



2019 Annual Water Quality Report



Photo by Graeme Nolan

Engineering and Operations

Operations Division

City of Port Moody

Foreword

Under the *British Columbia Drinking Water Protection Act* and the *British Columbia Drinking Water Protection Regulation (BCDWPA and BCDWPR)* the City of Port Moody is required to conduct drinking water quality monitoring and to publish the results in an annual report. A summary of water quality sampling, as well as an overview of projects and events as they relate to drinking water in the City of Port Moody, is provided in this report.

Please visit the following web sites for further information:

- Health Canada
<http://www.hc-sc.gc.ca/ewh-semt/water-eau/drink-potab/guide/index-eng.php>
- Ministry of Health
<https://www2.gov.bc.ca/gov/content/governments/local-governments/infrastructure/water-systems>
- Metro Vancouver
<http://www.metrovancouver.org/services/water/Pages/default.aspx>

Emergency Contact Information

Nick Cusano

Utility Maintenance Supervisor

Phone: 604-469-4511

E-mail: ncusano@portmoody.ca

Operations Customer Service

Phone: 604-469-4574

Fax: 604-469-4530

E-mail: operations@portmoody.ca

Jeff Little, ASCT, CPWI 2

Manager of Operations

Phone: 604-469-4604

E-mail: jlittle@portmoody.ca

Table of Contents

2019 Annual Water Quality Report	ii
Acronyms	vi
Executive Summary	1
1.0 Water Distribution System.....	2
1.1 System Infrastructure	2
1.2 Staff Certification.....	2
2.0 2019 Event Summary.....	3
2.1 Water Main Breaks.....	3
2.2 Water Quality Incident.....	3
2.3 Damage to Infrastructure	3
2.1 Customer Service.....	4
3.0 Water Main Flushing Program	4
4.0 Water Quality Sampling and Testing.....	4
4.1 Chemical and Physical Quality.....	5
4.1.1 Metals	6
4.1.2 Disinfection By-Products	6
4.1.3 Vinyl Chloride	6
4.2 Bacteriological Quality.....	6
4.3 Chlorine Residual.....	9
5.0 Water Distribution System Projects.....	9
6.0 Water Distribution System Emergency Plan	9
Conclusion	9
Works Cited	10
Appendix #1	11
Appendix #2	32
Appendix #3	35
Appendix #4	38
Appendix #5	41

List of Tables

Table #1: Water Distribution System Assets.....	2
Table #2: Chemical / Physical Monitoring in Municipal Distribution Systems	5
Table #3: Drinking Water Management Plan Action Items	10

List of Figures

Figure #1: Number of Bacterial Samples Analyzed / Month	7
Figure #2: 2019 Monthly Heterotrophic Plate Count Results > 500 CFU/mls	8
Figure #3: Results of Bacteriological Analysis of Potable Water Samples and Compliance with BCDWPR	9

Acronyms

AO:	Aesthetic Objective
ASTTBC:	Applied Science Technicians and Technologists of British Columbia
BCDWPA:	<i>British Columbia Drinking Water Protection Act</i>
BCDWPR:	<i>British Columbia Drinking Water Protection Regulation</i>
DBP:	Disinfection By-Products
DWMP:	<i>Metro Vancouver Drinking Water Management Plan</i>
E.coli:	<i>Escherichia coli</i>
EOCP:	Environmental Operators Certification Program
GCDWQ:	<i>Guidelines for Canadian Drinking Water Quality</i>
HAA:	Haloacetic Acid
HPC:	Heterotrophic Plate Count
MAC:	Maximum Acceptable Concentration
Mg/l:	Milligrams per Liter
NTU:	Nephelometric Turbidity Units
PPB:	Parts Per Billion
PPM:	Parts Per Million
PRV:	Pressure Regulating Valve
PVC:	Polyvinyl Chloride
SCADA:	Supervisory Control and Data Acquisition
SCFP:	Seymour – Capilano Filtration Plant
THM:	Trihalomethane
UDF:	Uni-directional Flushing
WQMRP:	<i>Water Quality Monitoring and Reporting Plan for Metro Vancouver and Member Municipalities</i>
YTD:	Year-to-Date

Executive Summary

The City of Port Moody supplies drinking water to residential, industrial, commercial, and institutional customers within city limits. In 2019, the City purchased and distributed over 5.2 million cubic metres of treated drinking water from Metro Vancouver.

This report fulfills the requirements for the City as set out in the *Drinking Water Protection Act* by providing an overview of the City's water distribution system and assessment of key performance indicators. Metro Vancouver collects and analyzes water samples from the City's distribution system on behalf of the City of Port Moody. This report includes a summary and discussion of these results, and a complete record of 2019 water quality sampling results.

In accordance with the *Water Quality Monitoring and Reporting Plan for Metro Vancouver and Member Municipalities (WQMRP)*, Metro Vancouver sampling analyzes chemical, physical, and bacterial parameters. The sample results for Port Moody's water were well under their respective Maximum Acceptable Concentration (MAC) values.

As part of its commitment to continual improvement, reliable service, and a high level of water quality, the City completes operational and capital improvement programs on an ongoing basis. In 2019, the City undertook:

- weekly inspections and maintenance of all water distribution facilities;
- a uni-directional water main flushing program;
- water main and service repairs and renewals;
- reservoir cleaning; and
- a valve exercising program.

These programs are continually evaluated and adjusted to ensure that high-quality drinking water is delivered with maximum efficiency.

Three incidents of note related to the water distribution system occurred in 2019, including one water main break, one water quality event requiring a response, and one incident of damage to City infrastructure.

1.0 Water Distribution System

1.1 System Infrastructure

The tables in this section provide a snapshot of the City of Port Moody's water distribution system. All of the components listed are operated and maintained by City of Port Moody staff.

Table #1: Water Distribution System Assets

Appurtenance	Quantity
Total length of all water mains	Approximately 120km
Fire Hydrants	Approximately 600
Pressure Regulating Valve (PRV) Stations	15
Pump Stations	3
Reservoirs	3
Rechlorination Stations	2

In addition to pipes, fire hydrants, and critical components, there are many other smaller components to Port Moody's water distribution system, including:

- water meters;
- air valves;
- blowdown chambers;
- line valves;
- sampling stations;
- automatic flushing units; and
- residual chlorine analyzers.

All of these components work together to distribute safe, high-quality drinking water throughout the city. As of December 31, 2019, the net book value of all these components, which together comprise the City's water distribution system, was \$21,807,781.

1.2 Staff Certification

The City's water system is monitored, operated, and maintained by a team of qualified personnel who are certified by the EOCP and the Applied Science Technologists and Technicians of British Columbia (ASTTBC). Port Moody's water distribution system is classified as a Class III system by the Environmental Operators Certification Program (EOCP), and is required to have a minimum number and level of certified staff. The City exceeds these requirements, with some staff certified as Level III and Level IV water distribution operators.

2.0 2019 Event Summary

2.1 Water Main Breaks

The City repaired one water main break in 2019 in the 2400 Block of Clarke Street. The water main, which was a 250mm cast iron pipe, broke during the City's response to a significant structure fire. The break may have been associated with peak flow conditions and alternating use of fire suppression equipment.

The City strives to make repairs immediately and to be on-site within one half hour on weekdays from 07:00 to 15:30 and within one hour on weekends, holidays, and weekdays from 15:30 to 07:00.

After repairs are completed, the water main is disinfected per the AWWA C651-99 *AWWA Standard for Disinfecting Water Mains* (AWWA, 2000). Following completion of these procedures, the water main is flushed until field water quality parameters match background values.

2.2 Water Quality Incident

On August 21, 2019, the presence of total coliforms was identified during regular sampling at sample stations PMY-512 at 202 Cecile Drive, PMY-513 at 485 Guildford Way, and PMY-514 at 200 Parkside Drive. The presence of total coliform bacteria in drinking water may indicate deteriorating water quality as a result of bacterial growth. They are not considered a direct risk to human health, but their presence is a useful indicator for assessing water quality deficiencies, according to the Guidelines for Canadian Drinking Water Quality (GCDWQ).

In response to the results, the City conducted flushing of the adjacent water systems at each location, and additional sampling was undertaken for three subsequent days in accordance with the GCDWQ. No further total coliform bacteria were identified in the additional samples.

On September 6, 2019, the Manager of Operations met with Fraser Health's Environmental Health Officer to conduct a water system inspection. The inspection consisted of a field review of the City's water distribution system infrastructure, and review of the function of the water distribution system near the locations of the August 21 samples with total coliform presence. Possible contributors to the incident that were identified during the meeting included upstream activities in Metro Vancouver's water system, warm atmospheric and water temperatures, or sampling errors.

2.3 Damage to Infrastructure

The City's Dewdney Trunk Road PRV building was damaged in a series of motor vehicle accidents on November 21. Trucks and equipment from an adjacent construction site repeatedly impacted the building, causing severe structural damage to the exterior walls and roof.

As a result of the structural damage, electrical supply to the building was shut off and all electronics were removed. The PRV station was placed out of service temporarily, and isolated from Metro Vancouver's Port Moody No. 1 transmission water main. Repairs to the building were initiated in late 2019, under the supervision of a structural engineer.

In order to ensure that no further damage occurred, the City directed the adjacent construction site to place concrete barricades around the perimeter of the building, as well as the nearby Metro Vancouver and City of Coquitlam water infrastructure on Dewdney Trunk Road.

While the PRV station was out of service, Guildford Drive PRV supplied water from Metro Vancouver's Port Moody No. 2 transmission water main to the entire 109m pressure zone. This change had a minor impact on the City's ability to deliver peak demand flows, but had no impact on water quality for customers in the area affected by the change.

2.1 Customer Service

Operations Customer Service, which is available by phone 24 hours a day, 7 days a week, received a total of 20 calls related to water quality in 2019. Of these calls, there were:

- 8 related to aesthetic water quality concerns, including taste or odour
- 3 regarding lead content in municipal drinking water systems
- 8 related to private plumbing repairs

3.0 Water Main Flushing Program

The City of Port Moody conducts uni-directional flushing to maintain a high level of water quality in the distribution system. Uni-directional flushing involves strategically closing valves and opening fire hydrants in sections of the distribution system in order to attain high water velocities in target water mains. This produces a scouring action that is more effective at cleaning the interior pipe wall than regular flushing and consumes less water. In 2019, the City completed uni-directional flushing on approximately 43.8 kilometres of water main, or approximately one-third of the City's total water distribution system.

4.0 Water Quality Sampling and Testing

Water quality from Metro Vancouver's Seymour Capilano Water Treatment Plant and Coquitlam Lake sources met or exceeded all of the recommendations listed in the GCDWQ at all times in 2019. Generally, Metro Vancouver's source water quality met or exceeded standards set by the GCDWQ as well as the BCDWPA and BCDWPR for bacteriological, physical, and chemical water quality.

