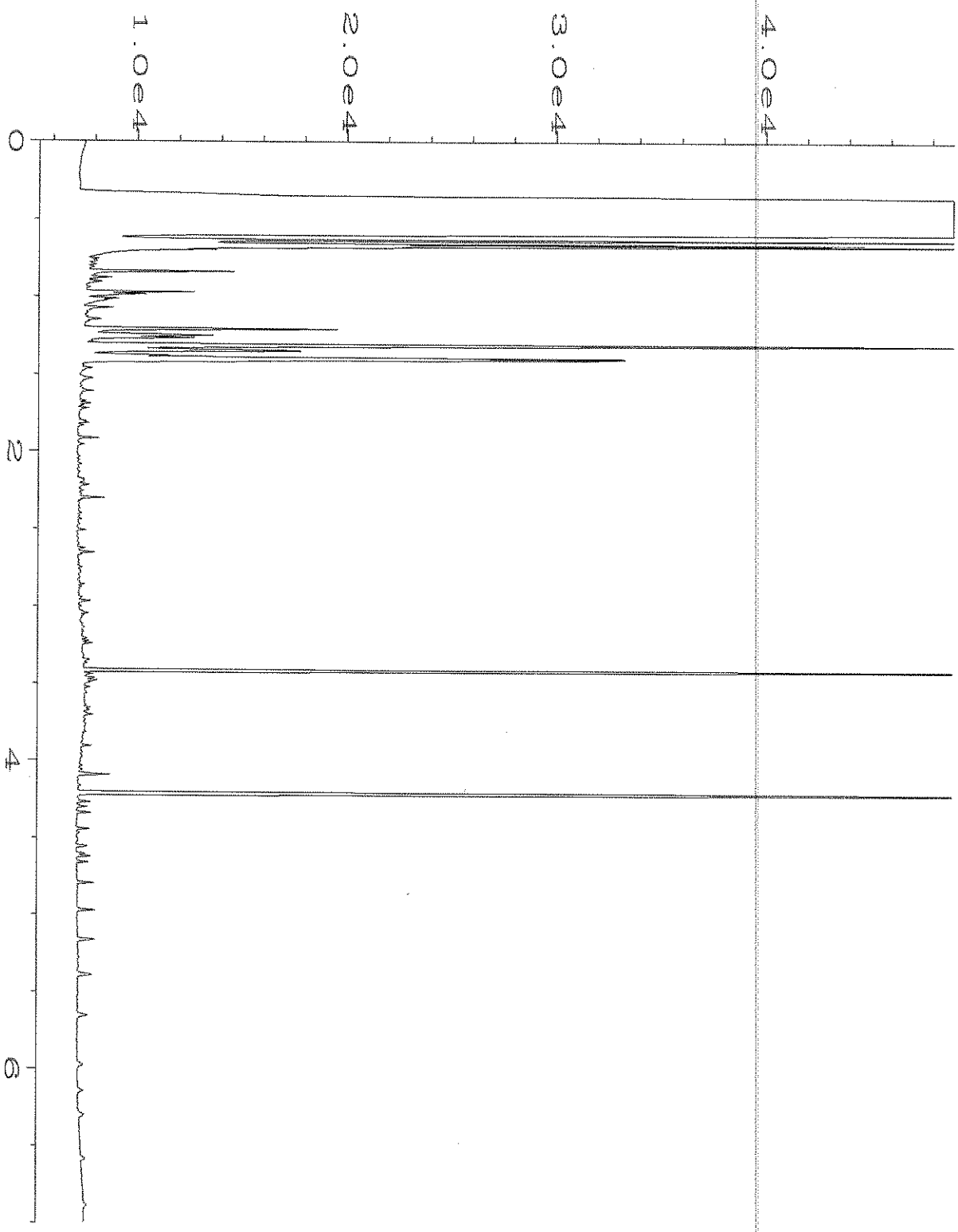
Operator : TL
Instrument : GC6
Sample Name : 809437-05
Run Time Bar Code:
Acquired on : 27 Sep 18 04:33 PM
Report Created on: 28 Sep 18 09:03 AM

Page Number : 1
Vial Number : 28
Injection Number : 1
Sequence Line : 7
Instrument Method: DX.MTH
Analysis Method : DX.MTH



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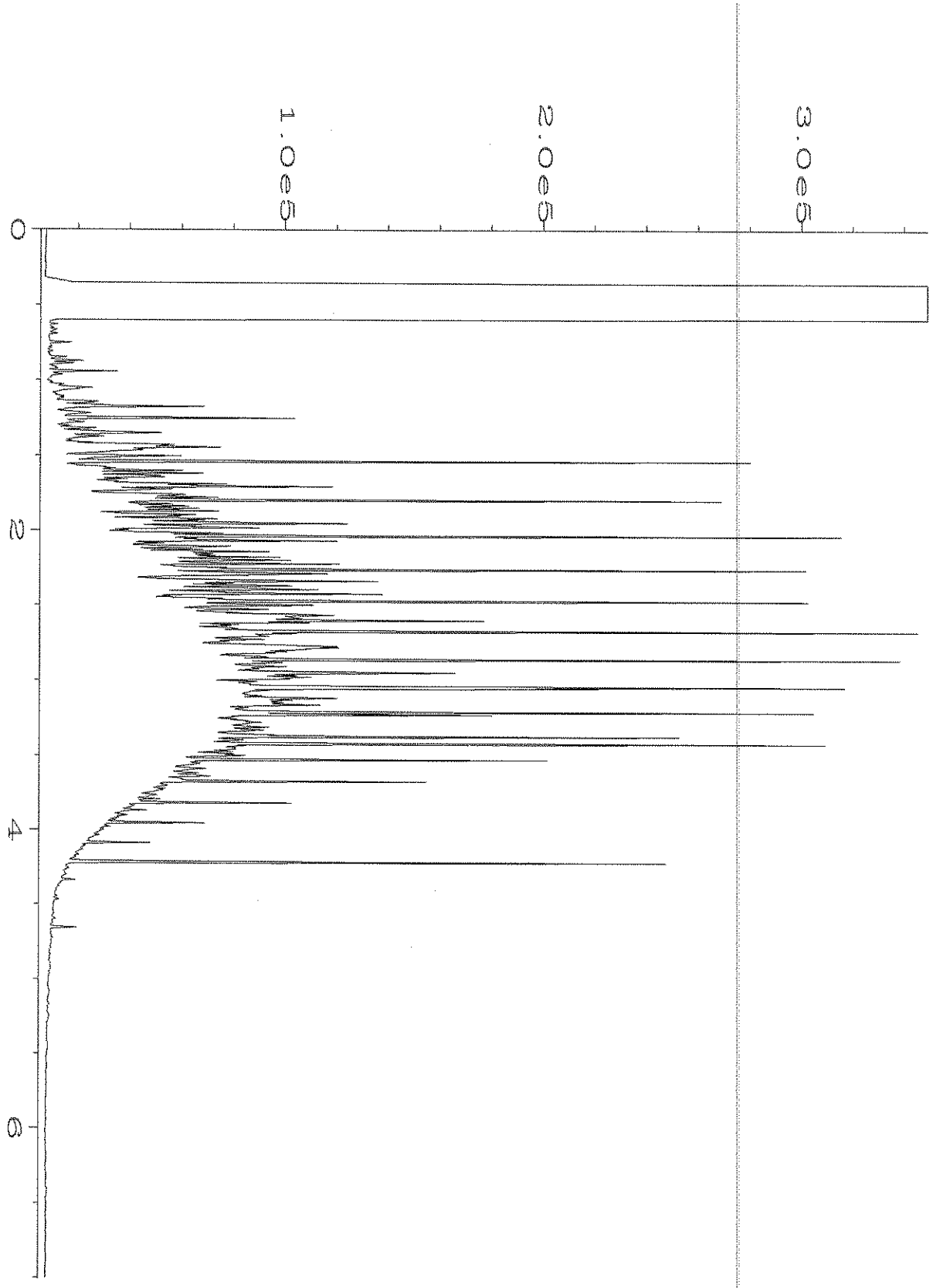
Operator : TL
Instrument : GC6
Sample Name : 08-2168 mb
Run Time Bar Code:
Acquired on : 27 Sep 18 01:46 PM
Report Created on: 28 Sep 18 09:03 AM

