

Drinking Water System

2018 Annual Report



Public Works Department

Village of Pemberton

Prepared by:

Jeff Westlake, Water Operator

Village of Pemberton

Drinking Water System

2018 Annual Report

INTRODUCTION

This report has been prepared for the consumers of the Drinking Water System of the Village of Pemberton to provide basic information on water quality and compliance with health standards.

Feedback and comments are always appreciated and should be directed to Village staff or Vancouver Coastal Health Authority (Squamish) officials.

1. CONSUMPTION (CUBIC METERS/DAY):

Daily flow numbers are recorded at the Wellhouse located in Pioneer Park. In addition to the 2018 statistics an additional column has been added to show 2017 for comparison. The 2018 numbers are slightly lower which could be a result of climatic factors or conservation efforts. The annual numbers are as follows:

Consumption	2017 (cubic meters)	2018 (cubic meters)
Average Flow/day	1,883	1,800
High Flow/day:	3,579 (July 7, 2017)	3,570 (July 30, 2018)
Low Flow/day:	1,102 (January 11, 2017)	1,001 (September 26 2018)
Total Annual (est.)	686,254	656,756

For daily results, please refer to **Appendix I**.

2. CHLORINATION:

Chlorination of the water is a condition of the Village of Pemberton's operating permit and has been in effect since March 2009. The objective is to have a positive residual chlorine reading throughout the water distribution system. The Fire Hall chlorine analyzer serves as the central measuring point, where a minimum residual of 0.20 mg/L is desired.

The chlorine residual is monitored continuously by a dedicated computer and alarm set points ensure consistent dosing. Daily readings of the previous 24 hour minimum residuals are recorded. The annual numbers are as follows:

	Residual (mg/L)
Average:	0.27
High:	0.36
Low:	0.18

As a means to ensure that target chlorine residuals are achieved within the distribution system, the Village also carries out sampling at nine (9) sites spread throughout the distribution system each week.

For daily results, please refer to **Appendix I** and for weekly results **Appendix III**.

3. CHEMISTRY TEST RESULTS:

The annual total metals sampling was performed January 26, 2018. Sampling was conducted on wells #2 and #3 and Oak St, and Industrial Park sample stations. The test results indicate that all of the items tested are within Health Canada, Maximum Acceptable Concentration guidelines. Well #2, which is used as a backup water source exceeds the Aesthetic Objectives for Iron and Maganese. Aesthetic quality guidelines address parameters such as taste, odour and colour and are not considered a health concern. For results, please refer to **Appendix II**.

4. CORROSION CONTROL:

In June of 2016, the Village of Pemberton undertook a water sampling program to determine the best course of action to mitigate the corrosion of metallic plumbing systems and fixtures. The results indicated a need to adjust the pH and alkalinity of the well water which is considered slightly acidic. As such, Village engineers proposed treatment options and subsequently prepare design drawings for tendering the construction of a water conditioning plant which would use Sodium Carbonate (Soda Ash) to increase the pH and Alkalinity of Pemberton's well water. In October 2017, the Village established a target pH of 7 and a target alkalinity between 40 and 80mg/L CaCO₃ at which the plant is set to run.

In order to confirm effective treatment, pH and alkalinity is monitor weekly by collecting and testing water from 7 sample stations in the distribution system. For results, please refer to **Appendix IV**.

5. TRIHALOMETHANE (THM) TEST RESULTS:

THM testing commenced in January 2010, at the Oak St. sample station and has now been expanded to include production Wells No. 2 and No. 3 as well as the Industrial Park sample station. All readings were well below the Health Canada guidelines.

For results and corresponding guidelines, please refer to **Appendix II**.

6. BACTERIOLOGICAL TEST RESULTS:

Water samples are collected weekly at the following locations:

Source:

- Well No. 2
- Well No. 3

Distribution:

Village of Pemberton

- Oak St
- Village Office
- Health Centre
- Treatment Plant
- Pemberton Plateau
- Industrial Park (Mount Currie water source)

Pemberton North Improvement District

- Collins Rd
- Pemberton Meadows Rd.
- Pemberton Farm Rd (West)
- Urdal Rd.

These samples are submitted for analysis to the laboratory at Vancouver Coastal Health Authority. All results were negative.

The individual results are on file at Vancouver Coastal Health Authority (Squamish) and the Village Office, where they can be reviewed. They can also be viewed at: www.healthspace.ca/Clients/VCHA/CoastGaribaldi/CoastGaribaldi_Website.nsf

For Sample Range Reports, please refer to **Appendix V**.

7. “FLUSH” MESSAGE FROM VANCOUVER COASTAL HEALTH AUTHORITY

In 2015 Vancouver Coastal Health Authority revised its metals at the tap “Flush” message. The following message shall be included in the Annual Report:

Anytime the water in a particular faucet has not been used for six hours or longer, “flush” your cold-water pipes by running the water until cold and you notice a change in temperature. (This could take as little as five to thirty seconds if there has been recent heavy water use such as showering or toilet flushing. Otherwise, it could take two minutes or longer.) The more time water has been sitting in your home’s pipes, the more lead it may contain.

Use only water from the cold-tap for drinking, cooking, and especially making baby formula. Hot water is likely to contain higher levels of lead.

The two actions recommended above are very important to the health of your family. They will probably be effective in reducing lead levels because most of the lead in household water usually comes from the plumbing in your house, not from the local water supply.

Conserving water is still important. Rather than just running the water down the drain you could use the water for things such as watering your plants (Zubel, 2014).

If residents have any questions, they are encouraged to contact the Vancouver Coastal Health Authorities Drinking Water Officer at 604-892-2293.

Appendix |

2018 Daily Consumption and Minimum Cl2 Residual

Date	Consumption Cubic Metres	Cl2 Residual ppm
1-Jan-18	1,297.00	0.22
2-Jan-18	1,297.00	0.22
3-Jan-18	1,224.00	0.22
4-Jan-18	1,197.00	0.22
5-Jan-18	1,235.00	0.23
6-Jan-18	1,276.00	0.23
7-Jan-18	1,267.00	0.23
8-Jan-18	1,297.00	0.34
9-Jan-18	1,264.00	0.31
10-Jan-18	1,185.00	0.33
11-Jan-18	1,297.00	0.35
12-Jan-18	1,287.00	0.35
13-Jan-18	1,287.00	0.35
14-Jan-18	1,287.00	0.35
15-Jan-18	1,358.00	0.32
16-Jan-18	1,296.00	0.32
17-Jan-18	1,301.00	0.31
18-Jan-18	1,311.00	0.32
19-Jan-18	1,309.00	0.33
20-Jan-18	1,309.00	0.33
21-Jan-18	1,309.00	0.33
22-Jan-18	1,317.00	0.33
23-Jan-18	1,336.00	0.31
24-Jan-18	1,308.00	0.30
25-Jan-18	1,179.00	0.29
26-Jan-18	1,111.00	0.28
27-Jan-18	1,111.00	0.28
28-Jan-18	1,111.00	0.28
29-Jan-18	1,317.00	0.26
30-Jan-18	1,461.00	0.24
31-Jan-18	1,371.00	0.27
1-Feb-18	1,200.00	0.26
2-Feb-18	1,200.00	0.26
3-Feb-18	1,200.00	0.26
4-Feb-18	1,200.00	0.26
5-Feb-18	1,255.00	0.29
6-Feb-18	1,422.00	0.26
7-Feb-18	1,316.00	0.26
8-Feb-18	1,216.00	0.36
9-Feb-18	1,403.00	0.33

10-Feb-18	1,403.00	0.33
11-Feb-18	1,403.00	0.33
12-Feb-18	1,443.00	0.33
13-Feb-18	1,443.00	0.33
14-Feb-18	1,458.00	0.33
15-Feb-18	1,277.00	0.33
16-Feb-18	1,358.00	0.33
17-Feb-18	1,358.00	0.33
18-Feb-18	1,358.00	0.33
19-Feb-18	1,475.00	0.28
20-Feb-18	1,475.00	0.28
21-Feb-18	1,508.00	0.27
22-Feb-18	1,421.00	0.27
23-Feb-18	1,422.00	0.27
24-Feb-18	1,442.00	0.27
25-Feb-18	1,442.00	0.27
26-Feb-18	1,428.00	0.27
27-Feb-18	1,345.00	0.27
28-Feb-18	1,443.00	0.27
1-Mar-18	1,414.00	0.27
2-Mar-18	1,304.00	0.27
3-Mar-18	1,358.00	0.27
4-Mar-18	1,434.00	0.27
5-Mar-18	1,398.00	0.27
6-Mar-18	1,405.00	0.27
7-Mar-18	1,318.00	0.27
8-Mar-18	1,270.00	0.28
9-Mar-18	1,404.00	0.27
10-Mar-18	1,404.00	0.27
11-Mar-18	1,404.00	0.27
12-Mar-18	1,404.00	0.27
13-Mar-18	1,404.00	0.27
14-Mar-18	1,449.00	0.27
15-Mar-18	1,359.00	0.28
16-Mar-18	1,444.00	0.27
17-Mar-18	1,444.00	0.27
18-Mar-18	1,444.00	0.27
19-Mar-18	1,301.00	0.27
20-Mar-18	1,419.00	0.27
21-Mar-18	1,441.00	0.27
22-Mar-18	1,336.00	0.27
23-Mar-18	1,308.00	0.27
24-Mar-18	1,308.00	0.27
25-Mar-18	1,308.00	0.27
26-Mar-18	1,472.00	0.27
27-Mar-18	1,307.00	0.27
28-Mar-18	1,396.00	0.27

29-Mar-18	1,301.00	0.27
30-Mar-18	1,301.00	0.27
31-Mar-18	1,301.00	0.27
1-Apr-18	1,301.00	0.27
2-Apr-18	1,357.00	0.28
3-Apr-18	1,357.00	0.28
4-Apr-18	1,388.00	0.28
5-Apr-18	1,388.00	0.28
6-Apr-18	1,228.00	0.28
7-Apr-18	1,228.00	0.28
8-Apr-18	1,228.00	0.28
9-Apr-18	1,228.00	0.28
10-Apr-18	1,243.00	0.35
11-Apr-18	1,400.00	0.31
12-Apr-18	1,315.00	0.30
13-Apr-18	1,203.00	0.30
14-Apr-18	1,203.00	0.30
15-Apr-18	1,203.00	0.30
16-Apr-18	1,210.00	0.30
17-Apr-18	1,312.00	0.30
18-Apr-18	1,402.00	0.28
19-Apr-18	1,341.00	0.26
20-Apr-18	1,194.00	0.24
21-Apr-18	1,194.00	0.24
22-Apr-18	1,194.00	0.24
23-Apr-18	1,428.00	0.25
24-Apr-18	1,450.00	0.25
25-Apr-18	1,422.00	0.22
26-Apr-18	1,423.00	0.25
27-Apr-18	1,655.00	0.26
28-Apr-18	1,655.00	0.26
29-Apr-18	1,655.00	0.26
30-Apr-18	1,655.00	0.26
1-May-18	1,424.00	0.26
2-May-18	1,452.00	0.29
3-May-18	1,849.00	0.29
4-May-18	1,511.00	0.31
5-May-18	1,511.00	0.31
6-May-18	1,511.00	0.31
7-May-18	2,240.00	0.34
8-May-18	2,014.00	0.34
9-May-18	2,083.00	0.34
10-May-18	2,000.00	0.30
11-May-18	1,952.00	0.35
12-May-18	1,952.00	0.30
13-May-18	1,952.00	0.30
14-May-18	2,683.00	0.34