In accordance with the *Water Quality Monitoring and Reporting Plan for Metro Vancouver and Member Municipalities*, sampling and analysis for water quality parameters are conducted on the City of Port Moody's distribution system on a regular basis by Metro Vancouver staff on

behalf of the City. This monitoring is conducted for bacterial, chemical, and physical characteristics.

The BCDWPR requires one monthly sample per 1,000 population. The City's 2019 population was approximately 34,000, meaning that 33 monthly samples were required to be taken. Port Moody exceeded the requirements for sampling, with an average of approximately 59 samples taken every month in 2019, and no fewer than 39 were taken in any given month. A total of 705 samples were collected from the City's distribution system in 2019. Appendix #2 shows the location of sampling stations.

4.1 Chemical and Physical Quality

Water quality sampling for chemical and physical parameters, including disinfection by-products, vinyl chloride, and metals, is carried out on varying schedules. Table #3 contains information modified from Metro Vancouver's *WQMRP*, and sets out a schedule requiring approximately 10% of the sample sites in the City's system to be sampled (Metro Vancouver, 2008).

Table #2: Chemical and Physical Monitoring in Municipal Distribution Systems

Parameter	Location	Frequency
Free Chlorine Residual	All	Tests run when bacteriological samples are taken
Copper	Municipal Distribution System**	Semi-annually
Haloacetic Acids	Municipal Sites – cross-section, representative of all three sources, minimum of one per municipality.	Quarterly
Iron	Representative municipal sites – unlined iron and steel mains.	Semi-annually
Lead	Municipal Distribution System**	Semi-annually
Odour	Any or all sites	Complaint Basis*
pH	Municipal Sites – cross-section, representative of all sources, minimum of three per municipality.	Quarterly
Taste	Any or all sites.	Complaint Basis*
Temperature	Representative municipal sites.	Quarterly
Trihalomethanes	Municipal Sites – cross-section, representative of all sources, minimum of three per municipality.	Quarterly
Turbidity	Municipal Sites – All	Collected with bacteriological samples
Vinyl Chloride	Municipal sites where PVC pipe is used in the distribution system – minimum of one per potentially affected system.	Semi-annually
Zinc	Municipal Distribution System**	Semi-annually

* If a complaint comes to Metro Vancouver, Metro Vancouver will bring it to the attention of the relevant municipality.

** The GCDWQ stipulate that samples for metals analysis should be from a flushed location. This provides rationale to sample for metals in the distribution system as opposed to locations in buildings.

4.1.1 Metals

Metals can enter the drinking water system from either the source watershed or in the distribution system itself. Historically, the City of Port Moody's drinking water has contained very low concentrations of metal compounds. Metro Vancouver completes metals sampling semi-annually according to the *WQMRP*.

A complete record of 2019 metals sampling results can be found in Appendix #3.

4.1.2 Disinfection By-Products

Disinfection By-Product (DBP) formation occurs when chlorine in drinking water reacts with dissolved organic compounds. These reactions produce two main groups of DBP compounds, Trihalomethanes (THM) and Haloacetic Acids (HAA). Monitoring for DBPs is conducted on a quarterly basis as set out by Metro Vancouver's *WQMRP*.

A complete record of 2019 DBP sampling results can be found in Appendix #4.

4.1.3 Vinyl Chloride

Approximately 660 metres of water main, located in the Klahanie Drive area, is constructed with polyvinyl chloride pipe (PVC). Studies have shown that under extreme conditions, PVC water mains can leach vinyl chloride into drinking water. The *GCDWQ* set a MAC for vinyl chloride at 0.002 mg/l (Health Canada, 2017). The City takes samples from these water mains and submits them to Metro Vancouver's laboratory for analysis on a semi-annual basis. All vinyl chloride monitoring results obtained in 2019 were well below MAC values and equipment detection limits.

A complete record of 2019 Vinyl Chloride sampling results can be found in Appendix #5.

4.2 Bacteriological Quality

All samples collected from the City's water distribution system are analyzed for three key indicators:

- total coliform;
- *E. coli* bacteria; and
- Heterotrophic (HPC) bacteria.

Total coliform and *E. coli* sampling results indicate whether adequate disinfection is present in the water distribution system, and are used to determine if water quality meets bacteriological guidelines.

Water quality at sample stations PMY-514 near 200 Parkside Drive, and PMY-506 near 26 Crawford Bay improved in 2019 over the previous years' results. The range of the aesthetic objective(AO) established by the *GCDWQ* is 0.2 mg/L to 1.0 mg/L. In 2018, average annual

chlorine residual levels at both locations were slightly below the recommended lower limit of the aesthetic objective(AO) for residual chlorine. In 2019, both stations had an annual average chlorine residual above 0.2 mg/l. These improvements are the result of unidirectional flushing in the adjacent pressure zones, as well as the installation of automatic flush valves near the sample stations which reduce water age by increasing water system demand.

The quantity of bacterial samples collected from municipal water distribution systems is based on the population served. Figures #1 and #2 display the number of bacteriological samples collected from the city's water distribution system and the percentage of samples collected that returned HPC results greater than 500 CFU/mls each month. Figure #3 demonstrates City compliance with the *BCDWPR* total coliform bacteria requirements. (Health Canada, 2017) (Province of British Columbia, 2011).

A complete record of 2019 bacteriological water quality sampling results can be found in Appendix #1.

