CERTIFICATE OF ANALYSIS

REPORTED TO	SION Improvement District 7920 Donaldson Drive GRAND FORKS, BC V0H 1H2		
ATTENTION	Dan Koochin	**WORK ORDER**	21B2721
PO NUMBER		**RECEIVED / TEMP**	2021-02-25 09:20 / 5°C
PROJECT	Comprehensive Drinking Water	**REPORTED**	2021-03-04 10:08
PROJECT INFO		**COC NUMBER**	40837.5581

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.

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

Authorized By:

Team CARO
Client Service Representative

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	SION Improvement District	**WORK ORDER**	21B2721
PROJECT	Comprehensive Drinking Water	**REPORTED**	2021-03-04 10:08

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
6140 Community Centre Road (21B2721-01) | Matrix: Water | Sampled: 2021-02-24 10:30						
Anions						
Chloride	**1.74**	AO ≤ 250	0.10	mg/L	2021-02-26	
Fluoride	**0.24**	MAC = 1.5	0.10	mg/L	2021-02-26	
Nitrate (as N)	**0.073**	MAC = 10	0.010	mg/L	2021-02-26	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2021-02-26	
Sulfate	**9.1**	AO ≤ 500	1.0	mg/L	2021-02-26	
Calculated Parameters						
Hardness, Total (as CaCO3)	**88.7**	None Required	0.500	mg/L	N/A	
Langelier Index	**-0.2**	N/A	-5.0		2021-03-04	
Solids, Total Dissolved	**121**	AO ≤ 500	1.00	mg/L	N/A	
General Parameters						
Alkalinity, Total (as CaCO3)	**117**	N/A	1.0	mg/L	2021-03-01	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2021-03-01	
Alkalinity, Bicarbonate (as CaCO3)	**117**	N/A	1.0	mg/L	2021-03-01	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2021-03-01	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2021-03-01	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2021-02-25	
Conductivity (EC)	**195**	N/A	2.0	µS/cm	2021-03-01	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2021-03-01	
pH	**7.76**	7.0-10.5	0.10	pH units	2021-03-01	HT2
Temperature, at pH	**21.5**	N/A		°C	2021-03-01	HT2
Turbidity	**0.13**	OG < 1	0.10	NTU	2021-02-26	
Microbiological Parameters						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2021-02-25	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2021-02-25	
Total Metals						
Aluminum, total	< 0.0050	OG < 0.1	0.0050	mg/L	2021-03-02	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2021-03-02	
Arsenic, total	**0.00123**	MAC = 0.01	0.00050	mg/L	2021-03-02	
Barium, total	**0.0086**	MAC = 2	0.0050	mg/L	2021-03-02	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2021-03-02	
Cadmium, total	**0.000059**	MAC = 0.005	0.000010	mg/L	2021-03-02	
Calcium, total	**27.6**	None Required	0.20	mg/L	2021-03-02	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2021-03-02	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2021-03-02	
Copper, total	**0.00393**	MAC = 2	0.00040	mg/L	2021-03-02	
Iron, total	< 0.010	AO ≤ 0.3	0.010	mg/L	2021-03-02	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2021-03-02	
Magnesium, total	**4.77**	None Required	0.010	mg/L	2021-03-02	
Manganese, total	**0.00232**	MAC = 0.12	0.00020	mg/L	2021-03-02	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2021-03-02	

