CERTIFICATE OF ANALYSIS

REPORTED TO	Stettler, Town of (Alberta) 5031 - 50 Street Stettler, AB T0C 2L0		
ATTENTION	Veronica Salmon	**WORK ORDER**	0010441
PO NUMBER		**RECEIVED / TEMP**	2020-01-09 08:50 / 6°C
PROJECT	Distribution System - Biannual Analysis	**REPORTED**	2020-01-28 14:16
PROJECT INFO		**COC NUMBER**	no number

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO 17025:2005 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks

You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry

It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve

Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

Work Order Comments:

This is a revised report; please refer to Appendix 3 for details.

If you have any questions or concerns, please contact me at sgulenchyn@caro.ca

Authorized By:

Sara Gulenchyn, B.Sc, P.Chem.
Client Service Manager

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	Stettler, Town of (Alberta)	**WORK ORDER**	0010441
PROJECT	Distribution System - Biannual Analysis	**REPORTED**	2020-01-28 14:16

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
GT Hydraulics (0010441-01) | Matrix: Water | Sampled: 2020-01-08 10:40						
Acid Herbicides						
2,4-D	< 0.00010	MAC = 0.1	0.00010	mg/L	2020-01-23	
Dicamba	< 0.00010	MAC = 0.12	0.00010	mg/L	2020-01-23	
MCPA	< 0.00020	MAC = 0.1	0.00020	mg/L	2020-01-23	
Picloram	< 0.00010	MAC = 0.19	0.00010	mg/L	2020-01-23	
Anions						
Bromate	< 0.010	MAC = 0.01	0.010	mg/L	2020-01-10	
Chloride	**10.2**	AO ≤ 250	0.10	mg/L	2020-01-11	
Fluoride	**0.69**	MAC = 1.5	0.10	mg/L	2020-01-11	
Nitrate (as N)	**0.238**	MAC = 10	0.010	mg/L	2020-01-11	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2020-01-11	
Sulfate	**68.5**	AO ≤ 500	1.0	mg/L	2020-01-11	
Calculated Parameters						
Total Trihalomethanes	**0.0460**	MAC = 0.1	0.00400	mg/L	N/A	
Chloramines	**1.33**	MAC = 3	0.0400	mg/L	N/A	
Total Trihalomethanes	**0.0635**	MAC = 0.1	0.00400	mg/L	N/A	
Hardness, Total (as CaCO3)	**224**	None Required	0.500	mg/L	N/A	
Solids, Total Dissolved	**300**	AO ≤ 500	1.00	mg/L	N/A	
Chlorinated Phenols						
2,4-Dichlorophenol	< 0.00020	AO ≤ 0.0003	0.00020	mg/L	2020-01-13	
2,4,6-Trichlorophenol	< 0.00050	AO ≤ 0.002	0.00050	mg/L	2020-01-13	
2,3,4,6-Tetrachlorophenol	< 0.00050	AO ≤ 0.001	0.00050	mg/L	2020-01-13	
Pentachlorophenol	< 0.00050	AO ≤ 0.03	0.00050	mg/L	2020-01-13	
General Parameters						
Alkalinity, Total (as CaCO3)	**196**	N/A	1.0	mg/L	2020-01-13	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2020-01-13	
Alkalinity, Bicarbonate (as CaCO3)	**196**	N/A	1.0	mg/L	2020-01-13	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2020-01-13	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2020-01-13	
Ammonia, Total (as N)	**0.443**	None Required	0.050	mg/L	2020-01-13	
Carbon, Total Organic	**3.01**	N/A	0.50	mg/L	2020-01-13	
Chlorine, Total	**1.41**	None Required	0.02	mg/L	2020-01-09	HT2
Chlorine, Free	**0.08**	N/A	0.02	mg/L	2020-01-09	HT2
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2020-01-10	
Conductivity (EC)	**443**	N/A	2.0	µS/cm	2020-01-13	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2020-01-13	
Nitrilotriacetic Acid	< 0.20	MAC = 0.4	0.20	mg/L	2020-01-14	
pH	**8.13**	7.0-10.5	0.10	pH units	2020-01-13	HT2
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2020-01-10	
Turbidity	**0.12**	OG < 1	0.10	NTU	2020-01-14	HT1

