Bluestem Utilities

2025 ANNUAL DRINKING WATER REPORT

PANORAMA MOUNTAIN RESORT

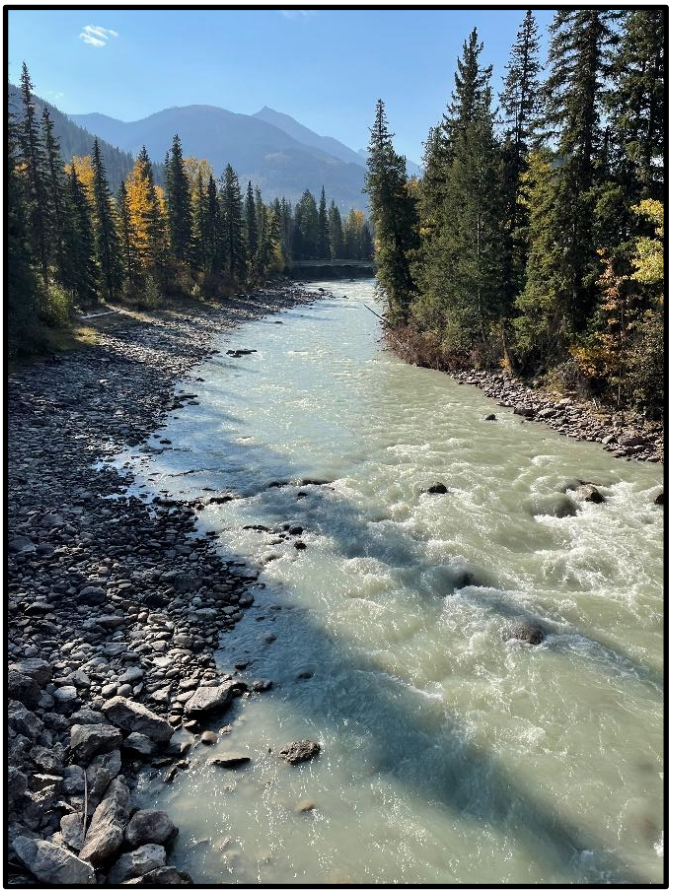

Table of Contents

Introduction

Panorama Mountain Resort is located approximately 18km west of Invermere, British Columbia. Bluestem owns and operates all the utility infrastructure associated with the water treatment and water distribution network. The distribution network currently serves 389 connections.

Panorama's water treatment system and water distribution system are both classified as Level ll facilities by the EOCP (Environmental Operators Certification Program). In 2025, Bluestem had four full time water treatment and distribution operators working on site. This ensured that at least one operator was on site every day, while also providing twenty-four-hour emergency on call coverage.

Providing clean, potable, and aesthetically pleasing drinking water for its customers is at the forefront of Bluestem's responsibilities. This is accomplished by maintaining a regular monitoring, sampling and maintenance schedule as outlined below.

System Overview

Source Water

Panorama's source water is from two, 10-inch diameter production wells near the Toby Creek. In 2020, Bluestem transitioned from a surface water source to a clean groundwater source to alleviate the high levels of turbidity in the water during spring runoff. Well 15-02 has a total depth of 106.5 ft (32.5m) and well 20-03 has a total depth of 124.5 ft (37.9m). Both wells have been drilled into the same semi-confined sand and gravel aquifer system. This system is overlain by sediments containing silt and clay, while it is underlain by bedrock.

Please refer to Appendix A for a full potability analysis for Well 15-02. This was completed June 25th, 2025. Please refer to Appendix B for a full potability analysis for Well 20-03. This was completed July 9th, 2025. This testing was completed prior to any treatment; therefore, it provides a very accurate representation of the water quality coming from the aquifer.

