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EXECUTIVE SUMMARY

This report summarizes the District of West Vancouver's water quality program for 2019. 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 <u>http://www.metrovancouver.org/services/water.</u>

Raw water from both Eagle Lake and Montizambert Creek sources were analyzed for bacteriological, physical and chemical parameters. Bacteriological testing in 2019 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. 591 samples were analyzed in 2019. All samples met the guideline of having no less than a 0.2 mg/L chlorine residual and turbidity of no more than 5 NTU. Ten 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 re-checked. The new samples show turbidity readings and chlorine residuals are well within the limits set by the GCDWQ. Through Metro Vancouver Microbiology Laboratory's early notification program, the District was alerted that one sample had the potential to be positive for total coliform bacteria. As per protocol, the District notified VCH and resampled the location. Two consecutive day samples were taken and both were negative for total coliform bacteria. Additional monthly or quarterly 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 2019. 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 <u>http://www.westvancouver.ca</u>.

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; and
- 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 29th 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 3 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 2019.

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 2019.

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; and
- 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 2019, the District of West Vancouver had approximately 44,000 residents, which translates to a minimum of 528 samples required annually. The total number of samples collected by the District during 2019 was 591, 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 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. The guideline target is to have no less than 0.2 mg/L chlorine residual.

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 рН

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. Both Eagle Lake and Montizambert source water pH range between 6.5 - 7.

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 7.3 – 7.5 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 37 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	Microbiological, Turbidity, Temperature	Bi-weekly		
Eagle Lake	Giardia, Cryptosporidium	Monthly		
Montizambert Creek	Chemical, physical list	Semi-annually		
	Microbiological, Turbidity, Temperature	Weekly (not at every site)		
Distribution System	HAA's, THM's, pH	Quarterly		
	Metals	Semi-annually		

5.1 Sample Analysis – Source Water (untreated)

At Eagle Lake, 27 bi-weekly source water samples were tested. 23 samples had a most probable number (MPN) of less than 1 per 100 mL, 3 samples had a presence of E. coli ranging from 1 to 2 MPN/100mls, and 1 sample had a presence of E. coli of 11 MPN/100mls. Testing for total coliforms had results ranging from 5 to 1553 MPN/100mls in the raw, untreated source water.

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

Sample Site	Number of Samples		Ecoli MPN/100mLs		С			Temperature °C			Total Coliform MPN/100mLs			Turbidity NTU		
WEAG-LK1	27	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.
		<1	11	<1	<2	560	271	4	20	9	5	1553	210	0.17	0.62	0.32

At Montizambert Creek, 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 3 MPN/100mls. Testing for total coliforms had results ranging from 3 to 411 MPN/100mls in the raw, untreated source water.

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

Sample Site	Number of Samples		Ecoli MPN/100mLs		C	and the second state of th		Temperature °C			Total Coliform MPN/100mLs					
WMZ-CK1	26	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.
WWIZ-CKI		<1	3	<1	84	1400	289	3	20	9.8	3	411	99	0.3	5.7	1.25

Giardia and Cryptosporidium testing was conducted monthly for both sources. Of the 12 samples taken at Eagle Lake, 5 tested positive for both Giardia and Cryptosporidium. Results range from 1 to 3 per 100L. Of the 12 samples taken at Montizambert Creek, 5 tested positive for Giardia, 2 tested positive for Cryptosporidium, and 1 sample tested positive for both Giardia and Cryptosporidium. Sample results range from 1 to 6 per 100L and 2 to 3 per 100L respectively.

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.

591 distribution system samples were analyzed in 2019. All samples met the guideline of having no less than 0.2 mg/L chlorine residual and turbidity of no more than 5 NTU. There were no elevated samples for E. coli and one sample had a slightly elevated Total Coliforms count. Section 8.1 of this report outlines the response procedures in the event of a positive E. coli test result.

Sample Date	Sample Name	Sample Type	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
28-Oct-19	WVR-761	Grab	0.28	<1	30	11	1	0.4
29-Oct-19	WVR-761	Repeat	0.45	<1	<2	NA	<1	0.36
30-Oct-19	WVR-761	Repeat	0.41	<1	<2	12	<1	0.26

The following chart documents the Total Coliform retests for Station 761.

Ten 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 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.

	Parameter		Chlorine Free mg/L C No less than 0.2		Ecoli CFU/100mLs	(HPC FU/m	ıL	Ten	nperat °C	ure	Total Coliform CFU/100mLs	Turbidity NTU		ty
Sample	Guideline	No le	ss tha	ın 0.2	None	No Limit		No m	ore th	an 15	None	No m	ore th	ian 5	
Site	# of Samples	Min.	Max.	Avg.	Result	Min.	Max.	Avg.	Min.	Max.	Avg.	Result	Min.	Max.	Avg.
WVR-711	14	0.57	1.01	0.81	<1	<2	20	N/A	5	16	10	<1	0.10	0.25	0.16
WVR-712	14	0.20	0.70	0.43	<1	<2	660	N/A	4	16	10	<1	0.11	0.29	0.18
WVR-718	14	0.34	0.63	0.49	<1	<2	50	N/A	6	20	12	<1	0.13	2.10	0.34
WVR-761	15	0.22	0.52	0.40	<1	<2	8400	N/A	4	18	11	<1	0.15	0.40	0.25
WVR-764	13	0.66	0.89	0.77	<1	<2	4	N/A	3	17	9	<1	0.12	0.38	0.21
WVR-790	27	0.33	0.97	0.67	<1	<2	26	N/A	4	16	10	<1	0.10	0.47	0.22
WVR-791	14	0.45	1.28	0.78	<1	<2	12	N/A	4	15	10	<1	0.10	0.51	0.23
WVR-792	27	0.46	0.76	0.62	<1	<2	4	N/A	4	17	10	<1	0.13	0.33	0.20
WVR-793	14	0.24	0.69	0.43	<1	<2	4	N/A	4	16	10	<1	0.13	0.57	0.20
WVR-794	14	0.49	0.79	0.64	<1	<2	6	N/A	4	16	10	<1	0.12	0.35	0.22
WVR-795	14	0.51	0.74	0.60	<1	<2	8	N/A	3	16	10	<1	0.12	0.35	0.21
WVR-796	27	0.25	0.92	0.64	<1	<2	16	N/A	4	18	10	<1	0.09	0.45	0.17
WVR-797	13	0.28	0.85	0.51	<1	2	3400	N/A	5	17	11	<1	0.13	0.43	0.26

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

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

	Parameter	Chlo	orine I mg/L		Ecoli CFU/100mLs	C	HPC FU/m	iL	Ten	nperat °C	ure	Total Coliform CFU/100mLs	τι	ırbidi NTU	ty
Sample	Guideline	No le	ess tha	ın 0.2	None	N	o Lim	it	No m	ore th	an 15	None	No m	ore th	an 5
Site	# of Samples	Min.	Max.	Avg.	Result	Min.	Max.	Avg.	Min.	Max.	Avg.	Result	Min.	Max.	Avg.
WEAG-710	14	1.04	1.45	1.14	<1	<2	6	n/a	4	20	11	<1	0.08	0.35	0.16
WEAG-716	25	0.57	1.10	0.83	<1	<2	10	n/a	5	20	12	<1	0.1	2.90	0.46
WEAG-719	27	0.40	1.26	0.77	<1	<2	92	n/a	5	19	11	<1	0.07	0.80	0.28
WEAG-765	11	0.32	0.97	0.68	<1	<2	32	n/a	6	19	14	<1	0.08	0.42	0.20
WEAG-768	12	0.46	1.15	0.84	<1	<2	2	n/a	5	17	11	<1	0.08	0.24	0.14
WEAG-769	14	0.59	1.30	0.86	<1	<2	12	n/a	5	19	11	<1	0.12	0.50	0.18
WEAG-770	25	0.46	1.09	0.76	<1	<2	6	n/a	5	19	10	<1	0.09	0.43	0.17
WEAG-771	25	0.47	1.19	0.91	<1	<2	32	n/a	6	19	12	<1	0.1	0.74	0.24
WEAG-772	25	0.66	1.11	0.93	<1	<2	120	n/a	5	19	12	<1	0.1	2.50	0.34
WEAG-773	11	0.24	0.96	0.62	<1	<2	90	n/a	5	19	13	<1	0.12	0.72	0.31
WEAG-774	14	0.89	1.23	1.01	<1	<2	38	n/a	5	19	11	<1	0.09	0.34	0.18
WEAG-776	12	0.74	1.25	1.02	<1	<2	0	n/a	5	19	12	<1	0.08	0.76	0.18
WEAG-778	25	0.72	1.20	0.96	<1	<2	16	n/a	5	19	11	<1	0.13	1.10	0.34
WEAG-779	13	0.65	1.09	0.89	<1	<2	2	n/a	5	16	10	<1	0.08	0.19	0.13
WEAG-780	11	0.89	1.20	1.00	<1	<2	56	n/a	6	19	12	<1	0.12	1.40	0.31
WEAG-783	14	0.94	1.24	1.03	<1	<2	10	n/a	4	19	10	<1	0.09	0.70	0.20
WEAG-784	11	0.30	0.97	0.73	<1	<2	50	n/a	5	20	13	<1	0.17	1.30	0.39
WEAG-785	11	0.79	1.32	1.06	<1	<2	28	n/a	5	20	13	<1	0.11	0.61	0.31
WEAG-786	12	0.45	1.04	0.74	<1	<2	2	n/a	5	17	10	<1	0.1	0.44	0.22
WEAG-787	12	0.43	1.00	0.73	<1	<2	2	n/a	5	17	11	<1	0.13	0.82	0.41
WEAG-788	12	0.62	1.05	0.81	<1	<2	6	n/a	5	17	10	<1	0.08	0.39	0.21
WEAG-880	11	0.48	1.14	0.81	<1	<2	24	n/a	5	18	13	<1	0.07	0.33	0.16
WMZ-781	14	0.99	1.55	1.22	<1	<2	2	n/a	4	17	10	<1	0.09	0.26	0.15
WMZ-782	12	0.55	1.40	1.02	<1	<2	8	n/a	5	16	11	<1	0.11	2.50	0.60

The semi-annual testing for metals within the distribution system are provided in Appendix C. All the sampling results were well within GCDWQ guidelines with the exception of elevated iron levels identified at station WMZ-782. Iron in drinking water is an aesthetic parameter, with no evidence of dietary toxicity in the general population. Water mains are regularly flushed, and at the time of writing of this report, iron levels are within normal values.

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 2019 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 2019 and lists the mains to be replaced in 2020.

2019 Water Main Construction	2020 Planned Water Main Construction
A: Fairmile & Eyremount - 920 m	A: Southborough Drive – 274 m
B: 23rd Street- Kings to Mathers - 200 m	B: Cross Creek Road – 690 m
C: Oxley Street North - 205 m	C: Northwood Drive – 320 m
D: 1400 Blk Equimalt - 197 m	D: Russet Way – 440 m
E: 3300 Blk Westmount Road - 240 m	
F: 3200 Blk Westmount Road - 120 m	
G: Thompson Crescent - 140 m	
H: 3100 Blk Mathers Ave - 180 m	

6.0 PUBLIC NOTIFICATION

6.1 Drinking Water Advisory/Boil Water Advisory

2019 was free of significant turbidity events from the Metro Vancouver, Eagle Lake and Montizambert sources.

6.2 General Drinking Water Quality Advisory

There were no General Drinking Water Advisories issued in 2019.

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; both the Eagle Lake and Montizambert Treatment Plants are classified Level 3 facilities.

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 2019, the District staff maintained the following certification levels:

Water Distribution:

- Level 4 one supervisor
- Level 3 one operator
- Level 2 five operators
- Level 1 0 operators

Water Treatment:

- Level 3 one supervisor
- Level 2 two 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 100 mls.

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 Facilitation Filtration Fi

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 2019.

