



Your P.O. #: LINDA

Attention: Marcus Pfeil

Savarin Springs Inc
1575 Strasburg Rd
Kitchener, ON
CANADA N2R 1K2

Report Date: 2021/04/19

Report #: R6600810

Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C195902

Received: 2021/04/12, 16:00

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity	3	N/A	2021/04/14	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	3	N/A	2021/04/15	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	2	N/A	2021/04/15	CAM SOP-00463	SM 23 4500-Cl E m
Chloride by Automated Colourimetry	1	N/A	2021/04/16	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	3	N/A	2021/04/14	CAM SOP-00414	SM 23 2510 m
Dissolved Organic Carbon (DOC) (1)	3	N/A	2021/04/15	CAM SOP-00446	SM 23 5310 B m
Hardness (calculated as CaCO3)	3	N/A	2021/04/15	CAM SOP 00102/00408/00447	SM 2340 B
Metals Analysis by ICPMS (as received) (2)	3	N/A	2021/04/14	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	2	N/A	2021/04/15		
Ion Balance (% Difference)	1	N/A	2021/04/16		
Anion and Cation Sum	3	N/A	2021/04/15		
Total Ammonia-N	3	N/A	2021/04/14	CAM SOP-00441	USGS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (3)	1	N/A	2021/04/16	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Nitrate (NO3) and Nitrite (NO2) in Water (3)	2	N/A	2021/04/17	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	3	2021/04/14	2021/04/14	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	2	N/A	2021/04/15	CAM SOP-00461	EPA 365.1 m
Orthophosphate	1	N/A	2021/04/16	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	2	N/A	2021/04/15		Auto Calc
Sat. pH and Langelier Index (@ 20C)	1	N/A	2021/04/16		Auto Calc
Sat. pH and Langelier Index (@ 4C)	2	N/A	2021/04/15		Auto Calc
Sat. pH and Langelier Index (@ 4C)	1	N/A	2021/04/16		Auto Calc
Sulphate by Automated Colourimetry	2	N/A	2021/04/15	CAM SOP-00464	EPA 375.4 m
Sulphate by Automated Colourimetry	1	N/A	2021/04/16	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	2	N/A	2021/04/15		Auto Calc
Total Dissolved Solids (TDS calc)	1	N/A	2021/04/16		Auto Calc

Remarks:

Scope Statement:

The analysis detailed in this document is intended to assist you, the Client, in your efforts and responsibility to produce safe food. The analysis may be for contaminants or adulterants that are known to be or may potentially be harmful, or that may impact on the quality or desired characteristics of the



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product. The results are representative of the samples at the time and condition of submission, and as determined by the indicated method(s). When Bureau Veritas has not been responsible for the sampling stage (e.g. the sample has been provided by the customer), the results apply to the sample received from the client. Any inference as to their applicability to any particular product, production lot, intermediate, ingredient or facility should be made by an individual with relevant expertise, based on an understanding of the product and the suitability of the sampling protocol.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

- (1) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (2) Metals analysis was performed on the sample 'as received'.
- (3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Jared Bowers, Customer Service Representative

Email: Jared.Bowers@bureauveritas.com

Phone# (905)817-5834

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Total Cover Pages : 2

Page 2 of 6



BUREAU
VERITAS

BV Labs Job #: C195902
Report Date: 2021/04/19

Savarin Springs Inc
Your P.O. #: LINDA

RESULTS OF ANALYSES OF WATER

BV Labs ID		PHJ635	PHJ685	PHJ686	
Sampling Date		2021/04/12 11:00	2021/04/12 11:00	2021/04/12 11:00	
	UNITS	DISTILLED WATER	D I WATER	REVERSE OSMOSIS WATER	RDL
Anion Sum	me/L	0.000	0.000	0.181	N/A
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	ND	ND	4.6	1.0
Calculated TDS	mg/L	ND	ND	11	1.0
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	ND	ND	ND	1.0
Cation Sum	me/L	0.00100	0.00100	0.174	N/A
Hardness (CaCO ₃)	mg/L	ND	ND	ND	1.0
Ion Balance (% Difference)	%	NC	NC	NC	N/A
Langelier Index (@ 20C)	N/A	NC	NC	NC	N/A
Langelier Index (@ 4C)	N/A	NC	NC	NC	N/A
Saturation pH (@ 20C)	N/A	NC	NC	NC	N/A
Saturation pH (@ 4C)	N/A	NC	NC	NC	N/A
Ammonia-N	mg/L	ND	ND	ND	0.050
Conductivity	umho/cm	1.8	ND	21	1.0
Organic Carbon	mg/L	ND	ND	ND	0.40
Orthophosphate (P)	mg/L	ND	ND	ND	0.010
pH	pH	6.00	5.84	6.61	N/A
Sulphate (SO ₄)	mg/L	ND	ND	ND	1.0
Alkalinity (Total as CaCO ₃)	mg/L	ND	ND	4.6	1.0
Chloride (Cl ⁻)	mg/L	ND	ND	3.2	1.0
Nitrite (N)	mg/L	ND	ND	ND	0.010
Nitrate (N)	mg/L	ND	ND	ND	0.10
RDL = Reportable Detection Limit N/A = Not Applicable ND = Not detected					



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BV Labs Job #: C195902
Report Date: 2021/04/19

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

BV Labs ID		PHJ635	PHJ685	PHJ686	
Sampling Date		2021/04/12 11:00	2021/04/12 11:00	2021/04/12 11:00	
	UNITS	DISTILLED WATER	D I WATER	REVERSE OSMOSIS WATER	RDL
Aluminum (Al)	ug/L	ND	ND	ND	4.9
Antimony (Sb)	ug/L	ND	ND	ND	0.50
Arsenic (As)	ug/L	ND	ND	ND	1.0
Barium (Ba)	ug/L	ND	ND	ND	2.0
Beryllium (Be)	ug/L	ND	ND	ND	0.40
Boron (B)	ug/L	ND	ND	29	10
Cadmium (Cd)	ug/L	ND	ND	ND	0.090
Calcium (Ca)	ug/L	ND	ND	ND	200
Chromium (Cr)	ug/L	ND	ND	ND	5.0
Cobalt (Co)	ug/L	ND	ND	ND	0.50
Copper (Cu)	ug/L	1.2	ND	ND	0.90
Iron (Fe)	ug/L	ND	ND	ND	100
Lead (Pb)	ug/L	ND	ND	ND	0.50
Magnesium (Mg)	ug/L	ND	ND	ND	50
Manganese (Mn)	ug/L	ND	ND	ND	2.0
Molybdenum (Mo)	ug/L	ND	ND	ND	0.50
Nickel (Ni)	ug/L	ND	ND	ND	1.0
Phosphorus (P)	ug/L	ND	ND	ND	100
Potassium (K)	ug/L	ND	ND	ND	200
Selenium (Se)	ug/L	ND	ND	ND	2.0
Silicon (Si)	ug/L	ND	ND	430	50
Silver (Ag)	ug/L	ND	ND	ND	0.090
Sodium (Na)	ug/L	ND	ND	4000	100
Strontium (Sr)	ug/L	1.2	ND	ND	1.0
Thallium (Tl)	ug/L	ND	ND	ND	0.050
Titanium (Ti)	ug/L	ND	ND	ND	5.0
Uranium (U)	ug/L	ND	ND	ND	0.10
Vanadium (V)	ug/L	ND	ND	ND	0.50
Zinc (Zn)	ug/L	ND	ND	ND	5.0
RDL = Reportable Detection Limit ND = Not detected					



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GENERAL COMMENTS

Results relate only to the items tested.