Panorama Well Site

Treatment

Panorama's source water is continuously pumped to a treatment station located at 2130 Trappers Way. There is continuous online turbidity monitoring for all water entering the treatment station. The first stage of disinfection is UV. Bluestem operates two Trojan UV Swift SC units. This UV disinfection process provides 99.99% inactivation of pathogens such as Cryptosporidium and Giardia. The next stage of disinfection is accomplished with chlorine. Bluestem administers a dosage using 12% Sodium Hypochlorite. The level of chlorine leaving the treatment station is continuously monitored, and is usually around 0.75 mg/L. The combination of UV technology and chlorine disinfection creates a very efficient disinfection process by inactivating many microorganisms.

Panorama UV disinfection units

After disinfection is accomplished, the water is pumped into a clear well, which is located underneath the treatment station. This acts as a holding tank, as two booster pumps then move the water from the treatment station to the main resort reservoir. As water demands increase and decrease all tank levels remain constant as well pumps and booster pumps act in unison and modulate their flow rate accordingly.

Treatment Station Booster Pumps

The main reservoir can hold approximately one million gallons. It is located partway up the ski hill near the top of the Discovery chair. The strategic location of the reservoir at that elevation allows the entire distribution system to maintain adequate pressure via gravity only.

Water Distribution

In 2025, Bluestem treated and distributed approximately 148,166 cubic meters of water (148,166,000L). Figure 1 below illustrates the amount of water that was treated daily over the course of the year. As can be seen, there are fluctuations throughout the year. This is because Panorama is a seasonal resort destination. Higher flows can be expected through winter months (Dec – Apr) and summer months (Jul – Sept) due to higher occupancy rates. Summer irrigation also factors into a higher demand during summer months.

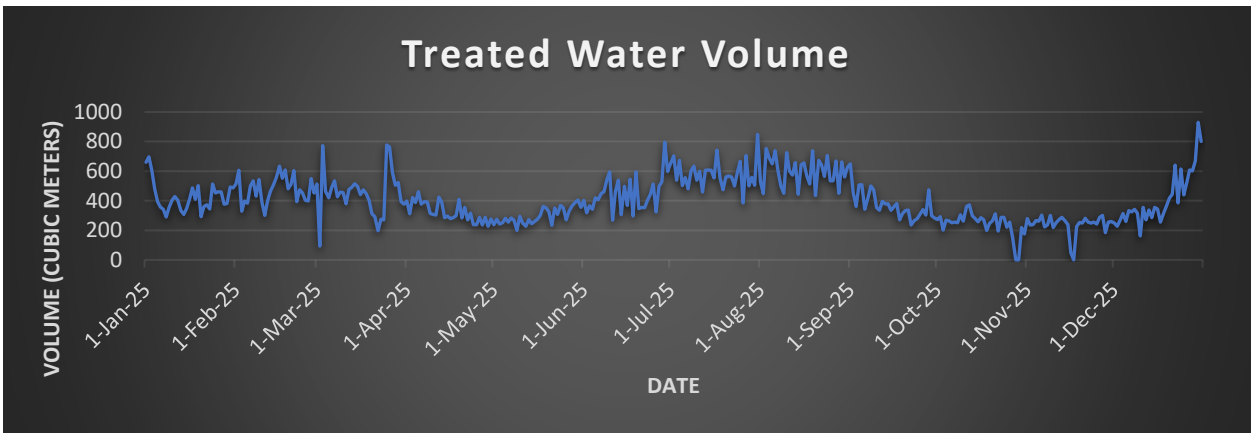

Figure 1

Due to the elevation of the reservoir, the distribution system is divided into multiple pressure zones. These pressure zones are controlled by PRV's (pressure reducing valves) located underground throughout the resort. These PRV's act to maintain constant water pressure through all areas of the resort, regardless of water usage. Bluestem employees record operating pressure of these valves and conduct visuals on them monthly to ensure there are no leaks and proper operation is maintained.

Water Quality Control

Every day, Bluestem operators perform a set of daily rounds consisting of operational checks of the well site and booster station. Turbidity and residual chlorine checks are also completed everyday by an operator. Please refer to Figure 2 and Figure 3 for a snapshot of chlorine and turbidity levels found at the start and near the end of the distribution system throughout 2025. By completing these checks at both the start and end of line, this ensures an adequate chlorine residual and turbidity level throughout the entire system.

