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Environmental Subsurface Assessment

KELLY'S AUTO BODY

Bellevue, Washington

Prepared For:

CITY OF BELLEVUE

Project No. 20190396V001
November 19, 2019

Associated Earth Sciences, Inc.
911 5th Avenue
Kirkland, WA 98033
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November 19, 2019
Project No. 20190396V001

City of Bellevue
450 110th Avenue NE
Bellevue, Washington 98004

Attention: Mr. Gregory Lucas

Subject: Environmental Subsurface Assessment
Kelly's Auto Body
1500 130th Avenue NE
Bellevue, Washington

Dear Mr. Lucas:

Associated Earth Sciences, Inc. (AESI) is pleased to present the enclosed copy of the above-referenced report. This report summarizes the results of the Environmental Subsurface Assessment for the Kelly's Auto Body property located at 1500 130th Avenue NE in Bellevue, Washington. The scope of services was completed in general accordance with the proposal provided by AESI, dated October 1, 2019. The scope of work was authorized by the City of Bellevue by means of an e-mail dated October 11, 2019 between the City of Bellevue and AESI and a project release order (#1921616) issued by the City of Bellevue.

We have enjoyed working with you on this study and are confident that our findings will aid in the evaluation of the Kelly's Auto Body property. If you should have any questions regarding this report, or if we can be of additional help to you, please do not hesitate to call.

Sincerely,
ASSOCIATED EARTH SCIENCES, INC.
Kirkland, Washington

Timothy S. Brown, L.Hg.
Associate Hydrogeologist

TSB/ld - 20190396V001-2

ENVIRONMENTAL SUBSURFACE ASSESSMENT

KELLY'S AUTO BODY

Bellevue, Washington

Prepared for:
City of Bellevue
450 110th Avenue NE
Bellevue, Washington 98004

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1.0 INTRODUCTION

Associated Earth Sciences, Inc. (AESI) has prepared this report on behalf of the City of Bellevue to summarize the results of the Environmental Subsurface Assessment performed at the Kelly's Auto Body property (Site) located at 1500 130th Avenue NE in Bellevue, Washington (Figure 1). The Site consists of one King County tax parcel (No. 2825059058) totaling approximately 1.15 acres. The Site is an active auto body automotive repair shop (Kelly's Auto Body) and is currently developed with an approximately 10,500-square-foot service building built in 1962, several storage structures, paved parking areas, and a driveway. The topography of the Site is relatively flat; there is a slight slope to the south with an overall vertical relief of approximately 5 feet between the northern and southern property lines.

1.1 Project Background

Previous investigations of the Site include a Phase I Environmental Site Assessment (Phase I ESA) completed by Shannon & Wilson, Inc. (Shannon & Wilson) in 2015 (Shannon & Wilson, 2015), a Hazardous Materials Technical Report (Technical Report) completed by Parametrix in 2016 (Parametrix, 2016), and a Phase II ESA completed by Shannon & Wilson in 2016 (Shannon & Wilson, 2016).

The Phase I ESA indicated review of files from the Washington State Department of Ecology (Ecology) disclosed a 30-day notice for removal of a 5,000-gallon gasoline underground storage tank (UST) at the Site, but no further documentation regarding the environmental quality of soil and/or groundwater at the UST location. However, further review of the documents from Ecology indicate the tank was used to hold diesel fuel and was pumped dry and permanently out-of-service since 1976. The Technical Report indicated the UST was closed-in-place in 1996. During a Site visit on October 10, 2019, AESI spoke to Jym Silvan, the General Manager of Kelly's Auto Body. Mr. Silvan indicated the owner of the Site stated the UST was previously removed and was located on the east-northeast corner of the service building, but did not have documentation to support this statement. No additional information regarding the UST was available in reports by others or on Ecology's website.

According to Shannon & Wilson's Phase I ESA, the historical land use of the Site was a truck repair facility. Shannon & Wilson also identified a patched area on the floor of the service building as a former lube pit for servicing trucks during their Phase I ESA Site reconnaissance. Communications between AESI and the General Manager of Kelly's Auto Body on October 10, 2019 suggest the area called out in the Shannon & Wilson report as a lube pit was actually used to adjust the alignment on trucks using a computerized system.

The Phase II ESA completed by Shannon & Wilson indicates residual soil contamination (petroleum) and a deed restriction exists on the adjoining (and assumed upgradient) parcel to the northeast. Groundwater contamination was also noted; however, it was not observed in the well closest to the Site. Low levels of petroleum and volatile organic compounds (VOCs) were also recently detected in soil and/or groundwater on the adjoining north parcel.

Based on previous reports by others and the historical use of a UST on Site, the potential chemicals of concern (COCs) for identified environmental media of concern (soil and groundwater) include total petroleum hydrocarbons (TPH) as gasoline-range petroleum hydrocarbons (GRPH), diesel-range petroleum hydrocarbons (DRPH), and oil-range petroleum hydrocarbons (ORPH), VOCs, and the Resource Recovery and Conservation Act (RCRA) monitored heavy metals (RCRA-8 metals).

1.2 Purpose

The purpose of this Environmental Subsurface Assessment was to assess for potential petroleum-impacted soil and groundwater from potential releases associated with the former 5,000-gallon UST, and historical and current day automotive repair operations.

2.0 ENVIRONMENTAL SUBSURFACE ASSESSMENT

The reporting and field activities for this Environmental Subsurface Assessment were performed as outlined in our proposal, dated October 1, 2019, and included the following:

- Preparation of a site-specific Health and Safety Plan (HASP).
- Public and private utility locates including a ground-penetrating radar (GPR) survey.
- Advancing seven Geoprobe® (GP) direct-push exploration borings.
- Collecting soil and reconnaissance groundwater samples.
- Submitting soil and reconnaissance groundwater samples to a subcontracted laboratory for potential chemical analysis.
- Evaluating analytical results from selected samples and comparing the results to the Washington State Model Toxics Control Act (MTCA) cleanup levels (CULs) for soil and groundwater.
- Preparing this report summarizing the results of the Environmental Subsurface Assessment.

2.1 Utility Locates

Prior to subsurface field activities, AESI notified the Washington One-Call Public Utility service for locating underground utilities on the Site. On October 10, 2019, Applied Professional Services (APS) conducted a GPR survey across the Site, including the presumed area of the former UST, to potentially locate the UST and/or associated piping. No UST or piping was identified during the GPR survey. APS conducted a private utility locate on October 12, 2019.

APS identified one unknown line in the presumed area of the former UST. The line terminated approximately 50 feet south from the northern limits of the service building and extended past the property limits to the north.

2.2 Soil Sample Collection

Direct-push exploration borings GP-1 through GP-7 were completed on October 12, 2019. Geoprobe® direct-push drilling services were provided by Cascade Drilling, LP, of Woodinville, Washington. An AESI field representative observed drilling activities and collected soil and reconnaissance groundwater samples for potential laboratory analysis. The approximate locations of the exploration borings completed for this Environmental Subsurface Assessment are shown on Figure 2.

Direct-push borings were completed using a track-mounted 7822DT Direct Push and Rotary Rig utilized for Geoprobe® direct-push drilling. During the drilling process, the Geoprobe sampler was lined with disposable plastic sleeves that were removed and opened to reveal the sample for each 5-foot driven interval. Soil samples were collected directly from the plastic sleeve using stainless steel spoons and/or Environmental Protection Agency (EPA) Method 5035A sampling kits. Soil samples were placed directly into laboratory-prepared sample containers and labeled with unique sample identification. Sample containers were placed in a chilled cooler immediately following sampling, and subsequently transported to the analytical laboratory under standard chain-of-custody protocols. One soil sample was analyzed from each boring for GRPH by Northwest Total Petroleum Hydrocarbons (NWTPH) Method NWTPH-Gx, DRPH and ORPH by NWTPH Method NWTPH-Dx, VOCs by EPA Method 8260C, and RCRA-8 metals using EPA Method 6020B. Drilling equipment was cleaned using an Alconox® wash and potable water rinse prior to drilling and between each boring location. Sampling equipment was cleaned using an Alconox® wash and potable water rinse prior to collecting each soil sample from the plastic sleeve.

The soil samples were observed and logged by an AESI representative in general accordance with the Unified Soil Classification System (USCS). Soil samples were screened in the field for potential evidence of contamination. Field-screening methods included visual observations, notations of odor, and obtaining headspace vapor measurements using a photoionization detector (PID) to detect the presence of VOCs. The USCS symbol, visual, and olfactory notations for the samples, and PID readings were recorded on boring log forms, which are provided in Appendix A.

2.3 Reconnaissance Groundwater Sample Collection

Reconnaissance groundwater samples were collected from exploration borings GP-1 through GP-7 at the time of drilling using a peristaltic pump and low-density polyethylene tubing. The reconnaissance groundwater samples were collected by placing a 5-foot to 10-foot section of 1-inch-diameter polyvinyl chloride well screen below the depth of the first encountered shallow

groundwater. Prior to sample collection, groundwater was purged from the temporary wells through 0.25-inch-diameter tubing using a peristatic pump. The temporary wells were purged until the groundwater appeared less turbid or a minimum of 0.5 gallons of water was removed. The temporary well screens and tubing were discarded as non-hazardous waste after collecting each reconnaissance groundwater sample.

Following the temporary well purging, reconnaissance groundwater samples were collected from the pump outlet tubing and placed directly into laboratory-prepared glass sample containers and labeled with unique sample identification. The groundwater was observed to be light brown and slightly turbid at the time of sample collection. No odor or sheen was observed. Sample containers were placed in a chilled cooler immediately following sampling, and subsequently transported to the analytical laboratory under standard chain-of-custody protocols. Reconnaissance groundwater samples were analyzed for GPRH by NWTPH Method NWTPH-Gx, DRPH and ORPH by NWTPH Method NWTPH-Dx, VOCs by EPA Method 8260C, and RCRA-8 metals (total metals) by EPA Method 6020B.

2.4 Waste Management

Soil cuttings and equipment decontamination and purge water generated during the October 12, 2019 field activities were placed in Department of Transportation (DOT)-approved, 16-gallon steel drums, closed, and appropriately labeled with project-specific information and initial accumulation date. Two drums containing soil cuttings and one drum containing purge/decontamination water were accumulated during field activities and remain at a designated off-site property owned by the City of Bellevue located off 124th Avenue NE and NE Spring Boulevard. AESI can provide recommendations for waste profiling and proper transport and disposal for the investigation-derived waste upon request.

3.0 RESULTS

This section summarizes observations of the subsurface conditions at the Site and the results for soil and reconnaissance groundwater samples analyzed for this Environmental Subsurface Assessment. The analytical results for TPH, VOCs, and RCRA-8 metals in soil are summarized in Tables 1 through 3, respectively. The analytical results for TPH, VOCs, and RCRA-8 metals in reconnaissance groundwater are summarized in Tables 4 through 6, respectively. Analytical laboratory reports and sample chain-of-custody forms are provided in Appendix B.

The assessment and cleanup of contaminated sites in Washington State is regulated by the MTCA cleanup regulation, *Washington Administrative Code* (WAC) 173-340. Concentrations of COCs from the selected soil samples and the reconnaissance groundwater samples analyzed were evaluated with respect to MTCA Method A CULs for unrestricted land use. A summary of field observations and analytical results for soil and reconnaissance groundwater samples analyzed is provided below.

3.1 Soil

Subsurface conditions at the Site were based upon conditions observed in the field and explorations completed for this study. Due to the nature and limitations of subsurface exploratory work, extrapolation of subsurface conditions between field explorations is necessary. Differing subsurface conditions may be present between exploration locations as a result of natural deposition or the alteration of topography by past grading and/or filling. Soils interpreted to be Vashon recessional outwash, Vashon advance outwash, and pre-Fraser undifferentiated deposits were encountered at the Site, capped by existing fill material, as indicated on the exploration boring logs.

The existing fill was observed beneath surficial hardscape (asphalt paving/concrete slab) and ranged in thickness from approximately 1.5 to 5.5 feet in six of the seven exploration borings. No fill was observed in GP-1. The fill material generally consisted of fine to medium sands with variable amounts of silt and gravel.

Native deposits were encountered below the fill materials. Vashon recessional outwash was observed below the fill to a depth of 4- to 5-feet below ground surface (bgs) in exploration borings GP-1 through GP-3. These deposits consisted of fine to medium sand with trace silt and occasional gravel. Vashon advance outwash was observed underlying the Vashon recessional outwash in exploration borings GP-1 through GP-3 and underlying the fill in exploration borings GP-4 through GP-7. The Vashon advance outwash ranged from 1.5 to 11 feet thick and generally consisted of fine to medium sand with variable silt content and occasional silt lenses. The older pre-Fraser undifferentiated deposits were encountered below the Vashon advance outwash deposits to the total depth explored in exploration borings GP-1 through GP-7. The pre-Fraser undifferentiated deposits consisted of silt with varying amounts of fine to medium sand and ranged from laminated to massive in structure.

A total of seven soil samples were collected between 7 and 10 feet bgs and selected for laboratory analysis for TPH, VOCs, and RCRA-8 Metals. Concentrations of TPH and VOCs were not detected above the laboratory reporting limits in soil samples analyzed from GP-1 through GP-7. Four of the RCRA-8 metals, arsenic, barium, chromium, and lead, were detected at concentrations above laboratory reporting limits but below MTCA Method A CULs for soil in soil samples with the exception of arsenic in GP-3 and lead in GP-7, which were not detected above the laboratory reporting limits. Four of the RCRA-8 metals, cadmium, mercury, selenium, and silver, did not have concentrations detected above laboratory reporting limits in soil samples from GP-1 through GP-7.

3.2 Reconnaissance Groundwater

Groundwater was observed within the Vashon advance outwash at depths ranging from approximately 5 to 10 feet bgs at the time of drilling in borings GP-1 through GP-7. Groundwater was measured at depths ranging from approximately 5 to 7 feet bgs in borings

GP-1 through GP-7 using an electronic water level indicator prior to collecting reconnaissance groundwater samples.

Seven reconnaissance groundwater samples were collected for laboratory analysis of TPH, VOCs, and total (RCRA-8) metals from borings GP-1 through GP-7. The reconnaissance groundwater sample collected from GP-2 detected DRPH at a concentration of 110 micrograms per Liter (µg/L), which is below the MTCA Method A CUL of 500 µg/L. This sample was flagged by the laboratory for their chromatographic pattern not representing the fuel standard used for quantitation. Concentrations of DRPH were not detected above the laboratory reporting limit from the reconnaissance groundwater samples collected from GP-1 and GP-3 through GP-7. Concentrations of GRPH, ORPH, and VOCs were not detected above the laboratory reporting limits from the reconnaissance groundwater samples collected from GP-1 through GP-7.

Total arsenic was detected at concentrations ranging from 5.58 to 45.7 µg/L in the reconnaissance groundwater samples collected from borings GP-1 through GP-7, which exceeds the MTCA Method A CUL of 5 µg/L. Total chromium was detected at concentrations ranging from 81.3 to 256 µg/L in the reconnaissance groundwater samples collected from borings GP-1, GP-2, and GP-4 through GP-7, which exceeds the MTCA Method A CUL of 50 µg/L. Total lead was detected at concentrations ranging from 23.1 to 49.6 µg/L in the reconnaissance groundwater samples collected from borings GP-1, GP-2, and GP-4 through GP-6, which exceeds the MTCA Method A CUL of 15 µg/L. Total barium was detected at concentrations ranging from 144 to 2,280 µg/L in the reconnaissance groundwater samples collected from borings GP-1 through GP-7, which is below the MTCA Method A CUL of 2,500 µg/L. Total cadmium was detected at concentrations of 1.21 µg/L, 1.27 µg/L, and 1.25 µg/L in the reconnaissance groundwater samples collected from borings GP-1, GP-5, and GP-6, respectively, which are below the MTCA Method A CUL of 5 µg/L.

4.0 CONCLUSIONS

The results from the Environmental Subsurface Assessment indicate the following:

- Field-screening methods performed by AESI did not indicate impacts to soil or groundwater at the seven boring locations during the field program.

- Concentrations of DRPH, ORPH, GRPH, VOCs, and RCRA 8 Metals were not detected in analyzed soil samples from GP-1 through GP-7 above the applicable MTCA CULs, indicating that soil in the vicinity of the borings does not require cleanup for these COCs.

- Concentrations of total metals including arsenic, chromium, and lead were detected in the reconnaissance groundwater samples exceeding the MTCA Method A CUL. The groundwater samples were grab samples, and appeared turbid at the time of collection, which indicates suspended particles. The metals exceedances are potentially from the collection methods, and do not resemble the dissolved phase (drinking water quality).

The metals exceeded in groundwater were observed in native soil at concentrations that do not exceed CULs and it is likely the detections in the reconnaissance groundwater are background concentrations.

- One reconnaissance groundwater sample (GP-2-GW) had detectable concentrations of DRPH below the applicable MTCA CULs. Boring GP-2 is located east of the service building in the reported vicinity of the former UST. These results indicate a limited release of DRPH has likely occurred to the subsurface in the vicinity of GP-2; however, the extent of petroleum-impacted groundwater appears to be localized in the vicinity of boring GP-2. In addition, the remaining reconnaissance groundwater samples did not detect concentrations of DRPH, ORPH, GRPH, and VOCs above the applicable MTCA CULs, indicating the groundwater at the Site does not require cleanup at this time.

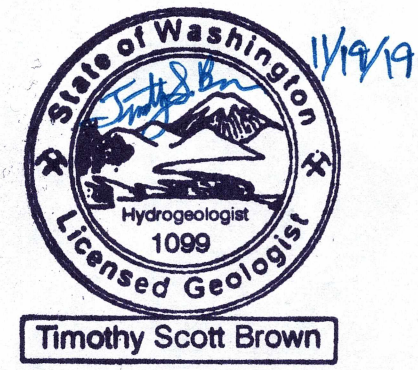
5.0 LIMITATIONS

This report has been prepared for the exclusive use of the City of Bellevue and their agents, for specific application to this project. The results contained in this report are based upon the information acquired during this assessment. Within the limitations of scope, schedule, and budget, our services have been performed in accordance with generally accepted environmental industry practices in effect in this area at the time our report was prepared. No other warranty, express or implied, is made.

6.0 CLOSURE

We are pleased to have had this opportunity to work with you and are confident that this report will aid in the evaluation of the Site. Should you have any questions, please do not hesitate to call.

