

Sampling and Analysis Plan - 19 Tamblyn Road, Orono, Ontario



July 25, 2024

Prepared for:
Creative Millworks Inc.

Cambium Reference: 19462-001

CAMBIUM INC.

866.217.7900

cambium-inc.com



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1.0 Introduction

This document outlines the Sampling and Analysis Plan (SAP) for the field work proposed for the Phase Two Environmental Site Assessment (ESA) being completed at 19 Tamblyn Road located in Orono, Ontario (the Site). The Site is developed with three structures utilized for industrial use as a custom millwork, furniture, and finished wood products manufacturing facility. The Client intends to sever the existing property into two parcels, a 3.58 ha parcel with the existing building for continued industrial use, and a retained 11.68 ha parcel for proposed future industrial use.

This SAP establishes a quality assurance and quality control (QA/QC) program, data quality objectives, standard operating procedures, and a description of potential physical impediments that may limit the ability to conduct sampling and analysis.

1.1 Objectives

Cambium Inc. (Cambium) completed a Phase One ESA for the Site (Cambium, 2024) which identified areas of potential environmental concern (APECs) associated with current and former uses of the site and surrounding properties.

The purpose of the soil characterization will be to investigate soil and groundwater quality in the identified APEC through the drilling of boreholes, the installation of monitoring wells, and the collection of soil and groundwater samples.

The contaminants of potential concern (COPCs) associated with the APECs include petroleum hydrocarbons (PHCs), benzene, toluene, ethylbenzene, xylene (BTEX), volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), metals and hydride-forming metals, electrical conductivity (EC), sodium adsorption ratio (SAR), sodium (Na), and chloride (Cl).

The overall objective of the Phase Two work program is to identify areas of contamination at the Phase Two property, if any, to support the to support filing a land severance application to the Region of Durham, while meeting the requirements of Ontario Regulation (O.Reg.) 153/04.



2.0 Work Proposed

Proposed boreholes and monitoring well locations and rationale are included in the following table:

Location ID	Rationale	Proposed Sample Depth	COPCs
BH101-BH103	Investigate soil quality south and east of Building A to investigate APEC 1, 2 and 3	Above the water table	PHCs, BTEX, VOCs, PAHs, PCBs, metals and hydride-forming metals, EC, SAR, CrVI, mercury, pH

To meet the objectives outlined above, the Phase Two ESA work program will generally consist of the following:

- Advance boreholes at least to the depth of the water table;
- Collect soil samples continuously at regular intervals (1.5 metres) using a dual tube sampling system;
- Instrument each borehole with a monitoring well; and,
- Collect groundwater samples using a low-flow sampling method.

2.1 Quality Assurance

Cambium will maintain the following quality control measures throughout the Phase Two work program:

- Non-dedicated sampling and monitoring equipment will be decontaminated following each use and between each sampling location.
- A minimum of one (1) duplicate sample will be collected for every ten samples collected, for both soil and groundwater.

Bureau Veritas (BV), an accredited analytical laboratory, will be utilized, and the laboratory will complete additional quality control measures (i.e. duplicates, method spikes) as required by its accreditation.



All laboratory certificates of analysis will be reviewed by Cambium for data integrity and quality control. If anomalies in the reported data are identified, Cambium will resample or collect additional samples, where possible and as required.

2.2 Sampling Methods

Boreholes will be advanced using a track-mounted drill rig. Retrieved soil samples will be inspected for visible and olfactory evidence of contamination. Soil samples will be divided, with half or more of the sample placed in a dedicated polyethylene sample bag and sealed for field screening, and the remaining sample placed in dedicated sample jars or vials for analytical submission. Samples to be submitted for analysis of PHC F1 and/or VOCs will be collected using a pre-calibrated syringe sampler and methanol preserved vial.

Two-inch monitoring wells will be installed by a licensed well contractor. Monitoring wells will generally consist of a 3.1 m length of PVC screen with riser to the top of the well. Wells will be completed with either a flush-mount casing or a protective steel monument casing.

Groundwater samples will be collected following development of the well to ensure representative formation waters. Samples from each well will be collected using a low-flow peristaltic pump, with dedicated tubing installed in each of the monitoring wells. Water quality parameters will be measured using a flow-through cell and allowed to stabilize prior to sample collection, to ensure samples are representative of the surrounding groundwater aquifer. Groundwater samples requiring filtration will be field filtered using an in-line filter attached to the end of the polyethylene tubing.

Each sample will be handled by a Cambium field technician using dedicated nitrile gloves to minimize the potential for cross-contamination.

2.2.1 Sample Handling and Custody

Samples will be collected in laboratory-supplied sample containers, with preservative as necessary. All samples requiring laboratory analysis will be placed in a cooler and maintained at less than 10°C prior to and during transport to the laboratory.



Samples will be labelled with a unique sample ID, sampling date, and project number. All samples will be shipped to the laboratory under chain of custody protocols.

2.2.2 Instrumentation

The Phase Two work program will require the use of the following non-dedicated instrumentation and equipment: RKI Eagle 2 portable gas detector, field water quality kit, peristaltic pump, YSI water quality meter, and interface probe. Equipment will be inspected daily for damage or defects, and appropriate measures will be taken, if necessary, prior to commencing field work.

An RKI Eagle 2 portable gas detector will be used to screen the soil samples for concentrations of combustible soil vapour (CSV) and organic vapour (OV). The RKI will be calibrated to hexane and isobutylene standards. After agitating the sample, the peak concentration will be recorded by inserting the RKI probe into the sample bag.

A YSI water quality meter with flow-through cell will be used and allowed to stabilize prior to sample collection, to ensure samples are representative of the surrounding groundwater aquifer. The YSI will be calibrated to pH, conductivity, dissolved oxygen, and oxygen reduction potential standards.

The interface probe will be decontaminated between monitoring wells using an Alconox wash and rinsed with distilled water.

2.3 Quality Control

2.3.1 Verification and Validation Methods

To validate the integrity of the laboratory analytical data as well as sampling methods, Cambium will determine the relative percent difference (RPD) of QA/QC duplicate samples and the corresponding numbered samples. Cambium will also review the analysis of laboratory completed matrix spikes.

RPD is calculated using the following formula:



$$RPD = \frac{|S - D|}{1/2(S + D)} * 100$$

Where S = numbered sample value

D = duplicate value

Low concentrations are more sensitive to RPD values; as such, RPDs will not be calculated where the parameter concentration in the sample and/or duplicate is less than five (5) times the laboratory RDL.

RPD values will be evaluated based on a target variance of 50% or less for soil and 30% or less for groundwater (CCME, 2016).

If an RPD is calculated above the allowable limits, Cambium will attempt to determine the source of the variance and will assess whether the elevated RPD affects the integrity and usability of the data.



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Appendix B

Borehole Logs



Client: Creative Millwork Inc.
Contractor: Strata Drilling Group
Project No.: 19462-001
Location: 19 Tamblyn Road,
Orono, Ontario

Project Name: Phase Two Environmental Site Assessment
Method: Geoprobe 7822DT
Elevation: 98.58 mREL
UTM: 17T N: 4873058.5 E: 691404.5

Log of Borehole: BH101
Page: 1 of 1
Date Completed: 06/18/2024

SUBSURFACE PROFILE					SAMPLE																
Elevation (m)	Depth	Lithology	Description	Elevation Depth	Number	Type	CSV (ppm)	OV (ppm)	% Recovery	SPT (N)/DCPT	Atterberg Limits (%)			Shear Strength Cu, kPa				Well Installation	Log Notes		
											LL PL PI			20 40 60 80							
														% Moisture						SPT (N) / DCPT	
											25 50 75			20 40 60 80							
98.6	0		(SW) SAND: Sand, trace gravel; brown, rootlets, no odor, moist	98.43	1	DT	<5	<2									Cap Concrete Seal	BH101_0.2-0.8: Metals, CrVI, Hg, EC, SAR, pH			
98.1	0.5		(SW) SAND: Sand, trace silt; light brown, no odor, moist	0.15	1	DT	<5	<2													
97.6	1					1	DT	<5	<2												
97.1	1.5																				
96.6	2			Some oxidation		2	DT	<5	<2												
96.1	2.5				2	DT	<5	<2									Bentonite Plug Riser				
95.6	3			95.53																	
95.1	3.5		(SM) SILTY SAND: Brownish-grey; moist to wet	3.05	3	DT	<5	<2													
94.6	4				3	DT	<5	<2													
94.1	4.5		Wet		3	DT	<5	<2													
93.6	5				4	DT	<5	<2									Sand Pack	Groundwater level measured at a depth of ~ 3.71 mbgs on June 25, 2024			
93.1	5.5		No silt																		
92.6	6			92.48																	
92.1	6.5		Borehole terminated @ 6.1 mbgs due to target depth achieved.	6.10	4	DT	<5	<2													
91.6	7																		PVC Screen	BH101_3.8-4.3: VOCs, PAHs, PCBs, Metals, CrVI, Hg	
91.1																					
GRAINSIZE [SAMPLE] GRAVEL SAND SILT CLAY																					
DISTRIBUTION																					



Client: Creative Millwork Inc.
Contractor: Strata Drilling Group
Project No.: 19462-001
Location: 19 Tamblyn Road,
Orono, Ontario

Project Name: Phase Two Environmental Site Assessment
Method: Geoprobe 7822DT
Elevation: 97.71 mREL
UTM: 17T N: 4873022.4 E: 691402.9

Log of Borehole: BH102
Page: 1 of 1
Date Completed: 06/18/2024

SUBSURFACE PROFILE					SAMPLE														
Elevation (m)	Depth	Lithology	Description	Elevation Depth	Number	Type	CSV (ppm)	OV (ppm)	% Recovery	SPT (N)/DCPT	Atterberg Limits (%)			Shear Strength Cu, kPa				Well Installation	Log Notes
											LL PL PI			nat V _u rem V _u					
											25	50	75	20	40	60	80		
											% Moisture			SPT (N) / DCPT					
											25	50	75	20	40	60	80		
97.7	0		ASPHALT: Asphalt and Gravel, black, no odor, moist	97.56 0.15	1	DT	<5	<2											BH102_0.2-0.8: Metals, CrVI, Hg, EC, SAR
97.2	0.5		(SW) SAND: Sand, trace gravel and silt; brown, no odor, moist		1	DT	<5	<2	50										
96.7	1				1	DT	<5	<2											
96.2	1.5				2	DT	<5	<2										BH102_3.0-3.8: VOCs, PAHs, PCBs, Metals, CrVI, Hg Groundwater level measured at 3.49 mbgs on June 25, 2024	
95.7	2				2	DT	<5	<2	85										
95.2	2.5		(SM) SILTY SAND: Silty Sand, trace gravel, grey-brown, wet	95.42 2.29	2	DT	<5	<2											
94.7	3				3	DT	610	<2											
94.2	3.5				3	DT	250	<2	90										
93.7	4				3	DT	10	<2											
93.2	4.5				4	DT	450	<2											
92.7	5				4	DT	185	<2	90										
92.2	5.5																		
91.7	6																		
91.2	6.5		Borehole terminated @ 6.1 mbgs due to target depth achieved.	91.61 6.10															
90.7	7																		
90.2																			
GRAINSIZE DISTRIBUTION																			
SAMPLE GRAVEL SAND SILT CLAY																			



Client: Creative Millwork Inc.
Contractor: Strata Drilling Group
Project No.: 19462-001
Location: 19 Tamblyn Road,
Orono, Ontario

Project Name: Phase Two Environmental Site Assessment
Method: Geoprobe 7822DT
Elevation: 97.16 mREL
UTM: 17T N: 4873013.1 E: 691358.7

Log of Borehole: BH103
Page: 1 of 1
Date Completed: 06/18/2024

SUBSURFACE PROFILE				SAMPLE																	
Elevation (m)	Depth	Lithology	Description	Elevation Depth	Number	Type	CSV (ppm)	OV (ppm)	% Recovery	SPT (N)/DCPT	Atterberg Limits (%)			Shear Strength Cu, kPa				Well Installation	Log Notes		
											25 50 75			20 40 60 80							
											% Moisture			SPT (N) / DCPT							
97.2	0		TOPSOIL: Topsoil, sand and gravel, trace asphalt debris; dark brown, rootlets, no odor; moist	97.01	1	DT	20	<2										Cap Concrete Seal	BH103_0.2-0.8: Metals, CrVI, Hg, EC, SAR		
96.7	0.5		(SW) SAND: Sand, trace silt and gravel; brown; moist	96.15	1	DT	40	<2													
96.2	1				1	DT	40	<2		70											
95.7	1.5																	Bentonite Plug Riser			
95.2	2		Wet		2	DT	50	<2													
94.7	2.5				2	DT	45	<2		70											
94.2	3			94.11														Sand Pack	Groundwater level measured at 2.94 mbgs on June 25, 2024		
93.7	3.5		(SM) SILTY SAND: Silty Sand, trace gravel; light brown to brown; moist	3.05	3	DT	280	<2													
93.2	4				3	DT	40	<2		90											
92.7	4.5		Trace gravel		3	DT	30	<2										PVC Screen	BH103_3.0-3.8: VOCs, PAHs, Metals, CrVI, Hg		
92.2	5				4	DT	40	<2	100												
91.7	5.5				10	DT	50	<2	100												
91.2	6			91.06														Cap			
90.7	6.5		Borehole terminated @ 6.1 mbgs due to target depth achieved.	6.10																	
90.2	7																				
89.7																					
GRAINSIZE DISTRIBUTION																					
SAMPLE GRAVEL SAND SILT CLAY																					



DRAFT

Appendix C

Laboratory Certificates of Analysis



Your Project #: 19462-001
Your C.O.C. #: C#996310-01-01

Attention: Curtis Edgington

Cambium Environmental Inc
194 Sophia Street
PO Box 325
Peterborough, ON
CANADA K9H 1E5

Report Date: 2024/07/02
Report #: R8218305
Version: 3 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4I6895

Received: 2024/06/19, 14:35

Sample Matrix: Soil
Samples Received: 7

Analyses	Date		Laboratory Method	Analytical Method
	Quantity	Extracted		
Methylnaphthalene Sum	4	N/A	2024/06/25 CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum	3	N/A	2024/06/24	EPA 8260C m
1,3-Dichloropropene Sum	1	N/A	2024/06/25	EPA 8260C m
Conductivity	3	2024/06/25	2024/06/26 CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1)	1	2024/06/22	2024/06/24 CAM SOP-00436	EPA 3060A/7199 m
Hexavalent Chromium in Soil by IC (1)	6	2024/06/24	2024/06/24 CAM SOP-00436	EPA 3060A/7199 m
Petroleum Hydrocarbons F2-F4 in Soil (2)	4	2024/06/21	2024/06/22 CAM SOP-00316	CCME CWS m
Petroleum Hydrocarbons F2-F4 in Soil (2)	1	2024/06/28	2024/06/28 CAM SOP-00316	CCME CWS m
F4G (CCME Hydrocarbons Gravimetric)	2	2024/06/25	2024/06/25 CAM SOP-00316	CCME PHC-CWS m
Acid Extractable Metals by ICPMS	7	2024/06/24	2024/06/25 CAM SOP-00447	EPA 6020B m
Moisture	3	N/A	2024/06/20 CAM SOP-00445	Carter 2nd ed 70.2 m
Moisture	4	N/A	2024/06/21 CAM SOP-00445	Carter 2nd ed 70.2 m
PAH Compounds in Soil by GC/MS (SIM)	4	2024/06/21	2024/06/22 CAM SOP-00318	EPA 8270E
pH CaCl2 EXTRACT	2	2024/06/25	2024/06/25 CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR)	3	N/A	2024/06/26 CAM SOP-00102	EPA 6010C
Volatile Organic Compounds and F1 PHCs	3	N/A	2024/06/21 CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds and F1 PHCs	1	N/A	2024/06/25 CAM SOP-00230	EPA 8260C m

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



Your Project #: 19462-001
Your C.O.C. #: C#996310-01-01

Attention: Curtis Edgington

Cambium Environmental Inc
194 Sophia Street
PO Box 325
Peterborough, ON
CANADA K9H 1E5

Report Date: 2024/07/02
Report #: R8218305
Version: 3 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C4I6895

Received: 2024/06/19, 14:35

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.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

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.

(1) Soils are reported on a dry weight basis unless otherwise specified.

