

District of Peachland Annual Drinking Water Report – 2023



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
- Trepanier Creek
- Okanagan Lake

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,
- 1 very high consequence dam (Peachland Lake)

- 1 significant consequence dam (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 II
- Water Distribution Operator: WD II
- Chief Water Treatment Plant Operator: WD Level II / WT Level IV
- Water Treatment Plant Operator: WD Level II / 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 2023.

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 within 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 <u>water quality advisory</u> (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 in 2023

A <u>boil water notice</u> (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. <u>There was one BWN issued in 2023 (details below).</u>

August 10/23

- BWN issued for 14 properties at the 2200 block of Renfrew Rd following a water main break and the subsequent repair

A <u>do not use notice</u> 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). <u>There were</u> no do not use notices issued in 2023.

WATER CONSUMPTION

In 2023, there was a total of 2,460 ML passing through the District of Peachland Distribution system. A monthly summary of consumption is located in Appendix II.

WORKS COMPLETED AND IN PROGRESS

Annual leak detection program continues with the North side of Peachland surveyed.

<u>Appendix I – Comprehensive Analyses and Disinfection By-products Analysis (Peachland Creek</u> 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 23B0744

PO NUMBER

RECEIVED / TEMP 2023-02-07 12:00 / 11.1°C **PROJECT** REPORTED 2023-02-13 16:07 Chemistry **PROJECT INFO COC NUMBER** No Number

Introduction:

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Big Picture Sidekicks



We've Got Chemistry



Ahead of the Curve



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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.

Through research, regulation knowledge, and instrumentation, 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-condition

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

Authorized By:

Team CARO

Client Service Representative

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 REPORTED TO
 Peachland, Corporation of the District of
 WORK ORDER
 23B0744

 PROJECT
 Chemistry
 REPORTED
 2023-02-13 16:07

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Treated Water - Turbidity Meter - W1	ΓP (23B0744-01) Matr	ix: Water Sampled	i: 2023-02-07	08:03		
Calculated Parameters						
Hardness, Total (as CaCO3)	102	None Required	0.500	mg/L	N/A	
Total Metals						
Aluminum, total	< 0.0250	OG < 0.1	0.0050	ma/L	2023-02-12	RA3
Antimony, total	< 0.00020	MAC = 0.006	0.00020		2023-02-12	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050		2023-02-12	
Barium, total	0.0210	MAC = 2	0.0050		2023-02-12	
Beryllium, total	< 0.00010	N/A	0.00010		2023-02-12	
Bismuth, total	< 0.00010	N/A	0.00010		2023-02-12	
Boron, total	< 0.0500	MAC = 5	0.0500		2023-02-12	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010		2023-02-12	
Calcium, total	33.9	None Required		mg/L	2023-02-12	
Chromium, total	0.00103	MAC = 0.05	0.00050		2023-02-12	
Cobalt, total	< 0.00010	N/A	0.00010		2023-02-12	
Copper, total	0.00079	MAC = 2	0.00040		2023-02-12	
Iron, total	0.011	AO ≤ 0.3	0.010		2023-02-12	
Lead, total	< 0.00020	MAC = 0.005	0.00020		2023-02-12	
Lithium, total	0.00192	N/A	0.00010	_	2023-02-12	
Magnesium, total	4.30	None Required	0.010		2023-02-12	
Manganese, total	< 0.00020	MAC = 0.12	0.00020		2023-02-12	
Molybdenum, total	0.0108	N/A	0.00010	ma/L	2023-02-12	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2023-02-12	
Phosphorus, total	< 0.050	N/A	0.050	mg/L	2023-02-12	
Potassium, total	1.47	N/A		mg/L	2023-02-12	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	-	2023-02-12	
Silicon, total	6.2	N/A		mg/L	2023-02-12	
Silver, total	< 0.000050	None Required	0.000050	_	2023-02-12	
Sodium, total	5.70	AO ≤ 200	0.10	mg/L	2023-02-12	
Strontium, total	0.217	MAC = 7	0.0010	mg/L	2023-02-12	
Sulfur, total	4.5	N/A	3.0	mg/L	2023-02-12	
Tellurium, total	< 0.00050	N/A	0.00050	_	2023-02-12	
Thallium, total	< 0.000020	N/A	0.000020		2023-02-12	
Thorium, total	< 0.00010	N/A	0.00010		2023-02-12	
Tin, total	< 0.00020	N/A	0.00020		2023-02-12	
Titanium, total	< 0.0050	N/A	0.0050		2023-02-12	
Tungsten, total	< 0.0010	N/A	0.0010		2023-02-12	
Uranium, total	0.000076	MAC = 0.02	0.000020		2023-02-12	
Vanadium, total	< 0.0050	N/A	0.0050		2023-02-12	
Zinc, total	< 0.0040	AO ≤ 5	0.0040		2023-02-12	
Zirconium, total	< 0.00010	N/A	0.00010		2023-02-12	

Sample Qualifiers:

RA3 The Reporting Limit has been raised due to comparable level detected in the blank(s).



