



Water Treatment Plant Annual Report 2025

Prepared by Stuart Henderson,
Water Treatment Plant Supervisor
May 2026

Table of Contents

1.0 Water Treatment History	4
2.0 Water Supply System	4
Penticton Creek Intake	4
Figure 1. Penticton Creek Dam 2.....	5
Figure 2. Penticton Creek Tributaries - Larratt Aquatic	6
Figure 3. Penticton Creek North Irrigation System	7
Okanagan Lake Intake	7
Figure 4. Okanagan Lake Water Shed -Larratt Aquatic	8
Figure 5. Okanagan Lake Pump StationOkanagan Lake water is pumped into the treatment plant from the Okanagan Lake Pump Station via a 5 KM dedicated transmission main.	9
Figure 6. Penticton Water Treatment Plant Schematic	10
3.0 Water Treatment.....	11
Blend Chamber	11
In 2025 the Water Treatment Plant had a total chemical cost of approx. \$425,000.....	12
Figure 7. Penticton Blend ChamberTable.....	12
1: Monthly Chemical Record 2025	12
Coagulation & Flocculation.....	13
Dissolved Air Floatation	14
Figure 9. Penticton Water Treatment Dissolved Air Floatation	14
Filtration.....	14
Figure 10. Penticton Water Treatment Mono Media Filters	15
Residuals Handling.....	15
Figure 11. Penticton Water Treatment Residual Handling Building	16
Disinfection	16
Table 2. 2025 Chlorine Residual	17
4.0 Water Distribution System	17
Water System Pressure Zones.....	18
5.0 Water Treatment Plant Staffing.....	19
Table 3. 2025 Staff Complement	19
6.0 Water Quality Monitoring Program	19
Water Quality Monitoring.....	20
PFAS testing.....	20
Chart 1. Health Canada Drinking Water Objective	21
Disinfection Byproducts	21
Chart 2. THM Quarterly Testing	22
Chart 3. HAA5 Quarterly Testing	22
7.0 Water Use and Licenses.....	22
Domestic	22
Irrigation	23
Table 4. 2025 Raw Water Diversion for Domestic and Irrigation use	23
8.0 Water Demand Monitoring	23
Maximum Daily Demand ML 2015-2025	24
Chart 4. Raw Water Usage 2015-2025	25
Chart 5. Penticton & West Bench Per Capita Consumption 2015-2025	25
Chart 6. Max Daily Demand 2012-2025.....	26

Chart 7. Max Daily Demand (Litres/Capita) 2012-2025	26
Chart 8. Total Distribution Demand by Month 2021 – 2025	27
2025 Water Conservation Goal and Objectives.....	27
9.0 Drought Management.....	27
Irrigation Systems	28
Penticton Creek Irrigation System	28
Penticton Creek Irrigation System	28
Ellis Creek Irrigation System	29
Table 5: Irrigation Water Use 2012-2025	29
10.0 Cross Connection Control	30
11.0 Source Water Protection Assessment and Plan	31
12.0 Water Operational and Capital Improvements	31
Major Capital Improvements 2025.....	31
Distribution System Maintenance 2025.....	31
Appendix A Quick Facts 2025.....	32
Appendix B – Water Quality Lab Reports	32

This report was completed in May 2026 in accordance with the requirements of the Ministry of Health Services and the Interior Health Authority.

1.0 Water Treatment History

In 1986, a Giardia outbreak from Penticton Creek led to engineering studies (1987–1988) recommending a dual-source water treatment plant. The facility at the east end of Penticton Avenue was commissioned in 1996 and became operational in January 1997, restoring Penticton Creek and integrating Okanagan Lake as sources. Since then, domestic water has come exclusively from these two sources, blended in varying proportions based on water quality, quantity, and operational requirements.

In 2005, Earth Tech (AECOM) reviewed the water system and projected future requirements. The study recommended Penticton Creek as an alternate source for peak summer demand. Pilot testing in 2007 identified high-rate dissolved aeration as the preferred option. Construction began in 2008 and was completed in 2009, enabling dual-source conventional treatment. Chemical system upgrades replaced chlorine gas and sulfur dioxide with sodium hypochlorite and Vitamin C in 2020.

2.0 Water Supply System

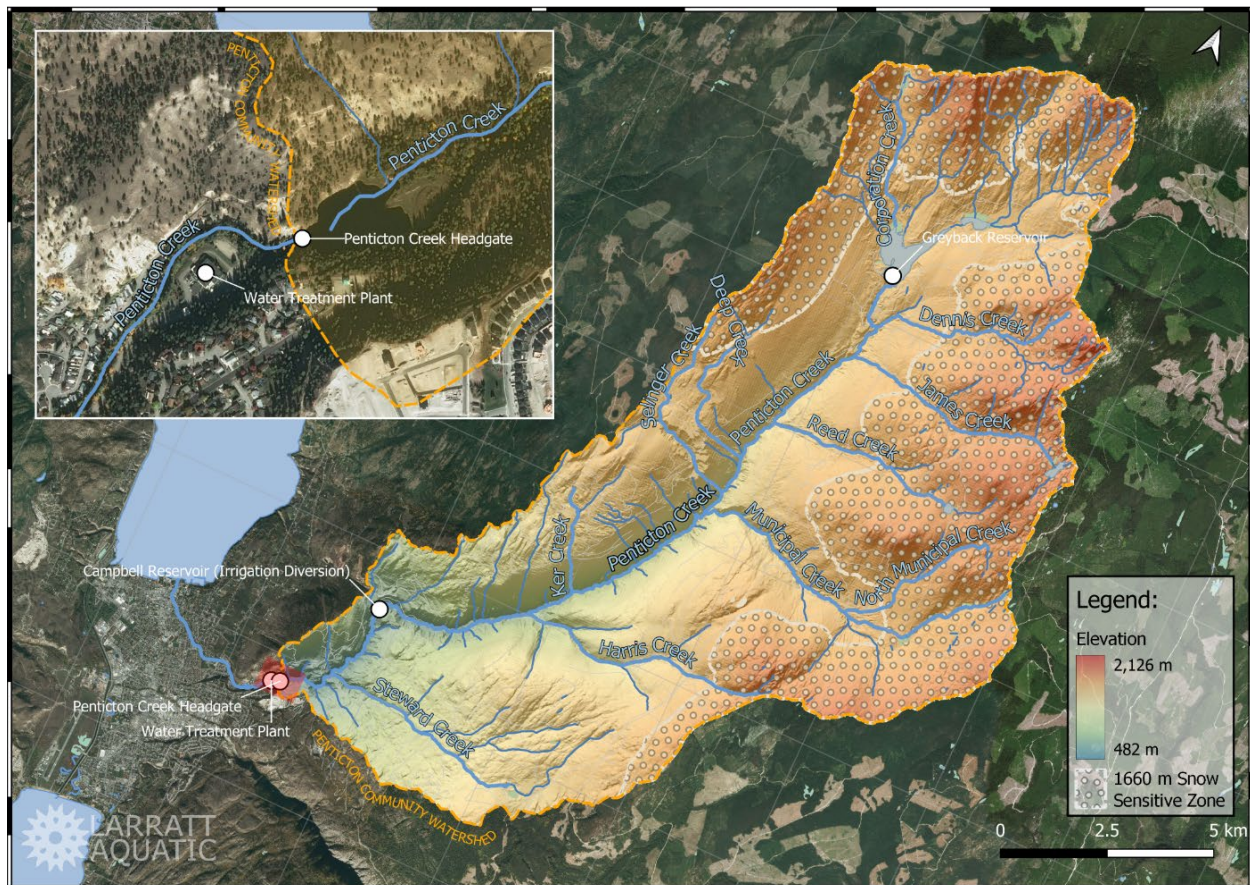
Penticton's water system, originally designed in the 1920s, to utilize Penticton Creek as its main water source, and was supplemented with Okanagan Lake source water during spring freshet as color and turbidity increased. Today, water is supplied from two sources: Penticton Creek via gravity and Okanagan Lake via pumps and a dedicated transmission main. Recent upgrades to the Okanagan Lake Pump Station include new electrical controls, variable frequency drives, rebuilt pumps, surge protection, and MCC cooling to enhance reliability and equipment life.

Penticton Creek Intake

Penticton Creek originates from Greyback Mountain Dam at 1,649 m elevation and flows west toward Okanagan Lake. The watershed covers 174 km², with most precipitation falling as snow in the 1,660 m snow-sensitive zone. Greyback Lake and Dam provide 12.3 million m³ of storage, supplemented by Campbell Mountain Reservoir (31,000 m³). The intake at Penticton Avenue draws water from a 71,500 m³ balancing reservoir. Creek water temperature ranges from 3.3 °C in January to 17 °C in August. True colour averaging 44.6 TCU and turbidity averaging 0.959 NTU.



Figure 1. Penticton Creek Dam 2



Creek Name	Confluence Elevation (m ASL)	Watershed Area (ha)	Terrain Zone	Within Snow-Sensitive Zone?
Corporation	1578	556	Highlands u/s of Greyback Lake	Y
Dennis	1515	978	Highlands	Y
James	1476	854	Highlands	Y
Reed	1337	903	Highlands	Y
Deep	1218	245	Canyon	Y
Selinger	1132	314	Canyon	Y
Municipal	1100	2748	Highlands into Canyon	Y
Harris	751	1386	Highlands into Canyon	Y
Steward	519	1555	Mid-elevation into Canyon	N

Figure 2. Pentiction Creek Tributaries - Larratt Aquatic

In 2025, 1.536 billion Litres of creek water was blended with 5.708 billion Litres of Okanagan Lake water and treated at the Water Treatment Plant. The total intake into the treatment plant was 7.243 billion Litres in 2025.

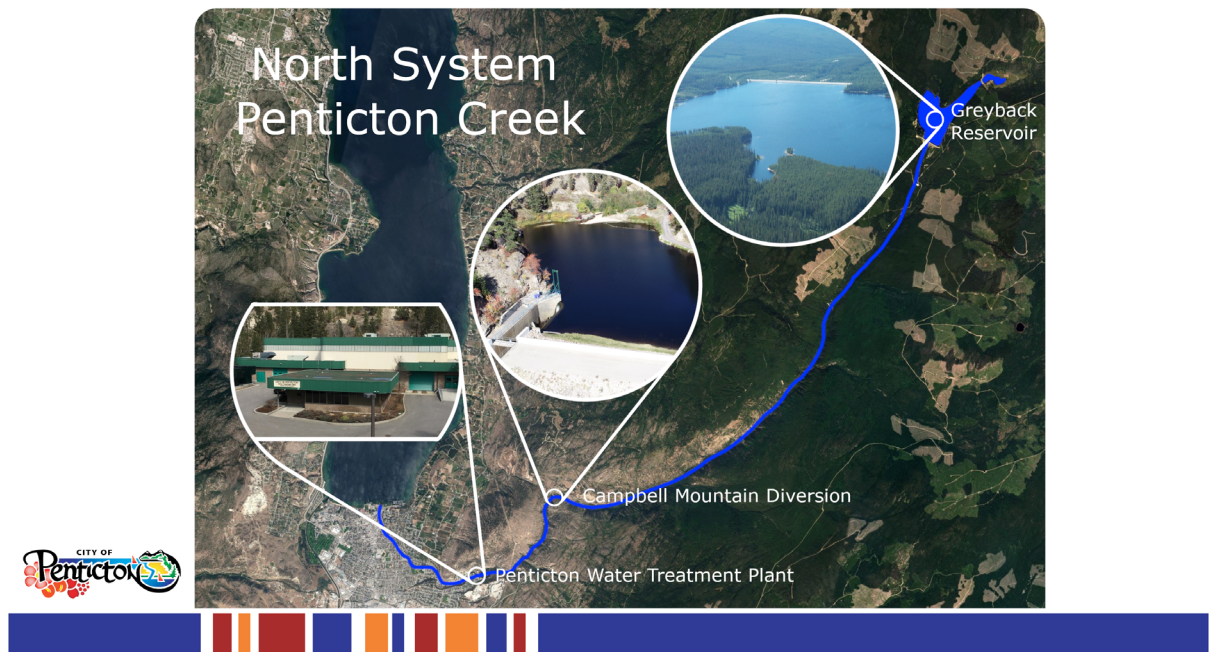


Figure 3. Penticton Creek North Irrigation System

Okanagan Lake Intake

Okanagan Lake is a large, deep lake with low nutrient concentrations. It is approximately 135 km long, 1-5 km wide, and has a surface area of 350 km². The theoretical residency time is ~52.8 years. Its maximum depth is 230 m, with a mean depth of 76 m, and it is divided into three sub-basins by underwater ridges. The intake is located within the south basin. Okanagan Lake receives water from 19 major tributaries, of which Mission Creek and Trout Creek are the largest. Okanagan Lake discharges into Okanagan River at Penticton (a tributary of the Columbia River).

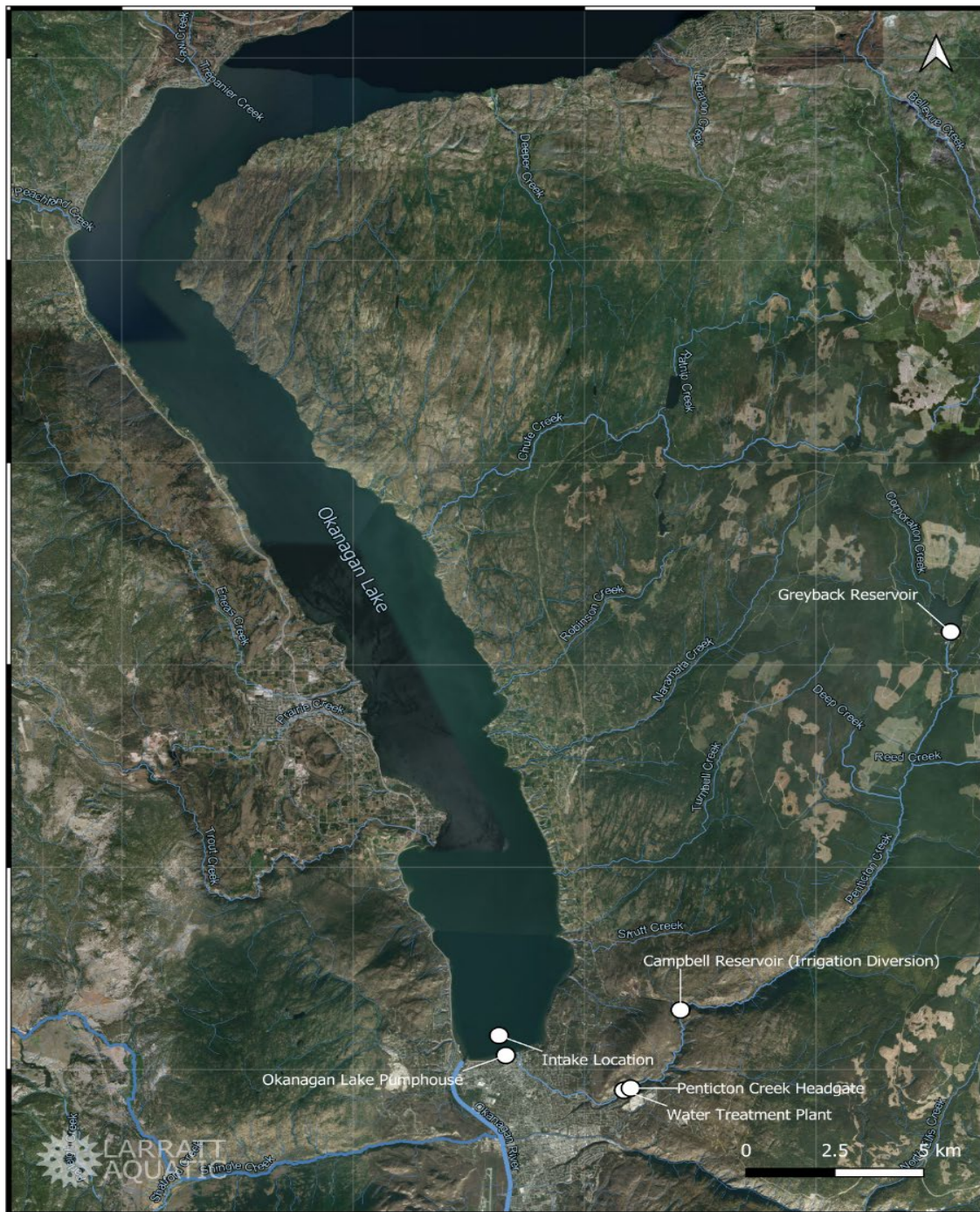


Figure 4. Okanagan Lake Water Shed -Larratt Aquatic

Every year, the single greatest effect on water quality in Okanagan Lake is the volume of freshet and its variable imports of nitrogen, phosphorus, pH, calcium, sulphates and organic/inorganic particulates.

Okanagan Lake is monomictic, forming distinct water temperature layers during the spring and remains stratified through the summer. The water layers erode during the fall until the water column mixes, usually in November. The lake becomes one temperature top to bottom and remains fully mixed throughout the winter until stratification commences again in the spring.

Turbidity in the Okanagan Lake raw water averaged 0.239 NTU with a low of 0.106 NTU and a high of 1.25 NTU as measured at the WTP sample tap. The high turbidity was 1.25 NTU but this can be influenced by flow increases caused by sediment in the intake and raw supply pipeline to be stirred.

True colour on the lake averaged 6 TCU with a low of 2 TCU and a high of 13 TCU.



Figure 5. Okanagan Lake Pump Station

Okanagan Lake water is pumped into the treatment plant from the Okanagan Lake Pump Station via a 5 KM dedicated transmission main.

In 2025, the City of Penticton pumped 5.708 billion Litres from the Okanagan Lake pump station to the Penticton Water Treatment Plant. The total combined intake into the treatment plant was 7.243 billion Litres.

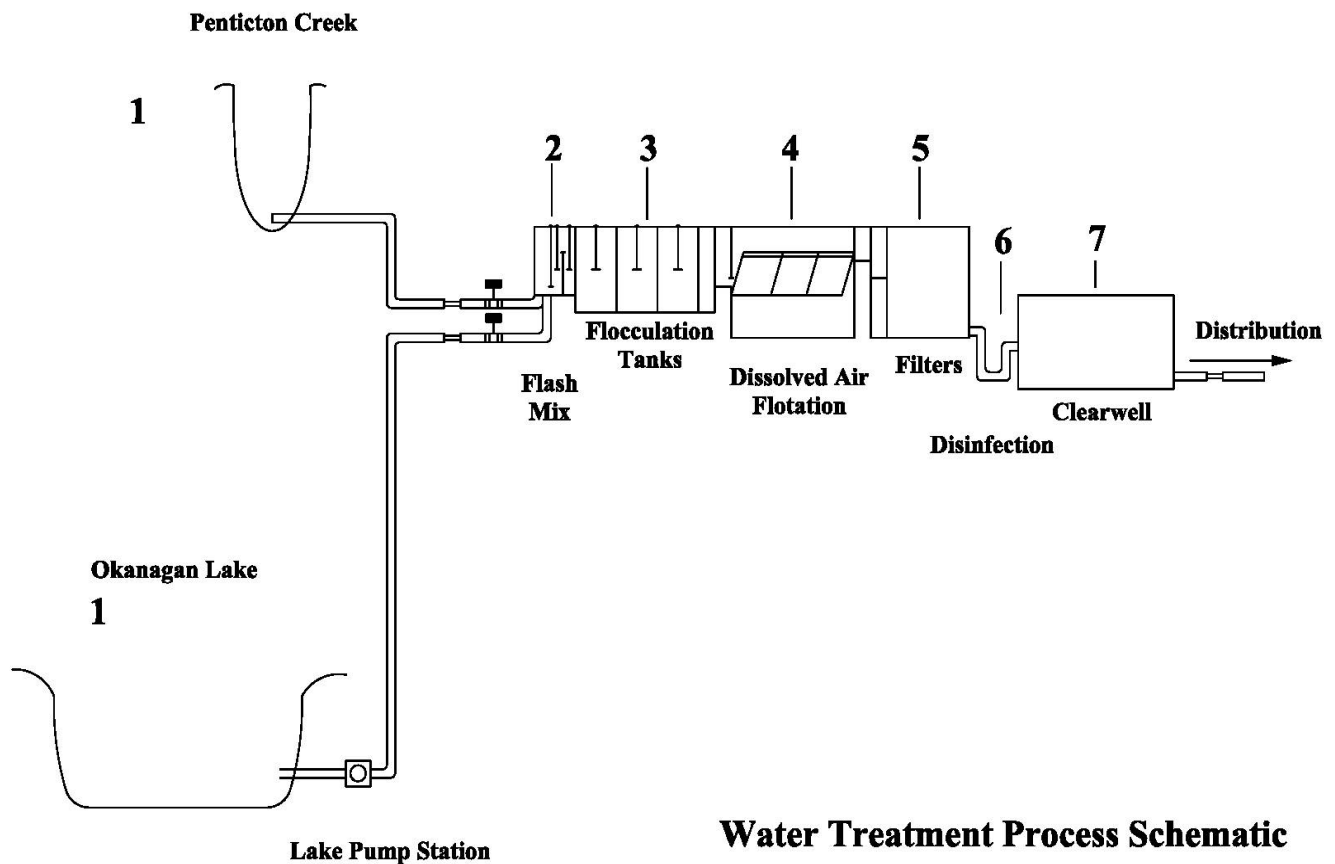


Figure 6. Penticton Water Treatment Plant Schematic

3.0 Water Treatment

The City of Penticton's Water Treatment Plant has a 60 million Litres/day capacity and uses a multi-barrier system designed to treat water in a single or blended format from two sources: Okanagan Lake and Penticton Creek. The water quality of the two sources is distinctly different and requires different protocols for successful treatment. The objectives of treatment for the two sources are to meet Guidelines for Canadian Drinking Water Quality on a consistent basis.

The Water Treatment Plant was commissioned in 1996 and upgraded in 2008, which included the installation of the following processes: high-rate dissolved air flotation, new pump station and dedicated main for the Ridgedale Reservoir system, incline plate thickeners for the residuals process, and increased clear well storage.

In 2020, the chlorine (Cl_2) and sulphur dioxide (SO_2) gas chemical systems were removed and replaced with sodium hypochlorite (NaOCl) and vitamin C.

Blend Chamber

Raw water arrives at the treatment plant into the blend chamber, water from a single source or from both sources in the desired percentage is blended and coagulants (chemicals that cause fine particles to clump together, forming "floc") are added. This mixing disperses the coagulants throughout the water and starts the coagulation process.

In 2025 the Water Treatment Plant had a total chemical cost of approx. \$425,000.



Figure 7. Penticton Blend ChamberTable

1: Monthly Chemical Record 2025

Month	Influent Total	Effluent Total	ACH	Coagulant Aid	Floc Aid
2025	Million Litres	Million Litres	mg/L	mg/L	mg/L
January	351.83	344.27	13.78	1.80	0.36
February	311.19	304.65	15.20	1.61	0.40
March	330.68	328.31	13.60	1.71	0.44
April	437.21	431.65	17.59	2.30	0.40
May	733.36	698.19	17.19	2.15	0.37
June	893.27	880.99	26.65	2.70	0.56
July	1065.51	1051.15	23.67	2.30	0.50
August	1077.34	1063.22	16.18	2.28	0.41
September	891.09	880.83	15.30	2.30	0.38
October	502.78	494.78	14.61	2.23	0.37
November	336.53	327.54	17.25	1.97	0.35
December	338.31	333.62	22.96	1.70	0.36
Average	605.76	594.93	17.83	2.09	0.41
Annual Total	7243	7139.21			

Coagulation & Flocculation

Water passes through the flocculation tanks where it is gently mixed. Tapered energy mixing is employed in the flocculation process. The particles will come in contact with each other and form larger floc. It is in this stage of the process that most of the impurities and harmful bacteria are captured within the floc particles and will later be captured in the DAF float or the filtering process.



Figure 8. Penticton Water Treatment Floc Tank Mixers

Dissolved Air Floatation

The water enters the dissolved air flotation basin where a saturated dissolved air/water stream is mixed with the process stream allowing the floc particles that have formed in the previous process to rise. The float rises to the top of the basin removing impurities from the water.

This float is processed by the onsite centrifuge or diverted to the sewer system to aid in the wastewater treatment process. The water then proceeds to the filtration stage.



Figure 9. Penticton Water Treatment Dissolved Air Floatation

Filtration

Six deep bed, mono media filters are utilized at the Penticton Water Treatment Plant. The filter material used is anthracite coal at a depth of 1.80 meters. As the water passes through the filter, impurities are removed. The number of filter washes required is directly related to the quantity and quality of the water processed through the filter. Filter backwashes are regulated by four different factors:

1. time the filter has been online
2. turbidity
3. particle counts,
4. head loss.

The number of filter washes increases dramatically in the months of May - September. This is related to the amount of water processed during the increased summer water demands. In 2022,

three of the filters received new butterfly valves and electric actuators. The remaining three filters were upgraded in spring 2023.



Figure 10. Penticton Water Treatment Mono Media Filters

Residuals Handling

There were no unauthorized discharges to Penticton Creek during 2025. The City of Penticton is constantly evaluating and making improvements to its treatment of the backwash stream. Ministry of Environment permit # PE-13491, which monitored the discharge was cancelled in 2011 due to changes in regulations.

Capital upgrades to the residuals process were constructed in 2009 as part of the Water Treatment Capacity Upgrade. These upgrades consisted of a new pump station and two new gravity thickeners to process backwash residuals.

In 2020 a Vitamin C de-chlorination system replaced the SO_2 gas to remove the backwash water chlorine residual. Testing of the backwash water indicates that the improvements made to the backwash handling system have considerably improved the discharge quality in comparison to pre-upgrade results.



Figure 11. Penticton Water Treatment Residual Handling Building

Disinfection

Once impurities have been removed from the water, liquid sodium hypochlorite is added as a disinfectant. This ensures the water is safe and prevents bacteria from developing as it travels from the treatment plant to the customer. The water treatment plant uses hypochlorite pumps that add a 6 -12% sodium hypochlorite chlorine solution at pre flocculation, and post filtration to achieve the required 1.35 mg/L residual leaving the facility.

Table 2. 2025 Chlorine Residual

Month	Hypo used Litres	Residual free mg/L Cl
January	15,985	1.35
February	15,126	1.40
March	15,321	1.36
April	20,728	1.39
May	21,330	1.33
June	28,403	1.38
July	30,296	1.36
August	30,268	1.35
September	24,229	1.34
October	14,070	1.35
November	16,548	1.32
December	14,326	1.37
Average	20,552	1.36

- Average 2025 chlorine residual at the clear well discharge was 1.36mg/L

4.0 Water Distribution System

The City of Penticton water system consists of six reservoirs, five main pressure zones, two pump stations, three booster stations, 256.3 km of distribution mains, 1,082 fire hydrants and approximately 10,467 water service connections, serving a population of 39,157 people.

These reservoirs establish different pressure zones to service a particular area of the distribution system. The reservoirs are filled during periods of decreased water usage and are used to buffer the system when water demands are high.

Total treated water reservoir capacity, excluding the treatment plant clear well, is 15.5- million Litres (23.5 million Litres including water plant clear well). All reservoirs are remotely controlled via the SCADA system located at the Water Treatment Plant.

Water System Pressure Zones

- **1420 zone.** The supply reservoir for this zone is the **Duncan Avenue Reservoir**, which has a capacity of 5.90 ML, and the Water Treatment Plant clear well. Water to fill this reservoir originates at the Treatment Plant and is controlled by valving within the Duncan Avenue Station. This zone supplies the lower areas of Penticton and West Bench.
- **1620 zone.** The supply reservoir for this zone is the **Evergreen Reservoir**, which has a capacity of 2.30 ML. This zone supplies the southern middle bench lands of Penticton. The water to fill this reservoir is gravity fed from the 1650 Ridgedale Reservoir via an automatic control valve.
- **1650 zone.** The supply for this zone is the **Ridgedale Reservoir**, which has a capacity of 2.35 ML. Water for this reservoir is pumped from the Water Treatment Plant's clear well. This zone supplies the middle bench lands of Penticton.
- **1820 zone.** The supply for this zone is the two **Carmi Reservoirs** and the **Gordon Avenue Reservoir**, which have a capacity of 1.14, 1.35 and 0.53 ML respectively. This zone supplies the upper-level areas of Penticton and is supplied by the Ridgedale Reservoir and pump station.
- **2020 zone.** The supply for this zone is the **Sendero Reservoir**, which has a capacity of 1.5 ML. This zone supplies the Sendero and Ridge subdivision located in the upper Carmi region. Water to fill this reservoir is supplied from the Ridgedale Reservoir and pump station.

5.0 Water Treatment Plant Staffing

The water plant is staffed by Environmental Operators Certification Program (EOCP) certified operators seven days per week, 365 days per year. The current complement of staff is:

Table 3. 2025 Staff Complement

Name	Position	Certification Level	Years of Experience
Stuart Henderson	Supervisor	EOCP WT IV	12
Karthick Chockalingam	Foreman	EOCP WT IV	7
Matt Finlayson	Operator III	EOCP WT IV	11
Jesse Repchuk	Operator III	EOCP WT III	5
Luke Beertema	Operator II	EOCP WT II	3
Randy Wewetzer	Operator II	EOCP WT IV	15
Scott Graham	Electrician/Instrumentation	Journeyman	17

All EOCP certified operators are mandated to receive annual 2.4 continuing education units of training every two years to maintain their operator certification.

6.0 Water Quality Monitoring Program

The raw water quality program is designed to compare seasonal trends that may impact treatment parameters and economic outcomes of using the source. The program includes parameters that are tested and linked to changes such as turbidity, temperature, pH, conductivity and microbiological results. The source monitoring program is conducted daily for each water source at the water treatment laboratory.

In addition to the laboratory tests conducted daily on each water source, the city samples both raw water sources weekly for Total Coliform and E. coli using the Colilert test method.

The City of Penticton maintains and operates dedicated sample stations located within the distribution system. The treated water within each pressure zone is continuously monitored for chlorine residual by an online residual analyzer connected to the Water Treatment Plant's SCADA via fibre optic or radio network. Chlorine dosage is adjusted at the treatment plant to maintain free chlorine residuals within the distribution system. The Utilities Distribution and Collections Branch maintains four automatic flush systems at the system extremities to help keep chlorine residuals at appropriate levels.

Water Quality Monitoring

450 microbiological tests were sampled for E. coli and Total Coliform in the treated water supply in 2025. Biological tests were collected from different locations within the city distribution boundaries. The results from the bacteriological tests indicated that 449 samples were negative for bacteriological contamination. One test had a result of 1.0 total coliform/100mL. The sample site was retested with the result absent of total coliforms.

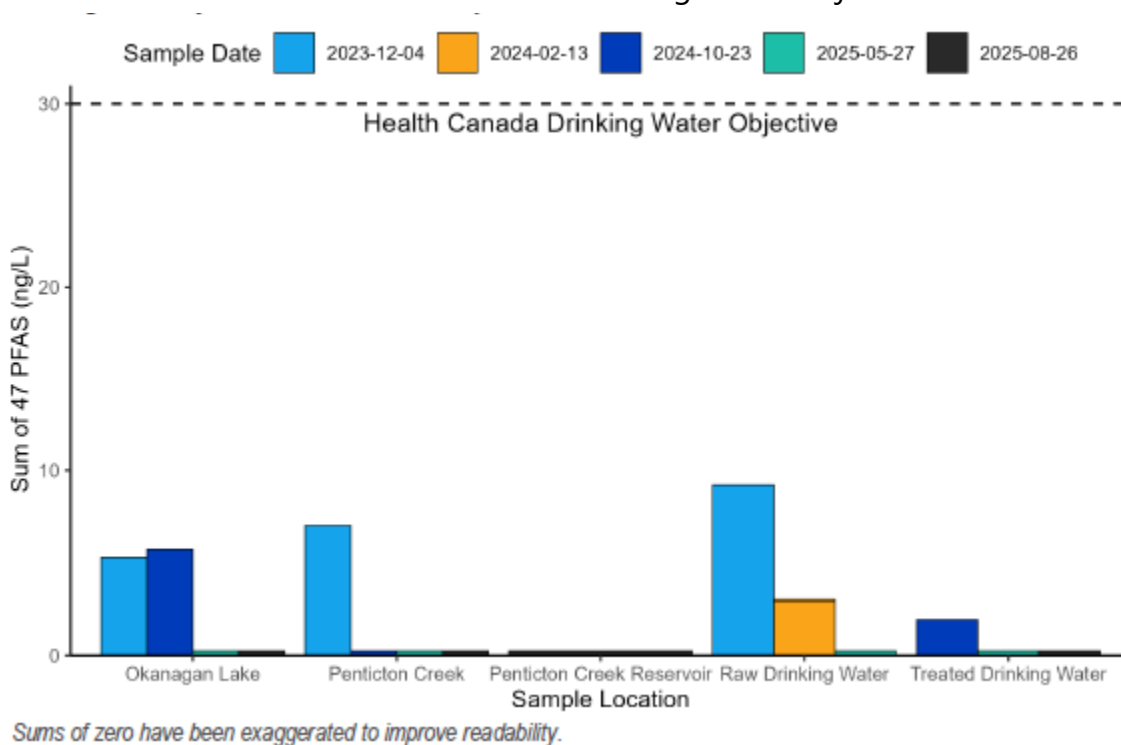
In 2025, a commercial lab tested the treated water and source waters four times a year. These scans test for disinfection byproducts, metals, nutrients, total organic carbon and organic pesticides. Samples are collected at the PRV Station, Okanagan Lake sample tap, Penticton Creek sample tap, and a rotating sample location in the distribution system.

PFAS testing

PFAS, short for per- and polyfluoroalkyl substances, are a large group of man-made chemicals widely used since the mid-20th century in products like non-stick cookware, water-resistant clothing, food packaging, and firefighting foams because they repel water, oil, and heat. The problem is that these “forever chemicals” break down extremely slowly, allowing them to build up in the environment and in our bodies over time. Scientific studies have linked exposure to certain PFAS with potential health risks. Because PFAS can enter rivers, lakes, and groundwater through industrial runoff, landfill leachate, or historical use of PFAS-containing products, monitoring them in raw water is essential to ensure the safety of our drinking water sources and to reduce long-term health and environmental impacts.

The City has tested water from both water supplies and drinking water for PFAS. No sample had total PFAS concentrations exceeding the Health Canada drinking water objective (Health Canada 2024) of 30 nanograms per liter (ng/L). In spring and summer 2025 no PFAS were detected in drinking water, Okanagan Lake, or Penticton Creek. These results indicate that the drinking water supply for the City would comply with the Health Canada drinking water objective if it was enforced by the Interior Health Authority in the future.

Chart 1. Health Canada Drinking Water Objective



Disinfection Byproducts

Disinfection by-products (DBPs), such as trihalomethanes (THMs) and haloacetic acids (HAAs), are substances that can form when chlorine, used to kill harmful microorganisms in drinking water, reacts with natural organic material like decaying leaves or plant matter in the source water. While chlorine is essential for keeping water safe, these by-products can pose health risks if they are present at high levels over many years. To protect the public, Health Canada has set Maximum Acceptable Concentrations (MACs) of 0.1mg/L for total THMs and 0.080mg/L for HAA5. As required in the national guidelines, DBP levels are assessed using a rolling annual average based on at least quarterly samples taken at locations in the distribution system where levels are expected to be highest. Our utility follows these guidelines by sampling quarterly at the highest-risk locations in town, and the reported MAC values represent the average of the most recent four tests for THMs and HAAs

Chart 2. THM Quarterly Testing

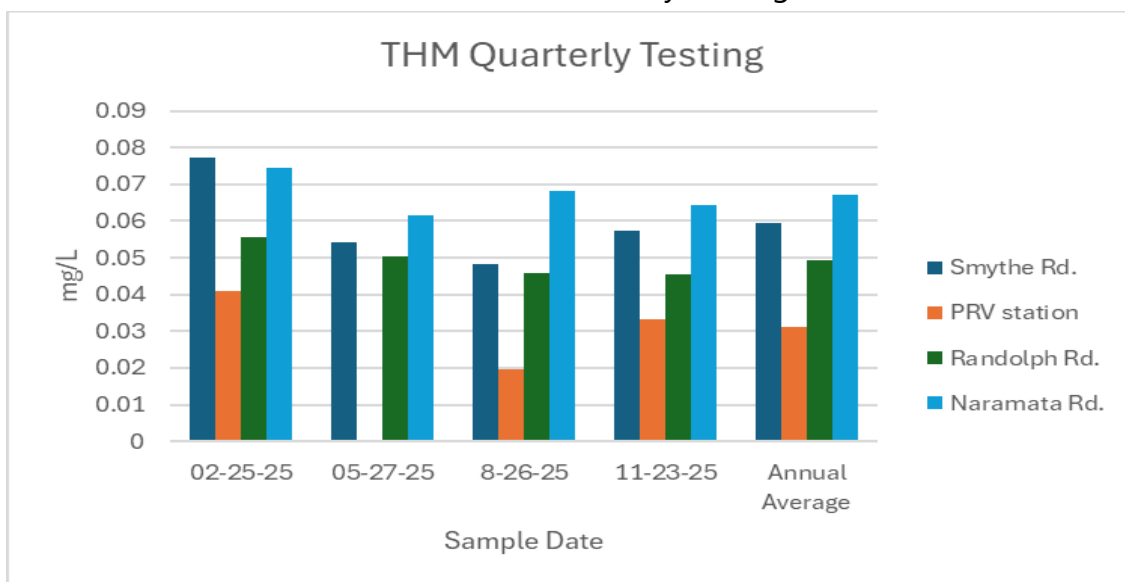
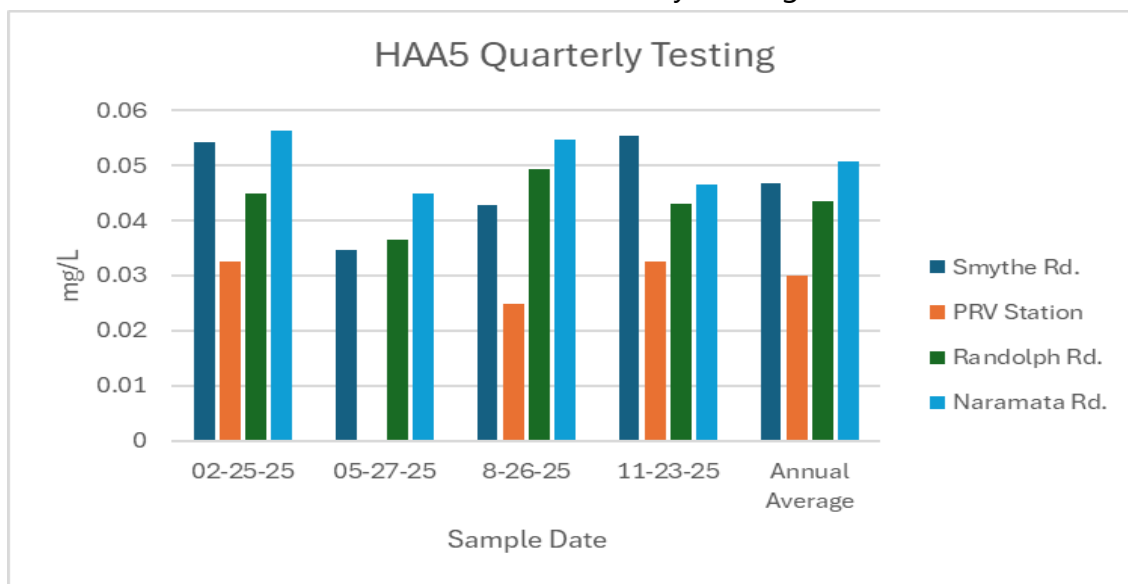


Chart 3. HAA5 Quarterly Testing



*See Appendix B for Water Quality analysis and reports.

7.0 Water Use and Licenses

Domestic

The City of Penticton holds domestic water licenses for Penticton Creek, Ellis Creek and Okanagan Lake water sources for the purpose of Waterworks Local Authority.

Penticton Creek (license C014229), (license C005729)
Ellis Creek (license C005731), license (C005732), and license (C025234)
Okanagan Lake (license C116809), (C116810), (C116811), *(C130923), *(C130920)
 * West Bench operations

The total yearly capacity of these licenses is approx. 18,208 million Litres. In 2025, The City of Penticton pumped or diverted 7,243 million Litres from Okanagan Lake and Penticton Creek for domestic waterworks use.

Irrigation

The City of Penticton holds irrigation water licenses for Penticton Creek, Ellis Creek and Okanagan Lake water sources for the purpose of Irrigation.

Penticton Creek (license C035678), (license C005729)
Ellis Creek (license C0241819), license (C0241803)
Okanagan Lake (license C130923)

In 2025 the City diverted 1623 million Litres from the Penticton Creek system for irrigation use.

In 2025 the City diverted 440 million Litres from the Ellis system as well as 437 million litres from the WTP domestic system for irrigation use during construction of Ellis dam #4.

In 2025 the City diverted 2.6 million Litres from the Okanagan Lake system for irrigation use.

These licenses are renewed each year and reviewed by the Water Stewardship Division within the Ministry of Environment.

Table 4. 2025 Raw Water Diversion for Domestic and Irrigation use

2025	Penticton Cr.	Ellis Cr.	Ok Lake	Total
	Million Litres	Million Litres	Million Litres	Million Litres
Domestic	1,536		5,708	7243
Irrigation	1,623	440+437 from domestic system	2.6	2502.6

The Ellis # 4 Dam had major reconstruction in 2024 and was out of service from July 2024 to April 2025. The Ellis system received 437 million Litres from July 28 2025 to October 18 2025 from the Water Treatment Plant using an emergency bypass connection with backflow protection.

8.0 Water Demand Monitoring

The volume of water pumped from the Okanagan Lake Pump Station and Penticton Creek is continuously monitored by flow meters located at the Water Treatment Plant. Treated plant discharge water into the distribution system is also continuously monitored to determine peak days and unusual usage.

In 2014 an extension of the distribution system was constructed to supply domestic city water to the RDOS West Bench System. This system is owned and operated by the Regional District and is supplied with water by The City of Penticton via a bulk purchase water agreement. In 2025, 333 million Litres of water was supplied to the West Bench Irrigation System.

Maximum Daily Demand ML 2015-2025

The peak maximum daily demand from the last 11 years was 44.9 million litres per day in 2021. The peak maximum daily demand historically was in July 2001 with 51.5 million litres per day, which was 1614 Litres per capita per day. Significant water conservation and the expanded use of reclaimed treated wastewater effluent for some parks and golf course irrigation are credited for the decreased water usage.

Demand has a direct impact on existing water infrastructure as well as community planning. In 2025, peak day was 40.9 million Litres, which occurred on August 30. This includes water supply to the West Bench System.

Average Yearly Daily Demand per person was 486 Litres per capita per day based upon a combined population from Penticton and West Bench of 40226 people. Demands, which are based on distribution flow meter records excluding backwash and other operational uses of water within the treatment process.

Chart 4. Raw Water Usage 2015-2025

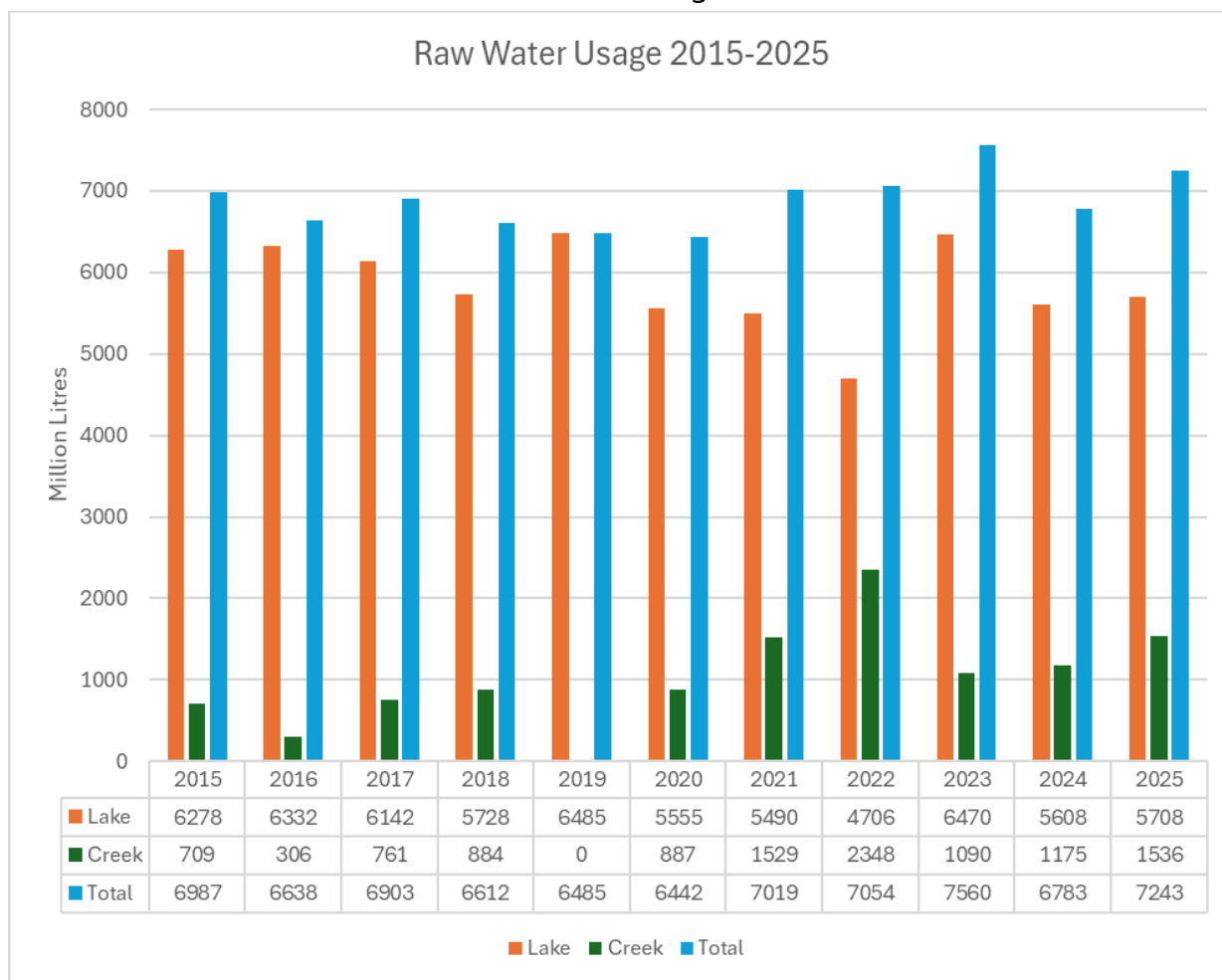
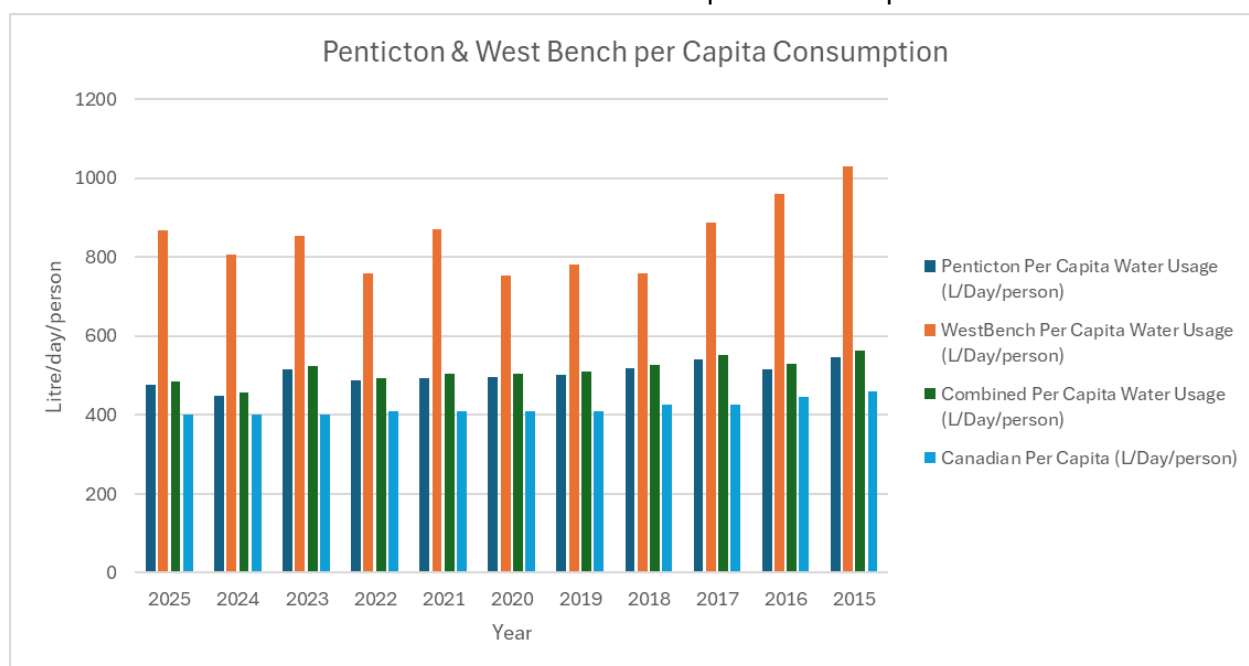


Chart 5. Penticton & West Bench Per Capita Consumption 2015-2025



- Penticton population estimate based on the 2021 census plus estimate of 1.2% per year 39,157 population estimate for 2025
- West Bench population 1069 from 2021 census and RDOS GIS system

Chart 6. Max Daily Demand 2012-2025

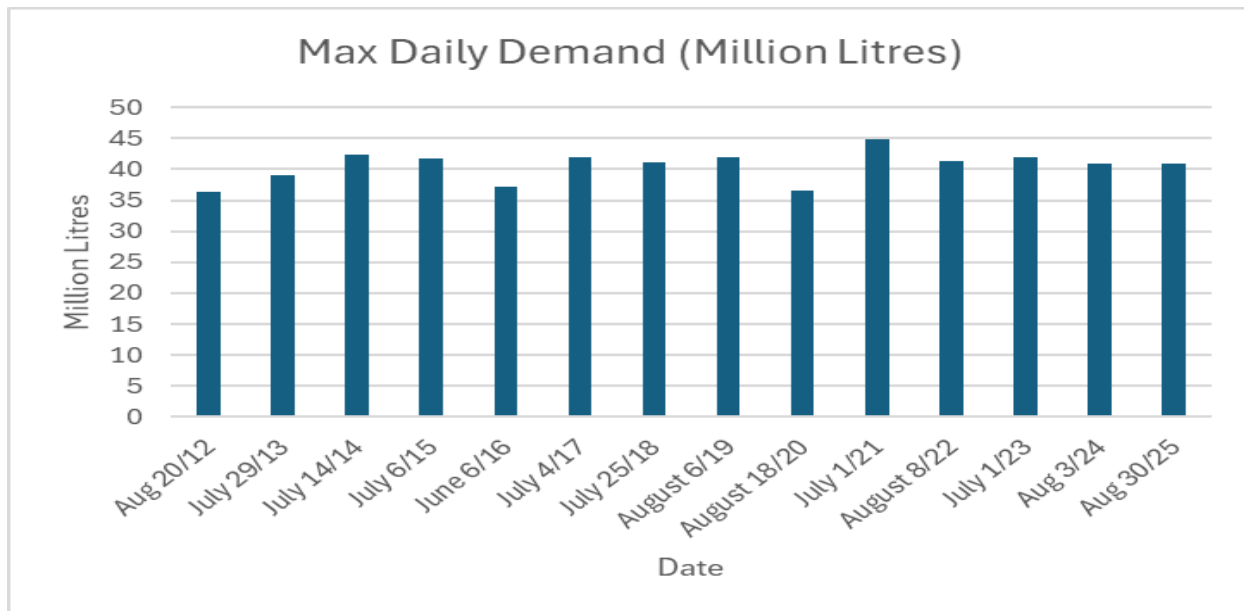


Chart 7. Max Daily Demand (Litres/Capita) 2012-2025

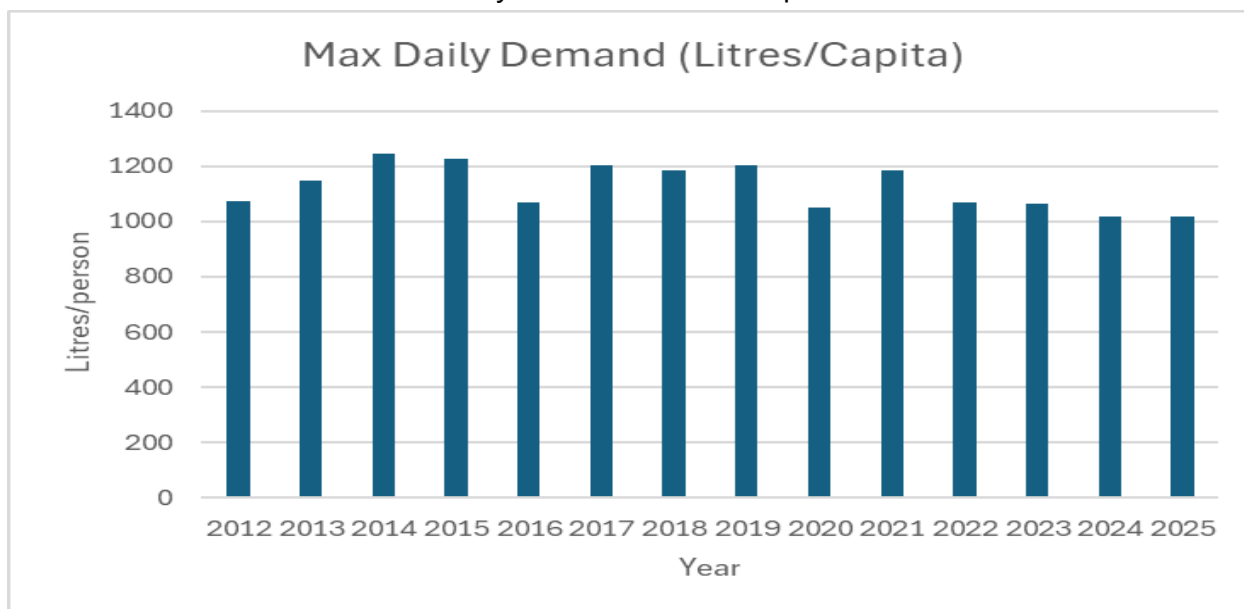
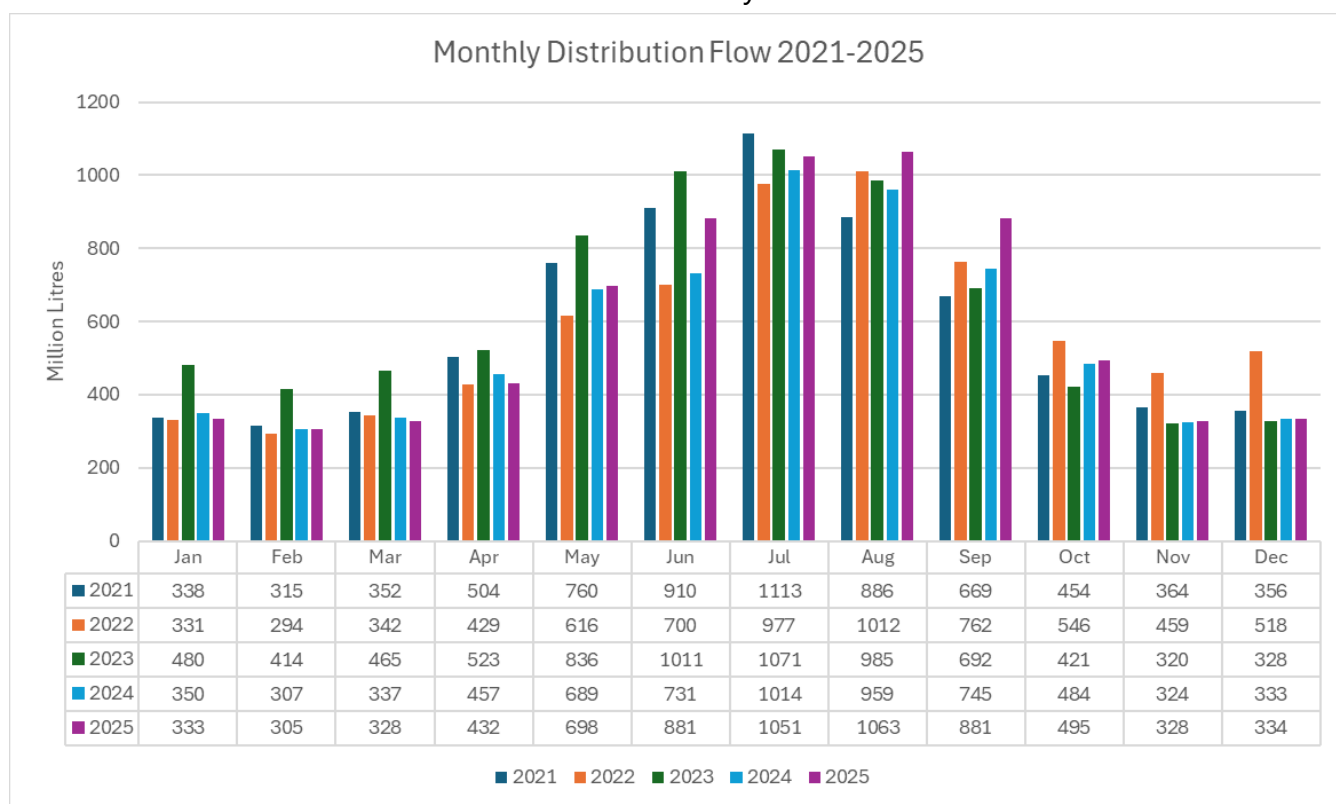


Chart 8. Total Distribution Demand by Month 2021 – 2025



2025 Water Conservation Goal and Objectives

1. Reduce Peak Day Demand and Average Daily Demand

Purpose – minimize the impact of our growing community on water resources. Effectively monitor programs, which aim at reducing Peak Day Demand and Average Daily Demand.

