District of Peachland
Annual Drinking Water Report – 2024

INTRODUCTION

The District of Peachland is legally required by the *Drinking Water Protection Act* to provide an annual report on their water supply systems. The annual report will provide water system users with an overview of the system, a summary of all water tests performed and an update to any significant maintenance and/or improvements made to the system.

Facility Name/Number: District of Peachland Water Distribution System (#561)
EOCP Classification: Level III

Facility Name/Number: Peachland Creek Water Treatment Facility (#2288)
EOCP Classification: Level IV

Facility Name/Number: Trepanier Creek Water Treatment Facility (#2289)
EOCP Classification: Level II

Facility Name/Number: Okanagan Lake Pumps Water Treatment Facility (#2290)
EOCP Classification: Level II

WATER SOURCES

Water for the District of Peachland can be supplied from three surface water sources;

- Peachland Creek
- Okanagan Lake (Emergency)
- Trepanier Creek (No longer in use)

The Peachland Creek system supplies water to all properties within the District of Peachland boundaries.

TREATMENT AND DISTRIBUTION

At the Peachland Creek Water Treatment Plant, ultraviolet (UV) light is used as the primary disinfectant and sodium hypochlorite as a secondary. Following dual-media filtration, water passes through UV reactors and sodium hypochlorite is injected afterwards using flow paced peristaltic pumps and is dosed to provide inactivation of bacteria, viruses and protozoan cysts. District staff maintain a first user residual ranging from 0.9 – 1.9 mg/L. At the ends of the distribution system, a free chlorine residual target of greater than 0.2 mg/L is maintained. A

residual of chlorine remaining in the distribution system extends a measure of protection against any possible contamination entering the system after initial disinfection.

The distribution system and supply includes;

- 16 pressure reducing stations
- 2 very high consequence dam (Peachland Lake, Glen Lake)
- 4 active reservoirs
- 6 pump stations
- Approximately 81 km of pipeline

The Water Department is staffed by Operators certified through the Environmental Operators Certification Program (EOCP – the association responsible for certification of system Operators and classification of water distribution (WD) and water treatment (WT) systems within British Columbia and the Yukon), with their certifications noted below;

- Water Distribution Leadhand: WD Level III / WT Level III
- Water Distribution Operator: WD III / WT III
- Water Distribution Operator: WD II
- Chief Water Treatment Plant Operator: WD Level III / WT Level IV
- Water Treatment Plant Operator: WD Level III / WT Level III

These operators have the capability to monitor the system at all times (24 hours per day, 365 days per year) through the use of the SCADA system (supervisory control and data acquisition). The system is set to alarm if it ranges beyond pre-determined set points, calling the standby Operator to alert them. There is an operator on standby at all times.

ROUTINE MAINTENANCE

Fire Hydrants

Hydrants undergo a complete tear-down and rebuild on an as-needed basis. Each public hydrant is pressure-tested annually (at minimum) to ensure operation.

System Flushing

System flushing occurs annually during the fall. Hydrants and blow offs are used to pass higher velocity water through the system to scour any sediment that may have settled in the system over the year.

Pressure Reducing Valves (PRVs)

PRV's are inspected at least every 4 months and repaired or rebuilt on an as-needed basis.

WATER MASTER PLAN

In 2007, the sitting mayor and council adopted the Water Master Plan (WMP), a set of comprehensive upgrades that was anticipated to provide treated water to Peachland in its entirety by the years 2023/24. The WMP was amended in 2015 to include information on increased population growth and changes in drinking water legislation. If more in-depth information is desired, it is available at the District of Peachland website (http://www.peachland.ca/water-master-plan-2015).

WATER SAMPLING

Drinking water samples are tested weekly for *E.Coli* and total coliforms by Caro Analytical Services in Kelowna. There were no positive bacteriological samples detected in 2024.

District employees monitor and record daily turbidity values along with pH and chlorine levels. Turbidity is one of the main parameters leading to a water quality advisory or a boil water notice as it can affect the number and type of microorganisms that enter a surface water source. As surface waters experience increased flows, for example, spring runoff and major rainfall events, turbidity can fluctuate dramatically, and the public is notified accordingly. Records of daily average turbidity, pH and free chlorine residual values can be found in Appendix III.

Chlorine concentrations are continuously monitored at 2 stations throughout the system as well as daily grab samples at several locations to ensure instrument accuracy and adequate levels in the Distribution system.

Water samples are collected annually to perform a comprehensive analysis, giving an indication of any changes occurring within the source waters and/or distribution system. It should be noted that all Peachland Creek and water supply system samples tested are within the maximum allowable concentration (MAC) limits set out in the Guidelines for Canadian Drinking Water Quality. Lastly, trihalomethanes (TTHMs) and haloacetic acids (HAA5) are also tested annually to provide an indication of the level of disinfection by-products present in the water supply system. The results from the comprehensive and disinfection by-products analyses are included in Appendix I. The attached reports also indicate the limits or guidelines for each parameter listed.

WATER QUALITY ADVISORIES / BOIL WATER NOTICES / DO NOT USE NOTICE

Water quality advisories and boil water notices are notifications designed to inform the public of possible public health threats. The decision to institute an advisory or notice is made in discussion with staff at the Interior Health Authority (IHA).

A water quality advisory (WQA) is the lowest-level notification and used in situations where the possible public health threat is modest. These advisories are instituted when the turbidity in the treated water increases over a value of 1 NTU (nephelometric turbidity units). There were no WQAs issued over the past year.

A boil water notice (BWN) is a moderate-level notification used in situations where the possible public health threat is one that can be effectively addressed by boiling the water. These notices are typically instituted when treated water turbidity increases over 5 NTU or there is a failure in the disinfection system or there is a main break and main depressurization occurs. Details of BWNs issued over the past year are noted below.

