



## CERTIFICATE OF ANALYSIS

**REPORTED TO** Elk River Alliance  
PO Box 2095, 1111 2nd Ave  
Fernie, BC V0B1M0

**ATTENTION** Kaileigh McCallum

**PO NUMBER**

**PROJECT** CBWM-2022

**PROJECT INFO** [info]

**WORK ORDER** 22K3344

**RECEIVED / TEMP** 2022-11-29 13:25 / 2.0°C

**REPORTED** 2022-12-06 16:40

**COC NUMBER** B90466

### 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>

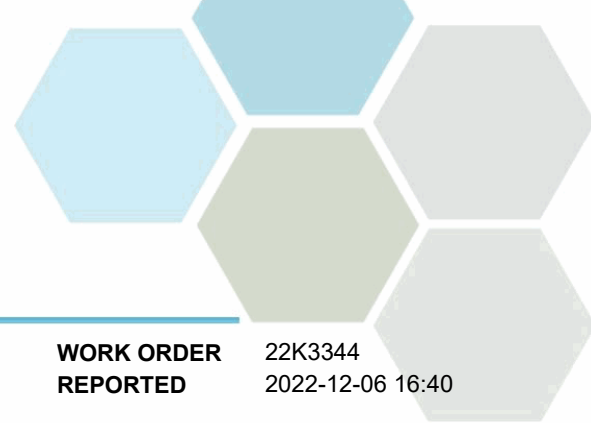
If you have any questions or concerns, please contact me at [TeamCaro@caro.ca](mailto:TeamCaro@caro.ca)

### 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** Elk River Alliance  
CBWM-2022

**WORK ORDER REPORTED** 22K3344  
2022-12-06 16:40

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
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**SF5001 - 20221128\_1145 (22K3344-01) | Matrix: Water | Sampled: 2022-11-28 11:45**

**Anions**

Chloride	0.20	AO ≤ 250	0.10 mg/L	2022-11-30	
Fluoride	< 0.10	MAC = 1.5	0.10 mg/L	2022-11-30	
Nitrate (as N)	0.044	MAC = 10	0.010 mg/L	2022-11-30	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2022-11-30	
Sulfate	5.6	AO ≤ 500	1.0 mg/L	2022-11-30	

**Calculated Parameters**

Hardness, Total (as CaCO3)	193	None Required	0.500 mg/L	N/A	
Langelier Index	0.4	N/A	-5.0	2022-12-06	CT6
Nitrogen, Organic	< 0.0500	N/A	0.0500 mg/L	N/A	
Solids, Total Dissolved	188	AO ≤ 500	1.00 mg/L	N/A	

**General Parameters**

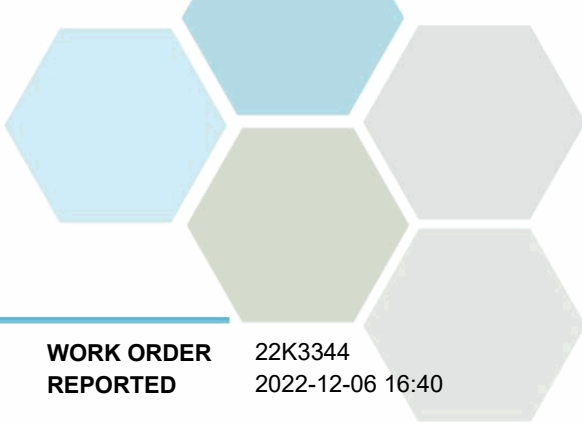
Alkalinity, Total (as CaCO3)	186	N/A	1.0 mg/L	2022-12-01	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0 mg/L	2022-12-01	
Alkalinity, Bicarbonate (as CaCO3)	186	N/A	1.0 mg/L	2022-12-01	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0 mg/L	2022-12-01	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0 mg/L	2022-12-01	
Ammonia, Total (as N)	< 0.050	None Required	0.050 mg/L	2022-12-06	
Carbon, Total Organic	< 0.50	N/A	0.50 mg/L	2022-11-30	
Colour, True	< 5.0	AO ≤ 15	5.0 CU	2022-12-02	HT1
Conductivity (EC)	339	N/A	2.0 µS/cm	2022-12-01	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020 mg/L	2022-11-30	
Nitrogen, Total Kjeldahl	< 0.050	N/A	0.050 mg/L	2022-12-02	
pH	7.95	7.0-10.5	0.10 pH units	2022-12-01	HT2
Phosphorus, Total (as P)	0.0075	N/A	0.0050 mg/L	2022-12-02	
Temperature, at pH	20.7	N/A	°C	2022-12-01	HT2
Turbidity	0.62	OG < 1	0.10 NTU	2022-11-30	
UV Transmittance @ 254 nm - Unfiltered	98.6	N/A	0.10 % T	2022-11-30	