2. Update Water Conservation Webpage

Purpose – provide relevant solutions to reducing water waste as well as timely information on water consumption to promote the cause and effect of turning off the tap. Every drop counts! The City of Penticton's web page has links to the Okanagan Basin Water Board and valley wide information supporting water conservation.

9.0 Drought Management

In 2021, the city completed work with a consulting engineer to develop and update a drought management plan. The purpose of the plan is to provide the city with a professional report that identifies our water supply and looks at water demands historically and for the future. The identified drought resilience for each source and the requirements to mitigate an extended

drought. The report identifies trigger points and provides decision making guidelines for each level of drought. In 2025, the Penticton Water System was in a Stage 1 restriction from May 1 to August 31.

Irrigation Systems

Two creeks within the City of Penticton boundaries are used as sources of water for irrigation systems. The South Okanagan Development Company initially developed the Penticton Creek irrigation system in 1906. The Ellis Creek irrigation system was developed in the late 1930's. The Penticton Creek Irrigation System is of high significance as the City of Penticton holds licenses for domestic water works on this source.

Penticton Creek Irrigation System

Records indicate that Penticton #1 Dam was built prior to 1921, although the exact year of construction is not known. It is located approximately 22 km northeast of Penticton. The dam has a live storage capacity of 1.48 million m³ and empties into the reservoir of Greyback Dam. A dam safety study identified seepage and stability issues and recommended the structure be updated or decommissioned. In September of 2006, upon final review of the Knight and Piesold dam study, Penticton #1 dam was breached and removed from service.

The Greyback Dam is located at the head of the Penticton Creek watershed, approximately 19-km northeast of Penticton. The dam is used by the City of Penticton to supply and control water for domestic water and north irrigation system. The dam has a live storage capacity of approximately 12.33 million m³. Greyback Dam is a zoned earth fill embankment designed by the Canadian Department of Regional Economic Expansion, with construction completed in 1967. The dam is approximately 35 meters in height and 610 meters in length. An emergency spillway is located on the east abutment. Greyback Reservoir covers an area of approximately 300 acres and empties into Penticton Creek flowing into Campbell Mountain Diversion Dam followed by Penticton #2 dam.

Penticton Creek Irrigation System

A.C. McEachern Ltd. of Vancouver constructed the Campbell Mountain Diversion Dam in 1966-1967. The purpose of this project was to divert water from Penticton Creek via a tunnel to the north irrigation system. The diversion dam has a storage capacity of 31,000 m³ of water. The method of construction is an earth filled embankment with a side discharge, Ogee Crest, concrete channel spillway and chute located on the right abutment. Before the construction of this diversion, irrigation water for farms and orchards located on the north bench was via flume and open ditch. Water, that is not diverted, flows into Penticton Creek and Penticton #2 dam.

Penticton # 2 Dam is a concrete arch dam originally constructed in about 1930 and raised by 3 meters in 1939. The current dam is approximately 16 meters in height and spans 22 meters between rock abutments. The dam has a storage capacity of 71,500 m³ of water. The flooded area behind the dam is approximately 5 acres. The current use of the dam is to supply water to the Water Treatment Plant located immediately downstream. Flow data is monitored continuously.

Total daily city allotted capacity for irrigation from Penticton Creek is calculated to be 46.26 million litres per day. 2025 peak day for Penticton Creek irrigation system was 15.9 million litres recorded at the Randolph Rd flow meter on July 8th Total demand on Penticton Creek Irrigation system in 2025 was 1.623 billion Litres

Ellis Creek Irrigation System

The Ellis Creek Diversion dam was constructed in 1966 by Interior Contracting Ltd. of Penticton and has been in operation since the spring of 1967. A major upgrade was started in June 2024. The dam was drained and out of service for the remainder of 2024 and into 2025.

The diversion dam is a small earth fill embankment with a concrete channel weir that spills over the crest and downstream face of the dam. The dam has a relatively minor storage capacity of approximately 6,200 m³ of water. The flooded area behind the dam is less than 1 acre. The diversion dam receives water from Ellis #2 and Ellis #4 dams. Maintenance of the diversion dam is the responsibility of the City Works Division.

The total daily city allotted capacity for irrigation from Ellis Creek is calculated to be 9.99 million litres per day. Peak day for Ellis Creek irrigation system occurred on July 4th when 10.3 million litre demand was recorded by the Ellis Creek Irrigation flow meter. Total demand for Ellis Creek Irrigation system for 2025 was 877 million Litres (437 million litres coming from the domestic system)

Table 5: Irrigation Water Use 2012-2025

Year	Penticton Creek Irrigation (Million Litres)	Ellis Creek Irrigation (Million Litres)
2012	3126	330
2013	3015	263
2014	3208	297
2015	3228	397
2016	3113	754
2017	3340	886
2018	1318	764
2019	1252	690
2020	1246	644
2021	1591	863
2022	1156	598
2023	1571	724
2024	1419	690
2025	1623	877 (440 from creek, 437 from domestic)

10.0 Cross Connection Control

A cross connection refers to any actual or potential physical connection between a potable water line and any pipe, vessel or machine containing or possibly containing a non-potable fluid, gas or solid, such that it is possible for the contaminant to enter the water system by backflow.

The City of Penticton's Cross Connection Control program has approximately 2,542 testable assemblies. These testable assemblies refer to Double Check Valve Assemblies and Reduced Pressure Backflow Assemblies isolating moderate and high hazards. The program is managed by the City of Penticton Building Department.

A secondary component of the Cross Connection Control Program entails performing site surveys and plan reviews of proposed building projects which identify actual or potential cross connections and their remedies. In some cases, the solution incorporated a non-testable device such as a Hose Bib Vacuum Breaker, an approved air gap or the elimination of the backflow hazard altogether.

These measures are in place as a means of providing safe drinking water and meeting one of the City of Penticton's conditions on the Interior Health Permit to Operate.

11.0 Source Water Protection Assessment and Plan

The objective of this drinking water source assessment was to quantify the source water quality, identify hazards, and make recommendations on protecting the source water quality of the City of Penticton's Okanagan Lake and Penticton Creek intakes.

Specific recommendations and action plans were developed with the aim of providing the best water quality. Key recommendations include:

- applying best management practices for shoreline protection
- creating a legal framework for the intake protection zone
- improving the condition of Penticton Creek's watershed drainage infrastructure
- educating recreators on how to operate safely near the intakes.

This assessment characterizes natural and man-induced hazards to drinking water quality as physical, chemical, or biological. As these risks change over time, revisions of this document may be needed. Existing research was augmented by a 2021 survey of the Penticton Creek watershed, field study of water currents, water quality profiles, and algae sampling in Okanagan Lake near the intake.

12.0 Water Operational and Capital Improvements

Major Capital Improvements 2025

1. \$8,000,000 Penticton PRV Replacement - Completed
2. \$20,000,000 on Ellis #4 Construction - Completed

Distribution System Maintenance 2025

1. Hydrants Inspected – 1,116
2. 10 fire hydrants installed
3. \$367,587 on Emergency water main repairs (21 failures)
4. 26.6km of water main flushed
5. 15,833m watermain evaluated for leaks
6. \$375,000 on water service repairs

Appendix A Quick Facts 2025

2025 Lab Data			
Lake	High	Low	Avg
Alkalinity	122	97	113
Colour Apparent	13	2	6
Colour True	8	10	3
Hardness	152	118	128
pH	8.39	7.88	8.14
Turbidity	1.25	0.106	0.239
Creek	High	Low	Avg
Alkalinity	21.8	4.2	13.7
Colour Apparent	168	24	59
Colour True	100	20	45
Hardness	20	6	12
pH	7.87	6.09	7.2
Turbidity	15.9	0.42	0.959
Distribution	High	Low	Avg
Alkalinity	116	12	91
Hardness	135	10	102
pH	9.28	7.69	8.01
Turbidity	0.106	0.018	0.032

Appendix B – Water Quality Lab Reports

- Summary of 2025 Bacteriological Testing
- Caro Bacteriological Results
- Caro Quarterly Sampling Results
- 2025 Main Break Reports
- 2025 Raw Water Algae Results

City of Penticton Water Treatment Plant

2025	Sample #	Date	Time	Location	Pressure Zone	Free (CL2)	Temp (°C)	Turbidity (NTU)	pH	E. coli Coliform (/100 mL) CARO	Total Coliform (/100 mL) CARO	e.Coli Coliform (/100mL) In-House	Total Coliform (/100mL) In-House
January	1	5-Jan	15:00	Gordon Ave Stn	1820ft/555m	0.85	6.40	0.120	8.10			A	A
	2	5-Jan	15:15	Lawrence Ave Stn	2020ft/616m	0.57	6.00	0.100	8.10			A	A
	3	5-Jan	15:48	1900 Penticton Ave	1650ft/503m	1.07	7.70	0.113	8.24			A	A
	4	7-Jan	12:40	Carmi Pumpstation	1820ft/555m	0.55	8.10	0.089	8.17	<1	<1		
	5	7-Jan	13:05	Gordon Pumpstation	1820ft/555m	0.53	7.30	0.092	8.22	<1	<1		
	6	7-Jan	13:25	4300 Lakeside Road	1420ft/433m	0.76	9.20	0.284	8.18	<1	<1		
	7	7-Jan	13:45	Randolph Road Station	1650ft/503m	0.86	6.10	0.123	8.16	<1	<1		
	8	7-Jan	14:10	1900 Penticton Ave	1620ft/494m	0.95	8.90	0.090	8.15	<1	<1		
	9	10-Jan	16:25	Naramata Rd Stn	1650/503m	0.53	6.30	0.100	7.88			A	A
	10	10-Jan	17:15	Community Centre	1420ft/433m	0.99	11.10	0.080	7.92			A	A
	11	10-Jan	17:27	1900 Penticton Ave	1420ft/433m	0.99	10.00	0.065	7.87			A	A
	12	14-Jan	14:10	Randolph Road Station	1650/503m	0.87	6.20	0.029	8.00	<1	<1		
	13	14-Jan	14:27	OK Lake Pump House	1420ft/433m	0.92	7.20	0.053	8.02	<1	<1		
	14	14-Jan	14:45	Lawrence Ave Stn	2020ft/616m	0.54	5.60	0.033	8.04	<1	<1		
	15	14-Jan	15:20	1900 Penticton Ave	1420ft/433m	0.93	10.30	0.034	8.03	<1	<1		
	16	14-Jan	14:35	4300 Lakeside Road	1420ft/433m	0.76	8.00	0.180	8.07	<1	<1		
	17	14-Jan	15:00	Carmi Pumpstation	1820ft/555m	0.57	7.60	0.205	8.04	<1	<1		
	18	17-Jan	13:40	City Yards	1650/503m	0.77	8.20	0.080	7.73			A	A
	19	17-Jan	14:14	Gordon Ave STN	1820ft/555m	0.53	6.00	0.093	7.86			A	A
	20	17-Jan	14:40	Lawrence Ave STN	2020ft/616m	0.65	5.40	0.061	7.90			A	A
	21	21-Jan	15:34	Lawrence Ave Stn	2020ft/616m	0.51	5.00	0.045	7.77	<1	<1		
	22	21-Jan	15:53	Carmi Pumpstation	1820ft/555m	0.57	7.90	0.115	7.82	<1	<1		
	23	21-Jan	16:15	4300 Lakeside Road	1420ft/433m	0.70	6.80	0.126	7.82	<1	<1		
	24	21-Jan	16:40	Randolph Road Station	1650/503m	0.74	7.80	0.088	7.83	<1	<1		
	25	21-Jan	16:50	OK Lake Pump House	1420ft/433m	0.72	7.60	0.125	7.85	<1	<1		
	26	25-Jan	9:43	Wiltse School STN	1620ft/494m	0.61	5.60	0.250	7.81			A	A
	27	25-Jan	10:15	Gordon Ave STN	1820ft/555m	0.50	5.50	0.123	7.90			A	A
	28	25-Jan	11:20	Community Centre Lunch Room	1420ft/433m	0.84	9.40	0.048	7.87			A	A
	29	25-Jan	11:45	1900 Penticton Ave	1650/503m	1.32	4.40	0.050	7.77			A	A
	30	28-Jan	13:14	1900 Penticton Ave	1650/503m	1.07	10.90	0.030	7.720	<1	<1		
	31	28-Jan	13:40	Randolph Road Station	1650/503m	0.86	5.50	0.032	7.820	<1	<1		
	32	28-Jan	14:00	OK Lake Pump House	1420ft/433m	0.97	6.00	0.102	7.863	<1	<1		
	33	28-Jan	14:18	Lawrence Ave Stn	2020ft/616m	0.51	4.90	0.096	7.830	<1	<1		
	34	28-Jan	14:35	Gordon Ave Stn	1820ft/555m	0.54	5.20	0.068	7.840	<1	<1		
	35	28-Jan	14:54	4300 Lakeside Road	1420ft/433m	0.84	6.00	0.144	7.820	<1	<1		
	36												
Average						0.76	7.44	0.099	7.94	#DIV/0!	#DIV/0!	0.00	#DIV/0!
Std. Dev.						0.20	1.75	0.058	0.15	0.00	0.00	0.00	0.00
n						35.00	35.00	35.000	35.00	22.00	22.00	13.00	13.00
Minimum						0.50	4.40	0.029	7.72	0.00	0.00	0.00	0.00
Maximum						1.32	11.10	0.284	8.24	0.00	0.00	0.00	0.00
February	1	4-Feb	14:17	1946 Harris Dr.	2020ft/616m	0.66	6.50	0.037	7.750	<1	<1		
	2	4-Feb	14:40	Carmi Stn	1820ft/555m	0.63	7.20	0.066	7.780	<1	<1		
	3	4-Feb	15:03	1900 Penticton Ave	1650/503m	1.00	9.10	0.069	7.770	<1	<1		
	4	4-Feb	13:55	Community Centre	1420ft/433m	1.00	8.80	0.084	7.800	<1	<1		
	5	4-Feb	14:20	Ok Lake Pump House	1420ft/433m	1.03	5.60	0.054	7.780	<1	<1		
	6	4-Feb	14:55	Randolph Rd Stn	1650/503m	0.89	5.30	0.043	7.720	<1	<1		
	7	7-Feb	11:25	4300 Lakeside Rd	1420ft/433m	0.72	5.60	0.154	7.980			A	A
	8	7-Feb	11:56	Ok Lake Pump House	1420ft/433m	0.99	5.10	0.081	7.740			A	A
	9	7-Feb	12:35	1900 Penticton Ave	1650/503m	0.96	8.00	0.051	7.800			A	A
	10	11-Feb	11:04	City Yards	1650/503m	0.70	6.90	0.228	7.80	<1	<1		
	11	11-Feb	12:00	WWTP	1420ft/433m	0.98	5.80	0.109	7.84	<1	<1		
	12	11-Feb	13:56	Gordon Ave STN	1820ft/555m	0.58	4.40	0.071	7.91	<1	<1		
	13	11-Feb	14:19	Randolph Rd Stn	1650/503m	0.87	6.90	0.079	7.88	<1	<1		
	14	11-Feb	14:47	Naramata Rd STN	1650/503m	0.60	3.40	0.073	7.88	<1	<1		
	15	11-Feb	16:40	1900 Penticton Ave	1650/503m	1.00	11.00	0.051	7.72	<1	<1		
	16	14-Feb	14:45	Carmi Pump House	1820ft/555m	0.69	5.70	0.090	7.82			A	A
	17	14-Feb	15:00	Lawrence Ave Stn	2020ft/616m	0.56	4.20	0.097	7.82			A	A
	18	14-Feb	15:21	Timmins St Stn	1420ft/433m	1.04	4.00	0.051	7.77			A	A
	19	18-Feb	13:00	1946 Harris Dr.	2020ft/616m	0.51	7.70	0.067	7.71	<1	<1		
	20	18-Feb	14:06	Carmi	1820ft/555m	0.62	8.10	0.074	7.82	<1	<1		
	21	18-Feb	14:33	Gordon Ave STN	1820ft/555m	0.60	5.40	0.099	7.85	<1	<1		
	22	18-Feb	14:00	Ok Lake Pump House	1420ft/433m	0.98	5.90	0.084	7.76	<1	<1		
	23	18-Feb	14:20	Randolph Rd Stn	1650/503m	0.93	4.70	0.030	7.69	<1	<1		
	24	18-Feb	14:40	218 Macdonald	1650/503m	0.92	6.20	0.049	7.83	<1	<1		
	25	21-Feb	14:00	Ok Lake Pump House	1420ft/433m	1.09	4.60	0.058	7.78			A	A
	26	21-Feb	15:50	Lawrence Ave Stn	2020ft/616m	0.66	3.30	0.041	7.73			A	A
	27	21-Feb	16:17	1900 Penticton Ave	1650/503m	1.02	3.20	0.050	7.72			A	A
	28	25-Feb	11:00	459 Waterloo AWWTP	1420ft/433m	1.15	6.20	0.048	7.84	<1	<1		
	29	25-Feb	11:51	Ok Lake Pump House	1420ft/433m	1.15	5.40	0.446	7.88	<1	<1		
	30	25-Feb	13:23	Randolph Rd	1650/503m	1.00	6.00	0.041	7.88	<1	<1		
	31	25-Feb	11:35	4300 Lakeside Rd STN	1420ft/433m	1.10	5.00	0.048	7.96	<1	<1		
	32	25-Feb	13:40	Gordon Ave STN	1820ft/555m	1.02	4.20	0.067	7.99	<1	<1		
	33	25-Feb	14:30	Carmi School Lunch Room	1820ft/555m	1.04	5.00	0.158	8.00	<1	<1		
	34	28-Feb	15:49	Naramata Rd Test STN	1650/503m	0.79	4.10	0.110	7.90			A	A
	35	28-Feb	16:30	1900 Penticton Ave	1650/503m	1.23	3.30	0.040	7.82			A	A
	36												
	37												
	38												
Average						0.88	5.77	0.086	7.82	0.00	0.00	0.00	0.00
Std. Dev.						0.20	1.77	0.073	0.08	0.00	0.00	0.00	0.00
n						35.00	35.00	35.000	35.00	24.00	24.00	11.00	11.00
Minimum						0.51	3.20	0.030	7.69	0.00	0.00	0.00	0.00
Maximum						1.23	11.00	0.446	8.00	0.00	0.00	0.00	0.00

March	1	4-Mar	13:40	Randolph Rd STN	1650/503m	0.87	8.20	0.044	7.83	<1	<1		
	2	4-Mar	14:05	Naramata Rd STN	1650/503m	0.85	4.60	0.065	7.85	<1	<1		
	3	4-Mar	14:35	OK Lake Pumphouse	1420ft/433m	1.00	5.10	0.102	7.88	<1	<1		
	4	4-Mar	15:10	Community Centre Lunch Room	1420ft/433m	0.99	7.30	0.083	7.98	<1	<1		
	5	4-Mar	16:05	Carmi Ave STN	1620ft/555m	0.68	7.70	0.146	7.97	<1	<1		
	6	4-Mar	16:25	Wiltse School STN	1620ft/494m	0.65	7.50	0.226	7.96	<1	<1		
	7	7-Mar	14:05	Carmi School Lunch Room	1820ft/555m	0.94	5.10	0.122	7.91			A	A
	8	7-Mar	14:30	Gordon Ave STN	1820ft/555m	0.67	4.80	0.082	7.93			A	A
	9	7-Mar	15:00	1900 Penticton Ave	1650/503m	1.00	5.90	0.075	7.92			A	A
	10	11-Mar	10:50	459 Waterloo AWWTP	1420ft/433m	0.88	10.70	0.060	7.90	<1	<1		
	11	11-Mar	11:40	Randolph Rd STN	1650/503m	0.89	6.70	0.033	7.96	<1	<1		
	12	11-Mar	13:27	4300 Lakeside Rd	1420ft/433m	0.88	6.20	0.115	8.00	<1	<1		
	13	11-Mar	13:50	Gordon Ave STN	1820ft/555m	0.55	5.80	0.080	8.02	<1	<1		
	14	11-Mar	14:30	Lawrence ave Stn	2020ft/616m	0.68	4.70	0.040	7.99	<1	<1		
	15	14-Mar	11:30	1900 Penticton Ave	1650/503m	1.06	10.00	0.047	7.85			A	A
	16	14-Mar	12:50	1946 Harris Dr	2020ft/616m	0.58	8.10	0.039	7.78			A	A
	17	14-Mar	13:31	Carmi Ave Stn	1820ft/555m	0.59	8.80	0.077	7.83			A	A
	18	18-Mar	13:00	Naramata Rd STN	1650/503m	0.65	6.30	0.068	7.88	<1	<1		
	19	18-Mar	13:25	Riverside Dr Stn	1420ft/433m	1.00	6.10	0.081	7.95	<1	<1		
	20	18-Mar	13:48	Lawrence ave Stn	2020ft/616m	0.64	5.10	0.046	7.99	<1	<1		
	21	18-Mar	14:09	Gordon Ave STN	1820ft/555m	0.63	5.90	0.083	7.85	<1	<1		
	22	18-Mar	14:28	Valleyview Test Stn	1620ft/494m	0.52	5.80	0.086	8.02	<1	<1		
	23	18-Mar	14:50	Smythe Dr Stn	1420ft/433m	0.73	6.60	0.057	7.91	<1	<1		
	24	21-Mar	13:55	WWTP	1420ft/433m	0.76	10.10	0.062	7.98			A	A
	25	21-Mar	14:35	4300 Lakeside Rd	1420ft/433m	0.93	7.10	0.098	8.01			A	A
	26	21-Mar	16:00	1900 Penticton Ave	1650/503m	0.93	7.80	0.040	8.04			A	A
	27	26-Mar	11:00	Randolph Rd STN	1650/503m	1.05	5.90	0.040	7.89	<1	<1		
	28	26-Mar	11:45	WWTP	1420ft/433m	1.11	7.50	0.064	7.78	<1	<1		
	29	26-Mar	12:35	Lawrence ave Stn	2020ft/616m	0.54	5.20	0.208	7.99	<1	<1		
	30	26-Mar	12:52	Carmi Pump Stn	1820ft/555m	0.62	5.40	0.112	8.02	<1	<1		
	31	26-Mar	13:17	Wiltse Blvd Stn	1650/503m	0.65	5.50	0.088	7.96	<1	<1		
	32	26-Mar	13:44	Smythe Dr Stn	1420ft/433m	0.71	7.10	0.076	7.97	<1	<1		
	33	28-Mar	11:10	Naramata Rd STN	1650/503m	0.69	7.30	0.064	8.00			A	A
	34	28-Mar	11:50	Gordon Ave STN	1820ft/555m	0.52	7.30	0.087	8.05			A	A
	35	28-Mar	16:20	1900 Penticton Ave	1650/503m	1.01	5.70	0.050	8.04			A	A
	36												
	37												
	38												
	39												
	40												
Average						0.78	6.71	0.081	7.94	0.00	0.00	0.00	0.00
n						35.00	35.00	35.000	35.00	23.00	23.00	12.00	12.00
Minimum						0.52	4.60	0.033	7.78	0.00	0.00	0.00	0.00
Maximum						1.11	10.70	0.226	8.05	0.00	0.00	0.00	0.00

April	1	1-Apr	15:45	Naramata Rd Stn	1650/503m	0.72	7.70	0.080	8.00	<1	<1		
	2	1-Apr	16:10	Riverside Dr Stn	1420ft/433m	0.91	8.00	0.100	7.96	<1	<1		
	3	1-Apr	16:26	Timmins St Stn	1420ft/433m	1.27	6.40	0.090	7.98	<1	<1		
	4	1-Apr	16:45	Lawrence Ave Stn	2020ft/616m	0.61	6.50	0.090	7.99	<1	<1		
	5	1-Apr	16:56	Carmi Pump Stn	1820ft/555m	0.67	6.50	0.180	7.95	<1	<1		
	6	1-Apr	17:24	Smythe Dr Stn	1420ft/433m	0.71	7.70	0.110	7.94	<1	<1		
	7	2-Apr	5:55	218 Macdonald St	1650/503m	0.94	9.10	0.076	7.85	<1	<1		
	8	4-Apr	14:25	Gordon Ave Stn	1820ft/555m	0.52	7.70	0.230	8.06			A	A
	9	4-Apr	15:45	1900 Penticton Ave	1650/503m	1.16	5.90	0.060	7.92			A	A
	10	8-Apr	9:05	Columbia School	1820ft/555m	0.79	8.60	0.180	7.91	<1	<1		
	11	8-Apr	9:25	Carmi Pump Stn	1820ft/555m	0.63	7.20	0.096	7.94	<1	<1		
	12	8-Apr	10:45	Randolph Rd Stn	1650/503m	0.84	7.50	0.068	7.95	<1	<1		
	13	8-Apr	11:10	Ok Lake Pump House	1420ft/433m	0.82	8.80	0.085	7.92	<1	<1		
	14	8-Apr	11:35	City Hall	1420ft/433m	1.30	8.30	0.059	7.93	<1	<1		
	15	8-Apr	14:30	Community Centre	1420ft/433m	0.89	11.00	0.097	7.95	<1	<1		
	16	8-Apr	15:15	Wiltse Blvd Stn	1620ft/494m	0.93	8.10	0.219	7.98	<1	<1		
	17	12-Apr	15:40	Lawrence Ave Stn	2020ft/616m	0.62	7.60	0.140	8.11			A	A
	18	12-Apr	16:03	1900 Penticton Ave	1650/503m	1.02	6.00	0.080	8.09			A	A
	19	15-Apr	13:43	1900 Penticton Ave	1650/503m	1.06	10.70	0.047	7.86	<1	<1		
	20	15-Apr	14:39	Gordon Ave Stn	1820ft/555m	0.40	9.70	0.129	7.96	<1	<1		
	21	15-Apr	15:05	Carmi Pump Stn	1820ft/555m	0.48	8.20	0.107	7.97	<1	<1		
	22	15-Apr	15:18	Lawrence Ave Stn	2020ft/616m	0.66	9.40	0.108	7.95	<1	<1		
	23	15-Apr	15:35	Fairford Bridge	1420ft/433m	0.98	8.90	0.061	7.99	<1	<1		
	24	15-Apr	15:54	Timmins St Stn	1420ft/433m	1.16	8.30	0.063	8.01	<1	<1		
	25	15-Apr	16:24	Naramata Rd Stn	1650/503m	0.67	10.00	0.051	7.96	<1	<1		
	26	18-Apr	8:34	Lawrence Ave Stn	2020ft/616m	0.66	7.60	0.110	8.08			A	A
	27	18-Apr	8:55	Carmi Pump Stn	1820ft/555m	0.57	7.50	0.120	7.99			A	A
	28	22-Apr	13:45	Randolph STN	1650/503m	0.96	8.60	0.039	7.96	<1	<1		
	29	22-Apr	14:10	OK Lake Pump House STN	1420ft/433m	0.82	10.40	0.116	7.98	<1	<1		
	30	22-Apr	14:40	Lawrence Ave STN	2020ft/616m	0.62	9.10	0.050	8.02	<1	<1		
	31	22-Apr	15:00	Wiltse School STN	1620ft/494m	0.65	9.60	0.107	8.02	<1	<1		
	32	22-Apr	15:25	4300 Lakeside STN	1420ft/433m	1.01	10.10	0.109	8.01	<1	<1		
	33	25-Apr	16:13	Naramata Rd Stn	1650/503m	0.67	10.90	0.035	7.79			A	A
	34	25-Apr	16:48	Smythe Dr Stn	1420ft/433m	0.99	10.10	0.099	7.89			A	A
	35	25-Apr	17:04	Valleyview Test Stn	1620ft/494m	0.47	9.80	0.053	7.96			A	A
	36	28-Apr	11:15	Timmins St Stn	1420ft/433m	1.13	9.60	0.050	8.01	<1	<1		
	37	28-Apr	13:25	Carmi Pump Stn	1820ft/555m	0.51	9.60	0.073	8.02	<1	<1		
	38	28-Apr	13:50	Gordon Ave Stn	1820ft/555m	0.64	10.40	0.088	8.05	<1	<1		
	39	28-Apr	14:25	Riverside Dr Stn	1420ft/433m	1.02	10.10	0.065	8.01	<1	<1		
	40	28-Apr	15:00	1900 Penticton Ave	1420ft/433m	0.99	0.99	0.041	8.02	<1	<1		
Average						0.81	8.45	0.094	7.97	0.00	0.00	0.00	0.00
n						40.00	40.00	40.000	40.00	31.00	31.00	9.00	9.00
Minimum						0.40	0.99	0.035	7.79	0.00	0.00	0.00	0.00
Maximum						1.30	11.00	0.230	8.11	0.00	0.00	0.00	0.00

July	1	1-Jul	8:57	Naramata Rd STN	1650/503m	0.31	18.90	0.033	7.99	<1	<1		
	2	1-Jul	10:33	Wiltse School Biv STN	1620ft/494m	0.83	13.40	0.055	8.18	<1	<1		
	3	1-Jul	10:15	Lawrence ave STN	2020ft/616m	0.73	13.70	0.034	8.12	<1	<1		
	4	1-Jul	10:53	Gordon Ave STN	1820ft/555m	0.57	14.30	0.037	8.22	<1	<1		
	5	1-Jul	9:50	Fairford Bridge STN	1420ft/433m	1.04	13.40	0.079	8.12	<1	<1		
	6	1-Jul	9:27	Riverside Drive STN	1420ft/433m	1.22	12.40	0.141	8.06	<1	<1		
	7	1-Jul	11:16	Smythe Drive STN	1420ft/433m	0.80	16.20	0.121	8.20	<1	<1		
	8	4-Jul	10:40	Naramata Rd STN	1650/503m	0.41	18.30	0.035	8.18			A	A
	9	4-Jul	13:34	WWTP	1420ft/433m	0.87	21.10	0.070	8.18			A	A
	10	4-Jul	14:05	City Hall Lunch Room	1650/503m	0.86	12.90	0.070	8.12			A	A
	11	8-Jul	12:00	Timmins St Stn	1420ft/433m	1.19	11.00	0.055	8.20	<1	<1		
	12	8-Jul	12:15	Riverside Drive STN	1420ft/433m	1.10	12.80	0.072	8.21	<1	<1		
	13	8-Jul	12:40	Randolph Rd Stn	1650/503m	1.07	12.80	0.027	8.18	<1	<1		
	14	8-Jul	13:05	Lawrence ave STN	2020ft/616m	0.66	13.60	0.065	8.20	<1	<1		
	15	8-Jul	13:17	Carmi Pump Stn	1820ft/555m	0.78	15.20	0.117	8.27	<1	<1		
	16	8-Jul	13:45	Valleyview Test Stn	1620ft/494m	0.41	17.60	0.037	8.23	<1	<1		
	17	8-Jul	14:03	Smythe Drive STN	1420ft/433m	1.01	14.50	0.145	8.22	<1	<1		
	18	11-Jul	8:46	OK Lake Pump House STN	1420ft/433m	0.42	10.40	0.674	7.91			A	A
	19	11-Jul	8:21	Yards	1650/503m	0.83	19.10	0.060	7.88			A	A
	20	11-Jul	9:09	Naramata Rd STN	1650/503m	0.39	20.00	0.027	8.00			A	A
	21	15-Jul	13:59	Lawrence ave STN	2020ft/616m	0.81	14.50	0.034	7.94	<1	<1		
	22	15-Jul	13:51	Elm St Stn	1420ft/433m	0.76	17.90	0.149	7.94	<1	<1		
	23	15-Jul	14:40	4300 Lakeside Rd	1420ft/433m	1.00	15.00	0.127	8.00	<1	<1		
	24	15-Jul	13:15	Wiltse School Biv STN	1620ft/494m	0.65	13.70	0.094	7.94	<1	<1		
	25	15-Jul	13:31	Gordon Ave STN	1820ft/555m	0.54	15.60	0.050	7.97	<1	<1		
	26	15-Jul	13:34	Naramata Rd STN	1650/503m	0.87	19.90	0.040	7.93	<1	<1		
	27	18-Jul	8:37	Smythe Drive STN	1420ft/433m	0.92	16.40	0.052	7.78			A	A
	28	18-Jul	9:11	Naramata Rd STN	1650/503m	0.34	20.50	0.025	7.75			A	A
	29	22-Jul	10:52	Naramata Rd STN	1650/503m	0.38	20.60	0.024	7.55	<1	<1		
	30	22-Jul	11:18	Riverside Drive STN	1420ft/433m	1.00	15.60	0.053	7.61	<1	<1		
	31	22-Jul	11:34	Timmins St Stn	1420ft/433m	1.17	13.10	0.061	7.92	<1	<1		
	32	22-Jul	13:54	Smythe Drive STN	1420ft/433m	0.72	18.20	0.042	7.83	<1	<1		
	33	22-Jul	14:20	Lawrence ave STN	2020ft/616m	0.67	15.50	0.034	7.69	<1	<1		
	34	25-Jul	13:45	Carmi Pump Stn	1820ft/555m	0.71	14.20	0.049	7.91			A	A
	35	25-Jul	14:00	1900 Penticton Ave	1650/503m	1.05	11.50	0.066	7.85			A	A
	36	29-Jul	11:48	Naramata Rd STN	1650/503m	0.34	20.80	0.029	7.61	<1	<1		
	37	29-Jul	13:24	Wiltse School Biv STN	1620ft/494m	0.67	14.40	0.054	7.73	<1	<1		
	38	29-Jul	13:44	4300 Lakeside Rd	1420ft/433m	0.95	16.20	0.222	7.79	<1	<1		
	39	29-Jul	14:39	Lawrence ave STN	2020ft/616m	0.51	15.70	0.033	7.85	<1	<1		
	40	29-Jul	14:15	OK Lake Pump House STN	1420ft/433m	0.43	17.70	0.569	7.83	<1	<1		
	41												
	42												
Average						0.75	15.72	0.093	7.98	0.00	0.00	0.00	0.00
Std. Dev.						0.26	2.87	0.129	0.20	0.00	0.00	0.00	0.00
n						40.00	40.00	40.000	40.00	30.00	30.00	10.00	10.00
Minimum						0.31	10.40	0.000	7.55	0.00	0.00	0.00	0.00
Maximum						1.22	21.10	0.674	8.27	0.00	0.00	0.00	0.00

August	1	1-Aug	11:50	Smythe Drive STN	1420ft/433m	0.75	17.80	0.052	7.85			A	A
	2	1-Aug	13:00	Naramata Rd STN	1650/503m	0.28	20.60	0.032	7.99			A	A
	3	1-Aug	13:27	Riverside Drive STN	1420ft/433m	1.07	14.10	0.065	7.89			A	A
	4	05-Aug	11:23	Naramata Rd STN	1650/503m	0.25	21.40	0.040	7.99	<1	<1		
	5	05-Aug	13:40	Wiltse School Blvd	1620ft/494m	0.67	15.10	0.230	7.91	<1	<1		
	6	05-Aug	13:10	Timmins Rd STN	1420ft/433m	1.23	14.50	0.046	8.00	<1	<1		
	7	05-Aug	14:19	4300 Lakeside Rd STN	1420ft/433m	0.91	16.96	0.093	8.01	<1	<1		
	8	05-Aug	13:50	Gordon Ave STN	1820ft/555m	0.51	15.60	0.180	8.08	<1	<1		
	9	05-Aug	14:43	Lawrence Ave STN	2020ft/616m	0.49	16.10	0.037	8.02	<1	<1		
	10	05-Aug	14:05	Elm St STN	1420ft/433m	0.91	16.90	0.063	8.01	<1	<1		
	11	8-Aug	9:58	Naramata Rd STN	1650/503m	0.24	22.60	0.032	8.02			A	A
	12	8-Aug	10:43	City Yards Lunch Room	1650/503m	0.99	19.50	0.049	8.00			A	A
	13	8-Aug	9:26	Fairford Bridge STN	1420ft/433m	1.08	14.10	0.067	8.07			A	A
	14	12-Aug	10:45	Naramata Rd STN	1650/503m	0.30	22.00	0.044	8.02	<1	<1		
	15	12-Aug	11:25	Randolph Rd. STN	1650/503m	0.79	14.50	0.087	8.00	<1	<1		
	16	12-Aug	12:00	OK Lake Pump House STN	1420ft/433m	0.50	18.00	0.205	8.02	<1	<1		
	17	12-Aug	12:20	Riverside Dr. STN	1420ft/433m	0.99	14.70	0.084	8.11	<1	<1		
	18	12-Aug	13:05	Community Centre	1420ft/433m	0.71	24.50	0.126	8.05	<1	<1		
	19	12-Aug	13:50	Carmi Ave STN	1820ft/555m	0.64	14.10	0.256	8.11	<1	<1		
	20	12-Aug	14:35	1900 Penticton Avenue	1650/503m	1.10	11.30	0.048	7.99	<1	<1		
	21	15-Aug	10:25	WWTP	1420ft/433m	1.02	16.30	0.075	8.12			A	A
	22	15-Aug	16:15	1900 Penticton Avenue	1650/503m	1.05	10.80	0.038	8.12			A	A
	23	16-Aug	9:55	Naramata Rd STN	1650/503m	0.47	21.60	0.090	8.05			A	A
	24	19-Aug	8:57	Naramata Rd STN	1650/503m	0.42	21.30	0.031	8.08	<1	<1		
	25	19-Aug	10:11	Valleyview Test STN	1620ft/494m	0.40	21.50	0.041	8.00	<1	<1		
	26	19-Aug	9:30	Timmins Rd STN	1420ft/433m	1.24	11.90	0.057	8.04	<1	<1		
	27	19-Aug	10:47	Smythe Drive STN	1420ft/433m	0.80	18.30	0.075	8.07	<1	<1		
	28	19-Aug	11:04	Gordon Ave STN	1820ft/555m	0.58	14.60	0.087	8.14	<1	<1		
	29	19-Aug	11:25	Lawrence Ave STN	2020ft/616m	0.74	15.00	0.034	8.12	<1	<1		
	30	22-Aug	9:04	Naramata Rd STN	1650/503m	0.40	21.50	0.032	8.00			A	A
	31	22-Aug	10:04	Smythe Drive STN	1420ft/433m	0.79	17.50	0.035	8.05			A	A
	32	22-Aug	10:20	Wiltse School Blvd	1620ft/494m	1.16	13.80	0.032	8.10			A	A
	33	26-Aug	10:26	Valleyview Test STN	1620ft/494m	0.26	21.30	0.382	8.00	<1	<1		
	34	26-Aug	10:50	Carmi Ave STN	1820ft/555m	0.80	14.80	0.383	8.04	<1	<1		
	35	26-Aug	11:01	Lawrence Ave STN	2020ft/616m	0.68	14.30	0.043	7.95	<1	<1		
	36	26-Aug	8:55	Naramata Rd STN	1650/503m	0.41	21.30	0.043	7.84	<1	<1		
	37	26-Aug	7:45	Smythe Drive STN	1420ft/433m	0.81	16.80	0.034	7.98	<1	<1		
	38	26-Aug	11:40	Bottle Fill Station RCMP	1420ft/433m	1.13	13.90	0.036	8.01	<1	<1		
	39	29-Aug	8:35	Riverside Dr Division Stn	1420ft/433m	1.11	12.60	0.069	8.02			A	A
	40	29-Aug	9:24	Wiltse School Blvd	1620ft/494m	1.15	13.10	0.092	8.04			A	A
Average						0.75	16.91	0.089	8.02	0.00	0.00	0.00	0.00
Std. Dev.						0.30	3.52	0.086	0.07	0.00	0.00	0.00	0.00
n						40.00	40.00	40.000	40.00	26.00	26.00	14.00	14.00
Minimum						0.24	10.80	0.031	7.84	0.00	0.00	0.00	0.00
Maximum						1.24	24.50	0.383	8.14	0.00	0.00	0.00	0.00

September	1	2-Sep	10:55	Naramata Rd Stn	1650/503m	0.30	22.20	0.068	7.91	<1	<1		
	2	2-Sep	11:37	WWTP	1420ft/433m	0.78	22.00	0.080	7.93	<1	<1		
	3	2-Sep	14:25	Lawrence Ave Stn	2020ft/616m	0.74	14.60	0.064	7.90	<1	<1		
	4	2-Sep	14:40	Carmi Ave Stn	1820ft/555m	0.46	14.90	0.034	7.98	<1	<1		
	5	2-Sep	15:05	Elm St Stn	1420ft/433m	0.92	16.40	0.095	7.90	<1	<1		
	6	2-Sep	15:24	Valleyview Test Stn	1620ft/494m	0.50	20.90	0.041	7.83	<1	<1		
	7	6-Sep	13:23	Naramata Rd Stn	1650/503m	0.46	21.40	0.041	8.06			A	A
	8	6-Sep	12:47	Valleyview Test Stn	1620ft/494m	0.40	20.50	0.112	8.01			A	A
	9	9-Sep	10:42	Naramata Rd Stn	1650/503m	0.37	21.80	0.027	7.90	<1	<1		
	10	9-Sep	11:20	Fairford Bridge	1420ft/433m	1.01	14.30	0.024	7.99	<1	<1		
	11	9-Sep	11:46	Lawrence Ave Stn	2020ft/616m	0.60	15.10	0.039	8.10	<1	<1		
	12	9-Sep	13:44	Gordon Ave Stn	1820ft/555m	0.61	14.80	0.027	8.01	<1	<1		
	13	9-Sep	11:08	Riverside Drive Stn	1420ft/433m	1.00	14.30	0.032	7.98	<1	<1		
	14	9-Sep	13:26	Wiltse School Stn	1620ft/494m	0.74	14.80	0.042	8.04	<1	<1		
	15	9-Sep	14:45	WTP	1650/503m	1.06	12.80	0.022	7.99	<1	<1		
	16	13-Sep	13:30	Naramata Rd Stn	1650/503m	0.39	21.80	0.046	7.98			A	A
	17	13-Sep	14:05	Randolph STN	1650/503m	0.80	15.20	0.159	7.99			A	A
	18	13-Sep	14:40	Community Centre	1420ft/433m	0.35	15.00	0.055	8.04			A	A
	19	16-Sep	10:53	Naramata Rd Stn	1650/503m	0.31	21.70	0.045	8.00	<1	<1		
	20	16-Sep	11:17	Ok Lake Pump Stn	1420ft/433m	0.40	17.60	0.340	8.02	<1	<1		
	21	16-Sep	11:34	Timmins St Stn	1420ft/433m	1.21	12.40	0.034	7.95	<1	<1		
	22	16-Sep	12:00	Valleyview Test Stn	1620ft/494m	0.31	20.70	0.036	7.98	<1	<1		
	23	16-Sep	13:30	Smythe Dr Stn	1420ft/433m	0.74	18.90	0.037	8.15	<1	<1		
	24	16-Sep	13:54	Carmi Ave Stn	1820ft/555m	0.50	14.40	0.206	8.12	<1	<1		
	25	16-Sep	14:09	Lawrence Ave Stn	2020ft/616m	0.59	15.30	0.024	8.11	<1	<1		
	26	19-Sep	8:51	Naramata Rd Stn	1650/503m	0.33	20.70	0.094	7.95			A	A
	27	19-Sep	9:50	Elm St Stn	1420ft/433m	0.89	15.50	0.038	8.03			A	A
	28	19-Sep	10:12	Gordon Ave Stn	1820ft/555m	1.02	13.40	0.046	8.06			A	A
	29	23-Sep	10:00	Randolph STN	1650/503m	0.86	12.50	0.057	8.01	<1	<1		
	30	23-Sep	11:17	OK Lake Pumphouse Stn	1420ft/433m	0.27	17.50	0.255	8.00	<1	<1		
	31	23-Sep	11:45	City Hall	1420ft/433m	1.10	16.40	0.485	7.99	<1	<1		
	32	23-Sep	12:05	Riverside Dr STN	1420ft/433m	0.93	14.50	0.073	8.00	<1	<1		
	33	23-Sep	12:35	Fairford Dr. STN	1420ft/433m	0.92	14.60	0.088	7.99	<1	<1		
	34	23-Sep	12:52	Wiltse School STN	1620ft/494m	0.93	13.80	0.080	8.04	<1	<1		
	35	23-Sep	17:10	1900 Pentiction Ave	1650/503m	1.01	10.90	0.039	8.03	<1	<1		
	36	30-Sep	10:15	Naramata Rd. STN	1650/503m	0.34	20.20	0.033	7.99	<1	<1		
	37	30-Sep	10:45	Carmi Ave STN	1820ft/555m	0.48	12.50	0.071	8.00	<1	<1		
	38	30-Sep	11:10	Lawrence Ave STN	2020ft/616m	0.63	13.50	0.056	8.01	<1	<1		
	39	30-Sep	11:40	Gordon Ave STN	1820ft/555m	0.56	13.80	0.045	8.07	<1	<1		
	40	30-Sep	14:30	Elm St. STN	1420ft/433m	0.83	15.80	0.069	8.04	<1	<1		
Average						0.67	16.49	0.081	8.00	0.00	0.00	0.00	0.00
Std. Dev.						0.27	3.29	0.091	0.06	0.00	0.00	0.00	0.00
n						40.00	40.00	40.000	40.00	32.00	32.00	8.00	8.00
Minimum						0.27	10.90	0.022	7.83	0.00	0.00	0.00	0.00
Maximum						1.21	22.20	0.485	8.15	0.00	0.00	0.00	0.00