Page Number : 1
Vial Number : 19
Injection Number : 1
Sequence Line : 7
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name	: C:\HPCHEM\6\DATA\09-27-18\005F0601.D		
Operator	: TL	Page Number	: 1
Instrument	: GC6	Vial Number	: 5
Sample Name	: 1000 Dx 55-27B	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 6
Acquired on	: 27 Sep 18 01:02 PM	Instrument Method	: DX.MTH
Report Created on	: 28 Sep 18 09:03 AM	Analysis Method	: DX.MTH

809437

SAMPLE CHAIN OF CUSTODY

MS 9/26/18

C03

Page # 1 of 1

Report To Brett Beaulieu

Company Floyd Snider

Address 601 Union St, Suite 600

City, State, ZIP Seattle, WA 98101

Phone 206 292-2078 Email ~~Pamela Osterhout~~ Brett.Beaulieu@FloydSnider.com

SAMPLERS (*signature*)

PROJECT NAME: PSTL-Longview

PO #

REMARKS

INVOICE TO

TURNAROUND TIME
- [X] Standard Turnaround
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [X] Dispose after 30 days
- [ ] Archive Samples
- [ ] Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM					Notes
MW3-GW-4-14	01A-C	9/25/18	1000	GW	3		X										MS/MSD
MW1-GW-4-14	02	"	1125	"	1		X										
MW12-GW-4-14	03	"	1200	"	1		X										
MW2-GW-4-14	04	"	1210	"	1		X										
MW4-GW-5-15	05	"	1255	"	1		X										

Samples received at 4 °C

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Pamela Osterhout	F/S	9/26/18	0647
Received by:	S. Olson	S. Olson	F&B, Inc	9/26/18	06:47
Relinquished by:					
Received by:					

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

April 4, 2018

Brett Beaulieu, Project Manager
Floyd-Snider
Two Union Square, Suite 600
601 Union St
Seattle, WA 98101

Dear Mr Beaulieu:

Included are the results from the testing of material submitted on March 29, 2018 from the TS PSTL Longview, F&BI 803499 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
FDS0404R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 29, 2018 by Friedman & Bruya, Inc. from the Floyd-Snider TS PSTL Longview, F&BI 803499 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Floyd-Snider
803499 -01	MW-3-GW-4-14
803499 -02	MW-4-GW-5-15
803499 -03	MW-14-GW-5-15
803499 -04	MW-2-GW-4-14

All quality control requirements were acceptable.

Date of Report: 04/04/18
Date Received: 03/29/18
Project: TS PSTL Longview, F&BI 803499
Date Extracted: 03/30/18
Date Analyzed: 03/30/18

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Surrogate (% Recovery) (Limit 51-134)
MW-3-GW-4-14 803499-01	320	108
MW-4-GW-5-15 803499-02	450	93
MW-14-GW-5-15 803499-03	450	94
MW-2-GW-4-14 803499-04	320	110
Method Blank 08-699 MB	<50	99

Date of Report: 04/04/18
Date Received: 03/29/18
Project: TS PSTL Longview, F&BI 803499

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

Laboratory Code: 803499-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel	ug/L (ppb)	2,500	320	101	99	52-149	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel	ug/L (ppb)	2,500	88	58-134

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

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

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

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

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

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

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

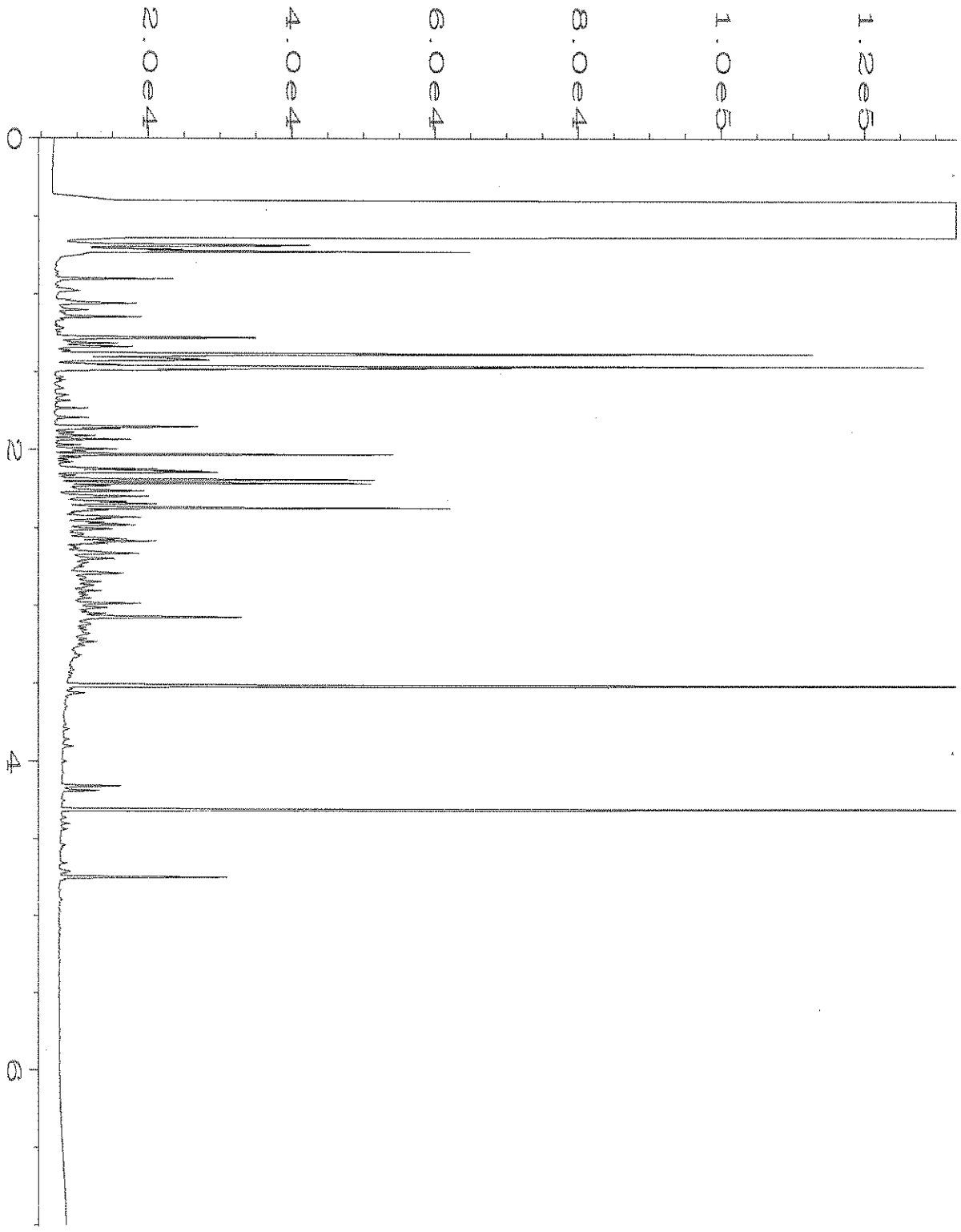
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