15-May-18	2,651.00	0.28
16-May-18	2,422.00	0.30
17-May-18	2,841.00	0.30
18-May-18	2,629.00	0.30
19-May-18	2,629.00	0.30
20-May-18	2,590.00	0.31
21-May-18	2,590.00	0.31
22-May-18	2,590.00	0.31
23-May-18	2,590.00	0.31
24-May-18	2,917.00	0.20
25-May-18	2,801.00	0.21
26-May-18	2,801.00	0.21
27-May-18	2,801.00	0.21
28-May-18	2,852.00	0.23
29-May-18	2,791.00	0.23
30-May-18	2,613.00	0.22
31-May-18	2,693.00	0.22
1-Jun-18	2,567.00	0.20
2-Jun-18	2,567.00	0.20
3-Jun-18	2,567.00	0.20
4-Jun-18	2,331.00	0.20
5-Jun-18	2,241.00	0.30
6-Jun-18	2,198.00	0.28
7-Jun-18	2,248.00	0.27
8-Jun-18	2,272.00	0.29
9-Jun-18	2,272.00	0.29
10-Jun-18	2,272.00	0.29
11-Jun-18	2,193.00	0.29
12-Jun-18	2,191.00	0.30
13-Jun-18	2,191.00	0.30
14-Jun-18	2,102.00	0.30
15-Jun-18	2,073.00	0.27
16-Jun-18	2,073.00	0.27
17-Jun-18	2,073.00	0.27
18-Jun-18	3,066.00	0.20
19-Jun-18	2,916.00	0.22
20-Jun-18	3,046.00	0.24
21-Jun-18	3,074.00	0.24
22-Jun-18	3,229.00	0.25
23-Jun-18	3,229.00	0.25
24-Jun-18	3,229.00	0.25
25-Jun-18	2,866.05	0.21
26-Jun-18	2,277.20	0.22
27-Jun-18	2,597.66	0.27
28-Jun-18	2,301.00	0.24
29-Jun-18	2,444.00	0.26
30-Jun-18	2,537.00	0.26

1-Jul-18	2,424.52	0.24
2-Jul-18	2,433.63	0.21
3-Jul-18	2,433.63	0.21
4-Jul-18	2,659.07	0.20
5-Jul-18	2,996.93	0.29
6-Jul-18	2,790.47	0.30
7-Jul-18	2,681.15	0.27
8-Jul-18	2,468.36	0.27
9-Jul-18	2,904.25	0.28
10-Jul-18	2,676.41	0.26
11-Jul-18	2,549.06	0.26
12-Jul-18	2,772.73	0.26
13-Jul-18	3,231.53	0.27
14-Jul-18	3,089.66	0.24
15-Jul-18	3,120.29	0.23
16-Jul-18	3,275.69	0.23
17-Jul-18	3,245.92	0.23
18-Jul-18	3,288.80	0.21
19-Jul-18	3,480.93	0.21
20-Jul-18	3,261.20	0.22
21-Jul-18	2,979.18	0.22
22-Jul-18	2,871.77	0.22
23-Jul-18	3,322.32	0.21
24-Jul-18	3,192.16	0.25
25-Jul-18	3,160.37	0.20
26-Jul-18	3,375.60	0.21
27-Jul-18	3,479.53	0.27
28-Jul-18	3,278.93	0.25
29-Jul-18	3,302.38	0.28
30-Jul-18	3,570.21	0.29
31-Jul-18	3,386.67	0.25
1-Aug-18	3,404.77	0.30
2-Aug-18	3,390.00	0.27
3-Aug-18	3,408.73	0.27
4-Aug-18	2,922.16	0.27
5-Aug-18	3,370.47	0.27
6-Aug-18	3,299.52	0.28
7-Aug-18	3,464.55	0.27
8-Aug-18	3,264.74	0.26
9-Aug-18	3,400.27	0.26
10-Aug-18	3,321.51	0.26
11-Aug-18	3,473.73	0.25
12-Aug-18	2,981.27	0.26
13-Aug-18	2,669.59	0.26
14-Aug-18	2,722.41	0.24
15-Aug-18	2,758.19	0.19
16-Aug-18	2,806.58	0.18

17-Aug-18	3,126.17	0.25
18-Aug-18	3,035.73	0.26
19-Aug-18	3,017.58	0.30
20-Aug-18	2,768.66	0.28
21-Aug-18	2,900.67	0.27
22-Aug-18	2,642.45	0.28
23-Aug-18	2,678.09	0.27
24-Aug-18	2,765.48	0.28
25-Aug-18	2,521.41	0.28
26-Aug-18	2,517.89	0.28
27-Aug-18	2,462.66	0.28
28-Aug-18	2,348.69	0.27
29-Aug-18	2,509.20	0.27
30-Aug-18	2,364.05	0.28
31-Aug-18	2,097.19	0.28
1-Sep-18	2,182.45	0.27
2-Sep-18	2,355.77	0.29
3-Sep-18	2,543.86	0.28
4-Sep-18	2,388.80	0.27
5-Sep-18	2,279.19	0.26
6-Sep-18	2,382.77	0.26
7-Sep-18	2,465.56	0.25
8-Sep-18	2,086.67	0.27
9-Sep-18	1,885.91	0.28
10-Sep-18	1,877.11	0.28
11-Sep-18	1,595.17	0.28
12-Sep-18	1,617.53	0.27
13-Sep-18	1,712.67	0.27
14-Sep-18	1,459.70	0.27
15-Sep-18	1,708.83	0.27
16-Sep-18	1,449.58	0.28
17-Sep-18	1,599.91	0.28
18-Sep-18	1,492.08	0.27
19-Sep-18	1,530.63	0.26
20-Sep-18	1,562.77	0.27
21-Sep-18	1,539.14	0.27
22-Sep-18	1,497.31	0.26
23-Sep-18	1,364.47	0.27
24-Sep-18	1,612.25	0.26
25-Sep-18	1,067.39	0.25
26-Sep-18	1,001.48	0.25
27-Sep-18	1,434.39	0.25
28-Sep-18	1,488.80	0.25
29-Sep-18	1,447.84	0.25
30-Sep-18	1,311.03	0.26
1-Oct-18	2,063.50	0.26
2-Oct-18	1,711.31	0.25

3-Oct-18	1,279.38	0.27
4-Oct-18	1,274.00	0.26
5-Oct-18	1,289.39	0.26
6-Oct-18	1,307.36	0.25
7-Oct-18	1,220.59	0.33
8-Oct-18	1,397.70	0.21
9-Oct-18	1,269.75	0.21
10-Oct-18	1,247.94	0.26
11-Oct-18	1,096.66	0.19
12-Oct-18	1,288.88	0.19
13-Oct-18	1,291.05	0.22
14-Oct-18	1,272.80	0.24
15-Oct-18	1,038.44	0.24
16-Oct-18	1,215.13	0.25
17-Oct-18	1,128.17	0.25
18-Oct-18	1,232.91	0.25
19-Oct-18	1,131.19	0.25
20-Oct-18	1,265.47	0.25
21-Oct-18	1,182.13	0.25
22-Oct-18	1,242.31	0.24
23-Oct-18	1,302.19	0.24
24-Oct-18	1,156.87	0.24
25-Oct-18	1,296.43	0.24
26-Oct-18	1,298.58	0.25
27-Oct-18	1,186.00	0.25
28-Oct-18	1,259.87	0.25
29-Oct-18	1,259.71	0.25
30-Oct-18	1,240.96	0.25
31-Oct-18	1,279.33	0.26
1-Nov-18	1,239.13	0.25
2-Nov-18	1,293.94	0.26
3-Nov-18	1,114.48	0.26
4-Nov-18	1,259.11	0.27
5-Nov-18	1,260.85	0.27
6-Nov-18	1,121.27	0.26
7-Nov-18	1,236.25	0.26
8-Nov-18	1,116.37	0.25
9-Nov-18	1,299.76	0.26
10-Nov-18	1,088.61	0.25
11-Nov-18	1,252.09	0.25
12-Nov-18	1,110.38	0.26
13-Nov-18	1,293.68	0.25
14-Nov-18	1,159.10	0.25
15-Nov-18	1,177.21	0.25
16-Nov-18	1,207.55	0.24
17-Nov-18	1,208.86	0.25
18-Nov-18	1,126.71	0.25

19-Nov-18	1,231.16	0.25
20-Nov-18	1,291.30	0.24
21-Nov-18	1,182.13	0.25
22-Nov-18	1,252.35	0.22
23-Nov-18	1,079.27	0.22
24-Nov-18	1,111.88	0.24
25-Nov-18	1,186.93	0.26
26-Nov-18	1,256.75	0.26
27-Nov-18	1,159.45	0.25
28-Nov-18	1,090.42	0.28
29-Nov-18	1,221.43	0.28
30-Nov-18	1,073.66	0.27
1-Dec-18	1,222.01	0.26
2-Dec-18	1,054.69	0.24
3-Dec-18	1,239.52	0.23
4-Dec-18	1,112.33	0.22
5-Dec-18	1,204.91	0.24
6-Dec-18	1,243.69	0.25
7-Dec-18	1,098.54	0.26
8-Dec-18	1,228.03	0.27
9-Dec-18	1,240.42	0.26
10-Dec-18	1,104.40	0.25
11-Dec-18	1,239.52	0.25
12-Dec-18	1,149.44	0.26
13-Dec-18	1,189.96	0.27
14-Dec-18	1,253.55	0.28
15-Dec-18	1,129.05	0.29
16-Dec-18	1,193.87	0.32
17-Dec-18	1,256.69	0.29
18-Dec-18	1,217.52	0.29
19-Dec-18	1,109.99	0.31
20-Dec-18	1,214.83	0.30
21-Dec-18	1,258.40	0.31
22-Dec-18	1,273.94	0.29
23-Dec-18	1,155.45	0.28
24-Dec-18	1,186.86	0.30
25-Dec-18	1,261.58	0.32
26-Dec-18	1,226.67	0.33
27-Dec-18	1,191.48	0.32
28-Dec-18	1,173.71	0.32
29-Dec-18	1,249.02	0.30
30-Dec-18	1,286.23	0.30
31-Dec-18	1,278.96	0.30

	Total m3	656,755.99	
	Average	1,799.33	0.27
30-Jul-18	Daily Max m3	3,570.21	
26-Sep-18	Daily Min m3	1,001.48	

