



**2021**

**DRINKING WATER QUALITY**

**FINAL REPORT | JUNE 2022**

**: ANNUAL  
: REPORT**



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## EXECUTIVE SUMMARY

This report summarizes the District of West Vancouver's water quality program for 2021. The program operates under the protocol developed in the Water Quality and Reporting Plan for Metro Vancouver and Member Municipalities; where objectives and monitoring results are in accordance with the *Guidelines for Canadian Drinking Water Quality* (GCDWQ).

The District's water system treats and distributes potable water supplied from two local sources, namely Eagle Lake and Montizambert Creek, and distributes treated water received from Metro Vancouver (Capilano and/or Seymour watershed sources). Detailed information regarding the Metro Vancouver supply is available at <http://www.metrovancouver.org/services/water>.

Raw water from both Eagle Lake and Montizambert Creek sources were analyzed for bacteriological, physical, and chemical parameters. Bacteriological testing in 2021 indicates the source waters have a very low presence of *Escherichia coli* (E. coli), giardia, and cryptosporidium.

Water throughout the distribution system was tested for bacteriological, physical, and chemical parameters. 584 samples were analyzed in 2021. All water sample results reported a turbidity of less than 5 NTU. 99.8% of water sample results reported a chlorine residual of greater than 0.2 mg/L. Five samples had HPC counts that exceeded 500 CFU/mL. Where HPC results exceeded 500 CFU, the water mains were flushed and the turbidity readings and chlorine residuals rechecked. The new samples show turbidity readings and chlorine residuals are well within the limits set by the GCDWQ. Additional monthly, quarterly and semi-annually testing for disinfection by-products, metals, and total organic carbons were within the Canadian Guidelines.

The report also contains Emergency Response Plans that outline the steps to take related to elevated E. coli, contamination, turbidity and loss of disinfection.

## **1.0 INTRODUCTION**

This report summarizes the District of West Vancouver's water quality program for 2021. The purpose is to detail the municipality's efforts in maintaining high quality drinking water and to provide residents with the results of the sampling and analysis program.

Water suppliers in British Columbia are regulated by the Drinking Water Protection Act and the Drinking Water Protection Regulation (DWPR). The *Drinking Water Quality Annual Report* is a requirement of the Vancouver Coastal Health Authority (VCHA) in order to receive annual operating permits and is reviewed by the Medical Health Officer (MHO) for the North Shore. As requested by the MHO, this report shall be made public via a prominent web site posting at <http://www.westvancouver.ca>.

The District's water quality program is in accordance with the *Water Quality Monitoring and Reporting Plan for the GVRD and Member Municipalities, May 2000*, which was developed under the authority and direction of the Regional MHOs.

## **2.0 GENERAL DESCRIPTION**

The District of West Vancouver operates two local water supplies and a distribution system consisting of a network of intakes, two treatment plants, reservoirs, chlorination stations, pressure reducing valve (PRV) stations, pumps, hydrants and mains. The system is required to adequately receive, store, and transport potable water to all users in West Vancouver. Key facilities are connected by a telemetry system (SCADA) to a central computer, which monitors and identifies erroneous operating conditions and communicates to key personnel 24 hours a day, seven days a week.

## **3.0 SOURCE WATER WATERSHEDS**

### **3.1 General**

The municipality obtains water from three sources:

- Eagle Lake
- Montizambert Creek
- Metro Vancouver's Capilano / Seymour Watersheds.

From Capilano River to Horseshoe Bay, the water distribution system is fed by both Eagle Lake and Metro Vancouver source waters. While the distribution area for each source varies seasonally, in general, Eagle Lake water is received below the Upper Levels Highway, west of 29<sup>th</sup> Street and above the Upper Levels Highway east to the Chartwell neighbourhood. The municipality continues to optimize the use of the Eagle Lake source whenever supplies permit in order to reduce the purchase of bulk water from Metro Vancouver.

North of Horseshoe Bay at the northern municipal boundary, the Sunset Highlands neighbourhood is serviced by the Montizambert Creek source, with the exception of the Seascapes multi-family development, which utilizes private wells.

### **3.2 Eagle Lake Treatment Plant**

Located above Cypress Falls Park, Eagle Lake source water flows by gravity through intake screens into the Eagle Lake treatment plant. The Eagle Lake facility is a Level 4 certified Suez (formerly GE) membrane treatment plant and is compliant with the 4-3-2-1 multi-barrier approach as specified in the GCDWQ to ensure safe drinking water as mandated by the Health Authorities of British Columbia. When the lake level drops below the elevation of the intake screens, floating pumps are required to pump water from the lower lake levels to the treatment plant. This typically occurs during the late summer months.

Once the water enters the treatment facility, it passes through an automatic self-cleaning bar screen to remove any floating debris. The water is pH adjusted and coagulant is added to optimize the membrane filtration process. The coagulated water is then pumped and filtered through submerged membrane filters. Once filtered, sodium hypochlorite is added for disinfection. The fully treated water is stored in concrete reservoirs ready for distribution.

#### **3.2.1 Eagle Lake Water Treatment Plant Bypass and Optimization**

In the event of an operational emergency, the Eagle Lake plant may need to be bypassed in order to maintain water supply to the District's residents and for the provision of fire protection. In the event of a bypass, the source water will continue to be disinfected with sodium hypochlorite though at a higher dose to compensate for the loss of the filtration process. The chlorine contact time will be maintained during a bypass event.

All EOCP certified distribution and treatment staff are familiar with the details of the bypass procedure. The details of this procedure have been provided separately in the Eagle Lake Water Treatment Plant Emergency Response and Contingency Plan to VCHA.

The Eagle Lake Treatment Plant was not bypassed in 2021.

The infrastructure needed to optimize the use of the Eagle Lake supply system was completed in June 2010. Eagle Lake optimization allows the District to increase the supply of Eagle Lake water into the distribution system during non-peak periods. The District SCADA system is used to automatically monitor and prompt any required changes to the system based on plant conditions such as clearwell levels and system demand. Standby personnel monitor the Eagle Lake Water Treatment Plant operation 24/7 and VCH is informed if there are any changes to operational procedures.

### **3.3 Montizambert Treatment Plant**

Located north of Horseshoe Bay, the Montizambert Treatment Plant is a Level 3 classified plant commissioned in September 2011. It is a Pall Membrane treatment plant compliant with the 4-3-2-1 multi-barrier approach as specified in the GCDWQ to ensure safe drinking water as mandated by the Health Authorities of British Columbia.

The source water from Montizambert Creek passes through a gravel filtration intake and a settling tank before entering the treatment facility. Coagulant is added once the water enters the plant and is mixed and pumped through the membrane filters. After the filtration process, sodium hypochlorite is added for disinfection and the water is stored in a concrete clearwell ready to be distributed.

#### **3.3.1 Montizambert Water Treatment Plant Bypass**

In the event of an operational emergency, the Montizambert Water Treatment Plant may need to be bypassed to maintain water supply to residents and for the provision of fire protection. The plant is capable of two different types of bypass, one with cartridge filters (3 microns nominal) and the second without. The use of cartridge filters will be determined on a case-by-case basis. For either procedure, the water will continue to be disinfected with sodium hypochlorite and adjusted to an appropriate dosage rate depending on the bypass process in place. The chlorine contact time is maintained during a bypass event.

All EOCP certified distribution and treatment staff are familiar with the details of the bypass procedure. This procedure has been provided separately in the Montizambert Creek Water Treatment Plant Emergency Response and Contingency plan to VCHA.

The Montizambert Water Treatment Plant was not bypassed in 2021.

### **3.4 Metro Vancouver**

Bulk treated water purchased by the District from Metro Vancouver is supplied from the Seymour and Capilano watersheds. This water enters the municipality's distribution system at five locations:

- Glenmore Dr. between Morven Dr. and Deep Dene Road,
- Mathers Avenue and Capilano Road,
- Keith Road and Upper Levels Highway,
- Marine Drive and Capilano Road, and
- Capilano Road and Welch Street.



### **3.5 Challenges**

Challenges to the quality and quantity of the source water include:

- maintaining a balance between public access for recreation (e.g. portions of the Baden Powell Trail above Eagle Lake) and security of the watershed for protection of drinking water quality
- physical disturbances in watersheds such as soil erosion into creeks, which lead to turbidity spikes
- vulnerability of open water sources to contamination from animal and human activity;
- maintaining creek flow supplementation for fish habitat during the summer months, when Eagle Lake level is low
- low flow conditions in Montizambert Creek during drier summer months
- climate change, heavy rainfall causing turbidity issues in winter months and potential for drought conditions in the summer months.

### **4.0 REGULATIONS AND STANDARDS FOR SOURCE WATER AND THE DISTRIBUTION SYSTEM**

Both source waters and water within the distribution system are tested for microbiological, chemical, and physical parameters. For the purposes of the municipality's water quality sampling program, the locations monitoring Metro water are treated as 'distribution' sites and not 'source' sites although some Metro sample points are located close to the entry points to the municipal distribution system.

The Drinking Water Protection Regulation (DWPR) requires 1 sample/1000 residents on a monthly basis for cities with a population between 5,000 and 90,000 residents. During 2021, the District of West Vancouver had approximately 45,000 residents, which translates to a minimum of 540 samples required annually. The total number of samples collected by the District during 2021 was 584, which exceeds the requirements of the DWPR for the number of stations and samples required.

Further to the information outlined below, full details outlining the health-based guidelines for water quality in Canada, established on behalf of the Federal-Provincial-Territorial Committee on Drinking Water, is available on Health Canada's website.

#### **4.1 Microbiological Parameters**

Under the Guidelines for Canadian Drinking Water Quality (GCDWQ) the most vital guidelines are those dealing with microbiological contaminants. The District of West Vancouver follows the guidelines by taking the required samples at the regulated times.

Samples are taken monthly at the Montizambert and Eagle Lake sources for *Cryptosporidium* and *Giardia*. The treatment goal for these two parameters is a minimum of 3-log (99.9%) removal.

Escherichia coli (E. coli) samples are taken bi-weekly at the source and weekly throughout the distribution system. E. coli is an indicator of microbiological safety and the GCDWQ maximum allowable concentration within the distribution system is none detected per 100 mL sample. Heterotrophic Plate Count (HPC) is tested bi-weekly at the source as well as weekly throughout the distribution system. Although it is naturally occurring and has no limits under the guideline, it is a good monitoring tool for general bacteriological water quality.

Total Coliforms are sampled bi-weekly at the source and weekly throughout the distribution system. Total coliforms are not used as indicators of potential health effects from pathogenic microorganisms; instead, they are used as an operational tool to determine how well the drinking water treatment system is operating. When sampled in the distribution system, the GCDWQ states that no consecutive samples shall contain total coliform and that no more than 10% of samples taken contain total coliform. Total coliform detected in the distribution system can be an indication of re-growth of bacteria in distribution biofilms or intrusion of untreated water.

IG MicroMed Environmental Inc. conducted the analysis for Giardia and Cryptosporidium and Metro Vancouver Laboratories conducted analysis for TOC, Total Coliform, E. coli and HPC.

## **4.2 Physical Parameters**

### **4.2.1 Turbidity**

Turbidity describes the amount of suspended solids in water measured in nephelometric turbidity units (NTU). The presence of turbidity can have significant effects on both the microbiological quality of water and the detection of the bacteria and viruses. The target turbidity for treated water from the Eagle Lake and Montizambert Water Treatment Plants is 0.1 NTU or less in at least 99% of measurements per operational filter period or per month. Measurements greater than 0.1 NTU for a period greater than 15 minutes from an individual membrane unit will trigger a membrane integrity test and investigation. To ensure good operation of the distribution system, the Guidelines for Canadian Drinking Water Quality recommends turbidity levels of 1.0 NTU or less. At levels greater than 5.0 NTU, cloudiness becomes apparent.

### **4.2.2 Temperature**

The aesthetic guideline for temperature is 15°C. Typically, the temperature of drinking water for both the source water and the distribution system rises during summer months. District staff appreciate that higher temperatures in the distribution system can affect chlorine residuals and can contribute to bacterial re-growth. Tests are completed on a regular basis throughout the distribution system to ensure acceptable water quality.

### **4.2.3 Colour**

The physical parameter of colour is tested together with chemical parameters for Eagle Lake and Montizambert source water. With respect to colour, the GCDWQ specifies an aesthetic objective of less than 15 true colour units (TCU) for treated water.

### **4.3 Inorganic and Organic Chemical Parameters**

Testing of source waters for chemical parameters, including bromate, bromide, chlorate, chloride, and sodium is conducted semi-annually at both Eagle Lake and Montizambert Creek.

In the distribution system, chemical parameters tested include chlorine residual, pH, and disinfection by-products. Chlorine residual is measured at all sampling sites when bacteriological samples are collected; additionally, there are several online chlorine analyzers for continuous monitoring throughout the distribution system.

#### **4.3.1 Disinfection By-Products**

Disinfection by-products are formed when chlorine reacts with natural organic matter. The two main disinfection by-products of concern when disinfecting with sodium hypochlorite are trihalomethanes (THMs) and haloacetic acids (HAAs). THMs and HAAs are included in the GCDWQ with maximum acceptable concentration (MAC) of 0.1 mg/l and 0.08 mg/l respectively.

#### **4.3.2 pH**

The water's scale of acidity or alkalinity is measured in potential of hydrogen (pH). The GCDWQ recommends a pH in the range of 7.0 – 10.5 as a treatment objective.

It is recognized that acidic water will accelerate the corrosion of metal pipes as well as hinder the treatment process and the pH is adjusted to the 7.5 - 9.0 range for the Eagle Lake supply. Sodium hydroxide is used to achieve this objective. No adjustment is made to the Montizambert supply.

#### **4.3.3 Metals**

The District's water quality sampling and monitoring program includes semi-annual testing at four locations within the distribution system for a variety of metals.

## 5.0 TESTING, SAMPLE ANALYSIS AND RESULTS

Microbiological testing was conducted at a total of 39 sampling sites including the Eagle Lake and Montizambert Creek source locations. The monitoring protocol dictates that 12 to 13 sites per week are sampled according to the following breakdown: 10% source water, 10% low flow/dead end locations, 40% medium flow locations, and 40% high flow locations. Table 1 outlines the District’s water sampling calendar.

**Table 1: Water Sampling Calendar**

Water Type	Parameter	Frequency
Sources Eagle Lake Montizambert Creek	Microbiological, Turbidity, Temperature	Bi-weekly
	Giardia, Cryptosporidium	Monthly
	Total Organic Carbon	Monthly
	Chemical, physical list	Semi-annually
Distribution System	Microbiological, Turbidity, Temperature	Weekly (not at every site)
	HAA’s, THM’s, pH	Quarterly
	Metals	Semi-annually

### 5.1 Sample Analysis – Source Water (untreated)

At Eagle Lake, 26 bi-weekly source water samples were tested. 22 samples had a most probable number (MPN) of less than 1 per 100 mL, and 4 samples had a presence of E. coli ranging from 1 to 2 MPN/100mls. Testing for total coliforms had results ranging from 11 to 201 MPN/100mls in the raw, untreated source water.

**Table 2A: Eagle Lake Source Water Microbiological and Physical Parameters**

Sample Name	Number of Samples	Ecoli MPN/100mLs			HPC CFU/mL			Temperature °C			Total Coliform MPN/100mLs			Turbidity NTU		
		Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.
WEAG-LK1	26	<1	2	<1	110	1400	408	4	23	10	11	201	56	0.2	0.77	0.30

At Montizambert Creek, 25 bi-weekly source water samples were tested. 19 samples had a most probable number (MPN) of less than 1 per 100 mL and 6 samples had a presence of E. coli ranging from 1 to 4 MPN/100mls. Testing for total coliforms had results ranging from 5 to 435 MPN/100mls in the raw, untreated source water.

**Table 2B: Montizambert Creek Source Water Microbiological and Physical Parameters**

Sample Name	Number of Samples	Ecoli MPN/100mLs			HPC CFU/mL			Temperature °C			Total Coliform MPN/100mLs			Turbidity NTU		
		Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.
WMZ-CK1	25	<1	4	<1	24	760	298	4	15	10	5	435	116	0.44	17	2.14

Giardia and Cryptosporidium testing was conducted monthly for both sources. Of the twelve samples taken at Eagle Lake, zero tested positive for Cryptosporidium and Giardia. Of the twelve samples taken at Montizambert Creek, zero tested positive for Cryptosporidium and Giardia.

Source water chemistry testing is conducted at Eagle Lake and Montizambert on a semi-annual basis. Source water chemistry testing results are shown in Appendix B along with a full range of other chemicals parameters which are not included in the guidelines but are still monitored by the District.