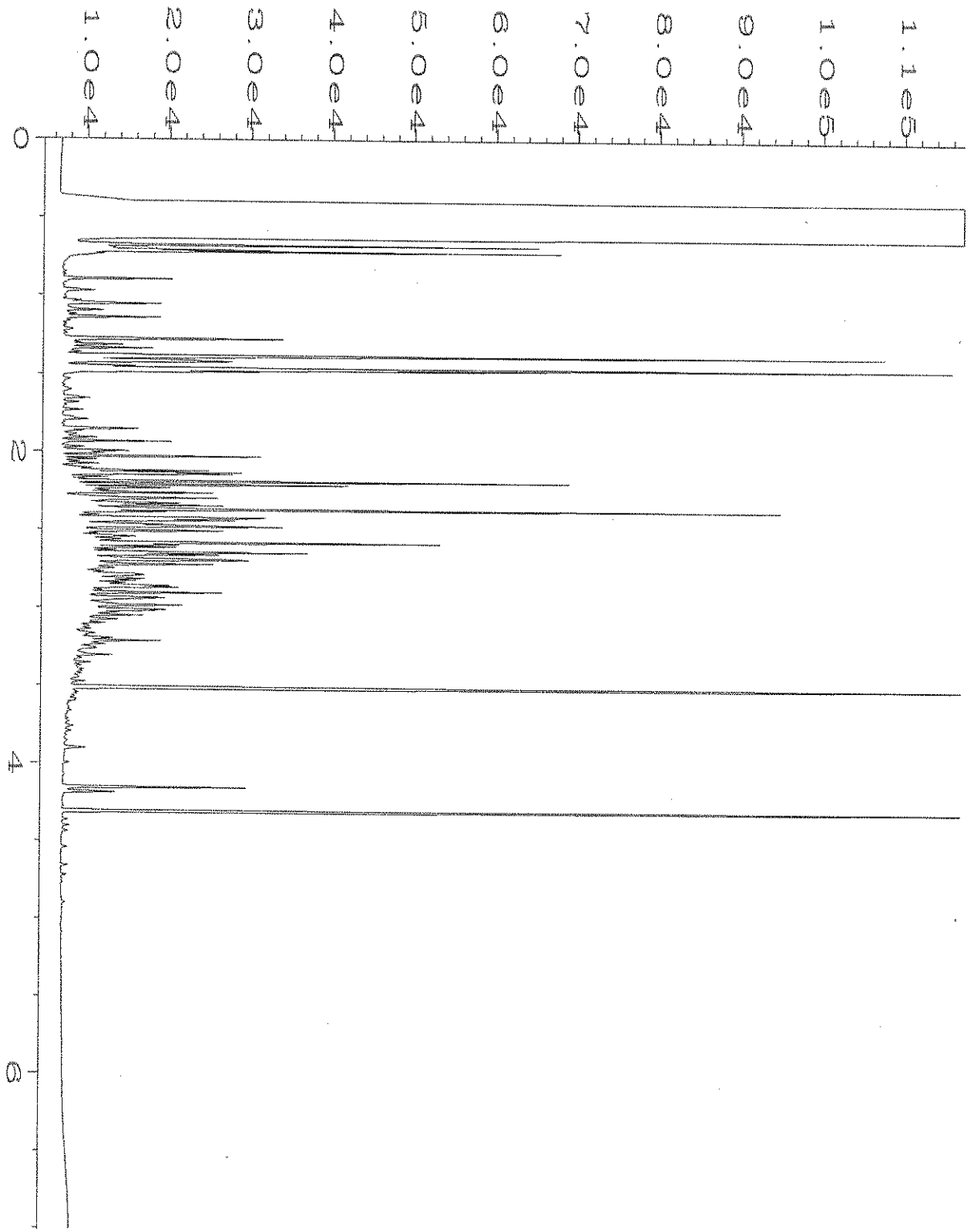
vo - The value reported fell outside the control limits established for this analyte.

