



**2018**

**DRINKING WATER QUALITY**

**FINAL REPORT | APRIL 2019**

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## **TABLE OF CONTENTS**

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>1.0 INTRODUCTION</b>	<b>2</b>
<b>2.0 GENERAL DESCRIPTION</b>	<b>2</b>
<b>3.0 SOURCE WATER WATERSHEDS</b>	<b>2</b>
3.1 General	2
3.2 Eagle Lake Treatment Plant	3
3.2.1 Eagle Lake Treatment Plant Bypass and Optimization	3
3.3 Montizambert Treatment Plant	4
3.3.1 Montizambert Water Treatment Plant Bypass	4
3.4 Metro Vancouver	4
3.5 Challenges	5
<b>4.0 REGULATIONS AND STANDARDS FOR SOURCE WATER AND THE DISTRIBUTION SYSTEM</b>	<b>5</b>
4.1 Microbiological Parameters	5
4.2 Physical Parameters	6
4.2.1 Turbidity	6
4.2.2 Temperature	6
4.2.3 Colour and Residue	6
4.3 Inorganic and Organic Chemical Parameters	6
4.3.1 Disinfection By-Products	7
4.3.2 pH	7
4.3.3 Metals	7
<b>5.0 TESTING, SAMPLE ANALYSIS AND RESULTS</b>	<b>7</b>
5.1 Sample Analysis Results – Source Water	8
5.2 Sample Analysis Results – Distribution System	8
5.3 Distribution System – Water Main Replacement	11
<b>6.0 PUBLIC NOTIFICATION</b>	<b>11</b>
6.1 Drinking Water Advisory/Boil Water Advisory	11
6.2 General Drinking Water Quality Advisory	11
<b>7.0 OPERATOR QUALIFICATIONS AND TRAINING</b>	<b>11</b>
7.1 Operator Qualifications	12
<b>8.0 EMERGENCY RESPONSE PLAN</b>	<b>13</b>
8.1 E. coli Positive Response	13
8.2 Chemical or Biological Contamination Response	13
8.3 Turbidity Response	14
8.4 Response to Interruption of Primary and/or Secondary Disinfection	15
<b>9.0 CONCLUSION</b>	<b>15</b>

**APPENDIX A**

1. Map of Water System Sampling Locations
2. Water Sampling Locations by Address

**APPENDIX B**

1. Source Water Quality – Eagle Lake
2. Source Water Quality – Montizambert Creek
3. Source Water Chemistry

**APPENDIX C**

1. Semi Annual Metals Monitoring Results
2. Disinfection By-Products - Quarterly Averages
3. Water Sampling Results

## EXECUTIVE SUMMARY

This report summarizes the District of West Vancouver's water quality program for 2018. 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 2018 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. 599 samples were analyzed in 2018. 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. 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 2018. 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; 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 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 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 2018.

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 2018.

### **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 2018, the District of West Vancouver had approximately 42,000 residents, which translates to a minimum of 540 samples required annually. The total number of samples collected by the District during 2018 was 599, 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 less than 0.1 NTU with the intent not to exceed 0.3 NTU at any time. The Guidelines for Canadian Drinking Water Quality supporting documentation states that the turbidity should not exceed 5.0 NTU within the distribution system especially at the point of consumption.

### **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 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 6.5 - 8.5 as a treatment objective. Both Eagle Lake and Montizambert source water trend toward the lower boundary of 6.5.

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 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
	Chemical, physical list	Semi-annually

<b>Distribution System</b>	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, 27 bi-weekly source water samples were tested. 18 samples had a most probable number (MPN) of less than 1 per 100 mL and 9 samples had a presence of E. coli ranging from 1 to 6 MPN/100mL. Testing for total coliforms had results ranging from 10 to >2420 MPN/100mL in the raw, untreated source water.

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

Sample Site	Number of Samples	Ecoli MPN/100mLs			HPC CFU/mls			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	27	<1	6	<1	190	3700	674	3	21	9.4	10	>2420	441	0.22	1.4	0.4

At Montizambert Creek, 25 bi-weekly source water samples were tested. 17 samples had a most probable number (MPN) of less than 1 per 100 mL and 8 samples had a presence of E. coli ranging from 1 to 14 MPN/100mL. Testing for total coliforms had results ranging from 6 to 1120 MPN/100mL in the raw, untreated source water.

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

Sample Site	Number of Samples	Ecoli MPN/100mLs			HPC CFU/mls			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	14	1.2	66	590	268	4	18	10.2	6	1120	140	0.28	3.7	1.0

Giardia and Cryptosporidium testing was conducted monthly for both sources. Of the 12 samples taken at Eagle Lake, 1 tested positive for Giardia, 1 tested positive for Cryptosporidium and 1 tested positive for both Giardia and Cryptosporidium. Results range from 1 to 2 per 100L. 2 samples taken at Montizambert Creek tested positive for both Giardia and Cryptosporidium, ranging from 3 to 7 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.

599 distribution system samples were analyzed in 2018. 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. The response procedures are outlined in Section 8.1 of this report.

The following chart documents the Total Coliform retests for Station 778.

Date	Location	Sample	Chlorine Free mg/L	HPC CFU/mL	Temperature °C	Ecoli CFU/100mLs	Total Coliform CFU/100mLs	Turbidity NTU
2018/07/16	WEAG-778	GRAB	1.09	-	21	<1	1	0.11
2018/07/18	WEAG-778	REPEAT	1.09	2	22	<1	<1	0.24
2018/07/19	WEAG-778	REPEAT	1.09	2	21	<1	<1	0.21

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.

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. In the second quarter of 2018, HAA testing was added to three locations that previously did not require HAA monitoring.

The test results are presented as a running quarterly average for total THMs and total HAAs in Appendix C. All the readings taken in 2018 are within normal levels, with the running average trending downward from the spike that occurred in 2017.

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 and 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 CFU/100mLs	Turbidity NTU		
	Guideline	No less than 0.2			None	No Limit			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	14	0.60	1.38	0.96	<1	<2	8	n/a	4	15	10	<1	0.11	0.52	0.26
WVR-712	14	0.21	0.58	0.39	<1	<2	140	n/a	4	18	10	<1	0.09	0.53	0.25
WVR-718	12	0.22	0.63	0.48	<1	<2	10	n/a	6	19	13	<1	0.11	0.24	0.15
WVR-761	13	0.20	0.48	0.33	<1	<2	2300	n/a	5	19	11	<1	0.15	1.50	0.45
WVR-764	13	0.62	0.87	0.76	<1	<2	2	n/a	4	14	9	<1	0.10	0.31	0.18
WVR-790	27	0.38	0.85	0.62	<1	<2	6	n/a	5	15	9	<1	0.10	0.97	0.33
WVR-791	14	0.40	0.98	0.75	<1	<2	4	n/a	3	15	8	<1	0.10	0.31	0.18
WVR-792	27	0.42	0.81	0.61	<1	<2	92	n/a	4	15	10	<1	0.13	0.37	0.22
WVR-793	14	0.21	0.62	0.46	<1	<2	4	n/a	4	18	10	<1	0.11	0.84	0.22
WVR-794	14	0.41	1.26	0.73	<1	<2	6	n/a	4	16	10	<1	0.11	0.37	0.20
WVR-795	14	0.30	0.78	0.57	<1	<2	28	n/a	3	15	9	<1	0.12	0.29	0.19
WVR-796	27	0.31	0.87	0.63	<1	<2	2	n/a	5	16	10	<1	0.08	0.83	0.23
WVR-797	13	0.26	0.99	0.61	<1	<2	1400	n/a	5	15	10	<1	0.11	0.60	0.25

**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 CFU/100mLs	Turbidity NTU		
	Guideline	No less than 0.2			None	No Limit			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	1.03	1.44	1.17	<1	<2	2	n/a	4	22	11	<1	0.11	0.56	0.21
WEAG-716	26	0.64	1.09	0.89	<1	<2	220	n/a	5	22	12	<1	0.10	1.3	0.28
WEAG-719	27	0.32	1.21	0.92	<1	<2	24	n/a	4	20	11	<1	0.06	0.40	0.19
WEAG-765	13	0.32	1.09	0.76	<1	<2	10	n/a	7	21	12	<1	0.11	0.74	0.23
WEAG-768	13	0.71	1.17	1.00	<1	<2	2	n/a	5	18	11	<1	0.07	0.17	0.12
WEAG-769	12	0.71	1.25	0.87	<1	<2	18	n/a	6	17	12	<1	0.09	0.27	0.15
WEAG-770	25	0.45	1.22	0.78	<1	<2	12	n/a	4	15	9	<1	0.09	0.40	0.18
WEAG-771	25	0.69	1.19	0.93	<1	<2	28	n/a	5	22	12	<1	0.12	0.59	0.26
WEAG-772	25	0.74	1.11	0.94	<1	<2	42	n/a	5	22	12	<1	0.10	0.61	0.21
WEAG-773	13	0.23	0.89	0.56	<1	<2	270	n/a	6	20	11	<1	0.13	0.53	0.26
WEAG-774	12	0.89	1.16	1.03	<1	<2	4	n/a	5	21	12	<1	0.11	0.41	0.17
WEAG-776	12	0.90	1.40	1.11	<1	<2	<2	n/a	4	21	11	<1	0.07	0.18	0.11
WEAG-778	25	0.83	1.23	1.00	<1	<2	16	n/a	5	22	11	<1	0.08	1.60	0.31
WEAG-779	14	0.70	2.00	1.15	<1	<2	2	n/a	4	15	10	<1	0.08	0.38	0.18
WEAG-780	13	0.88	1.16	1.05	<1	<2	16	n/a	5	22	11	<1	0.10	0.42	0.22
WEAG-783	12	0.90	1.30	1.09	<1	<2	8	n/a	4	22	11	<1	0.08	0.21	0.14
WEAG-784	13	0.58	1.14	0.78	<1	<2	98	n/a	5	22	11	<1	0.20	0.66	0.37
WEAG-785	13	0.83	1.26	1.04	<1	<2	18	n/a	5	23	11	<1	0.12	0.59	0.29
WEAG-786	13	0.60	1.26	0.97	<1	<2	70	n/a	5	15	10	<1	0.08	1.00	0.23
WEAG-787	13	0.54	1.29	0.95	<1	<2	12	n/a	5	15	10	<1	0.13	0.41	0.22
WEAG-788	13	0.64	1.28	1.03	<1	<2	4	n/a	5	15	10	<1	0.10	0.37	0.17
WEAG-880	13	0.66	1.08	0.87	<1	<2	24	n/a	6	16	11	<1	0.11	0.61	0.21
WMZ-781	13	0.21	1.40	0.80	<1	<2	>11000	n/a	4	18	11	<1	0.11	1.90	0.61
WMZ-782	13	0.68	1.85	1.16	<1	<2	44	n/a	5	18	10	<1	0.24	0.92	0.52

### 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 2018 and lists the mains to be replaced in 2019.

2018 Water Main Construction	2019 Planned Water Main Construction
A: 2800-2900 Block Mathers Ave - 769m	A: Fairmile & Eyremount - 920 m
B: 1100-1200 Block Ottaburn Road - 405m	B: 23rd Street- Kings to Mathers - 200 m
C: 1300-1400 Block 29th Street - 161m	C: Oxley Street North - 205 m
	D: 1400 Blk Equimalt - 197 m
	E: 300 Blk Keith Road - 60 m
	F: 3300 Blk Westmount Road - 240 m
	G: 3200 Blk Westmount Road - 120 m
	H: Thompson Crescent - 140 m
	I: 3100 Blk Mathers Ave - 180 m

## 6.0 PUBLIC NOTIFICATION

### 6.1 Drinking Water Advisory/Boil Water Advisory

2018 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 2018.

## 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. Legislation is pending on the target deadline for the minimum certification requirements for District staff operating, maintaining, or repairing the water system. Nevertheless, the District continues to work towards having 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 2018, the District staff maintained the following certification levels:

### **Water Distribution:**

- Level 4 – one supervisor and one operator
- Level 3 – one operator
- Level 2 – four operators
- Level 1 – 0 operators

### **Water Treatment:**

- Level 3 – at the time of writing this report (April, 2019), we are pleased to announce that the treatment supervisor has now obtained the level 3 water treatment certification
- Level 2 – two operators and one supervisor (see Level 3 above)
- Level 1 – 0 operators

It should be noted, sound technical support is available to the treatment operators through the 24/7 consulting expertise provided by WSP Canada who were integral to the design/build of the plant and are part of the ongoing operation and maintenance program.

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 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 2018.