Appendix II

Your P.O. #: 2400
Your C.O.C. #: 545422-01-01

Attention: Jeff Westlake

VILLAGE OF PEMBERTON
Box 100
7400 Prospect St
Pemberton, BC
CANADA V0N 2L0

Report Date: 2018/02/01

Report #: R2508493

Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

MAXXAM JOB #: B805966

Received: 2018/01/25, 08:15

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity - Water	4	2018/01/26	2018/01/26	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	3	N/A	2018/01/25	BBY6SOP-00011	SM 22 4500-Cl- E m
Chloride by Automated Colourimetry	1	N/A	2018/01/26	BBY6SOP-00011	SM 22 4500-Cl- E m
Colour (True) by Kone Lab	4	N/A	2018/01/25	BBY6SOP-00057	SM 22 2120 C m
Conductance - water	2	2018/01/26	2018/01/26	BBY6SOP-00026	SM 22 2510 B m
Conductance - water	2	2018/01/26	2018/01/27	BBY6SOP-00026	SM 22 2510 B m
Fluoride	4	N/A	2018/01/27	BBY6SOP-00048	SM 22 4500-F C m
Hardness Total (calculated as CaCO ₃) (1)	4	N/A	2018/01/26	BBY WI-00033	Auto Calc
Mercury (Total) by CVAF	4	2018/01/25	2018/01/25	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	4	N/A	2018/01/26	BBY WI-00033	Auto Calc
Elements by CRC ICPMS (total)	4	N/A	2018/01/25	BBY7SOP-00003,	EPA 6020b R2 m
Nitrate + Nitrite (N)	4	N/A	2018/01/25	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrite (N) by CFA	4	N/A	2018/01/25	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	4	N/A	2018/01/26	BBY WI-00033	Auto Calc
pH Water (2)	4	2018/01/26	2018/01/26	BBY6SOP-00026	SM 22 4500-H+ B m
Sulphate by Automated Colourimetry	4	N/A	2018/01/25	BBY6SOP-00017	SM 22 4500-SO42- E m
Total Dissolved Solids (Filt. Residue)	4	2018/01/26	2018/01/31	BBY6SOP-00033	SM 22 2540 C m
Total Trihalomethanes Calculation	4	N/A	2018/01/27	BBY WI-00033	Auto Calc
Turbidity	4	N/A	2018/01/25	BBY6SOP-00027	SM 22 2130 B m
VOCs, VH, F1, LH in Water by HS GC/MS	4	N/A	2018/01/26	BBY8SOP-00009/11/12	BCMOE BCLM Jul 2017
Volatile HC-BTEX	4	N/A	2018/01/27	BBY WI-00033	Auto Calc

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected.

Your P.O. #: 2400
Your C.O.C. #: 545422-01-01

Attention: Jeff Westlake

VILLAGE OF PEMBERTON
Box 100
7400 Prospect St
Pemberton, BC
CANADA V0N 2L0

Report Date: 2018/02/01

Report #: R2508493

Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

MAXXAM JOB #: B805966

Received: 2018/01/25, 08:15

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDS calculated using raw data. The rounding of final results may result in the apparent difference.

(1) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).

(2) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Morgan Melnychuk, Burnaby Project Manager

Email: MMelnychuk@maxxam.ca

Phone# (604)638-8034 Ext:8034

=====

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B805966
Report Date: 2018/02/01

VILLAGE OF PEMBERTON
Your P.O. #: 2400

VOLATILE ORGANICS BY GC-MS (WATER)

Maxxam ID			SW0689	SW0690	SW0691	SW0692		
Sampling Date			2018/01/24 09:00	2018/01/24 08:00	2018/01/24 08:30	2018/01/24 08:15		
COC Number			545422-01-01	545422-01-01	545422-01-01	545422-01-01		
	UNITS	MAC	WELL #2	WELL #3	OAK ST	INDUSTRIAL PARK	RDL	QC Batch

Volatiles

Total Trihalomethanes	ug/L	100	<1.0	<1.0	2.3	<1.0	1.0	8893977
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							

RDL = Reportable Detection Limit

Maxxam Job #: B805966

Report Date: 2018/02/01

VILLAGE OF PEMBERTON

Your P.O. #: 2400

DRINKING WATER PACKAGE (WATER)

Maxxam ID					SW0689		SW0690		
Sampling Date					2018/01/24 09:00		2018/01/24 08:00		
COC Number					545422-01-01		545422-01-01		
	UNITS	MAC	AO	OG	WELL #2	QC Batch	WELL #3	RDL	QC Batch
ANIONS									
Nitrite (N)	mg/L	1	-	-	<0.0050	8894995	<0.0050	0.0050	8894995
Calculated Parameters									
Total Hardness (CaCO ₃)	mg/L	-	-	-	65.8	8893629	25.0	0.50	8893629
Nitrate (N)	mg/L	10	-	-	0.193	8893975	0.102	0.020	8893975
Misc. Inorganics									
Fluoride (F)	mg/L	1.5	-	-	0.022	8896090	<0.020	0.020	8896090
Alkalinity (Total as CaCO ₃)	mg/L	-	-	-	30.3	8895794	12.7	1.0	8895790
Alkalinity (PP as CaCO ₃)	mg/L	-	-	-	<1.0	8895794	<1.0	1.0	8895790
Bicarbonate (HCO ₃)	mg/L	-	-	-	36.9	8895794	15.5	1.0	8895790
Carbonate (CO ₃)	mg/L	-	-	-	<1.0	8895794	<1.0	1.0	8895790
Hydroxide (OH)	mg/L	-	-	-	<1.0	8895794	<1.0	1.0	8895790
Anions									
Dissolved Sulphate (SO ₄)	mg/L	-	500	-	17.0	8895473	8.4	1.0	8895473
Dissolved Chloride (Cl)	mg/L	-	250	-	29	8895471	5.7	1.0	8895471
MISCELLANEOUS									
True Colour	Col. Unit	-	15	-	8.1	8894693	<5.0	5.0	8894693
Nutrients									
Nitrate plus Nitrite (N)	mg/L	-	-	-	0.193	8894993	0.102	0.020	8894993
Physical Properties									
Conductivity	uS/cm	-	-	-	217	8895793	74.0	2.0	8895791
pH	pH	-	7.0:10.5	-	7.34	8895792	7.15		8895788
Physical Properties									
Total Dissolved Solids	mg/L	-	500	-	130	8895485	36	10	8895485
Turbidity	NTU	see remark	see remark	see remark	3.21	8894392	0.14	0.10	8894392
Elements									
Total Mercury (Hg)	ug/L	1	-	-	<0.010	8893713	<0.010	0.010	8893713
Total Metals by ICPMS									
Total Aluminum (Al)	ug/L	-	-	100	98.1	8894305	9.6	3.0	8894305
Total Antimony (Sb)	ug/L	6	-	-	<0.50	8894305	<0.50	0.50	8894305
Total Arsenic (As)	ug/L	10	-	-	0.31	8894305	<0.10	0.10	8894305
Total Barium (Ba)	ug/L	1000	-	-	39.7	8894305	14.7	1.0	8894305
Total Boron (B)	ug/L	5000	-	-	105	8894305	<50	50	8894305
Total Cadmium (Cd)	ug/L	5	-	-	0.016	8894305	0.017	0.010	8894305
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									

Maxxam Job #: B805966

Report Date: 2018/02/01

VILLAGE OF PEMBERTON

Your P.O. #: 2400

DRINKING WATER PACKAGE (WATER)

Maxxam ID					SW0689		SW0690		
Sampling Date					2018/01/24 09:00		2018/01/24 08:00		
COC Number					545422-01-01		545422-01-01		
	UNITS	MAC	AO	OG	WELL #2	QC Batch	WELL #3	RDL	QC Batch
Total Chromium (Cr)	ug/L	50	-	-	<1.0	8894305	<1.0	1.0	8894305
Total Cobalt (Co)	ug/L	-	-	-	0.55	8894305	<0.20	0.20	8894305
Total Copper (Cu)	ug/L	-	1000	-	2.65	8894305	10.7	0.20	8894305
Total Iron (Fe)	ug/L	-	300	-	744	8894305	34.1	5.0	8894305
Total Lead (Pb)	ug/L	10	-	-	0.53	8894305	0.67	0.20	8894305
Total Manganese (Mn)	ug/L	-	50	-	122	8894305	12.7	1.0	8894305
Total Molybdenum (Mo)	ug/L	-	-	-	2.5	8894305	<1.0	1.0	8894305
Total Nickel (Ni)	ug/L	-	-	-	<1.0	8894305	<1.0	1.0	8894305
Total Selenium (Se)	ug/L	50	-	-	<0.10	8894305	<0.10	0.10	8894305
Total Silicon (Si)	ug/L	-	-	-	5300	8894305	4070	100	8894305
Total Silver (Ag)	ug/L	-	-	-	<0.020	8894305	<0.020	0.020	8894305
Total Uranium (U)	ug/L	20	-	-	<0.10	8894305	<0.10	0.10	8894305
Total Vanadium (V)	ug/L	-	-	-	<5.0	8894305	<5.0	5.0	8894305
Total Zinc (Zn)	ug/L	-	5000	-	18.4	8894305	<5.0	5.0	8894305
Total Calcium (Ca)	mg/L	-	-	-	23.9	8893974	9.12	0.050	8893974
Total Magnesium (Mg)	mg/L	-	-	-	1.49	8893974	0.535	0.050	8893974
Total Potassium (K)	mg/L	-	-	-	2.25	8893974	0.910	0.050	8893974
Total Sodium (Na)	mg/L	-	200	-	12.2	8893974	3.17	0.050	8893974
Total Sulphur (S)	mg/L	-	-	-	6.5	8893974	<3.0	3.0	8893974
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									

Maxxam Job #: B805966

Report Date: 2018/02/01

VILLAGE OF PEMBERTON

Your P.O. #: 2400

DRINKING WATER PACKAGE (WATER)

Maxxam ID					SW0691		SW0692		
Sampling Date					2018/01/24 08:30		2018/01/24 08:15		
COC Number					545422-01-01		545422-01-01		
	UNITS	MAC	AO	OG	OAK ST	QC Batch	INDUSTRIAL PARK	RDL	QC Batch
ANIONS									
Nitrite (N)	mg/L	1	-	-	<0.0050	8894995	<0.0050	0.0050	8894995
Calculated Parameters									
Total Hardness (CaCO ₃)	mg/L	-	-	-	24.3	8893629	30.6	0.50	8893629
Nitrate (N)	mg/L	10	-	-	0.102	8893975	0.057	0.020	8893975
Misc. Inorganics									
Fluoride (F)	mg/L	1.5	-	-	<0.020	8896090	0.027	0.020	8896090
Alkalinity (Total as CaCO ₃)	mg/L	-	-	-	40.9	8895794	24.3	1.0	8895790
Alkalinity (PP as CaCO ₃)	mg/L	-	-	-	<1.0	8895794	<1.0	1.0	8895790
Bicarbonate (HCO ₃)	mg/L	-	-	-	49.8	8895794	29.7	1.0	8895790
Carbonate (CO ₃)	mg/L	-	-	-	<1.0	8895794	<1.0	1.0	8895790
Hydroxide (OH)	mg/L	-	-	-	<1.0	8895794	<1.0	1.0	8895790
Anions									
Dissolved Sulphate (SO ₄)	mg/L	-	500	-	8.6	8895473	8.8	1.0	8895473
Dissolved Chloride (Cl)	mg/L	-	250	-	7.0	8895783	<1.0	1.0	8895471
MISCELLANEOUS									
True Colour	Col. Unit	-	15	-	<5.0	8894693	<5.0	5.0	8894693
Nutrients									
Nitrate plus Nitrite (N)	mg/L	-	-	-	0.102	8894993	0.057	0.020	8894993
Physical Properties									
Conductivity	uS/cm	-	-	-	125	8895793	72.1	2.0	8895791
pH	pH	-	7.0:10.5	-	7.75	8895792	7.56		8895788
Physical Properties									
Total Dissolved Solids	mg/L	-	500	-	58	8895485	34	10	8895485
Turbidity	NTU	see remark	see remark	see remark	0.16	8894392	0.18	0.10	8894392
Elements									
Total Mercury (Hg)	ug/L	1	-	-	<0.010	8893713	<0.010	0.010	8893713
Total Metals by ICPMS									
Total Aluminum (Al)	ug/L	-	-	100	5.9	8894305	5.6	3.0	8894305
Total Antimony (Sb)	ug/L	6	-	-	<0.50	8894305	<0.50	0.50	8894305
Total Arsenic (As)	ug/L	10	-	-	<0.10	8894305	0.14	0.10	8894305
Total Barium (Ba)	ug/L	1000	-	-	15.2	8894305	6.0	1.0	8894305
Total Boron (B)	ug/L	5000	-	-	<50	8894305	<50	50	8894305
Total Cadmium (Cd)	ug/L	5	-	-	<0.010	8894305	<0.010	0.010	8894305
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									