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



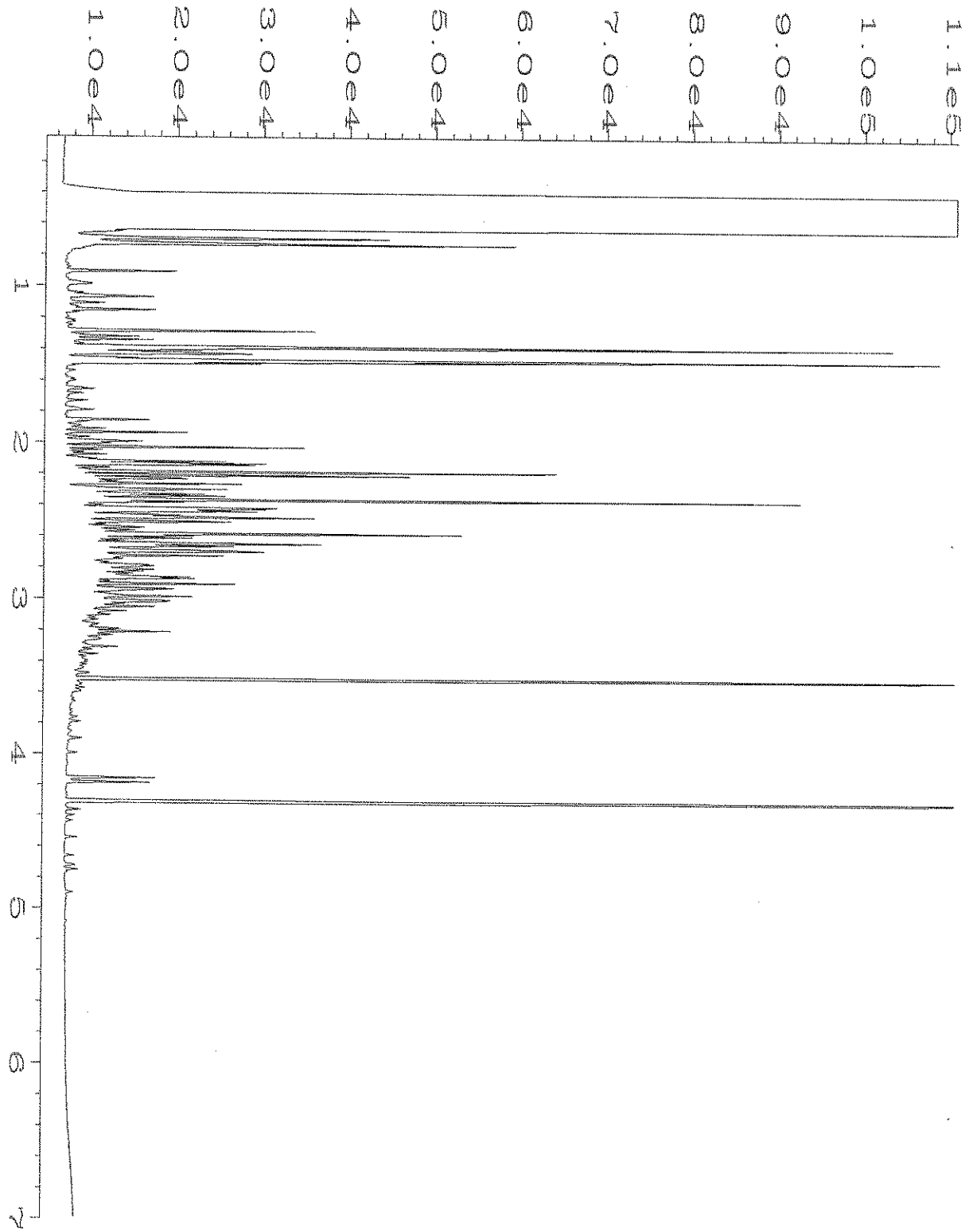
Data File Name : C:\HPCHEM\6\DATA\03-30-18\051F0901.D
Operator : mwdl
Instrument : GC6
Sample Name : 803499-01
Run Time Bar Code:
Acquired on : 30 Mar 18 06:26 PM
Report Created on: 02 Apr 18 08:18 AM

Page Number : 1
Vial Number : 51
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DX.MTH



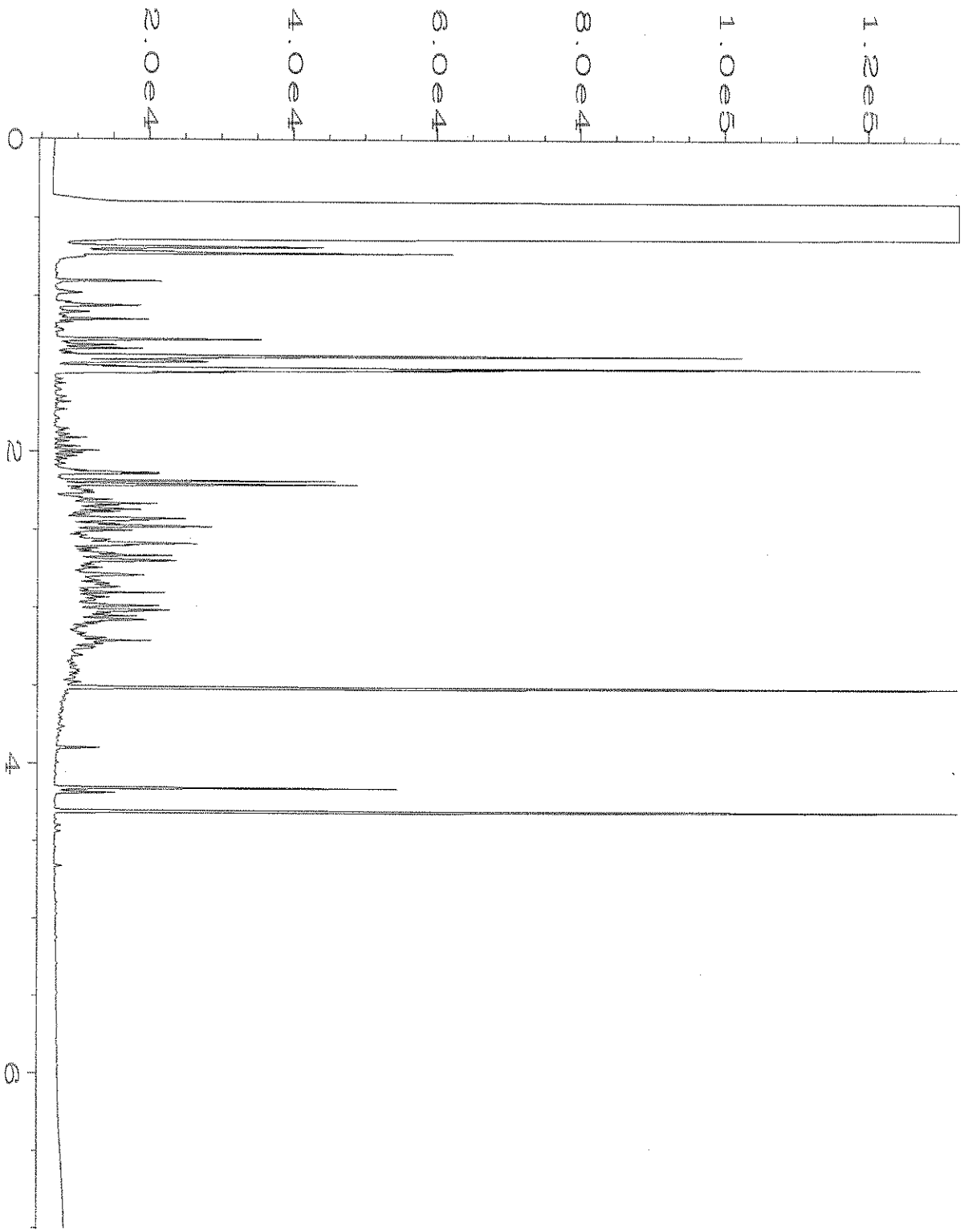
Data File Name : C:\HPCHEM\6\DATA\03-30-18\052F0901.D
Operator : mwdl
Instrument : GC6
Sample Name : 803499-02
Run Time Bar Code:
Acquired on : 30 Mar 18 06:37 PM
Report Created on: 02 Apr 18 08:18 AM

Page Number : 1
Vial Number : 52
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\03-30-18\053F0901.D
Operator : mwdl
Instrument : GC6
Sample Name : 803499-03
Run Time Bar Code:
Acquired on : 30 Mar 18 06:48 PM
Report Created on: 02 Apr 18 08:18 AM

Page Number : 1
Vial Number : 53
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DX.MTH



