



CERTIFICATE OF ANALYSIS

REPORTED TO Campbell Scientific Canada Corp.
1030 Sugar Lake Rd
Cherryville, BC V0E 2G2

ATTENTION Claude Labine

PO NUMBER

PROJECT Cherryville Water Stewart

PROJECT INFO

WORK ORDER 9091134

RECEIVED / TEMP 2019-09-12 15:02 / 11°C

REPORTED 2019-09-19 09:41

COC NUMBER B82545

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.

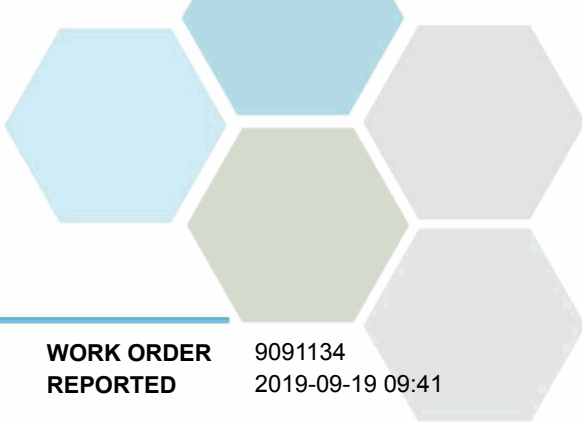
If you have any questions or concerns, please contact me at teamcaro@caro.ca

Authorized By:

Team CARO
Client Service Representative

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7



TEST RESULTS

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Cherryville Water Stewart

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Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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Shuswap River 1 Above Sugar Lake (9091134-01) | Matrix: Water | Sampled: 2019-09-11 15:45

Microbiological Parameters

Coliforms, Total	250	MAC = 0	1	CFU/100 mL	2019-09-12	
Background Colonies	> 200	N/A	200	CFU/100 mL	2019-09-12	
Coliforms, Fecal	14	N/A	1	CFU/100 mL	2019-09-12	
Heterotrophic Plate Count	86	N/A	5	CFU/mL	2019-09-12	
E. coli	12	MAC = 0	1	CFU/100 mL	2019-09-12	

Shuswap River 2 Blade Sugar Lake (9091134-02) | Matrix: Water | Sampled: 2019-09-11 16:22

Microbiological Parameters

Coliforms, Total	19	MAC = 0	1	CFU/100 mL	2019-09-12	
Background Colonies	> 200	N/A	200	CFU/100 mL	2019-09-12	
Coliforms, Fecal	1	N/A	1	CFU/100 mL	2019-09-12	
Heterotrophic Plate Count	59	N/A	5	CFU/mL	2019-09-12	
E. coli	1	MAC = 0	1	CFU/100 mL	2019-09-12	

Shuswap River Sihlis Road (9091134-03) | Matrix: Water | Sampled: 2019-09-12 11:19

Microbiological Parameters

Coliforms, Total	300	MAC = 0	1	CFU/100 mL	2019-09-13	
Background Colonies	> 200	N/A	200	CFU/100 mL	2019-09-13	
Coliforms, Fecal	1	N/A	1	CFU/100 mL	2019-09-13	
Heterotrophic Plate Count	100	N/A	5	CFU/mL	2019-09-13	
E. coli	1	MAC = 0	1	CFU/100 mL	2019-09-13	

Reactor Creek @ Shuswap River (9091134-04) | Matrix: Water | Sampled: 2019-09-12 11:18

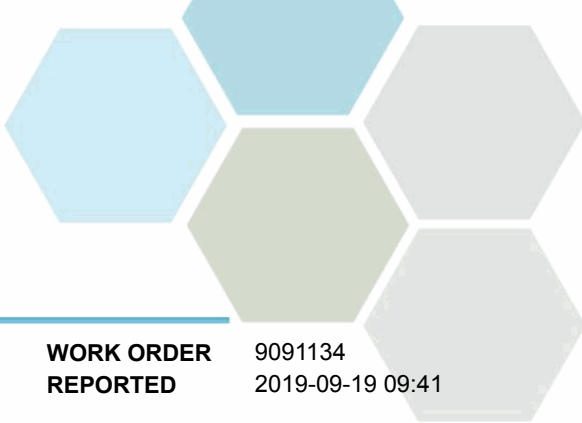
Microbiological Parameters

Coliforms, Total	260	MAC = 0	1	CFU/100 mL	2019-09-13	
Background Colonies	> 200	N/A	200	CFU/100 mL	2019-09-13	
Coliforms, Fecal	5	N/A	1	CFU/100 mL	2019-09-13	
Heterotrophic Plate Count	61	N/A	5	CFU/mL	2019-09-13	
E. coli	5	MAC = 0	1	CFU/100 mL	2019-09-13	