October	1	3-Oct	10:44	Randoph rd STN	1620ft/494m	0.88	13.40	0.025	8.21			A	A
	2	3-Oct	11:36	Gordon Ave STN	1820ft/555m	0.49	14.00	0.045	8.26			A	A
	3	3-Oct	11:47	Wiltse School BLVD STN	1650/503m	1.00	12.30	0.055	8.21			A	A
	4	7-Oct	10:03	Naramata Rd.STN	1650/503m	0.36	19.10	0.024	7.90	<1	<1		
	5	7-Oct	10:28	Ok Lake Pumphouse STN	1420ft/433m	0.39	16.00	0.177	7.97	<1	<1		
	6	7-Oct	10:43	Riverside Dr. STN	1420ft/433m	0.90	14.10	0.050	8.02	<1	<1		
	7	7-Oct	11:35	Gordon Ave STN	1820ft/555m	0.57	13.50	0.054	8.08	<1	<1		
	8	7-Oct	11:49	Wiltse School BLVD STN	1820ft/555m	0.56	13.90	0.067	8.03	<1	<1		
	9	7-Oct	12:18	Lawrence Ave STN	2020ft/616m	0.60	13.70	0.048	8.04	<1	<1		
	10	10-Oct	8:32	1900 Pentiction Ave	1650/503m	0.91	12.90	0.048	7.85			A	A
	11	10-Oct	14:00	Randoph rd STN	1650/503m	1.17	12.50	0.039	7.80			A	A
	12	10-Oct	14:43	Carmi STN	1820ft/555m	0.44	12.50	0.090	7.68			A	A
	13	14-Oct	10:44	Smythe Dr STN	1420ft/433m	0.45	15.70	0.035	7.91	<1	<1		
	14	14-Oct	11:26	Elm St STN	1420ft/433m	0.72	14.26	0.066	8.02	<1	<1		
	15	14-Oct	11:46	Wiltse School BLVD STN	1820ft/555m	1.08	10.80	0.806	8.03	<1	<1		
	16	14-Oct	13:25	Lawrence Ave STN	2020ft/616m	0.64	13.20	0.027	8.06	<1	<1		
	17	14-Oct	14:00	Riverside Dr. STN	1420ft/433m	0.94	13.40	0.037	8.01	<1	<1		
	18	14-Oct	14:22	Naramata Rd.STN	1650/503m	0.48	17.70	0.029	8.05	<1	<1		
	19	17-Oct	12:50	1946 Harris Dr	2020ft/616m	0.55	18.10	0.055	8.07			A	A
	20	17-Oct	14:00	Randolph Rd STN	1650/503m	1.11	12.30	0.032	7.97			A	A
	21	17-Oct	14:42	1900 Pentiction Ave	1650/503m	0.91	11.20	0.068	8.01			A	A
	22	21-Oct	10:16	Naramata Rd.STN	1650/503m	0.53	16.20	0.028	7.98	<1	<1		
	23	21-Oct	11:12	Ok Lake Pumphouse STN	1420ft/433m	0.40	13.10	0.200	8.01	<1	<1		
	24	21-Oct	11:26	Community Center	1420ft/433m	0.87	13.70	0.060	8.02	<1	<1		
	25	21-Oct	10:52	RCMP-bottle stn	1420ft/433m	1.09	12.00	0.035	7.95	<1	<1		
	26	21-Oct	13:07	Gordon Ave STN	1820ft/555m	0.62	13.30	0.069	8.16	<1	<1		
	27	21-Oct	13:43	Valley View Sample STN	1620ft/494m	0.25	10.00	0.036	8.03	<1	<1		
	28	24-Oct	11:30	Randolph Rd STN	1650/503m	0.83	13.20	0.068	8.07			A	A
	29	24-Oct	13:02	4300 Lakeside STN	1420ft/433m	0.65	14.80	0.111	8.05			A	A
	30	24-Oct	13:30	Carmi STN	1820ft/555m	0.43	11.00	0.077	8.09			A	A
	31	28-Oct	11:00	City Yards	1650/503m	0.92	14.00	0.047	7.93	<1	<1		
	32	28-Oct	11:34	Valley View Sample STN	1620ft/494m	0.22	13.80	0.056	8.03	<1	<1		
	33	28-Oct	11:53	Gordon Ave STN	1820ft/555m	0.37	12.50	0.078	8.12	<1	<1		
	34	28-Oct	13:23	Ok Lake Pumphouse STN	1420ft/433m	0.52	12.60	0.191	7.99	<1	<1		
	35	28-Oct	14:25	Lawrence Ave STN	2020ft/616m	0.39	12.40	0.029	8.05	<1	<1		
Average						0.66	13.63	0.085	8.02	0.00	0.00	0.00	0.00
n						35.00	35.00	35.000	35.00	23.00	23.00	12.00	12.00
Minimum						0.22	10.00	0.024	7.68	0.00	0.00	0.00	0.00
Maximum						1.17	19.10	0.806	8.26	0.00	0.00	0.00	0.00

November	1	01-Nov	9:50	Carmi STN	1820ft/555m	0.36	9.16	0.110	7.96			A	A
	2	01-Nov	9:13	Randolph STN	1650/503m	1.13	12.10	0.055	7.90			A	A
	3	01-Nov	17:00	WWTP	1420ft/433m	0.99	11.60	0.061	7.84			A	A
	4	04-Nov	10:18	Valleyview STN	1620ft/494m	0.22	13.00	0.095	7.92	<1	<1		
	5	04-Nov	10:46	Gordon Ave STN	1820ft/555m	0.28	11.10	0.088	7.95	<1	<1		
	6	04-Nov	11:03	Lawrence Ave STN	2020ft/616m	0.52	11.70	0.048	8.02	<1	<1		
	7	04-Nov	14:32	Naramata Rd STN	1650/503m	0.70	13.30	0.095	8.04	<1	<1		
	8	04-Nov	15:37	1900 Penticton Ave	1650/503m	1.11	8.40	0.053	7.79	<1	<1		
	9	07-Nov	13:27	Smythe Dr	1420ft/433m	0.57	13.60	0.213	8.00			A	A
	10	07-Nov	13:43	Valleyview STN	1620ft/494m	0.23	13.10	0.068	8.11			A	A
	11	07-Nov	14:25	WWTP	1420ft/433m	0.47	13.30	0.082	8.15			A	A
	12	07-Nov	14:55	Randolph STN	1650/503m	0.95	10.70	0.046	8.11			A	A
	13	11-Nov	10:42	1900 Penticton Ave	1650/503m	0.79	12.50	0.066	7.81	<1	<1		
	14	11-Nov	11:28	Randolph STN	1650/503m	0.67	9.30	0.033	7.76	<1	<1		
	15	11-Nov	11:48	Lake Pump STN	1420ft/433m	0.28	11.30	0.177	7.88	<1	<1		
	16	11-Nov	13:47	1946 Harris Dr	2020ft/616m	0.40	13.70	0.037	7.97	<1	<1		
	17	11-Nov	14:46	Gordon Ave STN	1820ft/555m	0.42	10.90	0.089	8.03	<1	<1		
	18	11-Nov	15:25	Carmi STN	1820ft/555m	0.29	9.50	0.081	8.00	<1	<1		
	19	14-Nov	10:30	Naramata Rd STN	1650/503m	0.57	12.60	0.044	7.92			A	A
	20	14-Nov	11:20	Valleyview STN	1620ft/494m	0.22	12.40	0.079	7.91			A	A
	21	14-Nov	11:44	Smythe Dr	1420ft/433m	0.42	12.70	0.073	7.88			A	A
	22	18-Nov	11:00	OK Lake Pump Stn	1420ft/433m	0.39	11.70	0.151	8.07	<1	<1		
	23	18-Nov	12:05	Naramata Rd STN	1650/503m	0.62	12.10	0.038	8.09	<1	<1		
	24	18-Nov	13:53	Valleyview STN	1620ft/494m	0.24	11.50	0.045	8.10	<1	<1		
	25	18-Nov	14:14	Lawrence Ave STN	2020ft/616m	0.32	10.60	0.027	8.00	<1	<1		
	26	18-Nov	14:21	City Yards	1650/503m	1.00	11.80	0.064	8.09	<1	<1		
	27	18-Nov	14:33	Gordon Ave STN	1820ft/555m	0.25	11.10	0.105	8.21	<1	<1		
	28	21-Nov	15:10	Valleyview STN	1620ft/494m	0.22	12.00	0.040	8.13			A	A
	29	21-Nov	15:30	Gordon Ave STN	1820ft/555m	0.60	10.60	0.096	8.07			A	A
	30	21-Nov	16:15	1900 Penticton Ave	1650/503m	1.02	8.50	0.028	7.99			A	A
	31	24-Nov	13:15	Duncan Ace STN(inside blow off	1420ft/433m	1.04	8.80	0.285	8.13			A	A
	32	25-Nov	9:38	Naramata Rd STN	1650/503m	0.58	11.30	0.050	8.06	<1	<1		
	33	25-Nov	10:16	Lawrence Ave STN	2020ft/616m	0.36	9.20	0.037	8.06	<1	<1		
	34	25-Nov	10:58	Smythe Dr	1420ft/433m	0.52	11.30	0.049	8.01	<1	<1		
	35	25-Nov	11:21	Valleyview STN	1620ft/494m	0.27	11.10	0.050	8.04	<1	<1		
	36												
Average						0.54	11.36	0.079	8.00	0.00	0.00	0.00	0.00
Std. Dev.						0.29	1.46	0.054	0.11	0.00	0.00	0.00	0.00
n						35.00	35.00	35.000	35.00	21.00	21.00	14.00	14.00
Minimum						0.22	8.40	0.027	7.76	0.00	0.00	0.00	0.00
Maximum						1.13	13.70	0.285	8.21	0.00	0.00	0.00	0.00

December	1	2-Dec	13:35	Randolph Rd. STN	1650/503m	0.70	9.50	0.039	8.02	<1	<1		
	2	2-Dec	14:00	Naramata Rd. STN	1650/503m	0.36	10.30	0.133	8.03	<1	<1		
	3	2-Dec	15:50	OK Lake Pumphouse STN	1420ft/433m	0.46	9.90	0.155	8.04	<1	<1		
	4	2-Dec	16:20	Riverside Dr. STN	1420ft/433m	0.72	9.30	0.069	8.04	<1	<1		
	5	2-Dec	16:45	Timmins St. STN	1420ft/433m	0.99	7.80	0.134	8.05	<1	<1		
	6	5-Dec	13:47	Carmi Station	1820ft/555m	0.34	8.20	0.085	8.18			A	A
	7	5-Dec	14:13	City Yards	1650/503m	0.82	10.20	0.057	8.14			A	A
	8	5-Dec	14:40	Lake Pump Station	1420ft/433m	0.42	10.00	0.126	8.13			A	A
	9	9-Dec	14:10	WWTP	1420ft/433m	0.55	12.40	0.306	8.06	<1	<1		
	10	9-Dec	16:15	Valleyview STN	1620ft/494m	0.27	9.90	0.066	8.13	<1	<1		
	11	9-Dec	15:35	Gordon Ave STN	1820ft/555m	0.35	8.90	0.141	8.17	<1	<1		
	12	9-Dec	15:15	Wilste School STN	1620ft/494m	0.77	8.20	0.081	8.14	<1	<1		
	13	9-Dec	17:20	1900 Penticton Ave	1650/503m	0.75	6.80	0.058	8.10	<1	<1		
	14	9-Dec	16:45	Lawrence Ave STN	2020ft/616m	0.43	7.60	0.049	8.14	<1	<1		
	15	12-Dec	11:30	1900 Penticton Ave	1650/503m	0.85	12.90	0.042	7.95			A	A
	16	12-Dec	13:50	Randolph Rd. STN	1650/503m	0.75	9.20	0.037	7.97			A	A
	17	12-Dec	14:25	Carmi Station	1820ft/555m	0.33	8.30	0.129	8.13			A	A
	18	16-Dec	15:15	City Yards	1650/503m	0.78	9.90	0.063	8.12	<1	<1		
	19	16-Dec	15:33	Gordon Stn	1820ft/555m	0.41	8.90	0.081	8.24	<1	<1		
	20	16-Dec	15:54	4300 Lakeside Rd	1420ft/433m	0.77	10.40	0.046	8.13	<1	<1		
	21	16-Dec	16:21	Lawrence Ave STN	2020ft/616m	0.39	8.00	0.052	8.15	<1	<1		
	22	16-Dec	16:47	OK Lake Pump Stn	1420ft/433m	0.52	9.60	0.146	8.14	<1	<1		
	23	16-Dec	17:19	1900 Penticton Ave	1650/503m	0.90	7.90	0.037	8.18	<1	<1		
	24	19-Dec	13:30	Randolph Rd. STN	1650/503m	0.73	9.50	0.039	8.09			A	A
	25	19-Dec	14:10	Lake Pump Station	1420ft/433m	0.57	12.10	0.185	8.11			A	A
	26	19-Dec	14:37	City Yards	1650/503m	0.59	13.70	0.086	8.07			A	A
	27	21-Dec	10:34	Carmi Station	1820ft/555m	0.40	7.60	0.101	8.19	<1	<1		
	28	21-Dec	10:54	Lawrence Ave STN	2020ft/616m	0.44	8.00	0.034	8.17	<1	<1		
	29	21-Dec	11:20	Randolph Rd. STN	1650/503m	0.74	9.00	0.038	8.15	<1	<1		
	30	21-Dec	11:45	Lake Pump Station	1420ft/433m	0.54	9.30	0.129	8.14	<1	<1		
	31	21-Dec	14:21	Valleyview STN	1620ft/494m	0.26	9.30	0.058	8.18	<1	<1		
	32	21-Dec	14:43	4300 Lakeside Rd	1420ft/433m	0.79	10.10	0.044	8.14	<1	<1		
	33	26-Dec	9:55	Gordon Ave STN	1820ft/555m	0.41	8.20	0.086	8.07			A	A
	34	26-Dec	10:14	Lawrence Ave STN	2020ft/616m	0.46	7.40	0.051	8.00			A	A
	35	26-Dec	12:40	1900 Penticton Ave	1650/503m	1.00	6.80	0.072	8.10			A	A
Average						0.59	9.29	0.087	8.11	0.00	0.00	0.00	0.00
Std. Dev.						0.21	1.60	0.055	0.06	0.00	0.00	0.00	0.00
n						35.00	35.00	35.000	35.00	23.00	23.00	12.00	12.00
Minimum						0.26	6.80	0.034	7.95	0.00	0.00	0.00	0.00
Maximum						1.00	13.70	0.306	8.24	0.00	0.00	0.00	0.00

Annual													
Average						0.74	11.59	0.086	8.01	0.00	0.00	0.00	0.00
Std. Dev.						0.26	4.41	0.081	0.15	0.00	0.06	0.00	0.00
n						450.00	450.00	450.000	450.00	311.00	311.00	127.00	127.00

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25A0565

RECEIVED / TEMP 2025-01-08 11:01 / 2.5°C

REPORTED 2025-01-15 14:59

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>

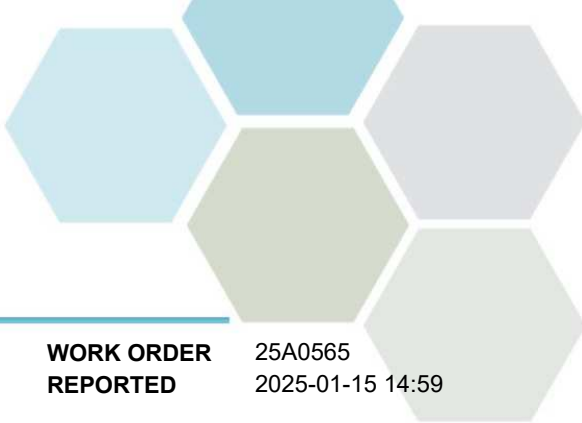
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25A0565 2025-01-15 14:59
----------------------------	---	----------------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Carmi Pump Station (25A0565-01) | Matrix: Water | Sampled: 2025-01-07 12:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-08	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-08	

Gordon Pumpstation (25A0565-02) | Matrix: Water | Sampled: 2025-01-07 13:05

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-08	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-08	

4300 Lakeside Rd (25A0565-03) | Matrix: Water | Sampled: 2025-01-07 13:25

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-08	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-08	

Randolph Rd Stn (25A0565-04) | Matrix: Water | Sampled: 2025-01-07 13:45

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-08	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-08	

1900 Penticton Ave (25A0565-05) | Matrix: Water | Sampled: 2025-01-07 14:10

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-08	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-08	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25A0565
2025-01-15 14:59

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25A1395

RECEIVED / TEMP 2025-01-15 10:21 / 4.4°C

REPORTED 2025-01-22 15:16

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>

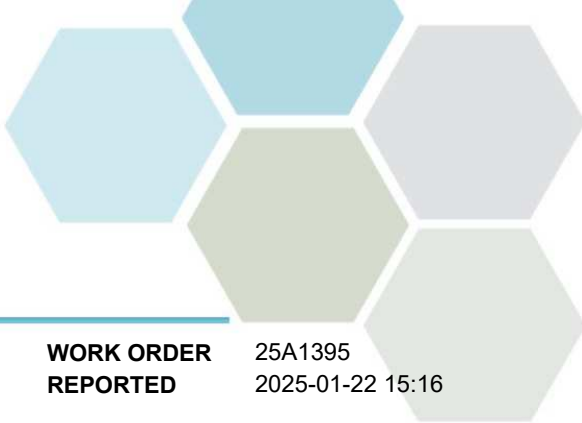
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25A1395 2025-01-22 15:16
----------------------------	---	----------------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Randolph Rd Stn (25A1395-01) Matrix: Water Sampled: 2025-01-14 14:10						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-15	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-15	
OK Lake Pump House (25A1395-02) Matrix: Water Sampled: 2025-01-14 14:27						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-15	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-15	
Lawrence Ave Stn (25A1395-03) Matrix: Water Sampled: 2025-01-14 14:45						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-15	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-15	
1900 Penticton Ave (25A1395-04) Matrix: Water Sampled: 2025-01-14 15:20						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-15	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-15	
4300 Lakeside Rd (25A1395-05) Matrix: Water Sampled: 2025-01-14 14:35						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-15	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-15	
Carmi Ave Stn (25A1395-06) Matrix: Water Sampled: 2025-01-14 15:00						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-15	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-15	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25A1395
2025-01-22 15:16

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25A2065

RECEIVED / TEMP 2025-01-22 10:09 / 4.8°C

REPORTED 2025-01-29 14:01

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25A2065 2025-01-29 14:01
----------------------------	---	----------------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Lawrence Ave Stn (25A2065-01) | Matrix: Water | Sampled: 2025-01-21 15:34

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-22	

Carmi Ave Stn (25A2065-02) | Matrix: Water | Sampled: 2025-01-21 15:53

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-22	

4300 Lakeside Rd (25A2065-03) | Matrix: Water | Sampled: 2025-01-21 16:15

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-22	

Randolph Rd Stn (25A2065-04) | Matrix: Water | Sampled: 2025-01-21 16:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-22	

Okanagan Lake Stn (25A2065-05) | Matrix: Water | Sampled: 2025-01-21 16:50

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-22	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25A2065
2025-01-29 14:01

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25A2801

RECEIVED / TEMP 2025-01-29 10:15 / 6.0°C

REPORTED 2025-02-05 14:57

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>

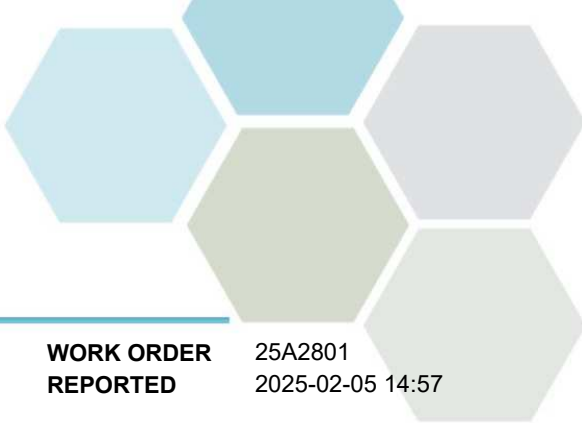
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25A2801 2025-02-05 14:57
----------------------------	---	----------------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

1900 Penticton Ave (25A2801-01) | Matrix: Water | Sampled: 2025-01-28 13:14

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-29	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-29	

Randolph Rd Stn (25A2801-02) | Matrix: Water | Sampled: 2025-01-28 13:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-29	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-29	

OK Lake Pump House (25A2801-03) | Matrix: Water | Sampled: 2025-01-28 14:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-29	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-29	

Lawrence Ave Stn (25A2801-04) | Matrix: Water | Sampled: 2025-01-28 14:18

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-29	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-29	

Gordon Ave Stn (25A2801-05) | Matrix: Water | Sampled: 2025-01-28 14:35

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-29	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-29	

4300 Lakeside Rd (25A2801-06) | Matrix: Water | Sampled: 2025-01-28 14:54

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-01-29	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-01-29	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25A2801
2025-02-05 14:57

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25B0361

RECEIVED / TEMP 2025-02-05 10:40 / 3.8°C

REPORTED 2025-02-11 12:58

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25B0361
2025-02-11 12:58

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
1946 Harris Dr. (25B0361-01) Matrix: Water Sampled: 2025-02-04 14:17						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-05	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-05	
Carmi Stn (25B0361-02) Matrix: Water Sampled: 2025-02-04 14:40						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-05	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-05	
1900 Penticton Ave (25B0361-03) Matrix: Water Sampled: 2025-02-04 15:03						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-05	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-05	
Community Centre (25B0361-04) Matrix: Water Sampled: 2025-02-04 13:55						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-05	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-05	
OK Lake Pump House (25B0361-05) Matrix: Water Sampled: 2025-02-04 14:20						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-05	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-05	
Randolph Rd Stn (25B0361-06) Matrix: Water Sampled: 2025-02-04 14:55						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-05	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-05	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25B0361
2025-02-11 12:58

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25B1143

RECEIVED / TEMP 2025-02-12 10:09 / 5.9°C

REPORTED 2025-02-14 11:49

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25B1143
2025-02-14 11:49

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

City Yards (25B1143-01) | Matrix: Water | Sampled: 2025-02-11 11:04

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-12	

WWTP (25B1143-02) | Matrix: Water | Sampled: 2025-02-11 12:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-12	

Gordon STN (25B1143-03) | Matrix: Water | Sampled: 2025-02-11 13:50

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-12	

Randolph Stn (25B1143-04) | Matrix: Water | Sampled: 2025-02-11 14:19

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-12	

Naramata Rd Stn (25B1143-05) | Matrix: Water | Sampled: 2025-02-11 14:47

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-12	

1900 Penticton Ave (25B1143-06) | Matrix: Water | Sampled: 2025-02-11 16:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-12	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25B1143
2025-02-14 11:49

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Quarterly Samples

PROJECT INFO OPR178-025

WORK ORDER 25B1323

RECEIVED / TEMP 2025-02-12 10:09 / 5.9°C

REPORTED 2025-02-21 13:56

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

PRV Station (25B1323-01) | Matrix: Water | Sampled: 2025-02-12 06:30

Anions

Chloride	8.53	AO ≤ 250	0.10	mg/L	2025-02-14	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2025-02-14	
Nitrate (as N)	0.056	MAC = 10	0.010	mg/L	2025-02-14	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-02-14	
Sulfate	22.6	AO ≤ 500	1.0	mg/L	2025-02-14	

Calculated Parameters

Total Trihalomethanes	0.0409	MAC = 0.1	0.00400	mg/L	N/A	
Hardness, Total (as CaCO ₃)	94.6	None Required	0.500	mg/L	N/A	
Langelier Index	-0.8	N/A	-5.0		2025-02-19	CT6
Nitrogen, Organic	0.271	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	127	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	81.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Bicarbonate (as CaCO ₃)	81.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-02-18	
Carbon, Total Organic	5.79	N/A	0.50	mg/L	2025-02-14	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-02-14	
Conductivity (EC)	243	N/A	2.0	µS/cm	2025-02-14	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-02-15	
Nitrogen, Total Kjeldahl	0.271	N/A	0.050	mg/L	2025-02-18	
pH	7.48	7.0-10.5	0.10	pH units	2025-02-14	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-02-14	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-02-18	
Temperature, at pH	21.4	N/A		°C	2025-02-14	HT2
Turbidity	0.18	OG < 1	0.10	NTU	2025-02-13	
UV Transmittance @ 254 nm - Unfiltered	92.9	N/A	0.10	% T	2025-02-14	

Haloacetic Acids

Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Dichloroacetic Acid	0.0171	N/A	0.0020	mg/L	2025-02-20	
Trichloroacetic Acid	0.0154	N/A	0.0020	mg/L	2025-02-20	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Total Haloacetic Acids (HAA5)	0.0325	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	92		70-130	%	2025-02-20	

Total Metals

Aluminum, total	0.0111	OG < 0.1	0.0050	mg/L	2025-02-15	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-02-15	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

PRV Station (25B1323-01) | Matrix: Water | Sampled: 2025-02-12 06:30, Continued

Total Metals, Continued

Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-02-15	
Barium, total	0.0177	MAC = 2	0.0050	mg/L	2025-02-15	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-02-15	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-02-15	
Calcium, total	25.9	None Required	0.20	mg/L	2025-02-15	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-15	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-02-15	
Copper, total	< 0.00040	MAC = 2	0.00040	mg/L	2025-02-15	
Iron, total	< 0.010	AO ≤ 0.3	0.010	mg/L	2025-02-15	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-02-15	
Magnesium, total	7.22	None Required	0.010	mg/L	2025-02-15	
Manganese, total	0.00085	MAC = 0.12	0.00020	mg/L	2025-02-15	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-02-15	HG1
Molybdenum, total	0.00263	N/A	0.00010	mg/L	2025-02-15	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-02-15	
Potassium, total	1.80	N/A	0.10	mg/L	2025-02-15	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-15	
Sodium, total	11.1	AO ≤ 200	0.10	mg/L	2025-02-15	
Strontium, total	0.216	MAC = 7	0.0010	mg/L	2025-02-15	
Uranium, total	0.000083	MAC = 0.02	0.000020	mg/L	2025-02-15	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-02-15	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0029	N/A	0.0010	mg/L	2025-02-15	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Chloroform	0.0379	N/A	0.0010	mg/L	2025-02-15	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Surrogate: Toluene-d8	91		70-130	%	2025-02-15	
Surrogate: 4-Bromofluorobenzene	74		70-130	%	2025-02-15	

Carmi Pump Station (25B1323-02) | Matrix: Water | Sampled: 2025-02-11 13:50

Anions

Chloride	8.48	AO ≤ 250	0.10	mg/L	2025-02-14	
Fluoride	0.11	MAC = 1.5	0.10	mg/L	2025-02-14	
Nitrate (as N)	0.053	MAC = 10	0.010	mg/L	2025-02-14	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-02-14	
Sulfate	22.6	AO ≤ 500	1.0	mg/L	2025-02-14	

Calculated Parameters

Hardness, Total (as CaCO3)	95.4	None Required	0.500	mg/L	N/A	
Langelier Index	-0.7	N/A	-5.0		2025-02-19	CT6
Nitrogen, Organic	0.292	N/A	0.0500	mg/L	N/A	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Carmi Pump Station (25B1323-02) | Matrix: Water | Sampled: 2025-02-11 13:50, Continued

Calculated Parameters, Continued

Solids, Total Dissolved	127	AO ≤ 500	1.00	mg/L	N/A	
-------------------------	-----	----------	------	------	-----	--

General Parameters

Alkalinity, Total (as CaCO ₃)	80.1	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Bicarbonate (as CaCO ₃)	80.1	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-02-18	
Carbon, Total Organic	4.90	N/A	0.50	mg/L	2025-02-14	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-02-14	
Conductivity (EC)	237	N/A	2.0	µS/cm	2025-02-14	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-02-15	
Nitrogen, Total Kjeldahl	0.292	N/A	0.050	mg/L	2025-02-18	
pH	7.55	7.0-10.5	0.10	pH units	2025-02-14	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-02-14	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-02-18	
Temperature, at pH	19.9	N/A		°C	2025-02-14	HT2
Turbidity	0.65	OG < 1	0.10	NTU	2025-02-13	
UV Transmittance @ 254 nm - Unfiltered	92.4	N/A	0.10	% T	2025-02-14	

Total Metals

Aluminum, total	0.0110	OG < 0.1	0.0050	mg/L	2025-02-14	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-02-14	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-02-14	
Barium, total	0.0172	MAC = 2	0.0050	mg/L	2025-02-14	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-02-14	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-02-14	
Calcium, total	26.0	None Required	0.20	mg/L	2025-02-14	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-14	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-02-14	
Copper, total	0.00174	MAC = 2	0.00040	mg/L	2025-02-14	
Iron, total	0.032	AO ≤ 0.3	0.010	mg/L	2025-02-14	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-02-14	
Magnesium, total	7.39	None Required	0.010	mg/L	2025-02-14	
Manganese, total	0.00109	MAC = 0.12	0.00020	mg/L	2025-02-14	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-02-14	HG1
Molybdenum, total	0.00267	N/A	0.00010	mg/L	2025-02-14	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-02-14	
Potassium, total	1.96	N/A	0.10	mg/L	2025-02-14	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-14	
Sodium, total	11.7	AO ≤ 200	0.10	mg/L	2025-02-14	
Strontium, total	0.214	MAC = 7	0.0010	mg/L	2025-02-14	
Uranium, total	0.000110	MAC = 0.02	0.000020	mg/L	2025-02-14	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Carmi Pump Station (25B1323-02) Matrix: Water Sampled: 2025-02-11 13:50, Continued						
<i>Total Metals, Continued</i>						
Zinc, total	0.0061	AO ≤ 5	0.0040	mg/L	2025-02-14	

Smythe Dr. Sample Stn (25B1323-03) | Matrix: Water | Sampled: 2025-02-11 13:30

<i>Calculated Parameters</i>						
Total Trihalomethanes	0.0774	MAC = 0.1	0.00400	mg/L	N/A	
<i>Haloacetic Acids</i>						
Monochloroacetic Acid	0.0025	N/A	0.0020	mg/L	2025-02-20	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Dichloroacetic Acid	0.0259	N/A	0.0020	mg/L	2025-02-20	
Trichloroacetic Acid	0.0259	N/A	0.0020	mg/L	2025-02-20	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Total Haloacetic Acids (HAA5)	0.0542	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	98		70-130	%	2025-02-20	
<i>Volatile Organic Compounds (VOC)</i>						
Bromodichloromethane	0.0053	N/A	0.0010	mg/L	2025-02-15	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Chloroform	0.0721	N/A	0.0010	mg/L	2025-02-15	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Surrogate: Toluene-d8	88		70-130	%	2025-02-15	
Surrogate: 4-Bromofluorobenzene	75		70-130	%	2025-02-15	

Randolph Rd Station (25B1323-04) | Matrix: Water | Sampled: 2025-02-11 14:10

<i>Calculated Parameters</i>						
Total Trihalomethanes	0.0556	MAC = 0.1	0.00400	mg/L	N/A	
<i>Haloacetic Acids</i>						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Dichloroacetic Acid	0.0221	N/A	0.0020	mg/L	2025-02-20	
Trichloroacetic Acid	0.0228	N/A	0.0020	mg/L	2025-02-20	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Total Haloacetic Acids (HAA5)	0.0450	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	89		70-130	%	2025-02-20	
<i>Volatile Organic Compounds (VOC)</i>						
Bromodichloromethane	0.0042	N/A	0.0010	mg/L	2025-02-15	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Chloroform	0.0514	N/A	0.0010	mg/L	2025-02-15	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Surrogate: Toluene-d8	80		70-130	%	2025-02-15	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Randolph Rd Station (25B1323-04) | Matrix: Water | Sampled: 2025-02-11 14:10, Continued

Volatile Organic Compounds (VOC), Continued

Surrogate: 4-Bromofluorobenzene	62		70-130	%	2025-02-15	S02
---------------------------------	----	--	--------	---	------------	-----

Naramata Rd Sample Stn (25B1323-05) | Matrix: Water | Sampled: 2025-02-11 14:30

Calculated Parameters

Total Trihalomethanes	0.0744	MAC = 0.1	0.00400	mg/L	N/A	
-----------------------	--------	-----------	---------	------	-----	--

Haloacetic Acids

Monochloroacetic Acid	0.0024	N/A	0.0020	mg/L	2025-02-20	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Dichloroacetic Acid	0.0249	N/A	0.0020	mg/L	2025-02-20	
Trichloroacetic Acid	0.0291	N/A	0.0020	mg/L	2025-02-20	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Total Haloacetic Acids (HAA5)	0.0564	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	100		70-130	%	2025-02-20	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0053	N/A	0.0010	mg/L	2025-02-15	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Chloroform	0.0691	N/A	0.0010	mg/L	2025-02-15	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Surrogate: Toluene-d8	79		70-130	%	2025-02-15	
Surrogate: 4-Bromofluorobenzene	63		70-130	%	2025-02-15	S02

Okanagan Lake Sample Tap (25B1323-06) | Matrix: Water | Sampled: 2025-02-12 06:30

Anions

Chloride	6.06	AO ≤ 250	0.10	mg/L	2025-02-14	
Fluoride	0.11	MAC = 1.5	0.10	mg/L	2025-02-14	
Nitrate (as N)	0.064	MAC = 10	0.010	mg/L	2025-02-14	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-02-14	
Sulfate	31.4	AO ≤ 500	1.0	mg/L	2025-02-14	

Calculated Parameters

Hardness, Total (as CaCO3)	128	None Required	0.500	mg/L	N/A	
Langelier Index	-0.2	N/A	-5.0		2025-02-19	CT6
Nitrogen, Organic	0.340	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	163	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO3)	107	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Bicarbonate (as CaCO3)	107	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-02-14	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Okanagan Lake Sample Tap (25B1323-06) | Matrix: Water | Sampled: 2025-02-12 06:30, Continued

General Parameters, Continued

Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-02-18	
Carbon, Total Organic	5.88	N/A	0.50	mg/L	2025-02-14	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-02-14	
Conductivity (EC)	297	N/A	2.0	µS/cm	2025-02-14	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-02-15	
Nitrogen, Total Kjeldahl	0.340	N/A	0.050	mg/L	2025-02-18	
pH	7.87	7.0-10.5	0.10	pH units	2025-02-14	HT2
Phosphorus, Total (as P)	0.0150	N/A	0.0050	mg/L	2025-02-14	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-02-18	
Temperature, at pH	19.5	N/A		°C	2025-02-14	HT2
Turbidity	0.31	OG < 1	0.10	NTU	2025-02-13	
UV Transmittance @ 254 nm - Unfiltered	86.7	N/A	0.10	% T	2025-02-14	

Total Metals

Aluminum, total	0.0082	OG < 0.1	0.0050	mg/L	2025-02-14	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-02-14	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-02-14	
Barium, total	0.0225	MAC = 2	0.0050	mg/L	2025-02-14	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-02-14	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-02-14	
Calcium, total	34.7	None Required	0.20	mg/L	2025-02-14	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-14	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-02-14	
Copper, total	0.00278	MAC = 2	0.00040	mg/L	2025-02-14	
Iron, total	< 0.010	AO ≤ 0.3	0.010	mg/L	2025-02-14	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-02-14	
Magnesium, total	10.0	None Required	0.010	mg/L	2025-02-14	
Manganese, total	0.00070	MAC = 0.12	0.00020	mg/L	2025-02-14	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-02-14	HG1
Molybdenum, total	0.00357	N/A	0.00010	mg/L	2025-02-14	
Nickel, total	0.00048	N/A	0.00040	mg/L	2025-02-14	
Potassium, total	2.57	N/A	0.10	mg/L	2025-02-14	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-14	
Sodium, total	12.6	AO ≤ 200	0.10	mg/L	2025-02-14	
Strontium, total	0.286	MAC = 7	0.0010	mg/L	2025-02-14	
Uranium, total	0.00248	MAC = 0.02	0.000020	mg/L	2025-02-14	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-02-14	

Penticton Creek Sample Tap (25B1323-07) | Matrix: Water | Sampled: 2025-02-12 06:40

Anions

Chloride	0.37	AO ≤ 250	0.10	mg/L	2025-02-14	
----------	-------------	----------	------	------	------------	--

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
---------	--------	-----------	----------	----------	-----------

Penticton Creek Sample Tap (25B1323-07) | Matrix: Water | Sampled: 2025-02-12 06:40, Continued

Anions, Continued

Fluoride	< 0.10	MAC = 1.5	0.10 mg/L	2025-02-14	
Nitrate (as N)	0.017	MAC = 10	0.010 mg/L	2025-02-14	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-02-14	
Sulfate	1.6	AO ≤ 500	1.0 mg/L	2025-02-14	

Calculated Parameters

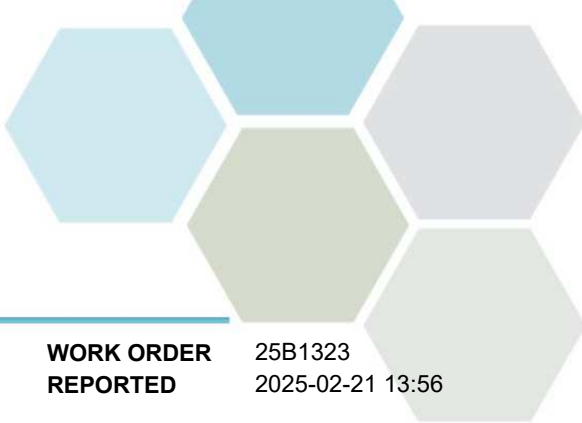
Hardness, Total (as CaCO ₃)	15.2	None Required	0.500 mg/L	N/A	
Langelier Index	-3.3	N/A	-5.0	2025-02-19	CT6
Nitrogen, Organic	0.319	N/A	0.0500 mg/L	N/A	
Solids, Total Dissolved	14.4	AO ≤ 500	1.00 mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	6.7	N/A	1.0 mg/L	2025-02-14	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0 mg/L	2025-02-14	
Alkalinity, Bicarbonate (as CaCO ₃)	6.7	N/A	1.0 mg/L	2025-02-14	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0 mg/L	2025-02-14	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0 mg/L	2025-02-14	
Ammonia, Total (as N)	< 0.050	None Required	0.050 mg/L	2025-02-18	
Carbon, Total Organic	7.20	N/A	0.50 mg/L	2025-02-14	
Colour, True	30	AO ≤ 15	5.0 CU	2025-02-14	
Conductivity (EC)	41.8	N/A	2.0 µS/cm	2025-02-14	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020 mg/L	2025-02-15	
Nitrogen, Total Kjeldahl	0.319	N/A	0.050 mg/L	2025-02-18	
pH	6.69	7.0-10.5	0.10 pH units	2025-02-14	HT2
Phosphorus, Total (as P)	0.0098	N/A	0.0050 mg/L	2025-02-14	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020 mg/L	2025-02-18	
Temperature, at pH	19.7	N/A	°C	2025-02-14	HT2
Turbidity	1.13	OG < 1	0.10 NTU	2025-02-13	
UV Transmittance @ 254 nm - Unfiltered	62.5	N/A	0.10 % T	2025-02-14	

Total Metals

Aluminum, total	0.0948	OG < 0.1	0.0050 mg/L	2025-02-14	
Antimony, total	< 0.00020	MAC = 0.006	0.00020 mg/L	2025-02-14	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050 mg/L	2025-02-14	
Barium, total	0.0060	MAC = 2	0.0050 mg/L	2025-02-14	
Boron, total	< 0.0500	MAC = 5	0.0500 mg/L	2025-02-14	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010 mg/L	2025-02-14	
Calcium, total	4.32	None Required	0.20 mg/L	2025-02-14	
Chromium, total	< 0.00050	MAC = 0.05	0.00050 mg/L	2025-02-14	
Cobalt, total	< 0.00010	N/A	0.00010 mg/L	2025-02-14	
Copper, total	0.00129	MAC = 2	0.00040 mg/L	2025-02-14	
Iron, total	0.451	AO ≤ 0.3	0.010 mg/L	2025-02-14	
Lead, total	< 0.00020	MAC = 0.005	0.00020 mg/L	2025-02-14	
Magnesium, total	1.08	None Required	0.010 mg/L	2025-02-14	



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Quarterly Samples	WORK ORDER REPORTED	25B1323 2025-02-21 13:56
---------------------	--	---------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Penticton Creek Sample Tap (25B1323-07) | Matrix: Water | Sampled: 2025-02-12 06:40, Continued

Total Metals, Continued

Manganese, total	0.00542	MAC = 0.12	0.00020	mg/L	2025-02-14	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-02-14	HG1
Molybdenum, total	0.00057	N/A	0.00010	mg/L	2025-02-14	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-02-14	
Potassium, total	0.49	N/A	0.10	mg/L	2025-02-14	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-14	
Sodium, total	2.38	AO ≤ 200	0.10	mg/L	2025-02-14	
Strontium, total	0.0474	MAC = 7	0.0010	mg/L	2025-02-14	
Uranium, total	0.000472	MAC = 0.02	0.000020	mg/L	2025-02-14	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-02-14	

Sample Qualifiers:

CT6	Results were based on lab temperature & lab pH.
HG1	Sample bottle and preservation submitted is not suitable for Mercury analysis and analyte stability may be affected.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
S02	Surrogate recovery outside of control limits. Data accepted based on acceptable recovery of other surrogates.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

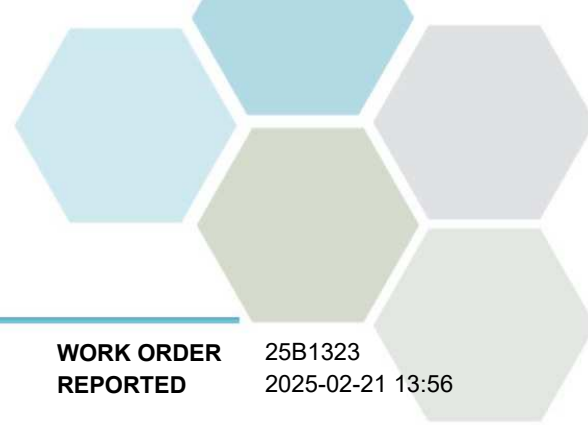
WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Carbon, Total Organic in Water	SM 5310 B (2022)	Combustion, Infrared CO2 Detection	✓	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	ASTM D7511-12	Flow Injection with In-Line UV Digestion and Amperometry	✓	Kelowna
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
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
Nitrogen, Total Kjeldahl in Water	SM 4500-Norg D* (2021)	Block Digestion and Flow Injection Analysis	✓	Kelowna
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Phosphorus, Total in Water	SM 4500-P B.5* (2011) / SM 4500-P F (2021)	Persulfate Digestion / Automated Colorimetry (Ascorbic Acid)	✓	Kelowna
Solids, Total Dissolved in Water	SM 1030 E (2021)	SM 1030 E		N/A
Sulfide, Total in Water	SM 4500-S2 D* (2021)	Colorimetry (Methylene Blue)	✓	Edmonton
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Transmittance at 254 nm - Unfiltered in Water	SM 5910 B* (2021)	Ultraviolet Absorption	✓	Kelowna
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	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)
% T	Percent Transmittance
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
AO	Aesthetic Objective
CU	Colour Units (referenced against a platinum cobalt standard)
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
ASTM	ASTM International Test Methods
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25B1851

RECEIVED / TEMP 2025-02-19 10:15 / 6.2°C

REPORTED 2025-02-21 11:28

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>

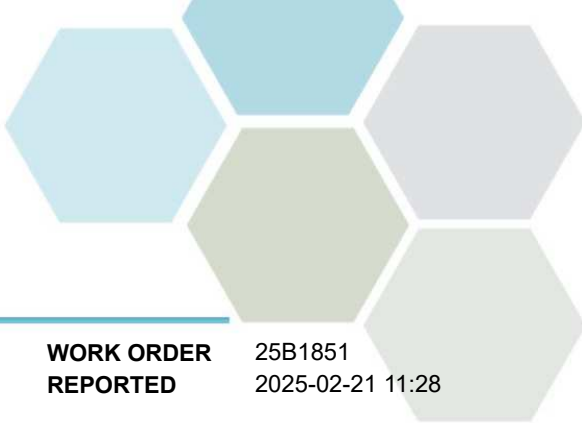
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25B1851 2025-02-21 11:28
---------------------	---	---------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

1946 Harris Dr. (25B1851-01) | Matrix: Water | Sampled: 2025-02-18 13:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-19	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-19	

Carmi (25B1851-02) | Matrix: Water | Sampled: 2025-02-18 14:06

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-19	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-19	

Gordon (25B1851-03) | Matrix: Water | Sampled: 2025-02-18 14:33

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-19	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-19	

OK Pump Station (25B1851-04) | Matrix: Water | Sampled: 2025-02-18 14:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-19	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-19	

Randolph (25B1851-05) | Matrix: Water | Sampled: 2025-02-18 14:20

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-19	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-19	

218 Macdonald (25B1851-06) | Matrix: Water | Sampled: 2025-02-18 14:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-19	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-19	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25B1851
2025-02-21 11:28

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25B2622

RECEIVED / TEMP 2025-02-26 09:57 / 7.6°C

REPORTED 2025-02-28 13:41

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>

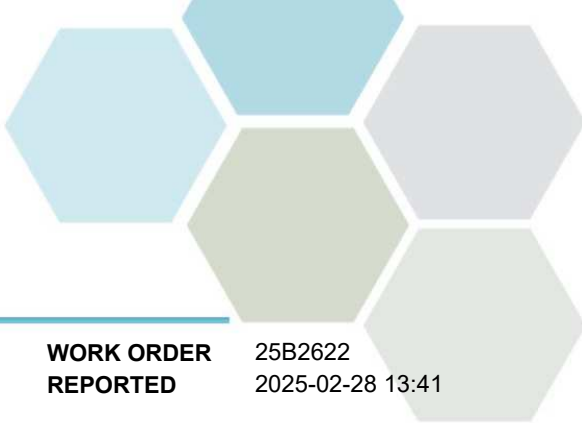
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25B2622 2025-02-28 13:41
---------------------	---	---------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

459 Waterloo AWWTP (25B2622-01) | Matrix: Water | Sampled: 2025-02-25 11:00

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-26	

Ok Lake Pumphouse (25B2622-02) | Matrix: Water | Sampled: 2025-02-25 11:51

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-26	

Randolph Rd (25B2622-03) | Matrix: Water | Sampled: 2025-02-25 13:23

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-26	

4300 Lakeside Rd (25B2622-04) | Matrix: Water | Sampled: 2025-02-25 11:35

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-26	

Gordon Ave Stn (25B2622-05) | Matrix: Water | Sampled: 2025-02-25 13:40

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-26	

Carmi School Lunch Room (25B2622-06) | Matrix: Water | Sampled: 2025-02-25 14:30

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-02-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-02-26	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25B2622
2025-02-28 13:41

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25C0558

RECEIVED / TEMP 2025-03-05 11:00 / 6.1°C

REPORTED 2025-03-12 15:14

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25C0558
2025-03-12 15:14

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Randolph Rd Stn (25C0558-01) Matrix: Water Sampled: 2025-03-05 13:40						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-06	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-06	
Naramata Rd Stn (25C0558-02) Matrix: Water Sampled: 2025-03-05 14:05						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-06	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-06	
Ok Lake Pumpouse Stn (25C0558-03) Matrix: Water Sampled: 2025-03-05 14:35						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-06	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-06	
Community Centre Lunch Room (25C0558-04) Matrix: Water Sampled: 2025-03-05 15:10						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-06	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-06	
Carmi Ave Stn (25C0558-05) Matrix: Water Sampled: 2025-03-05 16:05						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-06	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-06	
Wiltse School STN (25C0558-06) Matrix: Water Sampled: 2025-03-05 16:25						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-06	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-06	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25C0558
2025-03-12 15:14

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25C1347

RECEIVED / TEMP 2025-03-12 10:49 / 12.1°C

REPORTED 2025-03-19 11:05

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>

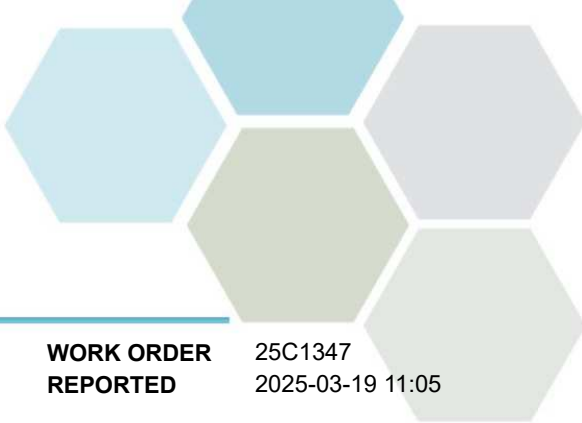
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25C1347 2025-03-19 11:05
----------------------------	---	----------------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

AWWTP (25C1347-01) | Matrix: Water | Sampled: 2025-03-11 10:50

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-12	

Randolph Rd (25C1347-02) | Matrix: Water | Sampled: 2025-03-11 11:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-12	

4300 Lakeside Rd (25C1347-03) | Matrix: Water | Sampled: 2025-03-11 13:27

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-12	

Gordon (25C1347-04) | Matrix: Water | Sampled: 2025-03-11 13:50

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-12	

Lawrence (25C1347-05) | Matrix: Water | Sampled: 2025-03-11 14:30

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-12	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25C1347
2025-03-19 11:05

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25C2255

RECEIVED / TEMP 2025-03-19 10:47 / 5.9°C

REPORTED 2025-03-24 11:34

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25C2255 2025-03-24 11:34
---------------------	---	---------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Naramata Rd Stn (25C2255-01) | Matrix: Water | Sampled: 2025-03-18 13:00

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-19	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-19	

Riverside Dr Stn (25C2255-02) | Matrix: Water | Sampled: 2025-03-18 13:25

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-19	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-19	

Lawrence Ave STN (25C2255-03) | Matrix: Water | Sampled: 2025-03-18 13:48

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-19	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-19	

Gordon Ave Stn (25C2255-04) | Matrix: Water | Sampled: 2025-03-18 14:09

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-19	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-19	

Valleyview Test Stn (25C2255-05) | Matrix: Water | Sampled: 2025-03-18 14:28

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-19	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-19	

Smythe Dr Stn (25C2255-06) | Matrix: Water | Sampled: 2025-03-18 14:50

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-19	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-19	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25C2255
2025-03-24 11:34

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25C3066

RECEIVED / TEMP 2025-03-26 09:44 / 7.3°C

REPORTED 2025-04-01 10:41

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>

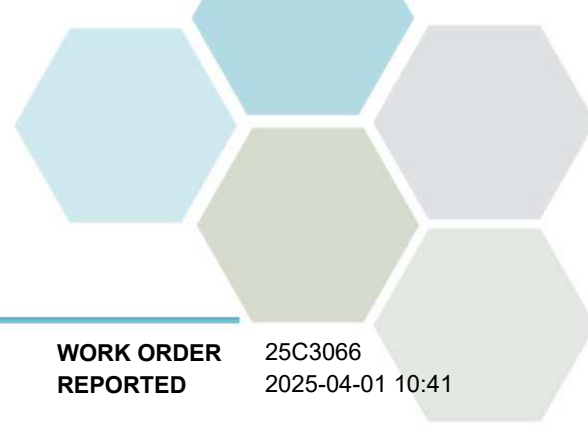
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25C3066
2025-04-01 10:41

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Randolph Rd Stn (25C3066-01) Matrix: Water Sampled: 2025-03-25 11:00						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-26	
WWTP (25C3066-02) Matrix: Water Sampled: 2025-03-25 11:45						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-26	
Lawrence Ave Stn (25C3066-03) Matrix: Water Sampled: 2025-03-25 12:35						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-26	
Carmi Pump Stn (25C3066-04) Matrix: Water Sampled: 2025-03-25 12:52						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-26	
Wiltse Blvd Stn (25C3066-05) Matrix: Water Sampled: 2025-03-25 13:17						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-26	
Smythe Dr Stn (25C3066-06) Matrix: Water Sampled: 2025-03-25 13:44						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-03-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-03-26	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25C3066
2025-04-01 10:41

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25D0386

RECEIVED / TEMP 2025-04-02 11:47 / 6.8°C

REPORTED 2025-04-04 11:55

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>

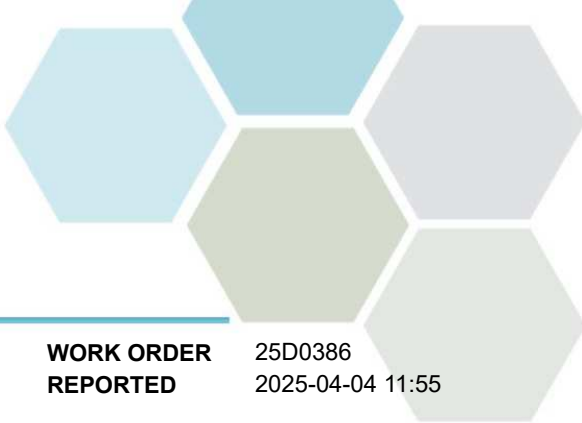
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25D0386 2025-04-04 11:55
---------------------	--	---------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Naramata Rd Stn (25D0386-01) Matrix: Water Sampled: 2025-04-01 15:45						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	
Riverside Dr Stn (25D0386-02) Matrix: Water Sampled: 2025-04-01 16:10						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	
Timmins St Stn (25D0386-03) Matrix: Water Sampled: 2025-04-01 16:26						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	
Carmi Pump Stn (25D0386-04) Matrix: Water Sampled: 2025-04-01 16:56						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	
Lawrence Ave Stn (25D0386-05) Matrix: Water Sampled: 2025-04-01 16:45						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	
Smythe Dr Stn (25D0386-06) Matrix: Water Sampled: 2025-04-01 17:24						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	
218 Macdonald St (25D0386-07) Matrix: Water Sampled: 2025-04-02 05:55						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-02	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25D0386
2025-04-04 11:55

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25D1239

RECEIVED / TEMP 2025-04-09 10:18 / 8.7°C

REPORTED 2025-04-15 11:59

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>

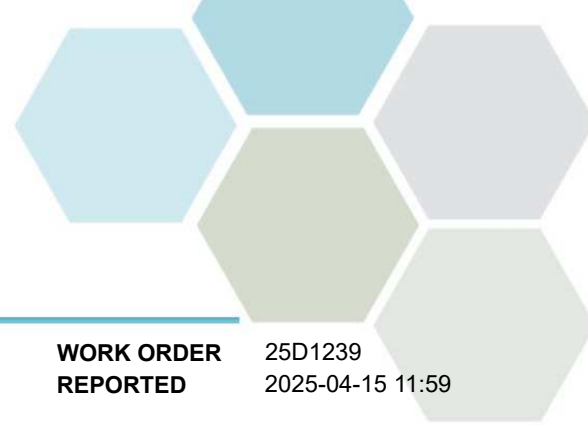
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25D1239
2025-04-15 11:59

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Columbia School Lunch (25D1239-01) | Matrix: Water | Sampled: 2025-04-08 09:05