CARO ANALYTICAL SERVICES

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Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
6140 Community Centre Road (21B2721-01) | Matrix: Water | Sampled: 2021-02-24 10:30, Continued						
Total Metals, Continued						
Molybdenum, total	**0.00188**	N/A	0.00010	mg/L	2021-03-02	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2021-03-02	
Potassium, total	**0.97**	N/A	0.10	mg/L	2021-03-02	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2021-03-02	
Sodium, total	**4.61**	AO ≤ 200	0.10	mg/L	2021-03-02	
Strontium, total	**0.264**	7	0.0010	mg/L	2021-03-02	
Uranium, total	**0.00129**	MAC = 0.02	0.000020	mg/L	2021-03-02	
Zinc, total	**0.0672**	AO ≤ 5	0.0040	mg/L	2021-03-02	
Hardy Mountiain Toad (21B2721-02) | Matrix: Water | Sampled: 2021-02-24 11:00						
Anions						
Chloride	**2.87**	AO ≤ 250	0.10	mg/L	2021-02-27	
Fluoride	**0.51**	MAC = 1.5	0.10	mg/L	2021-02-27	
Nitrate (as N)	**0.986**	MAC = 10	0.010	mg/L	2021-02-27	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2021-02-27	
Sulfate	**53.6**	AO ≤ 500	1.0	mg/L	2021-02-27	
Calculated Parameters						
Hardness, Total (as CaCO3)	**254**	None Required	0.500	mg/L	N/A	
Langelier Index	**0.8**	N/A	-5.0		2021-03-04	
Solids, Total Dissolved	**321**	AO ≤ 500	1.00	mg/L	N/A	
General Parameters						
Alkalinity, Total (as CaCO3)	**264**	N/A	1.0	mg/L	2021-03-01	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2021-03-01	
Alkalinity, Bicarbonate (as CaCO3)	**264**	N/A	1.0	mg/L	2021-03-01	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2021-03-01	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2021-03-01	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2021-02-25	
Conductivity (EC)	**513**	N/A	2.0	µS/cm	2021-03-01	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2021-03-01	
pH	**7.95**	7.0-10.5	0.10	pH units	2021-03-01	HT2
Temperature, at pH	**22.0**	N/A		°C	2021-03-01	HT2
Turbidity	**0.66**	OG < 1	0.10	NTU	2021-02-26	
Microbiological Parameters						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2021-02-25	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2021-02-25	
Total Metals						
Aluminum, total	< 0.0050	OG < 0.1	0.0050	mg/L	2021-03-02	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2021-03-02	
Arsenic, total	**0.00090**	MAC = 0.01	0.00050	mg/L	2021-03-02	

TEST RESULTS

REPORTED TO	SION Improvement District	**WORK ORDER**	21B2721
PROJECT	Comprehensive Drinking Water	**REPORTED**	2021-03-04 10:08

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Hardy Mountiain Toad (21B2721-02) | Matrix: Water | Sampled: 2021-02-24 11:00, Continued						
Total Metals, Continued						
Barium, total	**0.0609**	MAC = 2	0.0050	mg/L	2021-03-02	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2021-03-02	
Cadmium, total	**0.000012**	MAC = 0.005	0.000010	mg/L	2021-03-02	
Calcium, total	**68.0**	None Required	0.20	mg/L	2021-03-02	
Chromium, total	**0.00076**	MAC = 0.05	0.00050	mg/L	2021-03-02	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2021-03-02	
Copper, total	**0.00075**	MAC = 2	0.00040	mg/L	2021-03-02	
Iron, total	< 0.010	AO ≤ 0.3	0.010	mg/L	2021-03-02	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2021-03-02	
Magnesium, total	**20.5**	None Required	0.010	mg/L	2021-03-02	
Manganese, total	**0.00553**	MAC = 0.12	0.00020	mg/L	2021-03-02	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2021-03-02	
Molybdenum, total	**0.00506**	N/A	0.00010	mg/L	2021-03-02	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2021-03-02	
Potassium, total	**2.35**	N/A	0.10	mg/L	2021-03-02	
Selenium, total	**0.0160**	MAC = 0.05	0.00050	mg/L	2021-03-02	
Sodium, total	**8.17**	AO ≤ 200	0.10	mg/L	2021-03-02	
Strontium, total	**0.614**	7	0.0010	mg/L	2021-03-02	
Uranium, total	**0.00637**	MAC = 0.02	0.000020	mg/L	2021-03-02	
Zinc, total	**0.0060**	AO ≤ 5	0.0040	mg/L	2021-03-02	

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	SION Improvement District	**WORK ORDER**	21B2721
PROJECT	Comprehensive Drinking Water	**REPORTED**	2021-03-04 10:08

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2017)	Titration with H2SO4	✓	Kelowna
Anions in Water	SM 4110 B (2017)	Ion Chromatography	✓	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
pH in Water	SM 4500-H+ B (2017)	Electrometry	✓	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
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)
<	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

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PROJECT	Comprehensive Drinking Water	**REPORTED**	2021-03-04 10:08

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	SION Improvement District	**WORK ORDER**	21B2721
PROJECT	Comprehensive Drinking Water	**REPORTED**	2021-03-04 10:08