Maxxam Job #: B805966

Report Date: 2018/02/01

VILLAGE OF PEMBERTON

Your P.O. #: 2400

DRINKING WATER PACKAGE (WATER)

Maxxam ID					SW0691		SW0692		
Sampling Date					2018/01/24 08:30		2018/01/24 08:15		
COC Number					545422-01-01		545422-01-01		
	UNITS	MAC	AO	OG	OAK ST	QC Batch	INDUSTRIAL PARK	RDL	QC Batch
Total Chromium (Cr)	ug/L	50	-	-	<1.0	8894305	<1.0	1.0	8894305
Total Cobalt (Co)	ug/L	-	-	-	<0.20	8894305	<0.20	0.20	8894305
Total Copper (Cu)	ug/L	-	1000	-	2.60	8894305	2.03	0.20	8894305
Total Iron (Fe)	ug/L	-	300	-	5.4	8894305	7.4	5.0	8894305
Total Lead (Pb)	ug/L	10	-	-	0.55	8894305	<0.20	0.20	8894305
Total Manganese (Mn)	ug/L	-	50	-	4.2	8894305	<1.0	1.0	8894305
Total Molybdenum (Mo)	ug/L	-	-	-	<1.0	8894305	<1.0	1.0	8894305
Total Nickel (Ni)	ug/L	-	-	-	<1.0	8894305	<1.0	1.0	8894305
Total Selenium (Se)	ug/L	50	-	-	<0.10	8894305	<0.10	0.10	8894305
Total Silicon (Si)	ug/L	-	-	-	3900	8894305	2950	100	8894305
Total Silver (Ag)	ug/L	-	-	-	<0.020	8894305	<0.020	0.020	8894305
Total Uranium (U)	ug/L	20	-	-	<0.10	8894305	<0.10	0.10	8894305
Total Vanadium (V)	ug/L	-	-	-	<5.0	8894305	<5.0	5.0	8894305
Total Zinc (Zn)	ug/L	-	5000	-	<5.0	8894305	<5.0	5.0	8894305
Total Calcium (Ca)	mg/L	-	-	-	8.92	8893974	10.6	0.050	8893974
Total Magnesium (Mg)	mg/L	-	-	-	0.503	8893974	0.979	0.050	8893974
Total Potassium (K)	mg/L	-	-	-	0.898	8893974	0.516	0.050	8893974
Total Sodium (Na)	mg/L	-	200	-	17.4	8893974	1.36	0.050	8893974
Total Sulphur (S)	mg/L	-	-	-	<3.0	8893974	<3.0	3.0	8893974
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									

Maxxam Job #: B805966

Report Date: 2018/02/01

VILLAGE OF PEMBERTON

Your P.O. #: 2400

CSR VOC + VPH IN WATER (WATER)

Maxxam ID				SW0689	SW0690	SW0691	SW0692		
Sampling Date				2018/01/24 09:00	2018/01/24 08:00	2018/01/24 08:30	2018/01/24 08:15		
COC Number				545422-01-01	545422-01-01	545422-01-01	545422-01-01		
	UNITS	MAC	AO	WELL #2	WELL #3	OAK ST	INDUSTRIAL PARK	RDL	QC Batch
Calculated Parameters									
VPH (VH6 to 10 - BTEX)	ug/L	-	-	<300	<300	<300	<300	300	8893978
Volatiles									
VH C6-C10	ug/L	-	-	<300	<300	<300	<300	300	8894397
1,1,1,2-tetrachloroethane	ug/L	-	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
1,1,1-trichloroethane	ug/L	-	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
1,1,2,2-tetrachloroethane	ug/L	-	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
1,1,2Trichloro-1,2,2Trifluoroethane	ug/L	-	-	<2.0	<2.0	<2.0	<2.0	2.0	8894397
1,1,2-trichloroethane	ug/L	-	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
1,1-dichloroethane	ug/L	-	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
1,1-dichloroethene	ug/L	14	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
1,2,3-trichlorobenzene	ug/L	-	-	<2.0	<2.0	<2.0	<2.0	2.0	8894397
1,2,4-trichlorobenzene	ug/L	-	-	<2.0	<2.0	<2.0	<2.0	2.0	8894397
1,2-dibromoethane	ug/L	-	-	<0.20	<0.20	<0.20	<0.20	0.20	8894397
1,2-dichlorobenzene	ug/L	200	3	<0.50	<0.50	<0.50	<0.50	0.50	8894397
1,2-dichloroethane	ug/L	5	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
1,2-dichloropropane	ug/L	-	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
1,3,5-trimethylbenzene	ug/L	-	-	<2.0	<2.0	<2.0	<2.0	2.0	8894397
1,3-Butadiene	ug/L	-	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
1,3-dichlorobenzene	ug/L	-	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
1,3-dichloropropane	ug/L	-	-	<1.0	<1.0	<1.0	<1.0	1.0	8894397
1,4-dichlorobenzene	ug/L	5	1	<0.50	<0.50	<0.50	<0.50	0.50	8894397
Benzene	ug/L	5	-	<0.40	<0.40	<0.40	<0.40	0.40	8894397
Bromobenzene	ug/L	-	-	<2.0	<2.0	<2.0	<2.0	2.0	8894397
Bromodichloromethane	ug/L	-	-	<1.0	<1.0	1.0	<1.0	1.0	8894397
Bromoform	ug/L	-	-	<1.0	<1.0	<1.0	<1.0	1.0	8894397
Bromomethane	ug/L	-	-	<1.0	<1.0	<1.0	<1.0	1.0	8894397
Carbon tetrachloride	ug/L	2	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
Chlorobenzene	ug/L	80	30	<0.50	<0.50	<0.50	<0.50	0.50	8894397
Chlorodibromomethane	ug/L	-	-	<1.0	<1.0	1.3	<1.0	1.0	8894397
Chloroethane	ug/L	-	-	<1.0	<1.0	<1.0	<1.0	1.0	8894397
Chloroform	ug/L	-	-	<1.0	<1.0	<1.0	<1.0	1.0	8894397
Chloromethane	ug/L	-	-	<1.0	<1.0	<1.0	<1.0	1.0	8894397
cis-1,2-dichloroethene	ug/L	-	-	<1.0	<1.0	<1.0	<1.0	1.0	8894397
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									

Maxxam Job #: B805966

Report Date: 2018/02/01

VILLAGE OF PEMBERTON

Your P.O. #: 2400

CSR VOC + VPH IN WATER (WATER)

Maxxam ID				SW0689	SW0690	SW0691	SW0692		
Sampling Date				2018/01/24 09:00	2018/01/24 08:00	2018/01/24 08:30	2018/01/24 08:15		
COC Number				545422-01-01	545422-01-01	545422-01-01	545422-01-01		
	UNITS	MAC	AO	WELL #2	WELL #3	OAK ST	INDUSTRIAL PARK	RDL	QC Batch
cis-1,3-dichloropropene	ug/L	-	-	<1.0	<1.0	<1.0	<1.0	1.0	8894397
Dichlorodifluoromethane	ug/L	-	-	<2.0	<2.0	<2.0	<2.0	2.0	8894397
Dichloromethane	ug/L	50	-	<2.0	<2.0	<2.0	<2.0	2.0	8894397
Ethylbenzene	ug/L	140	1.6	<0.40	<0.40	<0.40	<0.40	0.40	8894397
Hexachlorobutadiene	ug/L	-	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
Isopropylbenzene	ug/L	-	-	<2.0	<2.0	<2.0	<2.0	2.0	8894397
Methyl-tert-butylether (MTBE)	ug/L	-	15	<4.0	<4.0	<4.0	<4.0	4.0	8894397
Styrene	ug/L	-	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
Tetrachloroethene	ug/L	10	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
Toluene	ug/L	60	24	<0.40	<0.40	<0.40	<0.40	0.40	8894397
trans-1,2-dichloroethene	ug/L	-	-	<1.0	<1.0	<1.0	<1.0	1.0	8894397
trans-1,3-dichloropropene	ug/L	-	-	<1.0	<1.0	<1.0	<1.0	1.0	8894397
Trichloroethene	ug/L	5	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
Trichlorofluoromethane	ug/L	-	-	<4.0	<4.0	<4.0	<4.0	4.0	8894397
Vinyl chloride	ug/L	2	-	<0.50	<0.50	<0.50	<0.50	0.50	8894397
m & p-Xylene	ug/L	-	-	<0.40	<0.40	<0.40	<0.40	0.40	8894397
o-Xylene	ug/L	-	-	<0.40	<0.40	<0.40	<0.40	0.40	8894397
Xylenes (Total)	ug/L	90	20	<0.40	<0.40	<0.40	<0.40	0.40	8894397
Surrogate Recovery (%)									
1,4-Difluorobenzene (sur.)	%	-	-	103	103	89	102		8894397
4-Bromofluorobenzene (sur.)	%	-	-	87	86	76	91		8894397
D4-1,2-Dichloroethane (sur.)	%	-	-	92	94	82	97		8894397
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									

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VILLAGE OF PEMBERTON

Your P.O. #: 2400

GENERAL COMMENTS

Revised report v2 (2018/02/01): Including Drinking Water Guidelines, per client request (MM4).

MAC, AO, OG: The guidelines that have been included in this report have been taken from the Canadian Drinking Water Quality Summary Table, February 2017.

Criteria A = Maximum Acceptable Concentration (MAC) / Criteria B = Aesthetic Objectives (AO) / Criteria C = Operational Guidance Values (OG)
It is recommended to consult these guidelines when interpreting your data since there are non-numerical guidelines that are not included on this report.