A do not use notice is the highest level of notification. It is used in situations where a significant public health threat exists (for example, a chemical spill or mercury lamp breakage). There were no do not use notices issued in 2024.

February 14/24 - BWN issued for 39 properties on the 4100, 4200, and 4300 blocks of Ponderosa Drive including 1st Avenue and 2nd Avenue. The BWN was implemented as a precaution, due to a necessary de-pressurization of the main to replace a system valve.

March 14/24 – BWN issued for 20 properties on the 6200 block of Whinton Cres. to repair a leaking water main.

April 16/24 – BWN issued for 29 properties on Sanderson Ave., Haker Pl., Bradley Dr., and Nash St. A contactor upgrading services on Sanderson Ave. pulled a service out of the main.

May 27/24 – BWN issued for entire distribution system due to de-pressuring of trunk main to perform main repair at intersection of Turner Ave. and Princeton Ave.

July 16/24 – BWN issued for the 5300 block of Buchanan Rd. to facilitate tie in of new 200mm C900 main to existing 200mm AC main.

August 02/24 BWN issued for 9 properties in the 5800 block of Vicary Rd. and 3 properties in the 5800 block of Columbia Ave. A leak discovered on the main on Vicary resulting in the de-pressurization of the water main to facilitate the repair.

WATER CONSUMPTION

In 2024, there was a total of 2250 ML passing through the District of Peachland Distribution system. A monthly summary of consumption is in Appendix II.

WORKS COMPLETED AND IN PROGRESS

- Annual leak detection program completed for south side of Princeton Ave. North side of Princeton Ave. east of Turner Ave to the Highway. A total of 13 leaks were discovered within the areas surveyed.
- Uni-directional flushing completed from the Water Treatment Plant to Hwy 97 on the Princeton Ave system, south to Thorne Rd., north to Gladstone Rd.
- Domestic water meter replacement in progress

Appendix I – Comprehensive Analyses and Disinfection By-products Analysis (Peachland Creek Intake and Peachland Distribution System)

CERTIFICATE OF ANALYSIS

REPORTED TO	Peachland, Corporation of the District of 5806 Beach Avenue PEACHLAND, BC V0H 1X7		
ATTENTION	Marc Forcier	**WORK ORDER**	24F1432
PO NUMBER		**RECEIVED / TEMP**	2024-06-11 13:15 / 7.1°C
PROJECT	Chemistry	**REPORTED**	2024-06-14 15:02
PROJECT INFO		**COC NUMBER**	No Number

Introduction:

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Big Picture Sidekicks

You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

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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.

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

Authorized By:

Team CARO
Client Service Representative

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24F1432
PROJECT	Chemistry	**REPORTED**	2024-06-14 15:02

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Robinson Place (DBP) (24F1432-01) | Matrix: Water | Sampled: 2024-06-11 08:15						
Calculated Parameters						
Total Trihalomethanes	**0.0360**	MAC = 0.1	0.00400	mg/L	N/A	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	**0.0025**	N/A	0.0010	mg/L	2024-06-13	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-06-13	
Chloroform	**0.0335**	N/A	0.0010	mg/L	2024-06-13	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-06-13	
Surrogate: Toluene-d8	*82*		*70-130*	%	*2024-06-13*	
Surrogate: 4-Bromofluorobenzene	*76*		*70-130*	%	*2024-06-13*	

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24F1432
PROJECT	Chemistry	**REPORTED**	2024-06-14 15:02

Analysis Description	Method Ref.	Technique	Accredited	Location
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	Richmond

Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
EPA	United States Environmental Protection Agency Test Methods

Guidelines Referenced in this Report:

Guidelines for Canadian Drinking Water Quality (Health Canada, September 2022)

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

General Comments:

The results in this report apply to the received samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Caro will dispose of all samples within 30 days of sample receipt, unless otherwise agreed. The quality control (QC) data is available upon request

Results in **Bold** indicate values that are above CARO's method reporting limits. Any results that are above regulatory limits are highlighted **red**. Please note that results will only be highlighted red if the regulatory limits are included on the CARO report. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager:TeamCaro@caro.ca

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CERTIFICATE OF ANALYSIS

REPORTED TO	Peachland, Corporation of the District of 5806 Beach Avenue PEACHLAND, BC V0H 1X7		
ATTENTION	Marc Forcier	**WORK ORDER**	24H1604
PO NUMBER		**RECEIVED / TEMP**	2024-08-13 15:30 / 12.1°C
PROJECT	Chemistry	**REPORTED**	2024-08-20 16:02
PROJECT INFO		**COC NUMBER**	No Number

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Authorized By:

Team CARO
Client Service Representative

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TEST RESULTS

REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24H1604
PROJECT	Chemistry	**REPORTED**	2024-08-20 16:02

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Thorne Rd. DBP (24H1604-01) | Matrix: Water | Sampled: 2024-08-13 07:46						
Calculated Parameters						
Total Trihalomethanes	**0.0352**	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	**0.0068**	N/A	0.0020	mg/L	2024-08-16	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-08-16	
Dichloroacetic Acid	**0.0109**	N/A	0.0020	mg/L	2024-08-16	
Trichloroacetic Acid	**0.0089**	N/A	0.0020	mg/L	2024-08-16	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-08-16	
Total Haloacetic Acids (HAA5)	**0.0266**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*99*		*70-130*	%	*2024-08-16*	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	**0.0021**	N/A	0.0010	mg/L	2024-08-16	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-08-16	
Chloroform	**0.0331**	N/A	0.0010	mg/L	2024-08-16	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-08-16	
Surrogate: Toluene-d8	*101*		*70-130*	%	*2024-08-16*	
Surrogate: 4-Bromofluorobenzene	*74*		*70-130*	%	*2024-08-16*	

