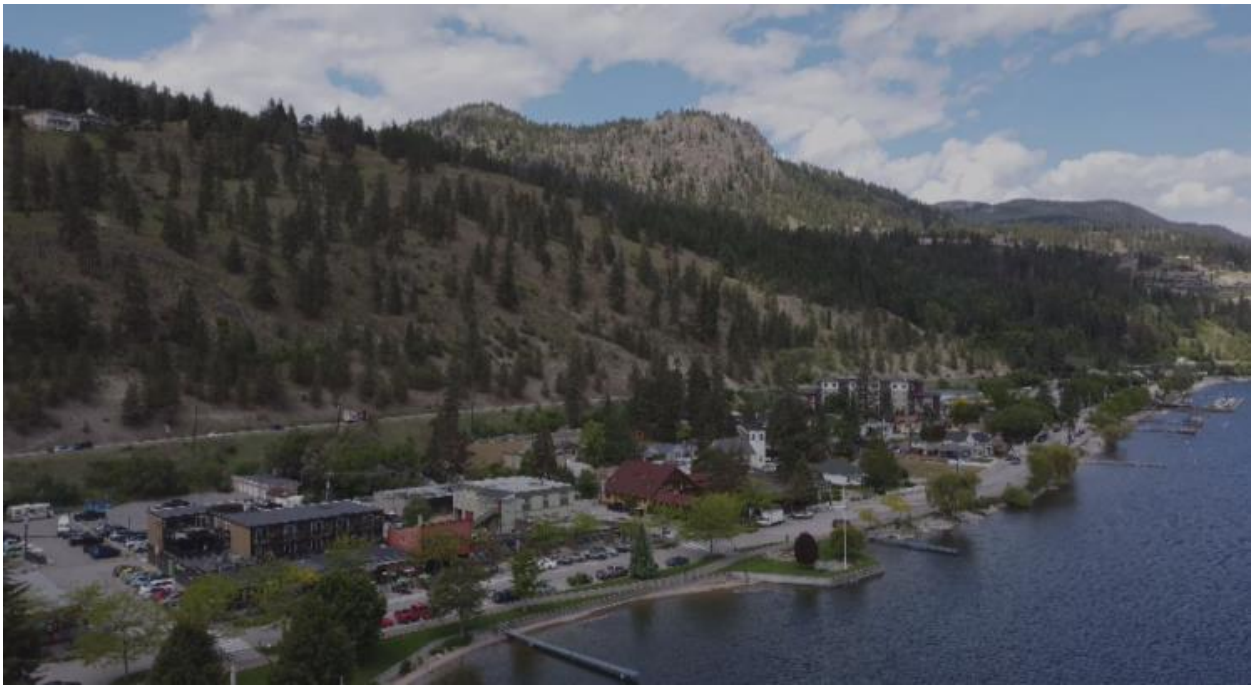
District of Peachland
Annual Drinking Water Report – 2022



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 boundary. It also supplies the properties accessed from Ponderosa Drive and the downtown area as far north as 11th Street (approximately).

The Trepanier system supplies water to the remainder of the properties in the District of Peachland (from 11th Street north). When the Okanagan Lake pumps are operated in place of the Trepanier Creek Intake, the supply area is identical to the Trepanier system. These supplies can be adjusted using valving within the system.

The majority of water is supplied from the Peachland Creek (PCI) system with the remainder supplied by the Trepanier Creek (TCI) system (approximately 1/3) or the Okanagan Lake Pumps. The Okanagan Lake Pumps (LPH) are typically operated during spring freshet/runoff to supply less turbid water to the Trepanier system. In 2022, the Okanagan Lake Pumps were not used to supply water.

TREATMENT AND DISTRIBUTION

The District of Peachland uses chlorine as its primary disinfectant, both in a gaseous (Trepanier and Okanagan) and liquid state (Peachland Creek Water Treatment Plant). Chlorine is injected using flow paced technology and is dosed to provide inactivation of bacteria, viruses and protozoan cysts which may be present within the surface water source. District staff maintain a first user residual ranging from 0.9 – 1.9 mg/L (depending on the time of year and clarity of the raw water). At the ends of the system, a chlorine residual target is 0.2 mg/L. 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 high consequence dam (Silver 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), with their certifications noted below;

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

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.

Pressure Reducing Valves (PRVs)

PRV's are inspected 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).

The Peachland Creek Water Treatment Plant was nominally completed in January 2021 and after commissioning, started supplying filtered water to residents within the Peachland Creek system on March 29, 2021.

Completion of the WTP allows the District of Peachland to exceed the minimum requirements of the Drinking Water Treatment Objectives for Surface Water Supplies in British Columbia. If minimum requirements are not met, water users can potentially be at increased risk of illness from protozoan pathogens.

To provide this filtered water to the entire District, a second project was added to the scope of construction; the installation of a large diameter water main to interconnect the Peachland Creek and Trepanier Creek systems. This project was initiated in the fall of 2020, completed by late 2021 and is supplying filtered water to the Trepanier system as of January 11, 2022.

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 2022.

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, major rainfall events, etc.), turbidity can fluctuate dramatically, and the public is notified accordingly. Records of average daily turbidity, pH and free chlorine residual values can be found in Appendix III.

Chlorine concentrations are continuously monitored at 4 stations throughout the system as well as daily grab samples at several locations to ensure instrument accuracy.

Water samples are also 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 raw sources tested are within the maximum allowable concentration (MAC) limits set out in the Guidelines for Canadian Drinking Water Quality. The results from the comprehensive analyses are included in Appendices I. The attached report 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.

- February 13/22: BWN issued for residents off of Cousins Reservoir due to low reservoir level associated with commissioning of new Ponderosa PRV and interconnect piping.

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 2022.

WATER CONSUMPTION

In 2022, there was a total of 2,250 ML passing through the District Intakes. A monthly summary of consumption per intake is located in Appendix II.

WORKS COMPLETED AND IN PROGRESS

- Annual leak detection program continues with various areas in Peachland surveyed.
- Trepanier Interconnect project completed with full operation and flow on January 11, 2022.