REPORTED TO Peachland, Corporation of the District of PROJECT PROJECT PROJECT WORK ORDER 23B0744

REPORTED 2023-02-13 16:07

Analysis Description	Method Ref.	Technique	Accredited	Location
Hardness in Water	SM 2340 B* (2021)	Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Est)	✓	N/A
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond

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

Glossary of Terms:

RL Reporting Limit (default)

Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors

AO Aesthetic Objective

MAC Maximum Acceptable Concentration (health based)

mg/L Milligrams per litre

OG Operational Guideline (treated water)

EPA United States Environmental Protection Agency Test Methods

SM Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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. Samples will be disposed of 30 days after the test report has been issued or once samples expire, whichever comes first. Longer hold is possible if agreed to in writing. 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 <u>not</u> 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 23C0097

 PO NUMBER
 RECEIVED / TEMP
 2023-02-28 16:00 / 4.5°C

 PROJECT
 Chemistry
 REPORTED
 2023-03-09 10:31

 PROJECT INFO
 COC NUMBER
 No Number

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 REPORTED TO
 Peachland, Corporation of the District of
 WORK ORDER
 23C0097

 PROJECT
 Chemistry
 REPORTED
 2023-03-09 10:31

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Thorne Rd (23C0097-01) Matrix: Water	r Sampled: 2023-02	2-28 08:20				
Calculated Parameters						
Total Trihalomethanes	0.0191	MAC = 0.1	0.00400	mg/L	N/A	
Haloacetic Acids						
Monochloroacetic Acid	< 0.0020	N/A	0.0020	mg/L	2023-03-07	
Monobromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2023-03-07	
Dichloroacetic Acid	0.0077	N/A	0.0020	mg/L	2023-03-07	
Trichloroacetic Acid	0.0077	N/A	0.0020	mg/L	2023-03-07	
Dibromoacetic Acid	< 0.0020	N/A	0.0020	mg/L	2023-03-07	
Total Haloacetic Acids (HAA5)	0.0154	MAC = 0.08	0.00200	mg/L	N/A	
Surrogate: 2-Bromopropionic Acid	98		70-130	%	2023-03-07	
Volatile Organic Compounds (VOC)						
Bromodichloromethane	0.0018	N/A	0.0010	mg/L	2023-03-06	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2023-03-06	
Chloroform	0.0173	N/A	0.0010	mg/L	2023-03-06	
Dibromochloromethane	< 0.0010	N/A	0.0010	mg/L	2023-03-06	
Surrogate: Toluene-d8	73		70-130	%	2023-03-06	
Surrogate: 4-Bromofluorobenzene	59		70-130	%	2023-03-06	S02

Sample Qualifiers:

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



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 Peachland, Corporation of the District of
 WORK ORDER
 23C0097

 PROJECT
 Chemistry
 REPORTED
 2023-03-09 10:31

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

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mg/L Milligrams per litre

EPA United States Environmental Protection Agency Test Methods

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> 5806 Beach Avenue PEACHLAND, BC V0H 1X7

ATTENTION WORK ORDER 23H2022 Marc Forcier

PO NUMBER

RECEIVED / TEMP 2023-08-15 15:00 / 16.3°C **PROJECT** Chemistry REPORTED 2023-08-22 15:12