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REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24H1604
PROJECT	Chemistry	**REPORTED**	2024-08-20 16:02

Analysis Description	Method Ref.	Technique	Accredited	Location
Haloacetic Acids in Water	EPA 552.3*	Liquid-Liquid Microextraction, Derivatization and GC-ECD	✓	Richmond
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	Richmond

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

Glossary of Terms:

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CERTIFICATE OF ANALYSIS

REPORTED TO	Peachland, Corporation of the District of 5806 Beach Avenue PEACHLAND, BC V0H 1X7		
ATTENTION	Jon Poole	**WORK ORDER**	24C1441
PO NUMBER		**RECEIVED / TEMP**	2024-03-12 15:35 / 8.7°C
PROJECT	General Potability	**REPORTED**	2024-03-21 09:32
PROJECT INFO		**COC NUMBER**	No Number

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TEST RESULTS

REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24C1441
PROJECT	General Potability	**REPORTED**	2024-03-21 09:32

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
1st Use Sink - Comprehensive (24C1441-01) | Matrix: Water | Sampled: 2024-03-12 08:25						
Anions						
Chloride	**7.82**	AO ≤ 250	0.10	mg/L	2024-03-13	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2024-03-13	
Nitrate (as N)	**0.035**	MAC = 10	0.010	mg/L	2024-03-13	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2024-03-13	
Sulfate	**14.6**	AO ≤ 500	1.0	mg/L	2024-03-13	
Calculated Parameters						
Total Trihalomethanes	**0.0275**	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		2024-03-20	CT6
Solids, Total Dissolved	**130**	AO ≤ 500	1.00	mg/L	N/A	
General Parameters						
Alkalinity, Total (as CaCO3)	**95.5**	N/A	1.0	mg/L	2024-03-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-03-14	
Alkalinity, Bicarbonate (as CaCO3)	**95.5**	N/A	1.0	mg/L	2024-03-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-03-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-03-14	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2024-03-14	
Conductivity (EC)	**225**	N/A	2.0	µS/cm	2024-03-14	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2024-03-13	
pH	**7.39**	7.0-10.5	0.10	pH units	2024-03-14	HT2
Temperature, at pH	**21.3**	N/A		°C	2024-03-14	HT2
Turbidity	**0.20**	OG < 1	0.10	NTU	2024-03-14	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Dichloroacetic Acid	**0.0072**	N/A	0.0020	mg/L	2024-03-21	
Trichloroacetic Acid	**0.0057**	N/A	0.0020	mg/L	2024-03-21	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Total Haloacetic Acids (HAA5)	**0.0129**	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*97*		*70-130*	%	*2024-03-21*	
Microbiological Parameters						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2024-03-13	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2024-03-13	
Total Metals						
Aluminum, total	**0.0051**	OG < 0.1	0.0050	mg/L	2024-03-19	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2024-03-19	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2024-03-19	
Barium, total	**0.0217**	MAC = 2	0.0050	mg/L	2024-03-19	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2024-03-19	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2024-03-19	

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24C1441
PROJECT	General Potability	**REPORTED**	2024-03-21 09:32

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
1st Use Sink - Comprehensive (24C1441-01) | Matrix: Water | Sampled: 2024-03-12 08:25, Continued						
Total Metals, Continued						
Calcium, total	**35.8**	None Required	0.20	mg/L	2024-03-19	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2024-03-19	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2024-03-19	
Copper, total	**0.00360**	MAC = 2	0.00040	mg/L	2024-03-19	
Iron, total	< 0.010	AO ≤ 0.3	0.010	mg/L	2024-03-19	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2024-03-19	
Magnesium, total	**4.45**	None Required	0.010	mg/L	2024-03-19	
Manganese, total	< 0.00020	MAC = 0.12	0.00020	mg/L	2024-03-19	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2024-03-17	
Molybdenum, total	**0.0115**	N/A	0.00010	mg/L	2024-03-19	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2024-03-19	
Potassium, total	**1.53**	N/A	0.10	mg/L	2024-03-19	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2024-03-19	
Sodium, total	**7.24**	AO ≤ 200	0.10	mg/L	2024-03-19	
Strontium, total	**0.219**	MAC = 7	0.0010	mg/L	2024-03-19	
Uranium, total	**0.000068**	MAC = 0.02	0.000020	mg/L	2024-03-19	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2024-03-19	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	**0.0018**	N/A	0.0010	mg/L	2024-03-20	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-03-20	
Chloroform	**0.0257**	N/A	0.0010	mg/L	2024-03-20	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-03-20	
Surrogate: Toluene-d8	*103*		*70-130*	%	*2024-03-20*	
Surrogate: 4-Bromofluorobenzene	*93*		*70-130*	%	*2024-03-20*	
Raw - Peachland Creek Sample (24C1441-02) | Matrix: Water | Sampled: 2024-03-12 08:11						
Anions						
Chloride	**2.53**	AO ≤ 250	0.10	mg/L	2024-03-13	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2024-03-13	
Nitrate (as N)	**0.021**	MAC = 10	0.010	mg/L	2024-03-13	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2024-03-13	
Sulfate	**14.1**	AO ≤ 500	1.0	mg/L	2024-03-13	
Calculated Parameters						
Total Trihalomethanes	< 0.00400	MAC = 0.1	0.00400	mg/L	N/A	
Hardness, Total (as CaCO3)	**108**	None Required	0.500	mg/L	N/A	
Langelier Index	**-0.8**	N/A	-5.0		2024-03-20	CT6
Solids, Total Dissolved	**119**	AO ≤ 500	1.00	mg/L	N/A	
General Parameters						
Alkalinity, Total (as CaCO3)	**91.9**	N/A	1.0	mg/L	2024-03-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-03-14	