Appendix I – Comprehensive Analyses (Peachland Creek Intake)

CARO ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

REPORTED TO	Urban Systems - Kelowna Office 304 - 1353 Ellis Street KELOWNA, BC V1Y 1Z9		
ATTENTION	Electra Coonjah	**WORK ORDER**	22I2808
PO NUMBER		**RECEIVED / TEMP**	2022-09-21 12:00 / 20.1°C
PROJECT	0655.0247.01	**REPORTED**	2022-09-28 14:31
PROJECT INFO	District of Peachland	**COC NUMBER**	B115377

Introduction:

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

Big Picture Sidekicks

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

We've Got Chemistry

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

Ahead of the Curve

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

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

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

Authorized By:

Brent Whitehead
Account Manager

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	Urban Systems - Kelowna Office	**WORK ORDER**	22I2808
PROJECT	0655.0247.01	**REPORTED**	2022-09-28 14:31

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Raw (22I2808-01) | Matrix: Water | Sampled: 2022-09-20						
Calculated Parameters						
Hardness, Total (as CaCO3)	**96.0**	None Required	0.500	mg/L	N/A	
Dissolved Metals						
Aluminum, dissolved	**13.1**	N/A	0.0050	mg/L	2022-09-25	
Antimony, dissolved	< 0.00020	N/A	0.00020	mg/L	2022-09-25	
Arsenic, dissolved	**0.00183**	N/A	0.00050	mg/L	2022-09-25	
Barium, dissolved	**0.0278**	N/A	0.0050	mg/L	2022-09-25	
Beryllium, dissolved	< 0.00010	N/A	0.00010	mg/L	2022-09-25	
Bismuth, dissolved	< 0.00010	N/A	0.00010	mg/L	2022-09-25	
Boron, dissolved	< 0.0500	N/A	0.0500	mg/L	2022-09-25	
Cadmium, dissolved	**0.000033**	N/A	0.000010	mg/L	2022-09-25	
Calcium, dissolved	**31.7**	N/A	0.20	mg/L	2022-09-25	
Chromium, dissolved	< 0.00050	N/A	0.00050	mg/L	2022-09-25	
Cobalt, dissolved	**0.00020**	N/A	0.00010	mg/L	2022-09-25	
Copper, dissolved	**0.00339**	N/A	0.00040	mg/L	2022-09-25	
Iron, dissolved	**0.166**	N/A	0.010	mg/L	2022-09-25	
Lead, dissolved	< 0.00020	N/A	0.00020	mg/L	2022-09-25	
Lithium, dissolved	**0.00189**	N/A	0.00010	mg/L	2022-09-26	
Magnesium, dissolved	**4.08**	N/A	0.010	mg/L	2022-09-25	
Manganese, dissolved	**0.179**	N/A	0.00020	mg/L	2022-09-25	
Mercury, dissolved	< 0.000040	N/A	0.000040	mg/L	2022-09-25	HG1
Molybdenum, dissolved	**0.00838**	N/A	0.00010	mg/L	2022-09-25	
Nickel, dissolved	< 0.00040	N/A	0.00040	mg/L	2022-09-25	
Phosphorus, dissolved	< 0.050	N/A	0.050	mg/L	2022-09-25	
Potassium, dissolved	**1.68**	N/A	0.10	mg/L	2022-09-25	
Selenium, dissolved	**0.00058**	N/A	0.00050	mg/L	2022-09-25	
Silicon, dissolved	**8.7**	N/A	1.0	mg/L	2022-09-25	
Silver, dissolved	< 0.000050	N/A	0.000050	mg/L	2022-09-25	
Sodium, dissolved	**3.87**	N/A	0.10	mg/L	2022-09-25	
Strontium, dissolved	**0.204**	N/A	0.0010	mg/L	2022-09-25	
Sulfur, dissolved	**3.9**	N/A	3.0	mg/L	2022-09-25	
Tellurium, dissolved	< 0.00050	N/A	0.00050	mg/L	2022-09-25	
Thallium, dissolved	< 0.000020	N/A	0.000020	mg/L	2022-09-25	
Thorium, dissolved	< 0.00010	N/A	0.00010	mg/L	2022-09-25	
Tin, dissolved	< 0.00020	N/A	0.00020	mg/L	2022-09-25	
Titanium, dissolved	< 0.0050	N/A	0.0050	mg/L	2022-09-25	
Tungsten, dissolved	< 0.0010	N/A	0.0010	mg/L	2022-09-25	
Uranium, dissolved	**0.00234**	N/A	0.000020	mg/L	2022-09-25	
Vanadium, dissolved	< 0.0050	N/A	0.0050	mg/L	2022-09-25	
Zinc, dissolved	**0.0041**	N/A	0.0040	mg/L	2022-09-25	
Zirconium, dissolved	**0.00022**	N/A	0.00010	mg/L	2022-09-25	
General Parameters						
Ammonia, Total (as N)	< 0.050	None Required	0.050	mg/L	2022-09-23	