Figure#1: Number of Bacterial Samples Analyzed per Month

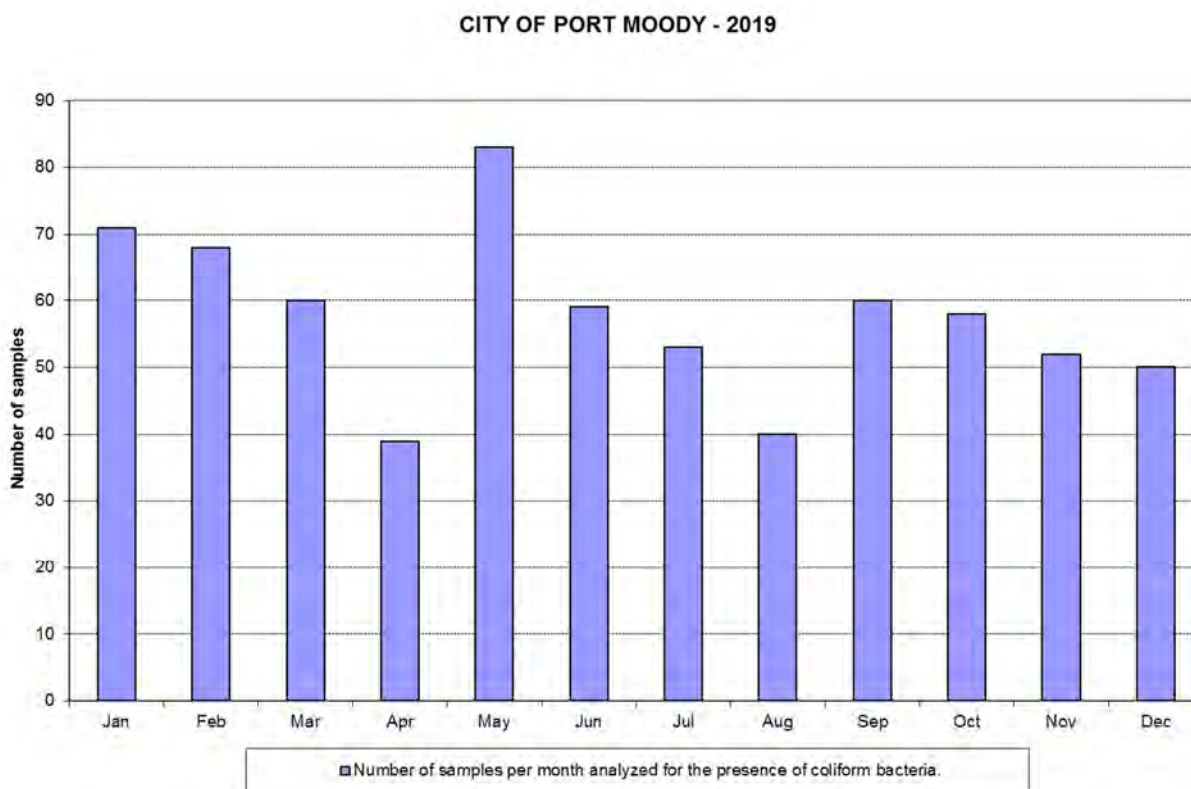


Figure #2: 2019 Monthly Heterotrophic Plate Count Results >500 CFU/mls

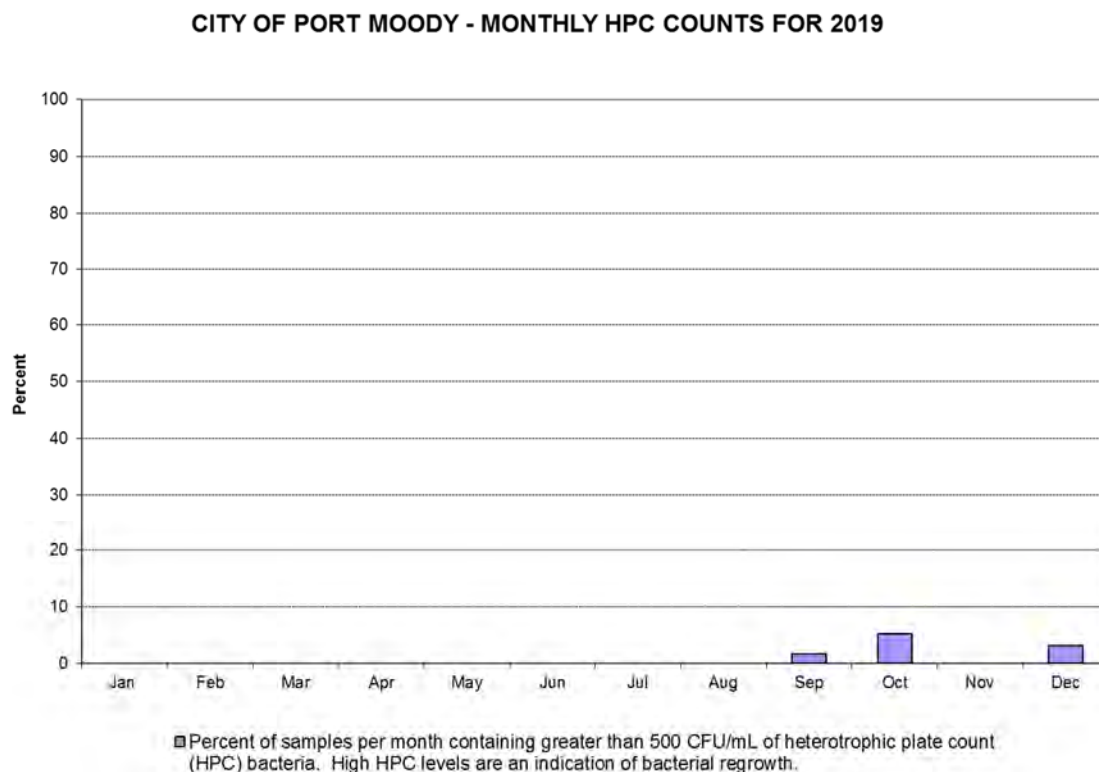
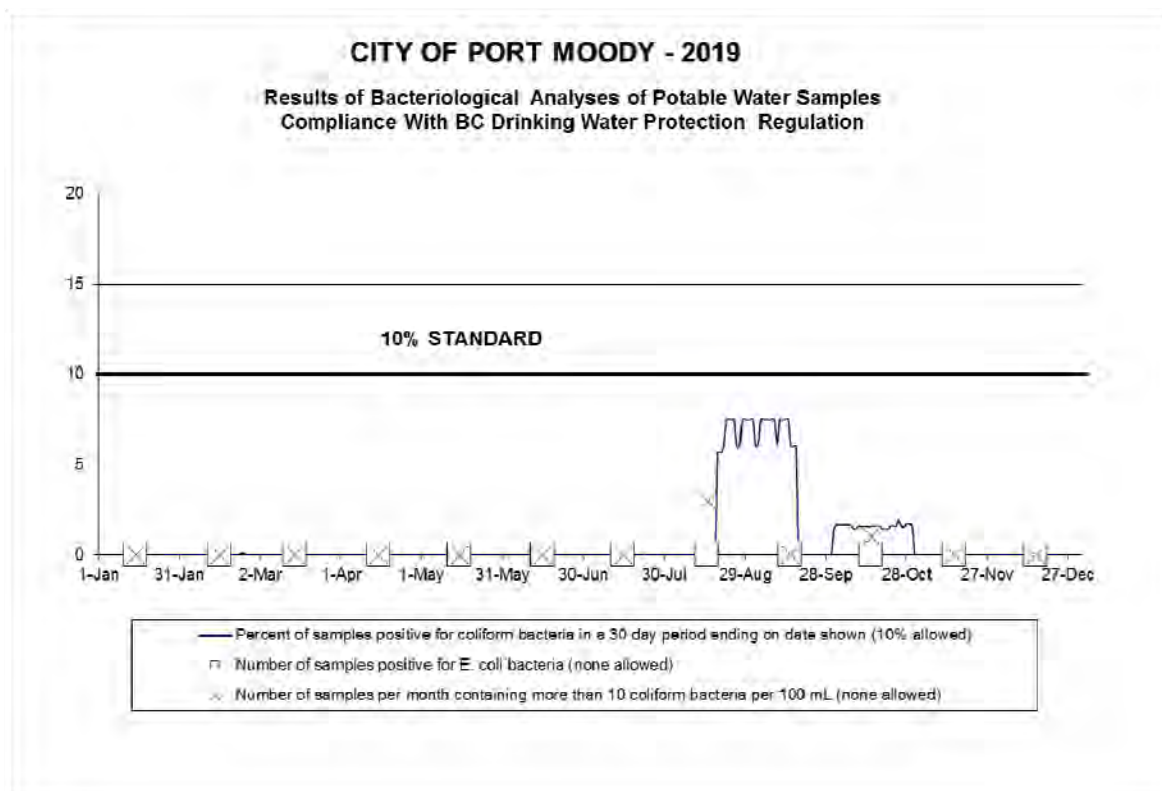


Figure #3: Results of Bacteriological Analysis of Potable Water Samples and Compliance with BCDWPR



4.3 Chlorine Residual

The water supplied to the City by Metro Vancouver is chlorinated at Metro Vancouver's water treatment facilities, and throughout their transmission system. The City rechlorinates water at the Ioco Road Rechlorination Station and at Chestnut Way Pump Station to provide for disinfection and to prevent bacterial regrowth in extended areas of the City's water distribution system. These facilities serve to maintain adequate chlorine residuals in the Pleasantside, Ioco, Sunnyside, Sentinel Hill, Heritage Mountain, and Heritage Woods neighbourhoods.

Maintaining adequate chlorine residual in a potable water distribution system is vital to preserving public health. The City strives to achieve a balance of aesthetics and disinfection when maintaining chlorine residuals.

5.0 Water Distribution System Projects

Port Moody completed a number of projects related to improving the City's water distribution system, including North Road Reservoir cleaning, a SCADA system security audit, and the initiation of a water main replacement project on Murray Street.

6.0 Water Distribution System Emergency Plan

In the event of an emergency, such as an earthquake, the City may enact its Emergency Water Supply and Distribution Plan. The *BCDWPR* requires water utilities to maintain effective emergency plans.

In 2019, the City awarded a contract to an engineering consulting firm for the development of a new emergency plan for the water distribution system. A task force led by the consulting firm, which includes City staff from a variety of functional areas, was created to manage the project to develop a new emergency plan. Communication with stakeholders, as well as evaluation of community hazards, risks and vulnerabilities took place in 2019. The revised emergency plan is anticipated to be complete in late 2020. The new emergency plan will fulfill the City's requirement to maintain an effective emergency plan, and will be easily integrated within the City's emergency management function. It will also consider the approach to emergency management and response within a regional context.

Conclusion

In 2019, drinking water in the City of Port Moody met or exceeded the requirements of both the *Guidelines for Canadian Drinking Water Quality* and the *British Columbia Drinking Water Act and Regulation*. Engineering and Operations staff at the City of Port Moody work to ensure safe, clean, potable water for the City's residents at a reasonable cost.

The City works closely with stakeholders including residents, Fraser Health, and Metro Vancouver to ensure that safe, reliable, high-quality drinking water is delivered throughout Port Moody.

Works Cited

AWWA. (2000). ANSI/AWWA C651-99 – AWWA Standard for Disinfecting Water Mains. Denver: American Water Works Association.

Health Canada. (2017). *Guidelines for Canadian Drinking Water Quality*. Ottawa: Federal-Provincial-Territorial Committee on Drinking Water of the Federal-Provincial-Territorial Committee on Health and the Environment.

Health Canada. (2009). *Guidelines for Canadian Drinking Water Quality: Guideline Technical Document – Chlorine*. Ottawa: Health Canada.

Health Canada. (2013). *Guidelines for Canadian Drinking Water Quality: Guideline Technical Document – Heterotrophic Plate Counts*. Ottawa: Health Canada.

Metro Vancouver. (2011). *Metro Vancouver Drinking Water Management Plan*. Burnaby: Metro Vancouver.

Metro Vancouver. (2008). *Water Quality Monitoring and Reporting Plan for Metro Vancouver and Member Municipalities*. Burnaby: Greater Vancouver Regional District.

Province of British Columbia. (2018). *Drinking Water Protection Regulation*. Victoria: British Columbia.

Appendix #1

Bacterial Analysis

PMY 506 – 22 Crawford Bay

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
03-Jan-19	0.19	<1	4	8	<1	0.34
09-Jan-19	0.29	<1	<2	7	<1	0.61
13-Jan-19	0.22	<1	<2	8	<1	0.25
18-Jan-19	0.47	<1	<2	6	<1	0.48
23-Jan-19	0.3	<1	<2	7	<1	0.3
27-Jan-19	0.34	<1	<2	7	<1	0.23
30-Jan-19	0.53	<1	<2	7	<1	0.36
03-Feb-19	0.3	<1	<2	7	<1	0.27
06-Feb-19	0.5	<1	<2	7	<1	0.36
10-Feb-19	0.44	<1	<2	6	<1	0.42
17-Feb-19	0.58	<1	<2	6	<1	0.26
21-Feb-19	0.11	<1	<2	5	<1	0.27
24-Feb-19	0.74	<1	<2	5	<1	0.24
27-Feb-19	0.96	<1	<2	4	<1	0.38
06-Mar-19	0.82	<1	<2	5	<1	0.32
14-Mar-19	0.69	<1	<2	5	<1	0.28
15-Mar-19	0.87	<1	<2	5	<1	0.36
20-Mar-19	0.85	<1	<2	6	<1	0.41
24-Mar-19	0.78	<1	<2	7	<1	0.4
29-Mar-19	0.59	<1	<2	7	<1	0.49
31-Mar-19	0.69	<1	<2	8	<1	0.34
07-Apr-19	0.63	<1	<2	9	<1	0.32
14-Apr-19	0.56	<1	<2	9	<1	0.23
27-Apr-19	0.59	<1	2	9	<1	0.32
28-Apr-19	0.36	<1	<2	10	<1	0.24
05-May-19	0.47	<1	<2	11	<1	0.24
08-May-19	1.2	<1	2	10	<1	0.47
10-May-19	0.45	<1	<2	11	<1	0.4
12-May-19	0.67	<1	<2	11	<1	0.26
16-May-19	0.35	<1	<2	12	<1	0.34
23-May-19	0.41	<1	<2	13	<1	0.36
26-May-19	0.53	<1	<2	14	<1	0.27
28-May-19	0.38	<1	<2	10	<1	0.25
29-May-19	0.56	<1	<2	13	<1	0.4
06-Jun-19	0.39	<1	<2	15	<1	0.24
09-Jun-19	0.56	<1	<2	14	<1	0.2
12-Jun-19	0.72	<1	<2	14	<1	0.68
19-Jun-19	0.81	<1	<2	14	<1	0.38
25-Jun-19	0.08	<1	2	16	<1	0.26
26-Jun-19	0.14	<1	2	15	<1	0.29
04-Jul-19	0.11	<1	<2	16	<1	0.23
11-Jul-19	0.21	<1	4	16	<1	0.19
17-Jul-19	0.3	<1	<2	17	<1	0.34
25-Jul-19	0.14	<1	<2	17	<1	0.19
31-Jul-19	0.34	<1	<2	16	<1	0.34
07-Aug-19	0.22	<1	<2	17	<1	0.37
14-Aug-19	0.09	<1	<2	17	<1	0.31