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24C1441
PROJECT	General Potability	**REPORTED**	2024-03-21 09:32

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Raw - Peachland Creek Sample (24C1441-02) | Matrix: Water | Sampled: 2024-03-12 08:11, Continued						
General Parameters, Continued						
Alkalinity, Bicarbonate (as CaCO3)	**91.9**	N/A	1.0	mg/L	2024-03-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-03-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-03-14	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2024-03-14	
Conductivity (EC)	**208**	N/A	2.0	µS/cm	2024-03-14	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2024-03-13	
pH	**7.28**	7.0-10.5	0.10	pH units	2024-03-14	HT2
Temperature, at pH	**21.3**	N/A		°C	2024-03-14	HT2
Turbidity	**0.71**	OG < 1	0.10	NTU	2024-03-14	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Dichloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Trichloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-03-21	
Total Haloacetic Acids (HAA5)	< 0.00200	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	*98*		*70-130*	%	*2024-03-21*	
Microbiological Parameters						
Coliforms, Total (Q-Tray)	52	MAC = 0	1	MPN/100 mL	2024-03-13	
E. coli (Q-Tray)	25	MAC = 0	1	MPN/100 mL	2024-03-13	
Total Metals						
Aluminum, total	**0.0088**	OG < 0.1	0.0050	mg/L	2024-03-19	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2024-03-19	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2024-03-19	
Barium, total	**0.0216**	MAC = 2	0.0050	mg/L	2024-03-19	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2024-03-19	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2024-03-19	
Calcium, total	**36.1**	None Required	0.20	mg/L	2024-03-19	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2024-03-19	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2024-03-19	
Copper, total	**0.00084**	MAC = 2	0.00040	mg/L	2024-03-19	
Iron, total	**0.022**	AO ≤ 0.3	0.010	mg/L	2024-03-19	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2024-03-19	
Magnesium, total	**4.44**	None Required	0.010	mg/L	2024-03-19	
Manganese, total	**0.00404**	MAC = 0.12	0.00020	mg/L	2024-03-19	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2024-03-17	
Molybdenum, total	**0.0114**	N/A	0.00010	mg/L	2024-03-19	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2024-03-19	
Potassium, total	**1.53**	N/A	0.10	mg/L	2024-03-19	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2024-03-19	
Sodium, total	**4.47**	AO ≤ 200	0.10	mg/L	2024-03-19	

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24C1441
PROJECT	General Potability	**REPORTED**	2024-03-21 09:32

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Raw - Peachland Creek Sample (24C1441-02) | Matrix: Water | Sampled: 2024-03-12 08:11, Continued						
Total Metals, Continued						
Strontium, total	**0.219**	MAC = 7	0.0010	mg/L	2024-03-19	
Uranium, total	**0.00128**	MAC = 0.02	0.000020	mg/L	2024-03-19	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2024-03-19	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	< 0.0010	N/A	0.0010	mg/L	2024-03-20	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-03-20	
Chloroform	< 0.0010	N/A	0.0010	mg/L	2024-03-20	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-03-20	
Surrogate: Toluene-d8	*110*		*70-130*	%	*2024-03-20*	
Surrogate: 4-Bromofluorobenzene	*103*		*70-130*	%	*2024-03-20*	

Sample Qualifiers:

CT6 Results were based on lab temperature & lab pH.

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

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24C1441
PROJECT	General Potability	**REPORTED**	2024-03-21 09:32

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	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
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Solids, Total Dissolved in Water	SM 1030 E (2021)	SM 1030 E		N/A
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
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)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
AO	Aesthetic Objective
CFU/100 mL	Colony Forming Units per 100 millilitres
CU	Colour Units (referenced against a platinum cobalt standard)
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
MPN/100 mL	Most Probable Number per 100 millilitres
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	Peachland, Corporation of the District of	**WORK ORDER**	24C1441
PROJECT	General Potability	**REPORTED**	2024-03-21 09:32

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:TeamCaro@caro.ca

Please note any regulatory guidelines applied to this report are added as a convenience to the client, at their request, to help provide some initial context to analytical results obtained. Although CARO makes every effort to ensure accuracy of the associated regulatory guideline(s) applied, the guidelines applied cannot be assumed to be correct due to a variety of factors and as such CARO Analytical Services assumes no liability or responsibility for the use of those guidelines to make any decisions. The original source of the regulation should be verified and a review of the guideline(s) should be validated as correct in order to make any decisions arising from the comparison of the analytical data obtained to the relevant regulatory guideline for one's particular circumstances. Further, CARO Analytical Services assumes no liability or responsibility for any loss attributed from the use of these guidelines in any way.