Sincerely,
ASSOCIATED EARTH SCIENCES, INC.
Kirkland, Washington



Kellie M. Andrews, G.I.T.
Senior Staff Geologist

Timothy S. Brown, L.Hg.
Associate Hydrogeologist

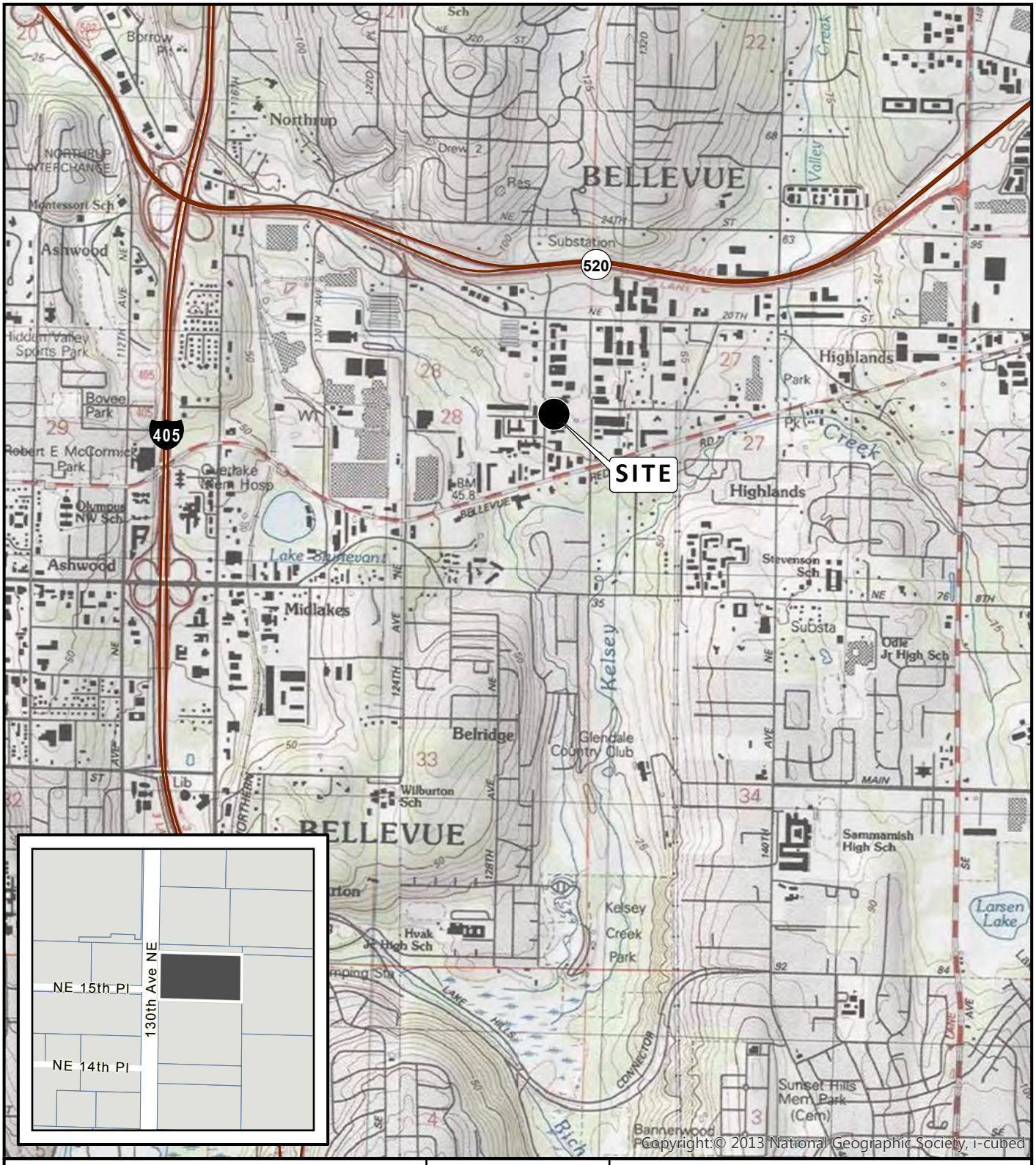
7.0 REFERENCES

Parametrix, 2016, 130th Avenue NE project - Hazardous materials technical report: October 25, 2016.

Shannon & Wilson, Inc., 2015, Phase I environmental site assessment Sound Transit ROW #EL 295 Kelly's Autobody 1500 130th Avenue NE Bellevue, Washington: June 16, 2015.

Shannon & Wilson, Inc., 2016, Phase II environmental site assessment Sound Transit Right-of-Way EL 295 Kelly Autobody property 1500 130th Avenue NE Bellevue, Washington: June 16, 2015.

FIGURES



DATA SOURCES / REFERENCES:
USGS: 7.5' SERIES TOPOGRAPHIC MAPS, ESRI/I-CUBED/NGS 2013
KING CO: STREETS, CITY LIMITS 1/19, PARCELS 4/19
LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE

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0 1000 2000
FEET

NOTE: BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION

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VICINITY MAP

KELLY'S AUTO BODY
BELLEVUE, WASHINGTON

PROJ NO.	DATE:	FIGURE:
20190396V001	11/19	1

Document Path: G:\GIS_Projects\aaY2019\190396 Kelly's Autobody\aprx_mxd\20190396V001 F1 VM_Kelly'sAB.aprx

LEGEND:

- GP — GEOPROBE BORING
- SITE BOUNDARY
- UNKNOWN UTILITY LINE IDENTIFIED BY PRIVATE UTILITY LOCATOR

NOTE: LOCATION AND DISTANCES SHOWN ARE APPROXIMATE.

NOTES:
1. BASE MAP REFERENCE: KING COUNTY PICTOMETRY 2017

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SITE AND EXPLORATION PLAN

KELLY'S AUTO BODY
BELLEVUE, WASHINGTON

PROJ NO.	DATE:	FIGURE:
20190396V001	11/19	2

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TABLES

Table 1
Summary of Soil Analytical Results
Volatile Organic Compounds and Total Petroleum Hydrocarbons
Kelly's Auto Body
Bellevue, Washington

Exploration / Well Location	Sample ID	Sample Date	Depth (feet)	Analytical Results (mg/kg)							
				Volatile Organic Compounds [1]					Total Petroleum Hydrocarbons [2]		
				Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	Gasoline Range Hydrocarbons	Diesel Range Hydrocarbons	Heavy Oil Range Hydrocarbons
GP-1	GP-1-10	10/12/2019	10	< 0.03	< 0.05	< 0.05	< 0.1	< 0.05	< 5	< 50	< 250
GP-2	GP-2-7.5	10/12/2019	7.5	< 0.03	< 0.05	< 0.05	< 0.1	< 0.05	< 5	< 50	< 250
GP-3	GP-3-10	10/12/2019	10	< 0.03	< 0.05	< 0.05	< 0.1	< 0.05	< 5	< 50	< 250
GP-4	GP-4-8	10/12/2019	8	< 0.03	< 0.05	< 0.05	< 0.1	< 0.05	< 5	< 50	< 250
GP-5	GP-5-7	10/12/2019	7	< 0.03	< 0.05	< 0.05	< 0.1	< 0.05	< 5	< 50	< 250
GP-6	GP-6-10	10/12/2019	10	< 0.03	< 0.05	< 0.05	< 0.1	< 0.05	< 5	< 50	< 250
GP-7	GP-7-10	10/12/2019	10	< 0.03	< 0.05	< 0.05	< 0.1	< 0.05	< 5	< 50	< 250
Model Toxics Control Act Cleanup Level [3]				0.03	7	6	9	5	30/100 [4]	2,000	2,000

NOTES:

(1) Samples were analyzed by Friedman & Bruya, Inc. of Seattle, Washington using EPA Method 8260C.

(2) Samples were analyzed by Friedman & Bruya, Inc. of Seattle, Washington using NWTPH Methods NWTPH-Gx and NWTPH-Dx.

(3) MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Uses.

(4) MTCA Method A Cleanup Level is 30 mg/kg when benzene is detected and 100 mg/kg when benzene is not detected.

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

EPA = U.S. Environmental Protection Agency

mg/kg = milligrams per kilogram

MTCA = Washingston State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

WAC = Washington Administrative Code

Table 2
Summary of Soil Analytical Results
Volatile Organic Compounds
Kelly's Auto Body
Bellevue, Washington

Analyte	Exploration No.	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	MTCA Cleanup Level[1]
	Depth (ft)	10	7.5	10	8	7	10	10	
	Sample Date	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019	
	Sample ID	GP-1-10	GP-2-7.5	GP-3-10	GP-4-8	GP-5-7	GP-6-10	GP-7-10	
Volatile Organic Compounds	**Unit**								
Dichlorodifluoromethane	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	16,000 (3)
Chloromethane	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NE
Vinyl chloride	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.67 (4)
Bromomethane	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	110 (3)
Chloroethane	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NE
Trichlorofluoromethane	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	24,000 (3)
Acetone	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	72,000 (3)
1,1-Dichloroethene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	4,000 (3)
Hexane	mg/kg	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	4,800 (3)
Methylene chloride	mg/kg	**< 0.5**	**< 0.5**	**< 0.5**	**< 0.5**	**< 0.5**	**< 0.5**	**< 0.5**	0.02
Methyl t-butyl ether (MTBE)	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.1
trans-1,2-Dichloroethene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	1,600 (3)
1,1-Dichloroethane	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	180 (4)
2,2-Dichloropropane	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	NE
cis-1,2-Dichloroethene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	160 (3)
Chloroform	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	32 (4)
2-Butanone (MEK)	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	48,000 (3)
1,2-Dichloroethane (EDC)	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	11 (4)
1,1,1-Trichloroethane	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	2
1,1-Dichloropropene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	NE
Carbon tetrachloride	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	14 (4)
Benzene	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	0.03
Trichloroethene	mg/kg	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.03
1,2-Dichloropropane	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	27 (4)
Bromodichloromethane	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	16 (4)
Dibromomethane	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	800 (3)
4-Methyl-2-pentanone	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	6,400 (3)
cis-1,3-Dichloropropene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	NE
Toluene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	7
trans-1,3-Dichloropropene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	10 (4)
1,1,2-Trichloroethane	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	18 (4)
2-Hexanone	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	400 (3)
1,3-Dichloropropane	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	NE
Tetrachloroethene	mg/kg	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	0.05
Dibromochloromethane	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	12 (4)
1,2-Dibromoethane (EDB)	mg/kg	**< 0.05**	**< 0.05**	**< 0.05**	**< 0.05**	**< 0.05**	**< 0.05**	**< 0.05**	0.005
Chlorobenzene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	1,600 (3)
Ethylbenzene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	6
1,1,1,2-Tetrachloroethane	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	38 (4)

Table 2
Summary of Soil Analytical Results
Volatile Organic Compounds
Kelly's Auto Body
Bellevue, Washington

Analyte	Exploration No.	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	MTCA Cleanup Level[1]
	Depth (ft)	10	7.5	10	8	7	10	10	
	Sample Date	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019	
	Sample ID	GP-1-10	GP-2-7.5	GP-3-10	GP-4-8	GP-5-7	GP-6-10	GP-7-10	
Volatile Organic Compounds	**Unit**								
m,p-Xylene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	16,000 (3)
o-Xylene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	16,000 (3)
Styrene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	16,000 (3)
Isopropylbenzene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	8,000 (3)
Bromoform	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	130 (4)
n-Propylbenzene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	8,000 (3)
Bromobenzene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	640 (3)
1,3,5-Trimethylbenzene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	800 (4)
1,1,2,2-Tetrachloroethane	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	5 (4)
1,2,3-Trichloropropane	mg/kg	**< 0.05**	**< 0.05**	**< 0.05**	**< 0.05**	**< 0.05**	**< 0.05**	**< 0.05**	0.033 (4)
2-Chlorotoluene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	1,600 (3)
4-Chlorotoluene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	NE
tert-Butylbenzene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	8,000 (3)
1,2,4-Trimethylbenzene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	800 (3)
sec-Butylbenzene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	8,000 (3)
p-Isopropyltoluene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	NE
1,3-Dichlorobenzene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	NE
1,4-Dichlorobenzene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	190 (4)
1,2-Dichlorobenzene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	7,200 (3)
1,2-Dibromo-3-chloropropane	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.3 (4)
1,2,4-Trichlorobenzene	mg/kg	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	34 (4)
Hexachlorobutadiene	mg/kg	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	13 (4)
Naphthalene	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	5
1,2,3-Trichlorobenzene	mg/kg	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	NE

Notes:

(1) Samples were analyzed by Friedman & Bruya, Inc. of Seattle, Washington using EPA Method 8260C.

(2) MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Uses.

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

(4) MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Carcinogen, Standard Formula Value, CLARC Website <http://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>.

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

EPA = U.S. Environmental Protection Agency

CLARC = Cleanup Levels and Risk Calculation

mg/kg = milligrams per kilogram

Table 3
Summary of Soil Analytical Results
RCRA 8 Metals
Kelly's Auto Body
Bellevue, Washington

Exploration / Well Location	Sample ID	Sample Date	Depth (feet)	Analytical Results (mg/kg)							
				Heavy Metals [1]							
				Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
GP-1	GP-1-10	10/12/2019	10	2.22	39.0	< 1	9.73	2.27	< 1	< 1	< 1
GP-2	GP-2-7.5	10/12/2019	7.5	4.63	40.9	< 1	6.54	1.94	< 1	< 1	< 1
GP-3	GP-3-10	10/12/2019	10	< 1	31.9	< 1	8.65	1.91	< 1	< 1	< 1
GP-4	GP-4-8	10/12/2019	8	2.66	43.6	< 1	7.83	2.39	< 1	< 1	< 1
GP-5	GP-5-7	10/12/2019	7	3.44	28.5	< 1	13.4	1.31	< 1	< 1	< 1
GP-6	GP-6-10	10/12/2019	10	1.69	26.8	< 1	15.0	1.74	< 1	< 1	< 1
GP-7	GP-7-10	10/12/2019	10	5.03	27.4	< 1	11.4	< 1	< 1	< 1	< 1
Model Toxics Control Act Cleanup Level [2]				20.0	16,000 [3]	2.00	2,000	250	2.00	5.20 [3]	400 [3]

NOTES:

(1) Samples were analyzed by Friedman & Bruya, Inc. of Seattle, Washington using EPA Method 6020B.

(2) MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Uses.

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

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

EPA = U.S. Environmental Protection Agency

mg/kg = milligrams per kilogram

MTCA = Washingston State Model Toxics Control Act

RCRA = Resource Conservation and Recovery Act

WAC = Washington Administrative Code

Table 4
Summary of Groundwater Analytical Results
Volatile Organic Compounds and Total Petroleum Hydrocarbons
Kelly's Auto Body
Bellevue, Washington

Exploration / Well Location	Sample ID	Sample Date	Screen Depth (feet)	Analytical Results (µg/L)						
				Volatile Organic Compounds [1]				Total Petroleum Hydrocarbons [2]		
				Benzene	Toluene	Ethylbenzene	Total Xylenes	Gasoline Range Hydrocarbons	Diesel Range Hydrocarbons	Heavy Oil Range Hydrocarbons
GP-1	GP-1-GW	10/12/2019	10-15	< 0.35	< 1	< 1	< 2	< 100	< 60	< 300
GP-2	GP-2-GW	10/12/2019	5-15	< 0.35	< 1	< 1	< 2	< 100	110 x	< 250
GP-3	GP-3-GW	10/12/2019	10-15	< 0.35	< 1	< 1	< 2	< 100	< 50	< 250
GP-4	GP-4-GW	10/12/2019	7-12	< 0.35	< 1	< 1	< 2	< 100	< 50	< 250
GP-5	GP-5-GW	10/12/2019	7-12	< 0.35	< 1	< 1	< 2	< 100	< 50	< 250
GP-6	GP-6-GW	10/12/2019	8-13	< 0.35	< 1	< 1	< 2	< 100	< 60	< 300
GP-7	GP-7-GW	10/12/2019	10-15	< 0.35	< 1	< 1	< 2	< 100	< 50	< 250
Model Toxics Control Act Cleanup Level [3]				5	1,000	700	1,000	800/1,000 [4]	500	500

NOTES:

(1) Samples were analyzed by Friedman & Bruya, Inc. of Seattle, Washington using EPA Method 8260C.

(2) Samples were analyzed by Friedman & Bruya, Inc. of Seattle, Washington using NWTPH Methods NWTPH-Gx and NWTPH-Dx.

(3) MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Levels for Ground Water.

(4) MTCA Method A Cleanup Level is 800 µg/L when benzene is detected and 1,000 µg/L when benzene is not detected.

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

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

EPA = U.S. Environmental Protection Agency

MTCA = Washingston State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbons

µg/L = micrograms per Liter

WAC = Washington Administrative Code

Table 5
Summary of Groundwater Analytical Results
Volatile Organic Compounds
Kelly's Auto Body
Bellevue, Washington

Analyte [1]	Exploration No.	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	MTCA Cleanup Level[2]
	Screen Depth (ft)	10-15	5-15	10-15	7-12	7-12	8-13	10-15	
	Sample Date	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019	
	Sample ID	GP-1-GW	GP-2-GW	GP-3-GW	GP-4-GW	GP-5-GW	GP-6-GW	GP-7-GW	
Volatile Organic Compounds	**Unit**								
Dichlorodifluoromethane	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1,600 [3]
1,3-Dichloropropane	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NE
Chloromethane	µg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NE
Tetrachloroethene (PCE)	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5
Vinyl chloride	µg/L	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.2
Dibromochloromethane	µg/L	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	0.52 [4]
Bromomethane	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	11 [3]
1,2-Dibromoethane (EDB)	µg/L	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	0.01
Chloroethane	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NE
Chlorobenzene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	160 [3]
Trichlorofluoromethane	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2,400 [3]
Ethylbenzene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	700
Acetone	µg/L	< 50	< 50	< 50	< 50	< 50	< 50	< 50	7,200 [3]
1,1,1,2-Tetrachloroethane	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.7 [4]
1,1-Dichloroethene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	400 [3]
m, p-Xylene	µg/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	1,600 [3]
Hexane	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	480 [3]
o-Xylene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1,600 [3]
Methylene chloride	µg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	5
Styrene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1,600 [3]
Methyl t-butyl ether	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	20
Isopropylbenzene (Cumene)	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	800 [3]
trans-1,2-Dichloroethene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	160 [3]
Bromoform	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5.5 [4]
1,1-Dichloroethane	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	8 [4]
n-Propylbenzene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	800 [4]
2,2-Dichloropropane	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NE
Bromobenzene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	64 [3]
cis-1,2-Dichloroethene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	16 [3]
1,3,5-Trimethylbenzene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	80 [3]
Chloroform	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.4 [4]
1,1,2,2-Tetrachloroethane	µg/L	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	0.22 [4]
2-Butanone	µg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	4,800 [3]
1,2,3-Trichloropropane	µg/L	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	0.0015 [4]
1,2-Dichloroethane	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5
2-Chlorotoluene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	160 [3]
1,1,1-Trichloroethane	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	200
4-Chlorotoluene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NE
1,1-Dichloropropene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NE
tert-Butylbenzene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	800 [3]
Carbon tetrachloride	µg/L	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	0.63 [4]
1,2,4-Trimethylbenzene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	80
Benzene	µg/L	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	< 0.35	5
sec-Butylbenzene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	800 [3]
Trichloroethene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5
p-Isopropyltoluene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NE

Table 5
Summary of Groundwater Analytical Results
Volatile Organic Compounds
Kelly's Auto Body
Bellevue, Washington

1,2-Dichloropropane	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.2 (4)
1,3-Dichlorobenzene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NE
Dichlorobromomethane	µg/L	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	0.710 (4)
1,4-Dichlorobenzene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	8.1 (4)
Dibromomethane	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	80 (3)
1,2-Dichlorobenzene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	720 (3)
Methyl isobutyl ketone	µg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	640 (3)
1,2-Dibromo-3-chloropropane	µg/L	**< 10**	**< 10**	**< 10**	**< 10**	**< 10**	**< 10**	**< 10**	0.055 (4)
cis-1,3-Dichloropropene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NE
1,2,4-Trichlorobenzene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.5 (4)
Toluene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1,000
Hexachlorobutadiene	µg/L	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	0.56 (4)
trans-1,3-Dichloropropene	µg/L	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	0.44 (4)
Naphthalene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	160
1,1,2-Trichloroethane	µg/L	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	**< 1**	0.77 (4)
1,2,3-Trichlorobenzene	µg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NE
2-Hexanone	µg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	40 (3)

NOTES:

(1) Samples were analyzed by Friedman & Bruya, Inc. of Seattle, Washington using EPA Method 8260C.
(2) MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Levels for Ground Water.
(3) MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Ground Water, Method B, Non-Carcinogen, Standard Formula Value
(4) MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Ground Water, Method B, Carcinogen, Standard Formula Value

Bold = concentration below laboratory detection limit, but exceeding the MTCA cleanup level for groundwater.
< = not detected at concentration exceeding the laboratory practical quantitation limit.