PMY 506 – 22 Crawford Bay continued

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
21-Aug-19	0.18	<1	4	17	<1	0.45
28-Aug-19	0.18	<1	<2	17	<1	0.52
04-Sep-19	0.17	<1	<2	16	<1	0.36
12-Sep-19	0.15	<1	10	17	<1	0.22
17-Sep-19	0.09	<1	44	16	<1	0.24
24-Sep-19	0.1	<1	150	16	<1	0.25
27-Sep-19	0.11	<1	240	17	<1	0.59
30-Sep-19	0.18	<1	70	18	<1	0.39
03-Oct-19	0.22	<1	500	17	1	0.27
05-Oct-19	<0.04	<1	190	16	<1	0.38
06-Oct-19	0.11	<1	300	9	<1	0.35
07-Oct-19	0.09	<1	50	14	<1	0.34
11-Oct-19	0.09	<1	190	14	<1	0.39
17-Oct-19	0.14	<1	640	15	<1	0.32
21-Oct-19	0.16	<1	140	15	<1	0.31
28-Oct-19	0.14	<1	110	13	<1	0.36
01-Nov-19	0.05	<1	190	13	<1	0.3
06-Nov-19	0.17	<1	84	12	<1	0.3
08-Nov-19	0.13	<1	88	11	<1	0.27
13-Nov-19	0.24	<1	36	11	<1	0.28
19-Nov-19	0.23	<1	380	11	<1	0.25
27-Nov-19	0.36	<1	56	8	<1	0.33
03-Dec-19	0.27	<1	410	8	<1	0.24
12-Dec-19	0.11	<1	800	9.6	<1	0.26
19-Dec-19	0.1	<1	NA	9	<1	0.27
26-Dec-19	0.07	<1	NA	5.3	<1	0.25

PMY 507 – 206 Edward Crescent

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
03-Jan-19	0.33	<1	4	7	<1	0.34
09-Jan-19	0.24	<1	<2	7	<1	0.43
13-Jan-19	0.28	<1	<2	6	<1	0.32
17-Jan-19	0.42	<1	<2	6	<1	0.33
18-Jan-19	0.31	<1	<2	6	<1	0.46
23-Jan-19	0.31	<1	<2	6	<1	0.26
27-Jan-19	0.29	<1	4	6	<1	0.25
30-Jan-19	0.45	<1	<2	6	<1	0.33
03-Feb-19	0.32	<1	<2	6	<1	0.3
06-Feb-19	0.44	<1	10	6	<1	0.35
10-Feb-19	0.61	<1	<2	5	<1	0.65
17-Feb-19	0.45	<1	4	4	<1	0.28
21-Feb-19	0.41	<1	<2	4	<1	0.3
24-Feb-19	0.49	<1	<2	4	<1	0.23
27-Feb-19	0.44	<1	<2	4	<1	0.29
06-Mar-19	0.46	<1	<2	4	<1	0.27
14-Mar-19	0.52	<1	<2	5	<1	0.33
20-Mar-19	0.46	<1	<2	6	<1	0.34
24-Mar-19	0.48	<1	<2	6	<1	0.34
31-Mar-19	0.4	<1	<2	7	<1	0.3
07-Apr-19	0.44	<1	<2	8	<1	0.38
14-Apr-19	0.47	<1	<2	8	<1	0.29
27-Apr-19	0.57	<1	<2	9	<1	0.39
28-Apr-19	0.38	<1	<2	9	<1	0.26
01-May-19	0.46	<1	<2	9	<1	0.35
05-May-19	0.33	<1	<2	10	<1	0.26
08-May-19	0.33	<1	<2	11	<1	0.3
12-May-19	0.31	<1	<2	11	<1	0.23
16-May-19	0.3	<1	<2	12	<1	0.3
23-May-19	0.31	<1	<2	12	<1	0.28
26-May-19	0.37	<1	2	12	<1	0.25
29-May-19	0.46	<1	<2	12	<1	0.37
06-Jun-19	0.5	<1	2	13	<1	0.25
09-Jun-19	0.27	<1	2	13	<1	0.21
12-Jun-19	0.46	<1	2	13	<1	0.43
19-Jun-19	0.5	<1	2	14	<1	0.27
25-Jun-19	0.34	<1	<2	15	<1	0.27
26-Jun-19	0.46	<1	<2	14	<1	0.37
04-Jul-19	0.39	<1	<2	14	<1	0.21
11-Jul-19	0.35	<1	2	15	<1	0.22
17-Jul-19	0.39	<1	<2	14	<1	0.25
25-Jul-19	0.34	<1	<2	16	<1	0.23
31-Jul-19	0.48	<1	<2	15	<1	0.22
07-Aug-19	0.43	<1	<2	15	<1	0.3
14-Aug-19	0.49	<1	2	15	<1	0.39
21-Aug-19	0.42	<1	4	17	<1	0.25
28-Aug-19	0.25	<1	<2	17	<1	0.25

PMY 507 – 206 Edward Crescent continued

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
04-Sep-19	0.4	<1	<2	16	<1	0.24
12-Sep-19	0.31	<1	4	17	<1	0.22
17-Sep-19	0.27	<1	2	15	<1	0.25
24-Sep-19	0.19	<1	<2	16	<1	0.37
27-Sep-19	0.21	<1	2	14	<1	0.39
30-Sep-19	0.27	<1	2	15	<1	0.38
03-Oct-19	0.32	<1	<2	15	<1	0.33
10-Oct-19	0.33	<1	<2	13	<1	0.29
11-Oct-19	0.2	<1	2	13	<1	0.31
17-Oct-19	0.36	<1	2	13	<1	0.34
21-Oct-19	0.25	<1	18	13	<1	0.28
28-Oct-19	0.46	<1	2	11	<1	0.3
30-Oct-19	0.19	<1	4	11	<1	0.26
01-Nov-19	0.3	<1	<2	12	<1	0.27
06-Nov-19	0.33	<1	<2	9	<1	0.31
08-Nov-19	0.26	<1	2	10	<1	0.24
13-Nov-19	0.37	<1	<2	11	<1	0.31
19-Nov-19	0.24	<1	8	11	<1	0.47
27-Nov-19	0.51	<1	2	8	<1	0.27
03-Dec-19	0.59	<1	2	7	<1	0.28
12-Dec-19	0.39	<1	2	8.7	<1	0.3
17-Dec-19	0.19	<1	2	6.9	<1	0.27
19-Dec-19	0.25	<1	NA	7.5	<1	0.27
24-Dec-19	0.4	<1	NA	7.7	<1	0.33

PMY 508 – 518 Ailsa Avenue

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
03-Jan-19	0.34	<1	6	8	<1	0.25
09-Jan-19	0.29	<1	<2	7	<1	0.31
11-Jan-19	0.28	<1	2	7	<1	0.27
13-Jan-19	0.23	<1	<2	7	<1	0.16
17-Jan-19	0.22	<1	<2	7	<1	0.24
18-Jan-19	0.28	<1	<2	7	<1	0.28
23-Jan-19	0.3	<1	<2	7	<1	0.19
27-Jan-19	0.24	<1	<2	7	<1	0.17
30-Jan-19	0.3	<1	2	7	<1	0.36
03-Feb-19	0.15	<1	2	7	<1	0.24
06-Feb-19	0.27	<1	<2	5	<1	0.18
07-Feb-19	0.43	<1	<2	5	<1	0.23
10-Feb-19	0.47	<1	<2	4	<1	0.3
15-Feb-19	0.51	<1	<2	4	<1	0.98
17-Feb-19	0.51	<1	<2	3	<1	0.1
21-Feb-19	0.46	<1	<2	4	<1	0.17
24-Feb-19	0.56	<1	<2	4	<1	0.12
27-Feb-19	0.57	<1	<2	4	<1	0.21
01-Mar-19	0.29	<1	<2	4	<1	0.61
06-Mar-19	0.53	<1	<2	4	<1	0.28
14-Mar-19	0.37	<1	<2	5	<1	0.25
20-Mar-19	0.36	<1	<2	7	<1	0.27
24-Mar-19	0.22	<1	<2	8	<1	0.3
29-Mar-19	0.31	<1	2	7	<1	0.49
31-Mar-19	0.43	<1	<2	9	<1	0.14
07-Apr-19	0.39	<1	<2	10	<1	0.16
14-Apr-19	0.46	<1	<2	10	<1	0.15
27-Apr-19	0.33	<1	2	12	<1	0.25
28-Apr-19	0.47	<1	<2	10	<1	0.14
01-May-19	0.37	<1	<2	12	<1	0.17
03-May-19	0.39	<1	<2	12	<1	0.22
05-May-19	0.44	<1	<2	12	<1	0.21
12-May-19	0.33	<1	<2	14	<1	0.17
16-May-19	0.29	<1	<2	15	<1	0.28
23-May-19	0.21	<1	<2	15	<1	0.29
26-May-19	0.26	<1	<2	15	<1	0.18
28-May-19	0.41	<1	<2	11	<1	0.15
29-May-19	0.32	<1	<2	15	<1	0.27
07-Jun-19	0.24	<1	<2	16	<1	0.26
09-Jun-19	0.11	<1	4	16	<1	0.18
12-Jun-19	0.24	<1	<2	16	<1	0.65
19-Jun-19	0.29	<1	<2	18	<1	0.64
25-Jun-19	0.12	<1	<2	18	<1	0.33
26-Jun-19	0.14	<1	<2	16	<1	0.49
04-Jul-19	0.12	<1	10	17	<1	0.2
11-Jul-19	0.15	<1	2	17	<1	0.25
17-Jul-19	0.13	<1	<2	17	<1	0.23

PMY 508 – 518 Ailsa Avenue continued

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
24-Jul-19	0.28	<1	8	17	<1	0.3
25-Jul-19	0.28	<1	<2	18	<1	0.18
31-Jul-19	0.3	<1	6	18	<1	0.21
07-Aug-19	0.35	<1	<2	17	<1	0.33
14-Aug-19	0.33	<1	<2	18	<1	0.24
21-Aug-19	0.18	<1	<2	17	<1	0.15
28-Aug-19	0.29	<1	<2	20	<1	0.28
04-Sep-19	0.26	<1	<2	18	<1	0.32
12-Sep-19	0.15	<1	2	20	<1	0.16
17-Sep-19	0.11	<1	30	18	<1	0.2
24-Sep-19	0.1	<1	<2	17	<1	0.2
27-Sep-19	0.13	<1	2	15	<1	0.19
30-Sep-19	0.13	<1	2	17	<1	0.13
03-Oct-19	0.24	<1	2	17	<1	0.14
10-Oct-19	0.25	<1	<2	15	<1	0.16
11-Oct-19	0.13	<1	<2	13	<1	0.23
17-Oct-19	0.39	<1	<2	15	<1	1.1
21-Oct-19	0.39	<1	<2	14	<1	0.73
28-Oct-19	0.29	<1	<2	13	<1	0.18
30-Oct-19	<0.04	<1	<2	12	<1	0.26
01-Nov-19	0.16	<1	2	12	<1	0.33
07-Nov-19	0.32	<1	<2	11	<1	0.21
13-Nov-19	0.19	<1	44	12	<1	0.29
19-Nov-19	0.14	<1	2	10	<1	0.21
27-Nov-19	0.32	<1	<2	8	<1	0.26
02-Dec-19	0.62	<1	<2	8	<1	0.27
03-Dec-19	0.35	<1	<2	7	<1	0.36
12-Dec-19	0.23	<1	<2	8.8	<1	0.22
17-Dec-19	0.14	<1	<2	8.3	<1	0.41
24-Dec-19	0.34	<1	NA	8.6	<1	0.35

