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July 3, 2024

Raymond Henault, President
Courtenay Airpark Association
1-110 20th Street
Courtenay, BC V9N 8B1
rlhenault@hotmail.com

Dear Mr. Henault:

RE: Recurrent Environmental Investigation
Courtenay Airpark, 100 20th Street, Courtenay, BC
Ref. 170-001-01

1.0 INTRODUCTION

Trillium Environmental Ltd. (Trillium) is pleased to provide the results of a recent Recurrent Environmental Investigation (REI) completed for a portion of the Courtenay Airpark property located at 100 20th Street, Courtenay, BC ("the Site"). This report serves to fulfill the conditions of the current "Airpark Lease Agreement" (Lease Agreement) between the Courtenay Airpark Association (CAA) and the City of Courtenay.

The focus of the REI was assessment of the groundwater quality in the vicinity of the underground storage tank (UST) and fuel area located on a portion of the leased area parcel described in **Table 1-1** below. A site location plan is presented in the attached **Figure 1**.

Table 1-1: Site Identification

Descriptor	Details
Civic Address	100 20th Street, Courtenay, BC (also known as 2040 Cliffe Avenue)
Legal Description	Northern portion of Lease Area B, Sections 66,67 and 68, Comox District Plan VIP80002, which is part of Lot 1, Section 68, Comox District Plan 15512 Except Part I Plan VIP88375
PID	004-154-665 (portion of)

This report summarizes the results of the groundwater monitoring and sampling activities undertaken at the Site on May 28, 2024.

1.1 Background

The following previous environmental report was provided to Trillium by the CAA for review:

- Baseline Environmental Assessment, Courtenay Airpark, 100 20th Street, Courtenay, BC. Prepared by Lewkowich Engineering Associates Ltd., November 29, 2021 (LEA, 2021)

The baseline assessment identified the following area of potential environmental concern (APEC) and associated potential contaminants of concern (PCOCs) requiring baseline environmental investigation and ongoing monitoring per the terms of the Lease Agreement.

Table 1-2: Summary of APEC and PCOCs (LEA, 2021)

APEC	Description	Potential Contaminants of Concern
APEC 1: Fuel Area (underground storage tank [UST] & Pumps)	The tank nest and fuel area consist of a two-compartment, double-walled fiberglass UST containing 30,000-L Avgas and 10,000-L of MoGas (supreme fuel) and two fuel pumps[1]. The UST was installed ca. 2005.	Benzene, toluene, ethylbenzene, xylenes (BTEX), volatile petroleum hydrocarbons (VPH), light/heavy extractable petroleum hydrocarbons (LEPH/HEPH/EPH), and volatile organic compounds (VOC)

[1] Personal communication, Raymond Henault, President, CAA, June 13, 2024

LEA (2021) summarized that five boreholes were advanced in the vicinity of the UST and fuel pumps to a maximum depth of 4.6 metres below ground surface (mbgs) and completed as four monitoring wells (MW21-1, MW21-2, MW21-4 and MW21-5) and one soil vapour probe (BH21-3) (**Figure 2**). Soil and groundwater samples were submitted for laboratory analysis of the above PCOCs. The volume of water in the wells was insufficient for sample recovery; therefore, pre-existing monitoring wells MW-1 and MW-2 (shown on Figure 2) were sampled for groundwater. The analytical results indicated that all PCOCs analyzed in soil and groundwater were below the applicable standards. Concentrations of PCOCs were predominantly below the reported detection limit (RDL) except for toluene which was detected at low concentrations (0.88 µg/L and 1.7 µg/L compared to the AW_{FW} standard of 5 µg/L). LEA (2021) indicated that a soil vapour assessment was not required based on field observations and soil and groundwater results indicating negligible volatile hydrocarbon impacts. LEA recommended that future groundwater monitoring/sampling events be undertaken during periods of high tide to ensure the volume of water is sufficient for sample collection.

In consideration of renewing their lease, the CAA requested Trillium prepare an REI that meets the requirements of the Lease Agreement. It is understood that the current lease is up for renewal on January 1, 2026.

1.2 Objectives

The REI program was developed based on LEA's Baseline Environmental Assessment (LEA, 2021) and the information provided via email correspondence between Trillium and Raymond Henault of the CAA, dated February 18, 2024.

The primary objective of the REI was to determine if specific fuel-related PCOCs are present in groundwater at concentrations above the BC Ministry of Environment and Climate Change Strategy (BC ENV) *Contaminated Sites Regulation* (CSR) standards. A secondary objective was to review whether it remains true that soil vapour sampling is not warranted based on the new groundwater sampling results.

1.3 Scope of Work

The scope of work for the REI included the following tasks:

- Mobilize to the Site to purge and sample four existing groundwater monitoring wells located in the vicinity of the UST nest and fuel area;
- Submit four groundwater samples and one duplicate sample to Bureau Veritas (BV Labs) for analysis of petroleum hydrocarbons including LEPH/HEPH, polycyclic aromatic hydrocarbons (PAH) and (VOC) including BTEX, methyl tert-butyl ether (MTBE), and styrene (as listed in 'Schedule F' of the Lease Agreement).
- Tabulate the results and compared to applicable CSR standards; and
- Prepare a letter report documenting the investigation methodologies, quality assurance / quality control (QA/QC) procedures, analytical results, conclusions, and recommendations.

The work was carried out in accordance with generally accepted industry practices and relevant BC ENV protocols and guidance documents.

2.0 SITE DESCRIPTION

The Courtenay Airpark comprises three legally titled lots described as follows (**Figure 1**):

- Lot 1, Section 68, Comox District, Plan 15512 Except Part in Plan VIP88375 (contains investigation area)
- Lot 1, Section 66, Comox District, Plan 14942, Except Any Portion of the Bed of the Courtenay River
- Lot A, Sections 66 and 67, Comox District, Plan 14521, Except Any Portion of the Bed of the Courtenay River

The Courtenay Airpark leases these parcels of which the Site is located on a portion of VIP88375.These properties have been occupied by the airpark for private storage and use of small aircraft since the 1960s (LEA, 2021). The greater airpark consists of several hangars, an office building, runway, and fueling area with a two-compartment (30-000-L Avgas and 10,000-L MoGas), double-walled fibreglass UST and two fuel pumps. This report focuses on the fueling area portion of the airpark lease. The fuel tank system was installed in 2005 and is monitored regularly by Mr. Sylvain Fortin, Director of Fuel Management (personal communication, Raymond Henault, May 28, 2024). Surrounding land use includes residential and commercial properties, a public walking path and park. Additional site details are provided in **Table 2-1** below.

Table 2-1: Site Description

Descriptor	Details
Current zoning / land use	PA-1: Public Use and Assembly One; PA-2: Public Use and Assembly two (City of Courtenay, 2021)
Total Area	0.26 ha (2,650 m^2) (approx.)
Site occupants	Courtenay Airpark Association
Elevation	The Site is relatively flat with surface elevations ranging from 6 to 7 metres above sea level (masl) (Google Earth, 2024)

Descriptor	Details
Regional topography	Regional topography slopes gently to the north-northeast northwest towards the Courtenay River and Comox Harbour (BC WRA, 2024)
Surface drainage	Surface runoff in the paved portions of the Site flows into on-site catch basins or flows to unpaved areas and infiltrates the surface soil.
Surficial geology	Surficial geology underlying the Site are mapped as Salish sediments consisting of shore, deltaic and fluvial deposits of gravel, sand, silt, clay, or peat (Fyles, 1960) which is generally consistent with the observations reported in LEA (2021) during the drilling investigation.
Bedrock	Bedrock underlying the Site is mapped as Upper Cretaceous undivided sedimentary rocks consisting of boulder, cobble, and pebble conglomerate, coarse to fine sandstone, siltstone, shale, and/or coal (BC Water Resources Atlas [BC WRA], 2024)
Hydrology and hydrogeology	Groundwater flow is expected to generally follow regional topography in a north-northeast direction towards the Courtenay River and Comox Harbour. There are two mapped aquifers underlying the Site (BC WRA, 2024). Aquifer 951 is an unconfined sand and gravel aquifer with moderate vulnerability and a median water depth of 2.59 m. Aquifer 411 is a fractured sedimentary bedrock aquifer with low vulnerability and a median water depth of 5.94 m.
Surface water	The nearest surface water body is the Courtenay River / Comox Harbour, an estuarine environment adjacent to the northeast portion of the Site.
Potable water	Potable water is supplied by the City of Courtenay via the Comox Valley Water System which sources water from an intake in Comox Lake (Comox Valley Regional District [CVRD], 2024)

3.0 REGULATORY BACKGROUND

The legislation which dictates site investigation and remediation in British Columbia is mandated by the BC ENV under the *Environmental Management Act*. Specific environmental standards, protocols and guidance are provided in the CSR. The CSR provides concentration-based standards for soil, water, sediment, and soil vapour that, when warranted, are used to determine whether a site is contaminated. Schedule 2 of the CSR specifies specific commercial and industrial activities that have the potential to cause contamination. The groundwater standards applied to the investigation are described in further detail in the following sections.

3.1 Groundwater Standards

The following CSR Schedule 3.2 Generic Numerical Water Standards are considered applicable at the Site:

- Freshwater and marine aquatic life (AW_F and AW_M) – based on the presence of an estuarine environment (Courtenay River / Comox Harbour) located adjacent to the northeast portion of the Site.
- Drinking water (DW) – although there are no registered water wells within a 500-m radius of the Site, the potential for future drinking water use in the area remains.

4.0 FIELD METHODOLOGIES

All work was carried out in accordance with Trillium's Standard Field Procedures and general environmental standards of practice. A project-specific health and safety plan was prepared prior to initiating field activities.

4.1 Groundwater Monitoring & Sampling Program

Groundwater monitoring and sampling activities were conducted in accordance with the BC Field Sampling Manual (BC ENV, 2020). Sampling was completed on May 28, 2024, targeting a period of high tide (~4.0 m) (Environment Canada, 2024). Static groundwater level measurements were obtained from each of the monitoring wells included in the scope of work prior to well purging and sampling activities. Monitoring wells were measured for depth to well bottom and depth to groundwater utilizing a Heron Instruments Inc. water level meter. Groundwater samples were collected from each of the wells using a dedicated polyethylene bailer and placed in laboratory-provided containers/bottles. Following sample collection, the wells were developed/purged dry to improve their utility for future groundwater monitoring events. Photographs of the groundwater monitoring/sampling activities are included in **Attachment A**.

