

CERTIFICATE OF ANALYSIS

REPORTED TO Slokan River Streamkeepers
PO Box 47
Winlaw, BC V0G 2J0

ATTENTION Dominique Monnier

PO NUMBER

PROJECT SIFCO

PROJECT INFO

WORK ORDER 2212441

RECEIVED / TEMP 2022-09-19 08:08 / 18.1°C

REPORTED 2022-10-05 15:23

COC NUMBER B122582

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.

Work Order Comments:

Custody Seals Intact: -

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

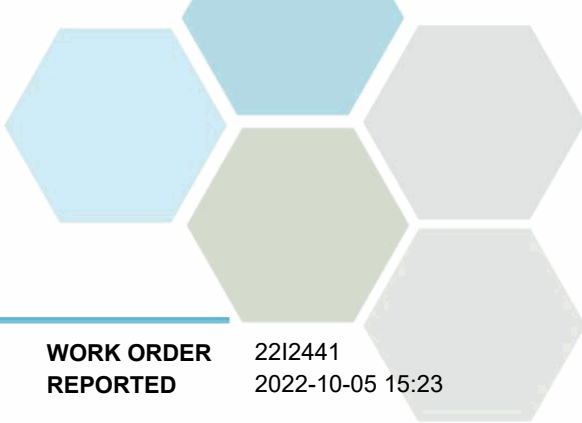
If you have any questions or concerns, please contact me at TeamCaro@caro.ca

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 | #108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Slocan River Streamkeepers
SIFCO

WORK ORDER REPORTED 2212441
2022-10-05 15:23

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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WIN-WQ01 (2212441-01) | Matrix: Water | Sampled: 2022-09-16 10:30

Anions

Nitrate+Nitrite (as N)	0.0254	N/A	0.0050	mg/L	2022-09-24	
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Calculated Parameters

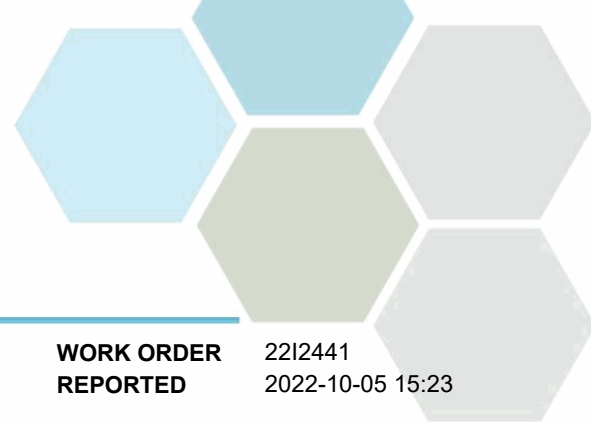
Hardness, Total (as CaCO3)	61.9	None Required	0.500	mg/L	N/A	
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General Parameters

Nitrogen, Total Kjeldahl	< 0.050	N/A	0.050	mg/L	2022-09-25	
Phosphorus, Total (as P)	0.0085	N/A	0.0050	mg/L	2022-09-22	