PMY 509 – 1240 Alderside Road

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
03-Jan-19	0.93	<1	<2	8	<1	0.37
09-Jan-19	0.85	<1	<2	7	<1	0.73
13-Jan-19	0.86	<1	<2	7	<1	0.3
18-Jan-19	0.29	<1	<2	7	<1	0.47
23-Jan-19	0.86	<1	<2	7	<1	0.45
27-Jan-19	0.81	<1	<2	7	<1	0.25
30-Jan-19	0.43	<1	<2	7	<1	0.44
03-Feb-19	0.97	<1	<2	6	<1	0.3
06-Feb-19	0.53	<1	<2	5	<1	0.44
10-Feb-19	0.83	<1	<2	5	<1	0.56
17-Feb-19	1.1	<1	8	4	<1	0.35
24-Feb-19	1.3	<1	2	5	<1	0.29
27-Feb-19	1.2	<1	<2	4	<1	0.51
06-Mar-19	1.2	<1	<2	4	<1	0.35
14-Mar-19	1.3	<1	<2	5	<1	0.26
15-Mar-19	1.2	<1	<2	5	<1	0.43
20-Mar-19	1	<1	<2	5	<1	0.52
24-Mar-19	1.3	<1	2	7	<1	0.43
29-Mar-19	1.2	<1	<2	7	<1	0.5
31-Mar-19	1.1	<1	<2	8	<1	0.34
07-Apr-19	0.72	<1	<2	9	<1	0.41
14-Apr-19	0.69	<1	<2	8	<1	0.33
27-Apr-19	0.57	<1	2	11	<1	0.29
28-Apr-19	0.89	<1	<2	11	<1	0.26
01-May-19	0.96	<1	<2	9	<1	0.47
03-May-19	1	<1	<2	10	<1	0.39
05-May-19	0.98	<1	<2	11	<1	0.23
08-May-19	1.4	<1	2	9	<1	0.47
10-May-19	0.79	<1	<2	12	<1	0.8
12-May-19	1	<1	<2	12	<1	0.24
16-May-19	1	<1	<2	13	<1	0.36
23-May-19	0.89	<1	<2	13	<1	0.25
26-May-19	0.91	<1	<2	14	<1	0.25
28-May-19	0.83	<1	<2	10	<1	0.29
29-May-19	1	<1	<2	13	<1	0.54
06-Jun-19	0.83	<1	<2	15	<1	0.3
09-Jun-19	0.97	<1	<2	14	<1	0.2
12-Jun-19	1	<1	<2	14	<1	0.45
19-Jun-19	0.83	<1	<2	15	<1	0.29
25-Jun-19	0.44	<1	<2	17	<1	0.31
26-Jun-19	0.86	<1	<2	16	<1	0.41
04-Jul-19	0.32	<1	4	17	<1	0.18
11-Jul-19	0.22	<1	<2	15	<1	0.19
17-Jul-19	0.64	<1	2	16	<1	0.4
25-Jul-19	0.32	<1	<2	17	<1	0.23
31-Jul-19	0.54	<1	<2	18	<1	0.4
07-Aug-19	0.75	<1	<2	17	<1	0.53

PMY 509 – 1240 Alderside Road continued

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
14-Aug-19	0.84	<1	2	19	<1	0.42
21-Aug-19	0.55	<1	<2	19	<1	0.44
28-Aug-19	0.62	<1	2	18	<1	0.45
04-Sep-19	0.66	<1	2	18	<1	0.38
12-Sep-19	0.1	<1	<2	19	<1	0.23
17-Sep-19	0.44	<1	<2	15	<1	0.21
24-Sep-19	0.57	<1	<2	16	<1	0.34
27-Sep-19	0.52	<1	<2	14	<1	0.46
30-Sep-19	0.85	<1	<2	15	<1	0.42
03-Oct-19	0.56	<1	<2	17	<1	0.31
11-Oct-19	0.4	<1	4	14	<1	0.39
17-Oct-19	0.37	<1	2	15	<1	0.39
21-Oct-19	0.8	<1	<2	13	<1	0.41
28-Oct-19	0.81	<1	<2	12	<1	0.36
01-Nov-19	0.67	<1	<2	13	<1	0.37
06-Nov-19	0.73	<1	2	10	<1	0.29
08-Nov-19	0.66	<1	<2	11	<1	0.33
13-Nov-19	0.79	<1	<2	9	<1	0.35
19-Nov-19	0.47	<1	<2	11	<1	0.63
27-Nov-19	0.94	<1	16	8	<1	0.31
03-Dec-19	0.8	<1	<2	7	<1	0.32
12-Dec-19	0.75	<1	2	9.1	<1	0.28
17-Dec-19	0.55	<1	<2	8	<1	0.28
19-Dec-19	0.71	<1	NA	8.7	<1	0.27
20-Dec-19	0.55	<1	NA	8.2	<1	0.38
24-Dec-19	0.73	<1	NA	6.8	<1	0.36

PMY 510 – 2000 Panorama Drive

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
03-Jan-19	0.1	<1	<2	7	<1	0.41
09-Jan-19	0.73	<1	<2	6	<1	0.46
13-Jan-19	0.67	<1	<2	6	<1	0.37
18-Jan-19	0.87	<1	<2	6	<1	0.47
23-Jan-19	0.7	<1	2	6	<1	0.41
27-Jan-19	0.88	<1	<2	6	<1	0.44
03-Feb-19	0.81	<1	<2	6	<1	0.27
06-Feb-19	0.54	<1	<2	6	<1	6.6
10-Feb-19	0.64	<1MPN/100mLs	<2	5	<1MPN/100mLs	8.4
11-Feb-19	0.69	<1	<2	4	<1	0.61
17-Feb-19	0.53	<1	<2	4	<1	0.37
24-Feb-19	0.81	<1	<2	4	<1	0.29
27-Feb-19	0.55	<1	<2	4	<1	4.4
06-Mar-19	1	<1	4	4	<1	0.26
15-Mar-19	0.7	<1	<2	4	<1	0.42
20-Mar-19	0.85	<1	<2	5	<1	0.42
24-Mar-19	0.36	<1	<2	6	<1	0.51
29-Mar-19	0.91	<1	<2	6	<1	0.38
31-Mar-19	0.8	<1	<2	7	<1	0.41
07-Apr-19	0.63	<1	2	8	<1	0.38
14-Apr-19	0.8	<1	<2	8	<1	0.32
27-Apr-19	1.1	<1	10	8	<1	0.42
28-Apr-19	0.87	<1	<2	7	<1	0.32
01-May-19	1	<1	<2	8	<1	0.43
03-May-19	0.62	<1	2	8	<1	0.42
05-May-19	0.93	<1	<2	8	<1	0.38
08-May-19	1.1	<1	<2	9	<1	0.31
12-May-19	1	<1	4	9	<1	0.47
23-May-19	0.57	<1	2	10	<1	0.38
26-May-19	0.46	<1	4	11	<1	0.26
29-May-19	1.2	<1	<2	9	<1	0.81
06-Jun-19	0.73	<1	2	11	<1	0.3
09-Jun-19	0.92	<1	4	11	<1	0.26
12-Jun-19	0.89	<1	2	11	<1	0.5
19-Jun-19	1	<1	2	13	<1	0.59
25-Jun-19	0.84	<1	2	12	<1	0.33
26-Jun-19	0.9	<1	<2	14	<1	0.35
04-Jul-19	0.91	<1	<2	13	<1	0.25
11-Jul-19	0.96	<1	2	12	<1	0.3
17-Jul-19	0.84	<1	42	15	<1	0.94
25-Jul-19	0.79	<1	6	15	<1	3.2
31-Jul-19	0.66	<1	2	14	<1	0.28
07-Aug-19	0.72	<1	38	15	<1	0.58
14-Aug-19	0.97	<1	78	16	<1	0.54
21-Aug-19	0.64	<1	<2	16	<1	0.29
28-Aug-19	0.85	<1	6	16	<1	0.45
04-Sep-19	0.87	<1	6	16	<1	0.32

PMY 510 – 2000 Panorama Drive continued

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
12-Sep-19	0.8	<1	2	16	<1	0.28
17-Sep-19	0.94	<1	22	15	<1	0.3
24-Sep-19	0.28	<1	10	15	<1	0.34
27-Sep-19	0.35	<1	20	13	<1	0.33
30-Sep-19	0.75	<1	36	14	<1	0.35
03-Oct-19	0.44	<1	20	16	<1	0.37
11-Oct-19	0.21	<1	50	14	<1	0.35
17-Oct-19	0.34	<1	10	14	<1	0.37
21-Oct-19	0.86	<1	66	14	<1	0.37
28-Oct-19	0.4	<1	16	11	<1	0.28
30-Oct-19	0.69	<1	110	11	<1	0.3
06-Nov-19	0.62	<1	28	9	<1	0.37
08-Nov-19	0.37	<1	24	10	<1	0.33
13-Nov-19	0.55	<1	22	11	<1	0.29
19-Nov-19	1.5	<1	120	10	<1	0.52
27-Nov-19	0.51	<1	32	8	<1	0.35
03-Dec-19	1.2	<1	68	7	<1	0.3
12-Dec-19	0.68	<1	54	8.8	<1	0.29
17-Dec-19	0.73	<1	26	7.7	<1	0.43
19-Dec-19	0.28	<1	NA	8.2	<1	0.25
24-Dec-19	0.45	<1	NA	7.4	<1	0.36