(2) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Mayank Nigam, Project Manager

Email: Mayank.Nigam@bureauveritas.com

Phone# (905) 817-5700

=====

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 Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C4I6895
Report Date: 2024/07/02

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

O.REG 153 ICPMS METALS (SOIL)

Bureau Veritas ID			ZMV489	ZMV490	ZMV491	ZMV492		
Sampling Date			2024/06/18 10:00	2024/06/18 11:30	2024/06/18 14:25	2024/06/18		
COC Number			C#996310-01-01	C#996310-01-01	C#996310-01-01	C#996310-01-01		
	UNITS	Criteria	BH101_3.8-4.3	BH102_3-3.8	BH103_3-3.8	QAQC1	RDL	QC Batch
Metals								
Acid Extractable Antimony (Sb)	ug/g	40	<0.20	<0.20	<0.20	<0.20	0.20	9474638
Acid Extractable Arsenic (As)	ug/g	18	<1.0	<1.0	<1.0	<1.0	1.0	9474638
Acid Extractable Barium (Ba)	ug/g	670	14	9.6	8.6	13	0.50	9474638
Acid Extractable Beryllium (Be)	ug/g	8	<0.20	<0.20	<0.20	<0.20	0.20	9474638
Acid Extractable Boron (B)	ug/g	120	<5.0	<5.0	<5.0	<5.0	5.0	9474638
Acid Extractable Cadmium (Cd)	ug/g	1.9	<0.10	<0.10	<0.10	<0.10	0.10	9474638
Acid Extractable Chromium (Cr)	ug/g	160	5.5	8.4	6.4	5.6	1.0	9474638
Acid Extractable Cobalt (Co)	ug/g	80	1.7	1.4	1.3	1.6	0.10	9474638
Acid Extractable Copper (Cu)	ug/g	230	2.9	2.4	2.5	3.0	0.50	9474638
Acid Extractable Lead (Pb)	ug/g	120	1.9	1.9	1.7	2.6	1.0	9474638
Acid Extractable Molybdenum (Mo)	ug/g	40	<0.50	1.4	0.90	<0.50	0.50	9474638
Acid Extractable Nickel (Ni)	ug/g	270	2.9	3.0	2.6	2.9	0.50	9474638
Acid Extractable Selenium (Se)	ug/g	5.5	<0.50	<0.50	<0.50	<0.50	0.50	9474638
Acid Extractable Silver (Ag)	ug/g	40	<0.20	<0.20	<0.20	<0.20	0.20	9474638
Acid Extractable Thallium (Tl)	ug/g	3.3	<0.050	<0.050	<0.050	<0.050	0.050	9474638
Acid Extractable Uranium (U)	ug/g	33	0.35	0.34	0.35	0.35	0.050	9474638
Acid Extractable Vanadium (V)	ug/g	86	12	14	11	12	5.0	9474638
Acid Extractable Zinc (Zn)	ug/g	340	13	12	12	13	5.0	9474638
Acid Extractable Mercury (Hg)	ug/g	3.9	<0.050	<0.050	<0.050	<0.050	0.050	9474638
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)								
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition								
Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soil								



**BUREAU
VERITAS**

Bureau Veritas Job #: C4I6895

Report Date: 2024/07/02

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

O.REG 153 ICPMS METALS (SOIL)

Bureau Veritas ID			ZMV496	ZMV497	ZMV498		
Sampling Date			2024/06/18 10:00	2024/06/18 11:30	2024/06/18 14:25		
COC Number			C#996310-01-01	C#996310-01-01	C#996310-01-01		
	UNITS	Criteria	BH101_0.2-0.8	BH102_0.2-0.8	BH103_0.2-0.8	RDL	QC Batch
Metals							
Acid Extractable Antimony (Sb)	ug/g	40	<0.20	<0.20	<0.20	0.20	9474638
Acid Extractable Arsenic (As)	ug/g	18	<1.0	1.1	1.0	1.0	9474638
Acid Extractable Barium (Ba)	ug/g	670	9.4	30	16	0.50	9474638
Acid Extractable Beryllium (Be)	ug/g	8	<0.20	0.22	<0.20	0.20	9474638
Acid Extractable Boron (B)	ug/g	120	<5.0	<5.0	<5.0	5.0	9474638
Acid Extractable Cadmium (Cd)	ug/g	1.9	<0.10	0.24	<0.10	0.10	9474638
Acid Extractable Chromium (Cr)	ug/g	160	4.5	10	6.6	1.0	9474638
Acid Extractable Cobalt (Co)	ug/g	80	1.3	2.3	2.0	0.10	9474638
Acid Extractable Copper (Cu)	ug/g	230	2.2	6.1	3.3	0.50	9474638
Acid Extractable Lead (Pb)	ug/g	120	1.4	7.3	3.0	1.0	9474638
Acid Extractable Molybdenum (Mo)	ug/g	40	<0.50	<0.50	<0.50	0.50	9474638
Acid Extractable Nickel (Ni)	ug/g	270	2.3	4.8	3.3	0.50	9474638
Acid Extractable Selenium (Se)	ug/g	5.5	<0.50	<0.50	<0.50	0.50	9474638
Acid Extractable Silver (Ag)	ug/g	40	<0.20	<0.20	<0.20	0.20	9474638
Acid Extractable Thallium (Tl)	ug/g	3.3	<0.050	<0.050	<0.050	0.050	9474638
Acid Extractable Uranium (U)	ug/g	33	0.35	0.38	0.50	0.050	9474638
Acid Extractable Vanadium (V)	ug/g	86	12	18	17	5.0	9474638
Acid Extractable Zinc (Zn)	ug/g	340	9.1	29	19	5.0	9474638
Acid Extractable Mercury (Hg)	ug/g	3.9	<0.050	<0.050	<0.050	0.050	9474638
No Fill	No Exceedance						
Grey	Exceeds 1 criteria policy/level						
Black	Exceeds both criteria/levels						
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)							
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition							
Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soil							

BUREAU
VERITAS

Bureau Veritas Job #: C4I6895

Report Date: 2024/07/02

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

O.REG 153 PAHS (SOIL)

Bureau Veritas ID			ZMV489		ZMV490	ZMV491		ZMV492		
Sampling Date			2024/06/18 10:00		2024/06/18 11:30	2024/06/18 14:25		2024/06/18		
COC Number			C#996310-01-01		C#996310-01-01	C#996310-01-01		C#996310-01-01		
	UNITS	Criteria	BH101_3.8-4.3	RDL	BH102_3-3.8	BH103_3-3.8	RDL	QAQC1	RDL	QC Batch

Calculated Parameters

Methylnaphthalene, 2-(1-)	ug/g	30	<0.0071	0.0071	<0.071	<0.071	0.071	<0.0071	0.0071	9467319
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Polyaromatic Hydrocarbons

Acenaphthene	ug/g	21	<0.0050	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9471187
Acenaphthylene	ug/g	0.15	<0.0050	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9471187
Anthracene	ug/g	0.67	<0.0050	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9471187
Benzo(a)anthracene	ug/g	0.96	<0.0050	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9471187
Benzo(a)pyrene	ug/g	0.3	<0.0050	0.0050	0.052	<0.050	0.050	<0.0050	0.0050	9471187
Benzo(b,j)fluoranthene	ug/g	0.96	<0.0050	0.0050	0.070	0.072	0.050	<0.0050	0.0050	9471187
Benzo(g,h,i)perylene	ug/g	9.6	<0.0050	0.0050	0.071	0.087	0.050	<0.0050	0.0050	9471187
Benzo(k)fluoranthene	ug/g	0.96	<0.0050	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9471187
Chrysene	ug/g	9.6	<0.0050	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9471187
Dibenzo(a,h)anthracene	ug/g	0.1	<0.0050	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9471187
Fluoranthene	ug/g	9.6	<0.0050	0.0050	0.073	0.11	0.050	<0.0050	0.0050	9471187
Fluorene	ug/g	62	<0.0050	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9471187
Indeno(1,2,3-cd)pyrene	ug/g	0.76	<0.0050	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9471187
1-Methylnaphthalene	ug/g	30	<0.0050	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9471187
2-Methylnaphthalene	ug/g	30	<0.0050	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9471187
Naphthalene	ug/g	9.6	<0.0050	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9471187
Phenanthrene	ug/g	12	<0.0050	0.0050	<0.050	0.065	0.050	<0.0050	0.0050	9471187
Pyrene	ug/g	96	<0.0050	0.0050	0.088	0.11	0.050	<0.0050	0.0050	9471187

Surrogate Recovery (%)

D10-Anthracene	%	-	107		117	114		104		9471187
D14-Terphenyl (FS)	%	-	107		109	106		105		9471187
D8-Acenaphthylene	%	-	78		94	92		87		9471187

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)

Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition

Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soil



Bureau Veritas Job #: C416895
Report Date: 2024/07/02

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

O.REG 153 VOCs BY HS & F1-F4 (SOIL)

Bureau Veritas ID			ZMV489	ZMV490	ZMV491		
Sampling Date			2024/06/18 10:00	2024/06/18 11:30	2024/06/18 14:25		
COC Number			C#996310-01-01	C#996310-01-01	C#996310-01-01		
	UNITS	Criteria	BH101_3.8-4.3	BH102_3-3.8	BH103_3-3.8	RDL	QC Batch
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/g	0.059	<0.050	<0.050	<0.050	0.050	9467654
Volatile Organics							
Acetone (2-Propanone)	ug/g	16	<0.49	<0.49	<0.49	0.49	9470538
Benzene	ug/g	0.32	<0.0060	<0.0060	<0.0060	0.0060	9470538
Bromodichloromethane	ug/g	1.5	<0.040	<0.040	<0.040	0.040	9470538
Bromoform	ug/g	0.61	<0.040	<0.040	<0.040	0.040	9470538
Bromomethane	ug/g	0.05	<0.040	<0.040	<0.040	0.040	9470538
Carbon Tetrachloride	ug/g	0.21	<0.040	<0.040	<0.040	0.040	9470538
Chlorobenzene	ug/g	2.4	<0.040	<0.040	<0.040	0.040	9470538
Chloroform	ug/g	0.47	<0.040	<0.040	<0.040	0.040	9470538
Dibromochloromethane	ug/g	2.3	<0.040	<0.040	<0.040	0.040	9470538
1,2-Dichlorobenzene	ug/g	1.2	<0.040	<0.040	<0.040	0.040	9470538
1,3-Dichlorobenzene	ug/g	9.6	<0.040	<0.040	<0.040	0.040	9470538
1,4-Dichlorobenzene	ug/g	0.2	<0.040	<0.040	<0.040	0.040	9470538
Dichlorodifluoromethane (FREON 12)	ug/g	16	<0.040	<0.040	<0.040	0.040	9470538
1,1-Dichloroethane	ug/g	0.47	<0.040	<0.040	<0.040	0.040	9470538
1,2-Dichloroethane	ug/g	0.05	<0.049	<0.049	<0.049	0.049	9470538
1,1-Dichloroethylene	ug/g	0.064	<0.040	<0.040	<0.040	0.040	9470538
cis-1,2-Dichloroethylene	ug/g	1.9	<0.040	<0.040	<0.040	0.040	9470538
trans-1,2-Dichloroethylene	ug/g	1.3	<0.040	<0.040	<0.040	0.040	9470538
1,2-Dichloropropane	ug/g	0.16	<0.040	<0.040	<0.040	0.040	9470538
cis-1,3-Dichloropropene	ug/g	0.059	<0.030	<0.030	<0.030	0.030	9470538
trans-1,3-Dichloropropene	ug/g	0.059	<0.040	<0.040	<0.040	0.040	9470538
Ethylbenzene	ug/g	1.1	<0.010	<0.010	<0.010	0.010	9470538
Ethylene Dibromide	ug/g	0.05	<0.040	<0.040	<0.040	0.040	9470538
Hexane	ug/g	46	<0.040	<0.040	<0.040	0.040	9470538
Methylene Chloride(Dichloromethane)	ug/g	1.6	<0.049	<0.049	<0.049	0.049	9470538
Methyl Ethyl Ketone (2-Butanone)	ug/g	70	<0.40	<0.40	<0.40	0.40	9470538
Methyl Isobutyl Ketone	ug/g	31	<0.40	<0.40	<0.40	0.40	9470538
No Fill	No Exceedance						
Grey	Exceeds 1 criteria policy/level						
Black	Exceeds both criteria/levels						
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)							
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition							
Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soil							

BUREAU
VERITAS

Bureau Veritas Job #: C416895

Report Date: 2024/07/02

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

O.REG 153 VOCS BY HS & F1-F4 (SOIL)

Bureau Veritas ID			ZMV489	ZMV490	ZMV491		
Sampling Date			2024/06/18 10:00	2024/06/18 11:30	2024/06/18 14:25		
COC Number			C#996310-01-01	C#996310-01-01	C#996310-01-01		
	UNITS	Criteria	BH101_3-8-4.3	BH102_3-3.8	BH103_3-3.8	RDL	QC Batch
Methyl t-butyl ether (MTBE)	ug/g	1.6	<0.040	<0.040	<0.040	0.040	9470538
Styrene	ug/g	34	<0.040	<0.040	<0.040	0.040	9470538
1,1,1,2-Tetrachloroethane	ug/g	0.087	<0.040	<0.040	<0.040	0.040	9470538
1,1,2,2-Tetrachloroethane	ug/g	0.05	<0.040	<0.040	<0.040	0.040	9470538
Tetrachloroethylene	ug/g	1.9	<0.040	<0.040	<0.040	0.040	9470538
Toluene	ug/g	6.4	<0.020	<0.020	<0.020	0.020	9470538
1,1,1-Trichloroethane	ug/g	6.1	<0.040	<0.040	<0.040	0.040	9470538
1,1,2-Trichloroethane	ug/g	0.05	<0.040	<0.040	<0.040	0.040	9470538
Trichloroethylene	ug/g	0.55	<0.010	<0.010	<0.010	0.010	9470538
Trichlorofluoromethane (FREON 11)	ug/g	4	<0.040	<0.040	<0.040	0.040	9470538
Vinyl Chloride	ug/g	0.032	<0.019	<0.019	<0.019	0.019	9470538
p+m-Xylene	ug/g	-	<0.020	<0.020	<0.020	0.020	9470538
o-Xylene	ug/g	-	<0.020	<0.020	<0.020	0.020	9470538
Total Xylenes	ug/g	26	<0.020	<0.020	<0.020	0.020	9470538
F1 (C6-C10)	ug/g	55	<10	<10	<10	10	9470538
F1 (C6-C10) - BTEX	ug/g	55	<10	<10	<10	10	9470538
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/g	230	<10	10	15	10	9471122
F3 (C16-C34 Hydrocarbons)	ug/g	1700	<50	350	960	50	9471122
F4 (C34-C50 Hydrocarbons)	ug/g	3300	<50	690	2000	50	9471122
Reached Baseline at C50	ug/g	-	Yes	No	No		9471122
Surrogate Recovery (%)							
o-Terphenyl	%	-	100	104	100		9471122
4-Bromofluorobenzene	%	-	99	94	96		9470538
D10-o-Xylene	%	-	118	91	93		9470538
D4-1,2-Dichloroethane	%	-	124	124	126		9470538
D8-Toluene	%	-	92	92	92		9470538
No Fill	No Exceedance						
Grey	Exceeds 1 criteria policy/level						
Black	Exceeds both criteria/levels						
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)							
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition							
Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soil							



Bureau Veritas Job #: C416895
Report Date: 2024/07/02

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

O.REG 153 VOCS BY HS & F1-F4 (SOIL)

Bureau Veritas ID			ZMV492		
Sampling Date			2024/06/18		
COC Number			C#996310-01-01		
	UNITS	Criteria	QAQC1	RDL	QC Batch
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/g	0.059	<0.050	0.050	9467654
Volatile Organics					
Acetone (2-Propanone)	ug/g	16	<0.49	0.49	9470791
Benzene	ug/g	0.32	<0.0060	0.0060	9470791
Bromodichloromethane	ug/g	1.5	<0.040	0.040	9470791
Bromoform	ug/g	0.61	<0.040	0.040	9470791
Bromomethane	ug/g	0.05	<0.040	0.040	9470791
Carbon Tetrachloride	ug/g	0.21	<0.040	0.040	9470791
Chlorobenzene	ug/g	2.4	<0.040	0.040	9470791
Chloroform	ug/g	0.47	<0.040	0.040	9470791
Dibromochloromethane	ug/g	2.3	<0.040	0.040	9470791
1,2-Dichlorobenzene	ug/g	1.2	<0.040	0.040	9470791
1,3-Dichlorobenzene	ug/g	9.6	<0.040	0.040	9470791
1,4-Dichlorobenzene	ug/g	0.2	<0.040	0.040	9470791
Dichlorodifluoromethane (FREON 12)	ug/g	16	<0.040	0.040	9470791
1,1-Dichloroethane	ug/g	0.47	<0.040	0.040	9470791
1,2-Dichloroethane	ug/g	0.05	<0.049	0.049	9470791
1,1-Dichloroethylene	ug/g	0.064	<0.040	0.040	9470791
cis-1,2-Dichloroethylene	ug/g	1.9	<0.040	0.040	9470791
trans-1,2-Dichloroethylene	ug/g	1.3	<0.040	0.040	9470791
1,2-Dichloropropane	ug/g	0.16	<0.040	0.040	9470791
cis-1,3-Dichloropropene	ug/g	0.059	<0.030	0.030	9470791
trans-1,3-Dichloropropene	ug/g	0.059	<0.040	0.040	9470791
Ethylbenzene	ug/g	1.1	<0.010	0.010	9470791
Ethylene Dibromide	ug/g	0.05	<0.040	0.040	9470791
Hexane	ug/g	46	<0.040	0.040	9470791
Methylene Chloride(Dichloromethane)	ug/g	1.6	<0.049	0.049	9470791
Methyl Ethyl Ketone (2-Butanone)	ug/g	70	<0.40	0.40	9470791
No Fill	No Exceedance				
Grey	Exceeds 1 criteria policy/level				
Black	Exceeds both criteria/levels				
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)					
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition					
Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soil					



Bureau Veritas Job #: C416895
Report Date: 2024/07/02

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

O.REG 153 VOCS BY HS & F1-F4 (SOIL)

Bureau Veritas ID				ZMV492		
Sampling Date				2024/06/18		
COC Number				C#996310-01-01		
		UNITS	Criteria	QAQC1	RDL	QC Batch
Methyl Isobutyl Ketone		ug/g	31	<0.40	0.40	9470791
Methyl t-butyl ether (MTBE)		ug/g	1.6	<0.040	0.040	9470791
Styrene		ug/g	34	<0.040	0.040	9470791
1,1,1,2-Tetrachloroethane		ug/g	0.087	<0.040	0.040	9470791
1,1,2,2-Tetrachloroethane		ug/g	0.05	<0.040	0.040	9470791
Tetrachloroethylene		ug/g	1.9	<0.040	0.040	9470791
Toluene		ug/g	6.4	<0.020	0.020	9470791
1,1,1-Trichloroethane		ug/g	6.1	<0.040	0.040	9470791
1,1,2-Trichloroethane		ug/g	0.05	<0.040	0.040	9470791
Trichloroethylene		ug/g	0.55	<0.010	0.010	9470791
Trichlorofluoromethane (FREON 11)		ug/g	4	<0.040	0.040	9470791
Vinyl Chloride		ug/g	0.032	<0.019	0.019	9470791
p+m-Xylene		ug/g	-	<0.020	0.020	9470791
o-Xylene		ug/g	-	<0.020	0.020	9470791
Total Xylenes		ug/g	26	<0.020	0.020	9470791
F1 (C6-C10)		ug/g	55	<10	10	9470791
F1 (C6-C10) - BTEX		ug/g	55	<10	10	9470791
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)		ug/g	230	<10	10	9471122
F3 (C16-C34 Hydrocarbons)		ug/g	1700	<50	50	9471122
F4 (C34-C50 Hydrocarbons)		ug/g	3300	<50	50	9471122
Reached Baseline at C50		ug/g	-	Yes		9471122
Surrogate Recovery (%)						
o-Terphenyl		%	-	100		9471122
4-Bromofluorobenzene		%	-	91		9470791
D10-o-Xylene		%	-	92		9470791
D4-1,2-Dichloroethane		%	-	106		9470791
D8-Toluene		%	-	97		9470791
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)						
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition						
Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soil						

**BUREAU
VERITAS**

Bureau Veritas Job #: C4I6895

Report Date: 2024/07/02

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID			ZMV489		ZMV490		ZMV491		
Sampling Date			2024/06/18 10:00		2024/06/18 11:30		2024/06/18 14:25		
COC Number			C#996310-01-01		C#996310-01-01		C#996310-01-01		
	UNITS	Criteria	BH101_3.8-4.3	QC Batch	BH102_3-3.8	QC Batch	BH103_3-3.8	RDL	QC Batch
Inorganics									
Moisture	%	-	13	9470564	11	9470564	11	1.0	9470564
Available (CaCl2) pH	pH	-			7.92	9476364			
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)									
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition									
Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soil									

Bureau Veritas ID			ZMV492	ZMV492			ZMV496		
Sampling Date			2024/06/18	2024/06/18			2024/06/18 10:00		
COC Number			C#996310-01-01	C#996310-01-01			C#996310-01-01		
	UNITS	Criteria	QAQC1	QAQC1 Lab-Dup	RDL	QC Batch	BH101_0.2-0.8	RDL	QC Batch
Calculated Parameters									
Sodium Adsorption Ratio	N/A	12					0.39 (1)		9467321
Inorganics									
Conductivity	mS/cm	1.4					0.080	0.002	9477156
Moisture	%	-	13	13	1.0	9470564	11	1.0	9469900
Available (CaCl2) pH	pH	-					7.87		9476364
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Lab-Dup = Laboratory Initiated Duplicate									
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)									
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition									
Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soil									
(1) Sodium was not detected. To report SAR the sodium detection limit was used in the calculation. This value represents a maximum ratio.									