TEST RESULTS

REPORTED TO	Stettler, Town of (Alberta)	**WORK ORDER**	0010441
PROJECT	Distribution System - Biannual Analysis	**REPORTED**	2020-01-28 14:16

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
GT Hydraulics (0010441-01) | Matrix: Water | Sampled: 2020-01-08 10:40, Continued						
Haloacetic Acids						
Monochloroacetic Acid	**0.0034**	N/A	0.0020	mg/L	2020-01-13	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2020-01-13	
Dichloroacetic Acid	**0.0162**	N/A	0.0020	mg/L	2020-01-13	
Trichloroacetic Acid	**0.0171**	N/A	0.0020	mg/L	2020-01-13	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2020-01-13	
Total Haloacetic Acids (HAA5)	**0.0367**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*111*		*70-130*	%	*2020-01-13*	
Miscellaneous Herbicides						
Glyphosate	< 0.050	MAC = 0.28	0.050	mg/L	2020-01-20	
Pesticides, Herbicides, and Fungicides						
Atrazine and metabolites	< 0.000100	MAC = 0.005	0.000100	mg/L	2020-01-15	
Azinphos-methyl	< 0.000200	MAC = 0.02	0.000200	mg/L	2020-01-15	
Bromoxynil	< 0.000200	MAC = 0.005	0.000200	mg/L	2020-01-15	
Chlorpyrifos	< 0.000010	MAC = 0.09	0.000010	mg/L	2020-01-15	
Cyanazine	< 0.000100	N/A	0.000100	mg/L	2020-01-15	
Diazinon	< 0.000020	MAC = 0.02	0.000020	mg/L	2020-01-15	
Diclofop-methyl	< 0.000100	MAC = 0.009	0.000100	mg/L	2020-01-15	
Dimethoate	< 0.000200	MAC = 0.02	0.000200	mg/L	2020-01-15	
Diuron	< 0.000200	MAC = 0.15	0.000200	mg/L	2020-01-15	
Malathion	< 0.000100	MAC = 0.19	0.000100	mg/L	2020-01-15	
Methoxychlor	< 0.000050	N/A	0.000050	mg/L	2020-01-15	
Metolachlor	< 0.000100	MAC = 0.05	0.000100	mg/L	2020-01-15	
Metribuzin	< 0.000200	MAC = 0.08	0.000200	mg/L	2020-01-15	
Phorate	< 0.000100	MAC = 0.002	0.000100	mg/L	2020-01-15	
Simazine	< 0.000200	MAC = 0.01	0.000200	mg/L	2020-01-15	
Terbufos	< 0.000100	MAC = 0.001	0.000100	mg/L	2020-01-15	
Triallate	< 0.000100	N/A	0.000100	mg/L	2020-01-15	
Trifluralin	< 0.000200	MAC = 0.045	0.000200	mg/L	2020-01-15	
Polycyclic Aromatic Hydrocarbons (PAH)						
Benzo(a)pyrene	< 0.010	MAC = 0.04	0.010	µg/L	2020-01-11	
Total Metals						
Aluminum, total	**0.0330**	OG < 0.1	0.0050	mg/L	2020-01-12	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2020-01-12	
Arsenic, total	**0.00051**	MAC = 0.01	0.00050	mg/L	2020-01-12	
Barium, total	**0.0945**	MAC = 2	0.0050	mg/L	2020-01-12	
Boron, total	**0.0442**	MAC = 5	0.0050	mg/L	2020-01-12	
Cadmium, total	< 0.010	MAC = 5	0.010	µg/L	2020-01-12	
Calcium, total	**58.8**	None Required	0.20	mg/L	2020-01-12	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2020-01-12	
Copper, total	**0.00800**	MAC = 2	0.00040	mg/L	2020-01-12	