CARO ANALYTICAL SERVICES

TEST RESULTS

REPORTED TO	Urban Systems - Kelowna Office	**WORK ORDER**	22I2808
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Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Raw (22I2808-01) | Matrix: Water | Sampled: 2022-09-20, Continued						
General Parameters, Continued						
Carbon, Total Organic	**8.97**	N/A	0.50	mg/L	2022-09-26	
Carbon, Dissolved Organic	**8.78**	N/A	0.50	mg/L	2022-09-26	
Chemical Oxygen Demand	< 20	N/A	20	mg/L	2022-09-25	
pH	**7.79**	7.0-10.5	0.10	pH units	2022-09-25	HT2
Solids, Total Suspended	**65.2**	N/A	2.0	mg/L	2022-09-26	
Turbidity	**10.3**	OG < 1	0.10	NTU	2022-09-23	
Total Metals						
Aluminum, total	**13.7**	OG < 0.1	0.0050	mg/L	2022-09-24	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2022-09-24	
Arsenic, total	**0.00224**	MAC = 0.01	0.00050	mg/L	2022-09-24	
Barium, total	**0.0271**	MAC = 2	0.0050	mg/L	2022-09-24	
Beryllium, total	< 0.00010	N/A	0.00010	mg/L	2022-09-24	
Bismuth, total	< 0.00010	N/A	0.00010	mg/L	2022-09-24	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2022-09-24	
Cadmium, total	**0.000035**	MAC = 0.005	0.000010	mg/L	2022-09-24	
Calcium, total	**32.1**	None Required	0.20	mg/L	2022-09-24	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2022-09-24	
Cobalt, total	**0.00020**	N/A	0.00010	mg/L	2022-09-24	
Copper, total	**0.00706**	MAC = 2	0.00040	mg/L	2022-09-24	
Iron, total	**0.201**	AO ≤ 0.3	0.010	mg/L	2022-09-24	
Lead, total	**0.00163**	MAC = 0.005	0.00020	mg/L	2022-09-24	
Lithium, total	**0.00187**	N/A	0.00010	mg/L	2022-09-24	
Magnesium, total	**4.02**	None Required	0.010	mg/L	2022-09-24	
Manganese, total	0.181	MAC = 0.12	0.00020	mg/L	2022-09-24	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2022-09-28	
Molybdenum, total	**0.0105**	N/A	0.00010	mg/L	2022-09-24	
Nickel, total	**0.00057**	N/A	0.00040	mg/L	2022-09-24	
Phosphorus, total	< 0.050	N/A	0.050	mg/L	2022-09-24	
Potassium, total	**1.57**	N/A	0.10	mg/L	2022-09-24	
Selenium, total	**0.00067**	MAC = 0.05	0.00050	mg/L	2022-09-24	
Silicon, total	**9.2**	N/A	1.0	mg/L	2022-09-24	
Silver, total	< 0.000050	None Required	0.000050	mg/L	2022-09-24	
Sodium, total	**4.02**	AO ≤ 200	0.10	mg/L	2022-09-24	
Strontium, total	**0.206**	MAC = 7	0.0010	mg/L	2022-09-24	
Sulfur, total	**3.9**	N/A	3.0	mg/L	2022-09-24	
Tellurium, total	< 0.00050	N/A	0.00050	mg/L	2022-09-24	
Thallium, total	< 0.000020	N/A	0.000020	mg/L	2022-09-24	
Thorium, total	< 0.00010	N/A	0.00010	mg/L	2022-09-24	
Tin, total	< 0.00020	N/A	0.00020	mg/L	2022-09-24	
Titanium, total	< 0.0050	N/A	0.0050	mg/L	2022-09-24	
Tungsten, total	< 0.0002	N/A	0.0002	mg/L	2022-09-24	
Uranium, total	**0.00251**	MAC = 0.02	0.000020	mg/L	2022-09-24	

CARO ANALYTICAL SERVICES

TEST RESULTS

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Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
Raw (22I2808-01) | Matrix: Water | Sampled: 2022-09-20, Continued						
Total Metals, Continued						
Vanadium, total	< 0.0050	N/A	0.0050	mg/L	2022-09-24	
Zinc, total	**0.0077**	AO ≤ 5	0.0040	mg/L	2022-09-24	
Zirconium, total	**0.00027**	N/A	0.00010	mg/L	2022-09-24	

CARO ANALYTICAL SERVICES

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Urban Systems - Kelowna Office	**WORK ORDER**	22I2808
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Analysis Description	Method Ref.	Technique	Accredited	Location
Ammonia, Total in Water	SM 4500-NH3 G* (2017)	Automated Colorimetry (Phenate)	✓	Kelowna
Carbon, Dissolved Organic in Water	SM 5310 B (2017)	Combustion, Infrared CO2 Detection	✓	Kelowna
Carbon, Total Organic in Water	SM 5310 B (2017)	Combustion, Infrared CO2 Detection	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2017)	Closed Reflux, Colorimetry	✓	Kelowna
Dissolved Metals in Water	EPA 200.8 / EPA 6020B	0.45 µm Filtration / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Hardness in Water	SM 2340 B (2017)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	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 (2017)	Electrometry	✓	Kelowna
Solids, Total Suspended in Water	Solids in Water, Filtered / SM 2540 D* (2017)	Solids in Water, Filtered / Gravimetry (Dried at 103-105C)	✓	Kelowna
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Turbidity in Water	SM 2130 B (2017)	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
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, ph > 7 = basic
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

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Urban Systems - Kelowna Office	**WORK ORDER**	22I2808
PROJECT	0655.0247.01	**REPORTED**	2022-09-28 14:31

General Comments:

The results in this report apply to the 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.

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

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

CARO ANALYTICAL SERVICES

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Urban Systems - Kelowna Office	**WORK ORDER**	22I2808
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The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk)**: A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup)**: An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS)**: A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS)**: A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM)**: A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B2I2801										
Blank (B2I2801-BLK1)				Prepared: 2022-09-25, Analyzed: 2022-09-25						
Aluminum, dissolved	< 0.0050	0.0050	mg/L							
Antimony, dissolved	< 0.00020	0.00020	mg/L							
Arsenic, dissolved	< 0.00050	0.00050	mg/L							
Barium, dissolved	< 0.0050	0.0050	mg/L							
Beryllium, dissolved	< 0.00010	0.00010	mg/L							
Bismuth, dissolved	< 0.00010	0.00010	mg/L							
Boron, dissolved	< 0.0500	0.0500	mg/L							
Cadmium, dissolved	< 0.000010	0.000010	mg/L							
Calcium, dissolved, dissolved	< 0.20	0.20	mg/L							
Chromium, dissolved	< 0.00050	0.00050	mg/L							
Cobalt, dissolved	< 0.00010	0.00010	mg/L							
Copper, dissolved	< 0.00040	0.00040	mg/L							
Iron, dissolved	< 0.010	0.010	mg/L							
Lead, dissolved	< 0.00020	0.00020	mg/L							
Lithium, dissolved	< 0.00010	0.00010	mg/L							
Magnesium, dissolved, dissolved	< 0.010	0.010	mg/L							
Manganese, dissolved	< 0.00020	0.00020	mg/L							
Mercury, dissolved	< 0.000040	0.000040	mg/L							
Molybdenum, dissolved	< 0.00010	0.00010	mg/L							
Nickel, dissolved	< 0.00040	0.00040	mg/L							
Phosphorus, dissolved	< 0.050	0.050	mg/L							
Potassium, dissolved	< 0.10	0.10	mg/L							
Selenium, dissolved	< 0.00050	0.00050	mg/L							
Silicon, dissolved	< 1.0	1.0	mg/L							
Silver, dissolved	< 0.000050	0.000050	mg/L							
Sodium, dissolved	< 0.10	0.10	mg/L							
Strontium, dissolved	< 0.0010	0.0010	mg/L							
Sulfur, dissolved	< 3.0	3.0	mg/L							
Tellurium, dissolved	< 0.00050	0.00050	mg/L							
Thallium, dissolved	< 0.000020	0.000020	mg/L							
Thorium, dissolved	< 0.00010	0.00010	mg/L							
Tin, dissolved	< 0.00020	0.00020	mg/L							
Titanium, dissolved	< 0.0050	0.0050	mg/L							
Tungsten, dissolved	< 0.0010	0.0010	mg/L							
Uranium, dissolved	< 0.000020	0.000020	mg/L							
Vanadium, dissolved	< 0.0050	0.0050	mg/L							