BUREAU
VERITAS

Bureau Veritas Job #: C416895

Report Date: 2024/07/02

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID			ZMV497	ZMV498		
Sampling Date			2024/06/18 11:30	2024/06/18 14:25		
COC Number			C#996310-01-01	C#996310-01-01		
	UNITS	Criteria	BH102_0.2-0.8	BH103_0.2-0.8	RDL	QC Batch
Calculated Parameters						
Sodium Adsorption Ratio	N/A	12	8.0	1.2		9467321
Inorganics						
Conductivity	mS/cm	1.4	0.31	0.14	0.002	9477156
Moisture	%	-	11	8.6	1.0	9469900
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)						
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition						
Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soil						



Bureau Veritas Job #: C4I6895
Report Date: 2024/07/02

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID			ZMV489	ZMV490	ZMV491	ZMV492	ZMV496		
Sampling Date			2024/06/18 10:00	2024/06/18 11:30	2024/06/18 14:25	2024/06/18	2024/06/18 10:00		
COC Number			C#996310-01-01	C#996310-01-01	C#996310-01-01	C#996310-01-01	C#996310-01-01		
	UNITS	Criteria	BH101_3.8-4.3	BH102_3-3.8	BH103_3-3.8	QAQC1	BH101_0.2-0.8	RDL	QC Batch

Inorganics

Chromium (VI)	ug/g	8	<0.18	<0.18	<0.18	<0.18	<0.18	0.18	9474212
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No Fill

No Exceedance

Grey

Exceeds 1 criteria policy/level

Black

Exceeds both criteria/levels

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)

Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition

Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soil

Bureau Veritas ID			ZMV497		ZMV498		
Sampling Date			2024/06/18 11:30		2024/06/18 14:25		
COC Number			C#996310-01-01		C#996310-01-01		
	UNITS	Criteria	BH102_0.2-0.8	QC Batch	BH103_0.2-0.8	RDL	QC Batch

Inorganics

Chromium (VI)	ug/g	8	0.20	9473293	<0.18	0.18	9474212
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No Fill

No Exceedance

Grey

Exceeds 1 criteria policy/level

Black

Exceeds both criteria/levels

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)

Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition

Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soil



Bureau Veritas Job #: C4I6895

Report Date: 2024/07/02

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID			ZMV490	ZMV491			ZMV498		
Sampling Date			2024/06/18 11:30	2024/06/18 14:25			2024/06/18 14:25		
COC Number			C#996310-01-01	C#996310-01-01			C#996310-01-01		
	UNITS	Criteria	BH102_3-3.8	BH103_3-3.8	RDL	QC Batch	BH103_0.2-0.8	RDL	QC Batch
F2-F4 Hydrocarbons									
F4G-sg (Grav. Heavy Hydrocarbons)	ug/g	3300	2200	6200	100	9476848			
F2 (C10-C16 Hydrocarbons)	ug/g	230					<10	10	9484585
F3 (C16-C34 Hydrocarbons)	ug/g	1700					<50	50	9484585
F4 (C34-C50 Hydrocarbons)	ug/g	3300					<50	50	9484585
Reached Baseline at C50	ug/g	-					Yes		9484585
Surrogate Recovery (%)									
o-Terphenyl	%	-					102		9484585
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)									
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition									
Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soil									



Bureau Veritas Job #: C4I6895

Report Date: 2024/07/02

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

TEST SUMMARY

Bureau Veritas ID: ZMV489
Sample ID: BH101_3.8-4.3
Matrix: Soil

Collected: 2024/06/18
Shipped:
Received: 2024/06/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9467319	N/A	2024/06/25	Automated Statchk
1,3-Dichloropropene Sum	CALC	9467654	N/A	2024/06/24	Automated Statchk
Hexavalent Chromium in Soil by IC	IC/SPEC	9474212	2024/06/24	2024/06/24	Sousan Besharatlou
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9471122	2024/06/21	2024/06/22	Dennis Ngundu
Acid Extractable Metals by ICPMS	ICP/MS	9474638	2024/06/24	2024/06/25	Jaswinder Kaur
Moisture	BAL	9470564	N/A	2024/06/21	Frances Gacayan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9471187	2024/06/21	2024/06/22	Mitesh Raj
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9470538	N/A	2024/06/21	Anna Gabrielyan

Bureau Veritas ID: ZMV490
Sample ID: BH102_3-3.8
Matrix: Soil

Collected: 2024/06/18
Shipped:
Received: 2024/06/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9467319	N/A	2024/06/25	Automated Statchk
1,3-Dichloropropene Sum	CALC	9467654	N/A	2024/06/24	Automated Statchk
Hexavalent Chromium in Soil by IC	IC/SPEC	9474212	2024/06/24	2024/06/24	Sousan Besharatlou
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9471122	2024/06/21	2024/06/22	Dennis Ngundu
F4G (CCME Hydrocarbons Gravimetric)	BAL	9476848	2024/06/25	2024/06/25	Fardous Fatama
Acid Extractable Metals by ICPMS	ICP/MS	9474638	2024/06/24	2024/06/25	Jaswinder Kaur
Moisture	BAL	9470564	N/A	2024/06/21	Frances Gacayan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9471187	2024/06/21	2024/06/22	Mitesh Raj
pH CaCl2 EXTRACT	AT	9476364	2024/06/25	2024/06/25	Kien Tran
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9470538	N/A	2024/06/21	Anna Gabrielyan

Bureau Veritas ID: ZMV491
Sample ID: BH103_3-3.8
Matrix: Soil

Collected: 2024/06/18
Shipped:
Received: 2024/06/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9467319	N/A	2024/06/25	Automated Statchk
1,3-Dichloropropene Sum	CALC	9467654	N/A	2024/06/24	Automated Statchk
Hexavalent Chromium in Soil by IC	IC/SPEC	9474212	2024/06/24	2024/06/24	Sousan Besharatlou
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9471122	2024/06/21	2024/06/22	Dennis Ngundu
F4G (CCME Hydrocarbons Gravimetric)	BAL	9476848	2024/06/25	2024/06/25	Fardous Fatama
Acid Extractable Metals by ICPMS	ICP/MS	9474638	2024/06/24	2024/06/25	Jaswinder Kaur
Moisture	BAL	9470564	N/A	2024/06/21	Frances Gacayan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9471187	2024/06/21	2024/06/22	Mitesh Raj
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9470538	N/A	2024/06/21	Anna Gabrielyan



Bureau Veritas Job #: C4I6895
Report Date: 2024/07/02

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

TEST SUMMARY

Bureau Veritas ID: ZMV492
Sample ID: QAQC1
Matrix: Soil

Collected: 2024/06/18
Shipped:
Received: 2024/06/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9467319	N/A	2024/06/25	Automated Statchk
1,3-Dichloropropene Sum	CALC	9467654	N/A	2024/06/25	Automated Statchk
Hexavalent Chromium in Soil by IC	IC/SPEC	9474212	2024/06/24	2024/06/24	Sousan Besharatlou
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9471122	2024/06/21	2024/06/22	Dennis Ngundu
Acid Extractable Metals by ICPMS	ICP/MS	9474638	2024/06/24	2024/06/25	Jaswinder Kaur
Moisture	BAL	9470564	N/A	2024/06/21	Frances Gacayan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9471187	2024/06/21	2024/06/22	Mitesh Raj
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9470791	N/A	2024/06/25	Denis Reid

Bureau Veritas ID: ZMV492 Dup
Sample ID: QAQC1
Matrix: Soil

Collected: 2024/06/18
Shipped:
Received: 2024/06/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	9470564	N/A	2024/06/21	Frances Gacayan

Bureau Veritas ID: ZMV496
Sample ID: BH101_0.2-0.8
Matrix: Soil

Collected: 2024/06/18
Shipped:
Received: 2024/06/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	9477156	2024/06/25	2024/06/26	Gurpartee Kaur
Hexavalent Chromium in Soil by IC	IC/SPEC	9474212	2024/06/24	2024/06/24	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	9474638	2024/06/24	2024/06/25	Jaswinder Kaur
Moisture	BAL	9469900	N/A	2024/06/20	Muhammad Chhaidan
pH CaCl2 EXTRACT	AT	9476364	2024/06/25	2024/06/25	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9467321	N/A	2024/06/26	Automated Statchk

Bureau Veritas ID: ZMV497
Sample ID: BH102_0.2-0.8
Matrix: Soil

Collected: 2024/06/18
Shipped:
Received: 2024/06/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	9477156	2024/06/25	2024/06/26	Gurpartee Kaur
Hexavalent Chromium in Soil by IC	IC/SPEC	9473293	2024/06/22	2024/06/24	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	9474638	2024/06/24	2024/06/25	Jaswinder Kaur
Moisture	BAL	9469900	N/A	2024/06/20	Muhammad Chhaidan
Sodium Adsorption Ratio (SAR)	CALC/MET	9467321	N/A	2024/06/26	Automated Statchk

Bureau Veritas ID: ZMV498
Sample ID: BH103_0.2-0.8
Matrix: Soil

Collected: 2024/06/18
Shipped:
Received: 2024/06/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	9477156	2024/06/25	2024/06/26	Gurpartee Kaur
Hexavalent Chromium in Soil by IC	IC/SPEC	9474212	2024/06/24	2024/06/24	Sousan Besharatlou



Bureau Veritas Job #: C416895
Report Date: 2024/07/02

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

TEST SUMMARY

Bureau Veritas ID: ZMV498
Sample ID: BH103_0.2-0.8
Matrix: Soil

Collected: 2024/06/18
Shipped:
Received: 2024/06/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9484585	2024/06/28	2024/06/28	(Kent) Maolin Li
Acid Extractable Metals by ICPMS	ICP/MS	9474638	2024/06/24	2024/06/25	Jaswinder Kaur
Moisture	BAL	9469900	N/A	2024/06/20	Muhammad Chhaidan
Sodium Adsorption Ratio (SAR)	CALC/MET	9467321	N/A	2024/06/26	Automated Statchk



Bureau Veritas Job #: C4I6895
Report Date: 2024/07/02

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

GENERAL COMMENTS

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

Package 1	6.0°C
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Sample ZMV490 [BH102_3-3.8] : PAH ANALYSIS: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample ZMV491 [BH103_3-3.8] : PAH ANALYSIS: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Results relate only to the items tested.



Bureau Veritas Job #: C416895
Report Date: 2024/07/02

QUALITY ASSURANCE REPORT

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9470538	4-Bromofluorobenzene	2024/06/21	108	60 - 140	103	60 - 140	93	%		
9470538	D10-o-Xylene	2024/06/21	103	60 - 130	78	60 - 130	104	%		
9470538	D4-1,2-Dichloroethane	2024/06/21	119	60 - 140	117	60 - 140	121	%		
9470538	D8-Toluene	2024/06/21	106	60 - 140	106	60 - 140	92	%		
9470791	4-Bromofluorobenzene	2024/06/24	94	60 - 140	97	60 - 140	92	%		
9470791	D10-o-Xylene	2024/06/24	95	60 - 130	96	60 - 130	86	%		
9470791	D4-1,2-Dichloroethane	2024/06/24	106	60 - 140	110	60 - 140	109	%		
9470791	D8-Toluene	2024/06/24	105	60 - 140	101	60 - 140	95	%		
9471122	o-Terphenyl	2024/06/22	88	60 - 130	94	60 - 130	96	%		
9471187	D10-Anthracene	2024/06/21	98	50 - 130	104	50 - 130	108	%		
9471187	D14-Terphenyl (FS)	2024/06/21	102	50 - 130	105	50 - 130	111	%		
9471187	D8-Acenaphthylene	2024/06/21	88	50 - 130	90	50 - 130	83	%		
9484585	o-Terphenyl	2024/06/28	88	60 - 130	89	60 - 130	113	%		
9469900	Moisture	2024/06/20							1.8	20
9470538	1,1,1,2-Tetrachloroethane	2024/06/21	114	60 - 140	110	60 - 130	<0.040	ug/g	NC	50
9470538	1,1,1-Trichloroethane	2024/06/21	118	60 - 140	114	60 - 130	<0.040	ug/g	NC	50
9470538	1,1,2,2-Tetrachloroethane	2024/06/21	112	60 - 140	109	60 - 130	<0.040	ug/g	NC	50
9470538	1,1,2-Trichloroethane	2024/06/21	113	60 - 140	109	60 - 130	<0.040	ug/g	NC	50
9470538	1,1-Dichloroethane	2024/06/21	117	60 - 140	113	60 - 130	<0.040	ug/g	NC	50
9470538	1,1-Dichloroethylene	2024/06/21	107	60 - 140	105	60 - 130	<0.040	ug/g	NC	50
9470538	1,2-Dichlorobenzene	2024/06/21	93	60 - 140	95	60 - 130	<0.040	ug/g	NC	50
9470538	1,2-Dichloroethane	2024/06/21	114	60 - 140	110	60 - 130	<0.049	ug/g	NC	50
9470538	1,2-Dichloropropane	2024/06/21	110	60 - 140	106	60 - 130	<0.040	ug/g	NC	50
9470538	1,3-Dichlorobenzene	2024/06/21	103	60 - 140	104	60 - 130	<0.040	ug/g	NC	50
9470538	1,4-Dichlorobenzene	2024/06/21	95	60 - 140	96	60 - 130	<0.040	ug/g	NC	50
9470538	Acetone (2-Propanone)	2024/06/21	111	60 - 140	110	60 - 140	<0.49	ug/g	NC	50
9470538	Benzene	2024/06/21	101	60 - 140	99	60 - 130	<0.0060	ug/g	NC	50
9470538	Bromodichloromethane	2024/06/21	116	60 - 140	111	60 - 130	<0.040	ug/g	NC	50
9470538	Bromoform	2024/06/21	106	60 - 140	103	60 - 130	<0.040	ug/g	NC	50
9470538	Bromomethane	2024/06/21	102	60 - 140	103	60 - 140	<0.040	ug/g	NC	50
9470538	Carbon Tetrachloride	2024/06/21	121	60 - 140	116	60 - 130	<0.040	ug/g	NC	50

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Bureau Veritas Job #: C416895
Report Date: 2024/07/02

QUALITY ASSURANCE REPORT(CONT'D)

