City of Nelson 2024 Annual Drinking Water Report

2024 Monitoring Year

Prepared by:
Kootenay-Columbia Environmental Innovations Ltd.

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Acronyms

Abbreviations	Meaning
CCCP	Cross-Connection Control Program
CFU	Colony Forming Units
DNA	Deoxyribonucleic Acid
EOCP	Environmental Operators Certification Program
GCDWQ	Guideline for Canadian Drinking Water Quality
HAA	Haloacetic Acid
KEI	Kootenay-Columbia Environmental Innovations Ltd.
LRAA	Locational Running Annual Average
MACs	Maximum Acceptable Concentration Limits
NTU	Nephelometric Turbidity Units
Reg	Regulation
RNA	Ribonucleic Acid
THM	Trihalomethane
UV	Ultraviolet Light
UVT	Ultraviolet Transmittance
WC	Water Cooled

1 Introduction

This report is provided to enhance communications between the City of Nelson (the City) and the public regarding the management, planning and operations of the City's water treatment and distribution system. The City is required by Interior Health Authority to monitor various aspects of the raw water and treated water systems, including:

- Annual water consumption,
- Bacteriological colony forming units in raw and treated water,
- Continuous raw water turbidity data,
- Continuous ultraviolet light treatment data,
- Trihalomethane and haloacetic acid data in treated water, and
- Residual chlorine data.

In addition to the water quality monitoring results listed above, the City is required to maintain multiple management plans, including:

- Water Master Plan,
- Cross-Connection Control Program,
- Emergency Response Plan, and
- Maintenance of Environmental Operators Certification Program training for the City's Treatment Plant Operators.

In addition to being a communication tool between the City and the public, this Annual Drinking Water Report satisfies requirements outlined in the drinking water protection regulation, BC Reg. 200/2003, and the City's operating permit for the City's water treatment and distribution system, including Facility #0210671 – Mountain Station Water Treatment Plant.

2 System Design

The City sources its drinking water from Five Mile Creek, Fell Creek, Anderson Creek and Selous Creek. Fell Creek is a tributary to Anderson Creek and feeds into the reservoir at the Anderson Creek intake. Unless otherwise noted, all references to Anderson Creek will include Fell Creek, as most activities related to Anderson Creek occur below the confluence of Fell Creek and Anderson Creek.

Water is taken year-round from Five Mile Creek and is supplemented by Anderson Creek and Selous Creek in periods of peak demand during the summer. Though raw water from Anderson Creek and Selous Creek is not required during periods of low demand, approximately one to two litres per second is always maintained in the transmission lines to ensure the water in those portions of the distribution system does not become stagnant or freeze.

As of March 2023, all four water sources flow or are pumped into the Mountain Station water treatment facility, where they are treated with chlorine and UV before entering the distribution system. A map of the four catchments, raw water transmission mains and facility locations associated with the City's drinking water system can be seen in Figure 1.

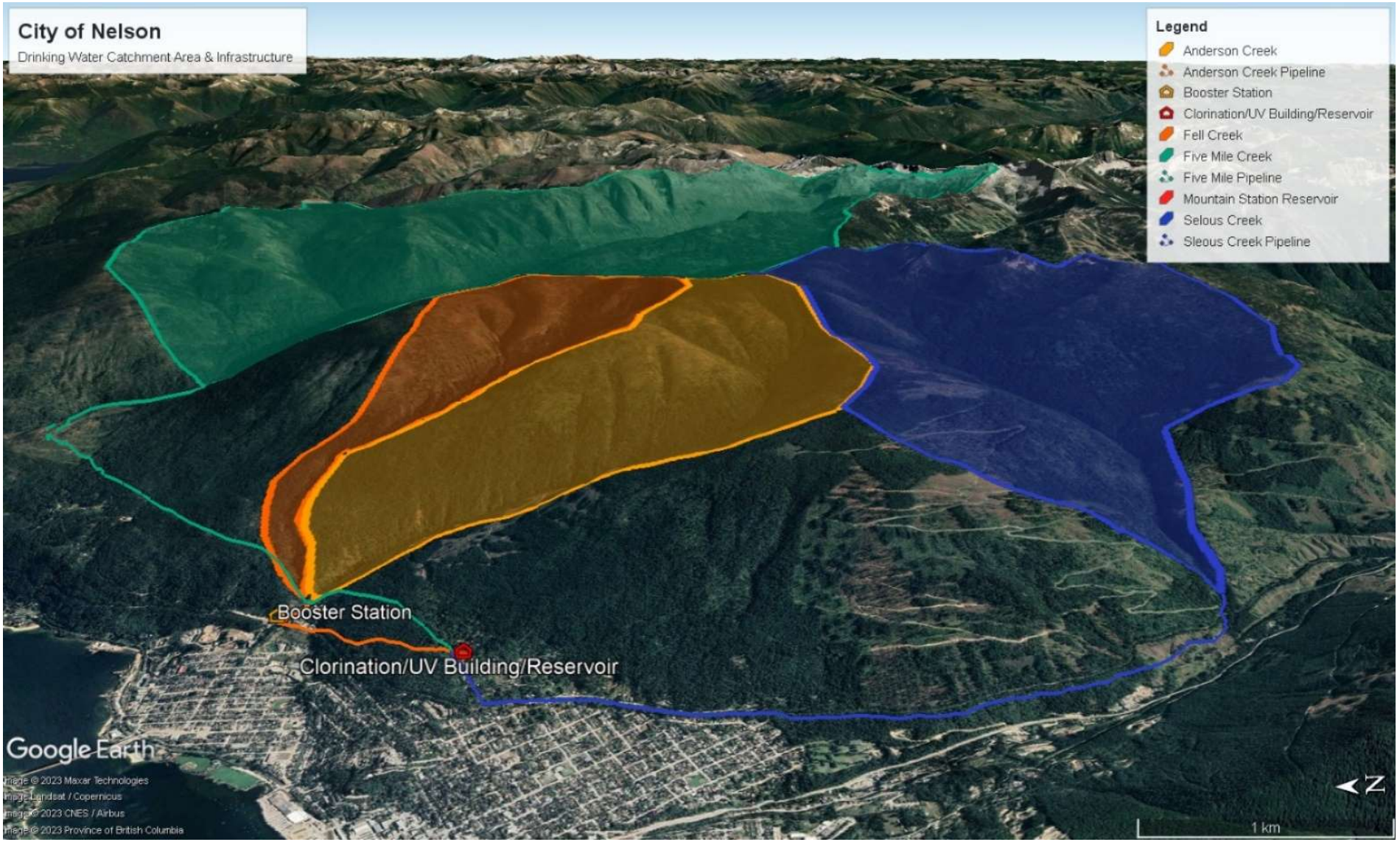

Figure 1: City of Nelson Catchments & Drinking Water Infrastructure as of 2023.

3 2024 Water Consumption

The City consumed 1,856,182 m^3 of drinking water in 2024. Following is the consumption per year for the previous four years:

- 2024 - 1,856,182 m^3/year
- 2023 – 1,946,430 m^3/year
- 2022 – 1,857,241 m^3/year
- 2021 – 1,846,496 m^3/year

Figure 2 shows the City's monthly water consumption, while Figure 3 shows the daily water consumption by source. Five Mile's size and flow continue to make it the largest contributor to Nelson's drinking water, contributing 87.8%, Selous Creek 9.7% and Anderson Creek contributing 2.6%.

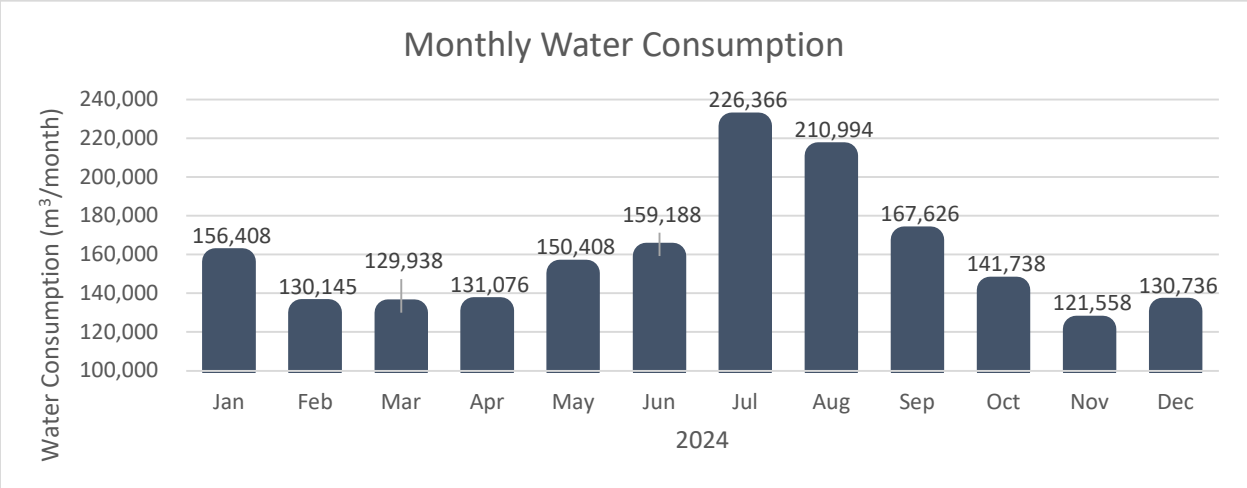

Figure 2: Monthly Water Consumption

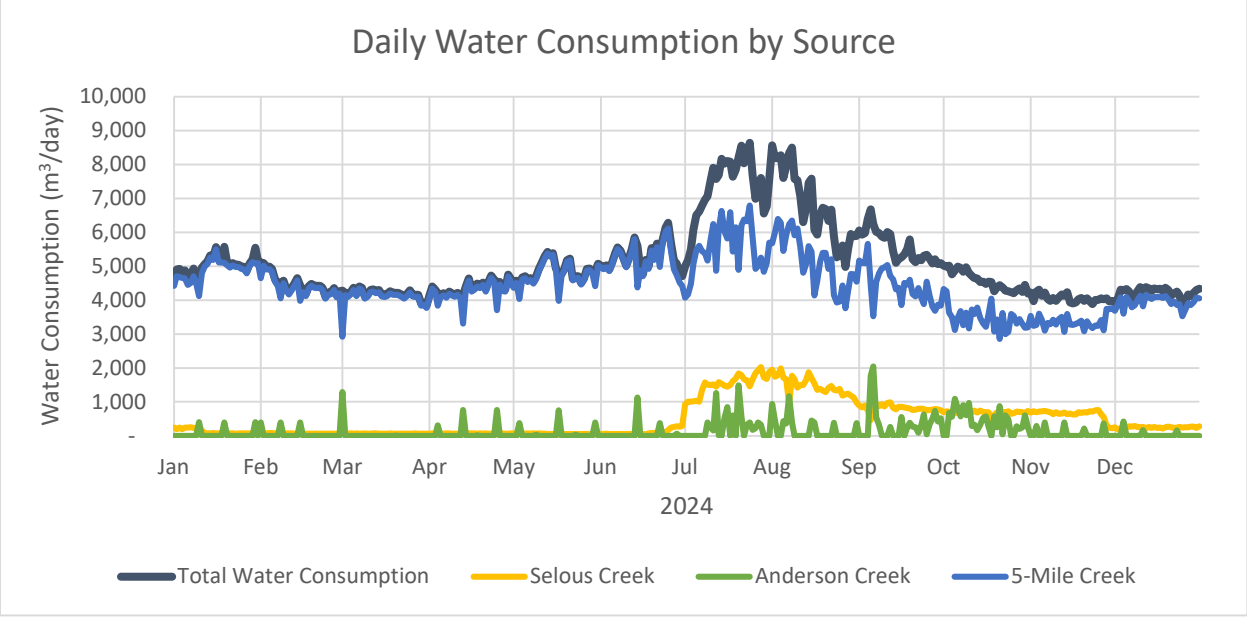

Figure 3: Daily Water Consumption by Source

4 Water Quality Monitoring Program

The City's Water Quality Monitoring Program requires the collection of, and reporting on, the following parameters:

- Weekly bacteriological sampling for:
  - E. coli,
  - Fecal Coliforms, and
  - Total Coliforms;
- Continuous turbidity data at the Anderson and Selous Creek intakes and the Mountain Station reservoir;
- Continuous UV performance/transmittance (UVT) data;
- Quarterly trihalomethane (THM) and haloacetic acid (HAA) testing in the distribution system;
- Quarterly manganese testing;
- A full comprehensive raw water analysis for each source collected annually; and
- Continuous chlorine residuals.

4.1 Weekly Bacteriological Sampling

The City collects bacteriological samples of treated water weekly from four locations within the distribution system, while raw water samples are taken from the Mountain Station reservoir. The Mountain Station reservoir is the sole sampling site for raw water, as it is the only point where untreated water enters the system before treatment.

The following four locations are the weekly sample locations within the distribution system:

- Rosemont reservoir,
- 300 Block Silica Street,
- 3rd Street and Davies Street, and
- Fell Street and 11th Street.

Tables 1 and 2 below show the bacteriological sampling results produced by a third-party independent laboratory, Passmore Laboratories Ltd.. The original reports from Passmore Laboratories can be found in Appendix B. Note that the sample for total coliforms taken on October 29th 2024 was labeled as too numerous to count. Therefore a value of 500 CFU/100ml was used as a numerical value so the value could be graphed. The highest total coliform value that could be counted in 2024 was 387 CFU/100ml.

Table 1: Weekly Coliform Results (Jan – Jun 2024)

Weekly Coliform Results (Jan to Jun 2024)

	Rosemont Reservoir		Silica St.		3rd & Davies		Fell & 11th		Mtn. Station Reservoir		
	Treated Drinking Water								Raw Water		
Sample Date	Coliforms, Total	Verified E.coli	Coliforms, Total	Verified E.coli	Coliforms, Total	Verified E.coli	Coliforms, Total	Verified E.coli	Coliforms, Total	Verified E.coli	Fecal (Thermotoleran
2024-01-02	0	0	0	0	0	0	0	0	9	0	1
2024-01-09	0	0	0	0	0	0	0	0	5	0	0
2024-01-16	0	0	0	0	0	0	0	0	6	0	0
2024-01-23	0	0	0	0	0	0	0	0	3	0	0
2024-01-30	0	0	0	0	0	0	0	0	12	0	0
2024-02-06	0	0	0	0	0	0	0	0	6	0	0
2024-02-13	0	0	0	0	0	0	0	0	7	0	1
2024-02-20	0	0	0	0	0	0	0	0	6	0	0
2024-02-27	0	0	0	0	0	0	0	0	8	0	0
2024-03-05	0	0	0	0	0	0	0	0	8	0	0
2024-03-12	0	0	0	0	0	0	0	0	0	0	0
2024-03-19	0	0	0	0	0	0	0	0	0	0	
2024-03-26	0	0	0	0	0	0	0	0	4	0	
2024-04-02	0	0	0	0	0	0	0	0	11	0	0
2024-04-09	0	0	0	0	0	0	0	0	21	0	1
2024-04-16	0	0	0	0	0	0	0	0	16	0	0
2024-04-23	0	0	0	0	0	0	0	0	0	0	0
2024-04-30	0	0	0	0	0	0	0	0	29	0	0
2024-05-07	0	0	0	0	0	0	0	0	17	0	0
2024-05-14	0	0	0	0	0	0	0	0	35	0	0
2024-05-21	0	0	0	0	0	0	0	0	18	0	3
2024-05-28	0	0	0	0	0	0	0	0	11	0	0
2024-06-04	0	0	0	0	0	0	0	0	9	0	0
2024-06-11	0	0	0	0	0	0	0	0	0	0	0
2024-06-18	0	0	0	0	0	0	0	0	21	0	0
2024-06-25	0	0	0	0	0	0	0	0	15	2	2

Table 2: Weekly Coliform results (Jul – Dec 2024)

Weekly Coliform Results (Jul to Dec 2024)

