

## CERTIFICATE OF ANALYSIS

<b>REPORTED TO</b>	Cherry Ridge Management 158 North Fork Road Cherryville, BC V0E 2G3	<b>WORK ORDER</b>	24E1627
<b>ATTENTION</b>	Melanie Staker	<b>RECEIVED / TEMP REPORTED</b>	2024-05-13 13:50 / 10.6°C 2024-05-21 14:18
<b>PO NUMBER</b>	Cherry Ridge Management Creek Monitoring	<b>COC NUMBER</b>	B135978
<b>PROJECT</b>	Creek Monitoring		
<b>PROJECT INFO</b>			

### 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/IEC 17025:2017 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.

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: <https://www.caro.ca/terms-conditions>

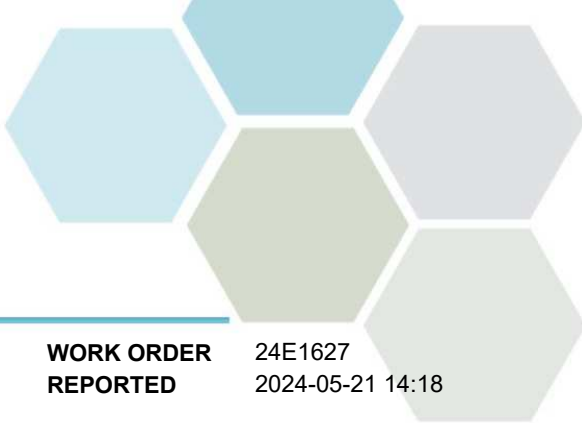
If you have any questions or concerns, please contact me at [TeamCaro@caro.ca](mailto:TeamCaro@caro.ca)

### Authorized By:

Team CARO  
Client Service Representative

1-888-311-8846 | [www.caro.ca](http://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 | #108 4475 Wayburne Drive Burnaby, BC V5G 4X4



# TEST RESULTS

**REPORTED TO PROJECT** Cherry Ridge Management Creek Monitoring

**WORK ORDER REPORTED** 24E1627  
2024-05-21 14:18

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
---------	--------	-----------	----------	----------	-----------

**North Fork Cherry Creek (24E1627-01) | Matrix: Water | Sampled: 2024-05-12 15:00**

**Anions**

Chloride	< 0.10	AO ≤ 250	0.10 mg/L	2024-05-14	
Nitrate (as N)	<b>0.034</b>	MAC = 10	0.010 mg/L	2024-05-14	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2024-05-14	
Sulfate	<b>4.9</b>	AO ≤ 500	1.0 mg/L	2024-05-14	

**Calculated Parameters**

Nitrate+Nitrite (as N)	<b>0.0345</b>	N/A	0.0100 mg/L	N/A	
Nitrogen, Total	<b>0.202</b>	N/A	0.0500 mg/L	N/A	

**General Parameters**

Conductivity (EC)	<b>86.0</b>	N/A	2.0 µS/cm	2024-05-21	
Nitrogen, Total Kjeldahl	<b>0.167</b>	N/A	0.050 mg/L	2024-05-21	
pH	<b>6.70</b>	7.0-10.5	0.10 pH units	2024-05-21	HT2
Phosphorus, Total (as P)	<b>0.0068</b>	N/A	0.0050 mg/L	2024-05-16	
Turbidity	<b>2.91</b>	OG < 1	0.10 NTU	2024-05-14	

**Microbiological Parameters**

Coliforms, Total (Q-Tray)	<b>82</b>	MAC = 0	1 MPN/100 mL	2024-05-13	
E. coli (Q-Tray)	<b>1</b>	MAC = 0	1 MPN/100 mL	2024-05-13	

**Half Mile Creek (24E1627-02) | Matrix: Water | Sampled: 2024-05-12 14:30**

**Anions**

Chloride	<b>0.27</b>	AO ≤ 250	0.10 mg/L	2024-05-14	
Nitrate (as N)	< 0.010	MAC = 10	0.010 mg/L	2024-05-14	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2024-05-14	
Sulfate	<b>25.0</b>	AO ≤ 500	1.0 mg/L	2024-05-14	

**Calculated Parameters**

Nitrate+Nitrite (as N)	< 0.0100	N/A	0.0100 mg/L	N/A	
Nitrogen, Total	<b>0.111</b>	N/A	0.0500 mg/L	N/A	