**5.2 Sample Analysis – Distribution System**

A map of the District’s water distribution system with sampling locations and an address list for the sampling sites is included in Appendix A. The naming convention for the sample number and sample bottle reflects a reference to either Metro Vancouver (WVR), Eagle Lake (WEAG) or Montizambert Creek (WMZ) as the water source. Depending on the hydraulic conditions, water may be provided from either Eagle Lake or Metro Vancouver for some locations.

584 distribution system samples were analyzed in 2021. One sample showed a slight deviation in the average chlorine residual, being 0.19mg/L at the end of the Eagle Lake Source. All subsequent samples at the sample site were > 0.2 mg/L, the average residual for 2021 at the same site was 0.34mg/L. All other water sample results reported no less than 0.2mg/L chlorine residual and turbidity of no more than 5 NTU.. There were no elevated samples for E. coli and no elevated samples for Total Coliforms. Section 8.1 of this report outlines the response procedures in the event of a positive E. coli test result.

Five samples had HPC counts that exceeded 500 CFU/mL. Elevated HPC is not an indication for water safety concerns but is an operational indicator of possible stagnation and potential degradation of water quality. Where HPC results exceeded 500 CFU/mL the water mains were flushed and the turbidity readings and chlorine residuals re-checked.

Table 3 and Table 4 below summarize the results by the sampling sites.

**Table 3: Distribution System Microbiological and Physical Parameters (WVR Sites)**

Sample Site	Parameter	Chlorine Free mg/L			Ecoli CFU/100mLs	HPC CFU/mL			Temperature °C			Total Coliform MPN/100mLs	Turbidity NTU		
	Guideline	No Less than 0.2			None	None			No more than 15			None	No more than 5		
	#of Samples	Min.	Max.	Avg.	Result	Min.	Max.	Avg.	Min.	Max.	Avg.	Result	Min.	Max.	Avg.
WVR-711	13	0.59	0.94	0.76	<1	2	82	16.7	5	18	11.2	<1	0.11	0.43	0.22
WVR-712	13	0.26	0.55	0.40	<1	<2	40	n/a	5	18	11.0	<1	0.11	0.23	0.14
WVR-718	12	0.41	0.71	0.60	<1	<2	18	n/a	5	17	11.1	<1	0.10	0.81	0.20
WVR-761	13	0.3	0.65	0.46	<1	4	88	19.8	5	20	11.1	<1	0.12	0.29	0.18
WVR-764	13	0.67	1.01	0.79	<1	<2	6	n/a	5	17	10.6	<1	0.11	0.27	0.18
WVR-790	25	0.49	0.84	0.69	<1	<2	6	n/a	5	17	10.4	<1	0.10	0.32	0.17
WVR-791	13	0.57	0.85	0.71	<1	<2	2	n/a	5	17	10.4	<1	0.10	0.42	0.21
WVR-792	25	0.45	0.79	0.66	<1	<2	18	n/a	5	17	10.6	<1	0.11	0.62	0.24
WVR-793	13	0.26	0.59	0.45	<1	<2	52	n/a	5	20	11.2	<1	0.09	0.3	0.15
WVR-794	13	0.45	0.88	0.73	<1	<2	16	n/a	5	19	11.2	<1	0.14	0.57	0.26
WVR-795	13	0.50	0.83	0.72	<1	<2	14	n/a	5	18	11.1	<1	0.14	0.46	0.27
WVR-796	26	0.44	0.97	0.69	<1	<2	540	n/a	5	18	10.7	<1	0.09	2.00	0.24
WVR-797	13	0.28	0.92	0.58	<1	<2	4300	n/a	5	17	10.8	<1	0.11	1.90	0.37

**Table 4: Distribution System Microbiological and Physical Parameters (WEAG and WMZ Sites)**

Sample Site	Parameter	Chlorine Free mg/L			Ecoli CFU/100mLs	HPC CFU/mL			Temperature °C			Total Coliform MPN/100mLs	Turbidity NTU		
	Guideline	No Less than 0.2			None	None			No more than 15			None	No more than 5		
	#of Samples	Min.	Max.	Avg.	Result	Min.	Max.	Avg.	Min.	Max.	Avg.	Result	Min.	Max.	Avg.
WEAG-710	12	0.89	1.11	1.01	<1	<2	16	n/a	5	20	11.7	<1	0.07	0.27	0.14
WEAG-716	24	0.35	0.91	0.74	<1	<2	16	n/a	5	21	11.6	<1	0.07	0.91	0.20
WEAG-719	26	0.35	1.01	0.68	<1	<2	170	n/a	5	19	11.1	<1	0.08	0.83	0.24
WEAG-765	12	0.80	1.07	0.88	<1	<2	16	n/a	5	20	11.3	<1	0.08	0.16	0.12
WEAG-768	13	0.57	0.99	0.84	<1	<2	240	n/a	5	18	10.9	<1	0.07	0.33	0.12
WEAG-769	12	0.61	1.02	0.87	<1	<2	54	n/a	5	17	11.4	<1	0.09	0.22	0.13
WEAG-770	24	0.51	1.06	0.70	<1	<2	22	n/a	5	20	11.0	<1	0.09	0.50	0.17
WEAG-771	24	0.45	0.91	0.70	<1	<2	44	n/a	5	20	11.5	<1	0.09	0.33	0.17
WEAG-772	24	0.54	0.96	0.76	<1	<2	32	n/a	5	21	11.6	<1	0.08	0.31	0.17
WEAG-773	12	0.19	0.95	0.34	<1	12	420	143	5	20	11.3	<1	0.09	0.34	0.18
WEAG-774	12	0.55	1.00	0.82	<1	<2	16	n/a	5	21	11.8	<1	0.09	0.40	0.19
WEAG-776	12	0.91	1.10	1.01	<1	<2	12	n/a	5	21	11.8	<1	0.07	0.13	0.10
WEAG-778	24	0.67	1.02	0.83	<1	<2	120	n/a	5	21	11.5	<1	0.07	0.45	0.24
WEAG-779	13	0.78	1.06	0.90	<1	<2	4	n/a	5	18	11.1	<1	0.07	0.18	0.11
WEAG-780	12	0.79	1.21	0.88	<1	<2	84	n/a	5	20	11.3	<1	0.08	0.26	0.15
WEAG-783	12	0.71	1.02	0.85	<1	<2	48	n/a	5	21	11.8	<1	0.11	0.48	0.17
WEAG-784	12	0.56	0.96	0.78	<1	<2	58	n/a	5	21	11.3	<1	0.15	0.39	0.23
WEAG-785	12	0.53	0.81	0.69	<1	<2	10	n/a	5	20	11.3	<1	0.06	0.27	0.14
WEAG-786	13	0.28	0.97	0.68	<1	<2	180	n/a	5	18	10.9	<1	0.10	0.37	0.16
WEAG-787	13	0.52	0.93	0.78	<1	<2	20	n/a	5	18	10.9	<1	0.10	0.37	0.17
WEAG-788	13	0.41	1.04	0.80	<1	<2	2	n/a	5	18	10.9	<1	0.08	0.30	0.13
WEAG-880	9	0.38	0.99	0.87	<1	<2	64	n/a	5	15	10.2	<1	0.09	0.41	0.20
WMZ-781	12	0.31	1.30	0.95	<1	<2	46	n/a	5	18	10.8	<1	0.08	0.83	0.26
WMZ-782	13	0.48	1.41	0.94	<1	<2	6.00	n/a	4	18	10.5	<1	0.17	0.60	0.29

The semi-annual testing for metals within the distribution system are provided in Appendix C. All the sampling results were well within GCDWQ guidelines.

Disinfection by-products are formed when chlorine reacts with natural organic matters. The two main categories of disinfection by-products are trihalomethanes (THMs) and haloacetic acids (HAAs) which are monitored on a quarterly basis from 10 sample sites.

The test results are presented as a running quarterly average for total THMs and total HAAs in Appendix C. All the readings taken in 2021 are within normal levels.

The level of natural organic matter is typically characterized by measuring total organic carbon (TOC) in a laboratory. Organic carbons originate in water from partially dissolved organic matter such as algae, leaves, bark, wood and soil. These materials also cause a significant portion of the colour found in natural water sources. TOC levels are within expected levels.

A complete record of the water sampling results is in Appendix C.

### 5.3 Distribution System – Water Main Replacement

An additional factor in water quality is the timely replacement of water mains. Factors related to capacity, flow characteristics and internal pipe condition can all improve water quality. The following table highlights the mains replaced in 2021 and lists the mains to be replaced in 2022.

2021 Water Main Construction	2022 Planned Water Main Construction
A: Taylor Way - 367m	A: Marine Drive - 615m
B: Hillside-Groveland - 135m	B: 26th Street - Between Ottawa and Nelson and 2500 block Ottawa Avenue - 413m
C: Northwood Drive - 135m	C: 27th Street - Between Ottawa and Mathers and 2700 block Nelson - 317m
D: Rena Crescent - 230m	D: Inglewood & Anderson – 448m
E: Hildhurt Place - 570m	E: Stone Crescent - 500m
F: Headland Drive - 308m (ongoing)	F: Keith Road – 63m
G: Caulfied Drive - 451m (ongoing)	G: Woodgreen Drive (phase II) - 278m
H: 4100 block Marine Drive - 487m (ongoing)	H: Woodgreen (C3 Res) – 197m
	I: St. Andrews Place - 240m

## **6.0 PUBLIC NOTIFICATION**

### **6.1 Drinking Water Advisory/Boil Water Advisory**

2021 was free of significant turbidity events from the Metro Vancouver, Eagle Lake and Montizambert sources.

No boil water advisory was issued in 2021.

### **6.2 General Drinking Water Quality Advisory**

There were no General Drinking Water Advisories issued in 2021.

## **7.0 OPERATOR QUALIFICATIONS AND TRAINING**

Further to the *Drinking Water Protection Act*, the Drinking Water Protection Regulation (DWPR) came into effect May 16, 2003. The regulation includes the classification of distribution and treatment systems and the qualification standards for persons operating these systems through the Environmental Operators Certification Program (EOCP).

The District's water distribution system is classified Level 4. The District is in compliance with EOCP's requirement to have at least one operator certified to the level of the facility. Nevertheless, the District continues to work towards having multiple operators certified to EOCP Level 4. The water treatment plants are assessed separately, and as noted in Sections 3.2 and 3.3.

### **7.1 Operator Qualifications**

The municipality has a distribution system staff of six operators and one supervisor and a treatment staff of two treatment operators and one supervisor.

In 2021, the District staff maintained the following certification levels:

#### **Water Distribution:**

- Level 4 – one supervisor
- Level 3 – two operators
- Level 2 – three operators
- Level 1 – 0 operators



## **Water Treatment:**

- Level 4 – one supervisor
- Level 3 – two operators
- Level 2 – 0 operators
- Level 1 – 0 operators

Staff are encouraged to take courses that will enable them to advance to higher EOCP certification levels. All operators are required to take a prescribed amount of education and training to keep their certifications in good standing.

## **8.0 EMERGENCY RESPONSE PLANS**

### **8.1 E. coli Positive Response**

If a sample analyzed by Metro Vancouver Laboratories is tested positive for E. coli, the following response plan will occur.

1. The municipality's water quality personnel and the MHO will be notified via the Metro laboratory.
2. Results of interim samples, if any, from the site will be examined. (Interim samples are any samples that may have been taken from the site in the period between when the E. coli positive sample was taken and when it was determined to be E. coli positive.)
3. Arrangements will be made for the immediate collection of a repeat sample including, where possible, samples from upstream and downstream of the E. coli positive sample location.
4. Water treatment personnel will be contacted to determine if an interruption of source water disinfection had occurred in the period before the E. coli positive sample was taken.
5. The chlorine residual for the sample noted on the sampler's Water Sample Data Sheet will be reviewed to determine if a localized loss of disinfectant residual has occurred.
6. All water utility personnel will be contacted to determine if there has been any loss of pressure or other unusual events that may have led to contaminants entering the water system.
7. The need for boil water advisory will be evaluated and if deemed necessary by the MHO, the VCHA and the municipality will carry out various means to inform the public. Metro Vancouver will be informed of this public advisory.
8. The MHO and District staff shall determine the extent of the boil water advisory.
9. Metro Labs will initiate procedures necessary for the identification of E.coli with standard biochemical tests.
10. The District will provide the MHO with repeat sample results and continue to sample until three consecutive samples show no E.coli detectable per 100mLs.

## **8.2 Chemical or Biological Contamination Response**

In the event of chemical or biological contamination, in either of the source waters (Eagle Lake, Montizambert Creek) or in the distribution system, the MHO will be immediately notified. The chemical will be identified and any public health risk factors associated with the chemical presence in the potable water will be determined. Steps will be taken to isolate the contaminated zone area and the level of contamination will be determined through water testing and sampling. Through consultation with the MHO, a public advisory will be communicated. All steps to ensure public health and safety including the banning of water usage will be undertaken if necessary.

## **8.3 Turbidity Response**

In general, turbidity has not been a persistent problem in the District's water supply (see Section 4.2.1), although on occasion, elevated levels can be experienced. Water quality has improved greatly with the introduction of the Eagle Lake and Montizambert Membrane Filtration Facilities, which produce treated water with turbidity of less than 0.1 NTU. As well, the commissioning of the Seymour-Capilano twin tunnels in 2015, which ensures all the water received from Metro Vancouver has gone through the Seymour-Capilano Filtration Plant has had a positive effect.

Since all water supply sources to the District of West Vancouver are currently filtered, an elevated turbidity event is very unlikely. Nevertheless, if an elevated turbidity event does occur, representatives from Metro Vancouver, the Health Authorities and local municipalities will review communications protocols. Meanwhile, the District continues to follow an existing turbidity response plan, which was developed in cooperation with the VCHA. The approach understands the need to increase and maintain chlorine dosage rates and residuals during periods of elevated turbidity while minimizing the levels of disinfection by-products whenever possible.

The following actions will be taken regarding turbidity in source waters.

1. The District will conduct regular sampling of Eagle Lake and Montizambert sources to monitor turbidity.
2. The District will take into consideration the effectiveness of increased chlorine dosage, the chlorine contact time, the source of turbidity, and the quality of the Metro Vancouver supply in its response to minimizing the amount of turbidity entering the water system.
3. A turbidity level of >1 NTU will be the trigger for municipal operational actions.
4. During turbidity events >1 NTU, the level of primary chlorination at Eagle Lake and Montizambert sources and at any secondary chlorination points will be increased accordingly.
5. During turbidity events of >5 NTU, a rigorous sampling program for microbiological activity throughout the distribution system will be conducted.
6. During turbidity events of >5 NTU, a public communication may be issued in consultation with the Health Authority.

7. During turbidity events >2 NTU and <3 NTU, the District will consider switching to the Metro Vancouver supply, depending on the turbidity of that supply.
8. During turbidity events >3 NTU, the District will switch to the Metro Vancouver supply, if possible, should the turbidity of that supply be <1 NTU.
9. Two consecutive days of turbidity <1 NTU shall pass before lowering chlorine dosage to pre-event levels.
10. During turbidity events of >5 NTU and while the Eagle Lake treatment plant is in bypass mode, the District may issue a boil water advisory in conjunction with the MHO to residents receiving such water.
11. After a turbidity event of >5 NTU, two consecutive days of turbidity <1 NTU shall pass before rescinding the water quality advisory.

#### **8.4 Response to Interruption of Secondary Disinfection**

The District's SCADA system constantly monitors the secondary chlorination stations. This system automatically alerts utility personnel of any disinfection failures, all of which are reported to VCH. Utility personnel carry out immediate repairs to equipment and if necessary, manual disinfection is established. Chlorine residual samples are taken at various points in the distribution system to ensure adequate free chlorine residual is present. In cases where chlorine residual is less than 0.2 mg/L, municipal crews will flush the affected area until the desired level is achieved.

Upon notification by Metro Vancouver Operations that an interruption in disinfection has occurred at Metro facilities, the municipality will immediately commence monitoring of chlorine residuals at strategic locations in the Metro Vancouver supply area. The monitoring will continue until disinfection is resumed and desired levels have been reached within the distribution system.

No manual disinfection protocol was implemented in 2021.

## **9.0 CONCLUSIONS**

Overall, the residents of West Vancouver enjoy a very high quality of drinking water. The protected nature of the Eagle Lake and Montizambert Creek watersheds and the very low levels of E. coli, giardia, and cryptosporidium in the raw source waters are key factors.