Chlorine residual concentrations usually range from 0.20 to 2.0 mg/L in many Canadian drinking water distribution systems. Bluestem operators try to keep the residual around 0.75 mg/L through the system to ensure proper disinfection while minimizing the taste of chlorine for the customer. As noted in Table 1, the average chlorine residuals at the start and the end of the distribution system were 0.72 mg/L and 0.75 mg/L respectively.

Turbidity is one of the most important measurements a water operator conducts. Turbidity is a measurement of the clarity of the water and gives an indication of the number of particles in the water that can't be seen by the naked eye. A rise in turbidity can help alert an operator to changes in raw water quality. Higher turbidity (more particles) can harbor microorganisms, shielding them from disinfection. For a water system that uses ground water, turbidity levels should never exceed 1.0 NTU. As noted in Table 1, the average turbidity level at the start and the end of the distribution system was 0.07 NTU.

As seen in Figure 2 & 3 on the following page, chlorine and turbidity levels remained consistent throughout the year.

	Start of Line		End of Line	
	Chlorine (mg/L)	Turbidity (NTU)	Chlorine (mg/L)	Turbidity (NTU)
Min.	0.49	0.03	0.54	0.03
Max.	0.97	0.23	0.99	0.17
Average	0.72	0.07	0.75	0.07