9.0 CONCLUSIONS

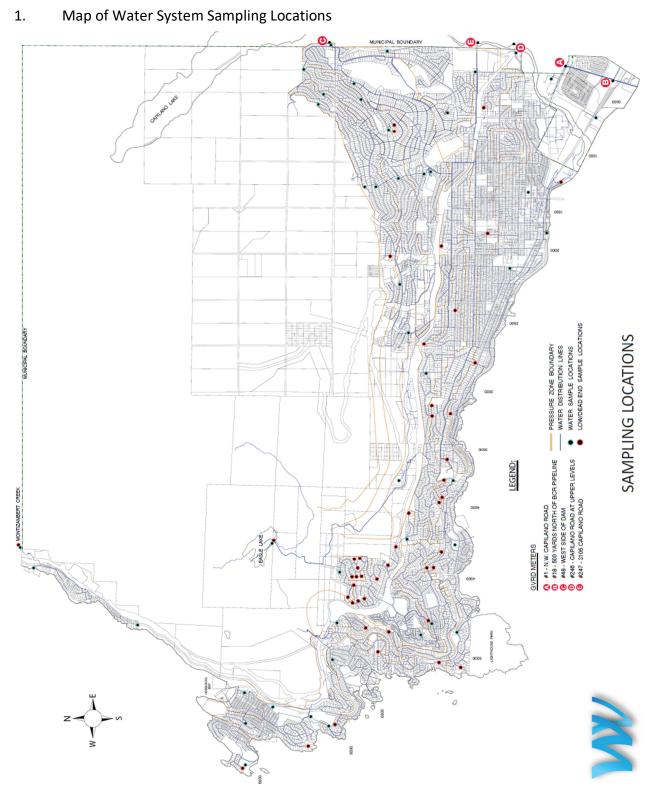
Overall, the residents of West Vancouver enjoy a very high quality of drinking water. The protected nature of the Eagle Lake and Montizambert Creek watersheds and the very low levels of E. coli, giardia, and cryptosporidium in the raw source waters are key factors.

In 2019, 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.





2. Water Sampling Locations by Address

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

	WATER S/	AMPLE LOCATIONS			
Supply Source	Address	Description	Flow Type	Sample #	Bottle #
Eagle Lake	1020 Groveland Road	Sample Kiosk	High	DmWEAG-711	E711
Require 12/13 samples	510 Ballantree Road	Sample Kiosk	Medium	DmWEAG-712	E712
3i - 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
	Whytcliffe 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
Iontizambert Creek	8005 Pasco Road	Sample Kiosk	Dead End	DmWMTZ-781	MZ-781
	8995 Lawrence Way	Sample Kiosk	Dead End	DmWMTZ-782	MZ-782
	Montizambert Creek ***	Source	Source	DmWMZ-CK1	MZ-CK1
letals Analysis					
emi - 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
	· ·				
	iate slightly if sampling point is not accessible.				_
Denotes source sites a	re sampled semi-annually for detailed analysis.				

APPENDIX B

1. Source Water Quality – Eagle Lake

Sample	Sample type	Sample	Sampled date	Ecoli	HPC	Temperature	Total Coliform	Turbidity
Name	Туре	Location	Date	MPN/100mLs	CFU/mL	°C	MPN/100mLs	NTU
WEAG-LK1	Grab	Eagle Lake Source	07-Jan-19	<1	380	6	34	0.24
WEAG-LK1	Grab	Eagle Lake Source	21-Jan-19	<1	240	5	32	0.28
WEAG-LK1	Grab	Eagle Lake Source	04-Feb-19	<1	56	4	12	0.22
WEAG-LK1	Grab	Eagle Lake Source	11-Feb-19	<1	190	4	15	0.23
WEAG-LK1	Grab	Eagle Lake Source	20-Feb-19	<1	<2	4	5	0.26
WEAG-LK1	Grab	Eagle Lake Source	04-Mar-19	<1	310	4	18	0.19
WEAG-LK1	Grab	Eagle Lake Source	18-Mar-19	<1	130	4	5	0.27
WEAG-LK1	Grab	Eagle Lake Source	01-Apr-19	<1	210	5	18	0.27
WEAG-LK1	Grab	Eagle Lake Source	15-Apr-19	<1	230	6	17	0.17
WEAG-LK1	Grab	Eagle Lake Source	29-Apr-19	<1	360	7	39	0.35
WEAG-LK1	Grab	Eagle Lake Source	13-May-19	<1	160	10	32	0.27
WEAG-LK1	Grab	Eagle Lake Source	27-May-19	<1	560	13	613	0.3
WEAG-LK1	Grab	Eagle Lake Source	10-Jun-19	<1	310	14	139	0.28
WEAG-LK1	Grab	Eagle Lake Source	24-Jun-19	<1	420	15	866	0.26
WEAG-LK1	Grab	Eagle Lake Source	08-Jul-19	<1	510	15	1553	0.48
WEAG-LK1	Grab	Eagle Lake Source	22-Jul-19	<1	210	18	411	0.29
WEAG-LK1	Grab	Eagle Lake Source	07-Aug-19	<1	360	20	272	0.34
WEAG-LK1	Grab	Eagle Lake Source	19-Aug-19	<1	310	13	457	0.4
WEAG-LK1	Grab	Eagle Lake Source	04-Sep-19	<1	180	18	194	0.35
WEAG-LK1	Grab	Eagle Lake Source	16-Sep-19	11	300	14	126	0.62
WEAG-LK1	Grab	Eagle Lake Source	30-Sep-19	1	330	10	66	0.43
WEAG-LK1	Grab	Eagle Lake Source	16-Oct-19	<1	140	10	80	0.46
WEAG-LK1	Grab	Eagle Lake Source	28-Oct-19	2	290	8	56	0.33
WEAG-LK1	Grab	Eagle Lake Source	13-Nov-19	1	110	8	26	0.3
WEAG-LK1	Grab	Eagle Lake Source	25-Nov-19	<1	280	8	71	0.35
WEAG-LK1	Grab	Eagle Lake Source	23-Dec-19	<1	NA	5	435	0.28
WEAG-LK1	Grab	Eagle Lake Source	09-Dec-19	<1	210	6	73	0.32

2. Source Water Quality – Montizambert Creek

Sample	Sample type	Sample	Sampled date	Ecoli	HPC	Temperature	Total Coliform	Turbidity
Name	Туре	Location	Date	MPN/100mLs	CFU/mL	°C	MPN/100mLs	NTU
WMZ-CK1	Grab	Montizambert Creek Source Water	03-Jan-19	<1	320	6	13	1.5
WMZ-CK1	Grab	Montizambert Creek Source Water	14-Jan-19	<1	130	7	17	1.4
WMZ-CK1	Grab	Montizambert Creek Source Water	28-Jan-19	<1	220	5	23	0.84
WMZ-CK1	Grab	Montizambert Creek Source Water	25-Feb-19	<1	90	3	4	0.4
WMZ-CK1	Grab	Montizambert Creek Source Water	11-Mar-19	<1	84	5	3	0.65
WMZ-CK1	Grab	Montizambert Creek Source Water	25-Mar-19	<1	140	4	6	1.6
WMZ-CK1	Grab	Montizambert Creek Source Water	08-Apr-19	<1	150	6	17	1.1
WMZ-CK1	Grab	Montizambert Creek Source Water	24-Apr-19	<1	160	6	42	1.3
WMZ-CK1	Grab	Montizambert Creek Source Water	06-May-19	<1	170	9	25	1.2
WMZ-CK1	Grab	Montizambert Creek Source Water	22-May-19	<1	300	9	46	1.5
WMZ-CK1	Grab	Montizambert Creek Source Water	03-Jun-19	<1	230	13	130	0.39
WMZ-CK1	Grab	Montizambert Creek Source Water	17-Jun-19	<1	220	14	91	0.33
WMZ-CK1	Grab	Montizambert Creek Source Water	03-Jul-19	<1	300	16	93	0.73
WMZ-CK1	Grab	Montizambert Creek Source Water	15-Jul-19	<1	340	20	231	0.38
WMZ-CK1	Grab	Montizambert Creek Source Water	29-Jul-19	1	320	14	326	0.8
WMZ-CK1	Grab	Montizambert Creek Source Water	12-Aug-19	<1	410	16	411	0.35
WMZ-CK1	Grab	Montizambert Creek Source Water	26-Aug-19	<1	260	13	194	0.37
WMZ-CK1	Grab	Montizambert Creek Source Water	09-Sep-19	1	280	13	196	0.3
WMZ-CK1	Grab	Montizambert Creek Source Water	24-Sep-19	3	1400	14	225	5.7
WMZ-CK1	Grab	Montizambert Creek Source Water	07-Oct-19	3	480	15	272	2.4
WMZ-CK1	Grab	Montizambert Creek Source Water	21-Oct-19	<1	350	9	88	2.4
WMZ-CK1	Grab	Montizambert Creek Source Water	04-Nov-19	<1	140	9	11	0.82
WMZ-CK1	Grab	Montizambert Creek Source Water	18-Nov-19	<1	460	9	50	0.8
WMZ-CK1	Grab	Montizambert Creek Source Water	02-Dec-19	<1	150	7	30	0.66
WMZ-CK1	Grab	Montizambert Creek Source Water	16-Dec-19	<1	120	7	17	3.2
WMZ-CK1	Grab	Montizambert Creek Source Water	30-Dec-19	<1	NA	5	25	1.4

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	0	Eagle Lake Source	Eagle Lake Source	Montizambert Creek Source Water	Montizambert Creek Source Water
Sample Date		2019/06/03 8:55	2019/12/03 7:54	2019/06/03 8:18	2019/12/03 8:35
Sample Type		GRAB	GRAB	GRAB	GRAB
Alkalinity as CaCO3	mg/L	3.1	3.2	1.5	3.6
Aluminium Dissolved	μg/L	70	111	6420	59
Aluminum Total	µg/L	84	125	9020	1620
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	3.0	3.6	1.3	1.8
Boron Total	μg/L	<10	<10	<10	<10
Cadmium Total	μg/L	<0.2	<0.2	<0.2	<0.2
Calcium Total	μg/L	1060	1240	1260	2270
Carbon Organic - Dissolved	mg/L	2.0	2.8	1.9	0.8
Carbon Organic - Total	mg/L	2.0	2.8	2.0	1.6
Chloride	mg/L	0.7	1.0	3.1	2.6
Chromium Total	μg/L	<0.05	<0.05	0.13	0.07
Color - Apparent	ACU	14	22	19	14
Color - True	TCU	9	18	14	3
Conductivity	µmhos/cm	11	13	15	21
Copper Total	µg/L	1.3	1.7	31.8	5.3
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	3.4	3.9	3.8	<5
Iron Dissolved Iron Total	µg/L	39 57	74	15	11
Lead Total	μg/L	<0.5	<0.5	3.6	<0.5
Magnesium Total	μg/L μg/L	182	205	157	295
Manganese Dissolved	μg/L	8.4	8.1	<0.5	<0.5
Manganese Total	μg/L μg/L	9.0	9.0	0.5	<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	0.02	0.02	0.04
Nitrogen - Nitrite as N	mg/L	<0.01	<0.01	<0.01	<0.01
рН	pH units	6.4	6.4	6.1	6.6
Phenol	mg/L	<0.005	<0.005	<0.005	<0.005
Phosphorus Dissolved	μg/L	16	<10	14	<10
Phosphorus Total	mg/L	<0.005		<0.005	
Phosphorus Total	μg/L		<10		<10
Potassium Total	μg/L	107	109	94	130
Residue Total	mg/L	17	23	31	32
Residue Total Dissolved	mg/L	9	15	10	20
Residue Total Fixed	mg/L	10	11	17	22
Residue Total Volatile	mg/L	7	12	14	10
Selenium Total Silica as SiO2	μg/L	<0.5	<0.5	<0.5	<0.5
	mg/L	4.0	4.1	3.7	<0.5
Silver Total Sodium Total	μg/L μg/L	<0.5 859	<0.5	<0.5	1290
Sodium Total Sulphate		0.8	1.0	0.9	2.7
UV Absorbance 254 nm	mg/L Abs/cm	0.8	0.116	0.078	0.019
Zinc Total	μg/L	3.9	<3.0	103	8.2

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
	91		Sample Location	Gleneagles Elementary - 6350 Marine Drive	Gleneagles Elementary - 6350 Marine Drive	8995 Lawrence Way Mtzb Creek	8995 Lawrence Way Mtzb Creek
	Canadian	Guideline	Sample Date	2019/04/30 9:15	2019/12/10 9:10	2019/04/30 8:55	2019/12/10 8:25
Parameter	Limit	Reason	Sample Type	GRAB	GRAB	GRAB	GRAB
Aluminum Total	200	Aesthetic	µg/L	22	24	21	24
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	1000	Health	µg/L	2.8	3.1	3.8	7.7
Boron Total	5000	Health	μg/L	<10	<10	<10	<10
Cadmium Total	5	Health	μg/L	<0.2	<0.2	<0.2	<0.2
Calcium Total	none		μg/L	1060	1370	1590	1870
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	≤1000	Aesthetic	µg/L	32.8	21.6	11.5	9.6
Iron Total	≤ 300	Aesthetic	µg/L	7	6	333	890
Lead Total	10	Health	µg/L	< 0.5	<0.5	<0.5	<0.5
Magnesium Total	none		µg/L	195	204	177	228
Manganese Total	≤ 50	Aesthetic	μg/L	5.2	4.8	2.2	6.8
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	91	107	92	108
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	4140	4130	3910	4150
Zinc Total	≤ 5000	Aesthetic	μg/L	7.6	3.8	4.3	<3.0
				1st Half	2nd Half	1st Half	2nd Half
			Sample Name	WVR-798	WVR-798	WVR-799	WVR-799
			Comple Location	Cypress Park	Cypress Park	Hollyburn	Hollyburn