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	

Carmi Ave Stn (25D1239-02) | Matrix: Water | Sampled: 2025-04-08 09:25

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	

Randolph Stn (25D1239-03) | Matrix: Water | Sampled: 2025-04-08 10:45

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	

Ok Lake Pumphouse (25D1239-04) | Matrix: Water | Sampled: 2025-04-08 11:10

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	

City Hall Lunch Room (25D1239-05) | Matrix: Water | Sampled: 2025-04-08 11:35

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	

Community Centre Water Fountain (25D1239-06) | Matrix: Water | Sampled: 2025-04-08 14:30

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	

Wiltse School STN (25D1239-07) | Matrix: Water | Sampled: 2025-04-08 15:15

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-09	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25D1239
2025-04-15 11:59

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25D2219

RECEIVED / TEMP 2025-04-16 10:44 / 6.8°C

REPORTED 2025-04-22 08:58

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25D2219
2025-04-22 08:58

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

1900 Penticton Ave (25D2219-01) | Matrix: Water | Sampled: 2025-04-15

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4

Gordon Ave Stn (25D2219-02) | Matrix: Water | Sampled: 2025-04-15

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4

Carmi Stn (25D2219-03) | Matrix: Water | Sampled: 2025-04-15

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4

Lawrence Ave (25D2219-04) | Matrix: Water | Sampled: 2025-04-15

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4

Fairford Bridge (25D2219-05) | Matrix: Water | Sampled: 2025-04-15

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4

Timmins St (25D2219-06) | Matrix: Water | Sampled: 2025-04-15

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4

Naramata Rd Stn (25D2219-07) | Matrix: Water | Sampled: 2025-04-15

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-16	HT4

Sample Qualifiers:

HT4 The collection date and/or time was not provided. Therefore holding time exceedances cannot be properly identified.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25D2219
2025-04-22 08:58

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25D2873

RECEIVED / TEMP 2025-04-23 10:42 / 9.9°C

REPORTED 2025-04-28 12:23

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25D2873
2025-04-28 12:23

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Randolph Rd Stn (25D2873-01) | Matrix: Water | Sampled: 2025-04-22 13:45

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-23	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-23	

Okanagan Lake Pumphouse Station (25D2873-02) | Matrix: Water | Sampled: 2025-04-22 14:10

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-23	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-23	

Lawrence Ave Stn (25D2873-03) | Matrix: Water | Sampled: 2025-04-22 14:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-23	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-23	

Wiltse School STN (25D2873-04) | Matrix: Water | Sampled: 2025-04-22 15:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-23	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-23	

4300 Lakeside Rd STN (25D2873-05) | Matrix: Water | Sampled: 2025-04-22 15:25

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-23	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-23	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25D2873
2025-04-28 12:23

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25D3958

RECEIVED / TEMP 2025-04-30 10:47 / 9.1°C

REPORTED 2025-05-06 12:05

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25D3958 2025-05-06 12:05
---------------------	---	---------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Timmins St Stn (25D3958-01) | Matrix: Water | Sampled: 2025-04-29 11:15

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-30	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-30	

Carmi Ave Stn (25D3958-02) | Matrix: Water | Sampled: 2025-04-29 13:25

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-30	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-30	

Gordon Ave Stn (25D3958-03) | Matrix: Water | Sampled: 2025-04-29 13:50

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-30	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-30	

Riverside Dr Stn (25D3958-04) | Matrix: Water | Sampled: 2025-04-29 14:25

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-30	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-30	

1900 Penticton Ave (25D3958-05) | Matrix: Water | Sampled: 2025-04-29 15:00

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-04-30	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-04-30	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25D3958
2025-05-06 12:05

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25E0904

RECEIVED / TEMP 2025-05-07 10:30 / 6.2°C

REPORTED 2025-05-13 10:38

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>

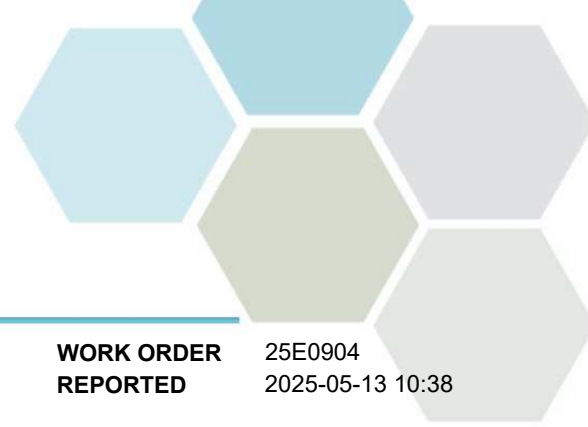
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25E0904
2025-05-13 10:38

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Naramata Rd Stn (25E0904-01) | Matrix: Water | Sampled: 2025-05-06 13:46

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-07	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-07	

Valleyview Stn (25E0904-02) | Matrix: Water | Sampled: 2025-05-06 14:38

Microbiological Parameters

Coliforms, Total	1	MAC = 0	1	CFU/100 mL	2025-05-07	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-07	

Lawrence Ave Stn (25E0904-03) | Matrix: Water | Sampled: 2025-05-06 16:15

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-07	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-07	

Gordon Ave Stn (25E0904-04) | Matrix: Water | Sampled: 2025-05-06 16:45

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-07	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-07	

PRV Stn (25E0904-05) | Matrix: Water | Sampled: 2025-05-06 17:09

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-07	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-07	

WWTP (25E0904-06) | Matrix: Water | Sampled: 2025-05-06 14:10

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-07	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-07	

1900 Penticton Ave (25E0904-07) | Matrix: Water | Sampled: 2025-05-06 14:50

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-07	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-07	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25E0904
2025-05-13 10:38

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25E1925

RECEIVED / TEMP 2025-05-14 11:00 / 9.0°C

REPORTED 2025-05-22 09:07

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25E1925
2025-05-22 09:07

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Naramata Rd Stn (25E1925-01) | Matrix: Water | Sampled: 2025-05-13 10:35

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	

Ok Lake Pump House (25E1925-02) | Matrix: Water | Sampled: 2025-05-13 11:05

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	

Smythe Drive Stn (25E1925-03) | Matrix: Water | Sampled: 2025-05-13 11:43

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	

Gordon Ave Stn (25E1925-04) | Matrix: Water | Sampled: 2025-05-13 12:05

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	

Wiltse Blvd Stn (25E1925-05) | Matrix: Water | Sampled: 2025-05-13 13:30

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	

Carmi Stn (25E1925-06) | Matrix: Water | Sampled: 2025-05-13 13:48

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	

Lawrence Ave Stn (25E1925-07) | Matrix: Water | Sampled: 2025-05-13 14:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-14	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25E1925
2025-05-22 09:07

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25E2694

RECEIVED / TEMP 2025-05-21 10:49 / 7.2°C

REPORTED 2025-05-23 09:33

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25E2694
2025-05-23 09:33

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Carmi Stn (25E2694-01) | Matrix: Water | Sampled: 2025-05-20 11:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	

Lawrence Ave Stn (25E2694-02) | Matrix: Water | Sampled: 2025-05-20 11:10

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	

Fairford Stn (25E2694-03) | Matrix: Water | Sampled: 2025-05-20 11:29

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	

Riverside Dr Division (25E2694-04) | Matrix: Water | Sampled: 2025-05-20 11:39

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	

Lake Pump House (25E2694-05) | Matrix: Water | Sampled: 2025-05-20 11:52

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	

Naramata Rd Stn (25E2694-06) | Matrix: Water | Sampled: 2025-05-20 13:24

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	

1900 Penticton Ave (25E2694-07) | Matrix: Water | Sampled: 2025-05-20 13:55

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-21	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25E2694
2025-05-23 09:33

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25E3794

RECEIVED / TEMP 2025-05-28 11:10 / 9.6°C

REPORTED 2025-06-03 09:35

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>

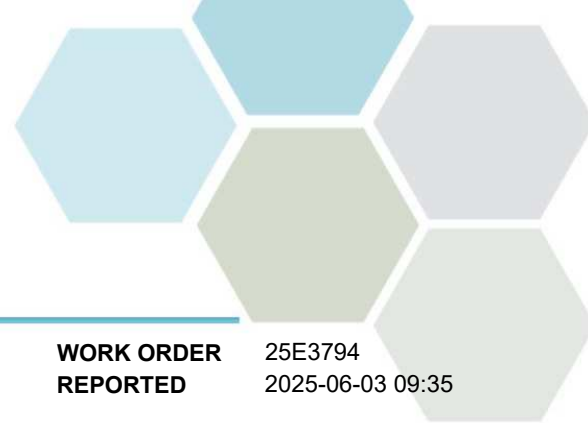
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25E3794
2025-06-03 09:35

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Wiltse School (25E3794-01) | Matrix: Water | Sampled: 2025-05-27 13:18

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	

Smythe Drive Stn (25E3794-02) | Matrix: Water | Sampled: 2025-05-27 13:32

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	

Elm St Stn (25E3794-03) | Matrix: Water | Sampled: 2025-05-27 13:54

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	

Carmi Stn (25E3794-04) | Matrix: Water | Sampled: 2025-05-27 14:14

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	

Lawrence Ave Test Stn (25E3794-05) | Matrix: Water | Sampled: 2025-05-27 14:26

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	

Riverside Drive Division (25E3794-06) | Matrix: Water | Sampled: 2025-05-27 14:48

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	

1900 Penticton Ave (25E3794-07) | Matrix: Water | Sampled: 2025-05-27 15:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-05-28	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25E3794
2025-06-03 09:35

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Quarterly Samples

PROJECT INFO OPR178-025

WORK ORDER 25E4021

RECEIVED / TEMP 2025-05-28 11:10 / 7.9°C

REPORTED 2025-06-06 12:13

COC NUMBER B112233

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Penticton Creek (25E4021-01) | Matrix: Water | Sampled: 2025-05-27

Anions

Chloride	0.16	AO ≤ 250	0.10	mg/L	2025-05-29	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2025-05-29	
Nitrate (as N)	0.012	MAC = 10	0.010	mg/L	2025-05-29	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-05-29	
Sulfate	< 1.0	AO ≤ 500	1.0	mg/L	2025-05-29	

Calculated Parameters

Hardness, Total (as CaCO ₃)	6.70	None Required	0.500	mg/L	N/A	
Langelier Index	-4.1	N/A	-5.0		2025-06-04	CT6
Nitrogen, Organic	0.271	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	5.09	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	1.8	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Bicarbonate (as CaCO ₃)	1.8	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-05-30	
Carbon, Total Organic	9.85	N/A	0.50	mg/L	2025-05-30	
Colour, True	57	AO ≤ 15	5.0	CU	2025-05-30	
Conductivity (EC)	21.4	N/A	2.0	µS/cm	2025-06-02	
Cyanide, Total	0.0027	MAC = 0.2	0.0020	mg/L	2025-06-01	
Nitrogen, Total Kjeldahl	0.271	N/A	0.050	mg/L	2025-06-03	
pH	6.73	7.0-10.5	0.10	pH units	2025-06-02	HT2
Phosphorus, Total (as P)	0.0118	N/A	0.0050	mg/L	2025-06-04	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-06-03	
Temperature, at pH	22.3	N/A		°C	2025-06-02	HT2
Turbidity	1.32	OG < 1	0.10	NTU	2025-05-30	
UV Transmittance @ 254 nm - Unfiltered	33.7	N/A	0.10	% T	2025-05-30	

Total Metals

Aluminum, total	0.337	OG < 0.1	0.0050	mg/L	2025-06-03	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-06-03	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-06-03	
Barium, total	0.0059	MAC = 2	0.0050	mg/L	2025-06-03	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-06-03	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-06-03	
Calcium, total	2.06	None Required	0.20	mg/L	2025-06-03	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-06-03	
Copper, total	0.00375	MAC = 2	0.00040	mg/L	2025-06-03	
Iron, total	0.273	AO ≤ 0.1	0.010	mg/L	2025-06-03	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-06-03	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Penticton Creek (25E4021-01) | Matrix: Water | Sampled: 2025-05-27, Continued

Total Metals, Continued

Magnesium, total	0.374	None Required	0.010	mg/L	2025-06-03	
Manganese, total	0.00824	MAC = 0.12	0.00020	mg/L	2025-06-03	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-06-03	HG1
Molybdenum, total	0.00021	N/A	0.00010	mg/L	2025-06-03	
Nickel, total	0.00077	N/A	0.00040	mg/L	2025-06-03	
Potassium, total	0.25	N/A	0.10	mg/L	2025-06-03	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Sodium, total	1.12	AO ≤ 200	0.10	mg/L	2025-06-03	
Strontium, total	0.0277	MAC = 7	0.0010	mg/L	2025-06-03	
Uranium, total	0.000328	MAC = 0.02	0.000020	mg/L	2025-06-03	
Zinc, total	0.0044	AO ≤ 5	0.0040	mg/L	2025-06-03	

Wiltse Blvd Stn (25E4021-02) | Matrix: Water | Sampled: 2025-05-27

Anions

Chloride	10.3	AO ≤ 250	0.10	mg/L	2025-05-29	
Fluoride	0.16	MAC = 1.5	0.10	mg/L	2025-05-29	
Nitrate (as N)	0.028	MAC = 10	0.010	mg/L	2025-05-29	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-05-29	
Sulfate	29.3	AO ≤ 500	1.0	mg/L	2025-05-29	

Calculated Parameters

Hardness, Total (as CaCO ₃)	120	None Required	0.500	mg/L	N/A	
Langelier Index	-0.09	N/A	-5.0		2025-06-04	CT6
Nitrogen, Organic	0.114	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	160	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	102	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Bicarbonate (as CaCO ₃)	102	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-05-30	
Carbon, Total Organic	2.93	N/A	0.50	mg/L	2025-05-30	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-05-30	
Conductivity (EC)	305	N/A	2.0	µS/cm	2025-06-02	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-06-01	
Nitrogen, Total Kjeldahl	0.114	N/A	0.050	mg/L	2025-06-03	
pH	7.94	7.0-10.5	0.10	pH units	2025-06-02	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-06-04	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-06-03	
Temperature, at pH	22.3	N/A		°C	2025-06-02	HT2

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Wiltse Blvd Stn (25E4021-02) | Matrix: Water | Sampled: 2025-05-27, Continued

General Parameters, Continued

Turbidity	0.11	OG < 1	0.10	NTU	2025-05-30	
UV Transmittance @ 254 nm - Unfiltered	94.3	N/A	0.10	% T	2025-05-30	

Total Metals

Aluminum, total	0.0141	OG < 0.1	0.0050	mg/L	2025-06-03	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-06-03	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-06-03	
Barium, total	0.0221	MAC = 2	0.0050	mg/L	2025-06-03	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-06-03	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-06-03	
Calcium, total	33.2	None Required	0.20	mg/L	2025-06-03	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-06-03	
Copper, total	0.0162	MAC = 2	0.00040	mg/L	2025-06-03	
Iron, total	< 0.010	AO ≤ 0.1	0.010	mg/L	2025-06-03	
Lead, total	0.00023	MAC = 0.005	0.00020	mg/L	2025-06-03	
Magnesium, total	8.97	None Required	0.010	mg/L	2025-06-03	
Manganese, total	0.00038	MAC = 0.12	0.00020	mg/L	2025-06-03	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-06-03	HG1
Molybdenum, total	0.00330	N/A	0.00010	mg/L	2025-06-03	
Nickel, total	0.00049	N/A	0.00040	mg/L	2025-06-03	
Potassium, total	2.37	N/A	0.10	mg/L	2025-06-03	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Sodium, total	13.5	AO ≤ 200	0.10	mg/L	2025-06-03	
Strontium, total	0.310	MAC = 7	0.0010	mg/L	2025-06-03	
Uranium, total	0.000168	MAC = 0.02	0.000020	mg/L	2025-06-03	
Zinc, total	0.0075	AO ≤ 5	0.0040	mg/L	2025-06-03	

Randolph Rd Stn (25E4021-03) | Matrix: Water | Sampled: 2025-05-27

Calculated Parameters

Total Trihalomethanes	0.0503	MAC = 0.1	0.00400	mg/L	N/A	
-----------------------	--------	-----------	---------	------	-----	--

Haloacetic Acids

Monochloroacetic Acid	< 0.0031	N/A	0.0020	mg/L	2025-06-05	RA3
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-05	
Dichloroacetic Acid	0.0177	N/A	0.0020	mg/L	2025-06-05	
Trichloroacetic Acid	0.0188	N/A	0.0020	mg/L	2025-06-05	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-05	
Total Haloacetic Acids (HAA5)	0.0365	MAC = 0.08	0.00312	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	97		70-130	%	2025-06-05	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0056	N/A	0.0010	mg/L	2025-06-03	
----------------------	--------	-----	--------	------	------------	--

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Randolph Rd Stn (25E4021-03) | Matrix: Water | Sampled: 2025-05-27, Continued

Volatile Organic Compounds (VOC), Continued

Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Chloroform	0.0446	N/A	0.0010	mg/L	2025-06-03	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Surrogate: Toluene-d8	78		70-130	%	2025-06-03	
Surrogate: 4-Bromofluorobenzene	74		70-130	%	2025-06-03	

PRV Stn (25E4021-04) | Matrix: Water | Sampled: 2025-05-27

Anions

Chloride	10.2	AO ≤ 250	0.10	mg/L	2025-05-29	
Fluoride	0.17	MAC = 1.5	0.10	mg/L	2025-05-29	
Nitrate (as N)	0.025	MAC = 10	0.010	mg/L	2025-05-29	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-05-29	
Sulfate	29.2	AO ≤ 500	1.0	mg/L	2025-05-29	

Calculated Parameters

Hardness, Total (as CaCO3)	118	None Required	0.500	mg/L	N/A	
Langelier Index	-0.04	N/A	-5.0		2025-06-04	CT6
Nitrogen, Organic	0.160	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	159	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO3)	101	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Bicarbonate (as CaCO3)	101	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-05-30	
Carbon, Total Organic	2.85	N/A	0.50	mg/L	2025-05-30	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-05-30	
Conductivity (EC)	304	N/A	2.0	µS/cm	2025-06-02	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-06-01	
Nitrogen, Total Kjeldahl	0.160	N/A	0.050	mg/L	2025-06-03	
pH	7.99	7.0-10.5	0.10	pH units	2025-06-02	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-06-04	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-06-03	
Temperature, at pH	22.8	N/A		°C	2025-06-02	HT2
Turbidity	< 0.10	OG < 1	0.10	NTU	2025-05-30	
UV Transmittance @ 254 nm - Unfiltered	94.3	N/A	0.10	% T	2025-05-30	

Total Metals

Aluminum, total	0.0123	OG < 0.1	0.0050	mg/L	2025-06-03	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-06-03	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-06-03	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
PRV Stn (25E4021-04) Matrix: Water Sampled: 2025-05-27, Continued						
Total Metals, Continued						
Barium, total	0.0217	MAC = 2	0.0050	mg/L	2025-06-03	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-06-03	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-06-03	
Calcium, total	32.7	None Required	0.20	mg/L	2025-06-03	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-06-03	
Copper, total	0.00076	MAC = 2	0.00040	mg/L	2025-06-03	
Iron, total	< 0.010	AO ≤ 0.1	0.010	mg/L	2025-06-03	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-06-03	
Magnesium, total	8.88	None Required	0.010	mg/L	2025-06-03	
Manganese, total	0.00079	MAC = 0.12	0.00020	mg/L	2025-06-03	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-06-03	HG1
Molybdenum, total	0.00326	N/A	0.00010	mg/L	2025-06-03	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-06-03	
Potassium, total	2.35	N/A	0.10	mg/L	2025-06-03	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Sodium, total	13.5	AO ≤ 200	0.10	mg/L	2025-06-03	
Strontium, total	0.310	MAC = 7	0.0010	mg/L	2025-06-03	
Uranium, total	0.000162	MAC = 0.02	0.000020	mg/L	2025-06-03	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-06-03	

Okanagan Lake Lab T (25E4021-05) | Matrix: Water | Sampled: 2025-05-27

Anions

Chloride	6.23	AO ≤ 250	0.10	mg/L	2025-05-29	
Fluoride	0.20	MAC = 1.5	0.10	mg/L	2025-05-29	
Nitrate (as N)	0.015	MAC = 10	0.010	mg/L	2025-05-29	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-05-29	
Sulfate	31.0	AO ≤ 500	1.0	mg/L	2025-05-29	

Calculated Parameters

Hardness, Total (as CaCO ₃)	126	None Required	0.500	mg/L	N/A	
Langelier Index	0.03	N/A	-5.0		2025-06-04	CT6
Nitrogen, Organic	0.232	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	161	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	107	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Bicarbonate (as CaCO ₃)	107	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-05-30	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Okanagan Lake Lab T (25E4021-05) | Matrix: Water | Sampled: 2025-05-27, Continued

General Parameters, Continued

Carbon, Total Organic	3.81	N/A	0.50	mg/L	2025-05-30	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-05-30	
Conductivity (EC)	303	N/A	2.0	µS/cm	2025-06-02	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-06-01	
Nitrogen, Total Kjeldahl	0.232	N/A	0.050	mg/L	2025-06-03	
pH	8.02	7.0-10.5	0.10	pH units	2025-06-02	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-06-04	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-06-03	
Temperature, at pH	21.8	N/A		°C	2025-06-02	HT2
Turbidity	0.44	OG < 1	0.10	NTU	2025-05-30	
UV Transmittance @ 254 nm - Unfiltered	86.7	N/A	0.10	% T	2025-05-30	

Total Metals

Aluminum, total	0.0096	OG < 0.1	0.0050	mg/L	2025-06-03	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-06-03	
Arsenic, total	0.00052	MAC = 0.01	0.00050	mg/L	2025-06-03	
Barium, total	0.0220	MAC = 2	0.0050	mg/L	2025-06-03	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-06-03	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-06-03	
Calcium, total	34.9	None Required	0.20	mg/L	2025-06-03	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-06-03	
Copper, total	0.00358	MAC = 2	0.00040	mg/L	2025-06-03	
Iron, total	0.012	AO ≤ 0.1	0.010	mg/L	2025-06-03	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-06-03	
Magnesium, total	9.46	None Required	0.010	mg/L	2025-06-03	
Manganese, total	0.00170	MAC = 0.12	0.00020	mg/L	2025-06-03	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-06-03	HG1
Molybdenum, total	0.00347	N/A	0.00010	mg/L	2025-06-03	
Nickel, total	0.00061	N/A	0.00040	mg/L	2025-06-03	
Potassium, total	2.44	N/A	0.10	mg/L	2025-06-03	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Sodium, total	11.9	AO ≤ 200	0.10	mg/L	2025-06-03	
Strontium, total	0.314	MAC = 7	0.0010	mg/L	2025-06-03	
Uranium, total	0.00223	MAC = 0.02	0.000020	mg/L	2025-06-03	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-06-03	

Smythe Dr Stn (25E4021-06) | Matrix: Water | Sampled: 2025-05-27

Calculated Parameters

Total Trihalomethanes	0.0543	MAC = 0.1	0.00400	mg/L	N/A
-----------------------	--------	-----------	---------	------	-----

Haloacetic Acids

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Smythe Dr Stn (25E4021-06) | Matrix: Water | Sampled: 2025-05-27, Continued

Haloacetic Acids, Continued

Monochloroacetic Acid	< 0.0032	N/A	0.0020	mg/L	2025-06-05	RA3
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-05	
Dichloroacetic Acid	0.0173	N/A	0.0020	mg/L	2025-06-05	
Trichloroacetic Acid	0.0175	N/A	0.0020	mg/L	2025-06-05	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-05	
Total Haloacetic Acids (HAA5)	0.0347	MAC = 0.08	0.00322	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	94		70-130	%	2025-06-05	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0054	N/A	0.0010	mg/L	2025-06-04	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-06-04	
Chloroform	0.0488	N/A	0.0010	mg/L	2025-06-04	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-04	
Surrogate: Toluene-d8	82		70-130	%	2025-06-04	
Surrogate: 4-Bromofluorobenzene	82		70-130	%	2025-06-04	

Naramata Rd Stn (25E4021-07) | Matrix: Water | Sampled: 2025-05-27

Calculated Parameters

Total Trihalomethanes	0.0614	MAC = 0.1	0.00400	mg/L	N/A	
-----------------------	---------------	-----------	---------	------	-----	--

Haloacetic Acids

Monochloroacetic Acid	< 0.0041	N/A	0.0020	mg/L	2025-06-05	RA3
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-05	
Dichloroacetic Acid	0.0224	N/A	0.0020	mg/L	2025-06-05	
Trichloroacetic Acid	0.0225	N/A	0.0020	mg/L	2025-06-05	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-05	
Total Haloacetic Acids (HAA5)	0.0449	MAC = 0.08	0.00410	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	95		70-130	%	2025-06-05	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0062	N/A	0.0010	mg/L	2025-06-03	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Chloroform	0.0553	N/A	0.0010	mg/L	2025-06-03	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Surrogate: Toluene-d8	75		70-130	%	2025-06-03	
Surrogate: 4-Bromofluorobenzene	71		70-130	%	2025-06-03	

Pre DAF (25E4021-08) | Matrix: Water | Sampled: 2025-05-27

Calculated Parameters

Total Trihalomethanes	0.0106	MAC = 0.1	0.00400	mg/L	N/A	
-----------------------	---------------	-----------	---------	------	-----	--

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0062	N/A	0.0010	mg/L	2025-06-03	
----------------------	---------------	-----	--------	------	------------	--



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Quarterly Samples	WORK ORDER REPORTED	25E4021 2025-06-06 12:13
---------------------	--	---------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Pre DAF (25E4021-08) Matrix: Water Sampled: 2025-05-27, Continued						
<i>Volatile Organic Compounds (VOC), Continued</i>						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Chloroform	0.0106	N/A	0.0010	mg/L	2025-06-03	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Surrogate: Toluene-d8	77		70-130	%	2025-06-03	
Surrogate: 4-Bromofluorobenzene	75		70-130	%	2025-06-03	

Post DAF (25E4021-09) | Matrix: Water | Sampled: 2025-05-27

<i>Calculated Parameters</i>						
Total Trihalomethanes	0.00916	MAC = 0.1	0.00400	mg/L	N/A	
<i>Volatile Organic Compounds (VOC)</i>						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-04	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-06-04	
Chloroform	0.0092	N/A	0.0010	mg/L	2025-06-04	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-04	
Surrogate: Toluene-d8	76		70-130	%	2025-06-04	
Surrogate: 4-Bromofluorobenzene	72		70-130	%	2025-06-04	

Sample Qualifiers:	
CT6	Results were based on lab temperature & lab pH.
HG1	Sample bottle and preservation submitted is not suitable for Mercury analysis and analyte stability may be affected.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
RA3	The Reporting Limit has been raised due to comparable level detected in the blank(s).

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

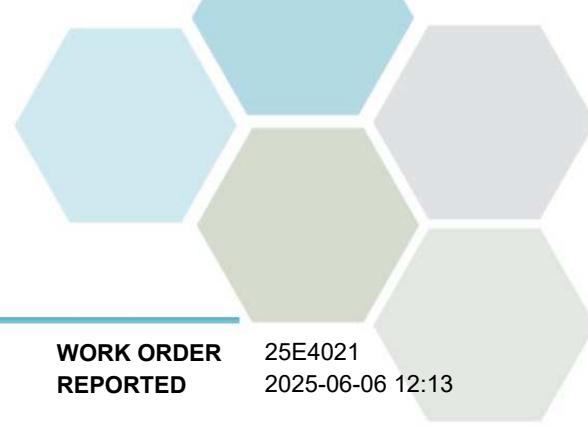
WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Carbon, Total Organic in Water	SM 5310 B (2022)	Combustion, Infrared CO2 Detection	✓	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	ASTM D7511-12	Flow Injection with In-Line UV Digestion and Amperometry	✓	Kelowna
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
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
Nitrogen, Total Kjeldahl in Water	SM 4500-Norg D* (2021)	Block Digestion and Flow Injection Analysis	✓	Kelowna
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Phosphorus, Total in Water	SM 4500-P B.5* (2011) / SM 4500-P F (2021)	Persulfate Digestion / Automated Colorimetry (Ascorbic Acid)	✓	Kelowna
Solids, Total Dissolved in Water	SM 1030 E (2021)	SM 1030 E		N/A
Sulfide, Total in Water	SM 4500-S2 D* (2021)	Colorimetry (Methylene Blue)	✓	Edmonton
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Transmittance at 254 nm - Unfiltered in Water	SM 5910 B* (2021)	Ultraviolet Absorption	✓	Kelowna
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	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)
% T	Percent Transmittance
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
AO	Aesthetic Objective
CU	Colour Units (referenced against a platinum cobalt standard)
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
ASTM	ASTM International Test Methods
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO Penticton, City of - DW & STP
PROJECT Quarterly Samples

WORK ORDER 25E4021
REPORTED 2025-06-06 12:13

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25F0473

RECEIVED / TEMP 2025-06-04 10:37 / 11.3°C

REPORTED 2025-06-09 13:35

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>

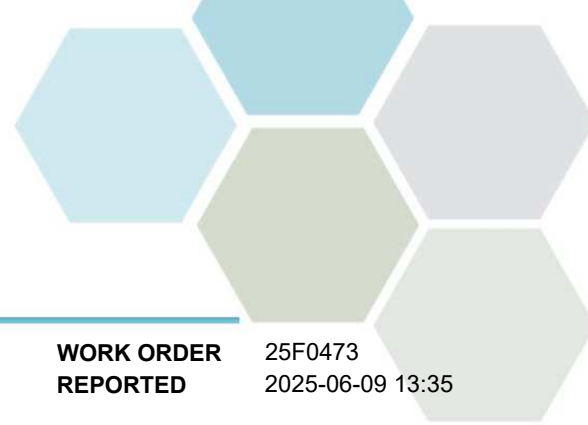
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25F0473
2025-06-09 13:35

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Carmi Ave Stn (25F0473-01) | Matrix: Water | Sampled: 2025-06-03 15:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	

Gordon Ave Stn (25F0473-02) | Matrix: Water | Sampled: 2025-06-03 14:19

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	

Elm St Stn (25F0473-03) | Matrix: Water | Sampled: 2025-06-03 14:55

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	

Wiltse School STN (25F0473-04) | Matrix: Water | Sampled: 2025-06-03 16:05

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	

Smyth Dr Stn (25F0473-05) | Matrix: Water | Sampled: 2025-06-03 15:09

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	

WWTP (25F0473-06) | Matrix: Water | Sampled: 2025-06-03 15:45

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	

Randolph Stn (25F0473-07) | Matrix: Water | Sampled: 2025-06-03 13:38

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-04	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25F0473
2025-06-09 13:35

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25F1551

RECEIVED / TEMP 2025-06-11 10:23 / 12.6°C

REPORTED 2025-06-16 11:38

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25F1551
2025-06-16 11:38

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Ok Lake Pump House (25F1551-01) | Matrix: Water | Sampled: 2025-06-10 10:57

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	

Community Centre (25F1551-02) | Matrix: Water | Sampled: 2025-06-10 13:42

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	

Timmins Rd STN (25F1551-03) | Matrix: Water | Sampled: 2025-06-10 11:20

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	

Fairford Bridge STN (25F1551-04) | Matrix: Water | Sampled: 2025-06-10 11:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	

Smyth Drive STN (25F1551-05) | Matrix: Water | Sampled: 2025-06-10 11:05

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	

4300 Lakeside Dr STN (25F1551-06) | Matrix: Water | Sampled: 2025-06-10 14:58

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	

Columbia School Lunch Room (25F1551-07) | Matrix: Water | Sampled: 2025-06-10 11:45

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-11	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25F1551
2025-06-16 11:38

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25F2598

RECEIVED / TEMP 2025-06-18 10:47 / 4.7°C

REPORTED 2025-06-24 10:38

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25F2598
2025-06-24 10:38

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Wilste Blvd Stn (25F2598-01) | Matrix: Water | Sampled: 2025-06-17 10:51

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	

Gordon Stn (25F2598-02) | Matrix: Water | Sampled: 2025-06-17 11:06

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	

Smythe Dr Stn (25F2598-03) | Matrix: Water | Sampled: 2025-06-17 11:30

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	

Randolph Rd Stn (25F2598-04) | Matrix: Water | Sampled: 2025-06-17 13:27

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	

WWTP (25F2598-05) | Matrix: Water | Sampled: 2025-06-17 13:57

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	

Yards (25F2598-06) | Matrix: Water | Sampled: 2025-06-17 14:11

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	

Lawrence Ave Stn (25F2598-07) | Matrix: Water | Sampled: 2025-06-17 14:30

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-18	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25F2598
2025-06-24 10:38

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25F3549

RECEIVED / TEMP 2025-06-25 11:00 / 6.0°C

REPORTED 2025-07-02 10:18

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25F3549
2025-07-02 10:18

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Valley View (25F3549-01) | Matrix: Water | Sampled: 2025-06-24 10:58

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	

Lawrence rd Stn (25F3549-02) | Matrix: Water | Sampled: 2025-06-24 11:43

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	

Timmins rd Stn (25F3549-03) | Matrix: Water | Sampled: 2025-06-24 13:10

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	

Riverside Drive Div STN (25F3549-04) | Matrix: Water | Sampled: 2025-06-24 13:26

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	

Naramata Rd Stn (25F3549-05) | Matrix: Water | Sampled: 2025-06-24 14:10

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	

Ok Lake Pumphouse (25F3549-06) | Matrix: Water | Sampled: 2025-06-24 13:44

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	

Penticton ave 1900 (25F3549-07) | Matrix: Water | Sampled: 2025-06-24 15:10

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-06-25	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25F3549
2025-07-02 10:18

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25G1264

RECEIVED / TEMP 2025-07-09 10:52 / 10.5°C

REPORTED 2025-07-15 13:00

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25G1264
2025-07-15 13:00

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Timmins St Stn (25G1264-01) | Matrix: Drinking Water | Sampled: 2025-07-08 12:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	

Riverside Dr Stn (25G1264-02) | Matrix: Drinking Water | Sampled: 2025-07-08 12:15

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	

Randolph Rd Stn (25G1264-03) | Matrix: Drinking Water | Sampled: 2025-07-08 12:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	

Lawrence Ave Stn (25G1264-04) | Matrix: Drinking Water | Sampled: 2025-07-08 13:05

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	

Carmi Pump Stn (25G1264-05) | Matrix: Drinking Water | Sampled: 2025-07-08 13:17

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	

Valleyview Test Stn (25G1264-06) | Matrix: Drinking Water | Sampled: 2025-07-08 13:45

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	

Smyth Dr Stn (25G1264-07) | Matrix: Water | Sampled: 2025-07-08 14:03

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-09	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25G1264
2025-07-15 13:00

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25G2343

RECEIVED / TEMP 2025-07-16 10:37 / 10.3°C

REPORTED 2025-07-22 12:25

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25G2343 2025-07-22 12:25
----------------------------	---	----------------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Lawrence Ave Stn (25G2343-01) | Matrix: Drinking Water | Sampled: 2025-07-15 13:59

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-16	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-16	

Elm St Stn (25G2343-02) | Matrix: Drinking Water | Sampled: 2025-07-15 13:51

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-16	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-16	

4300 Lakeside Dr (25G2343-03) | Matrix: Drinking Water | Sampled: 2025-07-15 14:40

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-16	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-16	

Wiltse School Blvd (25G2343-04) | Matrix: Drinking Water | Sampled: 2025-07-15 13:15

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-16	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-16	

Gordon Stn (25G2343-05) | Matrix: Drinking Water | Sampled: 2025-07-15 13:31

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-16	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-16	

Naramata Rd Stn (25G2343-06) | Matrix: Drinking Water | Sampled: 2025-07-15 13:34

<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-16	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-16	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25G2343
2025-07-22 12:25

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25G3312

RECEIVED / TEMP 2025-07-23 10:46 / 7.3°C

REPORTED 2025-07-28 11:16

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25G3312 2025-07-28 11:16
---------------------	---	---------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Naramata Rd Stn (25G3312-01) | Matrix: Drinking Water | Sampled: 2025-07-22 10:52

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-23	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-23	

Riverside Drive Div STN (25G3312-02) | Matrix: Water | Sampled: 2025-07-22 11:18

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-23	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-23	

Timmins Rd STN (25G3312-03) | Matrix: Drinking Water | Sampled: 2025-07-22 11:34

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-23	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-23	

Smythe Dr Stn (25G3312-04) | Matrix: Drinking Water | Sampled: 2025-07-22 13:54

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-23	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-23	

Lawrence Dr Stn (25G3312-05) | Matrix: Drinking Water | Sampled: 2025-07-22 14:20

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-23	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-23	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25G3312
2025-07-28 11:16

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25G4266

RECEIVED / TEMP 2025-07-30 10:07 / 10.3°C

REPORTED 2025-08-07 16:15

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25G4266
2025-08-07 16:15

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Naramata Rd Stn (25G4266-01) | Matrix: Drinking Water | Sampled: 2025-07-29 11:48

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-30	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-30	

Wiltse School Blvd Stn (25G4266-02) | Matrix: Water | Sampled: 2025-07-29 13:24

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-30	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-30	

4300 Lakeside Dr STN (25G4266-03) | Matrix: Water | Sampled: 2025-07-29 13:44

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-30	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-30	

Lawrence Rd Stn (25G4266-04) | Matrix: Drinking Water | Sampled: 2025-07-29 14:39

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-30	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-30	

Ok Lake Pump House (25G4266-05) | Matrix: Water | Sampled: 2025-07-29 14:15

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-07-30	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-07-30	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25G4266
2025-08-07 16:15

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25H0514

RECEIVED / TEMP 2025-08-06 10:52 / 8.3°C

REPORTED 2025-08-12 12:43

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25H0514
2025-08-12 12:43

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Naramata Rd Stn (25H0514-01) | Matrix: Drinking Water | Sampled: 2025-08-05 11:23

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	

Wiltse School Blvd Stn (25H0514-02) | Matrix: Drinking Water | Sampled: 2025-08-05 13:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	

Timmins Rd STN (25H0514-03) | Matrix: Drinking Water | Sampled: 2025-08-05 13:10

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	

4300 Lakeside Rd STN (25H0514-04) | Matrix: Drinking Water | Sampled: 2025-08-05 14:19

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	

Gordon Ave Stn (25H0514-05) | Matrix: Drinking Water | Sampled: 2025-08-05 13:50

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	

Elm St Stn (25H0514-06) | Matrix: Drinking Water | Sampled: 2025-08-05 14:05

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	

Lawrence Ave Stn (25H0514-07) | Matrix: Drinking Water | Sampled: 2025-08-05 14:43

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-06	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25H0514
2025-08-12 12:43

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25H1720

RECEIVED / TEMP 2025-08-13 11:10 / 7.6°C

REPORTED 2025-08-19 09:09

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

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wavburne Drive Burnaby BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25H1720
2025-08-19 09:09

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Naramata Rd Stn (25H1720-01) | Matrix: Drinking Water | Sampled: 2025-08-12 10:45

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	

Randolph Rd Stn (25H1720-02) | Matrix: Drinking Water | Sampled: 2025-08-12 11:25

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	

OK Lake Pumphouse STN (25H1720-03) | Matrix: Drinking Water | Sampled: 2025-08-12 12:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	

Riverside Dr Stn (25H1720-04) | Matrix: Drinking Water | Sampled: 2025-08-12 12:20

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	

Community Centre (25H1720-05) | Matrix: Drinking Water | Sampled: 2025-08-12 13:05

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	

Carmi Ave Stn (25H1720-06) | Matrix: Drinking Water | Sampled: 2025-08-12 13:50

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	

1900 Penticton Ave (25H1720-07) | Matrix: Drinking Water | Sampled: 2025-08-12 14:35

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-13	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25H1720
2025-08-19 09:09

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25H2726

RECEIVED / TEMP 2025-08-20 10:04 / 4.4°C

REPORTED 2025-08-27 16:36

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25H2726
2025-08-27 16:36

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Naramata road STN (25H2726-01) Matrix: Drinking Water Sampled: 2025-08-19 08:57						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-20	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-20	
Valleyview STN (25H2726-02) Matrix: Water Sampled: 2025-08-19 09:11						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-20	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-20	
Timmins St STN (25H2726-03) Matrix: Water Sampled: 2025-08-19 09:30						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-20	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-20	
Smythe Drive STN (25H2726-04) Matrix: Water Sampled: 2025-08-19 10:47						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-20	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-20	
Gordon ave STN (25H2726-05) Matrix: Drinking Water Sampled: 2025-08-19 11:04						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-20	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-20	
Lawrence ave STN (25H2726-06) Matrix: Drinking Water Sampled: 2025-08-19 11:25						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-20	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-20	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25H2726
2025-08-27 16:36

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25H3786

RECEIVED / TEMP 2025-08-27 10:07 / 10.7°C

REPORTED 2025-09-02 13:59

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25H3786
2025-09-02 13:59

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Smythe Dr Stn (25H3786-01) | Matrix: Drinking Water | Sampled: 2025-08-26 07:45

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-27	HT3
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-27	HT3

Naramata Rd Stn (25H3786-02) | Matrix: Drinking Water | Sampled: 2025-08-26 08:55

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-27	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-27	

Bottle fill station RCMP (25H3786-03) | Matrix: Water | Sampled: 2025-08-26 11:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-27	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-27	

Valleyview Test Stn (25H3786-04) | Matrix: Drinking Water | Sampled: 2025-08-26 10:26

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-27	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-27	

Lawrence Ave Stn (25H3786-05) | Matrix: Drinking Water | Sampled: 2025-08-26 11:01

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-27	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-27	

Carmi Ave Stn (25H3786-06) | Matrix: Drinking Water | Sampled: 2025-08-26 10:50

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-08-27	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-08-27	

Sample Qualifiers:

HT3 Microbiological analysis was initiated beyond the maximum holding time of 30 hours. Results may not be valid.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25H3786
2025-09-02 13:59

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25I0186

RECEIVED / TEMP 2025-09-03 10:30 / 5.5°C

REPORTED 2025-09-11 17:00

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25I0186
2025-09-11 17:00

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Naramata Rd Stn (25I0186-01) Matrix: Drinking Water Sampled: 2025-09-02 10:55						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-03	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-03	
WWTP (25I0186-02) Matrix: Water Sampled: 2025-09-02 11:37						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-03	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-03	
Lawrence Ave Stn (25I0186-03) Matrix: Drinking Water Sampled: 2025-09-02 14:25						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-03	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-03	
Carmi Ave Stn (25I0186-04) Matrix: Drinking Water Sampled: 2025-09-02 14:40						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-03	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-03	
Elm St Stn (25I0186-05) Matrix: Drinking Water Sampled: 2025-09-02 15:05						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-03	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-03	
Valleyview Test Stn (25I0186-06) Matrix: Drinking Water Sampled: 2025-09-02 15:24						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-03	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-03	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 2510186
2025-09-11 17:00

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 2512412

RECEIVED / TEMP 2025-09-17 10:50 / 5.1°C

REPORTED 2025-09-24 15:38

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25I2412
2025-09-24 15:38

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Naramata Rd Stn (25I2412-01) | Matrix: Drinking Water | Sampled: 2025-09-16 10:53

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	

Ok Lake Pump Stn (25I2412-02) | Matrix: Drinking Water | Sampled: 2025-09-16 11:17

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	

Timmins St STN (25I2412-03) | Matrix: Drinking Water | Sampled: 2025-09-16 11:36

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	

Valleyview Test Stn (25I2412-04) | Matrix: Drinking Water | Sampled: 2025-09-16 12:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	

Smythe Dr Stn (25I2412-05) | Matrix: Drinking Water | Sampled: 2025-09-16 13:30

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	

Carmi Stn (25I2412-06) | Matrix: Drinking Water | Sampled: 2025-09-16 13:54

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	

Lawrence Ave Stn (25I2412-07) | Matrix: Drinking Water | Sampled: 2025-09-16 14:09

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-17	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 2512412
2025-09-24 15:38

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25I3361

RECEIVED / TEMP 2025-09-24 10:15 / 6.9°C

REPORTED 2025-09-25 14:54

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25I3361
2025-09-25 14:54

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Randolph Stn (25I3361-01) | Matrix: Drinking Water | Sampled: 2025-09-23 10:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	

OK Lake Pumphouse STN (25I3361-02) | Matrix: Drinking Water | Sampled: 2025-09-23 11:17

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	

City Hall (25I3361-03) | Matrix: Drinking Water | Sampled: 2025-09-23 11:45

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	

Riverside Dr Stn (25I3361-04) | Matrix: Drinking Water | Sampled: 2025-09-23 12:05

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	

Fairford Dr. STN (25I3361-05) | Matrix: Drinking Water | Sampled: 2025-09-23 12:35

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	

Wiltse School Stn (25I3361-06) | Matrix: Drinking Water | Sampled: 2025-09-23 12:52

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	

1900 Penticton Ave (25I3361-07) | Matrix: Drinking Water | Sampled: 2025-09-23 17:10

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-09-24	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 2513361
2025-09-25 14:54

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25J0047

RECEIVED / TEMP 2025-10-01 10:17 / 10.8°C

REPORTED 2025-10-08 16:51

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>

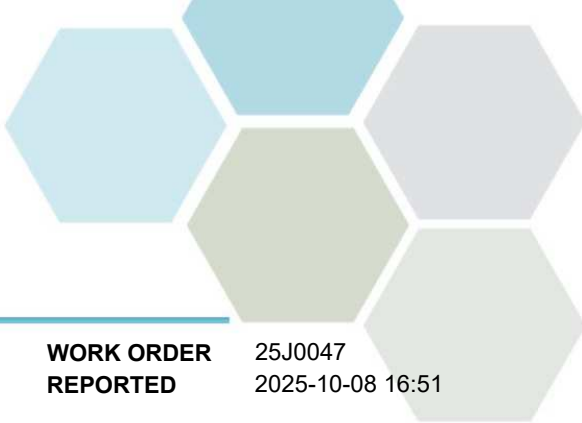
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25J0047 2025-10-08 16:51
----------------------------	---	----------------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Naramata Rd Stn (25J0047-01) | Matrix: Drinking Water | Sampled: 2025-09-30 10:15

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-01	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-01	

Carmi Ave Stn (25J0047-02) | Matrix: Drinking Water | Sampled: 2025-09-30 10:45

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-01	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-01	

Lawrence Ave Stn (25J0047-03) | Matrix: Drinking Water | Sampled: 2025-09-30 11:10

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-01	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-01	

Gordon Ave Stn (25J0047-04) | Matrix: Drinking Water | Sampled: 2025-09-30 11:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-01	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-01	

Elm St Stn (25J0047-05) | Matrix: Drinking Water | Sampled: 2025-09-30 14:30

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-01	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-01	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25J0047
2025-10-08 16:51

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25J1182

RECEIVED / TEMP 2025-10-08 10:10 / 8.4°C

REPORTED 2025-10-16 16:56

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>

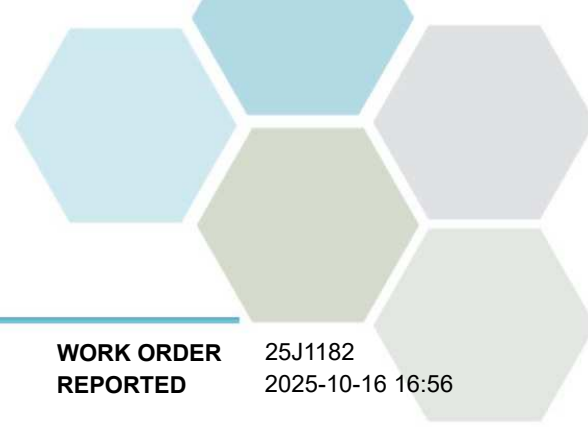
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25J1182
2025-10-16 16:56

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Naramata Test STN (25J1182-01) Matrix: Drinking Water Sampled: 2025-10-07 10:03						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-08	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-08	
OK Lake Pump STN (25J1182-02) Matrix: Drinking Water Sampled: 2025-10-07 10:28						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-08	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-08	
Riverside Drive STN (25J1182-03) Matrix: Drinking Water Sampled: 2025-10-07 10:43						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-08	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-08	
Gordon Ave STN (25J1182-04) Matrix: Drinking Water Sampled: 2025-10-07 11:35						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-08	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-08	
Wiltse School Blvd STN (25J1182-05) Matrix: Drinking Water Sampled: 2025-10-07 11:49						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-08	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-08	
Lawrence Ave Test STN (25J1182-06) Matrix: Drinking Water Sampled: 2025-10-07 12:18						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-08	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-08	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25J1182
2025-10-16 16:56

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25J2062

RECEIVED / TEMP 2025-10-15 11:35 / 10.4°C

REPORTED 2025-10-17 16:20

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

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wavburne Drive Burnaby BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25J2062
2025-10-17 16:20

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Smythe Dr Stn (25J2062-01) Matrix: Drinking Water Sampled: 2025-10-14 10:44						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-15	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-15	
Elm St Stn (25J2062-02) Matrix: Drinking Water Sampled: 2025-10-14 11:26						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-15	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-15	
Wiltse School Blvd Stn (25J2062-03) Matrix: Drinking Water Sampled: 2025-10-14 11:46						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-15	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-15	
Lawrence Ave Stn (25J2062-04) Matrix: Drinking Water Sampled: 2025-10-14 13:25						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-15	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-15	
Riverside Dr Stn (25J2062-05) Matrix: Drinking Water Sampled: 2025-10-14 14:00						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-15	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-15	
Naramata Rd Stn (25J2062-06) Matrix: Drinking Water Sampled: 2025-10-14 14:22						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-15	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-15	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25J2062
2025-10-17 16:20

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25J3013

RECEIVED / TEMP 2025-10-22 10:30 / 5.5°C

REPORTED 2025-10-29 17:24

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25J3013
2025-10-29 17:24

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Naramata rd sample STN (25J3013-01) | Matrix: Drinking Water | Sampled: 2025-10-21 10:16

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-22	

ok lake pump house (25J3013-02) | Matrix: Water | Sampled: 2025-10-21 11:12

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-22	

Community Center (25J3013-03) | Matrix: Drinking Water | Sampled: 2025-10-21 11:26

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-22	

RCMP - bottle STN (25J3013-04) | Matrix: Drinking Water | Sampled: 2025-10-21 10:52

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-22	

Gordon ave STN (25J3013-05) | Matrix: Drinking Water | Sampled: 2025-10-21 13:07

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-22	

Valley View sample STN (25J3013-06) | Matrix: Water | Sampled: 2025-10-21 13:43

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-22	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25J3013
2025-10-29 17:24

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25J4016

RECEIVED / TEMP 2025-10-29 10:43 / 7.0°C

REPORTED 2025-11-05 17:05

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>

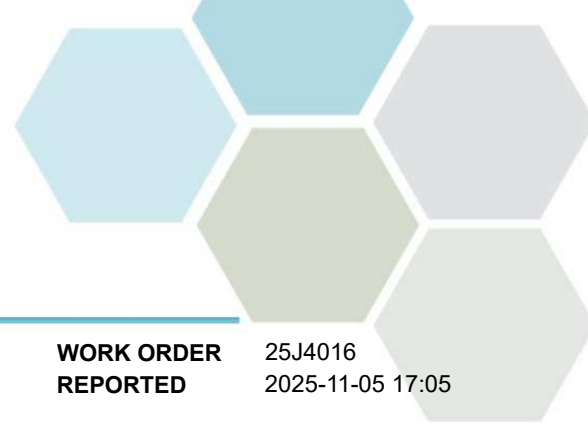
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25J4016
2025-11-05 17:05

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

City Yards (25J4016-01) | Matrix: Drinking Water | Sampled: 2025-10-28 11:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-29	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-29	

Valleyview STN (25J4016-02) | Matrix: Drinking Water | Sampled: 2025-10-28 11:34

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-29	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-29	

Gordon Pump STN (25J4016-03) | Matrix: Drinking Water | Sampled: 2025-10-28 11:53

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-29	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-29	

Lake Station (25J4016-04) | Matrix: Drinking Water | Sampled: 2025-10-28 13:23

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-29	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-29	

Lawrence STN (25J4016-05) | Matrix: Drinking Water | Sampled: 2025-10-28 14:25

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-10-29	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-10-29	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25J4016
2025-11-05 17:05

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25K0470

RECEIVED / TEMP 2025-11-05 10:45 / 7.9°C

REPORTED 2025-11-13 17:15

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25K0470
2025-11-13 17:15

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Valleyview STN (25K0470-01) | Matrix: Drinking Water | Sampled: 2025-11-04 10:18

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-05	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-05	

Gordon Ave STN (25K0470-02) | Matrix: Drinking Water | Sampled: 2025-11-04 10:40

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-05	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-05	

Lawrence Ave Stn (25K0470-03) | Matrix: Drinking Water | Sampled: 2025-11-04 11:03

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-05	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-05	

Naramata Rd Stn (25K0470-04) | Matrix: Drinking Water | Sampled: 2025-11-04 14:32

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-05	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-05	

1900 Penticton Ave (25K0470-05) | Matrix: Drinking Water | Sampled: 2025-11-04 15:37

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-05	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-05	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25K0470
2025-11-13 17:15