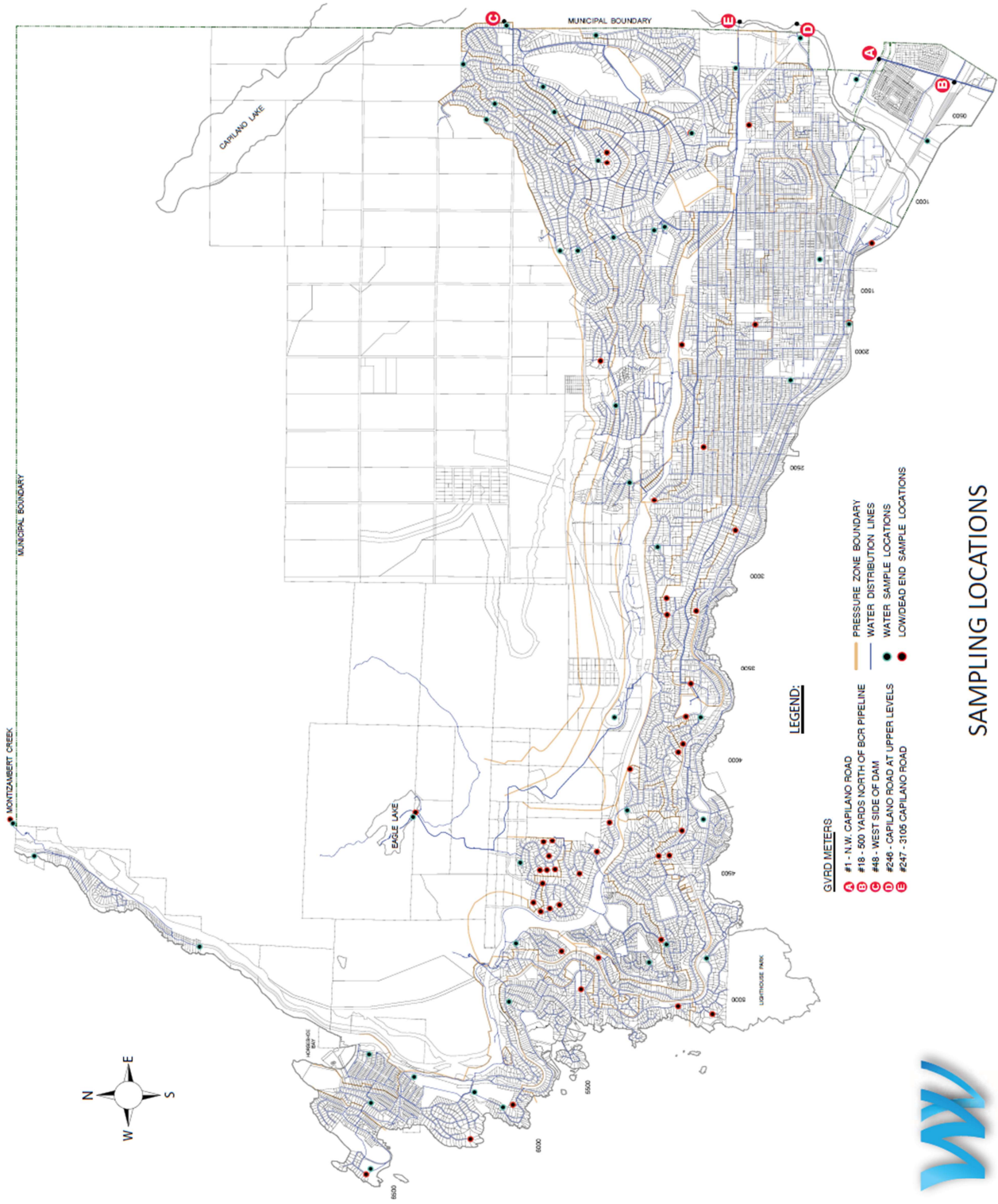
In 2021, the District's distribution water supply met all the requirements as outlined in the Guidelines for Canadian Drinking Water Quality.

District staff continues to take a balanced approach and employ best management practices in the operation and maintenance of the water system to maintain high water quality.

In closing, the District appreciates the good working relationship with public health staff and acknowledges the Health Authority as a partner in maintaining high quality drinking water in the municipality.

# APPENDIX A

## 1. Map of Water System Sampling Locations



SAMPLING LOCATIONS



## 2. Water Sampling Locations by Address

DISTRICT OF WEST VANCOUVER					
WATER SAMPLE LOCATIONS					
Supply Source	Address	Description	Flow Type	Sample #	Bottle #
<b>METRO VANCOUVER</b>	1020 Groveland Road	Sample Kiosk	High	DmWWR-711	G711
Require 12 samples	510 Ballantree Road	Sample Kiosk	Medium	DmWWR-712	G712
Bi-weekly	670 Holmbury Place (DBP Sample Only)	House	Low/Dead End	DmWWR-713	G713
	The Dale & Marine	Sample Kiosk	High	DmWWR-716	G716
	111 - 18th Street (DBP Sample Only)	Hydrant	Low/Dead End	DmWWR-717	G717
	885 - 22nd Street	Church	High	DmWWR-718	G718
	2600 Chelsea Court	Pump House	Medium	DmWWR-719	G719
	243 Rabbit Lane	Sample Kiosk	Low/Dead End	DmWWR-761	G761
	111 Bridge Road	Sample Kiosk	Medium	DmWWR-764	G764
	5459 West Vista Court	House	Low/Dead End	DmWWR-765	G765
	2185 Gisby Street	Sample Kiosk	Medium	DmWWR-768	G768
	1210 Chartwell Drive	Sample Kiosk	High	DmWWR-769	G769
	3828 Bayridge Avenue	Sample Kiosk	High	DmWWR-770	G770
	6406 Bruce St.	House	Medium	DmWWR-771	G771
	6470 Madrona Crescent	Reservoir	Medium	DmWWR-772	G772
	Whycliffe Park	Sample Kiosk	Low/Dead End	DmWWR-773	G773
	6117 Glen Eagles Drive	Sample Kiosk	High	DmWWR-774	G774
	3755 Cypress Bowl Road	Sample Kiosk	Medium	DmWWR-776	G776
	6190 Marine Drive	Sample Kiosk	Medium	DmWWR-778	G778
	1370 Burnside Road	Pump House	High	DmWWR-779	G779
	5634 Westhaven Road	Sample Kiosk	Medium	DmWWR-780	G780
	4520 Almondel Place	PRV Station	Medium	DmWWR-783	G783
	5759 Primrose Place	Sample Kiosk	Medium	DmWWR-784	G784
	4820 Headland Drive	Hydrant	High	DmWWR-785	G785
	1158 Millstream Road	Sample Kiosk	High	DmWWR-786	G786
	2711 Willoughby Road	Sample Kiosk	High	DmWWR-787	G787
	1551 Vinson Creek Road	Pump House	High	DmWWR-788	G788
	19 Glenmore Drive	Pump House	High	DmWWR-790	G790
	200 Keith Road	Klee Wyck Nursery	High	DmWWR-791	G791
	76 Bonnymuir Drive	Pump House	Medium	DmWWR-792	G792
	559 Kildonan Road	Sample Kiosk	Low/Dead End	DmWWR-793	G793
	702 Barnham Road	Sample Kiosk	Medium	DmWWR-794	G794
	620 Kenwood Road	Sample Kiosk	Medium	DmWWR-795	G795
	315 Mathers Avenue	House	High	DmWWR-796	G796
	395 Klahanie Court	Sample Kiosk	Medium	DmWWR-797	G797
	965 Cross Creek Road	Pump House	High	DmWWR-880	G880
	4778 Woodgreen Dr.	Sample Kiosk	High	DmWWR-710	G710
Sample locations may deviate slightly if sampling point is not accessible.					
Sampling Stations by Flow:	10% - Source	10% - Low Flow/Dead End	40% - Medium Flow	40% - High Flow	

DISTRICT OF WEST VANCOUVER					
WATER SAMPLE LOCATIONS					
Supply Source	Address	Description	Flow Type	Sample #	Bottle #
<b>Eagle Lake</b>	1020 Groveland Road	Sample Kiosk	High	DmWEAG-711	E711
Require 12/13 samples	510 Ballantree Road	Sample Kiosk	Medium	DmWEAG-712	E712
Bi - Weekly	670 Holmbury Place (DBP Sample Only)	House	Low/Dead End	DmWEAG-713	E713
	The Dale & Marine	Sample Kiosk	High	DmWEAG-716	E716
	2600 Chelsea Court	Pump House	Medium	DmWEAG-719	E719
	243 Rabbit Lane	Sample Kiosk	Low/Dead End	DmWEAG-761	E761
	5459 West Vista Court	House	Low	DmWEAG-765	E765
	2185 Gisby Street	Sample Kiosk	Medium	DmWEAG-768	E768
	4778 Woodgreen Drive	Sample Kiosk	High	DmWEAG-710	E710
	1210 Chartwell Drive	Sample Kiosk	High	DmWEAG-769	E769
	3828 Bayridge Avenue	Sample Kiosk	High	DmWEAG-770	E770
	6406 Bruce Street	House	Medium	DmWEAG-771	E771
	6470 Madrona Crescent	Reservoir	Medium	DmWEAG-772	E772
	Whycliffe Park	Sample Kiosk	Low/Dead End	DmWEAG-773	E773
	6117 Gleneagles Drive	Sample Kiosk	High	DmWEAG-774	E774
	3755 Cypress Bowl Road	Sample Kiosk	Medium	DmWEAG-776	E776
	6190 Marine Drive	Sample Kiosk	Medium	DmWEAG-778	E778
	1370 Burnside Road	Pump House	High	DmWEAG-779	E779
	5634 Westhaven Road	Sample Kiosk	Medium	DmWEAG-780	E780
	4520 Almondel Place	PRV Station	Medium	DmWEAG-783	E783
	5759 Primrose Place	Sample Kiosk	Medium	DmWEAG-784	E784
	4820 Headland Drive	Hydrant	High	DmWEAG-785	E785
	1158 Millstream Road	Sample Kiosk	High	DmWEAG-786	E786
	2711 Willoughby Road	Sample Kiosk	High	DmWEAG-787	E787
	1551 Vinson Creek Road	Pump House	High	DmWEAG-788	E788
	19 Glenmore Drive	Pump House	High	DmWEAG-790	E790
	76 Bonnymuir Drive	Pump House	Medium	DmWEAG-792	E792
	559 Kildonan Road	Sample Kiosk	Low/Dead End	DmWEAG-793	E793
	702 Barnham Road	Sample Kiosk	Medium	DmWEAG-794	E794
	620 Kenwood Road	Sample Kiosk	Medium	DmWEAG-795	E795
	315 Mathers Avenue	House	High	DmWEAG-796	E796
	965 Cross Creek Road	Pump House	High	DmWEAG-880	E880
	Eagle Lake ***	Source	Source	DmWEAG-LK1	E-LK1
<b>Montizambert Creek</b>	8005 Pasco Road	Sample Kiosk	Dead End	DmWMT Z-781	MZ-781
	8995 Lawrence Way	Sample Kiosk	Dead End	DmWMT Z-782	MZ-782
	Montizambert Creek ***	Source	Source	DmWMZ-CK1	MZ-CK1
<b>Metals Analysis</b>					
Semi - annual	8995 Lawrence Way	Marina - Hose Bib		DmWMZ-782	MZ-782
	Gleneagles Elementary School	Internal Faucet		DmWEAG/WVR-789	E/G-789
	Cypress Park Elementary School	Internal Faucet		DmWEAG/WVR-798	E/G-798
	Hollyburn Elementary School	Internal Faucet		DmWVR-799	G-799
Sample locations may deviate slightly if sampling point is not accessible.					
*** Denotes source sites are sampled semi-annually for detailed analysis.					
Sampling Stations by Flow: 10% - Source    10% - Low Flow/Dead End    40% - Medium Flow    40% - High Flow					

## APPENDIX B

### 1. Source Water Quality – Eagle Lake

Sample Name	Sample Type	Sample Location	Sample Date	Ecoli MPN/100mLs	HPC CFU/mL	Temperature °C	Total Coliform MPN/100mLs	Turbidity NTU
WEAG-LK1	Grab	Eagle Lake Source	4-Jan-21	<1	370	4	91	0.77
WEAG-LK1	Grab	Eagle Lake Source	18-Jan-21	<1	270	5	64	0.26
WEAG-LK1	Grab	Eagle Lake Source	1-Feb-21	<1	200	5	26	0.36
WEAG-LK1	Grab	Eagle Lake Source	17-Feb-21	<1	260	5	12	0.2
WEAG-LK1	Grab	Eagle Lake Source	1-Mar-21	<1	390	5	88	0.22
WEAG-LK1	Grab	Eagle Lake Source	15-Mar-21	<1	1400	6	52	0.29
WEAG-LK1	Grab	Eagle Lake Source	29-Mar-21	<1	410	6	11	0.25
WEAG-LK1	Grab	Eagle Lake Source	12-Apr-21	<1	230	7	19	0.28
WEAG-LK1	Grab	Eagle Lake Source	26-Apr-21	<1	280	12	77	0.26
WEAG-LK1	Grab	Eagle Lake Source	10-May-21	<1	1100	13	201	0.25
WEAG-LK1	Grab	Eagle Lake Source	26-May-21	<1	1100	11	98	0.27
WEAG-LK1	Grab	Eagle Lake Source	7-Jun-21	<1	200	14	19	0.23
WEAG-LK1	Grab	Eagle Lake Source	21-Jun-21	<1	200	12	37	0.27
WEAG-LK1	Grab	Eagle Lake Source	5-Jul-21	<1	470	15	71	0.32
WEAG-LK1	Grab	Eagle Lake Source	19-Jul-21	<1	220	15	56	0.2
WEAG-LK1	Grab	Eagle Lake Source	4-Aug-21	<1	160	23	32	0.27
WEAG-LK1	Grab	Eagle Lake Source	16-Aug-21	1	130	20	62	0.25
WEAG-LK1	Grab	Eagle Lake Source	30-Aug-21	<1	110	17	31	0.26
WEAG-LK1	Grab	Eagle Lake Source	13-Sep-21	<1	150	15	14	0.37
WEAG-LK1	Grab	Eagle Lake Source	27-Sep-21	1	360	15	21	0.46
WEAG-LK1	Grab	Eagle Lake Source	13-Oct-21	<1	360	9	22	0.33
WEAG-LK1	Grab	Eagle Lake Source	25-Oct-21	2	510	9	89	0.34
WEAG-LK1	Grab	Eagle Lake Source	8-Nov-21	1	570	8	101	0.28
WEAG-LK1	Grab	Eagle Lake Source	22-Nov-21	<1	380	7	83	0.34
WEAG-LK1	Grab	Eagle Lake Source	6-Dec-21	<1	360	6	39	0.27
WEAG-LK1	Grab	Eagle Lake Source	20-Dec-21	<1	NA	6	41	0.3



## 2. Source Water Quality – Montizambert Creek

Sample Name	Sample Type	Sample Location	Sample Date	Ecoli MPN/100mLs	HPC CFU/mL	Temperature °C	Total Coliform MPN/100mLs	Turbidity NTU
WMZ-CK1	Grab	Montizambert Creek Source Water	11-Jan-21	<1	220	5	35	3.4
WMZ-CK1	Grab	Montizambert Creek Source Water	25-Jan-21	<1	24	5	47	1.8
WMZ-CK1	Grab	Montizambert Creek Source Water	8-Feb-21	<1	150	4	16	1.1
WMZ-CK1	Grab	Montizambert Creek Source Water	22-Feb-21	<1	250	6	16	1.5
WMZ-CK1	Grab	Montizambert Creek Source Water	8-Mar-21	<1	200	7	15	0.58
WMZ-CK1	Grab	Montizambert Creek Source Water	22-Mar-21	<1	LA	5	10	1.9
WMZ-CK1	Grab	Montizambert Creek Source Water	7-Apr-21	<1	110	7	16	0.62
WMZ-CK1	Grab	Montizambert Creek Source Water	19-Apr-21	<1	210	11	10	17
WMZ-CK1	Grab	Montizambert Creek Source Water	3-May-21	<1	340	12	11	4.3
WMZ-CK1	Grab	Montizambert Creek Source Water	17-May-21	<1	330	11	61	0.55
WMZ-CK1	Grab	Montizambert Creek Source Water	31-May-21	<1	36	13	36	0.98
WMZ-CK1	Grab	Montizambert Creek Source Water	14-Jun-21	3	500	8	236	1.9
WMZ-CK1	Grab	Montizambert Creek Source Water	28-Jun-21	<1	290	15	12	0.59
WMZ-CK1	Grab	Montizambert Creek Source Water	12-Jul-21	<1	190	14	143	0.44
WMZ-CK1	Grab	Montizambert Creek Source Water	26-Jul-21	<1	130	14	276	0.44
WMZ-CK1	Grab	Montizambert Creek Source Water	9-Aug-21	4	610	14	411	0.61
WMZ-CK1	Grab	Montizambert Creek Source Water	23-Aug-21	<1	390	14	435	0.48
WMZ-CK1	Grab	Montizambert Creek Source Water	8-Sep-21	1	300	12	435	0.54
WMZ-CK1	Grab	Montizambert Creek Source Water	20-Sep-21	3	590	12	326	2.1
WMZ-CK1	Grab	Montizambert Creek Source Water	4-Oct-21	3	360	10	107	1.5
WMZ-CK1	Grab	Montizambert Creek Source Water	18-Oct-21	<1	760	14	117	1.8
WMZ-CK1	Grab	Montizambert Creek Source Water	1-Nov-21	<1	210	8	32	0.56
WMZ-CK1	Grab	Montizambert Creek Source Water	15-Nov-21	2	660	11	71	4.1
WMZ-CK1	Grab	Montizambert Creek Source Water	29-Nov-21	<1	200	7	11	3.6
WMZ-CK1	Grab	Montizambert Creek Source Water	13-Dec-21	<1	100	6	5	1.1