COC NUMBER PROJECT INFO

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	chland, Corporation of nistry	f the District of			WORK ORDER REPORTED	23H2022 2023-08-2	2 15:12
Analyte		Result	Guideline	RL	Units	Analyzed	Qualifie
Wetland Outlet (23H202	2-01) Matrix: Water	Sampled: 20	23-08-14 15:12				
Total Metals							
Aluminum, total		0.115	OG < 0.1	0.0050	mg/L	2023-08-19	
Raw Water (23H2022-02) Matrix: Water Sa	mpled: 2023-0	8-14 15:13				PRES
Calculated Parameters							
Hardness, Total (as CaCO	03)	102	None Required	0.500	mg/L	N/A	
General Parameters							
Carbon, Dissolved Organ	ic	3.38	N/A	0.50	mg/L	2023-08-16	
-		0.00	1471	0.00	gr.c	2020 00 10	
Total Metals							
Calcium, total		33.8	None Required		mg/L	2023-08-19	
Magnesium, total		4.15	None Required	0.010	mg/L	2023-08-19	
Treated Water (23H2022	2-03) Matrix: Water	Sampled: 202	3-08-14 14:54				
Treated Water (23H2022	2-03) Matrix: Water	Sampled: 202 0.0092	3-08-14 14:54 OG < 0.1	0.0050	mg/L	2023-08-19	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022		0.0092	OG < 0.1	0.0050	mg/L	2023-08-19	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022- Calculated Parameters		0.0092 Sampled: 2023	OG < 0.1				
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022		0.0092	OG < 0.1	0.0050		2023-08-19 N/A	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022- Calculated Parameters		0.0092 Sampled: 2023	OG < 0.1				
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022- Calculated Parameters Total Trihalomethanes		0.0092 Sampled: 2023	OG < 0.1		mg/L		
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022 Calculated Parameters Total Trihalomethanes Haloacetic Acids Monochloroacetic Acid Monobromoacetic Acid		0.0092 Sampled: 2023 0.0375 < 0.0020 < 0.0020	OG < 0.1 0-08-15 10:57 MAC = 0.1 N/A N/A	0.00400 0.0020 0.0020	mg/L mg/L mg/L	N/A 2023-08-20 2023-08-20	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022- Calculated Parameters Total Trihalomethanes Haloacetic Acids Monochloroacetic Acid Monobromoacetic Acid Dichloroacetic Acid		0.0092 Sampled: 2023 0.0375 < 0.0020 < 0.0020 0.0123	OG < 0.1 3-08-15 10:57 MAC = 0.1 N/A N/A N/A	0.00400 0.0020 0.0020 0.0020	mg/L mg/L mg/L	N/A 2023-08-20 2023-08-20 2023-08-20	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022 Calculated Parameters Total Trihalomethanes Haloacetic Acids Monochloroacetic Acid Monobromoacetic Acid Dichloroacetic Acid Trichloroacetic Acid		0.0092 Sampled: 2023 0.0375 < 0.0020 < 0.0020 0.0123 0.0090	OG < 0.1 1-08-15 10:57 MAC = 0.1 N/A N/A N/A N/A	0.00400 0.0020 0.0020 0.0020 0.0020	mg/L mg/L mg/L mg/L mg/L	N/A 2023-08-20 2023-08-20 2023-08-20 2023-08-20	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022 Calculated Parameters Total Trihalomethanes Haloacetic Acids Monochloroacetic Acid Monobromoacetic Acid Dichloroacetic Acid Trichloroacetic Acid	04) Matrix: Water	0.0092 Sampled: 2023 0.0375 < 0.0020 < 0.0020 0.0123 0.0090 < 0.0020	OG < 0.1 1-08-15 10:57 MAC = 0.1 N/A N/A N/A N/A N/A	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L	N/A 2023-08-20 2023-08-20 2023-08-20 2023-08-20 2023-08-20	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022 Calculated Parameters Total Trihalomethanes Haloacetic Acids Monochloroacetic Acid Monobromoacetic Acid Dichloroacetic Acid Trichloroacetic Acid Dibromoacetic Acid Dibromoacetic Acid Total Haloacetic Acid (Ha	04) Matrix: Water	0.0092 Sampled: 2023 0.0375 < 0.0020 < 0.0020 0.0123 0.0090 < 0.0020 0.0213	OG < 0.1 1-08-15 10:57 MAC = 0.1 N/A N/A N/A N/A	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A 2023-08-20 2023-08-20 2023-08-20 2023-08-20 2023-08-20 N/A	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022 Calculated Parameters Total Trihalomethanes Haloacetic Acids Monochloroacetic Acid Monobromoacetic Acid Dichloroacetic Acid Trichloroacetic Acid	04) Matrix: Water	0.0092 Sampled: 2023 0.0375 < 0.0020 < 0.0020 0.0123 0.0090 < 0.0020	OG < 0.1 1-08-15 10:57 MAC = 0.1 N/A N/A N/A N/A N/A	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L	N/A 2023-08-20 2023-08-20 2023-08-20 2023-08-20 2023-08-20	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022 Calculated Parameters Total Trihalomethanes Haloacetic Acids Monochloroacetic Acid Monobromoacetic Acid Dichloroacetic Acid Trichloroacetic Acid Dibromoacetic Acid Dibromoacetic Acid Total Haloacetic Acid (Ha	04) Matrix: Water	0.0092 Sampled: 2023 0.0375 < 0.0020 < 0.0020 0.0123 0.0090 < 0.0020 0.0213	OG < 0.1 1-08-15 10:57 MAC = 0.1 N/A N/A N/A N/A N/A	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A 2023-08-20 2023-08-20 2023-08-20 2023-08-20 2023-08-20 N/A	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022- Calculated Parameters Total Trihalomethanes Haloacetic Acids Monochloroacetic Acid Monobromoacetic Acid Dichloroacetic Acid Dichloroacetic Acid Dibromoacetic Acid Trichloroacetic Acid Trichloroacetic Acid Surrogate: 2-Bromopropio	04) Matrix: Water	0.0092 Sampled: 2023 0.0375 < 0.0020 < 0.0020 0.0123 0.0090 < 0.0020 0.0213	OG < 0.1 1-08-15 10:57 MAC = 0.1 N/A N/A N/A N/A N/A	0.00400 0.0020 0.0020 0.0020 0.0020 0.00200 70-130	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A 2023-08-20 2023-08-20 2023-08-20 2023-08-20 2023-08-20 N/A 2023-08-20	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022 Calculated Parameters Total Trihalomethanes Haloacetic Acids Monochloroacetic Acid Dichloroacetic Acid Trichloroacetic Acid Trichloroacetic Acid Dibromoacetic Acid Compound Total Haloacetic Acids (H. Surrogate: 2-Bromopropic	04) Matrix: Water	0.0092 Sampled: 2023 0.0375 < 0.0020 < 0.0020 0.0123 0.0090 < 0.0020 0.0213 117	OG < 0.1 1-08-15 10:57 MAC = 0.1 N/A N/A N/A N/A N/A N/A MAC = 0.08	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A 2023-08-20 2023-08-20 2023-08-20 2023-08-20 2023-08-20 N/A	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022- Calculated Parameters Total Trihalomethanes Haloacetic Acids Monochloroacetic Acid Dichloroacetic Acid Dichloroacetic Acid Dibromoacetic Acid Trichloroacetic Acid Compound (15 Surrogate: 2-Bromopropic) Volatile Organic Compound Bromodichloromethane	04) Matrix: Water	0.0092 Sampled: 2023 0.0375 < 0.0020 < 0.0020 0.0123 0.0090 < 0.0020 117 0.0024	OG < 0.1 N/A N/A N/A N/A N/A N/A N/A N/	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020 70-130	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A 2023-08-20 2023-08-20 2023-08-20 2023-08-20 N/A 2023-08-20 2023-08-17	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022 Calculated Parameters Total Trihalomethanes Haloacetic Acids Monochloroacetic Acid Dichloroacetic Acid Dichloroacetic Acid Dibromoacetic Acid Trichloroacetic Acid Compound Haloacetic Acids (H. Surrogate: 2-Bromopropic Volatile Organic Compound Bromodichloromethane Bromoform	04) Matrix: Water	0.0092 Sampled: 2023 0.0375 < 0.0020 < 0.0020 0.0123 0.0090 < 0.0020 0.0213 117 0.0024 < 0.0010	OG < 0.1 N/A N/A N/A N/A N/A N/A N/A N/	0.00400 0.0020 0.0020 0.0020 0.0020 0.0020 70-130	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A 2023-08-20 2023-08-20 2023-08-20 2023-08-20 N/A 2023-08-20 2023-08-17 2023-08-17	
Treated Water (23H2022 Total Metals Aluminum, total Thorne Road (23H2022 Calculated Parameters Total Trihalomethanes Haloacetic Acids Monochloroacetic Acid Dichloroacetic Acid Trichloroacetic Acid Total Haloacetic Acid Total Haloacetic Acids (H. Surrogate: 2-Bromopropic Volatile Organic Compoun Bromodichloromethane Bromoform Chloroform	04) Matrix: Water	0.0092 Sampled: 2023 0.0375 < 0.0020 < 0.0020 0.0123 0.0090 < 0.0020 0.0213 117 0.0024 < 0.0010 0.0351	OG < 0.1 N/A N/A N/A N/A N/A N/A N/A N/	0.00400 0.0020 0.0020 0.0020 0.0020 0.00200 70-130 0.0010 0.0010	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	N/A 2023-08-20 2023-08-20 2023-08-20 2023-08-20 N/A 2023-08-20 2023-08-17 2023-08-17 2023-08-17	