#### **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.

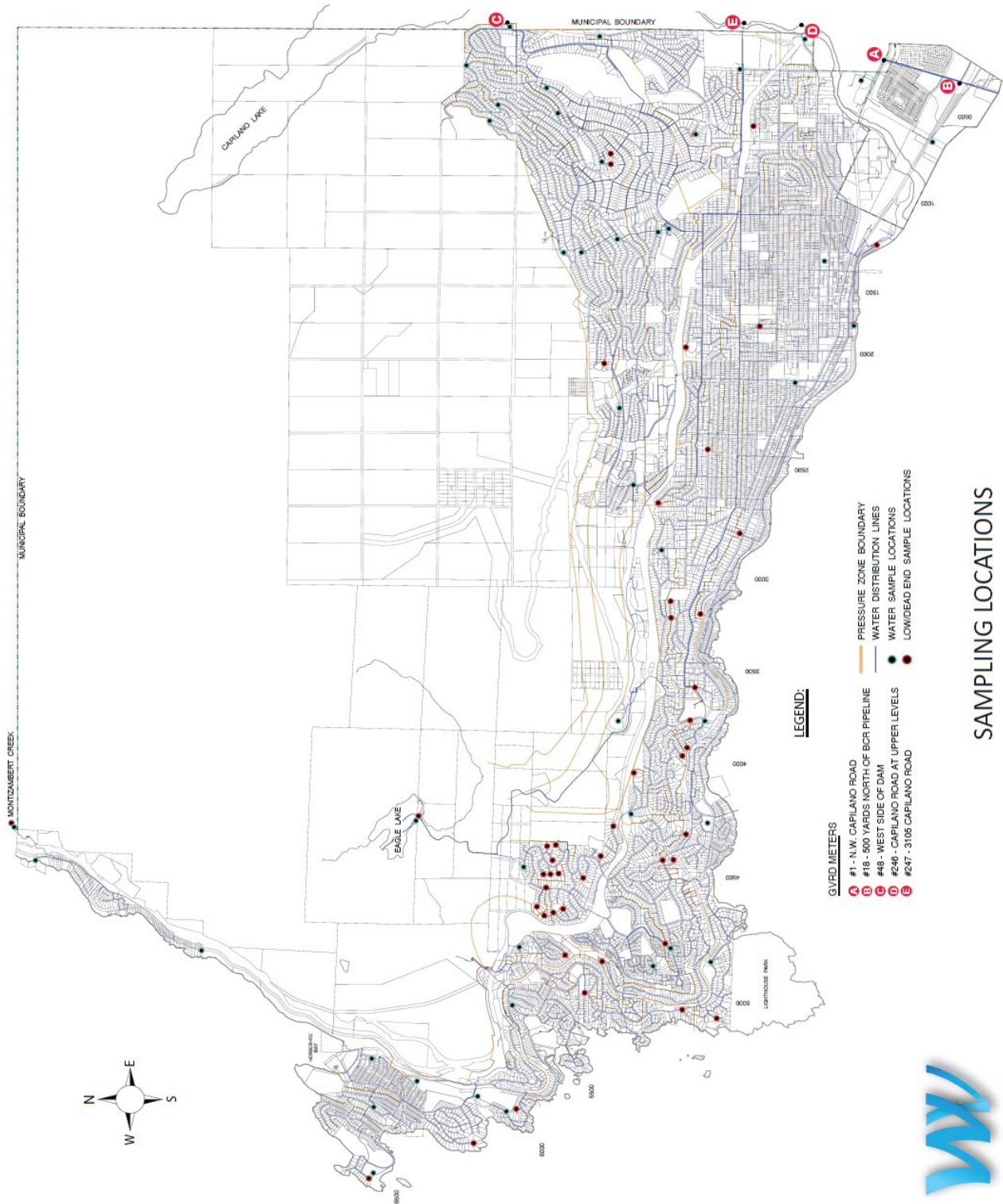
In 2018, the District's distribution water supply met all the requirements as outlined in the Guidelines for Canadian Drinking Water Quality.

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



## 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	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
	Whycliffe 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 Almond 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
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 Almond 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	DmWMTZ-781	MZ-781
	8995 Lawrence Way	Sample Kiosk	Dead End	DmWMTZ-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/mls	Temperature °C	Total Coliform MPN/100mLs	Turbidity NTU
WEAG-LK1	GRAB	Eagle Lake Source	3-Jan-18	1	220	3	37	0.32
WEAG-LK1	GRAB	Eagle Lake Source	8-Jan-18	<1	350	5	36	0.31
WEAG-LK1	GRAB	Eagle Lake Source	22-Jan-18	1	470	4	84	0.23
WEAG-LK1	GRAB	Eagle Lake Source	5-Feb-18	<1	600	5	56	0.45
WEAG-LK1	GRAB	Eagle Lake Source	19-Feb-18	<1	340	4	15	0.36
WEAG-LK1	GRAB	Eagle Lake Source	5-Mar-18	<1	190	3	17	0.31
WEAG-LK1	GRAB	Eagle Lake Source	19-Mar-18	<1	230	5	11	1.4
WEAG-LK1	GRAB	Eagle Lake Source	4-Apr-18	1	NA [Overgrown with mold]	5	10	0.22
WEAG-LK1	GRAB	Eagle Lake Source	16-Apr-18	<1	230	6	19	0.32
WEAG-LK1	GRAB	Eagle Lake Source	30-Apr-18	<1	NA [OG Spreader]	9	214	0.35
WEAG-LK1	GRAB	Eagle Lake Source	14-May-18	<1	670	11	81	0.29
WEAG-LK1	GRAB	Eagle Lake Source	28-May-18	2	950	13	>2420	0.35
WEAG-LK1	GRAB	Eagle Lake Source	11-Jun-18	<1	590	12	548	0.47
WEAG-LK1	GRAB	Eagle Lake Source	25-Jun-18	<1	400	12	>2420	0.33
WEAG-LK1	GRAB	Eagle Lake Source	9-Jul-18	<1	370	18	816	0.27
WEAG-LK1	GRAB	Eagle Lake Source	23-Jul-18	1	280	20	>2420	0.26
WEAG-LK1	GRAB	Eagle Lake Source	8-Aug-18	<1	3700	21	461	0.32
WEAG-LK1	GRAB	Eagle Lake Source	20-Aug-18	<1	3400	20	613	0.84
WEAG-LK1	GRAB	Eagle Lake Source	5-Sep-18	<1	430	16	435	0.41
WEAG-LK1	GRAB	Eagle Lake Source	17-Sep-18	6	640	11	345	0.71
WEAG-LK1	GRAB	Eagle Lake Source	1-Oct-18	2	270	11	201	0.63
WEAG-LK1	GRAB	Eagle Lake Source	15-Oct-18	<1	220	10	101	0.59
WEAG-LK1	GRAB	Eagle Lake Source	29-Oct-18	<1	NA [OG plate]	8	152	0.87
WEAG-LK1	GRAB	Eagle Lake Source	14-Nov-18	1	310	7	132	0.39
WEAG-LK1	GRAB	Eagle Lake Source	26-Nov-18	<1	240	6	99	0.48
WEAG-LK1	GRAB	Eagle Lake Source	10-Dec-18	<1	400	4	93	0.37
WEAG-LK1	GRAB	Eagle Lake Source	27-Dec-18	1	NA	4	84	0.25

### 2. Source Water Quality – Montizambert Creek

Sample Name	Sample Type	Sample Location	Sample Date	Ecoli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MPN/100mLs	Turbidity NTU
WMZ-CK1	GRAB	Montizambert Creek Source Water	15-Jan-18	3	330	4	91	1.9
WMZ-CK1	GRAB	Montizambert Creek Source Water	29-Jan-18	1	320	6	59	1.6
WMZ-CK1	GRAB	Montizambert Creek Source Water	14-Feb-18	<1	84	4	9	0.48
WMZ-CK1	GRAB	Montizambert Creek Source Water	26-Feb-18	<1	68	5	6	1.1
WMZ-CK1	GRAB	Montizambert Creek Source Water	12-Mar-18	<1	120	10	17	1.3
WMZ-CK1	GRAB	Montizambert Creek Source Water	26-Mar-18	<1	66	7	9	1.1
WMZ-CK1	GRAB	Montizambert Creek Source Water	9-Apr-18	<1	250	12	49	0.82
WMZ-CK1	GRAB	Montizambert Creek Source Water	23-Apr-18	<1	110	8	29	1.8
WMZ-CK1	GRAB	Montizambert Creek Source Water	7-May-18	1	270	13	38	2
WMZ-CK1	GRAB	Montizambert Creek Source Water	23-May-18	<1	440	13	96	0.46
WMZ-CK1	GRAB	Montizambert Creek Source Water	4-Jun-18	<1	170	9	76	0.5
WMZ-CK1	GRAB	Montizambert Creek Source Water	18-Jun-18	<1	240	16	160	1.2
WMZ-CK1	GRAB	Montizambert Creek Source Water	4-Jul-18	<1	170	17	70	0.74
WMZ-CK1	GRAB	Montizambert Creek Source Water	16-Jul-18	2	350	18	225	0.32
WMZ-CK1	GRAB	Montizambert Creek Source Water	30-Jul-18	5	490	14	299	0.37
WMZ-CK1	GRAB	Montizambert Creek Source Water	13-Aug-18	2	480	14	649	0.4
WMZ-CK1	GRAB	Montizambert Creek Source Water	27-Aug-18	<1	260	12	199	0.28
WMZ-CK1	GRAB	Montizambert Creek Source Water	10-Sep-18	14	590	12	1120	0.44
WMZ-CK1	GRAB	Montizambert Creek Source Water	24-Sep-18	1	300	13	80	1.7
WMZ-CK1	GRAB	Montizambert Creek Source Water	10-Oct-18	<1	140	13	53	0.8
WMZ-CK1	GRAB	Montizambert Creek Source Water	22-Oct-18	<1	320	10	22	0.69
WMZ-CK1	GRAB	Montizambert Creek Source Water	5-Nov-18	<1	300	8	52	0.96
WMZ-CK1	GRAB	Montizambert Creek Source Water	19-Nov-18	<1	290	7	50	1
WMZ-CK1	GRAB	Montizambert Creek Source Water	3-Dec-18	<1	280	5	19	0.59
WMZ-CK1	GRAB	Montizambert Creek Source Water	17-Dec-18	<1	NA	5	29	3.7

### 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		2018/06/25 9:52	2018/12/03 8:23	2018/06/25 10:19	2018/12/03 8:57
Sample Type		GRAB	GRAB	GRAB	GRAB
Alkalinity as CaCO3	mg/L	2.7	2.6	2.6	3
Aluminium Dissolved	µg/L	61	104	13000	3900
Aluminum Total	µg/L	83	116	13300	3880
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	2.9	3.1	1.2	1.6
Boron Total	µg/L	<10	<10	<10	<10
Cadmium Total	µg/L	<0.2	<0.2	<0.2	<0.2
Calcium Total	µg/L	968	1010	1120	1740
Carbon Organic - Dissolved	mg/L	1.7	2.8	2.2	1.8
Carbon Organic - Total	mg/L	1.7	2.9	2.4	2
Chloride	mg/L	0.8	0.9	9.9	3
Chromium Total	µg/L	<0.05	<0.05	0.1	0.11
Color - Apparent	ACU	10	23	23	19
Color - True	TCU	10	16	20	11
Conductivity	µmhos/cm	11	12	37	18
Copper Total	µg/L	1	0.9	30.1	7.5
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	3.1	3.2	3.4	5.2
Iron Dissolved	µg/L	39	36	24	12
Iron Total	µg/L	66	53	28	16
Lead Total	µg/L	<0.5	<0.5	2.8	<0.5
Magnesium Total	µg/L	166	167	142	219
Manganese Dissolved	µg/L	8.2	5.5	<0.5	<0.5
Manganese Total	µg/L	10	6.7	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	0.03	0.01
Nitrogen - Nitrite as N	mg/L	<0.01	<0.01	<0.01	<0.01
pH	pH units	6.4	6.4	5.3	6.4
Phenol	mg/L	<0.005	<0.005	<0.005	<0.005
Phosphorus Dissolved	µg/L		<10		<10
Phosphorus Total	-	6.57		6.03	
Phosphorus Total	µg/L		<10		<10
Potassium Total	µg/L	103	103	85	120
Residue Total	mg/L	16	19	66	33
Residue Total Dissolved	mg/L	15	13	61	28
Residue Total Fixed	mg/L	8	12	38	23
Residue Total Volatile	mg/L	8	7	28	10
Selenium Total	µg/L	<0.5	<0.5	<0.5	<0.5
Silica as SiO2	mg/L	3.1	3.9	3	6.6
Silver Total	µg/L	<0.5	<0.5	<0.5	<0.5
Sodium Total	µg/L	804	874	676	981
Sulphate	mg/L	0.8	1.2	1.2	1.9
UV Absorbance 254 nm	Abs/cm	0.065	0.108	0.107	0.067
Zinc Total	µg/L	<3.0	<3.0	41.5	12.4