### 3. Source Water Chemistry

		1st Half	2nd Half	1st Half	2nd Half
Sample Name		WVR- EAGLE_LAKE	WVR- EAGLE_LAKE	WVR- MONT_CREEK	WVR- MONT_CREEK
Sample Description		Eagle Lake Source	Eagle Lake Source	Montizambert Creek Source Water	Montizambert Creek Source Water
Sample Date & Time		2021/06/07 13:18	2021/12/06 9:35	2021/06/07 12:45	2021/12/06 10:51
Sample Type		GRAB	GRAB	GRAB	GRAB
Alkalinity as CaCO3	mg/L	2.9	2.2	1.5	1.5
Aluminium Dissolved	µg/L	93	115	12900	7510
Aluminum Total	µg/L	109	130	11100	9850
Antimony Total	µg/L	<0.5	<0.5	<0.5	<0.5
Arsenic Total	µg/L	<0.5	<0.5	<0.5	<0.5
Barium Total	µg/L	2.6	2.9	1.3	1.7
Boron Total	µg/L	<10	<10	<10	<10
Cadmium Total	µg/L	<0.2	<0.2	<0.2	<0.2
Calcium Total	µg/L	930	945	1070	1750
Carbon Organic - Total	mg/L	2.1	2.8	3.5	1.8
Chloride	mg/L	0.6	0.9	11.7	4.6
Chromium Total	µg/L	<0.05	<0.05	0.17	0.13
Color - Apparent	ACU	14	21	32	19
Color - True	TCU	13	16	25	12
Conductivity	µmhos/cm	10	10	45	20
Copper Total	µg/L	2.1	2.0	49.4	11.9
Cyanide Total	mg/L	<0.02	<0.02	<0.02	<0.02
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05
Hardness as CaCO3	mg/L	3.0	3.1	3.2	5.3
Iron Dissolved	µg/L	24	26	32	11
Iron Total	µg/L	34	36	40	25
Lead Total	µg/L	<0.5	<0.5	4.6	0.6
Magnesium Total	µg/L	154	168	131	236
Manganese Dissolved	µg/L	3.9	3.2	<0.5	<0.5
Manganese Total	µg/L	4.3	3.7	0.6	0.5
Mercury Total	µg/L	<0.05	<0.05	<0.05	<0.05
Nickel Total	µg/L	<0.5	<0.5	<0.5	<0.5
Nitrogen - Ammonia as N	mg/L	<0.02	<0.02	<0.02	<0.02
Nitrogen - Nitrate as N	mg/L	<0.01	0.01	<0.01	0.02
Nitrogen - Nitrite as N	mg/L	<0.01	<0.01	<0.01	<0.01
pH	pH units	6.5	6.3	5.1	5.9
Phenol	mg/L	<0.005	<0.005	<0.005	<0.005
Phosphorus Dissolved	µg/L	<10	<10	<10	<10
Phosphorus Total	µg/L	<10	11	<10	<10
Potassium Total	µg/L	84	97	60	112
Residue Total	mg/L	15	16	71	35
Residue Total Dissolved	mg/L	13	14	64	31
Residue Total Fixed	mg/L	4	10	42	24
Residue Total Volatile	mg/L	11	6	28	12
Selenium Total	µg/L	<0.5	<0.5	<0.5	<0.5
Silica as SiO2	mg/L	3.4	3.2	2.9	4.9
Silver Total	µg/L	<0.5	<0.5	<0.5	<0.5
Sodium Total	µg/L	747	856	583	1050
Sulphate	mg/L	0.7	0.9	0.9	1.4
UV Absorbance 254 nm	Abs/cm	0.088	0.110	0.130	0.072
Zinc Total	µg/L	5.1	3.4	51.6	24.1

## APPENDIX C

### 1. Semi Annual Metals Monitoring Results

				1st Half	2nd Half	1st Half	2nd Half	
				Sample Name	WEAG-789	WEAG-789	WMZ-782	WMZ-782
				Sample Location	Gleneagles Elementary - 6350 Marine Drive	Gleneagles Elementary - 6350 Marine Drive	8995 Lawrence Way, Mtzb Creek	8995 Lawrence Way, Mtzb Creek
				Sample Date	2021/04/22 8:30	2021/11/08 9:45	2021/04/22 8:00	2021/11/08 9:25
				Canadian Guideline	Sample Date	Sample Type	Sample Type	Sample Type
Analysis	Limit	Reason	Sample Type	GRAB	GRAB	GRAB	GRAB	
Aluminum Total	200	Aesthetic	µg/L	136	34	34	21	
Antimony Total	6	Health	µg/L	<0.5	<0.5	<0.5	<0.5	
Arsenic Total	10	Health	µg/L	<0.5	<0.5	<0.5	<0.5	
Barium Total	2000	Health	µg/L	1.7	3.6	3.5	2.3	
Boron Total	5000	Health	µg/L	<10	<10	<10	<10	
Cadmium Total	7	Health	µg/L	<0.2	<0.2	<0.2	<0.2	
Calcium Total	none		µg/L	1030	1180	1430	1380	
Chromium Total	50	Health	µg/L	<0.05	<0.05	<0.05	<0.05	
Cobalt Total	none		µg/L	<0.5	<0.5	<0.5	<0.5	
Copper Total	≤ 2000	Health	µg/L	7.2	15.9	7.4	7.8	
Iron Total	≤300	Aesthetic	µg/L	<5	15	285	139	
Lead Total	5	Health	µg/L	<0.5	<0.5	<0.5	<0.5	
Magnesium Total	none		µg/L	170	168	171	169	
Manganese Total	120	Health	µg/L	<0.5	2.9	1.9	1.2	
Mercury Total	1.0	Health	µg/L	<0.05	<0.05	<0.05	<0.05	
Molybdenum Total	none		µg/L	<0.5	<0.5	<0.5	<0.5	
Nickel Total	none		µg/L	<0.5	<0.5	<0.5	<0.5	
Potassium Total	none		µg/L	87	100	92	105	
Selenium Total	50	Health	µg/L	<0.5	<0.5	<0.5	<0.5	
Silver Total	none		µg/L	<0.5	<0.5	<0.5	<0.5	
Sodium Total	≤200,000	Aesthetic	µg/L	4600	3820	3580	4300	
Zinc Total	≤ 5000	Aesthetic	µg/L	<3.0	<3.0	57.9	<3.0	

				1st Half	2nd Half	1st Half	2nd Half	
				Sample Name	WVR-798	WVR-798	WVR-799	WVR-799
				Sample Location	Cypress Park Elementary	Cypress Park Elementary	Hollyburn Elementary	Hollyburn Elementary
				Sample Date	2021/04/22 9:00	2021/11/08 10:15	2021/04/22 9:30	2021/11/08 10:50
				Canadian Guideline	Sample Date	Sample Type	Sample Type	Sample Type
Analysis	Limit	Reason	Sample Type	GRAB	GRAB	GRAB	GRAB	
Aluminum Total	200	Aesthetic	µg/L	21	52	21	44	
Antimony Total	6	Health	µg/L	<0.5	<0.5	<0.5	<0.5	
Arsenic Total	10	Health	µg/L	<0.5	<0.5	<0.5	<0.5	
Barium Total	2000	Health	µg/L	2.8	2.1	2.9	2.2	
Boron Total	5000	Health	µg/L	<10	<10	<10	<10	
Cadmium Total	7	Health	µg/L	<0.2	<0.2	<0.2	<0.2	
Calcium Total	none		µg/L	4480	7740	4410	7630	
Chromium Total	50	Health	µg/L	<0.05	<0.05	<0.05	<0.05	
Cobalt Total	none		µg/L	<0.5	<0.5	<0.5	<0.5	
Copper Total	≤ 2000	Health	µg/L	51.8	19.4	37.0	16.6	
Iron Total	≤300	Aesthetic	µg/L	18	18	25	16	
Lead Total	5	Health	µg/L	<0.5	<0.5	<0.5	<0.5	
Magnesium Total	none		µg/L	194	186	219	191	
Manganese Total	120	Health	µg/L	2.2	2.6	4.7	2.5	
Mercury Total	1.0	Health	µg/L	<0.05	<0.05	<0.05	<0.05	
Molybdenum Total	none		µg/L	<0.5	<0.5	<0.5	<0.5	
Nickel Total	none		µg/L	<0.5	<0.5	<0.5	<0.5	
Potassium Total	none		µg/L	175	150	173	144	
Selenium Total	50	Health	µg/L	<0.5	<0.5	<0.5	<0.5	
Silver Total	none		µg/L	<0.5	<0.5	<0.5	<0.5	
Sodium Total	≤200,000	Aesthetic	µg/L	1730	1550	1630	1510	
Zinc Total	≤ 5000	Aesthetic	µg/L	3.6	<3.0	<3.0	<3.0	

## 2. 2021 Disinfection By-Products Quarterly Averages

Sample Site	Date Sampled	Total THM Quarterly Average (Guideline Limit 100 ppb)	Total HAA Quarterly Average (Guideline Limit 80 ppb)
WEAG-772	24-Feb-21	50	36
WEAG-772	1-Jun-21	63	48
WEAG-772	24-Aug-21	63	42
WEAG-772	23-Nov-21	68	46
WEAG-773	24-Feb-21	69	36
WEAG-773	1-Jun-21	80	45
WEAG-773	24-Aug-21	85	35
WEAG-773	23-Nov-21	88	38
WEAG-776	24-Feb-21	40	29
WEAG-776	1-Jun-21	52	40
WEAG-776	24-Aug-21	48	31
WEAG-776	23-Nov-21	50	41
WEAG-778	24-Feb-21	44	36
WEAG-778	1-Jun-21	54	47
WEAG-778	24-Aug-21	60	40
WEAG-778	23-Nov-21	65	36
WMZ-781	24-Feb-21	33	38
WMZ-781	1-Jun-21	33	37
WMZ-781	24-Aug-21	21	25
WMZ-781	23-Nov-21	19	21
WMZ-782	24-Feb-21	17	28
WMZ-782	1-Jun-21	16	30
WMZ-782	24-Aug-21	15	27
WMZ-782	23-Nov-21	12	20
WVR-713	24-Feb-21	30	28
WVR-713	1-Jun-21	24	23
WVR-713	24-Aug-21	24	20
WVR-713	23-Nov-21	25	19
WVR-716	24-Feb-21	47	40
WVR-716	1-Jun-21	57	50
WVR-716	24-Aug-21	61	42
WVR-716	23-Nov-21	65	46
WVR-717	24-Feb-21	23	21
WVR-717	1-Jun-21	23	21
WVR-717	24-Aug-21	24	17
WVR-717	23-Nov-21	25	16
WVR-764	24-Feb-21	22	17
WVR-764	1-Jun-21	21	19
WVR-764	24-Aug-21	22	16
WVR-764	23-Nov-21	22	15

### 3. Water Sampling Results

Sample Name	Sample Description	Sample Date	Sample Type	Chlorine Free mg/L	Ecoli	HPC	Temperature	Total Coliform	Turbidity
					CFU/100mLs	CFU/mL	°C	CFU/100mLs	NTU
WVR-711	1020 Groveland Road	4-Jan-21	GRAB	0.94	<1	<2	5	<1	0.18
WVR-711	1020 Groveland Road	1-Feb-21	GRAB	0.69	<1	2	5	<1	0.34
WVR-711	1020 Groveland Road	1-Mar-21	GRAB	0.91	<1	<2	7	<1	0.19
WVR-711	1020 Groveland Road	29-Mar-21	GRAB	0.82	<1	6	7	<1	0.23
WVR-711	1020 Groveland Road	26-Apr-21	GRAB	0.84	<1	8	12	<1	0.43
WVR-711	1020 Groveland Road	26-May-21	GRAB	0.59	<1	82	13	<1	0.13
WVR-711	1020 Groveland Road	21-Jun-21	GRAB	0.6	<1	18	13	<1	0.15
WVR-711	1020 Groveland Road	19-Jul-21	GRAB	0.66	<1	6	18	<1	0.13
WVR-711	1020 Groveland Road	16-Aug-21	GRAB	0.66	<1	6	18	<1	0.18
WVR-711	1020 Groveland Road	13-Sep-21	GRAB	0.76	<1	18	17	<1	0.25
WVR-711	1020 Groveland Road	13-Oct-21	GRAB	0.81	<1	16	12	<1	0.35
WVR-711	1020 Groveland Road	8-Nov-21	GRAB	0.9	<1	16	10	<1	0.17
WVR-711	1020 Groveland Road	6-Dec-21	GRAB	0.68	<1	6	8	<1	0.11
WVR-712	510 Ballantree Road	4-Jan-21	GRAB	0.35	<1	4	5	<1	0.13
WVR-712	510 Ballantree Road	1-Feb-21	GRAB	0.38	<1	2	5	<1	0.12
WVR-712	510 Ballantree Road	1-Mar-21	GRAB	0.26	<1	180	7	<1	0.16
WVR-712	510 Ballantree Road	29-Mar-21	GRAB	0.39	<1	<2	7	<1	0.23
WVR-712	510 Ballantree Road	26-Apr-21	GRAB	0.51	<1	<2	12	<1	0.13
WVR-712	510 Ballantree Road	26-May-21	GRAB	0.55	<1	<2	13	<1	0.13
WVR-712	510 Ballantree Road	21-Jun-21	GRAB	0.49	<1	<2	13	<1	0.11
WVR-712	510 Ballantree Road	19-Jul-21	GRAB	0.31	<1	<2	18	<1	0.17
WVR-712	510 Ballantree Road	16-Aug-21	GRAB	0.54	<1	<2	18	<1	0.18
WVR-712	510 Ballantree Road	13-Sep-21	GRAB	0.51	<1	40	15	<1	0.11
WVR-712	510 Ballantree Road	13-Oct-21	GRAB	0.31	<1	<2	12	<1	0.12
WVR-712	510 Ballantree Road	8-Nov-21	GRAB	0.31	<1	24	10	<1	0.14
WVR-712	510 Ballantree Road	6-Dec-21	GRAB	0.27	<1	18	8	<1	0.11
WVR-716	The Dale & Marine	28-Jun-21	GRAB	0.88	<1	4	16	<1	0.19
WVR-718	885 - 22nd Street	25-Jan-21	GRAB	0.67	<1	<2	5	<1	0.12
WVR-718	885 - 22nd Street	22-Feb-21	GRAB	0.62	<1	<2	6	<1	0.81
WVR-718	885 - 22nd Street	22-Mar-21	GRAB	0.59	<1	<2	6	<1	0.18
WVR-718	885 - 22nd Street	19-Apr-21	GRAB	0.71	<1	<2	11	<1	0.16
WVR-718	885 - 22nd Street	17-May-21	GRAB	0.59	<1	<2	12	<1	0.16
WVR-718	885 - 22nd Street	14-Jun-21	GRAB	0.6	<1	<2	15	<1	0.1
WVR-718	885 - 22nd Street	12-Jul-21	GRAB	0.41	<1	<2	17	<1	0.11
WVR-718	885 - 22nd Street	9-Aug-21	GRAB	0.71	<1	<2	16	<1	0.11
WVR-718	885 - 22nd Street	8-Sep-21	GRAB	0.67	<1	<2	15	<1	0.13
WVR-718	885 - 22nd Street	4-Oct-21	GRAB	0.52	<1	<2	11	<1	0.15
WVR-718	885 - 22nd Street	1-Nov-21	GRAB	0.45	<1	<2	11	<1	0.17
WVR-718	885 - 22nd Street	29-Nov-21	GRAB	0.63	<1	18	8	<1	0.16
WVR-761	243 Rabbit Lane	18-Jan-21	GRAB	0.55	<1	12	5	<1	0.2
WVR-761	243 Rabbit Lane	17-Feb-21	GRAB	0.49	<1	88	5	<1	0.16
WVR-761	243 Rabbit Lane	15-Mar-21	GRAB	0.51	<1	8	6	<1	0.14
WVR-761	243 Rabbit Lane	12-Apr-21	GRAB	0.6	<1	6	7	<1	0.19
WVR-761	243 Rabbit Lane	10-May-21	GRAB	0.5	<1	10	13	<1	0.13
WVR-761	243 Rabbit Lane	7-Jun-21	GRAB	0.36	<1	20	13	<1	0.12
WVR-761	243 Rabbit Lane	5-Jul-21	GRAB	0.34	<1	16	16	<1	0.12
WVR-761	243 Rabbit Lane	4-Aug-21	GRAB	0.46	<1	6	20	<1	0.3
WVR-761	243 Rabbit Lane	30-Aug-21	GRAB	0.37	<1	36	17	<1	0.17
WVR-761	243 Rabbit Lane	27-Sep-21	GRAB	0.3	<1	14	15	<1	0.29
WVR-761	243 Rabbit Lane	25-Oct-21	GRAB	0.35	<1	4	12	<1	0.14
WVR-761	243 Rabbit Lane	22-Nov-21	GRAB	0.65	<1	18	9	<1	0.15
WVR-761	243 Rabbit Lane	20-Dec-21	GRAB	0.54	<1	NA	6	<1	0.2
WVR-764	111 Bridge Road	18-Jan-21	GRAB	0.68	<1	4	5	<1	0.23
WVR-764	111 Bridge Road	17-Feb-21	GRAB	0.67	<1	<2	5	<1	0.11
WVR-764	111 Bridge Road	15-Mar-21	GRAB	0.78	<1	<2	6	<1	0.11
WVR-764	111 Bridge Road	12-Apr-21	GRAB	0.83	<1	<2	7	<1	0.18
WVR-764	111 Bridge Road	10-May-21	GRAB	0.89	<1	<2	13	<1	0.11
WVR-764	111 Bridge Road	7-Jun-21	GRAB	0.75	<1	<2	13	<1	0.11
WVR-764	111 Bridge Road	5-Jul-21	GRAB	0.77	<1	<2	14	<1	0.15
WVR-764	111 Bridge Road	4-Aug-21	GRAB	0.78	<1	<2	16	<1	0.25
WVR-764	111 Bridge Road	30-Aug-21	GRAB	1.01	<1	<2	17	<1	0.11
WVR-764	111 Bridge Road	27-Sep-21	GRAB	0.73	<1	6	15	<1	0.25
WVR-764	111 Bridge Road	25-Oct-21	GRAB	0.87	<1	<2	12	<1	0.27
WVR-764	111 Bridge Road	22-Nov-21	GRAB	0.86	<1	<2	9	<1	0.15
WVR-764	111 Bridge Road	20-Dec-21	GRAB	0.67	<1	NA	6	<1	0.27