Total Metals

Aluminum, total	0.0117	OG < 0.1	0.0050	mg/L	2022-09-22	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2022-09-22	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2022-09-22	
Barium, total	0.0448	MAC = 2	0.0050	mg/L	2022-09-22	
Beryllium, total	< 0.00010	N/A	0.00010	mg/L	2022-09-22	
Bismuth, total	< 0.00010	N/A	0.00010	mg/L	2022-09-22	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2022-09-22	
Cadmium, total	< 0.000010	MAC = 0.005	0.000010	mg/L	2022-09-22	
Calcium, total	21.0	None Required	0.20	mg/L	2022-09-22	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2022-09-22	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2022-09-22	
Copper, total	< 0.00040	MAC = 2	0.00040	mg/L	2022-09-22	
Iron, total	< 0.010	AO ≤ 0.3	0.010	mg/L	2022-09-22	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2022-09-22	
Lithium, total	0.00043	N/A	0.00010	mg/L	2022-09-22	
Magnesium, total	2.28	None Required	0.010	mg/L	2022-09-22	
Manganese, total	0.00089	MAC = 0.12	0.00020	mg/L	2022-09-24	
Molybdenum, total	0.00146	N/A	0.00010	mg/L	2022-09-22	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2022-09-22	
Phosphorus, total	< 0.050	N/A	0.050	mg/L	2022-09-22	
Potassium, total	0.57	N/A	0.10	mg/L	2022-09-22	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2022-09-22	
Silicon, total	5.3	N/A	1.0	mg/L	2022-09-22	
Silver, total	< 0.000050	None Required	0.000050	mg/L	2022-09-22	
Sodium, total	1.65	AO ≤ 200	0.10	mg/L	2022-09-22	
Strontium, total	0.628	MAC = 7	0.0010	mg/L	2022-09-22	
Sulfur, total	3.2	N/A	3.0	mg/L	2022-09-22	
Tellurium, total	< 0.00050	N/A	0.00050	mg/L	2022-09-22	
Thallium, total	< 0.000020	N/A	0.000020	mg/L	2022-09-22	
Thorium, total	< 0.00010	N/A	0.00010	mg/L	2022-09-22	
Tin, total	< 0.00020	N/A	0.00020	mg/L	2022-09-22	
Titanium, total	< 0.0050	N/A	0.0050	mg/L	2022-09-22	
Tungsten, total	< 0.0002	N/A	0.0002	mg/L	2022-09-22	
Uranium, total	0.000784	MAC = 0.02	0.000020	mg/L	2022-09-22	



TEST RESULTS

REPORTED TO PROJECT Slocan River Streamkeepers
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WORK ORDER REPORTED 2212441
2022-10-05 15:23

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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WIN-WQ01 (2212441-01) | Matrix: Water | Sampled: 2022-09-16 10:30, Continued

Total Metals, Continued

Vanadium, total	< 0.0050	N/A	0.0050	mg/L	2022-09-22	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2022-09-22	
Zirconium, total	< 0.00010	N/A	0.00010	mg/L	2022-09-22	

TRO-WQ01 (2212441-02) | Matrix: Water | Sampled: 2022-09-16 09:30

Anions

Nitrate+Nitrite (as N)	0.0544	N/A	0.0050	mg/L	2022-09-24	
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Calculated Parameters

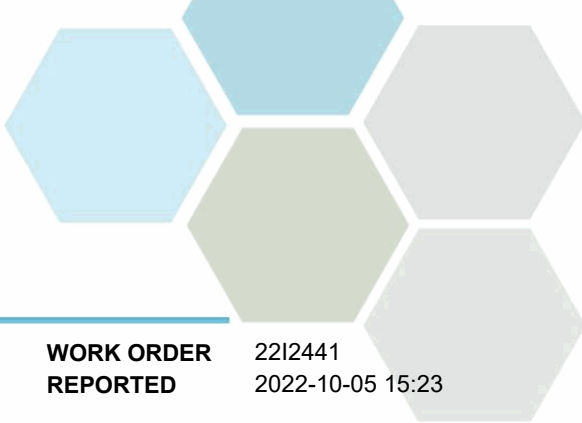
Hardness, Total (as CaCO3)	44.8	None Required	0.500	mg/L	N/A	
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General Parameters

Nitrogen, Total Kjeldahl	0.077	N/A	0.050	mg/L	2022-09-25	
Phosphorus, Total (as P)	0.0074	N/A	0.0050	mg/L	2022-09-22	