PMY 511 – 2701 Clarke Street

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
03-Jan-19	0.38	<1	<2	7	<1	0.33
09-Jan-19	0.33	<1	<2	7	<1	0.61
13-Jan-19	0.3	<1	2	7	<1	0.28
17-Jan-19	0.5	<1	<2	6	<1	0.38
18-Jan-19	0.45	<1	<2	7	<1	0.44
23-Jan-19	0.34	<1	<2	6	<1	0.28
27-Jan-19	0.37	<1	<2	6	<1	0.26
03-Feb-19	0.38	<1	<2	6	<1	0.29
06-Feb-19	0.57	<1	<2	5	<1	0.3
10-Feb-19	0.66	<1	<2	5	<1	0.54
17-Feb-19	0.54	<1	<2	4	<1	0.31
24-Feb-19	0.53	<1	<2	4	<1	0.25
27-Feb-19	0.54	<1	<2	5	<1	0.36
06-Mar-19	0.61	<1	<2	4	<1	0.33
14-Mar-19	0.78	<1	14	5	<1	0.93
20-Mar-19	0.58	<1	<2	5	<1	0.31
24-Mar-19	0.31	<1	<2	7	<1	0.3
31-Mar-19	0.27	<1	<2	8	<1	0.28
07-Apr-19	0.41	<1	<2	9	<1	0.42
14-Apr-19	0.44	<1	<2	9	<1	0.25
27-Apr-19	0.46	<1	<2	9	<1	0.28
28-Apr-19	0.44	<1	<2	9	<1	0.24
05-May-19	0.41	<1	<2	10	<1	0.3
12-May-19	0.37	<1	2	11	<1	0.22
16-May-19	0.4	<1	6	11	<1	2.2
23-May-19	0.45	<1	<2	11	<1	0.35
26-May-19	0.41	<1	<2	12	<1	0.22
28-May-19	0.7	<1	12	10	<1	0.47
29-May-19	0.45	<1	<2	11	<1	0.32
06-Jun-19	0.56	<1	<2	12	<1	0.4
09-Jun-19	0.39	<1	<2	12	<1	0.19
12-Jun-19	0.45	<1	<2	12	<1	0.34
19-Jun-19	0.48	<1	2	14	<1	0.27
25-Jun-19	0.58	<1	<2	12	<1	0.39
26-Jun-19	0.68	<1	2	13	<1	0.26
04-Jul-19	0.36	<1	<2	15	<1	0.19
11-Jul-19	0.59	<1	<2	15	<1	0.26
17-Jul-19	0.47	<1	<2	13	<1	0.25
24-Jul-19	0.47	<1	<2	16	<1	0.29
25-Jul-19	0.59	<1	2	15	<1	0.27
31-Jul-19	0.41	<1	<2	16	<1	0.23
07-Aug-19	0.46	<1	<2	15	<1	0.21
14-Aug-19	0.43	<1	6	15	<1	0.3
21-Aug-19	0.35	<1	<2	15	<1	0.22
28-Aug-19	0.41	<1	<2	16	<1	0.25
04-Sep-19	0.36	<1	<2	16	<1	0.25
12-Sep-19	0.26	<1	2	17	<1	0.18

PMY 511 – 2701 Clarke Street continued

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
17-Sep-19	0.3	<1	2	15	<1	0.2
24-Sep-19	0.17	<1	12	14	<1	0.42
27-Sep-19	0.2	<1	<2	14	<1	0.37
30-Sep-19	0.22	<1	2	15	<1	0.32
03-Oct-19	0.24	<1	<2	14	<1	0.29
10-Oct-19	0.32	<1	2	13	<1	0.29
11-Oct-19	0.16	<1	4	14	<1	0.29
17-Oct-19	0.32	<1	4	14	<1	0.37
21-Oct-19	0.32	<1	2	13	<1	0.28
28-Oct-19	0.25	<1	2	10	<1	0.27
30-Oct-19	0.21	<1	NA	12	<1	0.29
07-Nov-19	0.19	<1	<2	9	<1	0.19
13-Nov-19	0.35	<1	<2	10	<1	0.25
19-Nov-19	0.15	<1	<2	10	<1	0.45
27-Nov-19	0.51	<1	<2	8	<1	0.27
03-Dec-19	0.53	<1	<2	7	<1	0.3
12-Dec-19	0.27	<1	<2	9.3	<1	0.3
17-Dec-19	0.36	<1	2	7.5	<1	0.36
19-Dec-19	0.32	<1	NA	8.8	<1	0.28
24-Dec-19	0.32	<1	NA	7.8	<1	0.28

PMY 512 – 202 Cecile Drive

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
03-Jan-19	0.47	<1	24	7	<1	0.15
09-Jan-19	0.47	<1	<2	6	<1	0.49
13-Jan-19	0.53	<1	<2	6	<1	0.17
17-Jan-19	0.6	<1	<2	5	<1	0.32
18-Jan-19	0.63	<1	<2	6	<1	0.34
23-Jan-19	0.51	<1	<2	5	<1	0.17
27-Jan-19	0.53	<1	<2	5	<1	0.16
03-Feb-19	0.47	<1	<2	5	<1	0.19
06-Feb-19	0.49	<1	<2	5	<1	0.2
07-Feb-19	0.49	<1	2	5	<1	0.18
10-Feb-19	0.54	<1	<2	3	<1	0.13
15-Feb-19	0.61	<1	<2	5	<1	0.16
17-Feb-19	0.5	<1	<2	3	<1	0.1
24-Feb-19	0.59	<1	<2	2	<1	0.11
27-Feb-19	0.55	<1	<2	2	<1	0.25
01-Mar-19	0.56	<1	<2	4	<1	0.37
06-Mar-19	0.44	<1	<2	4	<1	0.31
14-Mar-19	0.57	<1	<2	5	<1	0.54
20-Mar-19	0.52	<1	<2	7	<1	0.23
24-Mar-19	0.45	<1	<2	6	<1	0.29
31-Mar-19	0.54	<1	<2	7	<1	0.12
07-Apr-19	0.51	<1	<2	8	<1	0.15
14-Apr-19	0.59	<1	<2	8	<1	0.13
27-Apr-19	0.68	<1	2	10	<1	0.33
28-Apr-19	0.48	<1	<2	9	<1	0.13
01-May-19	0.5	<1	<2	10	<1	0.14
03-May-19	0.59	<1	2	8	<1	0.26
05-May-19	0.49	<1	<2	10	<1	0.2
12-May-19	0.5	<1	<2	12	<1	0.23
16-May-19	0.41	<1	<2	13	<1	0.24
23-May-19	0.4	<1	<2	13	<1	0.26
26-May-19	0.51	<1	<2	13	<1	0.1
28-May-19	0.5	<1	<2	10	<1	0.16
29-May-19	0.3	<1	<2	13	<1	0.18
07-Jun-19	0.65	<1	2	14	<1	0.21
09-Jun-19	0.46	<1	<2	13	<1	0.17
12-Jun-19	0.63	<1	<2	14	<1	0.44
19-Jun-19	0.31	<1	<2	14	<1	0.31
25-Jun-19	0.26	<1	<2	14	<1	0.23
26-Jun-19	0.44	<1	<2	15	<1	0.35
04-Jul-19	0.59	<1	<2	15	<1	0.21
11-Jul-19	0.42	<1	<2	15	<1	0.2
17-Jul-19	0.29	<1	<2	14	<1	0.18
24-Jul-19	0.44	<1	<2	16	<1	0.2
25-Jul-19	0.36	<1	<2	14	<1	0.17
31-Jul-19	0.37	<1	<2	15	<1	0.19
07-Aug-19	0.48	<1	2	19	<1	0.18

PMY 512 – 202 Cecile Drive continued

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
14-Aug-19	0.44	<1	<2	19	<1	0.19
21-Aug-19	0.26	<1	8	16	1	0.14
23-Aug-19	0.33	<1	<2	17	<1	0.17
24-Aug-19	0.47	<1	<2	17	<1	0.14
25-Aug-19	0.49	<1	<2	17	<1	0.13
28-Aug-19	0.32	<1	<2	17	<1	0.26
04-Sep-19	0.39	<1	<2	16	<1	0.19
12-Sep-19	0.32	<1	2	20	<1	0.18
17-Sep-19	0.37	<1	<2	16	<1	0.18
24-Sep-19	0.35	<1	<2	15	<1	0.14
27-Sep-19	0.37	<1	<2	15	<1	0.19
30-Sep-19	0.39	<1	<2	15	<1	0.11
03-Oct-19	0.4	<1	<2	15	<1	0.11
10-Oct-19	0.32	<1	<2	14	<1	0.15
11-Oct-19	0.43	<1	32	12	<1	0.12
17-Oct-19	0.42	<1	2	14	<1	0.17
21-Oct-19	0.48	<1	<2	13	<1	0.14
28-Oct-19	0.6	<1	<2	12	<1	0.11
30-Oct-19	0.36	<1	<2	10	<1	0.12
01-Nov-19	0.44	<1	<2	11	<1	0.28
07-Nov-19	0.5	<1	<2	9	<1	0.14
13-Nov-19	0.29	<1	<2	11	<1	0.23
19-Nov-19	0.36	<1	<2	11	<1	0.26
27-Nov-19	0.7	<1	2	9	<1	0.1
02-Dec-19	0.69	<1	<2	8	<1	0.13
03-Dec-19	0.82	<1	<2	7	<1	0.13
06-Dec-19	0.49	<1	<2	8	<1	0.13
12-Dec-19	0.45	<1	<2	7.8	<1	0.17
17-Dec-19	0.4	<1	<2	7.8	<1	0.15
24-Dec-19	0.51	<1	NA	6.8	<1	0.32

PMY 513 – 485 Guildford Way

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
03-Jan-19	0.67	<1	<2	7	<1	0.41
09-Jan-19	0.8	<1	<2	5	<1	0.51
13-Jan-19	0.75	<1	<2	5	<1	0.35
18-Jan-19	1.1	<1	<2	6	<1	0.46
23-Jan-19	0.74	<1	<2	5	<1	0.32
27-Jan-19	0.73	<1	<2	5	<1	0.28
30-Jan-19	0.83	<1	<2	5	<1	0.32
03-Feb-19	0.74	<1	<2	5	<1	0.44
06-Feb-19	0.84	<1	<2	5	<1	0.33
10-Feb-19	1.1	<1	<2	4	<1	0.55
17-Feb-19	0.75	<1	<2	4	<1	0.34
24-Feb-19	0.83	<1	<2	4	<1	0.29
27-Feb-19	0.78	<1	<2	4	<1	0.38
06-Mar-19	0.94	<1	<2	4	<1	0.3
14-Mar-19	0.81	<1	<2	5	<1	0.29
20-Mar-19	0.72	<1	<2	6	<1	0.38
24-Mar-19	0.82	<1	<2	6	<1	0.42
31-Mar-19	0.67	<1	<2	6	<1	0.37
07-Apr-19	0.79	<1	<2	6	<1	0.36
14-Apr-19	0.8	<1	<2	6	<1	0.32
28-Apr-19	0.7	<1	<2	6	<1	0.27
05-May-19	0.72	<1	<2	9	<1	0.35
08-May-19	0.67	<1	<2	9	<1	0.34
12-May-19	0.72	<1	<2	8	<1	0.29
23-May-19	0.84	<1	<2	9	<1	0.34
26-May-19	0.71	<1	<2	10	<1	0.23
28-May-19	0.67	<1	<2	10	<1	0.33
29-May-19	0.94	<1	<2	10	<1	0.48
06-Jun-19	0.98	<1	<2	10	<1	0.3
09-Jun-19	0.83	<1	<2	11	<1	0.22
12-Jun-19	0.82	<1	2	11	<1	0.5
19-Jun-19	1	<1	<2	13	<1	0.33
25-Jun-19	0.95	<1	<2	12	<1	0.36
26-Jun-19	0.97	<1	<2	13	<1	0.37
04-Jul-19	0.96	<1	<2	12	<1	0.21
11-Jul-19	0.9	<1	<2	13	<1	0.25
17-Jul-19	0.77	<1	<2	14	<1	0.27
25-Jul-19	0.66	<1	<2	15	<1	0.3
31-Jul-19	0.67	<1	<2	15	<1	0.26
07-Aug-19	0.85	<1	<2	17	<1	0.33
14-Aug-19	0.76	<1	<2	16	<1	0.36
21-Aug-19	0.37	<1	<2	16	1	0.4
23-Aug-19	0.62	<1	<2	16	<1	0.28
24-Aug-19	0.96	<1	<2	16	<1	0.21
25-Aug-19	0.9	<1	<2	14	<1	0.24
28-Aug-19	0.92	<1	<2	16	<1	0.28
04-Sep-19	0.72	<1	<2	15	<1	0.25