Sample Name	Sample Description	Sample Date	Sample Type	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WVR-765	5459 West Vista Court	28-Jun-21	GRAB	0.82	<1	<2	17	<1	0.11
WVR-770	3828 Bayridge Avenue	28-Jun-21	GRAB	0.64	<1	<2	16	<1	0.14
WVR-771	6588 Royal Avenue	28-Jun-21	GRAB	0.94	<1	4	16	<1	0.44
WVR-772	6470 Madrona Crescent	28-Jun-21	GRAB	0.95	<1	<2	17	<1	0.42
WVR-773	Whytcliffe Park	28-Jun-21	GRAB	0.42	<1	110	19	<1	0.09
WVR-778	6190 Marine Drive	28-Jun-21	GRAB	1	<1	2	18	<1	0.39
WVR-780	5634 Westhaven Road	28-Jun-21	GRAB	1.04	<1	2	16	<1	0.18
WVR-784	5759 Primrose Place	28-Jun-21	GRAB	0.74	<1	<2	16	<1	0.4
WVR-785	4820 Headland Drive	28-Jun-21	GRAB	1.05	<1	4	17	<1	0.51
WVR-790	19 Glenmore Drive	4-Jan-21	GRAB	0.59	<1	<2	5	<1	0.17
WVR-790	19 Glenmore Drive	18-Jan-21	GRAB	0.61	<1	<2	5	<1	0.17
WVR-790	19 Glenmore Drive	1-Feb-21	GRAB	0.49	<1	<2	5	<1	0.14
WVR-790	19 Glenmore Drive	17-Feb-21	GRAB	0.69	<1	<2	5	<1	0.21
WVR-790	19 Glenmore Drive	1-Mar-21	GRAB	0.6	<1	6	7	<1	0.14
WVR-790	19 Glenmore Drive	15-Mar-21	GRAB	0.71	<1	<2	6	<1	0.15
WVR-790	19 Glenmore Drive	29-Mar-21	GRAB	0.64	<1	<2	7	<1	0.23
WVR-790	19 Glenmore Drive	12-Apr-21	GRAB	0.71	<1	<2	7	<1	0.2
WVR-790	19 Glenmore Drive	26-Apr-21	GRAB	0.71	<1	<2	12	<1	0.15
WVR-790	19 Glenmore Drive	10-May-21	GRAB	0.71	<1	<2	13	<1	0.1
WVR-790	19 Glenmore Drive	26-May-21	GRAB	0.74	<1	<2	13	<1	0.12
WVR-790	19 Glenmore Drive	7-Jun-21	GRAB	0.67	<1	<2	12	<1	0.13
WVR-790	19 Glenmore Drive	21-Jun-21	GRAB	0.73	<1	<2	13	<1	0.13
WVR-790	19 Glenmore Drive	5-Jul-21	GRAB	0.79	<1	<2	14	<1	0.25
WVR-790	19 Glenmore Drive	19-Jul-21	GRAB	0.73	<1	<2	15	<1	0.13
WVR-790	19 Glenmore Drive	4-Aug-21	GRAB	0.84	<1	<2	16	<1	0.32
WVR-790	19 Glenmore Drive	16-Aug-21	GRAB	0.8	<1	<2	16	<1	0.19
WVR-790	19 Glenmore Drive	30-Aug-21	GRAB	0.82	<1	<2	17	<1	0.13
WVR-790	19 Glenmore Drive	13-Sep-21	GRAB	0.76	<1	<2	15	<1	0.15
WVR-790	19 Glenmore Drive	27-Sep-21	GRAB	0.74	<1	4	15	<1	0.17
WVR-790	19 Glenmore Drive	25-Oct-21	GRAB	0.68	<1	<2	11	<1	0.16
WVR-790	19 Glenmore Drive	8-Nov-21	GRAB	0.63	<1	<2	10	<1	0.15
WVR-790	19 Glenmore Drive	22-Nov-21	GRAB	0.66	<1	<2	9	<1	0.15
WVR-790	19 Glenmore Drive	6-Dec-21	GRAB	0.6	<1	2	5	<1	0.13
WVR-790	19 Glenmore Drive	20-Dec-21	GRAB	0.69	<1	NA	6	<1	0.16
WVR-791	200 Keith Road	4-Jan-21	GRAB	0.62	<1	<2	5	<1	0.1
WVR-791	200 Keith Road	1-Feb-21	GRAB	0.71	<1	2	5	<1	0.28
WVR-791	200 Keith Road	1-Mar-21	GRAB	0.57	<1	2	7	<1	0.1
WVR-791	200 Keith Road	29-Mar-21	GRAB	0.68	<1	2	7	<1	0.18
WVR-791	200 Keith Road	26-Apr-21	GRAB	0.85	<1	2	12	<1	0.16
WVR-791	200 Keith Road	26-May-21	GRAB	0.69	<1	<2	13	<1	0.15
WVR-791	200 Keith Road	21-Jun-21	GRAB	0.81	<1	<2	12	<1	0.42
WVR-791	200 Keith Road	19-Jul-21	GRAB	0.64	<1	<2	17	<1	0.13
WVR-791	200 Keith Road	16-Aug-21	GRAB	0.76	<1	<2	16	<1	0.24
WVR-791	200 Keith Road	13-Sep-21	GRAB	0.81	<1	2	14	<1	0.19
WVR-791	200 Keith Road	13-Oct-21	GRAB	0.84	<1	<2	11	<1	0.38
WVR-791	200 Keith Road	8-Nov-21	GRAB	0.59	<1	<2	10	<1	0.15
WVR-791	200 Keith Road	6-Dec-21	GRAB	0.72	<1	<2	6	<1	0.21
WVR-792	76 Bonnymuir Drive	4-Jan-21	GRAB	0.63	<1	<2	5	<1	0.16
WVR-792	76 Bonnymuir Drive	18-Jan-21	GRAB	0.63	<1	<2	5	<1	0.16
WVR-792	76 Bonnymuir Drive	1-Feb-21	GRAB	0.51	<1	2	5	<1	0.22
WVR-792	76 Bonnymuir Drive	17-Feb-21	GRAB	0.79	<1	<2	5	<1	0.2
WVR-792	76 Bonnymuir Drive	1-Mar-21	GRAB	0.57	<1	8	7	<1	0.59
WVR-792	76 Bonnymuir Drive	15-Mar-21	GRAB	0.68	<1	<2	6	<1	0.56
WVR-792	76 Bonnymuir Drive	29-Mar-21	GRAB	0.74	<1	<2	7	<1	0.21
WVR-792	76 Bonnymuir Drive	12-Apr-21	GRAB	0.67	<1	<2	7	<1	0.62
WVR-792	76 Bonnymuir Drive	26-Apr-21	GRAB	0.72	<1	<2	12	<1	0.28
WVR-792	76 Bonnymuir Drive	10-May-21	GRAB	0.72	<1	<2	13	<1	0.17
WVR-792	76 Bonnymuir Drive	26-May-21	GRAB	0.72	<1	<2	13	<1	0.26
WVR-792	76 Bonnymuir Drive	7-Jun-21	GRAB	0.66	<1	<2	12	<1	0.13
WVR-792	76 Bonnymuir Drive	21-Jun-21	GRAB	0.68	<1	<2	13	<1	0.22
WVR-792	76 Bonnymuir Drive	5-Jul-21	GRAB	0.69	<1	2	16	<1	0.27
WVR-792	76 Bonnymuir Drive	19-Jul-21	GRAB	0.52	<1	<2	15	<1	0.11
WVR-792	76 Bonnymuir Drive	4-Aug-21	GRAB	0.79	<1	6	16	<1	0.34
WVR-792	76 Bonnymuir Drive	16-Aug-21	GRAB	0.73	<1	4	17	<1	0.21
WVR-792	76 Bonnymuir Drive	30-Aug-21	GRAB	0.71	<1	18	17	<1	0.16
WVR-792	76 Bonnymuir Drive	13-Sep-21	GRAB	0.74	<1	16	15	<1	0.18
WVR-792	76 Bonnymuir Drive	27-Sep-21	GRAB	0.71	<1	6	15	<1	0.15
WVR-792	76 Bonnymuir Drive	25-Oct-21	GRAB	0.61	<1	2	12	<1	0.22
WVR-792	76 Bonnymuir Drive	8-Nov-21	GRAB	0.63	<1	2	10	<1	0.15

Sample Name	Sample Description	Sample Date	Sample Type	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WVR-792	76 Bonnymuir Drive	22-Nov-21	GRAB	0.61	<1	<2	9	<1	0.15
WVR-792	76 Bonnymuir Drive	6-Dec-21	GRAB	0.45	<1	<2	8	<1	0.16
WVR-792	76 Bonnymuir Drive	20-Dec-21	GRAB	0.58	<1	NA	6	<1	0.2
WVR-793	559 Kildonan Road	4-Jan-21	GRAB	0.38	<1	<2	5	<1	0.17
WVR-793	559 Kildonan Road	1-Feb-21	GRAB	0.38	<1	<2	5	<1	0.09
WVR-793	559 Kildonan Road	1-Mar-21	GRAB	0.41	<1	<2	7	<1	0.3
WVR-793	559 Kildonan Road	29-Mar-21	GRAB	0.42	<1	2	7	<1	0.16
WVR-793	559 Kildonan Road	26-Apr-21	GRAB	0.48	<1	<2	12	<1	0.13
WVR-793	559 Kildonan Road	26-May-21	GRAB	0.59	<1	<2	13	<1	0.11
WVR-793	559 Kildonan Road	21-Jun-21	GRAB	0.54	<1	<2	13	<1	0.12
WVR-793	559 Kildonan Road	19-Jul-21	GRAB	0.46	<1	2	18	<1	0.12
WVR-793	559 Kildonan Road	16-Aug-21	GRAB	0.48	<1	34	20	<1	0.22
WVR-793	559 Kildonan Road	13-Sep-21	GRAB	0.57	<1	52	15	<1	0.19
WVR-793	559 Kildonan Road	13-Oct-21	GRAB	0.42	<1	14	12	<1	0.12
WVR-793	559 Kildonan Road	8-Nov-21	GRAB	0.46	<1	<2	10	<1	0.11
WVR-793	559 Kildonan Road	6-Dec-21	GRAB	0.26	<1	2	8	<1	0.11
WVR-794	702 Barnham Road	4-Jan-21	GRAB	0.69	<1	<2	5	<1	0.21
WVR-794	702 Barnham Road	1-Feb-21	GRAB	0.71	<1	2	5	<1	0.22
WVR-794	702 Barnham Road	1-Mar-21	GRAB	0.8	<1	16	7	<1	0.14
WVR-794	702 Barnham Road	29-Mar-21	GRAB	0.76	<1	<2	7	<1	0.19
WVR-794	702 Barnham Road	26-Apr-21	GRAB	0.88	<1	8	12	<1	0.2
WVR-794	702 Barnham Road	26-May-21	GRAB	0.69	<1	<2	13	<1	0.18
WVR-794	702 Barnham Road	21-Jun-21	GRAB	0.79	<1	2	13	<1	0.54
WVR-794	702 Barnham Road	19-Jul-21	GRAB	0.52	<1	4	17	<1	0.57
WVR-794	702 Barnham Road	16-Aug-21	GRAB	0.71	<1	2	19	<1	0.23
WVR-794	702 Barnham Road	13-Sep-21	GRAB	0.81	<1	8	17	<1	0.15
WVR-794	702 Barnham Road	13-Oct-21	GRAB	0.79	<1	4	12	<1	0.16
WVR-794	702 Barnham Road	8-Nov-21	GRAB	0.83	<1	<2	10	<1	0.14
WVR-794	702 Barnham Road	6-Dec-21	GRAB	0.45	<1	<2	8	<1	0.47
WVR-795	620 Kenwood Road	4-Jan-21	GRAB	0.76	<1	<2	5	<1	0.22
WVR-795	620 Kenwood Road	1-Feb-21	GRAB	0.68	<1	2	5	<1	0.19
WVR-795	620 Kenwood Road	1-Mar-21	GRAB	0.82	<1	12	7	<1	0.29
WVR-795	620 Kenwood Road	29-Mar-21	GRAB	0.72	<1	2	7	<1	0.27
WVR-795	620 Kenwood Road	26-Apr-21	GRAB	0.79	<1	<2	12	<1	0.33
WVR-795	620 Kenwood Road	26-May-21	GRAB	0.64	<1	<2	13	<1	0.19
WVR-795	620 Kenwood Road	21-Jun-21	GRAB	0.83	<1	<2	13	<1	0.14
WVR-795	620 Kenwood Road	19-Jul-21	GRAB	0.57	<1	<2	18	<1	0.17
WVR-795	620 Kenwood Road	16-Aug-21	GRAB	0.7	<1	2	18	<1	0.26
WVR-795	620 Kenwood Road	13-Sep-21	GRAB	0.79	<1	<2	17	<1	0.28
WVR-795	620 Kenwood Road	13-Oct-21	GRAB	0.79	<1	8	12	<1	0.37
WVR-795	620 Kenwood Road	8-Nov-21	GRAB	0.81	<1	14	10	<1	0.36
WVR-795	620 Kenwood Road	6-Dec-21	GRAB	0.5	<1	<2	7	<1	0.46
WVR-796	315 Mathers Avenue	4-Jan-21	GRAB	0.63	<1	<2	5	<1	0.09
WVR-796	315 Mathers Avenue	18-Jan-21	GRAB	0.57	<1	12	5	<1	0.13
WVR-796	315 Mathers Avenue	1-Feb-21	GRAB	0.56	<1	<2	5	<1	0.15
WVR-796	315 Mathers Avenue	17-Feb-21	GRAB	0.58	<1	<2	5	<1	0.11
WVR-796	315 Mathers Avenue	1-Mar-21	GRAB	0.6	<1	<2	7	<1	0.09
WVR-796	315 Mathers Avenue	15-Mar-21	GRAB	0.69	<1	<2	6	<1	0.15
WVR-796	315 Mathers Avenue	29-Mar-21	GRAB	0.74	<1	<2	7	<1	0.11
WVR-796	315 Mathers Avenue	12-Apr-21	GRAB	0.76	<1	<2	7	<1	0.21
WVR-796	315 Mathers Avenue	26-Apr-21	GRAB	0.77	<1	<2	12	<1	0.16
WVR-796	315 Mathers Avenue	10-May-21	GRAB	0.78	<1	<2	13	<1	0.11
WVR-796	315 Mathers Avenue	26-May-21	GRAB	0.71	<1	<2	13	<1	0.13
WVR-796	315 Mathers Avenue	7-Jun-21	GRAB	0.44	<1	<2	13	<1	0.29
WVR-796	315 Mathers Avenue	21-Jun-21	GRAB	0.73	<1	2	12	<1	0.15
WVR-796	315 Mathers Avenue	5-Jul-21	GRAB	0.51	<1	4	16	<1	0.21
WVR-796	315 Mathers Avenue	19-Jul-21	GRAB	0.58	<1	<2	15	<1	0.11
WVR-796	315 Mathers Avenue	4-Aug-21	GRAB	0.76	<1	<2	16	<1	0.33
WVR-796	315 Mathers Avenue	16-Aug-21	GRAB	0.82	<1	<2	18	<1	0.29
WVR-796	315 Mathers Avenue	30-Aug-21	GRAB	0.97	<1	4	18	<1	0.21
WVR-796	315 Mathers Avenue	13-Sep-21	GRAB	0.79	<1	2	14	<1	0.14
WVR-796	315 Mathers Avenue	27-Sep-21	GRAB	0.72	<1	<2	15	<1	0.28
WVR-796	315 Mathers Avenue	13-Oct-21	GRAB	0.79	<1	2	11	<1	0.18
WVR-796	315 Mathers Avenue	25-Oct-21	GRAB	0.81	<1	<2	13	<1	0.17
WVR-796	315 Mathers Avenue	8-Nov-21	GRAB	0.61	<1	2	10	<1	0.15
WVR-796	315 Mathers Avenue	22-Nov-21	GRAB	0.79	<1	<2	9	<1	0.14
WVR-796	315 Mathers Avenue	6-Dec-21	GRAB	0.58	<1	540	6	<1	2
WVR-796	315 Mathers Avenue	20-Dec-21	GRAB	0.69	<1	NA	6	<1	0.13
WVR-797	395 Klahanie Court	18-Jan-21	GRAB	0.31	<1	2300	5	<1	0.28