Total Metals

Aluminum, total	0.0190	OG < 0.1	0.0050	mg/L	2022-09-22	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2022-09-22	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2022-09-22	
Barium, total	0.0218	MAC = 2	0.0050	mg/L	2022-09-22	
Beryllium, total	< 0.00010	N/A	0.00010	mg/L	2022-09-22	
Bismuth, total	< 0.00010	N/A	0.00010	mg/L	2022-09-22	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2022-09-22	
Cadmium, total	< 0.000010	MAC = 0.005	0.000010	mg/L	2022-09-22	
Calcium, total	15.6	None Required	0.20	mg/L	2022-09-22	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2022-09-22	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2022-09-22	
Copper, total	< 0.00040	MAC = 2	0.00040	mg/L	2022-09-22	
Iron, total	0.011	AO ≤ 0.3	0.010	mg/L	2022-09-22	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2022-09-22	
Lithium, total	0.00079	N/A	0.00010	mg/L	2022-09-22	
Magnesium, total	1.41	None Required	0.010	mg/L	2022-09-22	
Manganese, total	0.00134	MAC = 0.12	0.00020	mg/L	2022-09-22	
Molybdenum, total	0.00059	N/A	0.00010	mg/L	2022-09-22	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2022-09-22	
Phosphorus, total	< 0.050	N/A	0.050	mg/L	2022-09-22	
Potassium, total	0.56	N/A	0.10	mg/L	2022-09-22	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2022-09-22	
Silicon, total	4.8	N/A	1.0	mg/L	2022-09-22	
Silver, total	< 0.000050	None Required	0.000050	mg/L	2022-09-22	
Sodium, total	1.54	AO ≤ 200	0.10	mg/L	2022-09-22	
Strontium, total	0.289	MAC = 7	0.0010	mg/L	2022-09-22	
Sulfur, total	< 3.0	N/A	3.0	mg/L	2022-09-22	

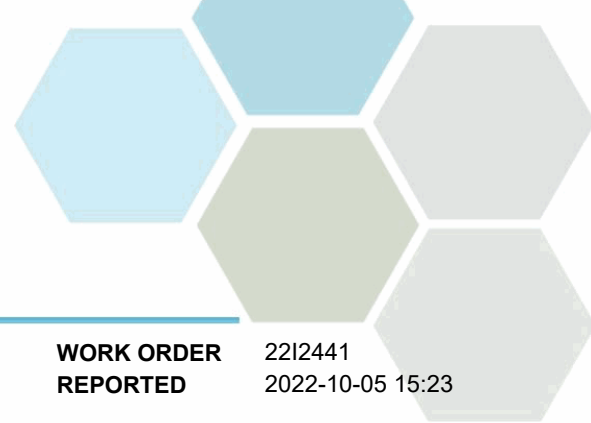


TEST RESULTS

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SIFCO

WORK ORDER REPORTED 2212441
2022-10-05 15:23

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
TRO-WQ01 (2212441-02) Matrix: Water Sampled: 2022-09-16 09:30, Continued						
<i>Total Metals, Continued</i>						
Tellurium, total	< 0.00050	N/A	0.00050	mg/L	2022-09-22	
Thallium, total	< 0.000020	N/A	0.000020	mg/L	2022-09-22	
Thorium, total	< 0.00010	N/A	0.00010	mg/L	2022-09-22	
Tin, total	< 0.00020	N/A	0.00020	mg/L	2022-09-22	
Titanium, total	< 0.0050	N/A	0.0050	mg/L	2022-09-22	
Tungsten, total	< 0.0002	N/A	0.0002	mg/L	2022-09-22	
Uranium, total	0.00148	MAC = 0.02	0.000020	mg/L	2022-09-22	
Vanadium, total	< 0.0050	N/A	0.0050	mg/L	2022-09-22	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2022-09-22	
Zirconium, total	< 0.00010	N/A	0.00010	mg/L	2022-09-22	



APPENDIX 1: SUPPORTING INFORMATION

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WORK ORDER REPORTED 2212441
2022-10-05 15:23

Analysis Description	Method Ref.	Technique	Accredited	Location
Hardness in Water	SM 2340 B* (2017)	Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Est)	✓	N/A
Nitrate+Nitrite in Water	SM 4500-NO3- F (2017)	Automated Colorimetry (Cadmium Reduction)	✓	Kelowna
Nitrogen, Total Kjeldahl in Water	SM 4500-Norg D* (2017)	Block Digestion and Flow Injection Analysis	✓	Kelowna
Phosphorus, Total in Water	SM 4500-P B.5* (2011) / SM 4500-P F (2017)	Persulfate Digestion / Automated Colorimetry (Ascorbic Acid)	✓	Kelowna
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond

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
OG	Operational Guideline (treated water)
EPA	United States Environmental Protection Agency Test Methods
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 \(Health Canada, June 2019\)](#)