Turbidity Guidelines:

1. Chemically assisted filtration: less than or equal to 0.3 NTU in 95% of the measurements or 95% of the time each month. Shall not exceed 1.0 NTU at any time.
2. Slow sand / diatomaceous earth filtration: less than or equal to 1.0 NTU in 95% of the measurements or 95% of the time each month. Shall not exceed 3.0 NTU at any time.
3. Membrane filtration: less than or equal to 0.1 NTU in 99% of the measurements made or at least 99% of the time each calendar month. Shall not exceed 0.3 NTU at any time.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

VILLAGE OF PEMBERTON

Your P.O. #: 2400

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8894397	1,4-Difluorobenzene (sur.)	2018/01/25	103	70 - 130	103	70 - 130	103	%		
8894397	4-Bromofluorobenzene (sur.)	2018/01/25	99	70 - 130	101	70 - 130	88	%		
8894397	D4-1,2-Dichloroethane (sur.)	2018/01/25	91	70 - 130	93	70 - 130	91	%		
8893713	Total Mercury (Hg)	2018/01/25	94	80 - 120	95	80 - 120	<0.010	ug/L		
8894305	Total Aluminum (Al)	2018/01/25	106	80 - 120	107	80 - 120	<3.0	ug/L	0.93	20
8894305	Total Antimony (Sb)	2018/01/25	100	80 - 120	101	80 - 120	<0.50	ug/L	NC	20
8894305	Total Arsenic (As)	2018/01/25	102	80 - 120	102	80 - 120	<0.10	ug/L	NC	20
8894305	Total Barium (Ba)	2018/01/25	101	80 - 120	101	80 - 120	<1.0	ug/L	NC	20
8894305	Total Boron (B)	2018/01/25	95	80 - 120	96	80 - 120	<50	ug/L	NC	20
8894305	Total Cadmium (Cd)	2018/01/25	100	80 - 120	100	80 - 120	<0.010	ug/L	NC	20
8894305	Total Chromium (Cr)	2018/01/25	102	80 - 120	99	80 - 120	<1.0	ug/L	NC	20
8894305	Total Cobalt (Co)	2018/01/25	103	80 - 120	101	80 - 120	<0.20	ug/L	NC	20
8894305	Total Copper (Cu)	2018/01/25	100	80 - 120	99	80 - 120	<0.20	ug/L	3.3	20
8894305	Total Iron (Fe)	2018/01/25	101	80 - 120	102	80 - 120	<5.0	ug/L	0.73	20
8894305	Total Lead (Pb)	2018/01/25	100	80 - 120	103	80 - 120	<0.20	ug/L	11	20
8894305	Total Manganese (Mn)	2018/01/25	100	80 - 120	99	80 - 120	<1.0	ug/L	NC	20
8894305	Total Molybdenum (Mo)	2018/01/25	96	80 - 120	101	80 - 120	<1.0	ug/L	NC	20
8894305	Total Nickel (Ni)	2018/01/25	103	80 - 120	102	80 - 120	<1.0	ug/L	NC	20
8894305	Total Selenium (Se)	2018/01/25	98	80 - 120	97	80 - 120	<0.10	ug/L	NC	20
8894305	Total Silicon (Si)	2018/01/25	103	80 - 120	104	80 - 120	<100	ug/L	NC	20
8894305	Total Silver (Ag)	2018/01/25	102	80 - 120	101	80 - 120	<0.020	ug/L	NC	20
8894305	Total Uranium (U)	2018/01/25	100	80 - 120	102	80 - 120	<0.10	ug/L	NC	20
8894305	Total Vanadium (V)	2018/01/25	102	80 - 120	98	80 - 120	<5.0	ug/L	NC	20
8894305	Total Zinc (Zn)	2018/01/25	101	80 - 120	101	80 - 120	<5.0	ug/L	NC	20
8894392	Turbidity	2018/01/25			101	80 - 120	<0.10	NTU	7.8	20
8894397	1,1,1,2-tetrachloroethane	2018/01/25	94	70 - 130	91	70 - 130	<0.50	ug/L		
8894397	1,1,1-trichloroethane	2018/01/25	94	70 - 130	88	70 - 130	<0.50	ug/L		
8894397	1,1,2,2-tetrachloroethane	2018/01/25	94	70 - 130	100	70 - 130	<0.50	ug/L		
8894397	1,1,2Trichloro-1,2,2Trifluoroethane	2018/01/25					<2.0	ug/L		
8894397	1,1,2-trichloroethane	2018/01/25	92	70 - 130	93	70 - 130	<0.50	ug/L		
8894397	1,1-dichloroethane	2018/01/25	89	70 - 130	86	70 - 130	<0.50	ug/L		
8894397	1,1-dichloroethene	2018/01/25	92	70 - 130	87	70 - 130	<0.50	ug/L		

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QUALITY ASSURANCE REPORT(CONT'D)

VILLAGE OF PEMBERTON
Your P.O. #: 2400

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8894397	1,2,3-trichlorobenzene	2018/01/25	92	70 - 130	96	70 - 130	<2.0	ug/L		
8894397	1,2,4-trichlorobenzene	2018/01/25	93	70 - 130	95	70 - 130	<2.0	ug/L		
8894397	1,2-dibromoethane	2018/01/25	91	70 - 130	93	70 - 130	<0.20	ug/L		
8894397	1,2-dichlorobenzene	2018/01/25	97	70 - 130	98	70 - 130	<0.50	ug/L		
8894397	1,2-dichloroethane	2018/01/25	86	70 - 130	91	70 - 130	<0.50	ug/L		
8894397	1,2-dichloropropane	2018/01/25	104	70 - 130	102	70 - 130	<0.50	ug/L		
8894397	1,3,5-trimethylbenzene	2018/01/25	88	70 - 130	97	70 - 130	<2.0	ug/L		
8894397	1,3-Butadiene	2018/01/25					<0.50	ug/L		
8894397	1,3-dichlorobenzene	2018/01/25	102	70 - 130	99	70 - 130	<0.50	ug/L		
8894397	1,3-dichloropropane	2018/01/25	93	30 - 130	95	30 - 130	<1.0	ug/L		
8894397	1,4-dichlorobenzene	2018/01/25	97	70 - 130	95	70 - 130	<0.50	ug/L		
8894397	Benzene	2018/01/25	95	70 - 130	92	70 - 130	<0.40	ug/L		
8894397	Bromobenzene	2018/01/25	95	70 - 130	93	70 - 130	<2.0	ug/L		
8894397	Bromodichloromethane	2018/01/25	95	70 - 130	92	70 - 130	<1.0	ug/L	NC	30
8894397	Bromoform	2018/01/25	87	70 - 130	91	70 - 130	<1.0	ug/L	NC	30
8894397	Bromomethane	2018/01/25	94	60 - 140	93	60 - 140	<1.0	ug/L		
8894397	Carbon tetrachloride	2018/01/25	93	70 - 130	85	70 - 130	<0.50	ug/L		
8894397	Chlorobenzene	2018/01/25	95	70 - 130	92	70 - 130	<0.50	ug/L		
8894397	Chlorodibromomethane	2018/01/25	92	70 - 130	92	70 - 130	<1.0	ug/L	NC	30
8894397	Chloroethane	2018/01/25	100	60 - 140	92	60 - 140	<1.0	ug/L		
8894397	Chloroform	2018/01/25	90	70 - 130	87	70 - 130	<1.0	ug/L	6.6	30
8894397	Chloromethane	2018/01/25	87	60 - 140	86	60 - 140	<1.0	ug/L		
8894397	cis-1,2-dichloroethene	2018/01/25	93	70 - 130	90	70 - 130	<1.0	ug/L		
8894397	cis-1,3-dichloropropene	2018/01/25	97	70 - 130	97	70 - 130	<1.0	ug/L		
8894397	Dichlorodifluoromethane	2018/01/25	76	60 - 140	72	60 - 140	<2.0	ug/L		
8894397	Dichloromethane	2018/01/25	84	70 - 130	83	70 - 130	<2.0	ug/L		
8894397	Ethylbenzene	2018/01/25	97	70 - 130	93	70 - 130	<0.40	ug/L		
8894397	Hexachlorobutadiene	2018/01/25	95	70 - 130	94	70 - 130	<0.50	ug/L		
8894397	Isopropylbenzene	2018/01/25	100	70 - 130	95	70 - 130	<2.0	ug/L		
8894397	m & p-Xylene	2018/01/25	99	70 - 130	94	70 - 130	<0.40	ug/L		
8894397	Methyl-tert-butylether (MTBE)	2018/01/25	88	70 - 130	87	70 - 130	<4.0	ug/L		
8894397	o-Xylene	2018/01/25	96	70 - 130	94	70 - 130	<0.40	ug/L		

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QUALITY ASSURANCE REPORT(CONT'D)

VILLAGE OF PEMBERTON
Your P.O. #: 2400

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8894397	Styrene	2018/01/25			76	70 - 130	<0.50	ug/L		
8894397	Tetrachloroethene	2018/01/25	97	70 - 130	94	70 - 130	<0.50	ug/L		
8894397	Toluene	2018/01/25	94	70 - 130	90	70 - 130	<0.40	ug/L		
8894397	trans-1,2-dichloroethene	2018/01/25	90	70 - 130	85	70 - 130	<1.0	ug/L		
8894397	trans-1,3-dichloropropene	2018/01/25	100	70 - 130	103	70 - 130	<1.0	ug/L		
8894397	Trichloroethene	2018/01/25	96	70 - 130	91	70 - 130	<0.50	ug/L		
8894397	Trichlorofluoromethane	2018/01/25	96	60 - 140	94	60 - 140	<4.0	ug/L		
8894397	VH C6-C10	2018/01/25			84	70 - 130	<300	ug/L		
8894397	Vinyl chloride	2018/01/25	93	60 - 140	90	60 - 140	<0.50	ug/L		
8894397	Xylenes (Total)	2018/01/25					<0.40	ug/L		
8894693	True Colour	2018/01/25			110	80 - 120	<5.0	Col. Unit	NC	20
8894993	Nitrate plus Nitrite (N)	2018/01/25	107	80 - 120	109	80 - 120	<0.020	mg/L	1.2	25
8894995	Nitrite (N)	2018/01/25	104	80 - 120	103	80 - 120	<0.0050	mg/L	NC	20
8895471	Dissolved Chloride (Cl)	2018/01/25			98	80 - 120	<1.0	mg/L		
8895473	Dissolved Sulphate (SO4)	2018/01/25			96	80 - 120	<1.0	mg/L		
8895485	Total Dissolved Solids	2018/01/31	101	80 - 120	98	80 - 120	<10	mg/L	2.5	20
8895783	Dissolved Chloride (Cl)	2018/01/26			97	80 - 120	<1.0	mg/L		
8895788	pH	2018/01/26			101	97 - 103				
8895790	Alkalinity (PP as CaCO3)	2018/01/26					<1.0	mg/L	NC	20
8895790	Alkalinity (Total as CaCO3)	2018/01/26	92	80 - 120	100	80 - 120	<1.0	mg/L	2.5	20
8895790	Bicarbonate (HCO3)	2018/01/26					<1.0	mg/L	2.5	20
8895790	Carbonate (CO3)	2018/01/26					<1.0	mg/L	NC	20
8895790	Hydroxide (OH)	2018/01/26					<1.0	mg/L	NC	20
8895791	Conductivity	2018/01/26			101	80 - 120	<2.0	uS/cm		
8895792	pH	2018/01/26			101	97 - 103			0.13	20
8895793	Conductivity	2018/01/27			100	80 - 120	<2.0	uS/cm		
8895794	Alkalinity (PP as CaCO3)	2018/01/26					<1.0	mg/L	NC	20
8895794	Alkalinity (Total as CaCO3)	2018/01/26	NC	80 - 120	96	80 - 120	<1.0	mg/L	1.9	20
8895794	Bicarbonate (HCO3)	2018/01/26					<1.0	mg/L	1.9	20
8895794	Carbonate (CO3)	2018/01/26					<1.0	mg/L	NC	20
8895794	Hydroxide (OH)	2018/01/26					<1.0	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

VILLAGE OF PEMBERTON
Your P.O. #: 2400

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8896090	Fluoride (F)	2018/01/27	100	80 - 120	100	80 - 120	<0.020	mg/L	12	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