## APPENDIX C

### 1. Semi Annual Metals Monitoring Results

Parameter	Canadian Guideline Limit Reason		Sample Name	1st Half	2nd Half	1st Half	2nd Half
			Sample Location	WEAG-789	WEAG-789	WMZ-782	WMZ-782
			Sample Date	Gleneagles Elementary - 6350 Marine Drive	Gleneagles Elementary - 6350 Marine Drive	8995 Lawrence Way - Mtzb Creek	8995 Lawrence Way - Mtzb Creek
			Sample Type	2018/06/13 8:30	2018/12/05 8:55	2018/06/13 8:10	2018/12/05 8:30
				GRAB	GRAB	GRAB	GRAB
Aluminum Total	200	Aesthetic	$\mu\text{g/L}$	10	17	17	21
Antimony Total	6	Health	$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Arsenic Total	10	Health	$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Barium Total	1000	Health	$\mu\text{g/L}$	3.6	3.2	3.6	4.3
Boron Total	5000	Health	$\mu\text{g/L}$	<10	<10	<10	<10
Cadmium Total	5	Health	$\mu\text{g/L}$	<0.2	<0.2	<0.2	<0.2
Calcium Total	none		$\mu\text{g/L}$	1120	1190	1300	1760
Chromium Total	50	Health	$\mu\text{g/L}$	<0.05	<0.05	<0.05	<0.05
Cobalt Total	none		$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Copper Total	$\leq 1000$	Aesthetic	$\mu\text{g/L}$	28.1	28.4	8.0	14.6
Iron Total	$\leq 300$	Aesthetic	$\mu\text{g/L}$	<5	8	314	457
Lead Total	10	Health	$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Magnesium Total	none		$\mu\text{g/L}$	195	207	147	195
Manganese Total	$\leq 50$	Aesthetic	$\mu\text{g/L}$	1.7	6.0	2.1	3.3
Mercury Total	1.0	Health	$\mu\text{g/L}$	<0.05	<0.05	<0.05	<0.05
Molybdenum Total	none		$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Nickel Total	none		$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Potassium Total	none		$\mu\text{g/L}$	98	111	80	115
Selenium Total	50	Health	$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Silver Total	none		$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Sodium Total	$\leq 200,000$	Aesthetic	$\mu\text{g/L}$	3560	3750	3180	3720
Zinc Total	$\leq 5000$	Aesthetic	$\mu\text{g/L}$	11.3	10.8	<3.0	6.1

Parameter	Canadian Guideline Limit Reason		Sample Name	1st Half	2nd Half	1st Half	2nd Half
			Sample Location	WVR-798	WVR-798	WVR-799	WVR-799
			Sample Date	Cypress Park Elementary	Cypress Park Elementary	Hollyburn Elementary	Hollyburn Elementary
			Sample Type	2018/06/13 9:00	2018/12/05 9:20	2018/06/13 9:40	2018/12/05 10:00
				GRAB	GRAB	GRAB	GRAB
Aluminum Total	200	Aesthetic	$\mu\text{g/L}$	27	16	23	30
Antimony Total	6	Health	$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Arsenic Total	10	Health	$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Barium Total	1000	Health	$\mu\text{g/L}$	2.5	2.7	2.4	2.7
Boron Total	5000	Health	$\mu\text{g/L}$	<10	<10	<10	<10
Cadmium Total	5	Health	$\mu\text{g/L}$	<0.2	<0.2	<0.2	<0.2
Calcium Total	none		$\mu\text{g/L}$	4650	1220	4680	4690
Chromium Total	50	Health	$\mu\text{g/L}$	<0.05	0.17	<0.05	<0.05
Cobalt Total	none		$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Copper Total	$\leq 1000$	Aesthetic	$\mu\text{g/L}$	52.2	74.8	19.3	27.1
Iron Total	$\leq 300$	Aesthetic	$\mu\text{g/L}$	13	30	21	39
Lead Total	10	Health	$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Magnesium Total	none		$\mu\text{g/L}$	150	166	150	140
Manganese Total	$\leq 50$	Aesthetic	$\mu\text{g/L}$	2.3	4.9	2.9	2.2
Mercury Total	1.0	Health	$\mu\text{g/L}$	<0.05	<0.05	<0.05	<0.05
Molybdenum Total	none		$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Nickel Total	none		$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Potassium Total	none		$\mu\text{g/L}$	134	111	134	150
Selenium Total	50	Health	$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Silver Total	none		$\mu\text{g/L}$	<0.5	<0.5	<0.5	<0.5
Sodium Total	$\leq 200,000$	Aesthetic	$\mu\text{g/L}$	1380	3700	1350	1430
Zinc Total	$\leq 5000$	Aesthetic	$\mu\text{g/L}$	4.7	12.3	<3.0	<3.0

2. 2018 Disinfection By-Products Quarterly Averages

Sample Site	Date Sampled	Total THM Quarterly Average (Guideline Limit 100ppb/mL)	Total HAA Quarterly Average (Guideline Limit 80ppb/mL)
WEAG-772	15-Feb-18	29	22
WEAG-772	31-May-18	29	19
WEAG-772	9-Aug-18	29	18
WEAG-772	21-Nov-18	31	20
WEAG-773	15-Feb-18	40	28
WEAG-773	31-May-18	43	26
WEAG-773	9-Aug-18	44	25
WEAG-773	21-Nov-18	44	24
WEAG-776	15-Feb-18	39	
WEAG-776	31-May-18	35	
WEAG-776	9-Aug-18	31	
WEAG-776	21-Nov-18	25	
WEAG-778	15-Feb-18	28	22
WEAG-778	31-May-18	29	18
WEAG-778	9-Aug-18	28	18
WEAG-778	21-Nov-18	29	18
WMZ-781	15-Feb-18	65	105
WMZ-781	31-May-18	55	41
WMZ-781	9-Aug-18	50	39
WMZ-781	21-Nov-18	44	38
WMZ-782	15-Feb-18	35	80
WMZ-782	31-May-18	21	28
WMZ-782	9-Aug-18	20	27
WMZ-782	21-Nov-18	17	28
WVR-713	15-Feb-18	31	
WVR-713	31-May-18	29	
WVR-713	9-Aug-18	28	
WVR-713	21-Nov-18	28	
WVR-716	15-Feb-18	31	26
WVR-716	31-May-18	31	19
WVR-716	9-Aug-18	31	18
WVR-716	21-Nov-18	32	17
WVR-717	15-Feb-18	22	
WVR-717	31-May-18	24	
WVR-717	9-Aug-18	23	
WVR-717	21-Nov-18	23	
WVR-764	15-Feb-18	17	16
WVR-764	31-May-18	18	13
WVR-764	9-Aug-18	18	13
WVR-764	21-Nov-18	20	12

### 3. Water Sampling Results

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WVR-711	GRAB	1020 Groveland Road	3-Jan-18	1.01	<1	2	4	<1	0.15
WVR-711	GRAB	1020 Groveland Road	8-Jan-18	1.17	<1	2	5	<1	0.11
WVR-711	GRAB	1020 Groveland Road	5-Feb-18	1.05	<1	4	7	<1	0.49
WVR-711	GRAB	1020 Groveland Road	5-Mar-18	1.23	<1	<2	5	<1	0.43
WVR-711	GRAB	1020 Groveland Road	4-Apr-18	1.38	<1	4	6	<1	0.12
WVR-711	GRAB	1020 Groveland Road	30-Apr-18	1.13	<1	<2	10	<1	0.31
WVR-711	GRAB	1020 Groveland Road	28-May-18	1.05	<1	8	13	<1	0.52
WVR-711	GRAB	1020 Groveland Road	25-Jun-18	0.81	<1	2	15	<1	0.25
WVR-711	GRAB	1020 Groveland Road	23-Jul-18	0.84	<1	<2	14	<1	0.22
WVR-711	GRAB	1020 Groveland Road	20-Aug-18	0.6	<1	2	15	<1	0.15
WVR-711	GRAB	1020 Groveland Road	17-Sep-18	0.73	<1	<2	14	<1	0.24
WVR-711	GRAB	1020 Groveland Road	15-Oct-18	0.79	<1	6	11	<1	0.3
WVR-711	GRAB	1020 Groveland Road	14-Nov-18	0.75	<1	<2	9	<1	0.15
WVR-711	GRAB	1020 Groveland Road	10-Dec-18	0.9	<1	<2	6	<1	0.16
WVR-712	GRAB	510 Ballantree Road	3-Jan-18	0.26	<1	12	4	<1	0.18
WVR-712	GRAB	510 Ballantree Road	8-Jan-18	0.32	<1	18	6	<1	0.09
WVR-712	GRAB	510 Ballantree Road	5-Feb-18	0.22	<1	42	6	<1	0.17
WVR-712	GRAB	510 Ballantree Road	5-Mar-18	0.24	<1	8	4	<1	0.53
WVR-712	GRAB	510 Ballantree Road	4-Apr-18	0.51	<1	<2	7	<1	0.14
WVR-712	GRAB	510 Ballantree Road	30-Apr-18	0.49	<1	<2	9	<1	0.28
WVR-712	GRAB	510 Ballantree Road	28-May-18	0.54	<1	<2	14	<1	0.41
WVR-712	GRAB	510 Ballantree Road	25-Jun-18	0.55	<1	2	16	<1	0.23
WVR-712	GRAB	510 Ballantree Road	23-Jul-18	0.48	<1	<2	18	<1	0.22
WVR-712	GRAB	510 Ballantree Road	20-Aug-18	0.56	<1	2	18	<1	0.13
WVR-712	GRAB	510 Ballantree Road	17-Sep-18	0.58	<1	2	15	<1	0.19
WVR-712	GRAB	510 Ballantree Road	15-Oct-18	0.3	<1	10	12	<1	0.5
WVR-712	GRAB	510 Ballantree Road	14-Nov-18	0.21	<1	54	9	<1	0.22
WVR-712	GRAB	510 Ballantree Road	10-Dec-18	0.24	<1	140	5	<1	0.17
WVR-718	GRAB	885 - 22nd Street	29-Jan-18	0.63	<1	6	8	<1	0.15
WVR-718	GRAB	885 - 22nd Street	26-Feb-18	0.43	<1	<2	6	<1	0.12
WVR-718	GRAB	885 - 22nd Street	26-Mar-18	0.6	<1	2	10	<1	0.12
WVR-718	GRAB	885 - 22nd Street	23-Apr-18	0.4	<1	<2	8	<1	0.15
WVR-718	GRAB	885 - 22nd Street	23-May-18	0.53	<1	<2	14	<1	0.24
WVR-718	GRAB	885 - 22nd Street	18-Jun-18	0.47	<1	2	16	<1	0.16
WVR-718	GRAB	885 - 22nd Street	16-Jul-18	0.54	<1	2	19	<1	0.15
WVR-718	GRAB	885 - 22nd Street	13-Aug-18	0.55	<1	<2	17	<1	0.17
WVR-718	GRAB	885 - 22nd Street	10-Sep-18	0.52	<1	<2	18	<1	0.11
WVR-718	GRAB	885 - 22nd Street	10-Oct-18	0.25	<1	<2	17	<1	0.13
WVR-718	GRAB	885 - 22nd Street	5-Nov-18	0.22	<1	10	13	<1	0.15
WVR-718	GRAB	885 - 22nd Street	3-Dec-18	0.6	<1	4	9	<1	0.17
WVR-761	GRAB	243 Rabbit Lane	22-Jan-18	0.37	<1	54	5	<1	0.4
WVR-761	GRAB	243 Rabbit Lane	19-Feb-18	0.39	<1	2	5	<1	0.82
WEAG-761	GRAB	243 Rabbit Lane	19-Mar-18	0.24	<1	4	5	<1	1.5
WVR-761	GRAB	243 Rabbit Lane	16-Apr-18	0.48	<1	18	8	<1	0.61
WVR-761	GRAB	243 Rabbit Lane	14-May-18	0.47	<1	64	13	<1	0.23
WVR-761	GRAB	243 Rabbit Lane	11-Jun-18	0.32	<1	28	14	<1	0.22
WVR-761	GRAB	243 Rabbit Lane	9-Jul-18	0.31	<1	330	16	<1	0.31
WVR-761	GRAB	243 Rabbit Lane	8-Aug-18	0.29	<1	1900	19	<1	0.15