**Microbiological Parameters**

Coliforms, Total	2	MAC = 0	1 CFU/100 mL	2022-11-29	
Background Colonies	2	N/A	1 CFU/100 mL	2022-11-29	
E. coli	< 1	MAC = 0	1 CFU/100 mL	2022-11-29	

**Total Metals**

Aluminum, total	0.0055	OG < 0.1	0.0050 mg/L	2022-12-03	
Antimony, total	< 0.00020	MAC = 0.006	0.00020 mg/L	2022-12-03	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050 mg/L	2022-12-03	
Barium, total	0.0321	MAC = 2	0.0050 mg/L	2022-12-03	
Boron, total	< 0.0500	MAC = 5	0.0500 mg/L	2022-12-03	
Cadmium, total	0.000036	MAC = 0.005	0.000010 mg/L	2022-12-03	
Calcium, total	53.9	None Required	0.20 mg/L	2022-12-03	
Chromium, total	0.00103	MAC = 0.05	0.00050 mg/L	2022-12-03	



## TEST RESULTS

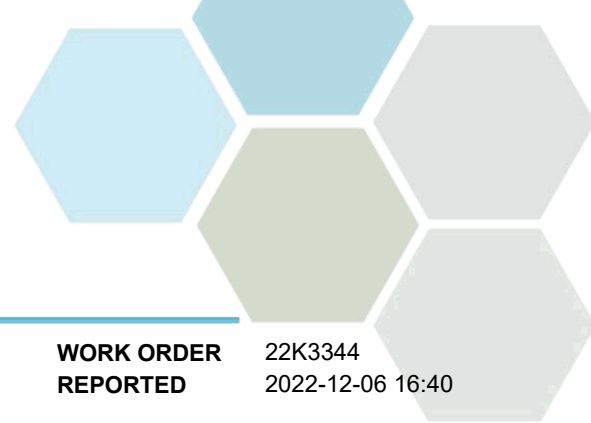
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Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
<b>SF5001 - 20221128_1145 (22K3344-01)   Matrix: Water   Sampled: 2022-11-28 11:45, Continued</b>					
<i>Total Metals, Continued</i>					
Cobalt, total	< 0.00010	N/A	0.00010 mg/L	2022-12-03	
Copper, total	< 0.00040	MAC = 2	0.00040 mg/L	2022-12-03	
Iron, total	< 0.010	AO ≤ 0.3	0.010 mg/L	2022-12-03	
Lead, total	< 0.00020	MAC = 0.005	0.00020 mg/L	2022-12-03	
Magnesium, total	<b>14.0</b>	None Required	0.010 mg/L	2022-12-03	
Manganese, total	<b>0.00028</b>	MAC = 0.12	0.00020 mg/L	2022-12-03	
Mercury, total	< 0.000010	MAC = 0.001	0.000010 mg/L	2022-12-05	
Molybdenum, total	<b>0.00086</b>	N/A	0.00010 mg/L	2022-12-03	
Nickel, total	< 0.00040	N/A	0.00040 mg/L	2022-12-03	
Potassium, total	<b>0.19</b>	N/A	0.10 mg/L	2022-12-03	
Selenium, total	<b>0.00070</b>	MAC = 0.05	0.00050 mg/L	2022-12-03	
Sodium, total	<b>0.54</b>	AO ≤ 200	0.10 mg/L	2022-12-03	
Strontium, total	<b>0.0548</b>	MAC = 7	0.0010 mg/L	2022-12-03	
Uranium, total	<b>0.000548</b>	MAC = 0.02	0.000020 mg/L	2022-12-03	
Zinc, total	< 0.0040	AO ≤ 5	0.0040 mg/L	2022-12-03	

**Sample Qualifiers:**

- CT6 Results were based on lab temperature & lab pH.
- 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.