TEST RESULTS

REPORTED TO Stettler, Town of (Alberta)
PROJECT Distribution System - Biannual Analysis

WORK ORDER 0010441
REPORTED 2020-01-28 14:16

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
GT Hydraulics (0010441-01) | Matrix: Water | Sampled: 2020-01-08 10:40, Continued						
Total Metals, Continued						
Iron, total	< 0.010	AO ≤ 0.3	0.010	mg/L	2020-01-12	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2020-01-12	
Magnesium, total	**18.8**	None Required	0.010	mg/L	2020-01-12	
Manganese, total	**0.00127**	MAC = 0.12	0.00020	mg/L	2020-01-12	
Mercury, total	< 0.010	MAC = 1	0.010	µg/L	2020-01-14	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2020-01-12	
Silver, total	< 0.050	N/A	0.050	µg/L	2020-01-12	
Sodium, total	**21.2**	AO ≤ 200	0.10	mg/L	2020-01-12	
Uranium, total	**0.776**	MAC = 20	0.020	µg/L	2020-01-12	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2020-01-12	
Volatile Organic Compounds (VOC)						S03
Benzene	< 0.0005	MAC = 0.005	0.0005	mg/L	2020-01-12	
Bromodichloromethane	**0.0057**	N/A	0.0010	mg/L	2020-01-12	
Bromoform	**0.0216**	N/A	0.0010	mg/L	2020-01-12	
Carbon tetrachloride	< 0.0005	MAC = 0.002	0.0005	mg/L	2020-01-12	
Monochlorobenzene	< 0.0010	AO ≤ 0.03	0.0010	mg/L	2020-01-12	
Chloroform	**0.0307**	N/A	0.0010	mg/L	2020-01-12	
Dibromochloromethane	**0.0054**	N/A	0.0010	mg/L	2020-01-12	
1,2-Dichlorobenzene	< 0.0005	AO ≤ 0.003	0.0005	mg/L	2020-01-12	
1,4-Dichlorobenzene	< 0.0010	AO ≤ 0.001	0.0010	mg/L	2020-01-12	
1,2-Dichloroethane	< 0.0010	MAC = 0.005	0.0010	mg/L	2020-01-12	
1,1-Dichloroethylene	< 0.0010	MAC = 0.014	0.0010	mg/L	2020-01-12	
Dichloromethane	< 0.0030	MAC = 0.05	0.0030	mg/L	2020-01-12	
Ethylbenzene	< 0.0010	AO ≤ 0.0016	0.0010	mg/L	2020-01-12	
Methyl tert-butyl ether	< 0.0010	AO ≤ 0.015	0.0010	mg/L	2020-01-12	
Tetrachloroethylene	< 0.0010	MAC = 0.01	0.0010	mg/L	2020-01-12	
Toluene	< 0.0010	AO ≤ 0.024	0.0010	mg/L	2020-01-12	
Trichloroethylene	< 0.0010	MAC = 0.005	0.0010	mg/L	2020-01-12	
Vinyl chloride	< 0.0010	MAC = 0.002	0.0010	mg/L	2020-01-12	
Xylenes (total)	< 0.0020	AO ≤ 0.02	0.0020	mg/L	2020-01-12	
Town Shop (0010441-02) | Matrix: Water | Sampled: 2020-01-08 09:50						
Calculated Parameters						
Total Trihalomethanes	**0.0382**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2020-01-13	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2020-01-13	
Dichloroacetic Acid	**0.0108**	N/A	0.0020	mg/L	2020-01-13	
Trichloroacetic Acid	**0.0142**	N/A	0.0020	mg/L	2020-01-13	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2020-01-13	

TEST RESULTS

REPORTED TO	Stettler, Town of (Alberta)	**WORK ORDER**	0010441
PROJECT	Distribution System - Biannual Analysis	**REPORTED**	2020-01-28 14:16