	Rosemont Reservoir		Silica St.		3rd & Davies		Fell & 11th		Mtn. Station Reservoir		
	Treated Drinking Water								Raw Water		
Sample Date	Coliforms, Total	Verified E.coli	Coliforms, Total	Verified E.coli	Coliforms, Total	Verified E.coli	Coliforms, Total	Verified E.coli	Coliforms, Total	Verified E.coli	Fecal (Thermotoleran
2024-07-02	0	0	0	0	0	0	0	0	29	9	
2024-07-09	0	0	0	0	0	0	0	0	44	1	0
2024-07-16	0	0	0	0	0	0	0	0	160	2	2
2024-07-23	0	0	0	0	0	0	0	0	33	1	5
2024-07-30	0	0	0	0	0	0	0	0	15	4	1
2024-08-06	0	0	0	0	0	0	0	0	158	1	3
2024-08-13	0	0	0	0	0	0	0	0	174	7	8
2024-08-20	0	0	0	0	0	0	0	0	61	0	3
2024-08-27	0	0	0	0	0	0	0	0	169	2	3
2024-09-03	0	0	0	0	0	0	0	0	139	3	3
2024-09-10	0	0	0	0	0	0	0	0	53	0	1
2024-09-17	0	0	0	0	0	0	0	0	247	2	3
2024-09-24	0	0	0	0	0	0	0	0	387	2	0
2024-10-01	0	0	0	0	0	0	0	0	175	0	0
2024-10-08	0	0	0	0	0	0	0	0	138	0	0
2024-10-15	0	0	0	0	0	0	0	0	44	0	
2024-10-22	0	0	0	0	0	0	0	0	88	2	0
2024-10-29	0	0	0	0	0	0	0	0	500	3	2
2024-11-05	0	0	0	0	0	0	0	0	46	2	0
2024-11-12	0	0	0	0	0	0	0	0	5	0	0
2024-11-19	0	0	0	0	0	0	0	0	55	0	0
2024-11-26	0	0	0	0	0	0	0	0	26	0	0
2024-12-03	0	0	0	0	0	0	0	0	25	0	
2024-12-10	0	0	0	0	0	0	0	0	16	0	0
2024-12-17	0	0	0	0	0	0	0	0	4	0	1
2024-12-23	0	0	0	0	0	0	0	0	0	0	0
2024-12-30	0	0	0	0	0	0	0	0	7	0	0

Throughout 2024, no bacteriological samples within the treated water system returned a positive result for any coliforms.

Raw water samples from the Mountain Station reservoir returned positive results for total coliforms, fecal (thermotolerant) coliforms, and E. coli. This is to be expected as the water in the reservoir is untreated. By observing the trends in Figure 4, showing the colony forming units (CFUs) in the raw water at the Mountain Station reservoir, the City is aware of CFUs being high during the summer months and fall precipitation events. Fecal (thermotolerant) coliforms and E. coli were only observed during the spring, summer and fall and are monitored by City staff. Raw water samples were not taken at Anderson Creek, Five Mile Creek or Selous Creek reservoirs, though this sampling may begin in future years.

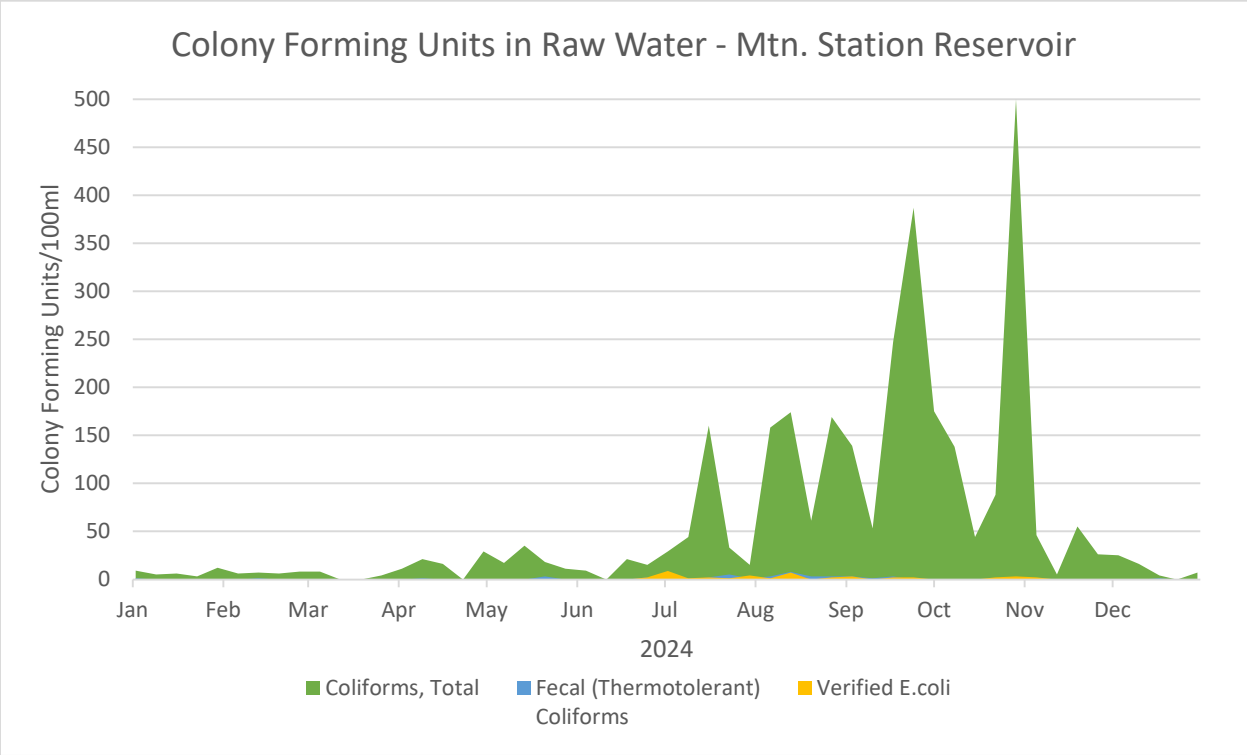

Figure 4: Colony Forming Units in Raw Untreated Water at Mtn. Station Reservoir

Though E. coli was observed in the raw water, the results remained below the filtration exemption criteria outlined in the Province's Drinking Water Treatment Objective for Surface Water in BC. The filtration exemption criteria state that E. coli should not exceed 20 CFU per 100 ml in at least 90% of the weekly samples from the previous six months (British Columbia, 2022a). In 2024, the highest E. Coli sample count was 9 CFU/100ml on July 2nd, 2024. The City met the filtration exemption criteria for bacteriological monitoring in 2024.

4.2 Continuous Raw Water Turbidity

The City conducts in-line turbidity monitoring at Anderson Creek, Selous Creek and at the Mountain Station reservoir. The Province's filtration exemption criteria outline that average daily turbidity measurements should not exceed "around 1 [Nephelometric Turbidity Units] NTU, but do not exceed 5 NTU for more than two days in a 12-month period" (British Columbia, 2022a). As shown in Figure 5, the City did exceed 1 NTU. The in-line turbidity meter that is used to calculate the daily average turbidity at

Mountain Station was found to be defective between March 15th 2024, and April 15th, 2024, so hand held turbidity readings were used the analysis for these dates.

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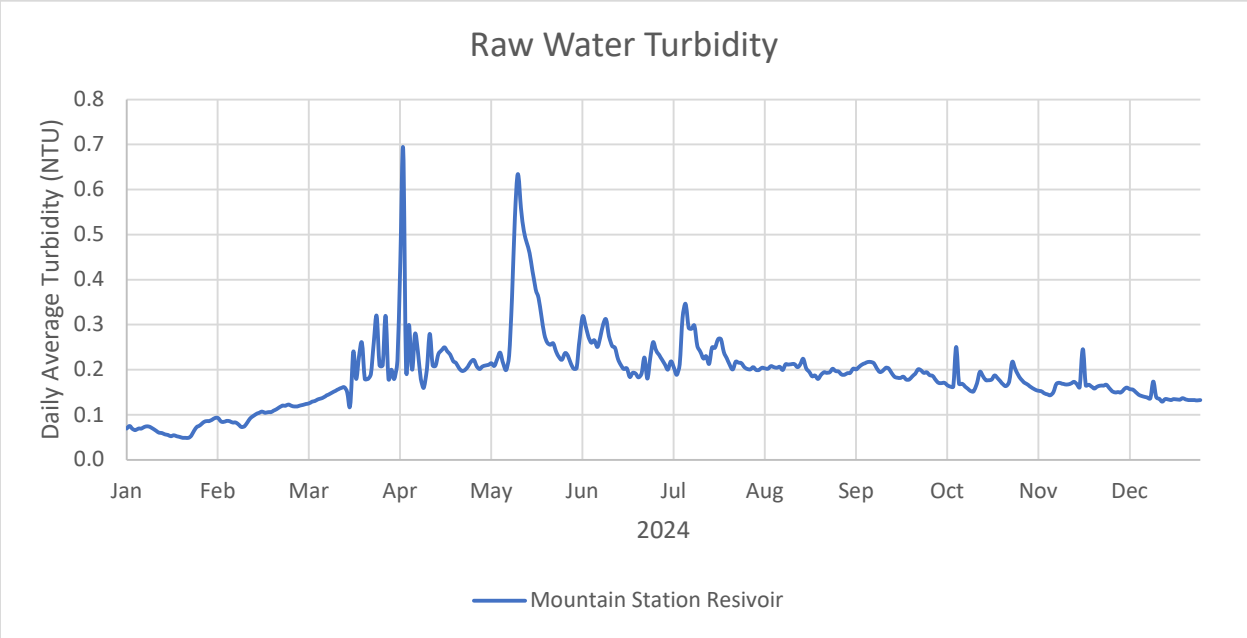

Figure 5: Daily Raw Water Turbidity

The monthly average turbidity represented in Nephelometric Turbidity Units (NTU) is displayed in Figure 6. The City continuously monitors turbidity levels in each water source and adjusts the water supply daily to ensure the cleanest possible water. Turbidity data from Selous was not available from July to December due to a sensor failure.

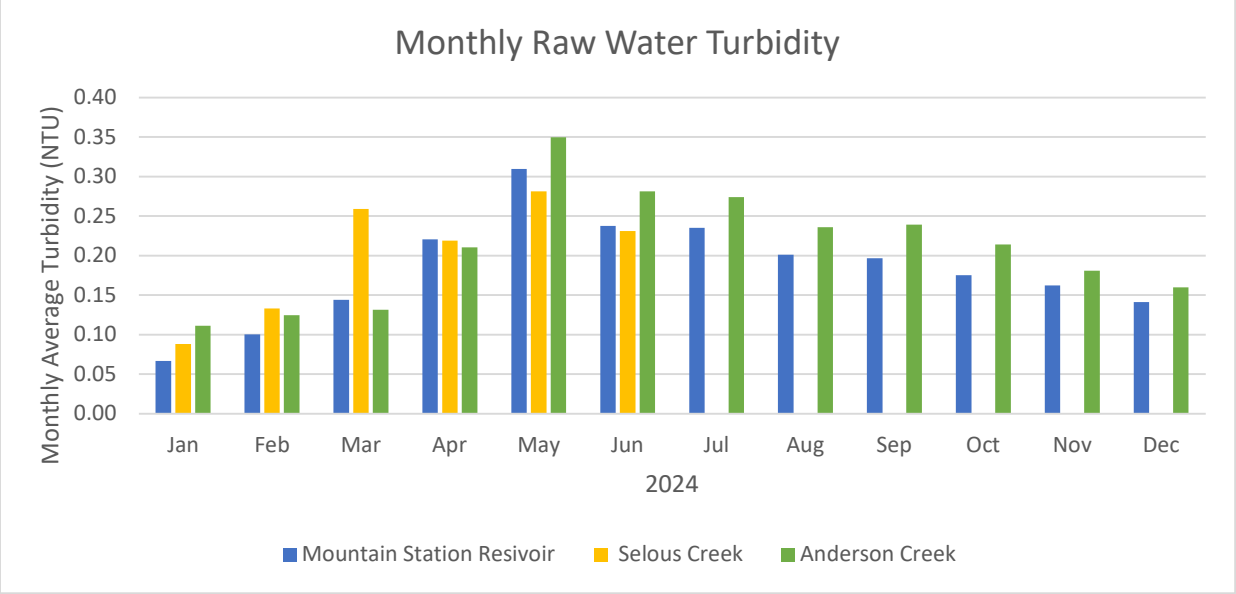

Figure 6: Monthly Raw Water Turbidity

4.3 Continuous Ultraviolet Performance

Ultraviolet (UV) performance is measured as the percent transmittance of ultraviolet light, referred to as Ultraviolet Transmittance (UVT), through a 10ml quartz cell. UV light is used in the drinking water disinfection process as UV "inactivates pathogens by damaging their nucleic acids (DNA and RNA) so that they cannot replicate and infect humans" (British Columbia, 2022b).

UVT is a vital performance metric as "it is related to the quantity of organics, colloidal solids and other material in the water which absorb and scatter the UV light as it passes through the water column. In a UV disinfection system, if the UVT of the water is low, the UV light cannot penetrate the water as effectively, thereby reducing the potency of the dose." (Real Tech Inc., n.d.)

As outlined in the Province's Guidelines for Ultraviolet Disinfection of Drinking Water, water entering a UV reactor is recommended to have a UVT greater than that recommended by the UV equipment supplier (British Columbia, 2022b). The UV system installed at Mountain Station is rated to achieve a 3-log reduction of giardia and cryptosporidium at a UVT of 72% at a flow up to 210 L/sec. As shown in Figure 7, in 2024 the raw water ultraviolet transmittance at Mountain Station remained above 72% for the entire year.

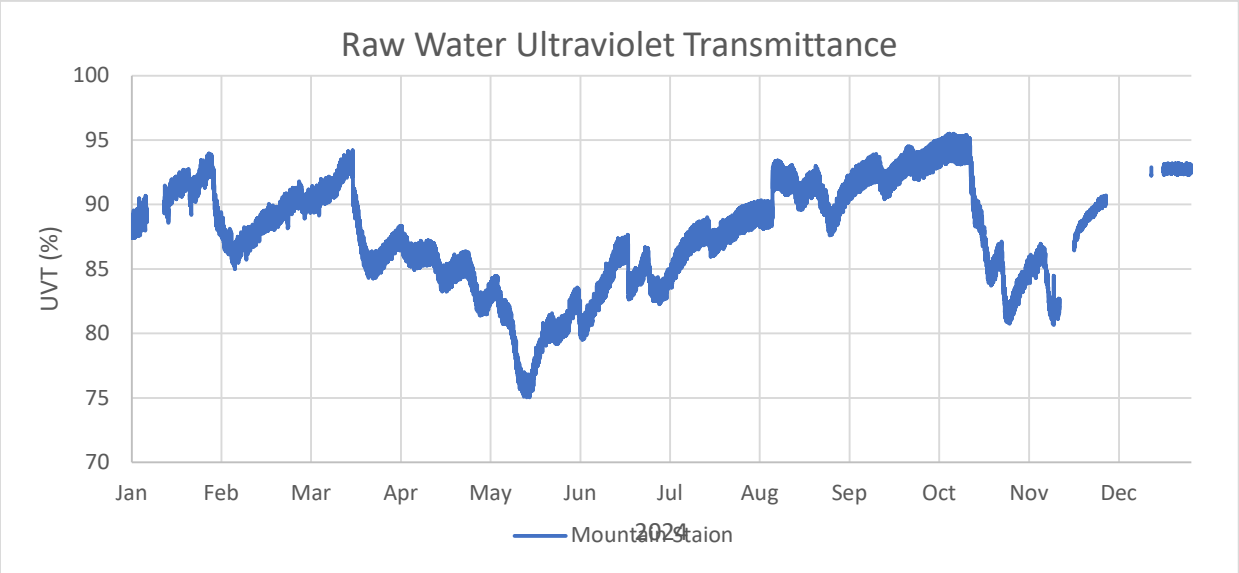

Figure 7: Mtn. Station Raw Water Ultraviolet Transmittance

4.4 Quarterly Trihalomethanes and Haloacetic Acids and Manganese Testing

The Guidelines for Canadian Drinking Water Quality (GCDWQ) published by Health Canada establishes Maximum Acceptable Concentration Limits (MACs) for Trihalomethanes (THMs) and Haloacetic Acids (HAAs). The MACs for these compounds are calculated over an average of the previous four calendar quarters at a designated location within the distribution system. This method of calculation is called the Locational Running Annual Average (LRAA). The MAC for THMs is 0.100mg/L (Health Canada, 2006), and the MAC for HAAs is 0.08mg/L (Health Canada, 2010).