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9470538	Chlorobenzene	2024/06/21	95	60 - 140	94	60 - 130	<0.040	ug/g	NC	50
9470538	Chloroform	2024/06/21	117	60 - 140	112	60 - 130	<0.040	ug/g	NC	50
9470538	cis-1,2-Dichloroethylene	2024/06/21	106	60 - 140	103	60 - 130	<0.040	ug/g	NC	50
9470538	cis-1,3-Dichloropropene	2024/06/21	95	60 - 140	97	60 - 130	<0.030	ug/g	NC	50
9470538	Dibromochloromethane	2024/06/21	119	60 - 140	114	60 - 130	<0.040	ug/g	NC	50
9470538	Dichlorodifluoromethane (FREON 12)	2024/06/21	96	60 - 140	99	60 - 140	<0.040	ug/g	NC	50
9470538	Ethylbenzene	2024/06/21	87	60 - 140	86	60 - 130	<0.010	ug/g	NC	50
9470538	Ethylene Dibromide	2024/06/21	105	60 - 140	103	60 - 130	<0.040	ug/g	NC	50
9470538	F1 (C6-C10) - BTEX	2024/06/21					<10	ug/g	NC	30
9470538	F1 (C6-C10)	2024/06/21	98	60 - 140	91	80 - 120	<10	ug/g	NC	30
9470538	Hexane	2024/06/21	106	60 - 140	104	60 - 130	<0.040	ug/g	NC	50
9470538	Methyl Ethyl Ketone (2-Butanone)	2024/06/21	107	60 - 140	105	60 - 140	<0.40	ug/g	NC	50
9470538	Methyl Isobutyl Ketone	2024/06/21	83	60 - 140	81	60 - 130	<0.40	ug/g	NC	50
9470538	Methyl t-butyl ether (MTBE)	2024/06/21	93	60 - 140	91	60 - 130	<0.040	ug/g	NC	50
9470538	Methylene Chloride(Dichloromethane)	2024/06/21	111	60 - 140	109	60 - 130	<0.049	ug/g	NC	50
9470538	o-Xylene	2024/06/21	90	60 - 140	88	60 - 130	<0.020	ug/g	NC	50
9470538	p+m-Xylene	2024/06/21	83	60 - 140	82	60 - 130	<0.020	ug/g	NC	50
9470538	Styrene	2024/06/21	75	60 - 140	73	60 - 130	<0.040	ug/g	NC	50
9470538	Tetrachloroethylene	2024/06/21	109	60 - 140	105	60 - 130	<0.040	ug/g	NC	50
9470538	Toluene	2024/06/21	96	60 - 140	93	60 - 130	<0.020	ug/g	NC	50
9470538	Total Xylenes	2024/06/21					<0.020	ug/g	NC	50
9470538	trans-1,2-Dichloroethylene	2024/06/21	110	60 - 140	106	60 - 130	<0.040	ug/g	NC	50
9470538	trans-1,3-Dichloropropene	2024/06/21	101	60 - 140	105	60 - 130	<0.040	ug/g	NC	50
9470538	Trichloroethylene	2024/06/21	104	60 - 140	100	60 - 130	<0.010	ug/g	NC	50
9470538	Trichlorofluoromethane (FREON 11)	2024/06/21	123	60 - 140	121	60 - 130	<0.040	ug/g	NC	50
9470538	Vinyl Chloride	2024/06/21	107	60 - 140	107	60 - 130	<0.019	ug/g	NC	50
9470564	Moisture	2024/06/21							0.77	20
9470791	1,1,1,2-Tetrachloroethane	2024/06/24	96	60 - 140	97	60 - 130	<0.040	ug/g		
9470791	1,1,1-Trichloroethane	2024/06/24	94	60 - 140	93	60 - 130	<0.040	ug/g		
9470791	1,1,2,2-Tetrachloroethane	2024/06/24	105	60 - 140	115	60 - 130	<0.040	ug/g		
9470791	1,1,2-Trichloroethane	2024/06/24	105	60 - 140	107	60 - 130	<0.040	ug/g		

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Bureau Veritas Job #: C416895
Report Date: 2024/07/02

QUALITY ASSURANCE REPORT(CONT'D)

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9470791	1,1-Dichloroethane	2024/06/24	104	60 - 140	105	60 - 130	<0.040	ug/g		
9470791	1,1-Dichloroethylene	2024/06/24	102	60 - 140	99	60 - 130	<0.040	ug/g		
9470791	1,2-Dichlorobenzene	2024/06/24	94	60 - 140	95	60 - 130	<0.040	ug/g		
9470791	1,2-Dichloroethane	2024/06/24	100	60 - 140	106	60 - 130	<0.049	ug/g		
9470791	1,2-Dichloropropane	2024/06/24	100	60 - 140	102	60 - 130	<0.040	ug/g		
9470791	1,3-Dichlorobenzene	2024/06/24	95	60 - 140	93	60 - 130	<0.040	ug/g		
9470791	1,4-Dichlorobenzene	2024/06/24	93	60 - 140	92	60 - 130	<0.040	ug/g		
9470791	Acetone (2-Propanone)	2024/06/24	108	60 - 140	120	60 - 140	<0.49	ug/g		
9470791	Benzene	2024/06/24	97	60 - 140	98	60 - 130	<0.0060	ug/g	NC	50
9470791	Bromodichloromethane	2024/06/24	98	60 - 140	101	60 - 130	<0.040	ug/g		
9470791	Bromoform	2024/06/24	93	60 - 140	98	60 - 130	<0.040	ug/g		
9470791	Bromomethane	2024/06/24	84	60 - 140	87	60 - 140	<0.040	ug/g		
9470791	Carbon Tetrachloride	2024/06/24	95	60 - 140	94	60 - 130	<0.040	ug/g		
9470791	Chlorobenzene	2024/06/24	92	60 - 140	93	60 - 130	<0.040	ug/g		
9470791	Chloroform	2024/06/24	101	60 - 140	102	60 - 130	<0.040	ug/g		
9470791	cis-1,2-Dichloroethylene	2024/06/24	99	60 - 140	101	60 - 130	<0.040	ug/g		
9470791	cis-1,3-Dichloropropene	2024/06/24	79	60 - 140	86	60 - 130	<0.030	ug/g		
9470791	Dibromochloromethane	2024/06/24	96	60 - 140	100	60 - 130	<0.040	ug/g		
9470791	Dichlorodifluoromethane (FREON 12)	2024/06/24	86	60 - 140	84	60 - 140	<0.040	ug/g		
9470791	Ethylbenzene	2024/06/24	89	60 - 140	87	60 - 130	<0.010	ug/g	NC	50
9470791	Ethylene Dibromide	2024/06/24	98	60 - 140	103	60 - 130	<0.040	ug/g		
9470791	F1 (C6-C10) - BTEX	2024/06/24					<10	ug/g	NC	30
9470791	F1 (C6-C10)	2024/06/24	87	60 - 140	87	80 - 120	<10	ug/g	NC	30
9470791	Hexane	2024/06/24	103	60 - 140	98	60 - 130	<0.040	ug/g		
9470791	Methyl Ethyl Ketone (2-Butanone)	2024/06/24	93	60 - 140	106	60 - 140	<0.40	ug/g		
9470791	Methyl Isobutyl Ketone	2024/06/24	88	60 - 140	100	60 - 130	<0.40	ug/g		
9470791	Methyl t-butyl ether (MTBE)	2024/06/24	87	60 - 140	88	60 - 130	<0.040	ug/g		
9470791	Methylene Chloride(Dichloromethane)	2024/06/24	108	60 - 140	110	60 - 130	<0.049	ug/g		
9470791	o-Xylene	2024/06/24	90	60 - 140	90	60 - 130	<0.020	ug/g	NC	50
9470791	p+m-Xylene	2024/06/24	86	60 - 140	84	60 - 130	<0.020	ug/g	NC	50
9470791	Styrene	2024/06/24	76	60 - 140	86	60 - 130	<0.040	ug/g		

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Bureau Veritas Job #: C416895
Report Date: 2024/07/02

QUALITY ASSURANCE REPORT(CONT'D)

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9470791	Tetrachloroethylene	2024/06/24	92	60 - 140	90	60 - 130	<0.040	ug/g		
9470791	Toluene	2024/06/24	95	60 - 140	92	60 - 130	<0.020	ug/g	NC	50
9470791	Total Xylenes	2024/06/24					<0.020	ug/g	NC	50
9470791	trans-1,2-Dichloroethylene	2024/06/24	99	60 - 140	99	60 - 130	<0.040	ug/g		
9470791	trans-1,3-Dichloropropene	2024/06/24	86	60 - 140	93	60 - 130	<0.040	ug/g		
9470791	Trichloroethylene	2024/06/24	93	60 - 140	92	60 - 130	<0.010	ug/g		
9470791	Trichlorofluoromethane (FREON 11)	2024/06/24	101	60 - 140	98	60 - 130	<0.040	ug/g		
9470791	Vinyl Chloride	2024/06/24	103	60 - 140	101	60 - 130	<0.019	ug/g		
9471122	F2 (C10-C16 Hydrocarbons)	2024/06/22	96	60 - 130	102	80 - 120	<10	ug/g	24	30
9471122	F3 (C16-C34 Hydrocarbons)	2024/06/22	98	60 - 130	105	80 - 120	<50	ug/g	NC	30
9471122	F4 (C34-C50 Hydrocarbons)	2024/06/22	NC (1)	60 - 130	93	80 - 120	<50	ug/g	144 (2)	30
9471187	1-Methylnaphthalene	2024/06/21	85	50 - 130	100	50 - 130	<0.0050	ug/g	16	40
9471187	2-Methylnaphthalene	2024/06/21	83	50 - 130	101	50 - 130	<0.0050	ug/g	11	40
9471187	Acenaphthene	2024/06/21	93	50 - 130	103	50 - 130	<0.0050	ug/g	16	40
9471187	Acenaphthylene	2024/06/21	95	50 - 130	104	50 - 130	<0.0050	ug/g	NC	40
9471187	Anthracene	2024/06/21	102	50 - 130	109	50 - 130	<0.0050	ug/g	NC	40
9471187	Benzo(a)anthracene	2024/06/21	102	50 - 130	111	50 - 130	<0.0050	ug/g	NC	40
9471187	Benzo(a)pyrene	2024/06/21	94	50 - 130	107	50 - 130	<0.0050	ug/g	NC	40
9471187	Benzo(b,j)fluoranthene	2024/06/21	89	50 - 130	105	50 - 130	<0.0050	ug/g	132 (3)	40
9471187	Benzo(g,h,i)perylene	2024/06/21	97	50 - 130	112	50 - 130	<0.0050	ug/g	NC	40
9471187	Benzo(k)fluoranthene	2024/06/21	91	50 - 130	107	50 - 130	<0.0050	ug/g	NC	40
9471187	Chrysene	2024/06/21	96	50 - 130	107	50 - 130	<0.0050	ug/g	NC	40
9471187	Dibenzo(a,h)anthracene	2024/06/21	107	50 - 130	116	50 - 130	<0.0050	ug/g	NC	40
9471187	Fluoranthene	2024/06/21	100	50 - 130	110	50 - 130	<0.0050	ug/g	NC	40
9471187	Fluorene	2024/06/21	98	50 - 130	104	50 - 130	<0.0050	ug/g	26	40
9471187	Indeno(1,2,3-cd)pyrene	2024/06/21	98	50 - 130	112	50 - 130	<0.0050	ug/g	NC	40
9471187	Naphthalene	2024/06/21	80	50 - 130	97	50 - 130	<0.0050	ug/g	3.7	40
9471187	Phenanthrene	2024/06/21	101	50 - 130	109	50 - 130	<0.0050	ug/g	77 (3)	40
9471187	Pyrene	2024/06/21	101	50 - 130	110	50 - 130	<0.0050	ug/g	NC	40
9473293	Chromium (VI)	2024/06/24	82	70 - 130	94	80 - 120	<0.18	ug/g	NC	35
9474212	Chromium (VI)	2024/06/24	67 (4)	70 - 130	94	80 - 120	<0.18	ug/g	NC	35

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QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9474638	Acid Extractable Antimony (Sb)	2024/06/25	96	75 - 125	100	80 - 120	<0.20	ug/g	NC	30
9474638	Acid Extractable Arsenic (As)	2024/06/25	97	75 - 125	100	80 - 120	<1.0	ug/g	11	30
9474638	Acid Extractable Barium (Ba)	2024/06/25	NC	75 - 125	93	80 - 120	<0.50	ug/g	4.5	30
9474638	Acid Extractable Beryllium (Be)	2024/06/25	98	75 - 125	100	80 - 120	<0.20	ug/g	9.5	30
9474638	Acid Extractable Boron (B)	2024/06/25	96	75 - 125	97	80 - 120	<5.0	ug/g		
9474638	Acid Extractable Cadmium (Cd)	2024/06/25	95	75 - 125	96	80 - 120	<0.10	ug/g	NC	30
9474638	Acid Extractable Chromium (Cr)	2024/06/25	100	75 - 125	97	80 - 120	<1.0	ug/g	4.0	30
9474638	Acid Extractable Cobalt (Co)	2024/06/25	95	75 - 125	99	80 - 120	<0.10	ug/g	3.6	30
9474638	Acid Extractable Copper (Cu)	2024/06/25	101	75 - 125	99	80 - 120	<0.50	ug/g	8.5	30
9474638	Acid Extractable Lead (Pb)	2024/06/25	91	75 - 125	95	80 - 120	<1.0	ug/g	6.9	30
9474638	Acid Extractable Mercury (Hg)	2024/06/25	94	75 - 125	98	80 - 120	<0.050	ug/g		
9474638	Acid Extractable Molybdenum (Mo)	2024/06/25	93	75 - 125	93	80 - 120	<0.50	ug/g	5.9	30
9474638	Acid Extractable Nickel (Ni)	2024/06/25	97	75 - 125	101	80 - 120	<0.50	ug/g	3.7	30
9474638	Acid Extractable Selenium (Se)	2024/06/25	97	75 - 125	101	80 - 120	<0.50	ug/g	NC	30
9474638	Acid Extractable Silver (Ag)	2024/06/25	95	75 - 125	96	80 - 120	<0.20	ug/g	NC	30
9474638	Acid Extractable Thallium (Tl)	2024/06/25	90	75 - 125	95	80 - 120	<0.050	ug/g	7.4	30
9474638	Acid Extractable Uranium (U)	2024/06/25	92	75 - 125	94	80 - 120	<0.050	ug/g		
9474638	Acid Extractable Vanadium (V)	2024/06/25	NC	75 - 125	99	80 - 120	<5.0	ug/g	4.8	30
9474638	Acid Extractable Zinc (Zn)	2024/06/25	97	75 - 125	102	80 - 120	<5.0	ug/g	2.1	30
9476364	Available (CaCl2) pH	2024/06/25			100	97 - 103			0.38	N/A
9476848	F4G-sg (Grav. Heavy Hydrocarbons)	2024/06/26	133	65 - 135	101	65 - 135	<100	ug/g	4.1	50
9477156	Conductivity	2024/06/26			101	90 - 110	<0.002	mS/cm	1.3	10
9484585	F2 (C10-C16 Hydrocarbons)	2024/06/28	93	60 - 130	95	80 - 120	<10	ug/g	NC	30
9484585	F3 (C16-C34 Hydrocarbons)	2024/06/28	97	60 - 130	98	80 - 120	<50	ug/g	NC	30



QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9484585	F4 (C34-C50 Hydrocarbons)	2024/06/28	88	60 - 130	89	80 - 120	<50	ug/g	NC	30

N/A = Not Applicable

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).

(1) Matrix spike recovery is outside the acceptance limit due to heterogeneity of the sample.

(2) Duplicate results exceeded RPD acceptance criteria for flagged analytes. Sample extract was reanalyzed with the same results. This is likely due to sample heterogeneity.

(3) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(4) The matrix spike recovery was below the lower control limit. This may be due in part to the reducing environment of the sample. The sample was reanalyzed with the same results.



Bureau Veritas Job #: C416895

Report Date: 2024/07/02

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

VALIDATION SIGNATURE PAGE

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

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

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 Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

[illegible]

NOTE: REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY							
Regulation 153 (2011)		Other Regulations		Special Instructions			
☒ Table 1	☒ Reg 60	☐ COME	☐ Sanitary Sewer Bylaw		EODS Req'd.		
☒ Table 2	☒ Reg 556	☐ Reg 556	☐ Storm Sewer Bylaw				
☐ Table 3	☐ MNSA	☐ MNSA	☐ Municipality				
☐ Table 4	☐ PWQDO	☐ PWQDO	☐ Reg 403 Table				
Table 2, ICC, Coarse		Include Criteria on Certificate of Analysis Y/N? ☒					
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix			
1	BH101-3B-43	2024/01/18	10:00	Soil			
2	BH102-3-3B		11:30				
3	BH103-3-3B		12:25				
4	QAQC1		-				
5	BH101-4.3-4.6		10:05				
6	BH102-5.3-6.1		11:40				
7	BH103-3.8-4.1		12:30	↓			
8	BH101-0.2-0.8		10:00	↓			
9	BH102-0.2-0.8		11:30	↓			
10	BH103-0.2-0.8		14:25	↓			

* RELINQUISHED BY: (Signature/Print) <i>J.M. Kubacka Jr.</i>	Date: (YY/MM/DD) 08-26-98	Time 14:35	RECEIVED BY: (Signature/Print) <i>Sgt. SULLIVAN</i>	Date: (YY/MM/DD) 2024/08/09	Time 14:35	# Jars used and not submitted	Laboratory Use Only Temperatures ($^{\circ}$ C) or % Y / O R F	Time Sensitive	Customs Seal Present Intact	No	Yes	Yellow Client
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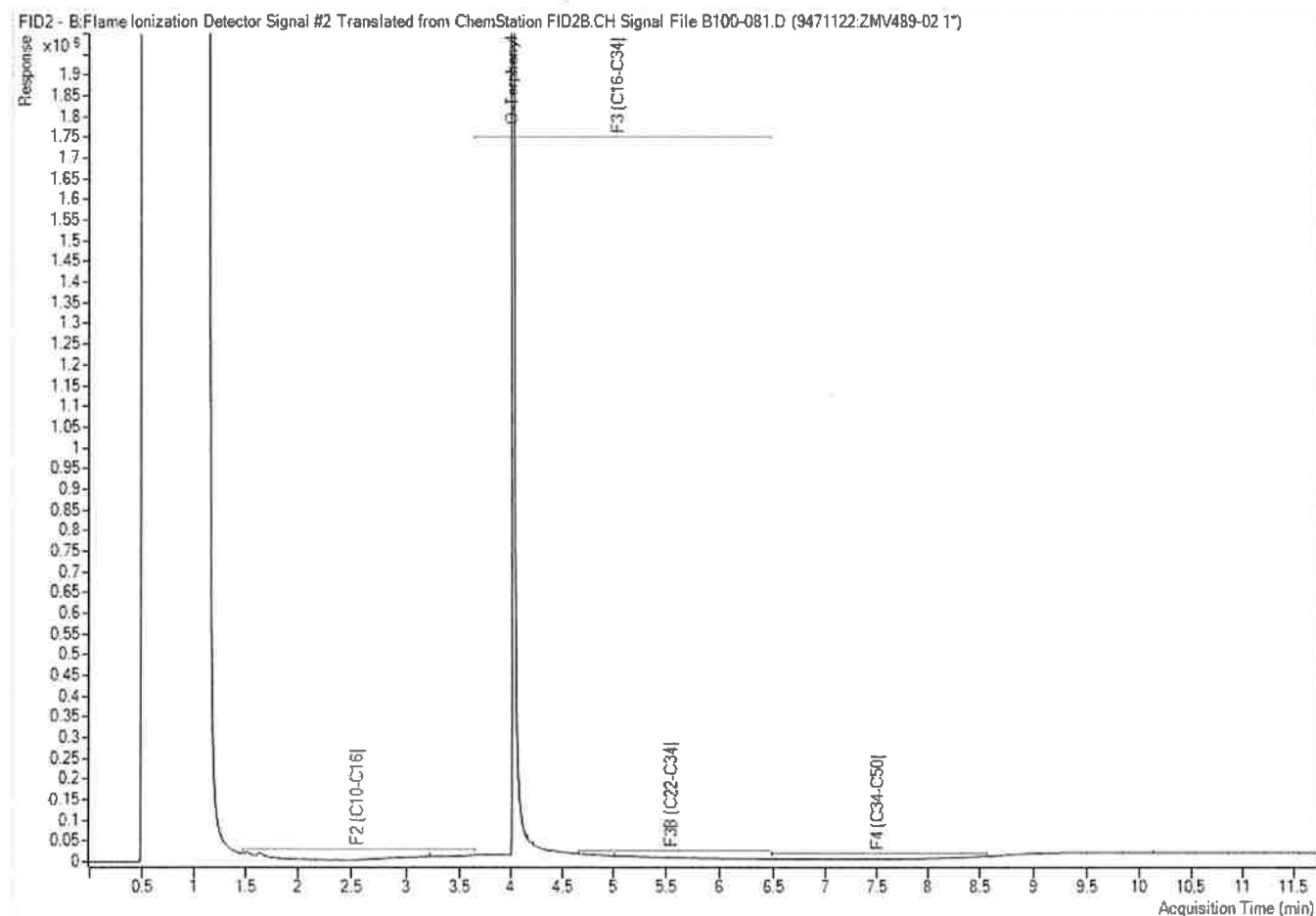
UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS AN ACKNOWLEDGEMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVIA.COM/ENVIRONMENTAL-LABORATORIES/SOURCES/COT-TERMS-AND-CONDITIONS.
IT IS THE RESPONSIBILITY OF THE RELINQUISHER OF THE CHAIN OF RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client
 SAMPLES MUST BE KEPT FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS
 1 CE