Data File Name : C:\HPCHEM\6\DATA\03-30-18\054F0901.D
Operator : mwdl
Instrument : GC6
Sample Name : 803499-04
Run Time Bar Code:
Acquired on : 30 Mar 18 06:58 PM
Report Created on: 02 Apr 18 08:19 AM

Page Number : 1
Vial Number : 54
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DX.MTH

803499 ME 03-29-18 EOY

SAMPLE CHAIN OF CUSTODY

Page # 1 of 1

Report To Brett Beaulieu
Company Floyd Snider
Address 601 Union St, Suite 600
City, State, ZIP Seattle, WA 98101
Phone 206 292-2078 Email Brett.Beaulieu@FloydSnider.com

SAMPLERS (*signature*)

PROJECT NAME: TS PSTL Longview

PO #

REMARKS

INVOICE TO

TURNAROUND TIME
- [x] Standard Turnaround
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [x] Dispose after 30 days
- [ ] Archive Samples
- [ ] Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM					Notes
						ANALYSES REQUESTED											
MW-3-GW-4-14	01 AB	3/28/18	1155	GW	2		X										Decant
MW-4-GW-5-15	02		1240	GW	1		X										
MW-14-GW-5-15	03		1300	GW	1		X										
MW-2-GW-4-14	04 A-C		1340	GW	3		X										MS/MSD
			P.O.				X										

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Pamela Osterhaut	Floyd Snider	3/29/18	17:02
Received by:	Jon Shuman	Jon Shuman	3/29/18	1
Relinquished by:				
Received by:	Nham Phan	FEBT	3/29/18	1702

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

June 20, 2018

Brett Beaulieu, Project Manager
Floyd-Snider
Two Union Square, Suite 600
601 Union St
Seattle, WA 98101

Dear Mr Beaulieu:

Included are the results from the testing of material submitted on June 15, 2018 from the TS-PSTL Longview, F&BI 806286 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
FDS0620R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on June 15, 2018 by Friedman & Bruya, Inc. from the Floyd-Snider TS-PSTL Longview, F&BI 806286 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Floyd-Snider
806286 -01	MW-3-4-14
806286 -02	MW-11-4-14
806286 -03	MW-1-4-14

All quality control requirements were acceptable.

Date of Report: 06/20/18
Date Received: 06/15/18
Project: TS-PSTL Longview, F&BI 806286
Date Extracted: 06/18/18
Date Analyzed: 06/18/18

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 41-152)
MW-3-4-14 806286-01	290	<250	88
MW-11-4-14 806286-02	300	<250	88
MW-1-4-14 806286-03	250	<250	88
Method Blank 08-1304 MB	<50	<250	87

Date of Report: 06/20/18
Date Received: 06/15/18
Project: TS-PSTL Longview, F&BI 806286

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

Laboratory Code: 806286-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	290	120	110	50-150	9

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	84	81	63-142	4

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Attachment 2
Draft Environmental Covenant

Text highlighted by yellow are instructions/comments and options.
Those instructions and related footnotes should be removed from the Covenant.

After Recording Return
Original Signed Covenant to: [1]
ADAM HARRIS
Toxics Cleanup Program
Department of Ecology
TOXICS CLEANUP PROGRAM,
SOUTHWEST REGIONAL OFFICE
P.O. BOX 47775
OLYMPIA, WA 98504-7775

NOTE: This Covenant is not valid without Ecology's approval and signature.

DRAFT Environmental Covenant

(For MTCA Sites – August 20, 2015 Version)

Grantor: **Wil-Hunt I LLC** [2]
Grantee: State of Washington, Department of Ecology (hereafter "Ecology")
Brief Legal Description: (Parcel 1): SUB:LONGVIEW OUTLOT BLK:LVOL LOT:94A SECT,TWN,RNG:3-7N-2W DESC: J BURBEE DLC PARCEL: 10137
(Parcel 2): SUB:LONGVIEW OUTLOT BLK:LVOL LOT:92 SECT,TWN,RNG:3-7N-2W DESC: J BURBEE DLC PARCEL: 10134
Tax Parcel Nos.: 10137, 10134
Cross Reference: **None**

RECITALS [3]

a. This document is an environmental (restrictive) covenant (hereafter "Covenant") executed pursuant to the Model Toxics Control Act ("MTCA"), chapter 70.105D RCW, and Uniform Environmental Covenants Act ("UECA"), chapter 64.70 RCW.

b. The Property that is the subject of this Covenant is part or all of a site commonly known as **Puget Sound Truck Lines Longview, Facility ID 74481279.** The Property is legally described in Exhibit A, and illustrated in Exhibit B, both of which are attached (hereafter "Property"). If there are differences between these two Exhibits, the legal description in Exhibit A shall prevail.

c. The Property is the subject of remedial action conducted under MTCA. This Covenant is required because residual contamination remains on the Property after completion of remedial actions. Specifically, the following principal contaminants remain on the Property: [4]

---

[1] Some counties keep the original Covenant, others don't. If the signed original is available, it must be sent to Ecology. If the signed original is not available, send a legible copy to Ecology.
[2] The Grantor of a Covenant typically is the fee simple land owner of the property. The Grantor may also include holders of other property interests such as a holder of an easement, right-of-way, mineral right, lien, or mortgage.
[3] This section is primarily used to describe this document and its purpose. It should not be used for substantive binding provisions.
[4] List the contaminants for the associated media. If more than a few are present, list the top three to five for each medium.

Medium	Principal Contaminants Present
Soil	
Groundwater	Diesel-range total petroleum hydrocarbons
Surface Water/Sediment	

d. It is the purpose of this Covenant to restrict certain activities and uses of the Property to protect human health and the environment and the integrity of remedial actions conducted at the site. Records describing the extent of residual contamination and remedial actions conducted are available through Ecology. This includes the following documents:

3 Kings Environmental, Inc. 2012. Remedial Investigation and Cleanup Report, Puget Sound Freight Lines Facility—146 Industrial Way, Longview, Washington. Prepared for Puget Sound Freight Lines. 24 December.

Floyd|Snider. 2014a. Puget Sound Truck Lines, Longview, Groundwater Compliance Sampling and Analysis Plan. Memorandum to Tom Lovejoy, Puget Sound Freight Lines, from Brett Beaulieu, Floyd|Snider. 13 January.

Floyd|Snider. 2014b. Puget Sound Truck Lines Longview Site—Groundwater Compliance Well Installation and Monitoring Results. Memorandum to Scott Rose, VCP Unit Manager, Washington State Department of Ecology, from Brett Beaulieu, Floyd|Snider. 3 September.

Floyd|Snider. 2015. Puget Sound Truck Lines Longview Site—VCP SW1429, 2014–2015 Groundwater Monitoring Results. Memorandum to Eugene Radcliff, VCP Unit Manager, Washington State Department of Ecology, from Brett Beaulieu, Floyd|Snider. 14 October.

Floyd|Snider. 2016. Puget Sound Truck Lines Longview Site—VCP SW1429, 2016 Groundwater Monitoring Results. Memorandum to Adam Harris, Washington State Department of Ecology, from Brett Beaulieu, Floyd|Snider. 30 November.