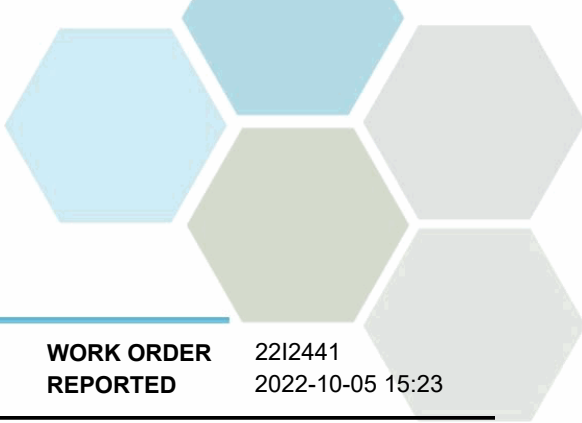
Note: In some cases, the values displayed on the report represent the lowest guideline and are to be verified by the end user

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 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

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 Slocan River Streamkeepers
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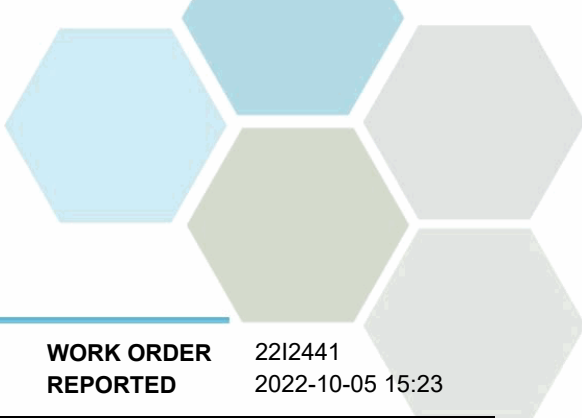
WORK ORDER REPORTED 2212441
2022-10-05 15:23

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
Anions, Batch B212739									
Blank (B212739-BLK1)			Prepared: 2022-09-24, Analyzed: 2022-09-24						
Nitrate+Nitrite (as N)	< 0.0050	0.0050 mg/L							
Blank (B212739-BLK2)			Prepared: 2022-09-24, Analyzed: 2022-09-24						
Nitrate+Nitrite (as N)	< 0.0050	0.0050 mg/L							
Blank (B212739-BLK3)			Prepared: 2022-09-24, Analyzed: 2022-09-24						
Nitrate+Nitrite (as N)	< 0.0050	0.0050 mg/L							
LCS (B212739-BS1)			Prepared: 2022-09-24, Analyzed: 2022-09-24						
Nitrate+Nitrite (as N)	0.519	0.0050 mg/L	0.500		104	91-108			
LCS (B212739-BS2)			Prepared: 2022-09-24, Analyzed: 2022-09-24						
Nitrate+Nitrite (as N)	0.515	0.0050 mg/L	0.500		103	91-108			
LCS (B212739-BS3)			Prepared: 2022-09-24, Analyzed: 2022-09-24						
Nitrate+Nitrite (as N)	0.516	0.0050 mg/L	0.500		103	91-108			
General Parameters, Batch B212455									
Blank (B212455-BLK1)			Prepared: 2022-09-21, Analyzed: 2022-09-22						
Phosphorus, Total (as P)	< 0.0050	0.0050 mg/L							
Blank (B212455-BLK3)			Prepared: 2022-09-21, Analyzed: 2022-09-22						
Phosphorus, Total (as P)	< 0.0050	0.0050 mg/L							
LCS (B212455-BS1)			Prepared: 2022-09-21, Analyzed: 2022-09-22						
Phosphorus, Total (as P)	0.110	0.0050 mg/L	0.100		110	85-115			
LCS (B212455-BS3)			Prepared: 2022-09-21, Analyzed: 2022-09-22						
Phosphorus, Total (as P)	0.110	0.0050 mg/L	0.100		110	85-115			
Duplicate (B212455-DUP3)			Source: 2212441-02		Prepared: 2022-09-21, Analyzed: 2022-09-22				
Phosphorus, Total (as P)	0.0083	0.0050 mg/L		0.0074					15
Matrix Spike (B212455-MS3)			Source: 2212441-02		Prepared: 2022-09-21, Analyzed: 2022-09-22				
Phosphorus, Total (as P)	0.109	0.0050 mg/L	0.102	0.0074	99	70-125			