Sample Name	Sample Description	Sample Date	Sample Type	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WVR-797	395 Klahanie Court	17-Feb-21	GRAB	0.28	<1	2400	5	<1	0.48
WVR-797	395 Klahanie Court	15-Mar-21	GRAB	0.51	<1	1000	6	<1	0.26
WVR-797	395 Klahanie Court	12-Apr-21	GRAB	0.36	<1	500	7	<1	0.45
WVR-797	395 Klahanie Court	10-May-21	GRAB	0.3	<1	4300	13	<1	0.37
WVR-797	395 Klahanie Court	7-Jun-21	GRAB	0.74	<1	<2	14	<1	0.11
WVR-797	395 Klahanie Court	5-Jul-21	GRAB	0.73	<1	4	15	<1	0.18
WVR-797	395 Klahanie Court	4-Aug-21	GRAB	0.81	<1	<2	16	<1	0.11
WVR-797	395 Klahanie Court	30-Aug-21	GRAB	0.92	<1	14	17	<1	0.15
WVR-797	395 Klahanie Court	27-Sep-21	GRAB	0.59	<1	82	15	<1	1.9
WVR-797	395 Klahanie Court	25-Oct-21	GRAB	0.75	<1	12	12	<1	0.24
WVR-797	395 Klahanie Court	22-Nov-21	GRAB	0.47	<1	<2	9	<1	0.2
WVR-797	395 Klahanie Court	20-Dec-21	GRAB	0.71	<1	NA	6	<1	0.13
WVR-880	965 Cross Creek Road	8-Feb-21	GRAB	0.89	<1	4	5	<1	0.09
WVR-880	965 Cross Creek Road	28-Jun-21	GRAB	0.96	<1	12	19	<1	0.13
WVR-880	965 Cross Creek Road	26-Jul-21	GRAB	0.57	<1	8	17	<1	0.17
WVR-880	965 Cross Creek Road	23-Aug-21	GRAB	0.93	<1	16	20	<1	0.18
WEAG-710	4782 Woodgreen Drive	25-Jan-21	GRAB	0.99	<1	16	5	<1	0.11
WEAG-710	4782 Woodgreen Drive	22-Feb-21	GRAB	0.93	<1	2	6	<1	0.09
WEAG-710	4782 Woodgreen Drive	22-Mar-21	GRAB	0.99	<1	<2	5	<1	0.07
WEAG-710	4782 Woodgreen Drive	19-Apr-21	GRAB	0.89	<1	<2	11	<1	0.12
WEAG-710	4782 Woodgreen Drive	17-May-21	GRAB	0.98	<1	<2	12	<1	0.12
WEAG-710	4782 Woodgreen Drive	14-Jun-21	GRAB	1.05	<1	2	14	<1	0.08
WEAG-710	4782 Woodgreen Drive	12-Jul-21	GRAB	1.11	<1	<2	18	<1	0.2
WEAG-710	4782 Woodgreen Drive	9-Aug-21	GRAB	1.1	<1	2	20	<1	0.11
WEAG-710	4782 Woodgreen Drive	8-Sep-21	GRAB	1.01	<1	2	18	<1	0.23
WEAG-710	4782 Woodgreen Drive	4-Oct-21	GRAB	0.96	<1	<2	13	<1	0.11
WEAG-710	4782 Woodgreen Drive	1-Nov-21	GRAB	1	<1	<2	10	<1	0.27
WEAG-710	4782 Woodgreen Drive	29-Nov-21	GRAB	1.08	<1	<2	8	<1	0.15
WEAG-716	The Dale & Marine	11-Jan-21	GRAB	0.85	<1	6	5	<1	0.08
WEAG-716	The Dale & Marine	25-Jan-21	GRAB	0.76	<1	2	5	<1	0.14
WEAG-716	The Dale & Marine	8-Feb-21	GRAB	0.89	<1	<2	5	<1	0.91
WEAG-716	The Dale & Marine	22-Feb-21	GRAB	0.82	<1	2	6	<1	0.13
WEAG-716	The Dale & Marine	8-Mar-21	GRAB	0.89	<1	<2	6	<1	0.11
WEAG-716	The Dale & Marine	22-Mar-21	GRAB	0.79	<1	<2	5	<1	0.13
WEAG-716	The Dale & Marine	7-Apr-21	GRAB	0.89	<1	<2	7	<1	0.09
WEAG-716	The Dale & Marine	19-Apr-21	GRAB	0.91	<1	<2	12	<1	0.86
WEAG-716	The Dale & Marine	3-May-21	GRAB	0.71	<1	<2	12	<1	0.13
WEAG-716	The Dale & Marine	17-May-21	GRAB	0.61	<1	<2	12	<1	0.07
WEAG-716	The Dale & Marine	31-May-21	GRAB	0.84	<1	<2	13	<1	0.11
WEAG-716	The Dale & Marine	14-Jun-21	GRAB	0.35	<1	<2	14	<1	0.09
WEAG-716	The Dale & Marine	12-Jul-21	GRAB	0.75	<1	<2	18	<1	0.18
WEAG-716	The Dale & Marine	26-Jul-21	GRAB	0.68	<1	8	21	<1	0.2
WEAG-716	The Dale & Marine	9-Aug-21	GRAB	0.68	<1	4	21	<1	0.14
WEAG-716	The Dale & Marine	23-Aug-21	GRAB	0.79	<1	12	20	<1	0.13
WEAG-716	The Dale & Marine	8-Sep-21	GRAB	0.81	<1	2	17	<1	0.23
WEAG-716	The Dale & Marine	20-Sep-21	GRAB	0.84	<1	2	15	<1	0.14
WEAG-716	The Dale & Marine	4-Oct-21	GRAB	0.37	<1	2	13	<1	0.11
WEAG-716	The Dale & Marine	18-Oct-21	GRAB	0.76	<1	16	15	<1	0.17
WEAG-716	The Dale & Marine	1-Nov-21	GRAB	0.64	<1	6	10	<1	0.17
WEAG-716	The Dale & Marine	15-Nov-21	GRAB	0.71	<1	12	10	<1	0.12
WEAG-716	The Dale & Marine	29-Nov-21	GRAB	0.81	<1	<2	8	<1	0.14
WEAG-716	The Dale & Marine	13-Dec-21	GRAB	0.64	<1	<2	8	<1	0.29
WEAG-719	2600 Chelsea Court	4-Jan-21	GRAB	0.67	<1	2	5	<1	0.17
WEAG-719	2600 Chelsea Court	18-Jan-21	GRAB	0.68	<1	2	5	<1	0.12
WEAG-719	2600 Chelsea Court	1-Feb-21	GRAB	0.79	<1	<2	5	<1	0.22
WEAG-719	2600 Chelsea Court	17-Feb-21	GRAB	0.91	<1	2	5	<1	0.13
WEAG-719	2600 Chelsea Court	1-Mar-21	GRAB	0.7	<1	<2	7	<1	0.23
WEAG-719	2600 Chelsea Court	15-Mar-21	GRAB	0.71	<1	2	6	<1	0.25
WEAG-719	2600 Chelsea Court	29-Mar-21	GRAB	0.71	<1	<2	7	<1	0.18
WEAG-719	2600 Chelsea Court	12-Apr-21	GRAB	0.71	<1	<2	7	<1	0.09
WEAG-719	2600 Chelsea Court	26-Apr-21	GRAB	0.68	<1	<2	12	<1	0.13
WEAG-719	2600 Chelsea Court	10-May-21	GRAB	0.61	<1	16	13	<1	0.08
WEAG-719	2600 Chelsea Court	26-May-21	GRAB	0.88	<1	<2	13	<1	0.14
WEAG-719	2600 Chelsea Court	7-Jun-21	GRAB	0.77	<1	2	12	<1	0.28
WEAG-719	2600 Chelsea Court	21-Jun-21	GRAB	0.68	<1	<2	13	<1	0.12
WEAG-719	2600 Chelsea Court	5-Jul-21	GRAB	1.01	<1	<2	16	<1	0.12
WEAG-719	2600 Chelsea Court	19-Jul-21	GRAB	0.69	<1	<2	18	<1	0.14
WEAG-719	2600 Chelsea Court	4-Aug-21	GRAB	0.72	<1	4	18	<1	0.17
WEAG-719	2600 Chelsea Court	16-Aug-21	GRAB	0.56	<1	<2	19	<1	0.26



Sample Name	Sample Description	Sample Date	Sample Type	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WEAG-719	2600 Chelsea Court	30-Aug-21	GRAB	0.59	<1	110	18	<1	0.19
WEAG-719	2600 Chelsea Court	13-Sep-21	GRAB	0.74	<1	130	17	<1	0.61
WEAG-719	2600 Chelsea Court	27-Sep-21	GRAB	0.53	<1	170	15	<1	0.83
WEAG-719	2600 Chelsea Court	13-Oct-21	GRAB	0.71	<1	68	12	<1	0.29
WEAG-719	2600 Chelsea Court	25-Oct-21	GRAB	0.35	<1	92	12	<1	0.34
WEAG-719	2600 Chelsea Court	8-Nov-21	GRAB	0.51	<1	10	10	<1	0.21
WEAG-719	2600 Chelsea Court	22-Nov-21	GRAB	0.51	<1	12	9	<1	0.34
WEAG-719	2600 Chelsea Court	6-Dec-21	GRAB	0.71	<1	6	9	<1	0.2
WEAG-719	2600 Chelsea Court	20-Dec-21	GRAB	0.61	<1	NA	6	<1	0.39
WEAG-765	5459 West Vista Court	11-Jan-21	GRAB	0.88	<1	<2	5	<1	0.09
WEAG-765	5459 West Vista Court	8-Feb-21	GRAB	0.86	<1	<2	5	<1	0.08
WEAG-765	5459 West Vista Court	8-Mar-21	GRAB	0.91	<1	<2	6	<1	0.13
WEAG-765	5459 West Vista Court	7-Apr-21	GRAB	0.89	<1	2	7	<1	0.09
WEAG-765	5459 West Vista Court	3-May-21	GRAB	0.87	<1	<2	12	<1	0.15
WEAG-765	5459 West Vista Court	31-May-21	GRAB	0.8	<1	<2	13	<1	0.1
WEAG-765	5459 West Vista Court	26-Jul-21	GRAB	0.81	<1	2	19	<1	0.1
WEAG-765	5459 West Vista Court	23-Aug-21	GRAB	0.83	<1	4	20	<1	0.15
WEAG-765	5459 West Vista Court	20-Sep-21	GRAB	0.89	<1	8	15	<1	0.12
WEAG-765	5459 West Vista Court	18-Oct-21	GRAB	0.92	<1	16	15	<1	0.16
WEAG-765	5459 West Vista Court	15-Nov-21	GRAB	0.84	<1	<2	10	<1	0.11
WEAG-765	5459 West Vista Court	13-Dec-21	GRAB	1.07	<1	<2	8	<1	0.16
WEAG-768	2185 Gisby Street	18-Jan-21	GRAB	0.91	<1	<2	5	<1	0.08
WEAG-768	2185 Gisby Street	17-Feb-21	GRAB	0.99	<1	<2	5	<1	0.09
WEAG-768	2185 Gisby Street	15-Mar-21	GRAB	0.97	<1	<2	6	<1	0.11
WEAG-768	2185 Gisby Street	12-Apr-21	GRAB	0.99	<1	12	7	<1	0.12
WEAG-768	2185 Gisby Street	10-May-21	GRAB	0.98	<1	<2	13	<1	0.1
WEAG-768	2185 Gisby Street	7-Jun-21	GRAB	0.57	<1	<2	12	<1	0.09
WEAG-768	2185 Gisby Street	5-Jul-21	GRAB	0.62	<1	4	16	<1	0.18
WEAG-768	2185 Gisby Street	4-Aug-21	GRAB	0.96	<1	20	18	<1	0.33
WEAG-768	2185 Gisby Street	30-Aug-21	GRAB	0.65	<1	240	18	<1	0.12
WEAG-768	2185 Gisby Street	27-Sep-21	GRAB	0.98	<1	8	15	<1	0.1
WEAG-768	2185 Gisby Street	25-Oct-21	GRAB	0.6	<1	<2	12	<1	0.08
WEAG-768	2185 Gisby Street	22-Nov-21	GRAB	0.81	<1	<2	9	<1	0.07
WEAG-768	2185 Gisby Street	20-Dec-21	GRAB	0.94	<1	NA	6	<1	0.08
WEAG-769	1210 Chartwell Drive	25-Jan-21	GRAB	0.89	<1	14	5	<1	0.09
WEAG-769	1210 Chartwell Drive	22-Feb-21	GRAB	1.01	<1	22	6	<1	0.1
WEAG-769	1210 Chartwell Drive	22-Mar-21	GRAB	0.89	<1	30	6	<1	0.1
WEAG-769	1210 Chartwell Drive	19-Apr-21	GRAB	1.02	<1	54	12	<1	0.1
WEAG-769	1210 Chartwell Drive	17-May-21	GRAB	0.92	<1	24	12	<1	0.1
WEAG-769	1210 Chartwell Drive	14-Jun-21	GRAB	0.61	<1	20	15	<1	0.09
WEAG-769	1210 Chartwell Drive	12-Jul-21	GRAB	0.72	<1	<2	17	<1	0.22
WEAG-769	1210 Chartwell Drive	9-Aug-21	GRAB	0.81	<1	26	16	<1	0.14
WEAG-769	1210 Chartwell Drive	8-Sep-21	GRAB	0.96	<1	8	17	<1	0.13
WEAG-769	1210 Chartwell Drive	4-Oct-21	GRAB	0.79	<1	30	13	<1	0.18
WEAG-769	1210 Chartwell Drive	1-Nov-21	GRAB	0.83	<1	2	10	<1	0.13
WEAG-769	1210 Chartwell Drive	29-Nov-21	GRAB	0.98	<1	16	8	<1	0.14
WEAG-770	3828 Bayridge Avenue	11-Jan-21	GRAB	0.71	<1	<2	5	<1	0.1
WEAG-770	3828 Bayridge Avenue	25-Jan-21	GRAB	0.73	<1	4	5	<1	0.11
WEAG-770	3828 Bayridge Avenue	8-Feb-21	GRAB	0.68	<1	<2	5	<1	0.13
WEAG-770	3828 Bayridge Avenue	22-Feb-21	GRAB	0.71	<1	<2	6	<1	0.25
WEAG-770	3828 Bayridge Avenue	8-Mar-21	GRAB	0.76	<1	<2	6	<1	0.16
WEAG-770	3828 Bayridge Avenue	22-Mar-21	GRAB	0.71	<1	2	5	<1	0.09
WEAG-770	3828 Bayridge Avenue	7-Apr-21	GRAB	0.67	<1	<2	7	<1	0.11
WEAG-770	3828 Bayridge Avenue	19-Apr-21	GRAB	0.76	<1	<2	12	<1	0.11
WEAG-770	3828 Bayridge Avenue	3-May-21	GRAB	0.68	<1	<2	12	<1	0.13
WEAG-770	3828 Bayridge Avenue	17-May-21	GRAB	0.81	<1	2	12	<1	0.23
WEAG-770	3828 Bayridge Avenue	31-May-21	GRAB	0.76	<1	<2	13	<1	0.14
WEAG-770	3828 Bayridge Avenue	14-Jun-21	GRAB	0.69	<1	2	15	<1	0.14
WEAG-770	3828 Bayridge Avenue	12-Jul-21	GRAB	0.62	<1	<2	14	<1	0.11
WEAG-770	3828 Bayridge Avenue	26-Jul-21	GRAB	0.57	<1	2	16	<1	0.5
WEAG-770	3828 Bayridge Avenue	9-Aug-21	GRAB	0.76	<1	8	16	<1	0.15
WEAG-770	3828 Bayridge Avenue	23-Aug-21	GRAB	0.76	<1	6	20	<1	0.15
WEAG-770	3828 Bayridge Avenue	8-Sep-21	GRAB	0.67	<1	<2	17	<1	0.23
WEAG-770	3828 Bayridge Avenue	20-Sep-21	GRAB	0.79	<1	8	15	<1	0.17
WEAG-770	3828 Bayridge Avenue	4-Oct-21	GRAB	0.51	<1	4	13	<1	0.15
WEAG-770	3828 Bayridge Avenue	18-Oct-21	GRAB	0.67	<1	22	15	<1	0.17
WEAG-770	3828 Bayridge Avenue	1-Nov-21	GRAB	0.55	<1	2	10	<1	0.2
WEAG-770	3828 Bayridge Avenue	15-Nov-21	GRAB	0.57	<1	6	10	<1	0.14
WEAG-770	3828 Bayridge Avenue	29-Nov-21	GRAB	0.57	<1	4	8	<1	0.16