Appendix ||

2018 Village of Pemberton Weekly Distribution System Results

Location	Date	Cl2	PH	Alkalinity	Notes
Health Centre	3/1/2018	0.31	7.6	44	
Village Office	3/1/2018	0.19	7.6	49	
Collins	3/1/2018				frozen
Plateau	3/1/2018	0.29	7.6	50	
Urdal	3/1/2018				frozen
Oak	3/1/2018	0.34	7.6	44	
Farm	3/1/2018				frozen
meadows	3/1/2018				frozen
		0.28	7.6	47	
Health Centre	8/1/2018	0.28	7.1	41	
Village Office	8/1/2018	0.35	7.1	50	
Collins	8/1/2018	0.40	7.1	49	
Plateau	8/1/2018	0.37	7.1	44	
Urdal	8/1/2018				flooded
Oak	8/1/2018	0.40	7.0	50	
Farm	8/1/2018	0.33	7.1	50	
meadows	8/1/2018	0.36	7.0	45	
		0.36	7.1	47	
Health Centre	16/1/2018	0.37	7.1	40	
Village Office	16/1/2018	0.30	7.2	49	
Collins	16/1/2018	0.37	7.1	49	
Plateau	16/1/2018	0.34	7.1	45	
Urdal	16/1/2018	0.30	7.1	39	
Oak	16/1/2018	0.36	7.1	40	
Farm	16/1/2018	0.21	7.1	45	
meadows	16/1/2018				frozen
		0.32	7.1	44	
Health Centre	22/1/2018	0.32	7.1	42	
Village Office	22/1/2018	0.28	7.2	41	
Collins	22/1/2018	0.31	7.1	45	
Plateau	22/1/2018	0.30	7.1	47	
Urdal	22/1/2018	0.31	7.1	37	
Oak	22/1/2018	0.31	7.1	42	
Farm	22/1/2018	0.27	7.1	41	
meadows	22/1/2018	0.27	7.2	44	
		0.30	7.1	42	
Health Centre	30/1/2018	0.32	7.0	54	
Village Office	30/1/2018	0.27	7.0	48	
Collins	30/1/2018	0.34	7.0	53	
Plateau	30/1/2018	0.32	7.0	51	

Urdal	30/1/2018				flooded
Oak	30/1/2018	0.31	7.0	56	
Farm	30/1/2018	0.29	7.0	45	
meadows	30/1/2018	0.34	7.0	50	
		0.31	7.0	51	
Health Centre	5/2/2018	0.29	7.2	44	
Village Office	5/2/2018	0.26	7.2	45	
Collins	5/2/2018	0.36	7.2	47	
Plateau	5/2/2018	0.36	7.2	44	
Urdal	5/2/2018				flooded
Oak	5/2/2018	0.36	7.2	47	
Farm	5/2/2018	0.35	7.2	43	
meadows	5/2/2018	0.35	7.2	45	
		0.33	7.2	45	
Health Centre	13/2/2018	0.32	7.5	55	
Village Office	13/2/2018	0.32	7.7	46	
Collins	13/2/2018				frozen
Plateau	13/2/2018	0.32	7.3	47	
Urdal	13/2/2018				frozen
Oak	13/2/2018	0.32	7.7	48	
Farm	13/2/2018				frozen
meadows	13/2/2018				frozen
		0.32	7.5	49	
Health Centre	20/2/2018	0.32	7.2	45	
Village Office	20/2/2018	0.31	7.2	48	
Collins	20/2/2018				frozen
Plateau	20/2/2018	0.33	7.2	50	
Urdal	20/2/2018				frozen
Oak	20/2/2018	0.36	7.2	51	
Farm	20/2/2018				frozen
meadows	20/2/2018				frozen
		0.33	7.2		
Health Centre	27/2/2018	0.34	7.2	43	
Village Office	27/2/2018	0.22	7.2	49	
Collins	27/2/2018	0.33	7.2	46	
Plateau	27/2/2018	0.34	7.2	51	
Urdal	27/2/2018				frozen
Oak	27/2/2018	0.33	7.2	44	
Farm	27/2/2018	0.31	7.2	49	
meadows	27/2/2018				frozen
		0.31	7.2	47	
Health Centre	5/3/2018	0.29	7.0	54	

Village Office	5/3/2018	0.32	7.0	53	
Collins	5/3/2018	0.37	7.0	51	
Plateau	5/3/2018	0.31	7.0	52	
Urdal	5/3/2018				flooded
Oak	5/3/2018	0.35	7.0	47	
Farm	5/3/2018	0.33	7.0	52	
meadows	5/3/2018				
		0.33	7.0	52	
Health Centre	20/03/2018	0.31	6.9	47	
Village Office	20/03/2018	0.32	7.0	48	
Collins	20/03/2018	0.35	7.0	48	
Plateau	20/03/2018	0.31	7.0	50	
Urdal	20/03/2018				flooded
Oak	20/03/2018	0.33	7.0	44	
Farm	20/03/2018	0.31	7.0	48	
meadows	20/03/2018	0.31	7.0	43	
		0.32	7.0	47	

Health Centre	26/03/2018	0.30	7.1	40	
Village Office	26/03/2018	0.28	6.9	35	
Collins	26/03/2018	0.32	7.1	40	
Plateau	26/03/2018	0.33	6.9	37	
Urdal	26/03/2018	0.30	7.1	40	
Oak	26/03/2018	0.31	7.2	40	
Farm	26/03/2018	0.31	7.3	43	
meadows	26/03/2018	0.25	6.9	39	
		0.30	7.1	39	
Health Centre	3/4/2018	0.29	6.9	51	
Village Office	3/4/2018	0.26	6.9	51	
Collins	3/4/2018	0.37	6.9	46	
Plateau	3/4/2018	0.32	6.9	46	
Urdal	3/4/2018	0.35	6.9	48	
Oak	3/4/2018	0.35	6.9	46	
Farm	3/4/2018	0.33	6.9	41	
meadows	3/4/2018	0.30	6.9	51	
		0.32	6.9	48	
Health Centre	9/4/2018	0.31	0.0	55	
Village Office	9/4/2018	0.23	0.0	47	
Collins	9/4/2018	0.36	0.0	49	pH analyser faulty
Plateau	9/4/2018	0.34	0.0	44	
Urdal	9/4/2018	0.35	0.0	53	
Oak	9/4/2018	0.35	0.0	49	
Farm	9/4/2018	0.33	0.0	46	

meadows	9/4/2018	0.32	0.0	50	
		0.32	0.0	49	
Health Centre	16/04/2018	0.28	7.2	54	
Village Office	16/04/2018	0.32	7.3	57	
Collins	16/04/2018	0.35	7.2	49	
Plateau	16/04/2018	0.33	7.2	50	
Urdal	16/04/2018	0.36	7.2	50	
Oak	16/04/2018	0.34	7.2	54	
Farm	16/04/2018	0.33	7.2	50	
meadows	16/04/2018	0.35	7.2	43	
		0.33	7.2	51	
Health Centre	24/04/2018	0.35	7.5	60	
Village Office	24/04/2018	0.32	7.3	70	
Collins	24/04/2018	0.34	7.3	46	
Plateau	24/04/2018	0.30	7.4	63	
Urdal	24/04/2018	0.31	7.3	48	
Oak	24/04/2018	0.31	7.4	53	
Farm	24/04/2018	0.25	7.3	53	
meadows	24/04/2018	0.29	7.3	50	
		0.31	7.3	55	
Health Centre	30/04/2018	0.28	7.2	68	
Village Office	30/04/2018	0.23	7.3	66	
Collins	30/04/2018	0.23	7.2	56	
Plateau	30/04/2018	0.30	7.3	66	
Urdal	30/04/2018	0.32	7.3	58	
Oak	30/04/2018				
Farm	30/04/2018	0.23	7.3	68	
meadows	30/04/2018	0.24	7.3	68	
		0.26	7.2	64	
Health Centre	7/5/2018	0.32	7.3	39	
Village Office	7/5/2018	0.31	7.3	56	
Collins	7/5/2018	0.37	7.3	55	
Plateau	7/5/2018	0.30	7.3	55	
Urdal	7/5/2018	0.24	7.3	55	
Oak	7/5/2018	0.43	7.3	57	
Farm	7/5/2018	0.34	7.3	56	
meadows	7/5/2018	0.29	7.3	55	
		0.33	7.3	54	
Health Centre	15/5/2018				
Village Office	15/5/2018	0.29	7.3	49	
Collins	15/5/2018	0.35	7.3	49	
Plateau	15/5/2018	0.31	7.3	40	
Urdal	15/5/2018	0.31	7.3	48	
Oak	15/5/2018	0.35	7.4	49	
Farm	15/5/2018	0.34	7.3	48	
meadows	15/5/2018	0.32	7.3	46	

		0.32	7.3	47	
Health Centre	23/5/2018	0.18	7.1	65	
Village Office	23/5/2018	0.20	7.1	42	
Collins	23/5/2018	0.26	7.1	60	
Plateau	23/5/2018	0.31	7.2	57	
Urdal	23/5/2018	0.24	7.2	48	
Oak	23/5/2018	0.27	7.1	56	
Farm	23/5/2018	0.27	7.1	62	
meadows	23/5/2018	0.32	7.2	60	
		0.26	7.1	56	
Health Centre	28/5/2018	0.18	6.7	44	
Village Office	28/5/2018	0.24	6.7	43	
Collins	28/5/2018	0.31	6.7	41	
Plateau	28/5/2018	0.26	6.9	60	
Urdal	28/5/2018	0.18	6.8	56	
Oak	28/5/2018	0.29	6.7	45	
Farm	28/5/2018	0.25	6.9	47	
meadows	28/5/2018	0.27	6.9	55	
		0.25	6.8	49	
Health Centre	4/6/2018	0.32	7.1	36	
Village Office	4/6/2018	0.36	7.1	30	
Collins	4/6/2018	0.42	7.1	41	
Plateau	4/6/2018	0.31	7.1	41	
Urdal	4/6/2018	0.35	7.1	43	
Oak	4/6/2018	0.40	7.1	37	
Farm	4/6/2018	0.33	7.1	39	
meadows	4/6/2018	0.36	7.1	38	
		0.36	7.1	38	
Health Centre	18/6/2018	0.29	7.3	68	
Village Office	18/6/2018	0.29	7.2	75	
Collins	18/6/2018	0.34	7.3	74	
Plateau	18/6/2018	0.28	7.2	72	
Urdal	18/6/2018	0.29	7.2	72	
Oak	18/6/2018	0.32	7.4	68	
Farm	18/6/2018	0.33	7.2	64	
meadows	18/6/2018	0.30	7.2	72	
		0.31	7.3	71	
Health Centre	4/7/2018	0.31	7.2	45	
Village Office	4/7/2018	0.33	7.2	43	
Collins	4/7/2018	0.40	7.2	43	
Plateau	4/7/2018	0.36	7.2	45	
Urdal	4/7/2018	0.34	7.2	45	
Oak	4/7/2018	0.38	7.2	45	
Farm	4/7/2018	0.32	7.2	51	
meadows	4/7/2018	0.38	7.2	45	
		0.35	7.2	45	
Health Centre	10/7/2018	0.32	7.2	50	