## APPENDIX 1: SUPPORTING INFORMATION

**REPORTED TO PROJECT** Elk River Alliance  
CBWM-2022

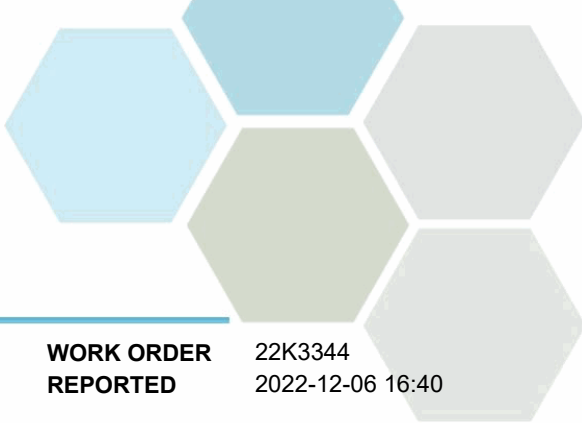
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Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2017)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2017)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2017)	Ion Chromatography	✓	Kelowna
Carbon, Total Organic in Water	SM 5310 B (2017)	Combustion, Infrared CO2 Detection	✓	Kelowna
Coliforms, Total in Water	SM 9222* (2017)	Membrane Filtration / Chromocult Agar	✓	Kelowna
Colour, True in Water	SM 2120 C (2017)	Spectrophotometry (456 nm)	✓	Kelowna
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
E. coli in Water	SM 9222* (2017)	Membrane Filtration / Chromocult Agar	✓	Kelowna
Hardness in Water	SM 2340 B* (2017)	Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Est)	✓	N/A
Langelier Index in Water	SM 2330 B (2017)	Calculation		N/A
Mercury, total in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
Nitrogen, Total Kjeldahl in Water	SM 4500-Norg D* (2017)	Block Digestion and Flow Injection Analysis	✓	Kelowna
pH in Water	SM 4500-H+ B (2017)	Electrometry	✓	Kelowna
Phosphorus, Total in Water	SM 4500-P B.5* (2011) / SM 4500-P F (2017)	Persulfate Digestion / Automated Colorimetry (Ascorbic Acid)	✓	Kelowna
Solids, Total Dissolved in Water	SM 1030 E (2017)	SM 1030 E (2011)		N/A
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Transmittance at 254 nm - Unfiltered in Water	SM 5910 B* (2017)	Ultraviolet Absorption	✓	Kelowna
Turbidity in Water	SM 2130 B (2017)	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)
% T	Percent Transmittance
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
AO	Aesthetic Objective
CFU/100 mL	Colony Forming Units per 100 millilitres
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
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



## APPENDIX 1: SUPPORTING INFORMATION

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**PROJECT** CBWM-2022

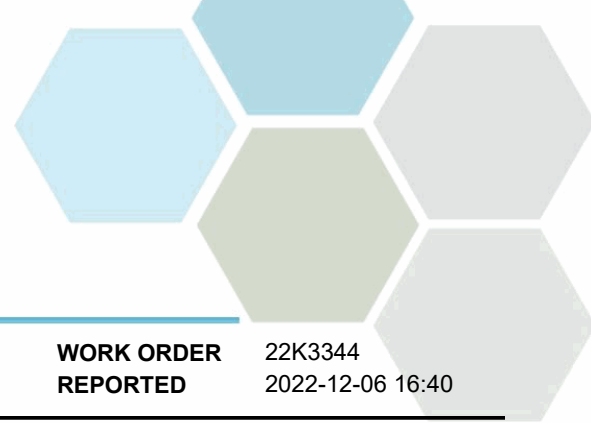
**WORK ORDER** 22K3344  
**REPORTED** 2022-12-06 16:40

**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. Samples will be disposed of 30 days after the test report has been issued or once samples expire, whichever comes first. Longer hold is possible if agreed to in writing.