The City was below Health Canada's MACs for THMs and HAA for all four quarters in 2024 based on an LRAA analysis. The results of the LRAA analysis for THMs and HAAs are shown in Tables 3 and 4. The quarterly THMs and HAAs sample results can be found in Appendix A

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Table 3: Q4 & Q3 THM & HAA LRAA Results

Legend

Below maximum acceptable concentration | Above Maximum Acceptable Concentration | Below Reporting Limit

2024 Q4 Locational Running Annual Average

	Analyte	Rosemont Reservoir	3rd St & Davies St	Fell St & 11th St	Silica St & Stanley St	Mountain Station Res	Units	Reporting Limit	GCDWQ Standard
Volatile Organic Compounds (VOC)	Bromodichloromethane	0.0005	0.0005	0.0005	0.0005	0.0005	mg/L	0.001	N/A
	Bromoform	0.0005	0.0005	0.0005	0.0005	0.0005	mg/L	0.001	N/A
	Chloroform	0.0510	0.1506	0.0502	0.0531	0.0320	mg/L	0.001	N/A
	Dibromochloromethane	0.0005	0.0005	0.0005	0.0005	0.0005	mg/L	0.001	N/A
Haloacetic Acids	Monochloroacetic Acid	0.0010	0.0010	0.0010	0.0010	0.0010	mg/L	0.002	N/A
	Monobromoacetic Acid	0.0010	0.0010	0.0010	0.0010	0.0010	mg/L	0.002	N/A
	Dichloroacetic Acid	0.0204	0.0219	0.0214	0.0195	0.0159	mg/L	0.002	N/A
	Trichloroacetic Acid	0.0241	0.0274	0.0251	0.0222	0.0114	mg/L	0.002	N/A
	Dibromoacetic Acid	0.0010	0.0010	0.0010	0.0010	0.0010	mg/L	0.002	N/A
	Total Haloacetic Acids (HAA5)	0.0446	0.0476	0.0502	0.0416	0.0272	mg/L	0.002	MAC**=0.08
Trihalomethanes	Total Trihalomethanes	0.0510	0.0527	0.0502	0.0531	0.0320	mg/L	0.004	MAC=0.1

2024 Q3 Locational Running Annual Average

	Analyte	Rosemont Reservoir	3rd St & Davies St	Fell St & 11th St	Silica St & Stanley St	Mountain Station Res	Units	Reporting Limit	GCDWQ Standard
Volatile Organic Compounds (VOC)	Bromodichloromethane	0.0005	0.0005	0.0005	0.0005	0.0005	mg/L	0.001	N/A
	Bromoform	0.0005	0.0005	0.0005	0.0005	0.0005	mg/L	0.001	N/A
	Chloroform	0.0549	0.1543	0.0528	0.0575	0.0344	mg/L	0.001	N/A
	Dibromochloromethane	0.0005	0.0005	0.0005	0.0005	0.0005	mg/L	0.001	N/A
Haloacetic Acids	Monochloroacetic Acid	0.0010	0.0010	0.0010	0.0010	0.0010	mg/L	0.002	N/A
	Monobromoacetic Acid	0.0010	0.0010	0.0010	0.0010	0.0010	mg/L	0.002	N/A
	Dichloroacetic Acid	0.0233	0.0247	0.0245	0.0225	0.0176	mg/L	0.002	N/A
	Trichloroacetic Acid	0.0282	0.0315	0.0289	0.0271	0.0131	mg/L	0.002	N/A
	Dibromoacetic Acid	0.0010	0.0010	0.0010	0.0010	0.0010	mg/L	0.002	N/A
	Total Haloacetic Acids (HAA5)	0.0515	0.0545	0.0571	0.0496	0.0307	mg/L	0.002	MAC**=0.08
Trihalomethanes	Total Trihalomethanes	0.0549	0.0564	0.0528	0.0575	0.0344	mg/L	0.004	MAC=0.1

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Table 4: Q2 & Q1 THM & HAA LRAA Results

2024 Q2 Locational Running Annual Average

	Analyte	Rosemont Reservoir	3rd St & Davies St	Fell St & 11th St	Silica St & Stanley St	Mountain Station Res	Units	Reporting Limit	GCDWQ Standard
Volatile Organic Compounds (VOC)	Bromodichloromethane	0.0005	0.0005	0.0005	0.0005	0.0005	mg/L	0.001	N/A
	Bromoform	0.0005	0.0005	0.0005	0.0005	0.0005	mg/L	0.001	N/A
	Chloroform	0.0590	0.0655	0.0558	0.0611	0.0360	mg/L	0.001	N/A
	Dibromochloromethane	0.0005	0.0005	0.0005	0.0005	0.0005	mg/L	0.001	N/A
Haloacetic Acids	Monochloroacetic Acid	0.0023	0.0019	0.0021	0.0018	0.0018	mg/L	0.002	N/A
	Monobromoacetic Acid	0.0010	0.0010	0.0010	0.0010	0.0010	mg/L	0.002	N/A
	Dichloroacetic Acid	0.0242	0.0254	0.0247	0.0237	0.0176	mg/L	0.002	N/A
	Trichloroacetic Acid	0.0298	0.0334	0.0302	0.0298	0.0136	mg/L	0.002	N/A
	Dibromoacetic Acid	0.0010	0.0010	0.0010	0.0010	0.0010	mg/L	0.002	N/A
	Total Haloacetic Acids (HAA5)	0.0555	0.0599	0.0599	0.0545	0.0323	mg/L	0.002	MAC**=0.08
Trihalomethanes	Total Trihalomethanes	0.0590	0.0655	0.0558	0.0611	0.0360	mg/L	0.004	MAC=0.1

2024 Q1 Locational Running Annual Average

	Analyte	Rosemont Reservoir	3rd St & Davies St	Fell St & 11th St	Silica St & Stanley St	Mountain Station Res	Units	Reporting Limit	GCDWQ Standard
Volatile Organic Compounds (VOC)	Bromodichloromethane	0.0005	0.0005	0.0005	0.0005	0.0005	mg/L	0.001	N/A
	Bromoform	0.0005	0.0005	0.0005	0.0005	0.0005	mg/L	0.001	N/A
	Chloroform	0.0881	0.0802	0.0671	0.0750	0.0391	mg/L	0.001	N/A
	Dibromochloromethane	0.0005	0.0005	0.0005	0.0005	0.0005	mg/L	0.001	N/A
Haloacetic Acids	Monochloroacetic Acid	0.0028	0.0025	0.0021	0.0026	0.0018	mg/L	0.002	N/A
	Monobromoacetic Acid	0.0010	0.0010	0.0010	0.0010	0.0010	mg/L	0.002	N/A
	Dichloroacetic Acid	0.0321	0.0289	0.0285	0.0275	0.0189	mg/L	0.002	N/A
	Trichloroacetic Acid	0.0441	0.0389	0.0400	0.0381	0.0166	mg/L	0.002	N/A
	Dibromoacetic Acid	0.0010	0.0010	0.0010	0.0010	0.0010	mg/L	0.002	N/A
	Total Haloacetic Acids (HAA5)	0.0785	0.0698	0.0735	0.0676	0.0365	mg/L	0.002	MAC**=0.08
Trihalomethanes	Total Trihalomethanes	0.0881	0.0802	0.0671	0.0750	0.0391	mg/L	0.004	MAC=0.1

Total Manganese is included in the same analysis as THMs and HAA and thus is also reported. The Guidelines for Canadian Drinking Water Quality listed the MAC for manganese at 0.12 mg/L for adults and 0.02 mg/L for infants who are fed formula "where water containing manganese at levels above the MAC are used to prepare formula." The health considerations of manganese in exceedance of the MAC can lead to "effects on neurological development and behaviour; deficits in memory, attention, and motor skills" (Health Canada, 2023).

The City was below the MAC for adults and infants during all sampling events in 2024. The results of the 2024 quarterly sampling are shown below in Table 5.

Table 5: Quarterly Total Manganese

Legend	
Below maximum acceptable concentration	Above Maximum Acceptable Concentration
Below Reporting Limits	Not Reported

2023 Quarterly Manganese Results

Sample Date	Analyte	Rosemont Reservoir	3rd St & Davies St	Fell St & 11th St	Silica St & Stanley St	Mountain Station	Units	Detection Limit	GCDWQ Adults	GCDWQ Infants
Q4 (2025-01-03)	Manganese, total	0.00035	0.00045	0.00032	0.00153	0.00126	mg/L	0.0002	MAC =0.12	MAC =0.02
Q3 (2024-10-11)		0.00055	0.00060	0.00051	0.00246	0.00230	mg/L	0.0002		
Q2 (2024-06-25)		0.00068	0.00079	0.00082	0.00242	0.00207	mg/L	0.0002		
Q1 (2024-03-13 & 14)		0.00036	0.00048	0.00037	0.00185	0.00155	mg/L	0.0002		

4.5 Annual Full Comprehensive Raw Water Analysis

A raw water analysis of Five Mile, Anderson, Selous Creeks and the Mountain Station reservoir, were taken on January 23rd, 2025, as the sampling in the Q4 of 2024 was disrupted. The results can be found in Appendix C.

The raw water analysis shows that the raw water was within the recommended levels outlined in the Guidelines for Canadian Drinking Water Quality (GCDWQ), published by Health Canada, for all parameters.

CARO Analytical Services (Kelowna facility) conducted the 2024 raw water analysis and reported on the following parameters:

- Chloride
- Fluoride
- Nitrate
- Nitrite
- Sulphate
- Langelier Index
- Hydrogen Sulfide
- Trihalomethanes
- Hardness
- Total Dissolved Solids
- UV Transmittance
- Colour
- Alkalinity
- Total Organic Carbon
- Cyanide
- Total Suspended Solids
- Sulphite
- Turbidity
- pH
- Conductivity
- Aluminum
- Antimony
- Arsenic
- Barium
- Boron
- Cadmium
- Calcium
- Chromium
- Cobalt
- Copper
- Iron
- Lead
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Potassium
- Selenium
- Sodium
- Strontium
- Uranium
- Zinc
- Bromodichloromethane
- Bromoform
- Chloroform

4.6 Continuous Chlorine Residual

Chlorine is one of the two ways the City disinfects its drinking water. As a best practice, the City maintains a minimum of 0.2 mg/L chlorine residuals at the furthest point in the distribution system. This small amount of chlorine acts as a secondary disinfectant, reducing the likelihood of biofilm formation in pipes and preventing the growth of opportunistic microorganisms. The City monitors residual chlorine in real-time and daily with a handheld meter at the Mountain Station reservoir intake.

Health Canada notes that residual chlorine "in most Canadian drinking water distribution systems range from 0.04 to 2.0 mg/L." However, the "suggested operational range for free chlorine residual is between a detectable level and 5 mg/L (Health Canada, 2016)." As can be seen in Figure 8, the City's daily handheld residual chlorine readings were most often between 0.04 and 2.0 mg/L and were never above 5 mg/L.

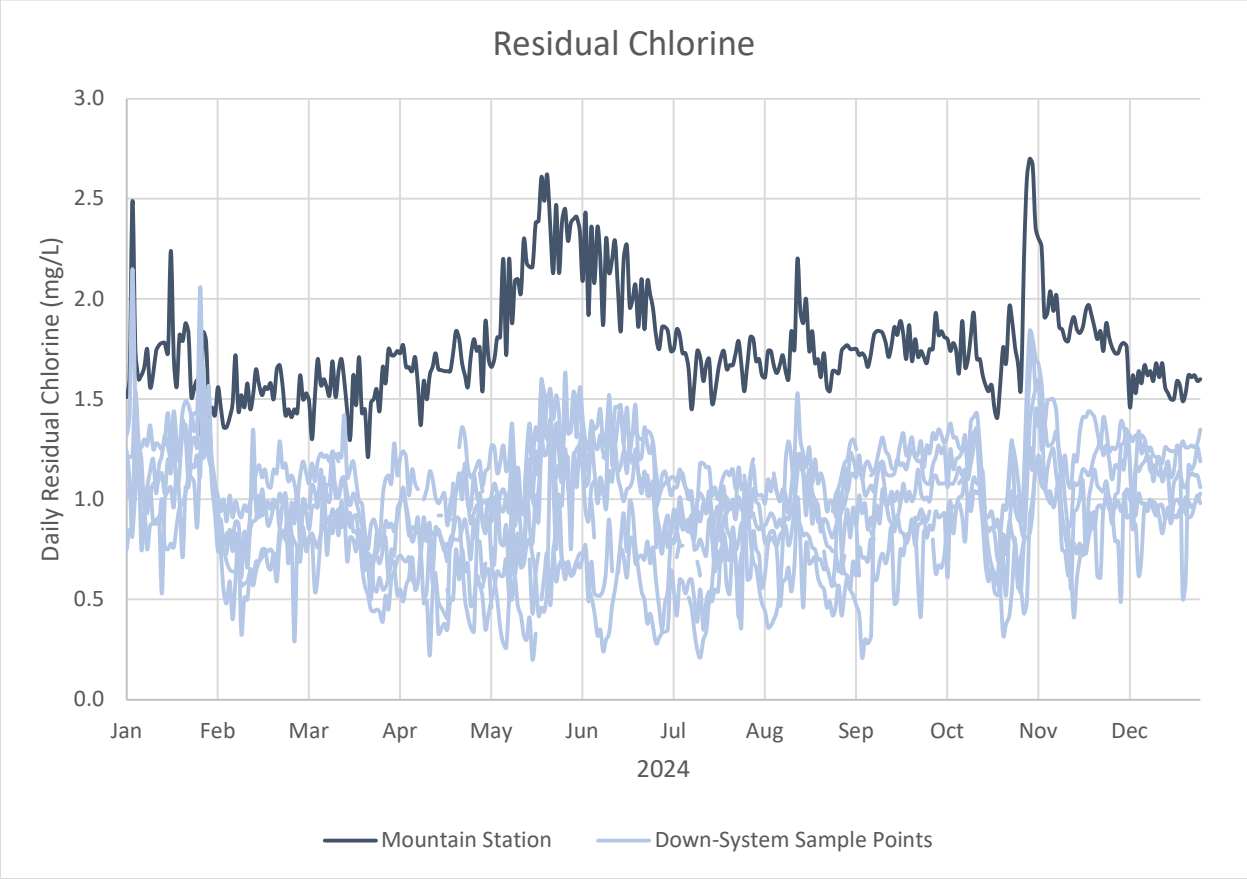

Figure 8: Daily Handheld Residual Chlorine Readings

5 Water Emergency Response Plan

Emergency response planning is an important part of protecting a drinking water system. Most public water systems have to contend with common operating emergencies such as pipe breaks, pump malfunctions, bacteriological contamination, or power outages. These are manageable if the water system has an emergency response plan that can be put into action.

More serious, non-routine emergencies may result from intentional acts of vandalism, chemical spills, floods, earthquakes, windstorms, or droughts. Each emergency has unique effects on different parts of a water system. Floods can cause widespread bacterial contamination and equipment failures, earthquakes can damage water sources, distribution systems and treatment systems, and storms can disrupt power supplies. The common element is that each emergency may threaten the system's ability to deliver potable and palatable drinking water. Emergency response planning is a process by which water system managers and staff explore vulnerabilities, make improvements, and establish procedures to follow in an emergency situation. It is also a process that encourages people to form partnerships and get to know one another. Preparing a response plan and practicing it can save lives, prevent illness, enhance system security, minimize property damage, and lessen the overall burden of a catastrophic event and the cost associated with the disaster.