#4350 Ponderosa (23H2022-05) | Matrix: Water | Sampled: 2023-08-15 09:00



 REPORTED TO
 Peachland, Corporation of the District of
 WORK ORDER
 23H2022

 PROJECT
 Chemistry
 REPORTED
 2023-08-22 15:12

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
#4350 Ponderosa (23H2022-05) Ma	ntrix: Water Sampled:	2023-08-15 09:00,	Continued			
Calculated Parameters						
Hardness, Total (as CaCO3)	90.6	None Required	0.500	mg/L	N/A	
Total Metals						
Aluminum, total	0.0106	OG < 0.1	0.0050	ma/L	2023-08-19	
Antimony, total	< 0.00020	MAC = 0.006	0.00020		2023-08-19	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050		2023-08-19	
Barium, total	0.0217	MAC = 2	0.0050		2023-08-19	
Beryllium, total	< 0.00010	N/A	0.00010		2023-08-19	
Bismuth, total	< 0.00010	N/A	0.00010		2023-08-19	
Boron, total	< 0.0500	MAC = 5	0.0500		2023-08-19	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	-	2023-08-19	
Calcium, total	30.0	None Required		mg/L	2023-08-19	
Chromium, total	0.00113	MAC = 0.05	0.00050	mg/L	2023-08-19	
Cobalt, total	< 0.00010	N/A	0.00010	_	2023-08-19	
Copper, total	0.0375	MAC = 2	0.00040	mg/L	2023-08-19	
Iron, total	0.010	AO ≤ 0.3	0.010		2023-08-19	
Lead, total	0.00174	MAC = 0.005	0.00020	mg/L	2023-08-19	
Lithium, total	0.00181	N/A	0.00010	mg/L	2023-08-19	
Magnesium, total	3.75	None Required	0.010		2023-08-19	
Manganese, total	0.00045	MAC = 0.12	0.00020	mg/L	2023-08-19	
Molybdenum, total	0.0121	N/A	0.00010	mg/L	2023-08-19	
Nickel, total	< 0.00040	N/A	0.00040		2023-08-19	
Phosphorus, total	< 0.050	N/A	0.050	mg/L	2023-08-19	
Potassium, total	1.63	N/A		mg/L	2023-08-19	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	-	2023-08-19	
Silicon, total	6.3	N/A	1.0	mg/L	2023-08-19	
Silver, total	< 0.000050	None Required	0.000050	mg/L	2023-08-19	
Sodium, total	5.32	AO ≤ 200	0.10	mg/L	2023-08-19	
Strontium, total	0.192	MAC = 7	0.0010	mg/L	2023-08-19	
Sulfur, total	3.7	N/A	3.0	mg/L	2023-08-19	
Tellurium, total	< 0.00050	N/A	0.00050	mg/L	2023-08-19	
Thallium, total	< 0.000020	N/A	0.000020	mg/L	2023-08-19	
Thorium, total	< 0.00010	N/A	0.00010	_	2023-08-19	
Tin, total	< 0.00020	N/A	0.00020	mg/L	2023-08-19	
Titanium, total	< 0.0050	N/A	0.0050	mg/L	2023-08-19	
Tungsten, total	< 0.0010	N/A	0.0010	mg/L	2023-08-19	
Uranium, total	0.000088	MAC = 0.02	0.000020	mg/L	2023-08-19	
Vanadium, total	< 0.0050	N/A	0.0050		2023-08-19	
Zinc, total	0.0084	AO ≤ 5	0.0040	mg/L	2023-08-19	
Zirconium, total	< 0.00010	N/A	0.00010	mg/L	2023-08-19	

Sample Qualifiers:

PRES Sample has been preserved for DOC in the laboratory and the holding time has been extended.