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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).




Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

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CASH CLIENTS - WATERLOO
ATTN: Marcus Pfeil
PENDING
PENDING ON PENDING

Date Received: 28-JAN-21
Report Date: 09-FEB-21 13:25 (MT)
Version: FINAL

Client Phone: - -

Certificate of Analysis

Lab Work Order #: L2552504

Project P.O. #: PAID BY CC

Job Reference:

C of C Numbers:

Legal Site Desc:

Emily Smith
Account Manager

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ANALYTICAL GUIDELINE REPORT

L2552504 CONTD....

Page 2 of 6

09-FEB-21 13:25 (MT)

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits			
Grouping	Analyte									
L2552504-1	FORMOSA SPRING WATER									
Sampled By:	CLIENT on 27-JAN-21 @ 16:00									
Matrix:	WATER									
Physical Tests										
pH		8.33		0.10	pH units	30-JAN-21			6.5-8.5	
Total Dissolved Solids		257	DLDS	20	mg/L	28-JAN-21			500	
Anions and Nutrients										
Alkalinity, Total (as CaCO ₃)		233		10	mg/L	30-JAN-21			30-500	
Bromide (Br)		<0.10		0.10	mg/L	29-JAN-21				
Chloride (Cl)		2.17		0.50	mg/L	29-JAN-21			250	
Fluoride (F)		0.75		0.10	mg/L	29-JAN-21	1.5			
Nitrate (as N)		0.036		0.020	mg/L	29-JAN-21	10			
Nitrite (as N)		<0.010		0.010	mg/L	29-JAN-21	1			
Orthophosphate-Dissolved (as P)		<0.0030		0.0030	mg/L	01-FEB-21				
Sulfate (SO ₄)		19.3		0.30	mg/L	29-JAN-21			500	
Cyanides										
Cyanide, Total		<0.0020		0.0020	mg/L	28-JAN-21				
Bacteriological Tests										
Escherichia Coli		0		0	MPN/100m L	28-JAN-21	0			
Total Coliforms		0		0	MPN/100m L	28-JAN-21	0			
Total Metals										
Aluminum (Al)		<10		10	ug/L	01-FEB-21			100	
Antimony (Sb)		<0.60		0.60	ug/L	01-FEB-21	6			
Arsenic (As)		<1.0		1.0	ug/L	01-FEB-21	10.0			
Barium (Ba)		300		10	ug/L	01-FEB-21	1000			
Beryllium (Be)		<0.50		0.50	ug/L	01-FEB-21				
Bismuth (Bi)		<1.0		1.0	ug/L	01-FEB-21				
Boron (B)		<50		50	ug/L	01-FEB-21	5000			
Cadmium (Cd)		<0.10		0.10	ug/L	01-FEB-21	5			
Calcium (Ca)		61.9		0.50	mg/L	01-FEB-21				
Cesium (Cs)		<0.10		0.10	ug/L	01-FEB-21				
Chromium (Cr)		<1.0		1.0	ug/L	01-FEB-21	50			
Cobalt (Co)		<0.50		0.50	ug/L	01-FEB-21				
Copper (Cu)		<1.0		1.0	ug/L	01-FEB-21			1000	
Iron (Fe)		<50		50	ug/L	01-FEB-21			300	
Lead (Pb)		<1.0		1.0	ug/L	01-FEB-21	10			
Lithium (Li)		<100		100	ug/L	01-FEB-21				
Magnesium (Mg)		25.7		0.50	mg/L	01-FEB-21				
Manganese (Mn)		3.5		1.0	ug/L	01-FEB-21			50	
Molybdenum (Mo)		1.87		0.50	ug/L	01-FEB-21				
Nickel (Ni)		<1.0		1.0	ug/L	01-FEB-21				
Phosphorus (P)		<0.050		0.050	mg/L	01-FEB-21				
Potassium (K)		1.0		1.0	mg/L	01-FEB-21				
Rubidium (Rb)		<2.0		2.0	ug/L	01-FEB-21				
Selenium (Se)		<1.0		1.0	ug/L	01-FEB-21	50			
Silicon (Si)		4000		1000	ug/L	01-FEB-21				
Silver (Ag)		<0.050		0.050	ug/L	01-FEB-21				
Sodium (Na)		3.41		0.50	mg/L	01-FEB-21	20		200	

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Drinking Water Regulation (ODWQS) JAN.1,2020 = [Suite] - ON-DW-STANDARD+GUIDELINES

#1: Schedule 1 (Microbiological) and 2 (Chemical) Standards (JAN,2020)

#2: Ontario DW Aesthetic and Operational Guidelines (June, 2006)



ANALYTICAL GUIDELINE REPORT

L2552504 CONTD....

Page 3 of 6

09-FEB-21 13:25 (MT)