Bureau Veritas Job #: C4I6895
Report Date: 2024/07/02
Bureau Veritas Sample: ZMV489

Cambium Environmental Inc
Client Project #: 19462-001
Client ID: BH101_3.8-4.3

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

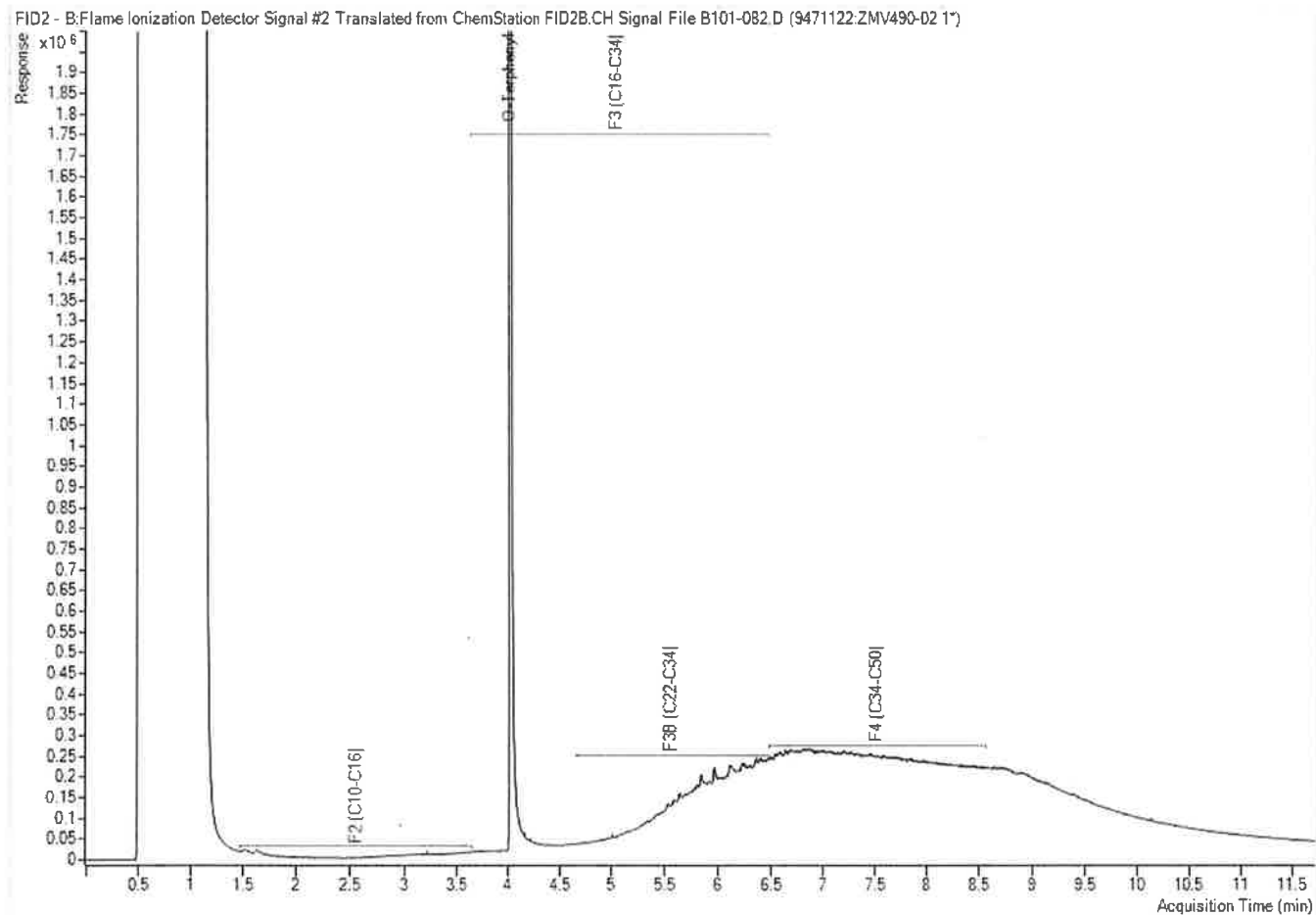


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C416895
Report Date: 2024/07/02
Bureau Veritas Sample: ZMV490

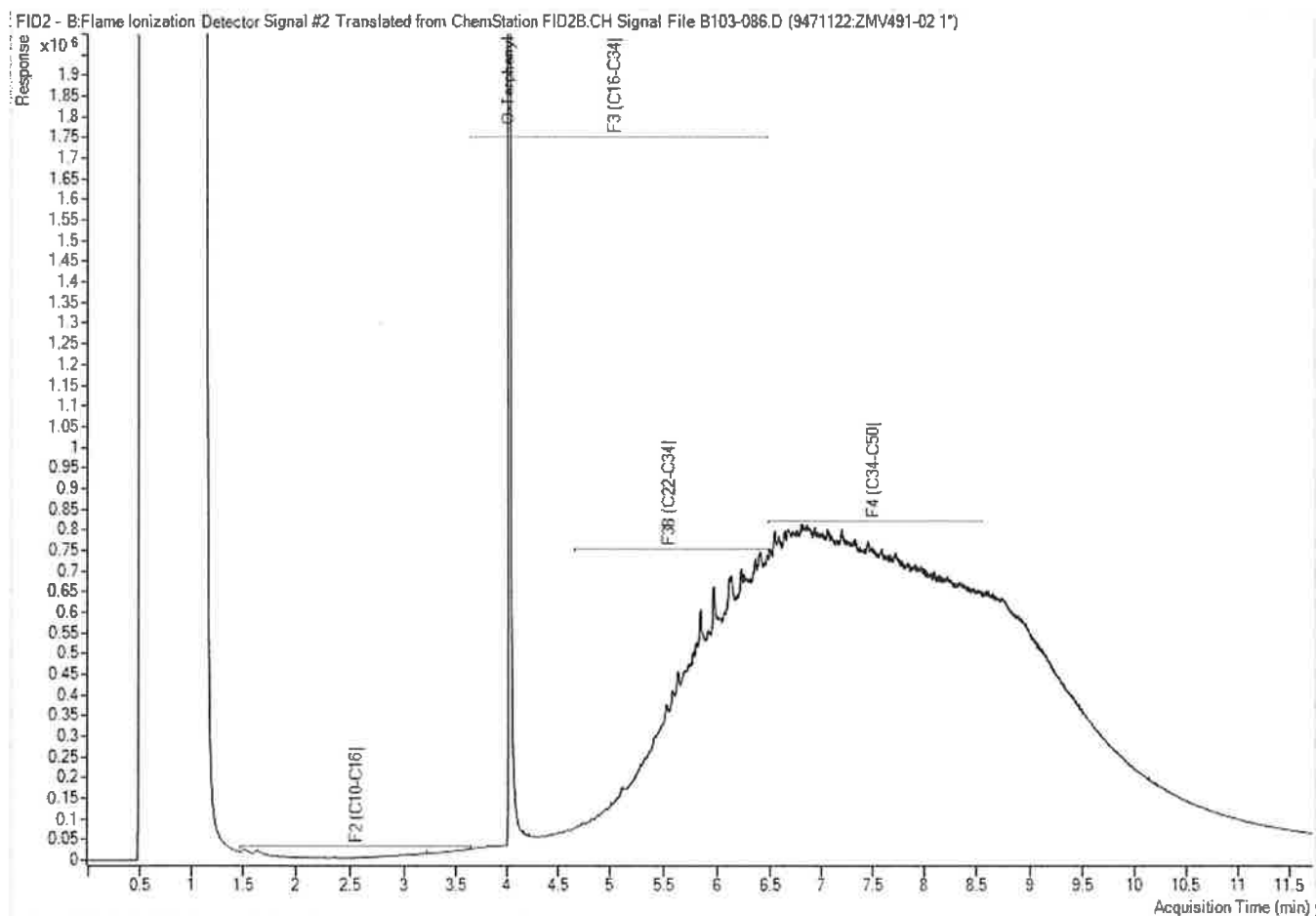
Cambium Environmental Inc
Client Project #: 19462-001
Client ID: BH102_3-3.8

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



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

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

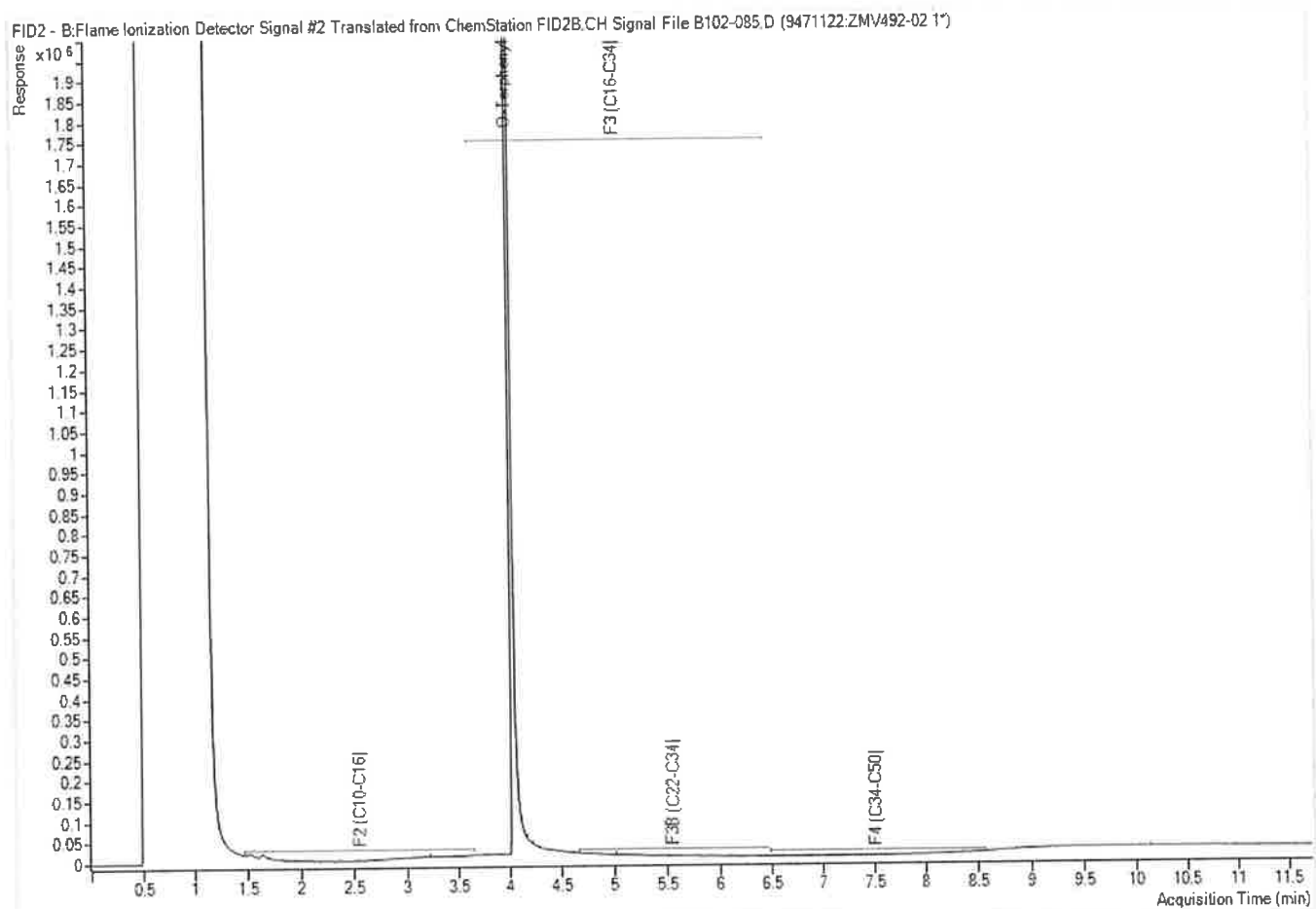


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C416895
Report Date: 2024/07/02
Bureau Veritas Sample: ZMV492

Cambium Environmental Inc
Client Project #: 19462-001
Client ID: QAQC1

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

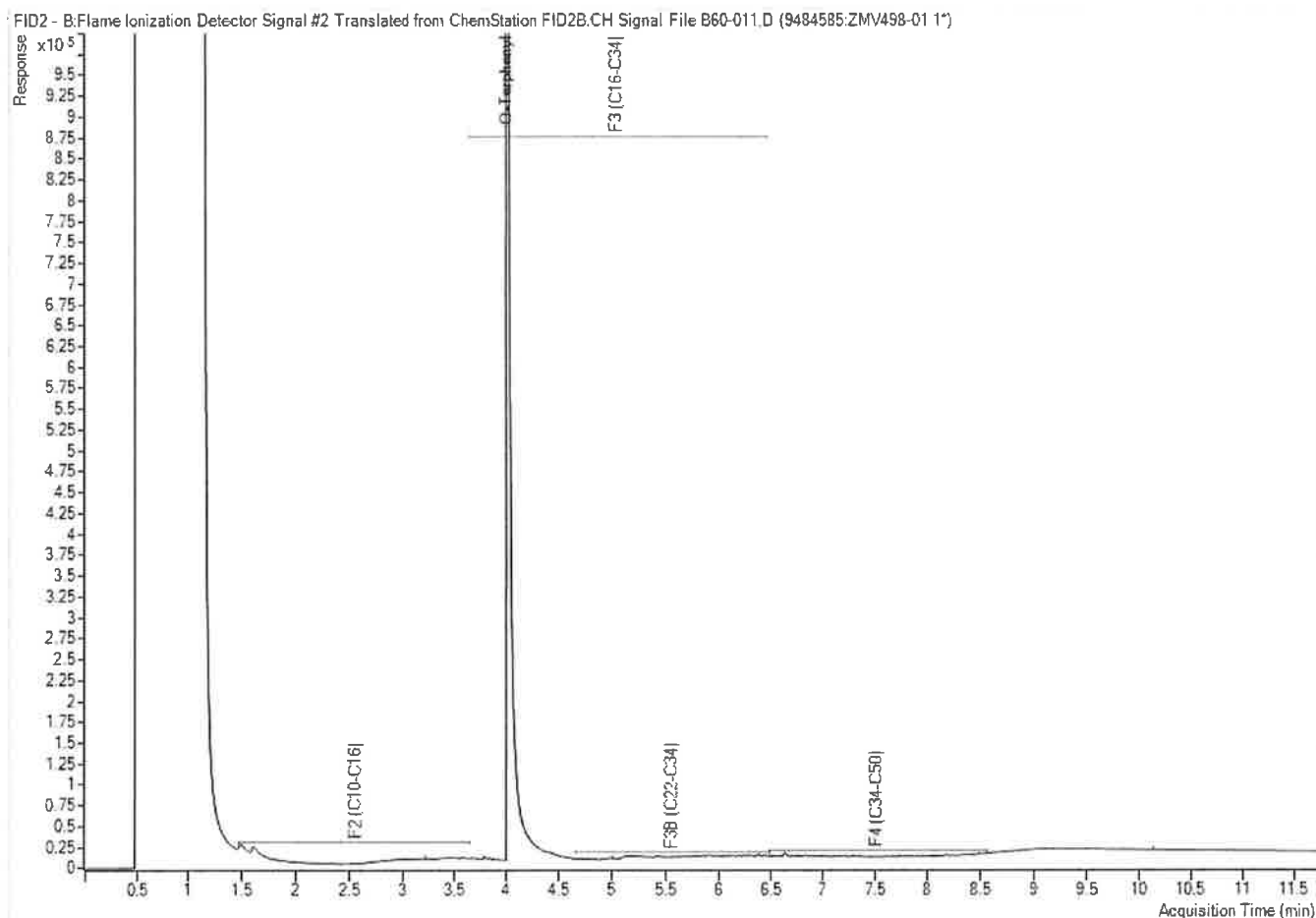


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4I6895
Report Date: 2024/07/02
Bureau Veritas Sample: ZMV498

Cambium Environmental Inc
Client Project #: 19462-001
Client ID: BH103_0.2-0.8

Petroleum Hydrocarbons F2-F4 in Soil 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 #: C4I6895
Report Date: 2024/07/02

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

Exceedance Summary Table – Reg153/04 T2-Soil/Ind-C
Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
BH103_3-3.8	ZMV491-02	F4G-sg (Grav. Heavy Hydrocarbons)	3300	6200	100	ug/g

The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.