5.0 RESULTS

5.1 Groundwater Observations

Groundwater was encountered in monitoring wells MW21-1, MW21-2, MW21-4, and MW21-5 at depths ranging from 2.3 to 2.6 mbgs. Despite sampling during a 4-m high-tide period, the volume of water and rate of recharge was insufficient for proper purging and sample recovery; therefore, groundwater samples were collected without purging the wells. As the lower portion of the wells was observed to be entrained with sediment, sampling targeted the relatively clear groundwater in the upper interval of the water column. No sheens, odours, or light non-aqueous phase liquids (LNAPL) were observed during the groundwater monitoring event. Groundwater monitoring data is summarized in the attached **Table 1**.

Upon cross-referencing the observed groundwater levels with the previous borehole logs (LEA, 2021), we suspect that the 2021 monitoring wells were not installed at the appropriate depths to effectively intercept the water table, which is likely situated in the coarse gravel and sand unit observed between 3.1 and 4.6 m.

Groundwater flow direction at the Site has not been assessed but is expected to cycle in and out with the nearby tidal estuarian Courtenay River and Comox Harbour, with an average discharge toward the north-northeast, based on regional topography and proximity to the aquatic environment.

5.2 Groundwater Analytical Results

Four groundwater samples and one duplicate sample were submitted to BV Labs for laboratory analysis. Groundwater analytical results were compared to the CSR AW_{FW}, AW_{M} and DW standards. The analytical results indicated that all measured PCOCs were below the reported detection limit (RDL) and applicable standards.

The analytical results are summarized along with the applicable standards in attached **Table 2** and laboratory certificates of analysis are provided in **Attachment B.** Monitoring well locations and groundwater results are depicted on the attached **Figure 2.**

5.3 Quality Assurance and Quality Control

QA/QC measures implemented for the groundwater analytical program included measures by both the laboratory and by field personnel collecting the soil samples. BV Labs is an environmental laboratory accredited by the Canadian Association for Laboratory Accreditation (CALA). Routine analysis of laboratory replicates and standard reference materials were conducted by the laboratory to define precision and accuracy, and to demonstrate contamination control for the type of samples and parameters under investigation.

Measured were taken during sample collection to prevent cross-contamination during sample collection as described below:

- Replaced nitrile gloves prior to collecting each sample;
- The water level meter was sanitized with a mixture of deionized water and Alconox® detergent prior to and after each monitoring location;
- Samples were collected using a dedicated polyethylene bailer for each well; and
- Samples were placed in laboratory-provided sample containers/bottles pre-loaded with the appropriate preservatives and stored in a cooler packed with ice during transport to the laboratory.

Additional QA/QC measures taken by Trillium included collection of sample-duplicate pairs for concurrent analysis by the laboratory. Typically, a measure of sampling reproducibility or precision is evaluated by calculating the relative percent difference (RPD) between each parameter of the sample-duplicate pairings; however, RPDs could not be calculated as all sample concentrations were below the RDLs (**Table 2**). Based on the QA/QC results, the groundwater data obtained by Trillium is considered reliable for the purpose of this investigation.

6.0 CONCLUSIONS AND RECOMMENDATIONS

An REI was completed at the Site on May 28, 2024, to assess groundwater quality within the vicinity of the UST nest and fuel area (APEC 1). Groundwater samples obtained from four existing monitoring wells MW21-1, MW21-2, MW21-4 and MW21-5 were below the RDL and met the applicable CSR standards for AW_{FW}, AW_{M} and DW use. Based on the results, no groundwater impacts were identified, and a soil vapour assessment is not warranted at this time.

Trillium recommends ongoing monitoring/sampling of groundwater be completed in the fuel area. The well installations were installed too shallow to allow for proper purging and sample recovery except for during the highest tides. While the wells could be redrilled and reinstalled deeper, it is recommended that future groundwater monitoring events be completed during a period of higher tide (4.5 m or greater) compared to the current and previous investigations.

This REI fulfills the requirements of the Lease Agreement and supports the ongoing use of the airpark lands by the CAA.

7.0 CLOSURE

We trust that this report meets your needs. Please do not hesitate to contact Trillium if you have any questions.

Yours truly,

TRILLIUM ENVIRONMENTAL LTD.

Prepared by:
Paul Antonelli, M.Sc., P.Ag.
Technical Lead

Reviewed by:
Stefan Quaglia, R.P.Bio., CSAP
Project Director

Attachments:

Figure 1	Site Location Plan
Figure 2	Groundwater Results: Petroleum Hydrocarbons
Table 1	Groundwater Physical Data
Table 2	Groundwater Analytical Results – Petroleum Hydrocarbons
Attachment A	Site Photographs
Attachment B	Laboratory Certificates of Analysis

8.0 STUDY LIMITATIONS

Findings presented in this report are based upon the results of field investigations including boreholes, monitoring wells, soil, groundwater, and soil vapour analyses. Geologic observations and analytical results reflect conditions encountered at specific test locations. Site conditions (geologic, hydrogeologic and chemical characterization) may vary from that extrapolated from the data collected during this investigation. Consequently, while findings and conclusions documented in this report have been prepared in a manner consistent with that level of care and skill normally exercised by other members of the environmental science and engineering profession practicing under similar circumstances in the area at the time of the performance of the work, this report is not intended nor is it able to provide a totally comprehensive review of past or present Site environmental conditions. This report is intended to provide information to reduce, but not necessarily eliminate, uncertainty regarding the potential for contamination of a property.

This report has been prepared solely for the internal use of the Courtenay Airpark Association pursuant to the agreement between Trillium Environmental Ltd. and Courtenay Airpark Association. By using the report, the abovementioned parties agree that they will review and use the report in its entirety. Any use which other parties make of this report, or any reliance on or decisions made based on it, are the responsibility of such parties. Trillium Environmental Ltd. accepts no responsibility for damages, if any, suffered by other parties as a result of decisions made or actions based on this report.

9.0 REFERENCES

British Columbia Ministry of Environment & Climate Change Strategy (BC ENV). 2020. British Columbia Field Sampling Manual, Part E: Water and Wastewater Sampling. Available: https://www2.gov.bc.ca/assets/gov/environment/research-monitoring-and-reporting/monitoring/emre/manuals/field-sampling-manual/bc_field_sampling_manual_part_e.pdf.

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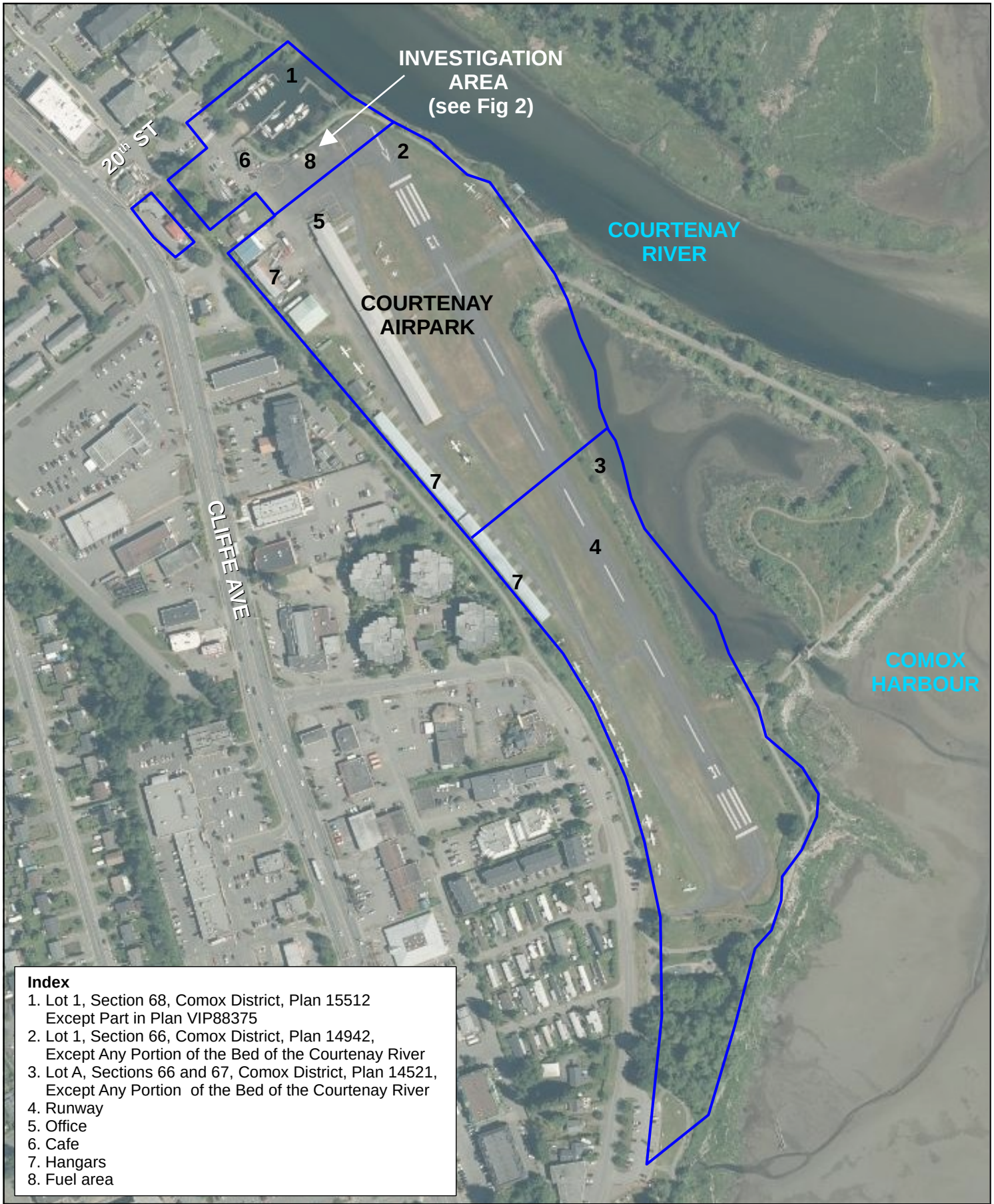
Figures



Index

1. Lot 1, Section 68, Comox District, Plan 15512 Except Part in Plan VIP88375
2. Lot 1, Section 66, Comox District, Plan 14942, Except Any Portion of the Bed of the Courtenay River
3. Lot A, Sections 66 and 67, Comox District, Plan 14521, Except Any Portion of the Bed of the Courtenay River
4. Runway
5. Office
6. Cafe
7. Hangars
8. Fuel area

LEGEND

Property Boundary

Scale 1:3,750

0 25 100

metres

Note: All measurements are approximate. No guarantee is made as to the accuracy.