 REPORTED TO
 Peachland, Corporation of the District of
 WORK ORDER
 23H2022

 PROJECT
 Chemistry
 REPORTED
 2023-08-22 15:12

Analysis Description	Method Ref.	Technique	Accredited	Location
Carbon, Dissolved Organic in Water	SM 5310 B (2022)	Combustion, Infrared CO2 Detection	✓	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
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	~	Richmond
Trihalomethanes in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	~	Richmond

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

Glossary of Terms:

RL Reporting Limit (default)

Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors

AO Aesthetic Objective

MAC Maximum Acceptable Concentration (health based)

mg/L Milligrams per litre

OG Operational Guideline (treated water)

EPA United States Environmental Protection Agency Test Methods

SM Standard Methods for the Examination of Water and Wastewater, American Public Health Association

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 <u>not</u> 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

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.

REPORTED TO Peachland, Corporation of the District of

> 5806 Beach Avenue PEACHLAND, BC V0H 1X7

ATTENTION Shawn Grundy WORK ORDER 23K3197

PO NUMBER

RECEIVED / TEMP 2023-11-28 10:50 / 5.1°C **PROJECT** General Potability REPORTED 2023-12-05 13:23 **COC NUMBER** PROJECT INFO 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.

Bia Picture Sidekicks

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:

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

Authorized By:

Team CARO

Client Service Representative

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#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



	Peachland, Corporation of the District of General Potability					23K3197 2023-12-05 13:2	
Analyte		Result	Guideline	RL	Units	Analyzed	Qualific
Peachland Creek (23K	(3197-01) Matrix: \	Water Sampled:	2023-11-28 07:00				
Anions							
Chloride		2.02	AO ≤ 250	0.10	mg/L	2023-11-29	
Fluoride		0.12	MAC = 1.5		mg/L	2023-11-29	
Nitrate (as N)		0.043	MAC = 10	0.010		2023-11-29	
Nitrite (as N)		< 0.010	MAC = 1	0.010		2023-11-29	
Sulfate		11.7	AO ≤ 500		mg/L	2023-11-29	
Calculated Parameters							
Hardness, Total (as Cat	CO3)	86.3	None Required	0.500	mg/L	N/A	
Langelier Index		-0.9	N/A	-5.0		2023-12-01	CT6
Solids, Total Dissolved		112	AO ≤ 500		mg/L	N/A	
General Parameters					-		
Alkalinity, Total (as CaC	O3)	99.7	N/A	1.0	mg/L	2023-11-29	
Alkalinity, Phenolphthale		< 1.0	N/A		mg/L	2023-11-29	
Alkalinity, Bicarbonate (, ,	99.7	N/A		mg/L	2023-11-29	
Alkalinity, Carbonate (as	,	< 1.0	N/A		mg/L	2023-11-29	
Alkalinity, Hydroxide (as		< 1.0	N/A		mg/L	2023-11-29	
Colour, True		7.9	AO ≤ 15		CU	2023-11-29	
Conductivity (EC)		183	N/A		μS/cm	2023-11-29	
Cyanide, Total		< 0.0020	MAC = 0.2	0.0020		2023-11-30	
pH		7.17	7.0-10.5		pH units	2023-11-29	HT2
Temperature, at pH		22.9	N/A		°C	2023-11-29	HT2
Turbidity		0.55	OG < 1	0.10	NTU	2023-11-29	
Microbiological Parame	ters						
Coliforms, Total (Q-Tray		93	MAC = 0	1	MPN/100 mL	2023-11-28	
E. coli (Q-Tray)		14	MAC = 0	1	MPN/100 mL	2023-11-28	
Total Metals							
Aluminum, total		0.0356	OG < 0.1	0.0050	mg/L	2023-11-30	
Antimony, total		< 0.00020	MAC = 0.006	0.00020	mg/L	2023-11-30	
Arsenic, total		< 0.00050	MAC = 0.01	0.00050	mg/L	2023-11-30	
Barium, total		0.0214	MAC = 2	0.0050	mg/L	2023-11-30	
Boron, total		< 0.0500	MAC = 5	0.0500	mg/L	2023-11-30	
Cadmium, total		< 0.000010	MAC = 0.007	0.000010	mg/L	2023-11-30	
Calcium, total		27.9	None Required	0.20	mg/L	2023-11-30	
Chromium, total		< 0.00050	MAC = 0.05	0.00050	mg/L	2023-11-30	
Cobalt, total		< 0.00010	N/A	0.00010	mg/L	2023-11-30	
Copper, total		0.00125	MAC = 2	0.00040		2023-11-30	
Iron, total		0.032	AO ≤ 0.3	0.010	mg/L	2023-11-30	
Lead, total		< 0.00020	MAC = 0.005	0.00020		2023-11-30	
Magnesium, total		4.02	None Required	0.010		2023-11-30	
Manganese, total		0.00616	MAC = 0.12	0.00020		2023-11-30	
<u> </u>		< 0.000010	MAC = 0.001		mg/L	2023-11-30	



Total Haloacetic Acids (HAA5)