CARO ANALYTICAL SERVICES

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO Urban Systems - Kelowna Office
PROJECT 0655.0247.01

WORK ORDER 22I2808
REPORTED 2022-09-28 14:31

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B2I2801, Continued										
Blank (B2I2801-BLK1), Continued				Prepared: 2022-09-25, Analyzed: 2022-09-25						
Zinc, dissolved	< 0.0040	0.0040	mg/L							
Zirconium, dissolved	< 0.00010	0.00010	mg/L							
LCS (B2I2801-BS1)				Prepared: 2022-09-25, Analyzed: 2022-09-25						
Aluminum, dissolved	4.03	0.0050	mg/L	4.00		101	80-120			
Antimony, dissolved	0.0408	0.00020	mg/L	0.0400		102	80-120			
Arsenic, dissolved	0.0422	0.00050	mg/L	0.0400		105	80-120			
Barium, dissolved	0.0398	0.0050	mg/L	0.0400		100	80-120			
Beryllium, dissolved	0.0399	0.00010	mg/L	0.0400		100	80-120			
Bismuth, dissolved	0.0397	0.00010	mg/L	0.0400		99	80-120			
Boron, dissolved	< 0.0500	0.0500	mg/L	0.0400		102	80-120			
Cadmium, dissolved	0.0405	0.000010	mg/L	0.0400		101	80-120			
Calcium, dissolved, dissolved	4.02	0.20	mg/L	4.00		101	80-120			
Chromium, dissolved	0.0412	0.00050	mg/L	0.0400		103	80-120			
Cobalt, dissolved	0.0407	0.00010	mg/L	0.0400		102	80-120			
Copper, dissolved	0.0405	0.00040	mg/L	0.0400		101	80-120			
Iron, dissolved	4.08	0.010	mg/L	4.00		102	80-120			
Lead, dissolved	0.0403	0.00020	mg/L	0.0400		101	80-120			
Lithium, dissolved	0.0400	0.00010	mg/L	0.0400		100	80-120			
Magnesium, dissolved, dissolved	4.17	0.010	mg/L	4.00		104	80-120			
Manganese, dissolved	0.0407	0.00020	mg/L	0.0400		102	80-120			
Mercury, dissolved	0.00405	0.000040	mg/L	0.00400		101	80-120			
Molybdenum, dissolved	0.0395	0.00010	mg/L	0.0400		99	80-120			
Nickel, dissolved	0.0407	0.00040	mg/L	0.0400		102	80-120			
Phosphorus, dissolved	4.05	0.050	mg/L	4.00		101	80-120			
Potassium, dissolved	4.08	0.10	mg/L	4.00		102	80-120			
Selenium, dissolved	0.0409	0.00050	mg/L	0.0400		102	80-120			
Silicon, dissolved	4.2	1.0	mg/L	4.00		104	80-120			
Silver, dissolved	0.0409	0.000050	mg/L	0.0400		102	80-120			
Sodium, dissolved	4.00	0.10	mg/L	4.00		100	80-120			
Strontium, dissolved	0.0417	0.0010	mg/L	0.0400		104	80-120			
Sulfur, dissolved	41.0	3.0	mg/L	40.0		103	80-120			
Tellurium, dissolved	0.0398	0.00050	mg/L	0.0400		99	80-120			
Thallium, dissolved	0.0398	0.000020	mg/L	0.0400		99	80-120			
Thorium, dissolved	0.0408	0.00010	mg/L	0.0400		102	80-120			
Tin, dissolved	0.0410	0.00020	mg/L	0.0400		103	80-120			
Titanium, dissolved	0.0392	0.0050	mg/L	0.0400		98	80-120			
Tungsten, dissolved	0.0399	0.0010	mg/L	0.0400		100	80-120			
Uranium, dissolved	0.0401	0.000020	mg/L	0.0400		100	80-120			
Vanadium, dissolved	0.0410	0.0050	mg/L	0.0400		102	80-120			
Zinc, dissolved	0.0396	0.0040	mg/L	0.0400		99	80-120			
Zirconium, dissolved	0.0408	0.00010	mg/L	0.0400		102	80-120			
General Parameters, Batch B2I2506										
Blank (B2I2506-BLK1)				Prepared: 2022-09-26, Analyzed: 2022-09-26						
Carbon, Total Organic	< 0.50	0.50	mg/L							
Carbon, Dissolved Organic	< 0.50	0.50	mg/L							
Blank (B2I2506-BLK2)				Prepared: 2022-09-26, Analyzed: 2022-09-26						
Carbon, Total Organic	< 0.50	0.50	mg/L							
Carbon, Dissolved Organic	< 0.50	0.50	mg/L							
Blank (B2I2506-BLK3)				Prepared: 2022-09-26, Analyzed: 2022-09-26						
Carbon, Total Organic	< 0.50	0.50	mg/L							
Carbon, Dissolved Organic	< 0.50	0.50	mg/L							

CARO ANALYTICAL SERVICES

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Urban Systems - Kelowna Office	**WORK ORDER**	22I2808
PROJECT	0655.0247.01	**REPORTED**	2022-09-28 14:31