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits			
Grouping	Analyte									
L2552504-1	FORMOSA SPRING WATER									
Sampled By:	CLIENT on 27-JAN-21 @ 16:00									
Matrix:	WATER									
Total Metals										
	Strontium (Sr)	1110		1.0	ug/L	01-FEB-21				
	Sulfur (S)	7710		500	ug/L	01-FEB-21				
	Tellurium (Te)	<2.0		2.0	ug/L	01-FEB-21				
	Thallium (Tl)	<0.060		0.060	ug/L	01-FEB-21				
	Thorium (Th)	<1.0		1.0	ug/L	01-FEB-21				
	Tin (Sn)	<1.0		1.0	ug/L	01-FEB-21				
	Titanium (Ti)	<2.0		2.0	ug/L	01-FEB-21				
	Tungsten (W)	<6.0		6.0	ug/L	01-FEB-21				
	Uranium (U)	<2.0		2.0	ug/L	01-FEB-21	20			
	Vanadium (V)	<0.50		0.50	ug/L	01-FEB-21				
	Zinc (Zn)	<3.0		3.0	ug/L	01-FEB-21		5000		
	Zirconium (Zr)	<0.80		0.80	ug/L	01-FEB-21				
Speciated Metals										
	Chromium, Hexavalent	<0.00050		0.00050	mg/L	29-JAN-21				
Volatile Organic Compounds										
	Benzene	<0.50	VOCHS	0.50	ug/L	29-JAN-21	1			
	Ethylbenzene	<0.50	VOCHS	0.50	ug/L	29-JAN-21	140	2.4		
	Toluene	<0.50	VOCHS	0.50	ug/L	29-JAN-21	60	24		
	o-Xylene	<0.50	VOCHS	0.50	ug/L	29-JAN-21				
	m+p-Xylenes	<1.0	VOCHS	1.0	ug/L	29-JAN-21				
	Xylenes (Total)	<1.1		1.1	ug/L	29-JAN-21	90	300		
	Surrogate: 4-Bromofluorobenzene	94.6		50-140	%	29-JAN-21				
	Surrogate: 1,4-Difluorobenzene	99.2		50-140	%	29-JAN-21				
Hydrocarbons										
	F1 (C6-C10)	<100	VOCHS	100	ug/L	29-JAN-21				
	F2 (C10-C16)	<100		100	ug/L	29-JAN-21				
	F3 (C16-C34)	<250		250	ug/L	29-JAN-21				
	F4 (C34-C50)	<250		250	ug/L	29-JAN-21				
	Chrom. to baseline at nC50	YES			No Unit	29-JAN-21				
	Surrogate: 2-Bromobenzotrifluoride	97.6		60-140	%	29-JAN-21				
	Surrogate: 3,4-Dichlorotoluene	84.1		60-130	%	29-JAN-21				
Polycyclic Aromatic Hydrocarbons										
	Acenaphthene	<20		20	ng/L	02-FEB-21				
	Acenaphthylene	<20		20	ng/L	02-FEB-21				
	Acridine	<4.0		4.0	ug/L	02-FEB-21				
	Anthracene	<20		20	ng/L	02-FEB-21				
	Benzo(a)anthracene	<20		20	ng/L	02-FEB-21				
	Benzo(a)pyrene	<0.0050		0.0050	ug/L	02-FEB-21	0.01			
	Benzo(b)fluoranthene	<20		20	ng/L	02-FEB-21				
	Benzo(g,h,i)perylene	<20		20	ng/L	02-FEB-21				
	Benzo(k)fluoranthene	<20		20	ng/L	02-FEB-21				
	Chrysene	<20		20	ng/L	02-FEB-21				
	Dibenzo(ah)anthracene	<20		20	ng/L	02-FEB-21				
	Fluoranthene	<20		20	ng/L	02-FEB-21				
	Fluorene	<20		20	ng/L	02-FEB-21				
	Indeno(1,2,3-cd)pyrene	<20		20	ng/L	02-FEB-21				
	1-Methylnaphthalene	<20		20	ng/L	02-FEB-21				

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#1: Schedule 1 (Microbiological) and 2 (Chemical) Standards (JAN,2020)

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L2552504 CONTD....

Page 4 of 6

09-FEB-21 13:25 (MT)

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#1: Schedule 1 (Microbiological) and 2 (Chemical) Standards (JAN,2020) #2: Ontario DW Aesthetic and Operational Guidelines (June, 2006)

Reference Information

Sample Parameter Qualifier key listed:

Qualifier	Description
VOCHS	VOC analysis was conducted for a water sample that contained > 5% headspace. Results may be biased low.
DLDS	Detection Limit Raised: Dilution required due to high Dissolved Solids / Electrical Conductivity.

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference***
ALK-ONT-DW-WT	Water	Alkalinity, Total (as CaCO ₃)	EPA 310.2
BR-IC-N-ONT-DW-WT	Water	Bromide in Water by IC	EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
BTEX-DW-WT Water BTEX by Headspace SW846 8260 (HEADSPACE)
BTX is determined by analyzing by headspace-GC/MS.

CL-IC-N-ONT-DW-WT	Water	Chloride by IC	EPA 300.1 (mod)
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Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

CN-TOT-ONT-DW-WT	Water	Cyanide, Total	ISO 14403-2
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Total cyanide is determined by the combination of UV digestion and distillation. Cyanide is converted to cyanogen chloride by reacting with chloramine-T, the cyanogen chloride then reacts with a combination of barbituric acid and isonicotinic acid to form a highly colored complex.

When using this method, high levels of thiocyanate in samples can cause false positives at ~1-2% of the thiocyanate concentration. For samples with detectable cyanide analyzed by this method, ALS recommends analysis for thiocyanate to check for this potential interference.

Ontario Drinking Water samples are not filtered during analysis.

CR-CR6-IC-DW-WT	Water	Chromium +6	EPA 7199
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This analysis is carried out using procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846, Method 7199, published by the United States Environmental Protection Agency (EPA). The procedure involves analysis for chromium (VI) by ion chromatography using diphenylcarbazide in a sulphuric acid solution.

EC-SCREEN-WT	Water	Conductivity Screen (Internal Use Only)	APHA 2510
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Qualitative analysis of conductivity where required during preparation of other tests - e.g. TDS, metals, etc.

F-DW-IC-WT	Water	Fluoride in Water by IC	EPA 300.1 (mod)
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Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

F1-HS-DW-WT	Water	F1	E3421/CCME (HS)
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Fraction F1 is determined by analyzing by headspace-GC/FID.

F2-F4-DW-WT	Water	F2-F4	MOE DECPH-E3421/CCME TIER 1
-------------	-------	-------	-----------------------------

Petroleum Hydrocarbons (F2-F4 fractions) are extracted from water using a hexane micro-extraction technique. Instrumental analysis is by GC-FID, as per the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Tier 1 Method, CCME, 2001.

MET-ONT-DW-WT	Water	Drinking Water Metals	EPA 6020A
NO2-DW-IC-WT	Water	Nitrite in Water by IC	EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

NO3-DW-IC-WT	Water	Nitrate in Water by IC	EPA 300.1 (mod)
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Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

PAH-ONT-DW-WT	Water	O.Reg 170/03 PAH	EPA 3510/8270-GC/MS
PH-ONT-DW-WT	Water	pH	APHA 4500 H-Electrode

Water samples are analyzed directly by a calibrated pH meter.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011). Holdtime for samples under this regulation is 28 days

PO4-DO-COL-DW-WT	Water	Diss. Orthophosphate in Water by Colour	APHA 4500-P PHOSPHORUS
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This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Dissolved Orthophosphate is determined colourimetrically on a sample that has been lab or field filtered through a 0.45 micron membrane filter.

Reference Information

SO4-IC-N-ONT-DW-WT Water Sulfate in Water by IC EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

SOLIDS-TDS-ONT-DW-WT Water Total Dissolved Solids APHA 2540C

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total Dissolved Solids (TDS) are determined by filtering a sample through a glass fibre filter, TDS is determined by evaporating the filtrate to dryness at 180 degrees celsius.

TC,EC-QT51-DW-WT Water Total Coliform and E. Coli APHA 9223B

This analysis is carried out using procedures adapted from APHA Method 9223 "Enzyme Substrate Coliform Test". E. coli and Total Coliform are determined simultaneously. The sample is mixed with a mixture of hydrolyzable substrates and then sealed in a multi-well packet. The packet is incubated for 18 or 24 hours and then the number of wells exhibiting a positive response are counted. The final result is obtained by comparing the positive responses to a probability table.