			Sample Name	WVR-798	WVR-798	WVR-799	WVR-799
			Sample Location	Cypress Park Elementary	Cypress Park Elementary	Hollyburn Elementary	Hollyburn Elementary
	Canadian	Guideline	Sample Date	2019/04/30 9:45	2019/12/10 9:30	2019/04/30 10:20	2019/12/10 10:05
Parameter	Limit	Reason	Sample Type	GRAB	GRAB	GRAB	GRAB
Aluminum Total	200	Aesthetic	µg/L	26	20	20	15
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	1000	Health	μg/L	2.5	4.2	2.4	2.9
Boron Total	5000	Health	μg/L	<10	<10	<10	<10
Cadmium Total	5	Health	μg/L	<0.2	<0.2	<0.2	<0.2
Calcium Total	none		μg/L	1090	1680	4310	3140
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	≤1000	Aesthetic	μg/L	37.9	11	24.6	35.9
Iron Total	≤ 300	Aesthetic	μg/L	17	160	19	35
Lead Total	10	Health	μg/L	<0.5	<0.5	<0.5	<0.5
Magnesium Total	none		µg/L	159	185	163	181
Manganese Total	≤ 50	Aesthetic	μg/L	7.6	3.6	3.0	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	93	113	149	187
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	4070	4070	1510	1620
Zinc Total	≤ 5000	Aesthetic	μg/L	4.2	6.6	<3.0	<3.0

2. 2019 Disinfection By-Products Quarterly Averages

		Total THM	Total HAA Quarterly
2000 CON 10 CANADO		Quarterly Average	Average
Sample Site	Date Sampled	(Guideline Limit	(Guideline Limit
		100ppb/mL)	80ppb/mL)
WEAG-772	21-Feb-19	30	21
WEAG-772	14-May-19	30	24
WEAG-772	20-Aug-19	30	24
WEAG-772	4-Dec-19	37	25
		1	
WEAG-773	21-Feb-19	43	23
WEAG-773	14-May-19	44	31
WEAG-773	20-Aug-19	44	31
WEAG-773	4-Dec-19	48	33
WEAG-776	21-Feb-19	24	13
WEAG-776	14-May-19	25	16
WEAG-776	20-Aug-19	24	15
WEAG-776	4-Dec-19	27	16
14/54 0 770	21-Feb-19	28	18
WEAG-778	14-May-19	28	21
WEAG-778		29	22
WEAG-778	20-Aug-19 4-Dec-19	33	22
WEAG-778	4-Dec-19	55	22
WMZ-781	21-Feb-19	20	21
WMZ-781	14-May-19	26	34
WMZ-781	20-Aug-19	25	33
WMZ-781	4-Dec-19	19	25
WWW2-701			
WMZ-782	21-Feb-19	13	20
WMZ-782	14-May-19	14	28
WMZ-782	20-Aug-19	16	29
WMZ-782	4-Dec-19	12	20
a contraction of the second			111-
WVR-713	21-Feb-19	26	20
WVR-713	14-May-19	28	22
WVR-713	20-Aug-19	28	22
WVR-713	4-Dec-19	27	21
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WVR-716	21-Feb-19	31	17
WVR-716	14-May-19	32	20
WVR-716	20-Aug-19	31	19
WVR-716	4-Dec-19	35	21
WVR-717	21-Feb-19	22	14
	14-May-19	23	14
WVR-717 WVR-717	20-Aug-19	25	17
WVR-717 WVR-717	4-Dec-19	25	16
WVR-/1/	+ 060-10	23	10
WVR-764	21-Feb-19	20	12
WVR-764	14-May-19	21	14
WVR-764	20-Aug-19	23	13
WVR-764	4-Dec-19	22	13

3. Water Sampling Results

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature ℃	Total Coliform MF/100mLs	Turbidity NTU
WVR-711	Grab	1020 Groveland Road	07-Jan-19	1	<1	2	5	<1	0.12
WVR-711	Grab	1020 Groveland Road	04-Feb-19	0.64	<1	8	6	<1	0.12
WVR-711	Grab	1020 Groveland Road	11-Feb-19	0.9	<1	<2	5	<1	0.1
WVR-711	Grab	1020 Groveland Road	04-Mar-19	1.01	<1	2	5	<1	0.12
WVR-711	Grab	1020 Groveland Road	01-Apr-19	0.95	<1	<2	7	<1	0.13
WVR-711	Grab	1020 Groveland Road	29-Apr-19	0.96	<1	<2	10	<1	0.25
WVR-711	Grab	1020 Groveland Road	27-May-19	0.93	<1	<2	14	<1	0.24
WVR-711	Grab	1020 Groveland Road	24-Jun-19	0.74	<1	4	12	<1	0.11
WVR-711	Grab	1020 Groveland Road	22-Jul-19	0.8	<1	<2	13	<1	0.17
WVR-711	Grab	1020 Groveland Road	19-Aug-19	0.57	<1	18	16	<1	0.14
WVR-711	Grab	1020 Groveland Road	16-Sep-19	0.58	<1	20	16	<1	0.25
WVR-711	Grab	1020 Groveland Road	16-Oct-19	0.75	<1	<2	11	<1	0.15
WVR-711	Grab	1020 Groveland Road	13-Nov-19	0.72	<1	6	10	<1	0.17
WVR-711	Grab	1020 Groveland Road	09-Dec-19	0.79	<1	<2	8	<1	0.17
WVR-712	Grab	510 Ballantree Road	07-Jan-19	0.3	<1	660	6	<1	0.16
WVR-712	Grab	510 Ballantree Road	04-Feb-19	0.7	<1	<2	4	<1	0.13
WVR-712	Grab	510 Ballantree Road	11-Feb-19	0.68	<1	<2	4	<1	0.16
WVR-712	Grab	510 Ballantree Road	04-Mar-19	0.55	<1	6	5	<1	0.11
WVR-712	Grab	510 Ballantree Road	01-Apr-19	0.49	<1	2	8	<1	0.2
WVR-712	Grab	510 Ballantree Road	29-Apr-19	0.5	<1	<2	10	<1	0.19
WVR-712	Grab	510 Ballantree Road	27-May-19	0.5	<1	<2	15	<1	0.22
WVR-712	Grab	510 Ballantree Road	24-Jun-19	0.55	<1	2	16	<1	0.13
WVR-712	Grab	510 Ballantree Road	22-Jul-19	0.41	<1	<2	15	<1	0.26
WVR-712	Grab	510 Ballantree Road	19-Aug-19	0.31	<1	<2	16	<1	0.25
WVR-712	Grab	510 Ballantree Road	16-Sep-19	0.35	<1	2	16	<1	0.17
WVR-712	Grab	510 Ballantree Road	16-Oct-19	0.3	<1	<2	13	<1	0.29
WVR-712	Grab	510 Ballantree Road	13-Nov-19	0.2	<1	<2	10	<1	0.13
WVR-712	Grab	510 Ballantree Road	09-Dec-19	0.21	<1	<2	8	<1	0.13
WVR-718	Grab	885 - 22nd Street	03-Jan-19	0.54	<1	<2	7	<1	0.19
WVR-718	Grab	885 - 22nd Street	28-Jan-19	0.55	<1	8	8	<1	0.14
WVR-718	Grab	885 - 22nd Street	25-Feb-19	0.52	<1	<2	6	<1	0.17
WVR-718	Grab	885 - 22nd Street	25-Mar-19	0.45	<1	8	9	<1	0.28
WVR-718	Grab	885 - 22nd Street	24-Apr-19	0.61	<1	<2	12	<1	0.17
WVR-718	Grab	885 - 22nd Street	22-May-19	0.63	<1	16	14	<1	2.1
WVR-718	Grab	885 - 22nd Street	17-Jun-19	0.55	<1	50	15	<1	0.13
WVR-718	Grab	885 - 22nd Street	15-Jul-19	0.5	<1	28	20	<1	0.18
WVR-718	Grab	885 - 22nd Street	12-Aug-19	0.42	<1	16	17	<1	0.13

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
WVR-718	Grab	885 - 22nd Street	09-Sep-19	0.49	<1	<2	18	<1	0.32
WVR-718	Grab	885 - 22nd Street	07-Oct-19	0.34	<1	<2	15	<1	0.16
WVR-718	Grab	885 - 22nd Street	04-Nov-19	0.48	<1	<2	13	<1	0.16
WVR-718	Grab	885 - 22nd Street	02-Dec-19	0.4	<1	8	9	<1	0.4
WVR-718	Grab	885 - 22nd Street	30-Dec-19	0.42	<1	NA	7	<1	0.2
WVR-761	Grab	243 Rabbit Lane	21-Jan-19	0.38	<1	160	6	<1	0.27
WVR-761	Grab	243 Rabbit Lane	20-Feb-19	0.46	<1	44	4	<1	0.2
WVR-761	Grab	243 Rabbit Lane	18-Mar-19	0.48	<1	54	5	<1	0.27
WVR-761	Grab	243 Rabbit Lane	15-Apr-19	0.5	<1	400	9	<1	0.2
WVR-761	Grab	243 Rabbit Lane	13-May-19	0.33	<1	980	13	<1	0.22
WVR-761	Grab	243 Rabbit Lane	10-Jun-19	0.29	<1	2300	15	<1	0.15
WVR-761	Grab	243 Rabbit Lane	08-Jul-19	0.41	<1	400	15	<1	0.22
WVR-761	Grab	243 Rabbit Lane	07-Aug-19	0.48	<1	8400	18	<1	0.22
WVR-761	Grab	243 Rabbit Lane	04-Sep-19	0.38	<1	4700	18	<1	0.17
WVR-761	Grab	243 Rabbit Lane	30-Sep-19	0.22	<1	16	12	<1	0.3
WVR-761	Grab	243 Rabbit Lane	28-Oct-19	0.28	<1	30	11	1	0.4
WVR-761	Repeat	243 Rabbit Lane	29-Oct-19	0.45	<1	<2	NA	<1	0.36
WVR-761	Repeat	243 Rabbit Lane	30-Oct-19	0.41	<1	<2	12	<1	0.26
WVR-761	Grab	243 Rabbit Lane	25-Nov-19	0.35	<1	<2	9	<1	0.19
WVR-761	Grab	243 Rabbit Lane	23-Dec-19	0.52	<1	NA	7	<1	0.27
WVR-764	Grab	111 Bridge Road	21-Jan-19	0.86	<1	<2	5	<1	0.14
WVR-764	Grab	111 Bridge Road	20-Feb-19	0.81	<1	<2	3	<1	0.2
WVR-764	Grab	111 Bridge Road	18-Mar-19	0.78	<1	<2	4	<1	0.17
WVR-764	Grab	111 Bridge Road	15-Apr-19	0.74	<1	2	7	<1	0.12
WVR-764	Grab	111 Bridge Road	13-May-19	0.74	<1	<2	10	<1	0.24
WVR-764	Grab	111 Bridge Road	10-Jun-19	0.74	<1	<2	11	<1	0.16
WVR-764	Grab	111 Bridge Road	08-Jul-19	0.78	<1	<2	12	<1	0.38
WVR-764	Grab	111 Bridge Road	07-Aug-19	0.8	<1	4	15	<1	0.25
WVR-764	Grab	111 Bridge Road	04-Sep-19	0.77	<1	<2	17	<1	0.32
WVR-764	Grab	111 Bridge Road	30-Sep-19	0.66	<1	<2	12	<1	0.25
WVR-764	Grab	111 Bridge Road	28-Oct-19	0.8	<1	<2	10	<1	0.23
WVR-764	Grab	111 Bridge Road	25-Nov-19	0.89	<1	2	7	<1	0.15
WVR-764	Grab	111 Bridge Road	23-Dec-19	0.68	<1	NA	6	<1	0.17
WVR-790	Grab	19 Glenmore Drive	07-Jan-19	0.62	<1	26	6	<1	0.14
WVR-790	Grab	19 Glenmore Drive	21-Jan-19	0.54	<1	<2	7	<1	0.32
WVR-790	Grab	19 Glenmore Drive	04-Feb-19	0.71	<1	2	5	<1	0.1
WVR-790	Grab	19 Glenmore Drive	11-Feb-19	0.67	<1	<2	4	<1	0.15
WVR-790	Grab	19 Glenmore Drive	20-Feb-19	0.74	<1	<2	4	<1	0.18
WVR-790	Grab	19 Glenmore Drive	04-Mar-19	0.97	<1	<2	4	<1	0.16