				_		\	
REPORTED TO PROJECT	Peachland, Corporation General Potability	of the District of			WORK ORDER REPORTED	23K3197 2023-12-0	5 13:23
Analyte		Result	Guideline	RL	Units	Analyzed	Qualific
Peachland Creek (23K3197-01) Matrix: V	Vater Sampled:	2023-11-28 07:00, C	ontinued			
Total Metals, Contin	ued		100				
Molybdenum, total		0.0116	N/A	0.00010	mg/L	2023-11-30	
Nickel, total		< 0.00040	N/A	0.00040	mg/L	2023-11-30	
Potassium, total		1.61	N/A		mg/L	2023-11-30	
Selenium, total		< 0.00050	MAC = 0.05	0.00050	mg/L	2023-11-30	
Sodium, total		4.03	AO ≤ 200	0.10	mg/L	2023-11-30	
Strontium, total		0.186	MAC = 7	0.0010	mg/L	2023-11-30	
Uranium, total		0.000824	MAC = 0.02	0.000020	mg/L	2023-11-30	
Zinc, total		< 0.0040	AO ≤ 5	0.0040	mg/L	2023-11-30	
	02) Matrix: Water Sar	mpled: 2023-11-2	8 07:30				
Anions			100 100	6.75	11.727	eres de	
Chloride		5.37	AO ≤ 250		mg/L	2023-11-29	
Fluoride		0.12	MAC = 1.5		mg/L	2023-11-29	
Nitrate (as N)		0.041	MAC = 10	0.010		2023-11-29	
Nitrite (as N)		< 0.010	MAC = 1	0.010	-	2023-11-29	
Sulfate		11.6	AO ≤ 500	1.0	mg/L	2023-11-29	
Calculated Paramete	ers						
Total Trihalomethan	es	0.0770	MAC = 0.1	0.00400	mg/L	N/A	
Hardness, Total (as	CaCO3)	90.0	None Required	0.500		N/A	
Langelier Index		-0.7	N/A	-5.0		2023-12-01	CT6
Solids, Total Dissolv	/ed	112	AO ≤ 500	1.00	mg/L	N/A	
General Parameters	8						
	0 _ 0000000	0.000		100	Contract of the Contract of th	222200000	
Alkalinity, Total (as		89.1	N/A		mg/L	2023-11-29	
Alkalinity, Phenolph		< 1.0	N/A		mg/L	2023-11-29	
Alkalinity, Bicarbona		89.1	N/A	100	mg/L	2023-11-29	
Alkalinity, Carbonate	The state of the s	< 1.0	N/A	The field of	mg/L	2023-11-29	
Alkalinity, Hydroxide	(as CaCO3)	< 1.0	N/A		mg/L	2023-11-29	
Colour, True		< 5.0	AO ≤ 15 N/A		CU μS/cm	2023-11-29	
Conductivity (EC) Cyanide, Total		< 0.0020	MAC = 0.2	0.0020	and the second s	2023-11-29	
pH		7.43	7.0-10.5		pH units	2023-11-30	HT2
Temperature, at pH	1	22.9	N/A	0.10	°C	2023-11-29	HT2
Turbidity	70	0.25	OG < 1	0.10	NTU	2023-11-29	nız
Haloacetic Acids		0.25	001	0.10	HIO	2023-11-28	
Monochloroacetic A	cid	< 0.0020	N/A	0.0000	ma/l	2023-12-05	
Monobromoacetic A	TATELLI .	< 0.0020	N/A	0.0020		2023-12-05	
Dichloroacetic Acid	NOTA :	0.0131	N/A	0.0020	The state of the s	2023-12-05	
Trichloroacetic Acid			N/A				
Dibromoacetic Acid		0.0137 < 0.0020	N/A N/A	0.0020	70.0	2023-12-05	
Total Halassatis Asi		< 0.0020	MAC = 0.00	0.0020		2023-12-05 N/A	

0.0267

MAC = 0.08

Caring About Results, Obviously.

0.00200 mg/L

N/A Page 3 of 6



REPORTED TO	Peachland, Corporation of the District of	WORK ORDER	23K3197
PROJECT	General Potability	REPORTED	2023-12-05 13:23

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifie
	Sampled: 2023-11-2	8 07:30, Continued				
laloacetic Acids, Continued						
Surrogate: 2-Bromopropionic Acid	106		70-130	%	2023-12-05	
Microbiological Parameters						
Coliforms, Total	< 1	MAC = 0	1	CFU/100 mL	2023-11-28	
E. coli	<1	MAC = 0		CFU/100 mL	2023-11-28	
Total Metals				0.0		
	0.0187	OG < 0.1	0.0050		2023-11-30	
Aluminum, total			0.0050			
Antimony, total	< 0.00020	MAC = 0.006	0.00020		2023-11-30	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050		2023-11-30	
Barium, total	0.0202	MAC = 2	0.0050		2023-11-30	
Boron, total	< 0.0500	MAC = 5	0.0500		2023-11-30	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	•	2023-11-30	
Calcium, total	30.2	None Required		mg/L	2023-11-30	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2023-11-30	
Cobalt, total	< 0.00010	N/A	0.00010	mg/L	2023-11-30	
Copper, total	0.0178	MAC = 2	0.00040	mg/L	2023-11-30	
Iron, total	0.018	AO ≤ 0.3	0.010	mg/L	2023-11-30	
Lead, total	0.00028	MAC = 0.005	0.00020	mg/L	2023-11-30	
Magnesium, total	3.52	None Required	0.010	mg/L	2023-11-30	
Manganese, total	0.00514	MAC = 0.12	0.00020	mg/L	2023-11-30	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2023-12-01	
Molybdenum, total	0.0110	N/A	0.00010	mg/L	2023-11-30	
Nickel, total	< 0.00040	N/A	0.00040	mg/L	2023-11-30	
Potassium, total	1.61	N/A	0.10	mg/L	2023-11-30	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2023-11-30	
Sodium, total	5.48	AO ≤ 200	0.10	mg/L	2023-11-30	
Strontium, total	0.188	MAC = 7	0.0010	mg/L	2023-11-30	
Uranium, total	0.000107	MAC = 0.02	0.000020	_	2023-11-30	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2023-11-30	
olatile Organic Compounds (VOC)						
Bromodichloromethane	0.0042	N/A	0.0010	mg/L	2023-12-01	
Bromoform	< 0.0010	N/A	0.0010	mg/L	2023-12-01	
Chloroform	0.0728	N/A	0.0010	•	2023-12-01	
Dibromochloromethane	< 0.0010	N/A	0.0010		2023-12-01	
Surrogate: Toluene-d8	113	-	70-130		2023-12-01	
Surrogate: 4-Bromofluorobenzene	82		70-130		2023-12-01	

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.