Your Project #: 19462-001
Your C.O.C. #: C#996316-01-01

Attention: Curtis Edgington

Cambium Environmental Inc
194 Sophia Street
PO Box 325
Peterborough, ON
CANADA K9H 1E5

Report Date: 2024/07/05
Report #: R8221629
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4J6967

Received: 2024/06/26, 14:16

Sample Matrix: Water
Samples Received: 4

Analyses	Date		Laboratory Method	Analytical Method
	Quantity	Date Extracted		
Methylnaphthalene Sum	4	N/A	2024/06/29 CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum	4	N/A	2024/07/03	EPA 8260C m
Chloride by Automated Colourimetry	4	N/A	2024/07/03 CAM SOP-00463	SM 24 4500-Cl E m
Chromium (VI) in Water	4	N/A	2024/07/02 CAM SOP-00436	EPA 7199 m
Petroleum Hydrocarbons F2-F4 in Water (1)	4	2024/06/28	2024/06/29 CAM SOP-00316	CCME PHC-CWS m
Mercury	4	2024/07/03	2024/07/03 CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	3	N/A	2024/07/03 CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS	1	N/A	2024/07/04 CAM SOP-00447	EPA 6020B m
PAH Compounds in Water by GC/MS (SIM)	4	2024/06/28	2024/06/28 CAM SOP-00318	EPA 8270E
Polychlorinated Biphenyl in Water	4	2024/07/02	2024/07/02 CAM SOP-00309	EPA 8082A m
Volatile Organic Compounds and F1 PHCs	4	N/A	2024/07/01 CAM SOP-00230	EPA 8260C m

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.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.



Your Project #: 19462-001
Your C.O.C. #: C#996316-01-01

Attention: Curtis Edgington

Cambium Environmental Inc
194 Sophia Street
PO Box 325
Peterborough, ON
CANADA K9H 1E5

Report Date: 2024/07/05
Report #: R8221629
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4J6967

Received: 2024/06/26, 14:16

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.

(1) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Mayank Nigam, Project Manager

Email: Mayank.Nigam@bureauveritas.com

Phone# (905) 817-5700

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**BUREAU
VERITAS**

Bureau Veritas Job #: C4J6967

Report Date: 2024/07/05

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID			ZOV512		ZOV513	ZOV514	ZOV515		
Sampling Date			2024/06/25 11:49		2024/06/25 12:59	2024/06/25 12:17	2024/06/25		
COC Number			C#996316-01-01		C#996316-01-01	C#996316-01-01	C#996316-01-01		
	UNITS	Criteria	BH101	RDL	BH102	BH103	QAQC1	RDL	QC Batch
Inorganics									
Dissolved Chloride (Cl-)	mg/L	790	1700	20	51	52	68	1.0	9486856
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)									
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition									
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil									

BUREAU
VERITAS

Bureau Veritas Job #: C4J6967

Report Date: 2024/07/05

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID			ZOV512			ZOV512			ZOV513		
Sampling Date			2024/06/25 11:49			2024/06/25 11:49			2024/06/25 12:59		
COC Number			C#996316-01-01			C#996316-01-01			C#996316-01-01		
	UNITS	Criteria	BH101	RDL	QC Batch	BH101 Lab-Dup	RDL	QC Batch	BH102	RDL	QC Batch

Metals

Chromium (VI)	ug/L	25	<1.0 (1)	1.0	9485681				<0.50	0.50	9485681
Mercury (Hg)	ug/L	0.29	<0.10	0.10	9491637	<0.10	0.10	9491637	<0.10	0.10	9491637

No Fill

No Exceedance

Grey

Exceeds 1 criteria policy/level

Black

Exceeds both criteria/levels

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)

Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition

Potable Ground Water- All Types of Property Uses - Coarse Textured Soil

(1) Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Bureau Veritas ID			ZOV514	ZOV515		
Sampling Date			2024/06/25 12:17	2024/06/25		
COC Number			C#996316-01-01	C#996316-01-01		
	UNITS	Criteria	BH103	QAQC1	RDL	QC Batch
Metals						
Chromium (VI)	ug/L	25	<0.50	<0.50	0.50	9485681
Mercury (Hg)	ug/L	0.29	<0.10	<0.10	0.10	9491637
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)						
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition						
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil						



Bureau Veritas Job #: C4J6967
Report Date: 2024/07/05

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

O.REG 153 DISSOLVED ICPMS METALS (WATER)

Bureau Veritas ID			ZOV512		ZOV513	ZOV514	ZOV514		
Sampling Date			2024/06/25 11:49		2024/06/25 12:59	2024/06/25 12:17	2024/06/25 12:17		
COC Number			C#996316-01-01		C#996316-01-01	C#996316-01-01	C#996316-01-01		
	UNITS	Criteria	BH101	RDL	BH102	BH103	BH103 Lab-Dup	RDL	QC Batch
Metals									
Dissolved Antimony (Sb)	ug/L	6.0	<0.50	0.50	<0.50	<0.50	<0.50	0.50	9484946
Dissolved Arsenic (As)	ug/L	25	<1.0	1.0	<1.0	<1.0	<1.0	1.0	9484946
Dissolved Barium (Ba)	ug/L	1000	270	2.0	44	34	34	2.0	9484946
Dissolved Beryllium (Be)	ug/L	4.0	<0.40	0.40	<0.40	<0.40	<0.40	0.40	9484946
Dissolved Boron (B)	ug/L	5000	81	10	54	170	170	10	9484946
Dissolved Cadmium (Cd)	ug/L	2.7	<0.090	0.090	<0.090	<0.090	<0.090	0.090	9484946
Dissolved Chromium (Cr)	ug/L	50	<5.0	5.0	<5.0	<5.0	<5.0	5.0	9484946
Dissolved Cobalt (Co)	ug/L	3.8	0.59	0.50	<0.50	<0.50	<0.50	0.50	9484946
Dissolved Copper (Cu)	ug/L	87	3.4	0.90	1.3	1.7	1.7	0.90	9484946
Dissolved Lead (Pb)	ug/L	10	<0.50	0.50	<0.50	<0.50	<0.50	0.50	9484946
Dissolved Molybdenum (Mo)	ug/L	70	2.1	0.50	1.2	1.2	1.1	0.50	9484946
Dissolved Nickel (Ni)	ug/L	100	3.5	1.0	<1.0	<1.0	<1.0	1.0	9484946
Dissolved Selenium (Se)	ug/L	10	<2.0	2.0	<2.0	<2.0	<2.0	2.0	9484946
Dissolved Silver (Ag)	ug/L	1.5	<0.090	0.090	<0.090	<0.090	<0.090	0.090	9484946
Dissolved Sodium (Na)	ug/L	490000	1000000	500	48000	32000	33000	100	9484946
Dissolved Thallium (Tl)	ug/L	2.0	<0.050	0.050	<0.050	<0.050	<0.050	0.050	9484946
Dissolved Uranium (U)	ug/L	20	0.89	0.10	0.41	0.86	0.86	0.10	9484946
Dissolved Vanadium (V)	ug/L	6.2	0.58	0.50	<0.50	<0.50	<0.50	0.50	9484946
Dissolved Zinc (Zn)	ug/L	1100	7.9	5.0	<5.0	<5.0	<5.0	5.0	9484946
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Lab-Dup = Laboratory Initiated Duplicate									
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)									
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition									
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil									



Bureau Veritas Job #: C4J6967
Report Date: 2024/07/05

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

O.REG 153 DISSOLVED ICPMS METALS (WATER)

Bureau Veritas ID			ZOV515		
Sampling Date			2024/06/25		
COC Number			C#996316-01-01		
	UNITS	Criteria	QAQC1	RDL	QC Batch
Metals					
Dissolved Antimony (Sb)	ug/L	6.0	<0.50	0.50	9484946
Dissolved Arsenic (As)	ug/L	25	<1.0	1.0	9484946
Dissolved Barium (Ba)	ug/L	1000	44	2.0	9484946
Dissolved Beryllium (Be)	ug/L	4.0	<0.40	0.40	9484946
Dissolved Boron (B)	ug/L	5000	52	10	9484946
Dissolved Cadmium (Cd)	ug/L	2.7	<0.090	0.090	9484946
Dissolved Chromium (Cr)	ug/L	50	<5.0	5.0	9484946
Dissolved Cobalt (Co)	ug/L	3.8	<0.50	0.50	9484946
Dissolved Copper (Cu)	ug/L	87	<0.90	0.90	9484946
Dissolved Lead (Pb)	ug/L	10	<0.50	0.50	9484946
Dissolved Molybdenum (Mo)	ug/L	70	1.3	0.50	9484946
Dissolved Nickel (Ni)	ug/L	100	<1.0	1.0	9484946
Dissolved Selenium (Se)	ug/L	10	<2.0	2.0	9484946
Dissolved Silver (Ag)	ug/L	1.5	<0.090	0.090	9484946
Dissolved Sodium (Na)	ug/L	490000	48000	100	9484946
Dissolved Thallium (Tl)	ug/L	2.0	<0.050	0.050	9484946
Dissolved Uranium (U)	ug/L	20	0.40	0.10	9484946
Dissolved Vanadium (V)	ug/L	6.2	<0.50	0.50	9484946
Dissolved Zinc (Zn)	ug/L	1100	<5.0	5.0	9484946
No Fill	No Exceedance				
Grey	Exceeds 1 criteria policy/level				
Black	Exceeds both criteria/levels				
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)					
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition					
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil					



Bureau Veritas Job #: C4J6967
Report Date: 2024/07/05

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

O.REG 153 PAHS (WATER)

Bureau Veritas ID			ZOV512	ZOV513	ZOV514	ZOV515		
Sampling Date			2024/06/25 11:49	2024/06/25 12:59	2024/06/25 12:17	2024/06/25		
COC Number			C#996316-01-01	C#996316-01-01	C#996316-01-01	C#996316-01-01		
	UNITS	Criteria	BH101	BH102	BH103	QAQC1	RDL	QC Batch
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/L	3.2	<0.071	<0.071	<0.071	<0.071	0.071	9482810
Polyaromatic Hydrocarbons								
Acenaphthene	ug/L	4.1	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Acenaphthylene	ug/L	1	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Anthracene	ug/L	2.4	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Benzo(a)anthracene	ug/L	1.0	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Benzo(a)pyrene	ug/L	0.01	<0.0090	<0.0090	<0.0090	<0.0090	0.0090	9484644
Benzo(b,j)fluoranthene	ug/L	0.1	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Benzo(g,h,i)perylene	ug/L	0.2	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Benzo(k)fluoranthene	ug/L	0.1	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Chrysene	ug/L	0.1	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Dibenzo(a,h)anthracene	ug/L	0.2	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Fluoranthene	ug/L	0.41	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Fluorene	ug/L	120	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Indeno(1,2,3-cd)pyrene	ug/L	0.2	<0.050	<0.050	<0.050	<0.050	0.050	9484644
1-Methylnaphthalene	ug/L	3.2	<0.050	<0.050	<0.050	<0.050	0.050	9484644
2-Methylnaphthalene	ug/L	3.2	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Naphthalene	ug/L	11	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Phenanthrene	ug/L	1	<0.030	<0.030	<0.030	<0.030	0.030	9484644
Pyrene	ug/L	4.1	<0.050	<0.050	<0.050	<0.050	0.050	9484644
Surrogate Recovery (%)								
D10-Anthracene	%	-	104	103	106	106		9484644
D14-Terphenyl (FS)	%	-	90	92	94	93		9484644
D8-Acenaphthylene	%	-	93	94	95	97		9484644
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)								
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition								
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil								



**BUREAU
VERITAS**

Bureau Veritas Job #: C4J6967

Report Date: 2024/07/05

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

O.REG 153 PCBS (WATER)

Bureau Veritas ID			ZOV512	ZOV513	ZOV514	ZOV515		
Sampling Date			2024/06/25 11:49	2024/06/25 12:59	2024/06/25 12:17	2024/06/25		
COC Number			C#996316-01-01	C#996316-01-01	C#996316-01-01	C#996316-01-01		
	UNITS	Criteria	BH101	BH102	BH103	QAQC1	RDL	QC Batch
PCBs								
Aroclor 1242	ug/L	-	<0.05	<0.05	<0.05	<0.05	0.05	9488745
Aroclor 1248	ug/L	-	<0.05	<0.05	<0.05	<0.05	0.05	9488745
Aroclor 1254	ug/L	-	<0.05	<0.05	<0.05	<0.05	0.05	9488745
Aroclor 1260	ug/L	-	<0.05	<0.05	<0.05	<0.05	0.05	9488745
Total PCB	ug/L	3.0	<0.05	<0.05	<0.05	<0.05	0.05	9488745
Surrogate Recovery (%)								
Decachlorobiphenyl	%	-	82	91	99	85		9488745
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)								
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition								
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil								



Bureau Veritas Job #: C4J6967

Report Date: 2024/07/05

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Bureau Veritas ID			ZOV512	ZOV513	ZOV514	ZOV515		
Sampling Date			2024/06/25 11:49	2024/06/25 12:59	2024/06/25 12:17	2024/06/25		
COC Number			C#996316-01-01	C#996316-01-01	C#996316-01-01	C#996316-01-01		
	UNITS	Criteria	BH101	BH102	BH103	QAQC1	RDL	QC Batch

Calculated Parameters								
1,3-Dichloropropene (cis+trans)	ug/L	0.5	<0.50	<0.50	<0.50	<0.50	0.50	9484037
Volatile Organics								
Acetone (2-Propanone)	ug/L	2700	<10	<10	<10	<10	10	9484934
Benzene	ug/L	5.0	<0.17	<0.17	<0.17	<0.17	0.17	9484934
Bromodichloromethane	ug/L	16.0	<0.50	<0.50	3.7	<0.50	0.50	9484934
Bromoform	ug/L	25.0	<1.0	<1.0	<1.0	<1.0	1.0	9484934
Bromomethane	ug/L	0.89	<0.50	<0.50	<0.50	<0.50	0.50	9484934
Carbon Tetrachloride	ug/L	0.79	<0.20	<0.20	<0.20	<0.20	0.20	9484934
Chlorobenzene	ug/L	30	<0.20	<0.20	<0.20	<0.20	0.20	9484934
Chloroform	ug/L	2.4	<0.20	<0.20	9.2	<0.20	0.20	9484934
Dibromochloromethane	ug/L	25.0	<0.50	<0.50	1.0	<0.50	0.50	9484934
1,2-Dichlorobenzene	ug/L	3.0	<0.50	<0.50	<0.50	<0.50	0.50	9484934
1,3-Dichlorobenzene	ug/L	59	<0.50	<0.50	<0.50	<0.50	0.50	9484934
1,4-Dichlorobenzene	ug/L	1.0	<0.50	<0.50	<0.50	<0.50	0.50	9484934
Dichlorodifluoromethane (FREON 12)	ug/L	590	<1.0	<1.0	<1.0	<1.0	1.0	9484934
1,1-Dichloroethane	ug/L	5	<0.20	<0.20	<0.20	<0.20	0.20	9484934
1,2-Dichloroethane	ug/L	1.6	<0.50	<0.50	<0.50	<0.50	0.50	9484934
1,1-Dichloroethylene	ug/L	1.6	<0.20	<0.20	<0.20	<0.20	0.20	9484934
cis-1,2-Dichloroethylene	ug/L	1.6	<0.50	<0.50	<0.50	<0.50	0.50	9484934
trans-1,2-Dichloroethylene	ug/L	1.6	<0.50	<0.50	<0.50	<0.50	0.50	9484934
1,2-Dichloropropane	ug/L	5.0	<0.20	<0.20	<0.20	<0.20	0.20	9484934
cis-1,3-Dichloropropene	ug/L	0.5	<0.30	<0.30	<0.30	<0.30	0.30	9484934
trans-1,3-Dichloropropene	ug/L	0.5	<0.40	<0.40	<0.40	<0.40	0.40	9484934
Ethylbenzene	ug/L	2.4	<0.20	<0.20	<0.20	<0.20	0.20	9484934
Ethylene Dibromide	ug/L	0.2	<0.20	<0.20	<0.20	<0.20	0.20	9484934
Hexane	ug/L	51	<1.0	<1.0	<1.0	<1.0	1.0	9484934
Methylene Chloride(Dichloromethane)	ug/L	50	<2.0	<2.0	<2.0	<2.0	2.0	9484934
Methyl Ethyl Ketone (2-Butanone)	ug/L	1800	<10	<10	<10	<10	10	9484934
Methyl Isobutyl Ketone	ug/L	640	<5.0	<5.0	<5.0	<5.0	5.0	9484934

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels
RDL = Reportable Detection Limit	
QC Batch = Quality Control Batch	
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)	
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition	
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil	



**BUREAU
VERITAS**

Bureau Veritas Job #: C4J6967

Report Date: 2024/07/05

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

O.REG 153 VOCs BY HS & F1-F4 (WATER)