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.*



## APPENDIX 2: QUALITY CONTROL RESULTS

**REPORTED TO PROJECT** Elk River Alliance  
CBWM-2022

**WORK ORDER REPORTED** 22K3344  
2022-12-06 16:40

The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk):** A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup):** An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS):** A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS):** A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM):** A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

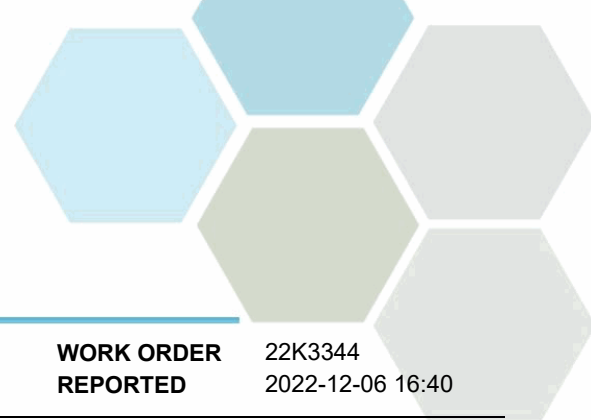
Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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### Anions, Batch B2K3330

Blank (B2K3330-BLK1)			Prepared: 2022-11-30, Analyzed: 2022-11-30						
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.010	0.010 mg/L							
Nitrite (as N)	< 0.010	0.010 mg/L							
Sulfate	< 0.5	0.5 mg/L							
LCS (B2K3330-BS1)			Prepared: 2022-11-30, Analyzed: 2022-11-30						
Chloride	16.0	0.10 mg/L	16.0		100	90-110			
Fluoride	4.19	0.10 mg/L	4.00		105	88-108			
Nitrate (as N)	4.14	0.010 mg/L	4.00		104	90-110			
Nitrite (as N)	1.97	0.010 mg/L	2.00		99	85-115			
Sulfate	15.8	0.5 mg/L	16.0		99	90-110			

### General Parameters, Batch B2K2946

Blank (B2K2946-BLK1)			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Carbon, Total Organic	< 0.50	0.50 mg/L							
Blank (B2K2946-BLK2)			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Carbon, Total Organic	< 0.50	0.50 mg/L							
Blank (B2K2946-BLK3)			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Carbon, Total Organic	< 0.50	0.50 mg/L							
Blank (B2K2946-BLK4)			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Carbon, Total Organic	< 0.50	0.50 mg/L							
LCS (B2K2946-BS1)			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Carbon, Total Organic	10.1	0.50 mg/L	10.0		101	78-116			
LCS (B2K2946-BS2)			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Carbon, Total Organic	9.19	0.50 mg/L	10.0		92	78-116			
LCS (B2K2946-BS3)			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Carbon, Total Organic	9.51	0.50 mg/L	10.0		95	78-116			



## APPENDIX 2: QUALITY CONTROL RESULTS

<b>REPORTED TO PROJECT</b>	Elk River Alliance CBWM-2022	<b>WORK ORDER REPORTED</b>	22K3344 2022-12-06 16:40
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Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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### General Parameters, Batch B2K2946, Continued

<b>LCS (B2K2946-BS4)</b>			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Carbon, Total Organic	9.40	0.50 mg/L	10.0		94	78-116			

### General Parameters, Batch B2K3360

<b>Blank (B2K3360-BLK1)</b>			Prepared: 2022-11-30, Analyzed: 2022-11-30						
Cyanide, Total	< 0.0020	0.0020 mg/L							

<b>LCS (B2K3360-BS1)</b>			Prepared: 2022-11-30, Analyzed: 2022-11-30						
Cyanide, Total	0.0195	0.0020 mg/L	0.0200		97	82-120			

<b>LCS Dup (B2K3360-BSD1)</b>			Prepared: 2022-11-30, Analyzed: 2022-11-30						
Cyanide, Total	0.0206	0.0020 mg/L	0.0200		103	82-120	6	10	

### General Parameters, Batch B2K3368

<b>LCS (B2K3368-BS1)</b>			Prepared: 2022-11-30, Analyzed: 2022-11-30						
UV Transmittance @ 254 nm - Unfiltered	35.9	0.10 % T	34.9		103	95-105			

### General Parameters, Batch B2K3369

<b>Blank (B2K3369-BLK1)</b>			Prepared: 2022-11-30, Analyzed: 2022-11-30						
Turbidity	< 0.10	0.10 NTU							

<b>Blank (B2K3369-BLK2)</b>			Prepared: 2022-11-30, Analyzed: 2022-11-30						
Turbidity	< 0.10	0.10 NTU							