CERTIFICATE OF ANALYSIS

REPORTED TO	Peachland, Corporation of the District of 5806 Beach Avenue PEACHLAND, BC V0H 1X7		
ATTENTION	Jon Poole	**WORK ORDER**	24K2239
PO NUMBER		**RECEIVED / TEMP**	2024-11-19 14:57 / 9.8°C
PROJECT	General Potability	**REPORTED**	2024-11-28 12:24
PROJECT INFO		**COC NUMBER**	No Number

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks

You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry

It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve

Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

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

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

Authorized By:

Team CARO
Client Service Representative

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24K2239
PROJECT	General Potability	**REPORTED**	2024-11-28 12:24

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Peachland Creek (24K2239-01) | Matrix: Water | Sampled: 2024-11-19 09:37						
Anions						
Chloride	**2.34**	AO ≤ 250	0.10	mg/L	2024-11-20	
Fluoride	**0.16**	MAC = 1.5	0.10	mg/L	2024-11-20	
Nitrate (as N)	**0.011**	MAC = 10	0.010	mg/L	2024-11-20	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2024-11-20	
Sulfate	**13.1**	AO ≤ 500	1.0	mg/L	2024-11-20	
Calculated Parameters						
Hardness, Total (as CaCO3)	**97.3**	None Required	0.500	mg/L	N/A	
Langelier Index	**-0.09**	N/A	-5.0		2024-11-22	CT6
Solids, Total Dissolved	**109**	AO ≤ 500	1.00	mg/L	N/A	
General Parameters						
Alkalinity, Total (as CaCO3)	**84.7**	N/A	1.0	mg/L	2024-11-20	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-11-20	
Alkalinity, Bicarbonate (as CaCO3)	**84.7**	N/A	1.0	mg/L	2024-11-20	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-11-20	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-11-20	
Colour, True	**6.5**	AO ≤ 15	5.0	CU	2024-11-21	
Conductivity (EC)	**211**	N/A	2.0	µS/cm	2024-11-20	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2024-11-20	
pH	**8.00**	7.0-10.5	0.10	pH units	2024-11-20	HT2
Temperature, at pH	**22.8**	N/A		°C	2024-11-20	HT2
Turbidity	**0.30**	OG < 1	0.10	NTU	2024-11-21	
Microbiological Parameters						
Coliforms, Total (Q-Tray)	**55**	MAC = 0	1	MPN/100 mL	2024-11-20	
E. coli (Q-Tray)	**1**	MAC = 0	1	MPN/100 mL	2024-11-20	
Total Metals						
Aluminum, total	**0.0089**	OG < 0.1	0.0050	mg/L	2024-11-21	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2024-11-21	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2024-11-21	
Barium, total	**0.0214**	MAC = 2	0.0050	mg/L	2024-11-21	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2024-11-21	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2024-11-21	
Calcium, total	**32.3**	None Required	0.20	mg/L	2024-11-21	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2024-11-21	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2024-11-21	
Copper, total	**0.00071**	MAC = 2	0.00040	mg/L	2024-11-21	
Iron, total	**0.030**	AO ≤ 0.3	0.010	mg/L	2024-11-21	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2024-11-21	
Magnesium, total	**4.00**	None Required	0.010	mg/L	2024-11-21	
Manganese, total	**0.00668**	MAC = 0.12	0.00020	mg/L	2024-11-21	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2024-11-21	

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24K2239
PROJECT	General Potability	**REPORTED**	2024-11-28 12:24

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Peachland Creek (24K2239-01) | Matrix: Water | Sampled: 2024-11-19 09:37, Continued						
Total Metals, Continued						
Molybdenum, total	**0.0109**	N/A	0.00010	mg/L	2024-11-21	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2024-11-21	
Potassium, total	**1.54**	N/A	0.10	mg/L	2024-11-21	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2024-11-21	
Sodium, total	**3.94**	AO ≤ 200	0.10	mg/L	2024-11-21	
Strontium, total	**0.200**	MAC = 7	0.0010	mg/L	2024-11-21	
Uranium, total	**0.000919**	MAC = 0.02	0.000020	mg/L	2024-11-21	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2024-11-21	
Ponderosa PRV Tap (24K2239-02) | Matrix: Water | Sampled: 2024-11-19 10:11						
Anions						
Chloride	**6.25**	AO ≤ 250	0.10	mg/L	2024-11-20	
Fluoride	**0.15**	MAC = 1.5	0.10	mg/L	2024-11-20	
Nitrate (as N)	**0.013**	MAC = 10	0.010	mg/L	2024-11-20	
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2024-11-20	
Sulfate	**12.9**	AO ≤ 500	1.0	mg/L	2024-11-20	
Calculated Parameters						
Total Trihalomethanes	**0.0212**	MAC = 0.1	0.00400	mg/L	N/A	
Hardness, Total (as CaCO3)	**97.0**	None Required	0.500	mg/L	N/A	
Langelier Index	**-0.08**	N/A	-5.0		2024-11-22	CT6
Solids, Total Dissolved	**114**	AO ≤ 500	1.00	mg/L	N/A	
General Parameters						
Alkalinity, Total (as CaCO3)	**84.2**	N/A	1.0	mg/L	2024-11-20	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-11-20	
Alkalinity, Bicarbonate (as CaCO3)	**84.2**	N/A	1.0	mg/L	2024-11-20	
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-11-20	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-11-20	
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2024-11-21	
Conductivity (EC)	**223**	N/A	2.0	µS/cm	2024-11-20	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2024-11-20	
pH	**8.01**	7.0-10.5	0.10	pH units	2024-11-20	HT2
Temperature, at pH	**23.4**	N/A		°C	2024-11-20	HT2
Turbidity	< 0.10	OG < 1	0.10	NTU	2024-11-21	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-11-22	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-11-22	
Dichloroacetic Acid	**0.0056**	N/A	0.0020	mg/L	2024-11-22	
Trichloroacetic Acid	**0.0068**	N/A	0.0020	mg/L	2024-11-22	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2024-11-22	
Total Haloacetic Acids (HAA5)	**0.0123**	MAC = 0.08	0.00200	mg/L	N/A	

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24K2239
PROJECT	General Potability	**REPORTED**	2024-11-28 12:24