 REPORTED TO
 Peachland, Corporation of the District of
 WORK ORDER
 23K3197

 PROJECT
 General Potability
 REPORTED
 2023-12-05 13:23

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

 $\begin{array}{lll} NTU & & Nephelometric Turbidity Units \\ OG & Operational Guideline (treated water) \\ pH units & pH < 7 = acidic, ph > 7 = basic \\ \mu S/cm & Microsiemens per centimetre \\ ASTM & ASTM International Test Methods \\ \end{array}$

EPA United States Environmental Protection Agency Test Methods

SM Standard Methods for the Examination of Water and Wastewater, American Public Health Association



REPORTED TO Peachland, Corporation of the District of PROJECT General Potability

WORK ORDER

23K3197 2023-12-05 13:23

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 <u>not</u> 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 WORK ORDER Marc Forcier

PO NUMBER RECEIVED / TEMP 2022-12-21 13:30 / 5.1°C **PROJECT** Chemistry REPORTED 2023-01-03 10:01 PROJECT INFO B095075 COC 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



We've Got Chemistry



Ahead of the Curve

22L2352



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.

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.

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

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

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Page 1 of 4



 REPORTED TO
 Peachland, Corporation of the District of
 WORK ORDER
 22L2352

 PROJECT
 Chemistry
 REPORTED
 2023-01-03 10:01

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Robinson Lane (22L2352-01) Matri	x: Water Sampled: 20)22-12-19 13:40				
Calculated Parameters						
Hardness, Total (as CaCO3)	104	None Required	0.500	mg/L	N/A	
Total Metals						
Aluminum, total	0.0072	OG < 0.1	0.0050	ma/L	2022-12-31	
Antimony, total	< 0.00020	MAC = 0.006	0.00020		2022-12-31	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	•	2022-12-31	
Barium, total	0.0218	MAC = 2	0.0050		2022-12-31	
Beryllium, total	< 0.00010	N/A	0.00010		2022-12-31	
Bismuth, total	< 0.00010	N/A	0.00010		2022-12-31	
Boron, total	< 0.0500	MAC = 5	0.0500		2022-12-31	
Cadmium, total	< 0.000010	MAC = 0.005	0.000010	•	2022-12-31	
Calcium, total	35.7	None Required		mg/L	2022-12-31	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2022-12-31	
Cobalt, total	< 0.00010	N/A	0.00010	-	2022-12-31	
Copper, total	0.00473	MAC = 2	0.00040	mg/L	2022-12-31	
Iron, total	< 0.010	AO ≤ 0.3	0.010	-	2022-12-31	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2022-12-31	
Lithium, total	0.00177	N/A	0.00010		2022-12-31	
Magnesium, total	3.50	None Required	0.010		2022-12-31	
Manganese, total	< 0.00020	MAC = 0.12	0.00020	mg/L	2022-12-31	
Molybdenum, total	0.0107	N/A	0.00010	mg/L	2022-12-31	
Nickel, total	< 0.00040	N/A	0.00040		2022-12-31	
Phosphorus, total	< 0.050	N/A	0.050	mg/L	2022-12-31	
Potassium, total	1.44	N/A	0.10	mg/L	2022-12-31	
Selenium, total	< 0.00050	MAC = 0.05	0.00050		2022-12-31	
Silicon, total	6.0	N/A	1.0	mg/L	2022-12-31	
Silver, total	< 0.000050	None Required	0.000050	mg/L	2022-12-31	
Sodium, total	5.61	AO ≤ 200		mg/L	2022-12-31	
Strontium, total	0.213	MAC = 7	0.0010	mg/L	2022-12-31	
Sulfur, total	4.3	N/A	3.0	mg/L	2022-12-31	
Tellurium, total	< 0.00050	N/A	0.00050	mg/L	2022-12-31	
Thallium, total	< 0.000020	N/A	0.000020	mg/L	2022-12-31	
Thorium, total	< 0.00010	N/A	0.00010	mg/L	2022-12-31	
Tin, total	< 0.00020	N/A	0.00020	mg/L	2022-12-31	
Titanium, total	< 0.0050	N/A	0.0050	mg/L	2022-12-31	
Tungsten, total	< 0.0010	N/A	0.0010	mg/L	2022-12-31	
Uranium, total	0.000067	MAC = 0.02	0.000020		2022-12-31	
Vanadium, total	< 0.0050	N/A	0.0050		2022-12-31	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2022-12-31	
Zirconium, total	< 0.00010	N/A	0.00010		2022-12-31	