Bureau Veritas ID			ZOV512	ZOV513	ZOV514	ZOV515		
Sampling Date			2024/06/25 11:49	2024/06/25 12:59	2024/06/25 12:17	2024/06/25		
COC Number			C#996316-01-01	C#996316-01-01	C#996316-01-01	C#996316-01-01		
	UNITS	Criteria	BH101	BH102	BH103	QAQC1	RDL	QC Batch
Methyl t-butyl ether (MTBE)	ug/L	15	<0.50	<0.50	<0.50	<0.50	0.50	9484934
Styrene	ug/L	5.4	<0.50	<0.50	<0.50	<0.50	0.50	9484934
1,1,1,2-Tetrachloroethane	ug/L	1.1	<0.50	<0.50	<0.50	<0.50	0.50	9484934
1,1,2,2-Tetrachloroethane	ug/L	1.0	<0.50	<0.50	<0.50	<0.50	0.50	9484934
Tetrachloroethylene	ug/L	1.6	<0.20	<0.20	<0.20	<0.20	0.20	9484934
Toluene	ug/L	24	<0.20	<0.20	<0.20	<0.20	0.20	9484934
1,1,1-Trichloroethane	ug/L	200	<0.20	<0.20	<0.20	<0.20	0.20	9484934
1,1,2-Trichloroethane	ug/L	4.7	<0.50	<0.50	<0.50	<0.50	0.50	9484934
Trichloroethylene	ug/L	1.6	<0.20	<0.20	<0.20	<0.20	0.20	9484934
Trichlorofluoromethane (FREON 11)	ug/L	150	<0.50	<0.50	<0.50	<0.50	0.50	9484934
Vinyl Chloride	ug/L	0.5	<0.20	<0.20	<0.20	<0.20	0.20	9484934
p+m-Xylene	ug/L	-	<0.20	<0.20	<0.20	<0.20	0.20	9484934
o-Xylene	ug/L	-	<0.20	<0.20	<0.20	<0.20	0.20	9484934
Total Xylenes	ug/L	300	<0.20	<0.20	<0.20	<0.20	0.20	9484934
F1 (C6-C10)	ug/L	750	<25	<25	<25	<25	25	9484934
F1 (C6-C10) - BTEX	ug/L	750	<25	<25	<25	<25	25	9484934
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/L	150	<100	<100	<100	<100	100	9484635
F3 (C16-C34 Hydrocarbons)	ug/L	500	<200	<200	<200	<200	200	9484635
F4 (C34-C50 Hydrocarbons)	ug/L	500	<200	<200	<200	<200	200	9484635
Reached Baseline at C50	ug/L	-	Yes	Yes	Yes	Yes		9484635
Surrogate Recovery (%)								
o-Terphenyl	%	-	94	93	92	94		9484635
4-Bromofluorobenzene	%	-	97	96	96	95		9484934
D4-1,2-Dichloroethane	%	-	107	105	106	106		9484934
D8-Toluene	%	-	94	95	94	94		9484934
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)								
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition								
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil								



Bureau Veritas Job #: C4J6967
Report Date: 2024/07/05

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

TEST SUMMARY

Bureau Veritas ID: ZOV512
Sample ID: BH101
Matrix: Water

Collected: 2024/06/25
Shipped:
Received: 2024/06/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9482810	N/A	2024/06/29	Automated Statchk
1,3-Dichloropropene Sum	CALC	9484037	N/A	2024/07/03	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9486856	N/A	2024/07/03	Alina Dobreanu
Chromium (VI) in Water	IC	9485681	N/A	2024/07/02	Surleen Kaur Romana
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9484635	2024/06/28	2024/06/29	Ksenia Trofimova
Mercury	CV/AA	9491637	2024/07/03	2024/07/03	Gagandeep Rai
Dissolved Metals by ICPMS	ICP/MS	9484946	N/A	2024/07/04	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9484644	2024/06/28	2024/06/28	Joe Paino
Polychlorinated Biphenyl in Water	GC/ECD	9488745	2024/07/02	2024/07/02	Svitlana Shaula
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9484934	N/A	2024/07/01	Gladys Guerrero

Bureau Veritas ID: ZOV512 Dup
Sample ID: BH101
Matrix: Water

Collected: 2024/06/25
Shipped:
Received: 2024/06/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	9491637	2024/07/03	2024/07/03	Gagandeep Rai

Bureau Veritas ID: ZOV513
Sample ID: BH102
Matrix: Water

Collected: 2024/06/25
Shipped:
Received: 2024/06/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9482810	N/A	2024/06/29	Automated Statchk
1,3-Dichloropropene Sum	CALC	9484037	N/A	2024/07/03	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9486856	N/A	2024/07/03	Alina Dobreanu
Chromium (VI) in Water	IC	9485681	N/A	2024/07/02	Surleen Kaur Romana
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9484635	2024/06/28	2024/06/29	Ksenia Trofimova
Mercury	CV/AA	9491637	2024/07/03	2024/07/03	Gagandeep Rai
Dissolved Metals by ICPMS	ICP/MS	9484946	N/A	2024/07/03	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9484644	2024/06/28	2024/06/28	Joe Paino
Polychlorinated Biphenyl in Water	GC/ECD	9488745	2024/07/02	2024/07/02	Svitlana Shaula
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9484934	N/A	2024/07/01	Gladys Guerrero

Bureau Veritas ID: ZOV514
Sample ID: BH103
Matrix: Water

Collected: 2024/06/25
Shipped:
Received: 2024/06/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9482810	N/A	2024/06/29	Automated Statchk
1,3-Dichloropropene Sum	CALC	9484037	N/A	2024/07/03	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9486856	N/A	2024/07/03	Alina Dobreanu
Chromium (VI) in Water	IC	9485681	N/A	2024/07/02	Surleen Kaur Romana
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9484635	2024/06/28	2024/06/29	Ksenia Trofimova
Mercury	CV/AA	9491637	2024/07/03	2024/07/03	Gagandeep Rai



Bureau Veritas Job #: C4J6967

Report Date: 2024/07/05

Cambium Environmental Inc

Client Project #: 19462-001

Sampler Initials: KJ

TEST SUMMARY

Bureau Veritas ID: ZOV514

Sample ID: BH103

Matrix: Water

Collected: 2024/06/25

Shipped:

Received: 2024/06/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals by ICPMS	ICP/MS	9484946	N/A	2024/07/03	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9484644	2024/06/28	2024/06/28	Joe Paino
Polychlorinated Biphenyl in Water	GC/ECD	9488745	2024/07/02	2024/07/02	Svitlana Shaula
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9484934	N/A	2024/07/01	Gladys Guerrero

Bureau Veritas ID: ZOV514 Dup

Sample ID: BH103

Matrix: Water

Collected: 2024/06/25

Shipped:

Received: 2024/06/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals by ICPMS	ICP/MS	9484946	N/A	2024/07/03	Azita Fazaeli

Bureau Veritas ID: ZOV515

Sample ID: QAQC1

Matrix: Water

Collected: 2024/06/25

Shipped:

Received: 2024/06/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9482810	N/A	2024/06/29	Automated Statchk
1,3-Dichloropropene Sum	CALC	9484037	N/A	2024/07/03	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9486856	N/A	2024/07/03	Alina Dobreanu
Chromium (VI) in Water	IC	9485681	N/A	2024/07/02	Surleen Kaur Romana
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9484635	2024/06/28	2024/06/29	Ksenia Trofimova
Mercury	CV/AA	9491637	2024/07/03	2024/07/03	Gagandeep Rai
Dissolved Metals by ICPMS	ICP/MS	9484946	N/A	2024/07/03	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9484644	2024/06/28	2024/06/28	Joe Paino
Polychlorinated Biphenyl in Water	GC/ECD	9488745	2024/07/02	2024/07/02	Svitlana Shaula
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9484934	N/A	2024/07/01	Gladys Guerrero



Bureau Veritas Job #: C4J6967
Report Date: 2024/07/05

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

GENERAL COMMENTS

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

Package 1	7.3°C
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Results relate only to the items tested.



Bureau Veritas Job #: C4J6967
Report Date: 2024/07/05

QUALITY ASSURANCE REPORT

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9484635	o-Terphenyl	2024/06/28	94	60 - 140	92	60 - 140	93	%		
9484644	D10-Anthracene	2024/06/28	115	50 - 130	101	50 - 130	100	%		
9484644	D14-Terphenyl (FS)	2024/06/28	99	50 - 130	98	50 - 130	93	%		
9484644	D8-Acenaphthylene	2024/06/28	102	50 - 130	100	50 - 130	93	%		
9484934	4-Bromofluorobenzene	2024/07/01	100	70 - 130	100	70 - 130	100	%		
9484934	D4-1,2-Dichloroethane	2024/07/01	99	70 - 130	93	70 - 130	94	%		
9484934	D8-Toluene	2024/07/01	102	70 - 130	102	70 - 130	96	%		
9488745	Decachlorobiphenyl	2024/07/02	84	60 - 130	103	60 - 130	99	%		
9484635	F2 (C10-C16 Hydrocarbons)	2024/06/28	101	60 - 140	99	60 - 140	<100	ug/L	NC	30
9484635	F3 (C16-C34 Hydrocarbons)	2024/06/28	108	60 - 140	108	60 - 140	<200	ug/L	NC	30
9484635	F4 (C34-C50 Hydrocarbons)	2024/06/28	96	60 - 140	97	60 - 140	<200	ug/L	NC	30
9484644	1-Methylnaphthalene	2024/06/28	96	50 - 130	100	50 - 130	<0.050	ug/L		
9484644	2-Methylnaphthalene	2024/06/28	91	50 - 130	96	50 - 130	<0.050	ug/L		
9484644	Acenaphthene	2024/06/28	106	50 - 130	109	50 - 130	<0.050	ug/L		
9484644	Acenaphthylene	2024/06/28	106	50 - 130	110	50 - 130	<0.050	ug/L		
9484644	Anthracene	2024/06/28	121	50 - 130	109	50 - 130	<0.050	ug/L		
9484644	Benzo(a)anthracene	2024/06/28	115	50 - 130	114	50 - 130	<0.050	ug/L		
9484644	Benzo(a)pyrene	2024/06/28	117	50 - 130	122	50 - 130	<0.0090	ug/L		
9484644	Benzo(b,j)fluoranthene	2024/06/28	119	50 - 130	125	50 - 130	<0.050	ug/L		
9484644	Benzo(g,h,i)perylene	2024/06/28	102	50 - 130	107	50 - 130	<0.050	ug/L		
9484644	Benzo(k)fluoranthene	2024/06/28	120	50 - 130	125	50 - 130	<0.050	ug/L		
9484644	Chrysene	2024/06/28	117	50 - 130	116	50 - 130	<0.050	ug/L		
9484644	Dibenzo(a,h)anthracene	2024/06/28	97	50 - 130	101	50 - 130	<0.050	ug/L		
9484644	Fluoranthene	2024/06/28	114	50 - 130	109	50 - 130	<0.050	ug/L		
9484644	Fluorene	2024/06/28	118	50 - 130	114	50 - 130	<0.050	ug/L		
9484644	Indeno(1,2,3-cd)pyrene	2024/06/28	107	50 - 130	110	50 - 130	<0.050	ug/L		
9484644	Naphthalene	2024/06/28	92	50 - 130	97	50 - 130	<0.050	ug/L		
9484644	Phenanthrene	2024/06/28	122	50 - 130	116	50 - 130	<0.030	ug/L	NC	30
9484644	Pyrene	2024/06/28	113	50 - 130	113	50 - 130	<0.050	ug/L		
9484934	1,1,1,2-Tetrachloroethane	2024/07/01	100	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
9484934	1,1,1-Trichloroethane	2024/07/01	100	70 - 130	100	70 - 130	<0.20	ug/L	NC	30

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Bureau Veritas Job #: C416967
Report Date: 2024/07/05

QUALITY ASSURANCE REPORT(CONT'D)

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9484934	1,1,2,2-Tetrachloroethane	2024/07/01	101	70 - 130	96	70 - 130	<0.50	ug/L	NC	30
9484934	1,1,2,2-Trichloroethane	2024/07/01	102	70 - 130	97	70 - 130	<0.50	ug/L	NC	30
9484934	1,1-Dichloroethane	2024/07/01	99	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
9484934	1,1-Dichloroethylene	2024/07/01	100	70 - 130	102	70 - 130	<0.20	ug/L	NC	30
9484934	1,2-Dichlorobenzene	2024/07/01	101	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
9484934	1,2-Dichloroethane	2024/07/01	99	70 - 130	96	70 - 130	<0.50	ug/L	NC	30
9484934	1,2-Dichloropropane	2024/07/01	103	70 - 130	103	70 - 130	<0.20	ug/L	NC	30
9484934	1,3-Dichlorobenzene	2024/07/01	98	70 - 130	96	70 - 130	<0.50	ug/L	NC	30
9484934	1,4-Dichlorobenzene	2024/07/01	98	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
9484934	Acetone (2-Propanone)	2024/07/01	93	60 - 140	88	60 - 140	<10	ug/L	NC	30
9484934	Benzene	2024/07/01	95	70 - 130	95	70 - 130	<0.17	ug/L	1.4	30
9484934	Bromodichloromethane	2024/07/01	100	70 - 130	97	70 - 130	<0.50	ug/L	NC	30
9484934	Bromoform	2024/07/01	95	70 - 130	95	70 - 130	<1.0	ug/L	NC	30
9484934	Bromomethane	2024/07/01	75	60 - 140	79	60 - 140	<0.50	ug/L	NC	30
9484934	Carbon Tetrachloride	2024/07/01	100	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
9484934	Chlorobenzene	2024/07/01	98	70 - 130	98	70 - 130	<0.20	ug/L	NC	30
9484934	Chloroform	2024/07/01	101	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
9484934	cis-1,2-Dichloroethylene	2024/07/01	102	70 - 130	101	70 - 130	<0.50	ug/L	0.87	30
9484934	cis-1,3-Dichloropropene	2024/07/01	94	70 - 130	98	70 - 130	<0.30	ug/L	NC	30
9484934	Dibromochloromethane	2024/07/01	100	70 - 130	97	70 - 130	<0.50	ug/L	NC	30
9484934	Dichlorodifluoromethane (FREON 12)	2024/07/01	64	60 - 140	69	60 - 140	<1.0	ug/L	NC	30
9484934	Ethylbenzene	2024/07/01	96	70 - 130	97	70 - 130	<0.20	ug/L	0.26	30
9484934	Ethylene Dibromide	2024/07/01	104	70 - 130	100	70 - 130	<0.20	ug/L	NC	30
9484934	F1 (C6-C10) - BTEX	2024/07/01					<25	ug/L	6.9	30
9484934	F1 (C6-C10)	2024/07/01	93	60 - 140	97	60 - 140	<25	ug/L	6.8	30
9484934	Hexane	2024/07/01	102	70 - 130	106	70 - 130	<1.0	ug/L	NC	30
9484934	Methyl Ethyl Ketone (2-Butanone)	2024/07/01	98	60 - 140	93	60 - 140	<10	ug/L	NC	30
9484934	Methyl Isobutyl Ketone	2024/07/01	96	70 - 130	94	70 - 130	<5.0	ug/L	NC	30
9484934	Methyl t-butyl ether (MTBE)	2024/07/01	100	70 - 130	100	70 - 130	<0.50	ug/L	NC	30
9484934	Methylene Chloride(Dichloromethane)	2024/07/01	94	70 - 130	92	70 - 130	<2.0	ug/L	NC	30
9484934	o-Xylene	2024/07/01	99	70 - 130	99	70 - 130	<0.20	ug/L	NC	30

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Bureau Veritas Job #: C416967
Report Date: 2024/07/05

QUALITY ASSURANCE REPORT(CONT'D)

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9484934	p+m-Xylene	2024/07/01	99	70 - 130	101	70 - 130	<0.20	ug/L	6.6	30
9484934	Styrene	2024/07/01	99	70 - 130	99	70 - 130	<0.50	ug/L	NC	30
9484934	Tetrachloroethylene	2024/07/01	108	70 - 130	96	70 - 130	<0.20	ug/L	1.4	30
9484934	Toluene	2024/07/01	98	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
9484934	Total Xylenes	2024/07/01					<0.20	ug/L	6.6	30
9484934	trans-1,2-Dichloroethylene	2024/07/01	96	70 - 130	97	70 - 130	<0.50	ug/L	NC	30
9484934	trans-1,3-Dichloropropene	2024/07/01	96	70 - 130	101	70 - 130	<0.40	ug/L	NC	30
9484934	Trichloroethylene	2024/07/01	99	70 - 130	99	70 - 130	<0.20	ug/L	0.65	30
9484934	Trichlorofluoromethane (FREON 11)	2024/07/01	92	70 - 130	92	70 - 130	<0.50	ug/L	NC	30
9484934	Vinyl Chloride	2024/07/01	84	70 - 130	88	70 - 130	<0.20	ug/L	NC	30
9484946	Dissolved Antimony (Sb)	2024/07/03	102	80 - 120	99	80 - 120	<0.50	ug/L	NC	20
9484946	Dissolved Arsenic (As)	2024/07/03	98	80 - 120	99	80 - 120	<1.0	ug/L	NC	20
9484946	Dissolved Barium (Ba)	2024/07/03	98	80 - 120	97	80 - 120	<2.0	ug/L	1.5	20
9484946	Dissolved Beryllium (Be)	2024/07/03	96	80 - 120	96	80 - 120	<0.40	ug/L	NC	20
9484946	Dissolved Boron (B)	2024/07/03	89	80 - 120	92	80 - 120	<10	ug/L	1.4	20
9484946	Dissolved Cadmium (Cd)	2024/07/03	98	80 - 120	96	80 - 120	<0.090	ug/L	NC	20
9484946	Dissolved Chromium (Cr)	2024/07/03	92	80 - 120	94	80 - 120	<5.0	ug/L	NC	20
9484946	Dissolved Cobalt (Co)	2024/07/03	98	80 - 120	100	80 - 120	<0.50	ug/L	NC	20
9484946	Dissolved Copper (Cu)	2024/07/03	100	80 - 120	100	80 - 120	<0.90	ug/L	1.2	20
9484946	Dissolved Lead (Pb)	2024/07/03	103	80 - 120	101	80 - 120	<0.50	ug/L	NC	20
9484946	Dissolved Molybdenum (Mo)	2024/07/03	100	80 - 120	97	80 - 120	<0.50	ug/L	5.8	20
9484946	Dissolved Nickel (Ni)	2024/07/03	93	80 - 120	95	80 - 120	<1.0	ug/L	NC	20
9484946	Dissolved Selenium (Se)	2024/07/03	99	80 - 120	97	80 - 120	<2.0	ug/L	NC	20
9484946	Dissolved Silver (Ag)	2024/07/03	98	80 - 120	97	80 - 120	<0.090	ug/L	NC	20
9484946	Dissolved Sodium (Na)	2024/07/03	NC	80 - 120	101	80 - 120	<100	ug/L	1.8	20
9484946	Dissolved Thallium (Tl)	2024/07/03	105	80 - 120	103	80 - 120	<0.050	ug/L	NC	20
9484946	Dissolved Uranium (U)	2024/07/03	103	80 - 120	100	80 - 120	<0.10	ug/L	0	20
9484946	Dissolved Vanadium (V)	2024/07/03	94	80 - 120	95	80 - 120	<0.50	ug/L	NC	20
9484946	Dissolved Zinc (Zn)	2024/07/03	94	80 - 120	96	80 - 120	<5.0	ug/L	NC	20
9485681	Chromium (VI)	2024/07/02	101	80 - 120	103	80 - 120	<0.50	ug/L	NC	20
9486856	Dissolved Chloride (Cl-)	2024/07/03	NC	80 - 120	102	80 - 120	<1.0	mg/L	0.84	20

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Bureau Veritas Job #: C4J6967
Report Date: 2024/07/05

QUALITY ASSURANCE REPORT(CONT'D)

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9488745	Aroclor 1242	2024/07/02					<0.05	ug/L	NC	30
9488745	Aroclor 1248	2024/07/02					<0.05	ug/L	NC	30
9488745	Aroclor 1254	2024/07/02					<0.05	ug/L	NC	30
9488745	Aroclor 1260	2024/07/02	94	60 - 130	101	60 - 130	<0.05	ug/L	NC	30
9488745	Total PCB	2024/07/02	94	60 - 130	101	60 - 130	<0.05	ug/L	NC	40
9491637	Mercury (Hg)	2024/07/03	97	75 - 125	98	80 - 120	<0.10	ug/L	NC	20

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 $\leq 2 \times \text{RDL}$).