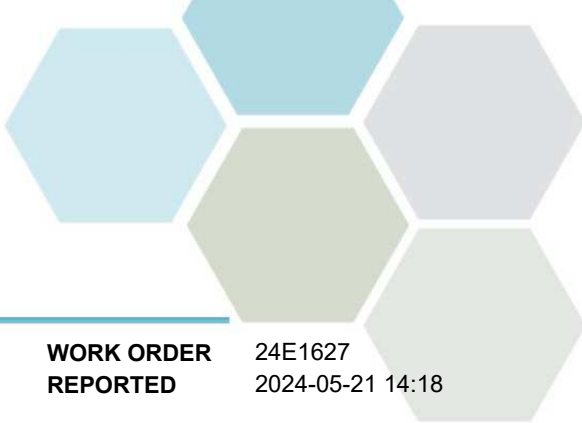
**General Parameters**

Conductivity (EC)	<b>341</b>	N/A	2.0 µS/cm	2024-05-21	
Nitrogen, Total Kjeldahl	<b>0.111</b>	N/A	0.050 mg/L	2024-05-21	
pH	<b>7.84</b>	7.0-10.5	0.10 pH units	2024-05-21	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050 mg/L	2024-05-16	
Turbidity	<b>0.53</b>	OG < 1	0.10 NTU	2024-05-14	

**Microbiological Parameters**

Coliforms, Total (Q-Tray)	<b>84</b>	MAC = 0	1 MPN/100 mL	2024-05-13	
E. coli (Q-Tray)	< 1	MAC = 0	1 MPN/100 mL	2024-05-13	

**Cherry Creek @ Hall (24E1627-03) | Matrix: Water | Sampled: 2024-05-12 14:00**



# TEST RESULTS

**REPORTED TO PROJECT** Cherry Ridge Management Creek Monitoring

**WORK ORDER REPORTED** 24E1627  
2024-05-21 14:18

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
---------	--------	-----------	----------	----------	-----------

**Cherry Creek @ Hall (24E1627-03) | Matrix: Water | Sampled: 2024-05-12 14:00, Continued**

**Anions**

Chloride	0.80	AO ≤ 250	0.10 mg/L	2024-05-14	
Nitrate (as N)	0.087	MAC = 10	0.010 mg/L	2024-05-14	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2024-05-14	
Sulfate	7.3	AO ≤ 500	1.0 mg/L	2024-05-14	

**Calculated Parameters**

Nitrate+Nitrite (as N)	0.0866	N/A	0.0100 mg/L	N/A	
Nitrogen, Total	0.465	N/A	0.0500 mg/L	N/A	

**General Parameters**

Conductivity (EC)	136	N/A	2.0 µS/cm	2024-05-21	
Nitrogen, Total Kjeldahl	0.378	N/A	0.050 mg/L	2024-05-21	
pH	6.87	7.0-10.5	0.10 pH units	2024-05-21	HT2
Phosphorus, Total (as P)	0.0655	N/A	0.0050 mg/L	2024-05-16	
Turbidity	21.5	OG < 1	0.10 NTU	2024-05-14	

**Microbiological Parameters**

Coliforms, Total (Q-Tray)	276	MAC = 0	1 MPN/100 mL	2024-05-13	
E. coli (Q-Tray)	1	MAC = 0	1 MPN/100 mL	2024-05-13	

**Shuswap River BC Hydro (24E1627-04) | Matrix: Water | Sampled: 2024-05-12 14:15**

**Anions**

Chloride	0.28	AO ≤ 250	0.10 mg/L	2024-05-14	
Nitrate (as N)	0.040	MAC = 10	0.010 mg/L	2024-05-14	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2024-05-14	
Sulfate	5.3	AO ≤ 500	1.0 mg/L	2024-05-14	

**Calculated Parameters**

Nitrate+Nitrite (as N)	0.0399	N/A	0.0100 mg/L	N/A	
Nitrogen, Total	0.280	N/A	0.0500 mg/L	N/A	

**General Parameters**

Conductivity (EC)	97.0	N/A	2.0 µS/cm	2024-05-21	
Nitrogen, Total Kjeldahl	0.240	N/A	0.050 mg/L	2024-05-21	
pH	6.69	7.0-10.5	0.10 pH units	2024-05-21	HT2
Phosphorus, Total (as P)	0.0168	N/A	0.0050 mg/L	2024-05-16	
Turbidity	8.25	OG < 1	0.10 NTU	2024-05-14	

**Microbiological Parameters**

Coliforms, Total (Q-Tray)	199	MAC = 0	1 MPN/100 mL	2024-05-13	
E. coli (Q-Tray)	6	MAC = 0	1 MPN/100 mL	2024-05-13	