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature ℃	Total Coliform MF/100mLs	Turbidity NTU
WVR-790	Grab	19 Glenmore Drive	18-Mar-19	0.6	<1	<2	6	<1	0.3
WVR-790	Grab	19 Glenmore Drive	01-Apr-19	0.72	<1	<2	7	<1	0.16
WVR-790	Grab	19 Glenmore Drive	15-Apr-19	0.77	<1	<2	7	<1	0.16
WVR-790	Grab	19 Glenmore Drive	29-Apr-19	0.76	<1	<2	9	<1	0.23
WVR-790	Grab	19 Glenmore Drive	13-May-19	0.74	<1	<2	9	<1	0.19
WVR-790	Grab	19 Glenmore Drive	27-May-19	0.76	<1	<2	12	<1	0.14
WVR-790	Grab	19 Glenmore Drive	10-Jun-19	0.68	<1	<2	11	<1	0.13
WVR-790	Grab	19 Glenmore Drive	24-Jun-19	0.69	<1	<2	11	<1	0.12
WVR-790	Grab	19 Glenmore Drive	08-Jul-19	0.81	<1	<2	11	<1	0.25
WVR-790	Grab	19 Glenmore Drive	22-Jul-19	0.7	<1	<2	12	<1	0.16
WVR-790	Grab	19 Glenmore Drive	07-Aug-19	0.77	<1	<2	15	<1	0.29
WVR-790	Grab	19 Glenmore Drive	19-Aug-19	0.68	<1	2	13	<1	0.2
WVR-790	Grab	19 Glenmore Drive	04-Sep-19	0.8	<1	<2	16	<1	0.26
WVR-790	Grab	19 Glenmore Drive	16-Sep-19	0.37	<1	<2	16	<1	0.31
WVR-790	Grab	19 Glenmore Drive	30-Sep-19	0.59	<1	<2	13	<1	0.16
WVR-790	Grab	19 Glenmore Drive	16-Oct-19	0.89	<1	<2	14	<1	0.2
WVR-790	Grab	19 Glenmore Drive	28-Oct-19	0.68	<1	<2	10	<1	0.17
WVR-790	Grab	19 Glenmore Drive	13-Nov-19	0.61	<1	<2	11	<1	0.25
WVR-790	Grab	19 Glenmore Drive	25-Nov-19	0.42	<1	<2	9	<1	0.3
WVR-790	Grab	19 Glenmore Drive	09-Dec-19	0.5	<1	<2	10	<1	0.33
WVR-790	Grab	19 Glenmore Drive	23-Dec-19	0.33	<1	NA	7	<1	0.47
WVR-791	Grab	200 Keith Road	07-Jan-19	0.49	<1	<2	7	<1	0.1
WVR-791	Grab	200 Keith Road	04-Feb-19	1.23	<1	<2	4	<1	0.16
WVR-791	Grab	200 Keith Road	11-Feb-19	0.45	<1	<2	5	<1	0.12
WVR-791	Grab	200 Keith Road	04-Mar-19	0.9	<1	<2	5	<1	0.13
WVR-791	Grab	200 Keith Road	01-Apr-19	0.73	<1	<2	6	<1	0.2
WVR-791	Grab	200 Keith Road	29-Apr-19	0.79	<1	<2	9	<1	0.19
WVR-791	Grab	200 Keith Road	27-May-19	0.73	<1	12	13	<1	0.47
WVR-791	Grab	200 Keith Road	24-Jun-19	0.58	<1	2	14	<1	0.11
WVR-791	Grab	200 Keith Road	22-Jul-19	0.8	<1	<2	15	<1	0.32
WVR-791	Grab	200 Keith Road	19-Aug-19	0.72	<1	<2	15	<1	0.21
WVR-791	Grab	200 Keith Road	16-Sep-19	0.63	<1	<2	15	<1	0.31
WVR-791	Grab	200 Keith Road	16-Oct-19	0.75	<1	<2	12	<1	0.1
WVR-791	Grab	200 Keith Road	13-Nov-19	1.28	<1	<2	9	<1	0.25
WVR-791	Grab	200 Keith Road	09-Dec-19	0.9	<1	<2	7	<1	0.51
WVR-792	Grab	76 Bonnymuir Drive	07-Jan-19	0.59	<1	<2	8	<1	0.13
WVR-792	Grab	76 Bonnymuir Drive	21-Jan-19	0.66	<1	2	6	<1	0.19
WVR-792	Grab	76 Bonnymuir Drive	04-Feb-19	0.73	<1	<2	4	<1	0.15
WVR-792	Grab	76 Bonnymuir Drive	11-Feb-19	0.65	<1	<2	5	<1	0.14

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 OmLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
WVR-792	Grab	76 Bonnymuir Drive	20-Feb-19	0.73	<1	<2	5	<1	0.19
WVR-792	Grab	76 Bonnymuir Drive	04-Mar-19	0.75	<1	<2	6	<1	0.26
WVR-792	Grab	76 Bonnymuir Drive	18-Mar-19	0.7	<1	<2	7	<1	0.21
WVR-792	Grab	76 Bonnymuir Drive	01-Apr-19	0.66	<1	<2	7	<1	0.18
WVR-792	Grab	76 Bonnymuir Drive	15-Apr-19	0.62	<1	<2	9	<1	0.13
WVR-792	Grab	76 Bonnymuir Drive	29-Apr-19	0.68	<1	<2	9	<1	0.19
WVR-792	Grab	76 Bonnymuir Drive	13-May-19	0.59	<1	<2	10	<1	0.23
WVR-792	Grab	76 Bonnymuir Drive	27-May-19	0.71	<1	<2	12	<1	0.28
WVR-792	Grab	76 Bonnymuir Drive	10-Jun-19	0.65	<1	<2	11	<1	0.2
WVR-792	Grab	76 Bonnymuir Drive	24-Jun-19	0.75	<1	<2	11	<1	0.19
WVR-792	Grab	76 Bonnymuir Drive	08-Jul-19	0.71	<1	<2	11	<1	0.23
WVR-792	Grab	76 Bonnymuir Drive	22-Jul-19	0.64	<1	2	10	<1	0.27
WVR-792	Grab	76 Bonnymuir Drive	07-Aug-19	0.7	<1	4	15	<1	0.22
WVR-792	Grab	76 Bonnymuir Drive	19-Aug-19	0.52	<1	<2	15	<1	0.22
WVR-792	Grab	76 Bonnymuir Drive	04-Sep-19	0.76	<1	<2	17	<1	0.21
WVR-792	Grab	76 Bonnymuir Drive	16-Sep-19	0.51	<1	<2	15	<1	0.33
WVR-792	Grab	76 Bonnymuir Drive	30-Sep-19	0.47	<1	<2	12	<1	0.17
WVR-792	Grab	76 Bonnymuir Drive	16-Oct-19	0.49	<1	<2	13	<1	0.15
WVR-792	Grab	76 Bonnymuir Drive	28-Oct-19	0.52	<1	<2	10	<1	0.19
WVR-792	Grab	76 Bonnymuir Drive	13-Nov-19	0.46	<1	<2	12	<1	0.16
WVR-792	Grab	76 Bonnymuir Drive	25-Nov-19	0.52	<1	<2	10	<1	0.16
WVR-792	Grab	76 Bonnymuir Drive	09-Dec-19	0.54	<1	4	10	<1	0.17
WVR-792	Grab	76 Bonnymuir Drive	23-Dec-19	0.52	<1	NA	8	<1	0.17
WVR-793	Grab	559 Kildonan Road	07-Jan-19	0.29	<1	2	6	<1	0.17
WVR-793	Grab	559 Kildonan Road	04-Feb-19	0.69	<1	<2	4	<1	0.13
WVR-793	Grab	559 Kildonan Road	11-Feb-19	0.62	<1	<2	4	<1	0.14
WVR-793	Grab	559 Kildonan Road	04-Mar-19	0.57	<1	<2	4	<1	0.15
WVR-793	Grab	559 Kildonan Road	01-Apr-19	0.51	<1	<2	8	<1	0.2
WVR-793	Grab	559 Kildonan Road	29-Apr-19	0.46	<1	<2	9	<1	0.21
WVR-793	Grab	559 Kildonan Road	27-May-19	0.42	<1	2	15	<1	0.22
WVR-793	Grab	559 Kildonan Road	24-Jun-19	0.41	<1	4	16	<1	0.14
WVR-793	Grab	559 Kildonan Road	22-Jul-19	0.33	<1	<2	16	<1	0.18
WVR-793	Grab	559 Kildonan Road	19-Aug-19	0.34	<1	2	16	<1	0.18
WVR-793	Grab	559 Kildonan Road	16-Sep-19	0.29	<1	<2	15	<1	0.18
WVR-793	Grab	559 Kildonan Road	16-Oct-19	0.31	<1	<2	11	<1	0.16
WVR-793	Grab	559 Kildonan Road	13-Nov-19	0.24	<1	<2	10	<1	0.57
WVR-793	Grab	559 Kildonan Road	09-Dec-19	0.48	<1	<2	8	<1	0.13
WVR-794	Grab	702 Barnham Road	07-Jan-19	0.69	<1	<2	6	<1	0.15
WVR-794	Grab	702 Barnham Road	04-Feb-19	0.69	<1	<2	5	<1	0.18

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature ℃	Total Coliform MF/100mLs	Turbidity NTU
WVR-794	Grab	702 Barnham Road	11-Feb-19	0.64	<1	<2	5	<1	0.14
WVR-794	Grab	702 Barnham Road	04-Mar-19	0.66	<1	<2	4	<1	0.12
WVR-794	Grab	702 Barnham Road	01-Apr-19	0.79	<1	<2	7	<1	0.16
WVR-794	Grab	702 Barnham Road	29-Apr-19	0.6	<1	<2	10	<1	0.26
WVR-794	Grab	702 Barnham Road	27-May-19	0.65	<1	6	14	<1	0.35
WVR-794	Grab	702 Barnham Road	24-Jun-19	0.66	<1	2	14	<1	0.16
WVR-794	Grab	702 Barnham Road	22-Jul-19	0.58	<1	2	16	<1	0.32
WVR-794	Grab	702 Barnham Road	19-Aug-19	0.58	<1	2	16	<1	0.25
WVR-794	Grab	702 Barnham Road	16-Sep-19	0.53	<1	4	16	<1	0.31
WVR-794	Grab	702 Barnham Road	16-Oct-19	0.49	<1	<2	12	<1	0.17
WVR-794	Grab	702 Barnham Road	13-Nov-19	0.62	<1	<2	10	<1	0.34
WVR-794	Grab	702 Barnham Road	09-Dec-19	0.75	<1	<2	8	<1	0.13
WVR-795	Grab	620 Kenwood Road	07-Jan-19	0.6	<1	6	5	<1	0.18
WVR-795	Grab	620 Kenwood Road	04-Feb-19	0.61	<1	<2	6	<1	0.15
WVR-795	Grab	620 Kenwood Road	11-Feb-19	0.6	<1	<2	5	<1	0.14
WVR-795	Grab	620 Kenwood Road	04-Mar-19	0.62	<1	2	3	<1	0.17
WVR-795	Grab	620 Kenwood Road	01-Apr-19	0.62	<1	2	7	<1	0.19
WVR-795	Grab	620 Kenwood Road	29-Apr-19	0.64	<1	<2	9	<1	0.25
WVR-795	Grab	620 Kenwood Road	27-May-19	0.74	<1	4	12	<1	0.29
WVR-795	Grab	620 Kenwood Road	24-Jun-19	0.72	<1	<2	12	<1	0.12
WVR-795	Grab	620 Kenwood Road	22-Jul-19	0.51	<1	2	15	<1	0.23
WVR-795	Grab	620 Kenwood Road	19-Aug-19	0.52	<1	8	16	<1	0.23
WVR-795	Grab	620 Kenwood Road	16-Sep-19	0.59	<1	<2	16	<1	0.21
WVR-795	Grab	620 Kenwood Road	16-Oct-19	0.54	<1	<2	12	<1	0.18
WVR-795	Grab	620 Kenwood Road	13-Nov-19	0.59	<1	<2	9	<1	0.35
WVR-795	Grab	620 Kenwood Road	09-Dec-19	0.51	<1	<2	7	<1	0.18
WVR-796	Grab	315 Mathers Avenue	07-Jan-19	0.55	<1	<2	7	<1	0.09
WVR-796	Grab	315 Mathers Avenue	21-Jan-19	0.76	<1	2	5	<1	0.18
WVR-796	Grab	315 Mathers Avenue	04-Feb-19	0.7	<1	<2	5	<1	0.11
WVR-796	Grab	315 Mathers Avenue	11-Feb-19	0.5	<1	<2	5	<1	0.1
WVR-796	Grab	315 Mathers Avenue	20-Feb-19	0.66	<1	2	4	<1	0.13
WVR-796	Grab	315 Mathers Avenue	04-Mar-19	0.92	<1	<2	5	<1	0.12
WVR-796	Grab	315 Mathers Avenue	18-Mar-19	0.25	<1	<2	5	<1	0.16
WVR-796	Grab	315 Mathers Avenue	01-Apr-19	0.8	<1	<2	8	<1	0.13
WVR-796	Grab	315 Mathers Avenue	15-Apr-19	0.73	<1	<2	9	<1	0.09
WVR-796	Grab	315 Mathers Avenue	29-Apr-19	0.75	<1	<2	10	<1	0.13
WVR-796	Grab	315 Mathers Avenue	13-May-19	0.46	<1	4	12	<1	0.16
WVR-796	Grab	315 Mathers Avenue	27-May-19	0.6	<1	2	15	<1	0.2
WVR-796	Grab	315 Mathers Avenue	10-Jun-19	0.69	<1	<2	14	<1	0.16