<b>LCS (B2K3369-BS1)</b>			Prepared: 2022-11-30, Analyzed: 2022-11-30						
Turbidity	15.5	0.10 NTU	14.6		106	90-110			

<b>LCS (B2K3369-BS2)</b>			Prepared: 2022-11-30, Analyzed: 2022-11-30						
Turbidity	15.4	0.10 NTU	14.6		105	90-110			

### General Parameters, Batch B2L0012

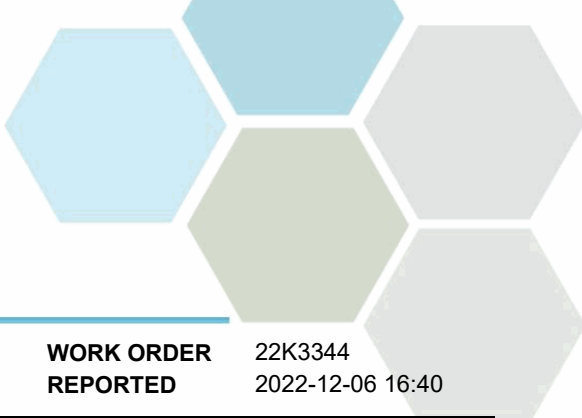
<b>Blank (B2L0012-BLK1)</b>			Prepared: 2022-12-01, Analyzed: 2022-12-01						
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Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
Temperature, at pH	20.2	°C							

<b>Blank (B2L0012-BLK2)</b>			Prepared: 2022-12-01, Analyzed: 2022-12-01						
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Alkalinity, Total (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0 mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0 mg/L							
Conductivity (EC)	< 2.0	2.0 µS/cm							
Temperature, at pH	20.1	°C							

<b>LCS (B2L0012-BS1)</b>			Prepared: 2022-12-01, Analyzed: 2022-12-01						
Alkalinity, Total (as CaCO3)	103	1.0 mg/L	100		103	80-120			