The City developed the current emergency response plan in 2016 and updates the plan annually, with the latest update being in 2022. The plan is available for viewing at the Public Works and Utility Complex located at 80 Lakeside Drive, Nelson, BC, V1L 6B9.

6 Cross-Connection Control Program Summary

The City's Cross-Connection Control Program (CCCP), implemented in 2017, has completed 280 facility inspections, representing 73% of industrial, commercial and institutional customers in the City, and has 137 registered backflow prevention devices in our tracking system.

The City's Waterworks Regulatory Bylaw #3293 (2015) and Subdivision and Development Bylaw #3170 (2011) contain provisions for the protection of the City’s water system from potential sources of contamination through cross-connection protection, mandating the installation of backflow protection and provisions for access to properties for inspections by qualified persons.

Building managers continue to submit cross connection control test reports which are recorded in a database.

7 Water Master Plan Summary

The City of Nelson Water Master Plan was updated in 2017, with final Council approval in 2018. A copy of the Master Plan is available by following the link:

https://www.nelson.ca/DocumentCenter/View/2066/Water-Masterplan-Update-

The plan continues to inform and outline major capital projects intended to strengthen utility resilience and treatment capacity. In 2022, The Capital Project Delivery team commissioned the Anderson Creek Booster Station, a facility designed to deliver raw water from Anderson and Fell Creeks to the Mountain Station Treatment Facility and represents one of the largest water assets that The City of Nelson has commissioned in over a decade. As of March 2023, the Anderson booster station was in full operation with all of Anderson Creek’s water being fed to the reservoir at Mountain Station where is treated with UV and chlorination.

The City of Nelson Capital Project Team continues to pursue projects identified in the Master Plan, including the engineering, design and site preparation for a 2000M3 finished water reservoir at the Mountain Station facility.

8 Water Distribution System Capital Works Summary

In 2024, the City replaced or installed 187 meters of modern water main, and 318 meters of raw water transmission main at the project locations listed in Table 6. The focus of investment in 2024 was the installation of new water mains in the 500 and 600 blocks of Kootenay Street. This work being part of the water capital plan to interconnect older sections of Nelson's distribution system to improve redundancy, improve water quality and bolster fire hydrant performance.

Table 6: Water Distribution System Asset Replacement

Material type	Watermain Diameter (mm)	Watermain Length (m)	Location
PVC	200	93	500 Kootenay Street
PVC	200	94	600 Kootenay Street
PVC	400	318	820 10th Street
PVC	150	2.5	200-300 Victoria Street
PVC	400	12.56	1400 Fell Street

**PVC – Polyvinyl Chloride C900 DR18 water pipe; MPE – Municipal Polyethylene series 160 water pipe*

9 Environmental Operators Certification Program Training

The City's water treatment plant and water distribution system operators are certified by the Environmental Operators Certification Program (EOCP). The current levels of each certified operator are documented in Table 7.

Table 7: Operator EOCP Certificates

Facility Operator	EOCP Certification #	Water Treatment Plant Operator	Water Distribution System Operator
Martin Grill – Chief Plant Operator	3964	Level 2	Level 2
Jason Allum	9288	Level 1	Level 2
Jay Moyle	8112	Level 1	Level 2
Chris Laminski	9369	Level 2	Level 2
Glen McDonald	9615	Level 2	n/a
Leonard Arabia	6800	Level 1	Level 2
Matthew Block	7707	Level 2	Level 1
Tori Mooney	1002623	n/a	Level 2

10 Water Conservation Measures

Table 8 shows the 2024 dates that the City enacted watering restrictions, while Figure 9 shows the restrictions associated with each stage.

Table 8: 2024 Watering Restrictions

Watering Restriction Level	Start Date
Normal Regulations	2024-01-01
Stage 1	2024-07-06
Stage 2	2024-08-09
Normal Regulations	2024-10-15

Water Restriction Stages

(As per Bylaw 3293, 2015)

City of NELSON

Activity	Normal Regulations	1	2	3
Watering lawns using a sprinkler or irrigation system	4am - 9am & 7pm-10pm Even # address: Even # days of the month Odd # address: Odd # days of the month	4am - 9am & 7pm-10pm Even # address: ONLY ON Wednesday and Saturday Odd # address: ONLY ON Thursday and Sunday	4am-9am & 7pm-10pm Even # address: ONLY ON Wednesday Odd # address: ONLY ON Thursday	✗
Watering trees, shrubs, or vegetable & flower gardens using a sprinkler or irrigation system	✓	4am-9am & 7pm -10pm ANY DAY	4am-9am & 7pm -10pm ANY DAY	✗
Watering trees, shrubs, or vegetable & flower gardens using a hand-held container, a hose with a shut-off nozzle, or a drip-irrigation system	✓	✓	✓	4am-9am & 7pm -10pm ANY DAY
Washing sidewalks, driveways, parking lots, exterior building surfaces, and exterior windows *	✓ with a handheld shut-off nozzle	✓ with a handheld shut-off nozzle	✗	✗
Washing personal Vehicles **	✓ with a handheld shut-off nozzle	✓ with a handheld shut-off nozzle	✓ with a handheld shut-off nozzle	✗
Filling of fountains, pools, hot tubs, or garden ponds	✓	✓	✓	✗
Watering new sod or grass outside of the permitted restrictions ***	PERMIT REQUIRED	PERMIT REQUIRED	✗	✗

* Permitted at all stages if necessary for applying product such as paint, preservative and stucco, preparing a surface prior to paving or repointing bricks, or if required bylaw to comply with health or safety regulations.

** Commercial carwash permitted at all stages

***Permits can be acquired by contacting the Public Works at (250) 352-8238.

save now. & tomorrow. 20%

Figure 9: City of Nelson Water Restriction Stages

11 References

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Appendix A: THM and HAA Quarterly Lab Results

CERTIFICATE OF ANALYSIS

REPORTED TO	Nelson, City of 101-310 Ward St Nelson, BC V1L 5S4		
ATTENTION	Martin Grill	**WORK ORDER**	24C1903
PO NUMBER		**RECEIVED / TEMP**	2024-03-14 09:50 / 4.8°C
PROJECT	Drinking Water	**REPORTED**	2024-03-21 15:32
PROJECT INFO		**COC NUMBER**	40837.5581

Introduction:

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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 bwhitehead@caro.ca

Authorized By:

Brent Whitehead
Account Manager

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	Nelson, City of	**WORK ORDER**	24C1903
PROJECT	Drinking Water	**REPORTED**	2024-03-21 15:32

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Rosemont Reservoir (24C1903-01) | Matrix: Water | Sampled: 2024-03-13 07:50						
Calculated Parameters						
Total Trihalomethanes	**0.0542**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Dichloroacetic Acid	**0.0168**	N/A	0.0020	mg/L	2024-03-21	
Trichloroacetic Acid	**0.0173**	N/A	0.0020	mg/L	2024-03-21	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Total Haloacetic Acids (HAA5)	**0.0341**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*101*		*70-130*	%	*2024-03-21*	
Total Metals						
Manganese, total	**0.00036**	MAC = 0.12	0.00020	mg/L	2024-03-19	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-03-21	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-03-21	
Chloroform	**0.0542**	N/A	0.0010	mg/L	2024-03-21	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-03-21	
Surrogate: Toluene-d8	*105*		*70-130*	%	*2024-03-21*	
Surrogate: 4-Bromofluorobenzene	*99*		*70-130*	%	*2024-03-21*	
3rd St and Davies St (24C1903-02) | Matrix: Water | Sampled: 2024-03-13 09:45						
Calculated Parameters						
Total Trihalomethanes	**0.0607**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Dichloroacetic Acid	**0.0176**	N/A	0.0020	mg/L	2024-03-21	
Trichloroacetic Acid	**0.0232**	N/A	0.0020	mg/L	2024-03-21	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Total Haloacetic Acids (HAA5)	**0.0409**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*101*		*70-130*	%	*2024-03-21*	
Total Metals						
Manganese, total	**0.00048**	MAC = 0.12	0.00020	mg/L	2024-03-19	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-03-21	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-03-21	
Chloroform	**0.0607**	N/A	0.0010	mg/L	2024-03-21	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-03-21	
Surrogate: Toluene-d8	*112*		*70-130*	%	*2024-03-21*	

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	Nelson, City of	**WORK ORDER**	24C1903
PROJECT	Drinking Water	**REPORTED**	2024-03-21 15:32

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
3rd St and Davies St (24C1903-02) | Matrix: Water | Sampled: 2024-03-13 09:45, Continued						
Volatile Organic Compounds (VOC), Continued						
Surrogate: 4-Bromofluorobenzene	*101*		*70-130*	%	*2024-03-21*	
Fell St and 11th St (24C1903-03) | Matrix: Water | Sampled: 2024-03-13 10:00						
Calculated Parameters						
Total Trihalomethanes	**0.0540**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Dichloroacetic Acid	**0.0172**	N/A	0.0020	mg/L	2024-03-21	
Trichloroacetic Acid	**0.0221**	N/A	0.0020	mg/L	2024-03-21	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Total Haloacetic Acids (HAA5)	**0.0393**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*104*		*70-130*	%	*2024-03-21*	
Total Metals						
Manganese, total	**0.00037**	MAC = 0.12	0.00020	mg/L	2024-03-19	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-03-21	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-03-21	
Chloroform	**0.0540**	N/A	0.0010	mg/L	2024-03-21	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-03-21	
Surrogate: Toluene-d8	*112*		*70-130*	%	*2024-03-21*	
Surrogate: 4-Bromofluorobenzene	*101*		*70-130*	%	*2024-03-21*	
Silica St and Stanley St (24C1903-04) | Matrix: Water | Sampled: 2024-03-13 08:20						
Calculated Parameters						
Total Trihalomethanes	**0.0581**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Dichloroacetic Acid	**0.0163**	N/A	0.0020	mg/L	2024-03-21	
Trichloroacetic Acid	**0.0194**	N/A	0.0020	mg/L	2024-03-21	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Total Haloacetic Acids (HAA5)	**0.0357**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*104*		*70-130*	%	*2024-03-21*	
Total Metals						
Manganese, total	**0.00185**	MAC = 0.12	0.00020	mg/L	2024-03-19	

TEST RESULTS

REPORTED TO	Nelson, City of	**WORK ORDER**	24C1903
PROJECT	Drinking Water	**REPORTED**	2024-03-21 15:32

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Silica St and Stanley St (24C1903-04) | Matrix: Water | Sampled: 2024-03-13 08:20, Continued						
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-03-21	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-03-21	
Chloroform	**0.0581**	N/A	0.0010	mg/L	2024-03-21	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-03-21	
Surrogate: Toluene-d8	*112*		*70-130*	%	*2024-03-21*	
Surrogate: 4-Bromofluorobenzene	*101*		*70-130*	%	*2024-03-21*	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Nelson, City of	**WORK ORDER**	24C1903
PROJECT	Drinking Water	**REPORTED**	2024-03-21 15:32

Analysis Description	Method Ref.	Technique	Accredited	Location
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	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
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
EPA	United States Environmental Protection Agency Test Methods

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

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:bwhitehead@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.

CERTIFICATE OF ANALYSIS

REPORTED TO	Nelson, City of 101-310 Ward St Nelson, BC V1L 5S4		
ATTENTION	Martin Grill	**WORK ORDER**	24C1918
PO NUMBER		**RECEIVED / TEMP**	2024-03-15 09:43 / 5.4°C
PROJECT	Drinking Water	**REPORTED**	2024-03-25 16:51
PROJECT INFO		**COC NUMBER**	40837.5581

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

Authorized By:

Brent Whitehead
Account Manager

TEST RESULTS

REPORTED TO	Nelson, City of	**WORK ORDER**	24C1918
PROJECT	Drinking Water	**REPORTED**	2024-03-25 16:51

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Mountain Station Res (24C1918-01) | Matrix: Water | Sampled: 2024-03-14 08:00						
Calculated Parameters						
Total Trihalomethanes	**0.0320**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-23	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-23	
Dichloroacetic Acid	**0.0134**	N/A	0.0020	mg/L	2024-03-23	
Trichloroacetic Acid	**0.0112**	N/A	0.0020	mg/L	2024-03-23	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-23	
Total Haloacetic Acids (HAA5)	**0.0246**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*71*		*70-130*	%	*2024-03-23*	
Total Metals						
Manganese, total	**0.00155**	MAC = 0.12	0.00020	mg/L	2024-03-21	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-03-22	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-03-22	
Chloroform	**0.0320**	N/A	0.0010	mg/L	2024-03-22	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-03-22	
Surrogate: Toluene-d8	*87*		*70-130*	%	*2024-03-22*	
Surrogate: 4-Bromofluorobenzene	*92*		*70-130*	%	*2024-03-22*	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Nelson, City of	**WORK ORDER**	24C1918
PROJECT	Drinking Water	**REPORTED**	2024-03-25 16:51

Analysis Description	Method Ref.	Technique	Accredited	Location
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	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
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
EPA	United States Environmental Protection Agency Test Methods

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

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:bwhitehead@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.

CERTIFICATE OF ANALYSIS

REPORTED TO	Nelson, City of 101-310 Ward St Nelson, BC V1L 5S4		
ATTENTION	Martin Grill	**WORK ORDER**	24F3496
PO NUMBER		**RECEIVED / TEMP**	2024-06-27 09:31 / 16.6°C
PROJECT	Drinking Water	**REPORTED**	2024-07-09 12:15
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.