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WVR-761	GRAB	243 Rabbit Lane	5-Sep-18	0.44	<1	840	16	<1	0.25
WVR-761	GRAB	243 Rabbit Lane	1-Oct-18	0.3	<1	790	14	<1	0.31
WVR-761	GRAB	243 Rabbit Lane	29-Oct-18	0.25	<1	1100	11	<1	0.37
WVR-761	GRAB	243 Rabbit Lane	26-Nov-18	0.29	<1	2300	9	<1	0.36
WVR-761	GRAB	243 Rabbit Lane	27-Dec-18	0.2	<1	NA	6	<1	0.29
WVR-764	GRAB	111 Bridge Road	22-Jan-18	0.71	<1	<2	4	<1	0.12
WVR-764	GRAB	111 Bridge Road	19-Feb-18	0.86	<1	<2	5	<1	0.13
WVR-764	GRAB	111 Bridge Road	19-Mar-18	0.74	<1	<2	4	<1	0.31
WVR-764	GRAB	111 Bridge Road	16-Apr-18	0.78	<1	<2	6	<1	0.18
WVR-764	GRAB	111 Bridge Road	14-May-18	0.79	<1	2	10	<1	0.17
WVR-764	GRAB	111 Bridge Road	11-Jun-18	0.75	<1	<2	10	<1	0.16
WVR-764	GRAB	111 Bridge Road	9-Jul-18	0.77	<1	<2	11	<1	0.14
WVR-764	GRAB	111 Bridge Road	8-Aug-18	0.81	<1	<2	13	<1	0.23
WVR-764	GRAB	111 Bridge Road	5-Sep-18	0.75	<1	<2	14	<1	0.27
WVR-764	GRAB	111 Bridge Road	1-Oct-18	0.62	<1	2	13	<1	0.11
WVR-764	GRAB	111 Bridge Road	29-Oct-18	0.87	<1	<2	9	<1	0.29
WVR-764	GRAB	111 Bridge Road	26-Nov-18	0.73	<1	<2	8	<1	0.14
WVR-764	GRAB	111 Bridge Road	27-Dec-18	0.71	<1	NA	5	<1	0.1
WVR-790	GRAB	19 Glenmore Drive	3-Jan-18	0.62	<1	<2	5	<1	0.43
WVR-790	GRAB	19 Glenmore Drive	8-Jan-18	0.59	<1	<2	5	<1	0.56
WVR-790	GRAB	19 Glenmore Drive	22-Jan-18	0.48	<1	<2	6	<1	0.49
WVR-790	GRAB	19 Glenmore Drive	5-Feb-18	0.38	<1	<2	7	<1	0.46
WVR-790	GRAB	19 Glenmore Drive	19-Feb-18	0.43	<1	6	5	<1	0.55
WVR-790	GRAB	19 Glenmore Drive	5-Mar-18	0.59	<1	<2	6	<1	0.34
WVR-790	GRAB	19 Glenmore Drive	19-Mar-18	0.6	<1	<2	6	<1	0.44
WVR-790	GRAB	19 Glenmore Drive	4-Apr-18	0.68	<1	<2	7	<1	0.17
WVR-790	GRAB	19 Glenmore Drive	16-Apr-18	0.51	<1	<2	8	<1	0.3
WVR-790	GRAB	19 Glenmore Drive	30-Apr-18	0.66	<1	<2	9	<1	0.17
WVR-790	GRAB	19 Glenmore Drive	14-May-18	0.57	<1	<2	13	<1	0.97
WVR-790	GRAB	19 Glenmore Drive	28-May-18	0.76	<1	<2	11	<1	0.34
WVR-790	GRAB	19 Glenmore Drive	11-Jun-18	0.7	<1	<2	11	<1	0.6
WVR-790	GRAB	19 Glenmore Drive	25-Jun-18	0.74	<1	<2	11	<1	0.15
WVR-790	GRAB	19 Glenmore Drive	9-Jul-18	0.78	<1	<2	10	<1	0.1
WVR-790	GRAB	19 Glenmore Drive	23-Jul-18	0.69	<1	<2	13	<1	0.13
WVR-790	GRAB	19 Glenmore Drive	8-Aug-18	0.85	<1	<2	12	<1	0.18
WVR-790	GRAB	19 Glenmore Drive	20-Aug-18	0.78	<1	2	15	<1	0.24
WVR-790	GRAB	19 Glenmore Drive	5-Sep-18	0.76	<1	<2	15	<1	0.33
WVR-790	GRAB	19 Glenmore Drive	17-Sep-18	0.79	<1	<2	13	<1	0.34
WVR-790	GRAB	19 Glenmore Drive	1-Oct-18	0.64	<1	<2	14	<1	0.21
WVR-790	GRAB	19 Glenmore Drive	15-Oct-18	0.69	<1	<2	11	<1	0.33
WVR-790	GRAB	19 Glenmore Drive	29-Oct-18	0.5	<1	<2	10	<1	0.29
WVR-790	GRAB	19 Glenmore Drive	14-Nov-18	0.51	<1	<2	9	<1	0.2
WVR-790	GRAB	19 Glenmore Drive	26-Nov-18	0.44	<1	2	9	<1	0.18
WVR-790	GRAB	19 Glenmore Drive	10-Dec-18	0.51	<1	2	7	<1	0.14
WVR-790	GRAB	19 Glenmore Drive	27-Dec-18	0.51	<1	NA	6	<1	0.27
WVR-791	GRAB	200 Keith Road	3-Jan-18	0.77	<1	<2	3	<1	0.17
WVR-791	GRAB	200 Keith Road	8-Jan-18	0.76	<1	<2	5	<1	0.12
WVR-791	GRAB	200 Keith Road	5-Feb-18	0.7	<1	<2	4	<1	0.11
WVR-791	GRAB	200 Keith Road	5-Mar-18	0.87	<1	<2	4	<1	0.28

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WVR-791	GRAB	200 Keith Road	4-Apr-18	0.4	<1	<2	5	<1	0.1
WVR-791	GRAB	200 Keith Road	30-Apr-18	0.69	<1	<2	10	<1	0.25
WVR-791	GRAB	200 Keith Road	28-May-18	0.8	<1	<2	9	<1	0.16
WVR-791	GRAB	200 Keith Road	25-Jun-18	0.75	<1	<2	13	<1	0.11
WVR-791	GRAB	200 Keith Road	23-Jul-18	0.8	<1	4	12	<1	0.14
WVR-791	GRAB	200 Keith Road	20-Aug-18	0.76	<1	2	15	<1	0.31
WVR-791	GRAB	200 Keith Road	17-Sep-18	0.98	<1	2	14	<1	0.18
WVR-791	GRAB	200 Keith Road	15-Oct-18	0.9	<1	<2	10	<1	0.25
WVR-791	GRAB	200 Keith Road	14-Nov-18	0.68	<1	<2	9	<1	0.18
WVR-791	GRAB	200 Keith Road	10-Dec-18	0.69	<1	<2	5	<1	0.15
WVR-792	GRAB	76 Bonnymuir Drive	3-Jan-18	0.64	<1	2	4	<1	0.27
WVR-792	GRAB	76 Bonnymuir Drive	8-Jan-18	0.58	<1	<2	6	<1	0.16
WVR-792	GRAB	76 Bonnymuir Drive	22-Jan-18	0.58	<1	<2	6	<1	0.25
WVR-792	GRAB	76 Bonnymuir Drive	5-Feb-18	0.61	<1	<2	7	<1	0.18
WVR-792	GRAB	76 Bonnymuir Drive	19-Feb-18	0.42	<1	<2	6	<1	0.31
WVR-792	GRAB	76 Bonnymuir Drive	5-Mar-18	0.55	<1	2	6	<1	0.32
WVR-792	GRAB	76 Bonnymuir Drive	19-Mar-18	0.59	<1	2	7	<1	0.36
WVR-792	GRAB	76 Bonnymuir Drive	4-Apr-18	0.58	<1	<2	7	<1	0.13
WVR-792	GRAB	76 Bonnymuir Drive	16-Apr-18	0.61	<1	18	8	<1	0.34
WVR-792	GRAB	76 Bonnymuir Drive	30-Apr-18	0.54	<1	92	9	<1	0.37
WVR-792	GRAB	76 Bonnymuir Drive	14-May-18	0.69	<1	<2	11	<1	0.21
WVR-792	GRAB	76 Bonnymuir Drive	28-May-18	0.62	<1	<2	12	<1	0.22
WVR-792	GRAB	76 Bonnymuir Drive	11-Jun-18	0.66	<1	28	11	<1	0.18
WVR-792	GRAB	76 Bonnymuir Drive	25-Jun-18	0.65	<1	2	12	<1	0.24
WVR-792	GRAB	76 Bonnymuir Drive	9-Jul-18	0.64	<1	<2	11	<1	0.13
WVR-792	GRAB	76 Bonnymuir Drive	23-Jul-18	0.68	<1	<2	13	<1	0.16
WVR-792	GRAB	76 Bonnymuir Drive	8-Aug-18	0.76	<1	<2	13	<1	0.18
WVR-792	GRAB	76 Bonnymuir Drive	20-Aug-18	0.7	<1	<2	15	<1	0.21
WVR-792	GRAB	76 Bonnymuir Drive	5-Sep-18	0.72	<1	<2	15	<1	0.17
WVR-792	GRAB	76 Bonnymuir Drive	17-Sep-18	0.81	<1	<2	13	<1	0.21
WVR-792	GRAB	76 Bonnymuir Drive	1-Oct-18	0.48	<1	4	13	<1	0.14
WVR-792	GRAB	76 Bonnymuir Drive	15-Oct-18	0.75	<1	10	12	<1	0.27
WVR-792	GRAB	76 Bonnymuir Drive	29-Oct-18	0.52	<1	2	11	<1	0.15
WVR-792	GRAB	76 Bonnymuir Drive	14-Nov-18	0.5	<1	2	10	<1	0.19
WVR-792	GRAB	76 Bonnymuir Drive	26-Nov-18	0.5	<1	2	9	<1	0.14
WVR-792	GRAB	76 Bonnymuir Drive	10-Dec-18	0.55	<1	6	7	<1	0.17
WVR-792	GRAB	76 Bonnymuir Drive	27-Dec-18	0.55	<1	NA	7	<1	0.23
WVR-793	GRAB	559 Kildonan Road	3-Jan-18	0.44	<1	<2	5	<1	0.15
WVR-793	GRAB	559 Kildonan Road	8-Jan-18	0.59	<1	<2	6	<1	0.19
WVR-793	GRAB	559 Kildonan Road	5-Feb-18	0.52	<1	<2	6	<1	0.16
WVR-793	GRAB	559 Kildonan Road	5-Mar-18	0.57	<1	<2	4	<1	0.84
WVR-793	GRAB	559 Kildonan Road	4-Apr-18	0.61	<1	<2	6	<1	0.26
WVR-793	GRAB	559 Kildonan Road	30-Apr-18	0.39	<1	2	10	<1	0.18
WVR-793	GRAB	559 Kildonan Road	28-May-18	0.62	<1	<2	14	<1	0.16
WVR-793	GRAB	559 Kildonan Road	25-Jun-18	0.53	<1	4	16	<1	0.16
WVR-793	GRAB	559 Kildonan Road	23-Jul-18	0.49	<1	<2	18	<1	0.11
WVR-793	GRAB	559 Kildonan Road	20-Aug-18	0.52	<1	<2	18	<1	0.19
WVR-793	GRAB	559 Kildonan Road	17-Sep-18	0.45	<1	4	13	<1	0.16
WVR-793	GRAB	559 Kildonan Road	15-Oct-18	0.35	<1	4	11	<1	0.31