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25K1219

RECEIVED / TEMP 2025-11-12 11:00 / 7.5°C

REPORTED 2025-11-19 17:02

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25K1219
2025-11-19 17:02

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
1900 Penticton Ave (25K1219-01) Matrix: Drinking Water Sampled: 2025-11-11 10:42						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-12	
Randolph Stn (25K1219-02) Matrix: Drinking Water Sampled: 2025-11-11 11:28						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-12	
Lake Pump Station (25K1219-03) Matrix: Drinking Water Sampled: 2025-11-11 11:48						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-12	
1946 Harris Dr (25K1219-04) Matrix: Drinking Water Sampled: 2025-11-11 13:42						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-12	
Gordon STN (25K1219-05) Matrix: Drinking Water Sampled: 2025-11-11 14:46						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-12	
Carmi Stn (25K1219-06) Matrix: Drinking Water Sampled: 2025-11-11 15:25						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-12	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-12	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25K1219
2025-11-19 17:02

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25K2996

RECEIVED / TEMP 2025-11-26 10:10 / 3.1°C

REPORTED 2025-12-03 16:13

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>

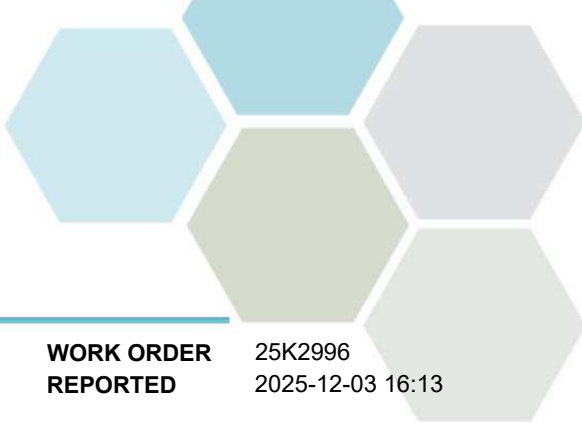
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Drinking Water	WORK ORDER REPORTED	25K2996 2025-12-03 16:13
----------------------------	---	----------------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Naramata ave test STN (25K2996-01) | Matrix: Drinking Water | Sampled: 2025-11-25 09:38

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-26	

Lawrence ave test STN (25K2996-02) | Matrix: Drinking Water | Sampled: 2025-11-25 10:16

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-26	

Smythe dr sample STN (25K2996-03) | Matrix: Drinking Water | Sampled: 2025-11-25 10:58

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-26	

Valleyview Test STN (25K2996-04) | Matrix: Drinking Water | Sampled: 2025-11-25 11:21

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-11-26	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-11-26	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25K2996
2025-12-03 16:13

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25L0417

RECEIVED / TEMP 2025-12-03 10:20 / 9.8°C

REPORTED 2025-12-10 17:21

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25L0417
2025-12-10 17:21

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Randolph Rd STN (25L0417-01) | Matrix: Drinking Water | Sampled: 2025-12-02 13:35

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-03	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-03	

Naramata Rd STN (25L0417-02) | Matrix: Drinking Water | Sampled: 2025-12-02 14:00

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-03	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-03	

OK Lake Pumphouse STN (25L0417-03) | Matrix: Drinking Water | Sampled: 2025-12-02 15:50

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-03	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-03	

Riverside Dr. STN (25L0417-04) | Matrix: Drinking Water | Sampled: 2025-12-02 16:20

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-03	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-03	

Timmins St. STN (25L0417-05) | Matrix: Drinking Water | Sampled: 2025-12-02 16:45

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-03	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-03	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25L0417
2025-12-10 17:21

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Regional District of Okanagan Similkameen
101 Martin Street
Penticton, BC V2A 5J9

ATTENTION Rob Palmer

PO NUMBER 20259001- West Bench

PROJECT West Bench

PROJECT INFO

WORK ORDER 25L1149

RECEIVED / TEMP 2025-12-09 10:15 / 9.0°C

REPORTED 2025-12-11 09:45

COC NUMBER eCOC#00030674

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks



You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry



It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve



Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

Work Order Comments:

Custody Seals Intact: N/A

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

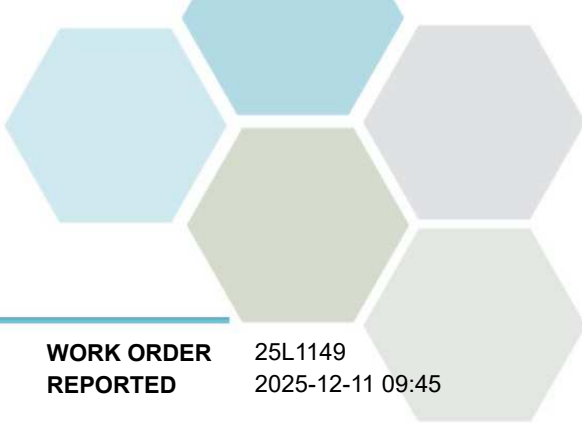
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Regional District of Okanagan Similkameen West Bench	WORK ORDER REPORTED	25L1149 2025-12-11 09:45
---------------------	---	---------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Hyslop Dr. (25L1149-01) | Matrix: Drinking Water | Sampled: 2025-12-08 10:50

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-09	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-09	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Regional District of Okanagan Similkameen
West Bench

WORK ORDER REPORTED 25L1149
2025-12-11 09:45

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25L1396

RECEIVED / TEMP 2025-12-10 10:00 / 11.8°C

REPORTED 2025-12-17 16:17

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25L1396
2025-12-17 16:17

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
WWTP (25L1396-01) Matrix: Water Sampled: 2025-12-09 14:10						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-10	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-10	
Valleyview STN (25L1396-02) Matrix: Drinking Water Sampled: 2025-12-09 16:15						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-10	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-10	
Gordon Ave STN (25L1396-03) Matrix: Drinking Water Sampled: 2025-12-09 15:35						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-10	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-10	
Wiltse School STN (25L1396-04) Matrix: Drinking Water Sampled: 2025-12-09 15:15						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-10	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-10	
1900 Penticton Ave (25L1396-05) Matrix: Drinking Water Sampled: 2025-12-09 17:20						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-10	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-10	
Lawrence Ave STN (25L1396-06) Matrix: Drinking Water Sampled: 2025-12-09 16:45						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-10	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-10	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25L1396
2025-12-17 16:17

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25L2237

RECEIVED / TEMP 2025-12-17 10:30 / 8.5°C

REPORTED 2025-12-24 10:33

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25L2237
2025-12-24 10:33

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
City Yards (25L2237-01) Matrix: Drinking Water Sampled: 2025-12-16 15:15						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-17	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-17	
Gordon Ave Stn (25L2237-02) Matrix: Drinking Water Sampled: 2025-12-16 15:33						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-17	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-17	
4300 Lakeside Rd (25L2237-03) Matrix: Drinking Water Sampled: 2025-12-16 15:54						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-17	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-17	
Lawrence Ave Test Stn (25L2237-04) Matrix: Drinking Water Sampled: 2025-12-16 16:21						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-17	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-17	
OK lake pump Stn (25L2237-05) Matrix: Drinking Water Sampled: 2025-12-16 16:47						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-17	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-17	
1900 Penticton Ave (25L2237-06) Matrix: Drinking Water Sampled: 2025-12-16 17:19						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-17	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-17	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25L2237
2025-12-24 10:33

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna

Note: An asterisk in the Method Reference indicates that the 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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Drinking Water

PROJECT INFO 0590-22

WORK ORDER 25L2640

RECEIVED / TEMP 2025-12-22 10:25 / 7.8°C

REPORTED 2025-12-31 12:49

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25L2640
2025-12-31 12:49

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Carmi Stn (25L2640-01) Matrix: Drinking Water Sampled: 2025-12-21 10:34						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-22	
Lawrence Ave Stn (25L2640-02) Matrix: Drinking Water Sampled: 2025-12-21 10:54						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-22	
Randolph Stn (25L2640-03) Matrix: Drinking Water Sampled: 2025-12-21 11:20						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-22	
Lake Station (25L2640-04) Matrix: Drinking Water Sampled: 2025-12-21 11:45						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-22	
Valleyview Stn (25L2640-05) Matrix: Drinking Water Sampled: 2025-12-21 14:21						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-22	
4300 Lakeside Rd (25L2640-06) Matrix: Drinking Water Sampled: 2025-12-21 14:43						
<i>Microbiological Parameters</i>						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-22	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-22	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Drinking Water

WORK ORDER REPORTED 25L2640
2025-12-31 12:49

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna

Note: An asterisk in the Method Reference indicates that the 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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Regional District of Okanagan Similkameen
101 Martin Street
Penticton, BC V2A 5J9

ATTENTION Rob Palmer

PO NUMBER 20259001- West Bench

PROJECT West Bench

PROJECT INFO

WORK ORDER 25L3113

RECEIVED / TEMP 2025-12-30 12:30 / 7.5°C

REPORTED 2026-01-05 11:46

COC NUMBER eCOC#00031095

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks



You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry



It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve



Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

Work Order Comments:

Custody Seals Intact: N/A

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

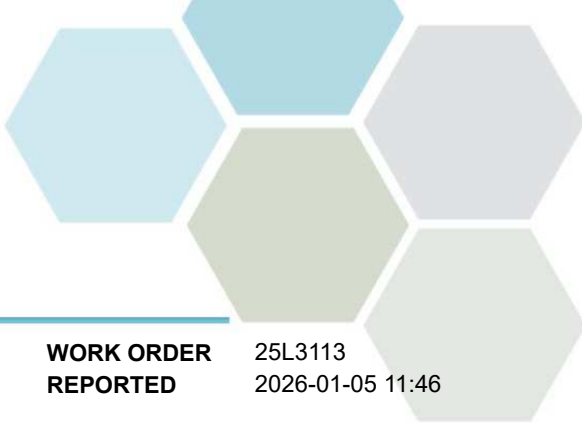
If you have any questions or concerns, please contact me at hhannaoui@caro.ca

Authorized By:

Hanane El Hannaoui
Junior Account Manager

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4



TEST RESULTS

REPORTED TO PROJECT	Regional District of Okanagan Similkameen West Bench	WORK ORDER REPORTED	25L3113 2026-01-05 11:46
---------------------	---	---------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Hyslop Dr. (25L3113-01) | Matrix: Drinking Water | Sampled: 2025-12-30 09:50

Microbiological Parameters

Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2025-12-31	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2025-12-31	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Regional District of Okanagan Similkameen
West Bench

WORK ORDER REPORTED 25L3113
2026-01-05 11:46

Analysis Description	Method Ref.	Technique	Accredited	Location
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna

Note: An asterisk in the Method Reference indicates that the 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
CFU/100 mL	Colony Forming Units per 100 millilitres
MAC	Maximum Acceptable Concentration (health based)
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Quarterly Samples

PROJECT INFO OPR178-025

WORK ORDER 25B1323

RECEIVED / TEMP 2025-02-12 10:09 / 5.9°C

REPORTED 2025-02-21 13:56

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

PRV Station (25B1323-01) | Matrix: Water | Sampled: 2025-02-12 06:30

Anions

Chloride	8.53	AO ≤ 250	0.10	mg/L	2025-02-14	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2025-02-14	
Nitrate (as N)	0.056	MAC = 10	0.010	mg/L	2025-02-14	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-02-14	
Sulfate	22.6	AO ≤ 500	1.0	mg/L	2025-02-14	

Calculated Parameters

Total Trihalomethanes	0.0409	MAC = 0.1	0.00400	mg/L	N/A	
Hardness, Total (as CaCO ₃)	94.6	None Required	0.500	mg/L	N/A	
Langelier Index	-0.8	N/A	-5.0		2025-02-19	CT6
Nitrogen, Organic	0.271	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	127	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	81.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Bicarbonate (as CaCO ₃)	81.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-02-18	
Carbon, Total Organic	5.79	N/A	0.50	mg/L	2025-02-14	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-02-14	
Conductivity (EC)	243	N/A	2.0	µS/cm	2025-02-14	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-02-15	
Nitrogen, Total Kjeldahl	0.271	N/A	0.050	mg/L	2025-02-18	
pH	7.48	7.0-10.5	0.10	pH units	2025-02-14	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-02-14	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-02-18	
Temperature, at pH	21.4	N/A		°C	2025-02-14	HT2
Turbidity	0.18	OG < 1	0.10	NTU	2025-02-13	
UV Transmittance @ 254 nm - Unfiltered	92.9	N/A	0.10	% T	2025-02-14	

Haloacetic Acids

Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Dichloroacetic Acid	0.0171	N/A	0.0020	mg/L	2025-02-20	
Trichloroacetic Acid	0.0154	N/A	0.0020	mg/L	2025-02-20	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Total Haloacetic Acids (HAA5)	0.0325	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	92		70-130	%	2025-02-20	

Total Metals

Aluminum, total	0.0111	OG < 0.1	0.0050	mg/L	2025-02-15	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-02-15	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

PRV Station (25B1323-01) | Matrix: Water | Sampled: 2025-02-12 06:30, Continued

Total Metals, Continued

Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-02-15	
Barium, total	0.0177	MAC = 2	0.0050	mg/L	2025-02-15	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-02-15	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-02-15	
Calcium, total	25.9	None Required	0.20	mg/L	2025-02-15	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-15	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-02-15	
Copper, total	< 0.00040	MAC = 2	0.00040	mg/L	2025-02-15	
Iron, total	< 0.010	AO ≤ 0.3	0.010	mg/L	2025-02-15	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-02-15	
Magnesium, total	7.22	None Required	0.010	mg/L	2025-02-15	
Manganese, total	0.00085	MAC = 0.12	0.00020	mg/L	2025-02-15	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-02-15	HG1
Molybdenum, total	0.00263	N/A	0.00010	mg/L	2025-02-15	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-02-15	
Potassium, total	1.80	N/A	0.10	mg/L	2025-02-15	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-15	
Sodium, total	11.1	AO ≤ 200	0.10	mg/L	2025-02-15	
Strontium, total	0.216	MAC = 7	0.0010	mg/L	2025-02-15	
Uranium, total	0.000083	MAC = 0.02	0.000020	mg/L	2025-02-15	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-02-15	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0029	N/A	0.0010	mg/L	2025-02-15	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Chloroform	0.0379	N/A	0.0010	mg/L	2025-02-15	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Surrogate: Toluene-d8	91		70-130	%	2025-02-15	
Surrogate: 4-Bromofluorobenzene	74		70-130	%	2025-02-15	

Carmi Pump Station (25B1323-02) | Matrix: Water | Sampled: 2025-02-11 13:50

Anions

Chloride	8.48	AO ≤ 250	0.10	mg/L	2025-02-14	
Fluoride	0.11	MAC = 1.5	0.10	mg/L	2025-02-14	
Nitrate (as N)	0.053	MAC = 10	0.010	mg/L	2025-02-14	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-02-14	
Sulfate	22.6	AO ≤ 500	1.0	mg/L	2025-02-14	

Calculated Parameters

Hardness, Total (as CaCO3)	95.4	None Required	0.500	mg/L	N/A	
Langelier Index	-0.7	N/A	-5.0		2025-02-19	CT6
Nitrogen, Organic	0.292	N/A	0.0500	mg/L	N/A	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Carmi Pump Station (25B1323-02) | Matrix: Water | Sampled: 2025-02-11 13:50, Continued

Calculated Parameters, Continued

Solids, Total Dissolved	127	AO ≤ 500	1.00	mg/L	N/A	
-------------------------	-----	----------	------	------	-----	--

General Parameters

Alkalinity, Total (as CaCO ₃)	80.1	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Bicarbonate (as CaCO ₃)	80.1	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-02-18	
Carbon, Total Organic	4.90	N/A	0.50	mg/L	2025-02-14	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-02-14	
Conductivity (EC)	237	N/A	2.0	µS/cm	2025-02-14	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-02-15	
Nitrogen, Total Kjeldahl	0.292	N/A	0.050	mg/L	2025-02-18	
pH	7.55	7.0-10.5	0.10	pH units	2025-02-14	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-02-14	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-02-18	
Temperature, at pH	19.9	N/A		°C	2025-02-14	HT2
Turbidity	0.65	OG < 1	0.10	NTU	2025-02-13	
UV Transmittance @ 254 nm - Unfiltered	92.4	N/A	0.10	% T	2025-02-14	

Total Metals

Aluminum, total	0.0110	OG < 0.1	0.0050	mg/L	2025-02-14	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-02-14	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-02-14	
Barium, total	0.0172	MAC = 2	0.0050	mg/L	2025-02-14	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-02-14	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-02-14	
Calcium, total	26.0	None Required	0.20	mg/L	2025-02-14	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-14	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-02-14	
Copper, total	0.00174	MAC = 2	0.00040	mg/L	2025-02-14	
Iron, total	0.032	AO ≤ 0.3	0.010	mg/L	2025-02-14	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-02-14	
Magnesium, total	7.39	None Required	0.010	mg/L	2025-02-14	
Manganese, total	0.00109	MAC = 0.12	0.00020	mg/L	2025-02-14	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-02-14	HG1
Molybdenum, total	0.00267	N/A	0.00010	mg/L	2025-02-14	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-02-14	
Potassium, total	1.96	N/A	0.10	mg/L	2025-02-14	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-14	
Sodium, total	11.7	AO ≤ 200	0.10	mg/L	2025-02-14	
Strontium, total	0.214	MAC = 7	0.0010	mg/L	2025-02-14	
Uranium, total	0.000110	MAC = 0.02	0.000020	mg/L	2025-02-14	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Carmi Pump Station (25B1323-02) Matrix: Water Sampled: 2025-02-11 13:50, Continued						
<i>Total Metals, Continued</i>						
Zinc, total	0.0061	AO ≤ 5	0.0040	mg/L	2025-02-14	

Smythe Dr. Sample Stn (25B1323-03) | Matrix: Water | Sampled: 2025-02-11 13:30

<i>Calculated Parameters</i>						
Total Trihalomethanes	0.0774	MAC = 0.1	0.00400	mg/L	N/A	
<i>Haloacetic Acids</i>						
Monochloroacetic Acid	0.0025	N/A	0.0020	mg/L	2025-02-20	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Dichloroacetic Acid	0.0259	N/A	0.0020	mg/L	2025-02-20	
Trichloroacetic Acid	0.0259	N/A	0.0020	mg/L	2025-02-20	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Total Haloacetic Acids (HAA5)	0.0542	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	98		70-130	%	2025-02-20	
<i>Volatile Organic Compounds (VOC)</i>						
Bromodichloromethane	0.0053	N/A	0.0010	mg/L	2025-02-15	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Chloroform	0.0721	N/A	0.0010	mg/L	2025-02-15	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Surrogate: Toluene-d8	88		70-130	%	2025-02-15	
Surrogate: 4-Bromofluorobenzene	75		70-130	%	2025-02-15	

Randolph Rd Station (25B1323-04) | Matrix: Water | Sampled: 2025-02-11 14:10

<i>Calculated Parameters</i>						
Total Trihalomethanes	0.0556	MAC = 0.1	0.00400	mg/L	N/A	
<i>Haloacetic Acids</i>						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Dichloroacetic Acid	0.0221	N/A	0.0020	mg/L	2025-02-20	
Trichloroacetic Acid	0.0228	N/A	0.0020	mg/L	2025-02-20	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Total Haloacetic Acids (HAA5)	0.0450	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	89		70-130	%	2025-02-20	
<i>Volatile Organic Compounds (VOC)</i>						
Bromodichloromethane	0.0042	N/A	0.0010	mg/L	2025-02-15	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Chloroform	0.0514	N/A	0.0010	mg/L	2025-02-15	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Surrogate: Toluene-d8	80		70-130	%	2025-02-15	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Randolph Rd Station (25B1323-04) | Matrix: Water | Sampled: 2025-02-11 14:10, Continued

Volatile Organic Compounds (VOC), Continued

Surrogate: 4-Bromofluorobenzene	62		70-130	%	2025-02-15	S02
---------------------------------	----	--	--------	---	------------	-----

Naramata Rd Sample Stn (25B1323-05) | Matrix: Water | Sampled: 2025-02-11 14:30

Calculated Parameters

Total Trihalomethanes	0.0744	MAC = 0.1	0.00400	mg/L	N/A	
-----------------------	--------	-----------	---------	------	-----	--

Haloacetic Acids

Monochloroacetic Acid	0.0024	N/A	0.0020	mg/L	2025-02-20	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Dichloroacetic Acid	0.0249	N/A	0.0020	mg/L	2025-02-20	
Trichloroacetic Acid	0.0291	N/A	0.0020	mg/L	2025-02-20	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-02-20	
Total Haloacetic Acids (HAA5)	0.0564	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	100		70-130	%	2025-02-20	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0053	N/A	0.0010	mg/L	2025-02-15	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Chloroform	0.0691	N/A	0.0010	mg/L	2025-02-15	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-02-15	
Surrogate: Toluene-d8	79		70-130	%	2025-02-15	
Surrogate: 4-Bromofluorobenzene	63		70-130	%	2025-02-15	S02

Okanagan Lake Sample Tap (25B1323-06) | Matrix: Water | Sampled: 2025-02-12 06:30

Anions

Chloride	6.06	AO ≤ 250	0.10	mg/L	2025-02-14	
Fluoride	0.11	MAC = 1.5	0.10	mg/L	2025-02-14	
Nitrate (as N)	0.064	MAC = 10	0.010	mg/L	2025-02-14	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-02-14	
Sulfate	31.4	AO ≤ 500	1.0	mg/L	2025-02-14	

Calculated Parameters

Hardness, Total (as CaCO3)	128	None Required	0.500	mg/L	N/A	
Langelier Index	-0.2	N/A	-5.0		2025-02-19	CT6
Nitrogen, Organic	0.340	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	163	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO3)	107	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Bicarbonate (as CaCO3)	107	N/A	1.0	mg/L	2025-02-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-02-14	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Okanagan Lake Sample Tap (25B1323-06) | Matrix: Water | Sampled: 2025-02-12 06:30, Continued

General Parameters, Continued

Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-02-14	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-02-18	
Carbon, Total Organic	5.88	N/A	0.50	mg/L	2025-02-14	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-02-14	
Conductivity (EC)	297	N/A	2.0	µS/cm	2025-02-14	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-02-15	
Nitrogen, Total Kjeldahl	0.340	N/A	0.050	mg/L	2025-02-18	
pH	7.87	7.0-10.5	0.10	pH units	2025-02-14	HT2
Phosphorus, Total (as P)	0.0150	N/A	0.0050	mg/L	2025-02-14	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-02-18	
Temperature, at pH	19.5	N/A		°C	2025-02-14	HT2
Turbidity	0.31	OG < 1	0.10	NTU	2025-02-13	
UV Transmittance @ 254 nm - Unfiltered	86.7	N/A	0.10	% T	2025-02-14	

Total Metals

Aluminum, total	0.0082	OG < 0.1	0.0050	mg/L	2025-02-14	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-02-14	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-02-14	
Barium, total	0.0225	MAC = 2	0.0050	mg/L	2025-02-14	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-02-14	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-02-14	
Calcium, total	34.7	None Required	0.20	mg/L	2025-02-14	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-14	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-02-14	
Copper, total	0.00278	MAC = 2	0.00040	mg/L	2025-02-14	
Iron, total	< 0.010	AO ≤ 0.3	0.010	mg/L	2025-02-14	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-02-14	
Magnesium, total	10.0	None Required	0.010	mg/L	2025-02-14	
Manganese, total	0.00070	MAC = 0.12	0.00020	mg/L	2025-02-14	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-02-14	HG1
Molybdenum, total	0.00357	N/A	0.00010	mg/L	2025-02-14	
Nickel, total	0.00048	N/A	0.00040	mg/L	2025-02-14	
Potassium, total	2.57	N/A	0.10	mg/L	2025-02-14	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-14	
Sodium, total	12.6	AO ≤ 200	0.10	mg/L	2025-02-14	
Strontium, total	0.286	MAC = 7	0.0010	mg/L	2025-02-14	
Uranium, total	0.00248	MAC = 0.02	0.000020	mg/L	2025-02-14	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-02-14	

Penticton Creek Sample Tap (25B1323-07) | Matrix: Water | Sampled: 2025-02-12 06:40

Anions

Chloride	0.37	AO ≤ 250	0.10	mg/L	2025-02-14	
----------	-------------	----------	------	------	------------	--

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
---------	--------	-----------	----------	----------	-----------

Penticton Creek Sample Tap (25B1323-07) | Matrix: Water | Sampled: 2025-02-12 06:40, Continued

Anions, Continued

Fluoride	< 0.10	MAC = 1.5	0.10 mg/L	2025-02-14	
Nitrate (as N)	0.017	MAC = 10	0.010 mg/L	2025-02-14	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-02-14	
Sulfate	1.6	AO ≤ 500	1.0 mg/L	2025-02-14	

Calculated Parameters

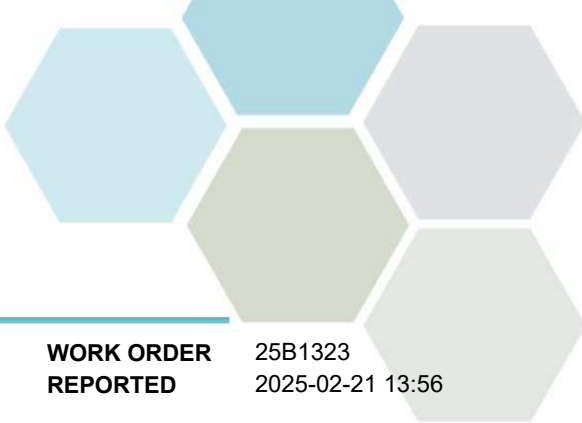
Hardness, Total (as CaCO ₃)	15.2	None Required	0.500 mg/L	N/A	
Langelier Index	-3.3	N/A	-5.0	2025-02-19	CT6
Nitrogen, Organic	0.319	N/A	0.0500 mg/L	N/A	
Solids, Total Dissolved	14.4	AO ≤ 500	1.00 mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	6.7	N/A	1.0 mg/L	2025-02-14	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0 mg/L	2025-02-14	
Alkalinity, Bicarbonate (as CaCO ₃)	6.7	N/A	1.0 mg/L	2025-02-14	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0 mg/L	2025-02-14	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0 mg/L	2025-02-14	
Ammonia, Total (as N)	< 0.050	None Required	0.050 mg/L	2025-02-18	
Carbon, Total Organic	7.20	N/A	0.50 mg/L	2025-02-14	
Colour, True	30	AO ≤ 15	5.0 CU	2025-02-14	
Conductivity (EC)	41.8	N/A	2.0 µS/cm	2025-02-14	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020 mg/L	2025-02-15	
Nitrogen, Total Kjeldahl	0.319	N/A	0.050 mg/L	2025-02-18	
pH	6.69	7.0-10.5	0.10 pH units	2025-02-14	HT2
Phosphorus, Total (as P)	0.0098	N/A	0.0050 mg/L	2025-02-14	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020 mg/L	2025-02-18	
Temperature, at pH	19.7	N/A	°C	2025-02-14	HT2
Turbidity	1.13	OG < 1	0.10 NTU	2025-02-13	
UV Transmittance @ 254 nm - Unfiltered	62.5	N/A	0.10 % T	2025-02-14	

Total Metals

Aluminum, total	0.0948	OG < 0.1	0.0050 mg/L	2025-02-14	
Antimony, total	< 0.00020	MAC = 0.006	0.00020 mg/L	2025-02-14	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050 mg/L	2025-02-14	
Barium, total	0.0060	MAC = 2	0.0050 mg/L	2025-02-14	
Boron, total	< 0.0500	MAC = 5	0.0500 mg/L	2025-02-14	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010 mg/L	2025-02-14	
Calcium, total	4.32	None Required	0.20 mg/L	2025-02-14	
Chromium, total	< 0.00050	MAC = 0.05	0.00050 mg/L	2025-02-14	
Cobalt, total	< 0.00010	N/A	0.00010 mg/L	2025-02-14	
Copper, total	0.00129	MAC = 2	0.00040 mg/L	2025-02-14	
Iron, total	0.451	AO ≤ 0.3	0.010 mg/L	2025-02-14	
Lead, total	< 0.00020	MAC = 0.005	0.00020 mg/L	2025-02-14	
Magnesium, total	1.08	None Required	0.010 mg/L	2025-02-14	



TEST RESULTS

REPORTED TO PROJECT	Penticton, City of - DW & STP Quarterly Samples	WORK ORDER REPORTED	25B1323 2025-02-21 13:56
---------------------	--	---------------------	-----------------------------

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Penticton Creek Sample Tap (25B1323-07) | Matrix: Water | Sampled: 2025-02-12 06:40, Continued

Total Metals, Continued

Manganese, total	0.00542	MAC = 0.12	0.00020	mg/L	2025-02-14	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-02-14	HG1
Molybdenum, total	0.00057	N/A	0.00010	mg/L	2025-02-14	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-02-14	
Potassium, total	0.49	N/A	0.10	mg/L	2025-02-14	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-02-14	
Sodium, total	2.38	AO ≤ 200	0.10	mg/L	2025-02-14	
Strontium, total	0.0474	MAC = 7	0.0010	mg/L	2025-02-14	
Uranium, total	0.000472	MAC = 0.02	0.000020	mg/L	2025-02-14	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-02-14	

Sample Qualifiers:

CT6	Results were based on lab temperature & lab pH.
HG1	Sample bottle and preservation submitted is not suitable for Mercury analysis and analyte stability may be affected.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
S02	Surrogate recovery outside of control limits. Data accepted based on acceptable recovery of other surrogates.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

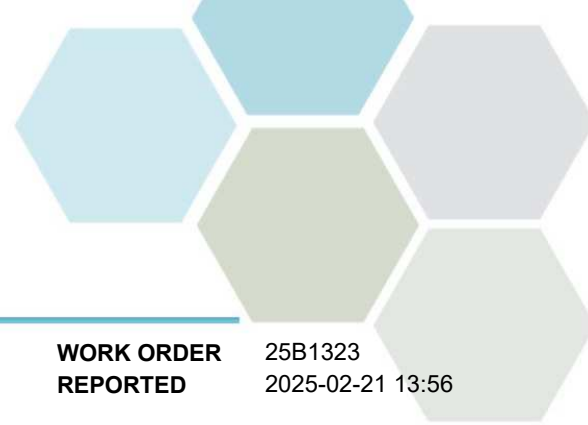
WORK ORDER REPORTED 25B1323
2025-02-21 13:56

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Carbon, Total Organic in Water	SM 5310 B (2022)	Combustion, Infrared CO2 Detection	✓	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	ASTM D7511-12	Flow Injection with In-Line UV Digestion and Amperometry	✓	Kelowna
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
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
Nitrogen, Total Kjeldahl in Water	SM 4500-Norg D* (2021)	Block Digestion and Flow Injection Analysis	✓	Kelowna
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Phosphorus, Total in Water	SM 4500-P B.5* (2011) / SM 4500-P F (2021)	Persulfate Digestion / Automated Colorimetry (Ascorbic Acid)	✓	Kelowna
Solids, Total Dissolved in Water	SM 1030 E (2021)	SM 1030 E		N/A
Sulfide, Total in Water	SM 4500-S2 D* (2021)	Colorimetry (Methylene Blue)	✓	Edmonton
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Transmittance at 254 nm - Unfiltered in Water	SM 5910 B* (2021)	Ultraviolet Absorption	✓	Kelowna
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	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)
% T	Percent Transmittance
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
AO	Aesthetic Objective
CU	Colour Units (referenced against a platinum cobalt standard)
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
ASTM	ASTM International Test Methods
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO Penticton, City of - DW & STP
PROJECT Quarterly Samples

WORK ORDER 25B1323
REPORTED 2025-02-21 13:56

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Quarterly Samples

PROJECT INFO OPR178-025

WORK ORDER 25E4021

RECEIVED / TEMP 2025-05-28 11:10 / 7.9°C

REPORTED 2025-06-06 12:13

COC NUMBER B112233

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Penticton Creek (25E4021-01) | Matrix: Water | Sampled: 2025-05-27

Anions

Chloride	0.16	AO ≤ 250	0.10	mg/L	2025-05-29	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2025-05-29	
Nitrate (as N)	0.012	MAC = 10	0.010	mg/L	2025-05-29	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-05-29	
Sulfate	< 1.0	AO ≤ 500	1.0	mg/L	2025-05-29	

Calculated Parameters

Hardness, Total (as CaCO ₃)	6.70	None Required	0.500	mg/L	N/A	
Langelier Index	-4.1	N/A	-5.0		2025-06-04	CT6
Nitrogen, Organic	0.271	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	5.09	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	1.8	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Bicarbonate (as CaCO ₃)	1.8	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-05-30	
Carbon, Total Organic	9.85	N/A	0.50	mg/L	2025-05-30	
Colour, True	57	AO ≤ 15	5.0	CU	2025-05-30	
Conductivity (EC)	21.4	N/A	2.0	µS/cm	2025-06-02	
Cyanide, Total	0.0027	MAC = 0.2	0.0020	mg/L	2025-06-01	
Nitrogen, Total Kjeldahl	0.271	N/A	0.050	mg/L	2025-06-03	
pH	6.73	7.0-10.5	0.10	pH units	2025-06-02	HT2
Phosphorus, Total (as P)	0.0118	N/A	0.0050	mg/L	2025-06-04	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-06-03	
Temperature, at pH	22.3	N/A		°C	2025-06-02	HT2
Turbidity	1.32	OG < 1	0.10	NTU	2025-05-30	
UV Transmittance @ 254 nm - Unfiltered	33.7	N/A	0.10	% T	2025-05-30	

Total Metals

Aluminum, total	0.337	OG < 0.1	0.0050	mg/L	2025-06-03	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-06-03	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-06-03	
Barium, total	0.0059	MAC = 2	0.0050	mg/L	2025-06-03	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-06-03	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-06-03	
Calcium, total	2.06	None Required	0.20	mg/L	2025-06-03	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-06-03	
Copper, total	0.00375	MAC = 2	0.00040	mg/L	2025-06-03	
Iron, total	0.273	AO ≤ 0.1	0.010	mg/L	2025-06-03	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-06-03	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Penticton Creek (25E4021-01) | Matrix: Water | Sampled: 2025-05-27, Continued

Total Metals, Continued

Magnesium, total	0.374	None Required	0.010	mg/L	2025-06-03	
Manganese, total	0.00824	MAC = 0.12	0.00020	mg/L	2025-06-03	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-06-03	HG1
Molybdenum, total	0.00021	N/A	0.00010	mg/L	2025-06-03	
Nickel, total	0.00077	N/A	0.00040	mg/L	2025-06-03	
Potassium, total	0.25	N/A	0.10	mg/L	2025-06-03	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Sodium, total	1.12	AO ≤ 200	0.10	mg/L	2025-06-03	
Strontium, total	0.0277	MAC = 7	0.0010	mg/L	2025-06-03	
Uranium, total	0.000328	MAC = 0.02	0.000020	mg/L	2025-06-03	
Zinc, total	0.0044	AO ≤ 5	0.0040	mg/L	2025-06-03	

Wiltse Blvd Stn (25E4021-02) | Matrix: Water | Sampled: 2025-05-27

Anions

Chloride	10.3	AO ≤ 250	0.10	mg/L	2025-05-29	
Fluoride	0.16	MAC = 1.5	0.10	mg/L	2025-05-29	
Nitrate (as N)	0.028	MAC = 10	0.010	mg/L	2025-05-29	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-05-29	
Sulfate	29.3	AO ≤ 500	1.0	mg/L	2025-05-29	

Calculated Parameters

Hardness, Total (as CaCO ₃)	120	None Required	0.500	mg/L	N/A	
Langelier Index	-0.09	N/A	-5.0		2025-06-04	CT6
Nitrogen, Organic	0.114	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	160	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	102	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Bicarbonate (as CaCO ₃)	102	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-05-30	
Carbon, Total Organic	2.93	N/A	0.50	mg/L	2025-05-30	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-05-30	
Conductivity (EC)	305	N/A	2.0	µS/cm	2025-06-02	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-06-01	
Nitrogen, Total Kjeldahl	0.114	N/A	0.050	mg/L	2025-06-03	
pH	7.94	7.0-10.5	0.10	pH units	2025-06-02	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-06-04	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-06-03	
Temperature, at pH	22.3	N/A		°C	2025-06-02	HT2

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Wiltse Blvd Stn (25E4021-02) | Matrix: Water | Sampled: 2025-05-27, Continued

General Parameters, Continued

Turbidity	0.11	OG < 1	0.10	NTU	2025-05-30	
UV Transmittance @ 254 nm - Unfiltered	94.3	N/A	0.10	% T	2025-05-30	

Total Metals

Aluminum, total	0.0141	OG < 0.1	0.0050	mg/L	2025-06-03	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-06-03	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-06-03	
Barium, total	0.0221	MAC = 2	0.0050	mg/L	2025-06-03	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-06-03	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-06-03	
Calcium, total	33.2	None Required	0.20	mg/L	2025-06-03	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-06-03	
Copper, total	0.0162	MAC = 2	0.00040	mg/L	2025-06-03	
Iron, total	< 0.010	AO ≤ 0.1	0.010	mg/L	2025-06-03	
Lead, total	0.00023	MAC = 0.005	0.00020	mg/L	2025-06-03	
Magnesium, total	8.97	None Required	0.010	mg/L	2025-06-03	
Manganese, total	0.00038	MAC = 0.12	0.00020	mg/L	2025-06-03	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-06-03	HG1
Molybdenum, total	0.00330	N/A	0.00010	mg/L	2025-06-03	
Nickel, total	0.00049	N/A	0.00040	mg/L	2025-06-03	
Potassium, total	2.37	N/A	0.10	mg/L	2025-06-03	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Sodium, total	13.5	AO ≤ 200	0.10	mg/L	2025-06-03	
Strontium, total	0.310	MAC = 7	0.0010	mg/L	2025-06-03	
Uranium, total	0.000168	MAC = 0.02	0.000020	mg/L	2025-06-03	
Zinc, total	0.0075	AO ≤ 5	0.0040	mg/L	2025-06-03	

Randolph Rd Stn (25E4021-03) | Matrix: Water | Sampled: 2025-05-27

Calculated Parameters

Total Trihalomethanes	0.0503	MAC = 0.1	0.00400	mg/L	N/A	
-----------------------	--------	-----------	---------	------	-----	--

Haloacetic Acids

Monochloroacetic Acid	< 0.0031	N/A	0.0020	mg/L	2025-06-05	RA3
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-05	
Dichloroacetic Acid	0.0177	N/A	0.0020	mg/L	2025-06-05	
Trichloroacetic Acid	0.0188	N/A	0.0020	mg/L	2025-06-05	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-05	
Total Haloacetic Acids (HAA5)	0.0365	MAC = 0.08	0.00312	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	97		70-130	%	2025-06-05	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0056	N/A	0.0010	mg/L	2025-06-03	
----------------------	--------	-----	--------	------	------------	--

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Randolph Rd Stn (25E4021-03) | Matrix: Water | Sampled: 2025-05-27, Continued

Volatile Organic Compounds (VOC), Continued

Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Chloroform	0.0446	N/A	0.0010	mg/L	2025-06-03	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Surrogate: Toluene-d8	78		70-130	%	2025-06-03	
Surrogate: 4-Bromofluorobenzene	74		70-130	%	2025-06-03	

PRV Stn (25E4021-04) | Matrix: Water | Sampled: 2025-05-27

Anions

Chloride	10.2	AO ≤ 250	0.10	mg/L	2025-05-29	
Fluoride	0.17	MAC = 1.5	0.10	mg/L	2025-05-29	
Nitrate (as N)	0.025	MAC = 10	0.010	mg/L	2025-05-29	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-05-29	
Sulfate	29.2	AO ≤ 500	1.0	mg/L	2025-05-29	

Calculated Parameters

Hardness, Total (as CaCO3)	118	None Required	0.500	mg/L	N/A	
Langelier Index	-0.04	N/A	-5.0		2025-06-04	CT6
Nitrogen, Organic	0.160	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	159	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO3)	101	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Bicarbonate (as CaCO3)	101	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-05-30	
Carbon, Total Organic	2.85	N/A	0.50	mg/L	2025-05-30	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-05-30	
Conductivity (EC)	304	N/A	2.0	µS/cm	2025-06-02	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-06-01	
Nitrogen, Total Kjeldahl	0.160	N/A	0.050	mg/L	2025-06-03	
pH	7.99	7.0-10.5	0.10	pH units	2025-06-02	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-06-04	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-06-03	
Temperature, at pH	22.8	N/A		°C	2025-06-02	HT2
Turbidity	< 0.10	OG < 1	0.10	NTU	2025-05-30	
UV Transmittance @ 254 nm - Unfiltered	94.3	N/A	0.10	% T	2025-05-30	

Total Metals

Aluminum, total	0.0123	OG < 0.1	0.0050	mg/L	2025-06-03	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-06-03	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-06-03	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
PRV Stn (25E4021-04) Matrix: Water Sampled: 2025-05-27, Continued						
Total Metals, Continued						
Barium, total	0.0217	MAC = 2	0.0050	mg/L	2025-06-03	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-06-03	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-06-03	
Calcium, total	32.7	None Required	0.20	mg/L	2025-06-03	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-06-03	
Copper, total	0.00076	MAC = 2	0.00040	mg/L	2025-06-03	
Iron, total	< 0.010	AO ≤ 0.1	0.010	mg/L	2025-06-03	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-06-03	
Magnesium, total	8.88	None Required	0.010	mg/L	2025-06-03	
Manganese, total	0.00079	MAC = 0.12	0.00020	mg/L	2025-06-03	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-06-03	HG1
Molybdenum, total	0.00326	N/A	0.00010	mg/L	2025-06-03	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-06-03	
Potassium, total	2.35	N/A	0.10	mg/L	2025-06-03	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Sodium, total	13.5	AO ≤ 200	0.10	mg/L	2025-06-03	
Strontium, total	0.310	MAC = 7	0.0010	mg/L	2025-06-03	
Uranium, total	0.000162	MAC = 0.02	0.000020	mg/L	2025-06-03	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-06-03	

Okanagan Lake Lab T (25E4021-05) | Matrix: Water | Sampled: 2025-05-27

Anions

Chloride	6.23	AO ≤ 250	0.10	mg/L	2025-05-29	
Fluoride	0.20	MAC = 1.5	0.10	mg/L	2025-05-29	
Nitrate (as N)	0.015	MAC = 10	0.010	mg/L	2025-05-29	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-05-29	
Sulfate	31.0	AO ≤ 500	1.0	mg/L	2025-05-29	

Calculated Parameters

Hardness, Total (as CaCO ₃)	126	None Required	0.500	mg/L	N/A	
Langelier Index	0.03	N/A	-5.0		2025-06-04	CT6
Nitrogen, Organic	0.232	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	161	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	107	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Bicarbonate (as CaCO ₃)	107	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-02	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-05-30	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Okanagan Lake Lab T (25E4021-05) | Matrix: Water | Sampled: 2025-05-27, Continued

General Parameters, Continued

Carbon, Total Organic	3.81	N/A	0.50	mg/L	2025-05-30	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-05-30	
Conductivity (EC)	303	N/A	2.0	µS/cm	2025-06-02	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-06-01	
Nitrogen, Total Kjeldahl	0.232	N/A	0.050	mg/L	2025-06-03	
pH	8.02	7.0-10.5	0.10	pH units	2025-06-02	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-06-04	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-06-03	
Temperature, at pH	21.8	N/A		°C	2025-06-02	HT2
Turbidity	0.44	OG < 1	0.10	NTU	2025-05-30	
UV Transmittance @ 254 nm - Unfiltered	86.7	N/A	0.10	% T	2025-05-30	

Total Metals

Aluminum, total	0.0096	OG < 0.1	0.0050	mg/L	2025-06-03	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-06-03	
Arsenic, total	0.00052	MAC = 0.01	0.00050	mg/L	2025-06-03	
Barium, total	0.0220	MAC = 2	0.0050	mg/L	2025-06-03	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-06-03	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-06-03	
Calcium, total	34.9	None Required	0.20	mg/L	2025-06-03	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-06-03	
Copper, total	0.00358	MAC = 2	0.00040	mg/L	2025-06-03	
Iron, total	0.012	AO ≤ 0.1	0.010	mg/L	2025-06-03	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-06-03	
Magnesium, total	9.46	None Required	0.010	mg/L	2025-06-03	
Manganese, total	0.00170	MAC = 0.12	0.00020	mg/L	2025-06-03	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-06-03	HG1
Molybdenum, total	0.00347	N/A	0.00010	mg/L	2025-06-03	
Nickel, total	0.00061	N/A	0.00040	mg/L	2025-06-03	
Potassium, total	2.44	N/A	0.10	mg/L	2025-06-03	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-03	
Sodium, total	11.9	AO ≤ 200	0.10	mg/L	2025-06-03	
Strontium, total	0.314	MAC = 7	0.0010	mg/L	2025-06-03	
Uranium, total	0.00223	MAC = 0.02	0.000020	mg/L	2025-06-03	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-06-03	

Smythe Dr Stn (25E4021-06) | Matrix: Water | Sampled: 2025-05-27

Calculated Parameters

Total Trihalomethanes	0.0543	MAC = 0.1	0.00400	mg/L	N/A
-----------------------	--------	-----------	---------	------	-----

Haloacetic Acids

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Smythe Dr Stn (25E4021-06) | Matrix: Water | Sampled: 2025-05-27, Continued

Haloacetic Acids, Continued

Monochloroacetic Acid	< 0.0032	N/A	0.0020	mg/L	2025-06-05	RA3
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-05	
Dichloroacetic Acid	0.0173	N/A	0.0020	mg/L	2025-06-05	
Trichloroacetic Acid	0.0175	N/A	0.0020	mg/L	2025-06-05	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-05	
Total Haloacetic Acids (HAA5)	0.0347	MAC = 0.08	0.00322	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	94		70-130	%	2025-06-05	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0054	N/A	0.0010	mg/L	2025-06-04	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-06-04	
Chloroform	0.0488	N/A	0.0010	mg/L	2025-06-04	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-04	
Surrogate: Toluene-d8	82		70-130	%	2025-06-04	
Surrogate: 4-Bromofluorobenzene	82		70-130	%	2025-06-04	

Naramata Rd Stn (25E4021-07) | Matrix: Water | Sampled: 2025-05-27

Calculated Parameters

Total Trihalomethanes	0.0614	MAC = 0.1	0.00400	mg/L	N/A	
-----------------------	---------------	-----------	---------	------	-----	--

Haloacetic Acids

Monochloroacetic Acid	< 0.0041	N/A	0.0020	mg/L	2025-06-05	RA3
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-05	
Dichloroacetic Acid	0.0224	N/A	0.0020	mg/L	2025-06-05	
Trichloroacetic Acid	0.0225	N/A	0.0020	mg/L	2025-06-05	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-05	
Total Haloacetic Acids (HAA5)	0.0449	MAC = 0.08	0.00410	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	95		70-130	%	2025-06-05	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0062	N/A	0.0010	mg/L	2025-06-03	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Chloroform	0.0553	N/A	0.0010	mg/L	2025-06-03	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Surrogate: Toluene-d8	75		70-130	%	2025-06-03	
Surrogate: 4-Bromofluorobenzene	71		70-130	%	2025-06-03	

Pre DAF (25E4021-08) | Matrix: Water | Sampled: 2025-05-27

Calculated Parameters

Total Trihalomethanes	0.0106	MAC = 0.1	0.00400	mg/L	N/A	
-----------------------	---------------	-----------	---------	------	-----	--

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0062	N/A	0.0010	mg/L	2025-06-03	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Chloroform	0.0553	N/A	0.0010	mg/L	2025-06-03	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Surrogate: Toluene-d8	75		70-130	%	2025-06-03	
Surrogate: 4-Bromofluorobenzene	71		70-130	%	2025-06-03	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Pre DAF (25E4021-08) Matrix: Water Sampled: 2025-05-27, Continued						
<i>Volatile Organic Compounds (VOC), Continued</i>						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Chloroform	0.0106	N/A	0.0010	mg/L	2025-06-03	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-03	
Surrogate: Toluene-d8	77		70-130	%	2025-06-03	
Surrogate: 4-Bromofluorobenzene	75		70-130	%	2025-06-03	

Post DAF (25E4021-09) | Matrix: Water | Sampled: 2025-05-27

<i>Calculated Parameters</i>						
Total Trihalomethanes	0.00916	MAC = 0.1	0.00400	mg/L	N/A	
<i>Volatile Organic Compounds (VOC)</i>						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-04	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-06-04	
Chloroform	0.0092	N/A	0.0010	mg/L	2025-06-04	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-04	
Surrogate: Toluene-d8	76		70-130	%	2025-06-04	
Surrogate: 4-Bromofluorobenzene	72		70-130	%	2025-06-04	

Sample Qualifiers:

CT6	Results were based on lab temperature & lab pH.
HG1	Sample bottle and preservation submitted is not suitable for Mercury analysis and analyte stability may be affected.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
RA3	The Reporting Limit has been raised due to comparable level detected in the blank(s).