PMY 513 – 485 Guildford Way continued

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
12-Sep-19	0.98	<1	<2	17	<1	0.28
17-Sep-19	0.59	<1	<2	15	<1	0.39
24-Sep-19	0.77	<1	<2	15	<1	0.4
27-Sep-19	0.48	<1	<2	15	<1	0.44
30-Sep-19	0.64	<1	<2	16	<1	0.37
03-Oct-19	0.64	<1	<2	13	<1	0.33
11-Oct-19	0.5	<1	<2	12	<1	0.39
17-Oct-19	0.57	<1	2	13	<1	0.5
21-Oct-19	0.66	<1	<2	14	<1	0.75
28-Oct-19	0.69	<1	<2	13	<1	0.29
30-Oct-19	0.69	<1	<2	10	<1	0.29
01-Nov-19	0.71	<1	LA	10	<1	0.29
06-Nov-19	0.83	<1	<2	9	<1	0.26
13-Nov-19	0.6	<1	<2	10	<1	0.23
19-Nov-19	0.87	<1	<2	10	<1	0.41
27-Nov-19	1	<1	2	8	<1	0.39
03-Dec-19	1	<1	<2	7	<1	0.3
12-Dec-19	0.68	<1	<2	8	<1	0.33
17-Dec-19	0.84	<1	<2	7.4	<1	0.35
19-Dec-19	0.77	<1	NA	7.3	<1	0.36
24-Dec-19	0.73	<1	NA	7.4	<1	0.3

PMY 514 – 200 Parkside Drive

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
03-Jan-19	0.17	<1	28	7	<1	0.41
09-Jan-19	0.14	<1	<2	7	<1	0.46
13-Jan-19	0.13	<1	<2	6.7	<1	0.33
19-Jan-19	0.1	<1	<2	7	<1	0.38
23-Jan-19	0.14	<1	<2	6	<1	0.3
27-Jan-19	0.16	<1	<2	6	<1	0.31
30-Jan-19	0.13	<1	2	7	<1	0.31
03-Feb-19	0.14	<1	<2	6	<1	0.29
06-Feb-19	0.15	<1	2	5	<1	0.32
10-Feb-19	0.07	<1	2	6	<1	0.25
17-Feb-19	0.24	<1	<2	5	<1	0.29
24-Feb-19	0.16	<1	2	5	<1	0.26
27-Feb-19	0.28	<1	<2	4	<1	0.28
06-Mar-19	0.32	<1	<2	4	<1	0.32
14-Mar-19	0.39	<1	<2	4	<1	0.33
15-Mar-19	0.39	<1	<2	5	<1	0.32
20-Mar-19	0.32	<1	<2	5	<1	0.31
24-Mar-19	0.12	<1	20	7	<1	0.34
29-Mar-19	0.22	<1	20	8	<1	0.34
31-Mar-19	0.1	<1	18	8	<1	0.37
07-Apr-19	0.14	<1	20	9	<1	0.31
14-Apr-19	0.08	<1	12	9	<1	0.28
27-Apr-19	0.17	<1	4	9	<1	0.31
28-Apr-19	0.2	<1	<2	9	<1	0.31
03-May-19	0.32	<1	6	9	<1	0.29
05-May-19	0.27	<1	2	9	<1	0.31
08-May-19	0.14	<1	<2	10	<1	0.34
10-May-19	0.15	<1	<2	9	<1	0.31
12-May-19	0.15	<1	<2	9	<1	0.33
23-May-19	0.12	<1	<2	12	<1	0.29
26-May-19	0.18	<1	<2	11.9	<1	0.25
29-May-19	0.26	<1	<2	11	<1	0.34
06-Jun-19	0.26	<1	8	12	<1	0.21
09-Jun-19	0.14	<1	2	11	<1	0.25
12-Jun-19	0.35	<1	2	12	<1	0.53
19-Jun-19	0.22	<1	4	13	<1	0.28
25-Jun-19	0.16	<1	2	13	<1	0.23
26-Jun-19	0.28	<1	<2	12	<1	0.4
04-Jul-19	0.22	<1	<2	13	<1	0.2
11-Jul-19	0.29	<1	4	15	<1	0.2
17-Jul-19	0.21	<1	4	14	<1	0.28
25-Jul-19	0.26	<1	<2	16	<1	0.3
31-Jul-19	0.37	<1	<2	17	<1	0.34
07-Aug-19	0.34	<1	<2	15	<1	0.42
14-Aug-19	0.21	<1	10	17	<1	0.38
21-Aug-19	0.17	<1	4	17	3	0.24
22-Aug-19	0.27	<1	8	17	<1	0.22

PMY 514 – 200 Parkside Drive continued

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
23-Aug-19	0.18	<1	110	18	<1	0.29
24-Aug-19	0.12	<1	64	17	<1	0.21
28-Aug-19	0.31	<1	<2	16	<1	0.27
04-Sep-19	0.28	<1	6	17	<1	0.28
12-Sep-19	0.12	<1	90	18	<1	0.21
17-Sep-19	0.09	<1	350	15	<1	0.23
24-Sep-19	0.12	<1	580	14	<1	0.35
27-Sep-19	0.14	<1	160	15	<1	0.37
30-Sep-19	0.19	<1	94	15	<1	0.27
03-Oct-19	0.16	<1	170	14	<1	0.3
13-Oct-19	<0.04	<1MPN/100mLs	510	14	<1MPN/100mLs	0.26
06-Nov-19	0.18	<1	230	9.4	<1	0.23
08-Nov-19	0.16	<1	170	11	<1	0.24
13-Nov-19	0.2	<1	110	10	<1	0.27
19-Nov-19	0.22	<1	88	10	<1	0.4
21-Nov-19	0.29	<1	170	9	<1	0.3
27-Nov-19	0.36	<1	250	8	<1	0.35
03-Dec-19	0.4	<1	72	7	<1	0.28
12-Dec-19	0.13	<1	190	8.9	<1	0.29
19-Dec-19	0.13	<1	NA	8.4	<1	0.28
26-Dec-19	0.13	<1	NA	2.5	<1	0.21