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 bwhitehead@caro.ca

Authorized By:

Brent Whitehead
Account Manager

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO Nelson, City of
PROJECT Drinking Water

WORK ORDER 24F3496
REPORTED 2024-07-09 12:15

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Rosemont Reservoir (24F3496-01) | Matrix: Water | Sampled: 2024-06-25 08:00						
Calculated Parameters						
Total Trihalomethanes	**0.0725**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-02	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-02	
Dichloroacetic Acid	**0.0311**	N/A	0.0020	mg/L	2024-07-02	
Trichloroacetic Acid	**0.0380**	N/A	0.0020	mg/L	2024-07-02	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-02	
Total Haloacetic Acids (HAA5)	**0.0691**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*101*		*70-130*	%	*2024-07-02*	
Total Metals						
Manganese, total	**0.00068**	MAC = 0.12	0.00020	mg/L	2024-07-01	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-06-28	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-06-28	
Chloroform	**0.0725**	N/A	0.0010	mg/L	2024-06-28	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-06-28	
Surrogate: Toluene-d8	*75*		*70-130*	%	*2024-06-28*	
Surrogate: 4-Bromofluorobenzene	*80*		*70-130*	%	*2024-06-28*	
3rd St and Davies St (24F3496-02) | Matrix: Water | Sampled: 2024-06-25 09:30						
Calculated Parameters						
Total Trihalomethanes	**0.0782**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-02	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-02	
Dichloroacetic Acid	**0.0320**	N/A	0.0020	mg/L	2024-07-02	
Trichloroacetic Acid	**0.0362**	N/A	0.0020	mg/L	2024-07-02	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-02	
Total Haloacetic Acids (HAA5)	**0.0681**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*93*		*70-130*	%	*2024-07-02*	
Total Metals						
Manganese, total	**0.00079**	MAC = 0.12	0.00020	mg/L	2024-07-01	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-06-28	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-06-28	
Chloroform	**0.0782**	N/A	0.0010	mg/L	2024-06-28	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-06-28	
Surrogate: Toluene-d8	*75*		*70-130*	%	*2024-06-28*	

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO Nelson, City of
PROJECT Drinking Water

WORK ORDER 24F3496
REPORTED 2024-07-09 12:15

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
3rd St and Davies St (24F3496-02) | Matrix: Water | Sampled: 2024-06-25 09:30, Continued						
Volatile Organic Compounds (VOC), Continued						
Surrogate: 4-Bromofluorobenzene	*84*		*70-130*	%	*2024-06-28*	
Fell St and 11th St (24F3496-03) | Matrix: Water | Sampled: 2024-06-25 09:15						
Calculated Parameters						
Total Trihalomethanes	**0.0750**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-02	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-02	
Dichloroacetic Acid	**0.0296**	N/A	0.0020	mg/L	2024-07-02	
Trichloroacetic Acid	**0.0301**	N/A	0.0020	mg/L	2024-07-02	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-02	
Total Haloacetic Acids (HAA5)	**0.0597**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*93*		*70-130*	%	*2024-07-02*	
Total Metals						
Manganese, total	**0.00082**	MAC = 0.12	0.00020	mg/L	2024-07-01	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-06-28	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-06-28	
Chloroform	**0.0750**	N/A	0.0010	mg/L	2024-06-28	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-06-28	
Surrogate: Toluene-d8	*78*		*70-130*	%	*2024-06-28*	
Surrogate: 4-Bromofluorobenzene	*84*		*70-130*	%	*2024-06-28*	
Silica St and Stanley St (24F3496-04) | Matrix: Water | Sampled: 2024-06-25 08:30						
Calculated Parameters						
Total Trihalomethanes	**0.0787**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-02	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-02	
Dichloroacetic Acid	**0.0279**	N/A	0.0020	mg/L	2024-07-02	
Trichloroacetic Acid	**0.0279**	N/A	0.0020	mg/L	2024-07-02	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-02	
Total Haloacetic Acids (HAA5)	**0.0558**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*90*		*70-130*	%	*2024-07-02*	
Total Metals						
Manganese, total	**0.00242**	MAC = 0.12	0.00020	mg/L	2024-07-01	

TEST RESULTS

REPORTED TO	Nelson, City of	**WORK ORDER**	24F3496
PROJECT	Drinking Water	**REPORTED**	2024-07-09 12:15

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Silica St and Stanley St (24F3496-04) | Matrix: Water | Sampled: 2024-06-25 08:30, Continued						
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-06-29	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-06-29	
Chloroform	**0.0787**	N/A	0.0010	mg/L	2024-06-29	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-06-29	
Surrogate: Toluene-d8	*79*		*70-130*	%	*2024-06-29*	
Surrogate: 4-Bromofluorobenzene	*80*		*70-130*	%	*2024-06-29*	
Mountain Station Res (24F3496-05) | Matrix: Water | Sampled: 2024-06-25 08:45						
Calculated Parameters						
Total Trihalomethanes	**0.0485**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-03	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-03	
Dichloroacetic Acid	**0.0218**	N/A	0.0020	mg/L	2024-07-03	
Trichloroacetic Acid	**0.0141**	N/A	0.0020	mg/L	2024-07-03	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-07-03	
Total Haloacetic Acids (HAA5)	**0.0359**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*93*		*70-130*	%	*2024-07-03*	
Total Metals						
Manganese, total	**0.00207**	MAC = 0.12	0.00020	mg/L	2024-07-01	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-06-29	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-06-29	
Chloroform	**0.0485**	N/A	0.0010	mg/L	2024-06-29	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-06-29	
Surrogate: Toluene-d8	*76*		*70-130*	%	*2024-06-29*	
Surrogate: 4-Bromofluorobenzene	*79*		*70-130*	%	*2024-06-29*	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Nelson, City of	**WORK ORDER**	24F3496
PROJECT	Drinking Water	**REPORTED**	2024-07-09 12:15

Analysis Description	Method Ref.	Technique	Accredited	Location
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	Richmond

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

Glossary of Terms:

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mg/L	Milligrams per litre
EPA	United States Environmental Protection Agency Test Methods

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CERTIFICATE OF ANALYSIS

REPORTED TO	Nelson, City of 101-310 Ward St Nelson, BC V1L 5S4		
ATTENTION	Martin Grill	**WORK ORDER**	24J2312
PO NUMBER		**RECEIVED / TEMP**	2024-10-16 09:52 / 13.5°C
PROJECT	Drinking Water	**REPORTED**	2024-10-25 15:35
PROJECT INFO		**COC NUMBER**	40837.5581

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

Authorized By:

Brent Whitehead
Account Manager

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	Nelson, City of	**WORK ORDER**	24J2312
PROJECT	Drinking Water	**REPORTED**	2024-10-25 15:35

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Rosemont Reservoir (24J2312-01) | Matrix: Water | Sampled: 2024-10-11 11:30						
Calculated Parameters						
Total Trihalomethanes	**0.0463**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-23	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-23	
Dichloroacetic Acid	**0.0211**	N/A	0.0020	mg/L	2024-10-23	
Trichloroacetic Acid	**0.0239**	N/A	0.0020	mg/L	2024-10-23	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-23	
Total Haloacetic Acids (HAA5)	**0.0450**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*88*		*70-130*	%	*2024-10-23*	
Total Metals						
Manganese, total	**0.00055**	MAC = 0.12	0.00020	mg/L	2024-10-18	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Chloroform	**0.0463**	N/A	0.0010	mg/L	2024-10-20	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Surrogate: Toluene-d8	*79*		*70-130*	%	*2024-10-20*	
Surrogate: 4-Bromofluorobenzene	*59*		*70-130*	%	*2024-10-20*	S02
3rd St and Davies St (24J2312-02) | Matrix: Water | Sampled: 2024-10-11 10:40						
Calculated Parameters						
Total Trihalomethanes	**0.0435**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-25	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-25	
Dichloroacetic Acid	**0.0230**	N/A	0.0020	mg/L	2024-10-25	
Trichloroacetic Acid	**0.0272**	N/A	0.0020	mg/L	2024-10-25	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-25	
Total Haloacetic Acids (HAA5)	**0.0502**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*106*		*70-130*	%	*2024-10-25*	
Total Metals						
Manganese, total	**0.00060**	MAC = 0.12	0.00020	mg/L	2024-10-18	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Chloroform	**0.0435**	N/A	0.0010	mg/L	2024-10-20	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Surrogate: Toluene-d8	*104*		*70-130*	%	*2024-10-20*	

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO Nelson, City of
PROJECT Drinking Water

WORK ORDER 24J2312
REPORTED 2024-10-25 15:35

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
3rd St and Davies St (24J2312-02) | Matrix: Water | Sampled: 2024-10-11 10:40, Continued						
Volatile Organic Compounds (VOC), Continued						
Surrogate: 4-Bromofluorobenzene	*72*		*70-130*	%	*2024-10-20*	
Fell St and 11th St (24J2312-03) | Matrix: Water | Sampled: 2024-10-11 11:00						
Calculated Parameters						
Total Trihalomethanes	**0.0415**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-25	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-25	
Dichloroacetic Acid	**0.0237**	N/A	0.0020	mg/L	2024-10-25	
Trichloroacetic Acid	**0.0268**	N/A	0.0020	mg/L	2024-10-25	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-25	
Total Haloacetic Acids (HAA5)	**0.0506**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*115*		*70-130*	%	*2024-10-25*	
Total Metals						
Manganese, total	**0.00051**	MAC = 0.12	0.00020	mg/L	2024-10-18	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Chloroform	**0.0415**	N/A	0.0010	mg/L	2024-10-20	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Surrogate: Toluene-d8	*102*		*70-130*	%	*2024-10-20*	
Surrogate: 4-Bromofluorobenzene	*75*		*70-130*	%	*2024-10-20*	
Silica St and Stanley St (24J2312-04) | Matrix: Water | Sampled: 2024-10-11 10:15						
Calculated Parameters						
Total Trihalomethanes	**0.0438**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-25	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-25	
Dichloroacetic Acid	**0.0201**	N/A	0.0020	mg/L	2024-10-25	
Trichloroacetic Acid	**0.0223**	N/A	0.0020	mg/L	2024-10-25	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-25	
Total Haloacetic Acids (HAA5)	**0.0424**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*102*		*70-130*	%	*2024-10-25*	
Total Metals						
Manganese, total	**0.00246**	MAC = 0.12	0.00020	mg/L	2024-10-18	

TEST RESULTS

REPORTED TO Nelson, City of
PROJECT Drinking Water

WORK ORDER 24J2312
REPORTED 2024-10-25 15:35

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Silica St and Stanley St (24J2312-04) | Matrix: Water | Sampled: 2024-10-11 10:15, Continued						
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Chloroform	**0.0438**	N/A	0.0010	mg/L	2024-10-20	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Surrogate: Toluene-d8	*95*		*70-130*	%	*2024-10-20*	
Surrogate: 4-Bromofluorobenzene	*73*		*70-130*	%	*2024-10-20*	
Mountain Station Res (24J2312-05) | Matrix: Water | Sampled: 2024-10-11 10:00						
Calculated Parameters						
Total Trihalomethanes	**0.0295**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-25	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-25	
Dichloroacetic Acid	**0.0182**	N/A	0.0020	mg/L	2024-10-25	
Trichloroacetic Acid	**0.0113**	N/A	0.0020	mg/L	2024-10-25	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-10-25	
Total Haloacetic Acids (HAA5)	**0.0295**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*113*		*70-130*	%	*2024-10-25*	
Total Metals						
Manganese, total	**0.00230**	MAC = 0.12	0.00020	mg/L	2024-10-19	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Chloroform	**0.0295**	N/A	0.0010	mg/L	2024-10-20	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-10-20	
Surrogate: Toluene-d8	*92*		*70-130*	%	*2024-10-20*	
Surrogate: 4-Bromofluorobenzene	*73*		*70-130*	%	*2024-10-20*	

Sample Qualifiers:

S02 Surrogate recovery outside of control limits. Data accepted based on acceptable recovery of other surrogates.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Nelson, City of	**WORK ORDER**	24J2312
PROJECT	Drinking Water	**REPORTED**	2024-10-25 15:35

Analysis Description	Method Ref.	Technique	Accredited	Location
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	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
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
EPA	United States Environmental Protection Agency Test Methods

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

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:bwhitehead@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.

CERTIFICATE OF ANALYSIS

REPORTED TO	Nelson, City of 101-310 Ward St Nelson, BC V1L 5S4		
ATTENTION	Martin Grill	**WORK ORDER**	25A0219
PO NUMBER	43982	**RECEIVED / TEMP**	2025-01-06 09:17 / 8.0°C
PROJECT	Drinking Water	**REPORTED**	2025-01-15 11:32
PROJECT INFO		**COC NUMBER**	No Number

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 hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO Nelson, City of
PROJECT Drinking Water

WORK ORDER 25A0219
REPORTED 2025-01-15 11:32

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Rosemont Reservoir (25A0219-01) | Matrix: Water | Sampled: 2025-01-03 10:30						
Calculated Parameters						
Total Trihalomethanes	**0.0310**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Dichloroacetic Acid	**0.0127**	N/A	0.0020	mg/L	2025-01-08	
Trichloroacetic Acid	**0.0173**	N/A	0.0020	mg/L	2025-01-08	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Total Haloacetic Acids (HAA5)	**0.0300**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*102*		*70-130*	%	*2025-01-08*	
Total Metals						
Manganese, total	**0.00035**	MAC = 0.12	0.00020	mg/L	2025-01-08	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Chloroform	**0.0310**	N/A	0.0010	mg/L	2025-01-09	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Surrogate: Toluene-d8	*119*		*70-130*	%	*2025-01-09*	
Surrogate: 4-Bromofluorobenzene	*107*		*70-130*	%	*2025-01-09*	
3rd St and Davies St (25A0219-02) | Matrix: Water | Sampled: 2025-01-03 11:15						
Calculated Parameters						
Total Trihalomethanes	**0.0285**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Dichloroacetic Acid	**0.0149**	N/A	0.0020	mg/L	2025-01-08	
Trichloroacetic Acid	**0.0231**	N/A	0.0020	mg/L	2025-01-08	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Total Haloacetic Acids (HAA5)	**0.0380**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*111*		*70-130*	%	*2025-01-08*	
Total Metals						
Manganese, total	**0.00045**	MAC = 0.12	0.00020	mg/L	2025-01-08	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Chloroform	**0.0285**	N/A	0.0010	mg/L	2025-01-09	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Surrogate: Toluene-d8	*105*		*70-130*	%	*2025-01-09*	

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO Nelson, City of
PROJECT Drinking Water

WORK ORDER 25A0219
REPORTED 2025-01-15 11:32

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
3rd St and Davies St (25A0219-02) | Matrix: Water | Sampled: 2025-01-03 11:15, Continued						
Volatile Organic Compounds (VOC), Continued						
Surrogate: 4-Bromofluorobenzene	*98*		*70-130*	%	*2025-01-09*	
Fell St and 11th St (25A0219-03) | Matrix: Water | Sampled: 2025-01-03 11:00						
Calculated Parameters						
Total Trihalomethanes	**0.0303**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Dichloroacetic Acid	**0.0149**	N/A	0.0020	mg/L	2025-01-08	
Trichloroacetic Acid	**0.0214**	N/A	0.0020	mg/L	2025-01-08	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Total Haloacetic Acids (HAA5)	**0.0364**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*114*		*70-130*	%	*2025-01-08*	
Total Metals						
Manganese, total	**0.00032**	MAC = 0.12	0.00020	mg/L	2025-01-08	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Chloroform	**0.0303**	N/A	0.0010	mg/L	2025-01-09	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Surrogate: Toluene-d8	*92*		*70-130*	%	*2025-01-09*	
Surrogate: 4-Bromofluorobenzene	*84*		*70-130*	%	*2025-01-09*	
Silica St and Stanley St (25A0219-04) | Matrix: Water | Sampled: 2025-01-03 10:45						
Calculated Parameters						
Total Trihalomethanes	**0.0316**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Dichloroacetic Acid	**0.0135**	N/A	0.0020	mg/L	2025-01-08	
Trichloroacetic Acid	**0.0191**	N/A	0.0020	mg/L	2025-01-08	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Total Haloacetic Acids (HAA5)	**0.0326**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*97*		*70-130*	%	*2025-01-08*	
Total Metals						
Manganese, total	**0.00153**	MAC = 0.12	0.00020	mg/L	2025-01-08	

TEST RESULTS

REPORTED TO Nelson, City of
PROJECT Drinking Water

WORK ORDER 25A0219
REPORTED 2025-01-15 11:32

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Silica St and Stanley St (25A0219-04) | Matrix: Water | Sampled: 2025-01-03 10:45, Continued						
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Chloroform	**0.0316**	N/A	0.0010	mg/L	2025-01-09	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Surrogate: Toluene-d8	*99*		*70-130*	%	*2025-01-09*	
Surrogate: 4-Bromofluorobenzene	*88*		*70-130*	%	*2025-01-09*	
Mountain Station Res (25A0219-05) | Matrix: Water | Sampled: 2025-01-03 13:00						
Calculated Parameters						
Total Trihalomethanes	**0.0180**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Dichloroacetic Acid	**0.0101**	N/A	0.0020	mg/L	2025-01-08	
Trichloroacetic Acid	**0.0088**	N/A	0.0020	mg/L	2025-01-08	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-01-08	
Total Haloacetic Acids (HAA5)	**0.0188**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*104*		*70-130*	%	*2025-01-08*	
Total Metals						
Manganese, total	**0.00126**	MAC = 0.12	0.00020	mg/L	2025-01-08	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Chloroform	**0.0180**	N/A	0.0010	mg/L	2025-01-09	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-01-09	
Surrogate: Toluene-d8	*112*		*70-130*	%	*2025-01-09*	
Surrogate: 4-Bromofluorobenzene	*105*		*70-130*	%	*2025-01-09*	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Nelson, City of	**WORK ORDER**	25A0219
PROJECT	Drinking Water	**REPORTED**	2025-01-15 11:32

Analysis Description	Method Ref.	Technique	Accredited	Location
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	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
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
EPA	United States Environmental Protection Agency Test Methods

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

General Comments:

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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:hhannaoui@caro.ca

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Appendix B: Weekly Bacteriological Sampling

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7271
Filename 240924CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

Tests were performed in accordance with methods outlined in the "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017 published by the American Public Health Association.