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 OmLs	HPC CFU/mls	Temperature ℃	Total Coliform MF/100mLs	Turbidity NTU
WVR-796	Grab	315 Mathers Avenue	24-Jun-19	0.7	<1	<2	13	<1	0.11
WVR-796	Grab	315 Mathers Avenue	08-Jul-19	0.46	<1	2	17	<1	0.14
WVR-796	Grab	315 Mathers Avenue	22-Jul-19	0.76	<1	<2	15	<1	0.26
WVR-796	Grab	315 Mathers Avenue	07-Aug-19	0.42	<1	<2	17	<1	0.29
WVR-796	Grab	315 Mathers Avenue	19-Aug-19	0.64	<1	<2	15	<1	0.21
WVR-796	Grab	315 Mathers Avenue	04-Sep-19	0.64	<1	<2	18	<1	0.45
WVR-796	Grab	315 Mathers Avenue	16-Sep-19	0.58	<1	6	15	<1	0.31
WVR-796	Grab	315 Mathers Avenue	30-Sep-19	0.41	<1	<2	12	<1	0.26
WVR-796	Grab	315 Mathers Avenue	16-Oct-19	0.71	<1	16	12	<1	0.1
WVR-796	Grab	315 Mathers Avenue	28-Oct-19	0.83	<1	<2	11	<1	0.11
WVR-796	Grab	315 Mathers Avenue	13-Nov-19	0.86	<1	<2	10	<1	0.12
WVR-796	Grab	315 Mathers Avenue	25-Nov-19	0.66	<1	<2	9	<1	0.24
WVR-796	Grab	315 Mathers Avenue	09-Dec-19	0.63	<1	<2	7	<1	0.09
WVR-796	Grab	315 Mathers Avenue	23-Dec-19	0.66	<1	NA	8	<1	0.18
WVR-797	Grab	395 Klahanie Court	21-Jan-19	0.45	<1	440	6	<1	0.27
WVR-797	Grab	395 Klahanie Court	20-Feb-19	0.3	<1	LA	5	<1	0.32
WVR-797	Grab	395 Klahanie Court	18-Mar-19	0.28	<1	500	5	<1	0.43
WVR-797	Grab	395 Klahanie Court	15-Apr-19	0.46	<1	870	7	<1	0.36
WVR-797	Grab	395 Klahanie Court	13-May-19	0.5	<1	530	11	<1	0.24
WVR-797	Grab	395 Klahanie Court	10-Jun-19	0.38	<1	2600	14	<1	0.23
WVR-797	Grab	395 Klahanie Court	08-Jul-19	0.85	<1	2	15	<1	0.32
WVR-797	Grab	395 Klahanie Court	07-Aug-19	0.75	<1	8	16	<1	0.14
WVR-797	Grab	395 Klahanie Court	04-Sep-19	0.3	<1	3400	17	<1	0.14
WVR-797	Grab	395 Klahanie Court	30-Sep-19	0.53	<1	4	14	<1	0.13
WVR-797	Grab	395 Klahanie Court	28-Oct-19	0.73	<1	18	11	<1	0.2
WVR-797	Grab	395 Klahanie Court	25-Nov-19	0.57	<1	6	10	<1	0.21
WVR-797	Grab	395 Klahanie Court	23-Dec-19	0.52	<1	NA	6	<1	0.4
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WEAG-710	Grab	4782 Woodgreen Drive	03-Jan-19	1.17	<1	<2	5	<1	0.31
WEAG-710	Grab	4782 Woodgreen Drive	28-Jan-19	1.13	<1	<2	5	<1	0.24
WEAG-710	Grab	4782 Woodgreen Drive	25-Feb-19	1.09	<1	<2	4	<1	0.12
WEAG-710	Grab	4782 Woodgreen Drive	25-Mar-19	1.06	<1	<2	5	<1	0.11
WEAG-710	Grab	4782 Woodgreen Drive	24-Apr-19	1.05	<1	<2	10	<1	0.15
WEAG-710	Grab	4782 Woodgreen Drive	22-May-19	1.08	<1	<2	13	<1	0.08
WEAG-710	Grab	4782 Woodgreen Drive	17-Jun-19	1.08	<1	<2	19	<1	0.14
WEAG-710	Grab	4782 Woodgreen Drive	15-Jul-19	1.15	<1	<2	20	<1	0.16
WEAG-710	Grab	4782 Woodgreen Drive	12-Aug-19	1.3	<1	<2	17	<1	0.13
WEAG-710	Grab	4782 Woodgreen Drive	09-Sep-19	1.2	<1	6	17	<1	0.16
WEAG-710	Grab	4782 Woodgreen Drive	07-Oct-19	1.13	<1	<2	13	<1	0.13

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
WEAG-710	Grab	4782 Woodgreen Drive	04-Nov-19	1.05	<1	<2	9	<1	0.1
WEAG-710	Grab	4782 Woodgreen Drive	02-Dec-19	1.45	<1	<2	8	<1	0.35
WEAG-710	Grab	4782 Woodgreen Drive	30-Dec-19	1.04	<1	NA	5	<1	0.11
WEAG-716	Grab	The Dale & Marine	03-Jan-19	0.95	<1	6	5	<1	0.16
WEAG-716	Grab	The Dale & Marine	14-Jan-19	0.99	<1	2	6	<1	2.9
WEAG-716	Grab	The Dale & Marine	28-Jan-19	0.83	<1	<2	7	<1	0.15
WEAG-716	Grab	The Dale & Marine	25-Feb-19	0.87	<1	<2	5	<1	1.4
WEAG-716	Grab	The Dale & Marine	11-Mar-19	0.95	<1	<2	5	<1	1
WEAG-716	Grab	The Dale & Marine	25-Mar-19	0.76	<1	<2	6	<1	0.14
WEAG-716	Grab	The Dale & Marine	08-Apr-19	0.73	<1	2	9	<1	0.1
WEAG-716	Grab	The Dale & Marine	24-Apr-19	0.96	<1	<2	10	<1	0.2
WEAG-716	Grab	The Dale & Marine	06-May-19	0.87	<1	<2	11	<1	0.28
WEAG-716	Grab	The Dale & Marine	22-May-19	0.84	<1	<2	13	<1	0.13
WEAG-716	Grab	The Dale & Marine	03-Jun-19	0.83	<1	4	16	<1	0.19
WEAG-716	Grab	The Dale & Marine	17-Jun-19	0.83	<1	2	18	<1	0.15
WEAG-716	Grab	The Dale & Marine	03-Jul-19	1.04	<1	<2	19	<1	0.39
WEAG-716	Grab	The Dale & Marine	15-Jul-19	0.85	<1	<2	19	<1	0.18
WEAG-716	Grab	The Dale & Marine	29-Jul-19	0.81	<1	2	20	<1	0.45
WEAG-716	Grab	The Dale & Marine	12-Aug-19	1.1	<1	2	16	<1	0.15
WEAG-716	Grab	The Dale & Marine	26-Aug-19	0.8	<1	4	18	<1	0.14
WEAG-716	Grab	The Dale & Marine	09-Sep-19	0.6	<1	6	19	<1	0.16
WEAG-716	Grab	The Dale & Marine	24-Sep-19	0.72	<1	10	15	<1	0.37
WEAG-716	Grab	The Dale & Marine	07-Oct-19	0.88	<1	<2	14	<1	0.12
WEAG-716	Grab	The Dale & Marine	21-Oct-19	0.86	<1	6	12	<1	0.19
WEAG-716	Grab	The Dale & Marine	04-Nov-19	0.69	<1	<2	10	<1	0.18
WEAG-716	Grab	The Dale & Marine	18-Nov-19	0.57	<1	<2	10	<1	1.9
WEAG-716	Grab	The Dale & Marine	02-Dec-19	0.73	<1	<2	8	<1	0.14
WEAG-716	Grab	The Dale & Marine	30-Dec-19	0.8	<1	NA	5	<1	0.26
WEAG-719	Grab	2600 Chelsea Court	07-Jan-19	0.89	<1	<2	6	<1	0.15
WEAG-719	Grab	2600 Chelsea Court	21-Jan-19	1.26	<1	<2	6	<1	0.21
WEAG-719	Grab	2600 Chelsea Court	04-Feb-19	1.2	<1	<2	7	<1	0.1
WEAG-719	Grab	2600 Chelsea Court	11-Feb-19	1.04	<1	<2	5	<1	0.07
WEAG-719	Grab	2600 Chelsea Court	20-Feb-19	0.75	<1	4	7	<1	0.38
WEAG-719	Grab	2600 Chelsea Court	04-Mar-19	0.4	<1	46	7	<1	0.42
WEAG-719	Grab	2600 Chelsea Court	18-Mar-19	0.64	<1	2	7	<1	0.26
WEAG-719	Grab	2600 Chelsea Court	01-Apr-19	0.84	<1	6	9	<1	0.32
WEAG-719	Grab	2600 Chelsea Court	15-Apr-19	0.45	<1	<2	9	<1	0.8
WEAG-719	Grab	2600 Chelsea Court	29-Apr-19	0.41	<1	<2	11	<1	0.37
WEAG-719	Grab	2600 Chelsea Court	13-May-19	0.75	<1	2	14	<1	0.22