Floyd|Snider. 2017. Puget Sound Truck Lines Longview Site—VCP SW1429, 2017 Groundwater Monitoring Results. Memorandum to Adam Harris, Washington State Department of Ecology, from Brett Beaulieu, Floyd|Snider. 8 December.

Floyd|Snider. 2018. Puget Sound Truck Lines Longview Site—VCP SW1429, 2018 Groundwater Monitoring Results. Memorandum to Adam Harris, Washington State Department of Ecology, from Brett Beaulieu, Floyd|Snider. 14 December.

e. This Covenant grants Ecology certain rights under UECA and as specified in this Covenant. As a Holder of this Covenant under UECA, Ecology has an interest in real property, however, this is not an ownership interest which equates to liability under MTCA or the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 *et seq*. The rights of Ecology as an "agency" under UECA, other than its' right as a holder, are not an interest in real property.

COVENANT

Wil-Hunt I LLC, as Grantor [5] and fee simple owner of the Property hereby grants to the Washington State Department of Ecology, and its successors and assignees, the following covenants. Furthermore, it is the intent of the Grantor that such covenants shall supersede any prior interests the GRANTOR has in the property and run with the land and be binding on all current and future owners of any portion of, or interest in, the Property.

Section 1. General Restrictions and Requirements.

The following general restrictions and requirements shall apply to the Property:

a. Interference with Remedial Action. The Grantor shall not engage in any activity on the Property that may impact or interfere with the remedial action and any operation, maintenance, inspection or monitoring of that remedial action without prior written approval from Ecology.

b. Protection of Human Health and the Environment. The Grantor shall not engage in any activity on the Property that may threaten continued protection of human health or the environment without prior written approval from Ecology. This includes, but is not limited to, any activity that results in the release of residual contamination that was contained as a part of the remedial action or that exacerbates or creates a new exposure to residual contamination remaining on the Property.

c. Continued Compliance Required. Grantor shall not convey any interest in any portion of the Property without providing for the continued adequate and complete operation, maintenance and monitoring of remedial actions and continued compliance with this Covenant.

d. Leases. Grantor shall restrict any lease for any portion of the Property to uses and activities consistent with this Covenant and notify all lessees of the restrictions on the use of the Property.

e. Preservation of Reference Monuments. Grantor shall make a good faith effort to preserve any reference monuments and boundary markers used to define the areal extent of coverage of this Covenant. Should a monument or marker be damaged or destroyed, Grantor shall have it replaced by a licensed professional surveyor within 30 days of discovery of the damage or destruction.

Section 2. Specific Prohibitions and Requirements.

In addition to the general restrictions in Section 1 of this Covenant, the following additional specific restrictions and requirements shall apply to the Property.

a Groundwater Use.

The groundwater beneath the area of the Property illustrated in Exhibit B remains contaminated and shall not be extracted for any purpose other than temporary construction dewatering, investigation, monitoring or remediation. Drilling of a well for any water supply purpose is strictly prohibited. Groundwater extracted from within this area for any purpose shall be considered potentially contaminated and any discharge of this water shall be done in accordance with state and federal law.

b. Monitoring.

Several groundwater monitoring wells are located on the Property to monitor the performance of the remedial action. The Grantor shall maintain clear access to these devices and protect them

[5] If there is more than one Grantor, use the term "Grantors" here and throughout this document.

from damage. The Grantor shall report to Ecology within forty-eight (48) hours of the discovery of any damage to any monitoring device. Unless Ecology approves of an alternative plan in writing, the Grantor shall promptly repair the damage and submit a report documenting this work to Ecology within thirty (30) days of completing the repairs.

Section 3. Access.

a. The Grantor shall maintain clear access to all remedial action components necessary to construct, operate, inspect, monitor and maintain the remedial action.

b. The Grantor freely and voluntarily grants Ecology and its authorized representatives, upon reasonable notice, the right to enter the Property at reasonable times to evaluate the effectiveness of this Covenant and associated remedial actions, and enforce compliance with this Covenant and those actions, including the right to take samples, inspect any remedial actions conducted on the Property, and to inspect related records.

c. No right of access or use by a third party to any portion of the Property is conveyed by this instrument.

Section 4. Notice Requirements.

a. Conveyance of Any Interest. The Grantor, when conveying any interest within the area of the Property described and illustrated in Exhibit B, including but not limited to title, easement, leases, and security or other interests, must:

i. Provide written notice to Ecology of the intended conveyance at least thirty (30) days in advance of the conveyance.[6]

ii. Include in the conveying document a notice in substantially the following form, as well as a complete copy of this Covenant:

NOTICE: THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL COVENANT GRANTED TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY ON [DATE] AND RECORDED WITH THE COWLITZ COUNTY AUDITOR UNDER RECORDING NUMBER [RECORDING NUMBER]. USES AND ACTIVITIES ON THIS PROPERTY MUST COMPLY WITH THAT COVENANT, A COMPLETE COPY OF WHICH IS ATTACHED TO THIS DOCUMENT.

[6] Ecology may waive this notice provision for some units at a Property where the anticipated use is a multi-tenant/owner building where some owners or tenants are unlikely to be exposed to residual contamination. For example: upper story apartments or condominiums, or commercial tenants in a strip mall, with limited rights to use the grounds under and around the building (such as for parking).

If Ecology agrees to such a waiver, the circumstances of the waiver must be detailed in paragraph 4.a.i. In addition to the specific circumstances, this provision must include the following statement: "Waiver of this advance notice to Ecology for these transactions does not constitute waiver of this notice for the entire Property nor a waiver of the requirement in Section 4.a.ii. to include this notice in any document conveying interest in the Property."

iii. Unless otherwise agreed to in writing by Ecology, provide Ecology with a complete copy of the executed document within thirty (30) days of the date of execution of such document.

b. Reporting Violations. Should the Grantor become aware of any violation of this Covenant, Grantor shall promptly report such violation in writing to Ecology.

c. Emergencies. For any emergency or significant change in site conditions due to Acts of Nature (for example, flood or fire) resulting in a violation of this Covenant, the Grantor is authorized to respond to such an event in accordance with state and federal law. The Grantor must notify Ecology in writing of the event and response actions planned or taken as soon as practical but no later than within 24 hours of the discovery of the event.

d. Notification procedure. Any required written notice, approval, reporting or other communication shall be personally delivered or sent by first class mail to the following persons. Any change in this contact information shall be submitted in writing to all parties to this Covenant. Upon mutual agreement of the parties to this Covenant, an alternative to personal delivery or first class mail, such as e-mail or other electronic means, may be used for these communications.