APPENDIX 2: QUALITY CONTROL RESULTS

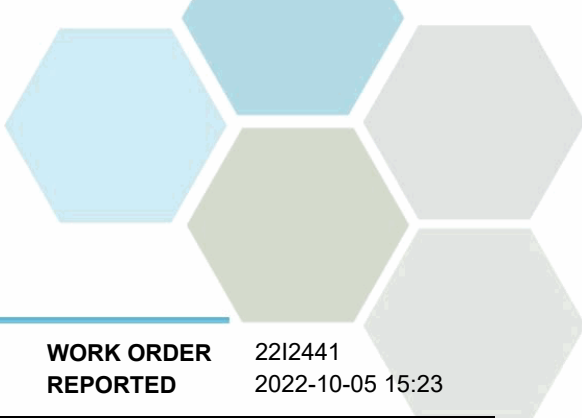
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WORK ORDER REPORTED 2212441
2022-10-05 15:23

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B212819									
Blank (B212819-BLK1)			Prepared: 2022-09-24, Analyzed: 2022-09-25						
Nitrogen, Total Kjeldahl	< 0.050	0.050 mg/L							
Blank (B212819-BLK2)			Prepared: 2022-09-24, Analyzed: 2022-09-25						
Nitrogen, Total Kjeldahl	< 0.050	0.050 mg/L							
LCS (B212819-BS1)			Prepared: 2022-09-24, Analyzed: 2022-09-25						
Nitrogen, Total Kjeldahl	0.920	0.050 mg/L	1.00		92	85-115			
LCS (B212819-BS2)			Prepared: 2022-09-24, Analyzed: 2022-09-25						
Nitrogen, Total Kjeldahl	0.927	0.050 mg/L	1.00		93	85-115			
Duplicate (B212819-DUP2)			Source: 2212441-01		Prepared: 2022-09-24, Analyzed: 2022-09-25				
Nitrogen, Total Kjeldahl	< 0.050	0.050 mg/L		< 0.050					15
Matrix Spike (B212819-MS2)			Source: 2212441-01		Prepared: 2022-09-24, Analyzed: 2022-09-25				
Nitrogen, Total Kjeldahl	0.909	0.050 mg/L	1.00	< 0.050	88	65-135			

Total Metals, Batch B212468

Blank (B212468-BLK1)			Prepared: 2022-09-21, Analyzed: 2022-09-22						
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							
Beryllium, total	< 0.00010	0.00010 mg/L							
Bismuth, total	< 0.00010	0.00010 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							
Iron, total	< 0.010	0.010 mg/L							
Lead, total	< 0.00020	0.00020 mg/L							
Lithium, total	< 0.00010	0.00010 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							
Phosphorus, total	< 0.050	0.050 mg/L							
Potassium, total	< 0.10	0.10 mg/L							
Selenium, total	< 0.00050	0.00050 mg/L							
Silicon, total	< 1.0	1.0 mg/L							
Silver, total	< 0.000050	0.000050 mg/L							
Sodium, total	< 0.10	0.10 mg/L							
Strontium, total	< 0.0010	0.0010 mg/L							
Sulfur, total	< 3.0	3.0 mg/L							
Tellurium, total	< 0.00050	0.00050 mg/L							
Thallium, total	< 0.000020	0.000020 mg/L							
Thorium, total	< 0.00010	0.00010 mg/L							
Tin, total	< 0.00020	0.00020 mg/L							
Titanium, total	< 0.0050	0.0050 mg/L							
Tungsten, total	< 0.0002	0.0002 mg/L							
Uranium, total	< 0.000020	0.000020 mg/L							
Vanadium, total	< 0.0050	0.0050 mg/L							
Zinc, total	< 0.0040	0.0040 mg/L							



APPENDIX 2: QUALITY CONTROL RESULTS

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2022-10-05 15:23

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Total Metals, Batch B212468, Continued

Blank (B212468-BLK1), Continued

Prepared: 2022-09-21, Analyzed: 2022-09-22

Zirconium, total	< 0.00010	0.00010 mg/L							
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LCS (B212468-BS1)