TURB-MET-WT Water Turbidity on preserved metals APHA 2130 B

Sample result is based on a comparison of the intensity of the light scattered by the sample under defined conditions with the intensity of light scattered by a standard reference suspension under the same conditions. Sample readings are obtained from a Nephelometer.

XYLENES-SUM-CALC-WT Water Sum of Xylene Isomer Concentrations CALCULATION

Total xylenes represents the sum of o-xylene and m&p-xylene.

*** ALS test methods may incorporate modifications from specified reference methods to improve performance.

Chain of Custody numbers:

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA		

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guideline limits are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.



Quality Control Report

Workorder: L2552504

Report Date: 09-FEB-21

Page 1 of 12

Client: CASH CLIENTS - WATERLOO
PENDING
PENDING ON PENDING

Contact: Marcus Pfeil

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ALK-ONT-DW-WT		Water						
Batch	R5360498							
WG3481084-4	DUP	WG3481084-3						
Alkalinity, Total (as CaCO3)		437	442		mg/L	1.2	20	30-JAN-21
WG3481084-2	LCS							
Alkalinity, Total (as CaCO3)			108.4		%		85-115	30-JAN-21
WG3481084-1	MB							
Alkalinity, Total (as CaCO3)			<10		mg/L		10	30-JAN-21
BR-IC-N-ONT-DW-WT		Water						
Batch	R5360608							
WG3480974-4	DUP	WG3480974-3						
Bromide (Br)		<0.10	<0.10	RPD-NA	mg/L	N/A	25	29-JAN-21
WG3480974-2	LCS							
Bromide (Br)			102.8		%		70-130	29-JAN-21
WG3480974-1	MB							
Bromide (Br)			<0.10		mg/L		0.1	29-JAN-21
WG3480974-5	MS	WG3480974-3						
Bromide (Br)			102.7		%		70-130	29-JAN-21
BTEX-DW-WT		Water						
Batch	R5359532							
WG3479878-4	DUP	WG3479878-3						
Benzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	29-JAN-21
Ethylbenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	29-JAN-21
m+p-Xylenes		<1.0	<1.0	RPD-NA	ug/L	N/A	30	29-JAN-21
o-Xylene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	29-JAN-21
Toluene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	29-JAN-21
WG3479878-1	LCS							
Benzene			101.2		%		70-130	29-JAN-21
Ethylbenzene			93.7		%		70-130	29-JAN-21
m+p-Xylenes			96.0		%		70-130	29-JAN-21
o-Xylene			94.4		%		70-130	29-JAN-21
Toluene			96.3		%		70-130	29-JAN-21
WG3479878-2	MB							
Benzene			<0.50		ug/L		0.5	29-JAN-21
Ethylbenzene			<0.50		ug/L		0.5	29-JAN-21
m+p-Xylenes			<1.0		ug/L		1	29-JAN-21
o-Xylene			<0.50		ug/L		0.5	29-JAN-21
Toluene			<0.50		ug/L		0.5	29-JAN-21



Quality Control Report

Workorder: L2552504

Report Date: 09-FEB-21

Page 2 of 12

Client: CASH CLIENTS - WATERLOO
PENDING
PENDING ON PENDING

Contact: Marcus Pfeil

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
BTEX-DW-WT Water								
Batch	R5359532							
WG3479878-2 MB								
Surrogate: 1,4-Difluorobenzene			99.0		%		50-140	29-JAN-21
Surrogate: 4-Bromofluorobenzene			96.0		%		50-140	29-JAN-21
WG3479878-5 MS		WG3479878-3						
Benzene			101.6		%		50-140	29-JAN-21
Ethylbenzene			91.2		%		50-140	29-JAN-21
m+p-Xylenes			94.7		%		50-140	29-JAN-21
o-Xylene			92.7		%		50-140	29-JAN-21
Toluene			85.3		%		50-140	29-JAN-21
CL-IC-N-ONT-DW-WT Water								
Batch	R5360608							
WG3480974-4 DUP		WG3480974-3						
Chloride (Cl)		2.16	2.15		mg/L	0.7	25	29-JAN-21
WG3480974-2 LCS								
Chloride (Cl)			100.1		%		70-130	29-JAN-21
WG3480974-1 MB								
Chloride (Cl)			<0.50		mg/L		0.5	29-JAN-21
WG3480974-5 MS		WG3480974-3						
Chloride (Cl)			96.4		%		70-130	29-JAN-21
CN-TOT-ONT-DW-WT Water								
Batch	R5359415							
WG3480263-8 DUP		WG3480263-10						
Cyanide, Total		0.0342	0.0338	J	mg/L	0.0004	20	28-JAN-21
WG3480263-7 LCS								
Cyanide, Total			94.1		%		80-120	28-JAN-21
WG3480263-6 MB								
Cyanide, Total			<0.0020		mg/L		0.002	28-JAN-21
WG3480263-9 MS		WG3480263-10						
Cyanide, Total			87.2		%		70-130	28-JAN-21
CR-CR6-IC-DW-WT Water								
Batch	R5360514							
WG3480864-4 DUP		WG3480864-3						
Chromium, Hexavalent		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	29-JAN-21
WG3480864-2 LCS								
Chromium, Hexavalent			98.2		%		80-120	29-JAN-21
WG3480864-1 MB								
Chromium, Hexavalent			<0.00050		mg/L		0.0005	29-JAN-21



Environmental

Quality Control Report

Workorder: L2552504

Report Date: 09-FEB-21

Page 3 of 12

Client: CASH CLIENTS - WATERLOO
PENDING
PENDING ON PENDING

Contact: Marcus Pfeil

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CR-CR6-IC-DW-WT	Water							
Batch R5360514								
WG3480864-5 MS		WG3480864-3						
Chromium, Hexavalent			95.9		%		70-130	29-JAN-21
F-DW-IC-WT	Water							
Batch R5360608								
WG3480974-4 DUP		WG3480974-3						
Fluoride (F)		0.73	0.73		mg/L	0.4	20	29-JAN-21
WG3480974-2 LCS								
Fluoride (F)			102.5		%		90-110	29-JAN-21
WG3480974-1 MB								
Fluoride (F)			<0.10		mg/L		0.1	29-JAN-21
WG3480974-5 MS		WG3480974-3						
Fluoride (F)			96.4		%		75-125	29-JAN-21
F1-HS-DW-WT	Water							
Batch R5359532								
WG3479878-4 DUP		WG3479878-3						
F1 (C6-C10)		<100	<100	RPD-NA	ug/L	N/A	50	29-JAN-21
WG3479878-1 LCS								
F1 (C6-C10)			95.4		%		80-120	29-JAN-21
WG3479878-2 MB								
F1 (C6-C10)			<100		ug/L		100	29-JAN-21
Surrogate: 3,4-Dichlorotoluene			97.2		%		60-130	29-JAN-21
WG3479878-5 MS		WG3479878-3						
F1 (C6-C10)			82.9		%		50-150	29-JAN-21
F2-F4-DW-WT	Water							
Batch R5359494								
WG3480470-2 LCS								
F2 (C10-C16)			101.9		%		65-135	29-JAN-21
F3 (C16-C34)			97.0		%		65-135	29-JAN-21
F4 (C34-C50)			111.8		%		65-135	29-JAN-21
WG3480470-1 MB								
F2 (C10-C16)			<100		ug/L		100	29-JAN-21
F3 (C16-C34)			<250		ug/L		250	29-JAN-21
F4 (C34-C50)			<250		ug/L		250	29-JAN-21
Surrogate: 2-Bromobenzotrifluoride			101.5		%		60-140	29-JAN-21
MET-ONT-DW-WT	Water							