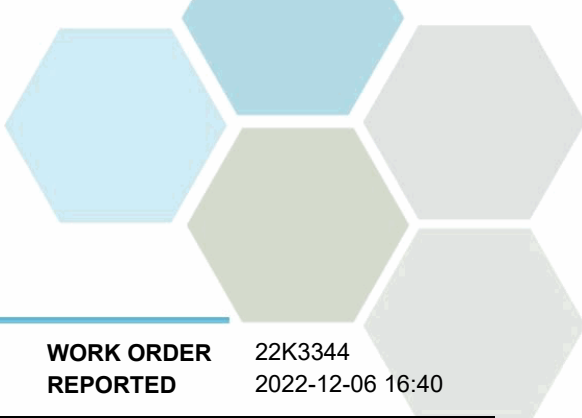


## APPENDIX 2: QUALITY CONTROL RESULTS

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 CBWM-2022
 
**WORK ORDER REPORTED** 22K3344  
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Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
<b>General Parameters, Batch B2L0012, Continued</b>									
<b>LCS (B2L0012-BS2)</b>			Prepared: 2022-12-01, Analyzed: 2022-12-01						
Alkalinity, Total (as CaCO3)	110	1.0 mg/L	100		110	80-120			
<b>LCS (B2L0012-BS3)</b>			Prepared: 2022-12-01, Analyzed: 2022-12-01						
Conductivity (EC)	1410	2.0 µS/cm	1410		100	95-105			
<b>LCS (B2L0012-BS4)</b>			Prepared: 2022-12-01, Analyzed: 2022-12-01						
Conductivity (EC)	1410	2.0 µS/cm	1410		100	95-105			
<b>Reference (B2L0012-SRM1)</b>			Prepared: 2022-12-01, Analyzed: 2022-12-01						
pH	7.01	0.10 pH units	7.01		100	98-102			
<b>Reference (B2L0012-SRM2)</b>			Prepared: 2022-12-01, Analyzed: 2022-12-01						
pH	7.01	0.10 pH units	7.01		100	98-102			
<b>General Parameters, Batch B2L0022</b>									
<b>Blank (B2L0022-BLK1)</b>			Prepared: 2022-12-02, Analyzed: 2022-12-02						
Colour, True	< 5.0	5.0 CU							
<b>LCS (B2L0022-BS1)</b>			Prepared: 2022-12-02, Analyzed: 2022-12-02						
Colour, True	21	5.0 CU	20.0		106	85-115			
<b>General Parameters, Batch B2L0052</b>									
<b>Blank (B2L0052-BLK1)</b>			Prepared: 2022-12-01, Analyzed: 2022-12-02						
Nitrogen, Total Kjeldahl	< 0.050	0.050 mg/L							
<b>Blank (B2L0052-BLK2)</b>			Prepared: 2022-12-01, Analyzed: 2022-12-02						
Nitrogen, Total Kjeldahl	< 0.050	0.050 mg/L							
<b>LCS (B2L0052-BS1)</b>			Prepared: 2022-12-01, Analyzed: 2022-12-02						
Nitrogen, Total Kjeldahl	0.980	0.050 mg/L	1.00		98	85-115			
<b>LCS (B2L0052-BS2)</b>			Prepared: 2022-12-01, Analyzed: 2022-12-02						
Nitrogen, Total Kjeldahl	0.979	0.050 mg/L	1.00		98	85-115			
<b>General Parameters, Batch B2L0143</b>									
<b>Blank (B2L0143-BLK2)</b>			Prepared: 2022-12-02, Analyzed: 2022-12-02						
Phosphorus, Total (as P)	< 0.0050	0.0050 mg/L							
<b>Blank (B2L0143-BLK3)</b>			Prepared: 2022-12-02, Analyzed: 2022-12-02						
Phosphorus, Total (as P)	< 0.0050	0.0050 mg/L							
<b>LCS (B2L0143-BS2)</b>			Prepared: 2022-12-02, Analyzed: 2022-12-02						
Phosphorus, Total (as P)	0.106	0.0050 mg/L	0.100		106	85-115			
<b>LCS (B2L0143-BS3)</b>			Prepared: 2022-12-02, Analyzed: 2022-12-02						
Phosphorus, Total (as P)	0.106	0.0050 mg/L	0.100		106	85-115			
<b>General Parameters, Batch B2L0495</b>									
<b>Blank (B2L0495-BLK1)</b>			Prepared: 2022-12-06, Analyzed: 2022-12-06						
Ammonia, Total (as N)	0.041	0.020 mg/L							





## APPENDIX 2: QUALITY CONTROL RESULTS

<b>REPORTED TO PROJECT</b>	Elk River Alliance CBWM-2022	<b>WORK ORDER REPORTED</b>	22K3344 2022-12-06 16:40
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Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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### General Parameters, Batch B2L0495, Continued

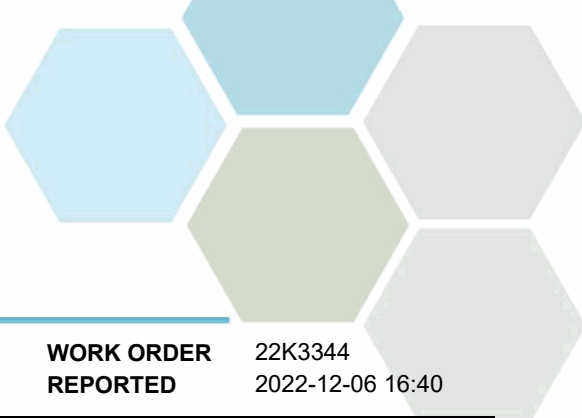
<b>Blank (B2L0495-BLK2)</b>			Prepared: 2022-12-06, Analyzed: 2022-12-06						
Ammonia, Total (as N)	< 0.020	0.020 mg/L							
<b>LCS (B2L0495-BS2)</b>			Prepared: 2022-12-06, Analyzed: 2022-12-06						
Ammonia, Total (as N)	1.02	0.020 mg/L	1.00		102	90-115			

### Microbiological Parameters, Batch B2K3231

<b>Blank (B2K3231-BLK1)</b>			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
<b>Blank (B2K3231-BLK2)</b>			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
<b>Blank (B2K3231-BLK3)</b>			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
<b>Blank (B2K3231-BLK4)</b>			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
<b>Blank (B2K3231-BLK5)</b>			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
<b>Blank (B2K3231-BLK6)</b>			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
<b>Blank (B2K3231-BLK7)</b>			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
<b>Blank (B2K3231-BLK8)</b>			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
<b>Blank (B2K3231-BLK9)</b>			Prepared: 2022-11-29, Analyzed: 2022-11-29						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							