Table 1

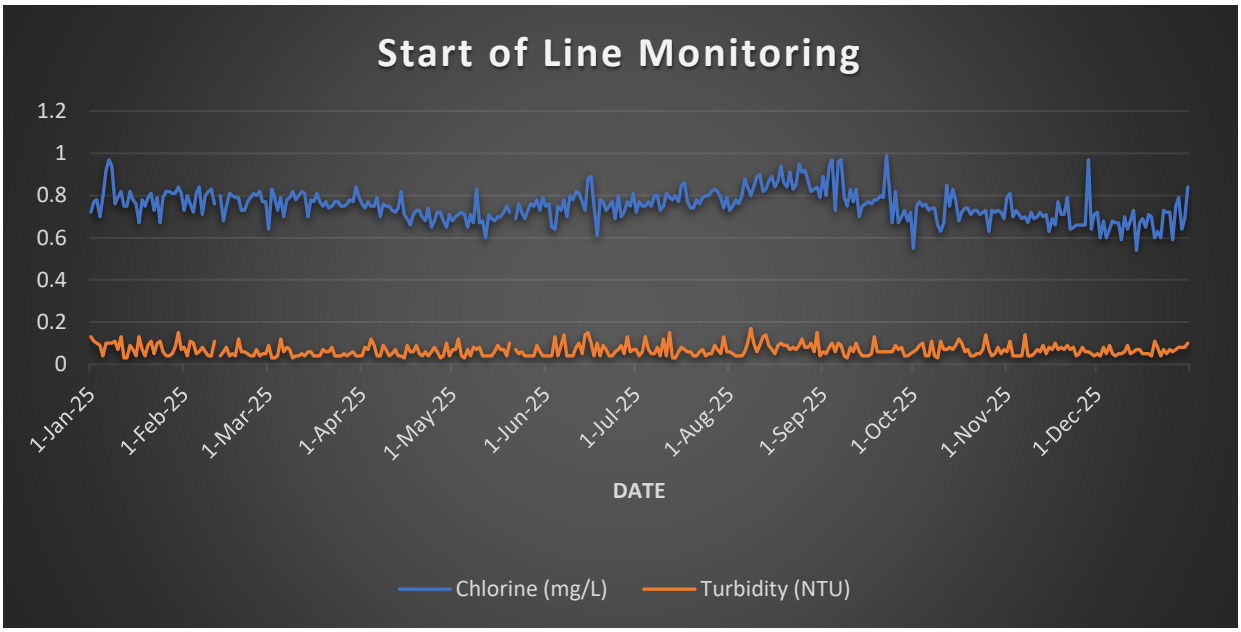

Figure 2

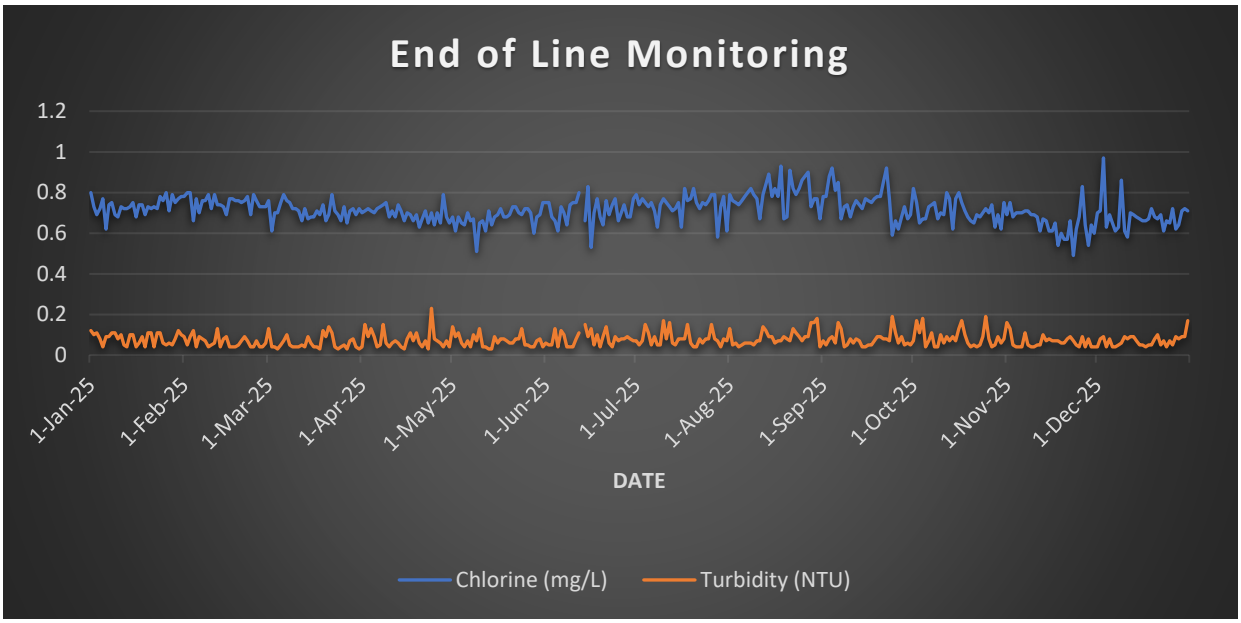

Figure 3

Bacteriological sampling was completed every other week at three different locations. These samples were sent to ALS Laboratories in Calgary where E. Coli bacteria and total coliforms were tested for. Twenty-seven sets of bacteriological samples were taken in 2025. Bluestem received zero reports of any positive test results.

Sampling for trihalomethanes (THM's) and Halo acetic acids (HAA's) were also completed on a quarterly basis in 2025. Both THM's and HAA's are formed when chlorine reacts with organic material in water. The

results found that the water treated at Panorama was well below the maximum acceptable concentration (MAC) dictated by Canada's "Guidelines for Canadian Drinking Water Quality".

System Maintenance/Upgrades

In 2025 Bluestem undertook a comprehensive flushing program. Bluestem operators strategically flushed from numerous hydrants throughout the resort. All hydrants at dead ends of distribution mains were prioritized. While flushing, operators tried to maximize the scouring velocity of the water to reduce any foreign material or bio film accumulation that could be present in the water mains.