Prepared: 2022-09-21, Analyzed: 2022-09-22

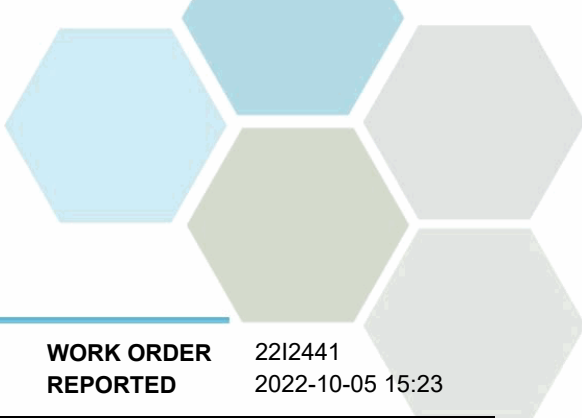
Aluminum, total	3.99	0.0050 mg/L	4.00		100	80-120			
Antimony, total	0.0400	0.00020 mg/L	0.0400		100	80-120			
Arsenic, total	0.0410	0.00050 mg/L	0.0400		103	80-120			
Barium, total	0.0405	0.0050 mg/L	0.0400		101	80-120			
Beryllium, total	0.0389	0.00010 mg/L	0.0400		97	80-120			
Bismuth, total	0.0396	0.00010 mg/L	0.0400		99	80-120			
Boron, total	< 0.0500	0.0500 mg/L	0.0400		103	80-120			
Cadmium, total	0.0404	0.000010 mg/L	0.0400		101	80-120			
Calcium, total	3.83	0.20 mg/L	4.00		96	80-120			
Chromium, total	0.0403	0.00050 mg/L	0.0400		101	80-120			
Cobalt, total	0.0402	0.00010 mg/L	0.0400		100	80-120			
Copper, total	0.0402	0.00040 mg/L	0.0400		101	80-120			
Iron, total	3.99	0.010 mg/L	4.00		100	80-120			
Lead, total	0.0399	0.00020 mg/L	0.0400		100	80-120			
Lithium, total	0.0389	0.00010 mg/L	0.0400		97	80-120			
Magnesium, total	4.05	0.010 mg/L	4.00		101	80-120			
Manganese, total	0.0401	0.00020 mg/L	0.0400		100	80-120			
Molybdenum, total	0.0398	0.00010 mg/L	0.0400		99	80-120			
Nickel, total	0.0398	0.00040 mg/L	0.0400		99	80-120			
Phosphorus, total	4.05	0.050 mg/L	4.00		101	80-120			
Potassium, total	4.01	0.10 mg/L	4.00		100	80-120			
Selenium, total	0.0399	0.00050 mg/L	0.0400		100	80-120			
Silicon, total	3.9	1.0 mg/L	4.00		97	80-120			
Silver, total	0.0406	0.000050 mg/L	0.0400		102	80-120			
Sodium, total	4.03	0.10 mg/L	4.00		101	80-120			
Strontium, total	0.0403	0.0010 mg/L	0.0400		101	80-120			
Sulfur, total	40.4	3.0 mg/L	40.0		101	80-120			
Tellurium, total	0.0392	0.00050 mg/L	0.0400		98	80-120			
Thallium, total	0.0407	0.000020 mg/L	0.0400		102	80-120			
Thorium, total	0.0397	0.00010 mg/L	0.0400		99	80-120			
Tin, total	0.0413	0.00020 mg/L	0.0400		103	80-120			
Titanium, total	0.0403	0.0050 mg/L	0.0400		101	80-120			
Tungsten, total	0.0398	0.0002 mg/L	0.0400		99	80-120			
Uranium, total	0.0415	0.000020 mg/L	0.0400		104	80-120			
Vanadium, total	0.0398	0.0050 mg/L	0.0400		100	80-120			
Zinc, total	0.0403	0.0040 mg/L	0.0400		101	80-120			
Zirconium, total	0.0407	0.00010 mg/L	0.0400		102	80-120			

Duplicate (B212468-DUP1)