### Total Metals, Batch B2L0242

<b>Blank (B2L0242-BLK1)</b>			Prepared: 2022-12-02, Analyzed: 2022-12-03						
Aluminum, total	< 0.0050	0.0050 mg/L							
Antimony, total	< 0.00020	0.00020 mg/L							
Arsenic, total	< 0.00050	0.00050 mg/L							
Barium, total	< 0.0050	0.0050 mg/L							
Boron, total	< 0.0500	0.0500 mg/L							
Cadmium, total	< 0.000010	0.000010 mg/L							
Calcium, total	< 0.20	0.20 mg/L							
Chromium, total	< 0.00050	0.00050 mg/L							
Cobalt, total	< 0.00010	0.00010 mg/L							
Copper, total	< 0.00040	0.00040 mg/L							



## APPENDIX 2: QUALITY CONTROL RESULTS

**REPORTED TO PROJECT** Elk River Alliance  
CBWM-2022

**WORK ORDER REPORTED** 22K3344  
2022-12-06 16:40

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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**Total Metals, Batch B2L0242, Continued**

**Blank (B2L0242-BLK1), Continued**

Prepared: 2022-12-02, Analyzed: 2022-12-03

Iron, total	< 0.010	0.010 mg/L							
Lead, total	< 0.00020	0.00020 mg/L							
Magnesium, total	< 0.010	0.010 mg/L							
Manganese, total	< 0.00020	0.00020 mg/L							
Molybdenum, total	< 0.00010	0.00010 mg/L							
Nickel, total	< 0.00040	0.00040 mg/L							
Potassium, total	< 0.10	0.10 mg/L							
Selenium, total	< 0.00050	0.00050 mg/L							
Sodium, total	< 0.10	0.10 mg/L							
Strontium, total	< 0.0010	0.0010 mg/L							
Uranium, total	< 0.000020	0.000020 mg/L							
Zinc, total	< 0.0040	0.0040 mg/L							

**LCS (B2L0242-BS1)**

Prepared: 2022-12-02, Analyzed: 2022-12-03

Aluminum, total	3.94	0.0050 mg/L	4.00		98	80-120			
Antimony, total	0.0399	0.00020 mg/L	0.0400		100	80-120			
Arsenic, total	0.0403	0.00050 mg/L	0.0400		101	80-120			
Barium, total	0.0395	0.0050 mg/L	0.0400		99	80-120			
Boron, total	< 0.0500	0.0500 mg/L	0.0400		107	80-120			
Cadmium, total	0.0400	0.000010 mg/L	0.0400		100	80-120			
Calcium, total	3.97	0.20 mg/L	4.00		99	80-120			
Chromium, total	0.0399	0.00050 mg/L	0.0400		100	80-120			
Cobalt, total	0.0392	0.00010 mg/L	0.0400		98	80-120			
Copper, total	0.0389	0.00040 mg/L	0.0400		97	80-120			
Iron, total	3.97	0.010 mg/L	4.00		99	80-120			
Lead, total	0.0392	0.00020 mg/L	0.0400		98	80-120			
Magnesium, total	3.97	0.010 mg/L	4.00		99	80-120			
Manganese, total	0.0400	0.00020 mg/L	0.0400		100	80-120			
Molybdenum, total	0.0394	0.00010 mg/L	0.0400		99	80-120			
Nickel, total	0.0397	0.00040 mg/L	0.0400		99	80-120			
Potassium, total	3.96	0.10 mg/L	4.00		99	80-120			
Selenium, total	0.0390	0.00050 mg/L	0.0400		97	80-120			
Sodium, total	3.96	0.10 mg/L	4.00		99	80-120			
Strontium, total	0.0406	0.0010 mg/L	0.0400		102	80-120			
Uranium, total	0.0394	0.000020 mg/L	0.0400		98	80-120			
Zinc, total	0.0395	0.0040 mg/L	0.0400		99	80-120			

**Total Metals, Batch B2L0392**

**Blank (B2L0392-BLK1)**

Prepared: 2022-12-05, Analyzed: 2022-12-05

Mercury, total	< 0.000010	0.000010 mg/L							
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**LCS (B2L0392-BS1)**

Prepared: 2022-12-05, Analyzed: 2022-12-05

Mercury, total	0.000485	0.000010 mg/L	0.000500		97	80-120			
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