Village Office	10/7/2018	0.33	7.2	48	
Collins	10/7/2018	0.41	7.2	48	
Plateau	10/7/2018	0.35	7.2	52	
Urdal	10/7/2018	0.37	7.2	48	
Oak	10/7/2018	0.38	7.2	46	
Farm	10/7/2018	0.35	7.2	48	
meadows	10/7/2018	0.36	7.2	52	
		0.36	7.2	49	
Health Centre	16/7/2018	0.33	7.2	55	
Village Office	16/7/2018				
Collins	16/7/2018	0.38	7.2	47	
Plateau	16/7/2018	0.34	7.2	47	
Urdal	16/7/2018				
Oak	16/7/2018	0.39	7.2	47	
Farm	16/7/2018	0.35	7.2	46	
meadows	16/7/2018	0.31	7.2	46	
		0.35	7.2	48	
Health Centre	23/7/2018	0.33	7.3	53	
Village Office	23/7/2018	0.32	7.3	49	
Collins	23/7/2018	0.33	7.3	56	
Plateau	23/7/2018	0.32	7.3	48	
Urdal	23/7/2018	0.29	7.3	51	
Oak	23/7/2018	0.37	7.3	56	
Farm	23/7/2018	0.35	7.3	54	
meadows	23/7/2018	0.36	7.3	53	
		0.33	7.3	53	
Health Centre	31/7/2018	0.34	7.2	40	
Village Office	31/7/2018				
Collins	31/7/2018	0.43	7.2	36	
Plateau	31/7/2018	0.36	7.1	53	
Urdal	31/7/2018	0.37	7.1	53	
Oak	31/7/2018	0.36	7.1	36	
Farm	31/7/2018	0.36	7.2	49	
meadows	31/7/2018	0.34	7.2	54	
		0.37	7.1	46	
Health Centre	7/8/2018	0.25	6.6	24	
Village Office	7/8/2018	0.28	6.6	22	
Collins	7/8/2018	0.33	6.6	24	
Plateau	7/8/2018	0.33	6.6	20	Equipment Maintenance
Urdal	7/8/2018	0.32	6.6	26	
Oak	7/8/2018	0.34	5.6	22	
Farm	7/8/2018	0.38	6.6	20	
meadows	7/8/2018	0.32	6.5	21	
		0.32	6.4	22	
Health Centre	13/8/2018	0.25	7.0	21	
Village Office	13/8/2018	0.24	6.9	24	
Collins	13/8/2018	0.40	7.0	22	

Plateau	13/8/2018	0.35	7.0	24	
Urdal	13/8/2018	0.37	7.0	23	
Oak	13/8/2018	0.40	7.0	22	
Farm	13/8/2018	0.36	7.0	23	
meadows	13/8/2018	0.33	7.0	22	
		0.34	7.0	23	
Health Centre	20/8/2018	0.26	7.1	57	
Village Office	20/8/2018	0.27	7.3	61	
Collins	20/8/2018	0.46	7.3	65	
Plateau	20/8/2018	0.28	7.3	65	
Urdal	20/8/2018	0.35	7.3	66	
Oak	20/8/2018	0.29	7.3	62	
Farm	20/8/2018	0.36	7.2	61	
meadows	20/8/2018	0.32	7.3	61	
		0.32	7.3	62	
Health Centre	27/8/2018	0.27	7.2	49	
Village Office	27/8/2018	0.30	7.2	51	
Collins	27/8/2018	0.35	7.2	50	
Plateau	27/8/2018	0.30	7.2	47	
Urdal	27/8/2018	0.33	7.2	59	
Oak	27/8/2018	0.30	7.2	54	
Farm	27/8/2018	0.33	7.2	50	
meadows	27/8/2018	0.29	7.2	47	
		0.31	7.2	51	
Health Centre	4/9/2018	0.25	7.1	48	
Village Office	4/9/2018	0.27	7.1	47	
Collins	4/9/2018	0.35	7.1	48	
Plateau	4/9/2018	0.28	7.2	45	
Urdal	4/9/2018	0.28	7.2	48	
Oak	4/9/2018	0.34	7.2	52	
Farm	4/9/2018	0.33	7.1	47	
meadows	4/9/2018	0.28	7.1	49	
		0.30	7.1	48	
Health Centre	10/9/2018	0.28	7.1	59	
Village Office	10/9/2018	0.23	7.1	54	
Collins	10/9/2018	0.29	7.1	56	
Plateau	10/9/2018	0.26	7.1	58	
Urdal	10/9/2018	0.28	7.0	51	
Oak	10/9/2018	0.30	7.0	54	
Farm	10/9/2018	0.27	7.1	57	
meadows	10/9/2018	0.28	7.1	53	
		0.27	7.1	55	
Health Centre	18/9/2018	0.26	7.0	58	
Village Office	18/9/2018	0.28	7.1	57	
Collins	18/9/2018	0.34	7.1	53	
Plateau	18/9/2018	0.26	7.1	58	
Urdal	18/9/2018	0.28	7.1	48	

Oak	18/9/2018	0.30	7.1	58	
Farm	18/9/2018	0.22	7.1	54	
meadows	18/9/2018	0.25	7.1	56	
		0.27	7.1	55	
Health Centre	24/9/2018	0.29	7.1	53	
Village Office	24/9/2018	0.29	7.0	49	
Collins	24/9/2018	0.30	7.1	55	
Plateau	24/9/2018	0.26	6.9	56	
Urdal	24/9/2018	0.25	7.1	54	
Oak	24/9/2018	0.32	7.1	56	
Farm	24/9/2018	0.24	7.1	64	
meadows	24/9/2018	0.25	7.1	64	
		0.28	7.1	56	
Health Centre	2/10/2018	0.23	7.1	53	
Village Office	2/10/2018	0.27	7.2	56	
Collins	2/10/2018	0.32	7.1	52	
Plateau	2/10/2018	0.26	7.2	52	
Urdal	2/10/2018	0.36	7.1	47	
Oak	2/10/2018	0.31	7.1	52	
Farm	2/10/2018	0.23	7.1	52	
meadows	2/10/2018	0.21	7.1	52	
		0.27	7.1	52	
Health Centre	9/10/2018	0.23	7.1	53	
Village Office	9/10/2018	0.31	7.2	55	
Collins	9/10/2018	0.36	7.1	66	
Plateau	9/10/2018	0.29	7.2	58	
Urdal	9/10/2018	0.29	7.1	58	
Oak	9/10/2018	0.31	7.2	50	
Farm	9/10/2018	0.28	7.1	58	
meadows	9/10/2018	0.27	7.1	58	
		0.29	7.1	57	
Health Centre	15/10/2018	0.27	7.1	54	
Village Office	15/10/2018	0.22	7.1	63	
Collins	15/10/2018	0.33	7.2	56	
Plateau	15/10/2018	0.25	7.1	55	
Urdal	15/10/2018	0.29	7.1	56	
Oak	15/10/2018	0.27	7.1	62	
Farm	15/10/2018	0.25	7.1	67	
meadows	15/10/2018	0.21	7.2	52	
		0.26	7.1	58	
Health Centre	22/10/2018	0.22	7.1	62	
Village Office	22/10/2018	0.22	7.1	57	
Collins	22/10/2018	0.31	7.1	61	
Plateau	22/10/2018	0.28	7.1	60	
Urdal	22/10/2018	0.26	7.1	59	
Oak	22/10/2018	0.27	7.1	56	
Farm	22/10/2018	0.18	7.1	57	

meadows	22/10/2018	0.25	7.1	53	
		0.25	7.1	58	
Health Centre	28/10/2018	0.22	7.1	50	
Village Office	28/10/2018	0.10	7.1	55	
Collins	28/10/2018	0.32	7.1	51	
Plateau	28/10/2018	0.22	7.2	49	
Urdal	28/10/2018	0.25	7.1	52	
Oak	28/10/2018	0.29	7.2	54	
Farm	28/10/2018	0.25	7.1	54	
meadows	28/10/2018	0.21	7.1	52	
		0.23	7.1	52	
Health Centre	5/11/2018	0.22	7.1	52	
Village Office	5/11/2018	0.10	7.1	61	
Collins	5/11/2018	0.32	7.1	57	
Plateau	5/11/2018	0.22	7.2	53	
Urdal	5/11/2018	0.25	7.1	59	
Oak	5/11/2018	0.29	7.2	59	
Farm	5/11/2018	0.25	7.1	56	
meadows	5/11/2018	0.21	7.1	52	
		0.23	7.1	56	
Health Centre	13/11/2018	0.24	7.2	63	
Village Office	13/11/2018	0.21	7.2	59	
Collins	13/11/2018				Frozen
Plateau	13/11/2018	0.25	7.3	62	
Urdal	13/11/2018				Frozen
Oak	13/11/2018	0.29	7.2	53	
Farm	13/11/2018				Frozen
meadows	13/11/2018				Frozen
		0.25	7.2	59	
Health Centre	19/11/2018	0.19	7.1	60	
Village Office	19/11/2018	0.23	7.2	58	
Collins	19/11/2018				Frozen
Plateau	19/11/2018	0.20	7.2	62	
Urdal	19/11/2018				Frozen
Oak	19/11/2018	0.25	7.2	56	
Farm	19/11/2018				Frozen
meadows	19/11/2018				Frozen
		0.22	7.2	59	
Health Centre	26/11/2018	0.29	7.2	46	
Village Office	26/11/2018	0.24	7.2	44	
Collins	26/11/2018	0.31	7.3	52	
Plateau	26/11/2018	0.25	7.2	49	
Urdal	26/11/2018	0.27	7.3	49	
Oak	26/11/2018	0.29	7.3	56	
Farm	26/11/2018	0.24	7.2	49	
meadows	26/11/2018	0.26	7.2	63	
		0.27	7.2	51	

Health Centre	3/12/2018	0.29	7.3	72	
Village Office	3/12/2018	0.26	7.3	71	
Collins	3/12/2018				Frozen
Plateau	3/12/2018	0.31	7.2	58	
Urdal	3/12/2018				Frozen
Oak	3/12/2018	0.27	7.2	71	
Farm	3/12/2018				Frozen
meadows	3/12/2018				Frozen
		0.28	7.3	68	
Health Centre	3/12/2018	0.27	7.2	47	
Village Office	3/12/2018	0.28	7.3	52	
Collins	3/12/2018				Frozen
Plateau	3/12/2018	0.27	7.2	58	
Urdal	3/12/2018				Frozen
Oak	3/12/2018	0.27	7.3	50	
Farm	3/12/2018				Frozen
meadows	3/12/2018				Frozen
		0.27	7.3	52	
Health Centre	18/12/2018	0.28	7.6	47	
Village Office	18/12/2018	0.24	7.2	46	
Collins	18/12/2018	0.32	7.2	47	
Plateau	18/12/2018	0.25	7.2	45	
Urdal	18/12/2018				Buried
Oak	18/12/2018	0.29	7.2	47	
Farm	18/12/2018	0.27	7.2	47	
meadows	18/12/2018	0.27	7.2	45	
		0.27	7.3	46	
Health Centre	28/12/2018	0.28	7.6	47	
Village Office	28/12/2018	0.24	7.2	46	
Collins	28/12/2018	0.32	7.2	47	
Plateau	28/12/2018	0.25	7.2	45	
Urdal	28/12/2018				Buried
Oak	28/12/2018	0.29	7.2	47	
Farm	28/12/2018	0.27	7.2	47	
meadows	28/12/2018	0.27	7.2	45	
		0.27	7.3	46	