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CLIENT: COURTENAY AIRPARK ASSOCIATION

RECURRENT ENVIRONMENTAL INVESTIGATION
COURTENAY AIRPARK
100 20th STREET, COURTENAY, BC

SITE LOCATION PLAN

PROJECT No.		
170-001-01	JULY 2024	FIGURE 1

MW21-5	BTEX/ VPH	LEPH/ HEPH	PAH
28-May-2024	<RDL	<RDL	<RDL

MW21-4	BTEX/ VPH	LEPH/ HEPH	PAH
28-May-2024	<RDL	<RDL	<RDL

MW21-2	BTEX/ VPH	LEPH/ HEPH	PAH
28-May-2024	<RDL	<RDL	<RDL

MW21-1	BTEX/ VPH	LEPH/ HEPH	PAH
28-May-2024	<RDL	<RDL	<RDL

LEGEND

- Property Boundary
- Tank Nest
- Groundwater Monitoring Well
- Sample Meets CSR Water Standards for Petroleum Hydrocarbons

Approx Scale 1:340

0 2.5 10
meters

Notes: All measurements are approximate. No guarantee is made as to the accuracy.

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CLIENT: COURTENAY AIRPARK ASSOCIATION

RECURRENT ENVIRONMENTAL INVESTIGATION
COURTENAY AIRPARK
100 20th STREET, COURTENAY, BC

GROUNDWATER RESULTS:
PETROLEUM HYDROCARBONS

PROJECT No. 170-001-01 | JULY 2024 | FIGURE 2

Tables

Table 1
Groundwater Physical Data
Courtenay Airpark, Courtenay, BC
Courtenay Airpark Association
Project No. 170-001-01

Location / Date	Screened Interval (approximate)		Stratigraphy Opposite Screen	Depth to Water from TOC mbtoc	Total Depth from TOC mbtoc	Total Depth from Ground Surface mbgs	Ground Surface Elevation[1] masl	Monitoring Well Headspace[2] ppm
	from (mbgs)	to (mbgs)						
MW21-1								
28-May-24	1.5	3.0	Silt, sand, gravel, organics	2.332	2.913	3.0	7	14.4
MW21-2								
28-May-24	1.5	3.0	Silt, sand, gravel, organics	2.498	3.163	3.2	7	9.9
MW21-4								
28-May-24	1.8	3.3	Silt, sand, gravel, organics	2.580	3.223	3.3	6	10.1
MW21-5								
28-May-24	1.8	3.3	Silt, sand, gravel, organics	2.507	3.071	3.2	6	6.1

NOTES:

mbgs	Metres below ground surface.
TOC	Top of casing.
mbtoc	Metres below top of casing.
masl	Metres above sea level
1	Ground elevation approximated from Google Earth.
2	Monitoring well headspace measured with a calibrated MiniRae 2000 photoionization detector.

Table 2
Groundwater Analytical Results
Petroleum Hydrocarbons
Courtenay Airpark, Courtenay, BC
Courtenay Airpark Association
Project No. 170-001-01

Well ID	MW21-1				MW21-2	MW21-4	MW21-5	CSR Water Standards[1]		
Sample ID	MW21-1	MW21-A Dup of MW21-1	RDL	RPD (%)	MW21-2	MW21-4	MW21-5			
Lab Sample ID:	COF351	COF358			COF359	COF360	COF361			
Date Sampled:	28-May-24	28-May-24			28-May-24	28-May-24	28-May-24	Freshwater Aquatic Life (AW_{FW})	Marine Aquatic Life (AW_{M})	Drinking Water (DW)
Volatile Organic Compounds										
Benzene	<0.40	<0.40	0.40	-	<0.40	<0.40	<0.40	400	1,000	5
Ethylbenzene	<0.40	<0.40	0.40	-	<0.40	<0.40	<0.40	2,000	2,500	140
Methyl tert-butyl ether (MTBE)	<4.0	<4.0	4.0	-	<4.0	<4.0	<4.0	34,000	4,400	95
Styrene	<0.40	<0.40	0.40	-	<0.40	<0.40	<0.40	720	720	800
Toluene	<0.40	<0.40	0.40	-	<0.40	<0.40	<0.40	5	2,000	60
Xylenes, total	<0.40	<0.40	0.40	-	<0.40	<0.40	<0.40	300	300	90
Hydrocarbons										
EPH (C10-C19)	<200	<200	200	-	<200	<200	<200	5,000	5,000	5,000
EPH (C19-C32)	<200	<200	200	-	<200	<200	<200	ns	ns	ns
VHw (C6-C10)	<300	<300	300	-	<300	<300	<300	15,000	15,000	15,000
LEPHw	<200	<200	200	-	<200	<200	<200	500	500	ns
HEPHw	<200	<200	200	-	<200	<200	<200	ns	ns	ns
VPHw	<300	<300	300	-	<300	<300	<300	1,500	1,500	ns
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	<0.050	<0.050	0.050	-	<0.050	<0.050	<0.050	60	60	250
Acenaphthylene	<0.050	<0.050	0.050	-	<0.050	<0.050	<0.050	ns	ns	ns
Acridine	<0.050	<0.050	0.050	-	<0.050	<0.050	<0.050	0.5	0.5	ns
Anthracene	<0.010	<0.010	0.010	-	<0.010	<0.010	<0.010	1	1	1,000
Benz(a)anthracene	<0.010	<0.010	0.010	-	<0.010	<0.010	<0.010	1	1	0.07
Benzo(a)pyrene	<0.0050	<0.0050	0.0050	-	<0.0050	<0.0050	<0.0050	0.1	0.1	0.01
Benzo(b+j)fluoranthene	<0.030	<0.030	0.030	-	<0.030	<0.030	<0.030	ns	ns	0.07
Benzo(g,h,i)perylene	<0.050	<0.050	0.050	-	<0.050	<0.050	<0.050	ns	ns	ns
Benzo(k)fluoranthene	<0.050	<0.050	0.050	-	<0.050	<0.050	<0.050	ns	ns	ns
Chrysene	<0.020	<0.020	0.020	-	<0.020	<0.020	<0.020	1	1	7
Dibenz(a,h)anthracene	<0.0030	<0.0030	0.0030	-	<0.0030	<0.0030	<0.0030	ns	ns	0.01
Fluoranthene	<0.020	<0.020	0.020	-	<0.020	<0.020	<0.020	2	2	150
Fluorene	<0.050	<0.050	0.050	-	<0.050	<0.050	<0.050	120	120	150
Indeno(1,2,3-cd)pyrene	<0.050	<0.050	0.050	-	<0.050	<0.050	<0.050	ns	ns	ns
1-Methylnaphthalene	<0.050	<0.050	0.050	-	<0.050	<0.050	<0.050	ns	ns	5.5
2-Methylnaphthalene	<0.10	<0.10	0.10	-	<0.10	<0.10	<0.10	ns	ns	15
Naphthalene	<0.10	<0.10	0.10	-	<0.10	<0.10	<0.10	10	10	80
Phenanthrene	<0.050	<0.050	0.050	-	<0.050	<0.050	<0.050	3	3	ns
Pyrene	<0.020	<0.020	0.020	-	<0.020	<0.020	<0.020	0.2	0.2	100
Quinoline	<0.020	<0.020	0.020	-	<0.020	<0.020	<0.020	34	34	0.05
Low Molecular Weight PAH`s	<0.10	<0.10	0.10	-	<0.10	<0.10	<0.10	ns	ns	ns
High Molecular Weight PAH`s	<0.050	<0.050	0.050	-	<0.050	<0.050	<0.050	ns	ns	ns
Total PAH	<0.10	<0.10	0.10	-	<0.10	<0.10	<0.10	ns	ns	ns

NOTES:
Standards are concentration based and are presented in units of micrograms per litre (µg/L) or parts per billion (ppb), unless otherwise noted.

CSR	Contaminated Sites Regulation, effective April 1, 1997, including amendments up to March 1, 2023.
RDL	Reported detection limit.
RPD	Relative percent difference, calculated as: (sample value - duplicate value) X 100% / ((sample + duplicate value)/2).
LEPHw	Light Extractable Petroleum Hydrocarbons in water, carbon range C10 to C19 corrected for PAHs.
HEPHw	Heavy Extractable Petroleum Hydrocarbons in water, carbon range C19 to C32 corrected for PAHs.
EPHw (C10-C19)	Extractable Petroleum Hydrocarbons in water, carbon range C10 to C19, aggregated.
EPHw (C19-C32)	Extractable Petroleum Hydrocarbons in water, carbon range C19 to C32, aggregated.
VHw (C6-C10)	Volatile Petroleum Hydrocarbons in water, carbon range C6 to C10, aggregated.
VPHw	Volatile Petroleum Hydrocarbons in water, carbon range C6 to C10, corrected for benzene, ethylbenzene, toluene and xylenes.
ns	No standard for this constituent.
-	Sample not analyzed for this parameter / RPD calculations not performed if analytical result in one or both samples is less than RDL.
1	CSR Schedule 3.2 Generic Numerical Water Standards.