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B2I2506, Continued										
Blank (B2I2506-BLK4)				Prepared: 2022-09-26, Analyzed: 2022-09-26						
Carbon, Total Organic	< 0.50	0.50	mg/L							
Carbon, Dissolved Organic	< 0.50	0.50	mg/L							
Blank (B2I2506-BLK5)				Prepared: 2022-09-26, Analyzed: 2022-09-26						
Carbon, Total Organic	< 0.50	0.50	mg/L							
Carbon, Dissolved Organic	< 0.50	0.50	mg/L							
LCS (B2I2506-BS1)				Prepared: 2022-09-26, Analyzed: 2022-09-26						
Carbon, Total Organic	10.4	0.50	mg/L	10.0		104	78-116			
Carbon, Dissolved Organic	10.4	0.50	mg/L	10.0		104	78-116			
LCS (B2I2506-BS2)				Prepared: 2022-09-26, Analyzed: 2022-09-26						
Carbon, Total Organic	10.1	0.50	mg/L	10.0		101	78-116			
Carbon, Dissolved Organic	9.97	0.50	mg/L	10.0		100	78-116			
LCS (B2I2506-BS3)				Prepared: 2022-09-26, Analyzed: 2022-09-26						
Carbon, Total Organic	10.1	0.50	mg/L	10.0		101	78-116			
Carbon, Dissolved Organic	9.98	0.50	mg/L	10.0		100	78-116			
LCS (B2I2506-BS4)				Prepared: 2022-09-26, Analyzed: 2022-09-26						
Carbon, Total Organic	9.85	0.50	mg/L	10.0		98	78-116			
Carbon, Dissolved Organic	9.85	0.50	mg/L	10.0		98	78-116			
LCS (B2I2506-BS5)				Prepared: 2022-09-26, Analyzed: 2022-09-26						
Carbon, Total Organic	10.5	0.50	mg/L	10.0		105	78-116			
Carbon, Dissolved Organic	10.5	0.50	mg/L	10.0		105	78-116			
General Parameters, Batch B2I2705										
Blank (B2I2705-BLK1)				Prepared: 2022-09-23, Analyzed: 2022-09-23						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							
Blank (B2I2705-BLK2)				Prepared: 2022-09-23, Analyzed: 2022-09-23						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							
Blank (B2I2705-BLK3)				Prepared: 2022-09-23, Analyzed: 2022-09-23						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							
Blank (B2I2705-BLK4)				Prepared: 2022-09-23, Analyzed: 2022-09-23						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							
LCS (B2I2705-BS1)				Prepared: 2022-09-23, Analyzed: 2022-09-23						
Ammonia, Total (as N)	0.984	0.050	mg/L	1.00		98	90-115			
LCS (B2I2705-BS2)				Prepared: 2022-09-23, Analyzed: 2022-09-23						
Ammonia, Total (as N)	0.996	0.050	mg/L	1.00		100	90-115			
LCS (B2I2705-BS3)				Prepared: 2022-09-23, Analyzed: 2022-09-23						
Ammonia, Total (as N)	0.985	0.050	mg/L	1.00		98	90-115			
LCS (B2I2705-BS4)				Prepared: 2022-09-23, Analyzed: 2022-09-23						
Ammonia, Total (as N)	0.978	0.050	mg/L	1.00		98	90-115			
General Parameters, Batch B2I2717										
Blank (B2I2717-BLK1)				Prepared: 2022-09-23, Analyzed: 2022-09-23						
Turbidity	< 0.10	0.10	NTU							

CARO ANALYTICAL SERVICES

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Urban Systems - Kelowna Office	**WORK ORDER**	22I2808
PROJECT	0655.0247.01	**REPORTED**	2022-09-28 14:31

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B2I2717, Continued										
LCS (B2I2717-BS1)				Prepared: 2022-09-23, Analyzed: 2022-09-23						
Turbidity	38.0	0.10	NTU	40.0		95	90-110			
General Parameters, Batch B2I2861										
Blank (B2I2861-BLK1)				Prepared: 2022-09-25, Analyzed: 2022-09-25						
Chemical Oxygen Demand	< 20	20	mg/L							
LCS (B2I2861-BS1)				Prepared: 2022-09-25, Analyzed: 2022-09-25						
Chemical Oxygen Demand	517	20	mg/L	500		103	89-115			
General Parameters, Batch B2I2873										
Reference (B2I2873-SRM1)				Prepared: 2022-09-25, Analyzed: 2022-09-25						
pH	7.03	0.10	pH units	7.01		100	98-102			
Reference (B2I2873-SRM2)				Prepared: 2022-09-25, Analyzed: 2022-09-25						
pH	7.03	0.10	pH units	7.01		100	98-102			
Reference (B2I2873-SRM3)				Prepared: 2022-09-25, Analyzed: 2022-09-25						
pH	7.02	0.10	pH units	7.01		100	98-102			
General Parameters, Batch B2I2923										
Blank (B2I2923-BLK1)				Prepared: 2022-09-26, Analyzed: 2022-09-26						
Solids, Total Suspended	< 2.0	2.0	mg/L							
LCS (B2I2923-BS1)				Prepared: 2022-09-26, Analyzed: 2022-09-26						
Solids, Total Suspended	100	10.0	mg/L	100		100	85-115			
Total Metals, Batch B2I2797										
Blank (B2I2797-BLK1)				Prepared: 2022-09-23, Analyzed: 2022-09-24						
Aluminum, total	< 0.0050	0.0050	mg/L							
Antimony, total	< 0.00020	0.00020	mg/L							
Arsenic, total	< 0.00050	0.00050	mg/L							
Barium, total	< 0.0050	0.0050	mg/L							
Beryllium, total	< 0.00010	0.00010	mg/L							
Bismuth, total	< 0.00010	0.00010	mg/L							
Boron, total	< 0.0500	0.0500	mg/L							
Cadmium, total	< 0.000010	0.000010	mg/L							
Calcium, total	< 0.20	0.20	mg/L							
Chromium, total	< 0.00050	0.00050	mg/L							
Cobalt, total	< 0.00010	0.00010	mg/L							
Copper, total	< 0.00040	0.00040	mg/L							
Iron, total	< 0.010	0.010	mg/L							
Lead, total	< 0.00020	0.00020	mg/L							
Lithium, total	< 0.00010	0.00010	mg/L							
Magnesium, total	< 0.010	0.010	mg/L							
Manganese, total	< 0.00020	0.00020	mg/L							
Molybdenum, total	< 0.00010	0.00010	mg/L							
Nickel, total	< 0.00040	0.00040	mg/L							
Phosphorus, total	< 0.050	0.050	mg/L							
Potassium, total	< 0.10	0.10	mg/L							
Selenium, total	< 0.00050	0.00050	mg/L							
Silicon, total	< 1.0	1.0	mg/L							

CARO ANALYTICAL SERVICES

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO Urban Systems - Kelowna Office
PROJECT 0655.0247.01