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

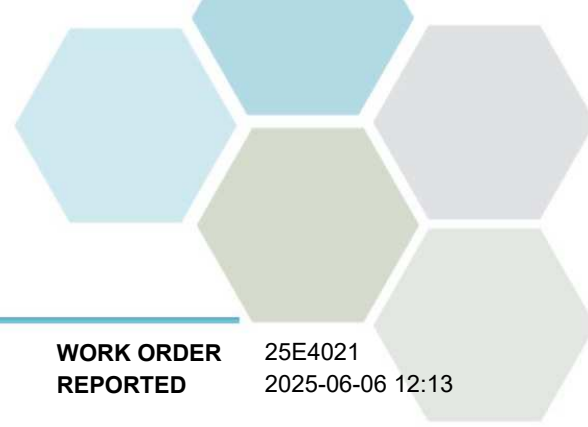
WORK ORDER REPORTED 25E4021
2025-06-06 12:13

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H ₂ SO ₄	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH ₃ G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Carbon, Total Organic in Water	SM 5310 B (2022)	Combustion, Infrared CO ₂ Detection	✓	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	ASTM D7511-12	Flow Injection with In-Line UV Digestion and Amperometry	✓	Kelowna
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
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
Nitrogen, Total Kjeldahl in Water	SM 4500-Norg D* (2021)	Block Digestion and Flow Injection Analysis	✓	Kelowna
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Phosphorus, Total in Water	SM 4500-P B.5* (2011) / SM 4500-P F (2021)	Persulfate Digestion / Automated Colorimetry (Ascorbic Acid)	✓	Kelowna
Solids, Total Dissolved in Water	SM 1030 E (2021)	SM 1030 E		N/A
Sulfide, Total in Water	SM 4500-S ₂ D* (2021)	Colorimetry (Methylene Blue)	✓	Edmonton
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO ₃ +HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Transmittance at 254 nm - Unfiltered in Water	SM 5910 B* (2021)	Ultraviolet Absorption	✓	Kelowna
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	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)
% T	Percent Transmittance
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
AO	Aesthetic Objective
CU	Colour Units (referenced against a platinum cobalt standard)
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
ASTM	ASTM International Test Methods
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO Penticton, City of - DW & STP
PROJECT Quarterly Samples

WORK ORDER 25E4021
REPORTED 2025-06-06 12:13

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: hhannaoui@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 Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Quarterly Samples

PROJECT INFO OPR178-025

WORK ORDER 25F1156

RECEIVED / TEMP 2025-06-07 09:20 / 11.2°C

REPORTED 2025-06-20 14:34

COC NUMBER B112233

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25F1156
2025-06-20 14:34

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

PRV Stn (25F1156-01) | Matrix: Water | Sampled: 2025-06-06 08:30

Anions

Chloride	7.13	AO ≤ 250	0.10	mg/L	2025-06-07	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2025-06-07	
Nitrate (as N)	< 0.010	MAC = 10	0.010	mg/L	2025-06-07	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-06-07	
Sulfate	1.5	AO ≤ 500	1.0	mg/L	2025-06-07	

Calculated Parameters

Total Trihalomethanes	0.0667	MAC = 0.1	0.00400	mg/L	N/A	
Hardness, Total (as CaCO ₃)	11.4	None Required	0.500	mg/L	N/A	
Langelier Index	-3.9	N/A	-5.0		2025-06-16	CT6
Nitrogen, Organic	0.140	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	20.9	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	3.2	N/A	1.0	mg/L	2025-06-12	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-12	
Alkalinity, Bicarbonate (as CaCO ₃)	3.2	N/A	1.0	mg/L	2025-06-12	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-12	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-06-12	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-06-12	
Carbon, Total Organic	3.08	N/A	0.50	mg/L	2025-06-10	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-06-10	HT1
Conductivity (EC)	55.3	N/A	2.0	µS/cm	2025-06-12	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-06-11	
Nitrogen, Total Kjeldahl	0.140	N/A	0.050	mg/L	2025-06-13	
pH	6.61	7.0-10.5	0.10	pH units	2025-06-12	HT2
Phosphorus, Total (as P)	0.0052	N/A	0.0050	mg/L	2025-06-20	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-06-12	
Temperature, at pH	21.1	N/A		°C	2025-06-12	HT2
Turbidity	0.33	OG < 1	0.10	NTU	2025-06-07	
UV Transmittance @ 254 nm - Unfiltered	91.7	N/A	0.10	% T	2025-06-10	HT1

Haloacetic Acids

Monochloroacetic Acid	< 0.0065	N/A	0.0020	mg/L	2025-06-14	RA3
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-14	
Dichloroacetic Acid	0.0205	N/A	0.0020	mg/L	2025-06-14	
Trichloroacetic Acid	0.0148	N/A	0.0020	mg/L	2025-06-14	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-06-14	
Total Haloacetic Acids (HAA5)	0.0354	MAC = 0.08	0.00650	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	106		70-130	%	2025-06-14	

Total Metals

Aluminum, total	0.0240	OG < 0.1	0.0050	mg/L	2025-06-12	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-06-12	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25F1156
2025-06-20 14:34

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

PRV Stn (25F1156-01) | Matrix: Water | Sampled: 2025-06-06 08:30, Continued

Total Metals, Continued

Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-06-12	
Barium, total	0.0059	MAC = 2	0.0050	mg/L	2025-06-12	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-06-12	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-06-12	
Calcium, total	3.31	None Required	0.20	mg/L	2025-06-12	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-12	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-06-12	
Copper, total	< 0.00040	MAC = 2	0.00040	mg/L	2025-06-12	
Iron, total	< 0.010	AO ≤ 0.1	0.010	mg/L	2025-06-12	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-06-12	
Magnesium, total	0.765	None Required	0.010	mg/L	2025-06-12	
Manganese, total	0.00550	MAC = 0.12	0.00020	mg/L	2025-06-12	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2025-06-12	
Molybdenum, total	0.00023	N/A	0.00010	mg/L	2025-06-12	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-06-12	
Potassium, total	0.36	N/A	0.10	mg/L	2025-06-12	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-06-12	
Sodium, total	5.91	AO ≤ 200	0.10	mg/L	2025-06-12	
Strontium, total	0.0383	MAC = 7	0.0010	mg/L	2025-06-12	
Uranium, total	< 0.000020	MAC = 0.02	0.000020	mg/L	2025-06-12	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-06-12	

Volatile Organic Compounds (VOC)

Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-11	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-06-11	
Chloroform	0.0667	N/A	0.0010	mg/L	2025-06-11	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-06-11	
Surrogate: Toluene-d8	72		70-130	%	2025-06-11	
Surrogate: 4-Bromofluorobenzene	64		70-130	%	2025-06-11	S02

Sample Qualifiers:

CT6	Results were based on lab temperature & lab pH.
HT1	The sample was prepared and/or analyzed past the recommended holding time.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
RA3	The Reporting Limit has been raised due to comparable level detected in the blank(s).
S02	Surrogate recovery outside of control limits. Data accepted based on acceptable recovery of other surrogates.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

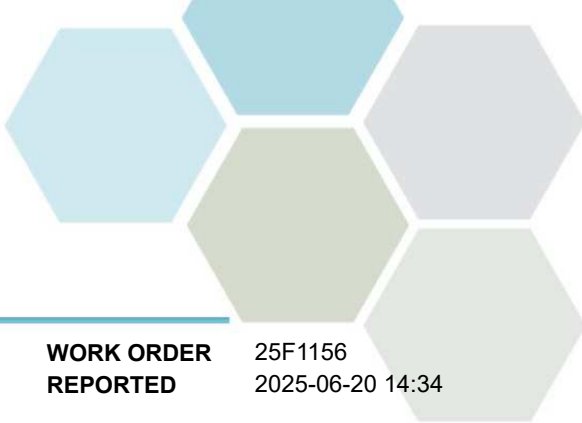
WORK ORDER REPORTED 25F1156
2025-06-20 14:34

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Carbon, Total Organic in Water	SM 5310 B (2022)	Combustion, Infrared CO2 Detection	✓	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	ASTM D7511-12	Flow Injection with In-Line UV Digestion and Amperometry	✓	Kelowna
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
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
Nitrogen, Total Kjeldahl in Water	SM 4500-Norg D* (2021)	Block Digestion and Flow Injection Analysis	✓	Kelowna
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Phosphorus, Total in Water	SM 4500-P B.5* (2011) / SM 4500-P F (2021)	Persulfate Digestion / Automated Colorimetry (Ascorbic Acid)	✓	Kelowna
Solids, Total Dissolved in Water	SM 1030 E (2021)	SM 1030 E		N/A
Sulfide, Total in Water	SM 4500-S2 D* (2021)	Colorimetry (Methylene Blue)	✓	Edmonton
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Transmittance at 254 nm - Unfiltered in Water	SM 5910 B* (2021)	Ultraviolet Absorption	✓	Kelowna
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	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)
% T	Percent Transmittance
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
AO	Aesthetic Objective
CU	Colour Units (referenced against a platinum cobalt standard)
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
ASTM	ASTM International Test Methods
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT	Penticton, City of - DW & STP Quarterly Samples	WORK ORDER REPORTED	25F1156 2025-06-20 14:34
---------------------	--	---------------------	-----------------------------

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Alistair Wardlaw

PO NUMBER

PROJECT Quarterly Samples

PROJECT INFO OPR178-025

WORK ORDER 25H3925

RECEIVED / TEMP 2025-08-27 10:07 / 12.5°C

REPORTED 2025-09-12 15:33

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25H3925
2025-09-12 15:33

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Okanagan Lake Lab Tap (25H3925-01) | Matrix: Water | Sampled: 2025-08-26 14:20

Anions

Chloride	6.13	AO ≤ 250	0.10	mg/L	2025-08-28	
Fluoride	0.22	MAC = 1.5	0.10	mg/L	2025-08-28	
Nitrate (as N)	0.095	MAC = 10	0.010	mg/L	2025-08-28	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-08-28	
Sulfate	34.1	AO ≤ 500	1.0	mg/L	2025-08-28	

Calculated Parameters

Hardness, Total (as CaCO ₃)	130	None Required	0.500	mg/L	N/A	
Langelier Index	-0.3	N/A	-5.0		2025-09-04	CT6
Nitrogen, Organic	0.108	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	171	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	114	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Bicarbonate (as CaCO ₃)	114	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-08-29	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-08-29	
Carbon, Total Organic	4.21	N/A	0.50	mg/L	2025-08-29	
Chemical Oxygen Demand	< 20	N/A	20	mg/L	2025-09-02	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-08-28	
Conductivity (EC)	304	N/A	2.0	µS/cm	2025-08-28	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-08-29	
Nitrogen, Total Kjeldahl	0.108	N/A	0.050	mg/L	2025-09-03	
pH	7.66	7.0-10.5	0.10	pH units	2025-08-29	HT2
Phosphorus, Total (as P)	0.0054	N/A	0.0050	mg/L	2025-08-29	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-08-29	
Temperature, at pH	22.7	N/A		°C	2025-08-28	HT2
Turbidity	0.30	OG < 1	0.10	NTU	2025-08-29	
UV Transmittance @ 254 nm - Unfiltered	86.9	N/A	0.10	% T	2025-08-30	HT1

Total Metals

Aluminum, total	0.0050	OG < 0.1	0.0050	mg/L	2025-09-01	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-09-01	
Arsenic, total	0.00054	MAC = 0.01	0.00050	mg/L	2025-09-01	
Barium, total	0.0217	MAC = 2	0.0050	mg/L	2025-09-01	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-09-01	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-09-01	
Calcium, total	34.4	None Required	0.20	mg/L	2025-09-01	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-09-01	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-09-01	
Copper, total	0.00309	MAC = 2	0.00040	mg/L	2025-09-01	
Iron, total	< 0.010	AO ≤ 0.1	0.010	mg/L	2025-09-01	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25H3925
2025-09-12 15:33

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Okanagan Lake Lab Tap (25H3925-01) | Matrix: Water | Sampled: 2025-08-26 14:20, Continued

Total Metals, Continued

Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-09-01	
Magnesium, total	10.6	None Required	0.010	mg/L	2025-09-01	
Manganese, total	0.00126	MAC = 0.12	0.00020	mg/L	2025-09-01	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-09-01	HG1
Molybdenum, total	0.00352	N/A	0.00010	mg/L	2025-09-01	
Nickel, total	0.00051	N/A	0.00040	mg/L	2025-09-01	
Potassium, total	2.64	N/A	0.10	mg/L	2025-09-01	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-09-01	
Sodium, total	12.7	AO ≤ 200	0.10	mg/L	2025-09-01	
Strontium, total	0.290	MAC = 7	0.0010	mg/L	2025-09-01	
Uranium, total	0.00250	MAC = 0.02	0.000020	mg/L	2025-09-01	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-09-01	

Penticton Creek (25H3925-02) | Matrix: Water | Sampled: 2025-08-26 14:10

Anions

Chloride	0.25	AO ≤ 250	0.10	mg/L	2025-08-28	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2025-08-28	
Nitrate (as N)	< 0.010	MAC = 10	0.010	mg/L	2025-08-28	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-08-28	
Sulfate	1.2	AO ≤ 500	1.0	mg/L	2025-08-28	

Calculated Parameters

Hardness, Total (as CaCO ₃)	11.8	None Required	0.500	mg/L	N/A	
Langelier Index	-3.8	N/A	-5.0		2025-09-04	CT6
Nitrogen, Organic	0.221	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	10.1	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	3.7	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Bicarbonate (as CaCO ₃)	3.7	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-08-29	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-08-29	
Carbon, Total Organic	6.63	N/A	0.50	mg/L	2025-08-29	
Chemical Oxygen Demand	< 20	N/A	20	mg/L	2025-09-02	
Colour, True	40	AO ≤ 15	5.0	CU	2025-08-28	
Conductivity (EC)	31.1	N/A	2.0	µS/cm	2025-08-28	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-08-29	
Nitrogen, Total Kjeldahl	0.221	N/A	0.050	mg/L	2025-09-03	
pH	6.57	7.0-10.5	0.10	pH units	2025-08-29	HT2
Phosphorus, Total (as P)	0.0063	N/A	0.0050	mg/L	2025-08-29	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25H3925
2025-09-12 15:33

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Penticton Creek (25H3925-02) | Matrix: Water | Sampled: 2025-08-26 14:10, Continued

General Parameters, Continued

Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-08-29	
Temperature, at pH	23.1	N/A		°C	2025-08-28	HT2
Turbidity	1.11	OG < 1	0.10	NTU	2025-08-29	
UV Transmittance @ 254 nm - Unfiltered	53.7	N/A	0.10	% T	2025-08-30	HT1

Total Metals

Aluminum, total	0.139	OG < 0.1	0.0050	mg/L	2025-09-01	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-09-01	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-09-01	
Barium, total	0.0061	MAC = 2	0.0050	mg/L	2025-09-01	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-09-01	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-09-01	
Calcium, total	3.36	None Required	0.20	mg/L	2025-09-01	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-09-01	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-09-01	
Copper, total	0.00229	MAC = 2	0.00040	mg/L	2025-09-01	
Iron, total	0.446	AO ≤ 0.1	0.010	mg/L	2025-09-01	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-09-01	
Magnesium, total	0.817	None Required	0.010	mg/L	2025-09-01	
Manganese, total	0.00923	MAC = 0.12	0.00020	mg/L	2025-09-01	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-09-01	HG1
Molybdenum, total	0.00050	N/A	0.00010	mg/L	2025-09-01	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-09-01	
Potassium, total	0.44	N/A	0.10	mg/L	2025-09-01	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-09-01	
Sodium, total	1.73	AO ≤ 200	0.10	mg/L	2025-09-01	
Strontium, total	0.0407	MAC = 7	0.0010	mg/L	2025-09-01	
Uranium, total	0.000356	MAC = 0.02	0.000020	mg/L	2025-09-01	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-09-01	

PRV Station (25H3925-03) | Matrix: Water | Sampled: 2025-08-26 13:15

Anions

Chloride	9.19	AO ≤ 250	0.10	mg/L	2025-08-28	
Fluoride	0.18	MAC = 1.5	0.10	mg/L	2025-08-28	
Nitrate (as N)	0.080	MAC = 10	0.010	mg/L	2025-08-28	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-08-28	
Sulfate	27.0	AO ≤ 500	1.0	mg/L	2025-08-28	

Calculated Parameters

Total Trihalomethanes	0.0196	MAC = 0.1	0.00400	mg/L	N/A	
Hardness, Total (as CaCO3)	108	None Required	0.500	mg/L	N/A	
Langelier Index	-0.6	N/A	-5.0		2025-09-04	CT6

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25H3925
2025-09-12 15:33

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

PRV Station (25H3925-03) | Matrix: Water | Sampled: 2025-08-26 13:15, Continued

Calculated Parameters, Continued

Nitrogen, Organic	0.0880	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	148	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	95.5	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Bicarbonate (as CaCO ₃)	95.5	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-08-29	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-08-29	
Carbon, Total Organic	3.23	N/A	0.50	mg/L	2025-08-29	
Chemical Oxygen Demand	< 20	N/A	20	mg/L	2025-09-02	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-08-28	
Conductivity (EC)	267	N/A	2.0	µS/cm	2025-08-28	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-08-29	
Nitrogen, Total Kjeldahl	0.088	N/A	0.050	mg/L	2025-09-03	
pH	7.53	7.0-10.5	0.10	pH units	2025-08-29	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-08-29	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-08-29	
Temperature, at pH	22.8	N/A		°C	2025-08-28	HT2
Turbidity	0.30	OG < 1	0.10	NTU	2025-08-29	
UV Transmittance @ 254 nm - Unfiltered	93.2	N/A	0.10	% T	2025-08-30	HT1

Haloacetic Acids

Monochloroacetic Acid	< 0.0024	N/A	0.0020	mg/L	2025-09-03	RA3
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-09-03	
Dichloroacetic Acid	0.0129	N/A	0.0020	mg/L	2025-09-03	
Trichloroacetic Acid	0.0120	N/A	0.0020	mg/L	2025-09-03	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-09-03	
Total Haloacetic Acids (HAA5)	0.0248	MAC = 0.08	0.00240	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	114		70-130	%	2025-09-03	

Pesticides, Herbicides, and Fungicides

Alachlor	< 0.100	N/A	0.100	µg/L	2025-09-11	
Aldrin	< 0.006	N/A	0.006	µg/L	2025-09-11	
Atrazine and metabolites	< 0.100	MAC = 5	0.100	µg/L	2025-09-11	
Azinphos-methyl	< 0.200	N/A	0.200	µg/L	2025-09-11	
alpha-BHC	< 0.010	N/A	0.010	µg/L	2025-09-11	
beta-BHC	< 0.050	N/A	0.050	µg/L	2025-09-11	
delta-BHC	< 0.050	N/A	0.050	µg/L	2025-09-11	
gamma-BHC (Lindane)	< 0.050	N/A	0.050	µg/L	2025-09-11	
Bromacil	< 0.100	N/A	0.100	µg/L	2025-09-11	
Bromoxynil	< 0.200	MAC = 30	0.200	µg/L	2025-09-11	
Butachlor	< 0.020	N/A	0.020	µg/L	2025-09-11	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25H3925
2025-09-12 15:33

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

PRV Station (25H3925-03) | Matrix: Water | Sampled: 2025-08-26 13:15, Continued

Pesticides, Herbicides, and Fungicides, Continued

Captan	< 0.100	N/A	0.100	µg/L	2025-09-11	
Chlordane (cis + trans)	< 0.050	N/A	0.050	µg/L	2025-09-11	
Chlorothalonil	< 0.050	N/A	0.050	µg/L	2025-09-11	
Chlorpyrifos	< 0.010	MAC = 90	0.010	µg/L	2025-09-11	
Cyanazine	< 0.100	N/A	0.100	µg/L	2025-09-11	
DDT, Total	< 0.010	N/A	0.010	µg/L	2025-09-11	
Deltamethrin	< 0.100	N/A	0.100	µg/L	2025-09-11	
Diazinon	< 0.020	N/A	0.020	µg/L	2025-09-11	
Dichlorvos	< 0.100	N/A	0.100	µg/L	2025-09-11	
Diclofop-methyl	< 0.100	N/A	0.100	µg/L	2025-09-11	
Dieldrin	< 0.010	N/A	0.010	µg/L	2025-09-11	
Dimethoate	< 0.200	MAC = 20	0.200	µg/L	2025-09-11	
Disulfoton	< 0.100	N/A	0.100	µg/L	2025-09-11	
Diuron	< 0.200	MAC = 150	0.200	µg/L	2025-09-11	
Endosulfan I + II	< 0.010	N/A	0.010	µg/L	2025-09-11	
Endosulfan sulfate	< 0.050	N/A	0.050	µg/L	2025-09-11	
Endrin	< 0.020	N/A	0.020	µg/L	2025-09-11	
Endrin aldehyde	< 0.020	N/A	0.020	µg/L	2025-09-11	
Endrin ketone	< 0.020	N/A	0.020	µg/L	2025-09-11	
Fenchlorphos (Ronnell)	< 0.100	N/A	0.100	µg/L	2025-09-11	
Heptachlor	< 0.010	N/A	0.010	µg/L	2025-09-11	
Heptachlor epoxide	< 0.010	N/A	0.010	µg/L	2025-09-11	
Linuron	< 0.050	N/A	0.050	µg/L	2025-09-11	
Malathion	< 0.100	MAC = 290	0.100	µg/L	2025-09-11	
Methoxychlor	< 0.050	N/A	0.050	µg/L	2025-09-11	
Methyl parathion	< 0.100	N/A	0.100	µg/L	2025-09-11	
Metolachlor	< 0.100	N/A	0.100	µg/L	2025-09-11	
Metribuzin	< 0.200	MAC = 80	0.200	µg/L	2025-09-11	
Parathion	< 0.100	N/A	0.100	µg/L	2025-09-11	
Pentachloronitrobenzene	< 0.100	N/A	0.100	µg/L	2025-09-11	
Permethrin	< 0.010	N/A	0.010	µg/L	2025-09-11	
Phorate	< 0.100	N/A	0.100	µg/L	2025-09-11	
Prometon	< 0.300	N/A	0.300	µg/L	2025-09-11	
Prometryne	< 0.100	N/A	0.100	µg/L	2025-09-11	
Simazine	< 0.200	N/A	0.200	µg/L	2025-09-11	
Sulfotep	< 0.100	N/A	0.100	µg/L	2025-09-11	
Tebuthiuron	< 0.200	N/A	0.200	µg/L	2025-09-11	
Temephos (Abate)	< 0.500	N/A	0.500	µg/L	2025-09-11	
Terbufos	< 0.100	N/A	0.100	µg/L	2025-09-11	
Triallate	< 0.100	N/A	0.100	µg/L	2025-09-11	
Trifluralin	< 0.200	N/A	0.200	µg/L	2025-09-11	
Surrogate: Tributyl Phosphate	101		50-140	%	2025-09-11	
Surrogate: 4-chloro-3-nitrobenzotrifluoride	77		50-140	%	2025-09-11	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25H3925
2025-09-12 15:33

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

PRV Station (25H3925-03) | Matrix: Water | Sampled: 2025-08-26 13:15, Continued

Total Metals

Aluminum, total	0.0129	OG < 0.1	0.0050	mg/L	2025-09-01	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-09-01	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-09-01	
Barium, total	0.0190	MAC = 2	0.0050	mg/L	2025-09-01	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-09-01	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-09-01	
Calcium, total	28.5	None Required	0.20	mg/L	2025-09-01	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-09-01	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-09-01	
Copper, total	0.00115	MAC = 2	0.00040	mg/L	2025-09-01	
Iron, total	< 0.010	AO ≤ 0.1	0.010	mg/L	2025-09-01	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-09-01	
Magnesium, total	8.94	None Required	0.010	mg/L	2025-09-01	
Manganese, total	0.00885	MAC = 0.12	0.00020	mg/L	2025-09-01	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-09-01	HG1
Molybdenum, total	0.00285	N/A	0.00010	mg/L	2025-09-01	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-09-01	
Potassium, total	2.17	N/A	0.10	mg/L	2025-09-01	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-09-01	
Sodium, total	13.2	AO ≤ 200	0.10	mg/L	2025-09-01	
Strontium, total	0.236	MAC = 7	0.0010	mg/L	2025-09-01	
Uranium, total	0.000111	MAC = 0.02	0.000020	mg/L	2025-09-01	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-09-01	

Volatile Organic Compounds (VOC)

Benzene	< 0.5	MAC = 5	0.5	µg/L	2025-08-30	
Bromodichloromethane	0.0021	N/A	0.0010	mg/L	2025-08-30	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-08-30	
Chloroform	0.0175	N/A	0.0010	mg/L	2025-08-30	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-08-30	
Ethylbenzene	< 1.0	MAC = 140	1.0	µg/L	2025-08-30	
Methyl tert-butyl ether	< 1.0	AO ≤ 15	1.0	µg/L	2025-08-30	
Styrene	< 1.0	N/A	1.0	µg/L	2025-08-30	
Toluene	< 1.0	MAC = 60	1.0	µg/L	2025-08-30	
Xylenes (total)	< 2.0	MAC = 90	2.0	µg/L	2025-08-30	
Surrogate: Toluene-d8	79		70-130	%	2025-08-30	
Surrogate: 4-Bromofluorobenzene	85		70-130	%	2025-08-30	

Fairford Drive STN (25H3925-04) | Matrix: Water | Sampled: 2025-08-26 13:40

Anions

Chloride	9.13	AO ≤ 250	0.10	mg/L	2025-08-28	
Fluoride	0.18	MAC = 1.5	0.10	mg/L	2025-08-28	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25H3925
2025-09-12 15:33

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Fairford Drive STN (25H3925-04) | Matrix: Water | Sampled: 2025-08-26 13:40, Continued

Anions, Continued

Nitrate (as N)	0.082	MAC = 10	0.010	mg/L	2025-08-28	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-08-28	
Sulfate	28.1	AO ≤ 500	1.0	mg/L	2025-08-28	

Calculated Parameters

Hardness, Total (as CaCO ₃)	108	None Required	0.500	mg/L	N/A	
Langelier Index	-0.5	N/A	-5.0		2025-09-04	CT6
Nitrogen, Organic	0.0600	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	149	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	96.2	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Bicarbonate (as CaCO ₃)	96.2	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-08-29	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-08-29	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-08-29	
Carbon, Total Organic	3.53	N/A	0.50	mg/L	2025-08-29	
Chemical Oxygen Demand	< 20	N/A	20	mg/L	2025-09-02	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-08-28	
Conductivity (EC)	268	N/A	2.0	µS/cm	2025-08-28	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-08-29	
Nitrogen, Total Kjeldahl	0.060	N/A	0.050	mg/L	2025-09-03	
pH	7.57	7.0-10.5	0.10	pH units	2025-08-29	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-08-29	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-08-29	
Temperature, at pH	23.0	N/A		°C	2025-08-28	HT2
Turbidity	0.13	OG < 1	0.10	NTU	2025-08-29	
UV Transmittance @ 254 nm - Unfiltered	93.2	N/A	0.10	% T	2025-08-30	HT1

Total Metals

Aluminum, total	0.0141	OG < 0.1	0.0050	mg/L	2025-09-01	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-09-01	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-09-01	
Barium, total	0.0194	MAC = 2	0.0050	mg/L	2025-09-01	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-09-01	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-09-01	
Calcium, total	28.6	None Required	0.20	mg/L	2025-09-01	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-09-01	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-09-01	
Copper, total	0.00133	MAC = 2	0.00040	mg/L	2025-09-01	
Iron, total	0.016	AO ≤ 0.1	0.010	mg/L	2025-09-01	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-09-01	
Magnesium, total	8.81	None Required	0.010	mg/L	2025-09-01	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25H3925
2025-09-12 15:33

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Fairford Drive STN (25H3925-04) | Matrix: Water | Sampled: 2025-08-26 13:40, Continued

Total Metals, Continued

Manganese, total	0.00098	MAC = 0.12	0.00020	mg/L	2025-09-01	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-09-01	HG1
Molybdenum, total	0.00287	N/A	0.00010	mg/L	2025-09-01	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-09-01	
Potassium, total	2.21	N/A	0.10	mg/L	2025-09-01	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-09-01	
Sodium, total	13.0	AO ≤ 200	0.10	mg/L	2025-09-01	
Strontium, total	0.244	MAC = 7	0.0010	mg/L	2025-09-01	
Uranium, total	0.000115	MAC = 0.02	0.000020	mg/L	2025-09-01	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-09-01	

Naramata Road (25H3925-05) | Matrix: Water | Sampled: 2025-08-26 08:55

Calculated Parameters

Total Trihalomethanes	0.0683	MAC = 0.1	0.00400	mg/L	N/A	
-----------------------	--------	-----------	---------	------	-----	--

Haloacetic Acids

Monochloroacetic Acid	< 0.0045	N/A	0.0020	mg/L	2025-09-03	RA3
Monobromoacetic Acid	0.0021	N/A	0.0020	mg/L	2025-09-03	
Dichloroacetic Acid	0.0205	N/A	0.0020	mg/L	2025-09-03	
Trichloroacetic Acid	0.0322	N/A	0.0020	mg/L	2025-09-03	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-09-03	
Total Haloacetic Acids (HAA5)	0.0547	MAC = 0.08	0.00450	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	130		70-130	%	2025-09-03	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0051	N/A	0.0010	mg/L	2025-08-30	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-08-30	
Chloroform	0.0632	N/A	0.0010	mg/L	2025-08-30	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-08-30	
Surrogate: Toluene-d8	84		70-130	%	2025-08-30	
Surrogate: 4-Bromofluorobenzene	87		70-130	%	2025-08-30	

Smythe Drive (25H3925-06) | Matrix: Water | Sampled: 2025-08-26 07:45

Calculated Parameters

Total Trihalomethanes	0.0481	MAC = 0.1	0.00400	mg/L	N/A	
-----------------------	--------	-----------	---------	------	-----	--

Haloacetic Acids

Monochloroacetic Acid	< 0.0034	N/A	0.0020	mg/L	2025-09-03	RA3
Monobromoacetic Acid	0.0022	N/A	0.0020	mg/L	2025-09-03	
Dichloroacetic Acid	0.0182	N/A	0.0020	mg/L	2025-09-03	
Trichloroacetic Acid	0.0223	N/A	0.0020	mg/L	2025-09-03	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25H3925
2025-09-12 15:33

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Smythe Drive (25H3925-06) | Matrix: Water | Sampled: 2025-08-26 07:45, Continued

Haloacetic Acids, Continued

Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-09-03	
Total Haloacetic Acids (HAA5)	0.0427	MAC = 0.08	0.00340	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	118		70-130	%	2025-09-03	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0037	N/A	0.0010	mg/L	2025-08-30	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-08-30	
Chloroform	0.0444	N/A	0.0010	mg/L	2025-08-30	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-08-30	
Surrogate: Toluene-d8	79		70-130	%	2025-08-30	
Surrogate: 4-Bromofluorobenzene	78		70-130	%	2025-08-30	

Randolph Rd STN (25H3925-07) | Matrix: Water | Sampled: 2025-08-26 09:20

Calculated Parameters

Total Trihalomethanes	0.0458	MAC = 0.1	0.00400	mg/L	N/A	
-----------------------	---------------	-----------	---------	------	-----	--

Haloacetic Acids

Monochloroacetic Acid	< 0.0042	N/A	0.0020	mg/L	2025-09-04	RA3
Monobromoacetic Acid	0.0020	N/A	0.0020	mg/L	2025-09-04	
Dichloroacetic Acid	0.0225	N/A	0.0020	mg/L	2025-09-04	
Trichloroacetic Acid	0.0249	N/A	0.0020	mg/L	2025-09-04	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-09-04	
Total Haloacetic Acids (HAA5)	0.0494	MAC = 0.08	0.00420	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	109		70-130	%	2025-09-04	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0036	N/A	0.0010	mg/L	2025-08-30	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-08-30	
Chloroform	0.0422	N/A	0.0010	mg/L	2025-08-30	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-08-30	
Surrogate: Toluene-d8	85		70-130	%	2025-08-30	
Surrogate: 4-Bromofluorobenzene	85		70-130	%	2025-08-30	

Sample Qualifiers:

CT6	Results were based on lab temperature & lab pH.
HG1	Sample bottle and preservation submitted is not suitable for Mercury analysis and analyte stability may be affected.
HT1	The sample was prepared and/or analyzed past the recommended holding time.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
RA3	The Reporting Limit has been raised due to comparable level detected in the blank(s).

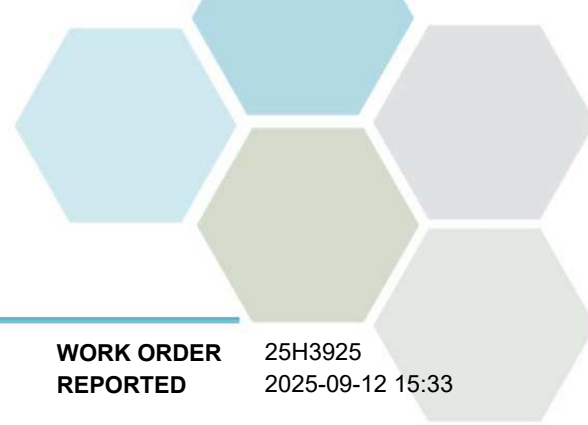
APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25H3925
2025-09-12 15:33

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
BTEX in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	Richmond
Carbon, Total Organic in Water	SM 5310 B (2022)	Combustion, Infrared CO2 Detection	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2022)	Closed Reflux, Colorimetry	✓	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	ASTM D7511-12	Flow Injection with In-Line UV Digestion and Amperometry	✓	Kelowna
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
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
Nitrogen, Total Kjeldahl in Water	SM 4500-Norg D* (2021)	Block Digestion and Flow Injection Analysis	✓	Kelowna
Pesticides in Water	EPA 3510C* / EPA 8270D*	Liquid-Liquid DCM Extraction (B/N) / GC-MSD (SIM)	✓	Richmond
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Phosphorus, Total in Water	SM 4500-P B.5* (2011) / SM 4500-P F (2021)	Persulfate Digestion / Automated Colorimetry (Ascorbic Acid)	✓	Kelowna
Solids, Total Dissolved in Water	SM 1030 E (2021)	SM 1030 E		N/A
Sulfide, Total in Water	SM 4500-S2 D* (2021)	Colorimetry (Methylene Blue)	✓	Edmonton
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Transmittance at 254 nm - Unfiltered in Water	SM 5910 B* (2021)	Ultraviolet Absorption	✓	Kelowna
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	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



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25H3925
2025-09-12 15:33

Glossary of Terms:

RL	Reporting Limit (default)
% T	Percent Transmittance
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
AO	Aesthetic Objective
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
µg/L	Micrograms per litre
µS/cm	Microsiemens per centimetre
ASTM	ASTM International Test Methods
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.

CERTIFICATE OF ANALYSIS

REPORTED TO Penticton, City of - DW & STP
171 Main Street
PENTICTON, BC V2A 5A9

ATTENTION Stuart Henderson

PO NUMBER

PROJECT Quarterly Samples

PROJECT INFO OPR178-025

WORK ORDER 25K2684

RECEIVED / TEMP 2025-11-24 09:55 / 6.3°C

REPORTED 2025-12-03 13:09

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

1-888-311-8846 | www.caro.ca

#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 |
#108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25K2684
2025-12-03 13:09

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Okanagan Lake Lab Tap (25K2684-01) | Matrix: Water | Sampled: 2025-11-23 16:00

Anions

Chloride	6.37	AO ≤ 250	0.10	mg/L	2025-11-24	
Fluoride	0.13	MAC = 1.5	0.10	mg/L	2025-11-24	
Nitrate (as N)	< 0.010	MAC = 10	0.010	mg/L	2025-11-24	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-11-24	
Sulfate	29.4	AO ≤ 500	1.0	mg/L	2025-11-24	

Calculated Parameters

Hardness, Total (as CaCO ₃)	122	None Required	0.500	mg/L	N/A	
Langelier Index	-0.9	N/A	-5.0		2025-11-26	CT6
Nitrogen, Organic	0.0950	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	168	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	123	N/A	1.0	mg/L	2025-11-25	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-11-25	
Alkalinity, Bicarbonate (as CaCO ₃)	123	N/A	1.0	mg/L	2025-11-25	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-11-25	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-11-25	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-11-25	
Carbon, Total Organic	4.88	N/A	0.50	mg/L	2025-11-25	
Chemical Oxygen Demand	< 20	N/A	20	mg/L	2025-11-25	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-11-25	
Conductivity (EC)	302	N/A	2.0	µS/cm	2025-11-25	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-11-25	
Nitrogen, Total Kjeldahl	0.095	N/A	0.050	mg/L	2025-11-28	
pH	7.09	7.0-10.5	0.10	pH units	2025-11-25	HT2
Phosphorus, Total (as P)	0.0059	N/A	0.0050	mg/L	2025-11-27	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-11-26	
Temperature, at pH	20.4	N/A		°C	2025-11-25	HT2
Turbidity	0.20	OG < 1	0.10	NTU	2025-11-24	
UV Transmittance @ 254 nm - Unfiltered	86.8	N/A	0.10	% T	2025-11-24	

Total Metals

Aluminum, total	< 0.0050	OG < 0.1	0.0050	mg/L	2025-11-25	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-11-25	
Arsenic, total	0.00051	MAC = 0.01	0.00050	mg/L	2025-11-25	
Barium, total	0.0217	MAC = 2	0.0050	mg/L	2025-11-25	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-11-25	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-11-25	
Calcium, total	33.5	None Required	0.20	mg/L	2025-11-25	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-11-25	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-11-25	
Copper, total	0.00244	MAC = 2	0.00040	mg/L	2025-11-25	
Iron, total	< 0.010	AO ≤ 0.1	0.010	mg/L	2025-11-25	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25K2684
2025-12-03 13:09

Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
Okanagan Lake Lab Tap (25K2684-01) Matrix: Water Sampled: 2025-11-23 16:00, Continued					
<i>Total Metals, Continued</i>					
Lead, total	< 0.00020	MAC = 0.005	0.00020 mg/L	2025-11-25	
Magnesium, total	9.32	None Required	0.010 mg/L	2025-11-25	
Manganese, total	0.00111	MAC = 0.12	0.00020 mg/L	2025-11-25	
Mercury, total	< 0.000040	MAC = 0.001	0.000040 mg/L	2025-11-25	HG1
Molybdenum, total	0.00346	N/A	0.00010 mg/L	2025-11-25	
Nickel, total	0.00051	N/A	0.00040 mg/L	2025-11-25	
Potassium, total	2.24	N/A	0.10 mg/L	2025-11-25	
Selenium, total	< 0.00050	MAC = 0.05	0.00050 mg/L	2025-11-25	
Sodium, total	11.9	AO ≤ 200	0.10 mg/L	2025-11-25	
Strontium, total	0.311	MAC = 7	0.0010 mg/L	2025-11-25	
Uranium, total	0.00232	MAC = 0.02	0.000020 mg/L	2025-11-25	
Zinc, total	< 0.0040	AO ≤ 5	0.0040 mg/L	2025-11-25	

Penticton Creek (25K2684-02) | Matrix: Water | Sampled: 2025-11-23 16:00

Anions

Chloride	0.48	AO ≤ 250	0.10 mg/L	2025-11-24	
Fluoride	< 0.10	MAC = 1.5	0.10 mg/L	2025-11-24	
Nitrate (as N)	< 0.010	MAC = 10	0.010 mg/L	2025-11-24	
Nitrite (as N)	< 0.010	MAC = 1	0.010 mg/L	2025-11-24	
Sulfate	1.4	AO ≤ 500	1.0 mg/L	2025-11-24	

Calculated Parameters

Hardness, Total (as CaCO ₃)	13.9	None Required	0.500 mg/L	N/A	
Langelier Index	-3.8	N/A	-5.0	2025-12-01	CT6
Nitrogen, Organic	0.194	N/A	0.0500 mg/L	N/A	
Solids, Total Dissolved	13.9	AO ≤ 500	1.00 mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	7.3	N/A	1.0 mg/L	2025-11-25	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0 mg/L	2025-11-25	
Alkalinity, Bicarbonate (as CaCO ₃)	7.3	N/A	1.0 mg/L	2025-11-25	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0 mg/L	2025-11-25	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0 mg/L	2025-11-25	
Ammonia, Total (as N)	< 0.050	None Required	0.050 mg/L	2025-11-25	
Carbon, Total Organic	7.36	N/A	0.50 mg/L	2025-11-25	
Chemical Oxygen Demand	21	N/A	20 mg/L	2025-11-25	
Colour, True	37	AO ≤ 15	5.0 CU	2025-11-25	
Conductivity (EC)	37.0	N/A	2.0 µS/cm	2025-11-25	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020 mg/L	2025-11-25	
Nitrogen, Total Kjeldahl	0.194	N/A	0.050 mg/L	2025-11-28	
pH	6.21	7.0-10.5	0.10 pH units	2025-11-25	HT2
Phosphorus, Total (as P)	0.0124	N/A	0.0050 mg/L	2025-11-27	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25K2684
2025-12-03 13:09

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Penticton Creek (25K2684-02) | Matrix: Water | Sampled: 2025-11-23 16:00, Continued

General Parameters, Continued

Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-11-26	
Temperature, at pH	19.3	N/A		°C	2025-11-25	HT2
Turbidity	1.36	OG < 1	0.10	NTU	2025-11-24	
UV Transmittance @ 254 nm - Unfiltered	54.1	N/A	0.10	% T	2025-11-24	

Total Metals

Aluminum, total	0.142	OG < 0.1	0.0050	mg/L	2025-11-27	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-11-27	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-11-27	
Barium, total	0.0064	MAC = 2	0.0050	mg/L	2025-11-27	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-11-27	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-11-27	
Calcium, total	3.87	None Required	0.20	mg/L	2025-11-27	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-11-27	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-11-27	
Copper, total	0.00202	MAC = 2	0.00040	mg/L	2025-11-27	
Iron, total	0.415	AO ≤ 0.1	0.010	mg/L	2025-11-27	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-11-27	
Magnesium, total	1.02	None Required	0.010	mg/L	2025-11-27	
Manganese, total	0.00585	MAC = 0.12	0.00020	mg/L	2025-11-27	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-11-27	HG1
Molybdenum, total	0.00056	N/A	0.00010	mg/L	2025-11-27	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-11-27	
Potassium, total	0.45	N/A	0.10	mg/L	2025-11-27	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-11-27	
Sodium, total	2.29	AO ≤ 200	0.10	mg/L	2025-11-27	
Strontium, total	0.0453	MAC = 7	0.0010	mg/L	2025-11-27	
Uranium, total	0.000432	MAC = 0.02	0.000020	mg/L	2025-11-27	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-11-27	

Duncan PRV (25K2684-03) | Matrix: Water | Sampled: 2025-11-23 11:55

Anions

Chloride	9.61	AO ≤ 250	0.10	mg/L	2025-11-24	
Fluoride	0.14	MAC = 1.5	0.10	mg/L	2025-11-24	
Nitrate (as N)	< 0.010	MAC = 10	0.010	mg/L	2025-11-24	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-11-24	
Sulfate	24.4	AO ≤ 500	1.0	mg/L	2025-11-24	

Calculated Parameters

Total Trihalomethanes	0.0332	MAC = 0.1	0.00400	mg/L	N/A	
Hardness, Total (as CaCO3)	103	None Required	0.500	mg/L	N/A	
Langelier Index	-0.9	N/A	-5.0		2025-11-26	CT6

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25K2684
2025-12-03 13:09

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Duncan PRV (25K2684-03) | Matrix: Water | Sampled: 2025-11-23 11:55, Continued

Calculated Parameters, Continued

Nitrogen, Organic	0.109	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	147	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO ₃)	103	N/A	1.0	mg/L	2025-11-25	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-11-25	
Alkalinity, Bicarbonate (as CaCO ₃)	103	N/A	1.0	mg/L	2025-11-25	
Alkalinity, Carbonate (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-11-25	
Alkalinity, Hydroxide (as CaCO ₃)	< 1.0	N/A	1.0	mg/L	2025-11-25	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-11-25	
Carbon, Total Organic	3.48	N/A	0.50	mg/L	2025-11-25	
Chemical Oxygen Demand	< 20	N/A	20	mg/L	2025-11-25	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-11-25	
Conductivity (EC)	274	N/A	2.0	µS/cm	2025-11-25	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-11-25	
Nitrogen, Total Kjeldahl	0.109	N/A	0.050	mg/L	2025-11-28	
pH	7.27	7.0-10.5	0.10	pH units	2025-11-25	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-11-28	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-11-26	
Temperature, at pH	20.8	N/A		°C	2025-11-25	HT2
Turbidity	0.12	OG < 1	0.10	NTU	2025-11-24	
UV Transmittance @ 254 nm - Unfiltered	93.3	N/A	0.10	% T	2025-11-24	

Haloacetic Acids

Monochloroacetic Acid	< 0.0040	N/A	0.0020	mg/L	2025-11-28	RA3
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-11-28	
Dichloroacetic Acid	0.0142	N/A	0.0020	mg/L	2025-11-28	
Trichloroacetic Acid	0.0183	N/A	0.0020	mg/L	2025-11-28	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-11-28	
Total Haloacetic Acids (HAA5)	0.0325	MAC = 0.08	0.00400	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	115		70-130	%	2025-11-28	

Total Metals

Aluminum, total	0.0110	OG < 0.1	0.0050	mg/L	2025-11-25	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-11-25	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-11-25	
Barium, total	0.0189	MAC = 2	0.0050	mg/L	2025-11-25	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-11-25	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-11-25	
Calcium, total	27.8	None Required	0.20	mg/L	2025-11-25	
Chromium, total	0.00257	MAC = 0.05	0.00050	mg/L	2025-11-25	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-11-25	
Copper, total	0.00148	MAC = 2	0.00040	mg/L	2025-11-25	
Iron, total	< 0.010	AO ≤ 0.1	0.010	mg/L	2025-11-25	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25K2684
2025-12-03 13:09

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Duncan PRV (25K2684-03) | Matrix: Water | Sampled: 2025-11-23 11:55, Continued

Total Metals, Continued

Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-11-25	
Magnesium, total	8.12	None Required	0.010	mg/L	2025-11-25	
Manganese, total	0.00049	MAC = 0.12	0.00020	mg/L	2025-11-25	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-11-25	HG1
Molybdenum, total	0.00292	N/A	0.00010	mg/L	2025-11-25	
Nickel, total	0.00121	N/A	0.00040	mg/L	2025-11-25	
Potassium, total	1.94	N/A	0.10	mg/L	2025-11-25	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-11-25	
Sodium, total	12.2	AO ≤ 200	0.10	mg/L	2025-11-25	
Strontium, total	0.233	MAC = 7	0.0010	mg/L	2025-11-25	
Uranium, total	0.000065	MAC = 0.02	0.000020	mg/L	2025-11-25	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-11-25	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0028	N/A	0.0010	mg/L	2025-11-26	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-11-26	
Chloroform	0.0304	N/A	0.0010	mg/L	2025-11-26	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-11-26	
Surrogate: Toluene-d8	82		70-130	%	2025-11-26	
Surrogate: 4-Bromofluorobenzene	86		70-130	%	2025-11-26	

Lawrence Ave Stn (25K2684-04) | Matrix: Water | Sampled: 2025-11-23 12:25

Anions

Chloride	9.25	AO ≤ 250	0.10	mg/L	2025-11-24	
Fluoride	0.13	MAC = 1.5	0.10	mg/L	2025-11-24	
Nitrate (as N)	< 0.010	MAC = 10	0.010	mg/L	2025-11-24	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2025-11-24	
Sulfate	24.5	AO ≤ 500	1.0	mg/L	2025-11-24	

Calculated Parameters

Hardness, Total (as CaCO3)	108	None Required	0.500	mg/L	N/A	
Langelier Index	-1.0	N/A	-5.0		2025-12-01	CT6
Nitrogen, Organic	0.120	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	148	AO ≤ 500	1.00	mg/L	N/A	

General Parameters

Alkalinity, Total (as CaCO3)	102	N/A	1.0	mg/L	2025-11-25	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-25	
Alkalinity, Bicarbonate (as CaCO3)	102	N/A	1.0	mg/L	2025-11-25	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-25	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2025-11-25	
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2025-11-25	
Carbon, Total Organic	3.46	N/A	0.50	mg/L	2025-11-25	

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25K2684
2025-12-03 13:09

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Lawrence Ave Stn (25K2684-04) | Matrix: Water | Sampled: 2025-11-23 12:25, Continued

General Parameters, Continued

Chemical Oxygen Demand	< 20	N/A	20	mg/L	2025-11-25	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2025-11-25	
Conductivity (EC)	267	N/A	2.0	µS/cm	2025-11-25	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2025-11-25	
Nitrogen, Total Kjeldahl	0.120	N/A	0.050	mg/L	2025-11-28	
pH	7.07	7.0-10.5	0.10	pH units	2025-11-25	HT2
Phosphorus, Total (as P)	< 0.0050	N/A	0.0050	mg/L	2025-11-28	
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2025-11-26	
Temperature, at pH	20.9	N/A		°C	2025-11-25	HT2
Turbidity	< 0.10	OG < 1	0.10	NTU	2025-11-24	
UV Transmittance @ 254 nm - Unfiltered	93.1	N/A	0.10	% T	2025-11-24	

Total Metals

Aluminum, total	0.0130	OG < 0.1	0.0050	mg/L	2025-11-28	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2025-11-28	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2025-11-28	
Barium, total	0.0196	MAC = 2	0.0050	mg/L	2025-11-28	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2025-11-28	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2025-11-28	
Calcium, total	30.3	None Required	0.20	mg/L	2025-11-28	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-11-28	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2025-11-28	
Copper, total	0.00572	MAC = 2	0.00040	mg/L	2025-11-28	
Iron, total	< 0.010	AO ≤ 0.1	0.010	mg/L	2025-11-28	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2025-11-28	
Magnesium, total	7.88	None Required	0.010	mg/L	2025-11-28	
Manganese, total	< 0.00020	MAC = 0.12	0.00020	mg/L	2025-11-27	
Mercury, total	< 0.000040	MAC = 0.001	0.000040	mg/L	2025-11-28	HG1
Molybdenum, total	0.00297	N/A	0.00010	mg/L	2025-11-28	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2025-11-28	
Potassium, total	2.12	N/A	0.10	mg/L	2025-11-28	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2025-11-28	
Sodium, total	12.1	AO ≤ 200	0.10	mg/L	2025-11-28	
Strontium, total	0.242	MAC = 7	0.0010	mg/L	2025-11-28	
Uranium, total	0.000116	MAC = 0.02	0.000020	mg/L	2025-11-28	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2025-11-28	

Naramata Rd Stn (25K2684-05) | Matrix: Water | Sampled: 2025-11-23 15:04

Calculated Parameters

Total Trihalomethanes	0.0645	MAC = 0.1	0.00400	mg/L	N/A
-----------------------	---------------	-----------	---------	------	-----

Haloacetic Acids

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25K2684
2025-12-03 13:09

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
---------	--------	-----------	----	-------	----------	-----------

Naramata Rd Stn (25K2684-05) | Matrix: Water | Sampled: 2025-11-23 15:04, Continued

Haloacetic Acids, Continued

Monochloroacetic Acid	< 0.0050	N/A	0.0020	mg/L	2025-11-26	RA3
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-11-26	
Dichloroacetic Acid	0.0201	N/A	0.0020	mg/L	2025-11-26	
Trichloroacetic Acid	0.0264	N/A	0.0020	mg/L	2025-11-26	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-11-26	
Total Haloacetic Acids (HAA5)	0.0465	MAC = 0.08	0.00500	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	108		70-130	%	2025-11-26	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0055	N/A	0.0010	mg/L	2025-11-26	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-11-26	
Chloroform	0.0590	N/A	0.0010	mg/L	2025-11-26	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-11-26	
Surrogate: Toluene-d8	85		70-130	%	2025-11-26	
Surrogate: 4-Bromofluorobenzene	79		70-130	%	2025-11-26	

Smythe Dr (25K2684-06) | Matrix: Water | Sampled: 2025-11-23 13:00

Calculated Parameters

Total Trihalomethanes	0.0575	MAC = 0.1	0.00400	mg/L	N/A	
-----------------------	---------------	-----------	---------	------	-----	--

Haloacetic Acids

Monochloroacetic Acid	< 0.0050	N/A	0.0020	mg/L	2025-11-26	RA3
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-11-26	
Dichloroacetic Acid	0.0239	N/A	0.0020	mg/L	2025-11-26	
Trichloroacetic Acid	0.0315	N/A	0.0020	mg/L	2025-11-26	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-11-26	
Total Haloacetic Acids (HAA5)	0.0554	MAC = 0.08	0.00500	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	120		70-130	%	2025-11-26	

Volatile Organic Compounds (VOC)

Bromodichloromethane	0.0045	N/A	0.0010	mg/L	2025-11-26	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-11-26	
Chloroform	0.0530	N/A	0.0010	mg/L	2025-11-26	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-11-26	
Surrogate: Toluene-d8	85		70-130	%	2025-11-26	
Surrogate: 4-Bromofluorobenzene	81		70-130	%	2025-11-26	

Randolph Rd Stn (25K2684-07) | Matrix: Water | Sampled: 2025-11-23 13:40

Calculated Parameters

Total Trihalomethanes	0.0454	MAC = 0.1	0.00400	mg/L	N/A	
-----------------------	---------------	-----------	---------	------	-----	--

Haloacetic Acids

TEST RESULTS

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

WORK ORDER REPORTED 25K2684
2025-12-03 13:09

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Randolph Rd Stn (25K2684-07) Matrix: Water Sampled: 2025-11-23 13:40, Continued						
<i>Haloacetic Acids, Continued</i>						
Monochloroacetic Acid	< 0.0050	N/A	0.0020	mg/L	2025-11-26	RA3
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-11-26	
Dichloroacetic Acid	0.0183	N/A	0.0020	mg/L	2025-11-26	
Trichloroacetic Acid	0.0248	N/A	0.0020	mg/L	2025-11-26	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2025-11-26	
Total Haloacetic Acids (HAA5)	0.0431	MAC = 0.08	0.00500	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	127		70-130	%	2025-11-26	

Volatle Organic Compounds (VOC)

Bromodichloromethane	0.0043	N/A	0.0010	mg/L	2025-11-26	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2025-11-26	
Chloroform	0.0411	N/A	0.0010	mg/L	2025-11-26	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2025-11-26	
Surrogate: Toluene-d8	83		70-130	%	2025-11-26	
Surrogate: 4-Bromofluorobenzene	82		70-130	%	2025-11-26	

Sample Qualifiers:

CT6	Results were based on lab temperature & lab pH.
HG1	Sample bottle and preservation submitted is not suitable for Mercury analysis and analyte stability may be affected.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
RA3	The Reporting Limit has been raised due to comparable level detected in the blank(s).

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Penticton, City of - DW & STP
Quarterly Samples

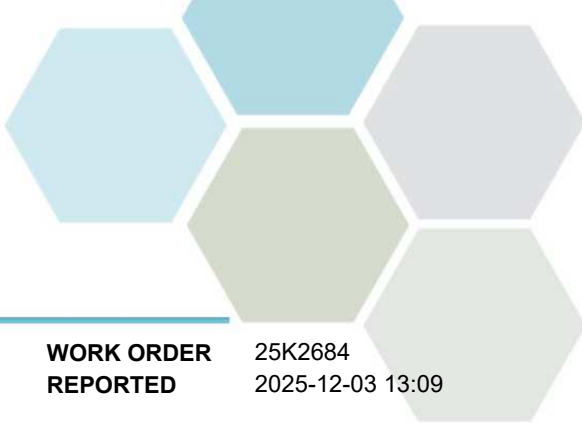
WORK ORDER REPORTED 25K2684
2025-12-03 13:09

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Carbon, Total Organic in Water	SM 5310 B (2022)	Combustion, Infrared CO2 Detection	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2022)	Closed Reflux, Colorimetry	✓	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	ASTM D7511-12	Flow Injection with In-Line UV Digestion and Amperometry	✓	Kelowna
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
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
Nitrogen, Total Kjeldahl in Water	SM 4500-Norg D* (2021)	Block Digestion and Flow Injection Analysis	✓	Kelowna
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Phosphorus, Total in Water	SM 4500-P B.5* (2011) / SM 4500-P F (2021)	Persulfate Digestion / Automated Colorimetry (Ascorbic Acid)	✓	Kelowna
Solids, Total Dissolved in Water	SM 1030 E (2021)	SM 1030 E		N/A
Sulfide, Total in Water	SM 4500-S2 D* (2021)	Colorimetry (Methylene Blue)	✓	Edmonton
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Transmittance at 254 nm - Unfiltered in Water	SM 5910 B* (2021)	Ultraviolet Absorption	✓	Kelowna
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	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)
% T	Percent Transmittance
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
AO	Aesthetic Objective
CU	Colour Units (referenced against a platinum cobalt standard)
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, pH > 7 = basic
µS/cm	Microsiemens per centimetre
ASTM	ASTM International Test Methods
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Penticton, City of - DW & STP	WORK ORDER	25K2684
PROJECT	Quarterly Samples	REPORTED	2025-12-03 13:09

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any 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. Results in **red** indicate values above the regulatory limits where these have been included. 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

Regulatory limits are added to test reports on request and are as a convenience only. While CARO makes every effort to ensure accuracy of regulatory limits, CARO assumes no liability for the use of this information. It remains the client's responsibility to ensure that regulatory limits are correct for their circumstances.