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Town Shop (0010441-02) | Matrix: Water | Sampled: 2020-01-08 09:50, Continued						
Haloacetic Acids, Continued						
Total Haloacetic Acids (HAA5)	**0.0249**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*108*		*70-130*	%	*2020-01-13*	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	**0.0030**	N/A	0.0010	mg/L	2020-01-12	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2020-01-12	
Chloroform	**0.0352**	N/A	0.0010	mg/L	2020-01-12	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2020-01-12	
Surrogate: Toluene-d8	*87*		*70-130*	%	*2020-01-12*	
Surrogate: 4-Bromofluorobenzene	*86*		*70-130*	%	*2020-01-12*	
Turtle Club (0010441-03) | Matrix: Water | Sampled: 2020-01-08 10:15						
Calculated Parameters						
Total Trihalomethanes	**0.0341**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2020-01-13	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2020-01-13	
Dichloroacetic Acid	**0.0129**	N/A	0.0020	mg/L	2020-01-13	
Trichloroacetic Acid	**0.0152**	N/A	0.0020	mg/L	2020-01-13	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2020-01-13	
Total Haloacetic Acids (HAA5)	**0.0281**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*105*		*70-130*	%	*2020-01-13*	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	**0.0030**	N/A	0.0010	mg/L	2020-01-12	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2020-01-12	
Chloroform	**0.0311**	N/A	0.0010	mg/L	2020-01-12	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2020-01-12	
Surrogate: Toluene-d8	*88*		*70-130*	%	*2020-01-12*	
Surrogate: 4-Bromofluorobenzene	*88*		*70-130*	%	*2020-01-12*	

Sample Qualifiers:

HT1	The sample was prepared and/or analyzed past the recommended holding time.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
S03	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Stettler, Town of (Alberta)	**WORK ORDER**	0010441
PROJECT	Distribution System - Biannual Analysis	**REPORTED**	2020-01-28 14:16

Analysis Description	Method Ref.	Technique	Location
Acid Herbicides in Water	EPA 8151A*	DCM Extraction with Diazomethane Derivatization, GC-MS	Richmond
Alkalinity in Water	SM 2320 B* (2017)	Titration with H2SO4	Kelowna
Ammonia, Total in Water	SM 4500-NH3 D* (2017)	Ion Selective Electrode	Edmonton
Anions in Water	SM 4110 B (2017)	Ion Chromatography	Kelowna
Bromate in Water	SM 4110 B (2017)	Ion Chromatography	Sublet
Carbon, Total Organic in Water	SM 5310 B (2017)	Combustion, Infrared CO2 Detection	Kelowna
Chlorine, Free in Water	SM 4500-Cl G (2017)	Colorimetry (DPD)	Edmonton
Chlorine, Total in Water	SM 4500-Cl G (2017)	Colorimetry (DPD)	Edmonton
Colour, True in Water	SM 2120 C (2017)	Spectrophotometry (456 nm)	Edmonton
Conductivity in Water	SM 2510 B (2017)	Conductivity Meter	Kelowna
Cyanide, SAD in Water	ASTM D7511-12	Flow Injection with In-Line UV Digestion and Amperometry	Kelowna
Glyphosate in Water	EPA 547*	Direct Aqueous Injection HPLC with Post-Column Derivatization and Fluorescence Detection	Richmond
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	Richmond
Hardness in Water	SM 2340 B* (2017)	Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Est)	N/A
Mercury, total in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	Richmond
Nitrilotriacetic Acid in Water	EPA 430.1	Manual Colorimetry (Zinc-Zincon)	Kelowna
Pesticides in Water	EPA 3510C* / EPA 8270D*	Liquid-Liquid DCM Extraction (B/N) / GC-MSD (SIM)	Richmond
pH in Water	SM 4500-H+ B (2017)	Electrometry	Kelowna
Phenols, Chlorinated in Water	EPA 3510C* / EPA 8270D	Liquid-Liquid DCM Extraction (Acidic) / GC-MSD (SIM)	Richmond
Polycyclic Aromatic Hydrocarbons in Water	EPA 3511* / EPA 8270D	Hexane MicroExtraction (Base/Neutral) / GC-MSD (SIM)	Richmond
Solids, Total Dissolved in Water	SM 1030 E (2017)	SM 1030 E (2011)	N/A
Sulfide, Total in Water	SM 4500-S2 D* (2017)	Colorimetry (Methylene Blue)	Edmonton
Total Metals in Water	EPA 200.2* / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	Richmond
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	Richmond
Turbidity in Water	SM 2130 B (2017)	Nephelometry	Kelowna
Volatile Organic Compounds in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	Richmond