Attachment A
Site Photographs

Photo 1: View of tank nest and fuel area in north portion of the Site, looking west (May 28, 2024)

Photo 2: View of groundwater monitoring/sampling at MW21-4 (May 28, 2024)

Attachment B
Laboratory Certificates of Analysis

Your Project #: 170-001-01
Site Location: COURTENAY AIRPARK, BC
Your C.O.C. #: 08536842

Attention: Paul Antonelli

Trillium Environmental
126 Ingram St.
Unit 203
Duncan, BC
CANADA V9M 1P1

Report Date: 2024/06/04
Report #: R3508627
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C437897
Received: 2024/05/28, 11:40

Sample Matrix: Water
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE LH, VH, F1 SIM/MS (1)	5	N/A	2024/05/29	BBY8SOP-00010 / BBY8SOP-00011 / BBY8SOP-00012	BCMOE BCLM Jul 2017
EPH in Water when PAH required (1)	4	2024/05/30	2024/05/31	BBY8SOP-00029	BCMOE BCLM Sep2017 m
EPH in Water when PAH required (1)	1	2024/05/31	2024/05/31	BBY8SOP-00029	BCMOE BCLM Sep2017 m
PAH in Water by GC/MS (SIM) (1)	1	2024/05/30	2024/05/31	BBY8SOP-00021	BCMOE BCLM Jul2017m
PAH in Water by GC/MS (SIM) (1)	3	2024/05/30	2024/06/01	BBY8SOP-00021	BCMOE BCLM Jul2017m
PAH in Water by GC/MS (SIM) (1)	1	2024/05/31	2024/05/31	BBY8SOP-00021	BCMOE BCLM Jul2017m
Total LMW, HMW, Total PAH Calc (1, 2)	5	N/A	2024/06/03	BBY WI-00033	Auto Calc
EPH less PAH in Water by GC/FID (1, 3)	5	N/A	2024/06/03	BBY WI-00033	Auto Calc
Volatile HC-BTEX (1, 4)	5	N/A	2024/05/30	BBY WI-00033	Auto Calc

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your Project #: 170-001-01
Site Location: COURTENAY AIRPARK, BC
Your C.O.C. #: 08536842

Attention: Paul Antonelli

Trillium Environmental
126 Ingram St.
Unit 203
Duncan, BC
CANADA V9M 1P1

Report Date: 2024/06/04
Report #: R3508627
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C437897

Received: 2024/05/28, 11:40

(1) This test was performed by Bureau Veritas Vancouver, 4606 Canada Way , Burnaby, BC, V5G 1K5
(2) Total PAHs in Water include: Quinoline, Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Acridine, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b&j)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, and Benzo(g,h,i)perylene.
(3) LEPH = EPH (C10 to C19) - (Acenaphthene + Acridine + Anthracene + Fluorene + Naphthalene + Phenanthrene)
HEPH = EPH (C19 to C32) - (Benzo(a)anthracene + Benzo(a)pyrene + Fluoranthene + Pyrene)
(4) VPH = VH - (Benzene + Toluene + Ethylbenzene + m & p-Xylene + o-Xylene + Styrene)

Encryption Key

AUTHORIZED REPORT
RAPPORT AUTORISÉ

Bureau Veritas
04 Jun 2024 13:47:52

Please direct all questions regarding this Certificate of Analysis to:
Shanaz Akbar, Customer Solutions Representative
Email: Shanaz.Akbar@bureauveritas.com
Phone# (833) 282-5227

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This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Raphael Kwan, Senior Manager, BC and Yukon Regions responsible for British Columbia Food laboratory operations.

Bureau Veritas Job #: C437897
Report Date: 2024/06/04

Trillium Environmental
Client Project #: 170-001-01
Site Location: COURTENAY AIRPARK, BC
Sampler Initials: PA

CSR BTEX/VPH IN WATER (WATER)

Bureau Veritas ID		COF351	COF358	COF359	COF360	COF361		
Sampling Date		2024/05/28 09:00	2024/05/28 09:00	2024/05/28 08:30	2024/05/28 09:30	2024/05/28 10:00		
COC Number		08536842	08536842	08536842	08536842	08536842		
	UNITS	MW21-1	MW21-A	MW21-2	MW21-4	MW21-5	RDL	QC Batch
Calculated Parameters								
VPH (VH6 to 10 - BTEX)	ug/L	<300	<300	<300	<300	<300	300	B383052
Volatiles								
Methyl-tert-butylether (MTBE)	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	4.0	B383360
Benzene	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	B383360
Toluene	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	B383360
Ethylbenzene	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	B383360
m & p-Xylene	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	B383360
o-Xylene	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	B383360
Styrene	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	B383360
Xylenes (Total)	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	B383360
VH C6-C10	ug/L	<300	<300	<300	<300	<300	300	B383360
Surrogate Recovery (%)								
1,4-Difluorobenzene (sur.)	%	106	105	109	107	106		B383360
4-Bromofluorobenzene (sur.)	%	96	97	96	95	95		B383360
D4-1,2-Dichloroethane (sur.)	%	107	114	110	106	106		B383360

RDL = Reportable Detection Limit

Bureau Veritas Courtenay: 2755B Moray Avenue V9N 8M9, Phone: (250) 338-7786. Toll free: (800) 665-8566

Bureau Veritas Job #: C437897
Report Date: 2024/06/04

Trillium Environmental
Client Project #: 170-001-01
Site Location: COURTENAY AIRPARK, BC
Sampler Initials: PA

LEPH & HEPH WITH CSR/CCME PAH IN WATER (WATER)

Bureau Veritas ID		COF351	COF358	COF359	COF360		COF361		
Sampling Date		2024/05/28 09:00	2024/05/28 09:00	2024/05/28 08:30	2024/05/28 09:30		2024/05/28 10:00		
COC Number		08536842	08536842	08536842	08536842		08536842		
	UNITS	MW21-1	MW21-A	MW21-2	MW21-4	QC Batch	MW21-5	RDL	QC Batch
Calculated Parameters									
Low Molecular Weight PAH`s	ug/L	<0.10	<0.10	<0.10	<0.10	B383048	<0.10	0.10	B383048
High Molecular Weight PAH`s	ug/L	<0.050	<0.050	<0.050	<0.050	B383048	<0.050	0.050	B383048
Total PAH	ug/L	<0.10	<0.10	<0.10	<0.10	B383048	<0.10	0.10	B383048
Polycyclic Aromatics									
Quinoline	ug/L	<0.020	<0.020	<0.020	<0.020	B384885	<0.020	0.020	B385869
Naphthalene	ug/L	<0.10	<0.10	<0.10	<0.10	B384885	<0.10	0.10	B385869
1-Methylnaphthalene	ug/L	<0.050	<0.050	<0.050	<0.050	B384885	<0.050	0.050	B385869
2-Methylnaphthalene	ug/L	<0.10	<0.10	<0.10	<0.10	B384885	<0.10	0.10	B385869
Acenaphthylene	ug/L	<0.050	<0.050	<0.050	<0.050	B384885	<0.050	0.050	B385869
Acenaphthene	ug/L	<0.050	<0.050	<0.050	<0.050	B384885	<0.050	0.050	B385869
Fluorene	ug/L	<0.050	<0.050	<0.050	<0.050	B384885	<0.050	0.050	B385869
Phenanthrene	ug/L	<0.050	<0.050	<0.050	<0.050	B384885	<0.050	0.050	B385869
Anthracene	ug/L	<0.010	<0.010	<0.010	<0.010	B384885	<0.010	0.010	B385869
Acridine	ug/L	<0.050	<0.050	<0.050	<0.050	B384885	<0.050	0.050	B385869
Fluoranthene	ug/L	<0.020	<0.020	<0.020	<0.020	B384885	<0.020	0.020	B385869
Pyrene	ug/L	<0.020	<0.020	<0.020	<0.020	B384885	<0.020	0.020	B385869
Benzo(a)anthracene	ug/L	<0.010	<0.010	<0.010	<0.010	B384885	<0.010	0.010	B385869
Chrysene	ug/L	<0.020	<0.020	<0.020	<0.020	B384885	<0.020	0.020	B385869
Benzo(b&j)fluoranthene	ug/L	<0.030	<0.030	<0.030	<0.030	B384885	<0.030	0.030	B385869
Benzo(k)fluoranthene	ug/L	<0.050	<0.050	<0.050	<0.050	B384885	<0.050	0.050	B385869
Benzo(a)pyrene	ug/L	<0.0050	<0.0050	<0.0050	<0.0050	B384885	<0.0050	0.0050	B385869
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	<0.050	<0.050	<0.050	B384885	<0.050	0.050	B385869
Dibenz(a,h)anthracene	ug/L	<0.0030	<0.0030	<0.0030	<0.0030	B384885	<0.0030	0.0030	B385869
Benzo(g,h,i)perylene	ug/L	<0.050	<0.050	<0.050	<0.050	B384885	<0.050	0.050	B385869
Calculated Parameters									
LEPH (C10-C19 less PAH)	mg/L	<0.20	<0.20	<0.20	<0.20	B383051	<0.20	0.20	B383051
HEPH (C19-C32 less PAH)	mg/L	<0.20	<0.20	<0.20	<0.20	B383051	<0.20	0.20	B383051
Ext. Pet. Hydrocarbon									
EPH (C10-C19)	mg/L	<0.20	<0.20	<0.20	<0.20	B384895	<0.20	0.20	B385872
EPH (C19-C32)	mg/L	<0.20	<0.20	<0.20	<0.20	B384895	<0.20	0.20	B385872
RDL = Reportable Detection Limit									

Bureau Veritas Courtenay: 2755B Moray Avenue V9N 8M9, Phone: (250) 338-7786. Toll free: (800) 665-8566

Bureau Veritas Job #: C437897
Report Date: 2024/06/04

Trillium Environmental
Client Project #: 170-001-01
Site Location: COURTENAY AIRPARK, BC
Sampler Initials: PA

LEPH & HEPH WITH CSR/CCME PAH IN WATER (WATER)

Bureau Veritas ID		COF351	COF358	COF359	COF360		COF361		
Sampling Date		2024/05/28 09:00	2024/05/28 09:00	2024/05/28 08:30	2024/05/28 09:30		2024/05/28 10:00		
COC Number		08536842	08536842	08536842	08536842		08536842		
	UNITS	**MW21-1**	**MW21-A**	**MW21-2**	**MW21-4**	**QC Batch**	**MW21-5**	**RDL**	**QC Batch**
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	111	115	112	113	B384895	99		B385872
D10-ANTHRACENE (sur.)	%	84	88	85	86	B384885	84		B385869
D8-ACENAPHTHYLENE (sur.)	%	77	81	80	74	B384885	90		B385869
D8-NAPHTHALENE (sur.)	%	55	62	58	60	B384885	83		B385869
TERPHENYL-D14 (sur.)	%	84	89	85	81	B384885	77		B385869
RDL = Reportable Detection Limit									

Bureau Veritas Courtenay: 2755B Moray Avenue V9N 8M9, Phone: (250) 338-7786. Toll free: (800) 665-8566

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	14.3°C

Results relate only to the items tested.