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WVR-793	GRAB	559 Kildonan Road	14-Nov-18	0.21	<1	<2	9	<1	0.13
WVR-793	GRAB	559 Kildonan Road	10-Dec-18	0.21	<1	<2	5	<1	0.14
WVR-794	GRAB	702 Barnham Road	3-Jan-18	0.89	<1	<2	4	<1	0.18
WVR-794	GRAB	702 Barnham Road	8-Jan-18	0.95	<1	<2	4	<1	0.13
WVR-794	GRAB	702 Barnham Road	5-Feb-18	0.41	<1	2	6	<1	0.13
WVR-794	GRAB	702 Barnham Road	5-Mar-18	1.26	<1	<2	4	<1	0.12
WVR-794	GRAB	702 Barnham Road	4-Apr-18	0.64	<1	<2	6	<1	0.11
WVR-794	GRAB	702 Barnham Road	30-Apr-18	0.53	<1	<2	10	<1	0.23
WVR-794	GRAB	702 Barnham Road	28-May-18	0.65	<1	4	13	<1	0.26
WVR-794	GRAB	702 Barnham Road	25-Jun-18	0.66	<1	<2	15	<1	0.24
WVR-794	GRAB	702 Barnham Road	23-Jul-18	0.69	<1	<2	15	<1	0.15
WVR-794	GRAB	702 Barnham Road	20-Aug-18	0.65	<1	<2	16	<1	0.24
WVR-794	GRAB	702 Barnham Road	17-Sep-18	0.56	<1	<2	15	<1	0.28
WVR-794	GRAB	702 Barnham Road	15-Oct-18	0.7	<1	6	13	<1	0.28
WVR-794	GRAB	702 Barnham Road	14-Nov-18	0.75	<1	<2	9	<1	0.11
WVR-794	GRAB	702 Barnham Road	10-Dec-18	0.82	<1	4	5	<1	0.37
WVR-795	GRAB	620 Kenwood Road	3-Jan-18	0.32	<1	10	4	<1	0.19
WVR-795	GRAB	620 Kenwood Road	8-Jan-18	0.67	<1	2	5	<1	0.14
WVR-795	GRAB	620 Kenwood Road	5-Feb-18	0.32	<1	22	6	<1	0.15
WVR-795	GRAB	620 Kenwood Road	5-Mar-18	0.55	<1	6	3	<1	0.17
WVR-795	GRAB	620 Kenwood Road	4-Apr-18	0.63	<1	4	6	<1	0.14
WVR-795	GRAB	620 Kenwood Road	30-Apr-18	0.58	<1	28	9	<1	0.29
WVR-795	GRAB	620 Kenwood Road	28-May-18	0.66	<1	2	12	<1	0.19
WVR-795	GRAB	620 Kenwood Road	25-Jun-18	0.78	<1	<2	12	<1	0.18
WVR-795	GRAB	620 Kenwood Road	23-Jul-18	0.74	<1	<2	12	<1	0.12
WVR-795	GRAB	620 Kenwood Road	20-Aug-18	0.76	<1	<2	15	<1	0.18
WVR-795	GRAB	620 Kenwood Road	17-Sep-18	0.7	<1	<2	14	<1	0.24
WVR-795	GRAB	620 Kenwood Road	15-Oct-18	0.5	<1	2	11	<1	0.21
WVR-795	GRAB	620 Kenwood Road	14-Nov-18	0.3	<1	22	10	<1	0.28
WVR-795	GRAB	620 Kenwood Road	10-Dec-18	0.5	<1	<2	5	<1	0.24
WVR-796	GRAB	315 Mathers Avenue	3-Jan-18	0.72	<1	<2	5	<1	0.14
WVR-796	GRAB	315 Mathers Avenue	8-Jan-18	0.52	<1	<2	5	<1	0.7
WVR-796	GRAB	315 Mathers Avenue	22-Jan-18	0.68	<1	<2	5	<1	0.14
WVR-796	GRAB	315 Mathers Avenue	5-Feb-18	0.51	<1	<2	8	<1	0.08
WVR-796	GRAB	315 Mathers Avenue	19-Feb-18	0.69	<1	<2	9	<1	0.11
WVR-796	GRAB	315 Mathers Avenue	5-Mar-18	0.65	<1	2	5	<1	0.58
WVR-796	GRAB	315 Mathers Avenue	19-Mar-18	0.31	<1	<2	10	<1	0.4
WVR-796	GRAB	315 Mathers Avenue	4-Apr-18	0.32	<1	<2	7	<1	0.83
WVR-796	GRAB	315 Mathers Avenue	16-Apr-18	0.87	<1	<2	9	<1	0.18
WVR-796	GRAB	315 Mathers Avenue	30-Apr-18	0.53	<1	<2	9	<1	0.13
WVR-796	GRAB	315 Mathers Avenue	14-May-18	0.7	<1	<2	15	<1	0.16
WVR-796	GRAB	315 Mathers Avenue	28-May-18	0.72	<1	<2	14	<1	0.25
WVR-796	GRAB	315 Mathers Avenue	11-Jun-18	0.66	<1	<2	13	<1	0.2
WVR-796	GRAB	315 Mathers Avenue	25-Jun-18	0.77	<1	<2	12	<1	0.15
WVR-796	GRAB	315 Mathers Avenue	9-Jul-18	0.62	<1	<2	15	<1	0.12
WVR-796	GRAB	315 Mathers Avenue	23-Jul-18	0.77	<1	<2	13	<1	0.11
WVR-796	GRAB	315 Mathers Avenue	8-Aug-18	0.52	<1	<2	15	<1	0.2
WVR-796	GRAB	315 Mathers Avenue	20-Aug-18	0.61	<1	<2	16	<1	0.29
WVR-796	GRAB	315 Mathers Avenue	5-Sep-18	0.74	<1	<2	15	<1	0.22

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WVR-796	GRAB	315 Mathers Avenue	17-Sep-18	0.72	<1	<2	15	<1	0.2
WVR-796	GRAB	315 Mathers Avenue	1-Oct-18	0.67	<1	<2	15	<1	0.11
WVR-796	GRAB	315 Mathers Avenue	15-Oct-18	0.78	<1	<2	11	<1	0.42
WVR-796	GRAB	315 Mathers Avenue	29-Oct-18	0.74	<1	2	11	<1	0.12
WVR-796	GRAB	315 Mathers Avenue	14-Nov-18	0.63	<1	<2	9	<1	0.18
WVR-796	GRAB	315 Mathers Avenue	26-Nov-18	0.49	<1	<2	8	<1	0.09
WVR-796	GRAB	315 Mathers Avenue	10-Dec-18	0.53	<1	<2	6	<1	0.14
WVR-796	GRAB	315 Mathers Avenue	27-Dec-18	0.54	<1	NA	6	<1	0.09
WVR-797	GRAB	395 Klahanie Court	22-Jan-18	0.61	<1	1400	5	<1	0.6
WVR-797	GRAB	395 Klahanie Court	19-Feb-18	0.84	<1	<2	5	<1	0.11
WVR-797	GRAB	395 Klahanie Court	19-Mar-18	0.28	<1	450	5	<1	0.38
WVR-797	GRAB	395 Klahanie Court	16-Apr-18	0.37	<1	100	8	<1	0.28
WVR-797	GRAB	395 Klahanie Court	14-May-18	0.26	<1	640	11	<1	0.25
WVR-797	GRAB	395 Klahanie Court	11-Jun-18	0.95	<1	4	13	<1	0.18
WVR-797	GRAB	395 Klahanie Court	9-Jul-18	0.75	<1	12	15	<1	0.17
WVR-797	GRAB	395 Klahanie Court	8-Aug-18	0.72	<1	2	15	<1	0.23
WVR-797	GRAB	395 Klahanie Court	5-Sep-18	0.54	<1	310	15	<1	0.19
WVR-797	GRAB	395 Klahanie Court	1-Oct-18	0.99	<1	36	15	<1	0.13
WVR-797	GRAB	395 Klahanie Court	29-Oct-18	0.46	<1	200	10	<1	0.25
WVR-797	GRAB	395 Klahanie Court	26-Nov-18	0.56	<1	390	9	<1	0.19
WVR-797	GRAB	395 Klahanie Court	27-Dec-18	0.55	<1	NA	5	<1	0.28
WEAG-710	GRAB	4782 Woodgreen Drive	29-Jan-18	1.2	<1	<2	5	<1	0.23
WEAG-710	GRAB	4782 Woodgreen Drive	26-Feb-18	1.24	<1	<2	4	<1	0.25
WEAG-710	GRAB	4782 Woodgreen Drive	26-Mar-18	1.1	<1	<2	5	<1	0.14
WEAG-710	GRAB	4782 Woodgreen Drive	23-Apr-18	1.09	<1	2	9	<1	0.12
WEAG-710	GRAB	4782 Woodgreen Drive	23-May-18	1.04	<1	<2	14	<1	0.19
WEAG-710	GRAB	4782 Woodgreen Drive	18-Jun-18	1.14	<1	<2	16	<1	0.13
WEAG-710	GRAB	4782 Woodgreen Drive	16-Jul-18	1.26	<1	2	22	<1	0.23
WEAG-710	GRAB	4782 Woodgreen Drive	13-Aug-18	1.28	<1	<2	19	<1	0.19
WEAG-710	GRAB	4782 Woodgreen Drive	10-Sep-18	1.11	<1	<2	15	<1	0.14
WEAG-710	GRAB	4782 Woodgreen Drive	10-Oct-18	1.05	<1	<2	11	<1	0.17
WEAG-710	GRAB	4782 Woodgreen Drive	5-Nov-18	1.03	<1	<2	9	<1	0.11
WEAG-710	GRAB	4782 Woodgreen Drive	3-Dec-18	1.44	<1	<2	5	<1	0.56
WEAG-716	GRAB	The Dale & Marine	15-Jan-18	1.09	<1	2	6	<1	1.3
WEAG-716	GRAB	The Dale & Marine	29-Jan-18	0.69	<1	<2	6	<1	0.26
WEAG-716	GRAB	The Dale & Marine	14-Feb-18	0.93	<1	<2	6	<1	0.46
WEAG-716	GRAB	The Dale & Marine	26-Feb-18	1.03	<1	<2	5	<1	0.14
WEAG-716	GRAB	The Dale & Marine	12-Mar-18	0.99	<1	220	6	<1	0.68
WEAG-716	GRAB	The Dale & Marine	26-Mar-18	0.95	<1	2	7	<1	0.11
WEAG-716	GRAB	The Dale & Marine	9-Apr-18	1.02	<1	2	8	<1	0.12
WEAG-716	GRAB	The Dale & Marine	23-Apr-18	0.94	<1	2	8	<1	0.11
WEAG-716	GRAB	The Dale & Marine	7-May-18	0.89	<1	<2	12	<1	0.21
WEAG-716	GRAB	The Dale & Marine	23-May-18	0.88	<1	<2	14	<1	0.4
WEAG-716	GRAB	The Dale & Marine	4-Jun-18	1.05	<1	<2	14	<1	0.17
WEAG-716	GRAB	The Dale & Marine	18-Jun-18	1.01	<1	<2	15	<1	0.1
WEAG-716	GRAB	The Dale & Marine	4-Jul-18	0.96	<1	2	17	<1	0.38
WEAG-716	GRAB	The Dale & Marine	16-Jul-18	0.93	<1	6	20	<1	0.15
WEAG-716	GRAB	The Dale & Marine	30-Jul-18	0.83	<1	2	22	<1	0.17

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WEAG-716	GRAB	The Dale & Marine	13-Aug-18	1.02	<1	<2	19	<1	0.16
WEAG-716	GRAB	The Dale & Marine	27-Aug-18	1.04	<1	4	18	<1	0.11
WEAG-716	GRAB	The Dale & Marine	10-Sep-18	0.8	<1	4	17	<1	0.15
WEAG-716	GRAB	The Dale & Marine	24-Sep-18	0.71	<1	10	14	<1	0.3
WEAG-716	GRAB	The Dale & Marine	10-Oct-18	0.81	<1	LA	12	<1	0.14
WEAG-716	GRAB	The Dale & Marine	16-Oct-18	0.75	<1	<2	13	<1	0.14
WEAG-716	GRAB	The Dale & Marine	22-Oct-18	0.71	<1	4	11	<1	0.11
WEAG-716	GRAB	The Dale & Marine	5-Nov-18	0.64	<1	6	10	<1	0.17
WEAG-716	GRAB	The Dale & Marine	19-Nov-18	0.69	<1	6	9	<1	0.64
WEAG-716	GRAB	The Dale & Marine	3-Dec-18	1.02	<1	<2	7	<1	0.19
WEAG-716	GRAB	The Dale & Marine	17-Dec-18	0.82	<1	NA	6	<1	0.52
WEAG-719	GRAB	2600 Chelsea Court	3-Jan-18	1.11	<1	<2	4	<1	0.1
WEAG-719	GRAB	2600 Chelsea Court	8-Jan-18	0.97	<1	<2	5	<1	0.31
WEAG-719	GRAB	2600 Chelsea Court	22-Jan-18	1.1	<1	2	5	<1	0.27
WEAG-719	GRAB	2600 Chelsea Court	5-Feb-18	1.03	<1	<2	5	<1	0.29
WEAG-719	GRAB	2600 Chelsea Court	19-Feb-18	1.07	<1	<2	6	<1	0.21
WEAG-719	GRAB	2600 Chelsea Court	5-Mar-18	1.2	<1	<2	4	<1	0.26
WEAG-719	GRAB	2600 Chelsea Court	19-Mar-18	0.98	<1	<2	7	<1	0.31
WEAG-719	GRAB	2600 Chelsea Court	4-Apr-18	0.99	<1	<2	6	<1	0.13
WEAG-719	GRAB	2600 Chelsea Court	16-Apr-18	1.21	<1	<2	7	<1	0.22
WEAG-719	GRAB	2600 Chelsea Court	30-Apr-18	0.84	<1	<2	11	<1	0.17
WEAG-719	GRAB	2600 Chelsea Court	14-May-18	0.99	<1	<2	14	<1	0.16
WEAG-719	GRAB	2600 Chelsea Court	28-May-18	0.94	<1	2	14	<1	0.13
WEAG-719	GRAB	2600 Chelsea Court	11-Jun-18	0.97	<1	<2	14	<1	0.1
WEAG-719	GRAB	2600 Chelsea Court	25-Jun-18	0.9	<1	2	13	<1	0.14
WEAG-719	GRAB	2600 Chelsea Court	9-Jul-18	1.02	<1	4	18	<1	0.1
WEAG-719	GRAB	2600 Chelsea Court	23-Jul-18	1.13	<1	2	20	<1	0.18
WEAG-719	GRAB	2600 Chelsea Court	8-Aug-18	0.85	<1	<2	20	<1	0.09
WEAG-719	GRAB	2600 Chelsea Court	20-Aug-18	0.73	<1	<2	17	<1	0.14
WEAG-719	GRAB	2600 Chelsea Court	5-Sep-18	0.78	<1	<2	16	<1	0.1
WEAG-719	GRAB	2600 Chelsea Court	17-Sep-18	0.8	<1	2	15	<1	0.16
WEAG-719	GRAB	2600 Chelsea Court	1-Oct-18	1.02	<1	<2	13	<1	0.06
WEAG-719	GRAB	2600 Chelsea Court	15-Oct-18	0.32	<1	24	12	<1	0.29
WEAG-719	GRAB	2600 Chelsea Court	29-Oct-18	1.14	<1	2	11	<1	0.4
WEAG-719	GRAB	2600 Chelsea Court	14-Nov-18	0.51	<1	24	11	<1	0.21
WEAG-719	GRAB	2600 Chelsea Court	26-Nov-18	0.39	<1	6	11	<1	0.15
WEAG-719	GRAB	2600 Chelsea Court	10-Dec-18	0.87	<1	4	8	<1	0.18
WEAG-719	GRAB	2600 Chelsea Court	27-Dec-18	0.96	<1	NA	6	<1	0.15
WEAG-765	GRAB	5459 West Vista Court	15-Jan-18	1.04	<1	2	7	<1	0.26
WEAG-765	GRAB	5459 West Vista Court	14-Feb-18	0.86	<1	<2	7	<1	0.15
WEAG-765	GRAB	5459 West Vista Court	12-Mar-18	0.98	<1	2	7	<1	0.74
WEAG-765	GRAB	5459 West Vista Court	9-Apr-18	1.09	<1	<2	9	<1	0.15
WEAG-765	GRAB	5459 West Vista Court	7-May-18	0.52	<1	<2	14	<1	0.17
WEAG-765	GRAB	5459 West Vista Court	4-Jun-18	0.7	<1	<2	15	<1	0.19
WEAG-765	GRAB	5459 West Vista Court	4-Jul-18	0.65	<1	10	16	<1	0.25
WEAG-765	GRAB	5459 West Vista Court	30-Jul-18	0.61	<1	4	21	<1	0.16
WEAG-765	GRAB	5459 West Vista Court	27-Aug-18	0.86	<1	4	18	<1	0.11
WEAG-765	GRAB	5459 West Vista Court	24-Sep-18	0.32	<1	2	16	<1	0.23
WEAG-765	GRAB	5459 West Vista Court	22-Oct-18	0.67	<1	<2	15	<1	0.11



Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WEAG-765	GRAB	5459 West Vista Court	19-Nov-18	0.8	<1	<2	10	<1	0.14
WEAG-765	GRAB	5459 West Vista Court	17-Dec-18	0.83	<1	NA	7	<1	0.39
WEAG-768	GRAB	2185 Gisby Street	22-Jan-18	0.95	<1	<2	5	<1	0.11
WEAG-768	GRAB	2185 Gisby Street	19-Feb-18	1.04	<1	<2	5	<1	0.12
WEAG-768	GRAB	2185 Gisby Street	19-Mar-18	1.07	<1	<2	7	<1	0.13
WEAG-768	GRAB	2185 Gisby Street	16-Apr-18	1.09	<1	<2	8	<1	0.17
WEAG-768	GRAB	2185 Gisby Street	14-May-18	1.03	<1	<2	14	<1	0.13
WEAG-768	GRAB	2185 Gisby Street	11-Jun-18	1.14	<1	<2	15	<1	0.08
WEAG-768	GRAB	2185 Gisby Street	9-Jul-18	1.01	<1	<2	18	<1	0.09
WEAG-768	GRAB	2185 Gisby Street	8-Aug-18	0.78	<1	<2	16	<1	0.13
WEAG-768	GRAB	2185 Gisby Street	5-Sep-18	0.77	<1	<2	15	<1	0.16
WEAG-768	GRAB	2185 Gisby Street	1-Oct-18	0.71	<1	<2	14	<1	0.14
WEAG-768	GRAB	2185 Gisby Street	29-Oct-18	1.11	<1	2	10	<1	0.07
WEAG-768	GRAB	2185 Gisby Street	26-Nov-18	1.17	<1	<2	8	<1	0.08
WEAG-768	GRAB	2185 Gisby Street	27-Dec-18	1.11	<1	NA	6	<1	0.11
WEAG-769	GRAB	1210 Chartwell Drive	29-Jan-18	0.71	<1	6	7	<1	0.11
WEAG-769	GRAB	1210 Chartwell Drive	26-Feb-18	1.05	<1	18	6	<1	0.13
WEAG-769	GRAB	1210 Chartwell Drive	26-Mar-18	1.03	<1	2	8	<1	0.15
WEAG-769	GRAB	1210 Chartwell Drive	23-Apr-18	0.98	<1	8	16	<1	0.11
WEAG-769	GRAB	1210 Chartwell Drive	23-May-18	0.76	<1	<2	15	<1	0.27
WEAG-769	GRAB	1210 Chartwell Drive	18-Jun-18	0.78	<1	<2	16	<1	0.12
WEAG-769	GRAB	1210 Chartwell Drive	16-Jul-18	0.77	<1	4	17	<1	0.15
WEAG-769	GRAB	1210 Chartwell Drive	13-Aug-18	0.74	<1	<2	16	<1	0.13
WEAG-769	GRAB	1210 Chartwell Drive	10-Sep-18	0.71	<1	2	17	<1	0.13
WEAG-769	GRAB	1210 Chartwell Drive	10-Oct-18	0.76	<1	4	13	<1	0.19
WEAG-769	GRAB	1210 Chartwell Drive	5-Nov-18	0.86	<1	8	10	<1	0.19
WEAG-769	GRAB	1210 Chartwell Drive	3-Dec-18	1.25	<1	4	8	<1	0.09
WEAG-770	GRAB	3828 Bayridge Avenue	15-Jan-18	0.72	<1	2	4	<1	0.3
WEAG-770	GRAB	3828 Bayridge Avenue	29-Jan-18	0.48	<1	<2	6	<1	0.14
WEAG-770	GRAB	3828 Bayridge Avenue	14-Feb-18	0.45	<1	<2	6	<1	0.17
WEAG-770	GRAB	3828 Bayridge Avenue	26-Feb-18	0.59	<1	<2	4	<1	0.12
WEAG-770	GRAB	3828 Bayridge Avenue	12-Mar-18	0.63	<1	10	5	<1	0.4
WEAG-770	GRAB	3828 Bayridge Avenue	26-Mar-18	0.56	<1	<2	5	<1	0.15
WEAG-770	GRAB	3828 Bayridge Avenue	9-Apr-18	0.58	<1	2	7	<1	0.12
WEAG-770	GRAB	3828 Bayridge Avenue	23-Apr-18	0.6	<1	<2	9	<1	0.11
WEAG-770	GRAB	3828 Bayridge Avenue	7-May-18	0.73	<1	LA	10	<1	0.16
WEAG-770	GRAB	3828 Bayridge Avenue	23-May-18	0.75	<1	2	10	<1	0.25
WEAG-770	GRAB	3828 Bayridge Avenue	4-Jun-18	0.78	<1	2	11	<1	0.12
WEAG-770	GRAB	3828 Bayridge Avenue	18-Jun-18	0.77	<1	2	12	<1	0.13
WEAG-770	GRAB	3828 Bayridge Avenue	4-Jul-18	0.78	<1	2	13	<1	0.19
WEAG-770	GRAB	3828 Bayridge Avenue	16-Jul-18	0.9	<1	<2	12	<1	0.15
WEAG-770	GRAB	3828 Bayridge Avenue	30-Jul-18	0.77	<1	2	14	<1	0.09
WEAG-770	GRAB	3828 Bayridge Avenue	13-Aug-18	0.79	<1	<2	14	<1	0.16
WEAG-770	GRAB	3828 Bayridge Avenue	27-Aug-18	0.79	<1	12	14	<1	0.13
WEAG-770	GRAB	3828 Bayridge Avenue	10-Sep-18	0.72	<1	10	15	<1	0.15
WEAG-770	GRAB	3828 Bayridge Avenue	24-Sep-18	0.69	<1	8	13	<1	0.32
WEAG-770	GRAB	3828 Bayridge Avenue	10-Oct-18	1.05	<1	<2	11	<1	0.27
WEAG-770	GRAB	3828 Bayridge Avenue	22-Oct-18	0.96	<1	<2	10	<1	0.19
WEAG-770	GRAB	3828 Bayridge Avenue	5-Nov-18	1	<1	<2	10	<1	0.17

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WEAG-770	GRAB	3828 Bayridge Avenue	19-Nov-18	1.02	<1	2	7	<1	0.13
WEAG-770	GRAB	3828 Bayridge Avenue	3-Dec-18	1.22	<1	2	6	<1	0.15
WEAG-770	GRAB	3828 Bayridge Avenue	17-Dec-18	1.09	<1	NA	6	<1	0.22
WEAG-771	GRAB	6588 Royal Ave.	15-Jan-18	0.97	<1	2	6	<1	0.37
WEAG-771	GRAB	6588 Royal Ave.	29-Jan-18	0.77	<1	2	7	<1	0.27
WEAG-771	GRAB	6588 Royal Ave.	14-Feb-18	0.98	<1	6	6	<1	0.26
WEAG-771	GRAB	6588 Royal Ave.	26-Feb-18	1.07	<1	<2	5	<1	0.24
WEAG-771	GRAB	6588 Royal Ave.	12-Mar-18	0.96	<1	<2	6	<1	0.58
WEAG-771	GRAB	6588 Royal Ave.	26-Mar-18	0.97	<1	<2	6	<1	0.16
WEAG-771	GRAB	6588 Royal Ave.	9-Apr-18	1.02	<1	6	8	<1	0.25
WEAG-771	GRAB	6588 Royal Ave.	23-Apr-18	1.09	<1	2	9	<1	0.28
WEAG-771	GRAB	6588 Royal Ave.	7-May-18	0.82	<1	12	13	<1	0.28
WEAG-771	GRAB	6588 Royal Ave.	23-May-18	0.79	<1	<2	15	<1	0.15
WEAG-771	GRAB	6588 Royal Ave.	4-Jun-18	0.93	<1	4	14	<1	0.28
WEAG-771	GRAB	6588 Royal Ave.	18-Jun-18	0.95	<1	<2	17	<1	0.17
WEAG-771	GRAB	6588 Royal Ave.	4-Jul-18	0.91	<1	6	17	<1	0.31
WEAG-771	GRAB	6588 Royal Ave.	16-Jul-18	0.95	<1	16	21	<1	0.25
WEAG-771	GRAB	6588 Royal Ave.	30-Jul-18	0.81	<1	10	22	<1	0.22
WEAG-771	GRAB	6588 Royal Ave.	13-Aug-18	0.98	<1	<2	20	<1	0.41
WEAG-771	GRAB	6588 Royal Ave.	27-Aug-18	1.19	<1	<2	16	<1	0.12
WEAG-771	GRAB	6588 Royal Ave.	10-Sep-18	1	<1	2	16	<1	0.15
WEAG-771	GRAB	6588 Royal Ave.	24-Sep-18	0.88	<1	28	13	<1	0.18
WEAG-771	GRAB	6588 Royal Ave.	10-Oct-18	0.85	<1	8	14	<1	0.25
WEAG-771	GRAB	6588 Royal Ave.	22-Oct-18	0.86	<1	2	11	<1	0.15
WEAG-771	GRAB	6588 Royal Ave.	5-Nov-18	0.9	<1	<2	10	<1	0.27
WEAG-771	GRAB	6588 Royal Ave.	19-Nov-18	0.69	<1	2	9	<1	0.22
WEAG-771	GRAB	6588 Royal Ave.	3-Dec-18	0.86	<1	<2	8	<1	0.15
WEAG-771	GRAB	6588 Royal Ave.	17-Dec-18	0.93	<1	NA	6	<1	0.59
WEAG-772	GRAB	6470 Madrona Crescent	15-Jan-18	1.03	<1	<2	6	<1	0.42
WEAG-772	GRAB	6470 Madrona Crescent	29-Jan-18	0.9	<1	<2	7	<1	0.3
WEAG-772	GRAB	6470 Madrona Crescent	14-Feb-18	1.09	<1	<2	6	<1	0.17
WEAG-772	GRAB	6470 Madrona Crescent	26-Feb-18	1.05	<1	<2	5	<1	0.16
WEAG-772	GRAB	6470 Madrona Crescent	12-Mar-18	0.98	<1	<2	5	<1	0.24
WEAG-772	GRAB	6470 Madrona Crescent	26-Mar-18	1.04	<1	<2	6	<1	0.13
WEAG-772	GRAB	6470 Madrona Crescent	9-Apr-18	1.04	<1	<2	8	<1	0.21
WEAG-772	GRAB	6470 Madrona Crescent	23-Apr-18	0.96	<1	<2	9	<1	0.11
WEAG-772	GRAB	6470 Madrona Crescent	7-May-18	0.88	<1	4	13	<1	0.16
WEAG-772	GRAB	6470 Madrona Crescent	23-May-18	0.83	<1	2	14	<1	0.14
WEAG-772	GRAB	6470 Madrona Crescent	4-Jun-18	0.87	<1	<2	14	<1	0.31
WEAG-772	GRAB	6470 Madrona Crescent	18-Jun-18	0.96	<1	4	17	<1	0.12
WEAG-772	GRAB	6470 Madrona Crescent	4-Jul-18	0.88	<1	8	17	<1	0.23
WEAG-772	GRAB	6470 Madrona Crescent	16-Jul-18	0.98	<1	8	20	<1	0.17
WEAG-772	GRAB	6470 Madrona Crescent	30-Jul-18	0.83	<1	4	22	<1	0.18
WEAG-772	GRAB	6470 Madrona Crescent	13-Aug-18	1.08	<1	<2	19	<1	0.37
WEAG-772	GRAB	6470 Madrona Crescent	27-Aug-18	1.11	<1	2	18	<1	0.1
WEAG-772	GRAB	6470 Madrona Crescent	10-Sep-18	0.93	<1	8	16	<1	0.14
WEAG-772	GRAB	6470 Madrona Crescent	24-Sep-18	0.85	<1	4	14	<1	0.16
WEAG-772	GRAB	6470 Madrona Crescent	10-Oct-18	0.8	<1	24	12	<1	0.21
WEAG-772	GRAB	6470 Madrona Crescent	22-Oct-18	0.9	<1	32	11	<1	0.17