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Stettler, Town of (Alberta)	**WORK ORDER**	0010441
PROJECT	Distribution System - Biannual Analysis	**REPORTED**	2020-01-28 14:16

Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
AO	Aesthetic Objective
CU	Colour Units (referenced against a platinum cobalt standard)
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, ph > 7 = basic
µg/L	Micrograms per litre
µS/cm	Microsiemens per centimetre
ASTM	ASTM International Test Methods
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to the samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Samples will be disposed of 30 days after the test report has been issued unless otherwise agreed to in writing. The quality control (QC) data is available upon request

Results in **Bold** indicate values that are above CARO's method reporting limits. Any results that are above regulatory limits are highlighted **red**. Please note that results will only be highlighted red if the regulatory limits are included on the CARO report. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager:sgulenchyn@caro.ca

APPENDIX 3: REVISION HISTORY

REPORTED TO	Stettler, Town of (Alberta)	**WORK ORDER**	0010441
PROJECT	Distribution System - Biannual Analysis	**REPORTED**	2020-01-28 14:16

Sample ID	Changed	Change	Analysis	Analyte(s)
0010441-01	2020-01-28	Made Non-Reportable	Trihalomethanes	4-Bromofluorobenzene, Bromodichloromethane, Bromoform, Chloroform, Dibromochloromethane, Toluene-d8

AGAT Laboratories

2910 12TH STREET NE
CALGARY, ALBERTA
CANADA T2E 7P7
TEL (403)735-2005
FAX (403)735-2771
http://www.agatlabs.com

CLIENT NAME: CARO ANALYTICAL SERVICES
17225 109 AVENUE NW
EDMONTON, AB T5S1H7
(780) 489-9100

ATTENTION TO: Eilish St.Clair

PROJECT: 0010441-01

AGAT WORK ORDER: 20C562828

WATER ANALYSIS REVIEWED BY: Yu Zhang, Senior Analyst

DATE REPORTED: Jan 13, 2020

PAGES (INCLUDING COVER): 7

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (403) 735-2005

NOTES

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.

AGAT Laboratories

2910 12TH STREET NE
CALGARY, ALBERTA
CANADA T2E 7P7
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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 20C562828

PROJECT: 0010441-01

CLIENT NAME: CARO ANALYTICAL SERVICES

ATTENTION TO: Eilish St.Clair

SAMPLING SITE:

SAMPLED BY:

Water Analysis - Bromate

DATE RECEIVED: 2020-01-10

DATE REPORTED: 2020-01-13

				SAMPLE DESCRIPTION:	0010441-01
				SAMPLE TYPE:	Water
				DATE SAMPLED:	2020-01-08 10:40
Parameter	**Unit**	**G / S**	**RDL**	**857291**	
Bromate	mg/L		0.01	<0.01	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

Analysis performed at AGAT Calgary (unless marked by *)

Certified By:

AGAT Laboratories

2910 12TH STREET NE
CALGARY, ALBERTA
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TEL (403)735-2005
FAX (403)735-2771
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Quality Assurance

CLIENT NAME: CARO ANALYTICAL SERVICES

AGAT WORK ORDER: 20C562828

PROJECT: 0010441-01

ATTENTION TO: Eilish St.Clair

SAMPLING SITE:

SAMPLED BY:

Water Analysis

RPT Date: Jan 13, 2020			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Water Analysis - Bromate															
Bromate	853831	831	<0.01	<0.01	NA	< 0.01	106%	80%	120%	103%	80%	120%	102%	80%	120%

Comments: If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.