Bureau Veritas Courtenay: 2755B Moray Avenue V9N 8M9, Phone: (250) 338-7786. Toll free: (800) 665-8566

Bureau Veritas Job #: C437897
Report Date: 2024/06/04

QUALITY ASSURANCE REPORT

Trillium Environmental
Client Project #: 170-001-01
Site Location: COURTENAY AIRPARK, BC
Sampler Initials: PA

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B383360	1,4-Difluorobenzene (sur.)	2024/05/29	106	70 - 130	105	70 - 130	105	%		
B383360	4-Bromofluorobenzene (sur.)	2024/05/29	100	70 - 130	99	70 - 130	96	%		
B383360	D4-1,2-Dichloroethane (sur.)	2024/05/29	109	70 - 130	102	70 - 130	108	%		
B384885	D10-ANTHRACENE (sur.)	2024/05/31	70	50 - 140	85	50 - 140	88	%		
B384885	D8-ACENAPHTHYLENE (sur.)	2024/05/31	70	50 - 140	78	50 - 140	79	%		
B384885	D8-NAPHTHALENE (sur.)	2024/05/31	53	50 - 140	57	50 - 140	51	%		
B384885	TERPHENYL-D14 (sur.)	2024/05/31	63	50 - 140	86	50 - 140	86	%		
B384895	O-TERPHENYL (sur.)	2024/05/31			117	60 - 140	117	%		
B385869	D10-ANTHRACENE (sur.)	2024/05/31	88	50 - 140	87	50 - 140	85	%		
B385869	D8-ACENAPHTHYLENE (sur.)	2024/05/31	90	50 - 140	88	50 - 140	86	%		
B385869	D8-NAPHTHALENE (sur.)	2024/05/31	69	50 - 140	75	50 - 140	70	%		
B385869	TERPHENYL-D14 (sur.)	2024/05/31	89	50 - 140	76	50 - 140	78	%		
B385872	O-TERPHENYL (sur.)	2024/05/31	99	60 - 140	117	60 - 140	106	%		
B383360	Benzene	2024/05/29	98	70 - 130	95	70 - 130	<0.40	ug/L	NC	30
B383360	Ethylbenzene	2024/05/29	87	70 - 130	86	70 - 130	<0.40	ug/L	NC	30
B383360	m & p-Xylene	2024/05/29	86	70 - 130	86	70 - 130	<0.40	ug/L	NC	30
B383360	Methyl-tert-butylether (MTBE)	2024/05/29	91	70 - 130	88	70 - 130	<4.0	ug/L	NC	30
B383360	o-Xylene	2024/05/29	92	70 - 130	90	70 - 130	<0.40	ug/L	NC	30
B383360	Styrene	2024/05/29	87	70 - 130	84	70 - 130	<0.40	ug/L	NC	30
B383360	Toluene	2024/05/29	88	70 - 130	87	70 - 130	<0.40	ug/L	NC	30
B383360	VH C6-C10	2024/05/29			96	70 - 130	<300	ug/L	NC	30
B383360	Xylenes (Total)	2024/05/29					<0.40	ug/L	NC	30
B384885	1-Methylnaphthalene	2024/05/31	64	50 - 140	63	50 - 140	<0.050	ug/L		
B384885	2-Methylnaphthalene	2024/05/31	64	50 - 140	60	50 - 140	<0.10	ug/L		
B384885	Acenaphthene	2024/05/31	64	50 - 140	69	50 - 140	<0.050	ug/L		
B384885	Acenaphthylene	2024/05/31	67	50 - 140	69	50 - 140	<0.050	ug/L		
B384885	Acridine	2024/05/31	94	50 - 140	93	50 - 140	<0.050	ug/L		
B384885	Anthracene	2024/05/31	63	50 - 140	72	50 - 140	<0.010	ug/L		
B384885	Benzo(a)anthracene	2024/05/31	64	50 - 140	77	50 - 140	<0.010	ug/L		
B384885	Benzo(a)pyrene	2024/05/31	62	50 - 140	82	50 - 140	<0.0050	ug/L	NC	40
B384885	Benzo(b&j)fluoranthene	2024/05/31	61	50 - 140	79	50 - 140	<0.030	ug/L		
B384885	Benzo(g,h,i)perylene	2024/05/31	52	50 - 140	79	50 - 140	<0.050	ug/L		

Bureau Veritas Courtenay: 2755B Moray Avenue V9N 8M9, Phone: (250) 338-7786. Toll free: (800) 665-8566

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B384885	Benzo(k)fluoranthene	2024/05/31	65	50 - 140	85	50 - 140	<0.050	ug/L		
B384885	Chrysene	2024/05/31	65	50 - 140	77	50 - 140	<0.020	ug/L		
B384885	Dibenz(a,h)anthracene	2024/05/31	51	50 - 140	80	50 - 140	<0.0030	ug/L		
B384885	Fluoranthene	2024/05/31	59	50 - 140	73	50 - 140	<0.020	ug/L		
B384885	Fluorene	2024/05/31	65	50 - 140	72	50 - 140	<0.050	ug/L		
B384885	Indeno(1,2,3-cd)pyrene	2024/05/31	53	50 - 140	80	50 - 140	<0.050	ug/L		
B384885	Naphthalene	2024/05/31	64	50 - 140	62	50 - 140	<0.10	ug/L		
B384885	Phenanthrene	2024/05/31	58	50 - 140	71	50 - 140	<0.050	ug/L		
B384885	Pyrene	2024/05/31	61	50 - 140	75	50 - 140	<0.020	ug/L		
B384885	Quinoline	2024/05/31	99	50 - 140	100	50 - 140	<0.020	ug/L		
B384895	EPH (C10-C19)	2024/05/31			113	70 - 130	<0.20	mg/L		
B384895	EPH (C19-C32)	2024/05/31			127	70 - 130	<0.20	mg/L		
B385869	1-Methylnaphthalene	2024/05/31	NC	50 - 140	79	50 - 140	<0.050	ug/L	NC	40
B385869	2-Methylnaphthalene	2024/05/31	NC	50 - 140	79	50 - 140	<0.10	ug/L	NC	40
B385869	Acenaphthene	2024/05/31	103	50 - 140	82	50 - 140	<0.050	ug/L	NC	40
B385869	Acenaphthylene	2024/05/31	87	50 - 140	84	50 - 140	<0.050	ug/L	NC	40
B385869	Acridine	2024/05/31	107	50 - 140	94	50 - 140	<0.050	ug/L	NC	40
B385869	Anthracene	2024/05/31	106	50 - 140	86	50 - 140	<0.010	ug/L	NC	40
B385869	Benzo(a)anthracene	2024/05/31	88	50 - 140	82	50 - 140	<0.010	ug/L	NC	40
B385869	Benzo(a)pyrene	2024/05/31	86	50 - 140	88	50 - 140	<0.0050	ug/L	NC	40
B385869	Benzo(b&j)fluoranthene	2024/05/31	83	50 - 140	85	50 - 140	<0.030	ug/L	NC	40
B385869	Benzo(g,h,i)perylene	2024/05/31	70	50 - 140	85	50 - 140	<0.050	ug/L	NC	40
B385869	Benzo(k)fluoranthene	2024/05/31	81	50 - 140	83	50 - 140	<0.050	ug/L	NC	40
B385869	Chrysene	2024/05/31	87	50 - 140	82	50 - 140	<0.020	ug/L	NC	40
B385869	Dibenz(a,h)anthracene	2024/05/31	73	50 - 140	86	50 - 140	<0.0030	ug/L	NC	40
B385869	Fluoranthene	2024/05/31	88	50 - 140	82	50 - 140	<0.020	ug/L	NC	40
B385869	Fluorene	2024/05/31	97	50 - 140	84	50 - 140	<0.050	ug/L	NC	40
B385869	Indeno(1,2,3-cd)pyrene	2024/05/31	70	50 - 140	84	50 - 140	<0.050	ug/L	NC	40
B385869	Naphthalene	2024/05/31	99	50 - 140	80	50 - 140	<0.10	ug/L	NC	40
B385869	Phenanthrene	2024/05/31	86	50 - 140	81	50 - 140	<0.050	ug/L	NC	40
B385869	Pyrene	2024/05/31	91	50 - 140	81	50 - 140	<0.020	ug/L	NC	40
B385869	Quinoline	2024/05/31	116	50 - 140	105	50 - 140	<0.020	ug/L	NC	40

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B385872	EPH (C10-C19)	2024/05/31	NC	60 - 140	115	70 - 130	<0.20	mg/L	NC	30
B385872	EPH (C19-C32)	2024/05/31	NC	60 - 140	128	70 - 130	<0.20	mg/L	NC	30

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

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Bureau Veritas Job #: C437897
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Trillium Environmental
Client Project #: 170-001-01
Site Location: COURTENAY AIRPARK, BC
Sampler Initials: PA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

David Huang, M.Sc., P.Chem., QP, Scientific Services Manager

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Bureau Veritas Courtenay: 2755B Moray Avenue V9N 8M9, Phone: (250) 338-7786. Toll free: (800) 665-8566

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08536842

CHAIN OF CUSTODY RECORD

ENV COC - 00015v3

Invoice Information	Invoice to (requires report) ☑	Report Information (if differs from invoice)		Project Information	
Company:	Trillium Environmental	Company:		Quotation #:	C40415
Contact Name:	Paul Antonelli	Contact Name:	Stefan Quaglia	P.O. #/ AFE#:	
Street Address:	126 Ingram St #203	Street Address:		Project #:	170-001-01
City:	Duncan Prov: BC Postal Code: V9L 1P1	City:	Prov: Postal Code:	Site #:	
Phone:	250 466 9990	Phone:	250 574-1983.	Site Location:	Courtenay Airpark.
Email:	accounting@trillium enviro.com	Email:	pantonelli@trillium enviro.com	Site Location Province:	BC
Copies:		Copies:	Squaglia	Sampled By:	PA

C437897_COC

Regulatory Criteria

☑ BC CSR ☐ CCME ☐ Drinking Water
☐ YUKON CSR ☐ BC Water Quality ☐ Other: _____

SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

Regular Turnaround Time (TAT)
☑ 5 to 7 Day ☐ 10 Day

Rush Turnaround Time (TAT) Surcharges apply
☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day

Date Required: YY MM DD

Comments

	Sample Identification	Date Sampled YY	MM	DD	Time (24hr) HH	MM	Matrix	1 FIELD FILTERED	2 FIELD PRESERVED	3 LAB FILTRATION REQUIRED	4 BTEXS/VPH	5 VOCs	6 MTBE	7 BTEX/F1	8 PAHs	9 LEPH/HEPH/PAH	10 F2-F4	11 TEH	12 Dissolved metals	13 Dissolved mercury	14 Total metals	15 Total mercury	16 fecal coliforms	17 BOD	18 TSS	19	20	21 # OF CONTAINERS SUBMITTED	22 HOLD - DO NOT ANALYZE
1	MW21-1	24	05	28	08	00	Water		X		X					X												4	
2	MW21-A	↓	↓	↓	09	00	↓		X		X					X												4	
3	MW21-2				08	30			X		X					X												4	
4	MW21-4				09	30			X		X					X												4	
5	MW21-5				10	00			X		X					X												4	
6																													
7																													
8																													
9																													
10																													
11																													
12																													

*UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS AND CONDITIONS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/TERMS-AND-CONDITIONS OR BY CALLING THE LABORATORY LISTED ABOVE TO OBTAIN A COPY

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present						
Seal intact						
Cooling media present						

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present		X				
Seal intact		X				
Cooling media present	X		15	14	14	

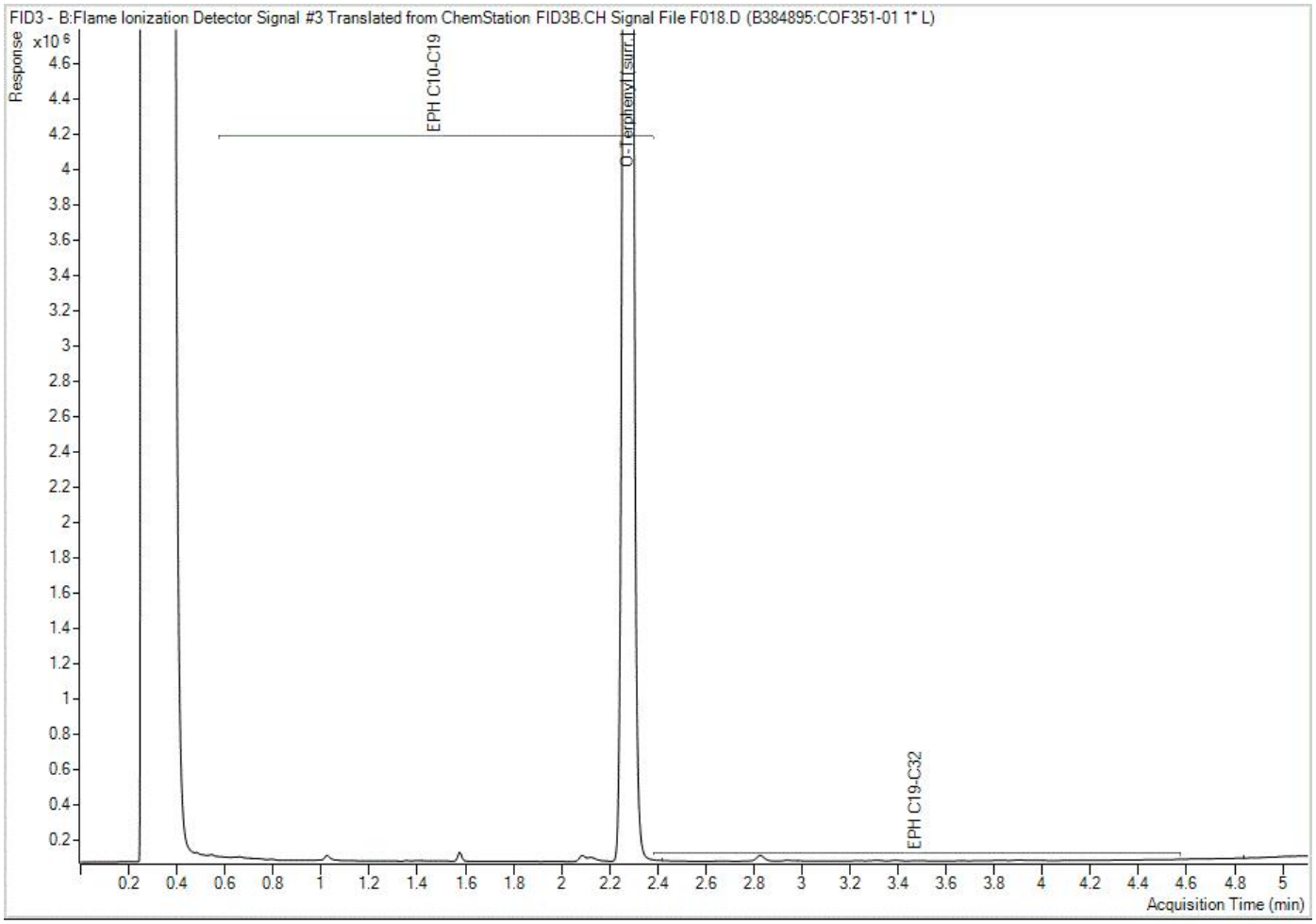
LAB USE ONLY	Yes	No	°C	1	2	3	Temperature reading by:
Seal present							
Seal intact							
Cooling media present							

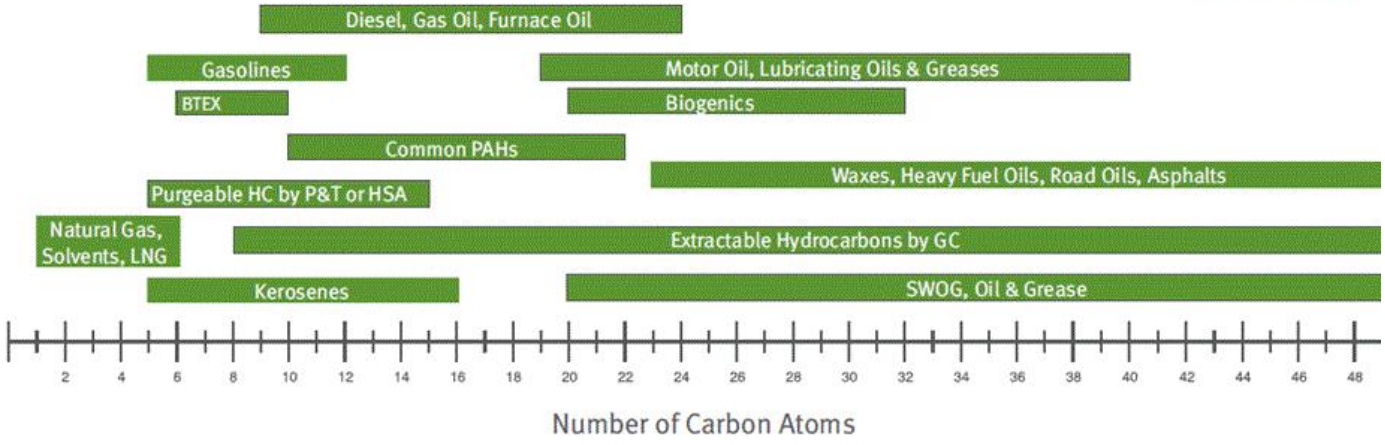
	Relinquished by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Received by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Special instructions
1	Paul Antonelli	24	05	28	11	35	AS Alexa Schreider	24	05	28	11	40	
2	Paul Antonelli												

Bureau Veritas Job #: C437897
Report Date: 2024/06/04
Bureau Veritas Sample: COF351

Trillium Environmental
Client Project #: 170-001-01
Site Reference: COURTENAY AIRPARK, BC
Client ID: MW21-1