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 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 B1B2419										
Blank (B1B2419-BLK1)				Prepared: 2021-02-26, Analyzed: 2021-02-26						
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	< 1.0	1.0	mg/L							
Blank (B1B2419-BLK2)				Prepared: 2021-02-27, Analyzed: 2021-02-27						
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	< 1.0	1.0	mg/L							
LCS (B1B2419-BS1)				Prepared: 2021-02-26, Analyzed: 2021-02-26						
Chloride	16.1	0.10	mg/L	16.0		101	90-110			
Fluoride	3.99	0.10	mg/L	4.00		100	88-108			
Nitrate (as N)	4.03	0.010	mg/L	4.00		101	90-110			
Nitrite (as N)	1.86	0.010	mg/L	2.00		93	85-115			
Sulfate	15.9	1.0	mg/L	16.0		100	90-110			
LCS (B1B2419-BS2)				Prepared: 2021-02-27, Analyzed: 2021-02-27						
Chloride	16.1	0.10	mg/L	16.0		101	90-110			
Fluoride	3.97	0.10	mg/L	4.00		99	88-108			
Nitrate (as N)	4.06	0.010	mg/L	4.00		102	90-110			
Nitrite (as N)	1.89	0.010	mg/L	2.00		94	85-115			
Sulfate	16.0	1.0	mg/L	16.0		100	90-110			
General Parameters, Batch B1B2433										
Blank (B1B2433-BLK1)				Prepared: 2021-02-25, Analyzed: 2021-02-25						
Colour, True	< 5.0	5.0	CU							
LCS (B1B2433-BS1)				Prepared: 2021-02-25, Analyzed: 2021-02-25						
Colour, True	20	5.0	CU	20.0		101	85-115			

APPENDIX 2: QUALITY CONTROL RESULTS

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Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B1B2442										
Blank (B1B2442-BLK1)				Prepared: 2021-02-26, Analyzed: 2021-02-26						
Turbidity	< 0.10	0.10	NTU							
LCS (B1B2442-BS1)				Prepared: 2021-02-26, Analyzed: 2021-02-26						
Turbidity	38.6	0.10	NTU	40.0		96	90-110			
General Parameters, Batch B1C0003										
Blank (B1C0003-BLK1)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
Cyanide, Total	< 0.0020	0.0020	mg/L							
Blank (B1C0003-BLK2)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
Cyanide, Total	< 0.0020	0.0020	mg/L							
LCS (B1C0003-BS1)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
Cyanide, Total	0.0186	0.0020	mg/L	0.0200		93	82-120			
LCS (B1C0003-BS2)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
Cyanide, Total	0.0171	0.0020	mg/L	0.0200		85	82-120			
LCS Dup (B1C0003-BSD1)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
Cyanide, Total	0.0189	0.0020	mg/L	0.0200		94	82-120	1	10	
LCS Dup (B1C0003-BSD2)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
Cyanide, Total	0.0175	0.0020	mg/L	0.0200		87	82-120	2	10	
General Parameters, Batch B1C0077										
Blank (B1C0077-BLK1)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
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							
Blank (B1C0077-BLK2)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
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							
LCS (B1C0077-BS1)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
Alkalinity, Total (as CaCO3)	108	1.0	mg/L	100		108	80-120			
LCS (B1C0077-BS2)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
Alkalinity, Total (as CaCO3)	111	1.0	mg/L	100		111	80-120			
LCS (B1C0077-BS3)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
Conductivity (EC)	1460	2.0	µS/cm	1410		104	95-104			
LCS (B1C0077-BS4)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
Conductivity (EC)	1420	2.0	µS/cm	1410		101	95-104			
Reference (B1C0077-SRM1)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
pH	6.97	0.10	pH units	7.01		99	98-102			