Quality Control Report

Workorder: L2552504

Report Date: 09-FEB-21

Page 4 of 12

Client: CASH CLIENTS - WATERLOO
PENDING
PENDING ON PENDING

Contact: Marcus Pfeil

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-ONT-DW-WT		Water						
Batch	R5360780							
WG3480772-4	DUP	WG3480772-3						
Aluminum (Al)		13	15		ug/L	10	25	01-FEB-21
Antimony (Sb)		<0.60	<0.60	RPD-NA	ug/L	N/A	25	01-FEB-21
Arsenic (As)		<1.0	<1.0	RPD-NA	ug/L	N/A	25	01-FEB-21
Barium (Ba)		22	21		ug/L	2.6	25	01-FEB-21
Beryllium (Be)		<0.50	<0.50	RPD-NA	ug/L	N/A	25	01-FEB-21
Bismuth (Bi)		<1.0	<1.0	RPD-NA	ug/L	N/A	25	01-FEB-21
Boron (B)		<50	<50	RPD-NA	ug/L	N/A	25	01-FEB-21
Cadmium (Cd)		<0.10	<0.10	RPD-NA	ug/L	N/A	25	01-FEB-21
Calcium (Ca)		38.0	38.9		mg/L	2.3	25	01-FEB-21
Cesium (Cs)		<0.10	<0.10	RPD-NA	ug/L	N/A	25	01-FEB-21
Chromium (Cr)		<1.0	<1.0	RPD-NA	ug/L	N/A	25	01-FEB-21
Cobalt (Co)		0.76	0.76		ug/L	0.7	25	01-FEB-21
Copper (Cu)		439	439		ug/L	0.0	25	01-FEB-21
Iron (Fe)		<50	<50	RPD-NA	ug/L	N/A	25	01-FEB-21
Lead (Pb)		<1.0	<1.0	RPD-NA	ug/L	N/A	25	01-FEB-21
Lithium (Li)		<100	<100	RPD-NA	ug/L	N/A	25	01-FEB-21
Magnesium (Mg)		9.55	9.64		mg/L	1.0	25	01-FEB-21
Manganese (Mn)		1.0	1.1		ug/L	7.5	25	01-FEB-21
Molybdenum (Mo)		1.29	1.34		ug/L	3.6	25	01-FEB-21
Nickel (Ni)		1.9	1.9		ug/L	1.3	25	01-FEB-21
Phosphorus (P)		<0.050	<0.050	RPD-NA	mg/L	N/A	25	01-FEB-21
Potassium (K)		1.8	1.8		mg/L	0.2	25	01-FEB-21
Rubidium (Rb)		<2.0	<2.0	RPD-NA	ug/L	N/A	25	01-FEB-21
Selenium (Se)		<1.0	<1.0	RPD-NA	ug/L	N/A	25	01-FEB-21
Silicon (Si)		<1000	<1000	RPD-NA	ug/L	N/A	25	01-FEB-21
Silver (Ag)		<0.050	<0.050	RPD-NA	ug/L	N/A	25	01-FEB-21
Sodium (Na)		21.2	21.7		mg/L	2.3	25	01-FEB-21
Strontium (Sr)		198	203		ug/L	2.4	25	01-FEB-21
Sulfur (S)		9420	9530		ug/L	1.1	25	01-FEB-21
Tellurium (Te)		<2.0	<2.0	RPD-NA	ug/L	N/A	25	01-FEB-21
Thallium (Tl)		<0.060	<0.060	RPD-NA	ug/L	N/A	25	01-FEB-21
Thorium (Th)		<1.0	<1.0	RPD-NA	ug/L	N/A	25	01-FEB-21
Tin (Sn)		<1.0	<1.0		ug/L			01-FEB-21

Quality Control Report

Workorder: L2552504

Report Date: 09-FEB-21

Page 5 of 12

Client: CASH CLIENTS - WATERLOO
PENDING
PENDING ON PENDING

Contact: Marcus Pfeil

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-ONT-DW-WT		Water						
Batch	R5360780							
WG3480772-4	DUP	WG3480772-3						
Tin (Sn)		<1.0	<1.0	RPD-NA	ug/L	N/A	25	01-FEB-21
Titanium (Ti)		<2.0	<2.0	RPD-NA	ug/L	N/A	25	01-FEB-21
Tungsten (W)		<6.0	<6.0	RPD-NA	ug/L	N/A	25	01-FEB-21
Uranium (U)		<2.0	<2.0	RPD-NA	ug/L	N/A	25	01-FEB-21
Vanadium (V)		<0.50	<0.50	RPD-NA	ug/L	N/A	25	01-FEB-21
Zinc (Zn)		140	142		ug/L	1.5	25	01-FEB-21
Zirconium (Zr)		<0.80	<0.80	RPD-NA	ug/L	N/A	25	01-FEB-21
WG3480772-2	LCS							
Aluminum (Al)			105.5		%		70-130	01-FEB-21
Antimony (Sb)			100.5		%		70-130	01-FEB-21
Arsenic (As)			100.3		%		70-130	01-FEB-21
Barium (Ba)			100.0		%		70-130	01-FEB-21
Beryllium (Be)			105.3		%		70-130	01-FEB-21
Bismuth (Bi)			103.5		%		70-130	01-FEB-21
Boron (B)			103.1		%		70-130	01-FEB-21
Cadmium (Cd)			98.0		%		70-130	01-FEB-21
Calcium (Ca)			103.8		%		70-130	01-FEB-21
Cesium (Cs)			102.9		%		70-130	01-FEB-21
Chromium (Cr)			98.9		%		70-130	01-FEB-21
Cobalt (Co)			98.7		%		70-130	01-FEB-21
Copper (Cu)			99.4		%		70-130	01-FEB-21
Iron (Fe)			100.5		%		70-130	01-FEB-21
Lead (Pb)			102.9		%		70-130	01-FEB-21
Lithium (Li)			106.8		%		70-130	01-FEB-21
Magnesium (Mg)			107.3		%		70-130	01-FEB-21
Manganese (Mn)			102.9		%		70-130	01-FEB-21
Molybdenum (Mo)			106.1		%		70-130	01-FEB-21
Nickel (Ni)			99.3		%		70-130	01-FEB-21
Phosphorus (P)			107.9		%		70-130	01-FEB-21
Potassium (K)			103.0		%		70-130	01-FEB-21
Rubidium (Rb)			102.8		%		70-130	01-FEB-21
Selenium (Se)			98.0		%		70-130	01-FEB-21
Silicon (Si)			105.8		%		70-130	01-FEB-21