CLARC = Cleanup Levels and Risk Calculation
EPA = U.S. Environmental Protection Agency
MTCA = Washingston State Model Toxics Control Act
NE = not established.
µg/L = micrograms per Liter
WAC = Washington Administrative Code

Table 6
Summary of Groundwater Analytical Results
RCRA 8 Metals
Kelly's Auto Body
Bellevue, Washington

Exploration / Well Location	Sample ID	Sample Date	Screen Depth (feet)	Analytical Results (µg/L) Total Metals [1] Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
GP-1	GP-1-GW	10/12/2019	10-15	**45.7**	2,280	1.21	**256**	**49.6**	< 1	< 1	< 1
GP-2	GP-2-GW	10/12/2019	5-15	**27.3**	1,170	< 1	**172**	**34.3**	< 1	< 1	< 1
GP-3	GP-3-GW	10/12/2019	10-15	**5.58**	144	< 1	21.4	11.8	< 1	< 1	< 1
GP-4	GP-4-GW	10/12/2019	7-12	**22.4**	509	< 1	**114**	**23.1**	< 1	< 1	< 1
GP-5	GP-5-GW	10/12/2019	7-12	**36.1**	926	1.27	**253**	**36.4**	< 1	< 1	< 1
GP-6	GP-6-GW	10/12/2019	8-13	**17.8**	928	1.25	**218**	**42.4**	< 1	< 1	< 1
GP-7	GP-7-GW	10/12/2019	10-15	**25.4**	1,170	< 1	**81.3**	15.0	< 1	< 1	< 1
Model Toxics Control Act Cleanup Level [2]				5	3,200 [3]	5	50	15	2	80 [3]	80 [3]

NOTES:

(1) Samples were analyzed by Friedman & Bruya, Inc. of Seattle, Washington usign EPA Method 6020B.

(2) MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Cleanup Levels for Ground Water.

(3) MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Ground Water, Method B, Non-Carcinogen, Standard Formula Value.

Red = concentration exceeds MTCA cleanup level.

< = not detected at concentration exceeding the laboratory practical quantitation limit.

CLARC = Cleanup Levels and Risk Calculation

MTCA = Washingston State Model Toxics Control Act

RCRA = Resource Conservation and Recovery Act

µg/L = micrograms per Liter

WAC = Washington Administrative Code

APPENDIX A

Exploration Logs

associated earth sciences incorporated

Exploration Boring

Project Number	Exploration Number	Sheet
190396V001	GP-1	1 of 1

Project Name	Kelly's Auto Body	Ground Surface Elevation (ft)	~173
Location	Bellevue, WA	Datum	NAVD 88
Driller/Equipment	Cascade Drilling / Geoprobe Direct Push	Date Start/Finish	10/12/19,10/12/19
Hammer Weight/Drop	N/A	Hole Diameter (in)	2

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot (10 20 30 40)	Other Tests
				Concrete - 6 inches					
				Vashon Recessional Outwash					
				Slightly moist, orangish brown, fine to medium SAND, some to trace silt; occasional gravel; slightly laminated (SP).					
		S-1		**Vashon Advance Outwash**					
5				Moist, greenish gray, fine to medium SAND, trace silt; massive (SP). **GP-1-4 (0.0 PPM)** Slightly moist, orangish brown, fine to medium SAND, some silt; stratified (SP-SM). **GP-1-GW**		▽			X
		S-2		Lens (6 inches thick) of oxidized light brown, laminated silt with trace organics. Slightly moist to moist, grayish brown, medium SAND, some fine sand, trace silt; faintly stratified (SP).					
10				Becomes moist to very moist. **GP-1-10 (0.0 PPM)** Saturated at top of sampler.		▼			X
		S-3		**Pre-Fraser Undifferentiated Deposits**					
				Slightly moist, light brown to gray, SILT, trace sand; massive to faintly laminated (ML). **GP-1-12.5 (0.0 PPM)**					
15				As above; some sand (ML).					
		S-4		Slightly moist to moist, dark gray, sandy, SILT grading to silty, SAND; occasional organics (dark brown to black material); massive to faintly laminated (ML/SM).					
				Becomes fine to medium SAND, some silt (SP-SM). **GP-1-19 (0.0 PPM)**					
20				Bottom of exploration boring at 19 feet Hand auger equipment used to advance 0 to 2.5 feet Groundwater encountered at ~9.5 feet at time of drilling Groundwater measured at ~5.15 feet in temporary well post drilling with water level indicator Bold = Environmental sample ID (### ppm) = Photoionization detector measurement in parts per million Temporary well screen placed from 10 to 15 feet X = Environmental sample submitted for chemical analysis					

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample
- M - Moisture
- ▽ Water Level ()
- ▼ Water Level at time of drilling (ATD)

Logged by: KMA
Approved by: TSB

AESIBOR 190396V001.GPJ November 15, 2019

associated earth sciences incorporated

Exploration Boring

Project Number	Exploration Number	Sheet
190396V001	GP-2	1 of 1

Project Name	Kelly's Auto Body	Ground Surface Elevation (ft)	~173
Location	Bellevue, WA	Datum	NAVD 88
Driller/Equipment	Cascade Drilling / Geoprobe Direct Push	Date Start/Finish	10/12/19,10/12/19
Hammer Weight/Drop	N/A	Hole Diameter (in)	2

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot (10 20 30 40)	Other Tests
				Concrete - 6 inches					
				Fill ? / Vashon Recessional Outwash ? Slightly moist, orangish brown to brown, fine to medium SAND, trace silt; occasional gravel; disturbed (SP).					
5				**Vashon Advance Outwash** Moist to very moist, grayish brown to light brown, very silty, fine SAND (SM). **GP-2-GW**		▽			X
		S-1		Wet, grayish brown to light brown, medium SAND, some fine sand, trace silt; faintly stratified (SP). **GP-2-7.5 (0.0 ppm)**		▼			X
10									
		S-2		**Pre-Fraser Undifferentiated Deposits** Becomes fine SAND; stratified. **GP-2-12 (0.0 ppm)** Slightly moist, gray to dark brownish gray, fine sandy, SILT, trace organics; faintly stratified (ML). Oxidized zone at 13 feet. **GP-2-15 (0.0 ppm)**					
15				Bottom of exploration boring at 15 feet Hand auger equipment used to advance 0 to 5 feet Groundwater encountered at ~7 feet at time of drilling Groundwater measured at ~5.15 feet in temporary well post drilling with water level indicator Bold = Environmental sample ID (### ppm) = Photoionization detector measurement in parts per million Temporary well screen placed from 5 to 15 feet X = Environmental sample submitted for chemical analysis					
20									

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample

M - Moisture

▽ Water Level ()

▼ Water Level at time of drilling (ATD)

Logged by: KMA

Approved by: TSB

AESIBOR 190396V001.GPJ November 15, 2019

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Exploration Boring

Project Number	Exploration Number	Sheet
190396V001	GP-3	1 of 1

Project Name	Kelly's Auto Body	Ground Surface Elevation (ft)	~173
Location	Bellevue, WA	Datum	NAVD 88
Driller/Equipment	Cascade Drilling / Geoprobe Direct Push	Date Start/Finish	10/12/19,10/12/19
Hammer Weight/Drop	N/A	Hole Diameter (in)	2

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot (10 20 30 40)	Other Tests
				Concrete - 6 inches					
				Fill ? / Vashon Recessional Outwash ? Slightly moist, orangish brown to brown, fine to medium SAND, trace silt; occasional gravel; disturbed (SP).					
5				**Vashon Advance Outwash** Wet, light brown, fine to medium SAND, trace silt; occasional gravel (SP). **GP-3-5 (0.0 ppm)**		▼			
				Pre-Fraser Undifferentiated Deposits Lens (6 inches thick) of slightly moist, dark gray, silt with trace organics (rootlets); massive.					
		S-1		Wet, gray, medium SAND, some fine sand, trace silt; massive (SP). **GP-3-GW**					X
10				**GP-3-10 (0.0 ppm)**					X
		S-2		Grades to purple-dark gray.					
				As above; becomes silty, fine to medium SAND (SM). **GP-3-15 (0.0 ppm)**					
15				Bottom of exploration boring at 15 feet Hand auger equipment used to advance 0 to 5 feet Groundwater encountered at ~5.5 feet at time of drilling Groundwater measured at ~6 feet in temporary well post drilling with water level indicator Bold = Environmental sample ID (### ppm) = Photoionization detector measurement in parts per million Temporary well screen placed from 5 to 10 feet X = Environmental sample submitted for chemical analysis					
20									

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample

M - Moisture

▽ Water Level ()

▼ Water Level at time of drilling (ATD)

Logged by: KMA

Approved by: TSB

AESIBOR 190396V001.GPJ November 15, 2019

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Exploration Boring

Project Number	Exploration Number	Sheet
190396V001	GP-4	1 of 1

Project Name	Kelly's Auto Body	Ground Surface Elevation (ft)	~173
Location	Bellevue, WA	Datum	NAVD 88
Driller/Equipment	Cascade Drilling / Geoprobe Direct Push	Date Start/Finish	10/12/19,10/12/19
Hammer Weight/Drop	N/A	Hole Diameter (in)	2

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot (10 20 30 40)	Other Tests
				Concrete - 6 inches					
				Fill Slightly moist, brown, fine to coarse SAND, trace silt; massive (SW).					
		S-1		**GP-4-5 (0.0 ppm)**		▽			
5				**Vashon Advance Outwash** Lens (8 inches thick) of slightly moist, brown to gray, SILT; massive (ML).					
		S-2		**GP-4-GW** Wet, light brown with zones of oxidation, fine SAND, some to trace silt; faintly stratified (SP). **GP-4-8 (0.0 ppm)**		▼			X X
10				Becomes fine to medium SAND.					
				Pre-Fraser Undifferentiated Deposits Moist to very moist, dark gray to purple gray, fine sandy, SILT to silty, fine SAND, trace organics; massive (ML/SM).					
		S-3		**GP-4-15 (0.0 ppm)**					
15				Bottom of exploration boring at 15 feet Groundwater encountered at ~8 feet at time of drilling Groundwater measured at ~5 feet in temporary well post drilling with water level indicator Bold = Environmental sample ID (### ppm) = Photoionization detector measurement in parts per million Temporary well screen placed from 7 to 12 feet X = Environmental sample submitted for chemical analysis					
20									

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample

M - Moisture

▽ Water Level ()

▼ Water Level at time of drilling (ATD)

Logged by: KMA

Approved by: TSB

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Exploration Boring

Project Number	Exploration Number	Sheet
190396V001	GP-5	1 of 1

Project Name	Kelly's Auto Body	Ground Surface Elevation (ft)	~173
Location	Bellevue, WA	Datum	NAVD 88
Driller/Equipment	Cascade Drilling / Geoprobe Direct Push	Date Start/Finish	10/12/19,10/12/19
Hammer Weight/Drop	N/A	Hole Diameter (in)	2

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot (10 20 30 40)	Other Tests
				Concrete - 6 inches					
				Fill					
		S-1		Slightly moist, brown, fine to coarse SAND, trace silt, trace gravel; massive (SW).					
				GP-5-5 (0.0 ppm)					
5				**Vashon Advance Outwash**		▽			
				Slightly moist, brown, fine to medium SAND, some gravel, trace silt (SP).					
				Becomes wet. **GP-5-7 (0.0 ppm)**		▼			X
				GP-5-GW					X
		S-2		Very moist to wet, brown, fine to medium SAND, trace silt; faintly stratified (SP).					
				Becomes oxidized.					
10				Poor recovery 10 to 15 feet; sampler stuck in rod.					
		S-3		**Pre-Fraser Undifferentiated Deposits**					
				Slightly moist, dark gray, fine sandy, SILT; faintly stratified (ML).					
				GP-5-15 (0.0 ppm)					
15				Bottom of exploration boring at 15 feet					
				Groundwater encountered at ~7 feet at time of drilling					
				Groundwater measured at ~5.2 feet in temporary well post drilling with water level indicator					
				Bold = Environmental sample ID					
				(### ppm) = Photoionization detector measurement in parts per million					
				Temporary well screen placed from 7 to 12 feet					
				X = Environmental sample submitted for chemical analysis					
20									

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample
- M - Moisture
- ▽ Water Level ()
- ▼ Water Level at time of drilling (ATD)

Logged by: KMA
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Exploration Boring

Project Number	Exploration Number	Sheet
190396V001	GP-6	1 of 1

Project Name	Kelly's Auto Body	Ground Surface Elevation (ft)	~173
Location	Bellevue, WA	Datum	NAVD 88
Driller/Equipment	Cascade Drilling / Geoprobe Direct Push	Date Start/Finish	10/12/19,10/12/19
Hammer Weight/Drop	N/A	Hole Diameter (in)	2

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot (10 20 30 40)	Other Tests
				Asphalt - 2 inches					
				Fill Slightly moist, gray brown, silty, fine to medium SAND, some gravel; massive (SM).					
				Vashon Advance Outwash					
		S-1		Slightly moist, light brown, medium SAND (SP).					
5				**GP-6-5 (0.0 ppm)**					
		S-2		Occasional gravel.		▽			
				GP-6-GW					X
10				Becomes very moist to wet. **GP-6-10 (0.0 ppm)** Wet at top of sampler.		▼			X
		S-3							
				Pre-Fraser Undifferentiated Deposits Moist, dark gray, medium SAND grading to fine sandy, SILT, trace organics (SP-ML).					
				GP-6-14 (0.0 ppm)					
15				Bottom of exploration boring at 14 feet Groundwater encountered at ~10 feet at time of drilling Groundwater measured at ~7.1 feet in temporary well post drilling with water level indicator Bold = Environmental sample ID (### ppm) = Photoionization detector measurement in parts per million Temporary well screen placed from 8 to 13 feet X = Environmental sample submitted for chemical analysis					
20									

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample
- M - Moisture
- ▽ Water Level ()
- ▼ Water Level at time of drilling (ATD)

Logged by: KMA
Approved by: TSB

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Exploration Boring

Project Number	Exploration Number	Sheet
190396V001	GP-7	1 of 1

Project Name	Kelly's Auto Body	Ground Surface Elevation (ft)	~172
Location	Bellevue, WA	Datum	NAVD 88
Driller/Equipment	Cascade Drilling / Geoprobe Direct Push	Date Start/Finish	10/12/19,10/12/19
Hammer Weight/Drop	N/A	Hole Diameter (in)	2

Depth (ft)	ST	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot (10 20 30 40)	Other Tests
				Asphalt - 2 inches					
				Fill Slightly moist, gray brown, silty, fine to medium SAND, some gravel; massive (SM). Slightly moist, light brown, fine to medium SAND, trace silt (SP).					
		S-1		Becomes very silty (SM).					
				Fill ? / Vashon Advance Outwash ? Slightly moist, brown, medium SAND, some fine sand, trace silt; massive (SP).					
5				**GP-7-5 (0.0 ppm)**					
		S-2				▽			
				Becomes very moist to wet and oxidized. **GP-7-10 (0.0 ppm)**		▼			X
10				**GP-7-GW**					X
				Pre-Fraser Undifferentiated Deposits Moist to very moist, dark gray, fine SAND, some silt grading to silty, fine SAND (SP-SM/SM).					
		S-3		**GP-7-13 (0.0 ppm)**					
				Becomes SILT with occasional organics (ML).					
15				Bottom of exploration boring at 15 feet					
20				Groundwater encountered at ~9.5 feet at time of drilling Groundwater measured at ~6.8 feet in temporary well post drilling with water level indicator Bold = Environmental sample ID (### ppm) = Photoionization detector measurement in parts per million Temporary well screen placed from 10 to 15 feet X = Environmental sample submitted for chemical analysis					

Sampler Type (ST):

- 2" OD Split Spoon Sampler (SPT)
- 3" OD Split Spoon Sampler (D & M)
- Grab Sample
- No Recovery
- Ring Sample
- Shelby Tube Sample
- M - Moisture
- ▽ Water Level ()
- ▼ Water Level at time of drilling (ATD)

Logged by: KMA
Approved by: TSB

AESIBOR 190396V001.GPJ November 15, 2019

APPENDIX B

Laboratory Reports and Chain-of-Custody Forms

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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Seattle, WA 98119-2029
(206) 285-8282
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October 22, 2019

Kellie Andrews, Project Manager
Associated Earth Sciences, Inc.
911 5th Avenue, Suite 100
Kirkland, WA 98033

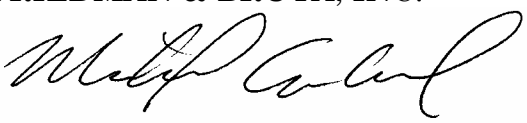
Dear Ms Andrews:

Included are the results from the testing of material submitted on October 14, 2019 from the Kelly's Auto Body 190396V001, F&BI 910283 project. There are 31 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
AE11022R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on October 14, 2019 by Friedman & Bruya, Inc. from the Associated Earth Sciences Kelly's Auto Body 190396V001, F&BI 910283 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Associated Earth Sciences
910283 -01	GP-1-GW
910283 -02	GP-2-GW
910283 -03	GP-3-GW
910283 -04	GP-4-GW
910283 -05	GP-5-GW
910283 -06	GP-6-GW
910283 -07	GP-7-GW

A 6020B internal standard failed the acceptance criteria for several soil samples. The samples were diluted and reanalyzed with acceptable results. Both data sets were reported.

All other quality control requirements were acceptable.

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910283
Date Extracted: 10/21/19
Date Analyzed: 10/21/19

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 51-134)
GP-1-GW 910283-01	<100	86
GP-2-GW 910283-02	<100	85
GP-3-GW 910283-03	<100	87
GP-4-GW 910283-04	<100	84
GP-5-GW 910283-05	<100	86
GP-6-GW 910283-06	<100	87
GP-7-GW 910283-07	<100	85
Method Blank 09-2513 MB	<100	92

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910283
Date Extracted: 10/15/19
Date Analyzed: 10/15/19

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 47-140)
GP-1-GW 910283-01 1/1.2	<60	<300	101
GP-2-GW 910283-02	110 x	<250	102
GP-3-GW 910283-03	<50	<250	95
GP-4-GW 910283-04	<50	<250	98
GP-5-GW 910283-05	<50	<250	104
GP-6-GW 910283-06 1/1.2	<60	<300	87
GP-7-GW 910283-07	<50	<250	98
Method Blank 09-2524 MB2	<50	<250	105

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-1-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	910283-01
Date Analyzed:	10/15/19	Data File:	910283-01.104
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	45.7
Barium	2,060 ve
Cadmium	1.21
Chromium	107 J
Lead	49.6
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-1-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	910283-01 x10
Date Analyzed:	10/15/19	Data File:	910283-01 x10.177
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Barium	2,280
Chromium	256

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-2-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	910283-02
Date Analyzed:	10/15/19	Data File:	910283-02.105
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	27.3
Barium	1,030 ve
Cadmium	<1
Chromium	76.5 J
Lead	34.3
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-2-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	910283-02 x10
Date Analyzed:	10/15/19	Data File:	910283-02 x10.178
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Barium	1,170
Chromium	172

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-3-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	910283-03
Date Analyzed:	10/15/19	Data File:	910283-03.106
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	5.58
Barium	144
Cadmium	<1
Chromium	21.4
Lead	11.8
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-4-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	910283-04
Date Analyzed:	10/15/19	Data File:	910283-04.107
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	22.4
Barium	509
Cadmium	<1
Chromium	56.1 J
Lead	23.1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-4-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	910283-04 x10
Date Analyzed:	10/15/19	Data File:	910283-04 x10.179
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	114

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-5-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	910283-05
Date Analyzed:	10/15/19	Data File:	910283-05.108
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	36.1
Barium	926
Cadmium	1.27
Chromium	115 J
Lead	36.4
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-5-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	910283-05 x10
Date Analyzed:	10/15/19	Data File:	910283-05 x10.180
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	253

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-6-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	910283-06
Date Analyzed:	10/15/19	Data File:	910283-06.109
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	17.8
Barium	928
Cadmium	1.25
Chromium	107 J
Lead	42.4
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-6-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	910283-06 x10
Date Analyzed:	10/15/19	Data File:	910283-06 x10.181
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Chromium	218

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-7-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	910283-07
Date Analyzed:	10/15/19	Data File:	910283-07.110
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	25.4
Barium	1,080 ve
Cadmium	<1
Chromium	42.3 J
Lead	15.0
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-7-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	910283-07 x10
Date Analyzed:	10/15/19	Data File:	910283-07 x10.182
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Barium	1,170
Chromium	81.3