Sample Name	Sample Description	Sample Date	Sample Type	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WEAG-770	3828 Bayridge Avenue	13-Dec-21	GRAB	1.06	<1	<2	8	<1	0.13
WEAG-771	6588 Royal Ave.	11-Jan-21	GRAB	0.68	<1	8	5	<1	0.28
WEAG-771	6588 Royal Ave.	25-Jan-21	GRAB	0.89	<1	4	5	<1	0.19
WEAG-771	6588 Royal Ave.	8-Feb-21	GRAB	0.71	<1	8	5	<1	0.23
WEAG-771	6588 Royal Ave.	22-Feb-21	GRAB	0.71	<1	10	6	<1	0.33
WEAG-771	6588 Royal Ave.	8-Mar-21	GRAB	0.81	<1	4	6	<1	0.24
WEAG-771	6588 Royal Ave.	22-Mar-21	GRAB	0.69	<1	4	5	<1	0.11
WEAG-771	6588 Royal Ave.	7-Apr-21	GRAB	0.71	<1	10	7	<1	0.14
WEAG-771	6588 Royal Ave.	19-Apr-21	GRAB	0.88	<1	6	12	<1	0.22
WEAG-771	6588 Royal Ave.	3-May-21	GRAB	0.71	<1	26	12	<1	0.15
WEAG-771	6588 Royal Ave.	17-May-21	GRAB	0.65	<1	4	12	<1	0.11
WEAG-771	6588 Royal Ave.	31-May-21	GRAB	0.71	<1	10	13	<1	0.09
WEAG-771	6588 Royal Ave.	14-Jun-21	GRAB	0.56	<1	18	14	<1	0.11
WEAG-771	6588 Royal Ave.	12-Jul-21	GRAB	0.5	<1	2	18	<1	0.11
WEAG-771	6588 Royal Ave.	26-Jul-21	GRAB	0.57	<1	8	19	<1	0.15
WEAG-771	6588 Royal Ave.	9-Aug-21	GRAB	0.81	<1	16	20	<1	0.17
WEAG-771	6588 Royal Ave.	23-Aug-21	GRAB	0.91	<1	22	20	<1	0.17
WEAG-771	6588 Royal Ave.	8-Sep-21	GRAB	0.89	<1	22	18	<1	0.18
WEAG-771	6588 Royal Ave.	20-Sep-21	GRAB	0.76	<1	40	15	<1	0.26
WEAG-771	6588 Royal Ave.	4-Oct-21	GRAB	0.54	<1	28	13	<1	0.13
WEAG-771	6588 Royal Ave.	18-Oct-21	GRAB	0.66	<1	44	15	<1	0.17
WEAG-771	6588 Royal Ave.	1-Nov-21	GRAB	0.45	<1	22	10	<1	0.16
WEAG-771	6588 Royal Ave.	15-Nov-21	GRAB	0.65	<1	2	10	<1	0.1
WEAG-771	6588 Royal Ave.	29-Nov-21	GRAB	0.71	<1	6	8	<1	0.18
WEAG-771	6588 Royal Ave.	13-Dec-21	GRAB	0.64	<1	<2	8	<1	0.13
WEAG-772	6470 Madrona Crescent	11-Jan-21	GRAB	0.73	<1	16	5	<1	0.29
WEAG-772	6470 Madrona Crescent	25-Jan-21	GRAB	0.91	<1	2	5	<1	0.24
WEAG-772	6470 Madrona Crescent	8-Feb-21	GRAB	0.76	<1	12	5	<1	0.24
WEAG-772	6470 Madrona Crescent	22-Feb-21	GRAB	0.75	<1	2	6	<1	0.31
WEAG-772	6470 Madrona Crescent	8-Mar-21	GRAB	0.84	<1	6	6	<1	0.22
WEAG-772	6470 Madrona Crescent	22-Mar-21	GRAB	0.74	<1	2	5	<1	0.11
WEAG-772	6470 Madrona Crescent	7-Apr-21	GRAB	0.77	<1	2	7	<1	0.14
WEAG-772	6470 Madrona Crescent	19-Apr-21	GRAB	0.93	<1	6	12	<1	0.19
WEAG-772	6470 Madrona Crescent	3-May-21	GRAB	0.74	<1	6	12	<1	0.12
WEAG-772	6470 Madrona Crescent	17-May-21	GRAB	0.67	<1	12	12	<1	0.17
WEAG-772	6470 Madrona Crescent	31-May-21	GRAB	0.74	<1	14	13	<1	0.08
WEAG-772	6470 Madrona Crescent	14-Jun-21	GRAB	0.54	<1	14	13	<1	0.1
WEAG-772	6470 Madrona Crescent	12-Jul-21	GRAB	0.88	<1	<2	19	<1	0.13
WEAG-772	6470 Madrona Crescent	26-Jul-21	GRAB	0.75	<1	6	20	<1	0.21
WEAG-772	6470 Madrona Crescent	9-Aug-21	GRAB	0.86	<1	30	21	<1	0.19
WEAG-772	6470 Madrona Crescent	23-Aug-21	GRAB	0.96	<1	28	20	<1	0.17
WEAG-772	6470 Madrona Crescent	8-Sep-21	GRAB	0.91	<1	20	18	<1	0.19
WEAG-772	6470 Madrona Crescent	20-Sep-21	GRAB	0.81	<1	28	15	<1	0.21
WEAG-772	6470 Madrona Crescent	4-Oct-21	GRAB	0.61	<1	20	13	<1	0.13
WEAG-772	6470 Madrona Crescent	18-Oct-21	GRAB	0.71	<1	32	15	<1	0.17
WEAG-772	6470 Madrona Crescent	1-Nov-21	GRAB	0.54	<1	10	11	<1	0.2
WEAG-772	6470 Madrona Crescent	15-Nov-21	GRAB	0.67	<1	10	10	<1	0.11
WEAG-772	6470 Madrona Crescent	29-Nov-21	GRAB	0.75	<1	4	8	<1	0.15
WEAG-772	6470 Madrona Crescent	13-Dec-21	GRAB	0.69	<1	2	7	<1	0.12
WEAG-773	Whytcliffe Park	11-Jan-21	GRAB	0.36	<1	170	5	<1	0.16
WEAG-773	Whytcliffe Park	8-Feb-21	GRAB	0.21	<1	72	5	<1	0.11
WEAG-773	Whytcliffe Park	8-Mar-21	GRAB	0.21	<1	40	6	<1	0.18
WEAG-773	Whytcliffe Park	7-Apr-21	GRAB	0.31	<1	140	7	<1	0.33
WEAG-773	Whytcliffe Park	3-May-21	GRAB	0.26	<1	16	12	<1	0.09
WEAG-773	Whytcliffe Park	31-May-21	GRAB	0.22	<1	54	13	<1	0.09
WEAG-773	Whytcliffe Park	26-Jul-21	GRAB	0.28	<1	320	20	<1	0.34
WEAG-773	Whytcliffe Park	23-Aug-21	GRAB	0.95	<1	420	20	<1	0.14
WEAG-773	Whytcliffe Park	20-Sep-21	GRAB	0.45	<1	280	15	<1	0.16
WEAG-773	Whytcliffe Park	18-Oct-21	GRAB	0.32	<1	86	15	<1	0.17
WEAG-773	Whytcliffe Park	15-Nov-21	GRAB	0.37	<1	110	10	<1	0.14
WEAG-773	Whytcliffe Park	13-Dec-21	GRAB	0.19	<1	12	8	<1	0.19
WEAG-774	6117 Gleneagles Drive	25-Jan-21	GRAB	1	<1	<2	5	<1	0.18
WEAG-774	6117 Gleneagles Drive	22-Feb-21	GRAB	0.92	<1	16	6	<1	0.4
WEAG-774	6117 Gleneagles Drive	22-Mar-21	GRAB	0.68	<1	<2	5	<1	0.09
WEAG-774	6117 Gleneagles Drive	19-Apr-21	GRAB	0.98	<1	2	12	<1	0.12
WEAG-774	6117 Gleneagles Drive	17-May-21	GRAB	0.79	<1	2	12	<1	0.09
WEAG-774	6117 Gleneagles Drive	14-Jun-21	GRAB	0.55	<1	<2	14	<1	0.15
WEAG-774	6117 Gleneagles Drive	12-Jul-21	GRAB	0.9	<1	<2	18	<1	0.12
WEAG-774	6117 Gleneagles Drive	9-Aug-21	GRAB	0.89	<1	2	21	<1	0.12

Sample Name	Sample Description	Sample Date	Sample Type	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WEAG-774	6117 Gleneagles Drive	8-Sep-21	GRAB	0.79	<1	2	17	<1	0.24
WEAG-774	6117 Gleneagles Drive	4-Oct-21	GRAB	0.7	<1	<2	13	<1	0.2
WEAG-774	6117 Gleneagles Drive	1-Nov-21	GRAB	0.92	<1	2	10	<1	0.29
WEAG-774	6117 Gleneagles Drive	29-Nov-21	GRAB	0.72	<1	<2	8	<1	0.22
WEAG-776	3755 Cypress Bowl Road	25-Jan-21	GRAB	1.01	<1	<2	5	<1	0.11
WEAG-776	3755 Cypress Bowl Road	22-Feb-21	GRAB	1.03	<1	<2	6	<1	0.07
WEAG-776	3755 Cypress Bowl Road	22-Mar-21	GRAB	0.97	<1	<2	6	<1	0.08
WEAG-776	3755 Cypress Bowl Road	19-Apr-21	GRAB	1.06	<1	<2	12	<1	0.13
WEAG-776	3755 Cypress Bowl Road	17-May-21	GRAB	0.98	<1	<2	12	<1	0.09
WEAG-776	3755 Cypress Bowl Road	14-Jun-21	GRAB	1.1	<1	<2	14	<1	0.08
WEAG-776	3755 Cypress Bowl Road	12-Jul-21	GRAB	1.01	<1	<2	17	<1	0.13
WEAG-776	3755 Cypress Bowl Road	9-Aug-21	GRAB	0.99	<1	4	21	<1	0.1
WEAG-776	3755 Cypress Bowl Road	8-Sep-21	GRAB	1.01	<1	12	17	<1	0.13
WEAG-776	3755 Cypress Bowl Road	4-Oct-21	GRAB	0.91	<1	<2	13	<1	0.08
WEAG-776	3755 Cypress Bowl Road	1-Nov-21	GRAB	1.08	<1	2	10	<1	0.12
WEAG-776	3755 Cypress Bowl Road	29-Nov-21	GRAB	1.02	<1	<2	8	<1	0.12
WEAG-778	6190 Marine Drive	11-Jan-21	GRAB	0.83	<1	<2	5	<1	0.21
WEAG-778	6190 Marine Drive	25-Jan-21	GRAB	0.81	<1	<2	5	<1	0.16
WEAG-778	6190 Marine Drive	8-Feb-21	GRAB	0.76	<1	<2	5	<1	0.12
WEAG-778	6190 Marine Drive	22-Feb-21	GRAB	0.84	<1	8	6	<1	0.43
WEAG-778	6190 Marine Drive	8-Mar-21	GRAB	0.98	<1	16	6	<1	0.42
WEAG-778	6190 Marine Drive	22-Mar-21	GRAB	0.77	<1	120	5	<1	0.45
WEAG-778	6190 Marine Drive	7-Apr-21	GRAB	0.9	<1	110	7	<1	0.25
WEAG-778	6190 Marine Drive	19-Apr-21	GRAB	1.02	<1	56	12	<1	0.23
WEAG-778	6190 Marine Drive	3-May-21	GRAB	0.85	<1	28	12	<1	0.28
WEAG-778	6190 Marine Drive	17-May-21	GRAB	0.71	<1	18	12	<1	0.18
WEAG-778	6190 Marine Drive	31-May-21	GRAB	0.72	<1	4	13	<1	0.2
WEAG-778	6190 Marine Drive	14-Jun-21	GRAB	0.67	<1	6	14	<1	0.07
WEAG-778	6190 Marine Drive	12-Jul-21	GRAB	0.89	<1	<2	18	<1	0.12
WEAG-778	6190 Marine Drive	26-Jul-21	GRAB	0.87	<1	4	20	<1	0.21
WEAG-778	6190 Marine Drive	9-Aug-21	GRAB	0.88	<1	10	21	<1	0.12
WEAG-778	6190 Marine Drive	23-Aug-21	GRAB	1.01	<1	8	20	<1	0.14
WEAG-778	6190 Marine Drive	8-Sep-21	GRAB	0.81	<1	12	17	<1	0.18
WEAG-778	6190 Marine Drive	20-Sep-21	GRAB	0.77	<1	4	15	<1	0.42
WEAG-778	6190 Marine Drive	4-Oct-21	GRAB	0.69	<1	6	13	<1	0.29
WEAG-778	6190 Marine Drive	18-Oct-21	GRAB	0.98	<1	6	15	<1	0.27
WEAG-778	6190 Marine Drive	1-Nov-21	GRAB	0.75	<1	4	10	<1	0.34
WEAG-778	6190 Marine Drive	15-Nov-21	GRAB	0.79	<1	<2	10	<1	0.14
WEAG-778	6190 Marine Drive	29-Nov-21	GRAB	0.81	<1	<2	8	<1	0.2
WEAG-778	6190 Marine Drive	13-Dec-21	GRAB	0.87	<1	<2	7	<1	0.23
WEAG-779	1370 Burnside Road	4-Jan-21	GRAB	0.88	<1	<2	5	<1	0.1
WEAG-779	1370 Burnside Road	1-Feb-21	GRAB	0.79	<1	<2	5	<1	0.13
WEAG-779	1370 Burnside Road	1-Mar-21	GRAB	1.06	<1	<2	7	<1	0.07
WEAG-779	1370 Burnside Road	29-Mar-21	GRAB	0.92	<1	<2	7	<1	0.09
WEAG-779	1370 Burnside Road	26-Apr-21	GRAB	0.89	<1	<2	12	<1	0.08
WEAG-779	1370 Burnside Road	26-May-21	GRAB	1	<1	<2	13	<1	0.09
WEAG-779	1370 Burnside Road	21-Jun-21	GRAB	0.83	<1	2	13	<1	0.07
WEAG-779	1370 Burnside Road	19-Jul-21	GRAB	0.78	<1	<2	17	<1	0.1
WEAG-779	1370 Burnside Road	16-Aug-21	GRAB	0.83	<1	<2	17	<1	0.18
WEAG-779	1370 Burnside Road	13-Sep-21	GRAB	0.91	<1	2	18	<1	0.16
WEAG-779	1370 Burnside Road	13-Oct-21	GRAB	1.01	<1	<2	12	<1	0.09
WEAG-779	1370 Burnside Road	8-Nov-21	GRAB	0.97	<1	4	10	<1	0.11
WEAG-779	1370 Burnside Road	6-Dec-21	GRAB	0.79	<1	2	8	<1	0.11
WEAG-780	5634 Westhaven Road	11-Jan-21	GRAB	0.82	<1	2	5	<1	0.08
WEAG-780	5634 Westhaven Road	8-Feb-21	GRAB	0.79	<1	18	5	<1	0.12
WEAG-780	5634 Westhaven Road	8-Mar-21	GRAB	0.84	<1	4	6	<1	0.22
WEAG-780	5634 Westhaven Road	7-Apr-21	GRAB	0.79	<1	2	7	<1	0.08
WEAG-780	5634 Westhaven Road	3-May-21	GRAB	0.76	<1	24	12	<1	0.24
WEAG-780	5634 Westhaven Road	31-May-21	GRAB	0.79	<1	6	13	<1	0.12
WEAG-780	5634 Westhaven Road	26-Jul-21	GRAB	0.83	<1	4	20	<1	0.16
WEAG-780	5634 Westhaven Road	23-Aug-21	GRAB	0.89	<1	<2	20	<1	0.13
WEAG-780	5634 Westhaven Road	20-Sep-21	GRAB	0.91	<1	84	15	<1	0.18
WEAG-780	5634 Westhaven Road	18-Oct-21	GRAB	0.94	<1	24	15	<1	0.26
WEAG-780	5634 Westhaven Road	15-Nov-21	GRAB	0.97	<1	10	10	<1	0.12
WEAG-780	5634 Westhaven Road	13-Dec-21	GRAB	1.21	<1	6	8	<1	0.11
WEAG-783	4520 Almondel Place	25-Jan-21	GRAB	0.81	<1	16	5	<1	0.11
WEAG-783	4520 Almondel Place	22-Feb-21	GRAB	0.81	<1	8	6	<1	0.11
WEAG-783	4520 Almondel Place	22-Mar-21	GRAB	0.88	<1	10	5	<1	0.14
WEAG-783	4520 Almondel Place	19-Apr-21	GRAB	0.89	<1	14	12	<1	0.11