Certified By:

2910 12TH STREET NE
CALGARY, ALBERTA
CANADA T2E 7P7
TEL (403)735-2005
FAX (403)735-2771
http://www.agatlabs.com

Method Summary

CLIENT NAME: CARO ANALYTICAL SERVICES

AGAT WORK ORDER: 20C562828

PROJECT: 0010441-01

ATTENTION TO: Eilish St.Clair

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Bromate	INST 0150	SM 4110 B	ION CHROMATOGRAPH

CARO ANALYTICAL SERVICES

SUBCONTRACT REQUEST (WO# 0010441)

20C862828

SENDING LABORATORY:

CARO Analytical Services
17225 109 Avenue NW
Edmonton, AB T5S 1H7
Phone: (780) 489-9100

Contact sublet@caro.ca

RECEIVING LABORATORY:

AGAT Laboratories (Calgary)
2910 12 St. NE
Calgary, AB T2E 7P7
Phone: (403) 735-2011

REGULAR TAT

Analysis / Method	Expires	Comments
CARO Sample ID: 0010441-01 | Matrix: Water | Sampled: 2020-01-08 10:40		
Container(s) Submitted: E = S22_125 mL Plastic (EDA) F = S22_125 mL Plastic (EDA)		
Bromate in Water by IC [SM 4110 B (2017)]	2020-02-05	857291

Released By — Date: Jan 9/2020

Received By — Date: Jan 10/2020

Client submitted extra so just sent 2 bottles instead of the regular one

12.3°C

C 43467

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AGAT Laboratories

SAMPLE INTEGRITY RECEIPT FORM

RECEIVING BASICS - Shipping

Company/Consultant: Cara Analytical

Courier: Purolator Prepaid Collect

Waybill# 332129270895

Branch: EDM GP FN FM RD VAN LYD FSJ EST Other:____

If multiple sites were submitted at once: Yes No

Custody Seal Intact: Yes No NA

TAT: <24hr 24-48hr 48-72hr Reg Other_____

Cooler Quantity: 1 box

TIME SENSITIVE ISSUES - Shipping

ALREADY EXCEEDED HOLD TIME? Yes No

Inorganic Tests (Please Circle): Mibi , BOD , Nitrate/Nitrite , Turbidity , Microtox , Ortho PO4 , Tedlar Bag , Residual Chlorine , Chlorophyll* , Chloroamines*

Earliest Expiry:_____

Hydrocarbons: Earliest Expiry _____

SAMPLE INTEGRITY - Shipping

Hazardous Samples: YES NO Precaution Taken:_____

Legal Samples: Yes No

International Samples: Yes No

Tape Sealed: Yes No

Coolant Used: Icepack Bagged Ice Free Ice Free Water None

Temperature (Bottles/Jars only) N/A if only Soil Bags Received

FROZEN (Please Circle if samples received Frozen)

1 (Bottle/Jar)___+___+___=12.3°C 2(Bottle/Jar)___+___+___=____°C

3 (Bottle/Jar)___+___+___=____°C 4 (Bottle/Jar)___+___+___=____°C

5 (Bottle/Jar)___+___+___=____°C 6 (Bottle/Jar)___+___+___=____°C

7 (Bottle/Jar)___+___+___=____°C 8 (Bottle/Jar)___+___+___=____°C

9 (Bottle/Jar)___+___+___=____°C 10 (Bottle/Jar)___+___+___=____°C

(If more than 10 coolers are received use another sheet of paper and attach)

LOGISTICS USE ONLY

Workorder No: _____

Samples Damaged: Yes No If YES why?