Passmore Laboratory Ltd. complies with methods and certification through the Province of British Columbia Enhanced Water Quality Assurance (EWQA) Program and the Clinical Microbiology Proficiency Testing (CMPT) Program. Other analytical results on this report not listed above are not within the scope of the EWQA. Passmore Laboratory assumes no responsibility for any loss or damage resulting from error or omission in the conduct of testing. Liability is limited to the cost of the analysis.

Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-09-24 Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-09-24 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-09-24 Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-09-24 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-09-24 Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-09-24 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-09-24 Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-09-24 4:45 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-09-24 Matrix SW Temperature on Receipt 12
Date/Time on Test 2024-09-24 4:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	387	CFU/100mL	1
Verified E.coli	2	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Sample ID	Lakeside Park Beach, Nelson, BC			Sample #	6
Date/Time Sampled	2024-09-24	Matrix	SW	Temperature on Receipt	11

Date/Time on Test 2024-09-24 4:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	n/a	CFU/100mL	1
Verified E.coli	2	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	2	CFU/100mL	1

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 6683
Filename 240409CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

Tests were performed in accordance with methods outlined in the "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017 published by the American Public Health Association.

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-04-09 7:45 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-04-09 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-04-09 8:10 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-04-09 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-04-09 9:10 AM Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-04-09 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-04-09 9:00 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-04-09 4:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-04-09 9:35 AM Matrix SW Temperature on Receipt 8
Date/Time on Test 2024-04-09 5:00 PM

Analyses	Result	Units	RDL
Coliforms, Total	21	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 6705
Filename 240416CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

Tests were performed in accordance with methods outlined in the "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017 published by the American Public Health Association.

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-04-16 8:38 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-04-16 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-04-16 9:13 AM Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-04-16 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-04-16 11:22 AM Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-04-16 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-04-16 11:10 PM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-04-16 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-04-16 10:49 AM Matrix SW Temperature on Receipt 9
Date/Time on Test 2024-04-16 4:45 PM

Analyses	Result	Units	RDL
Coliforms, Total	16	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 6738
Filename 240423CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Mechelle Babic

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-04-23 8:00 AM Matrix DW Temperature on Receipt 9
Date/Time on Test 2024-04-23 6:05 AM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Silica st. Sampler Sample # 2
Date/Time Sampled 2024-04-23 8:30 AM Matrix DW Temperature on Receipt 11
Date/Time on Test 2024-04-23 6:10 AM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-04-23 11:20 AM Matrix DW Temperature on Receipt 11
Date/Time on Test 2024-04-23 6:15 AM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-04-23 11:10 AM Matrix DW Temperature on Receipt 10
Date/Time on Test 2024-04-23 6:20 AM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-04-23 10:30 AM Matrix SW Temperature on Receipt 10
Date/Time on Test 2024-04-23 6:25 AM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 6753
Filename 240430CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: James Lerch

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-04-30 8:00 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-04-30 5:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Silica st. Sampler Sample # 2
Date/Time Sampled 2024-04-30 8:10 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-04-30 5:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID 3rd and Davies Sample # 3
Date/Time Sampled 2024-04-30 10:10 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-04-30 5:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID 11th and Fell Sample # 4
Date/Time Sampled 2024-04-30 10:00 AM Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-04-30 5:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mountain Station Reservoir Sample # 5
Date/Time Sampled 2024-04-30 8:35 AM Matrix SW Temperature on Receipt 13
Date/Time on Test 2024-04-30 5:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	29	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 6778
Filename 240507CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: James Lerch

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-05-07 7:50 AM Matrix DW Temperature on Receipt 9
Date/Time on Test 2024-05-07 6:00 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Silica st. Sampler Sample # 2
Date/Time Sampled 2024-05-07 8:15 AM Matrix DW Temperature on Receipt 10
Date/Time on Test 2024-05-07 6:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID 3rd and Davies Sample # 3
Date/Time Sampled 2024-05-07 9:25 AM Matrix DW Temperature on Receipt 9
Date/Time on Test 2024-05-07 6:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID 11th and Fell Sample # 4
Date/Time Sampled 2024-05-07 9:20 AM Matrix DW Temperature on Receipt 9
Date/Time on Test 2024-05-07 6:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-05-07 11:10 AM Matrix RW Temperature on Receipt 10
Date/Time on Test 2024-05-07 6:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	17	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 6802
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Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Mechelle Babic

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-05-14 8:20 AM Matrix DW Temperature on Receipt 11
Date/Time on Test 2024-05-14 5:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Silica st. Sampler Sample # 2
Date/Time Sampled 2024-05-14 9:20 AM Matrix DW Temperature on Receipt 11
Date/Time on Test 2024-05-14 5:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-05-14 11:40 AM Matrix DW Temperature on Receipt 10
Date/Time on Test 2024-05-14 5:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-05-14 11:05 AM Matrix DW Temperature on Receipt 11
Date/Time on Test 2024-05-14 5:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-05-14 11:55 AM Matrix SW Temperature on Receipt 11
Date/Time on Test 2024-05-14 5:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	35	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

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Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-05-21 8:10 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-05-21 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-05-21 8:25 AM Matrix TW Temperature on Receipt 10
Date/Time on Test 2024-05-21 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-05-21 8:35 AM Matrix TW Temperature on Receipt 11
Date/Time on Test 2024-05-21 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-05-21 9:35 AM Matrix TW Temperature on Receipt 10
Date/Time on Test 2024-05-21 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-05-21 8:30 AM Matrix SW Temperature on Receipt 9
Date/Time on Test 2024-05-21 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	18	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	3	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
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CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 6846
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Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

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ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-05-28 Matrix TW Temperature on Receipt 10
Date/Time on Test 2024-05-28 4:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-05-28 Matrix TW Temperature on Receipt 10
Date/Time on Test 2024-05-28 4:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-05-28 Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-05-28 4:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-05-28 Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-05-28 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-05-28 Matrix SW Temperature on Receipt 10
Date/Time on Test 2024-05-28 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	11	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 6866
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Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-06-04 8:00 AM Matrix TW Temperature on Receipt 11
Date/Time on Test 2024-06-04 4:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-06-04 8:45 AM Matrix TW Temperature on Receipt 11
Date/Time on Test 2024-06-04 4:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-06-04 9:45 AM Matrix TW Temperature on Receipt 11
Date/Time on Test 2024-06-04 4:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-06-04 10:10 AM Matrix TW Temperature on Receipt 11
Date/Time on Test 2024-06-04 4:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-06-04 10:55 AM Matrix SW Temperature on Receipt 11
Date/Time on Test 2024-06-04 4:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	9	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 6891
Filename 240611CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

Tests were performed in accordance with methods outlined in the "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017 published by the American Public Health Association.

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Processed by: Mechelle Babic

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-06-11 7:20 AM Matrix DW Temperature on Receipt 9
Date/Time on Test 2024-06-11 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Silica st. Sampler Sample # 2
Date/Time Sampled 2024-06-11 7:40 AM Matrix DW Temperature on Receipt 10
Date/Time on Test 2024-06-11 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-06-11 8:15 AM Matrix DW Temperature on Receipt 9
Date/Time on Test 2024-06-11 4:45 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-06-11 9:00 AM Matrix DW Temperature on Receipt 10
Date/Time on Test 2024-06-11 4:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-06-11 9:25 AM Matrix SW Temperature on Receipt 10
Date/Time on Test 2024-06-11 4:55 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 6918
Filename 240618CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-06-18 7:55 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-06-18 5:00 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-06-18 8:55 AM Matrix TW Temperature on Receipt 10
Date/Time on Test 2024-06-18 5:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-06-18 9:10 AM Matrix TW Temperature on Receipt 10
Date/Time on Test 2024-06-18 5:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-06-18 10:30 AM Matrix TW Temperature on Receipt 10
Date/Time on Test 2024-06-18 5:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-06-18 8:40 AM Matrix SW Temperature on Receipt 11
Date/Time on Test 2024-06-18 5:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	21	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 6944
Filename 240625CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-06-25 8:00 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-06-25 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-06-25 8:30 AM Matrix TW Temperature on Receipt 14
Date/Time on Test 2024-06-25 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-06-25 9:30 AM Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-06-25 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-06-25 9:15 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-06-25 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-06-25 8:45 AM Matrix SW Temperature on Receipt 14
Date/Time on Test 2024-06-25 4:45 PM

Analyses	Result	Units	RDL
Coliforms, Total	15	CFU/100mL	1
Verified E.coli	2	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	2	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 6965
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Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I

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Processed by: James Lerch

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-07-02 8:00 AM Matrix DW Temperature on Receipt 8
Date/Time on Test 2024-07-02 5:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Silica st. Sampler Sample # 2
Date/Time Sampled 2024-07-02 8:10 AM Matrix DW Temperature on Receipt 8
Date/Time on Test 2024-07-02 5:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID 3rd and Davies Sample # 3
Date/Time Sampled 2024-07-02 8:45 AM Matrix DW Temperature on Receipt 9
Date/Time on Test 2024-07-02 5:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID 11th and Fell Sample # 4
Date/Time Sampled 2024-07-02 8:50 AM Matrix DW Temperature on Receipt 8
Date/Time on Test 2024-07-02 5:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mountain Station Reservoir Sample # 5
Date/Time Sampled 2024-07-02 9:10 AM Matrix SW Temperature on Receipt 10
Date/Time on Test 2024-07-02 5:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	29	CFU/100mL	1
Verified E.coli	9	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 6995
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Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

Tests were performed in accordance with methods outlined in the "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017 published by the American Public Health Association.

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-07-09 9:44 AM Matrix TW Temperature on Receipt 14
Date/Time on Test 2024-07-09 5:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-07-09 9:08 AM Matrix TW Temperature on Receipt 16
Date/Time on Test 2024-07-09 5:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-07-09 8:56 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-07-09 5:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-07-09 8:45 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-07-09 5:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-07-09 8:30 AM Matrix SW Temperature on Receipt 15
Date/Time on Test 2024-07-09 5:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	44	CFU/100mL	1
Verified E.coli	1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7019
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Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-07-16 7:30 AM Matrix TW Temperature on Receipt 14
Date/Time on Test 2024-07-16 4:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-07-16 8:00 AM Matrix TW Temperature on Receipt 15
Date/Time on Test 2024-07-16 4:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-07-16 9:00 AM Matrix TW Temperature on Receipt 15
Date/Time on Test 2024-07-16 4:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-07-16 9:45 AM Matrix TW Temperature on Receipt 14
Date/Time on Test 2024-07-16 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-07-16 9:50 AM Matrix SW Temperature on Receipt 14
Date/Time on Test 2024-07-16 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	160	CFU/100mL	1
Verified E.coli	2	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	2	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7043
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Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Lakeside Park Beach, Nelson, BC — Sample # 1
Date/Time Sampled 2024-07-23 9:15 AM — Matrix SW — Temperature on Receipt 13
Date/Time on Test 2024-07-23 4:40 PM

Analyses	Result	Units	RDL
Verified E.coli	42	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	46	CFU/100mL	1

Sample ID Rosemont Res. — Sample # 2
Date/Time Sampled 2024-07-23 7:50 AM — Matrix TW — Temperature on Receipt 17
Date/Time on Test 2024-07-23 4:45 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley — Sample # 3
Date/Time Sampled 2024-07-23 8:15 AM — Matrix TW — Temperature on Receipt 17
Date/Time on Test 2024-07-23 4:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies — Sample # 4
Date/Time Sampled 2024-07-23 9:00 AM — Matrix TW — Temperature on Receipt 16
Date/Time on Test 2024-07-23 4:55 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th — Sample # 5
Date/Time Sampled 2024-07-23 9:10 AM — Matrix TW — Temperature on Receipt 17
Date/Time on Test 2024-07-23 5:00 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Sample ID	Mtn. Station Reservoir - Raw			Sample #	6
Date/Time Sampled	2024-07-23	8:30 AM	Matrix SW	Temperature on Receipt	17
Date/Time on Test	2024-07-23	5:05 PM			

Analyses	Result	Units	RDL
Coliforms, Total	33	CFU/100mL	1
Verified E.coli	1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	5	CFU/100mL	1

Glossary of Terms

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CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7061
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Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-07-30 7:50 AM Matrix TW Temperature on Receipt 16
Date/Time on Test 2024-07-30 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-07-30 8:00 AM Matrix TW Temperature on Receipt 16
Date/Time on Test 2024-07-30 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-07-30 8:40 AM Matrix TW Temperature on Receipt 15
Date/Time on Test 2024-07-30 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-07-30 8:35 AM Matrix TW Temperature on Receipt 16
Date/Time on Test 2024-07-30 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-07-30 9:00 AM Matrix SW Temperature on Receipt 16
Date/Time on Test 2024-07-30 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	15	CFU/100mL	1
Verified E.coli	4	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7079
Filename 240806CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

Tests were performed in accordance with methods outlined in the "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017 published by the American Public Health Association.

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-08-06 8:20 AM Matrix TW Temperature on Receipt 16
Date/Time on Test 2024-08-06 4:00 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-08-06 8:50 AM Matrix TW Temperature on Receipt 18
Date/Time on Test 2024-08-06 4:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-08-06 9:30 AM Matrix TW Temperature on Receipt 17
Date/Time on Test 2024-08-06 4:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-08-06 9:20 AM Matrix TW Temperature on Receipt 17
Date/Time on Test 2024-08-06 4:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-08-06 11:00 AM Matrix SW Temperature on Receipt 18
Date/Time on Test 2024-08-06 4:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	158	CFU/100mL	1
Verified E.coli	1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	3	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7116
Filename 240813CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: James Lerch

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-08-13 8:00 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-08-13 5:55 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Silica st. Sampler Sample # 2
Date/Time Sampled 2024-08-13 8:10 AM Matrix TW Temperature on Receipt 14
Date/Time on Test 2024-08-13 6:00 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID 3rd and Davies Sample # 3
Date/Time Sampled 2024-08-13 9:15 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-08-13 6:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID 11th and Fell Sample # 4
Date/Time Sampled 2024-08-13 9:10 AM Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-08-13 6:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mountain Station Reservoir Sample # 5
Date/Time Sampled 2024-08-13 8:45 AM Matrix RW Temperature on Receipt 11
Date/Time on Test 2024-08-13 6:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	174	CFU/100mL	1
Verified E.coli	7	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	8	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7142
Filename 240820CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-08-20 8:40 AM Matrix TW Temperature on Receipt 17
Date/Time on Test 2024-08-20 4:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-08-20 12:45 PM Matrix TW Temperature on Receipt 17
Date/Time on Test 2024-08-20 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-08-20 1:06 PM Matrix TW Temperature on Receipt 16
Date/Time on Test 2024-08-20 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-08-20 12:25 PM Matrix TW Temperature on Receipt 17
Date/Time on Test 2024-08-20 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-08-20 11:50 AM Matrix SW Temperature on Receipt 16
Date/Time on Test 2024-08-20 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	61	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	3	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7163
Filename 240827CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-08-27 8:10 AM Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-08-27 4:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-08-27 8:48 AM Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-08-27 4:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-08-27 12:05 PM Matrix TW Temperature on Receipt 14
Date/Time on Test 2024-08-27 4:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-08-27 11:55 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-08-27 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-08-27 12:25 PM Matrix SW Temperature on Receipt 13
Date/Time on Test 2024-08-27 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	169	CFU/100mL	1
Verified E.coli	2	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	3	CFU/100mL	1

ANALYTICAL RESULTS

Sample ID	Lakeside Park Beach, Nelson, BC			Sample #	6
Date/Time Sampled	2024-08-27	11:45 AM	Matrix SW	Temperature on Receipt	9