Quality Control Report

Workorder: L2552504
 Report Date: 09-FEB-21
 Page 6 of 12

Client: CASH CLIENTS - WATERLOO
 PENDING
 PENDING ON PENDING
 Contact: Marcus Pfeil

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-ONT-DW-WT		Water						
Batch	R5360780							
WG3480772-2	LCS							
Silver (Ag)			103.1		%		70-130	01-FEB-21
Sodium (Na)			105.0		%		70-130	01-FEB-21
Strontium (Sr)			107.8		%		70-130	01-FEB-21
Sulfur (S)			108.8		%		70-130	01-FEB-21
Tellurium (Te)			98.9		%		70-130	01-FEB-21
Thallium (Tl)			103.4		%		70-130	01-FEB-21
Thorium (Th)			103.4		%		70-130	01-FEB-21
Tin (Sn)			97.4		%		70-130	01-FEB-21
Titanium (Ti)			98.2		%		70-130	01-FEB-21
Tungsten (W)			101.5		%		70-130	01-FEB-21
Uranium (U)			106.4		%		70-130	01-FEB-21
Vanadium (V)			102.5		%		70-130	01-FEB-21
Zinc (Zn)			98.4		%		70-130	01-FEB-21
Zirconium (Zr)			101.6		%		70-130	01-FEB-21
WG3480772-1	MB							
Aluminum (Al)			<10		ug/L		10	01-FEB-21
Antimony (Sb)			<0.60		ug/L		0.6	01-FEB-21
Arsenic (As)			<1.0		ug/L		1	01-FEB-21
Barium (Ba)			<10		ug/L		10	01-FEB-21
Beryllium (Be)			<0.50		ug/L		0.5	01-FEB-21
Bismuth (Bi)			<1.0		ug/L		1	01-FEB-21
Boron (B)			<50		ug/L		50	01-FEB-21
Cadmium (Cd)			<0.10		ug/L		0.1	01-FEB-21
Calcium (Ca)			<0.50		mg/L		0.5	01-FEB-21
Cesium (Cs)			<0.10		ug/L		0.1	01-FEB-21
Chromium (Cr)			<1.0		ug/L		1	01-FEB-21
Cobalt (Co)			<0.50		ug/L		0.5	01-FEB-21
Copper (Cu)			<1.0		ug/L		1	01-FEB-21
Iron (Fe)			<50		ug/L		50	01-FEB-21
Lead (Pb)			<1.0		ug/L		1	01-FEB-21
Lithium (Li)			<100		ug/L		100	01-FEB-21
Magnesium (Mg)			<0.50		mg/L		0.5	01-FEB-21
Manganese (Mn)			<1.0		ug/L		1	01-FEB-21
Molybdenum (Mo)			<0.50		ug/L		0.5	01-FEB-21

Quality Control Report

Workorder: L2552504

Report Date: 09-FEB-21

Page 7 of 12

Client: CASH CLIENTS - WATERLOO
PENDING
PENDING ON PENDING

Contact: Marcus Pfeil

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-ONT-DW-WT		Water						
Batch	R5360780							
WG3480772-1	MB							
Nickel (Ni)			<1.0		ug/L		1	01-FEB-21
Phosphorus (P)			<0.050		mg/L		0.05	01-FEB-21
Potassium (K)			<1.0		mg/L		1	01-FEB-21
Rubidium (Rb)			<2.0		ug/L		2	01-FEB-21
Selenium (Se)			<1.0		ug/L		1	01-FEB-21
Silicon (Si)			<1000		ug/L		1000	01-FEB-21
Silver (Ag)			<0.050		ug/L		0.05	01-FEB-21
Sodium (Na)			<0.50		mg/L		0.5	01-FEB-21
Strontium (Sr)			<1.0		ug/L		1	01-FEB-21
Sulfur (S)			<500		ug/L		500	01-FEB-21
Tellurium (Te)			<2.0		ug/L		2	01-FEB-21
Thallium (Tl)			<0.060		ug/L		0.06	01-FEB-21
Thorium (Th)			<1.0		ug/L		1	01-FEB-21
Tin (Sn)			<1.0		ug/L		1	01-FEB-21
Titanium (Ti)			<2.0		ug/L		2	01-FEB-21
Tungsten (W)			<6.0		ug/L		6	01-FEB-21
Uranium (U)			<2.0		ug/L		2	01-FEB-21
Vanadium (V)			<0.50		ug/L		0.5	01-FEB-21
Zinc (Zn)			<3.0		ug/L		3	01-FEB-21
Zirconium (Zr)			<0.80		ug/L		0.8	01-FEB-21
WG3480772-5	MS	WG3480772-3						
Aluminum (Al)			100.3		%		70-130	01-FEB-21
Antimony (Sb)			94.5		%		70-130	01-FEB-21
Arsenic (As)			96.6		%		70-130	01-FEB-21
Barium (Ba)			N/A	MS-B	%		-	01-FEB-21
Beryllium (Be)			103.4		%		70-130	01-FEB-21
Bismuth (Bi)			89.4		%		70-130	01-FEB-21
Boron (B)			98.4		%		70-130	01-FEB-21
Cadmium (Cd)			92.7		%		70-130	01-FEB-21
Calcium (Ca)			N/A	MS-B	%		-	01-FEB-21
Cesium (Cs)			91.7		%		70-130	01-FEB-21
Chromium (Cr)			93.3		%		70-130	01-FEB-21
Cobalt (Co)			91.6		%		70-130	01-FEB-21
Copper (Cu)			N/A	MS-B	%		-	01-FEB-21