No Bubble Wrap Frozen Courier

Other: _____

Account Project Manager: _____ have they been notified of the above issues: Yes No

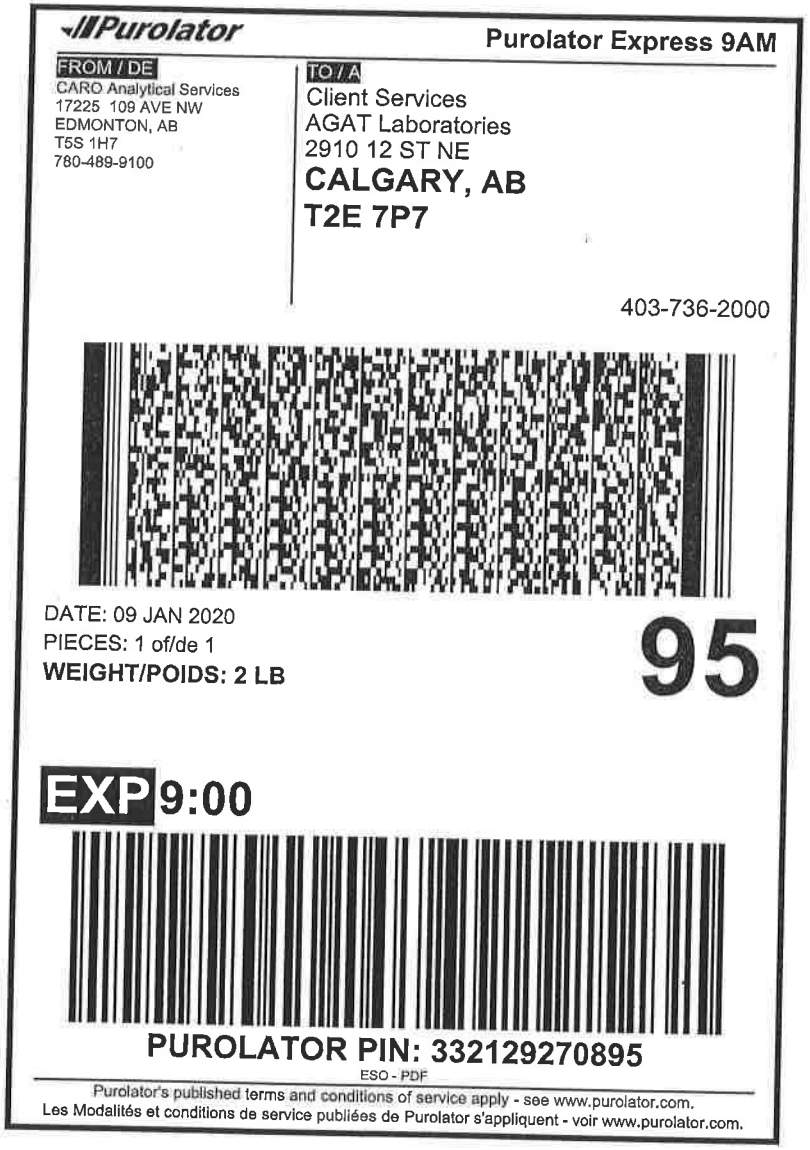
Whom spoken to: _____ Date/Time: _____

CPM Initial_____

General Comments: _____

* Subcontracted Analysis (See CPM)

Date issued: October 05, 2015
Document ID: SR-9505.003


Purolator
Purolator Express 9AM
FROM / DE
CARO Analytical Services
17225 109 AVE NW
EDMONTON, AB
T5S 1H7
780-489-9100
TO / A
Client Services
AGAT Laboratories
2910 12 ST NE
CALGARY, AB
T2E 7P7
403-736-2000
DATE: 09 JAN 2020
PIECES: 1 of/de 1
WEIGHT/POIDS: 2 LB
95
EXP 9:00
PUROLATOR PIN: 332129270895
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