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Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B1C0077, Continued										
Reference (B1C0077-SRM2)				Prepared: 2021-03-01, Analyzed: 2021-03-01						
pH	6.97	0.10	pH units	7.01		99	98-102			
Microbiological Parameters, Batch B1B2366										
Blank (B1B2366-BLK1)				Prepared: 2021-02-25, Analyzed: 2021-02-25						
Coliforms, Total	< 1	1	CFU/100 mL							
E. coli	< 1	1	CFU/100 mL							
Blank (B1B2366-BLK2)				Prepared: 2021-02-25, Analyzed: 2021-02-25						
Coliforms, Total	< 1	1	CFU/100 mL							
E. coli	< 1	1	CFU/100 mL							
Blank (B1B2366-BLK3)				Prepared: 2021-02-25, Analyzed: 2021-02-25						
Coliforms, Total	< 1	1	CFU/100 mL							
E. coli	< 1	1	CFU/100 mL							
Blank (B1B2366-BLK4)				Prepared: 2021-02-25, Analyzed: 2021-02-25						
Coliforms, Total	< 1	1	CFU/100 mL							
E. coli	< 1	1	CFU/100 mL							
Blank (B1B2366-BLK5)				Prepared: 2021-02-25, Analyzed: 2021-02-25						
Coliforms, Total	< 1	1	CFU/100 mL							
E. coli	< 1	1	CFU/100 mL							
Blank (B1B2366-BLK6)				Prepared: 2021-02-25, Analyzed: 2021-02-25						
Coliforms, Total	< 1	1	CFU/100 mL							
E. coli	< 1	1	CFU/100 mL							
Duplicate (B1B2366-DUP5)				**Source: 21B2721-01** Prepared: 2021-02-25, Analyzed: 2021-02-25						
Coliforms, Total	< 1	1	CFU/100 mL		< 1				82	
E. coli	< 1	1	CFU/100 mL		< 1				104	
Total Metals, Batch B1B2649										
Blank (B1B2649-BLK1)				Prepared: 2021-02-28, Analyzed: 2021-03-02						
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							
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							
Mercury, total	< 0.000040	0.000040	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							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	SION Improvement District	**WORK ORDER**	21B2721
PROJECT	Comprehensive Drinking Water	**REPORTED**	2021-03-04 10:08

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B1B2649, Continued										
Blank (B1B2649-BLK1), Continued				Prepared: 2021-02-28, Analyzed: 2021-03-02						
Uranium, total	< 0.000020	0.000020	mg/L							
Zinc, total	< 0.0040	0.0040	mg/L							
Blank (B1B2649-BLK2)				Prepared: 2021-02-28, Analyzed: 2021-03-02						
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							
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							
Mercury, total	< 0.000040	0.000040	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 (B1B2649-BS1)				Prepared: 2021-02-28, Analyzed: 2021-03-02						
Aluminum, total	0.0222	0.0050	mg/L	0.0199		111	80-120			
Antimony, total	0.0210	0.00020	mg/L	0.0200		105	80-120			
Arsenic, total	0.0198	0.00050	mg/L	0.0200		99	80-120			
Barium, total	0.0198	0.0050	mg/L	0.0198		100	80-120			
Boron, total	< 0.0500	0.0500	mg/L	0.0200		98	80-120			
Cadmium, total	0.0204	0.000010	mg/L	0.0199		102	80-120			
Calcium, total	1.88	0.20	mg/L	2.02		93	80-120			
Chromium, total	0.0200	0.00050	mg/L	0.0198		101	80-120			
Cobalt, total	0.0204	0.00010	mg/L	0.0199		102	80-120			
Copper, total	0.0205	0.00040	mg/L	0.0200		103	80-120			
Lead, total	0.0202	0.00020	mg/L	0.0199		101	80-120			
Magnesium, total	2.11	0.010	mg/L	2.02		104	80-120			
Manganese, total	0.0199	0.00020	mg/L	0.0199		100	80-120			
Mercury, total	0.00111	0.000040	mg/L	0.00100		111	80-120			
Molybdenum, total	0.0192	0.00010	mg/L	0.0200		96	80-120			
Nickel, total	0.0201	0.00040	mg/L	0.0200		100	80-120			
Potassium, total	1.99	0.10	mg/L	2.02		99	80-120			
Selenium, total	0.0200	0.00050	mg/L	0.0200		100	80-120			
Sodium, total	2.17	0.10	mg/L	2.02		107	80-120			
Strontium, total	0.0202	0.0010	mg/L	0.0200		101	80-120			
Uranium, total	0.0198	0.000020	mg/L	0.0200		99	80-120			
Zinc, total	0.0216	0.0040	mg/L	0.0200		108	80-120			
LCS (B1B2649-BS2)				Prepared: 2021-02-28, Analyzed: 2021-03-02						
Aluminum, total	0.0229	0.0050	mg/L	0.0199		115	80-120			
Antimony, total	0.0218	0.00020	mg/L	0.0200		109	80-120			
Arsenic, total	0.0205	0.00050	mg/L	0.0200		103	80-120			
Barium, total	0.0207	0.0050	mg/L	0.0198		105	80-120			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO SION Improvement District
PROJECT Comprehensive Drinking Water