August 26, 2025 Okanagan Lake Intake Raw Water Algae Results

Algae densities in the City of Penticton Okanagan Lake raw water were moderate on August 26 with total cell densities of 4535 cells/mL (Figure 1). Cyanobacteria were the dominant group, representing a combined cell count of 3,835 cells/mL across multiple species.

Cyanobacteria densities exceeding 2,000 cells/mL are considered to represent a low-level risk for cyanotoxin production. While the observed density of 3,835 cells/mL falls within the typical seasonal range for Okanagan Lake raw water, any exceedance of the 2,000 cells/mL threshold should be noted, as it indicates the potential for bloom development and possible impacts on drinking water quality.

Report prepared by: Larratt Aquatic Consulting Ltd.

Written by:

Stephanie Butt: Taxonomist, H. B.Sc., BIT

Reviewed by:

Heather Larratt: Principal Aquatic Biologist, H. B.Sc., R.P.Bio

Table 1: Algae densities in August 26 sample

Algae Type	Density (cells/mL)
Total Cells	4535
Diatoms	550
Yellow-Brown	10
Green	70
Cyanobacteria	3835
Dinoflagellates	0
Other Flagellates	70

Table 2: Dominant algae densities by individual taxa

Group	Taxa	Density (cells/mL)
Cyanobacteria	<i>Planktolyngbya sp.</i>	1745
Cyanobacteria	<i>Anacystis sp.</i>	975
Cyanobacteria	<i>Anathece sp.</i>	460
Diatoms	<i>UID centric diatom</i>	400
Cyanobacteria	<i>Aphanocapsa sp.</i>	290
Cyanobacteria	<i>Aphanizomenon sp.</i>	245
Cyanobacteria	<i>Pseudanabaena sp.</i>	80

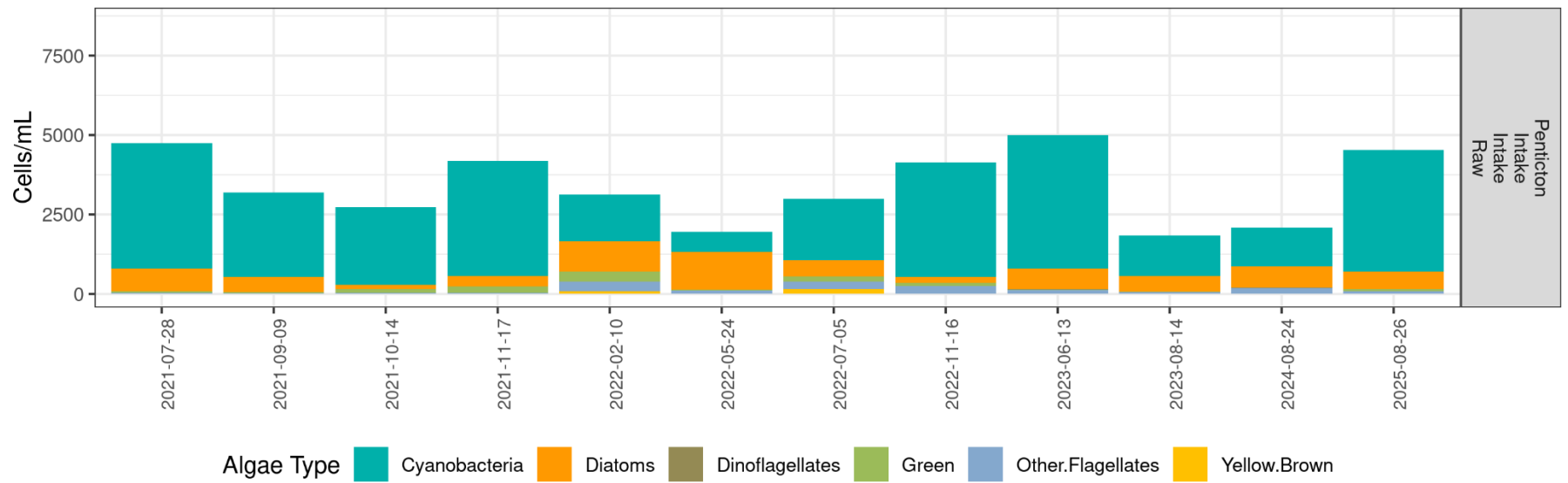


Figure 1: Penticton intake raw water algae densities, 2021-2025



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME: 8:00 AM	DAY: 08	MONTH: 01	YEAR: 2025	ADDRESS OF LEAK / BREAK
REPORT COMPLETED BY: Ken Almeida				CIVIC ADDRESS: 188 Hasting Pl.

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY: Ken Almeida					SERVICE TYPE: ☒ POTABLE ☐ IRRIGATION ☐ SANITARY FORCEMAIN ☐ SANITARY GRAVITY ☐ STORM GRAVITY				
TIME AND DATE REPORTED	TIME: 8:00 AM	DAY: 05	MONTH: 01	YEAR: 2025	TIME AND DATE OF INITIAL ASSESSMENT	TIME: 8:15 AM	DAY: 05	MONTH: 01	YEAR: 2025
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF	TIME: 12:00 PM	DAY: 06	MONTH: 01	YEAR: 2025	TIME AND DATE SERVICE RESTORED	TIME: 1:00 PM	DAY: 06	MONTH: 01	YEAR: 2025
PRIVATE PROPERTY AFFECTED: YES ☐ NO ☒			CIVIC ADDRESS OF PROPERTY AFFECTED: —			BREAK HISTORY IN AREA YES ☐ NO ☒		ADDRESS OF NEAREST BREAK:	

PHYSICAL INFORMATION:

PIPE DIAMETER: 100	MM	TYPE OF INTERNAL LINING:	—
PIPE MATERIAL: CAS		TYPE OF EXTERNAL COATING:	—
INSTALLATION YEAR: 1930		TYPE OF JOINT:	—
TYPICAL OPERATING PRESSURE: 122	PSI	SERVICE TYPE:	—
DEPTH OF COVER: 4.5 FT	M	DEPTH OF FROST:	— M
LOCATED UNDER: BLVD / SIDEWALK / ROAD / OTHER		OTHER UTILITIES:	gas line was near
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC ☐ ROCK ☐ GRAVEL ☐ GRAVEL / SAND ☐ SAND ☒ SILT ☐ CLAY ☒		

FAILURE INFORMATION:

CIRCUMFERENTIAL BREAK: YES ☒ NO ☐	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK: YES ☐ NO ☒		
SPLIT-BELL: YES ☐ NO ☒	CROWN YES ☐ NO ☒	
LOCALIZED CORROSION (PITTING): YES ☐ NO ☒	SPRINGLINE YES ☐ NO ☒	
GENERAL CORROSION: YES ☐ NO ☒	INVERT YES ☐ NO ☒	
LEAKING JOINT: YES ☐ NO ☒		
BROKEN / LEAKING VALVE / FITTING: YES ☐ NO ☒		
LEAKING SERVICE CONNECTION: YES ☐ NO ☒		
PIPE SAMPLE TAKEN: YES ☐ NO ☒	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN: YES ☐ NO ☒	OLD PIPE, Poor BACK fill	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES ☒ NO ☐	REPLACE VALVE:	YES ☒ NO ☐	TYPE:
LENGTH OF PIPE REPLACED:	1.2 M	REPLACE SERVICE CONNECTION:	YES ☒ NO ☐	
REPLACEMENT PIPE MATERIAL:	PVC	REPAIR JOINT:	YES ☒ NO ☐	
REPAIR CLAMP:	YES ☒ NO ☐	WELD REPAIR:	YES ☒ NO ☐	
COMPRESSION SLEEVE:	YES ☒ NO ☐	POST REPAIR HYDROTEST REQUIRED:	YES ☒ NO ☐	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:		YES ☒ NO ☐		
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)		TYPE I ☒ TYPE II ☐ TYPE III ☐ TYPE IV ☐		
POSITIVE MAIN PRESSURE MAINTAINED:		YES ☒ NO ☐		
MAINTAIN PIT WATER LEVEL BELOW BREAK		YES ☒ NO ☐		
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)				
REPAIR COMMENTS:				
Section of Pipe was replaced				
ADDITIONAL WORK REQUIRED:	YES ☒ NO ☐	ADDITIONAL WORK DETAILS:		
CITY PERSONNEL ON SITE:	Devon Kilby murray R Pat Wreer mikes		CITY EQUIPMENT ON SITE:	H51 Back Hoe Dump truck

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:		
Ken Almrod	Flushed for 30 mins Once Repaired		
HYDRANT ID# OR LOCATION:	Hyd-862	START TIME:	12:50 pm
HYDRANT ID# OR LOCATION:		END TIME:	1:20 pm
HYDRANT ID# OR LOCATION:		START TIME:	
HYDRANT ID# OR LOCATION:		END TIME:	

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
Ken Almrod	1:20 pm	06	01	2025
CHLORINE RESIDUAL:	0.79	MG/L	HYDRANT ID# OR SAMPLE LOCATION:	
TURBIDITY READING:	0.77	NTU	Hyd-862	

GENERAL COMMENTS ON LEAK OR BREAK:

Before shutting Down main there was Proper Distance from the Pipe and around.
Hymax Clamps were USED



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME:	DAY:	MONTH:	YEAR:	ADDRESS OF LEAK / BREAK	
10:00 AM	10	Jan	2025	CIVIC ADDRESS:	
REPORT COMPLETED BY:				662 Okanagan E. Ave.	
Ken Almer D					

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY:					SERVICE TYPE:					
Ken Almer D					☒ POTABLE IRRIGATION SANITARY FORCEMAIN SANITARY GRAVITY STORM GRAVITY					
TIME AND DATE REPORTED	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE OF INITIAL ASSESSMENT	TIME:	DAY:	MONTH:	YEAR:	
12:30 pm	05	01	2025		12:45	05	01	2025		
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE SERVICE RESTORED	TIME:	DAY:	MONTH:	YEAR:	
2:00 pm	05	01	2025		6 pm	05	01	25		
PRIVATE PROPERTY AFFECTED:			CIVIC ADDRESS OF PROPERTY AFFECTED:			BREAK HISTORY IN AREA			ADDRESS OF NEAREST BREAK:	
YES ☒ NO						YES ☒ NO				

PHYSICAL INFORMATION:

PIPE DIAMETER:	150	MM	TYPE OF INTERNAL LINING:	
PIPE MATERIAL:	CAS		TYPE OF EXTERNAL COATING:	
INSTALLATION YEAR:	1960		TYPE OF JOINT:	
TYPICAL OPERATING PRESSURE:	120	PSI	SERVICE TYPE:	
DEPTH OF COVER:		M	DEPTH OF FROST:	M
LOCATED UNDER:	BLVRD / SIDEWALK / ROAD / OTHER		OTHER UTILITIES:	gas line near
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC ☒ ROCK ☒ GRAVEL ☒ GRAVEL / SAND SAND SILT CLAY			

FAILURE INFORMATION:

CIRCUMFERENTIAL BREAK:	☒ YES ☒ NO	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK:	☒ YES ☒ NO		
SPLIT-BELL:	☒ YES ☒ NO	CROWN YES ☒ NO	
LOCALIZED CORROSION (PITTING):	☒ YES ☒ NO	SPRINGLINE YES ☒ NO	
GENERAL CORROSION:	☒ YES ☒ NO	INVERT YES ☒ NO	
LEAKING JOINT:	☒ YES ☒ NO		
BROKEN / LEAKING VALVE / FITTING:	☒ YES ☒ NO		
LEAKING SERVICE CONNECTION:	☒ YES ☒ NO		
PIPE SAMPLE TAKEN:	☒ YES ☒ NO	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN:	☒ YES ☒ NO	Rock under pipe	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES ☒ NO	REPLACE VALVE:	YES ☒ NO	TYPE: <u> </u>
LENGTH OF PIPE REPLACED:	<u> </u> M	REPLACE SERVICE CONNECTION:	YES ☒ NO	
REPLACEMENT PIPE MATERIAL:	<u> </u>	REPAIR JOINT:	YES ☒ NO	
REPAIR CLAMP:	YES / NO	WELD REPAIR:	YES ☒ NO	
COMPRESSION SLEEVE:	YES / NO	POST REPAIR HYDROTEST REQUIRED:	YES ☒ NO	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:			☒ YES / NO	
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)			☒ TYPE I TYPE II TYPE III TYPE IV	
POSITIVE MAIN PRESSURE MAINTAINED:		MAINTAIN PIT WATER LEVEL BELOW BREAK		
☒ YES / NO		☒ YES / NO		
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)				
☒ YES / NO				
REPAIR COMMENTS: <u>Rock under Pipe Poor Back fill</u>				
ADDITIONAL WORK REQUIRED:		ADDITIONAL WORK DETAILS:		
YES ☒ NO		<u> </u>		
CITY PERSONNEL ON SITE:	<u>Blake Pickering mike S. Derecs PAT Greer</u>		CITY EQUIPMENT ON SITE:	<u>BACK HOE #5' Dump truck</u>

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
CHLORINE RESIDUAL:	<u> </u> MG/L	HYDRANT ID# OR SAMPLE LOCATION: <u> </u>		
TURBIDITY READING:	<u> </u> NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:		
<u>Trevor Wingrove</u>	<u>Flush for 20min. Once Repaired</u>		
HYDRANT ID# OR LOCATION: <u>Hyd-452</u>	START TIME: <u>6:00 pm</u>	END TIME: <u>6:20 pm</u>	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
<u>Trevor Wingrove</u>	<u>6:25</u>	<u>05</u>	<u>01</u>	<u>2025</u>
CHLORINE RESIDUAL:	<u>1.17</u> MG/L	HYDRANT ID# OR SAMPLE LOCATION: <u>Hyd-452</u>		
TURBIDITY READING:	<u>0.44</u> NTU			

GENERAL COMMENTS ON LEAK OR BREAK:

<u>Repair Clamp was Installed. Positive Pressure was maintained.</u>



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME:	DAY:	MONTH:	YEAR:	ADDRESS OF LEAK / BREAK
7:30am	15	01	2025	
REPORT COMPLETED BY:				CIVIC ADDRESS:
Ken Almrud				299 Winnipeg St.

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY:					SERVICE TYPE:					
Ken Almrud					☒ POTABLE IRRIGATION SANITARY FORCEMAIN SANITARY GRAVITY STORM GRAVITY					
TIME AND DATE REPORTED	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE OF INITIAL ASSESSMENT	TIME:	DAY:	MONTH:	YEAR:	
	1:pm	14	01	2025		1:15 pm	14	01	2025	
TIME AND DATE SERVICE THROTTLED DOWN /SHUT OFF	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE SERVICE RESTORED	TIME:	DAY:	MONTH:	YEAR:	
	6:30 pm	14	01	2025		11:30 pm	14	01	2025	
PRIVATE PROPERTY AFFECTED:		YES ☐ NO ☒			CIVIC ADDRESS OF PROPERTY AFFECTED:		BREAK HISTORY IN AREA			ADDRESS OF NEAREST BREAK:
							YES ☐ NO ☒			186 Nanaimo Ave. W

PHYSICAL INFORMATION:

PIPE DIAMETER:	200	MM	TYPE OF INTERNAL LINING:	
PIPE MATERIAL:	CAS		TYPE OF EXTERNAL COATING:	
INSTALLATION YEAR:	1950		TYPE OF JOINT:	
TYPICAL OPERATING PRESSURE:	120	PSI	SERVICE TYPE:	
DEPTH OF COVER:	5 ft.	M	DEPTH OF FROST:	M
LOCATED UNDER:	BLVRD / SIDEWALK ☒ ROAD ☐ OTHER		OTHER UTILITIES:	
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC ROCK GRAVEL ☒ GRAVEL / SAND ☐ SAND SILT CLAY			

FAILURE INFORMATION:

CIRUMFERENTIAL BREAK:	YES ☒ NO ☐	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK:	YES ☐ NO ☒		
SPLIT-BELL:	YES ☐ NO ☒	CROWN YES ☐ NO ☒	
LOCALIZED CORROSION(PITTING):	YES ☐ NO ☒	SPRINGLINE YES ☐ NO ☒	
GENERAL CORROSION:	YES ☐ NO ☒	INVERT YES ☐ NO ☒	
LEAKING JOINT:	YES ☐ NO ☒		
BROKEN / LEAKING VALVE / FITTING:	YES ☐ NO ☒		
LEAKING SERVICE CONNECTION:	YES ☐ NO ☒		
PIPE SAMPLE TAKEN:	YES ☐ NO ☒	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN:	YES ☐ NO ☒	OLD Pipe	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES ☒ NO ☐	REPLACE VALVE:	YES ☒ NO ☐	TYPE:
LENGTH OF PIPE REPLACED:	— M	REPLACE SERVICE CONNECTION:	YES ☒ NO ☐	
REPLACEMENT PIPE MATERIAL:	—	REPAIR JOINT:	YES ☒ NO ☐	
REPAIR CLAMP:	YES / NO	WELD REPAIR:	YES ☒ NO ☐	
COMPRESSION SLEEVE:	YES / NO	POST REPAIR HYDROTEST REQUIRED:	YES ☒ NO ☐	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:			☒ YES ☐ NO	
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)			☒ TYPE I ☐ TYPE II ☐ TYPE III ☐ TYPE IV	
POSITIVE MAIN PRESSURE MAINTAINED:		MAINTAIN PIT WATER LEVEL BELOW BREAK		
☒ YES ☐ NO		☒ YES ☐ NO		
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)				
☒ YES ☐ NO				
REPAIR COMMENTS:				
Isolated section of main				
ADDITIONAL WORK REQUIRED:	YES ☒ NO ☐	ADDITIONAL WORK DETAILS:		
CITY PERSONNEL ON SITE:		CITY EQUIPMENT ON SITE:		
Jason Peck, PAT L Murry R. Mike S Devon K. Jon T		2 Dump Trucks Back Hoe. Grizzley Vac Truck		

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:		
Jon Ten Veen	Flushed for 45 min		
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
Hyd-70	11:30 PM	12:15 AM	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
Jon Ten Veen	12:15 AM	15	01	2025
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
1.02		Hyd-70		
TURBIDITY READING:	NTU			
.39				

GENERAL COMMENTS ON LEAK OR BREAK:

cut and capped Pipe. finish Repair in a few weeks. Positive Pressure was maintained at all times.	



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME:	DAY:	MONTH:	YEAR:	ADDRESS OF LEAK / BREAK
10:00am	20	01	2025	CIVIC ADDRESS:
REPORT COMPLETED BY:				140 Woodlands Pl.
Ken AlmroD				

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY:					SERVICE TYPE:					
Jon Ten Veen					☒ POTABLE ☐ IRRIGATION ☐ SANITARY FORCEMAIN ☐ SANITARY GRAVITY ☐ STORM GRAVITY					
TIME AND DATE REPORTED	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE OF INITIAL ASSESSMENT	TIME:	DAY:	MONTH:	YEAR:	
	7:10am	20	01	2025		7:20am	20	01	2025	
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE SERVICE RESTORED	TIME:	DAY:	MONTH:	YEAR:	
	9:45am	20	01	2025		11:30am	20	01	2025	
PRIVATE PROPERTY AFFECTED:		YES / NO			CIVIC ADDRESS OF PROPERTY AFFECTED:		BREAK HISTORY IN AREA		ADDRESS OF NEAREST BREAK:	
		☒ YES ☐ NO					☐ YES ☐ NO			

PHYSICAL INFORMATION:

PIPE DIAMETER:	100	MM	TYPE OF INTERNAL LINING:	
PIPE MATERIAL:	CAS		TYPE OF EXTERNAL COATING:	
INSTALLATION YEAR:	1968		TYPE OF JOINT:	
TYPICAL OPERATING PRESSURE:	87	PSI	SERVICE TYPE:	
DEPTH OF COVER:	5.5 ft.	M	DEPTH OF FROST:	M
LOCATED UNDER:	BLVRD / SIDEWALK / ROAD / OTHER		OTHER UTILITIES:	Sewer Service
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC ☒ ROCK ☐ GRAVEL ☐ GRAVEL / SAND ☐ SAND ☐ SILT ☐ CLAY			

FAILURE INFORMATION:

CIRUMFERENTIAL BREAK:	☒ YES ☐ NO	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK:	☒ YES ☐ NO		
SPLIT-BELL:	☒ YES ☐ NO	CROWN YES / NO	
LOCALIZED CORROSION(PITTING):	☒ YES ☐ NO	SPRINGLINE YES / NO	
GENERAL CORROSION:	☒ YES ☐ NO	INVERT YES / NO	
LEAKING JOINT:	☒ YES ☐ NO		
BROKEN / LEAKING VALVE / FITTING:	☒ YES ☐ NO		
LEAKING SERVICE CONNECTION:	☒ YES ☐ NO		
PIPE SAMPLE TAKEN:	☒ YES ☐ NO	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN:	☒ YES ☐ NO	Poor Backfill	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES ☒ NO ☐	REPLACE VALVE:	YES ☒ NO ☐	TYPE: <u> </u>
LENGTH OF PIPE REPLACED:	<u> </u> M	REPLACE SERVICE CONNECTION:	YES ☒ NO ☐	
REPLACEMENT PIPE MATERIAL:	<u> </u>	REPAIR JOINT:	YES ☒ NO ☐	
REPAIR CLAMP:	YES ☒ NO ☐	WELD REPAIR:	YES ☒ NO ☐	
COMPRESSION SLEEVE:	YES ☒ NO ☐	POST REPAIR HYDROTEST REQUIRED:	YES ☒ NO ☐	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:				YES ☒ NO ☐
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)				
☒ TYPE I ☐ TYPE II ☐ TYPE III ☐ TYPE IV				
POSITIVE MAIN PRESSURE MAINTAINED:	YES ☒ NO ☐	MAINTAIN PIT WATER LEVEL BELOW BREAK	YES ☒ NO ☐	
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)				YES ☒ NO ☐
REPAIR COMMENTS:				
<u>Repair Clamp USED</u>				
ADDITIONAL WORK REQUIRED:	YES ☒ NO ☐	ADDITIONAL WORK DETAILS:		
CITY PERSONNEL ON SITE:	<u>PAT. G. MURRAY R. JASON P. DERECK S. MIKE S.</u>		CITY EQUIPMENT ON SITE:	<u>2 Dump Trucks # 5' Backhoe</u>

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:		
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

GENERAL COMMENTS ON LEAK OR BREAK:

<u>Positive Pressure was maintained. Home Owner as the Top of the Calde Sac let his water run for 30 min.</u>



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME:	DAY:	MONTH:	YEAR:	ADDRESS OF LEAK / BREAK
7:30 am	22	01	2025	CIVIC ADDRESS:
REPORT COMPLETED BY:				66 Duncan Ave. W.
Ken Almrud				

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY:					SERVICE TYPE:				
Jason Peck					☒ POTABLE ☐ IRRIGATION ☐ SANITARY FORCEMAIN ☐ SANITARY GRAVITY ☐ STORM GRAVITY				
TIME AND DATE REPORTED	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE OF INITIAL ASSESSMENT	TIME:	DAY:	MONTH:	YEAR:
6:45 pm	21	01	2025	6:50 pm	21	01	2025		
TIME AND DATE SERVICE THROTTLED DOWN /SHUT OFF	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE SERVICE RESTORED	TIME:	DAY:	MONTH:	YEAR:
11:00 pm	21	01	2025	11:20 pm	21	01	2025		
PRIVATE PROPERTY AFFECTED:		YES ☐ NO ☒			CIVIC ADDRESS OF PROPERTY AFFECTED:		BREAK HISTORY IN AREA		YES ☐ NO ☒
									ADDRESS OF NEAREST BREAK:

PHYSICAL INFORMATION:

PIPE DIAMETER:	150	MM	TYPE OF INTERNAL LINING:	—
PIPE MATERIAL:	CAS		TYPE OF EXTERNAL COATING:	—
INSTALLATION YEAR:	1953		TYPE OF JOINT:	—
TYPICAL OPERATING PRESSURE:	102	PSI	SERVICE TYPE:	—
DEPTH OF COVER:	1.2	M	DEPTH OF FROST:	— M
LOCATED UNDER:	BLVRD / SIDEWALK ☒ ROAD ☐ OTHER ☐		OTHER UTILITIES:	—
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC ☐	ROCK ☒	GRAVEL ☒	GRAVEL / SAND SAND SILT CLAY

FAILURE INFORMATION:

CIRUMFERENTIAL BREAK:	YES ☐ NO ☒	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK:	YES ☐ NO ☒		
SPLIT-BELL:	YES ☐ NO ☒	CROWN YES / NO	
LOCALIZED CORROSION(PITTING):	YES ☐ NO ☒	SPRINGLINE YES / NO	
GENERAL CORROSION:	YES ☐ NO ☒	INVERT YES / NO	
LEAKING JOINT:	YES ☐ NO ☒		
BROKEN / LEAKING VALVE / FITTING:	YES ☐ NO ☒		
LEAKING SERVICE CONNECTION:	YES ☐ NO ☒		
PIPE SAMPLE TAKEN:	YES ☐ NO ☒	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN:	YES ☐ NO ☒	Rocks in Backfill & Age of Pipe	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES/NO	REPLACE VALVE:	YES/NO	TYPE:	
LENGTH OF PIPE REPLACED:		M	REPLACE SERVICE CONNECTION:	YES/NO	
REPLACEMENT PIPE MATERIAL:			REPAIR JOINT:	YES/NO	
REPAIR CLAMP:	YES/NO		WELD REPAIR:	YES/NO	
COMPRESSION SLEEVE:	YES/NO		POST REPAIR HYDROTEST REQUIRED:	YES/NO	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:			YES/NO		
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)			TYPE I TYPE II TYPE III TYPE IV		
POSITIVE MAIN PRESSURE MAINTAINED:			YES/NO		
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)			YES/NO		
REPAIR COMMENTS:					
Repair Clamp was used					
ADDITIONAL WORK REQUIRED:		ADDITIONAL WORK DETAILS:			
YES/NO					
CITY PERSONNEL ON SITE:		CITY EQUIPMENT ON SITE:			
Jon Tenveen Mike S. PAT breer Ken A. Devon Kilby		Dump Truck #51 brizzley Vac Truck			

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:		
Ken Almeida			
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
Hyd-546	11:20	11:45	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
Ken Almeida	11:45	21	01	2025
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
1.04		Hyd-546		
TURBIDITY READING:	NTU			
.41				

GENERAL COMMENTS ON LEAK OR BREAK:

Positive Pressure was maintained at all times



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME:	DAY:	MONTH:	YEAR:	ADDRESS OF LEAK / BREAK	
6:00 AM	13	02	25	CIVIC ADDRESS:	
REPORT COMPLETED BY:				702 Creekside RD.	
Ken Almeida					

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY:					SERVICE TYPE:					
Son Tenveen					☒ POTABLE ☐ IRRIGATION ☐ SANITARY FORCEMAIN ☐ SANITARY GRAVITY ☐ STORM GRAVITY					
TIME AND DATE REPORTED	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE OF INITIAL ASSESSMENT	TIME:	DAY:	MONTH:	YEAR:	
6:30 AM	13	02	2025		6:35 AM	13	02	2025		
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE SERVICE RESTORED	TIME:	DAY:	MONTH:	YEAR:	
2:00 AM	13	02	2025		12:09 PM	13	02	2025		
PRIVATE PROPERTY AFFECTED:		☒ YES / ☐ NO			CIVIC ADDRESS OF PROPERTY AFFECTED:		BREAK HISTORY IN AREA		ADDRESS OF NEAREST BREAK:	
					796 Eckhardt Ave. E		☒ YES / ☐ NO		717 Creek Side	

PHYSICAL INFORMATION:

PIPE DIAMETER:	150	MM	TYPE OF INTERNAL LINING:	—
PIPE MATERIAL:	CAS		TYPE OF EXTERNAL COATING:	—
INSTALLATION YEAR:	1970		TYPE OF JOINT:	—
TYPICAL OPERATING PRESSURE:	75	PSI	SERVICE TYPE:	—
DEPTH OF COVER:	1.2	M	DEPTH OF FROST:	— M
LOCATED UNDER:	BLVRD / SIDEWALK / ROAD	OTHER	OTHER UTILITIES:	—
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC	ROCK	☒ GRAVEL	GRAVEL / SAND SAND SILT CLAY

FAILURE INFORMATION:

CIRUMFERENTIAL BREAK:	☒ YES / ☐ NO	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK:	☐ YES / ☒ NO		
SPLIT-BELL:	☐ YES / ☒ NO	CROWN	
LOCALIZED CORROSION(PITTING):	YES / NO	YES / NO	
GENERAL CORROSION:	YES / NO	SPRINGLINE	
LEAKING JOINT:	☐ YES / ☒ NO	YES / NO	
BROKEN / LEAKING VALVE / FITTING:	☐ YES / ☒ NO	INVERT	
LEAKING SERVICE CONNECTION:	☐ YES / ☒ NO	YES / NO	
PIPE SAMPLE TAKEN:	☐ YES / ☒ NO	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN:	☐ YES / ☒ NO	Old Pipe	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES ☒ NO	REPLACE VALVE:	YES ☒ NO	TYPE:
LENGTH OF PIPE REPLACED:	— M	REPLACE SERVICE CONNECTION:	YES ☒ NO	
REPLACEMENT PIPE MATERIAL:	—	REPAIR JOINT:	YES ☒ NO	
REPAIR CLAMP:	YES ☒ NO	WELD REPAIR:	YES ☒ NO	
COMPRESSION SLEEVE:	YES ☒ NO	POST REPAIR HYDROTEST REQUIRED:	YES ☒ NO	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:		YES ☒ NO		
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)		TYPE I TYPE II TYPE III TYPE IV		
POSITIVE MAIN PRESSURE MAINTAINED:	YES ☒ NO	MAINTAIN PIT WATER LEVEL BELOW BREAK	YES ☒ NO	
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)		YES ☒ NO		
REPAIR COMMENTS: Pipe is OLD				
ADDITIONAL WORK REQUIRED:	YES ☒ NO	ADDITIONAL WORK DETAILS: —		
CITY PERSONNEL ON SITE:	Mike S. Jason P. Devon K. Jon T. murray R. mike J.		CITY EQUIPMENT ON SITE:	Dump Truck #51 Back Hoe,

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:		
Ken Almeida	flushed for 30 mins		
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
HYD-675	12:05	12:35	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
—	—	—	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
—	—	—	

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
Ken Almeida	12:35	13	02	2025
CHLORINE RESIDUAL:	.84 MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	.56 NTU	HYD-675		

GENERAL COMMENTS ON LEAK OR BREAK:

Positive Pressure was maintained AT all Times.



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME: 12:30	DAY: 24	MONTH: 01	YEAR: 2025	ADDRESS OF LEAK / BREAK
REPORT COMPLETED BY: Ken Almrud				CIVIC ADDRESS: 1341 MacCleave Ave.

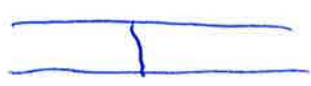
GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY: B. Jason Peck					SERVICE TYPE: ☒ POTABLE ☐ IRRIGATION ☐ SANITARY FORCEMAIN ☐ SANITARY GRAVITY ☐ STORM GRAVITY				
TIME AND DATE REPORTED	TIME: 6:30pm	DAY: 22	MONTH: 01	YEAR: 2025	TIME AND DATE OF INITIAL ASSESSMENT	TIME: 6:45pm	DAY: 22	MONTH: 01	YEAR: 2025
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF	TIME: 10:15 AM	DAY: 23	MONTH: 01	YEAR: 2025	TIME AND DATE SERVICE RESTORED	TIME: 10:45 AM	DAY: 23	MONTH: 01	YEAR: 2025
PRIVATE PROPERTY AFFECTED: YES / ☒ NO			CIVIC ADDRESS OF PROPERTY AFFECTED: _____			BREAK HISTORY IN AREA: YES / ☒ NO		ADDRESS OF NEAREST BREAK: 1301 MacCleave Ave.	

PHYSICAL INFORMATION:

PIPE DIAMETER: 150	MM	TYPE OF INTERNAL LINING: _____
PIPE MATERIAL: Cast Iron		TYPE OF EXTERNAL COATING: _____
INSTALLATION YEAR: 1968		TYPE OF JOINT: _____
TYPICAL OPERATING PRESSURE: 68	PSI	SERVICE TYPE: _____
DEPTH OF COVER: 1.2	M	DEPTH OF FROST: _____ M
LOCATED UNDER: BLVD / SIDEWALK / ROAD / OTHER		OTHER UTILITIES: _____
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC ☐ ROCK ☒ GRAVEL ☒ GRAVEL / SAND ☐ SAND ☐ SILT ☐ CLAY	

FAILURE INFORMATION:

CIRCUMFERENTIAL BREAK: YES / ☒ NO	LOCATION OF FAILURE: 	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK: YES / ☒ NO		
SPLIT-BELL: YES / ☒ NO		
LOCALIZED CORROSION (PITTING): YES / ☒ NO		
GENERAL CORROSION: YES / ☒ NO		
LEAKING JOINT: YES / ☒ NO		
BROKEN / LEAKING VALVE / FITTING: YES / ☒ NO	INVERT YES / ☒ NO	
LEAKING SERVICE CONNECTION: YES / ☒ NO		
PIPE SAMPLE TAKEN: YES / ☒ NO	PROBABLE CAUSE OF FAILURE: Poor Backfill, Age of Pipe	
SOIL SAMPLE TAKEN: YES / ☒ NO		

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES / NO	REPLACE VALVE:	YES / <u>NO</u>	TYPE:
LENGTH OF PIPE REPLACED:	M	REPLACE SERVICE CONNECTION:	YES / <u>NO</u>	
REPLACEMENT PIPE MATERIAL:		REPAIR JOINT:	YES / <u>NO</u>	
REPAIR CLAMP:	<u>YES</u> / NO	WELD REPAIR:	YES / <u>NO</u>	
COMPRESSION SLEEVE:	YES / <u>NO</u>	POST REPAIR HYDROTEST REQUIRED:	YES / <u>NO</u>	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:		<u>YES</u> / NO		
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)		☒ TYPE I ☐ TYPE II ☐ TYPE III ☐ TYPE IV		
POSITIVE MAIN PRESSURE MAINTAINED:		<u>YES</u> / NO		
MAINTAIN PIT WATER LEVEL BELOW BREAK		<u>YES</u> / NO		
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)				
REPAIR COMMENTS:				
Repair clamp was used.				
ADDITIONAL WORK REQUIRED:	<u>YES</u> / NO	ADDITIONAL WORK DETAILS:		
		Under mind the road further work was Done		
CITY PERSONNEL ON SITE:	Jon Tenveen Jason P. Devon Kilby Mike S. Murray R	CITY EQUIPMENT ON SITE:	Dump Truck Back Hoe Wrizzley Vac Truck	

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:		
Ken Almrud	Flushed for 30 mins		
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
Hyd-739	10:50 AM	11:20 AM	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
Ken Almrud	11:30 AM	23	01	2025
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
.41		Hyd-739.		
TURBIDITY READING:	NTU			
1.04				

GENERAL COMMENTS ON LEAK OR BREAK:

Positive Pressure was maintained at all Times



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME: 7:30 am	DAY: 19	MONTH: 02	YEAR: 2025	ADDRESS OF LEAK / BREAK
REPORT COMPLETED BY: Ken Almred				CIVIC ADDRESS: 1351 Kensington

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY: Jon Tenveen					SERVICE TYPE: POTABLE IRRIGATION SANITARY FORCEMAIN SANITARY GRAVITY STORM GRAVITY				
TIME AND DATE REPORTED	TIME: 2:30 pm	DAY: 18	MONTH: 02	YEAR: 2025	TIME AND DATE OF INITIAL ASSESSMENT	TIME: 2:45 pm	DAY: 18	MONTH: 02	YEAR: 2025
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF	TIME: 3:00 pm	DAY: 18	MONTH: 02	YEAR: 2025	TIME AND DATE SERVICE RESTORED	TIME: 5:30 pm	DAY: 18	MONTH: 02	YEAR: 2025
PRIVATE PROPERTY AFFECTED: YES / NO			CIVIC ADDRESS OF PROPERTY AFFECTED: —			BREAK HISTORY IN AREA: YES / NO		ADDRESS OF NEAREST BREAK: 1325 Kensington	

PHYSICAL INFORMATION:

PIPE DIAMETER:	150	MM	TYPE OF INTERNAL LINING:	
PIPE MATERIAL:	CAS		TYPE OF EXTERNAL COATING:	
INSTALLATION YEAR:	1949		TYPE OF JOINT:	
TYPICAL OPERATING PRESSURE:	52	PSI	SERVICE TYPE:	
DEPTH OF COVER:	1.52	M	DEPTH OF FROST:	M
LOCATED UNDER:	BLVRD / SIDEWALK / ROAD / OTHER		OTHER UTILITIES:	
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC / ROCK / GRAVEL / GRAVEL / SAND / SAND / SILT / CLAY			

FAILURE INFORMATION:

CIRUMFERENTIAL BREAK: YES / NO	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK: YES / NO		
SPLIT-BELL: YES / NO	CROWN YES / NO	
LOCALIZED CORROSION (PITTING): YES / NO	SPRINGLINE YES / NO	
GENERAL CORROSION: YES / NO	INVERT YES / NO	
LEAKING JOINT: YES / NO		
BROKEN / LEAKING VALVE / FITTING: YES / NO		
LEAKING SERVICE CONNECTION: YES / NO		
PIPE SAMPLE TAKEN: YES / NO	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN: YES / NO	Rocks BAD BACK FILL	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	<u> </u> YES / NO	REPLACE VALVE:	YES <u>NO</u>	TYPE:	<u> </u>
LENGTH OF PIPE REPLACED:	<u> </u> M	REPLACE SERVICE CONNECTION:	YES <u>NO</u>		
REPLACEMENT PIPE MATERIAL:	<u> </u>	REPAIR JOINT:	YES <u>NO</u>		
REPAIR CLAMP:	<u>YES</u> / NO	WELD REPAIR:	YES <u>NO</u>		
COMPRESSION SLEEVE:	YES <u>NO</u>	POST REPAIR HYDROTEST REQUIRED:	YES <u>NO</u>		
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:			<u>YES</u> / NO		
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)			<u>TYPE I</u>	TYPE II	TYPE III TYPE IV
POSITIVE MAIN PRESSURE MAINTAINED:		<u>YES</u> / NO	MAINTAIN PIT WATER LEVEL BELOW BREAK <u>YES</u> / NO		
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)			<u>YES</u> / NO		
REPAIR COMMENTS:					
<u>EASY Dig Big Rocks</u>					
ADDITIONAL WORK REQUIRED:		<u>YES</u> / NO	ADDITIONAL WORK DETAILS:		
CITY PERSONNEL ON SITE:		<u>Don Tenveen Pat H Jason P Dustin L Justin Z Mike J</u>		CITY EQUIPMENT ON SITE:	
				<u>Back Hoe. #5 dump truck</u>	

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	<u> </u> MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	<u> </u> NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	<u> </u> MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	<u> </u> NTU			

GENERAL COMMENTS ON LEAK OR BREAK:

<u>BACK fill was NOT Good with Big Rocks. Positive Pressure was maintained at all Times Flushing was Not Needed. Because of Positive Pressure was maintained</u>



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME: 7:30 Am	DAY: 26	MONTH: 02	YEAR: 2025	ADDRESS OF LEAK / BREAK
REPORT COMPLETED BY: Ken Almrud				CIVIC ADDRESS: 97 Power St.

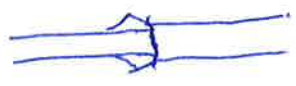
GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY: Jon Ten Veen					SERVICE TYPE: ☒ POTABLE ☐ IRRIGATION ☐ SANITARY FORCEMAIN ☐ SANITARY GRAVITY ☐ STORM GRAVITY				
TIME AND DATE REPORTED	TIME: 1:00 pm	DAY: 25	MONTH: 02	YEAR: 2025	TIME AND DATE OF INITIAL ASSESSMENT	TIME: 1:15 pm	DAY: 25	MONTH: 02	YEAR: 2025
TIME AND DATE SERVICE THROTTLED DOWN /SHUT OFF	TIME: 4:00 pm	DAY: 25	MONTH: 02	YEAR: 2025	TIME AND DATE SERVICE RESTORED	TIME: 4:30 pm	DAY: 25	MONTH: 02	YEAR: 2025
PRIVATE PROPERTY AFFECTED: YES ☐ NO ☒		CIVIC ADDRESS OF PROPERTY AFFECTED: —			BREAK HISTORY IN AREA YES ☐ NO ☒		ADDRESS OF NEAREST BREAK: 922 Dynes Ave.		

PHYSICAL INFORMATION:

PIPE DIAMETER:	100	MM	TYPE OF INTERNAL LINING:	—
PIPE MATERIAL:	CAS		TYPE OF EXTERNAL COATING:	—
INSTALLATION YEAR:	1932		TYPE OF JOINT:	—
TYPICAL OPERATING PRESSURE:	124	PSI	SERVICE TYPE:	—
DEPTH OF COVER:	1.06	M	DEPTH OF FROST:	— M
LOCATED UNDER:	BLVRD / SIDEWALK ☒ ROAD ☐ OTHER		OTHER UTILITIES:	—
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC ☐ ROCK ☐ GRAVEL ☒ GRAVEL / SAND ☒ SAND ☐ SILT ☐ CLAY ☐			

FAILURE INFORMATION:

CIRUMFERENTIAL BREAK: YES ☐ NO ☒	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE) 
LONGITUDINAL BREAK: YES ☐ NO ☒		
SPLIT-BELL: YES ☒ NO ☐	CROWN YES ☐ NO ☒	
LOCALIZED CORROSION(PITTING): YES ☐ NO ☒	SPRINGLINE YES ☐ NO ☒	
GENERAL CORROSION: YES ☐ NO ☒	INVERT YES ☐ NO ☒	
LEAKING JOINT: YES ☐ NO ☒		
BROKEN / LEAKING VALVE / FITTING: YES ☐ NO ☒		
LEAKING SERVICE CONNECTION: YES ☐ NO ☒		
PIPE SAMPLE TAKEN: YES ☐ NO ☒	PROBABLE CAUSE OF FAILURE: Split Bell.	
SOIL SAMPLE TAKEN: YES ☐ NO ☒	A/E of Pipe.	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	☒ YES ☐ NO	REPLACE VALVE:	YES ☒ NO ☐	TYPE:
LENGTH OF PIPE REPLACED:	3 ft. M	REPLACE SERVICE CONNECTION:	YES ☒ NO ☐	
REPLACEMENT PIPE MATERIAL:	PVC.	REPAIR JOINT:	YES ☒ NO ☐	
REPAIR CLAMP:	YES ☒ NO ☐	WELD REPAIR:	YES ☒ NO ☐	
COMPRESSION SLEEVE:	☒ YES ☐ NO	POST REPAIR HYDROTEST REQUIRED:	YES ☒ NO ☐	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:		☒ YES ☐ NO		
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)		☒ TYPE I ☐ TYPE II ☐ TYPE III ☐ TYPE IV		
POSITIVE MAIN PRESSURE MAINTAINED:	YES / NO	MAINTAIN PIT WATER LEVEL BELOW BREAK	☒ YES ☐ NO	
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)		☒ YES ☐ NO		
REPAIR COMMENTS:				
Bell was cut out and Replaced with PVC.				
ADDITIONAL WORK REQUIRED:	YES ☒ NO ☐	ADDITIONAL WORK DETAILS:		
CITY PERSONNEL ON SITE:	Ken A. Jon T. Devon K.	PAT G. Jason D. Murray R.	CITY EQUIPMENT ON SITE:	Flush Truck BACK Hoe. Dump Truck # 57

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:	
Ken Almrud	HYD-967 flushed for 30 mins	
HYDRANT ID# OR LOCATION: Hyd-967	START TIME: 4:00pm	END TIME: 4:30pm
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
Ken Almrud	4:30	25	02	2025
CHLORINE RESIDUAL:	.63 MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	.49 NTU	Hyd-967		

GENERAL COMMENTS ON LEAK OR BREAK:

maintained Pit Water level Below Break	



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME:	DAY:	MONTH:	YEAR:	ADDRESS OF LEAK / BREAK
7:38m	21	02	2025	
REPORT COMPLETED BY:				CIVIC ADDRESS:
Ken Almqvist				702 Duncan Ave. E.

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY:					SERVICE TYPE:					
Jon TenVeen					POTABLE IRRIGATION SANITARY FORCEMAIN SANITARY GRAVITY STORM GRAVITY					
TIME AND DATE REPORTED	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE OF INITIAL ASSESSMENT	TIME:	DAY:	MONTH:	YEAR:	
	12:00	20	02	2025		12:15	20	02	2025	
TIME AND DATE SERVICE THROTTLED DOWN /SHUT OFF	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE SERVICE RESTORED	TIME:	DAY:	MONTH:	YEAR:	
	12:30 pm	20	02	2025		2:45 pm	20	02	2025	
PRIVATE PROPERTY AFFECTED: YES ☐ NO ☒					CIVIC ADDRESS OF PROPERTY AFFECTED:		BREAK HISTORY IN AREA: YES ☐ NO ☒			ADDRESS OF NEAREST BREAK:
										660 Duncan Ave. E.

PHYSICAL INFORMATION:

PIPE DIAMETER:	150	MM	TYPE OF INTERNAL LINING:	—
PIPE MATERIAL:	CAS		TYPE OF EXTERNAL COATING:	—
INSTALLATION YEAR:	1957		TYPE OF JOINT:	—
TYPICAL OPERATING PRESSURE:	72	PSI	SERVICE TYPE:	—
DEPTH OF COVER:	1.52	M	DEPTH OF FROST:	— M
LOCATED UNDER:	BLVRD / SIDEWALK / ROAD / OTHER		OTHER UTILITIES:	—
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC ☐ ROCK ☒ GRAVEL ☒ GRAVEL / SAND ☐ SAND ☐ SILT ☐ CLAY ☐			

FAILURE INFORMATION:

CIRUMFERENTIAL BREAK:	YES ☒ NO ☐	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK:	YES ☐ NO ☒		
SPLIT-BELL:	YES ☐ NO ☒	CROWN YES ☒ NO ☐	
LOCALIZED CORROSION(PITTING):	YES ☐ NO ☒		
GENERAL CORROSION:	YES ☐ NO ☒	SPRINGLINE YES ☒ NO ☐	
LEAKING JOINT:	YES ☐ NO ☒		
BROKEN / LEAKING VALVE / FITTING:	YES ☐ NO ☒	INVERT YES ☒ NO ☐	
LEAKING SERVICE CONNECTION:	YES ☐ NO ☒		
PIPE SAMPLE TAKEN:	YES ☐ NO ☒	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN:	YES ☐ NO ☒	AGE of PIPE. Poor Backfill	

REPLACE PIPE SECTION:	YES ☒ NO ☐	REPLACE VALVE:	YES ☒ NO ☐	TYPE:	
LENGTH OF PIPE REPLACED:	<u> </u> M	REPLACE SERVICE CONNECTION:	YES ☒ NO ☐		
REPLACEMENT PIPE MATERIAL:	<u> </u>	REPAIR JOINT:	YES ☒ NO ☐		
REPAIR CLAMP:	YES ☒ NO ☐	WELD REPAIR:	YES ☒ NO ☐		
COMPRESSION SLEEVE:	YES ☒ NO ☐	POST REPAIR HYDROTEST REQUIRED:	YES ☒ NO ☐		
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:			YES ☒ NO ☐		
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)		☒ TYPE I	TYPE II	TYPE III	TYPE IV
POSITIVE MAIN PRESSURE MAINTAINED:	YES ☒ NO ☐	MAINTAIN PIT WATER LEVEL BELOW BREAK		YES ☒ NO ☐	
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)			YES ☒ NO ☐		
REPAIR COMMENTS:					
Repair went well Replaced Cur B Stop as well					
ADDITIONAL WORK REQUIRED:	YES ☒ NO ☐	ADDITIONAL WORK DETAILS:			
CITY PERSONNEL ON SITE:	Ken Almeida Murray R PAT L Jason P		CITY EQUIPMENT ON SITE:	Back Hoe 2 Dump Trucks 2 Flatbed Trucks	

INITIAL WATER QUALITY SAMPLES COLLECTED BY:		TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:		MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:		NTU			

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY: Ken Almeida		TIME: 3:15 pm	DAY: 20	MONTH: 02	YEAR: 2025
CHLORINE RESIDUAL: .90		MG/L	HYDRANT ID# OR SAMPLE LOCATION: HYD-780		
TURBIDITY READING: .34		NTU			

Positive Pressure was maintained at all Times
maintained Pit water level Below Break.



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME:	DAY:	MONTH:	YEAR:	ADDRESS OF LEAK / BREAK	
11:30	8	04	2025	CIVIC ADDRESS:	
REPORT COMPLETED BY:				40 ABBOTT ST.	
Ken Almud					

GENERAL INFORMATION:

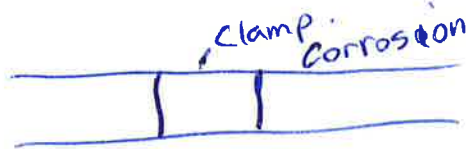
INITIAL ASSESSMENT COMPLETED BY:					SERVICE TYPE:				
Jon Tenveen					☒ POTABLE ☐ IRRIGATION ☐ SANITARY FORCEMAIN ☐ SANITARY GRAVITY ☐ STORM GRAVITY				
TIME AND DATE REPORTED	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE OF INITIAL ASSESSMENT	TIME:	DAY:	MONTH:	YEAR:
	6:30 pm	05	04	2025			05	04	2025
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE SERVICE RESTORED	TIME:	DAY:	MONTH:	YEAR:
	11:30 am	06	04	2025		12:00 pm	06	04	2025
PRIVATE PROPERTY AFFECTED:			CIVIC ADDRESS OF PROPERTY AFFECTED:			BREAK HISTORY IN AREA		ADDRESS OF NEAREST BREAK:	
YES ☐ NO ☒			—			YES ☒ NO ☐		292 ABBOTT ST.	