Bluestem employees are responsible for the maintenance and the operational reliability of fifty-four fire hydrants at Panorama Mountain Resort. While moving systematically through the distribution system, Bluestem operators tested hydrants for static pressure and flow rates. The static pressure of all fifty-four hydrants was documented. This test ensures that the hydrant is exercised and does not leak when fully pressurized. Flow testing was carried out on eighteen hydrants in 2025. This allowed operators to note the maximum flowrate of the hydrant and the residual pressure maintained during that flow. Full teardowns and inspections were completed on ten hydrants in 2025. A full tear down includes the removal of the upper hydrant assembly and lower valve assembly. All parts are inspected and greased. Any worn parts are replaced. The operational goal is to complete full tear downs on twenty percent of the hydrants each year. This ensures that every hydrant is fully inspected on a five-year rotation. All these practices combined help ensure that any fire suppression demand will be met.

Throughout 2025, annual valve exercising took place. This process helps to ensure the operational reliability of all isolation valves. There are sixty-two documented isolation valves throughout the distribution system. Fifty-four were successfully exercised. The remaining eight have documented issues which will have to be addressed in the coming year. Fifty-three fire hydrant isolation valves were exercised throughout the year. All water main pressure reducing valves have an upstream and downstream isolation valve. These were all successfully exercised in 2025.

On June 12th 2025 a section of the distribution system, servicing Toby Creek Road addresses, was isolated to facilitate plumbing upgrades at the Wastewater Treatment Plant. Due to the temporary loss of pressure, a boil water advisory (BWA) was put into place. Water samples were collected on June 25th and sent to ALS Laboratories in Calgary where bacteriological testing was completed. The samples came back negative and the BWA was rescinded.

SCADA system

Bluestem utilizes a SCADA (Supervisory control and data acquisition) system to monitor all critical components and operations of the water treatment system. The SCADA system allows Bluestem operators to monitor alarms, adjust treatment processes and accumulate data. This allows the operator to respond to events or look at data trends, regardless of location. Below (Figure 3) is screen shot of the Panorama water treatment process on SCADA. Pump controls, reservoir levels and crucial parameters such as chlorine and turbidity are all displayed.