Source: 2212441-01

Prepared: 2022-09-21, Analyzed: 2022-09-22

Aluminum, total	0.0123	0.0050 mg/L	0.0117					20	
Antimony, total	< 0.00020	0.00020 mg/L	< 0.00020					20	
Arsenic, total	< 0.00050	0.00050 mg/L	< 0.00050					20	
Barium, total	0.0438	0.0050 mg/L	0.0448				2	20	
Beryllium, total	< 0.00010	0.00010 mg/L	< 0.00010					20	
Bismuth, total	< 0.00010	0.00010 mg/L	< 0.00010					20	
Boron, total	< 0.0500	0.0500 mg/L	< 0.0500					20	
Cadmium, total	< 0.000010	0.000010 mg/L	< 0.000010					20	
Calcium, total	22.6	0.20 mg/L	21.0				7	20	
Chromium, total	< 0.00050	0.00050 mg/L	< 0.00050					20	
Cobalt, total	< 0.00010	0.00010 mg/L	< 0.00010					20	
Copper, total	< 0.00040	0.00040 mg/L	< 0.00040					20	
Iron, total	< 0.010	0.010 mg/L	< 0.010					20	
Lead, total	< 0.00020	0.00020 mg/L	< 0.00020					20	
Lithium, total	0.00047	0.00010 mg/L	0.00043					20	



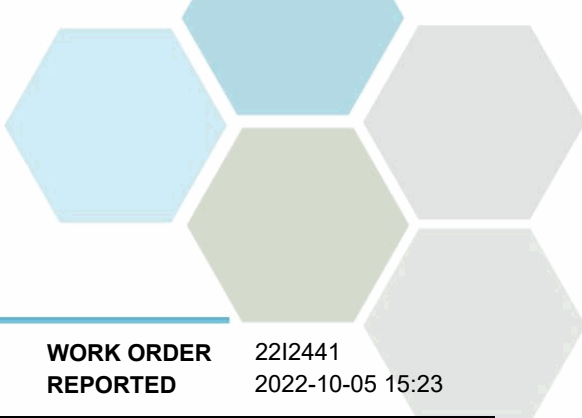
APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Slocan River Streamkeepers
SIFCO

WORK ORDER REPORTED 2212441
2022-10-05 15:23

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B212468, Continued									
Duplicate (B212468-DUP1), Continued		Source: 2212441-01		Prepared: 2022-09-21, Analyzed: 2022-09-22					
Magnesium, total	2.29	0.010 mg/L		2.28			< 1	20	
Manganese, total	0.00090	0.00020 mg/L		0.00089				20	
Molybdenum, total	0.00146	0.00010 mg/L		0.00146			< 1	20	
Nickel, total	< 0.00040	0.00040 mg/L		< 0.00040				20	
Phosphorus, total	< 0.050	0.050 mg/L		< 0.050				20	
Potassium, total	0.57	0.10 mg/L		0.57			< 1	20	
Selenium, total	< 0.00050	0.00050 mg/L		< 0.00050				20	
Silicon, total	5.3	1.0 mg/L		5.3			< 1	20	
Silver, total	< 0.000050	0.000050 mg/L		< 0.000050				20	
Sodium, total	1.60	0.10 mg/L		1.65			3	20	
Strontium, total	0.615	0.0010 mg/L		0.628			2	20	
Sulfur, total	3.2	3.0 mg/L		3.2				20	
Tellurium, total	< 0.00050	0.00050 mg/L		< 0.00050				20	
Thallium, total	< 0.000020	0.000020 mg/L		< 0.000020				20	
Thorium, total	< 0.00010	0.00010 mg/L		< 0.00010				20	
Tin, total	< 0.00020	0.00020 mg/L		< 0.00020				20	
Titanium, total	< 0.0050	0.0050 mg/L		< 0.0050				20	
Tungsten, total	< 0.0002	0.0002 mg/L		< 0.0002				20	
Uranium, total	0.000779	0.000020 mg/L		0.000784			< 1	20	
Vanadium, total	< 0.0050	0.0050 mg/L		< 0.0050				20	
Zinc, total	< 0.0040	0.0040 mg/L		< 0.0040				20	
Zirconium, total	< 0.00010	0.00010 mg/L		< 0.00010				20	