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WEAG-772	GRAB	6470 Madrona Crescent	5-Nov-18	0.87	<1	4	10	<1	0.17
WEAG-772	GRAB	6470 Madrona Crescent	19-Nov-18	0.74	<1	<2	9	<1	0.17
WEAG-772	GRAB	6470 Madrona Crescent	3-Dec-18	1	<1	42	7	<1	0.14
WEAG-772	GRAB	6470 Madrona Crescent	17-Dec-18	0.9	<1	NA	6	<1	0.61
WEAG-773	GRAB	Whytcliffe Park	15-Jan-18	0.23	<1	28	6	<1	0.53
WEAG-773	GRAB	Whytcliffe Park	14-Feb-18	0.54	<1	38	6	<1	0.38
WEAG-773	GRAB	Whytcliffe Park	12-Mar-18	0.61	<1	12	6	<1	0.39
WEAG-773	GRAB	Whytcliffe Park	9-Apr-18	0.76	<1	12	9	<1	0.21
WEAG-773	GRAB	Whytcliffe Park	7-May-18	0.49	<1	68	13	<1	0.25
WEAG-773	GRAB	Whytcliffe Park	4-Jun-18	0.65	<1	18	15	<1	0.23
WEAG-773	GRAB	Whytcliffe Park	4-Jul-18	0.64	<1	30	16	<1	0.19
WEAG-773	GRAB	Whytcliffe Park	30-Jul-18	0.63	<1	66	20	<1	0.19
WEAG-773	GRAB	Whytcliffe Park	27-Aug-18	0.89	<1	270	18	<1	0.14
WEAG-773	GRAB	Whytcliffe Park	24-Sep-18	0.55	<1	100	14	<1	0.16
WEAG-773	GRAB	Whytcliffe Park	22-Oct-18	0.36	<1	260	11	<1	0.13
WEAG-773	GRAB	Whytcliffe Park	19-Nov-18	0.38	<1	180	9	<1	0.17
WEAG-773	GRAB	Whytcliffe Park	17-Dec-18	0.55	<1	NA	6	<1	0.47
WEAG-774	GRAB	6117 Gleneagles Drive	29-Jan-18	0.93	<1	4	7	<1	0.13
WEAG-774	GRAB	6117 Gleneagles Drive	26-Feb-18	1.16	<1	<2	5	<1	0.14
WEAG-774	GRAB	6117 Gleneagles Drive	26-Mar-18	1.09	<1	2	7	<1	0.19
WEAG-774	GRAB	6117 Gleneagles Drive	23-Apr-18	1.1	<1	<2	8	<1	0.15
WEAG-774	GRAB	6117 Gleneagles Drive	23-May-18	0.91	<1	<2	14	<1	0.17
WEAG-774	GRAB	6117 Gleneagles Drive	18-Jun-18	1.06	<1	<2	15	<1	0.11
WEAG-774	GRAB	6117 Gleneagles Drive	16-Jul-18	1.07	<1	<2	21	<1	0.11
WEAG-774	GRAB	6117 Gleneagles Drive	13-Aug-18	1.14	<1	<2	18	<1	0.18
WEAG-774	GRAB	6117 Gleneagles Drive	10-Sep-18	0.92	<1	2	16	<1	0.15
WEAG-774	GRAB	6117 Gleneagles Drive	10-Oct-18	0.89	<1	<2	11	<1	0.2
WEAG-774	GRAB	6117 Gleneagles Drive	5-Nov-18	0.9	<1	<2	10	<1	0.41
WEAG-774	GRAB	6117 Gleneagles Drive	3-Dec-18	1.16	<1	2	6	<1	0.14
WEAG-776	GRAB	3755 Cypress Bowl Road	29-Jan-18	0.9	<1	<2	6	<1	0.09
WEAG-776	GRAB	3755 Cypress Bowl Road	26-Feb-18	1.25	<1	<2	4	<1	0.08
WEAG-776	GRAB	3755 Cypress Bowl Road	26-Mar-18	1.15	<1	<2	5	<1	0.07
WEAG-776	GRAB	3755 Cypress Bowl Road	23-Apr-18	1.13	<1	<2	10	<1	0.08
WEAG-776	GRAB	3755 Cypress Bowl Road	23-May-18	1.05	<1	<2	15	<1	0.18
WEAG-776	GRAB	3755 Cypress Bowl Road	18-Jun-18	1.15	<1	<2	15	<1	0.09
WEAG-776	GRAB	3755 Cypress Bowl Road	16-Jul-18	1.07	<1	<2	21	<1	0.11
WEAG-776	GRAB	3755 Cypress Bowl Road	13-Aug-18	1.14	<1	<2	15	<1	0.17
WEAG-776	GRAB	3755 Cypress Bowl Road	10-Sep-18	0.97	<1	<2	15	<1	0.11
WEAG-776	GRAB	3755 Cypress Bowl Road	10-Oct-18	1.04	<1	<2	11	<1	0.17
WEAG-776	GRAB	3755 Cypress Bowl Road	5-Nov-18	1.06	<1	<2	9	<1	0.1
WEAG-776	GRAB	3755 Cypress Bowl Road	3-Dec-18	1.4	<1	<2	5	<1	0.07
WEAG-778	GRAB	6190 Marine Drive	15-Jan-18	1.11	<1	16	5	<1	1.6
WEAG-778	GRAB	6190 Marine Drive	29-Jan-18	1.05	<1	8	6	<1	0.26
WEAG-778	GRAB	6190 Marine Drive	14-Feb-18	0.92	<1	<2	5	<1	0.24
WEAG-778	GRAB	6190 Marine Drive	26-Feb-18	1.15	<1	6	5	<1	0.15
WEAG-778	GRAB	6190 Marine Drive	12-Mar-18	1.1	<1	6	5	<1	0.16
WEAG-778	GRAB	6190 Marine Drive	26-Mar-18	1.05	<1	6	5	<1	0.12
WEAG-778	GRAB	6190 Marine Drive	9-Apr-18	1.1	<1	2	7	<1	0.14
WEAG-778	GRAB	6190 Marine Drive	23-Apr-18	1.01	<1	4	9	<1	0.21

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WEAG-778	GRAB	6190 Marine Drive	7-May-18	0.98	<1	4	11	<1	0.17
WEAG-778	GRAB	6190 Marine Drive	23-May-18	0.89	<1	<2	14	<1	0.23
WEAG-778	GRAB	6190 Marine Drive	4-Jun-18	0.86	<1	<2	13	<1	0.22
WEAG-778	GRAB	6190 Marine Drive	18-Jun-18	1.08	<1	<2	15	<1	0.08
WEAG-778	GRAB	6190 Marine Drive	4-Jul-18	1.03	<1	8	17	<1	0.58
WEAG-778	GRAB	6190 Marine Drive	16-Jul-18	1.09	<1	6	21	1	0.11
WEAG-778	GRAB	6190 Marine Drive	30-Jul-18	0.93	<1	<2	22	<1	0.15
WEAG-778	GRAB	6190 Marine Drive	13-Aug-18	1.03	<1	2	18	<1	0.34
WEAG-778	GRAB	6190 Marine Drive	27-Aug-18	1.23	<1	<2	18	<1	0.26
WEAG-778	GRAB	6190 Marine Drive	10-Sep-18	0.87	<1	2	15	<1	0.18
WEAG-778	GRAB	6190 Marine Drive	24-Sep-18	0.83	<1	6	13	<1	0.29
WEAG-778	GRAB	6190 Marine Drive	10-Oct-18	0.86	<1	16	12	<1	0.38
WEAG-778	GRAB	6190 Marine Drive	22-Oct-18	0.89	<1	6	11	<1	0.5
WEAG-778	GRAB	6190 Marine Drive	5-Nov-18	0.95	<1	<2	10	<1	0.39
WEAG-778	GRAB	6190 Marine Drive	19-Nov-18	0.87	<1	<2	8	<1	0.19
WEAG-778	GRAB	6190 Marine Drive	3-Dec-18	0.99	<1	<2	7	<1	0.14
WEAG-778	GRAB	6190 Marine Drive	17-Dec-18	1.01	<1	NA	5	<1	0.66
WEAG-779	GRAB	1370 Burnside Road	3-Jan-18	2	<1	<2	4	<1	0.36
WEAG-779	GRAB	1370 Burnside Road	8-Jan-18	1.02	<1	<2	7	<1	0.12
WEAG-779	GRAB	1370 Burnside Road	5-Feb-18	1.05	<1	<2	7	<1	0.1
WEAG-779	GRAB	1370 Burnside Road	5-Mar-18	1.19	<1	<2	5	<1	0.38
WEAG-779	GRAB	1370 Burnside Road	4-Apr-18	1.59	<1	<2	7	<1	0.08
WEAG-779	GRAB	1370 Burnside Road	30-Apr-18	1.96	<1	<2	10	<1	0.13
WEAG-779	GRAB	1370 Burnside Road	28-May-18	0.9	<1	<2	13	<1	0.27
WEAG-779	GRAB	1370 Burnside Road	25-Jun-18	0.87	<1	<2	15	<1	0.15
WEAG-779	GRAB	1370 Burnside Road	23-Jul-18	0.92	<1	<2	14	<1	0.13
WEAG-779	GRAB	1370 Burnside Road	20-Aug-18	0.7	<1	2	15	<1	0.18
WEAG-779	GRAB	1370 Burnside Road	17-Sep-18	0.87	<1	<2	13	<1	0.16
WEAG-779	GRAB	1370 Burnside Road	15-Oct-18	1.1	<1	<2	11	<1	0.29
WEAG-779	GRAB	1370 Burnside Road	14-Nov-18	0.9	<1	<2	9	<1	0.11
WEAG-779	GRAB	1370 Burnside Road	10-Dec-18	1.05	<1	<2	5	<1	0.1
WEAG-780	GRAB	5634 Westhaven Road	15-Jan-18	1.08	<1	<2	6	<1	0.32
WEAG-780	GRAB	5634 Westhaven Road	14-Feb-18	1.01	<1	2	6	<1	0.27
WEAG-780	GRAB	5634 Westhaven Road	12-Mar-18	1.15	<1	6	5	<1	0.28
WEAG-780	GRAB	5634 Westhaven Road	9-Apr-18	1.14	<1	2	8	<1	0.15
WEAG-780	GRAB	5634 Westhaven Road	7-May-18	0.98	<1	4	11	<1	0.15
WEAG-780	GRAB	5634 Westhaven Road	4-Jun-18	1.16	<1	<2	13	<1	0.1
WEAG-780	GRAB	5634 Westhaven Road	4-Jul-18	1.09	<1	<2	16	<1	0.27
WEAG-780	GRAB	5634 Westhaven Road	30-Jul-18	1.07	<1	2	22	<1	0.11
WEAG-780	GRAB	5634 Westhaven Road	27-Aug-18	1.11	<1	2	17	<1	0.16
WEAG-780	GRAB	5634 Westhaven Road	24-Sep-18	0.93	<1	4	13	<1	0.34
WEAG-780	GRAB	5634 Westhaven Road	22-Oct-18	0.88	<1	16	11	<1	0.18
WEAG-780	GRAB	5634 Westhaven Road	19-Nov-18	0.97	<1	6	9	<1	0.17
WEAG-780	GRAB	5634 Westhaven Road	17-Dec-18	1.05	<1	NA	6	<1	0.42
WEAG-783	GRAB	4520 Almondel Place	29-Jan-18	1.1	<1	2	7	<1	0.09
WEAG-783	GRAB	4520 Almondel Place	26-Feb-18	1.26	<1	<2	4	<1	0.09
WEAG-783	GRAB	4520 Almondel Place	26-Mar-18	1.06	<1	2	6	<1	0.14
WEAG-783	GRAB	4520 Almondel Place	23-Apr-18	1.05	<1	2	9	<1	0.08
WEAG-783	GRAB	4520 Almondel Place	23-May-18	0.98	<1	<2	14	<1	0.16