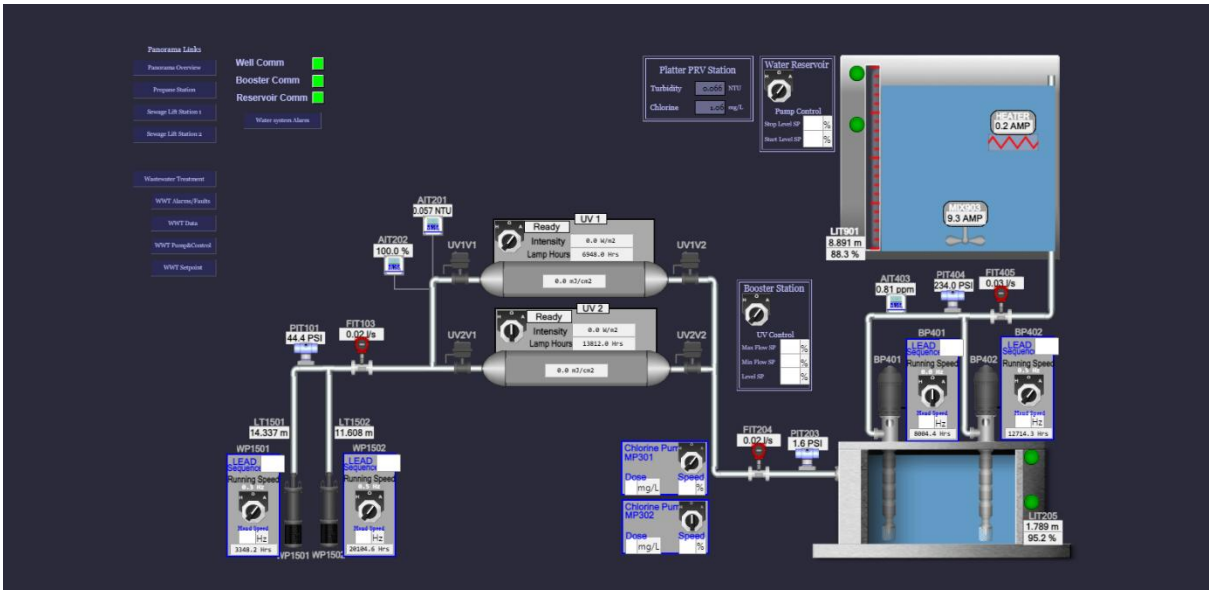

Figure 4

Appendix A - Well 15-02 Full Potability Report

Analytical Results

Sub-Matrix: Water (Matrix: Water)					Client sample ID	Location #2
					Client sampling date / time	25-Jun-2025 10:00
Analyte	CAS Number	Method/Lab	LOR	Unit	CG2508682-001	
					Result	
Physical Tests						
Absorbance, UV (@ 254nm)	----	E404/CG	0.0050	AU/cm	0.0050	
Alkalinity, bicarbonate (as CaCO3)	----	E290/CG	1.0	mg/L	235	
Alkalinity, carbonate (as CaCO3)	----	E290/CG	1.0	mg/L	10.4	
Alkalinity, hydroxide (as CaCO3)	----	E290/CG	1.0	mg/L	<1.0	
Alkalinity, total (as CaCO3)	----	E290/CG	1.0	mg/L	245	
Colour, true	----	E329/CG	5.0	CU	<5.0	
Conductivity	----	E100/CG	2.0	µS/cm	647	
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/CG	0.50	mg/L	287	
Langelier index (@ 4°C)	----	EC105A/CG	0.010	-	0.881	
pH	----	E108/CG	0.10	pH units	8.40	
Solids, total dissolved [TDS]	----	E162/CG	10	mg/L	383	
Solids, total suspended [TSS]	----	E160-L/CG	1.0	mg/L	<3.0	DLIS
Temperature, sample	----	E218/CG	0.10	°C	21.8	
Turbidity	----	E121/CG	0.10	NTU	0.11	
Transmittance, UV (@ 254nm)	----	E404/CG	1.0	% T/cm	98.8	
Anions and Nutrients						
Ammonia, total (as N)	7664-41-7	E298/CG	0.0050	mg/L	0.0065	
Chloride	16887-00-6	E235.Cl-L/CG	0.10	mg/L	46.2	
Fluoride	16984-48-8	E235.F/CG	0.020	mg/L	0.038	
Nitrite (as N)	14797-65-0	E235.NO2-L/CG	0.0010	mg/L	<0.0010	
Nitrogen, total organic	----	EC363/CG	0.050	mg/L	0.212	

Appendix A Continued

Analytical Results

Sub-Matrix: Water (Matrix: Water)			Client sample ID		Location #2
			Client sampling date / time		25-Jun-2025 10:00
Analyte	*CAS Number*	*Method/Lab*	*LOR*	*Unit*	CG2508682-001 Result
Anions and Nutrients					
Phosphorus, total	7723-14-0	E372-U/CG	0.0020	mg/L	<0.0020
Sulfate (as SO4)	14808-79-8	E235.SO4-L/CG	0.050	mg/L	60.6
Nitrate (as N)	14797-55-8	E235.NO3-L/CG	0.0050	mg/L	3.83
Kjeldahl nitrogen, total [TKN]	----	E318/CG	0.050	mg/L	0.219
Nitrogen, total	7727-37-9	EC368/CG	0.050	mg/L	4.05
Cyanides					
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020
Organic / Inorganic Carbon					
Carbon, total organic [TOC]	----	E355-L/CG	0.50	mg/L	<0.50
Microbiological Tests					
Coliforms, total	----	E010/CG	1	MPN/100 mL	<1
Heterotrophic plate count [HPC]	----	E010.HPC/CG	1	MPN/100 mL	<1
Coliforms, Escherichia coli [E. coli]	----	E010/CG	1	MPN/100 mL	<1
Aggressivity	----	E030.IRB/CG	-	-	Not Aggressive
Bacteria, iron related, population estimate	----	E030.IRB/CG	1	CFU/mL	<1
Total Metals					
Aluminum, total	7429-90-5	E420/CG	0.0030	mg/L	<0.0030
Antimony, total	7440-36-0	E420/CG	0.00010	mg/L	<0.00010
Arsenic, total	7440-38-2	E420/CG	0.00010	mg/L	<0.00010
Barium, total	7440-39-3	E420/CG	0.00010	mg/L	0.117
Boron, total	7440-42-8	E420/CG	0.010	mg/L	0.015