WORK ORDER 22I2808
REPORTED 2022-09-28 14:31

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B2I2797, Continued										
Blank (B2I2797-BLK1), Continued				Prepared: 2022-09-23, Analyzed: 2022-09-24						
Silver, total	< 0.000050	0.000050	mg/L							
Sodium, total	< 0.10	0.10	mg/L							
Strontium, total	< 0.0010	0.0010	mg/L							
Sulfur, total	< 3.0	3.0	mg/L							
Tellurium, total	< 0.00050	0.00050	mg/L							
Thallium, total	< 0.000020	0.000020	mg/L							
Thorium, total	< 0.00010	0.00010	mg/L							
Tin, total	< 0.00020	0.00020	mg/L							
Titanium, total	< 0.0050	0.0050	mg/L							
Tungsten, total	< 0.0002	0.0002	mg/L							
Uranium, total	< 0.000020	0.000020	mg/L							
Vanadium, total	< 0.0050	0.0050	mg/L							
Zinc, total	< 0.0040	0.0040	mg/L							
Zirconium, total	< 0.00010	0.00010	mg/L							
LCS (B2I2797-BS1)				Prepared: 2022-09-23, Analyzed: 2022-09-24						
Aluminum, total	4.02	0.0050	mg/L	4.00		101	80-120			
Antimony, total	0.0403	0.00020	mg/L	0.0400		101	80-120			
Arsenic, total	0.0420	0.00050	mg/L	0.0400		105	80-120			
Barium, total	0.0388	0.0050	mg/L	0.0400		97	80-120			
Beryllium, total	0.0388	0.00010	mg/L	0.0400		97	80-120			
Bismuth, total	0.0390	0.00010	mg/L	0.0400		98	80-120			
Boron, total	< 0.0500	0.0500	mg/L	0.0400		99	80-120			
Cadmium, total	0.0403	0.000010	mg/L	0.0400		101	80-120			
Calcium, total	3.97	0.20	mg/L	4.00		99	80-120			
Chromium, total	0.0409	0.00050	mg/L	0.0400		102	80-120			
Cobalt, total	0.0405	0.00010	mg/L	0.0400		101	80-120			
Copper, total	0.0399	0.00040	mg/L	0.0400		100	80-120			
Iron, total	4.05	0.010	mg/L	4.00		101	80-120			
Lead, total	0.0394	0.00020	mg/L	0.0400		99	80-120			
Lithium, total	0.0382	0.00010	mg/L	0.0400		96	80-120			
Magnesium, total	4.12	0.010	mg/L	4.00		103	80-120			
Manganese, total	0.0405	0.00020	mg/L	0.0400		101	80-120			
Molybdenum, total	0.0397	0.00010	mg/L	0.0400		99	80-120			
Nickel, total	0.0398	0.00040	mg/L	0.0400		99	80-120			
Phosphorus, total	4.00	0.050	mg/L	4.00		100	80-120			
Potassium, total	4.07	0.10	mg/L	4.00		102	80-120			
Selenium, total	0.0398	0.00050	mg/L	0.0400		100	80-120			
Silicon, total	4.1	1.0	mg/L	4.00		102	80-120			
Silver, total	0.0406	0.000050	mg/L	0.0400		101	80-120			
Sodium, total	4.02	0.10	mg/L	4.00		100	80-120			
Strontium, total	0.0416	0.0010	mg/L	0.0400		104	80-120			
Sulfur, total	40.1	3.0	mg/L	40.0		100	80-120			
Tellurium, total	0.0384	0.00050	mg/L	0.0400		96	80-120			
Thallium, total	0.0393	0.000020	mg/L	0.0400		98	80-120			
Thorium, total	0.0392	0.00010	mg/L	0.0400		98	80-120			
Tin, total	0.0403	0.00020	mg/L	0.0400		101	80-120			
Titanium, total	0.0402	0.0050	mg/L	0.0400		100	80-120			
Tungsten, total	0.0402	0.0002	mg/L	0.0400		100	80-120			
Uranium, total	0.0404	0.000020	mg/L	0.0400		101	80-120			
Vanadium, total	0.0397	0.0050	mg/L	0.0400		99	80-120			
Zinc, total	0.0401	0.0040	mg/L	0.0400		100	80-120			
Zirconium, total	0.0405	0.00010	mg/L	0.0400		101	80-120			
Total Metals, Batch B2I2969										

CARO ANALYTICAL SERVICES

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Urban Systems - Kelowna Office	**WORK ORDER**	22I2808
PROJECT	0655.0247.01	**REPORTED**	2022-09-28 14:31

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B2I2969, Continued										
Blank (B2I2969-BLK1)				Prepared: 2022-09-26, Analyzed: 2022-09-27						
Mercury, total	< 0.000010	0.000010	mg/L							
Blank (B2I2969-BLK2)				Prepared: 2022-09-26, Analyzed: 2022-09-27						
Mercury, total	< 0.000010	0.000010	mg/L							
Blank (B2I2969-BLK3)				Prepared: 2022-09-26, Analyzed: 2022-09-27						
Mercury, total	< 0.000010	0.000010	mg/L							
Blank (B2I2969-BLK4)				Prepared: 2022-09-26, Analyzed: 2022-09-27						
Mercury, total	< 0.000010	0.000010	mg/L							
LCS (B2I2969-BS1)				Prepared: 2022-09-26, Analyzed: 2022-09-27						
Mercury, total	0.000481	0.000010	mg/L	0.000500		96	80-120			
LCS (B2I2969-BS2)				Prepared: 2022-09-26, Analyzed: 2022-09-27						
Mercury, total	0.000473	0.000010	mg/L	0.000500		95	80-120			
LCS (B2I2969-BS3)				Prepared: 2022-09-26, Analyzed: 2022-09-27						
Mercury, total	0.000464	0.000010	mg/L	0.000500		93	80-120			
LCS (B2I2969-BS4)				Prepared: 2022-09-26, Analyzed: 2022-09-27						
Mercury, total	0.000463	0.000010	mg/L	0.000500		93	80-120			

Appendix II – 2022 Water Consumption

Month	Volume (UKG) Trepanier Creek	Volume (ML) Trepanier Creek	Volume (IGPM) Lake Pumps	Volume (ML) Lake Pumps	Volume (m3) Peachland Creek	Volume (ML) Peachland Creek	Volume (ML) Total
January	2414600	10.977	0	0	80226	80.226	91.203
February	0	0.000	0	0	78238	78.238	78.238
March	0	0.000	0	0	86005	86.005	86.005
April	0	0.000	0	0	112906	112.906	112.906
May	0	0.000	0	0	198756	198.756	198.756
June	0	0.000	0	0	242656	242.656	242.656
July	0	0.000	0	0	378211	378.211	378.211
August	0	0.000	0	0	400586	400.586	400.586
September	0	0.000	0	0	281075	281.075	281.075
October	0	0.000	0	0	187136	187.136	187.136
November	0	0.000	0	0	91386	91.386	91.386
December	0	0.000	0	0	90724	90.724	90.724
Annual	2414600	10.977	0	0	2227905	2227.905	2249.859