Matrix Spike (B212468-MS1)		Source: 2212441-02		Prepared: 2022-09-21, Analyzed: 2022-09-22					
Aluminum, total	3.89	0.0050 mg/L		4.00	0.0190	97	70-130		
Antimony, total	0.0377	0.00020 mg/L		0.0400	< 0.00020	94	70-130		
Arsenic, total	0.0400	0.00050 mg/L		0.0400	< 0.00050	100	70-130		
Barium, total	0.0620	0.0050 mg/L		0.0400	0.0218	101	70-130		
Beryllium, total	0.0386	0.00010 mg/L		0.0400	< 0.00010	96	70-130		
Bismuth, total	0.0399	0.00010 mg/L		0.0400	< 0.00010	100	70-130		
Boron, total	< 0.0500	0.0500 mg/L		0.0400	< 0.0500	94	70-130		
Cadmium, total	0.0397	0.000010 mg/L		0.0400	< 0.000010	99	70-130		
Calcium, total	19.5	0.20 mg/L		4.00	15.6	97	70-130		
Chromium, total	0.0389	0.00050 mg/L		0.0400	< 0.00050	97	70-130		
Cobalt, total	0.0387	0.00010 mg/L		0.0400	< 0.00010	97	70-130		
Copper, total	0.0392	0.00040 mg/L		0.0400	< 0.00040	98	70-130		
Iron, total	3.88	0.010 mg/L		4.00	0.011	97	70-130		
Lead, total	0.0388	0.00020 mg/L		0.0400	< 0.00020	97	70-130		
Lithium, total	0.0389	0.00010 mg/L		0.0400	0.00079	95	70-130		
Magnesium, total	5.44	0.010 mg/L		4.00	1.41	101	70-130		
Manganese, total	0.0403	0.00020 mg/L		0.0400	0.00134	98	70-130		
Molybdenum, total	0.0401	0.00010 mg/L		0.0400	0.00059	99	70-130		
Nickel, total	0.0383	0.00040 mg/L		0.0400	< 0.00040	96	70-130		
Phosphorus, total	4.00	0.050 mg/L		4.00	< 0.050	100	70-130		
Potassium, total	4.56	0.10 mg/L		4.00	0.56	100	70-130		
Selenium, total	0.0390	0.00050 mg/L		0.0400	< 0.00050	98	70-130		
Silicon, total	9.1	1.0 mg/L		4.00	4.8	106	70-130		
Silver, total	0.0403	0.000050 mg/L		0.0400	< 0.000050	101	70-130		
Sodium, total	5.46	0.10 mg/L		4.00	1.54	98	70-130		
Strontium, total	0.349	0.0010 mg/L		0.0400	0.289	149	70-130		MS2
Sulfur, total	41.2	3.0 mg/L		40.0	< 3.0	99	70-130		
Tellurium, total	0.0399	0.00050 mg/L		0.0400	< 0.00050	100	70-130		
Thallium, total	0.0398	0.000020 mg/L		0.0400	< 0.000020	100	70-130		
Thorium, total	0.0399	0.00010 mg/L		0.0400	< 0.00010	100	70-130		
Tin, total	0.0408	0.00020 mg/L		0.0400	< 0.00020	102	70-130		
Titanium, total	0.0395	0.0050 mg/L		0.0400	< 0.0050	98	70-130		



APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Slocan River Streamkeepers
SIFCO

WORK ORDER REPORTED 2212441
2022-10-05 15:23

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B212468, Continued									
Matrix Spike (B212468-MS1), Continued		Source: 2212441-02		Prepared: 2022-09-21, Analyzed: 2022-09-22					
Tungsten, total	0.0405	0.0002 mg/L	0.0400	< 0.0002	101	70-130			
Uranium, total	0.0424	0.000020 mg/L	0.0400	0.00148	102	70-130			
Vanadium, total	0.0397	0.0050 mg/L	0.0400	< 0.0050	99	70-130			
Zinc, total	0.0393	0.0040 mg/L	0.0400	< 0.0040	98	70-130			
Zirconium, total	0.0405	0.00010 mg/L	0.0400	< 0.00010	101	70-130			

QC Qualifiers:

MS2 The native sample concentration is greater than the spike concentration hence the matrix spike limits do not apply.