Appendix A Continued

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

					Client sample ID	Location #2
					Client sampling date / time	25-Jun-2025 10:00
Analyte	CAS Number	Method/Lab	LOR	Unit	CG2508682-001	
					Result	
Total Metals						
Cadmium, total	7440-43-9	E420/CG	0.0000050	mg/L	<0.0000050	
Calcium, total	7440-70-2	E420/CG	0.050	mg/L	61.8	
Chromium, total	7440-47-3	E420/CG	0.00050	mg/L	<0.00050	
Copper, total	7440-50-8	E420/CG	0.00050	mg/L	<0.00050	
Iron, total	7439-89-6	E420/CG	0.010	mg/L	<0.010	
Lead, total	7439-92-1	E420/CG	0.000050	mg/L	<0.000050	
Magnesium, total	7439-95-4	E420/CG	0.0050	mg/L	32.2	
Manganese, total	7439-96-5	E420/CG	0.00010	mg/L	0.00020	
Mercury, total	7439-97-6	E508/CG	0.0000050	mg/L	<0.0000050	
Molybdenum, total	7439-98-7	E420/CG	0.000050	mg/L	0.000108	
Potassium, total	7440-09-7	E420/CG	0.050	mg/L	1.99	
Selenium, total	7782-49-2	E420/CG	0.000050	mg/L	0.000228	
Sodium, total	7440-23-5	E420/CG	0.050	mg/L	27.4	
Strontium, total	7440-24-6	E420/CG	0.00020	mg/L	0.282	
Uranium, total	7440-61-1	E420/CG	0.000010	mg/L	0.000829	
Zinc, total	7440-66-6	E420/CG	0.0030	mg/L	<0.0030	

Appendix B - Well 20-03 Full Potability Report

Analytical Results

Sub-Matrix: Water (Matrix: Water)			Client sample ID		Location #2 ----
			Client sampling date / time		09-Jul-2025 10:00
Analyte	CAS Number	Method/Lab	LOR	Unit	CG2509397-001 Result
Physical Tests					
Absorbance, UV (@ 254nm)	----	E404/CG	0.0050	AU/cm	<0.0050
Alkalinity, bicarbonate (as CaCO3)	----	E290/CG	1.0	mg/L	260
Alkalinity, carbonate (as CaCO3)	----	E290/CG	1.0	mg/L	4.6
Alkalinity, hydroxide (as CaCO3)	----	E290/CG	1.0	mg/L	<1.0
Alkalinity, total (as CaCO3)	----	E290/CG	1.0	mg/L	264
Colour, true	----	E329/CG	5.0	CU	<5.0
Conductivity	----	E100/CG	2.0	µS/cm	572
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/CG	0.50	mg/L	268
Langelier index (@ 4°C)	----	EC105A/CG	0.010	-	0.849
pH	----	E108/CG	0.10	pH units	8.35
Solids, total dissolved [TDS]	----	E162/CG	10	mg/L	330
Solids, total suspended [TSS]	----	E160-L/CG	1.0	mg/L	<5.0 DLIS
Temperature, sample	----	E218/CG	0.10	°C	20.8
Turbidity	----	E121/CG	0.10	NTU	0.57
Transmittance, UV (@ 254nm)	----	E404/CG	1.0	% T/cm	100
Anions and Nutrients					
Ammonia, total (as N)	7664-41-7	E298/CG	0.0050	mg/L	<0.0050
Chloride	16887-00-6	E235.Cl-L/CG	0.10	mg/L	21.4
Fluoride	16984-48-8	E235.F/CG	0.020	mg/L	0.036
Nitrite (as N)	14797-65-0	E235.NO2-L/CG	0.0010	mg/L	0.0020
Nitrogen, total organic	----	EC363/CG	0.050	mg/L	<0.056