Appendix III – Turbidity, pH and free chlorine residual data

Date	Distribution System								
	January						February		
	Trepanier Creek			Peachland WTP			Peachland WTP		
	Turbidity	pH	FCR	Turbidity	pH	FCR	Turbidity	pH	FCR
1				0.10	7.71	1.01	0.02	7.80	1.00
2				0.10	7.72	1.05	0.02	7.80	1.00
3				0.10	7.72	1.09	0.02	7.81	0.89
4	0.27	8.3	1.6	0.05	7.72	1.10	0.02	7.80	1.01
5	0.89	8.3	1.8	0.02	7.74	1.03	0.03	7.80	0.89
6		8.3	1.5	0.02	7.75	1.30	0.03	7.80	0.92
7	0.15	8.3	1.8	0.02	7.74	1.25	0.03	7.80	0.94
8				0.02	7.75	1.22	0.03	7.80	0.92
9				0.02	7.74	1.18	0.03	7.80	0.83
10	0.22	8.3	1.7	0.05	7.74	1.28	0.03	7.80	0.93
11	0.14		1.8	0.02	7.74	1.25	0.03	7.81	0.84
12				0.02	7.74	1.23	0.03	7.81	0.87
13				0.02	7.74	1.29	0.03	7.81	0.82
14				0.02	7.75	1.26	0.03	7.82	0.89
15				0.02	7.75	1.15	0.03	7.81	0.80
16				0.02	7.76	1.17	0.03	7.81	0.87
17				0.02	7.76	1.22	0.03	7.83	0.77
18				0.02	7.76	1.11	0.03	7.85	0.79
19				0.02	7.77	1.12	0.03	7.85	0.75
20				0.02	7.77	1.17	0.03	7.85	0.73
21				0.02	7.77	1.08	0.03	7.87	0.72
22				0.02	7.78	1.12	0.03	7.88	0.79
23				0.02	7.78	1.10	0.03	7.89	0.76
24				0.02	7.78	1.07	0.03	7.90	0.75
25				0.02	7.79	1.10	0.04	7.89	0.91
26				0.02	7.79	1.08	0.04	7.88	0.87
27				0.02	7.80	0.98	0.03	7.87	0.91
28				0.02	7.80	1.04	0.03	7.87	0.98
29				0.02	7.80	1.01			
30				0.02	7.80	1.00			
31				0.02	7.80	1.00			

Turbidity measured in NTU

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

	Distribution System								
	March			April			May		
	Peachland WTP			Peachland WTP			Peachland WTP		
Date	Turbidity	pH	FCR	Turbidity	pH	FCR	Turbidity	pH	FCR
1	0.05	7.87	0.90	0.08	7.98	0.94	0.09	7.77	1.31
2	0.03	7.84	0.90	0.08	7.98	0.94	0.08	7.76	1.25
3	0.02	7.86	0.81	0.10	7.98	0.92	0.09	7.77	1.16
4	0.02	7.87	0.69	0.12	7.98	0.81	0.08	7.78	1.18
5	0.02	7.88	0.70	0.16	7.99	0.67	0.08	7.77	1.05
6	0.02	7.89	0.68	0.13	7.96	0.84	0.08	7.77	1.26
7	0.02	7.89	0.85	0.10	7.93	1.10	0.08	7.78	1.18
8	0.02	7.89	1.00	0.07	7.90	0.91	0.09	7.80	1.18
9	0.02	7.90	0.97	0.08	7.90	0.68	0.09	7.81	1.18
10	0.03	7.91	0.92	0.09	7.90	0.65	0.09	7.81	1.24
11	0.03	7.90	0.88	0.09	7.90	0.83	0.09	7.81	1.41
12	0.03	7.90	0.86	0.07	7.88	0.82	0.08	7.88	1.19
13	0.03	7.89	0.90	0.09	7.87	1.21	0.08	7.83	1.31
14	0.03	7.89	1.14	0.06	7.88	1.21	0.08	7.83	1.32
15	0.04	7.89	1.11	0.07	7.89	1.48	0.08	7.83	1.36
16	0.04	7.90	1.10	0.08	7.89	1.49	0.08	7.83	1.37
17	0.04	7.90	0.99	0.11	7.88	1.87	0.07	7.85	1.23
18	0.05	7.90	1.01	0.07	7.89	1.67	0.07	7.85	1.17
19	0.05	7.90	0.95	0.08	7.88	1.54	0.07	7.85	1.11
20	0.05	7.91	0.79	0.08	7.91	1.30	0.07	7.88	1.12
21	0.05	7.92	0.89	0.08	7.90	1.44	0.07	7.92	1.05
22	0.05	7.92	0.93	0.08	7.89	1.45	0.06	7.92	0.99
23	0.05	7.91	1.02	0.09	7.88	1.30	0.06	7.93	1.01
24	0.06	7.92	0.85	0.09	7.87	1.34	0.07	7.95	1.07
25	0.06	7.94	0.90	0.10	7.85	1.34	0.06	7.96	1.03
26	0.06	7.94	0.90	0.12	7.79	1.44	0.07	7.97	0.97
27	0.06	7.94	0.92	0.10	7.77	1.41	0.09	7.97	0.98
28	0.07	7.95	0.92	0.08	7.77	1.37	0.07	7.98	0.98
29	0.08	7.94	0.73	0.10	7.78	1.25	0.06	7.97	0.94
30	0.10	7.96	0.81	0.09	7.77	1.36	0.07	7.98	0.96
31	0.08	7.99	1.00				0.07	7.98	0.84