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Ponderosa PRV Tap (24K2239-02) | Matrix: Water | Sampled: 2024-11-19 10:11, Continued						
Haloacetic Acids, Continued						
Surrogate: 2-Bromopropionic Acid	*100*		*70-130*	%	*2024-11-22*	
Microbiological Parameters						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2024-11-20	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2024-11-20	
Total Metals						
Aluminum, total	**0.0074**	OG < 0.1	0.0050	mg/L	2024-11-21	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2024-11-21	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2024-11-21	
Barium, total	**0.0216**	MAC = 2	0.0050	mg/L	2024-11-21	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2024-11-21	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2024-11-21	
Calcium, total	**32.1**	None Required	0.20	mg/L	2024-11-21	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2024-11-21	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2024-11-21	
Copper, total	**0.00044**	MAC = 2	0.00040	mg/L	2024-11-21	
Iron, total	< 0.010	AO ≤ 0.3	0.010	mg/L	2024-11-21	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2024-11-21	
Magnesium, total	**4.07**	None Required	0.010	mg/L	2024-11-21	
Manganese, total	< 0.00020	MAC = 0.12	0.00020	mg/L	2024-11-21	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2024-11-21	
Molybdenum, total	**0.0110**	N/A	0.00010	mg/L	2024-11-21	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2024-11-21	
Potassium, total	**1.61**	N/A	0.10	mg/L	2024-11-21	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2024-11-21	
Sodium, total	**5.82**	AO ≤ 200	0.10	mg/L	2024-11-21	
Strontium, total	**0.204**	MAC = 7	0.0010	mg/L	2024-11-21	
Uranium, total	**0.000061**	MAC = 0.02	0.000020	mg/L	2024-11-21	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2024-11-21	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	**0.0017**	N/A	0.0010	mg/L	2024-11-23	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2024-11-23	
Chloroform	**0.0195**	N/A	0.0010	mg/L	2024-11-23	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2024-11-23	
Surrogate: Toluene-d8	*93*		*70-130*	%	*2024-11-23*	
Surrogate: 4-Bromofluorobenzene	*84*		*70-130*	%	*2024-11-23*	
Community Centre Janitors Sink (24K2239-03) | Matrix: Water | Sampled: 2024-11-19 10:47						
Microbiological Parameters						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2024-11-20	
E. coli	< 1	MAC = 0	1	CFU/100 mL	2024-11-20	

TEST RESULTS

REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24K2239
PROJECT	General Potability	**REPORTED**	2024-11-28 12:24

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier

Sample Qualifiers:

CT6	Results were based on lab temperature & lab pH.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Peachland, Corporation of the District of	**WORK ORDER**	24K2239
PROJECT	General Potability	**REPORTED**	2024-11-28 12:24

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
Coliforms, Total in Water	SM 9223 (2016)	Quanti-Tray / Enzyme Substrate Endo Agar	✓	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
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
E. coli in Water	SM 9223 (2016)	Quanti-Tray / Enzyme Substrate Endo Agar	✓	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
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Solids, Total Dissolved in Water	SM 1030 E (2021)	SM 1030 E		N/A
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
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)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
AO	Aesthetic Objective
CFU/100 mL	Colony Forming Units per 100 millilitres
CU	Colour Units (referenced against a platinum cobalt standard)
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
MPN/100 mL	Most Probable Number per 100 millilitres
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	Peachland, Corporation of the District of	**WORK ORDER**	24K2239
PROJECT	General Potability	**REPORTED**	2024-11-28 12:24

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:TeamCaro@caro.ca

Please note any regulatory guidelines applied to this report are added as a convenience to the client, at their request, to help provide some initial context to analytical results obtained. Although CARO makes every effort to ensure accuracy of the associated regulatory guideline(s) applied, the guidelines applied cannot be assumed to be correct due to a variety of factors and as such CARO Analytical Services assumes no liability or responsibility for the use of those guidelines to make any decisions. The original source of the regulation should be verified and a review of the guideline(s) should be validated as correct in order to make any decisions arising from the comparison of the analytical data obtained to the relevant regulatory guideline for one's particular circumstances. Further, CARO Analytical Services assumes no liability or responsibility for any loss attributed from the use of these guidelines in any way.

Appendix II – 2024 Water Consumption

Month	Total Volume (m3)	Total Volume (ML)
	Peachland Distribution System	Peachland Distribution System
January	97916	97.916
February	89314	89.314
March	102086	102.086
April	143895	143.895
May	247286	247.286
June	271811	271.811
July	381247	381.247
August	340105	340.105
September	246835	246.835
October	144329	144.329
November	92384	92.384
December	93139	93.139
Annual	2250347	2250.347