3822 Beach Ave (22L2352-02) | Matrix: Water | Sampled: 2022-12-19 13:51



 REPORTED TO
 Peachland, Corporation of the District of
 WORK ORDER
 22L2352

 PROJECT
 Chemistry
 REPORTED
 2023-01-03 10:01

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
3822 Beach Ave (22L2352-02) Matr	rix: Water Sampled: 2	022-12-19 13:51, Co	ontinued			
Calculated Parameters						
Hardness, Total (as CaCO3)	101	None Required	0.500	mg/L	N/A	
Total Metals						
Aluminum, total	0.0067	OG < 0.1	0.0050	mg/L	2022-12-31	
Antimony, total	< 0.00020	MAC = 0.006	0.00020		2022-12-31	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050		2022-12-31	
Barium, total	0.0205	MAC = 2	0.0050		2022-12-31	
Beryllium, total	< 0.00010	N/A	0.00010	mg/L	2022-12-31	
Bismuth, total	< 0.00010	N/A	0.00010	•	2022-12-31	
Boron, total	< 0.0500	MAC = 5	0.0500	-	2022-12-31	
Cadmium, total	< 0.000010	MAC = 0.005	0.000010	•	2022-12-31	
Calcium, total	34.0	None Required		mg/L	2022-12-31	
Chromium, total	< 0.00050	MAC = 0.05	0.00050		2022-12-31	
Cobalt, total	< 0.00010	N/A	0.00010		2022-12-31	
Copper, total	0.0177	MAC = 2	0.00040	•	2022-12-31	
Iron, total	< 0.010	AO ≤ 0.3	0.010	-	2022-12-31	
Lead, total	0.00024	MAC = 0.005	0.00020		2022-12-31	
Lithium, total	0.00178	N/A	0.00010		2022-12-31	
Magnesium, total	3.93	None Required	0.010	-	2022-12-31	
Manganese, total	< 0.00020	MAC = 0.12	0.00020		2022-12-31	
Molybdenum, total	0.0107	N/A	0.00010		2022-12-31	
Nickel, total	< 0.00040	N/A	0.00040		2022-12-31	
Phosphorus, total	< 0.050	N/A	0.050	•	2022-12-31	
Potassium. total	1.43	N/A		mg/L	2022-12-31	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	_	2022-12-31	
Silicon, total	6.1	N/A		mg/L	2022-12-31	
Silver, total	< 0.000050	None Required	0.000050	-	2022-12-31	
Sodium, total	5.46	AO ≤ 200		mg/L	2022-12-31	
Strontium, total	0.207	MAC = 7	0.0010	_	2022-12-31	
Sulfur, total	4.4	N/A		mg/L	2022-12-31	
Tellurium, total	< 0.00050	N/A	0.00050	_	2022-12-31	
Thallium, total	< 0.000020	N/A	0.000020		2022-12-31	
Thorium, total	< 0.00010	N/A	0.00010		2022-12-31	
Tin, total	< 0.00010	N/A	0.00010		2022-12-31	
Titanium, total	< 0.0050	N/A	0.0050		2022-12-31	
Tungsten, total	< 0.0010	N/A	0.0010	•	2022-12-31	
Uranium, total	0.000064	MAC = 0.02	0.000020		2022-12-31	
Vanadium, total	< 0.0050	N/A	0.0050		2022-12-31	
Zinc, total	< 0.0040	AO ≤ 5	0.0030		2022-12-31	
Zirconium, total	< 0.0040	N/A	0.00010	•	2022-12-31	



 REPORTED TO
 Peachland, Corporation of the District of
 WORK ORDER
 22L2352

 PROJECT
 Chemistry
 REPORTED
 2023-01-03 10:01

Analysis Description	Method Ref.	Technique	Accredited	Location
Hardness in Water	SM 2340 B* (2017)	Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Est)	✓	N/A
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively	✓	Richmond
		Coupled Plasma-Mass Spectroscopy (ICP-MS)		

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

AO Aesthetic Objective

MAC Maximum Acceptable Concentration (health based)

mg/L Milligrams per litre

OG Operational Guideline (treated water)

EPA United States Environmental Protection Agency Test Methods

SM Standard Methods for the Examination of Water and Wastewater, American Public Health Association

Guidelines Referenced in this Report:

Guidelines for Canadian Drinking Water Quality (Health Canada, June 2019)

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

General Comments:

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Appendix II – 2023 Water Consumption

	Total Volume (m3)	Total Volume (ML)
Month	Peachland Distribution System	Peachland Distribution System
January	87298	87.298
February	75104	75.104
March	81768	81.768
April	109944	109.944
May	275246	275.246
June	363805	363.805
July	438805	438.805
August	402125	402.125
September	289258	289.258
October	149356	149.356
November	91861	91.861
December	95920	95.92
Annual	2460490	2460.49

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

				Peach	land W	TP			
	Ja	nuary		Fe	bruary		N	/larch	
Date	Turbidity	рН	FCR	Turbidity	рН	FCR	Turbidity	рΗ	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 n	neasure	d in NTI	J					
	FCR = Free	Chlorin	e Resid	ual and is m	easure	d in mg/	L L		

	Peachland WTP									
	Αŗ	oril		М	ау		Ju	ne		
Date	Turbidity	рН	FCR	Turbidity	рН	FCR	Turbidity	рН	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

	Peachland WTP									
	Ju	ıly		Au	gust		Septe	mber		
Date	Turbidity	рН	FCR	Turbidity	рН	FCR	Turbidity	рН	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

	Peachland WTP									
	October November De				Dece	mber				
Date	Turbidity	рН	FCR	Turbidity	рН	FCR	Turbidity	рН	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