PMY 515 – Hickory Reservoir

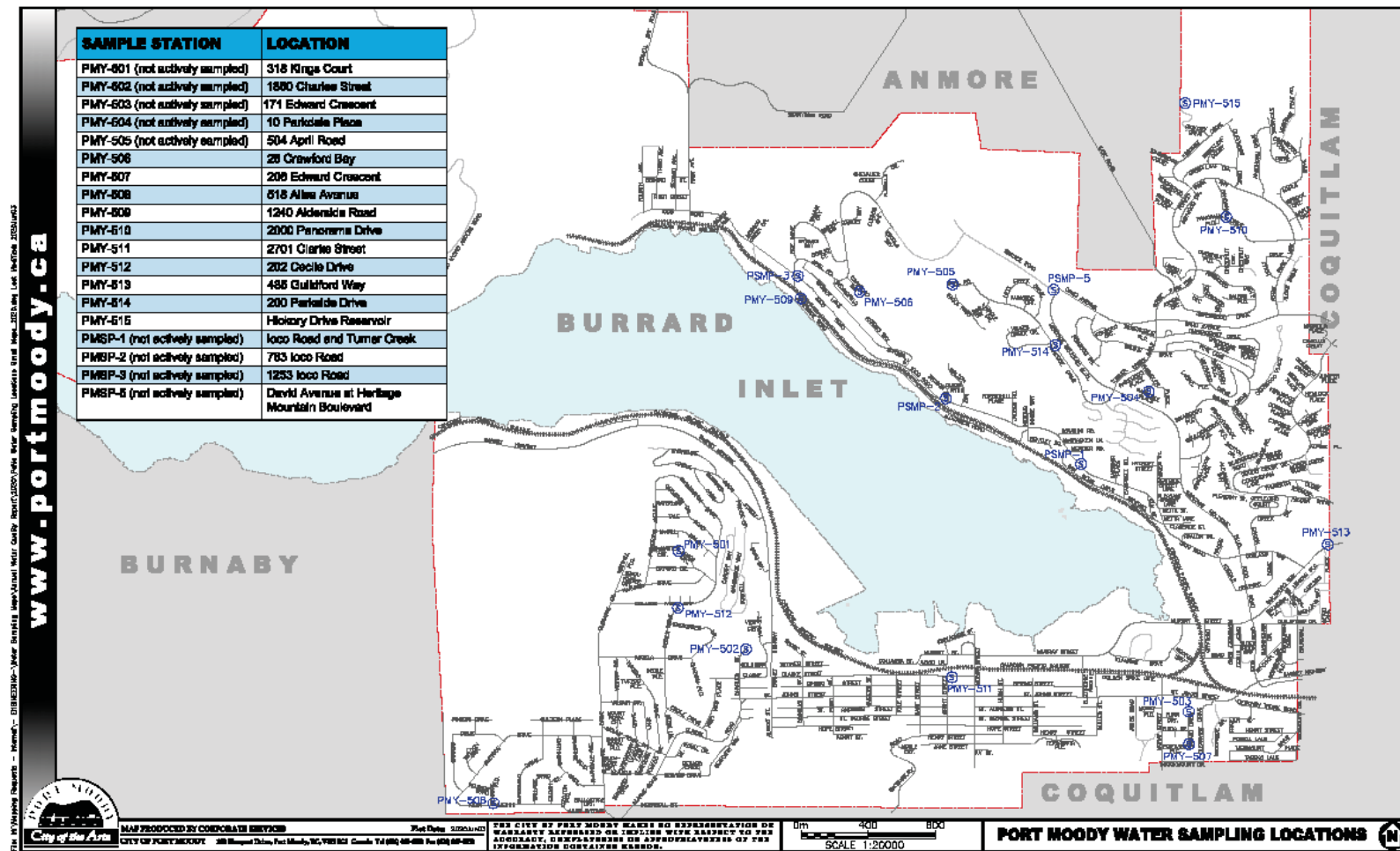
Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
03-Jan-19	0.39	<1	<2	7	<1	0.45
09-Jan-19	0.61	<1	<2	6	<1	0.57
13-Jan-19	0.61	<1	<2	6	<1	0.41
18-Jan-19	0.66	<1	<2	6	<1	0.68
23-Jan-19	0.54	<1	<2	5	<1	0.42
27-Jan-19	0.56	<1	<2	5	<1	0.38
03-Feb-19	0.72	<1	<2	5	<1	0.35
06-Feb-19	0.52	<1	<2	5	<1	0.35
10-Feb-19	0.61	<1	<2	4	<1	0.5
17-Feb-19	0.49	<1	2	4	<1	0.43
24-Feb-19	0.47	<1	<2	4	<1	0.36
27-Feb-19	0.55	<1	<2	4	<1	0.31
06-Mar-19	0.52	<1	<2	3	<1	0.35
14-Mar-19	0.6	<1	<2	4	<1	0.32
20-Mar-19	0.57	<1	<2	5	<1	0.3
29-Mar-19	0.75	<1	<2	6	<1	16
31-Mar-19	0.7	<1	<2	6	<1	0.51
07-Apr-19	0.59	<1	<2	7	<1	0.35
14-Apr-19	0.62	<1	<2	7	<1	0.35
27-Apr-19	0.63	<1	<2	8	<1	0.45
28-Apr-19	0.61	<1	<2	7	<1	0.34
03-May-19	0.66	<1	<2	8	<1	0.4
05-May-19	0.62	<1	<2	8	<1	0.42
08-May-19	0.76	<1	<2	9	<1	0.35
12-May-19	0.61	<1	<2	9	<1	0.34
23-May-19	0.54	<1	2	10	<1	0.35
26-May-19	0.56	<1	<2	10	<1	0.28
29-May-19	0.7	<1	2	10	<1	0.36
06-Jun-19	0.42	<1	<2	10	<1	0.3
09-Jun-19	0.36	<1	<2	11	<1	0.28
12-Jun-19	0.43	<1	<2	11	<1	0.38
19-Jun-19	0.59	<1	<2	12	<1	0.35
25-Jun-19	0.32	<1	<2	13	<1	0.3
04-Jul-19	0.47	<1	<2	12	<1	0.23
11-Jul-19	0.44	<1	<2	11	<1	0.27
17-Jul-19	0.32	<1	<2	14	<1	0.3
25-Jul-19	0.37	<1	<2	13	<1	0.34
31-Jul-19	0.4	<1	<2	14	<1	0.25
07-Aug-19	0.38	<1	<2	15	<1	0.28
14-Aug-19	0.2	<1	<2	15	<1	0.37
21-Aug-19	0.22	<1	<2	16	<1	0.31
28-Aug-19	0.33	<1	<2	15	<1	0.35
04-Sep-19	0.25	<1	<2	16	<1	0.26
12-Sep-19	0.37	<1	<2	16	<1	0.35
17-Sep-19	0.19	<1	<2	15	<1	0.35
24-Sep-19	0.17	<1	2	12	<1	0.37
27-Sep-19	0.2	<1	2	12	<1	0.43

PMY 515 – Hickory Reservoir continued

Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
30-Sep-19	0.35	<1	16	14	<1	0.41
03-Oct-19	0.26	<1	4	14	<1	0.37
17-Oct-19	0.49	<1	<2	13	<1	0.39
21-Oct-19	0.45	<1	14	13	<1	0.49
24-Oct-19	0.33	<1	34	11	<1	0.32
28-Oct-19	0.52	<1	4	12	<1	0.33
30-Oct-19	0.64	<1	36	11	<1	0.35
06-Nov-19	0.36	<1	<2	9	<1	0.39
13-Nov-19	0.37	<1	<2	10	<1	0.27
19-Nov-19	0.41	<1	24	9	<1	0.42
27-Nov-19	0.5	<1	<2	8	<1	0.34
03-Dec-19	0.54	<1	2	7	<1	0.37
12-Dec-19	0.39	<1	<2	7.9	<1	0.34
17-Dec-19	0.25	<1	14	7	<1	0.39
19-Dec-19	0.52	<1	NA	7.5	<1	0.28
24-Dec-19	0.32	<1	NA	6.4	<1	0.33

Appendix #2

Sample Station Locations



2019 Annual Water Quality Report

Sample Station	Location
PMY-501 (<i>not actively sampled</i>)	318 Kings Court
PMY-502 (<i>not actively sampled</i>)	1860 Charles Street
PMY-503 (<i>not actively sampled</i>)	171 Edward Crescent
PMY-504 (<i>not actively sampled</i>)	10 Parkdale Place
PMY-505 (<i>not actively sampled</i>)	504 April Road
PMY-506	26 Crawford Bay
PMY-507	206 Edward Crescent
PMY-508	518 Ailsa Avenue
PMY-509	1240 Alderside Road
PMY-510	2000 Panorama Drive
PMY-511	2701 Clarke Street
PMY-512	202 Cecile Drive
PMY-513	485 Guildford Way
PMY-514	200 Parkside Drive
PMY-515	Hickory Drive Reservoir
PMSP-1 (<i>not actively sampled</i>)	loco Road and Turner Creek
PMSP-2 (<i>not actively sampled</i>)	763 loco Road
PMSP-3 (<i>not actively sampled</i>)	1253 loco Road
PMSP-5 (<i>not actively sampled</i>)	David Avenue at Heritage Mountain Boulevard

Appendix #3

Metals Monitoring

2019 Metals Monitoring Data for GCDWQ Parameters

		PMY-507	PMY-508	PMY-509	PMY-510	PMY-512
	Sample Location	206 Edward Crescent	518 Ailsa Ave	1240 Alderside	2000 Panorama Drive	202 Cecile Drive
	Sample Date	01/05/2019 7:56	01/05/2019 13:32	01/05/2019 8:50	01/05/2019 8:28	01/05/2019 13:38
Aluminum Total	µg/L	92	27	107	91	28
Antimony Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Arsenic Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Barium Total	µg/L	2.2	2.8	2.5	2.1	2.8
Boron Total	µg/L	<10	<10	<10	<10	<10
Cadmium Total	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2
Calcium Total	µg/L	955	4440	1050	869	4500
Chromium Total	µg/L	0.05	<0.05	<0.05	0.11	<0.05
Cobalt Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Copper Total	µg/L	2.3	9.8	1.2	21.4	20.2
Iron Total	µg/L	70	30	96	63	8
Lead Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Magnesium Total	µg/L	95	162	100	94	163
Manganese Total	µg/L	5.7	2.8	6.4	4.0	1.5
Mercury Total	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
Molybdenum Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Nickel Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Potassium Total	µg/L	103	157	108	106	164
Selenium Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Silver Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Sodium Total	µg/L	5080	1700	6680	5930	1720
Zinc Total	µg/L	<3.0	<3.0	<3.0	<3.0	<3.0

2019 Annual Water Quality Report

		PMY-507	PMY-508	PMY-509	PMY-510	PMY-512
	Sample Location	206 Edward Crescent	518 Ailsa Ave	1240 Alderside	2000 Panorama Drive	202 Cecile Drive
	Sample Date	2019-12-12 07:44	2019-12-12 07:13	2019-12-12 08:59	2019-12-12 09:30	2019-12-12 07:23
Aluminum Total	µg/L	80	19	79	86	21
Antimony Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Arsenic Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Barium Total	µg/L	2.5	2.9	2.7	2.5	3.4
Boron Total	µg/L	<10	<10	<10	<10	<10
Cadmium Total	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2
Calcium Total	µg/L	981	3110	1050	959	3050
Chromium Total	µg/L	<0.05	<0.05	<0.05	0.05	<0.05
Cobalt Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Copper Total	µg/L	2.1	16.2	1.1	25.7	19.7
Iron Total	µg/L	47	100	50	45	<5
Lead Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Magnesium Total	µg/L	99	172	98	106	173
Manganese Total	µg/L	2.3	1.7	1.6	1.9	0.6
Mercury Total	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
Molybdenum Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Nickel Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Potassium Total	µg/L	115	185	115	116	191
Selenium Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Silver Total	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Sodium Total	µg/L	4850	1620	6210	5440	1620
Zinc Total	µg/L	<3.0	<3.0	<3.0	<3.0	<3.0

Appendix #4

Disinfection By-Product Monitoring

2019 Trihalomethane Monitoring Results

Station	Date Sampled	THM (ppb)				
		Bromodichloromethane (MAC 16 ppb)	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes (MAC 100 ppb)
PMY-506	16-May-19	<1	<1	<1	37	38
PMY-507	16-May-19	<1	<1	<1	24	24
PMY-508	16-May-19	<1	<1	<1	38	38
PMY-506	3-Dec-19	<1	<1	<1	32	34
PMY-507	3-Dec-19	<1	<1	<1	24	25
PMY-508	3-Dec-19	<1	<1	<1	28	29

2019 Haloacetic Acid Monitoring Results

Station	Date Sampled	HAA (ppb)					
		Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid (MAC 80 ppb)
PMY-506	16-May-19	<0.5	18	<1	3	25.5	47.8
PMY-507	16-May-19	<0.5	11	<1	<2	16.1	29
PMY-508	16-May-19	<0.5	16	<1	<2	27	46.5
PMY-506	03-Dec-19	<0.5	3	<1	<2	10.8	13.8
PMY-507	03-Dec-19	<0.5	6	<1	3	7.8	17
PMY-508	03-Dec-19	<0.5	3	<1	<2	13.5	17

Appendix #5

Vinyl Chloride Monitoring

2019 Vinyl Chloride Monitoring Results

Address	Sample Reported Name	Sampled Date	Vinyl Chloride (mg/L)
100 Klahanie Drive	PMY-1 (Hydrant #2129)	10-Jun-19	<0.00040
300 Klahanie Drive	PMY-2 (Hydrant # 2131)	10-Jun-19	<0.00040
100 Klahanie Drive	PMY-1 (Hydrant #2129)	26-Nov-19	<0.00040
300 Klahanie Drive	PMY-2 (Hydrant # 2131)	26-Nov-19	<0.00040