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature ℃	Total Coliform MF/100mLs	Turbidity NTU
WEAG-719	Grab	2600 Chelsea Court	27-May-19	0.78	<1	60	14	<1	0.3
WEAG-719	Grab	2600 Chelsea Court	10-Jun-19	0.75	<1	2	15	<1	0.18
WEAG-719	Grab	2600 Chelsea Court	24-Jun-19	0.71	<1	4	16	<1	0.14
WEAG-719	Grab	2600 Chelsea Court	08-Jul-19	0.79	<1	<2	14	<1	0.26
WEAG-719	Grab	2600 Chelsea Court	22-Jul-19	0.87	<1	<2	16	<1	0.12
WEAG-719	Grab	2600 Chelsea Court	07-Aug-19	0.95	<1	<2	19	<1	0.16
WEAG-719	Grab	2600 Chelsea Court	19-Aug-19	0.75	<1	2	17	<1	0.11
WEAG-719	Grab	2600 Chelsea Court	04-Sep-19	0.62	<1	<2	17	<1	0.19
WEAG-719	Grab	2600 Chelsea Court	16-Sep-19	0.61	<1	92	16	<1	0.4
WEAG-719	Grab	2600 Chelsea Court	30-Sep-19	0.45	<1	62	12	<1	0.36
WEAG-719	Grab	2600 Chelsea Court	16-Oct-19	0.95	<1	<2	12	<1	0.15
WEAG-719	Grab	2600 Chelsea Court	28-Oct-19	0.55	<1	22	11	<1	0.34
WEAG-719	Grab	2600 Chelsea Court	13-Nov-19	0.48	<1	10	10	<1	0.29
WEAG-719	Grab	2600 Chelsea Court	25-Nov-19	1.05	<1	<2	8	<1	0.5
WEAG-719	Grab	2600 Chelsea Court	09-Dec-19	1.1	<1	<2	7	<1	0.08
WEAG-719	Grab	2600 Chelsea Court	23-Dec-19	0.63	<1	NA	7	<1	0.62
WEAG-765	Grab	5459 West Vista Court	14-Jan-19	0.54	<1	<2	8	<1	0.18
WEAG-765	Grab	5459 West Vista Court	11-Mar-19	0.78	<1	<2	6	<1	0.19
WEAG-765	Grab	5459 West Vista Court	08-Apr-19	0.51	<1	<2	10	<1	0.08
WEAG-765	Grab	5459 West Vista Court	06-May-19	0.92	<1	<2	15	<1	0.42
WEAG-765	Grab	5459 West Vista Court	03-Jun-19	0.59	<1	<2	16	<1	0.15
WEAG-765	Grab	5459 West Vista Court	03-Jul-19	0.97	<1	<2	19	<1	0.15
WEAG-765	Grab	5459 West Vista Court	29-Jul-19	0.63	<1	<2	19	<1	0.26
WEAG-765	Grab	5459 West Vista Court	26-Aug-19	0.69	<1	4	18	<1	0.21
WEAG-765	Grab	5459 West Vista Court	24-Sep-19	0.32	<1	2	15	<1	0.17
WEAG-765	Grab	5459 West Vista Court	21-Oct-19	0.83	<1	32	12	<1	0.1
WEAG-765	Grab	5459 West Vista Court	18-Nov-19	0.69	<1	<2	11	<1	0.31
WEAG-768	Grab	2185 Gisby Street	20-Feb-19	0.86	<1	2	5	<1	0.12
WEAG-768	Grab	2185 Gisby Street	18-Mar-19	1.15	<1	2	7	<1	0.14
WEAG-768	Grab	2185 Gisby Street	15-Apr-19	0.99	<1	<2	8	<1	0.24
WEAG-768	Grab	2185 Gisby Street	13-May-19	0.9	<1	2	12	<1	0.19
WEAG-768	Grab	2185 Gisby Street	10-Jun-19	0.73	<1	<2	13	<1	0.15
WEAG-768	Grab	2185 Gisby Street	08-Jul-19	0.68	<1	<2	14	<1	0.14
WEAG-768	Grab	2185 Gisby Street	07-Aug-19	0.69	<1	<2	16	<1	0.19
WEAG-768	Grab	2185 Gisby Street	04-Sep-19	0.72	<1	<2	17	<1	0.13
WEAG-768	Grab	2185 Gisby Street	30-Sep-19	0.46	<1	<2	13	<1	0.15
WEAG-768	Grab	2185 Gisby Street	28-Oct-19	1.02	<1	<2	11	<1	0.08
WEAG-768	Grab	2185 Gisby Street	25-Nov-19	0.92	<1	<2	8	<1	0.1
WEAG-768	Grab	2185 Gisby Street	23-Dec-19	0.97	<1	NA	7	<1	0.08

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
WEAG-769	Grab	1210 Chartwell Drive	03-Jan-19	1.08	<1	4	5	<1	0.13
WEAG-769	Grab	1210 Chartwell Drive	28-Jan-19	0.96	<1	4	7	<1	0.12
WEAG-769	Grab	1210 Chartwell Drive	25-Feb-19	0.59	<1	6	5	<1	0.17
WEAG-769	Grab	1210 Chartwell Drive	25-Mar-19	0.95	<1	8	8	<1	0.15
WEAG-769	Grab	1210 Chartwell Drive	24-Apr-19	0.93	<1	4	11	<1	0.16
WEAG-769	Grab	1210 Chartwell Drive	22-May-19	0.88	<1	8	14	<1	0.25
WEAG-769	Grab	1210 Chartwell Drive	17-Jun-19	0.74	<1	2	18	<1	0.16
WEAG-769	Grab	1210 Chartwell Drive	15-Jul-19	0.7	<1	8	15	<1	0.14
WEAG-769	Grab	1210 Chartwell Drive	12-Aug-19	0.78	<1	10	17	<1	0.13
WEAG-769	Grab	1210 Chartwell Drive	09-Sep-19	0.63	<1	12	19	<1	0.14
WEAG-769	Grab	1210 Chartwell Drive	07-Oct-19	1.3	<1	<2	13	<1	0.5
WEAG-769	Grab	1210 Chartwell Drive	04-Nov-19	0.88	<1	<2	10	<1	0.15
WEAG-769	Grab	1210 Chartwell Drive	02-Dec-19	0.75	<1	8	8	<1	0.17
WEAG-769	Grab	1210 Chartwell Drive	30-Dec-19	0.89	<1	NA	6	<1	0.18
WEAG-770	Grab	3828 Bayridge Avenue	03-Jan-19	0.99	<1	<2	5	<1	0.13
WEAG-770	Grab	3828 Bayridge Avenue	14-Jan-19	1.09	<1	<2	6	<1	0.17
WEAG-770	Grab	3828 Bayridge Avenue	28-Jan-19	1.06	<1	<2	5	<1	0.1
WEAG-770	Grab	3828 Bayridge Avenue	25-Feb-19	0.86	<1	<2	5	<1	0.12
WEAG-770	Grab	3828 Bayridge Avenue	11-Mar-19	1.03	<1	<2	5	<1	0.2
WEAG-770	Grab	3828 Bayridge Avenue	25-Mar-19	0.87	<1	<2	6	<1	0.13
WEAG-770	Grab	3828 Bayridge Avenue	08-Apr-19	1.02	<1	<2	7	<1	0.19
WEAG-770	Grab	3828 Bayridge Avenue	24-Apr-19	1.01	<1	<2	9	<1	0.17
WEAG-770	Grab	3828 Bayridge Avenue	06-May-19	1.03	<1	<2	10	<1	0.43
WEAG-770	Grab	3828 Bayridge Avenue	22-May-19	0.79	<1	LA	12	<1	0.11
WEAG-770	Grab	3828 Bayridge Avenue	03-Jun-19	0.8	<1	<2	15	<1	0.17
WEAG-770	Grab	3828 Bayridge Avenue	17-Jun-19	0.73	<1	2	12	<1	0.13
WEAG-770	Grab	3828 Bayridge Avenue	03-Jul-19	0.65	<1	<2	13	<1	0.09
WEAG-770	Grab	3828 Bayridge Avenue	15-Jul-19	0.69	<1	2	19	<1	0.2
WEAG-770	Grab	3828 Bayridge Avenue	29-Jul-19	0.6	<1	<2	14	<1	0.12
WEAG-770	Grab	3828 Bayridge Avenue	12-Aug-19	0.69	<1	4	15	<1	0.11
WEAG-770	Grab	3828 Bayridge Avenue	26-Aug-19	0.55	<1	<2	15	<1	0.14
WEAG-770	Grab	3828 Bayridge Avenue	09-Sep-19	0.57	<1	6	17	<1	0.16
WEAG-770	Grab	3828 Bayridge Avenue	24-Sep-19	0.56	<1	<2	14	<1	0.17
WEAG-770	Grab	3828 Bayridge Avenue	07-Oct-19	0.52	<1	<2	14	<1	0.17
WEAG-770	Grab	3828 Bayridge Avenue	21-Oct-19	0.6	<1	2	12	<1	0.13
WEAG-770	Grab	3828 Bayridge Avenue	04-Nov-19	0.61	<1	<2	9	<1	0.1
WEAG-770	Grab	3828 Bayridge Avenue	18-Nov-19	0.61	<1	<2	9	<1	0.36
WEAG-770	Grab	3828 Bayridge Avenue	02-Dec-19	0.56	<1	2	8	<1	0.24
WEAG-770	Grab	3828 Bayridge Avenue	30-Dec-19	0.46	<1	NA	5	<1	0.2

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature ℃	Total Coliform MF/100mLs	Turbidity NTU
WEAG-771	Grab	6588 Royal Ave.	03-Jan-19	0.99	<1	<2	6	<1	0.2
WEAG-771	Grab	6588 Royal Ave.	14-Jan-19	1.04	<1	<2	8	<1	0.22
WEAG-771	Grab	6588 Royal Ave.	28-Jan-19	0.86	<1	2	8	<1	0.19
WEAG-771	Grab	6588 Royal Ave.	25-Feb-19	0.87	<1	18	6	<1	0.17
WEAG-771	Grab	6588 Royal Ave.	11-Mar-19	0.96	<1	<2	6	<1	0.25
WEAG-771	Grab	6588 Royal Ave.	25-Mar-19	0.84	<1	2	7	<1	0.28
WEAG-771	Grab	6588 Royal Ave.	08-Apr-19	0.86	<1	<2	8	<1	0.12
WEAG-771	Grab	6588 Royal Ave.	24-Apr-19	1.12	<1	<2	11	<1	0.13
WEAG-771	Grab	6588 Royal Ave.	06-May-19	0.86	<1	<2	12	<1	0.6
WEAG-771	Grab	6588 Royal Ave.	22-May-19	0.89	<1	<2	14	<1	0.1
WEAG-771	Grab	6588 Royal Ave.	03-Jun-19	0.91	<1	<2	16	<1	0.1
WEAG-771	Grab	6588 Royal Ave.	17-Jun-19	1.08	<1	2	17	<1	0.16
WEAG-771	Grab	6588 Royal Ave.	03-Jul-19	1.19	<1	<2	18	<1	0.16
WEAG-771	Grab	6588 Royal Ave.	15-Jul-19	0.95	<1	10	16	<1	0.29
WEAG-771	Grab	6588 Royal Ave.	29-Jul-19	0.85	<1	2	19	<1	0.25
WEAG-771	Grab	6588 Royal Ave.	12-Aug-19	1.19	<1	<2	18	<1	0.11
WEAG-771	Grab	6588 Royal Ave.	26-Aug-19	1.01	<1	2	18	<1	0.21
WEAG-771	Grab	6588 Royal Ave.	09-Sep-19	0.47	<1	<2	19	<1	0.26
WEAG-771	Grab	6588 Royal Ave.	24-Sep-19	0.65	<1	30	16	<1	0.74
WEAG-771	Grab	6588 Royal Ave.	07-Oct-19	0.9	<1	32	15	<1	0.21
WEAG-771	Grab	6588 Royal Ave.	21-Oct-19	0.99	<1	<2	12	<1	0.23
WEAG-771	Grab	6588 Royal Ave.	04-Nov-19	0.79	<1	2	11	<1	0.49
WEAG-771	Grab	6588 Royal Ave.	18-Nov-19	0.7	<1	<2	11	<1	0.2
WEAG-771	Grab	6588 Royal Ave.	02-Dec-19	0.86	<1	<2	8	<1	0.22
WEAG-771	Grab	6588 Royal Ave.	30-Dec-19	0.95	<1	NA	6	<1	0.22
WEAG-772	Grab	6470 Madrona Crescent	03-Jan-19	1.04	<1	<2	5	<1	0.24
WEAG-772	Grab	6470 Madrona Crescent	14-Jan-19	0.97	<1	<2	7	<1	0.25
WEAG-772	Grab	6470 Madrona Crescent	28-Jan-19	0.87	<1	100	7	<1	0.17
WEAG-772	Grab	6470 Madrona Crescent	25-Feb-19	0.9	<1	<2	6	<1	0.27
WEAG-772	Grab	6470 Madrona Crescent	11-Mar-19	0.93	<1	<2	5	<1	0.29
WEAG-772	Grab	6470 Madrona Crescent	25-Mar-19	0.85	<1	2	7	<1	0.15
WEAG-772	Grab	6470 Madrona Crescent	08-Apr-19	0.89	<1	4	9	<1	0.11
WEAG-772	Grab	6470 Madrona Crescent	24-Apr-19	1.08	<1	<2	11	<1	0.24
WEAG-772	Grab	6470 Madrona Crescent	06-May-19	0.85	<1	2	12	<1	0.35
WEAG-772	Grab	6470 Madrona Crescent	22-May-19	0.84	<1	4	14	<1	0.23
WEAG-772	Grab	6470 Madrona Crescent	03-Jun-19	0.89	<1	<2	16	<1	0.13
WEAG-772	Grab	6470 Madrona Crescent	17-Jun-19	1.1	<1	2	17	<1	0.16
WEAG-772	Grab	6470 Madrona Crescent	03-Jul-19	1.05	<1	2	18	<1	0.2
WEAG-772	Grab	6470 Madrona Crescent	15-Jul-19	0.97	<1	4	18	<1	0.27