WORK ORDER 21B2721
REPORTED 2021-03-04 10:08

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B1B2649, Continued										
LCS (B1B2649-BS2), Continued					Prepared: 2021-02-28, Analyzed: 2021-03-02					
Boron, total	< 0.0500	0.0500	mg/L	0.0200		103	80-120			
Cadmium, total	0.0210	0.000010	mg/L	0.0199		105	80-120			
Calcium, total	1.90	0.20	mg/L	2.02		94	80-120			
Chromium, total	0.0208	0.00050	mg/L	0.0198		105	80-120			
Cobalt, total	0.0214	0.00010	mg/L	0.0199		107	80-120			
Copper, total	0.0212	0.00040	mg/L	0.0200		106	80-120			
Lead, total	0.0203	0.00020	mg/L	0.0199		102	80-120			
Magnesium, total	2.09	0.010	mg/L	2.02		104	80-120			
Manganese, total	0.0205	0.00020	mg/L	0.0199		103	80-120			
Mercury, total	0.00111	0.000040	mg/L	0.00100		111	80-120			
Molybdenum, total	0.0202	0.00010	mg/L	0.0200		101	80-120			
Nickel, total	0.0209	0.00040	mg/L	0.0200		104	80-120			
Potassium, total	2.02	0.10	mg/L	2.02		100	80-120			
Selenium, total	0.0204	0.00050	mg/L	0.0200		102	80-120			
Sodium, total	2.18	0.10	mg/L	2.02		108	80-120			
Strontium, total	0.0213	0.0010	mg/L	0.0200		107	80-120			
Uranium, total	0.0202	0.000020	mg/L	0.0200		101	80-120			
Zinc, total	0.0215	0.0040	mg/L	0.0200		107	80-120			
Duplicate (B1B2649-DUP2)			**Source: 21B2721-01**		Prepared: 2021-02-28, Analyzed: 2021-03-02					
Aluminum, total	< 0.0050	0.0050	mg/L		< 0.0050				20	
Antimony, total	< 0.00020	0.00020	mg/L		< 0.00020				20	
Arsenic, total	0.00133	0.00050	mg/L		0.00123				20	
Barium, total	0.0091	0.0050	mg/L		0.0086				20	
Boron, total	< 0.0500	0.0500	mg/L		< 0.0500				20	
Cadmium, total	0.000047	0.000010	mg/L		0.000059			22	20	
Calcium, total	27.4	0.20	mg/L		27.6			< 1	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	0.00417	0.00040	mg/L		0.00393			6	20	
Iron, total	< 0.010	0.010	mg/L		< 0.010				20	
Lead, total	< 0.00020	0.00020	mg/L		< 0.00020				20	
Magnesium, total	4.91	0.010	mg/L		4.77			3	20	
Manganese, total	0.00198	0.00020	mg/L		0.00232			16	20	
Mercury, total	< 0.000040	0.000040	mg/L		< 0.000040				20	
Molybdenum, total	0.00182	0.00010	mg/L		0.00188			3	20	
Nickel, total	< 0.00040	0.00040	mg/L		< 0.00040				20	
Potassium, total	1.00	0.10	mg/L		0.97			3	20	
Selenium, total	< 0.00050	0.00050	mg/L		< 0.00050				20	
Sodium, total	4.70	0.10	mg/L		4.61			2	20	
Strontium, total	0.272	0.0010	mg/L		0.264			3	20	
Uranium, total	0.00128	0.000020	mg/L		0.00129			< 1	20	
Zinc, total	0.0694	0.0040	mg/L		0.0672			3	20	
Reference (B1B2649-SRM1)					Prepared: 2021-02-28, Analyzed: 2021-03-02					
Aluminum, total	0.305	0.0050	mg/L	0.299		102	70-130			
Antimony, total	0.0533	0.00020	mg/L	0.0517		103	70-130			
Arsenic, total	0.125	0.00050	mg/L	0.119		105	70-130			
Barium, total	0.788	0.0050	mg/L	0.801		98	70-130			
Boron, total	3.84	0.0500	mg/L	4.11		93	70-130			
Cadmium, total	0.0505	0.000010	mg/L	0.0503		100	70-130			
Calcium, total	9.71	0.20	mg/L	10.7		91	70-130			
Chromium, total	0.255	0.00050	mg/L	0.250		102	70-130			
Cobalt, total	0.0404	0.00010	mg/L	0.0384		105	70-130			
Copper, total	0.504	0.00040	mg/L	0.487		103	70-130			
Iron, total	0.510	0.010	mg/L	0.504		101	70-130			
Lead, total	0.278	0.00020	mg/L	0.278		100	70-130			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	SION Improvement District	**WORK ORDER**	21B2721
PROJECT	Comprehensive Drinking Water	**REPORTED**	2021-03-04 10:08