Cherry Creek @ Sugar Lake Road (9091134-05) | Matrix: Water | Sampled: 2019-09-12 11:36

Microbiological Parameters

Coliforms, Total	210	MAC = 0	1	CFU/100 mL	2019-09-13	
Background Colonies	> 200	N/A	200	CFU/100 mL	2019-09-13	
Coliforms, Fecal	13	N/A	1	CFU/100 mL	2019-09-13	
Heterotrophic Plate Count	100	N/A	5	CFU/mL	2019-09-13	
E. coli	12	MAC = 0	1	CFU/100 mL	2019-09-13	



TEST RESULTS

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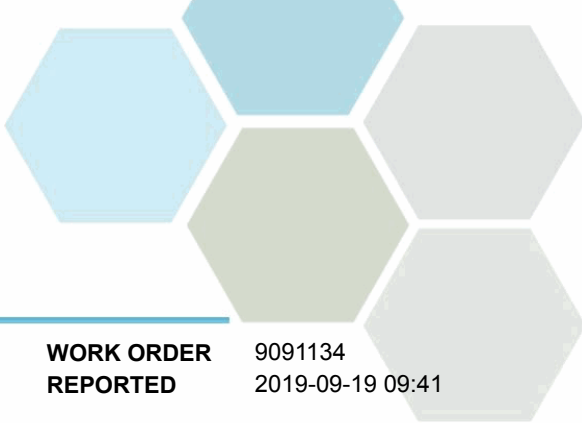
Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
Ferry Creek @ Shuswap River (9091134-06) Matrix: Water Sampled: 2019-09-12 11:45					
<i>Microbiological Parameters</i>					
Coliforms, Total	230	MAC = 0	1 CFU/100 mL	2019-09-13	
Background Colonies	> 200	N/A	200 CFU/100 mL	2019-09-13	
Coliforms, Fecal	2	N/A	1 CFU/100 mL	2019-09-13	
Heterotrophic Plate Count	140	N/A	5 CFU/mL	2019-09-13	
E. coli	2	MAC = 0	1 CFU/100 mL	2019-09-13	

Shuswap River Post Ferry Creek (9091134-07) | Matrix: Water | Sampled: 2019-09-12 11:50

<i>Microbiological Parameters</i>					
Coliforms, Total	68	MAC = 0	1 CFU/100 mL	2019-09-13	
Background Colonies	> 200	N/A	200 CFU/100 mL	2019-09-13	
Coliforms, Fecal	3	N/A	1 CFU/100 mL	2019-09-13	
Heterotrophic Plate Count	130	N/A	5 CFU/mL	2019-09-13	
E. coli	3	MAC = 0	1 CFU/100 mL	2019-09-13	

Shuswap River BC Hydro Picnic (9091134-08) | Matrix: Water | Sampled: 2019-09-12 12:00

<i>Microbiological Parameters</i>					
Coliforms, Total	280	MAC = 0	1 CFU/100 mL	2019-09-13	
Background Colonies	> 200	N/A	200 CFU/100 mL	2019-09-13	
Coliforms, Fecal	5	N/A	1 CFU/100 mL	2019-09-13	
Heterotrophic Plate Count	160	N/A	5 CFU/mL	2019-09-13	
E. coli	4	MAC = 0	1 CFU/100 mL	2019-09-13	



APPENDIX 1: SUPPORTING INFORMATION

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Analysis Description	Method Ref.	Technique	Location
Coliforms, Fecal in Water	SM 9222 D (2017)	Membrane Filtration / m-FC Agar	Kelowna
Coliforms, Total in Water	SM 9222 B (2017)	Membrane Filtration / m-Endo Agar	Kelowna
E. coli in Water	SM 9222 G (2017)	Membrane Filtration / Nutrient Agar with MUG	Kelowna
Heterotrophic Plate Count in Water	SM 9215 D (2017)	Membrane Filtration / Membrane Filtration	Kelowna

Glossary of Terms:

RL	Reporting Limit (default)
>	Greater than the specified Result
CFU/100 mL	Colony Forming Units per 100 millilitres
CFU/mL	Colony Forming Units per millilitre
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

Guidelines Referenced in this Report:

[Guidelines for Canadian Drinking Water Quality \(Health Canada, Feb 2017\)](#)

Note: In some cases, the values displayed on the report represent the lowest guideline and are to be verified by the end user

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: teamcaro@caro.ca