James Williams **(509) 623-4000** **7405 S. Hayford Rd** **Cheney, WA 99004** **stucker@trans-system.com**	Environmental Covenants Coordinator Washington State Department of Ecology Toxics Cleanup Program P.O. Box 47600 Olympia, WA 98504 – 7600 (360) 407-6000 ToxicsCleanupProgramHQ@ecy.wa.gov

Section 5. Modification or Termination.

a. Grantor must provide written notice and obtain approval from Ecology at least sixty (60) days in advance of any proposed activity or use of the Property in a manner that is inconsistent with this Covenant. [7] For any proposal that is inconsistent with this Covenant and permanently modifies an activity or use restriction at the site: [8]

i. Ecology must issue a public notice and provide an opportunity for the public to comment on the proposal; and

ii. If Ecology approves of the proposal, the Covenant must be amended to reflect the change before the activity or use can proceed.

b. If the conditions at the site requiring a Covenant have changed or no longer exist, then the Grantor may submit a request to Ecology that this Covenant be amended or terminated. Any amendment or termination of this Covenant must follow the procedures in MTCA and UECA and any rules promulgated under these chapters.

c. **[*Optional*]** By signing this agreement, per RCW 64.70.100, the original signatories to this agreement, other than Ecology, agree to waive all rights to sign amendments to and termination of this Covenant. [9]

Section 6. Enforcement and Construction.

a. This Covenant is being freely and voluntarily granted by the Grantor.

b. Within ten (10) days of execution of this Covenant, Grantor shall provide Ecology with an original signed Covenant and proof of recording and a copy of the Covenant and proof of recording to others required by RCW 64.70.070.

[7] Example of inconsistent uses are using the Property for a use not allowed under the covenant (i.e. mixed residential and commercial use on a property restricted to industrial uses), OR drilling a water supply well when use of the groundwater for water supply is prohibited by the covenant.
[8] An example of an activity that is unlikely to be considered a permanent modification is a proposal to disturb a cap to repair an existing underground utility that passes through the site. However, installing a new underground utility within a capped area would be a permanent change.
[9] As time passes, the original grantor and other signers of the Covenant may no longer exist as viable entities. This provision is intended to allow future amendments or termination of the Covenant without Ecology having to seek court authorization, as provided by RCW 64.70.100.

c. Ecology shall be entitled to enforce the terms of this Covenant by resort to specific performance or legal process. All remedies available in this Covenant shall be in addition to any and all remedies at law or in equity, including MTCA and UECA. Enforcement of the terms of this Covenant shall be at the discretion of Ecology, and any forbearance, delay or omission to exercise its rights under this Covenant in the event of a breach of any term of this Covenant is not a waiver by Ecology of that term or of any subsequent breach of that term, or any other term in this Covenant, or of any rights of Ecology under this Covenant.

d. The Grantor shall be responsible for all costs associated with implementation of this Covenant. Furthermore, the Grantor, upon request by Ecology, shall be obligated to pay for Ecology's costs to process a request for any modification or termination of this Covenant and any approval required by this Covenant.

e. This Covenant shall be liberally construed to meet the intent of MTCA and UECA.

f. The provisions of this Covenant shall be severable. If any provision in this Covenant or its application to any person or circumstance is held invalid, the remainder of this Covenant or its application to any person or circumstance is not affected and shall continue in full force and effect as though such void provision had not been contained herein.

g. A heading used at the beginning of any section or paragraph or exhibit of this Covenant may be used to aid in the interpretation of that section or paragraph or exhibit but does not override the specific requirements in that section or paragraph.

[GRANTOR'S SIGNATURE BLOCK FOR ORIGINAL COVENANTS]

Each person who signs must have a separate signature block and applicable notary acknowledgment. Repeat as many times as necessary.

Holders of other property interests must either sign the amended Covenant as a GRANTOR or sign the subordination agreement in Exhibit D.

The undersigned Grantor warrants he/she holds the title **[to the Property] OR [to an (Easement/Right of Way/etc.) on the Property]** and has authority to execute this Covenant.

EXECUTED this _____ day of _____, 20___.

_____ [SIGNATURE] _____

by: _____ [PRINTED NAME] _____

Title: _____

Insert one of the following, as applicable after each signature. See example format on page after next:

INDIVIDUAL ACKNOWLEDGMENT
CORPORATE ACKNOWLEDGMENT
REPRESENTATIVE ACKNOWLEDGEMENT

[GRANTOR'S SIGNATURE BLOCK FOR AMENDED COVENANTS]

Each person who signs must have a separate signature block and applicable notary acknowledgment. Repeat as many times as necessary.

When amending a Covenant, each GRANTOR of the existing Covenant must sign the amended Covenant unless the GRANTOR waived its rights under Section 5(b) of the Covenant.

Holders of other property interests must either sign the amended Covenant as a GRANTOR or sign the subordination agreement in Exhibit D.

The undersigned Grantor warrants he/she holds the title **[to the Property] OR [to an (Easement/Right of Way/etc.) on the Property]** and has authority to execute this Covenant.

EXECUTED this _____ day of _____, 20___.

The undersigned further acknowledges [Environmental or Restrictive] Covenant [# OF THE ORIGINAL COVENANT] filed in **[_____]** County, is hereby terminated and replaced with the above Environmental Covenant.

_____ [SIGNATURE] _____

by: _____ [PRINTED NAME] _____

Title: _____

Insert one of the following, as applicable. See example format on next page:

INDIVIDUAL ACKNOWLEDGMENT
CORPORATE ACKNOWLEDGMENT
REPRESENTATIVE ACKNOWLEDGEMENT

INDIVIDUAL ACKNOWLEDGMENT

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the individual described herein and who executed the within and foregoing instrument and signed the same at **his/her** free and voluntary act and deed for the uses and purposes therein mentioned.

_____
Notary Public in and for the State of Washington [10]
Residing at _____
My appointment expires _____

CORPORATE ACKNOWLEDGMENT

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the _____ of the corporation that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that **he/she** was authorized to execute said instrument for said corporation.

_____
Notary Public in and for the State of Washington [15]
Residing at _____
My appointment expires _____

REPRESENTATIVE ACKNOWLEDGEMENT

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** signed this instrument, on oath stated that **he/she** was authorized to execute this instrument, and acknowledged it as the _____ [TYPE OF AUTHORITY] of _____ [NAME OF PARTY BEING REPRESENTED] to be the free and voluntary act and deed of such party for the uses and purposes mentioned in the instrument.

_____
Notary Public in and for the State of Washington [15]
Residing at _____
My appointment expires _____

[10] Where landowner is located out of state, replace with appropriate out-of-state title and location.

[ECOLOGY'S SIGNATURE BLOCK]

The Department of Ecology**,** hereby accepts the status as GRANTEE and HOLDER of the above Environmental Covenant.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

_____ [SIGNATURE] _____

by: _____ [PRINTED NAME] _____

Title: _____

Dated: _____

STATE ACKNOWLEDGMENT

STATE OF _____

COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the _____ of the state agency that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed, for the uses and purposes therein mentioned, and on oath stated that **he/she** was authorized to execute said instrument for said state agency.