**Ferry Creek (24E1627-05) | Matrix: Water | Sampled: 2024-05-12 14:40**



# TEST RESULTS

**REPORTED TO PROJECT** Cherry Ridge Management  
Creek Monitoring

**WORK ORDER REPORTED** 24E1627  
2024-05-21 14:18

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
<b>Ferry Creek (24E1627-05)   Matrix: Water   Sampled: 2024-05-12 14:40, Continued</b>					
<b>Anions</b>					
Chloride	0.16	AO ≤ 250	0.10 mg/L	2024-05-14	
Nitrate (as N)	0.011	MAC = 10	0.010 mg/L	2024-05-14	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2024-05-14	
Sulfate	2.8	AO ≤ 500	1.0 mg/L	2024-05-14	
<b>Calculated Parameters</b>					
Nitrate+Nitrite (as N)	0.0113	N/A	0.0100 mg/L	N/A	
Nitrogen, Total	0.472	N/A	0.0500 mg/L	N/A	
<b>General Parameters</b>					
Conductivity (EC)	57.0	N/A	2.0 µS/cm	2024-05-21	
Nitrogen, Total Kjeldahl	0.461	N/A	0.050 mg/L	2024-05-21	
pH	6.67	7.0-10.5	0.10 pH units	2024-05-21	HT2
Phosphorus, Total (as P)	0.0452	N/A	0.0050 mg/L	2024-05-16	
Turbidity	10.7	OG < 1	0.10 NTU	2024-05-14	
<b>Microbiological Parameters</b>					
Coliforms, Total (Q-Tray)	435	MAC = 0	1 MPN/100 mL	2024-05-13	
E. coli (Q-Tray)	< 1	MAC = 0	1 MPN/100 mL	2024-05-13	

**Sample Qualifiers:**

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.



## APPENDIX 1: SUPPORTING INFORMATION

**REPORTED TO PROJECT** Cherry Ridge Management Creek Monitoring

**WORK ORDER REPORTED** 24E1627  
2024-05-21 14:18

Analysis Description	Method Ref.	Technique	Accredited	Location
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Coliforms, Total in Water	SM 9223 (2016)	Quanti-Tray / Enzyme Substrate Endo Agar	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
E. coli in Water	SM 9223 (2016)	Quanti-Tray / Enzyme Substrate Endo Agar	✓	Kelowna
Nitrogen, Total Kjeldahl in Water	SM 4500-Norg D* (2021)	Block Digestion and Flow Injection Analysis	✓	Kelowna
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Phosphorus, Total in Water	SM 4500-P B.5* (2011) / SM 4500-P F (2021)	Persulfate Digestion / Automated Colorimetry (Ascorbic Acid)	✓	Kelowna
Turbidity in Water	SM 2130 B (2020)	Nephelometry	✓	Kelowna

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

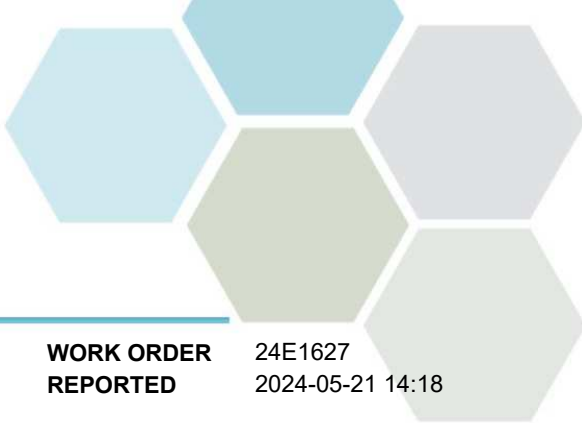
### Glossary of Terms:

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
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
MPN/100 mL	Most Probable Number per 100 millilitres
NTU	Nephelometric Turbidity Units
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
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 \(Health Canada, September 2022\)](#)

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



## APPENDIX 1: SUPPORTING INFORMATION

**REPORTED TO PROJECT** Cherry Ridge Management  
Creek Monitoring

**WORK ORDER REPORTED** 24E1627  
2024-05-21 14:18

**General Comments:**

The results in this report apply to the received 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. CarO will dispose of all samples within 30 days of sample receipt, unless otherwise agreed. 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](mailto:TeamCaro@caro.ca)

*Please note any regulatory guidelines applied to this report are added as a convenience to the client, at their request, to help provide some initial context to analytical results obtained. Although CARO makes every effort to ensure accuracy of the associated regulatory guideline(s) applied, the guidelines applied cannot be assumed to be correct due to a variety of factors and as such CARO Analytical Services assumes no liability or responsibility for the use of those guidelines to make any decisions. The original source of the regulation should be verified and a review of the guideline(s) should be validated as correct in order to make any decisions arising from the comparison of the analytical data obtained to the relevant regulatory guideline for one's particular circumstances. Further, CARO Analytical Services assumes no liability or responsibility for any loss attributed from the use of these guidelines in any way.*