EPH in Water when PAH required Chromatogram



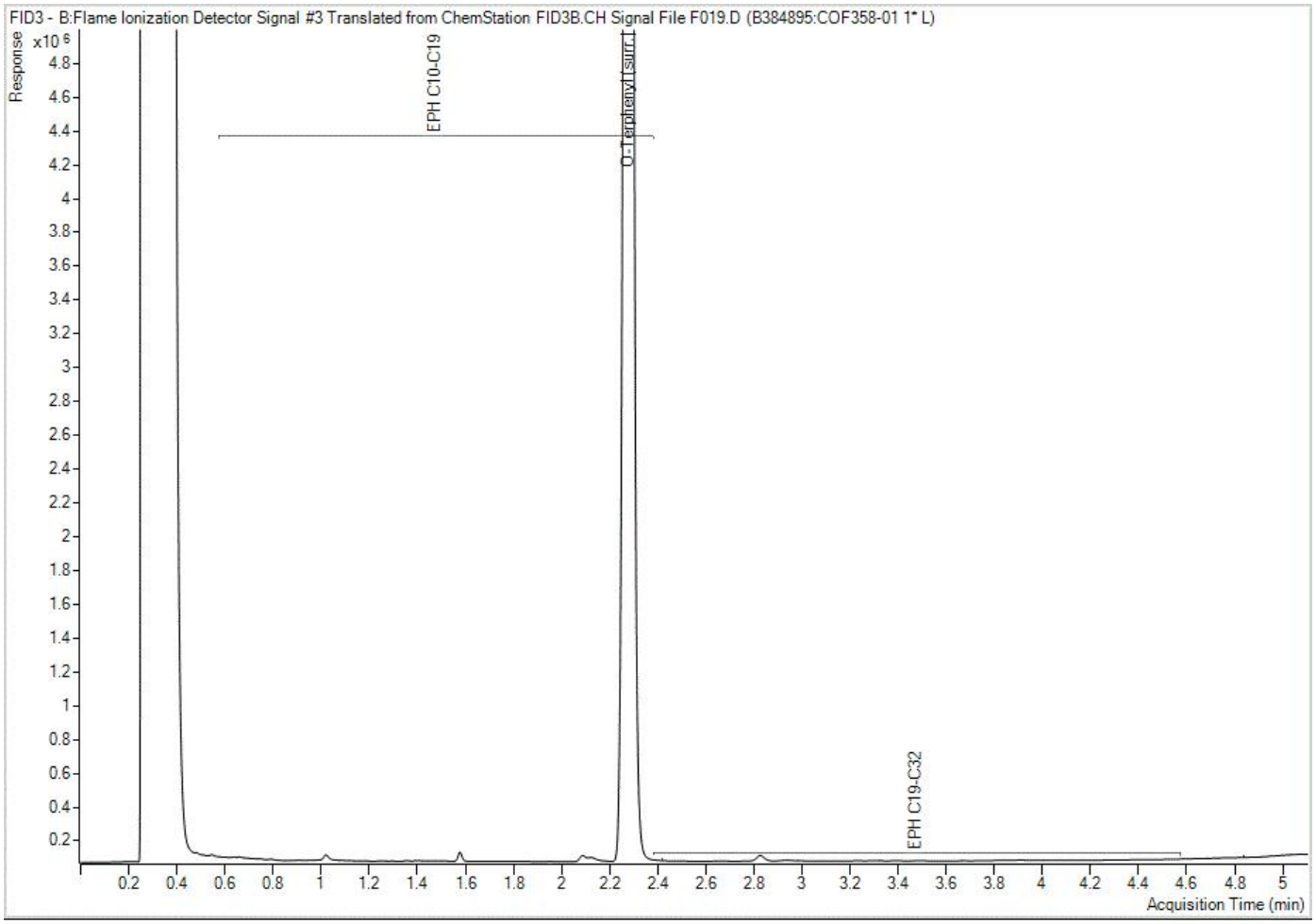


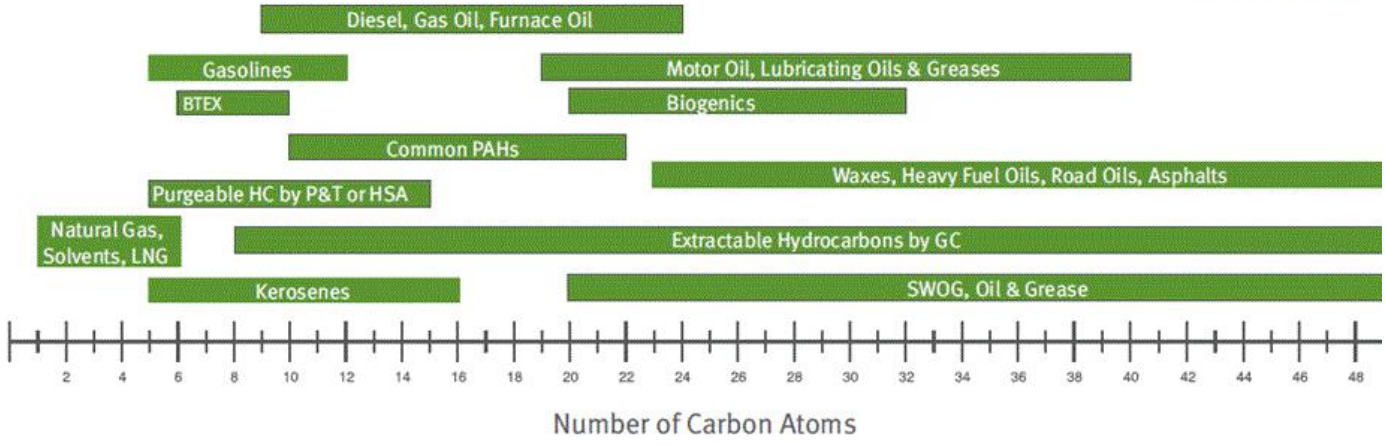
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C437897
Report Date: 2024/06/04
Bureau Veritas Sample: COF358

Trillium Environmental
Client Project #: 170-001-01
Site Reference: COURTENAY AIRPARK, BC
Client ID: MW21-A

EPH in Water when PAH required Chromatogram





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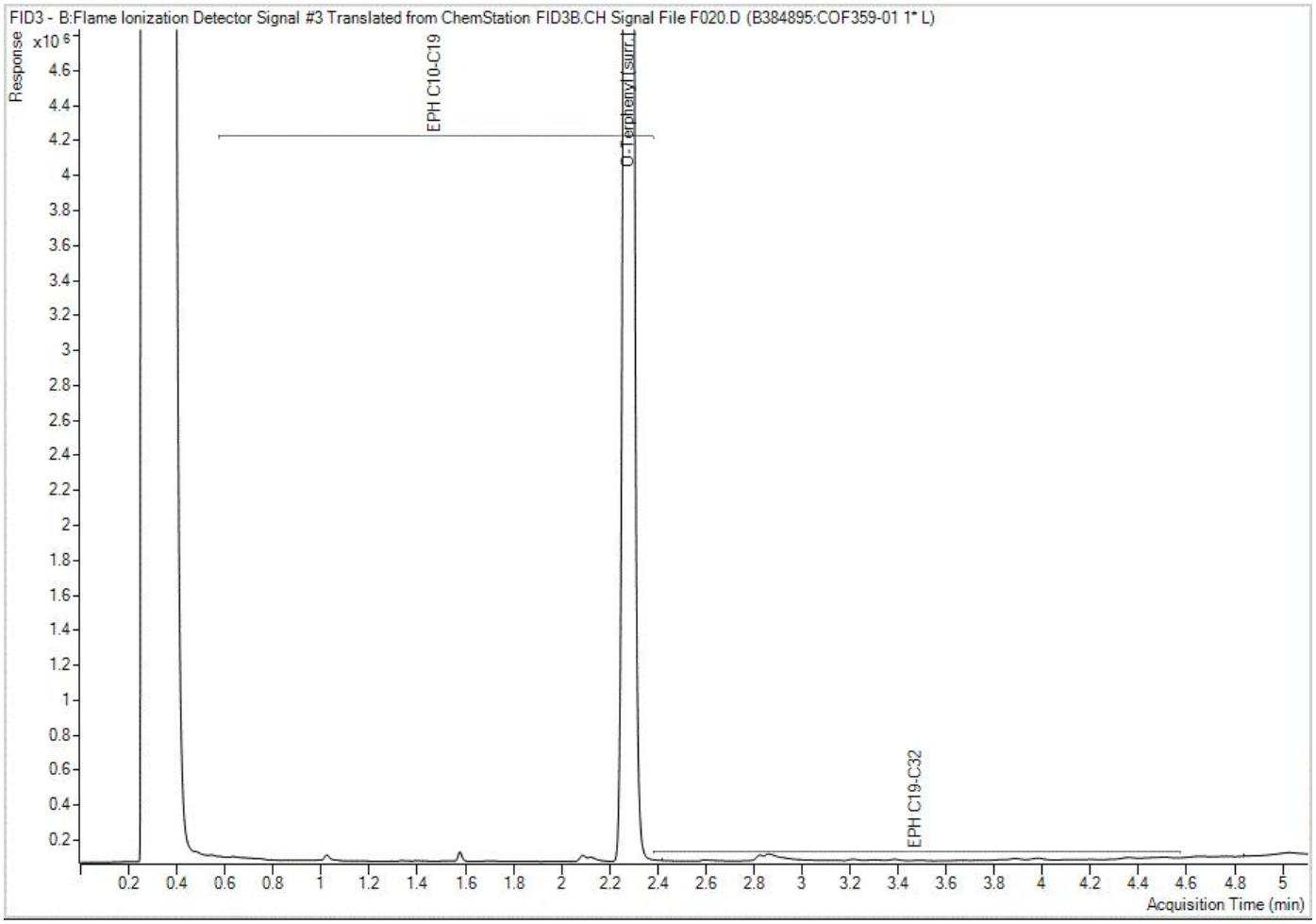
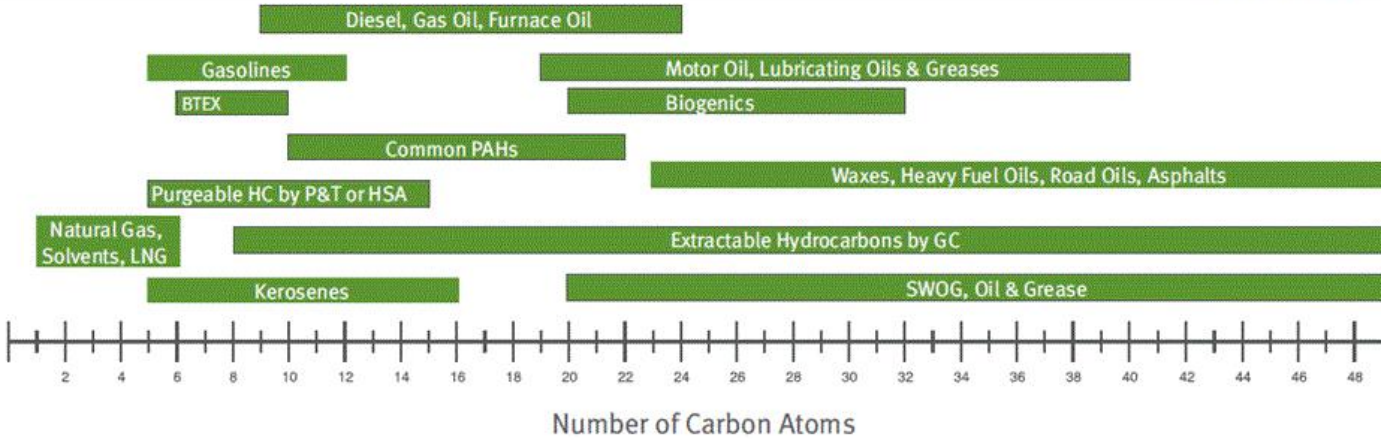
Bureau Veritas Job #: C437897
Report Date: 2024/06/04
Bureau Veritas Sample: COF359

Trillium Environmental
Client Project #: 170-001-01
Site Reference: COURTENAY AIRPARK, BC
Client ID: MW21-2