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Associated Earth Sciences
Date Received:	NA	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/15/19	Lab ID:	I9-649 mb2
Date Analyzed:	10/15/19	Data File:	I9-649 mb2.090
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-1-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910283-01
Date Analyzed:	10/17/19	Data File:	101729.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS/AEN

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

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-2-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910283-02
Date Analyzed:	10/17/19	Data File:	101730.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS/AEN

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

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-3-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910283-03
Date Analyzed:	10/17/19	Data File:	101731.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	57	121
Toluene-d8	94	63	127
4-Bromofluorobenzene	91	60	133

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-4-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910283-04
Date Analyzed:	10/17/19	Data File:	101732.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS/AEN

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

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-5-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910283-05
Date Analyzed:	10/18/19	Data File:	101749.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	94	63	127
4-Bromofluorobenzene	88	60	133

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-6-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910283-06
Date Analyzed:	10/18/19	Data File:	101750.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	57	121
Toluene-d8	94	63	127
4-Bromofluorobenzene	92	60	133

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-7-GW	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910283-07
Date Analyzed:	10/18/19	Data File:	101751.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	94	63	127
4-Bromofluorobenzene	88	60	133

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Associated Earth Sciences
Date Received:	Not Applicable	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	09-2553 mb
Date Analyzed:	10/17/19	Data File:	101728.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	MS/AEN

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

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

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910283

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

Laboratory Code: 910283-01 (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	88	69-134

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910283

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	88	58-134	4

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910283

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

Laboratory Code: 910218-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<1	92	90	75-125	2
Barium	ug/L (ppb)	50	31.9	112	111	75-125	1
Cadmium	ug/L (ppb)	5	<1	102	101	75-125	1
Chromium	ug/L (ppb)	20	<1	100	100	75-125	0
Lead	ug/L (ppb)	10	<1	83	83	75-125	0
Mercury	ug/L (ppb)	5	<1	86	87	75-125	1
Selenium	ug/L (ppb)	5	<1	93	90	75-125	3
Silver	ug/L (ppb)	5	<1	73 vo	74 vo	75-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	101	80-120
Barium	ug/L (ppb)	50	100	80-120
Cadmium	ug/L (ppb)	5	99	80-120
Chromium	ug/L (ppb)	20	97	80-120
Lead	ug/L (ppb)	10	100	80-120
Mercury	ug/L (ppb)	5	94	80-120
Selenium	ug/L (ppb)	5	103	80-120
Silver	ug/L (ppb)	5	100	80-120

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910283

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

Laboratory Code: 910283-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<1	84	10-172
Chloromethane	ug/L (ppb)	50	<10	109	25-166
Vinyl chloride	ug/L (ppb)	50	<0.2	104	36-166
Bromomethane	ug/L (ppb)	50	<1	104	47-169
Chloroethane	ug/L (ppb)	50	<1	102	46-160
Trichlorofluoromethane	ug/L (ppb)	50	<1	105	44-165
Acetone	ug/L (ppb)	250	<50	83	10-182
1,1-Dichloroethene	ug/L (ppb)	50	<1	100	60-136
Hexane	ug/L (ppb)	50	<1	88	52-150
Methylene chloride	ug/L (ppb)	50	<5	103	67-132
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	103	74-127
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	103	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	100	70-128
2,2-Dichloropropane	ug/L (ppb)	50	<1	97	36-154
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	99	71-127
Chloroform	ug/L (ppb)	50	<1	99	65-132
2-Butanone (MEK)	ug/L (ppb)	250	<10	83	10-129
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	91	48-149
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	101	60-146
1,1-Dichloropropene	ug/L (ppb)	50	<1	93	69-133
Carbon tetrachloride	ug/L (ppb)	50	<1	104	56-152
Benzene	ug/L (ppb)	50	<0.35	90	76-125
Trichloroethene	ug/L (ppb)	50	<1	88	66-135
1,2-Dichloropropane	ug/L (ppb)	50	<1	90	78-125
Bromodichloromethane	ug/L (ppb)	50	<1	96	61-150
Dibromomethane	ug/L (ppb)	50	<1	88	66-141
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	92	10-185
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	90	72-132
Toluene	ug/L (ppb)	50	<1	94	76-122
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	91	76-130
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	91	68-131
2-Hexanone	ug/L (ppb)	250	<10	86	10-185
1,3-Dichloropropane	ug/L (ppb)	50	<1	86	71-128
Tetrachloroethene	ug/L (ppb)	50	<1	91	10-226
Dibromochloromethane	ug/L (ppb)	50	<1	94	70-139
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	90	69-134
Chlorobenzene	ug/L (ppb)	50	<1	93	77-122
Ethylbenzene	ug/L (ppb)	50	<1	95	69-135
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	111	73-137
m,p-Xylene	ug/L (ppb)	100	<2	97	69-135
o-Xylene	ug/L (ppb)	50	<1	100	60-140
Styrene	ug/L (ppb)	50	<1	96	71-133
Isopropylbenzene	ug/L (ppb)	50	<1	100	65-142
Bromoform	ug/L (ppb)	50	<1	100	65-142
n-Propylbenzene	ug/L (ppb)	50	<1	95	58-144
Bromobenzene	ug/L (ppb)	50	<1	91	75-124
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	97	66-137
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	99	51-154
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	93	53-150
2-Chlorotoluene	ug/L (ppb)	50	<1	95	66-127
4-Chlorotoluene	ug/L (ppb)	50	<1	94	65-130
tert-Butylbenzene	ug/L (ppb)	50	<1	98	65-137
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	95	59-146
sec-Butylbenzene	ug/L (ppb)	50	<1	98	64-140
p-Isopropyltoluene	ug/L (ppb)	50	<1	97	65-141
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	97	72-123
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	95	69-126
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	100	69-128
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	102	32-164
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	101	66-136
Hexachlorobutadiene	ug/L (ppb)	50	<1	93	60-143
Naphthalene	ug/L (ppb)	50	<1	103	44-164
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	99	69-148

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910283

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	96	91	25-158	5
Chloromethane	ug/L (ppb)	50	109	102	45-156	7
Vinyl chloride	ug/L (ppb)	50	103	98	50-154	5
Bromomethane	ug/L (ppb)	50	103	97	55-143	6
Chloroethane	ug/L (ppb)	50	99	95	58-146	4
Trichlorofluoromethane	ug/L (ppb)	250	103	99	50-150	4
Acetone	ug/L (ppb)	250	93	90	53-131	3
1,1-Dichloroethene	ug/L (ppb)	50	101	96	67-136	5
Hexane	ug/L (ppb)	50	98	94	57-137	4
Methylene chloride	ug/L (ppb)	50	104	97	39-148	7
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	105	100	64-147	5
trans-1,2-Dichloroethene	ug/L (ppb)	50	104	98	68-128	6
1,1-Dichloroethane	ug/L (ppb)	50	103	98	79-121	5
2,2-Dichloropropane	ug/L (ppb)	50	103	99	55-143	4
cis-1,2-Dichloroethene	ug/L (ppb)	50	101	95	80-123	6
Chloroform	ug/L (ppb)	50	102	97	80-121	5
2-Butanone (MEK)	ug/L (ppb)	250	98	97	57-149	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	100	97	73-132	3
1,1,1-Trichloroethane	ug/L (ppb)	50	103	97	81-125	6
1,1-Dichloropropene	ug/L (ppb)	50	101	95	77-129	6
Carbon tetrachloride	ug/L (ppb)	50	107	103	75-158	4
Benzene	ug/L (ppb)	50	97	93	69-134	4
Trichloroethene	ug/L (ppb)	50	97	93	79-113	4
1,2-Dichloropropane	ug/L (ppb)	50	101	98	77-123	3
Bromodichloromethane	ug/L (ppb)	50	107	103	81-133	4
Dibromomethane	ug/L (ppb)	50	99	96	82-125	3
4-Methyl-2-pentanone	ug/L (ppb)	250	103	100	65-138	3
cis-1,3-Dichloropropene	ug/L (ppb)	50	109	106	82-132	3
Toluene	ug/L (ppb)	50	102	98	72-122	4
trans-1,3-Dichloropropene	ug/L (ppb)	50	110	106	80-136	4
1,1,2-Trichloroethane	ug/L (ppb)	50	103	100	75-124	3
2-Hexanone	ug/L (ppb)	250	102	99	60-136	3
1,3-Dichloropropane	ug/L (ppb)	50	100	97	76-126	3
Tetrachloroethene	ug/L (ppb)	50	99	96	76-121	3
Dibromochloromethane	ug/L (ppb)	50	104	101	84-133	3
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	102	99	82-115	3
Chlorobenzene	ug/L (ppb)	50	102	97	83-114	5
Ethylbenzene	ug/L (ppb)	50	102	98	77-124	4
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	115	109	84-127	5
m,p-Xylene	ug/L (ppb)	100	103	99	81-112	4
o-Xylene	ug/L (ppb)	50	104	99	81-121	5
Styrene	ug/L (ppb)	50	104	100	84-119	4
Isopropylbenzene	ug/L (ppb)	50	103	98	80-117	5
Bromoform	ug/L (ppb)	50	108	105	74-136	3
n-Propylbenzene	ug/L (ppb)	50	104	102	74-126	2
Bromobenzene	ug/L (ppb)	50	102	99	80-121	3
1,3,5-Trimethylbenzene	ug/L (ppb)	50	103	101	78-123	2
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	109	108	66-126	1
1,2,3-Trichloropropane	ug/L (ppb)	50	103	102	67-124	1
2-Chlorotoluene	ug/L (ppb)	50	102	101	77-127	1
4-Chlorotoluene	ug/L (ppb)	50	103	101	78-128	2
tert-Butylbenzene	ug/L (ppb)	50	104	101	80-123	3
1,2,4-Trimethylbenzene	ug/L (ppb)	50	101	99	79-122	2
sec-Butylbenzene	ug/L (ppb)	50	103	102	80-116	1
p-Isopropyltoluene	ug/L (ppb)	50	102	100	81-123	2
1,3-Dichlorobenzene	ug/L (ppb)	50	103	99	83-113	4
1,4-Dichlorobenzene	ug/L (ppb)	50	101	98	83-107	3
1,2-Dichlorobenzene	ug/L (ppb)	50	103	100	84-112	3
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	107	105	57-141	2
1,2,4-Trichlorobenzene	ug/L (ppb)	50	105	104	72-130	1
Hexachlorobutadiene	ug/L (ppb)	50	94	94	53-141	0
Naphthalene	ug/L (ppb)	50	107	104	64-133	3
1,2,3-Trichlorobenzene	ug/L (ppb)	50	104	101	65-136	3

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

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

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

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

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

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

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

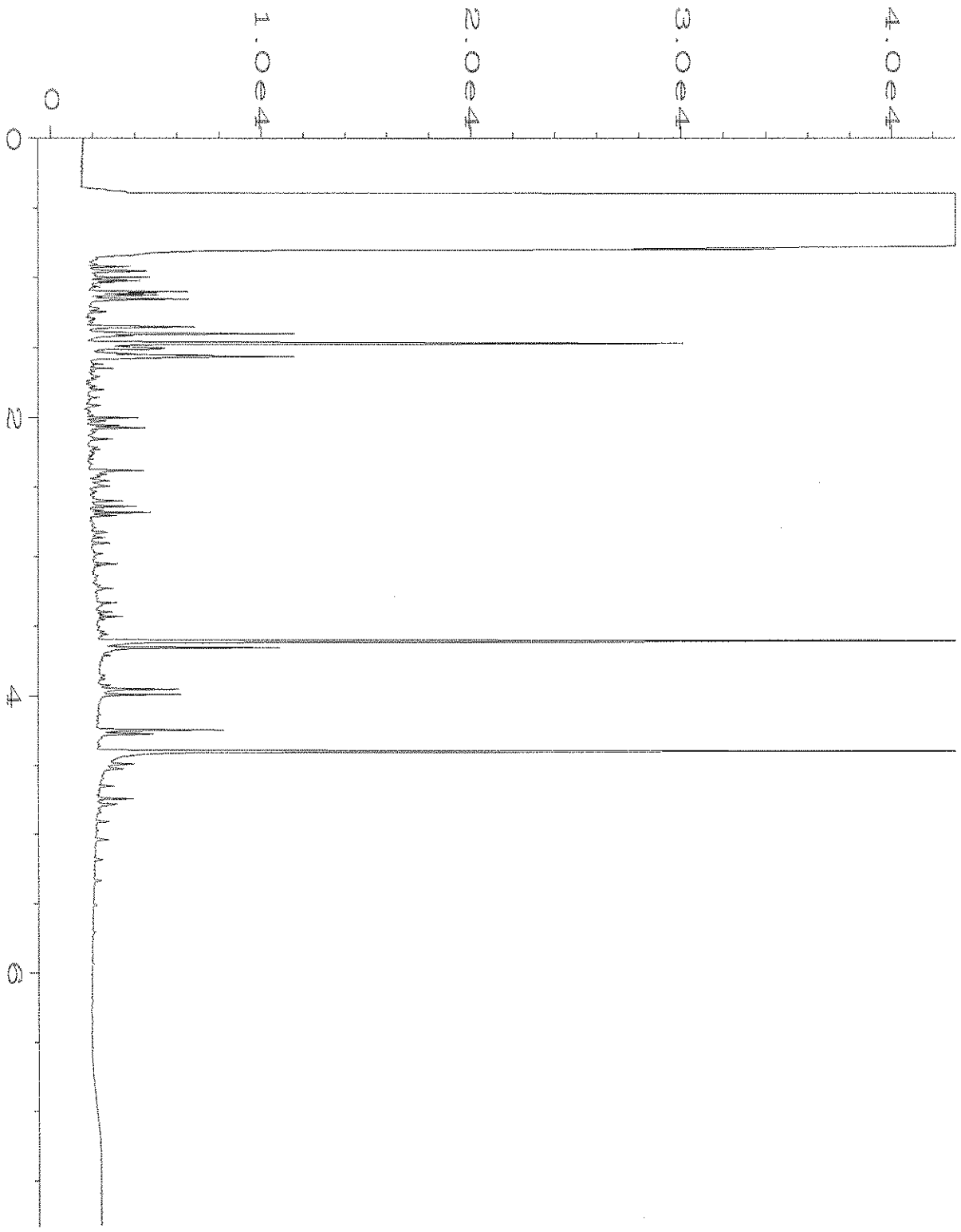
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

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

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



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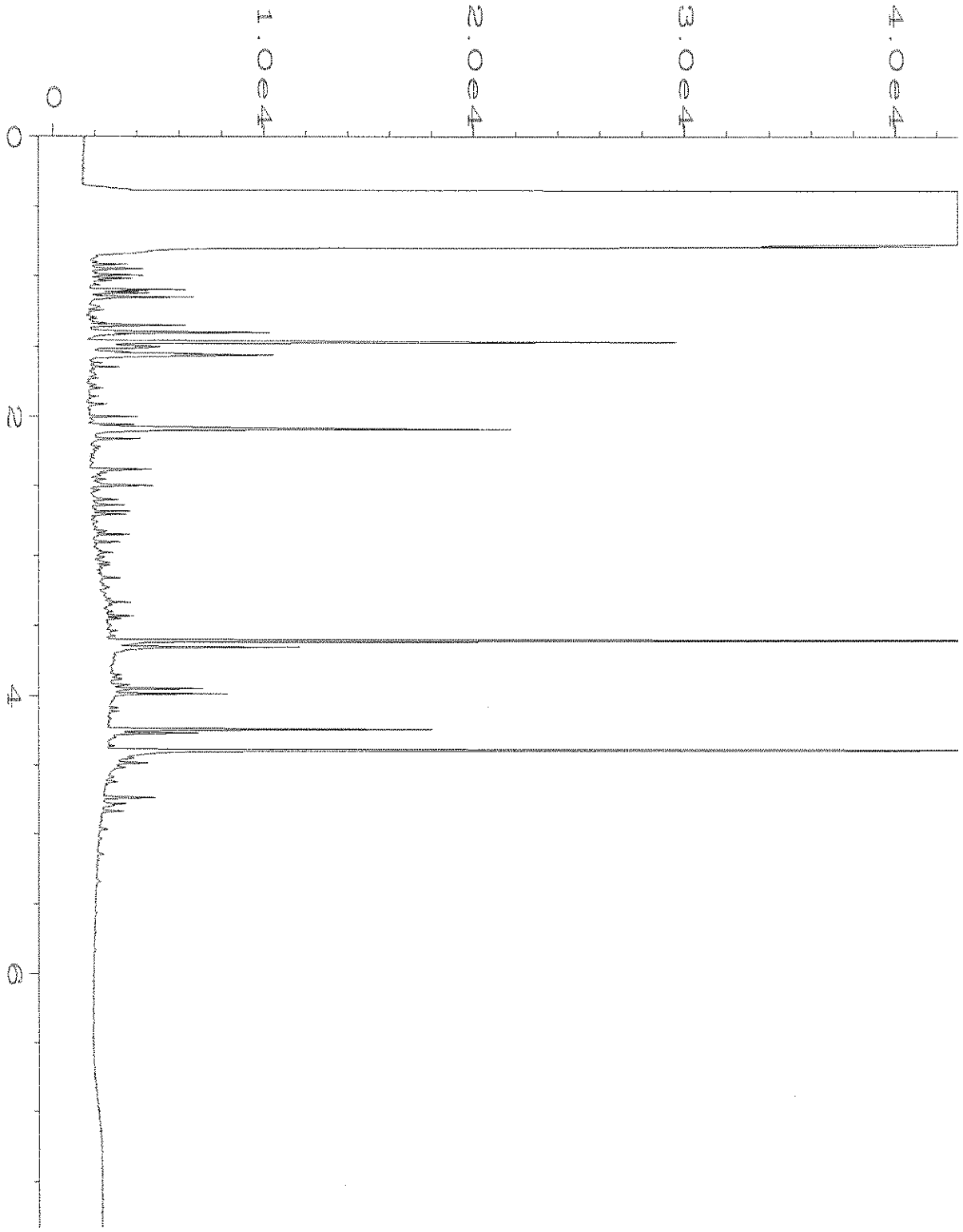
Operator : TL
Instrument : GC#4
Sample Name : 910283-01
Run Time Bar Code:
Acquired on : 15 Oct 19 10:32 PM
Report Created on: 16 Oct 19 12:25 PM