Appendix B Continued

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID: Location #2 ----
					Client sampling date / time: 09-Jul-2025 10:00
					CG2509397-001 Result
Anions and Nutrients					
Phosphorus, total	7723-14-0	E372-U/CG	0.0020	mg/L	<0.0020
Sulfate (as SO4)	14808-79-8	E235.SO4-L/CG	0.050	mg/L	43.4
Nitrate (as N)	14797-55-8	E235.NO3-L/CG	0.0050	mg/L	0.804
Kjeldahl nitrogen, total [TKN]	----	E318/CG	0.050	mg/L	<0.050 TKNI
Nitrogen, total	7727-37-9	EC368/CG	0.050	mg/L	0.806
Cyanides					
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020
Organic / Inorganic Carbon					
Carbon, total organic [TOC]	----	E355-L/CG	0.50	mg/L	<0.50
Microbiological Tests					
Coliforms, total	----	E010/CG	1	MPN/100 mL	<1
Heterotrophic plate count [HPC]	----	E010.HPC/CG	1	MPN/100 mL	259
Coliforms, Escherichia coli [E. coli]	----	E010/CG	1	MPN/100 mL	<1
Aggressivity	----	E030.IRB/CG	-	-	Aggressive
Bacteria, iron related, population estimate	----	E030.IRB/CG	1	CFU/mL	9000
Total Metals					
Aluminum, total	7429-90-5	E420/CG	0.0030	mg/L	<0.0030
Antimony, total	7440-36-0	E420/CG	0.00010	mg/L	<0.00010
Arsenic, total	7440-38-2	E420/CG	0.00010	mg/L	<0.00010
Barium, total	7440-39-3	E420/CG	0.00010	mg/L	0.0664
Boron, total	7440-42-8	E420/CG	0.010	mg/L	<0.010

Appendix B Continued

Analytical Results

Sub-Matrix: Water (Matrix: Water)			Client sample ID		Location #2 ----
			Client sampling date / time		09-Jul-2025 10:00
Analyte	*CAS Number*	*Method/Lab*	*LOR*	*Unit*	CG2509397-001 Result
Total Metals					
Cadmium, total	7440-43-9	E420/CG	0.0000050	mg/L	<0.0000050
Calcium, total	7440-70-2	E420/CG	0.050	mg/L	57.9
Chromium, total	7440-47-3	E420/CG	0.00050	mg/L	<0.00050
Copper, total	7440-50-8	E420/CG	0.00050	mg/L	<0.00050
Iron, total	7439-89-6	E420/CG	0.010	mg/L	0.066
Lead, total	7439-92-1	E420/CG	0.000050	mg/L	<0.000050
Magnesium, total	7439-95-4	E420/CG	0.0050	mg/L	30.0
Manganese, total	7439-96-5	E420/CG	0.00010	mg/L	0.0203
Mercury, total	7439-97-6	E508/CG	0.0000050	mg/L	<0.0000050
Molybdenum, total	7439-98-7	E420/CG	0.000050	mg/L	0.000207
Potassium, total	7440-09-7	E420/CG	0.050	mg/L	0.658
Selenium, total	7782-49-2	E420/CG	0.000050	mg/L	0.000202
Sodium, total	7440-23-5	E420/CG	0.050	mg/L	12.9
Strontium, total	7440-24-6	E420/CG	0.00020	mg/L	0.270
Uranium, total	7440-61-1	E420/CG	0.000010	mg/L	0.00104
Zinc, total	7440-66-6	E420/CG	0.0030	mg/L	0.0034