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
WEAG-772	Grab	6470 Madrona Crescent	29-Jul-19	0.66	<1	120	19	<1	0.27
WEAG-772	Grab	6470 Madrona Crescent	12-Aug-19	1.11	<1	2	18	<1	0.1
WEAG-772	Grab	6470 Madrona Crescent	26-Aug-19	1.1	<1	<2	17	<1	0.13
WEAG-772	Grab	6470 Madrona Crescent	09-Sep-19	1	<1	2	18	<1	0.4
WEAG-772	Grab	6470 Madrona Crescent	24-Sep-19	0.79	<1	34	15	<1	0.73
WEAG-772	Grab	6470 Madrona Crescent	07-Oct-19	0.89	<1	6	14	<1	0.18
WEAG-772	Grab	6470 Madrona Crescent	21-Oct-19	0.98	<1	2	12	<1	0.32
WEAG-772	Grab	6470 Madrona Crescent	04-Nov-19	0.81	<1	2	11	<1	0.32
WEAG-772	Grab	6470 Madrona Crescent	18-Nov-19	0.77	<1	26	11	<1	2.5
WEAG-772	Grab	6470 Madrona Crescent	02-Dec-19	0.86	<1	<2	8	<1	0.22
WEAG-772	Grab	6470 Madrona Crescent	30-Dec-19	0.94	<1	NA	6	<1	0.28
WEAG-773	Grab	Whytcliffe Park	14-Jan-19	0.24	<1	48	7	<1	0.68
WEAG-773	Grab	Whytcliffe Park	11-Mar-19	0.77	<1	8	5	<1	0.21
WEAG-773	Grab	Whytcliffe Park	08-Apr-19	0.74	<1	36	9	<1	0.27
WEAG-773	Grab	Whytcliffe Park	06-May-19	0.77	<1	<2	12	<1	0.41
WEAG-773	Grab	Whytcliffe Park	03-Jun-19	0.61	<1	6	16	<1	0.16
WEAG-773	Grab	Whytcliffe Park	03-Jul-19	0.96	<1	4	19	<1	0.12
WEAG-773	Grab	Whytcliffe Park	29-Jul-19	0.69	<1	56	19	<1	0.19
WEAG-773	Grab	Whytcliffe Park	26-Aug-19	0.69	<1	90	18	<1	0.15
WEAG-773	Grab	Whytcliffe Park	24-Sep-19	0.38	<1	20	16	<1	0.72
WEAG-773	Grab	Whytcliffe Park	21-Oct-19	0.63	<1	28	12	<1	0.27
WEAG-773	Grab	Whytcliffe Park	18-Nov-19	0.31	<1	18	11	<1	0.27
WEAG-774	Grab	6117 Gleneagles Drive	03-Jan-19	1.15	<1	38	5	<1	0.17
WEAG-774	Grab	6117 Gleneagles Drive	28-Jan-19	1.03	<1	<2	6	<1	0.23
WEAG-774	Grab	6117 Gleneagles Drive	25-Feb-19	0.93	<1	<2	5	<1	0.16
WEAG-774	Grab	6117 Gleneagles Drive	25-Mar-19	0.89	<1	<2	6	<1	0.24
WEAG-774	Grab	6117 Gleneagles Drive	24-Apr-19	1.03	<1	4	9	<1	0.12
WEAG-774	Grab	6117 Gleneagles Drive	22-May-19	0.93	<1	<2	12	<1	0.13
WEAG-774	Grab	6117 Gleneagles Drive	17-Jun-19	1.02	<1	<2	19	<1	0.16
WEAG-774	Grab	6117 Gleneagles Drive	15-Jul-19	1.01	<1	4	18	<1	0.15
WEAG-774	Grab	6117 Gleneagles Drive	12-Aug-19	1.23	<1	<2	18	<1	0.09
WEAG-774	Grab	6117 Gleneagles Drive	09-Sep-19	1.07	<1	<2	18	<1	0.12
WEAG-774	Grab	6117 Gleneagles Drive	07-Oct-19	0.93	<1	<2	13	<1	0.16
WEAG-774	Grab	6117 Gleneagles Drive	04-Nov-19	0.96	<1	<2	9	<1	0.24
WEAG-774	Grab	6117 Gleneagles Drive	02-Dec-19	0.98	<1	<2	7	<1	0.34
WEAG-774	Grab	6117 Gleneagles Drive	30-Dec-19	0.99	<1	NA	5	<1	0.18
WEAG-776	Grab	3755 Cypress Bowl Road	03-Jan-19	1.19	<1	<2	6	<1	0.18
WEAG-776	Grab	3755 Cypress Bowl Road	28-Jan-19	1.11	<1	<2	6	<1	0.1
WEAG-776	Grab	3755 Cypress Bowl Road	25-Feb-19	1.18	<1	<2	5	<1	0.14

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
WEAG-776	Grab	3755 Cypress Bowl Road	22-May-19	0.89	<1	<2	14	<1	0.24
WEAG-776	Grab	3755 Cypress Bowl Road	17-Jun-19	0.93	<1	<2	19	<1	0.1
WEAG-776	Grab	3755 Cypress Bowl Road	15-Jul-19	0.96	<1	<2	17	<1	0.11
WEAG-776	Grab	3755 Cypress Bowl Road	12-Aug-19	1.05	<1	<2	17	<1	0.09
WEAG-776	Grab	3755 Cypress Bowl Road	09-Sep-19	0.87	<1	<2	18	<1	0.1
WEAG-776	Grab	3755 Cypress Bowl Road	07-Oct-19	1.25	<1	<2	13	<1	0.76
WEAG-776	Grab	3755 Cypress Bowl Road	04-Nov-19	1.05	<1	<2	9	<1	0.08
WEAG-776	Grab	3755 Cypress Bowl Road	02-Dec-19	0.74	<1	<2	8	<1	0.1
WEAG-776	Grab	3755 Cypress Bowl Road	30-Dec-19	1.07	<1	NA	6	<1	0.17
WEAG-778	Grab	6190 Marine Drive	03-Jan-19	1.05	<1	<2	5	<1	0.28
WEAG-778	Grab	6190 Marine Drive	14-Jan-19	1.05	<1	<2	6	<1	0.41
WEAG-778	Grab	6190 Marine Drive	28-Jan-19	0.72	<1	2	7	<1	1.1
WEAG-778	Grab	6190 Marine Drive	25-Feb-19	0.93	<1	<2	5	<1	0.16
WEAG-778	Grab	6190 Marine Drive	11-Mar-19	1.06	<1	<2	5	<1	0.24
WEAG-778	Grab	6190 Marine Drive	25-Mar-19	0.87	<1	2	6	<1	0.27
WEAG-778	Grab	6190 Marine Drive	08-Apr-19	0.96	<1	8	7	<1	0.47
WEAG-778	Grab	6190 Marine Drive	24-Apr-19	1.11	<1	4	9	<1	0.38
WEAG-778	Grab	6190 Marine Drive	06-May-19	0.94	<1	<2	10	<1	0.38
WEAG-778	Grab	6190 Marine Drive	22-May-19	0.89	<1	2	12	<1	0.19
WEAG-778	Grab	6190 Marine Drive	03-Jun-19	0.95	<1	<2	15	<1	0.24
WEAG-778	Grab	6190 Marine Drive	17-Jun-19	0.95	<1	4	18	<1	0.22
WEAG-778	Grab	6190 Marine Drive	03-Jul-19	1.15	<1	<2	18	<1	0.27
WEAG-778	Grab	6190 Marine Drive	15-Jul-19	0.97	<1	2	19	<1	0.55
WEAG-778	Grab	6190 Marine Drive	29-Jul-19	0.91	<1	4	19	<1	0.13
WEAG-778	Grab	6190 Marine Drive	12-Aug-19	1.2	<1	2	17	<1	0.2
WEAG-778	Grab	6190 Marine Drive	26-Aug-19	0.96	<1	16	18	<1	0.22
WEAG-778	Grab	6190 Marine Drive	09-Sep-19	1.01	<1	10	18	<1	0.13
WEAG-778	Grab	6190 Marine Drive	24-Sep-19	0.76	<1	6	15	<1	0.99
WEAG-778	Grab	6190 Marine Drive	07-Oct-19	0.97	<1	8	13	<1	0.19
WEAG-778	Grab	6190 Marine Drive	21-Oct-19	1.02	<1	2	11	<1	0.31
WEAG-778	Grab	6190 Marine Drive	04-Nov-19	0.9	<1	8	10	<1	0.19
WEAG-778	Grab	6190 Marine Drive	18-Nov-19	0.78	<1	10	10	<1	0.33
WEAG-778	Grab	6190 Marine Drive	02-Dec-19	0.92	<1	NA	8	<1	0.29
WEAG-778	Grab	6190 Marine Drive	30-Dec-19	0.91	<1	NA	6	<1	0.31
WEAG-779	Grab	1370 Burnside Road	07-Jan-19	1.06	<1	2	6	<1	0.13
WEAG-779	Grab	1370 Burnside Road	04-Feb-19	0.8	<1	<2	6	<1	0.13
WEAG-779	Grab	1370 Burnside Road	11-Feb-19	0.98	<1	LA	5	<1	0.09
WEAG-779	Grab	1370 Burnside Road	04-Mar-19	1.06	<1	LA	5	<1	0.14
WEAG-779	Grab	1370 Burnside Road	01-Apr-19	1.07	<1	<2	8	<1	0.13

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
WEAG-779	Grab	1370 Burnside Road	29-Apr-19	1.09	<1	<2	10	<1	0.17
WEAG-779	Grab	1370 Burnside Road	27-May-19	0.99	<1	<2	14	<1	0.13
WEAG-779	Grab	1370 Burnside Road	24-Jun-19	0.75	<1	<2	11	<1	0.12
WEAG-779	Grab	1370 Burnside Road	22-Jul-19	0.66	<1	<2	13	<1	0.19
WEAG-779	Grab	1370 Burnside Road	19-Aug-19	0.65	<1	<2	14	<1	0.12
WEAG-779	Grab	1370 Burnside Road	16-Sep-19	0.65	<1	<2	16	<1	0.17
WEAG-779	Grab	1370 Burnside Road	16-Oct-19	1	<1	<2	11	<1	0.08
WEAG-779	Grab	1370 Burnside Road	13-Nov-19	0.76	<1	<2	10	<1	0.13
WEAG-780	Grab	5634 Westhaven Road	14-Jan-19	1.13	<1	6	6	<1	0.16
WEAG-780	Grab	5634 Westhaven Road	11-Mar-19	1.1	<1	2	6	<1	0.15
WEAG-780	Grab	5634 Westhaven Road	08-Apr-19	0.99	<1	8	9	<1	0.27
WEAG-780	Grab	5634 Westhaven Road	06-May-19	0.9	<1	<2	10	<1	0.42
WEAG-780	Grab	5634 Westhaven Road	03-Jun-19	1.04	<1	2	16	<1	0.18
WEAG-780	Grab	5634 Westhaven Road	03-Jul-19	1.2	<1	<2	18	<1	0.16
WEAG-780	Grab	5634 Westhaven Road	29-Jul-19	0.94	<1	<2	19	<1	0.23
WEAG-780	Grab	5634 Westhaven Road	26-Aug-19	0.93	<1	4	17	<1	0.12
WEAG-780	Grab	5634 Westhaven Road	24-Sep-19	0.89	<1	4	15	<1	1.4
WEAG-780	Grab	5634 Westhaven Road	21-Oct-19	0.96	<1	56	11	<1	0.16
WEAG-780	Grab	5634 Westhaven Road	18-Nov-19	0.9	<1	46	10	<1	0.19
WEAG-783	Grab	4520 Almondel Place	03-Jan-19	1.14	<1	6	4	<1	0.18
WEAG-783	Grab	4520 Almondel Place	28-Jan-19	1.01	<1	4	6	<1	0.23
WEAG-783	Grab	4520 Almondel Place	25-Feb-19	0.94	<1	2	5	<1	0.13
WEAG-783	Grab	4520 Almondel Place	25-Mar-19	0.94	<1	4	7	<1	0.09
WEAG-783	Grab	4520 Almondel Place	24-Apr-19	1	<1	4	9	<1	0.18
WEAG-783	Grab	4520 Almondel Place	22-May-19	0.98	<1	10	14	<1	0.15
WEAG-783	Grab	4520 Almondel Place	17-Jun-19	1.03	<1	2	19	<1	0.14
WEAG-783	Grab	4520 Almondel Place	15-Jul-19	1.05	<1	2	13	<1	0.2
WEAG-783	Grab	4520 Almondel Place	12-Aug-19	1.24	<1	<2	17	<1	0.24
WEAG-783	Grab	4520 Almondel Place	09-Sep-19	0.94	<1	6	18	<1	0.13
WEAG-783	Grab	4520 Almondel Place	07-Oct-19	1.07	<1	<2	13	<1	0.18
WEAG-783	Grab	4520 Almondel Place	04-Nov-19	1.01	<1	2	9	<1	0.17
WEAG-783	Grab	4520 Almondel Place	02-Dec-19	1.05	<1	4	7	<1	0.7
WEAG-783	Grab	4520 Almondel Place	30-Dec-19	1	<1	NA	5	<1	0.14
WEAG-784	Grab	5759 Primrose Place	14-Jan-19	0.9	<1	<2	5	<1	0.17
WEAG-784	Grab	5759 Primrose Place	11-Mar-19	0.97	<1	2	5	<1	0.5
WEAG-784	Grab	5759 Primrose Place	08-Apr-19	0.75	<1	<2	8	<1	0.19
WEAG-784	Grab	5759 Primrose Place	06-May-19	0.88	<1	<2	10	<1	0.49
WEAG-784	Grab	5759 Primrose Place	03-Jun-19	0.3	<1	<2	16	<1	0.22
WEAG-784	Grab	5759 Primrose Place	03-Jul-19	0.92	<1	<2	19	<1	0.19