Date/Time on Test 2024-08-27 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

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Filename 240903CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

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ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-09-03 8:33 AM Matrix DW Temperature on Receipt 14
Date/Time on Test 2024-09-03 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Silica st. Sampler Sample # 2
Date/Time Sampled 2024-09-03 8:58 AM Matrix DW Temperature on Receipt 13
Date/Time on Test 2024-09-03 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-09-03 12:40 PM Matrix DW Temperature on Receipt 11
Date/Time on Test 2024-09-03 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-09-03 12:21 PM Matrix DW Temperature on Receipt 12
Date/Time on Test 2024-09-03 12:21 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-09-03 11:50 AM Matrix DW Temperature on Receipt 13
Date/Time on Test 2024-09-03 11:50 AM

Analyses	Result	Units	RDL
Coliforms, Total	139	CFU/100mL	1
Verified E.coli	3	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	3	CFU/100mL	1

ANALYTICAL RESULTS

Sample ID	Lakeside Park Beach, Nelson, BC			Sample #	6
Date/Time Sampled	2024-09-03	Matrix	SW	Temperature on Receipt	

Date/Time on Test 2024-09-03

Analyses	Result	Units	RDL
Coliforms, Total	n/a	CFU/100mL	1
Verified E.coli	less than	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	2	CFU/100mL	1

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7218
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Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-09-10 8:15 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-09-10 4:45 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-09-10 8:45 AM Matrix TW Temperature on Receipt 14
Date/Time on Test 2024-09-10 4:45 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-09-10 12:30 PM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-09-10 4:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-09-10 12:11 PM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-09-10 4:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-09-10 11:21 AM Matrix SW Temperature on Receipt 15
Date/Time on Test 2024-09-10 4:55 PM

Analyses	Result	Units	RDL
Coliforms, Total	53	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	1	CFU/100mL	1

ANALYTICAL RESULTS

Sample ID	Lakeside Park Beach, Nelson, BC			Sample #	6
Date/Time Sampled	2024-09-10	Matrix	SW	Temperature on Receipt	10

Date/Time on Test 2024-09-10 5:00 PM

Analyses	Result	Units	RDL
Coliforms, Total	n/a	CFU/100mL	1
Verified E.coli	2	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	10	CFU/100mL	1

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7244
Filename 240917CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

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ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-09-17 8:26 AM Matrix TW Temperature on Receipt 15
Date/Time on Test 2024-09-17 4:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-09-17 9:15 AM Matrix TW Temperature on Receipt 14
Date/Time on Test 2024-09-17 4:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-09-17 11:35 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-09-17 4:55 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-09-17 11:50 AM Matrix TW Temperature on Receipt 16
Date/Time on Test 2024-09-17 4:55 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-09-17 10:00 AM Matrix SW Temperature on Receipt 15
Date/Time on Test 2024-09-17 5:00 PM

Analyses	Result	Units	RDL
Coliforms, Total	247	CFU/100mL	1
Verified E.coli	2	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	3	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7286
Filename 241001CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-10-01 7:45 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-10-01 5:00 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-10-01 8:30 AM Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-10-01 5:00 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-10-01 10:30 AM Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-10-01 5:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-10-01 10:50 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-10-01 5:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-10-01 9:45 AM Matrix SW Temperature on Receipt 13
Date/Time on Test 2024-10-01 5:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	175	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7320
Filename 241008CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

Tests were performed in accordance with methods outlined in the "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017 published by the American Public Health Association.

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-10-08 8:00 AM Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-10-08 4:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-10-08 8:35 AM Matrix TW Temperature on Receipt 10
Date/Time on Test 2024-10-08 4:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-10-08 9:45 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-10-08 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-10-08 9:50 AM Matrix TW Temperature on Receipt 11
Date/Time on Test 2024-10-08 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-10-08 9:35 AM Matrix SW Temperature on Receipt 12
Date/Time on Test 2024-10-08 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	138	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7338
Filename 241015CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-10-15 10:10 AM Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-10-15 3:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	Less than 1	CFU/100mL	1
Verified E.coli	Less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-10-15 10:55 AM Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-10-15 3:55 PM

Analyses	Result	Units	RDL
Coliforms, Total	Less than 1	CFU/100mL	1
Verified E.coli	Less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-10-15 8:30 AM Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-10-15 3:55 PM

Analyses	Result	Units	RDL
Coliforms, Total	Less than 1	CFU/100mL	1
Verified E.coli	Less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-10-15 8:15 AM Matrix TW Temperature on Receipt 13
Date/Time on Test 2024-10-15 4:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	Less than 1	CFU/100mL	1
Verified E.coli	Less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-10-15 11:30 AM Matrix SW Temperature on Receipt 12
Date/Time on Test 2024-10-15 4:15 PM

Analyses	Result	Units	RDL
Coliforms, Total	44	CFU/100mL	1
Verified E.coli	Less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7367
Filename 241022CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-10-22 7:30 AM Matrix TW Temperature on Receipt 10
Date/Time on Test 2024-10-22 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-10-22 7:55 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-10-22 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-10-22 9:30 AM Matrix TW Temperature on Receipt 10
Date/Time on Test 2024-10-22 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-10-22 9:00 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-10-22 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-10-22 8:30 AM Matrix SW Temperature on Receipt 10
Date/Time on Test 2024-10-22 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	88	CFU/100mL	1
Verified E.coli	2	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7388
Filename 241029CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-10-29 7:30 AM Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-10-29 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-10-29 7:50 AM Matrix TW Temperature on Receipt 11
Date/Time on Test 2024-10-29 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-10-29 9:10 AM Matrix TW Temperature on Receipt 10
Date/Time on Test 2024-10-29 4:45 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-10-29 8:50 AM Matrix TW Temperature on Receipt 11
Date/Time on Test 2024-10-29 4:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Sample ID	Mtn. Station Reservoir - Raw			Sample #	5
Date/Time Sampled	2024-10-29	9:25 AM	Matrix SW	Temperature on Receipt	12
Date/Time on Test	2024-10-29	4:55 PM			

Analyses	Result	Units	RDL
Coliforms, Total	TNTC - confluent growth	CFU/100mL	1
Verified E.coli	3	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	2	CFU/100mL	1

Comments TNTC: Too Numerous To Count

Glossary of Terms

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CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7412
Filename 241105CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-11-05 7:45 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-11-05 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-11-05 8:00 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-11-05 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-11-05 8:50 AM Matrix TW Temperature on Receipt 11
Date/Time on Test 2024-11-05 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-11-05 9:30 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-11-05 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-11-05 11:00 AM Matrix SW Temperature on Receipt 10
Date/Time on Test 2024-11-05 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	46	CFU/100mL	1
Verified E.coli	2	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
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CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7429
Filename 241112CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-11-12 8:15 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-11-12 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-11-12 8:35 AM Matrix TW Temperature on Receipt 10
Date/Time on Test 2024-11-12 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-11-12 10:15 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-11-12 4:45 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-11-12 10:25 AM Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-11-12 4:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-11-12 9:10 AM Matrix RW Temperature on Receipt 9
Date/Time on Test 2024-11-12 4:55 PM

Analyses	Result	Units	RDL
Coliforms, Total	5	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
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CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7463
Filename 241119CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-11-19 7:52 AM Matrix TW Temperature on Receipt 12
Date/Time on Test 2024-11-19 4:05 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-11-19 8:06 AM Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-11-19 4:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-11-19 9:45 AM Matrix TW Temperature on Receipt 9
Date/Time on Test 2024-11-19 4:10 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-11-19 9:32 AM Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-11-19 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-11-19 9:00 AM Matrix SW Temperature on Receipt 8
Date/Time on Test 2024-11-19 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	55	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

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4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7488
Filename 241126CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-11-26 7:50 AM Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-11-26 4:25 AM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-11-26 8:10 AM Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-11-26 4:30 AM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-11-26 8:40 AM Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-11-26 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-11-26 8:30 AM Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-11-26 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-11-26 9:00 AM Matrix SW Temperature on Receipt 9
Date/Time on Test 2024-11-26 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	26	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7509
Filename 241203CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I

Tests were performed in accordance with methods outlined in the "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017 published by the American Public Health Association.

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-12-03 7:40 AM Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-12-03 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 2
Date/Time Sampled 2024-12-03 7:55 AM Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-12-03 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-12-03 8:20 AM Matrix TW Temperature on Receipt 7
Date/Time on Test 2024-12-03 4:45 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-12-03 8:05 AM Matrix TW Temperature on Receipt 8
Date/Time on Test 2024-12-03 4:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-12-03 8:30 AM Matrix SW Temperature on Receipt 8
Date/Time on Test 2024-12-03 4:55 PM

Analyses	Result	Units	RDL
Coliforms, Total	25	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7534
Filename 241210CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

Tests were performed in accordance with methods outlined in the "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017 published by the American Public Health Association.

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-12-10 8:22 AM Matrix TW Temperature on Receipt 6
Date/Time on Test 2024-12-10 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-12-10 8:40 AM Matrix TW Temperature on Receipt 6
Date/Time on Test 2024-12-10 4:20 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-12-10 9:40 AM Matrix TW Temperature on Receipt 7
Date/Time on Test 2024-12-10 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-12-10 10:11 AM Matrix TW Temperature on Receipt 7
Date/Time on Test 2024-12-10 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-12-10 11:02 AM Matrix SW Temperature on Receipt 7
Date/Time on Test 2024-12-10 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	16	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7549
Filename 241217CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

Tests were performed in accordance with methods outlined in the "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017 published by the American Public Health Association.

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Processed by: Lynne Alexander

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-12-17 8:00 AM Matrix TW Temperature on Receipt 7
Date/Time on Test 2024-12-17 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Silica and Stanley Sample # 2
Date/Time Sampled 2024-12-17 8:20 AM Matrix TW Temperature on Receipt 6
Date/Time on Test 2024-12-17 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ 3rd and Davies Sample # 3
Date/Time Sampled 2024-12-17 8:55 AM Matrix TW Temperature on Receipt 6
Date/Time on Test 2024-12-17 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Sampler @ Fell and 11th Sample # 4
Date/Time Sampled 2024-12-17 8:49 AM Matrix TW Temperature on Receipt 6
Date/Time on Test 2024-12-17 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mtn. Station Reservoir - Raw Sample # 5
Date/Time Sampled 2024-12-17 9:10 AM Matrix SW Temperature on Receipt 7
Date/Time on Test 2024-12-17 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	4	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7573
Filename 241223CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

Tests were performed in accordance with methods outlined in the "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017 published by the American Public Health Association.

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Processed by: James Lerch

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-12-23 8:00 AM Matrix DW Temperature on Receipt 9
Date/Time on Test 2024-12-23 4:25 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Silica st. Sampler Sample # 2
Date/Time Sampled 2024-12-23 8:15 AM Matrix DW Temperature on Receipt 9
Date/Time on Test 2024-12-23 4:30 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID 3rd and Davies Sample # 3
Date/Time Sampled 2024-12-23 8:45 AM Matrix DW Temperature on Receipt 9
Date/Time on Test 2024-12-23 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID 11th and Fell Sample # 4
Date/Time Sampled 2024-12-23 8:40 AM Matrix DW Temperature on Receipt 9
Date/Time on Test 2024-12-23 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mountain Station Reservoir Sample # 5
Date/Time Sampled 2024-12-23 10:30 AM Matrix DW Temperature on Receipt 9
Date/Time on Test 2024-12-23 4:45 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Sample ID	920 3rd Before PRV					Sample #	6
Date/Time Sampled	2024-12-23	9:50 AM	Matrix	DW		Temperature on Receipt	11
Date/Time on Test	2024-12-23	4:50 PM					

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID	920 3rd Kitchen					Sample #	7
Date/Time Sampled	2024-12-23	9:50 AM	Matrix	DW		Temperature on Receipt	11
Date/Time on Test	2024-12-23	4:55 PM					

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

PASSMORE LABORATORY LTD.
4240 Passmore Upper Road, Winlaw BC, V0G2J0
250-226-7339
test@passmorelaboratory.ca
passmorelaboratory.ca

Report# 7579
Filename 241230CN.pdf

Client City of Nelson
Attention Martin Grill

CERTIFICATE OF ANALYSIS

Analyses	Method Description	Reference
Total Coliforms	Membrane Filtration on LES Endo medium	APHA 9222B
E. coli	MF Partition on NA-MUG medium	APHA 9222I
Fecal Coliforms	Membrane Filtration on mFC medium	APHA 9222D

Tests were performed in accordance with methods outlined in the "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017 published by the American Public Health Association.

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Processed by: James Lerch

Mechelle Babic,
Lab Manager

Please call or Email for with any questions, feedback, or more information

ANALYTICAL RESULTS

Sample ID Rosemont Res. Sample # 1
Date/Time Sampled 2024-12-30 8:10 AM Matrix TW Temperature on Receipt 6
Date/Time on Test 2024-12-30 4:35 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Silica st. Sampler Sample # 2
Date/Time Sampled 2024-12-30 8:20 AM Matrix TW Temperature on Receipt 6
Date/Time on Test 2024-12-30 4:40 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID 3rd and Davies Sample # 3
Date/Time Sampled 2024-12-30 8:45 AM Matrix TW Temperature on Receipt 6
Date/Time on Test 2024-12-30 4:45 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID 11th and Fell Sample # 4
Date/Time Sampled 2024-12-30 8:36 AM Matrix TW Temperature on Receipt 6
Date/Time on Test 2024-12-30 4:45 PM

Analyses	Result	Units	RDL
Coliforms, Total	less than 1	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1

Sample ID Mountain Station Reservoir Sample # 5
Date/Time Sampled 2024-12-30 9:00 AM Matrix RW Temperature on Receipt 7
Date/Time on Test 2024-12-30 4:50 PM

Analyses	Result	Units	RDL
Coliforms, Total	7	CFU/100mL	1
Verified E.coli	less than 1	CFU/100mL	1
Fecal (Thermotolerant) Coliforms	less than 1	CFU/100mL	1

ANALYTICAL RESULTS

Glossary of Terms

Less than 1	Less than the Reportable Detection Limit, except under circumstances where the detection limit is higher due to interferences, insufficient sample volume, or dilutions.
APHA	American Pubic Health Association
CFU/100mL	Colony Forming Units per 100 milliliters
Matrix	SW = Surface water, TW =Treated water, DW= Distribution water, UGW = Untreated Ground water, RW = Raw water
RDL	Reportable Detection Limit

References

Appendix C: Annual Full Comprehensive Raw Water Analysis

CERTIFICATE OF ANALYSIS

REPORTED TO	Nelson, City of 101-310 Ward St Nelson, BC V1L 5S4		
ATTENTION	Martin Grill	**WORK ORDER**	25A2398
PO NUMBER	5030	**RECEIVED / TEMP**	2025-01-24 09:26 / 3.6°C
PROJECT	Source Water- Standard Package	**REPORTED**	2025-02-04 10:44
PROJECT INFO	Water Samples	**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.