Quality Control Report

Workorder: L2552504

Report Date: 09-FEB-21

Page 8 of 12

Client: CASH CLIENTS - WATERLOO
PENDING
PENDING ON PENDING

Contact: Marcus Pfeil

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-ONT-DW-WT		Water						
Batch	R5360780							
WG3480772-5	MS	WG3480772-3						
Iron (Fe)			90.7		%		70-130	01-FEB-21
Lead (Pb)			89.2		%		70-130	01-FEB-21
Lithium (Li)			100.9		%		70-130	01-FEB-21
Magnesium (Mg)			N/A	MS-B	%		-	01-FEB-21
Manganese (Mn)			95.0		%		70-130	01-FEB-21
Molybdenum (Mo)			97.8		%		70-130	01-FEB-21
Nickel (Ni)			90.4		%		70-130	01-FEB-21
Phosphorus (P)			105.9		%		70-130	01-FEB-21
Potassium (K)			101.9		%		70-130	01-FEB-21
Rubidium (Rb)			99.2		%		70-130	01-FEB-21
Selenium (Se)			92.5		%		70-130	01-FEB-21
Silicon (Si)			N/A	MS-B	%		-	01-FEB-21
Silver (Ag)			90.5		%		70-130	01-FEB-21
Sodium (Na)			N/A	MS-B	%		-	01-FEB-21
Strontium (Sr)			N/A	MS-B	%		-	01-FEB-21
Sulfur (S)			N/A	MS-B	%		-	01-FEB-21
Tellurium (Te)			87.7		%		70-130	01-FEB-21
Thallium (Tl)			89.7		%		70-130	01-FEB-21
Thorium (Th)			92.1		%		70-130	01-FEB-21
Tin (Sn)			89.7		%		70-130	01-FEB-21
Titanium (Ti)			97.3		%		70-130	01-FEB-21
Tungsten (W)			92.6		%		70-130	01-FEB-21
Uranium (U)			N/A	MS-B	%		-	01-FEB-21
Vanadium (V)			97.3		%		70-130	01-FEB-21
Zinc (Zn)			N/A	MS-B	%		-	01-FEB-21
Zirconium (Zr)			95.0		%		70-130	01-FEB-21
NO2-DW-IC-WT		Water						
Batch	R5360608							
WG3480974-4	DUP	WG3480974-3						
Nitrite (as N)		<0.010	<0.010	RPD-NA	mg/L	N/A	20	29-JAN-21
WG3480974-2	LCS							
Nitrite (as N)			100.3		%		90-110	29-JAN-21
WG3480974-1	MB							
Nitrite (as N)			<0.010		mg/L		0.01	29-JAN-21

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Page 9 of 12

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
NO2-DW-IC-WT								
Water								
Batch	R5360608							
WG3480974-5	MS	WG3480974-3						
Nitrite (as N)			95.2		%		75-125	29-JAN-21
NO3-DW-IC-WT								
Water								
Batch	R5360608							
WG3480974-4	DUP	WG3480974-3						
Nitrate (as N)		0.036	0.036		mg/L	0.1	20	29-JAN-21
WG3480974-2	LCS							
Nitrate (as N)			99.9		%		90-110	29-JAN-21
WG3480974-1	MB							
Nitrate (as N)			<0.020		mg/L		0.02	29-JAN-21
WG3480974-5	MS	WG3480974-3						
Nitrate (as N)			93.2		%		75-125	29-JAN-21
PAH-ONT-DW-WT								
Water								
Batch	R5360472							
WG3480470-2	LCS							
1-Methylnaphthalene			98.4		%		60-130	25-JAN-21
2-Methylnaphthalene			93.7		%		60-130	25-JAN-21
Acenaphthene			104.6		%		60-130	25-JAN-21
Acenaphthylene			95.7		%		60-130	25-JAN-21
Acridine			115.4		%		60-130	25-JAN-21
Anthracene			96.3		%		60-130	25-JAN-21
Benzo(a)anthracene			101.6		%		60-130	25-JAN-21
Benzo(a)pyrene			100.6		%		60-130	25-JAN-21
Benzo(b)fluoranthene			114.8		%		60-130	25-JAN-21
Benzo(g,h,i)perylene			120.2		%		60-130	25-JAN-21
Benzo(k)fluoranthene			107.2		%		60-130	25-JAN-21
Chrysene			98.1		%		60-130	25-JAN-21
Dibenzo(ah)anthracene			105.4		%		60-130	25-JAN-21
Fluoranthene			105.0		%		60-130	25-JAN-21
Fluorene			102.2		%		60-130	25-JAN-21
Indeno(1,2,3-cd)pyrene			124.2		%		60-130	25-JAN-21
Naphthalene			96.4		%		50-130	25-JAN-21
Phenanthrene			107.3		%		60-130	25-JAN-21
Pyrene			106.1		%		60-130	25-JAN-21
WG3480470-1	MB							



Quality Control Report

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Page 11 of 12

Client: CASH CLIENTS - WATERLOO
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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PO4-DO-COL-DW-WT Water								
Batch	R5360332							
WG3481412-2 LCS								
Orthophosphate-Dissolved (as P)			105.6		%		80-120	01-FEB-21
WG3481412-1 MB								
Orthophosphate-Dissolved (as P)			<0.0030		mg/L		0.003	01-FEB-21
WG3481412-4 MS		WG3481412-5						
Orthophosphate-Dissolved (as P)			N/A	MS-B	%		-	01-FEB-21
SO4-IC-N-ONT-DW-WT Water								
Batch	R5360608							
WG3480974-4 DUP		WG3480974-3						
Sulfate (SO4)		19.3	19.2		mg/L	0.1	20	29-JAN-21
WG3480974-2 LCS								
Sulfate (SO4)			101.5		%		90-110	29-JAN-21
WG3480974-1 MB								
Sulfate (SO4)			<0.30		mg/L		0.3	29-JAN-21
WG3480974-5 MS		WG3480974-3						
Sulfate (SO4)			97.7		%		75-125	29-JAN-21
SOLIDS-TDS-ONT-DW-WT Water								
Batch	R5359717							
WG3480186-3 DUP		WG3480186-4						
Total Dissolved Solids		851	839		mg/L	1.4	25	28-JAN-21
WG3480186-2 LCS								
Total Dissolved Solids			100.6		%		70-130	28-JAN-21
WG3480186-1 MB								
Total Dissolved Solids			<10		mg/L		10	28-JAN-21
TC,EC-QT51-DW-WT Water								
Batch	R5359468							
WG3480241-2 DUP		L2552508-2						
Total Coliforms		0	0		MPN/100mL	0.0	65	28-JAN-21
Escherichia Coli		0	0		MPN/100mL	0.0	65	28-JAN-21
WG3480241-1 MB								
Total Coliforms			0		MPN/100mL		1	28-JAN-21
Escherichia Coli			0		MPN/100mL		1	28-JAN-21

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Page 12 of 12

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
J	Duplicate results and limits are expressed in terms of absolute difference.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