Appendix III – Turbidity data, pH and free chlorine residual data

	Peachland WTP								
	January			February			March		
Date	Turbidity	pH	FCR	Turbidity	pH	FCR	Turbidity	pH	FCR
1	0.02	8.02	1.23	0.04	7.91	1.03	0.02	7.88	0.77
2	0.02	8.02	1.23	0.05	7.90	1.19	0.02	7.89	0.87
3	0.02	8.02	1.21	0.04	7.91	1.26	0.02	7.89	0.97
4	0.02	8.03	1.20	0.03	7.93	1.21	0.02	7.88	1.01
5	0.02	8.03	1.22	0.03	7.94	1.12	0.02	7.88	0.96
6	0.02	8.02	1.17	0.03	7.97	1.01	0.02	7.87	0.88
7	0.02	8.02	1.16	0.03	7.99	1.15	0.03	7.92	0.88
8	0.02	8.02	1.18	0.03	7.97	1.12	0.02	7.81	0.90
9	0.02	8.01	1.16	0.03	7.97	1.22	0.02	7.78	0.98
10	0.02	8.01	1.17	0.02	7.96	1.15	0.02	7.80	0.93
11	0.03	8.01	1.10	0.02	7.96	1.09	0.02	7.79	0.95
12	0.02	8.03	0.97	0.02	7.96	1.09	0.02	7.79	0.93
13	0.02	8.04	0.99	0.02	7.95	1.04	0.02	7.78	0.90
14	0.02	8.02	0.91	0.02	7.95	1.09	0.02	7.78	0.98
15	0.02	8.00	0.90	0.02	7.96	1.06	0.02	7.78	0.95
16	0.02	7.99	0.93	0.02	7.95	0.98	0.02	7.78	0.94
17	0.02	8.00	0.91	0.02	7.96	1.07	0.02	7.78	0.93
18	0.02	8.00	1.16	0.02	7.96	1.10	0.02	7.79	0.93
19	0.02	7.99	1.17	0.02	7.95	1.10	0.02	7.78	0.94
20	0.02	7.98	1.09	0.02	7.95	1.03	0.02	7.78	0.92
21	0.02	7.97	1.05	0.02	7.94	0.95	0.02	7.78	0.91
22	0.02	7.96	1.02	0.02	7.95	0.99	0.02	7.79	0.95
23	0.02	7.96	1.03	0.02	7.95	0.92	0.02	7.80	0.93
24	0.02	7.94	0.97	0.02	7.94	0.95	0.02	7.78	1.06
25	0.02	7.93	0.98	0.02	7.93	1.02	0.02	7.78	1.46
26	0.02	7.91	0.92	0.02	7.91	0.96	0.02	7.78	1.34
27	0.02	7.90	0.91	0.02	7.90	0.92	0.02	7.77	1.17
28	0.02	7.89	0.88	0.02	7.89	0.87	0.02	7.76	1.10
29	0.03	7.90	0.89				0.02	7.76	1.04
30	0.04	7.88	0.87				0.02	7.76	1.01
31	0.04	7.89	0.86				0.02	7.76	1.03

Turbidity measured in NTU

FCR = Free Chlorine Residual and is measured in mg/L

Date	Peachland WTP								
	April			May			June		
	Turbidity	pH	FCR	Turbidity	pH	FCR	Turbidity	pH	FCR
1	0.02	7.77	1.04	0.03	7.66	1.15	0.03	7.98	1.26
2	0.02	7.77	1.05	0.03	7.64	1.14	0.03	7.97	1.25
3	0.02	7.77	1.05	0.03	7.55	1.12	0.03	8.03	1.28
4	0.02	7.77	1.01	0.03	7.57	1.05	0.03	8.07	1.33
5	0.02	7.76	1.01	0.03	7.73	1.16	0.03	8.10	1.41
6	0.02	7.76	1.02	0.03	7.79	1.08	0.03	8.12	1.57
7	0.02	7.76	1.05	0.03	7.83	1.05	0.03	8.13	1.60
8	0.02	7.76	1.01	0.03	7.86	1.18	0.03	8.12	1.47
9	0.02	7.78	0.99	0.03	7.87	1.18	0.03	8.09	1.32
10	0.02	7.78	0.99	0.03	7.85	1.23	0.03	8.05	1.28
11	0.02	7.79	0.96	0.03	7.89	1.30	0.03	8.08	1.34
12	0.02	7.80	0.94	0.04	8.06	1.36	0.03	8.11	1.34
13	0.02	7.80	0.97	0.04	8.09	1.28	0.03	8.13	1.34
14	0.02	7.79	0.98	0.05	8.10	1.34	0.03	8.13	1.41
15	0.02	7.79	0.96	0.04	8.11	1.39	0.03	8.13	1.44
16	0.02	7.80	0.95	0.02	8.00	1.34	0.03	8.17	1.44
17	0.02	7.80	0.96	0.02	7.94	1.42	0.03	8.15	1.35
18	0.02	7.80	0.90	0.02	7.92	1.43	0.03	8.15	1.35
19	0.02	7.81	0.95	0.02	7.92	1.28	0.03	8.15	1.35
20	0.02	7.80	0.93	0.02	7.95	1.23	0.03	8.16	1.33
21	0.02	7.81	0.96	0.03	7.94	1.19	0.03	8.17	1.30
22	0.02	7.82	1.05	0.02	7.94	1.18	0.03	8.18	1.31
23	0.02	7.82	1.05	0.03	7.96	1.14	0.03	8.22	1.32
24	0.02	7.81	1.00	0.03	7.94	1.16	0.03	8.21	1.29
25	0.02	7.77	0.98	0.03	7.93	1.12	0.03	8.18	1.26
26	0.02	7.67	0.98	0.03	7.90	1.14	0.03	8.19	1.27
27	0.02	7.64	0.94	0.03	7.90	1.27	0.03	8.20	1.30
28	0.02	7.58	1.00	0.03	7.87	1.23	0.03	8.20	1.27
29	0.03	7.68	1.02	0.03	7.88	1.26	0.03	8.19	1.27
30	0.03	7.70	1.11	0.03	7.96	1.32	0.03	8.22	1.26
31				0.03	8.02	1.29			