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

Authorized By:

Hanane El Hannaoui
Junior Account Manager

TEST RESULTS

REPORTED TO	Nelson, City of	**WORK ORDER**	25A2398
PROJECT	Source Water- Standard Package	**REPORTED**	2025-02-04 10:44

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Anderson Ck_Source water (25A2398-01) | Matrix: Water | Sampled: 2025-01-23 10:40						
Anions						
Chloride	**0.25**	AO ≤ 250	0.10	mg/L	2025-01-25	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2025-01-25	
Nitrate (as N)	**0.032**	MAC = 10	0.010	mg/L	2025-01-25	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-01-25	
Sulfate	**4.8**	AO ≤ 500	1.0	mg/L	2025-01-25	
Calculated Parameters						
Hardness, Total (as CaCO3)	**28.5**	None Required	0.500	mg/L	N/A	
Langelier Index	**-2.3**	N/A	-5.0		2025-01-28	CT6
Solids, Total Dissolved	**35.0**	AO ≤ 500	1.00	mg/L	N/A	
General Parameters						
Alkalinity, Total (as CaCO3)	**26.8**	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Bicarbonate (as CaCO3)	**26.8**	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-01-25	
Conductivity (EC)	**65.1**	N/A	2.0	µS/cm	2025-01-25	
Cyanide, Total	< 0.0050	MAC = 0.2	0.0050	mg/L	2025-01-31	
pH	**6.80**	7.0-10.5	0.10	pH units	2025-01-25	HT2
Temperature, at pH	**20.9**	N/A		°C	2025-01-25	HT2
Turbidity	**0.16**	OG < 1	0.10	NTU	2025-01-26	
Total Metals						
Aluminum, total	**0.0170**	OG < 0.1	0.0050	mg/L	2025-01-27	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-01-27	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-01-27	
Barium, total	**0.0150**	MAC = 2	0.0050	mg/L	2025-01-27	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-01-27	
Cadmium, total	**0.000011**	MAC = 0.007	0.000010	mg/L	2025-01-27	
Calcium, total	**9.99**	None Required	0.20	mg/L	2025-01-27	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-01-27	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-01-27	
Copper, total	< 0.00040	MAC = 2	0.00040	mg/L	2025-01-27	
Iron, total	**0.011**	AO ≤ 0.3	0.010	mg/L	2025-01-27	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-01-27	
Magnesium, total	**0.844**	None Required	0.010	mg/L	2025-01-27	
Manganese, total	**0.00059**	MAC = 0.12	0.00020	mg/L	2025-01-27	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2025-01-28	
Molybdenum, total	**0.00076**	N/A	0.00010	mg/L	2025-01-27	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-01-27	
Potassium, total	**0.96**	N/A	0.10	mg/L	2025-01-27	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-01-27	

TEST RESULTS

REPORTED TO	Nelson, City of	**WORK ORDER**	25A2398
PROJECT	Source Water- Standard Package	**REPORTED**	2025-02-04 10:44

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Anderson Ck_Source water (25A2398-01) | Matrix: Water | Sampled: 2025-01-23 10:40, Continued						
Total Metals, Continued						
Sodium, total	**1.63**	AO ≤ 200	0.10	mg/L	2025-01-27	
Strontium, total	**0.0712**	MAC = 7	0.0010	mg/L	2025-01-27	
Uranium, total	**0.000677**	MAC = 0.02	0.000020	mg/L	2025-01-27	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-01-27	
5-Mile Ck_Source water (25A2398-02) | Matrix: Water | Sampled: 2025-01-23 11:28						
Anions						
Chloride	**0.14**	AO ≤ 250	0.10	mg/L	2025-01-25	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2025-01-25	
Nitrate (as N)	**0.028**	MAC = 10	0.010	mg/L	2025-01-25	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-01-25	
Sulfate	**2.3**	AO ≤ 500	1.0	mg/L	2025-01-25	
Calculated Parameters						
Hardness, Total (as CaCO3)	**16.9**	None Required	0.500	mg/L	N/A	
Langelier Index	**-3.1**	N/A	-5.0		2025-01-28	CT6
Solids, Total Dissolved	**16.1**	AO ≤ 500	1.00	mg/L	N/A	
General Parameters						
Alkalinity, Total (as CaCO3)	**7.9**	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Bicarbonate (as CaCO3)	**7.9**	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-01-25	
Conductivity (EC)	**43.3**	N/A	2.0	µS/cm	2025-01-25	
Cyanide, Total	< 0.0050	MAC = 0.2	0.0050	mg/L	2025-01-31	
pH	**6.75**	7.0-10.5	0.10	pH units	2025-01-25	HT2
Temperature, at pH	**21.3**	N/A		°C	2025-01-25	HT2
Turbidity	< 0.10	OG < 1	0.10	NTU	2025-01-26	
Total Metals						
Aluminum, total	**0.0202**	OG < 0.1	0.0050	mg/L	2025-01-27	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-01-27	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-01-27	
Barium, total	**0.0098**	MAC = 2	0.0050	mg/L	2025-01-27	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-01-27	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-01-27	
Calcium, total	**5.91**	None Required	0.20	mg/L	2025-01-27	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-01-27	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-01-27	
Copper, total	< 0.00040	MAC = 2	0.00040	mg/L	2025-01-27	
Iron, total	**0.010**	AO ≤ 0.3	0.010	mg/L	2025-01-27	

TEST RESULTS

REPORTED TO	Nelson, City of	**WORK ORDER**	25A2398
PROJECT	Source Water- Standard Package	**REPORTED**	2025-02-04 10:44

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
5-Mile Ck_Source water (25A2398-02) | Matrix: Water | Sampled: 2025-01-23 11:28, Continued						
Total Metals, Continued						
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-01-27	
Magnesium, total	**0.527**	None Required	0.010	mg/L	2025-01-27	
Manganese, total	**0.00051**	MAC = 0.12	0.00020	mg/L	2025-01-27	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2025-01-28	
Molybdenum, total	**0.00073**	N/A	0.00010	mg/L	2025-01-27	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-01-27	
Potassium, total	**0.66**	N/A	0.10	mg/L	2025-01-27	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-01-27	
Sodium, total	**1.54**	AO ≤ 200	0.10	mg/L	2025-01-27	
Strontium, total	**0.0505**	MAC = 7	0.0010	mg/L	2025-01-27	
Uranium, total	**0.000814**	MAC = 0.02	0.000020	mg/L	2025-01-27	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-01-27	
Selous Ck_Source water (25A2398-03) | Matrix: Water | Sampled: 2025-01-23 09:56						
Anions						
Chloride	**0.16**	AO ≤ 250	0.10	mg/L	2025-01-25	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2025-01-25	
Nitrate (as N)	**0.071**	MAC = 10	0.010	mg/L	2025-01-25	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-01-25	
Sulfate	**13.8**	AO ≤ 500	1.0	mg/L	2025-01-25	
Calculated Parameters						
Hardness, Total (as CaCO3)	**63.9**	None Required	0.500	mg/L	N/A	
Langelier Index	**-1.3**	N/A	-5.0		2025-01-28	CT6
Solids, Total Dissolved	**73.1**	AO ≤ 500	1.00	mg/L	N/A	
General Parameters						
Alkalinity, Total (as CaCO3)	**51.3**	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Bicarbonate (as CaCO3)	**51.3**	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Colour, True	**5.5**	AO ≤ 15	5.0	CU	2025-01-25	
Conductivity (EC)	**132**	N/A	2.0	µS/cm	2025-01-25	
Cyanide, Total	< 0.0050	MAC = 0.2	0.0050	mg/L	2025-01-31	
pH	**7.15**	7.0-10.5	0.10	pH units	2025-01-25	HT2
Temperature, at pH	**21.3**	N/A		°C	2025-01-25	HT2
Turbidity	< 0.10	OG < 1	0.10	NTU	2025-01-26	
Total Metals						
Aluminum, total	**0.0105**	OG < 0.1	0.0050	mg/L	2025-01-27	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-01-27	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-01-27	

TEST RESULTS

REPORTED TO	Nelson, City of	**WORK ORDER**	25A2398
PROJECT	Source Water- Standard Package	**REPORTED**	2025-02-04 10:44

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Selous Ck_Source water (25A2398-03) | Matrix: Water | Sampled: 2025-01-23 09:56, Continued						
Total Metals, Continued						
Barium, total	**0.0315**	MAC = 2	0.0050	mg/L	2025-01-27	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-01-27	
Cadmium, total	**0.000012**	MAC = 0.007	0.000010	mg/L	2025-01-27	
Calcium, total	**22.9**	None Required	0.20	mg/L	2025-01-27	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-01-27	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-01-27	
Copper, total	**0.00051**	MAC = 2	0.00040	mg/L	2025-01-27	
Iron, total	**0.015**	AO ≤ 0.3	0.010	mg/L	2025-01-27	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-01-27	
Magnesium, total	**1.63**	None Required	0.010	mg/L	2025-01-27	
Manganese, total	**0.00072**	MAC = 0.12	0.00020	mg/L	2025-01-27	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2025-01-28	
Molybdenum, total	**0.00081**	N/A	0.00010	mg/L	2025-01-27	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-01-27	
Potassium, total	**1.70**	N/A	0.10	mg/L	2025-01-27	
Selenium, total	**0.00055**	MAC = 0.05	0.00050	mg/L	2025-01-27	
Sodium, total	**1.36**	AO ≤ 200	0.10	mg/L	2025-01-27	
Strontium, total	**0.0859**	MAC = 7	0.0010	mg/L	2025-01-27	
Uranium, total	**0.000230**	MAC = 0.02	0.000020	mg/L	2025-01-27	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-01-27	
Mtn. Stn. Resivoir_Source water (25A2398-04) | Matrix: Water | Sampled: 2025-01-23 12:02						
Anions						
Chloride	**0.13**	AO ≤ 250	0.10	mg/L	2025-01-25	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2025-01-25	
Nitrate (as N)	**0.032**	MAC = 10	0.010	mg/L	2025-01-25	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-01-25	
Sulfate	**2.9**	AO ≤ 500	1.0	mg/L	2025-01-25	
Calculated Parameters						
Hardness, Total (as CaCO3)	**19.4**	None Required	0.500	mg/L	N/A	
Langelier Index	**-2.6**	N/A	-5.0		2025-01-28	CT6
Solids, Total Dissolved	**25.8**	AO ≤ 500	1.00	mg/L	N/A	
General Parameters						
Alkalinity, Total (as CaCO3)	**21.1**	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Bicarbonate (as CaCO3)	**21.1**	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-01-25	
Conductivity (EC)	**47.9**	N/A	2.0	µS/cm	2025-01-25	

TEST RESULTS

REPORTED TO	Nelson, City of	**WORK ORDER**	25A2398
PROJECT	Source Water- Standard Package	**REPORTED**	2025-02-04 10:44

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Mtn. Stn. Resivoir_Source water (25A2398-04) | Matrix: Water | Sampled: 2025-01-23 12:02, Continued						
General Parameters, Continued						
Cyanide, Total	< 0.0050	MAC = 0.2	0.0050	mg/L	2025-01-31	
pH	**6.75**	7.0-10.5	0.10	pH units	2025-01-25	HT2
Temperature, at pH	**21.3**	N/A		°C	2025-01-25	HT2
Turbidity	**0.21**	OG < 1	0.10	NTU	2025-01-26	
Total Metals						
Aluminum, total	**0.0269**	OG < 0.1	0.0050	mg/L	2025-01-27	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-01-27	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-01-27	
Barium, total	**0.0109**	MAC = 2	0.0050	mg/L	2025-01-27	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-01-27	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-01-27	
Calcium, total	**6.79**	None Required	0.20	mg/L	2025-01-27	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-01-27	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-01-27	
Copper, total	**0.0224**	MAC = 2	0.00040	mg/L	2025-01-27	
Iron, total	**0.022**	AO ≤ 0.3	0.010	mg/L	2025-01-27	
Lead, total	**0.00087**	MAC = 0.005	0.00020	mg/L	2025-01-27	
Magnesium, total	**0.591**	None Required	0.010	mg/L	2025-01-27	
Manganese, total	**0.00127**	MAC = 0.12	0.00020	mg/L	2025-01-27	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2025-01-28	
Molybdenum, total	**0.00075**	N/A	0.00010	mg/L	2025-01-27	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-01-27	
Potassium, total	**0.73**	N/A	0.10	mg/L	2025-01-27	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-01-27	
Sodium, total	**1.57**	AO ≤ 200	0.10	mg/L	2025-01-27	
Strontium, total	**0.0530**	MAC = 7	0.0010	mg/L	2025-01-27	
Uranium, total	**0.000784**	MAC = 0.02	0.000020	mg/L	2025-01-27	
Zinc, total	**0.0041**	AO ≤ 5	0.0040	mg/L	2025-01-27	
Fell Ck_Source water (25A2398-05) | Matrix: Water | Sampled: 2025-01-23 10:30						
Anions						
Chloride	**0.16**	AO ≤ 250	0.10	mg/L	2025-01-25	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2025-01-25	
Nitrate (as N)	**0.026**	MAC = 10	0.010	mg/L	2025-01-25	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-01-25	
Sulfate	**8.0**	AO ≤ 500	1.0	mg/L	2025-01-25	
Calculated Parameters						
Hardness, Total (as CaCO3)	**32.4**	None Required	0.500	mg/L	N/A	
Langelier Index	**-2.2**	N/A	-5.0		2025-01-28	CT6
Solids, Total Dissolved	**41.2**	AO ≤ 500	1.00	mg/L	N/A	

TEST RESULTS

REPORTED TO	Nelson, City of	**WORK ORDER**	25A2398
PROJECT	Source Water- Standard Package	**REPORTED**	2025-02-04 10:44

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Fell Ck_Source water (25A2398-05) | Matrix: Water | Sampled: 2025-01-23 10:30, Continued						
General Parameters						
Alkalinity, Total (as CaCO3)	**29.1**	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Bicarbonate (as CaCO3)	**29.1**	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-01-25	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-01-25	
Conductivity (EC)	**78.3**	N/A	2.0	µS/cm	2025-01-25	
Cyanide, Total	< 0.0050	MAC = 0.2	0.0050	mg/L	2025-01-31	
pH	**6.86**	7.0-10.5	0.10	pH units	2025-01-25	HT2
Temperature, at pH	**21.3**	N/A		°C	2025-01-25	HT2
Turbidity	**0.13**	OG < 1	0.10	NTU	2025-01-26	
Total Metals						
Aluminum, total	**0.0128**	OG < 0.1	0.0050	mg/L	2025-01-27	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-01-27	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-01-27	
Barium, total	**0.0345**	MAC = 2	0.0050	mg/L	2025-01-27	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-01-27	
Cadmium, total	**0.000488**	MAC = 0.007	0.000010	mg/L	2025-01-27	
Calcium, total	**10.7**	None Required	0.20	mg/L	2025-01-27	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-01-27	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-01-27	
Copper, total	**0.00062**	MAC = 2	0.00040	mg/L	2025-01-27	
Iron, total	**0.013**	AO ≤ 0.3	0.010	mg/L	2025-01-27	
Lead, total	**0.00088**	MAC = 0.005	0.00020	mg/L	2025-01-27	
Magnesium, total	**1.38**	None Required	0.010	mg/L	2025-01-27	
Manganese, total	**0.00045**	MAC = 0.12	0.00020	mg/L	2025-01-27	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2025-01-28	
Molybdenum, total	**0.00128**	N/A	0.00010	mg/L	2025-01-27	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-01-27	
Potassium, total	**1.43**	N/A	0.10	mg/L	2025-01-27	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-01-27	
Sodium, total	**1.68**	AO ≤ 200	0.10	mg/L	2025-01-27	
Strontium, total	**0.0666**	MAC = 7	0.0010	mg/L	2025-01-27	
Uranium, total	**0.000308**	MAC = 0.02	0.000020	mg/L	2025-01-27	
Zinc, total	**0.0517**	AO ≤ 5	0.0040	mg/L	2025-01-27	

Sample Qualifiers:

CT6 Results were based on lab temperature & lab pH.

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

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Nelson, City of	**WORK ORDER**	25A2398
PROJECT	Source Water- Standard Package	**REPORTED**	2025-02-04 10:44

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Colour, True in Water	SM 2120 C (2021)	Spectrophotometry (456 nm)	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Cyanide, SAD in Water	ISO 14403	FIA and CFA		Sublet
Hardness in Water	SM 2340 B* (2021)	Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Est)	✓	N/A
Langelier Index in Water	SM 2330 B (2021)	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 (2021)	Electrometry	✓	Kelowna
Solids, Total Dissolved in Water	SM 1030 E (2021)	SM 1030 E		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 (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
°C	Degrees Celcius
AO	Aesthetic Objective
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
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

REPORTED TO	Nelson, City of	**WORK ORDER**	25A2398
PROJECT	Source Water- Standard Package	**REPORTED**	2025-02-04 10:44

General Comments:

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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:hhannaoui@caro.ca

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