EPH in Water when PAH required Chromatogram



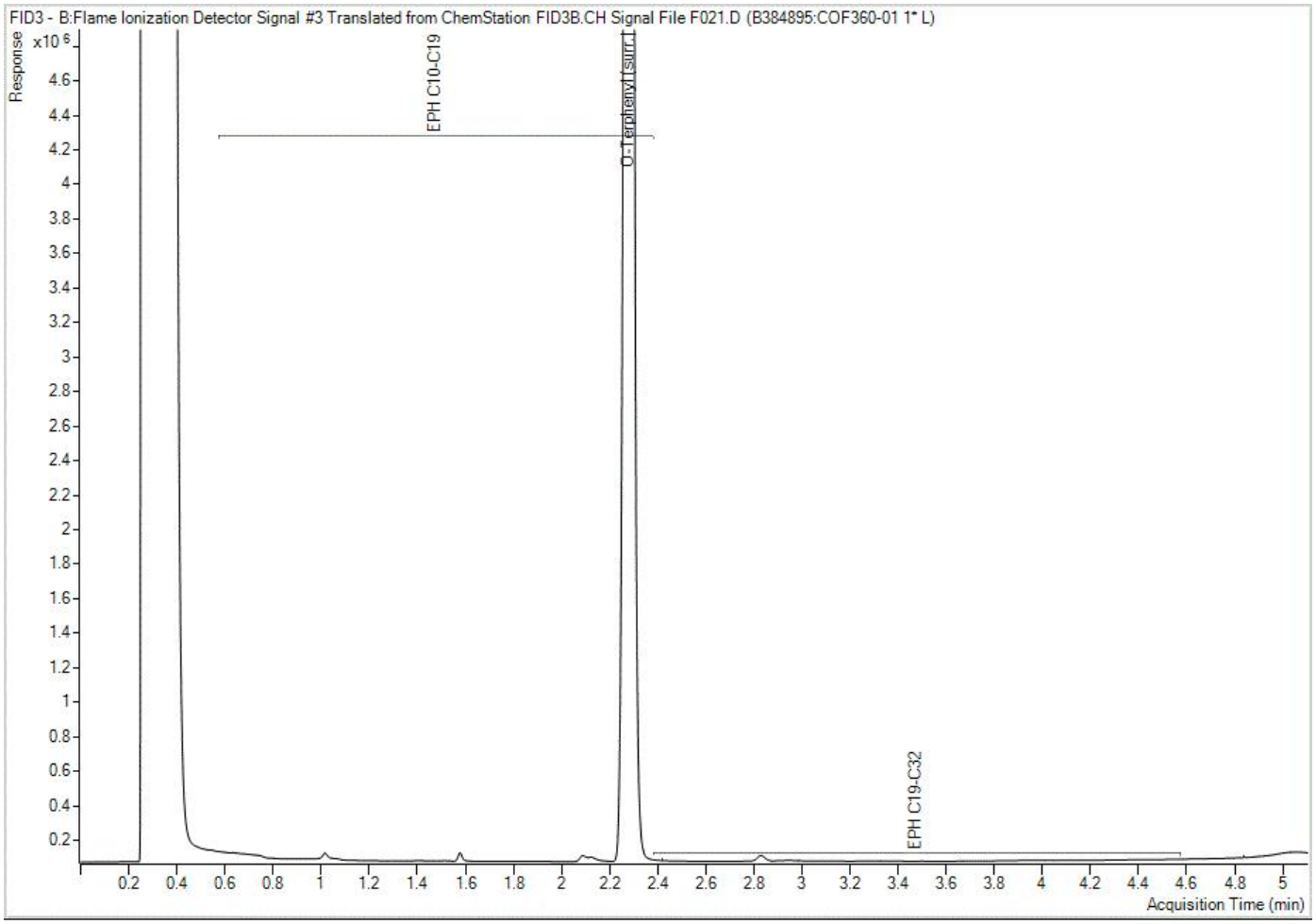


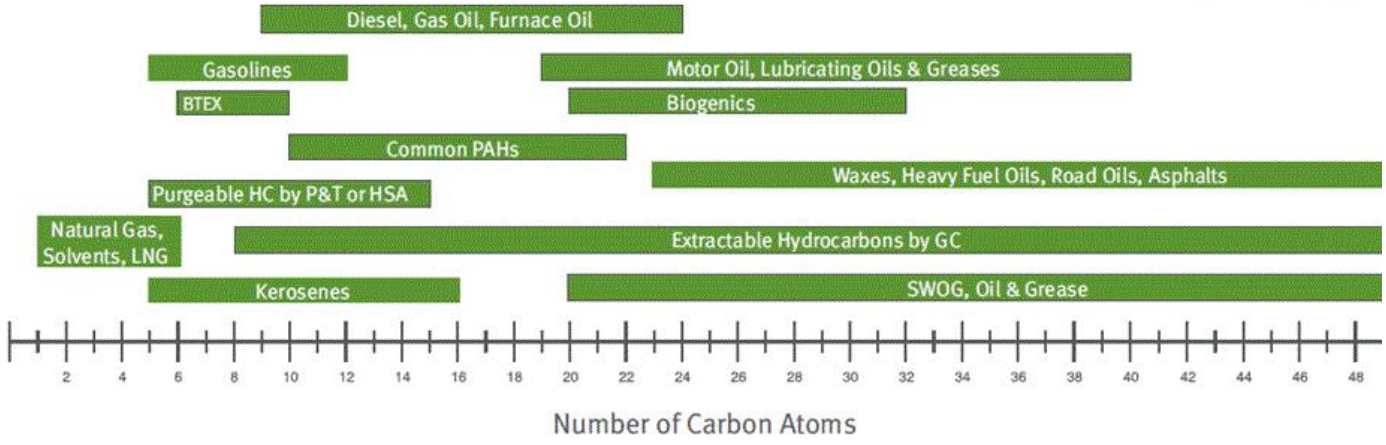
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C437897
Report Date: 2024/06/04
Bureau Veritas Sample: COF360

Trillium Environmental
Client Project #: 170-001-01
Site Reference: COURTENAY AIRPARK, BC
Client ID: MW21-4

EPH in Water when PAH required Chromatogram



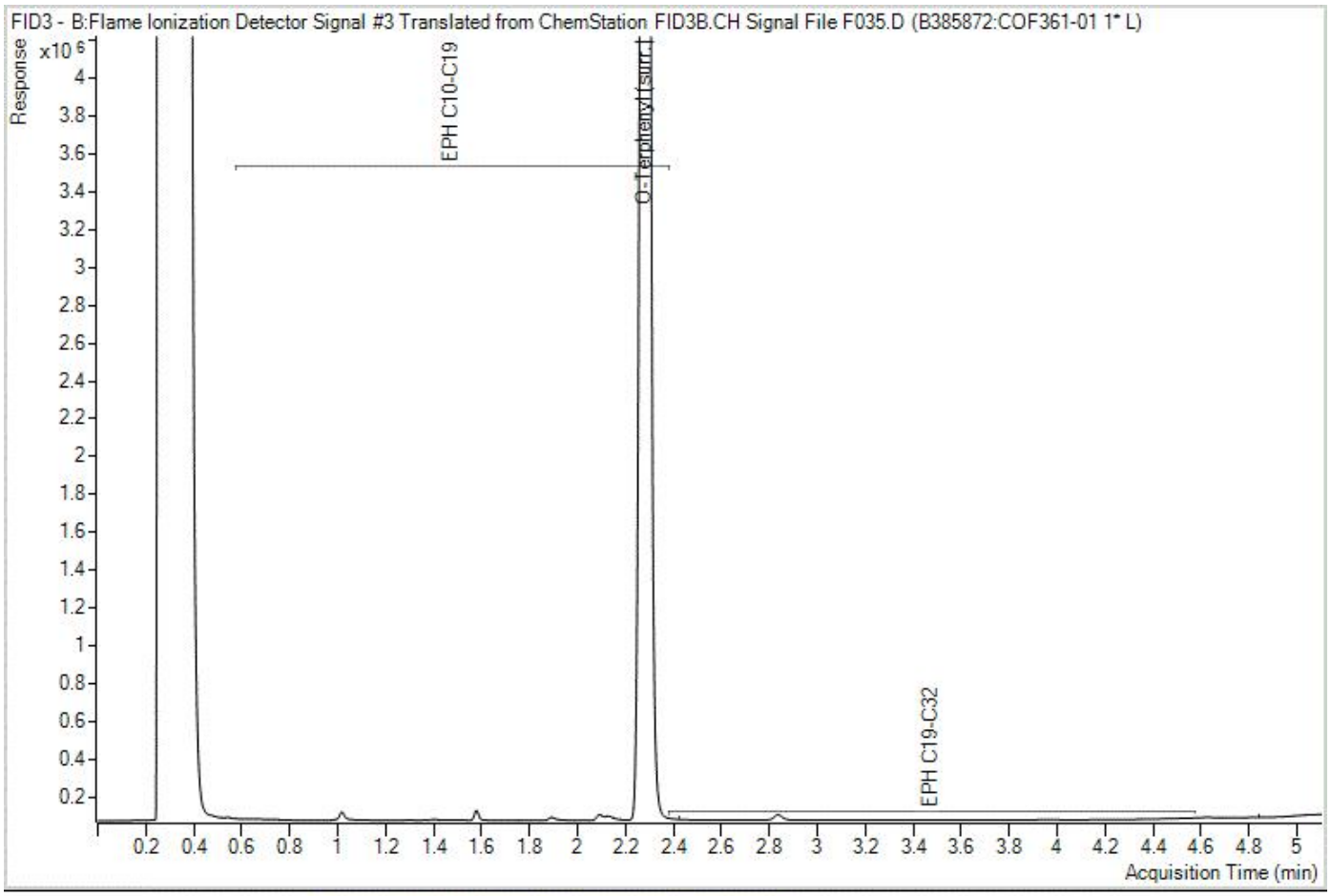


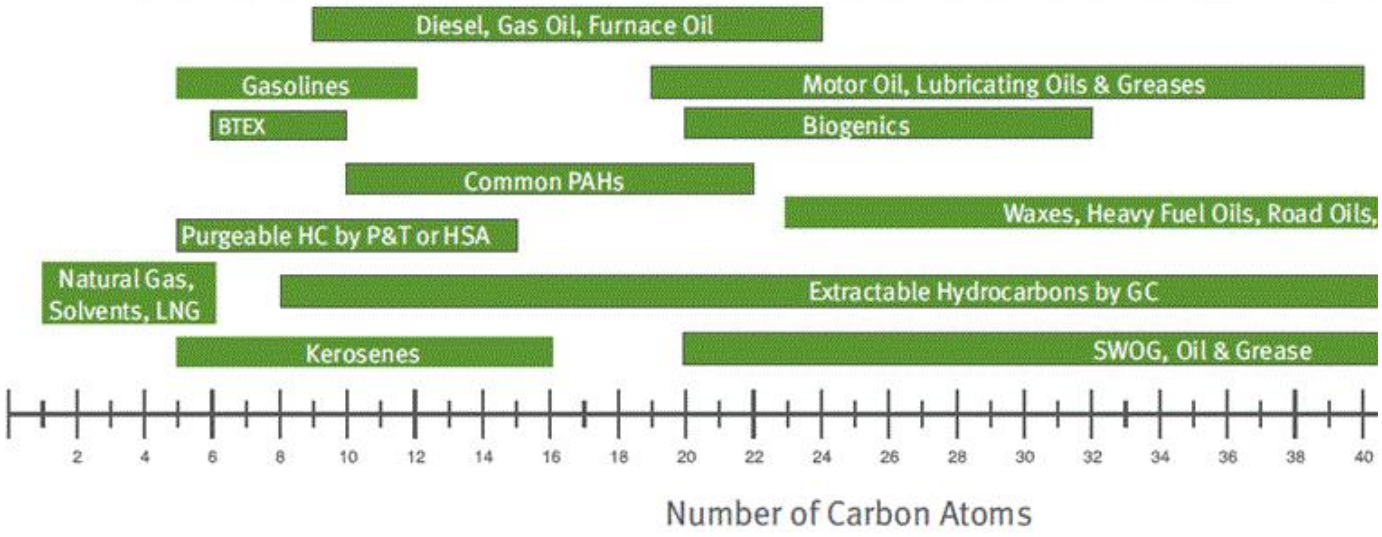
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C437897
Report Date: 2024/06/04
Bureau Veritas Sample: COF361

Trillium Environmental
Client Project #: 170-001-01
Site Reference: COURTENAY AIRPARK, BC
Client ID: MW21-5

EPH in Water when PAH required Chromatogram





Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.