Page Number : 1
Vial Number : 46
Injection Number : 1
Sequence Line : 13
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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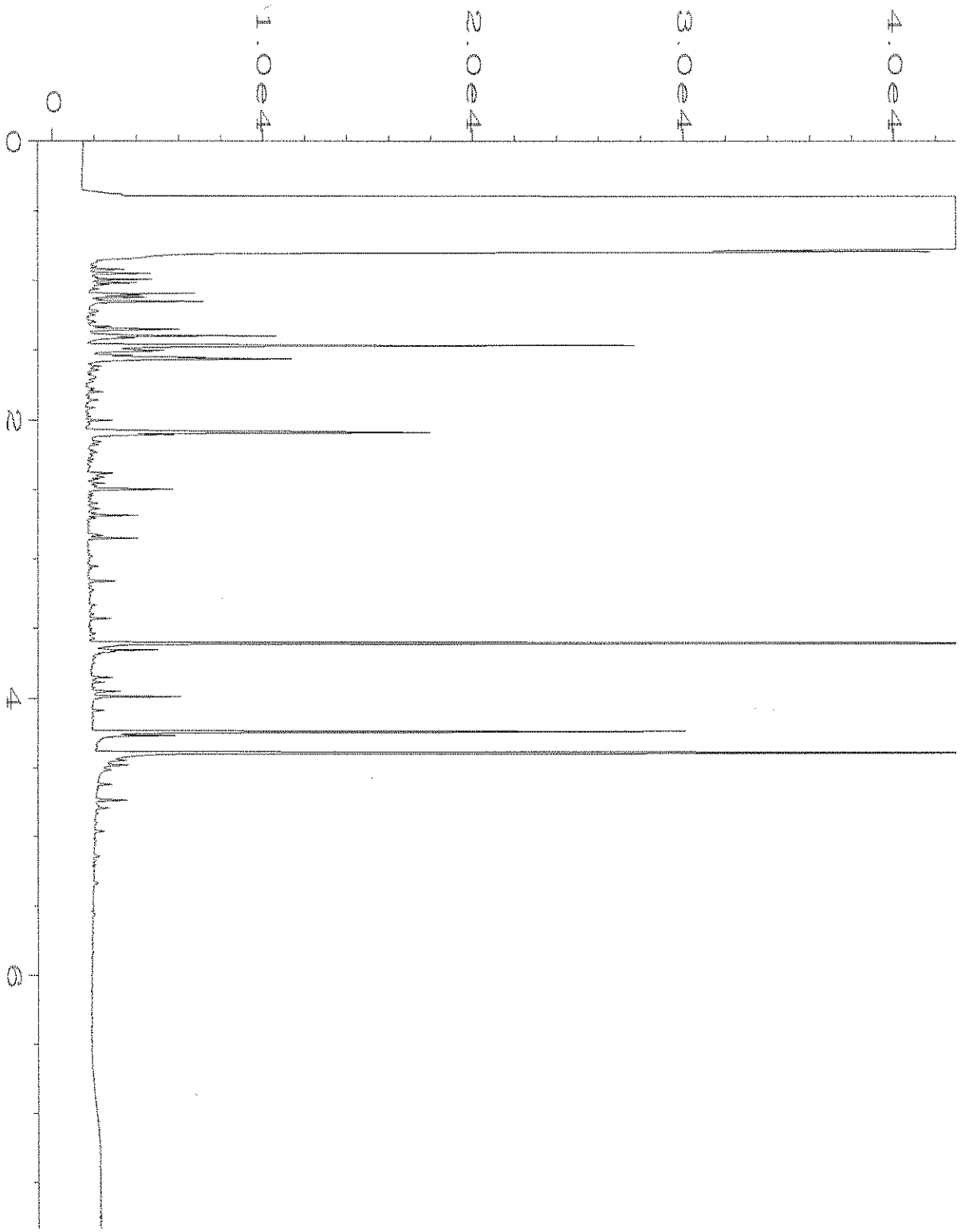
Operator : TL
Instrument : GC#4
Sample Name : 910283-02
Run Time Bar Code:
Acquired on : 15 Oct 19 10:44 PM
Report Created on: 16 Oct 19 12:25 PM

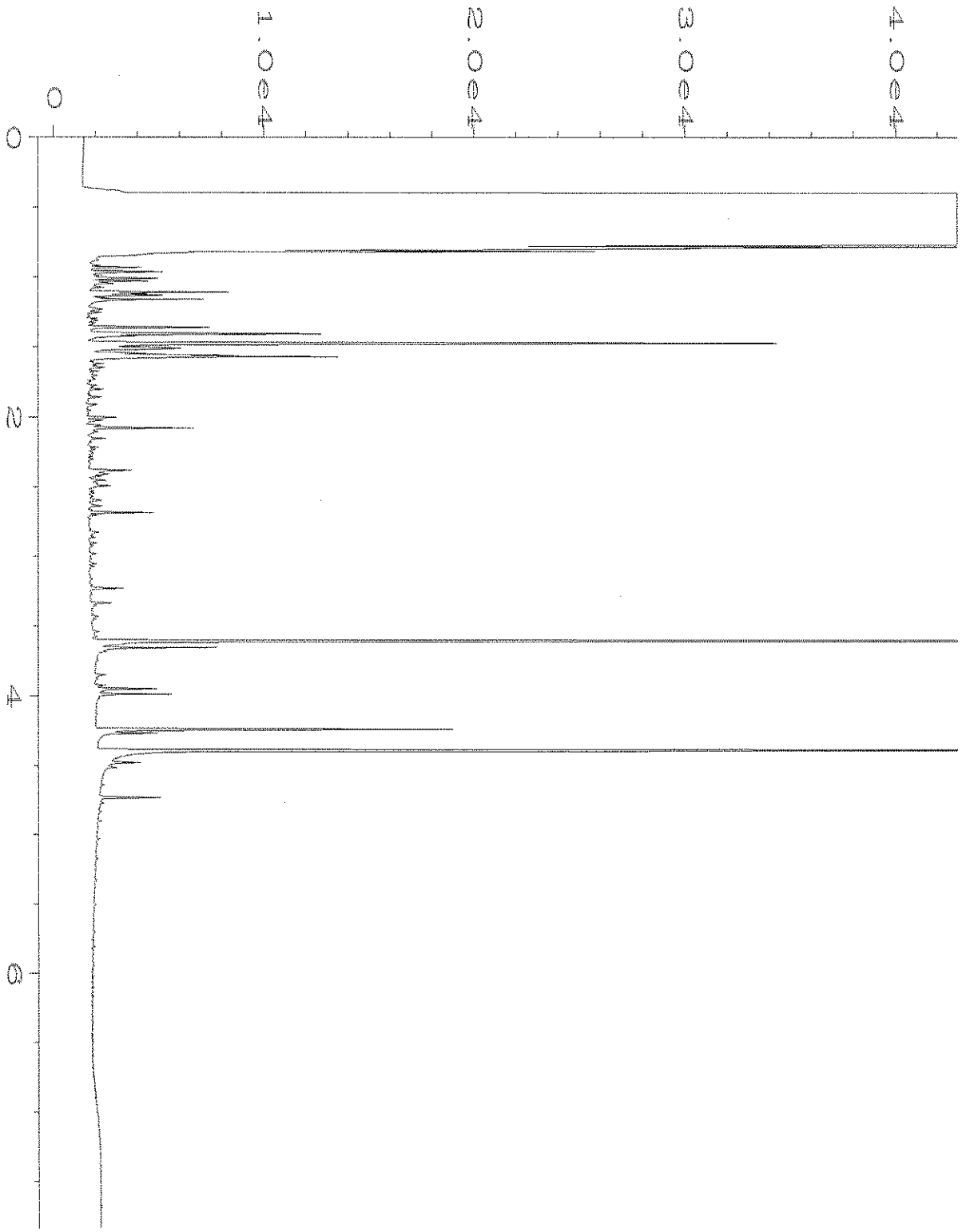
Page Number : 1
Vial Number : 47
Injection Number : 1
Sequence Line : 13
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



Data File Name : C:\HPCHEM\4\DATA\10-15-19\048F1301.D
Operator : TL
Instrument : GC#4
Sample Name : 910283-03
Run Time Bar Code:
Acquired on : 15 Oct 19 10:56 PM
Report Created on: 16 Oct 19 12:25 PM

Page Number : 1
Vial Number : 48
Injection Number : 1
Sequence Line : 13
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH

Data File Name	: C:\HPCHEM\4\DATA\10-15-19\049F1301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 49
Sample Name	: 910283-04	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 13
Acquired on	: 15 Oct 19 11:08 PM	Instrument Method	: DX.MTH
Report Created on	: 16 Oct 19 12:26 PM	Analysis Method	: DEFAULT.MTH



Data File Name : C:\HPCHEM\4\DATA\10-15-19\050F1301.D
Operator : TL
Instrument : GC#4
Sample Name : 910283-05
Run Time Bar Code:
Acquired on : 15 Oct 19 11:21 PM
Report Created on: 16 Oct 19 12:26 PM

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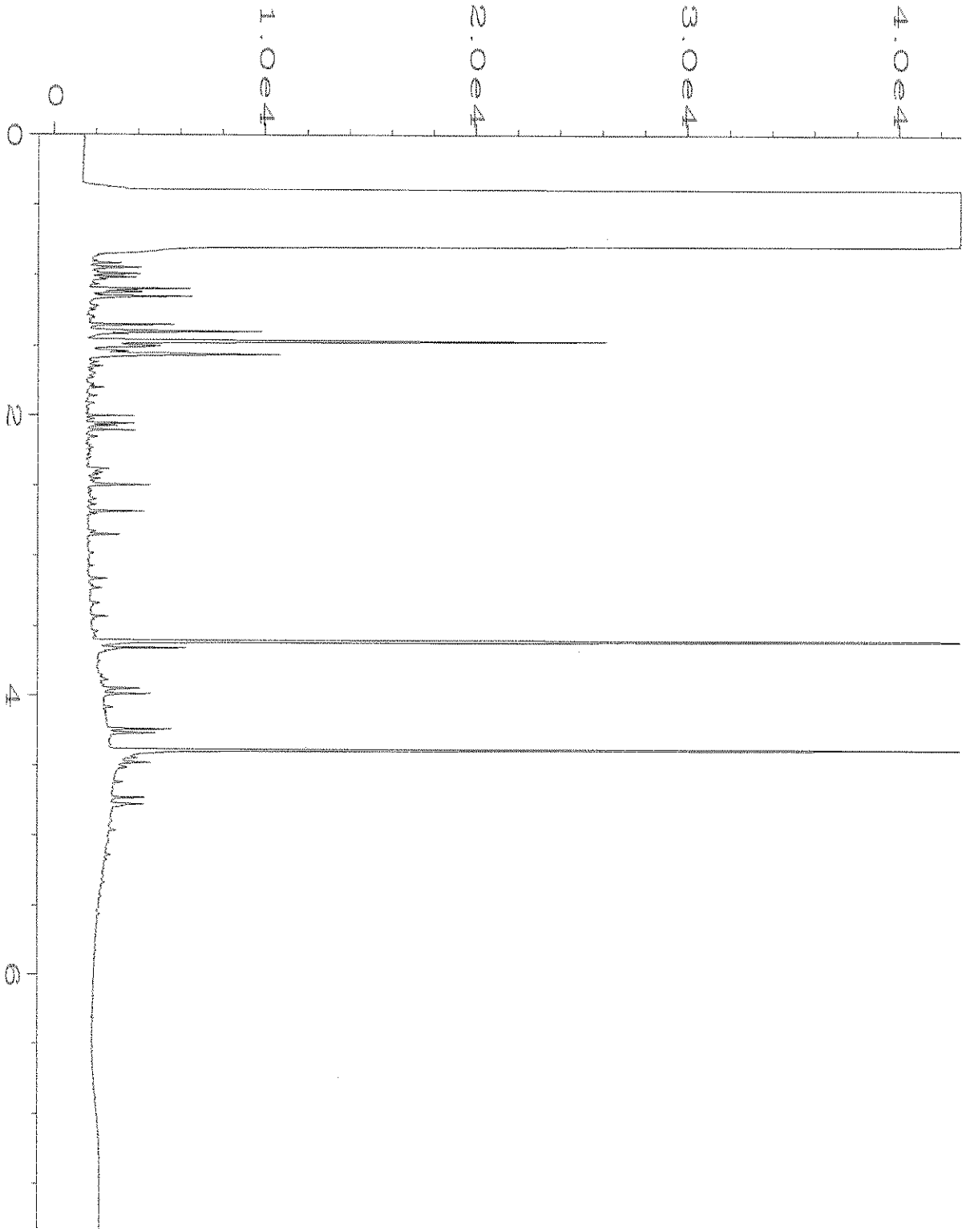
Injection Number : 1
Sequence Line : 13
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



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Instrument	: GC#4	Vial Number	: 51
Sample Name	: 910283-06	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 13
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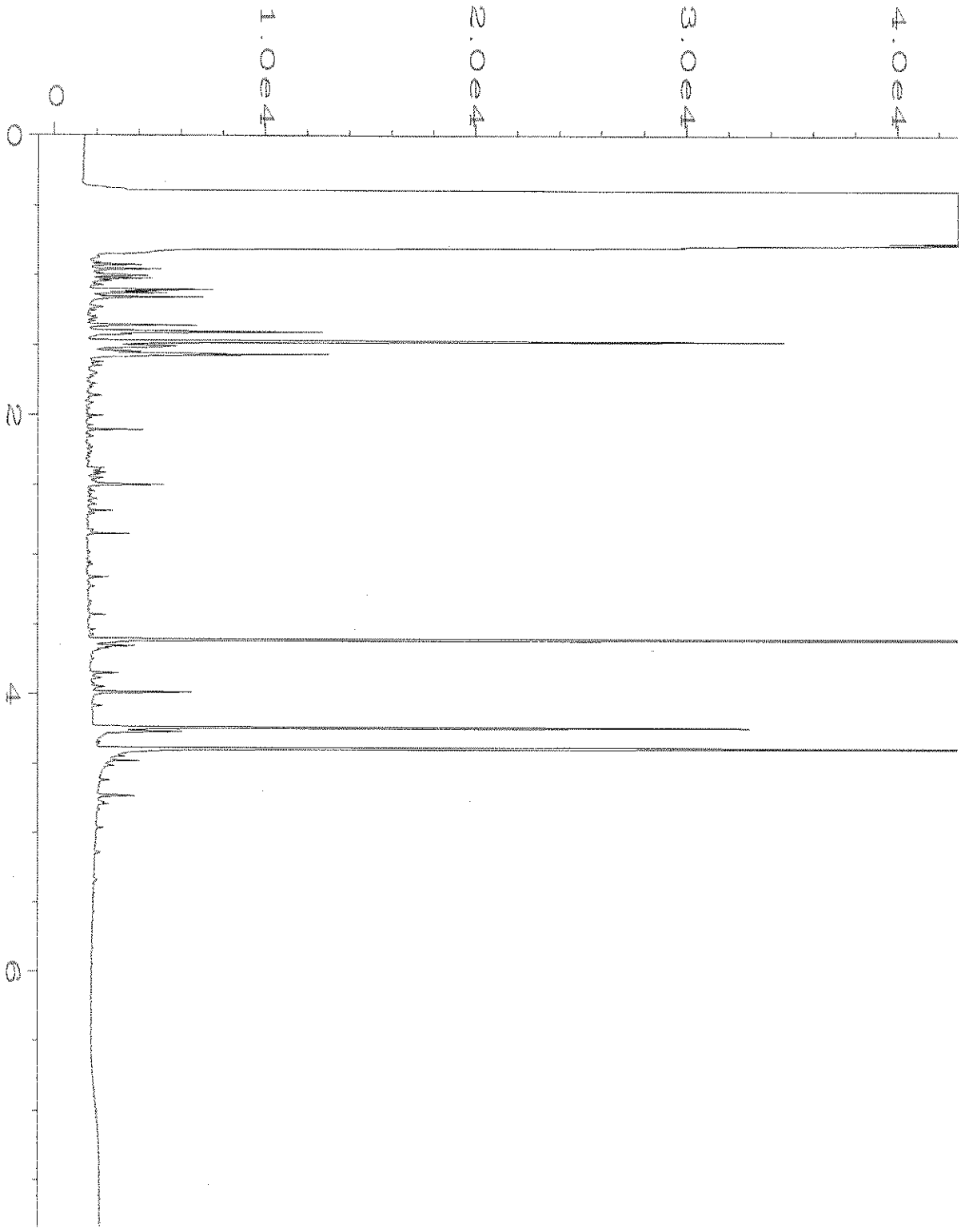
Report Created on	: 16 Oct 19 12:26 PM	Analysis Method	: DEFAULT.MTH



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Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 52
Sample Name	: 910283-07	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 13
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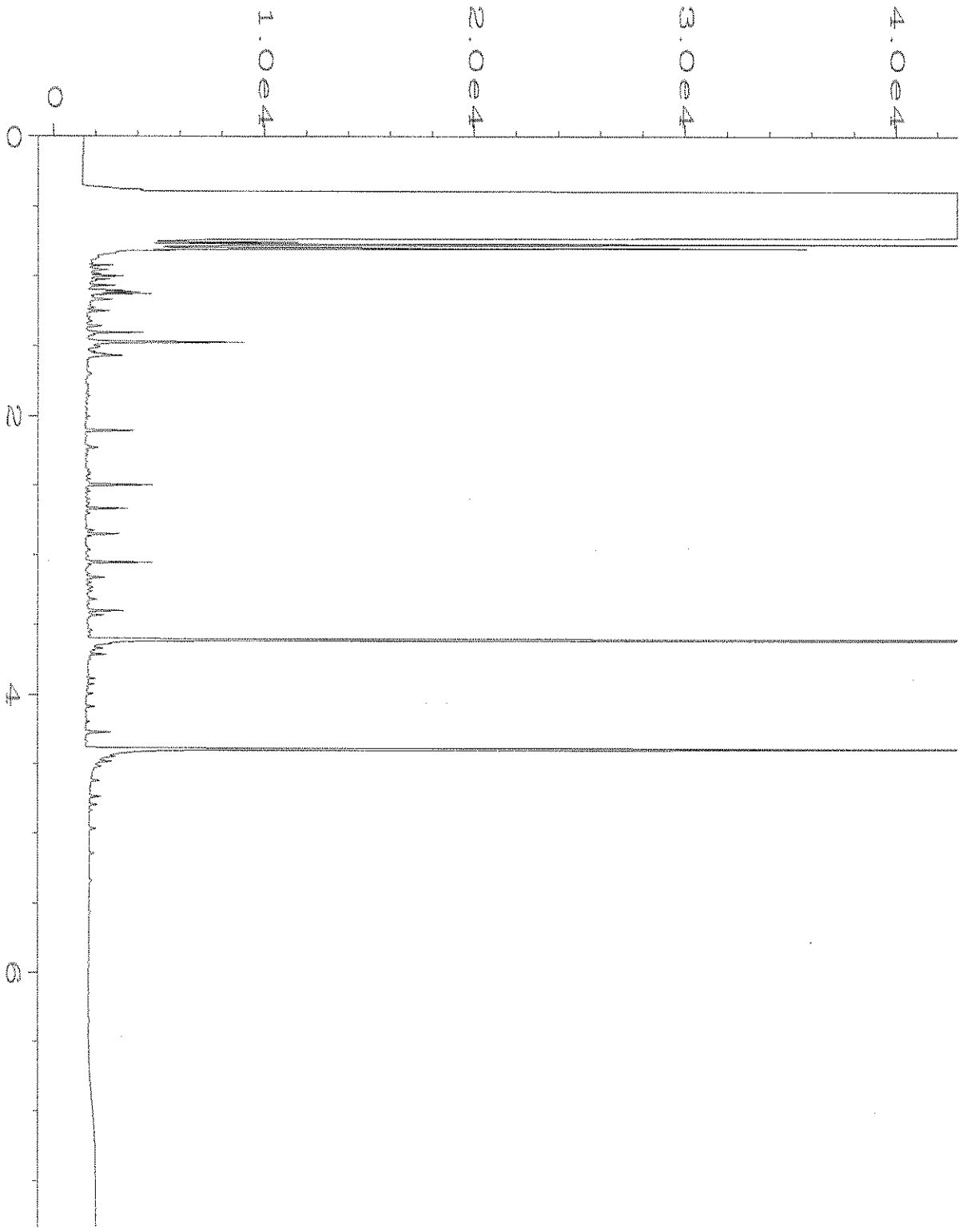
Report Created on:	16 Oct 19 12:26 PM	Analysis Method	: DEFAULT.MTH