_____
Notary Public in and for the State of Washington

Residing at _____

My appointment expires _____

Exhibit A

LEGAL DESCRIPTION

(Required)

Exhibit B

PROPERTY MAP

(Required)

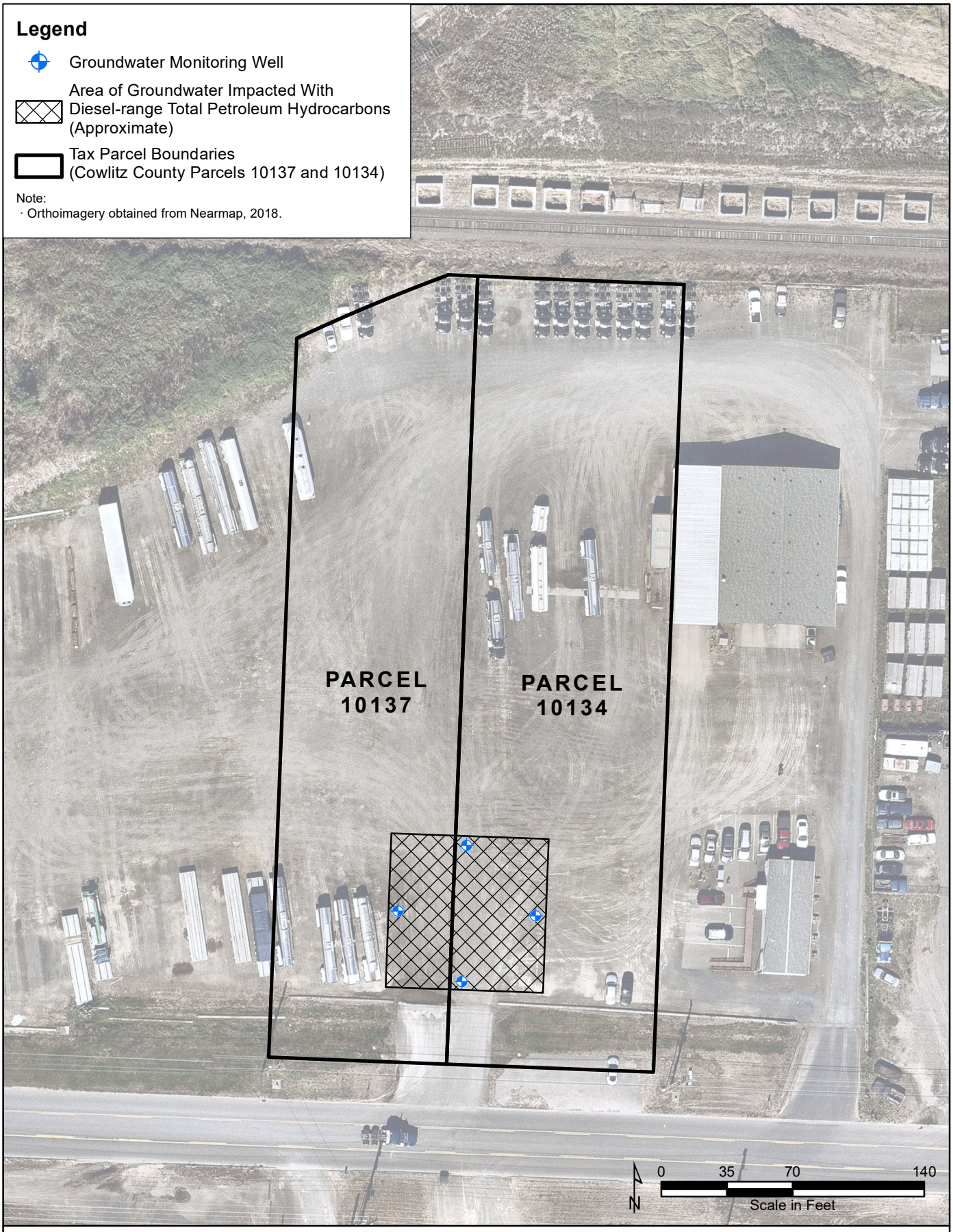


Exhibit B
Property Map Illustrating Location of Restrictions

I:\GIS\Projects\PSTL-Longview\MXD\VCP Reapplication\Exhibit B Property Map Illustrating Location of Restrictions.mxd 11/30/2018

Exhibit C

MAP ILLUSTRATING LOCATION OF RESTRICTIONS

While a map illustrating the location of the restrictions is required, the grantor has the option of creating a separate map or including this information in Exhibit B.

More than one map may be necessary to illustrate the area subject to restrictions. For example, the area encompassing a soil cap may be different than the area where vapor or groundwater contamination is a concern.

The area subject to the restrictions, if less than the entire property, should be a contiguous area with even boundaries that follow physical features on the site so the boundary can be easily discerned in the field.

Exhibit D

SUBORDINATION AGREEMENT

KNOW ALL PERSONS, That __ [HOLDER'S NAME] __, the owner and holder of that certain __[INSTRUMENT – E.G. EASEMENT/ROW/MORTGAGE/ETC.]__ bearing the date the _____ day of __[MONTH]__, __ [YEAR] __, executed by __[NAME OF PERSON THAT GRANTED THE INTEREST BEING SUBORDINATED] __, __[LEGAL STATUS OF ORIGINAL GRANTOR – E.G. LANDOWNER, CORPORATE OFFICER, ETC.]__, and recorded in the office of the County Auditor of __[COUNTY]__ County, State of Washington, on __[DATE]__, under Auditor's File Number _____, does hereby agree that said Instrument shall be subordinate to the interest of the State of Washington, Department of Ecology, under the environmental (restrictive) covenant dated __[DATE]__, executed by __[NAME OF PERSON SIGNING THIS SUBORDINATION AGREEMENT]__, and recorded in __[COUNTY]__ County, Washington under Auditor's File Number _____.

_____ [SIGNATURE] _____

by: _____ [PRINTED NAME] _____

Title: _____

Dated: _____

Insert one of the following, as applicable. See example format on next page:

INDIVIDUAL ACKNOWLEDGMENT
CORPORATE ACKNOWLEDGMENT
REPRESENTATIVE ACKNOWLEDGEMENT

INDIVIDUAL ACKNOWLEDGMENT

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the individual described herein and who executed the within and foregoing instrument and signed the same at **his/her** free and voluntary act and deed for the uses and purposes therein mentioned.

_____
Notary Public in and for the State of Washington [11]
Residing at _____
My appointment expires _____

CORPORATE ACKNOWLEDGMENT

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the _____ of the corporation that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that **he/she** was authorized to execute said instrument for said corporation.

_____
Notary Public in and for the State of Washington [16]
Residing at _____
My appointment expires _____

REPRESENTATIVE ACKNOWLEDGEMENT

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** signed this instrument, on oath stated that **he/she** was authorized to execute this instrument, and acknowledged it as the _____ [TYPE OF AUTHORITY] of _____ [NAME OF PARTY BEING REPRESENTED] to be the free and voluntary act and deed of such party for the uses and purposes mentioned in the instrument.

_____
Notary Public in and for the State of Washington [16]
Residing at _____
My appointment expires _____

[11] Where landowner is located out of state, replace with appropriate out-of-state title and location.