Turbidity measured in NTU

FCR = Free Chlorine Residual and is measured in mg/L

Date	Peachland WTP								
	July			August			September		
	Turbidity	pH	FCR	Turbidity	pH	FCR	Turbidity	pH	FCR
1	0.03	8.26	1.27	0.03	8.32	1.38	0.03	8.14	1.22
2	0.03	8.28	1.27	0.03	8.32	1.36	0.03	8.18	1.22
3	0.03	8.29	1.29	0.03	8.32	1.31	0.03	8.17	1.23
4	0.03	8.29	1.29	0.03	8.32	1.27	0.03	8.15	1.25
5	0.03	8.29	1.30	0.03	8.30	1.25	0.03	8.19	1.23
6	0.03	8.27	1.28	0.03	8.29	1.25	0.03	8.19	1.20
7	0.03	8.26	1.32	0.03	8.27	1.26	0.03	8.19	1.18
8	0.03	8.26	1.34	0.03	8.25	1.24	0.03	8.19	1.17
9	0.03	8.24	1.33	0.03	8.21	1.25	0.03	8.20	1.15
10	0.03	8.22	1.33	0.03	8.23	1.23	0.03	8.18	1.13
11	0.03	8.21	1.28	0.03	8.24	1.24	0.03	8.09	1.03
12	0.03	8.23	1.29	0.03	8.25	1.23	0.03	8.00	1.07
13	0.03	8.21	1.29	0.03	8.23	1.21	0.03	8.02	1.56
14	0.03	8.26	1.32	0.03	8.24	1.22	0.03	8.07	1.27
15	0.03	8.28	1.34	0.03	8.24	1.22	0.03	8.08	1.19
16	0.03	8.31	1.34	0.03	8.23	1.21	0.03	8.04	1.20
17	0.03	8.31	1.35	0.03	8.23	1.21	0.03	8.04	1.20
18	0.03	8.35	1.36	0.03	8.25	1.18	0.03	8.03	1.21
19	0.03	8.33	1.34	0.03	8.17	1.12	0.03	7.97	1.35
20	0.03	8.35	1.34	0.03	8.10	1.05	0.03	7.92	1.17
21	0.03	8.29	1.37	0.03	8.10	1.04	0.03	7.93	1.16
22	0.03	8.29	1.35	0.03	8.08	1.04	0.03	7.95	1.14
23	0.03	8.28	1.33	0.03	8.11	1.04	0.03	7.91	1.16
24	0.03	8.31	1.33	0.03	8.13	0.89	0.03	7.90	1.11
25	0.03	8.26	1.35	0.03	8.18	1.15	0.03	7.93	1.13
26	0.03	8.26	1.35	0.03	8.16	1.31	0.03	7.86	1.13
27	0.03	8.32	1.51	0.03	8.17	1.28	0.03	7.88	1.15
28	0.03	8.33	1.68	0.03	8.17	1.28	0.03	7.87	1.16
29	0.03	8.28	1.49	0.03	8.15	1.25	0.03	7.89	1.19
30	0.03	8.30	1.46	0.03	8.07	1.21	0.03	7.92	1.18
31	0.03	8.32	1.38	0.03	8.12	1.23			

Turbidity measured in NTU

FCR = Free Chlorine Residual and is measured in mg/L

Date	Peachland WTP								
	October			November			December		
	Turbidity	pH	FCR	Turbidity	pH	FCR	Turbidity	pH	FCR
1	0.03	7.92	1.19	0.03	7.91	1.30	0.03	7.89	1.01
2	0.03	7.90	1.21	0.03	7.91	1.30	0.03	7.89	1.10
3	0.03	7.89	1.21	0.03	7.86	1.04	0.03	7.89	1.31
4	0.03	7.88	1.23	0.03	7.84	0.99	0.03	7.88	1.35
5	0.03	7.87	1.29	0.03	7.83	0.71	0.03	7.87	1.09
6	0.03	7.86	1.29	0.03	7.88	0.96	0.03	7.86	1.22
7	0.03	7.87	1.34	0.03	7.88	1.08	0.03	7.85	1.19
8	0.03	7.87	1.34	0.03	7.89	0.94	0.03	7.87	1.13
9	0.03	7.87	1.36	0.03	7.92	1.01	0.03	7.89	1.19
10	0.03	7.84	1.38	0.03	7.89	1.13	0.03	7.89	1.34
11	0.03	7.81	1.21	0.03	7.89	1.10	0.04	7.89	1.41
12	0.03	7.84	1.15	0.03	7.90	1.07	0.04	7.89	1.30
13	0.03	7.86	1.20	0.03	7.91	1.07	0.05	7.91	1.13
14	0.03	7.90	1.32	0.03	7.93	1.07	0.05	7.92	1.26
15	0.03	7.89	1.19	0.03	7.91	1.19	0.05	7.91	1.41
16	0.03	7.91	1.16	0.03	7.90	1.26	0.05	7.92	1.64
17	0.03	7.88	1.17	0.03	7.90	1.33	0.05	7.92	1.22
18	0.03	7.88	1.12	0.03	7.90	1.38	0.05	7.94	0.94
19	0.03	7.91	0.98	0.03	7.90	1.45	0.04	7.92	1.10
20	0.03	7.89	1.16	0.03	7.91	1.50	0.03	7.91	1.26
21	0.03	7.89	1.39	0.03	7.90	1.36	0.03	7.91	1.20
22	0.03	7.91	1.71	0.03	7.91	1.13	0.03	7.90	1.21
23	0.03	7.90	1.36	0.03	7.91	1.22	0.03	7.90	1.27
24	0.03	7.90	1.20	0.03	7.90	1.23	0.03	7.90	1.18
25	0.03	7.90	1.12	0.03	7.90	1.21	0.03	7.91	1.20
26	0.03	7.92	1.13	0.03	7.89	1.17	0.03	7.91	1.20
27	0.03	7.93	1.04	0.03	7.91	1.13	0.04	7.91	1.14
28	0.03	7.93	0.99	0.03	7.92	1.03	0.04	7.91	1.04
29	0.03	7.92	0.98	0.03	7.89	1.05	0.03	7.90	1.07
30	0.03	7.91	1.08	0.03	7.89	1.13	0.03	7.90	1.00
31	0.03	7.91	1.30				0.03	7.90	0.96

Turbidity measured in NTU

FCR = Free Chlorine Residual and is measured in mg/L