Data File Name	: C:\HPCHEM\4\DATA\10-15-19\088F0401.D		
Operator	: TL	Page Number	: 1
Instrument	: GC#4	Vial Number	: 88
Sample Name	: 09-2524 mb2	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 4
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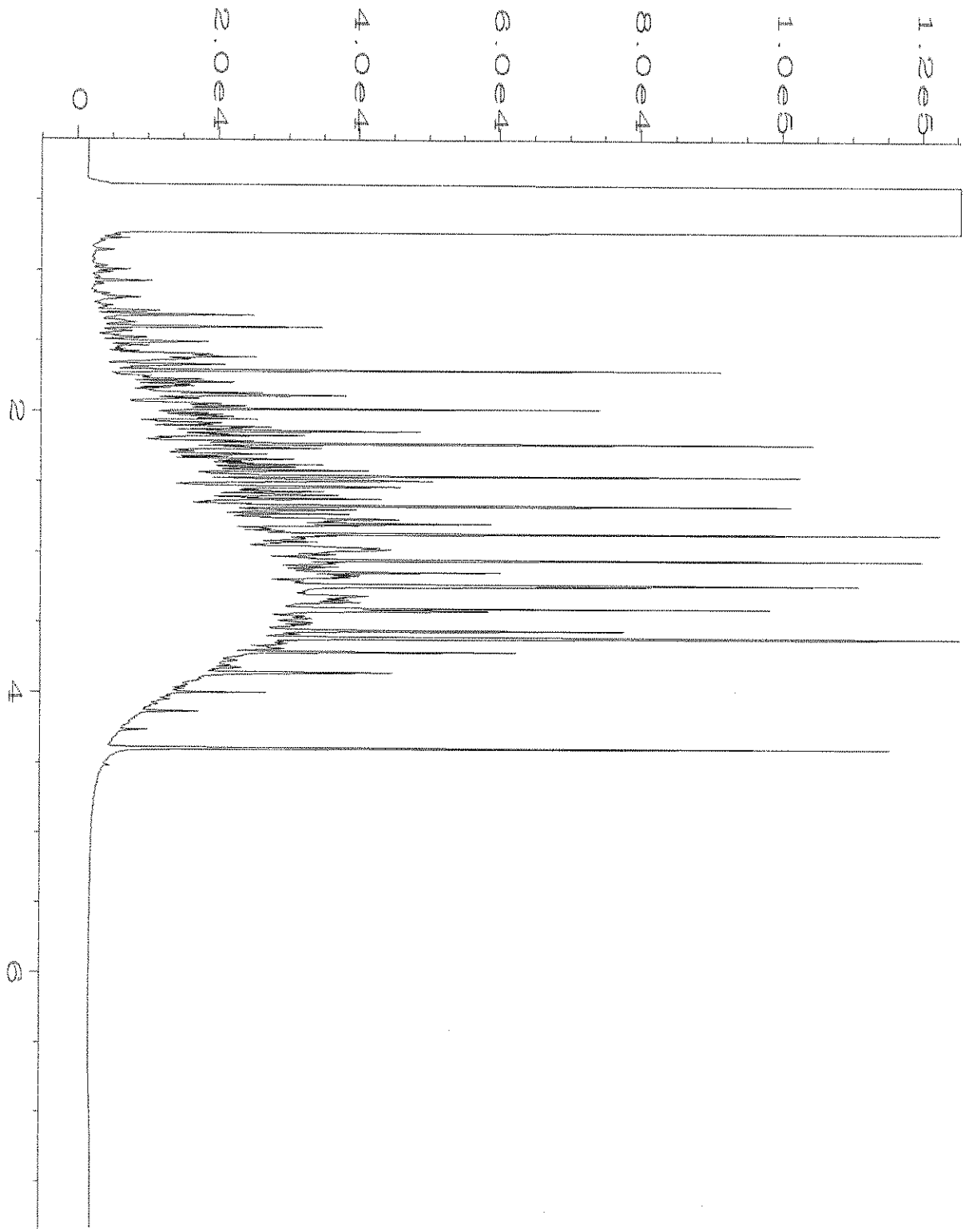
Report Created on	: 16 Oct 19 11:51 AM	Analysis Method	: DEFAULT.MTH



Data File Name : C:\HPCHEM\4\DATA\10-15-19\003F0201.D
Operator : TL
Instrument : GC#4
Sample Name : 500 Dx 58-62F
Run Time Bar Code:
Acquired on : 15 Oct 19 06:20 AM
Report Created on: 16 Oct 19 11:50 AM

Page Number : 1
Vial Number : 3
Injection Number : 1
Sequence Line : 2
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH

910283

SAMPLE CHAIN OF CUSTODY

ME 10-14-19

Page # 1 of 1 VW4/ C05

Report To Kellie Andrews

Company AESI

Address 911 5th Ave

City, State, ZIP Kirkland WA 98033

Phone ______ Email ______

SAMPLERS (signature) Kellie An

PROJECT NAME	PO #
Kelly's Auto Body	190396V001
REMARKS	INVOICE TO

TURNAROUND TIME

☒ Standard Turnaround AIS
☐ RUSH______
Rush charges authorized by:

SAMPLE DISPOSAL

☐ 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	RCRA 8 Metals 6000/7000 series	Total per KA 10/10/19 ME			Notes
GP-1-GW	01 A-H	10.12.19	0945	g.w	8		X	X		X			X				
GP-2-GW	02	↓	1030	↓	8		X	X		X			X				
GP-3-GW	03	↓	1115	↓	8		X	X		X			X				
GP-4-GW	04	↓	1205	↓	8		X	X		X			X				
GP-5-GW	05	↓	1300	↓	8		X	X		X			X				
GP-6-GW	06	↓	1345	↓	8		X	X		X			X				
GP-7-GW	07	↓	1515	↓	8		X	X		X			X				

Kellie

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Kellie An	Kellie Andrews	AESI	10-14-19	0830
Received by:	[signature]	Wes Herring	F&B	10-14-19	940 am
Relinquished by:	[signature]	Liz Webber-Bruya	F&BI	10/14/19	1330
Received by:					

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

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
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fbi@isomedia.com
www.friedmanandbruya.com

October 22, 2019

Kellie Andrews, Project Manager
Associated Earth Sciences, Inc.
911 5th Avenue, Suite 100
Kirkland, WA 98033

Dear Ms Andrews:

Included are the results from the testing of material submitted on October 14, 2019 from the Kelly's Auto Body 190396V001, F&BI 910284 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
AE11022R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on October 14, 2019 by Friedman & Bruya, Inc. from the Associated Earth Sciences Kelly's Auto Body 190396V001, F&BI 910284 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Associated Earth Sciences
910284 -01	GP-1-4
910284 -02	GP-1-10
910284 -03	GP-1-12.5
910284 -04	GP-1-19
910284 -05	GP-2-7.5
910284 -06	GP-2-12
910284 -07	GP-2-15
910284 -08	GP-3-5
910284 -09	GP-3-10
910284 -10	GP-3-15
910284 -11	GP-4-5
910284 -12	GP-4-8
910284 -13	GP-4-15
910284 -14	GP-5-5
910284 -15	GP-5-7
910284 -16	GP-5-10
910284 -17	GP-5-15
910284 -18	GP-6-5
910284 -19	GP-6-10
910284 -20	GP-6-14
910284 -21	GP-7-5
910284 -22	GP-7-10
910284 -23	GP-7-13

A 6020B internal standard failed the acceptance criteria for samples GP-6-10 and GP-7-10. The samples were diluted and reanalyzed with acceptable results. Both data sets were reported.

All other quality control requirements were acceptable.

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910284
Date Extracted: 10/17/19
Date Analyzed: 10/17/19

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

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

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 58-139)
GP-1-10 910284-02	<5	82
GP-2-7.5 910284-05	<5	81
GP-3-10 910284-09	<5	79
GP-4-8 910284-12	<5	79
GP-5-7 910284-15	<5	80
GP-6-10 910284-19	<5	81
GP-7-10 910284-22	<5	80
Method Blank 09-2510 MB	<5	82

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910284
Date Extracted: 10/17/19
Date Analyzed: 10/17/19

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

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

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 56-165)
GP-1-10 910284-02	<50	<250	95
GP-2-7.5 910284-05	<50	<250	90
GP-3-10 910284-09	<50	<250	97
GP-4-8 910284-12	<50	<250	102
GP-5-7 910284-15	<50	<250	92
GP-6-10 910284-19	<50	<250	99
GP-7-10 910284-22	<50	<250	90
Method Blank 09-2581 MB2	<50	<250	92

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-1-10	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/16/19	Lab ID:	910284-02
Date Analyzed:	10/16/19	Data File:	910284-02.056
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.22
Barium	39.0
Cadmium	<1
Chromium	9.73
Lead	2.27
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-2-7.5	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/16/19	Lab ID:	910284-05
Date Analyzed:	10/16/19	Data File:	910284-05.057
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	4.63
Barium	40.9
Cadmium	<1
Chromium	6.54
Lead	1.94
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-3-10	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/16/19	Lab ID:	910284-09
Date Analyzed:	10/16/19	Data File:	910284-09.058
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	31.9
Cadmium	<1
Chromium	8.65
Lead	1.91
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-4-8	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/16/19	Lab ID:	910284-12
Date Analyzed:	10/16/19	Data File:	910284-12.059
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.66
Barium	43.6
Cadmium	<1
Chromium	7.83
Lead	2.39
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-5-7	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/16/19	Lab ID:	910284-15
Date Analyzed:	10/16/19	Data File:	910284-15.062
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	3.44
Barium	28.5
Cadmium	<1
Chromium	13.4
Lead	1.31
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-6-10	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/16/19	Lab ID:	910284-19
Date Analyzed:	10/16/19	Data File:	910284-19.063
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.69
Barium	26.8
Cadmium	<1
Chromium	13.8 J
Lead	1.74
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-6-10	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/16/19	Lab ID:	910284-19 x5
Date Analyzed:	10/16/19	Data File:	910284-19 x5.137
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Chromium	15.0

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-7-10	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/16/19	Lab ID:	910284-22
Date Analyzed:	10/16/19	Data File:	910284-22.064
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	5.03
Barium	27.4
Cadmium	<1
Chromium	10.2 J
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1

Analysis For Total Metals By EPA Method 6020B

Client ID:	GP-7-10	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/16/19	Lab ID:	910284-22 x5
Date Analyzed:	10/16/19	Data File:	910284-22 x5.138
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Chromium	11.4

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Associated Earth Sciences
Date Received:	NA	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/16/19	Lab ID:	I9-656 mb
Date Analyzed:	10/16/19	Data File:	I9-656 mb.034
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-1-10	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910284-02
Date Analyzed:	10/18/19	Data File:	101816.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	93	107
Toluene-d8	99	87	110
4-Bromofluorobenzene	92	85	112

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-2-7.5	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910284-05
Date Analyzed:	10/18/19	Data File:	101817.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	93	107
Toluene-d8	99	87	110
4-Bromofluorobenzene	94	85	112

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-3-10	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910284-09
Date Analyzed:	10/18/19	Data File:	101818.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	93	107
Toluene-d8	97	87	110
4-Bromofluorobenzene	90	85	112

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-4-8	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910284-12
Date Analyzed:	10/18/19	Data File:	101819.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	93	107
Toluene-d8	99	87	110
4-Bromofluorobenzene	93	85	112

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-5-7	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910284-15
Date Analyzed:	10/18/19	Data File:	101820.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	93	107
Toluene-d8	99	87	110
4-Bromofluorobenzene	92	85	112

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-6-10	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910284-19
Date Analyzed:	10/18/19	Data File:	101821.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	93	107
Toluene-d8	99	87	110
4-Bromofluorobenzene	91	85	112

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GP-7-10	Client:	Associated Earth Sciences
Date Received:	10/14/19	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	910284-22
Date Analyzed:	10/18/19	Data File:	101822.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	93	107
Toluene-d8	99	87	110
4-Bromofluorobenzene	93	85	112

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Associated Earth Sciences
Date Received:	Not Applicable	Project:	Kelly's Auto Body 190396V001
Date Extracted:	10/17/19	Lab ID:	09-2550 mb
Date Analyzed:	10/17/19	Data File:	101730.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	MS/AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	93	107
Toluene-d8	101	87	110
4-Bromofluorobenzene	96	85	112

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

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910284

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

Laboratory Code: 910284-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	20	70	61-153

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910284

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

Laboratory Code: 910329-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	96	94	64-133	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	90	58-147

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910284

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

Laboratory Code: 910288-01 x5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	<5	89	93	75-125	4
Barium	mg/kg (ppm)	50	72.7	93 b	130 b	75-125	33 b
Cadmium	mg/kg (ppm)	10	<5	93	96	75-125	3
Chromium	mg/kg (ppm)	50	17.1	90	89	75-125	1
Lead	mg/kg (ppm)	50	45.8	101	111	75-125	9
Mercury	mg/kg (ppm	5	<5	95	92	75-125	3
Selenium	mg/kg (ppm)	5	<5	80	85	75-125	6
Silver	mg/kg (ppm)	10	<5	97	101	75-125	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	90	80-120
Barium	mg/kg (ppm)	50	98	80-120
Cadmium	mg/kg (ppm)	10	97	80-120
Chromium	mg/kg (ppm)	50	97	80-120
Lead	mg/kg (ppm)	50	104	80-120
Mercury	mg/kg (ppm)	5	98	80-120
Selenium	mg/kg (ppm)	5	103	80-120
Silver	mg/kg (ppm)	10	104	80-120

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910284

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

Laboratory Code: 910259-29 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	19	17	10-142	11
Chloromethane	mg/kg (ppm)	2.5	<0.5	57	51	10-126	11
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	57	50	10-138	13
Bromomethane	mg/kg (ppm)	2.5	<0.5	72	66	10-163	9
Chloroethane	mg/kg (ppm)	2.5	<0.5	70	65	10-176	7
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	63	55	10-176	14
Acetone	mg/kg (ppm)	12.5	<0.5	83	81	10-163	2
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	75	70	10-160	7
Hexane	mg/kg (ppm)	2.5	<0.25	44	37	10-137	17
Methylene chloride	mg/kg (ppm)	2.5	<0.5	91	87	10-156	4
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	97	91	21-145	6
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	89	83	14-137	7
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	90	84	19-140	7
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	80	75	10-158	6
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	92	87	25-135	6
Chloroform	mg/kg (ppm)	2.5	<0.05	91	87	21-145	4
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	71	72	19-147	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	79	78	12-160	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	91	86	10-156	6
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	79	75	17-140	5
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	92	86	9-164	7
Benzene	mg/kg (ppm)	2.5	<0.03	80	76	29-129	5
Trichloroethene	mg/kg (ppm)	2.5	<0.02	90	83	21-139	8
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	82	79	30-135	4
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	85	82	23-155	4
Dibromomethane	mg/kg (ppm)	2.5	<0.05	80	77	23-145	4
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	83	81	24-155	2
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	77	76	28-144	1
Toluene	mg/kg (ppm)	2.5	<0.05	85	83	35-130	2
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	80	81	26-149	1
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	82	81	10-205	1
2-Hexanone	mg/kg (ppm)	12.5	<0.5	77	77	15-166	0
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	76	76	31-137	0
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	84	82	20-133	2
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	82	81	28-150	1
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	79	77	28-142	3
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	86	84	32-129	2
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	89	86	32-137	3
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	104	101	31-143	3
m,p-Xylene	mg/kg (ppm)	5	<0.1	90	88	34-136	2
o-Xylene	mg/kg (ppm)	2.5	<0.05	95	93	33-134	2
Styrene	mg/kg (ppm)	2.5	<0.05	89	88	35-137	1
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	96	92	31-142	4
Bromoform	mg/kg (ppm)	2.5	<0.05	86	84	21-156	2
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	85	85	23-146	0
Bromobenzene	mg/kg (ppm)	2.5	<0.05	81	81	34-130	0
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	88	87	18-149	1
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	74	77	28-140	4
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	82	82	25-144	0
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	88	87	31-134	1
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	84	84	31-136	0
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	88	87	30-137	1
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	87	86	10-182	1
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	89	89	23-145	0
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	90	89	21-149	1
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	89	88	30-131	1
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	87	86	29-129	1
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	94	91	31-132	3
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	95	93	11-161	2
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	99	97	22-142	2
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	96	93	10-142	3
Naphthalene	mg/kg (ppm)	2.5	<0.05	99	95	14-157	4
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	97	92	20-144	5

Date of Report: 10/22/19
Date Received: 10/14/19
Project: Kelly's Auto Body 190396V001, F&BI 910284

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	54	10-146
Chloromethane	mg/kg (ppm)	2.5	71	27-133
Vinyl chloride	mg/kg (ppm)	2.5	79	22-139
Bromomethane	mg/kg (ppm)	2.5	73	38-114
Chloroethane	mg/kg (ppm)	2.5	79	9-163
Trichlorofluoromethane	mg/kg (ppm)	2.5	82	10-196
Acetone	mg/kg (ppm)	12.5	109	52-141
1,1-Dichloroethene	mg/kg (ppm)	2.5	86	47-128
Hexane	mg/kg (ppm)	2.5	86	43-142
Methylene chloride	mg/kg (ppm)	2.5	92	42-132
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	99	60-123
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	93	67-129
1,1-Dichloroethane	mg/kg (ppm)	2.5	95	68-115
2,2-Dichloropropane	mg/kg (ppm)	2.5	90	52-170
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	72-127
Chloroform	mg/kg (ppm)	2.5	97	66-120
2-Butanone (MEK)	mg/kg (ppm)	12.5	100	72-127
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	95	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	97	62-131
1,1-Dichloropropene	mg/kg (ppm)	2.5	96	69-128
Carbon tetrachloride	mg/kg (ppm)	2.5	97	60-139
Benzene	mg/kg (ppm)	2.5	93	68-114
Trichloroethene	mg/kg (ppm)	2.5	99	64-117
1,2-Dichloropropane	mg/kg (ppm)	2.5	98	72-127
Bromodichloromethane	mg/kg (ppm)	2.5	98	72-130
Dibromomethane	mg/kg (ppm)	2.5	93	70-120
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	102	45-145
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	99	75-136
Toluene	mg/kg (ppm)	2.5	90	66-126
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	96	72-132
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	97	75-113
2-Hexanone	mg/kg (ppm)	12.5	103	33-152
1,3-Dichloropropane	mg/kg (ppm)	2.5	97	72-130
Tetrachloroethene	mg/kg (ppm)	2.5	93	72-114
Dibromochloromethane	mg/kg (ppm)	2.5	97	74-125
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	93	74-132
Chlorobenzene	mg/kg (ppm)	2.5	95	76-111
Ethylbenzene	mg/kg (ppm)	2.5	97	64-123
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	96	69-135
m,p-Xylene	mg/kg (ppm)	5	99	78-122
o-Xylene	mg/kg (ppm)	2.5	99	77-124
Styrene	mg/kg (ppm)	2.5	102	74-126
Isopropylbenzene	mg/kg (ppm)	2.5	102	76-127
Bromoform	mg/kg (ppm)	2.5	97	56-132
n-Propylbenzene	mg/kg (ppm)	2.5	97	74-124
Bromobenzene	mg/kg (ppm)	2.5	95	72-122
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	100	76-126
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	92	56-143
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	95	61-137
2-Chlorotoluene	mg/kg (ppm)	2.5	96	74-121
4-Chlorotoluene	mg/kg (ppm)	2.5	98	75-122
tert-Butylbenzene	mg/kg (ppm)	2.5	102	73-130
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	100	76-125
sec-Butylbenzene	mg/kg (ppm)	2.5	101	71-130
p-Isopropyltoluene	mg/kg (ppm)	2.5	99	70-132
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	96	75-121
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	95	74-117
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	97	76-121
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	96	58-138
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	97	64-135
Hexachlorobutadiene	mg/kg (ppm)	2.5	101	50-153
Naphthalene	mg/kg (ppm)	2.5	104	63-140
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	99	63-138

Data Qualifiers & Definitions

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

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

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

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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