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature ℃	Total Coliform MF/100mLs	Turbidity NTU
WEAG-784	Grab	5759 Primrose Place	29-Jul-19	0.81	<1	50	20	<1	0.32
WEAG-784	Grab	5759 Primrose Place	26-Aug-19	0.82	<1	20	19	<1	0.2
WEAG-784	Grab	5759 Primrose Place	24-Sep-19	0.51	<1	8	16	<1	1.3
WEAG-784	Grab	5759 Primrose Place	21-Oct-19	0.69	<1	<2	11	<1	0.47
WEAG-784	Grab	5759 Primrose Place	18-Nov-19	0.47	<1	2	10	<1	0.24
WEAG-785	Grab	4820 Headland Drive	14-Jan-19	1.11	<1	10	6	<1	0.18
WEAG-785	Grab	4820 Headland Drive	11-Mar-19	1.08	<1	2	5	<1	0.11
WEAG-785	Grab	4820 Headland Drive	08-Apr-19	1.13	<1	10	9	<1	0.12
WEAG-785	Grab	4820 Headland Drive	06-May-19	1.09	<1	18	12	<1	0.55
WEAG-785	Grab	4820 Headland Drive	03-Jun-19	1.08	<1	8	17	<1	0.29
WEAG-785	Grab	4820 Headland Drive	03-Jul-19	1.3	<1	4	19	<1	0.4
WEAG-785	Grab	4820 Headland Drive	29-Jul-19	1.01	<1	<2	20	<1	0.2
WEAG-785	Grab	4820 Headland Drive	26-Aug-19	1.32	<1	4	19	<1	0.25
WEAG-785	Grab	4820 Headland Drive	24-Sep-19	0.79	<1	28	15	<1	0.36
WEAG-785	Grab	4820 Headland Drive	21-Oct-19	0.98	<1	8	11	<1	0.36
WEAG-785	Grab	4820 Headland Drive	18-Nov-19	0.82	<1	8	10	<1	0.61
WEAG-786	Grab	1158 Millstream Road	20-Feb-19	0.97	<1	<2	5	<1	0.19
WEAG-786	Grab	1158 Millstream Road	18-Mar-19	1.04	<1	<2	5	<1	0.17
WEAG-786	Grab	1158 Millstream Road	15-Apr-19	0.91	<1	<2	8	<1	0.1
WEAG-786	Grab	1158 Millstream Road	13-May-19	0.75	<1	2	10	<1	0.36
WEAG-786	Grab	1158 Millstream Road	10-Jun-19	0.63	<1	2	13	<1	0.17
WEAG-786	Grab	1158 Millstream Road	08-Jul-19	0.68	<1	2	13	<1	0.23
WEAG-786	Grab	1158 Millstream Road	07-Aug-19	0.79	<1	<2	15	<1	0.3
WEAG-786	Grab	1158 Millstream Road	04-Sep-19	0.69	<1	<2	17	<1	0.19
WEAG-786	Grab	1158 Millstream Road	30-Sep-19	0.45	<1	<2	11	<1	0.21
WEAG-786	Grab	1158 Millstream Road	28-Oct-19	0.69	<1	<2	10	<1	0.1
WEAG-786	Grab	1158 Millstream Road	25-Nov-19	0.64	<1	<2	8	<1	0.44
WEAG-786	Grab	1158 Millstream Road	23-Dec-19	0.58	<1	NA	6	<1	0.14
WEAG-787	Grab	2711 Willoughby Road	20-Feb-19	0.87	<1	2	5	<1	0.82
WEAG-787	Grab	2711 Willoughby Road	18-Mar-19	1	<1	<2	5	<1	0.25
WEAG-787	Grab	2711 Willoughby Road	15-Apr-19	0.87	<1	<2	8	<1	0.14
WEAG-787	Grab	2711 Willoughby Road	13-May-19	0.74	<1	<2	11	<1	0.55
WEAG-787	Grab	2711 Willoughby Road	10-Jun-19	0.72	<1	<2	13	<1	0.24
WEAG-787	Grab	2711 Willoughby Road	08-Jul-19	0.77	<1	<2	14	<1	0.26
WEAG-787	Grab	2711 Willoughby Road	07-Aug-19	0.76	<1	<2	16	<1	0.35
WEAG-787	Grab	2711 Willoughby Road	04-Sep-19	0.76	<1	<2	17	<1	0.6
WEAG-787	Grab	2711 Willoughby Road	30-Sep-19	0.54	<1	<2	13	<1	0.62
WEAG-787	Grab	2711 Willoughby Road	28-Oct-19	0.59	<1	<2	11	<1	0.22
WEAG-787	Grab	2711 Willoughby Road	25-Nov-19	0.69	<1	<2	9	<1	0.76

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature ℃	Total Coliform MF/100mLs	Turbidity NTU
WEAG-787	Grab	2711 Willoughby Road	23-Dec-19	0.43	<1	NA	7	<1	0.13
WEAG-788	Grab	1551 Vinson Creek Road	20-Feb-19	0.95	<1	2	5	<1	0.1
WEAG-788	Grab	1551 Vinson Creek Road	18-Mar-19	1.05	<1	<2	6	<1	0.2
WEAG-788	Grab	1551 Vinson Creek Road	15-Apr-19	0.92	<1	6	9	<1	0.11
WEAG-788	Grab	1551 Vinson Creek Road	13-May-19	0.81	<1	<2	11	<1	0.36
WEAG-788	Grab	1551 Vinson Creek Road	10-Jun-19	0.75	<1	<2	11	<1	0.3
WEAG-788	Grab	1551 Vinson Creek Road	08-Jul-19	0.78	<1	<2	12	<1	0.17
WEAG-788	Grab	1551 Vinson Creek Road	07-Aug-19	0.8	<1	<2	15	<1	0.26
WEAG-788	Grab	1551 Vinson Creek Road	04-Sep-19	0.81	<1	2	17	<1	0.39
WEAG-788	Grab	1551 Vinson Creek Road	30-Sep-19	0.63	<1	<2	12	<1	0.13
WEAG-788	Grab	1551 Vinson Creek Road	28-Oct-19	0.72	<1	<2	10	<1	0.08
WEAG-788	Grab	1551 Vinson Creek Road	25-Nov-19	0.62	<1	<2	9	<1	0.2
WEAG-788	Grab	1551 Vinson Creek Road	23-Dec-19	0.82	<1	NA	7	<1	0.19
WEAG-880	Grab	965 Cross Creek Road	14-Jan-19	1.07	<1	4	8	<1	0.24
WEAG-880	Grab	965 Cross Creek Road	11-Mar-19	1.14	<1	<2	5	<1	0.07
WEAG-880	Grab	965 Cross Creek Road	08-Apr-19	0.9	<1	2	8	<1	0.09
WEAG-880	Grab	965 Cross Creek Road	06-May-19	0.91	<1	12	12	<1	0.23
WEAG-880	Grab	965 Cross Creek Road	03-Jun-19	0.79	<1	2	16	<1	0.11
WEAG-880	Grab	965 Cross Creek Road	03-Jul-19	0.75	<1	2	16	<1	0.13
WEAG-880	Grab	965 Cross Creek Road	29-Jul-19	0.69	<1	8	17	<1	0.17
WEAG-880	Grab	965 Cross Creek Road	26-Aug-19	0.66	<1	24	18	<1	0.1
WEAG-880	Grab	965 Cross Creek Road	24-Sep-19	0.48	<1	4	15	<1	0.17
WEAG-880	Grab	965 Cross Creek Road	21-Oct-19	0.86	<1	2	13	<1	0.33
WEAG-880	Grab	965 Cross Creek Road	18-Nov-19	0.7	<1	<2	11	<1	0.16
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WMZ-781	Grab	8005 Pasco Road	03-Jan-19	1.12	<1	2	5	<1	0.16
WMZ-781	Grab	8005 Pasco Road	28-Jan-19	1.55	<1	<2	7	<1	0.17
WMZ-781	Grab	8005 Pasco Road	25-Feb-19	1.31	<1	<2	4	<1	0.11
WMZ-781	Grab	8005 Pasco Road	25-Mar-19	1.17	<1	<2	6	<1	0.13
WMZ-781	Grab	8005 Pasco Road	24-Apr-19	1.31	<1	<2	9	<1	0.2
WMZ-781	Grab	8005 Pasco Road	22-May-19	1.13	<1	<2	13	<1	0.17
WMZ-781	Grab	8005 Pasco Road	, 17-Jun-19	1.25	<1	<2	15	<1	0.15
WMZ-781	Grab	8005 Pasco Road	15-Jul-19	1	<1	<2	15	<1	0.16
WMZ-781	Grab	8005 Pasco Road	12-Aug-19	1.29	<1	<2	16	<1	0.26
WMZ-781	Grab	8005 Pasco Road	09-Sep-19	1.21	<1	<2	17	<1	0.1
WMZ-781	Grab	8005 Pasco Road	07-Oct-19	0.99	<1	<2	13	<1	0.15
WMZ-781	Grab	8005 Pasco Road	04-Nov-19	1.22	<1	<2	9	<1	0.09
WMZ-781	Grab	8005 Pasco Road	02-Dec-19	1.26	<1	<2	9	<1	0.13
WMZ-781	Grab	8005 Pasco Road	30-Dec-19	1.2	<1	NA	6	<1	0.14

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli MF/10 0mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
WMZ-782	Grab	8995 Lawrence Way	14-Jan-19	1.32	<1	2	6	<1	0.27
WMZ-782	Grab	8995 Lawrence Way	06-May-19	1.29	<1	4	11	<1	0.91
WMZ-782	Grab	8995 Lawrence Way	26-Aug-19	1.4	<1	8	13	<1	0.32
WMZ-782	Grab	8995 Lawrence Way	11-Mar-19	1.34	<1	<2	5	<1	0.2
WMZ-782	Grab	8995 Lawrence Way	08-Apr-19	0.84	<1	<2	8	<1	0.84
WMZ-782	Grab	8995 Lawrence Way	03-Jun-19	1.1	<1	<2	15	<1	0.24
WMZ-782	Grab	8995 Lawrence Way	03-Jul-19	1.03	<1	<2	16	<1	0.25
WMZ-782	Grab	8995 Lawrence Way	29-Jul-19	1.11	<1	<2	16	<1	0.43
WMZ-782	Grab	8995 Lawrence Way	24-Sep-19	0.55	<1	<2	15	<1	0.11
WMZ-782	Grab	8995 Lawrence Way	21-Oct-19	0.8	<1	<2	10	<1	0.54
WMZ-782	Grab	8995 Lawrence Way	18-Nov-19	0.76	<1	<2	10	<1	2.5
WMZ-782	Grab	8995 Lawrence Way	16-Dec-19	0.73	<1	<2	8	<1	0.55