PHYSICAL INFORMATION:

PIPE DIAMETER:	150	MM	TYPE OF INTERNAL LINING:	—
PIPE MATERIAL:	AC		TYPE OF EXTERNAL COATING:	—
INSTALLATION YEAR:	1974		TYPE OF JOINT:	—
TYPICAL OPERATING PRESSURE:	108	PSI	SERVICE TYPE:	—
DEPTH OF COVER:	1.21	M	DEPTH OF FROST:	— M
LOCATED UNDER:	BLVRD / SIDEWALK ☒ ROAD ☐ OTHER		OTHER UTILITIES:	GAS
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	☒ ORGANIC ☐ ROCK ☒ GRAVEL ☐ GRAVEL / SAND ☐ SAND ☐ SILT ☐ CLAY			

FAILURE INFORMATION:

CIRCUMFERENTIAL BREAK:	YES ☒ NO ☐	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK:	YES ☐ NO ☒		
SPLIT-BELL:	YES ☐ NO ☒	CROWN YES / NO	
LOCALIZED CORROSION (PITTING):	YES ☐ NO ☒	SPRINGLINE YES / NO	
GENERAL CORROSION:	YES ☒ NO ☐	INVERT YES / NO	
LEAKING JOINT:	YES ☐ NO ☒		
BROKEN / LEAKING VALVE / FITTING:	YES ☐ NO ☒		
LEAKING SERVICE CONNECTION:	YES ☐ NO ☒		
PIPE SAMPLE TAKEN:	YES ☐ NO ☒	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN:	YES ☐ NO ☒	Corroded Repair Clamp	



REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES ☒ NO ☐	REPLACE VALVE:	YES ☒ NO ☐	TYPE:	—
LENGTH OF PIPE REPLACED:	— M	REPLACE SERVICE CONNECTION:	YES ☒ NO ☐		
REPLACEMENT PIPE MATERIAL:	—	REPAIR JOINT:	YES ☒ NO ☐		
REPAIR CLAMP:	YES ☒ NO ☐	WELD REPAIR:	YES ☒ NO ☐		
COMPRESSION SLEEVE:	YES ☒ NO ☐	POST REPAIR HYDROTEST REQUIRED:	YES ☒ NO ☐		
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:				YES ☒ NO ☐	
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)				TYPE I ☒	TYPE II ☐ TYPE III ☐ TYPE IV ☐
POSITIVE MAIN PRESSURE MAINTAINED:		YES ☒ NO ☐	MAINTAIN PIT WATER LEVEL BELOW BREAK		
		YES ☒ NO ☐			
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)					
REPAIR COMMENTS: Old Repair Clamp was taken of and New one Replaced					
ADDITIONAL WORK REQUIRED:		YES ☒ NO ☐	ADDITIONAL WORK DETAILS:		
		YES ☒ NO ☐			
CITY PERSONNEL ON SITE:		Ken A. Patk. Jon. A. Jason P. Thomas S. Jacob	CITY EQUIPMENT ON SITE:		
			Vactor Dump Truck Back Hoe		

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:	
Ken Almeud	Flushed for 20 min	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
Hyd-663	12:00pm	12:20
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
Ken Almeud	12:20pm	06	04	2025
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
1.03		Hyd-663		
TURBIDITY READING:	NTU			
.54				

GENERAL COMMENTS ON LEAK OR BREAK:

Maintained Pit water level Below Break
Maintained Positive water Pressure at all times



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME:	DAY:	MONTH:	YEAR:	ADDRESS OF LEAK / BREAK	
1:15pm	9	06	2025	CIVIC ADDRESS:	
REPORT COMPLETED BY:				1456 Penticton Ave.	
Ken Almreud					

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY:					SERVICE TYPE:				
Jon Tenveen					☒ POTABLE ☐ IRRIGATION ☐ SANITARY FORCEMAIN ☐ SANITARY GRAVITY ☐ STORM GRAVITY				
TIME AND DATE REPORTED	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE OF INITIAL ASSESSMENT	TIME:	DAY:	MONTH:	YEAR:
	11:20am	4	09	2025		11:35am	4	09	2025
TIME AND DATE SERVICE THROTTLED DOWN /SHUT OFF	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE SERVICE RESTORED	TIME:	DAY:	MONTH:	YEAR:
	11:40am	04	09	2025		10:15pm	04	09	
PRIVATE PROPERTY AFFECTED:			CIVIC ADDRESS OF PROPERTY AFFECTED:			BREAK HISTORY IN AREA		ADDRESS OF NEAREST BREAK:	
YES / NO						☒ YES ☐ NO		1456 Penticton Ave.	

PHYSICAL INFORMATION:

PIPE DIAMETER:	750	MM	TYPE OF INTERNAL LINING:	Cement
PIPE MATERIAL:	Ductile Iron		TYPE OF EXTERNAL COATING:	Asphaltic
INSTALLATION YEAR:	1996		TYPE OF JOINT:	
TYPICAL OPERATING PRESSURE:		PSI	SERVICE TYPE:	
DEPTH OF COVER:	1.5	M	DEPTH OF FROST:	
LOCATED UNDER:	BLVD / SIDEWALK / ROAD / OTHER		OTHER UTILITIES:	
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC	ROCK	GRAVEL	☒ GRAVEL / SAND
			SAND	SILT
			CLAY	

FAILURE INFORMATION:

CIRCUMFERENTIAL BREAK:	YES / NO	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK:	YES / NO		
SPLIT-BELL:	YES / NO		
LOCALIZED CORROSION(PITTING):	YES / NO	CROWN	
GENERAL CORROSION:	YES / NO	YES / NO	
LEAKING JOINT:	YES / NO	SPRINGLINE	
BROKEN / LEAKING VALVE / FITTING:	YES / NO	YES / NO	INVERT
LEAKING SERVICE CONNECTION:	YES / NO	YES / NO	
PIPE SAMPLE TAKEN:	YES / NO	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN:	YES / NO	Water Hammer & Corrosion	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES / NO	REPLACE VALVE:	YES / NO	TYPE:
LENGTH OF PIPE REPLACED:	4 M	REPLACE SERVICE CONNECTION:	YES / NO	
REPLACEMENT PIPE MATERIAL:	Ductile Iron	REPAIR JOINT:	YES / NO	
REPAIR CLAMP:	YES / NO	WELD REPAIR:	YES / NO	
COMPRESSION SLEEVE:	YES / NO	POST REPAIR HYDROTEST REQUIRED:	YES / NO	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:				
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)				
POSITIVE MAIN PRESSURE MAINTAINED:		MAINTAIN PIT WATER LEVEL BELOW BREAK		
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION:				
(INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS, AND HANDHELD MATERIALS)				
REPAIR COMMENTS: Raw water Transmission line from lake to Treatment Plant				
Roll BAR to Clamp WAS USED				
ADDITIONAL WORK REQUIRED:	YES / NO	ADDITIONAL WORK DETAILS:		
CITY PERSONNEL ON SITE:	Civil Contractors		CITY EQUIPMENT ON SITE:	Civil Contractors

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

GENERAL COMMENTS ON LEAK OR BREAK:

Operators were performing routine oil change on pumps while other pumps were running. Just Before water hammer event, pumps 4, 5 and 6 were operating moving 30 MG/day. Pump 3's oil change was complete and the operators Brought pump 3 back on line, while pump 4 was being shut Down. During the switch over, Power was lost to the entire pump station. the result of the immediate power loss caused the water hammer event to begin.



PUBLIC WORKS – UTILITIES DEPARTMENT
MAIN & SERVICE LEAK / BREAK REPORT



pentiction.ca

TIME: 1:15 PM	DAY: 9	MONTH: 06	YEAR: 2025	ADDRESS OF LEAK / BREAK
REPORT COMPLETED BY: Ken Almqvist				CIVIC ADDRESS: 1458 Pentiction Ave.

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY: Jon Tenveen		SERVICE TYPE: ☒ POTABLE		IRRIGATION		SANITARY FORCEMAIN		SANITARY GRAVITY		STORM GRAVITY	
TIME AND DATE REPORTED 11:20 AM	TIME: 4	DAY: 06	MONTH: 06	YEAR: 2025	TIME AND DATE OF INITIAL ASSESSMENT 11:35 AM	TIME: 4	DAY: 06	MONTH: 06	YEAR: 2025		
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF 11:40 AM	TIME: 04	DAY: 06	MONTH: 06	YEAR: 2025	TIME AND DATE SERVICE RESTORED 10:15 PM	TIME: 04	DAY: 06	MONTH: 06	YEAR: 2025		
PRIVATE PROPERTY AFFECTED:	YES / NO YES	CIVIC ADDRESS OF PROPERTY AFFECTED:			BREAK HISTORY IN AREA ☒ YES ☐ NO			ADDRESS OF NEAREST BREAK: 1458 Pentiction Ave.			

PHYSICAL INFORMATION:

PIPE DIAMETER:	750	MM	TYPE OF INTERNAL LINING:	Cement		
PIPE MATERIAL:	Ductile Iron		TYPE OF EXTERNAL COATING:	Asphaltic		
INSTALLATION YEAR:	1996		TYPE OF JOINT:			
TYPICAL OPERATING PRESSURE:		PSI	SERVICE TYPE:			
DEPTH OF COVER:	1.5	M	DEPTH OF FROST:			
LOCATED UNDER:	BLVD / SIDEWALK / ROAD / OTHER		OTHER UTILITIES:			
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC	ROCK	GRAVEL	SAND	SILT	CLAY

FAILURE INFORMATION:

CIRCUMFERENTIAL BREAK:	YES / NO ☒ YES ☐ NO	LOCATION OF FAILURE:	
LONGITUDINAL BREAK:	YES / NO ☒ YES ☐ NO	CROWN YES / NO	
SPLIT-BELL:	YES / NO ☒ YES ☐ NO	SPRINGLINE YES / NO	
LOCALIZED CORROSION (PITTING):	YES / NO ☒ YES ☐ NO	INVERT YES / NO	
GENERAL CORROSION:	YES / NO ☒ YES ☐ NO		
LEAKING JOINT:	YES / NO ☒ YES ☐ NO		
BROKEN / LEAKING VALVE / FITTING:	YES / NO ☒ YES ☐ NO		
LEAKING SERVICE CONNECTION:	YES / NO ☒ YES ☐ NO		
PIPE SAMPLE TAKEN:	YES / NO ☒ YES ☐ NO	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN:	YES / NO ☒ YES ☐ NO	Water Hammer & Corrosion	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	☒ YES ☐ NO	REPLACE VALVE:	☒ YES ☐ NO	TYPE:
LENGTH OF PIPE REPLACED:	4 M	REPLACE SERVICE CONNECTION:	☒ YES ☐ NO	
REPLACEMENT PIPE MATERIAL:	Ductile Iron	REPAIR JOINT:	☒ YES ☐ NO	
REPAIR CLAMP:	☒ YES ☐ NO	WELD REPAIR:	☒ YES ☐ NO	
COMPRESSION SLEEVE:	☒ YES ☐ NO	POST REPAIR HYDROTEST REQUIRED:	☒ YES ☐ NO	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:				
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)		TYPE I	TYPE II	TYPE III
POSITIVE MAIN PRESSURE MAINTAINED:		☒ YES ☐ NO	MAINTAIN PIT WATER LEVEL BELOW BREAK:	☒ YES ☐ NO
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS, AND HANDHELD MATERIALS)		☒ YES ☐ NO		
REPAIR COMMENTS: Raw water Transmission line from lake to Treatment Plant				
Roll Bar to Clamp was used				
ADDITIONAL WORK DETAILS:				
ADDITIONAL WORK REQUIRED:	☒ YES ☐ NO			
CITY PERSONNEL ON SITE:	Okanagan	CITY EQUIPMENT ON SITE:	Okanagan	
Civil Contractors		Civil Contractors		

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:			
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:		
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:		
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:		

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

GENERAL COMMENTS ON LEAK OR BREAK:

Operators were performing routine oil change on pumps while other pumps were running. Just before water hammer event pumps 4, 5 and 6 were operating moving 30 m³/day Pump 3's oil change was complete and the operator brought pump 3 back on line, while pump 4 was being shut down. During the switch over, Power was lost to the entire pump station. the result of the immediate power loss caused the water hammer event to begin.



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME: 07:12	DAY: 04	MONTH: 07	YEAR: 2025	ADDRESS OF LEAK / BREAK CIVIC ADDRESS: 161 Ellis St.
REPORT COMPLETED BY: Trevor W.				

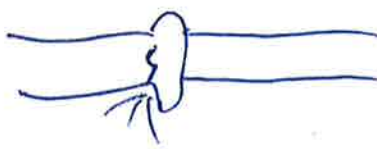
GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY: Devon Kilby				SERVICE TYPE: ☒ POTABLE IRRIGATION SANITARY FORCEMAIN SANITARY GRAVITY STORM GRAVITY					
TIME AND DATE REPORTED	TIME: 18:22	DAY: 01	MONTH: 07	YEAR: 2025	TIME AND DATE OF INITIAL ASSESSMENT	TIME: 08:30	DAY: 02	MONTH: 07	YEAR: 2025
TIME AND DATE SERVICE THROTTLED DOWN /SHUT OFF	TIME: 09:30	DAY: 02	MONTH: 07	YEAR: 2025	TIME AND DATE SERVICE RESTORED	TIME: 14:25	DAY: 02	MONTH: 07	YEAR: 2025
PRIVATE PROPERTY AFFECTED: YES / ☒ NO		CIVIC ADDRESS OF PROPERTY AFFECTED: _____			BREAK HISTORY IN AREA: YES / ☒ NO		ADDRESS OF NEAREST BREAK: 127 Ellis St.		

PHYSICAL INFORMATION:

PIPE DIAMETER: 250	MM	TYPE OF INTERNAL LINING: _____
PIPE MATERIAL: Cast Iron		TYPE OF EXTERNAL COATING: _____
INSTALLATION YEAR: 1951		TYPE OF JOINT: Bell + Spigot, lead gasket.
TYPICAL OPERATING PRESSURE: 120	PSI	SERVICE TYPE: Potable
DEPTH OF COVER: 1.5	M	DEPTH OF FROST: _____ M
LOCATED UNDER: BLVRD / SIDEWALK / ROAD / OTHER		OTHER UTILITIES: _____
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC ROCK GRAVEL GRAVEL / SAND SAND ☒ SILT CLAY	

FAILURE INFORMATION:

CIRCUMFERENTIAL BREAK: YES / ☒ NO	LOCATION OF FAILURE: CROWN: ☒ YES / NO SPRINGLINE: ☒ YES / NO INVERT: ☒ YES / NO	DRAW DIAGRAM OF BREAK (IF APPLICABLE) 
LONGITUDINAL BREAK: YES / ☒ NO		
SPLIT-BELL: YES / ☒ NO		
LOCALIZED CORROSION(PITTING): YES / ☒ NO		
GENERAL CORROSION: YES / ☒ NO		
LEAKING JOINT: YES / ☒ NO		
BROKEN / LEAKING VALVE / FITTING: YES / ☒ NO	PROBABLE CAUSE OF FAILURE: Age.	
LEAKING SERVICE CONNECTION: YES / ☒ NO		
PIPE SAMPLE TAKEN: YES / ☒ NO		
SOIL SAMPLE TAKEN: YES / ☒ NO		

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES / ☒ NO	REPLACE VALVE:	YES / ☒ NO	TYPE:
LENGTH OF PIPE REPLACED:	1.4 M	REPLACE SERVICE CONNECTION:	YES / ☒ NO	
REPLACEMENT PIPE MATERIAL:	C900 PVC	REPAIR JOINT:	☒ YES / NO	
REPAIR CLAMP:	YES / ☒ NO	WELD REPAIR:	YES / ☒ NO	
COMPRESSION SLEEVE:	YES / ☒ NO	POST REPAIR HYDROTEST REQUIRED:	YES / ☒ NO	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:		☒ YES / NO		
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)		☒ TYPE I TYPE II TYPE III TYPE IV		
POSITIVE MAIN PRESSURE MAINTAINED:		☒ YES / NO		MAINTAIN PIT WATER LEVEL BELOW BREAK
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)		☒ YES / NO		
REPAIR COMMENTS: 				
ADDITIONAL WORK REQUIRED:		ADDITIONAL WORK DETAILS:		
YES / ☒ NO				
CITY PERSONNEL ON SITE:	Utilities 751 crew		CITY EQUIPMENT ON SITE:	Back Hoe Dump truck

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
Trevor Wingrove	13:08	02	07	2025
CHLORINE RESIDUAL:	1.18 MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	3.90 NTU	Bench Market		

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:	
Trevor W, Thomas S, Jon T.	Flushed from relief valve @ late pump house	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
Relief valve	14:03	16:09
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
HYD-886	14:30	16:00
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
1+		

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
Trevor Wingrove	16:10	02	07	2025
CHLORINE RESIDUAL:	0.58 MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	0.89 NTU	Cannery Brewing		

GENERAL COMMENTS ON LEAK OR BREAK:

Positive pressure was maintained
* This is the fourth break on the stretch of main between Westminister Ave & Vancouver Ave.



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME: 11:30	DAY: 08	MONTH: 12	YEAR: 2025	ADDRESS OF LEAK / BREAK
REPORT COMPLETED BY: Ken Almeida				CIVIC ADDRESS: 976 Vernon Ave

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY: Trevor Wingrove					SERVICE TYPE: <u>POTABLE</u> IRRIGATION SANITARY FORCEMAIN SANITARY GRAVITY STORM GRAVITY				
TIME AND DATE REPORTED	TIME: 11:15 AM	DAY: 07	MONTH: 12	YEAR: 2025	TIME AND DATE OF INITIAL ASSESSMENT	TIME: 11:30 AM	DAY: 07	MONTH: 12	YEAR: 2025
TIME AND DATE SERVICE THROTTLED DOWN /SHUT OFF	TIME: 11:45 AM	DAY: 07	MONTH: 12	YEAR: 2025	TIME AND DATE SERVICE RESTORED		DAY: 08	MONTH: 12	YEAR: 2025
PRIVATE PROPERTY AFFECTED: YES / <u>NO</u>		CIVIC ADDRESS OF PROPERTY AFFECTED: _____			BREAK HISTORY IN AREA: YES / <u>NO</u>		ADDRESS OF NEAREST BREAK:		

PHYSICAL INFORMATION:

PIPE DIAMETER:	150	MM	TYPE OF INTERNAL LINING:	_____
PIPE MATERIAL:	AC		TYPE OF EXTERNAL COATING:	_____
INSTALLATION YEAR:	1975		TYPE OF JOINT:	_____
TYPICAL OPERATING PRESSURE:	126	PSI	SERVICE TYPE:	_____
DEPTH OF COVER:	1.45	M	DEPTH OF FROST:	_____ M
LOCATED UNDER:	BLVRD / SIDEWALK / <u>ROAD</u> / OTHER		OTHER UTILITIES:	_____
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC	ROCK	<u>GRAVEL</u>	GRAVEL / SAND SAND <u>SILT</u> CLAY

FAILURE INFORMATION:

CIRUMFERENTIAL BREAK: YES / <u>NO</u>	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK: YES / <u>NO</u>		
SPLIT-BELL: YES / <u>NO</u>	CROWN YES / <u>NO</u>	
LOCALIZED CORROSION(PITTING): YES / <u>NO</u>	SPRINGLINE YES / <u>NO</u>	
GENERAL CORROSION: YES / <u>NO</u>	INVERT YES / <u>NO</u>	
LEAKING JOINT: YES / <u>NO</u>		
BROKEN / LEAKING VALVE / FITTING: YES / <u>NO</u>	PROBABLE CAUSE OF FAILURE:	
LEAKING SERVICE CONNECTION: YES / <u>NO</u>		
PIPE SAMPLE TAKEN: YES / <u>NO</u>		
SOIL SAMPLE TAKEN: YES / <u>NO</u>	other utilities	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES ☒ NO ☐	REPLACE VALVE:	YES ☒ NO ☐	TYPE: <u> </u>
LENGTH OF PIPE REPLACED:	<u> </u> M	REPLACE SERVICE CONNECTION:	YES ☒ NO ☐	
REPLACEMENT PIPE MATERIAL:	<u> </u>	REPAIR JOINT:	YES ☒ NO ☐	
REPAIR CLAMP:	YES ☒ NO ☐	WELD REPAIR:	YES ☒ NO ☐	
COMPRESSION SLEEVE:	YES ☒ NO ☐	POST REPAIR HYDROTEST REQUIRED:	YES ☒ NO ☐	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:		YES ☒ NO ☐		
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)		☒ TYPE I ☐ TYPE II ☐ TYPE III ☐ TYPE IV		
POSITIVE MAIN PRESSURE MAINTAINED:	YES ☒ NO ☐	MAINTAIN PIT WATER LEVEL BELOW BREAK	YES ☒ NO ☐	
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)		YES ☒ NO ☐		
REPAIR COMMENTS: <u>New Utilities Closes to water main</u>				
ADDITIONAL WORK REQUIRED:	YES ☒ NO ☐	ADDITIONAL WORK DETAILS: <u> </u>		
CITY PERSONNEL ON SITE:	<u>Devon K</u> <u>Derrick S</u> <u>Dawn</u>	CITY EQUIPMENT ON SITE:	<u>Unit 51</u>	

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	<u> </u> MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	<u> </u> NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:				
<u>Jon Tenveen</u>					
HYDRANT ID# OR LOCATION:	<u>Hyd-136</u>	START TIME:	<u>10:30 Am</u>	END TIME:	<u>11:00 Am</u>
HYDRANT ID# OR LOCATION:		START TIME:		END TIME:	
HYDRANT ID# OR LOCATION:		START TIME:		END TIME:	

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
<u>Jon Tenveen</u>	<u>11:15 Am</u>	<u>08</u>	<u>12</u>	<u>2025</u>
CHLORINE RESIDUAL:	<u>.85</u> MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	<u>.69</u> NTU			

GENERAL COMMENTS ON LEAK OR BREAK:

<u>Positive Pressure was maintained at all times</u>
<u>Maintained Pit water level Below Break</u>



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME: 2:15	DAY: 20	MONTH: Aug	YEAR: 2025	ADDRESS OF LEAK / BREAK
REPORT COMPLETED BY: Ken Almqvist				CIVIC ADDRESS: 740 Westminister Ave. E

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY: Jon Tenveen					SERVICE TYPE: ☒ POTABLE ☐ IRRIGATION ☐ SANITARY FORCEMAIN ☐ SANITARY GRAVITY ☐ STORM GRAVITY				
TIME AND DATE REPORTED	TIME: 9:10	DAY: 20	MONTH: 08	YEAR: 2025	TIME AND DATE OF INITIAL ASSESSMENT	TIME: 9:25	DAY: 20	MONTH: 08	YEAR: 2025
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF	TIME: 9:30	DAY: 20	MONTH: 08	YEAR: 2025	TIME AND DATE SERVICE RESTORED	TIME: 12:09	DAY: 20	MONTH: 08	YEAR: 2025
PRIVATE PROPERTY AFFECTED: YES ☒ NO		CIVIC ADDRESS OF PROPERTY AFFECTED: _____			BREAK HISTORY IN AREA YES ☒ NO		ADDRESS OF NEAREST BREAK: 205 Farrell St.		

PHYSICAL INFORMATION:

PIPE DIAMETER: 150	MM	TYPE OF INTERNAL LINING: —
PIPE MATERIAL: CAS		TYPE OF EXTERNAL COATING: —
INSTALLATION YEAR: 1950		TYPE OF JOINT: —
TYPICAL OPERATING PRESSURE: 145	PSI	SERVICE TYPE: —
DEPTH OF COVER: 4 ft.	M	DEPTH OF FROST: —
LOCATED UNDER: BLVRD / SIDEWALK ☒ ROAD / OTHER		OTHER UTILITIES: —
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC ☐ ROCK ☐ GRAVEL ☐ GRAVEL / SAND ☐ SAND ☐ SILT ☐ CLAY ☒	

FAILURE INFORMATION:

CIRCUMFERENTIAL BREAK: YES ☒ NO	LOCATION OF FAILURE: CROWN YES ☒ NO SPRINGLINE YES ☒ NO INVERT YES ☒ NO	DRAW DIAGRAM OF BREAK (IF APPLICABLE) 
LONGITUDINAL BREAK: YES ☒ NO		
SPLIT-BELL: YES ☒ NO		
LOCALIZED CORROSION (PITTING): YES ☒ NO		
GENERAL CORROSION: YES ☒ NO		
LEAKING JOINT: YES ☒ NO		
BROKEN / LEAKING VALVE / FITTING: YES ☒ NO		
LEAKING SERVICE CONNECTION: YES ☒ NO		
PIPE SAMPLE TAKEN: YES ☒ NO	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN: YES ☒ NO	OLD PIPE	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES ☒ NO	REPLACE VALVE:	YES ☒ NO	TYPE:	☒
LENGTH OF PIPE REPLACED:	<u>1</u> M	REPLACE SERVICE CONNECTION:	YES ☒ NO		
REPLACEMENT PIPE MATERIAL:	<u>1</u>	REPAIR JOINT:	YES ☒ NO		
REPAIR CLAMP:	YES ☒ NO	WELD REPAIR:	YES ☒ NO		
COMPRESSION SLEEVE:	YES ☒ NO	POST REPAIR HYDROTEST REQUIRED:	YES ☒ NO		
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:				YES ☒ NO	
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)				TYPE I ☒ TYPE II TYPE III TYPE IV	
POSITIVE MAIN PRESSURE MAINTAINED:		YES ☒ NO		MAINTAIN PIT WATER LEVEL BELOW BREAK	
				YES ☒ NO	
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)					
REPAIR COMMENTS:					
<u>Pos Repair Clamp was used</u>					
ADDITIONAL WORK REQUIRED:		YES ☒ NO			
		ADDITIONAL WORK DETAILS:			
CITY PERSONNEL ON SITE:		CITY EQUIPMENT ON SITE:			
<u>Devon Kirby</u> <u>Darce Spieren</u> <u>Danny Pio</u> <u>Jason Peck</u>		<u>Dump Truck</u> <u>Unit 51A</u> <u>Hem Back Hoe</u>			

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:			
<u>Trevor Wingrove</u>				
HYDRANT ID# OR LOCATION:	<u>HyD-645</u>	START TIME:	<u>12:05</u>	END TIME:
HYDRANT ID# OR LOCATION:		START TIME:		END TIME:
HYDRANT ID# OR LOCATION:		START TIME:		END TIME:

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
<u>Trevor Wingrove</u>	<u>12:35</u>	<u>20</u>	<u>08</u>	<u>2025</u>
CHLORINE RESIDUAL:	<u>.63</u>	MG/L	HYDRANT ID# OR SAMPLE LOCATION:	
TURBIDITY READING:	<u>.77</u>	NTU	<u>HyD-645</u>	

GENERAL COMMENTS ON LEAK OR BREAK:

<u>Maintained Pit Water level Below Break</u>
<u>Maintained Positive Water Pressure at all Times</u>



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME: 11:30am	DAY: 05	MONTH: 09	YEAR: 2025	ADDRESS OF LEAK / BREAK
REPORT COMPLETED BY: Ken Almeida				CIVIC ADDRESS: 595 Warren Ave.

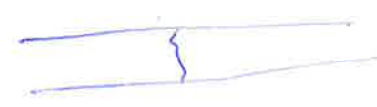
GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY:					SERVICE TYPE: POTABLE IRRIGATION SANITARY FORCEMAIN SANITARY GRAVITY STORM GRAVITY				
TIME AND DATE REPORTED	TIME: 6:45 Am	DAY: 04	MONTH: 09	YEAR: 2025	TIME AND DATE OF INITIAL ASSESSMENT	TIME: 6:50 Am	DAY: 04	MONTH: 09	YEAR: 2025
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF	TIME: 7:00 Am	DAY: 04	MONTH: 09	YEAR: 2025	TIME AND DATE SERVICE RESTORED	TIME: 11:00 Am	DAY: 04	MONTH: 09	YEAR: 2025
PRIVATE PROPERTY AFFECTED: ☒ YES / ☐ NO		CIVIC ADDRESS OF PROPERTY AFFECTED: _____			BREAK HISTORY IN AREA YES ☒ / ☐ NO		ADDRESS OF NEAREST BREAK: _____		

PHYSICAL INFORMATION:

PIPE DIAMETER: 200	MM	TYPE OF INTERNAL LINING: _____
PIPE MATERIAL: CAS		TYPE OF EXTERNAL COATING: _____
INSTALLATION YEAR: 1965		TYPE OF JOINT: _____
TYPICAL OPERATING PRESSURE: 140	PSI	SERVICE TYPE: _____
DEPTH OF COVER: _____	M	DEPTH OF FROST: _____ M
LOCATED UNDER: BLVRD / SIDEWALK / ROAD / OTHER		OTHER UTILITIES: _____
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC ☒ ROCK GRAVEL GRAVEL / SAND SAND SILT CLAY	

FAILURE INFORMATION:

CIRUMFERENTIAL BREAK: ☒ YES / ☐ NO	LOCATION OF FAILURE: CROWN YES / NO SPRINGLINE YES / NO INVERT YES / NO	DRAW DIAGRAM OF BREAK (IF APPLICABLE) 
LONGITUDINAL BREAK: YES / ☒ NO		
SPLIT-BELL: YES / ☒ NO		
LOCALIZED CORROSION(PITTING): YES / ☒ NO		
GENERAL CORROSION: YES / ☒ NO		
LEAKING JOINT: YES / ☒ NO		
BROKEN / LEAKING VALVE / FITTING: YES / ☒ NO		
LEAKING SERVICE CONNECTION: YES / ☒ NO		
PIPE SAMPLE TAKEN: YES / ☒ NO	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN: YES / ☒ NO	LARGE ROCKS and poor Back fill	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES / <u>NO</u>	REPLACE VALVE:	YES / <u>NO</u>	TYPE:	<u>—</u>
LENGTH OF PIPE REPLACED:	<u>—</u> M	REPLACE SERVICE CONNECTION:	YES / <u>NO</u>		
REPLACEMENT PIPE MATERIAL:	<u>—</u>	REPAIR JOINT:	YES / <u>NO</u>		
REPAIR CLAMP:	<u>YES</u> / NO	WELD REPAIR:	YES / <u>NO</u>		
COMPRESSION SLEEVE:	YES / <u>NO</u>	POST REPAIR HYDROTEST REQUIRED:	YES / <u>NO</u>		
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:				<u>YES</u> / NO	
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)				<u>TYPE I</u> TYPE II TYPE III TYPE IV	
POSITIVE MAIN PRESSURE MAINTAINED:		<u>YES</u> / NO		MAINTAIN PIT WATER LEVEL BELOW BREAK	
				<u>YES</u> / NO	
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)					
<u>YES</u> / NO					
REPAIR COMMENTS:					
<u>Repair Clamp was used</u>					
ADDITIONAL WORK REQUIRED:		ADDITIONAL WORK DETAILS:			
YES / <u>NO</u>		<u>—</u>			
CITY PERSONNEL ON SITE:		CITY EQUIPMENT ON SITE:			
<u>Devon K. Jason P. Derek S. mike S.</u>		<u>Back Hoe Dump truck #51 Truck</u>			

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:		
<u>Thomas Schultz</u>			
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
<u>HYD-280</u>	<u>11:00 Am</u>	<u>11:30 Am</u>	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
<u>Thomas Schultz</u>	<u>11:00 Am</u>	<u>04</u>	<u>09</u>	<u>2025</u>
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
<u>1.4</u>		<u>Hyd-280</u>		
TURBIDITY READING:	NTU			
<u>-34</u>				

GENERAL COMMENTS ON LEAK OR BREAK:

<u>Positive Pressure was maintain at all times maintained Pit water level Below Break.</u>



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME:	DAY:	MONTH:	YEAR:	ADDRESS OF LEAK / BREAK	
9:08am	3	11	2025	CIVIC ADDRESS:	
REPORT COMPLETED BY:				1371 Kilwinning St.	
Ken Almrud					

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY:					SERVICE TYPE:				
Jon Tenveen					☒ POTABLE IRRIGATION SANITARY FORCEMAIN SANITARY GRAVITY STORM GRAVITY				
TIME AND DATE REPORTED	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE OF INITIAL ASSESSMENT	TIME:	DAY:	MONTH:	YEAR:
2:45	31	10	2025		3:00	31	10	2025	
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE SERVICE RESTORED	TIME:	DAY:	MONTH:	YEAR:
4:08pm	31	10	2025		6:30pm	31	10	2025	
PRIVATE PROPERTY AFFECTED:		YES / ☒ NO			CIVIC ADDRESS OF PROPERTY AFFECTED:		BREAK HISTORY IN AREA		YES / ☒ NO
									ADDRESS OF NEAREST BREAK:

PHYSICAL INFORMATION:

PIPE DIAMETER:	150	MM	TYPE OF INTERNAL LINING:	—
PIPE MATERIAL:	CAS		TYPE OF EXTERNAL COATING:	—
INSTALLATION YEAR:	1949		TYPE OF JOINT:	—
TYPICAL OPERATING PRESSURE:	52	PSI	SERVICE TYPE:	—
DEPTH OF COVER:	1.55	M	DEPTH OF FROST:	— M
LOCATED UNDER:	BLVRD / SIDEWALK / ☒ ROAD / OTHER		OTHER UTILITIES:	—
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC	☒ ROCK	☒ GRAVEL	GRAVEL / SAND SAND SILT CLAY

FAILURE INFORMATION:

CIRCUMFERENTIAL BREAK:	☒ YES / ☒ NO	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK:	YES / ☒ NO		
SPLIT-BELL:	YES / ☒ NO	CROWN	
LOCALIZED CORROSION(PITTING):	YES / ☒ NO	YES / ☒ NO	
GENERAL CORROSION:	YES / ☒ NO	SPRINGLINE	
LEAKING JOINT:	YES / ☒ NO	YES / ☒ NO	
BROKEN / LEAKING VALVE / FITTING:	YES / ☒ NO	INVERT	
LEAKING SERVICE CONNECTION:	YES / ☒ NO	YES / ☒ NO	
PIPE SAMPLE TAKEN:	YES / ☒ NO	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN:	YES / ☒ NO	Age of Pipe and Poor Back fill	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES ☒ NO ☐	REPLACE VALVE:	YES ☒ NO ☐	TYPE:	—
LENGTH OF PIPE REPLACED:	— M	REPLACE SERVICE CONNECTION:	YES ☒ NO ☐		
REPLACEMENT PIPE MATERIAL:	—	REPAIR JOINT:	YES ☒ NO ☐		
REPAIR CLAMP:	YES ☒ NO ☐	WELD REPAIR:	YES ☒ NO ☐		
COMPRESSION SLEEVE:	YES ☒ NO ☐	POST REPAIR HYDROTEST REQUIRED:	YES ☒ NO ☐		
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:			YES ☒ NO ☐		
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)			TYPE I ☒ TYPE II ☐ TYPE III ☐ TYPE IV ☐		
POSITIVE MAIN PRESSURE MAINTAINED:			YES ☒ NO ☐		
MAINTAIN PIT WATER LEVEL BELOW BREAK			YES ☒ NO ☐		
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)					
REPAIR COMMENTS:					
Positive Pressure was maintained					
ADDITIONAL WORK REQUIRED:		YES ☒ NO ☐			
ADDITIONAL WORK DETAILS:		—			
CITY PERSONNEL ON SITE:		CITY EQUIPMENT ON SITE:			
Jon. T Jason. P Denny P		Chris		Dump Truck ractor	

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:		
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

GENERAL COMMENTS ON LEAK OR BREAK:

Positive main Pressure was maintained at all times. Pit water level was Below Break at all times	

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME: 8:00 AM	DAY: 23	MONTH: 09	YEAR: 2025	ADDRESS OF LEAK / BREAK
REPORT COMPLETED BY: Ken Almeida				CIVIC ADDRESS: 95 Ellis St.

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY: Thomas Schultze				SERVICE TYPE: POTABLE IRRIGATION SANITARY FORCEMAIN SANITARY GRAVITY STORM GRAVITY					
TIME AND DATE REPORTED	TIME: 6:30	DAY: 22	MONTH: 09	YEAR: 2025	TIME AND DATE OF INITIAL ASSESSMENT	TIME: 6:45	DAY: 22	MONTH: 09	YEAR: 2025
TIME AND DATE SERVICE THROTTLED DOWN /SHUT OFF	TIME: 6:50 pm	DAY: 22	MONTH: 09	YEAR: 2025	TIME AND DATE SERVICE RESTORED	TIME: 2:30 Am	DAY: 23	MONTH: 09	YEAR: 2025
PRIVATE PROPERTY AFFECTED: YES AND			CIVIC ADDRESS OF PROPERTY AFFECTED: _____			BREAK HISTORY IN AREA YES NO		ADDRESS OF NEAREST BREAK: 127 Ellis St.	

PHYSICAL INFORMATION:

PIPE DIAMETER:		250	MM	TYPE OF INTERNAL LINING:				
PIPE MATERIAL:		CAS		TYPE OF EXTERNAL COATING:				
INSTALLATION YEAR:		1951		TYPE OF JOINT:				
TYPICAL OPERATING PRESSURE:		120	PSI	SERVICE TYPE:				
DEPTH OF COVER:			M	DEPTH OF FROST:				
LOCATED UNDER:		BLVRD / SIDEWALK / ROAD / OTHER		OTHER UTILITIES:				
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL :	ORGANIC			ROCK				
				GRAVEL				
		GRAVEL / SAND		SAND		SILT		CLAY

FAILURE INFORMATION:

CIRUMFERENTIAL BREAK:	YES ☒ NO	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK:	YES ☒ NO		
SPLIT-BELL:	YES ☒ NO	CROWN YES ☒ NO	
LOCALIZED CORROSION(PITTING):	YES ☒ NO	SPRINGLINE YES ☒ NO	
GENERAL CORROSION:	YES ☒ NO		
LEAKING JOINT:	YES ☒ NO	INVERT YES ☒ NO	
BROKEN / LEAKING VALVE / FITTING:	YES ☒ NO		
LEAKING SERVICE CONNECTION:	YES ☒ NO		
PIPE SAMPLE TAKEN:	YES ☒ NO	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN:	YES ☒ NO	Bad Beddings OLD Pipe	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES ☒ NO	REPLACE VALVE:	YES ☒ NO	TYPE:
LENGTH OF PIPE REPLACED:	2.14 M	REPLACE SERVICE CONNECTION:	YES ☒ NO	
REPLACEMENT PIPE MATERIAL:	PVC	REPAIR JOINT:	YES ☒ NO	
REPAIR CLAMP:	YES ☒ NO	WELD REPAIR:	YES ☒ NO	
COMPRESSION SLEEVE:	YES ☒ NO	POST REPAIR HYDROTEST REQUIRED:	YES ☒ NO	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM: YES ☒ NO				
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW) TYPE I TYPE II ☒ TYPE III TYPE IV				
POSITIVE MAIN PRESSURE MAINTAINED:	YES ☒ NO	MAINTAIN PIT WATER LEVEL BELOW BREAK	YES ☒ NO	
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS) YES ☒ NO				
REPAIR COMMENTS: Keep Positive Pressure until Cut, Chlorinated all Parts				
ADDITIONAL WORK REQUIRED:	YES ☒ NO	ADDITIONAL WORK DETAILS:		
CITY PERSONNEL ON SITE:	Devon K Dee S Pat W.	mikes mike J	CITY EQUIPMENT ON SITE:	Unit 51 Dump truck Back Hoe

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:		
Ken Almrud	Flush for 45 min		
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
Hyd - 32	3:00 AM	3:45	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:	

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
Ken Almrud	3:45	23	09	2025
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
.74		Hyd - 32		
TURBIDITY READING:	NTU			
.64				

GENERAL COMMENTS ON LEAK OR BREAK:

All Parts were chlorinated
Maintained Pit water level Below Break



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME:	DAY:	MONTH:	YEAR:	ADDRESS OF LEAK / BREAK	
7:30AM	10	11	2025	CIVIC ADDRESS:	
REPORT COMPLETED BY:				1351 EDGEMOOD DR	
Ken Almeida					

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY:					SERVICE TYPE:					
Jon Tenfeen					☒ POTABLE IRRIGATION ☐ SANITARY FORCEMAIN ☐ SANITARY GRAVITY ☐ STORM GRAVITY					
TIME AND DATE REPORTED	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE OF INITIAL ASSESSMENT	TIME:	DAY:	MONTH:	YEAR:	
2:30	07	11	2025		2:45	07	11	2025		
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE SERVICE RESTORED	TIME:	DAY:	MONTH:	YEAR:	
3:00	07	11	2025		3:30	07	11	2025		
PRIVATE PROPERTY AFFECTED:		YES / ☒ NO			CIVIC ADDRESS OF PROPERTY AFFECTED:		BREAK HISTORY IN AREA		ADDRESS OF NEAREST BREAK:	
					—		☒ YES / ☐ NO		1343 Kensington St.	

PHYSICAL INFORMATION:

PIPE DIAMETER:	150	MM	TYPE OF INTERNAL LINING:	—
PIPE MATERIAL:	CAS		TYPE OF EXTERNAL COATING:	—
INSTALLATION YEAR:	1949		TYPE OF JOINT:	—
TYPICAL OPERATING PRESSURE:	52	PSI	SERVICE TYPE:	—
DEPTH OF COVER:	1.55	M	DEPTH OF FROST:	— M
LOCATED UNDER:	BLVRD / SIDEWALK / ☒ ROAD / OTHER		OTHER UTILITIES:	—
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC	☒ ROCK	☒ GRAVEL	GRAVEL / SAND SAND SILT CLAY

FAILURE INFORMATION:

CIRCUMFERENTIAL BREAK:	☒ YES / ☐ NO	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK:	YES / ☒ NO		
SPLIT-BELL:	YES / ☒ NO	CROWN	
LOCALIZED CORROSION (PITTING):	YES / ☒ NO	YES / ☒ NO	
GENERAL CORROSION:	YES / ☒ NO	SPRINGLINE	
LEAKING JOINT:	YES / ☒ NO	YES / ☒ NO	
BROKEN / LEAKING VALVE / FITTING:	YES / ☒ NO	INVERT	
LEAKING SERVICE CONNECTION:	YES / ☒ NO	YES / ☒ NO	
PIPE SAMPLE TAKEN:	YES / ☒ NO	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN:	YES / ☒ NO	Age of Pipe, Poor Backfill	

REPLACE PIPE SECTION:		YES ☒ NO	REPLACE VALVE:		YES ☒ NO	REPLACE SERVICE CONNECTION:		YES ☒ NO
LENGTH OF PIPE REPLACED:		— M	REPAIR JOINT:		YES ☒ NO			
REPLACEMENT PIPE MATERIAL:		—	WELD REPAIR:		YES ☒ NO			
REPAIR CLAMP:		YES ☒ NO	POST REPAIR HYDROTEST REQUIRED:		YES ☒ NO			
COMPRESSION SLEEVE:		YES ☒ NO	GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:		YES ☒ NO			
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)			TYPE I		TYPE II		TYPE III	
POSITIVE MAIN PRESSURE MAINTAINED:			YES ☒ NO		MAINTAIN PIT WATER LEVEL BELOW BREAK		YES ☒ NO	
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)			YES ☒ NO					
REPAIR COMMENTS: Positive Pressure was maintained at all times								
ADDITIONAL WORK REQUIRED:			ADDITIONAL WORK DETAILS: —					
CITY PERSONNEL ON SITE:			mikes. Thomas & Jon T. Dust L.			CITY EQUIPMENT ON SITE: Vactor Back Hoe Dump Truck		

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:		TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:		MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:		NTU			

Positive Pressure was maintained, Pit Water level was Below Break at all times



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME:	DAY:	MONTH:	YEAR:	ADDRESS OF LEAK / BREAK
7:39 am	31	12	2025	CIVIC ADDRESS:
REPORT COMPLETED BY:				101 Martin St.
Ken Almrud				

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY:					SERVICE TYPE:					
Ken Almrud					☒ POTABLE ☐ IRRIGATION ☐ SANITARY FORCEMAIN ☐ SANITARY GRAVITY ☐ STORM GRAVITY					
TIME AND DATE REPORTED	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE OF INITIAL ASSESSMENT	TIME:	DAY:	MONTH:	YEAR:	
	3:45 pm	30	12	2025		3:50 pm	30	12	2025	
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF	TIME:	DAY:	MONTH:	YEAR:	TIME AND DATE SERVICE RESTORED	TIME:	DAY:	MONTH:	YEAR:	
	4:00 pm	30	12	2025		8:30 pm	30	12	2025	
PRIVATE PROPERTY AFFECTED:		YES ☒ NO ☐			CIVIC ADDRESS OF PROPERTY AFFECTED:		BREAK HISTORY IN AREA		ADDRESS OF NEAREST BREAK:	
							YES ☒ NO ☐			

PHYSICAL INFORMATION:

PIPE DIAMETER:	100	MM	TYPE OF INTERNAL LINING:	
PIPE MATERIAL:	LAS		TYPE OF EXTERNAL COATING:	
INSTALLATION YEAR:	1950		TYPE OF JOINT:	
TYPICAL OPERATING PRESSURE:	124	PSI	SERVICE TYPE:	
DEPTH OF COVER:	1.2	M	DEPTH OF FROST:	
LOCATED UNDER:	BLVRD / SIDEWALK ☒ ROAD ☐ OTHER ☐		OTHER UTILITIES:	
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC ☐ ☒ ROCK ☐ GRAVEL ☐ GRAVEL / SAND ☐ SAND ☐ SILT ☐ CLAY			

FAILURE INFORMATION:

CIRUMFERENTIAL BREAK:	☒ YES ☐ NO	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK:	☐ YES ☒ NO		
SPLIT-BELL:	☐ YES ☒ NO	CROWN ☐ YES ☒ NO	
LOCALIZED CORROSION(PITTING):	☐ YES ☒ NO	SPRINGLINE ☐ YES ☒ NO	
GENERAL CORROSION:	☐ YES ☒ NO	INVERT ☐ YES ☒ NO	
LEAKING JOINT:	☐ YES ☒ NO		
BROKEN / LEAKING VALVE / FITTING:	☐ YES ☒ NO		
LEAKING SERVICE CONNECTION:	☐ YES ☒ NO		
PIPE SAMPLE TAKEN:	☐ YES ☒ NO	PROBABLE CAUSE OF FAILURE:	
SOIL SAMPLE TAKEN:	☐ YES ☒ NO	Bad Back fill age of Pipe	

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES <u>NO</u>	REPLACE VALVE:	YES <u>NO</u>	TYPE:	<u> </u>
LENGTH OF PIPE REPLACED:	<u> </u> M	REPLACE SERVICE CONNECTION:	YES <u>NO</u>		
REPLACEMENT PIPE MATERIAL:	<u> </u>	REPAIR JOINT:	YES <u>NO</u>		
REPAIR CLAMP:	YES / NO	WELD REPAIR:	YES <u>NO</u>		
COMPRESSION SLEEVE:	YES / NO	POST REPAIR HYDROTEST REQUIRED:	YES <u>NO</u>		
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:				YES <u>NO</u>	
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW)				TYPE I <u> </u> TYPE II TYPE III TYPE IV	
POSITIVE MAIN PRESSURE MAINTAINED:		YES <u>NO</u>		MAINTAIN PIT WATER LEVEL BELOW BREAK	
				YES <u>NO</u>	
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)					
REPAIR COMMENTS: <u>Positive Pressure was Maintained</u>					
ADDITIONAL WORK REQUIRED:		ADDITIONAL WORK DETAILS:			
YES <u>NO</u>					
CITY PERSONNEL ON SITE:		CITY EQUIPMENT ON SITE:			
<u>Ken A. Mike S. JACOB</u> <u>Devon K Mike S</u> <u>Deric S. Thomas S</u> <u>DUSTIN G</u>		<u>Vac. Truck #51</u> <u>Backhoe</u> <u>Dump truck</u>			

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:		
<u>Ken Almeud</u>			
HYDRANT ID# OR LOCATION:	<u>Hyd-912</u>	START TIME:	<u>8:10 pm</u>
		END TIME:	<u>8:30 pm</u>
HYDRANT ID# OR LOCATION:		START TIME:	
		END TIME:	
HYDRANT ID# OR LOCATION:		START TIME:	
		END TIME:	

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
<u>Ken Almeud</u>	<u>8:30 pm</u>	<u>30</u>	<u>12</u>	<u>2025</u>
CHLORINE RESIDUAL:	<u>.69</u> MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	<u>1.66</u> NTU	<u>Hyd-912</u>		

GENERAL COMMENTS ON LEAK OR BREAK:

<u>Positive Pressure was Maintained</u>
<u>Pit Water level was below the Break</u>
<u>Throughout.</u>



PUBLIC WORKS – UTILITIES DEPARTMENT

MAIN & SERVICE LEAK / BREAK REPORT

penticton.ca

TIME: 11am	DAY: 30	MONTH: 12	YEAR: 2025	ADDRESS OF LEAK / BREAK
REPORT COMPLETED BY: DUSTIN GERK				CIVIC ADDRESS: 67 Pineview Rd

GENERAL INFORMATION:

INITIAL ASSESSMENT COMPLETED BY: DUSTIN GERK					SERVICE TYPE: ☒ POTABLE ☐ IRRIGATION ☐ SANITARY FORCEMAIN ☐ SANITARY GRAVITY ☐ STORM GRAVITY					
TIME AND DATE REPORTED	TIME: 9:15 pm	DAY: 29	MONTH: 12	YEAR: 2025	TIME AND DATE OF INITIAL ASSESSMENT	TIME: 9:35 pm	DAY: 29	MONTH: 12	YEAR: 2025	
TIME AND DATE SERVICE THROTTLED DOWN / SHUT OFF	TIME: 9:50 pm	DAY: 29	MONTH: 12	YEAR: 2025	TIME AND DATE SERVICE RESTORED	TIME: 10:30 Am	DAY: 30	MONTH: 12	YEAR: 2025	
PRIVATE PROPERTY AFFECTED: YES ☐ NO ☒					CIVIC ADDRESS OF PROPERTY AFFECTED: —		BREAK HISTORY IN AREA: YES ☐ NO ☒			ADDRESS OF NEAREST BREAK:

PHYSICAL INFORMATION:

PIPE DIAMETER:	100	MM	TYPE OF INTERNAL LINING:	—
PIPE MATERIAL:	CAS		TYPE OF EXTERNAL COATING:	—
INSTALLATION YEAR:	1968		TYPE OF JOINT:	—
TYPICAL OPERATING PRESSURE:		PSI	SERVICE TYPE:	—
DEPTH OF COVER:	1.68	M	DEPTH OF FROST:	2.08 M
LOCATED UNDER:	☒ BLVRD ☐ SIDEWALK ☐ ROAD ☐ OTHER		OTHER UTILITIES:	—
DESCRIPTION OF ORIGINAL BACKFILL MATERIAL:	ORGANIC ☐ ROCK ☒ GRAVEL ☒		GRAVEL / SAND ☐ SAND ☐ SILT ☐ CLAY ☐	

FAILURE INFORMATION:

CIRUMFERENTIAL BREAK: YES ☒ NO ☐	LOCATION OF FAILURE:	DRAW DIAGRAM OF BREAK (IF APPLICABLE)
LONGITUDINAL BREAK: YES ☐ NO ☒		
SPLIT-BELL: YES ☐ NO ☒	CROWN YES ☒ NO ☐	
LOCALIZED CORROSION(PITTING): YES ☐ NO ☒	SPRINGLINE YES ☐ NO ☒	
GENERAL CORROSION: YES ☐ NO ☒	INVERT YES ☐ NO ☒	
LEAKING JOINT: YES ☐ NO ☒		
BROKEN / LEAKING VALVE / FITTING: YES ☐ NO ☒		
LEAKING SERVICE CONNECTION: YES ☐ NO ☒		
PIPE SAMPLE TAKEN: YES ☐ NO ☒	PROBABLE CAUSE OF FAILURE: Age, Large Rocks around pipe	
SOIL SAMPLE TAKEN: YES ☐ NO ☒		

REPAIR INFORMATION:

REPLACE PIPE SECTION:	YES / <u>NO</u>	REPLACE VALVE:	YES / <u>NO</u>	TYPE:
LENGTH OF PIPE REPLACED:	<u>1</u> M	REPLACE SERVICE CONNECTION:	YES / <u>NO</u>	
REPLACEMENT PIPE MATERIAL:	<u>1</u>	REPAIR JOINT:	YES / <u>NO</u>	
REPAIR CLAMP:	<u>YES</u> / NO	WELD REPAIR:	YES / <u>NO</u>	
COMPRESSION SLEEVE:	YES / <u>NO</u>	POST REPAIR HYDROTEST REQUIRED:	YES / <u>NO</u>	
GIS POINT TAKEN OF BREAK LOCATION FOR UPDATE OF SYSTEM:				YES / <u>NO</u>
WATER MAIN BREAK TYPE: (USE TABLE PROVIDED BELOW) <u>TYPE I</u> TYPE II TYPE III TYPE IV				
POSITIVE MAIN PRESSURE MAINTAINED:	<u>YES</u> / NO	MAINTAIN PIT WATER LEVEL BELOW BREAK	<u>YES</u> / NO	
REPAIR MATERIALS DISINFECTED WITH MINIMUM 1% CHLORINE SOLUTION: (INCLUDES EXPOSED PORTION OF EXISTING PIPE INTERIOR SURFACES, PIPE REPAIR MATERIALS AND HANDHELD MATERIALS)				
REPAIR COMMENTS: <u>Positive pressure was maintained throughout repair</u>				
ADDITIONAL WORK REQUIRED:	YES / <u>NO</u>	ADDITIONAL WORK DETAILS: <u>1</u>		
CITY PERSONNEL ON SITE:	<u>Dustin G. JACOB G. KEA A. DEAN K. MIKE S. DARIL S. JASON P.</u>		CITY EQUIPMENT ON SITE:	<u>VACTOR BACK HOSE DUMP TRUCK</u>

WATER QUALITY INFORMATION:

INITIAL WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
CHLORINE RESIDUAL:	<u>1</u> MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	<u>1</u> NTU			

POST REPAIR SYSTEM FLUSHING PERFORMED BY:	SYSTEM FLUSHING COMMENTS:	
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:
HYDRANT ID# OR LOCATION:	START TIME:	END TIME:

POST REPAIR WATER QUALITY SAMPLES COLLECTED BY:	TIME:	DAY:	MONTH:	YEAR:
<u>KEA A</u>	<u>10:40 AM</u>	<u>30</u>	<u>12</u>	<u>2025</u>
CHLORINE RESIDUAL:	<u>0.75</u> MG/L	HYDRANT ID# OR SAMPLE LOCATION:		
TURBIDITY READING:	<u>0.30</u> NTU	<u>Hydrant 425 Pineview Pl.</u>		

GENERAL COMMENTS ON LEAK OR BREAK:

<u>Positive Pressure was maintained, Pit water level was below the break throughout.</u>