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

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

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

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

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

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

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

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

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

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

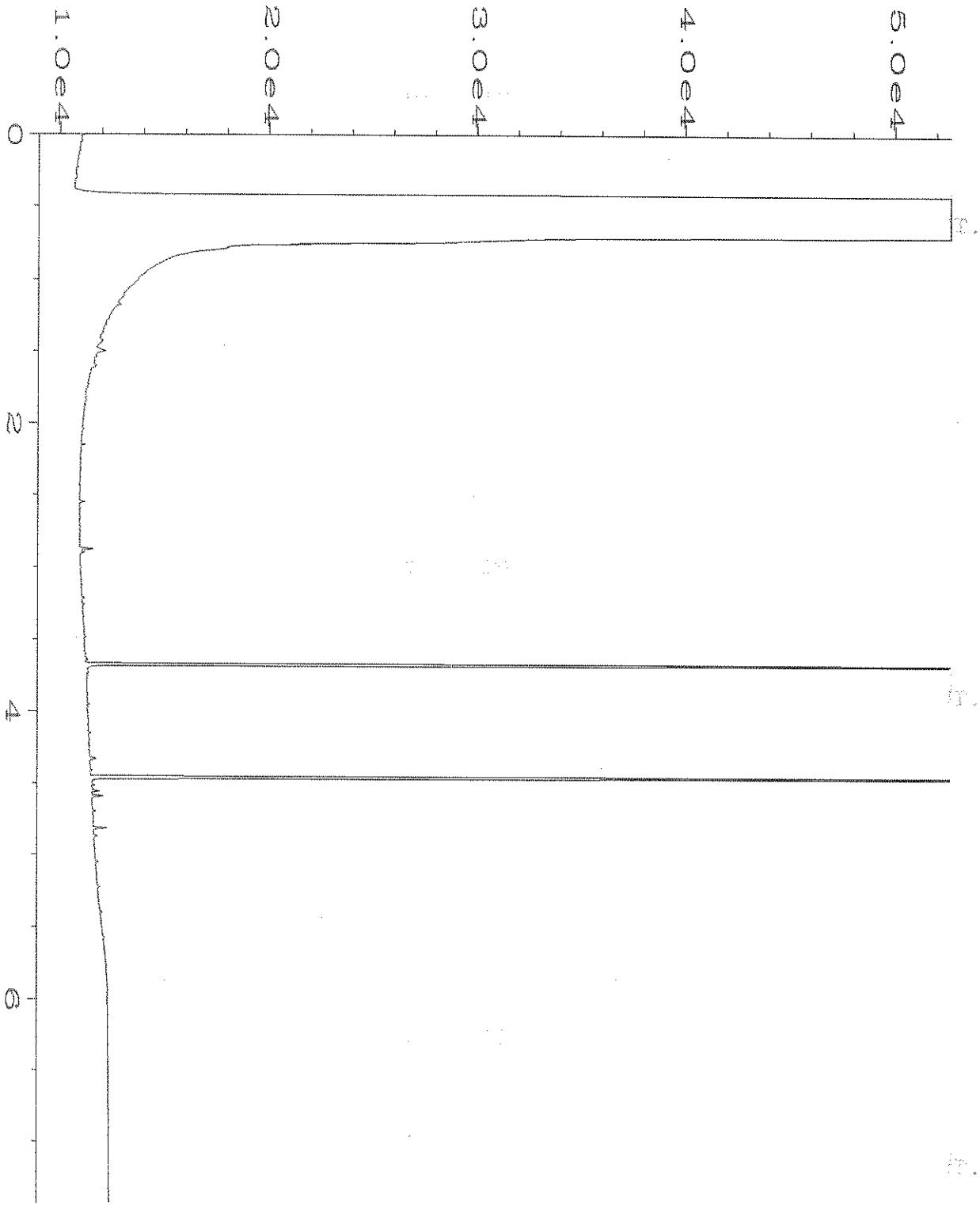
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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

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

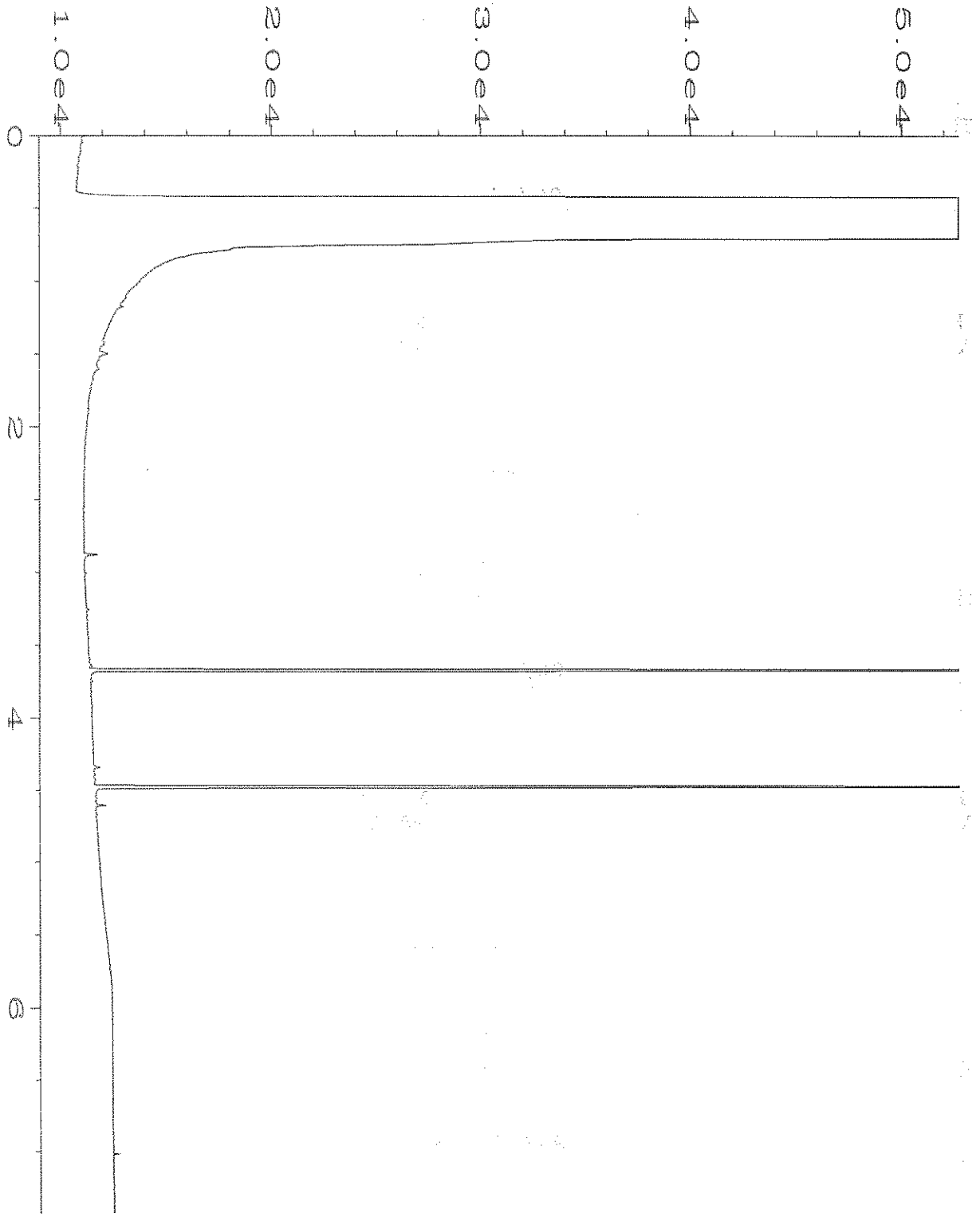
vo - The value reported fell outside the control limits established for this analyte.

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



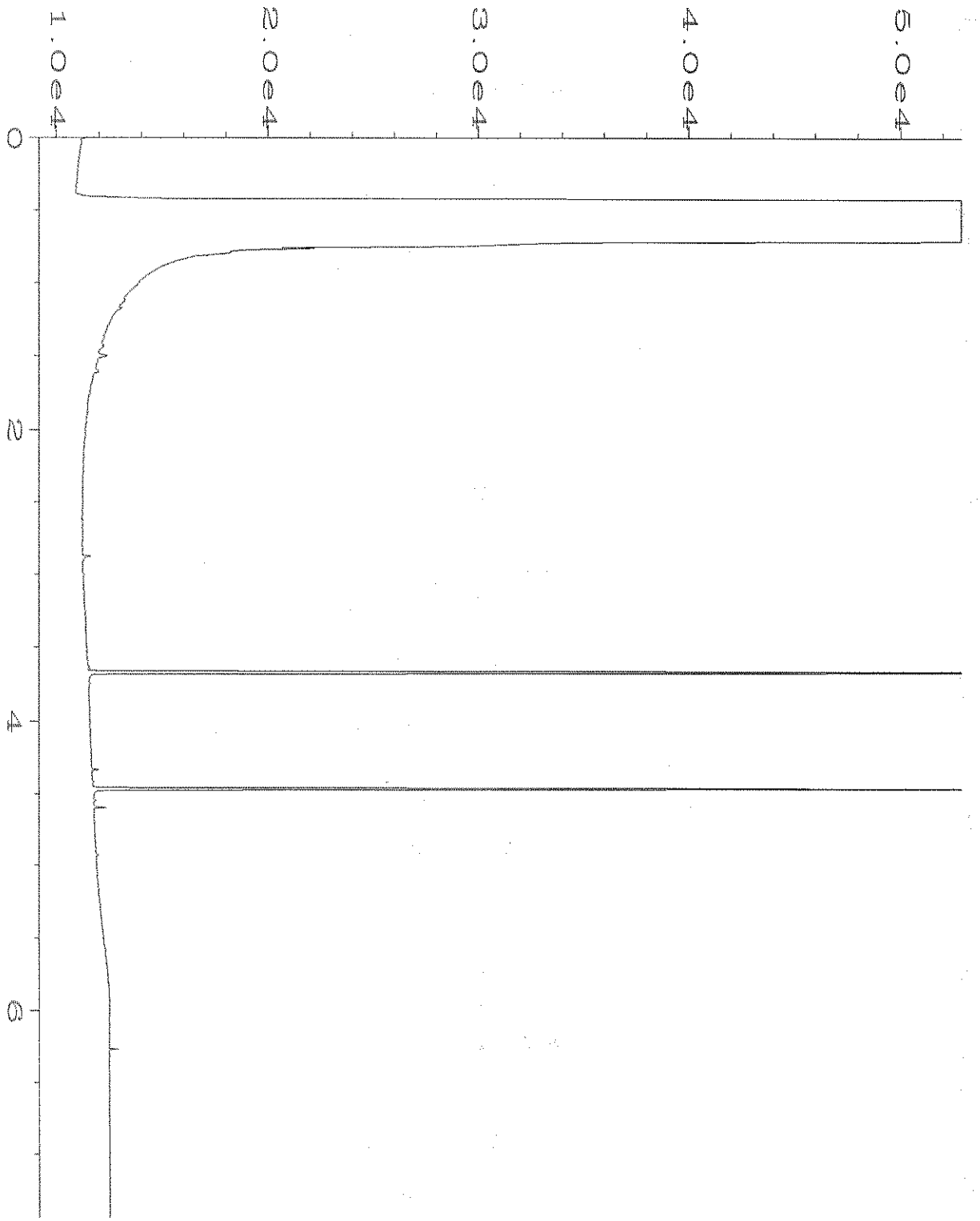
Data File Name : C:\HPCHEM\1\DATA\10-17-19\007F0301.D
Operator : TL
Instrument : GC1
Sample Name : 910284-02
Run Time Bar Code:
Acquired on : 17 Oct 19 08:00 AM
Report Created on: 18 Oct 19 08:13 AM

Page Number : 1
Vial Number : 7
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



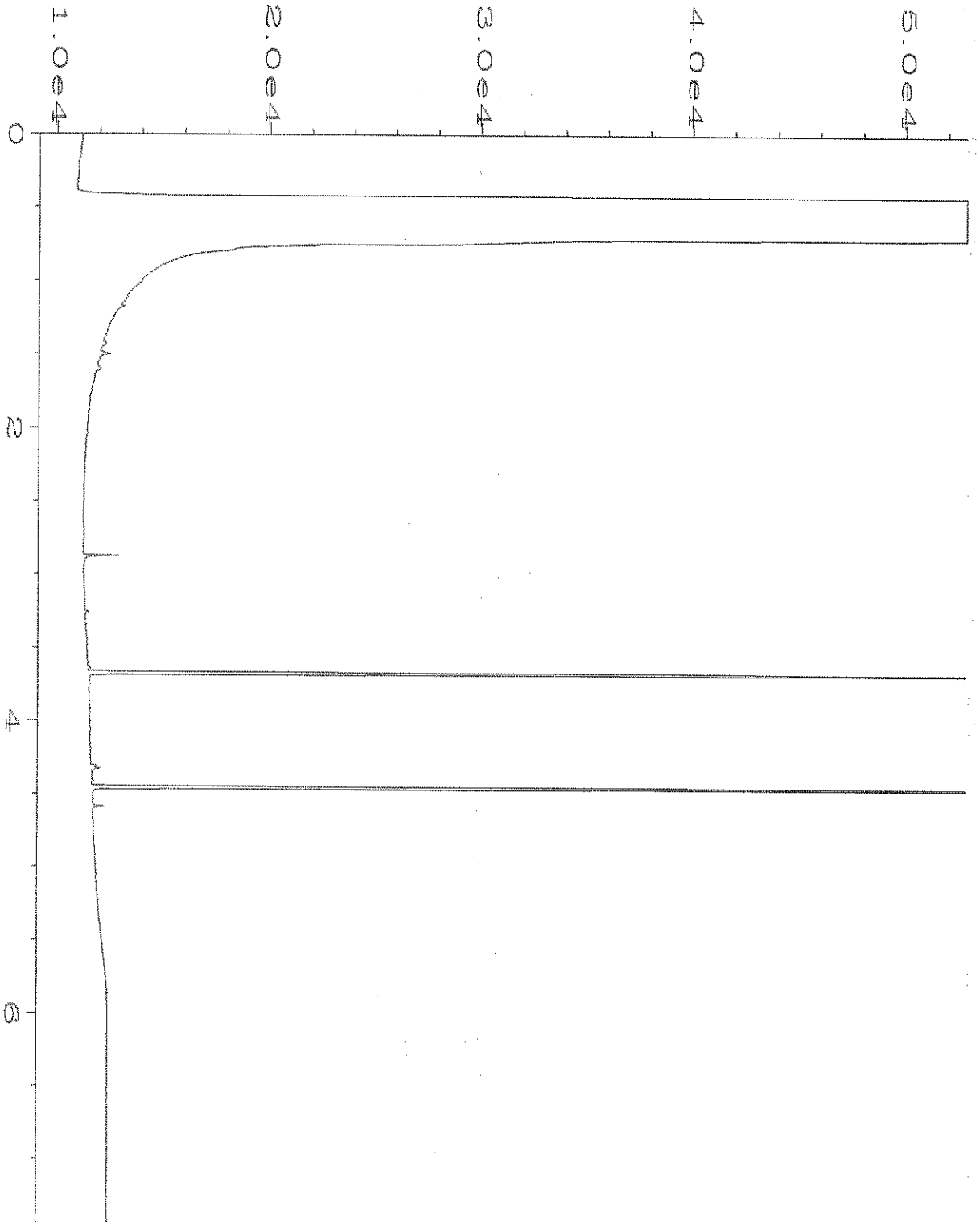
Data File Name : C:\HPCHEM\1\DATA\10-17-19\008F0301.D
Operator : TL
Instrument : GC1
Sample Name : 910284-05
Run Time Bar Code:
Acquired on : 17 Oct 19 08:12 AM
Report Created on: 18 Oct 19 08:13 AM

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

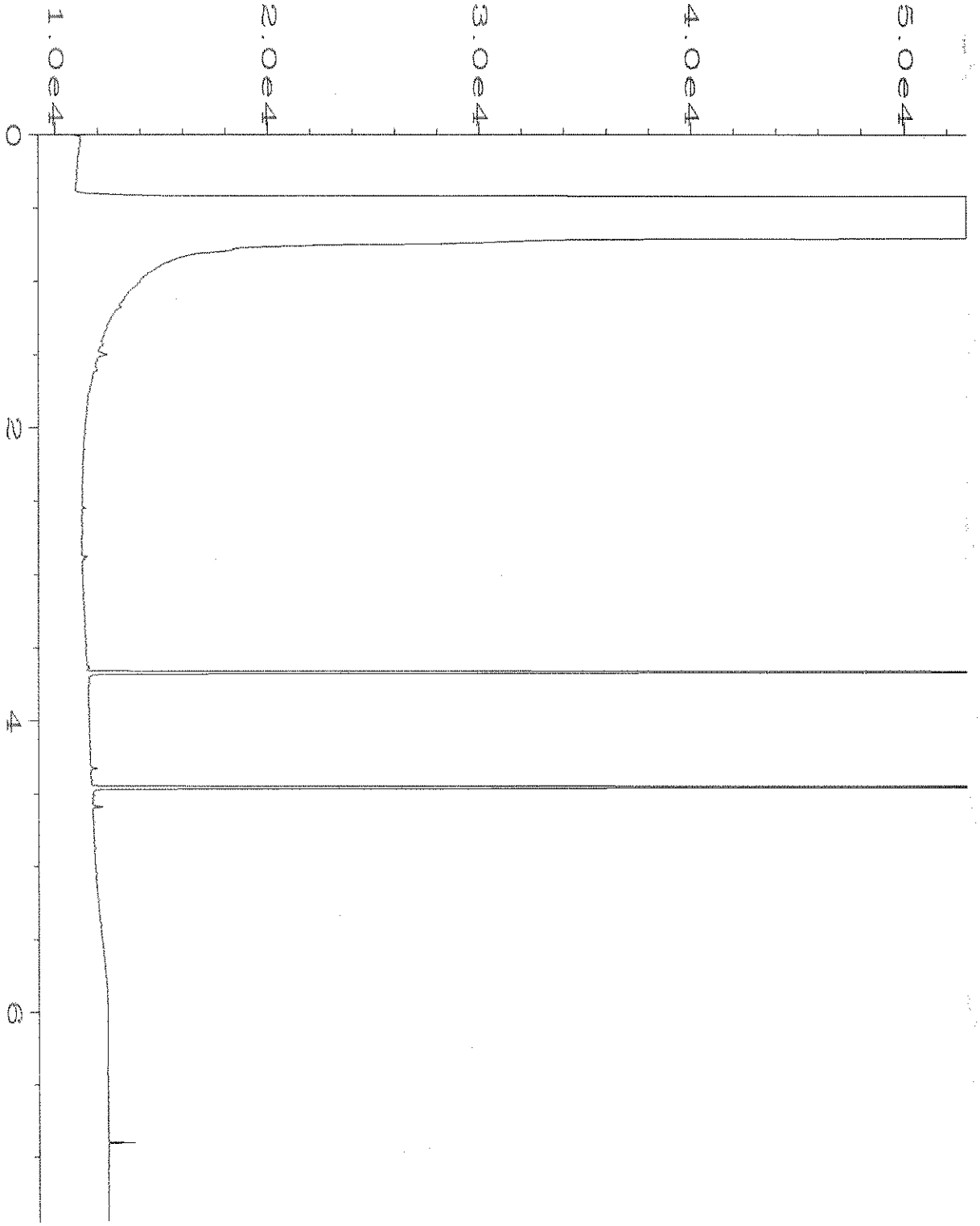


Data File Name : C:\HPCHEM\1\DATA\10-17-19\009F0301.D
Operator : TL
Instrument : GC1
Sample Name : 910284-09
Run Time Bar Code:
Acquired on : 17 Oct 19 08:23 AM
Report Created on: 18 Oct 19 08:13 AM