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B1B2649, Continued										
Reference (B1B2649-SRM1), Continued				Prepared: 2021-02-28, Analyzed: 2021-03-02						
Magnesium, total	3.77	0.010	mg/L	3.59		105	70-130			
Manganese, total	0.108	0.00020	mg/L	0.111		97	70-130			
Mercury, total	0.00634	0.000040	mg/L	0.00581		109	70-130			
Molybdenum, total	0.200	0.00010	mg/L	0.196		102	70-130			
Nickel, total	0.253	0.00040	mg/L	0.248		102	70-130			
Potassium, total	6.22	0.10	mg/L	5.89		106	70-130			
Selenium, total	0.120	0.00050	mg/L	0.120		100	70-130			
Sodium, total	9.03	0.10	mg/L	8.71		104	70-130			
Strontium, total	0.403	0.0010	mg/L	0.393		103	70-130			
Uranium, total	0.0343	0.000020	mg/L	0.0344		100	70-130			
Zinc, total	2.48	0.0040	mg/L	2.50		99	70-130			
Reference (B1B2649-SRM2)				Prepared: 2021-02-28, Analyzed: 2021-03-02						
Aluminum, total	0.303	0.0050	mg/L	0.299		101	70-130			
Antimony, total	0.0544	0.00020	mg/L	0.0517		105	70-130			
Arsenic, total	0.127	0.00050	mg/L	0.119		107	70-130			
Barium, total	0.803	0.0050	mg/L	0.801		100	70-130			
Boron, total	3.92	0.0500	mg/L	4.11		95	70-130			
Cadmium, total	0.0518	0.000010	mg/L	0.0503		103	70-130			
Calcium, total	9.92	0.20	mg/L	10.7		93	70-130			
Chromium, total	0.257	0.00050	mg/L	0.250		103	70-130			
Cobalt, total	0.0406	0.00010	mg/L	0.0384		106	70-130			
Copper, total	0.519	0.00040	mg/L	0.487		107	70-130			
Iron, total	0.511	0.010	mg/L	0.504		101	70-130			
Lead, total	0.283	0.00020	mg/L	0.278		102	70-130			
Magnesium, total	3.77	0.010	mg/L	3.59		105	70-130			
Manganese, total	0.110	0.00020	mg/L	0.111		99	70-130			
Mercury, total	0.00645	0.000040	mg/L	0.00581		111	70-130			
Molybdenum, total	0.201	0.00010	mg/L	0.196		103	70-130			
Nickel, total	0.257	0.00040	mg/L	0.248		104	70-130			
Potassium, total	6.27	0.10	mg/L	5.89		107	70-130			
Selenium, total	0.121	0.00050	mg/L	0.120		101	70-130			
Sodium, total	9.06	0.10	mg/L	8.71		104	70-130			
Strontium, total	0.418	0.0010	mg/L	0.393		106	70-130			
Uranium, total	0.0349	0.000020	mg/L	0.0344		101	70-130			
Zinc, total	2.50	0.0040	mg/L	2.50		100	70-130			
Total Metals, Batch B1C0154										
Blank (B1C0154-BLK1)				Prepared: 2021-03-02, Analyzed: 2021-03-02						
Mercury, total	< 0.000010	0.000010	mg/L							
Reference (B1C0154-SRM1)				Prepared: 2021-03-02, Analyzed: 2021-03-02						
Mercury, total	0.00616	0.000010	mg/L	0.00581		106	70-130			