Sample Name	Sample Description	Sample Date	Sample Type	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WEAG-783	4520 Almondel Place	17-May-21	GRAB	0.79	<1	10	12	<1	0.12
WEAG-783	4520 Almondel Place	14-Jun-21	GRAB	0.81	<1	4	15	<1	0.12
WEAG-783	4520 Almondel Place	12-Jul-21	GRAB	0.98	<1	2	18	<1	0.17
WEAG-783	4520 Almondel Place	9-Aug-21	GRAB	0.86	<1	48	21	<1	0.16
WEAG-783	4520 Almondel Place	8-Sep-21	GRAB	0.86	<1	4	17	<1	0.13
WEAG-783	4520 Almondel Place	4-Oct-21	GRAB	0.71	<1	42	13	<1	0.24
WEAG-783	4520 Almondel Place	1-Nov-21	GRAB	1.02	<1	26	10	<1	0.48
WEAG-783	4520 Almondel Place	29-Nov-21	GRAB	0.79	<1	14	8	<1	0.17
WEAG-784	5759 Primrose Place	11-Jan-21	GRAB	0.79	<1	6	5	<1	0.17
WEAG-784	5759 Primrose Place	8-Feb-21	GRAB	0.82	<1	28	5	<1	0.25
WEAG-784	5759 Primrose Place	8-Mar-21	GRAB	0.71	<1	28	6	<1	0.26
WEAG-784	5759 Primrose Place	7-Apr-21	GRAB	0.84	<1	58	7	<1	0.39
WEAG-784	5759 Primrose Place	3-May-21	GRAB	0.8	<1	20	12	<1	0.19
WEAG-784	5759 Primrose Place	31-May-21	GRAB	0.71	<1	<2	13	<1	0.15
WEAG-784	5759 Primrose Place	26-Jul-21	GRAB	0.56	<1	22	21	<1	0.28
WEAG-784	5759 Primrose Place	23-Aug-21	GRAB	0.96	<1	2	20	<1	0.26
WEAG-784	5759 Primrose Place	20-Sep-21	GRAB	0.82	<1	24	15	<1	0.25
WEAG-784	5759 Primrose Place	18-Oct-21	GRAB	0.88	<1	32	15	<1	0.25
WEAG-784	5759 Primrose Place	15-Nov-21	GRAB	0.92	<1	6	10	<1	0.16
WEAG-784	5759 Primrose Place	13-Dec-21	GRAB	0.6	<1	6	7	<1	0.17
WEAG-785	4820 Headland Drive	11-Jan-21	GRAB	0.81	<1	2	5	<1	0.1
WEAG-785	4820 Headland Drive	8-Feb-21	GRAB	0.71	<1	<2	5	<1	0.08
WEAG-785	4820 Headland Drive	8-Mar-21	GRAB	0.72	<1	<2	6	<1	0.13
WEAG-785	4820 Headland Drive	7-Apr-21	GRAB	0.71	<1	<2	7	<1	0.1
WEAG-785	4820 Headland Drive	3-May-21	GRAB	0.55	<1	<2	12	<1	0.12
WEAG-785	4820 Headland Drive	31-May-21	GRAB	0.71	<1	<2	13	<1	0.06
WEAG-785	4820 Headland Drive	26-Jul-21	GRAB	0.53	<1	10	20	<1	0.25
WEAG-785	4820 Headland Drive	23-Aug-21	GRAB	0.71	<1	2	20	<1	0.17
WEAG-785	4820 Headland Drive	20-Sep-21	GRAB	0.61	<1	6	15	<1	0.14
WEAG-785	4820 Headland Drive	18-Oct-21	GRAB	0.7	<1	6	15	<1	0.13
WEAG-785	4820 Headland Drive	15-Nov-21	GRAB	0.81	<1	10	10	<1	0.13
WEAG-785	4820 Headland Drive	13-Dec-21	GRAB	0.69	<1	6	8	<1	0.27
WEAG-786	1158 Millstream Road	18-Jan-21	GRAB	0.52	<1	<2	5	<1	0.12
WEAG-786	1158 Millstream Road	17-Feb-21	GRAB	0.83	<1	4	5	<1	0.11
WEAG-786	1158 Millstream Road	15-Mar-21	GRAB	0.97	<1	<2	6	<1	0.1
WEAG-786	1158 Millstream Road	12-Apr-21	GRAB	0.81	<1	2	7	<1	0.22
WEAG-786	1158 Millstream Road	10-May-21	GRAB	0.89	<1	26	13	<1	0.11
WEAG-786	1158 Millstream Road	7-Jun-21	GRAB	0.28	<1	4	12	<1	0.2
WEAG-786	1158 Millstream Road	5-Jul-21	GRAB	0.47	<1	6	16	<1	0.15
WEAG-786	1158 Millstream Road	4-Aug-21	GRAB	0.83	<1	2	17	<1	0.37
WEAG-786	1158 Millstream Road	30-Aug-21	GRAB	0.4	<1	18	18	<1	0.16
WEAG-786	1158 Millstream Road	27-Sep-21	GRAB	0.79	<1	180	15	<1	0.18
WEAG-786	1158 Millstream Road	25-Oct-21	GRAB	0.45	<1	82	12	<1	0.15
WEAG-786	1158 Millstream Road	22-Nov-21	GRAB	0.79	<1	26	9	<1	0.12
WEAG-786	1158 Millstream Road	20-Dec-21	GRAB	0.76	<1	NA	6	<1	0.1
WEAG-787	2711 Willoughby Road	18-Jan-21	GRAB	0.71	<1	8	5	<1	0.27
WEAG-787	2711 Willoughby Road	17-Feb-21	GRAB	0.93	<1	<2	5	<1	0.1
WEAG-787	2711 Willoughby Road	15-Mar-21	GRAB	0.86	<1	2	6	<1	0.1
WEAG-787	2711 Willoughby Road	12-Apr-21	GRAB	0.84	<1	<2	7	<1	0.1
WEAG-787	2711 Willoughby Road	10-May-21	GRAB	0.77	<1	14	13	<1	0.12
WEAG-787	2711 Willoughby Road	7-Jun-21	GRAB	0.52	<1	2	12	<1	0.16
WEAG-787	2711 Willoughby Road	5-Jul-21	GRAB	0.75	<1	16	16	<1	0.19
WEAG-787	2711 Willoughby Road	4-Aug-21	GRAB	0.91	<1	8	17	<1	0.37
WEAG-787	2711 Willoughby Road	30-Aug-21	GRAB	0.7	<1	10	18	<1	0.16
WEAG-787	2711 Willoughby Road	27-Sep-21	GRAB	0.81	<1	14	15	<1	0.21
WEAG-787	2711 Willoughby Road	25-Oct-21	GRAB	0.79	<1	20	12	<1	0.14
WEAG-787	2711 Willoughby Road	22-Nov-21	GRAB	0.68	<1	<2	9	<1	0.13
WEAG-787	2711 Willoughby Road	20-Dec-21	GRAB	0.81	<1	NA	6	<1	0.11
WEAG-788	1551 Vinson Creek Road	18-Jan-21	GRAB	0.41	<1	<2	5	<1	0.15
WEAG-788	1551 Vinson Creek Road	17-Feb-21	GRAB	0.81	<1	<2	5	<1	0.08
WEAG-788	1551 Vinson Creek Road	15-Mar-21	GRAB	1.04	<1	<2	6	<1	0.1
WEAG-788	1551 Vinson Creek Road	12-Apr-21	GRAB	0.88	<1	<2	7	<1	0.09
WEAG-788	1551 Vinson Creek Road	10-May-21	GRAB	0.88	<1	2	13	<1	0.09
WEAG-788	1551 Vinson Creek Road	7-Jun-21	GRAB	0.69	<1	<2	13	<1	0.16
WEAG-788	1551 Vinson Creek Road	5-Jul-21	GRAB	0.75	<1	<2	15	<1	0.15
WEAG-788	1551 Vinson Creek Road	4-Aug-21	GRAB	0.81	<1	<2	17	<1	0.3
WEAG-788	1551 Vinson Creek Road	30-Aug-21	GRAB	0.77	<1	<2	18	<1	0.13
WEAG-788	1551 Vinson Creek Road	27-Sep-21	GRAB	0.89	<1	<2	15	<1	0.16
WEAG-788	1551 Vinson Creek Road	25-Oct-21	GRAB	0.75	<1	2	12	<1	0.12

Sample Name	Sample Description	Sample Date	Sample Type	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WEAG-788	1551 Vinson Creek Road	22-Nov-21	GRAB	0.88	<1	<2	9	<1	0.12
WEAG-788	1551 Vinson Creek Road	20-Dec-21	GRAB	0.88	<1	NA	6	<1	0.09
WEAG-880	965 Cross Creek Road	11-Jan-21	GRAB	0.89	<1	2	5	<1	0.11
WEAG-880	965 Cross Creek Road	8-Mar-21	GRAB	0.99	<1	14	6	<1	0.16
WEAG-880	965 Cross Creek Road	7-Apr-21	GRAB	0.99	<1	8	7	<1	0.09
WEAG-880	965 Cross Creek Road	3-May-21	GRAB	0.9	<1	18	12	<1	0.16
WEAG-880	965 Cross Creek Road	31-May-21	GRAB	0.89	<1	10	13	<1	0.41
WEAG-880	965 Cross Creek Road	20-Sep-21	GRAB	0.93	<1	16	15	<1	0.35
WEAG-880	965 Cross Creek Road	18-Oct-21	GRAB	0.92	<1	64	15	<1	0.14
WEAG-880	965 Cross Creek Road	15-Nov-21	GRAB	0.93	<1	<2	10	<1	0.13
WEAG-880	965 Cross Creek Road	13-Dec-21	GRAB	0.38	<1	6	9	<1	0.21
WMZ-781	8005 Pasco Road, Mtzb Creek	25-Jan-21	GRAB	0.87	<1	<2	5	<1	0.09
WMZ-781	8005 Pasco Road, Mtzb Creek	22-Feb-21	GRAB	1.05	<1	<2	6	<1	0.08
WMZ-781	8005 Pasco Road, Mtzb Creek	22-Mar-21	GRAB	0.31	<1	<2	5	<1	0.83
WMZ-781	8005 Pasco Road, Mtzb Creek	19-Apr-21	GRAB	0.91	<1	46	12	<1	0.26
WMZ-781	8005 Pasco Road, Mtzb Creek	17-May-21	GRAB	0.82	<1	<2	12	<1	0.3
WMZ-781	8005 Pasco Road, Mtzb Creek	14-Jun-21	GRAB	0.97	<1	<2	12	<1	0.08
WMZ-781	8005 Pasco Road, Mtzb Creek	12-Jul-21	GRAB	1.3	<1	<2	18	<1	0.2
WMZ-781	8005 Pasco Road, Mtzb Creek	9-Aug-21	GRAB	1.13	<1	<2	18	<1	0.19
WMZ-781	8005 Pasco Road, Mtzb Creek	8-Sep-21	GRAB	0.98	<1	6	14	<1	0.37
WMZ-781	8005 Pasco Road, Mtzb Creek	4-Oct-21	GRAB	1.08	<1	2	11	<1	0.37
WMZ-781	8005 Pasco Road, Mtzb Creek	1-Nov-21	GRAB	0.85	<1	<2	10	<1	0.16
WMZ-781	8005 Pasco Road, Mtzb Creek	29-Nov-21	GRAB	1.13	<1	<2	7	<1	0.13
WMZ-782	8995 Lawrence Way, Mtzb Creek	11-Jan-21	GRAB	1.01	<1	<2	5	<1	0.6
WMZ-782	8995 Lawrence Way, Mtzb Creek	8-Feb-21	GRAB	0.86	<1	<2	4	<1	0.21
WMZ-782	8995 Lawrence Way, Mtzb Creek	8-Mar-21	GRAB	0.98	<1	6	6	<1	0.23
WMZ-782	8995 Lawrence Way, Mtzb Creek	7-Apr-21	GRAB	0.73	<1	<2	7	<1	0.38
WMZ-782	8995 Lawrence Way, Mtzb Creek	3-May-21	GRAB	0.79	<1	<2	12	<1	0.29
WMZ-782	8995 Lawrence Way, Mtzb Creek	31-May-21	GRAB	0.92	<1	<2	13	<1	0.3
WMZ-782	8995 Lawrence Way, Mtzb Creek	28-Jun-21	GRAB	1.29	<1	2	17	<1	0.17
WMZ-782	8995 Lawrence Way, Mtzb Creek	26-Jul-21	GRAB	1.19	<1	<2	18	<1	0.21
WMZ-782	8995 Lawrence Way, Mtzb Creek	23-Aug-21	GRAB	1.02	<1	<2	10	<1	0.28
WMZ-782	8995 Lawrence Way, Mtzb Creek	20-Sep-21	GRAB	0.51	<1	<2	13	<1	0.37
WMZ-782	8995 Lawrence Way, Mtzb Creek	18-Oct-21	GRAB	0.48	<1	<2	14	<1	0.26
WMZ-782	8995 Lawrence Way, Mtzb Creek	15-Nov-21	GRAB	0.99	<1	<2	11	<1	0.25
WMZ-782	8995 Lawrence Way, Mtzb Creek	13-Dec-21	GRAB	1.41	<1	2	6	<1	0.17

#### 4. Total Organic Carbon Sample Results

Date	Sample Type	Eagle Lake		Montizambert Creek	
		Raw	Treated	Raw	Treated
11-Jan-21	GRAB	2.4	1.3	2.8	0.7
08-Feb-21	GRAB	2.2	1.3	1.9	0.5
08-Mar-21	GRAB	2.2	1.2	2.5	0.6
19-Apr-21	GRAB	2.0	1.1	4.2	1.1
10-May-21	GRAB	2.4	1.5	3.2	1
14-Jun-21	GRAB	2.3	1.4	4.9	1.2
12-Jul-21	GRAB	2.2	1.3	1.3	0.3
09-Aug-21	GRAB	2.0	1.4	1.1	0.3
13-Sep-21	GRAB	1.9	1.4	1.2	0.3
13-Oct-21	GRAB	2.6	1.7	3.3	1.1
08-Nov-21	GRAB	3.0	1.7	2.8	0.9
13-Dec-21	GRAB	2.8	1.6	2.0	0.5

#### 5. Cryptosporidium & Giardia Sample Results

Date	Eagle Lake		Montizambert Creek	
	Cryptosporidium	Giardia	Cryptosporidium	Giardia
11-Jan-21	Negative	Negative	Negative	Negative
08-Feb-21	Negative	Negative	Negative	Negative
08-Mar-21	Negative	Negative	Negative	Negative
19-Apr-21	Negative	Negative	Negative	Negative
10-May-21	Negative	Negative	Negative	Negative
25-Jun-21	Negative	Negative	Negative	Negative
19-Jul-21	Negative	Negative	Negative	Negative
09-Aug-21	Negative	Negative	Negative	Negative
20-Sep-21	Negative	Negative	Negative	Negative
13-Oct-21	Negative	Negative	Negative	Negative
08-Nov-21	Negative	Negative	Negative	Negative
13-Dec-21	Negative	Negative	Negative	Negative