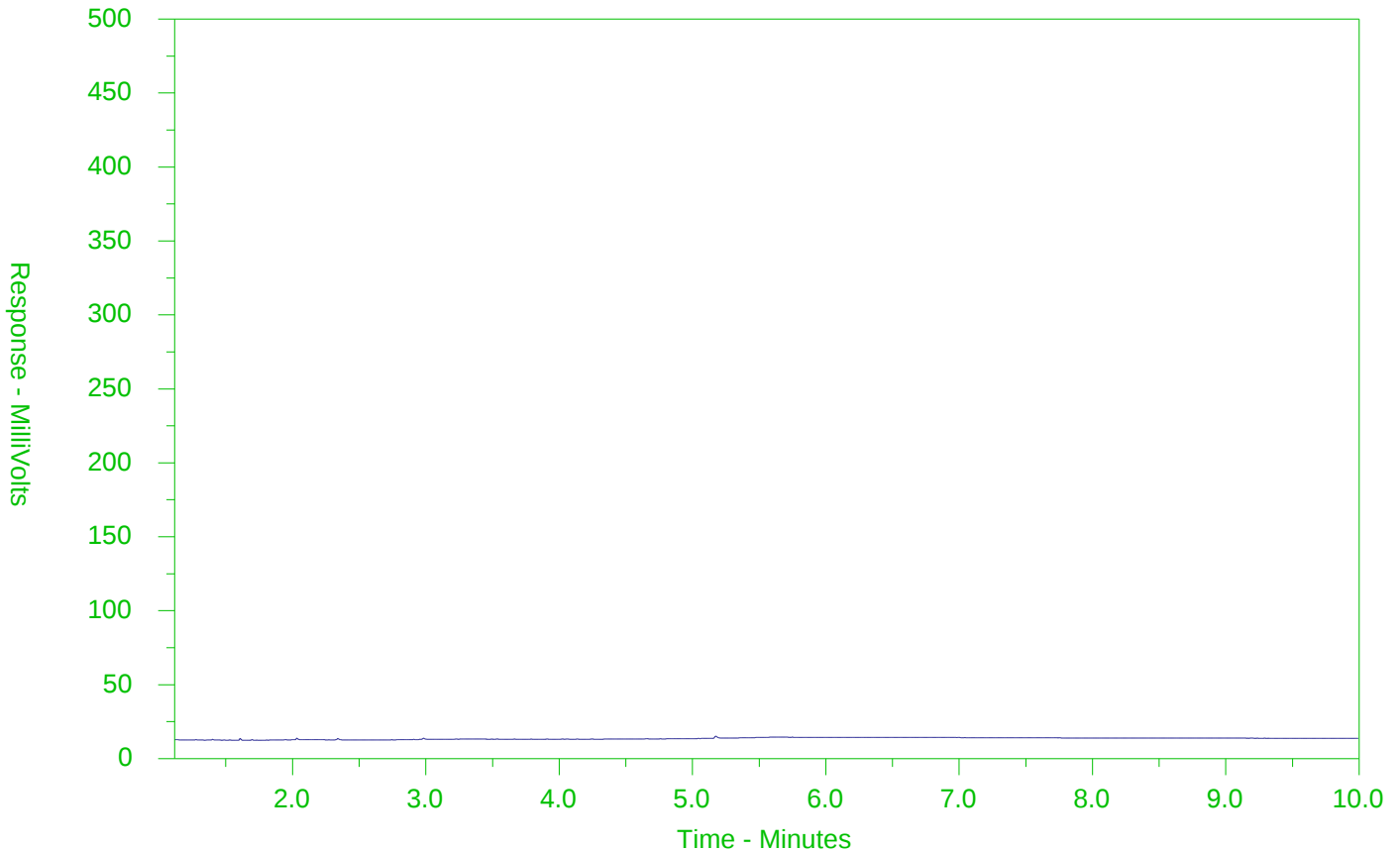
The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L2552504-1
Client Sample ID: FORMOSA SPRING WATER



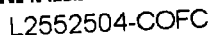
← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.



Contact and company name below will appear on the final report			Select Report: Merge QC/QCI Reports with COA			Turnaround Time (TAT) Requested										AFFIX ALS BARCODE LABEL HERE (ALS use only)									
Company address below will appear on the final report			Select Distribution:			Date and Time Required for all E&P TATs:										For all tests with rush TATs requested, please contact your AM to confirm availability.									
Invoice To			Invoice Recipients			Analysis Request										Analysis Request									
Copy of Invoice with Report			Select Invoice Distribution:			Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below										Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below									
Project Information			Oil and Gas Required Fields (client use)			NUMBER OF CONTAINERS										SAMPLES ON HOLD									
S Account # / Quote #: Q83669			AFE/Cost Center: PO#			Alkalinity (ALK-ONT-DW-WT)										Alkalinity (ALK-ONT-DW-WT)									
Major/Minor Code: Routing Code:			Major/Minor Code: Routing Code:			Bromide (BR-IC-N-ONT-DW-WT)										Bromide (BR-IC-N-ONT-DW-WT)									
Requisitioner:			Requisitioner:			BTX/PHCs (BTX-F1-F4-DW-WT)										BTX/PHCs (BTX-F1-F4-DW-WT)									
Location:			Location:			Chloride (CL-IC-N-ONT-DW-WT)										Chloride (CL-IC-N-ONT-DW-WT)									
ALS Lab Work Order # (ALS use only):			ALS Contact: Emily Smith			Tot Cyanide (CN-TOT-ONT-DW-WT)										Tot Cyanide (CN-TOT-ONT-DW-WT)									
Sample Identification and/or Coordinates			Date			Hex. Chromium (CR-CR6-IC-DW-WT)										Hex. Chromium (CR-CR6-IC-DW-WT)									
(This description will appear on the report)			(dd-mmm-yy)			Fluoride (F-DW-IC-WT)										Fluoride (F-DW-IC-WT)									
Formosa Spring Water			27/01/21			Tot Metals (MET-ONT-DW-WT)										Tot Metals (MET-ONT-DW-WT)									
						Nitrate/Nitrite (N2N3-ONT-DW-P-WT)										Nitrate/Nitrite (N2N3-ONT-DW-P-WT)									
						PAHs (PAH-ONT-DW-WT)										PAHs (PAH-ONT-DW-WT)									
						pH (PH-ONT-DW-WT)										pH (PH-ONT-DW-WT)									
						Phosphate (PO4-DO-COL-DW-WT)										Phosphate (PO4-DO-COL-DW-WT)									
						Sulfate (SO4-IC-N-ONT-DW-WT)										Sulfate (SO4-IC-N-ONT-DW-WT)									
						TDS (SOLIDS-TDS-ONT-DW-WT)										TDS (SOLIDS-TDS-ONT-DW-WT)									
						Coliforms/E. Coli (TC, EC-DW51-P-W)										Coliforms/E. Coli (TC, EC-DW51-P-W)									
Drinking Water (DW) Samples ¹ (client use)			Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)			SAMPLE RECEIPT DETAILS (ALS use only)										SAMPLE RECEIPT DETAILS (ALS use only)									
samples taken from a Regulated DW System?			Please compare results to Ontario Drinking Water Standards			Cooling Method:										Cooling Method:									
samples for human consumption/ use?						Submission Comments identified on Sample Receipt Notification:										Submission Comments identified on Sample Receipt Notification:									
						Cooler Custody Seals Intact:										Cooler Custody Seals Intact:									
						INITIAL COOLER TEMPERATURES °C										INITIAL COOLER TEMPERATURES °C									
						4.9										4.9									
SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)										FINAL SHIPMENT RECEPTION (ALS use only)									
Released by:			Received by:			Received by:										Received by:									
Date:			Date:			Date:										Date:									
Time:			Time:			Time:										Time:									

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

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