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

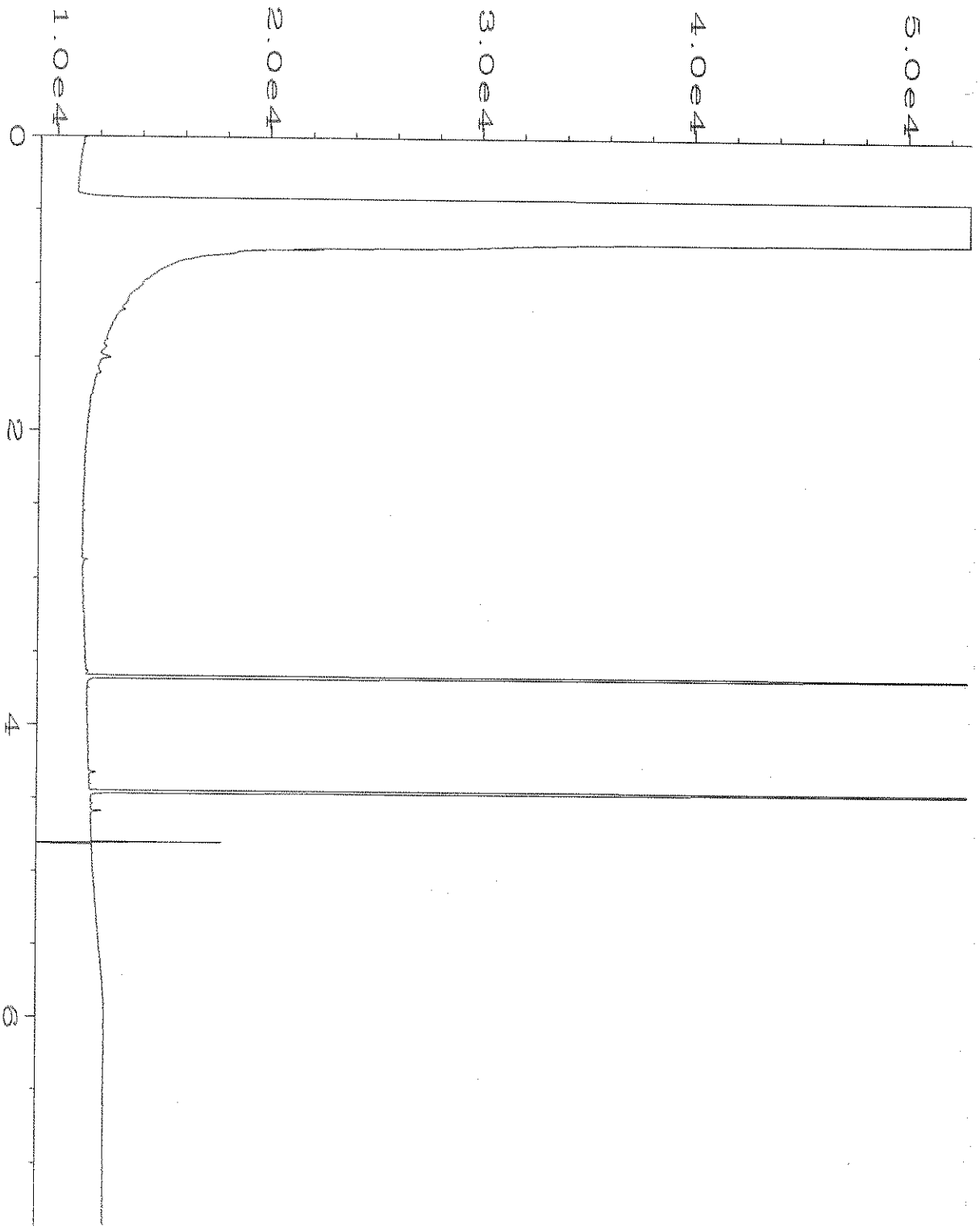


Data File Name	: C:\HPCHEM\1\DATA\10-17-19\010F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 10
Sample Name	: 910284-12	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 17 Oct 19 08:35 AM	Instrument Method	: DX.MTH
Report Created on:	18 Oct 19 08:13 AM	Analysis Method	: DEFAULT.MTH



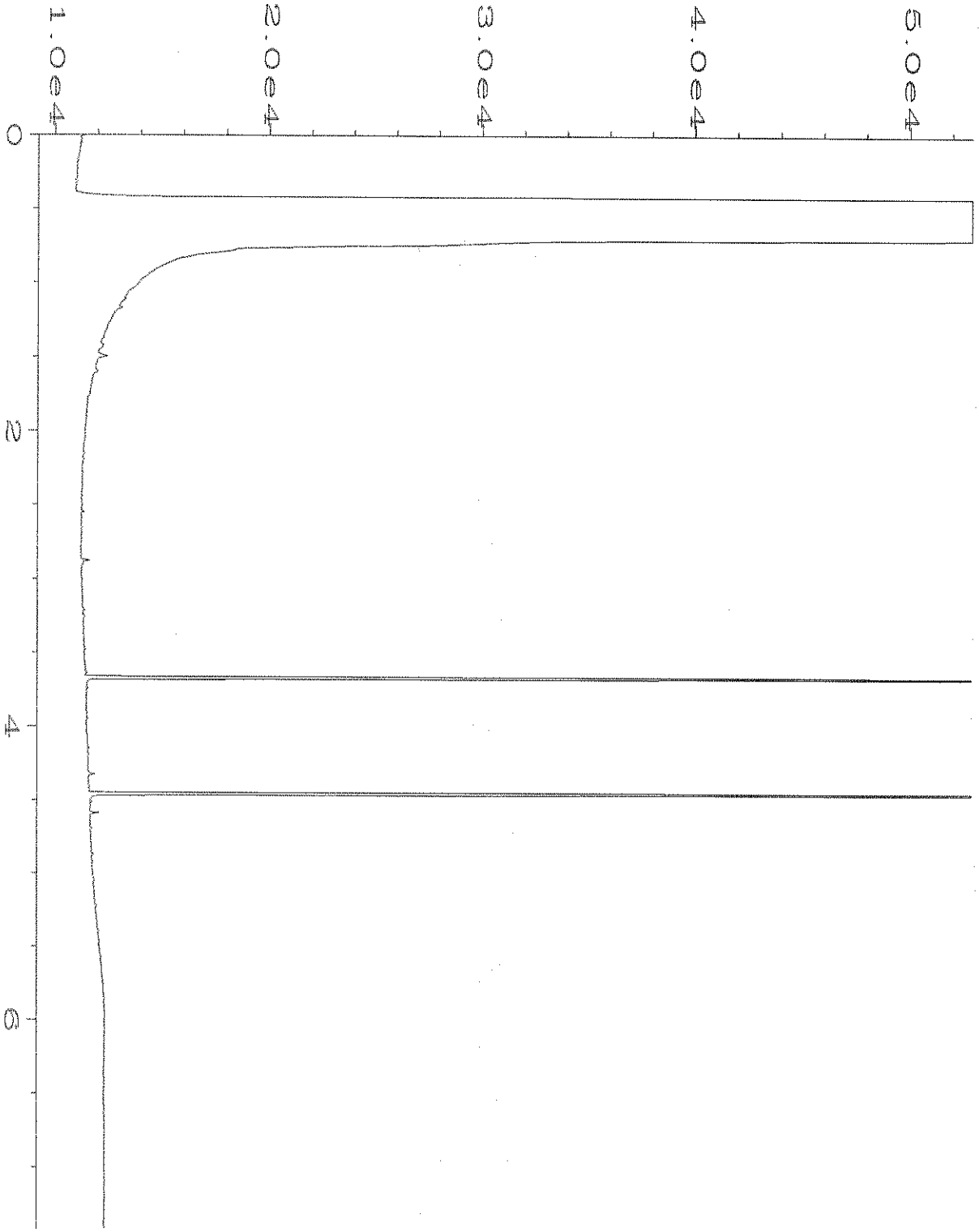
Data File Name : C:\HPCHEM\1\DATA\10-17-19\011F0301.D
Operator : TL
Instrument : GC1
Sample Name : 910284-15
Run Time Bar Code:
Acquired on : 17 Oct 19 08:46 AM
Report Created on: 18 Oct 19 08:13 AM

Page Number : 1
Vial Number : 11
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



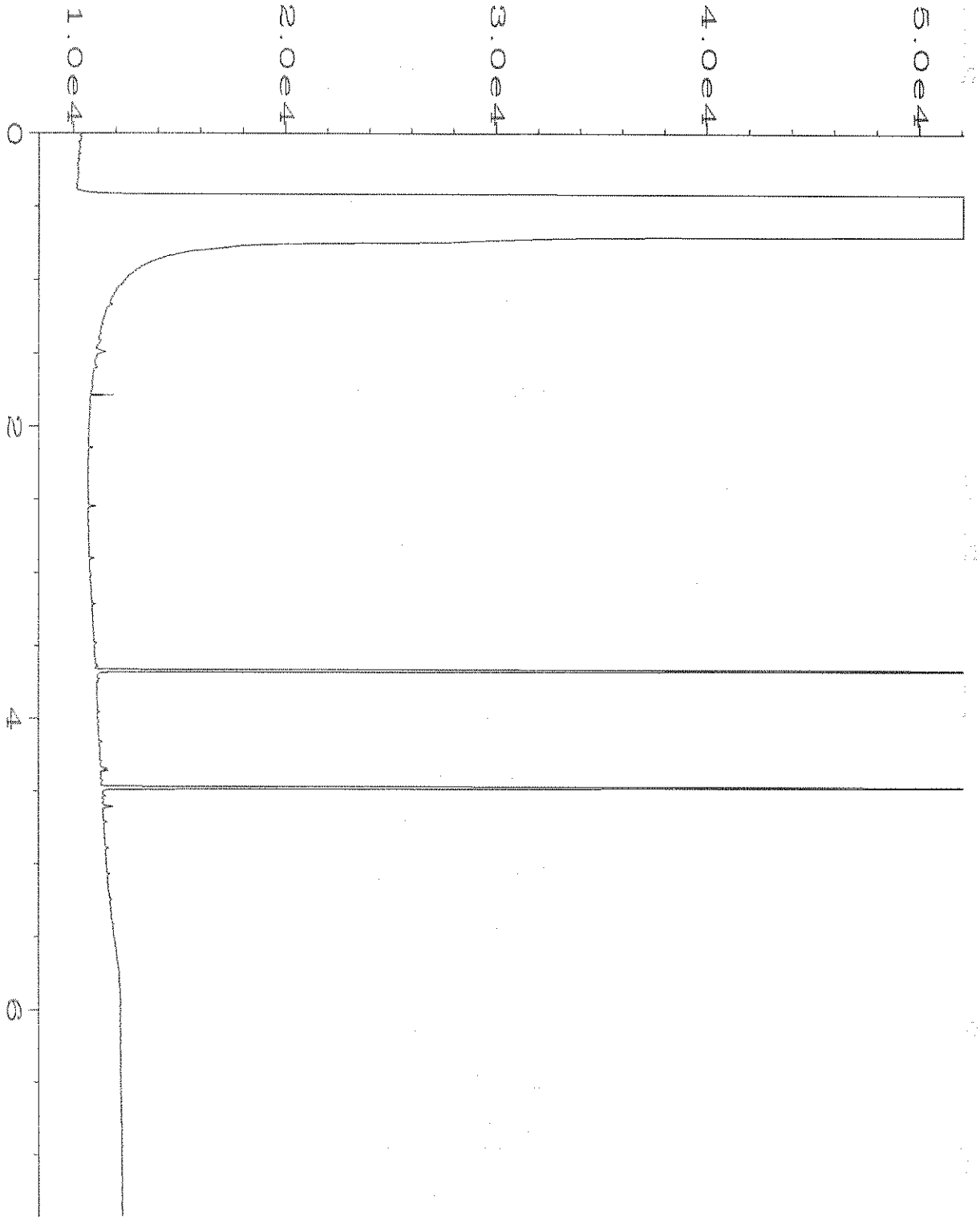
Data File Name : C:\HPCHEM\1\DATA\10-17-19\012F0301.D
Operator : TL
Instrument : GC1
Sample Name : 910284-19
Run Time Bar Code:
Acquired on : 17 Oct 19 08:58 AM
Report Created on: 18 Oct 19 08:14 AM

Page Number : 1
Vial Number : 12
Injection Number : 1
Sequence Line : 3
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH



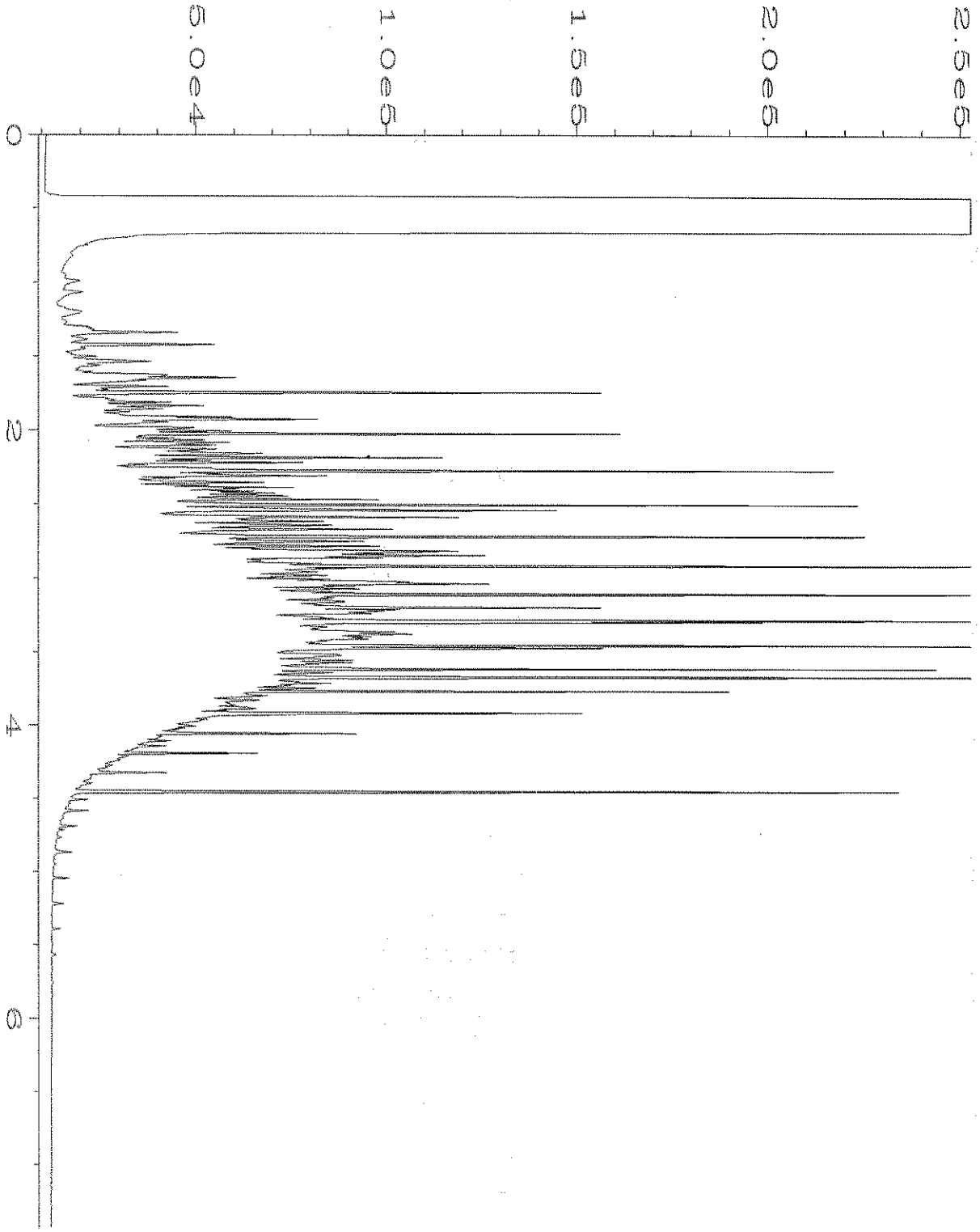
Data File Name : C:\HPCHEM\1\DATA\10-17-19\013F0301.D
Operator : TL
Instrument : GC1
Sample Name : 910284-22
Run Time Bar Code:
Acquired on : 17 Oct 19 09:09 AM
Report Created on: 18 Oct 19 08:14 AM

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



Data File Name : C:\HPCHEM\1\DATA\10-17-19\006F0301.D
Operator : TL
Instrument : GC1
Sample Name : 09-2581 mb2
Run Time Bar Code:
Acquired on : 17 Oct 19 07:51 AM
Report Created on: 18 Oct 19 08:14 AM

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



Data File Name : C:\HPCHEM\1\DATA\10-17-19\005F0801.D
Operator : TL
Instrument : GC1
Sample Name : 1000 Dx 58-62E
Run Time Bar Code:
Acquired on : 17 Oct 19 10:31 PM
Report Created on: 18 Oct 19 08:14 AM

Page Number : 1
Vial Number : 5
Injection Number : 1
Sequence Line : 8
Instrument Method: DX.MTH
Analysis Method : DEFAULT.MTH

910284

SAMPLE CHAIN OF CUSTODY ME 10-14-19

VS2/C05

Page # 1 of 3

Report To Kellie Andrews
Company AESI
Address 911 5th Ave
City, State, ZIP Kirkland WA 98033
Phone _____ Email _____

SAMPLERS (*signature*) Kellie Andrews

PROJECT NAME	PO #
Kelly's Auto Body	190391GV001
REMARKS	INVOICE TO

TURNAROUND TIME
☑ Standard Turnaround
☐ RUSH _____
Rush charges authorized by: _____

SAMPLE DISPOSAL
☐ 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	PCBA 8				Notes
						ANALYSES REQUESTED											
GP-1-4	01 A-E	10.12.19	0845	soil	5												HOLD
GP-1-10	02		0855		5		X	X		X			X				
GP-1-12.5	03		0903		5												HOLD
GP-1-19	04		0915		5												HOLD
GP-2-7.5	05		0958		5		X	X		X			X				
GP-2-12	06		1010		5												HOLD
GP-2-15	07		1015		5												HOLD
GP-3-5	08		1050		5												HOLD
GP-3-10	09		1055		5		X	X		X			X				
GP-3-15	10	↓	1100	↓	5												HOLD

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Kellie Andrews	Kellie Andrews	AESI	10.14.19	0830
Received by:	WES HERRING	F&L Ex	10-14-19	0940
Relinquished by: D. M-B	Liz Webber-Bruya	FBI	10/14/19	1330
Received by:		Samples received at		4 °C

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

910284

SAMPLE CHAIN OF CUSTODY ME 10-14-19

V32/C05

Page # 2 of 3

Report To Kellie Andrews

Company AESI

Address 911 5th Ave

City, State, ZIP Kirkland WA 98033

Phone _____ Email _____

SAMPLERS (*signature*): Kellie An

PROJECT NAME: Kelly's Auto Body

PO #: 190390 V001

REMARKS

INVOICE TO

TURNAROUND TIME
- ☒ Standard Turnaround
- ☐ RUSH _____
- Rush charges authorized by: _____

SAMPLE DISPOSAL
- ☐ 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	RCRA 6				Notes
GP-4-5	11A-E	10.12.19	1125	Soil	5												HOLD
GP-4-8	12		1130		5		X	X		X			X				
GP-4-15	13		1140		5												HOLD
GP-5-5	14		1215		5												HOLD
GP-5-7	15		1220		5		X	X		X			X				
GP-5-10	16		1230		5												HOLD
GP-5-15	17		1240		5												HOLD
GP-6-5	18		1310		5												HOLD
GP-6-10	19		1315		5		X	X		X			X				
GP-6-14	20		1325		5												HOLD

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Kellie An	Kellie Andrews	AESI	10.14.19	1830
Received by:	WES Herring	Fed Ex	10.14.19	0940
Relinquished by:	Liz Webber-Bruya	F?B1	10/14/19	1330
Received by:				

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

910284

SAMPLE CHAIN OF CUSTODY ME 10-14-19

VS2/C05

Page # 3 of 3

Report To Kellie Andrews

Company AESI

Address 911 5th Ave

City, State, ZIP Kirkland WA

Phone _____ Email _____

SAMPLERS (*signature*)

PROJECT NAME	PO #
Kelly's Auto Body	190396v001
REMARKS	INVOICE TO

TURNAROUND TIME
- ☒ Standard Turnaround
- ☐ RUSH _____
- Rush charges authorized by: _____

SAMPLE DISPOSAL
- ☐ 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	RCRA 8				Notes
						ANALYSES REQUESTED											
GP-7-5	21 AE	10.12.19	1420	Soil	5												HOLD
GP-7-10	22	↓	1425	↓	5		X	X		X			X				
GP-7-13	23	↓	1435	↓	5												HOLD

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Kellie Andrews	Kellie Andrews	AESI	10.14.19	1830
Received by:	WES HERRING	FedEx	10-14-19	9:40 pm
Relinquished by: D. M-B	Liz Wobber-Bruya	FTBI	10/14/19	1330
Received by:				

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