Turbidity measured in NTU

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

	Distribution System								
	June			July			August		
	Peachland WTP			Peachland WTP			Peachland WTP		
Date	Turbidity	pH	FCR	Turbidity	pH	FCR	Turbidity	pH	FCR
1	0.06	7.99	0.92	0.03	8.05	1.16	0.03	8.01	1.80
2	0.06	7.98	1.04	0.03	8.05	1.15	0.03	8.00	1.57
3	0.06	7.97	0.97	0.03	8.02	1.15	0.03	7.99	1.48
4	0.06	7.96	0.97	0.03	7.99	1.16	0.03	8.01	1.45
5	0.06	7.97	0.86	0.03	8.01	1.18	0.03	8.02	1.40
6	0.06	7.98	0.92	0.03	8.01	1.29	0.03	8.05	1.72
7	0.06	7.99	0.86	0.03	8.00	1.27	0.03	8.06	1.69
8	0.05	8.00	0.88	0.03	7.98	1.32	0.03	8.06	1.67
9	0.04	8.03	0.81	0.03	7.93	1.41	0.03	8.04	1.64
10	0.04	8.02	0.86	0.03	7.95	1.33	0.03	8.01	1.54
11	0.04	8.03	0.90	0.03	8.02	1.11	0.03	8.03	1.39
12	0.04	8.05	0.83	0.03	8.02	1.00	0.03	8.00	1.36
13	0.04	8.06	0.86	0.03	8.02	1.06	0.03	8.00	1.29
14	0.04	8.07	0.89	0.03	8.02	1.00	0.03	8.04	1.40
15	0.03	8.09	1.23	0.03	8.02	0.97	0.03	8.05	1.49
16	0.02	8.06	1.16	0.03	8.01	1.13	0.03	8.06	1.67
17	0.02	8.01	1.10	0.03	8.02	1.25	0.03	8.04	1.48
18	0.02	8.00	1.05	0.03	8.03	1.29	0.03	8.05	1.63
19	0.02	8.02	0.86	0.03	8.03	1.22	0.03	8.04	1.79
20	0.02	8.01	0.90	0.03	8.02	1.23	0.04	8.03	1.81
21	0.03	8.02	1.00	0.03	8.05	1.17	0.04	8.02	1.28
22	0.03	8.01	1.05	0.03	8.06	1.21	0.04	8.05	1.32
23	0.03	8.08	0.92	0.03	8.05	1.09	0.04	8.04	1.32
24	0.03	8.06	0.98	0.03	8.04	1.13	0.04	8.02	1.04
25	0.03	8.06	0.95	0.03	8.05	1.22	0.04	8.03	1.09
26	0.03	8.06	0.92	0.03	7.98	1.47	0.04	8.03	1.25
27	0.03	8.06	0.97	0.03	7.84	1.69	0.04	8.04	1.17
28	0.03	8.03	1.02	0.03	8.03	1.42	0.04	8.04	1.16
29	0.03	8.02	1.10	0.03	8.01	1.48	0.04	8.08	1.20
30	0.03	8.04	1.28	0.03	8.01	1.68	0.04	8.08	1.25
31				0.03	8.01	1.72	0.04	8.06	1.22

Turbidity measured in NTU

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

	Distribution System								
	September			October			November		
	Peachland WTP			Peachland WTP			Peachland WTP		
Date	Turbidity	pH	FCR	Turbidity	pH	FCR	Turbidity	pH	FCR
1	0.04	8.03	1.17	0.02	7.99	1.03	0.02	7.89	1.13
2	0.04	8.04	1.22	0.02	7.98	1.03	0.02	7.89	1.05
3	0.04	8.04	1.20	0.02	7.99	1.06	0.02	7.90	1.01
4	0.05	8.08	1.12	0.02	7.99	1.03	0.02	7.94	1.01
5	0.05	8.08	1.12	0.02	7.98	1.11	0.02	7.92	0.84
6	0.04	8.05	1.09	0.02	7.96	1.28	0.02	7.93	0.82
7	0.04	8.04	1.18	0.02	7.96	1.27	0.03	7.96	0.88
8	0.04	8.07	1.23	0.02	7.94	1.21	0.03	7.92	0.80
9	0.05	8.12	1.14	0.02	7.93	1.15	0.03	7.92	0.99
10	0.04	8.05	1.13	0.02	7.92	1.14	0.03	8.00	0.99
11	0.04	8.04	1.11	0.02	7.90	1.07	0.04	8.00	0.90
12	0.04	8.01	1.10	0.02	7.90	1.04	0.04	8.01	0.88
13	0.04	7.97	1.05	0.02	7.89	1.03	0.05	8.04	0.89
14	0.04	7.97	0.98	0.02	7.87	1.03	0.07	8.06	0.93
15	0.04	7.97	0.92	0.02	7.87	1.03	0.03	8.06	0.98
16	0.02	8.01	1.11	0.02	7.85	1.00	0.03	8.07	1.07
17	0.02	8.01	1.11	0.02	7.85	1.00	0.03	8.06	1.08
18	0.02	8.04	1.08	0.02	7.85	0.99	0.02	8.06	1.24
19	0.02	8.04	1.06	0.02	7.85	0.97	0.02	8.07	1.19
20	0.02	8.03	1.05	0.02	7.85	0.94	0.02	8.07	1.16
21	0.02	8.03	1.04	0.02	7.84	0.97	0.02	8.06	1.04
22	0.02	8.03	1.06	0.02	7.84	0.95	0.02	8.06	1.48
23	0.02	8.03	1.12	0.02	7.85	0.91	0.02	8.05	1.22
24	0.02	8.01	1.12	0.02	7.85	0.90	0.02	8.06	1.12
25	0.02	8.02	1.09	0.02	7.85	0.91	0.02	8.06	1.16
26	0.02	8.01	1.11	0.02	7.85	0.92	0.02	8.06	1.08
27	0.02	8.01	1.16	0.02	7.85	0.95	0.02	8.07	1.10
28	0.02	8.01	1.10	0.02	7.85	0.92	0.02	8.07	1.13
29	0.02	7.99	1.08	0.02	7.87	0.91	0.02	8.07	1.03
30	0.02	7.99	1.04	0.02	7.88	0.90	0.02	8.09	1.16
31				0.02	7.89	0.99			

Turbidity measured in NTU

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

	Distribution System		
	December		
	Peachland WTP		
Date	Turbidity	pH	FCR
1	0.02	8.08	1.18
2	0.02	8.07	1.27
3	0.02	8.06	1.24
4	0.02	8.05	1.28
5	0.02	8.05	1.36
6	0.02	8.05	1.36
7	0.02	8.06	1.31
8	0.02	8.06	1.34
9	0.02	8.06	1.34
10	0.02	8.06	1.27
11	0.02	8.06	1.30
12	0.02	8.05	1.29
13	0.02	8.04	1.23
14	0.02	8.04	1.22
15	0.02	8.04	1.16
16	0.02	8.04	1.17
17	0.02	8.05	1.16
18	0.02	8.05	1.19
19	0.02	8.05	1.22
20	0.02	8.04	1.10
21	0.02	8.01	1.10
22	0.02	7.99	1.01
23	0.02	7.99	1.18
24	0.02	8.00	1.23
25	0.02	8.00	1.27
26	0.02	8.00	1.31
27	0.02	8.00	1.31
28	0.02	8.01	1.25
29	0.02	8.01	1.21
30	0.02	8.02	1.18
31	0.02	8.02	1.23

Turbidity measured in NTU

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