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WEAG-783	GRAB	4520 Almondel Place	18-Jun-18	1.15	<1	<2	15	<1	0.1
WEAG-783	GRAB	4520 Almondel Place	16-Jul-18	1.15	<1	<2	22	<1	0.15
WEAG-783	GRAB	4520 Almondel Place	13-Aug-18	1.1	<1	2	18	<1	0.21
WEAG-783	GRAB	4520 Almondel Place	10-Sep-18	1.08	<1	2	15	<1	0.2
WEAG-783	GRAB	4520 Almondel Place	10-Oct-18	0.9	<1	2	11	<1	0.14
WEAG-783	GRAB	4520 Almondel Place	5-Nov-18	0.9	<1	6	9	<1	0.15
WEAG-783	GRAB	4520 Almondel Place	3-Dec-18	1.3	<1	8	5	<1	0.11
WEAG-784	GRAB	5759 Primrose Place	15-Jan-18	0.68	<1	<2	6	<1	0.36
WEAG-784	GRAB	5759 Primrose Place	14-Feb-18	0.58	<1	4	7	<1	0.48
WEAG-784	GRAB	5759 Primrose Place	12-Mar-18	0.64	<1	8	5	<1	0.43
WEAG-784	GRAB	5759 Primrose Place	9-Apr-18	0.91	<1	26	8	<1	0.4
WEAG-784	GRAB	5759 Primrose Place	7-May-18	0.81	<1	4	11	<1	0.23
WEAG-784	GRAB	5759 Primrose Place	4-Jun-18	0.61	<1	22	13	<1	0.66
WEAG-784	GRAB	5759 Primrose Place	4-Jul-18	0.77	<1	98	18	<1	0.24
WEAG-784	GRAB	5759 Primrose Place	30-Jul-18	0.86	<1	14	22	<1	0.23
WEAG-784	GRAB	5759 Primrose Place	27-Aug-18	1.14	<1	<2	18	<1	0.2
WEAG-784	GRAB	5759 Primrose Place	24-Sep-18	0.71	<1	4	14	<1	0.56
WEAG-784	GRAB	5759 Primrose Place	22-Oct-18	0.75	<1	<2	10	<1	0.21
WEAG-784	GRAB	5759 Primrose Place	19-Nov-18	0.79	<1	2	9	<1	0.22
WEAG-784	GRAB	5759 Primrose Place	17-Dec-18	0.88	<1	NA	5	<1	0.6
WEAG-785	GRAB	4820 Headland Drive	15-Jan-18	1.1	<1	2	6	<1	0.59
WEAG-785	GRAB	4820 Headland Drive	14-Feb-18	1.05	<1	4	5	<1	0.33
WEAG-785	GRAB	4820 Headland Drive	12-Mar-18	1.04	<1	2	5	<1	0.18
WEAG-785	GRAB	4820 Headland Drive	9-Apr-18	1.08	<1	4	8	<1	0.12
WEAG-785	GRAB	4820 Headland Drive	7-May-18	0.99	<1	18	12	<1	0.15
WEAG-785	GRAB	4820 Headland Drive	4-Jun-18	1.26	<1	2	14	<1	0.41
WEAG-785	GRAB	4820 Headland Drive	4-Jul-18	1.11	<1	6	17	<1	0.34
WEAG-785	GRAB	4820 Headland Drive	30-Jul-18	0.97	<1	<2	23	<1	0.16
WEAG-785	GRAB	4820 Headland Drive	27-Aug-18	1.26	<1	<2	17	<1	0.15
WEAG-785	GRAB	4820 Headland Drive	24-Sep-18	0.96	<1	6	14	<1	0.43
WEAG-785	GRAB	4820 Headland Drive	22-Oct-18	0.89	<1	4	11	<1	0.16
WEAG-785	GRAB	4820 Headland Drive	19-Nov-18	0.83	<1	<2	8	<1	0.24
WEAG-785	GRAB	4820 Headland Drive	17-Dec-18	0.97	<1	NA	5	<1	0.56
WEAG-786	GRAB	1158 Millstream Road	22-Jan-18	1.11	<1	6	5	<1	0.19
WEAG-786	GRAB	1158 Millstream Road	19-Feb-18	1.2	<1	70	7	<1	0.16
WVR-786	GRAB	1158 Millstream Road	19-Mar-18	1.16	<1	<2	5	<1	1
WEAG-786	GRAB	1158 Millstream Road	16-Apr-18	1.26	<1	<2	7	<1	0.23
WEAG-786	GRAB	1158 Millstream Road	14-May-18	1.08	<1	<2	13	<1	0.18
WEAG-786	GRAB	1158 Millstream Road	11-Jun-18	1.2	<1	<2	12	<1	0.08
WEAG-786	GRAB	1158 Millstream Road	9-Jul-18	0.78	<1	<2	14	<1	0.13
WEAG-786	GRAB	1158 Millstream Road	8-Aug-18	0.81	<1	2	13	<1	0.18
WEAG-786	GRAB	1158 Millstream Road	5-Sep-18	0.8	<1	2	15	<1	0.2
WEAG-786	GRAB	1158 Millstream Road	1-Oct-18	0.6	<1	<2	13	<1	0.14
WEAG-786	GRAB	1158 Millstream Road	29-Oct-18	0.85	<1	4	10	<1	0.15
WEAG-786	GRAB	1158 Millstream Road	26-Nov-18	0.78	<1	10	7	<1	0.16
WEAG-786	GRAB	1158 Millstream Road	27-Dec-18	1.04	<1	NA	6	<1	0.13
WEAG-787	GRAB	2711 Willoughby Road	22-Jan-18	1.29	<1	<2	5	<1	0.19
WEAG-787	GRAB	2711 Willoughby Road	19-Feb-18	1.25	<1	12	8	<1	0.13
WVR-787	GRAB	2711 Willoughby Road	19-Mar-18	1.23	<1	4	5	<1	0.23

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WVR-787	GRAB	2711 Willoughby Road	16-Apr-18	1.19	<1	2	8	<1	0.2
WEAG-787	GRAB	2711 Willoughby Road	14-May-18	1.04	<1	<2	12	<1	0.41
WEAG-787	GRAB	2711 Willoughby Road	11-Jun-18	1.1	<1	6	13	<1	0.13
WEAG-787	GRAB	2711 Willoughby Road	9-Jul-18	0.68	<1	2	15	<1	0.22
WEAG-787	GRAB	2711 Willoughby Road	8-Aug-18	0.76	<1	<2	15	<1	0.25
WEAG-787	GRAB	2711 Willoughby Road	5-Sep-18	0.71	<1	2	15	<1	0.33
WEAG-787	GRAB	2711 Willoughby Road	1-Oct-18	0.54	<1	2	14	<1	0.26
WEAG-787	GRAB	2711 Willoughby Road	29-Oct-18	0.82	<1	<2	11	<1	0.24
WEAG-787	GRAB	2711 Willoughby Road	26-Nov-18	0.71	<1	4	8	<1	0.14
WEAG-787	GRAB	2711 Willoughby Road	27-Dec-18	1.05	<1	NA	6	<1	0.14
WEAG-788	GRAB	1551 Vinson Creek Road	22-Jan-18	1.28	<1	<2	5	<1	0.12
WEAG-788	GRAB	1551 Vinson Creek Road	19-Feb-18	1.23	<1	<2	5	<1	0.11
WVR-788	GRAB	1551 Vinson Creek Road	19-Mar-18	1.24	<1	<2	7	<1	0.24
WEAG-788	GRAB	1551 Vinson Creek Road	16-Apr-18	1.25	<1	<2	7	<1	0.18
WEAG-788	GRAB	1551 Vinson Creek Road	14-May-18	1.24	<1	<2	12	<1	0.22
WEAG-788	GRAB	1551 Vinson Creek Road	11-Jun-18	1.02	<1	<2	11	<1	0.1
WEAG-788	GRAB	1551 Vinson Creek Road	9-Jul-18	0.79	<1	<2	15	<1	0.1
WEAG-788	GRAB	1551 Vinson Creek Road	8-Aug-18	0.83	<1	<2	13	<1	0.21
WEAG-788	GRAB	1551 Vinson Creek Road	5-Sep-18	0.64	<1	<2	15	<1	0.37
WEAG-788	GRAB	1551 Vinson Creek Road	1-Oct-18	0.71	<1	<2	14	<1	0.25
WEAG-788	GRAB	1551 Vinson Creek Road	29-Oct-18	0.91	<1	4	10	<1	0.11
WEAG-788	GRAB	1551 Vinson Creek Road	26-Nov-18	1.18	<1	<2	8	<1	0.14
WEAG-788	GRAB	1551 Vinson Creek Road	27-Dec-18	1.12	<1	NA	6	<1	0.1
WEAG-880	GRAB	965 Cross Creek Road	15-Jan-18	1.04	<1	8	7	<1	0.14
WEAG-880	GRAB	965 Cross Creek Road	14-Feb-18	1.06	<1	14	6	<1	0.18
WEAG-880	GRAB	965 Cross Creek Road	12-Mar-18	1.04	<1	8	7	<1	0.25
WEAG-880	GRAB	965 Cross Creek Road	9-Apr-18	1.08	<1	24	9	<1	0.13
WEAG-880	GRAB	965 Cross Creek Road	7-May-18	0.89	<1	8	13	<1	0.26
WEAG-880	GRAB	965 Cross Creek Road	4-Jun-18	0.81	<1	2	15	<1	0.14
WEAG-880	GRAB	965 Cross Creek Road	4-Jul-18	0.71	<1	6	16	<1	0.27
WEAG-880	GRAB	965 Cross Creek Road	30-Jul-18	0.72	<1	8	16	<1	0.15
WEAG-880	GRAB	965 Cross Creek Road	27-Aug-18	0.7	<1	<2	15	<1	0.13
WEAG-880	GRAB	965 Cross Creek Road	24-Sep-18	0.66	<1	6	15	<1	0.19
WEAG-880	GRAB	965 Cross Creek Road	22-Oct-18	0.81	<1	6	12	<1	0.12
WEAG-880	GRAB	965 Cross Creek Road	19-Nov-18	0.9	<1	6	8	<1	0.11
WEAG-880	GRAB	965 Cross Creek Road	17-Dec-18	0.91	<1	NA	6	<1	0.61
WMZ-781	GRAB	8005 Pasco Road	29-Jan-18	0.7	<1	36	7	<1	0.66
WMZ-781	GRAB	8005 Pasco Road	26-Feb-18	0.8	<1	<2	4	<1	0.78
WMZ-781	GRAB	8005 Pasco Road	26-Mar-18	0.69	<1	6	5	<1	0.72
WMZ-781	GRAB	8005 Pasco Road	23-Apr-18	0.4	<1	36	14	<1	0.71
WMZ-781	GRAB	8005 Pasco Road	23-May-18	0.21	<1	680	14	<1	1.9
WMZ-781	GRAB	8005 Pasco Road	18-Jun-18	1.25	<1	<2	14	<1	0.43
WMZ-781	GRAB	8005 Pasco Road	16-Jul-18	1.4	<1	2	17	<1	0.61
WMZ-781	GRAB	8005 Pasco Road	13-Aug-18	1.22	<1	LA	18	<1	0.3
WMZ-781	GRAB	8005 Pasco Road	10-Sep-18	0.87	<1	190	15	<1	0.48
WMZ-781	GRAB	8005 Pasco Road	10-Oct-18	0.44	<1	>11000	11	<1	0.51
WMZ-781	GRAB	8005 Pasco Road	16-Oct-18	0.43	<1	5100	11	<1	0.37
WMZ-781	GRAB	8005 Pasco Road	5-Nov-18	0.95	<1	<2	9	<1	0.3

Sample Name	Sample Type	Sample Location	Sample Date	Chlorine Free mg/L	Ecoli CFU/100mLs	HPC CFU/mL	Temperature °C	Total Coliform CFU/100mLs	Turbidity NTU
WMZ-781	GRAB	8005 Pasco Road	3-Dec-18	1.08	<1	<2	6	<1	0.11
WMZ-782	GRAB	8995 Lawrence Way	15-Jan-18	0.92	<1	<2	5	<1	0.82
WMZ-782	GRAB	8995 Lawrence Way	14-Feb-18	1.16	<1	<2	5	<1	0.92
WMZ-782	GRAB	8995 Lawrence Way	12-Mar-18	1.02	<1	<2	6	<1	0.8
WMZ-782	GRAB	8995 Lawrence Way	9-Apr-18	1.06	<1	<2	9	<1	0.52
WMZ-782	GRAB	8995 Lawrence Way	7-May-18	1.24	<1	<2	11	<1	0.46
WMZ-782	GRAB	8995 Lawrence Way	4-Jun-18	1.85	<1	<2	14	<1	0.24
WMZ-782	GRAB	8995 Lawrence Way	4-Jul-18	1.19	<1	<2	15	<1	0.25
WMZ-782	GRAB	8995 Lawrence Way	30-Jul-18	1.6	<1	44	18	<1	0.47
WMZ-782	GRAB	8995 Lawrence Way	27-Aug-18	1.05	<1	4	12	<1	0.41
WMZ-782	GRAB	8995 Lawrence Way	24-Sep-18	0.68	<1	<2	14	<1	0.39
WMZ-782	GRAB	8995 Lawrence Way	22-Oct-18	0.85	<1	<2	11	<1	0.34
WMZ-782	GRAB	8995 Lawrence Way	19-Nov-18	1.27	<1	<2	9	<1	0.57
WMZ-782	GRAB	8995 Lawrence Way	17-Dec-18	1.19	<1	NA	6	<1	0.58