Bureau Veritas Job #: C4J6967
Report Date: 2024/07/05

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

VALIDATION SIGNATURE PAGE

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

Cristina Carriere

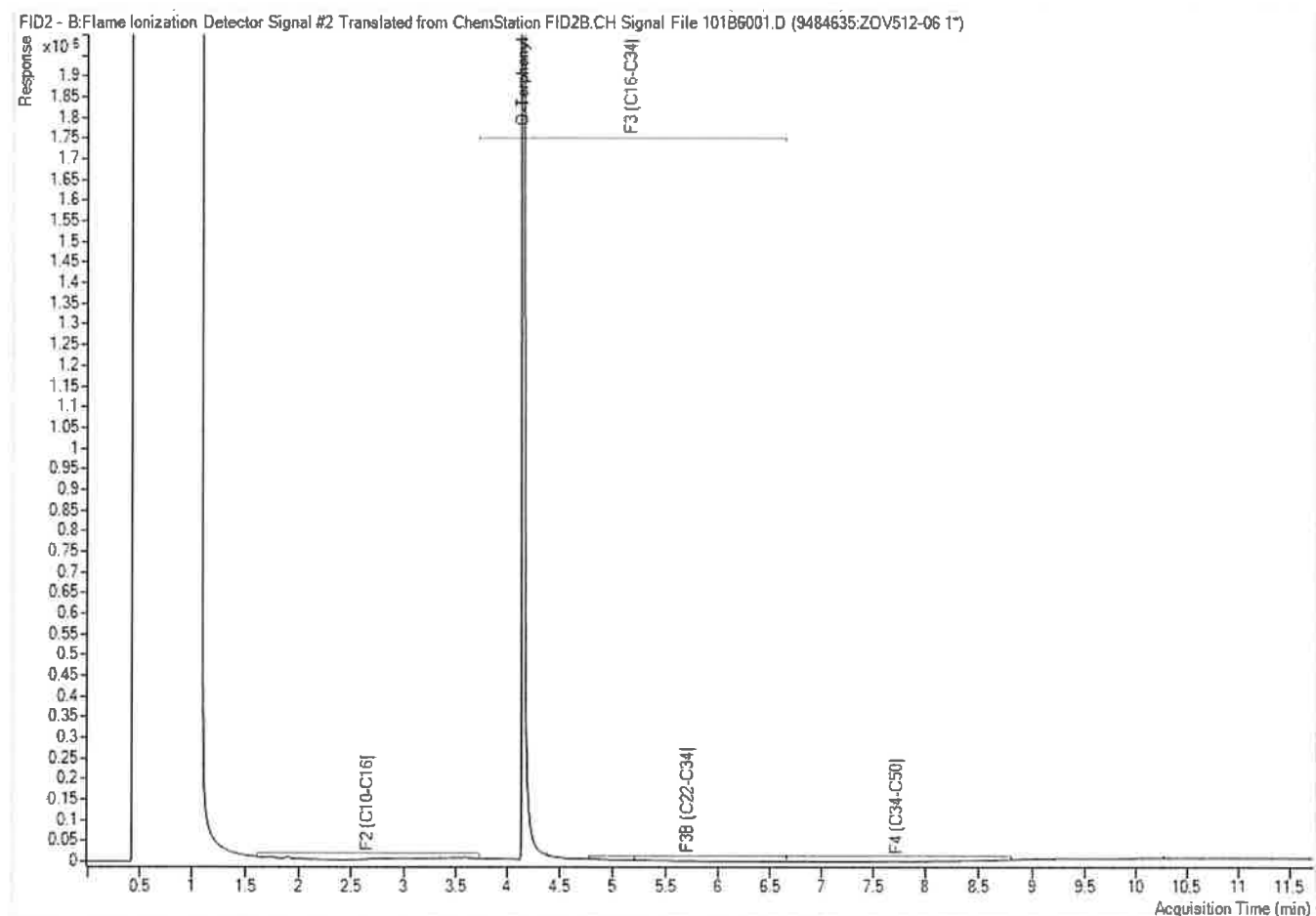
Cristina Carriere, Senior Scientific Specialist

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 Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C4J6967
Report Date: 2024/07/05
Bureau Veritas Sample: ZOV512

Cambium Environmental Inc
Client Project #: 19462-001
Client ID: BH101

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

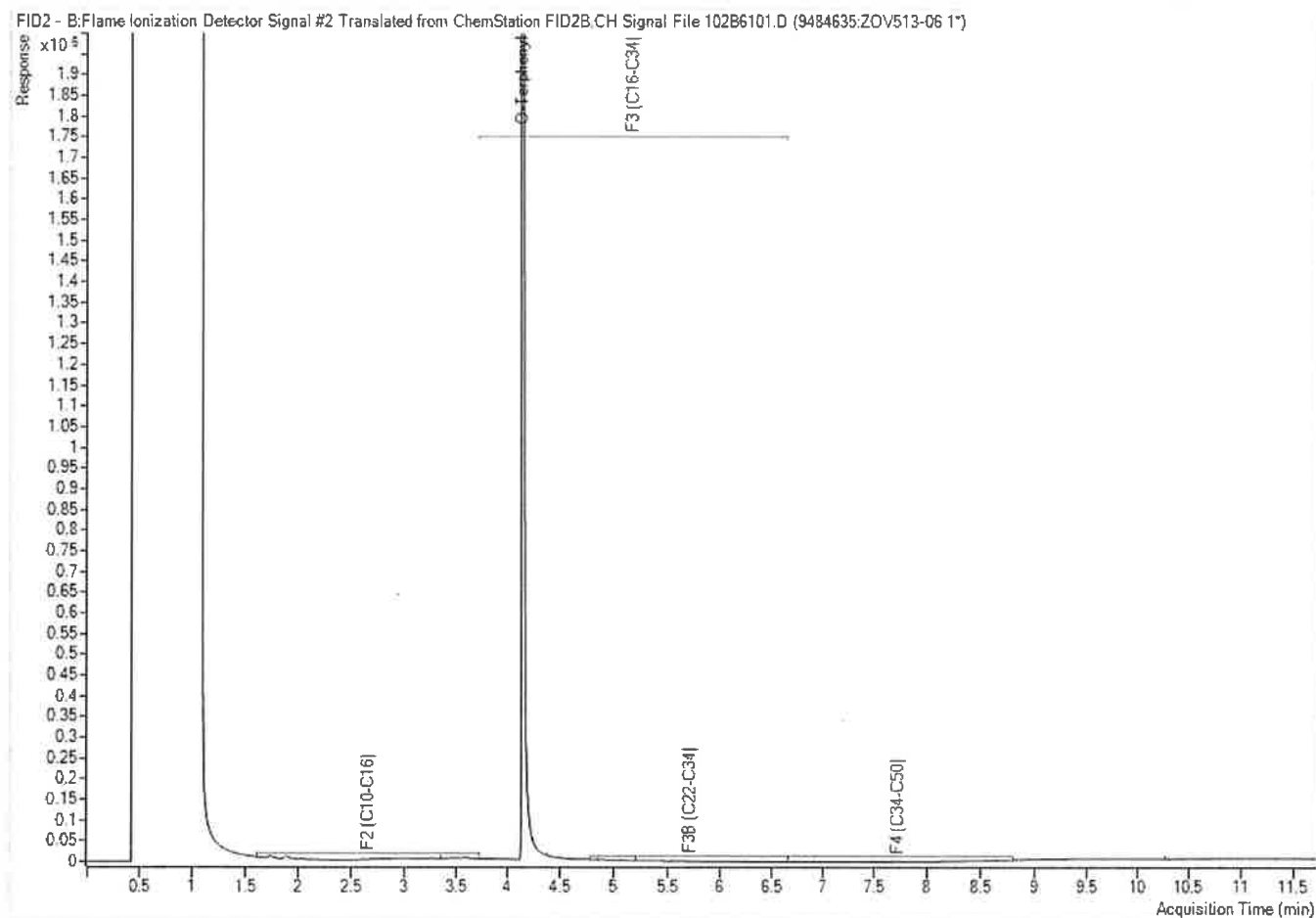


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4J6967
Report Date: 2024/07/05
Bureau Veritas Sample: ZOV513

Cambium Environmental Inc
Client Project #: 19462-001
Client ID: BH102

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

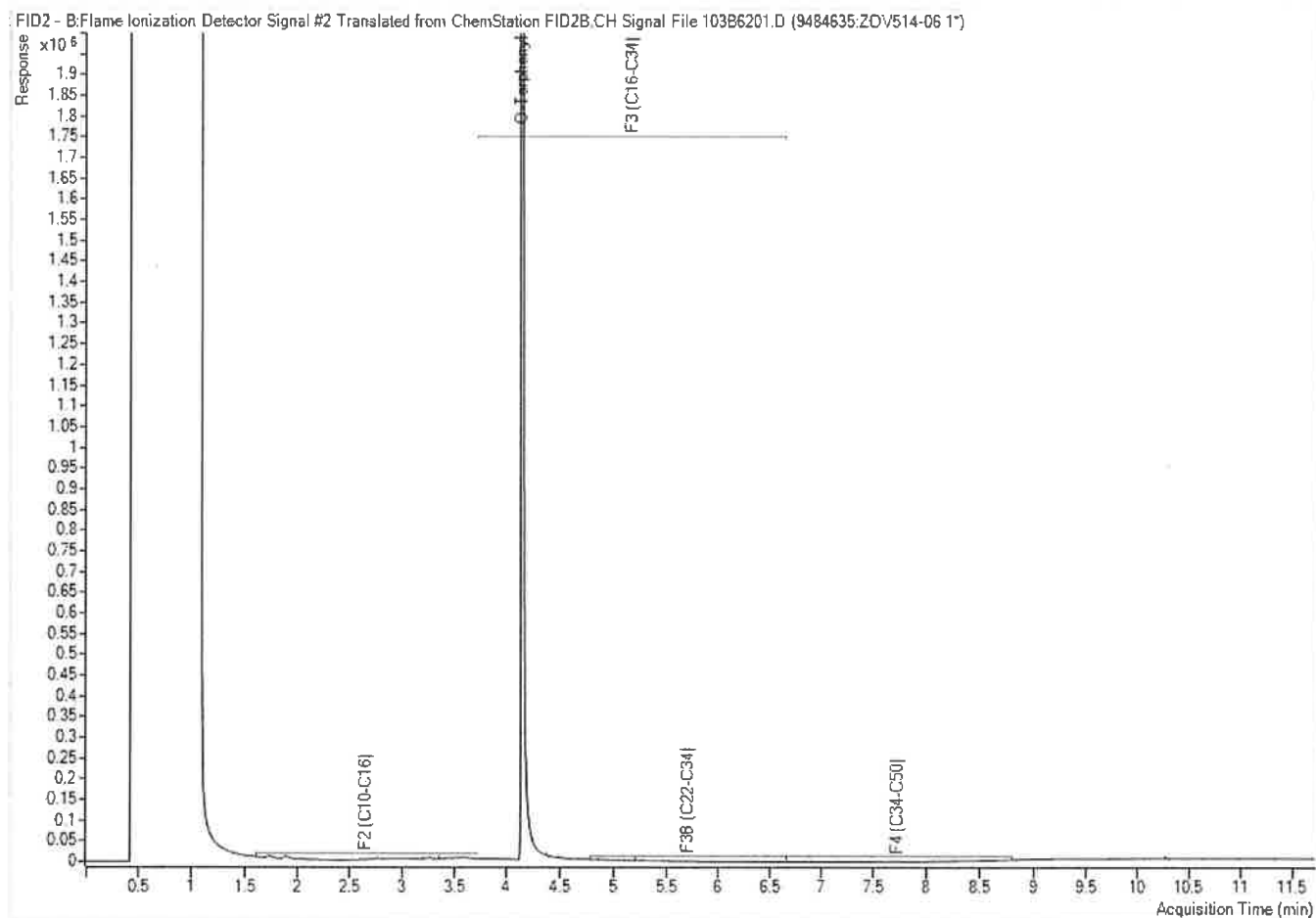


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4J6967
Report Date: 2024/07/05
Bureau Veritas Sample: ZOV514

Cambium Environmental Inc
Client Project #: 19462-001
Client ID: BH103

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

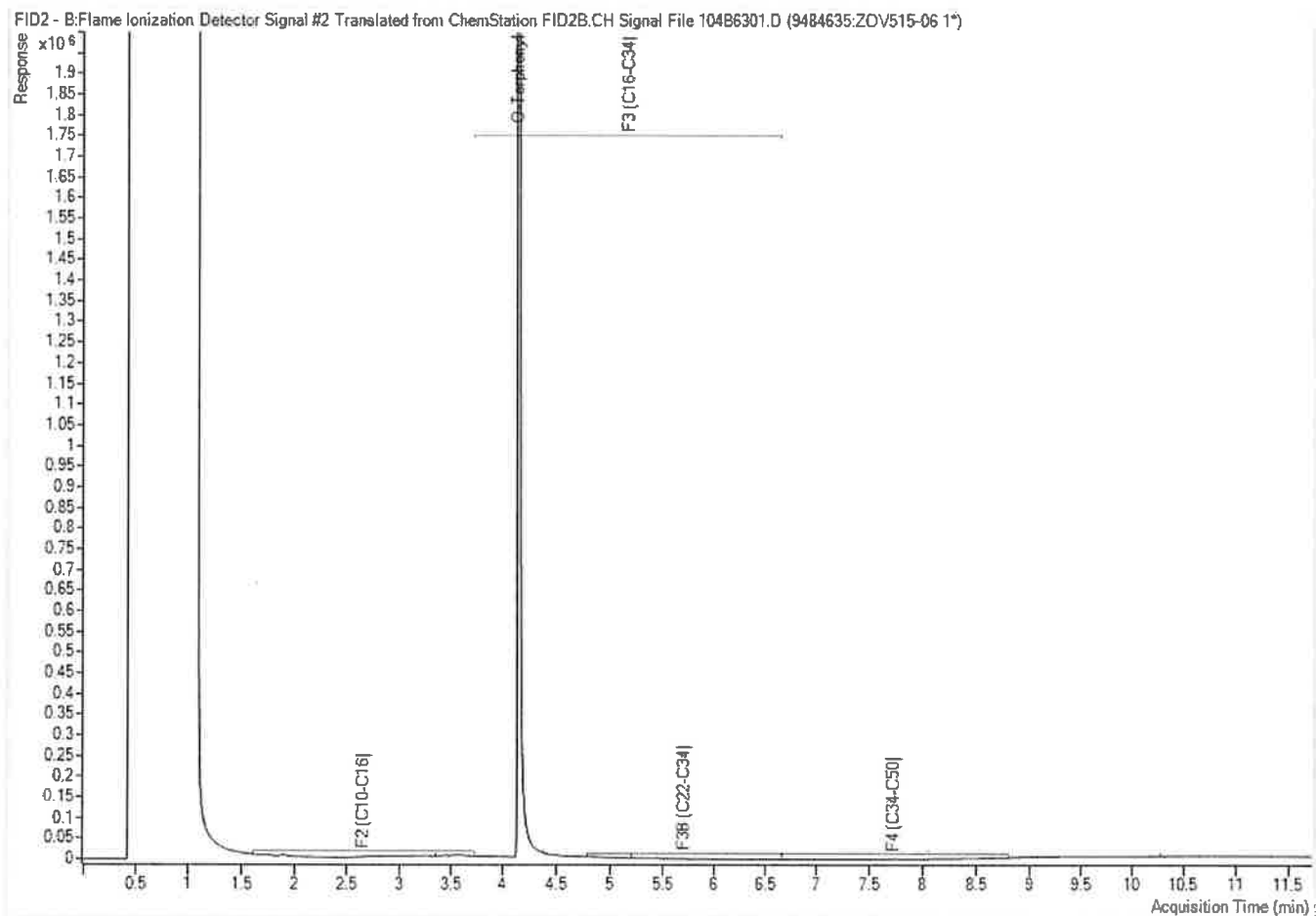


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4J6967
Report Date: 2024/07/05
Bureau Veritas Sample: ZOV515

Cambium Environmental Inc
Client Project #: 19462-001
Client ID: QAQC1

Petroleum Hydrocarbons F2-F4 in Water 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 #: C4J6967
Report Date: 2024/07/05

Cambium Environmental Inc
Client Project #: 19462-001
Sampler Initials: KJ

Exceedance Summary Table – Reg153/04 T2-GW-C
Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
BH101	ZOV512-04	Dissolved Chloride (Cl-)	790	1700	20	mg/L
BH101	ZOV512-02	Dissolved Sodium (Na)	490000	1000000	500	ug/L
BH103	ZOV514-07	Chloroform	2.4	9.2	0.20	ug/L

The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.