Appendix V

Sample Range Report

Vancouver Coastal Health

Facility Name: Pemberton Village Water Works
Date Range: Jan 1 2018 to Dec 31 2018

Operator

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Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>1403 Portage Road - audit site - PHN office tap, Pemberton Health Centre</u>				
	1/30/2018	L1	L1	
	2/20/2018	L1	L1	
	4/3/2018	L1	L1	
	4/9/2018	L1	L1	
	4/16/2018	L1	L1	
	5/15/2018	L1	L1	
	6/12/2018	L1	L1	
	6/26/2018	L1	L1	
	7/4/2018	L1	L1	
	7/31/2018	L1	L1	
	9/4/2018	L1	L1	
	11/13/2018	L1	L1	
	11/19/2018	L1	L1	
	11/26/2018	L1	L1	
	12/3/2018	L1	L1	
	12/10/2018	L1	L1	
	12/18/2018	L1	L1	
	Total Positive :	0	0	
<u>Reservoir South, Pemberton</u>				
	10/1/2018	L1	L1	
	Total Positive :	0	0	
<u>Oak Street At High School, Pemberton</u>				
	1/3/2018	L1	L1	
	1/8/2018	L1	L1	
	1/16/2018	L1	L1	
	1/22/2018	L1	L1	
	1/30/2018	L1	L1	
	2/5/2018	L1	L1	
	2/13/2018	L1	L1	
	2/20/2018	L1	L1	

2/27/2018	L1	L1
3/5/2018	L1	L1
3/12/2018	L1	L1
3/20/2018	L1	L1
3/26/2018	L1	L1
4/3/2018	L1	L1
4/9/2018	L1	L1
4/16/2018	L1	L1
4/25/2018	L1	L1
4/30/2018	L1	L1
5/7/2018	L1	L1
5/15/2018	L1	L1
5/23/2018	L1	L1
5/28/2018	L1	L1
6/4/2018	L1	L1
6/12/2018	L1	L1
6/18/2018	L1	L1
6/26/2018	L1	L1
7/4/2018	L1	L1
7/10/2018	L1	L1
7/16/2018	L1	L1
7/23/2018	L1	L1
7/31/2018	L1	L1
8/7/2018	L1	L1
8/13/2018	L1	L1
8/20/2018	L1	L1
8/27/2018	L1	L1
9/4/2018	L1	L1
9/10/2018	L1	L1
9/18/2018	L1	L1
9/24/2018	L1	L1
10/2/2018	L1	L1
10/9/2018	L1	L1
10/15/2018	L1	L1
10/22/2018	L1	L1
10/29/2018	L1	L1
11/5/2018	L1	L1
11/13/2018	L1	L1
11/19/2018	L1	L1
11/26/2018	L1	L1
12/3/2018	L1	L1
12/10/2018	L1	L1
12/18/2018	<u>L1</u>	<u>L1</u>
Total Positive :	0	0

<u>Treatment</u> <u>Plant/Airport Rd.,</u> <u>Pemberton</u>		
1/3/2018	L1	L1
1/8/2018	L1	L1
1/16/2018	L1	L1
1/22/2018	L1	L1
1/30/2018	L1	L1
2/5/2018	L1	L1

2/13/2018	L1	L1
2/20/2018	L1	L1
2/27/2018	L1	L1
3/5/2018	L1	L1
3/12/2018	L1	L1
3/19/2018	L1	L1
3/26/2018	L1	L1
4/3/2018	L1	L1
4/9/2018	L1	L1
4/16/2018	L1	L1
4/24/2018	L1	L1
4/30/2018	L1	L1
5/7/2018	L1	L1
5/15/2018	L1	L1
5/23/2018	L1	L1
5/28/2018	L1	L1
6/4/2018	L1	L1
6/12/2018	L1	L1
6/18/2018	L1	L1
6/26/2018	L1	L1
7/4/2018	L1	L1
7/10/2018	L1	L1
7/16/2018	L1	L1
7/23/2018	L1	L1
7/31/2018	L1	L1
8/7/2018	L1	L1
8/13/2018	L1	L1
8/20/2018	L1	L1
8/27/2018	L1	L1
9/4/2018	L1	L1
9/10/2018	L1	L1
9/18/2018	L1	L1
9/24/2018	L1	L1
10/2/2018	L1	L1
10/9/2018	L1	L1
10/15/2018	L1	L1
10/22/2018	L1	L1
10/29/2018	L1	L1
11/5/2018	L1	L1
11/13/2018	L1	L1
11/19/2018	L1	L1
11/26/2018	L1	L1
12/3/2018	L1	L1
12/10/2018	L1	L1
12/18/2018	<u>L1</u>	<u>L1</u>
Total Positive :	0	0

Pemberton Plateau.
Pemberton

1/3/2018	L1	L1
1/8/2018	L1	L1
1/16/2018	L1	L1
1/22/2018	L1	L1
1/30/2018	L1	L1

2/5/2018	L1	L1
2/13/2018	L1	L1
2/20/2018	L1	L1
2/27/2018	L1	L1
3/5/2018	L1	L1
3/12/2018	L1	L1
3/20/2018	L1	L1
3/26/2018	L1	L1
4/3/2018	L1	L1
4/9/2018	L1	L1
4/16/2018	L1	L1
4/24/2018	L1	L1
4/30/2018	L1	L1
5/7/2018	L1	L1
5/15/2018	L1	L1
5/23/2018	L1	L1
5/28/2018	L1	L1
6/4/2018	L1	L1
6/12/2018	L1	L1
6/18/2018	L1	L1
6/26/2018	L1	L1
7/4/2018	L1	L1
7/10/2018	L1	L1
7/16/2018	L1	L1
7/23/2018	L1	L1
7/31/2018	L1	L1
8/7/2018	L1	L1
8/13/2018	L1	L1
8/20/2018	L1	L1
8/27/2018	L1	L1
9/4/2018	L1	L1
9/10/2018	L1	L1
9/18/2018	L1	L1
9/24/2018	L1	L1
10/2/2018	L1	L1
10/9/2018	L1	L1
10/15/2018	L1	L1
10/22/2018	L1	L1
10/29/2018	L1	L1
11/5/2018	L1	L1
11/13/2018	L1	L1
11/19/2018	L1	L1
11/26/2018	L1	L1
12/3/2018	L1	L1
12/10/2018	L1	L1
12/18/2018	<u>L1</u>	<u>L1</u>
Total Positive :	0	0

Ad hoc /
miscellaneous site,
Pemberton

1/10/2018	L1	L1
Total Positive :	0	0

Pemberton Health
Center, 1403
Portage Road,
Pemberton, B.C.

1/3/2018	L1	L1
1/8/2018	L1	L1
1/16/2018	L1	L1
1/22/2018	L1	L1
2/5/2018	L1	L1
2/13/2018	L1	L1
2/27/2018	L1	L1
3/5/2018	L1	L1
3/12/2018	L1	L1
3/20/2018	L1	L1
3/26/2018	L1	L1
4/24/2018	L1	L1
4/30/2018	L1	L1
5/7/2018	L1	L1
5/23/2018	L1	L1
5/28/2018	L1	L1
6/4/2018	L1	L1
6/18/2018	L1	L1
7/10/2018	L1	L1
7/23/2018	L1	L1
8/7/2018	L1	L1
8/13/2018	L1	L1
8/20/2018	L1	L1
8/27/2018	L1	L1
9/10/2018	L1	L1
9/18/2018	L1	L1
9/24/2018	L1	L1
10/2/2018	L1	L1
10/9/2018	L1	L1
10/15/2018	L1	L1
10/22/2018	L1	L1
10/29/2018	L1	L1
11/5/2018	L1	L1
Total Positive :	0	0

Village Office, 7410
Prospect

1/3/2018	L1	L1
1/8/2018	L1	L1
1/16/2018	L1	L1
1/22/2018	L1	L1
1/30/2018	L1	L1
2/5/2018	L1	L1
2/13/2018	L1	L1
2/20/2018	L1	L1
2/27/2018	L1	L1
3/5/2018	L1	L1
3/12/2018	L1	L1
3/20/2018	L1	L1

3/26/2018	L1	L1
4/3/2018	L1	L1
4/9/2018	L1	L1
4/16/2018	L1	L1
4/24/2018	L1	L1
4/30/2018	L1	L1
5/7/2018	L1	L1
5/15/2018	L1	L1
5/23/2018	L1	L1
5/28/2018	L1	L1
6/4/2018	L1	L1
6/12/2018	L1	L1
6/18/2018	L1	L1
6/26/2018	L1	L1
7/4/2018	L1	L1
7/10/2018	L1	L1
7/16/2018	L1	L1
7/23/2018	L1	L1
7/31/2018	L1	L1
8/7/2018	L1	L1
8/13/2018	L1	L1
8/20/2018	L1	L1
8/27/2018	L1	L1
9/4/2018	L1	L1
9/10/2018	L1	L1
9/18/2018	L1	L1
9/24/2018	L1	L1
10/2/2018	L1	L1
10/9/2018	L1	L1
10/15/2018	L1	L1
10/22/2018	L1	L1
10/29/2018	L1	L1
11/5/2018	L1	L1
11/13/2018	L1	L1
11/19/2018	L1	L1
11/26/2018	L1	L1
12/3/2018	L1	L1
12/10/2018	L1	L1
12/18/2018	<u>L1</u>	<u>L1</u>
Total Positive :	0	0

Result Values: **E - estimated** **L - less than** **G - greater than**

Samples that contain total coliform:	0	0.00% of total
Samples that contain e. coli:	0	0.00% of total
Samples that contain fecal coliform:	0	0.00% of total
Number of consecutive samples that contain total coliform:	0	
Number of samples that contain total coliform in last 30 days:	0/0	
Total number of samples:	256	

Comments:

Sample Range Report

Vancouver Coastal Health

Facility Name: Pemberton North Water System
Date Range: Jan 1 2018 to Dec 31 2018

Operator Utilities Department-SLRD
P.O. Box 219
Pemberton, BC V0N 2L0

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>1428 Pemberton</u> <u>Farm Road,</u> <u>Adjacent to 1428</u> <u>Pemberton Farm</u> <u>Road</u>	1/8/2018	L1	L1	
	1/16/2018	L1	L1	
	1/22/2018	L1	L1	
	1/30/2018	L1	L1	
	2/5/2018	L1	L1	
	2/27/2018	L1	L1	
	3/5/2018	L1	L1	
	3/20/2018	L1	L1	
	3/26/2018	L1	L1	
	4/3/2018	L1	L1	
	4/9/2018	L1	L1	
	4/16/2018	L1	L1	
	4/25/2018	L1	L1	
	4/30/2018	L1	L1	
	5/7/2018	L1	L1	
	5/15/2018	L1	L1	
	5/23/2018	L1	L1	
	5/28/2018	L1	L1	
	6/4/2018	L1	L1	
	6/12/2018	L1	L1	
	6/18/2018	L1	L1	
	6/26/2018	L1	L1	
	7/4/2018	L1	L1	
	7/10/2018	L1	L1	
	7/16/2018	L1	L1	
	7/23/2018	L1	L1	
	7/31/2018	L1	L1	
	8/7/2018	L1	L1	
	8/13/2018	L1	L1	
	8/20/2018	L1	L1	
	8/27/2018	L1	L1	
	9/4/2018	L1	L1	
	9/10/2018	L1	L1	
	9/18/2018	L1	L1	
	9/24/2018	L1	L1	
	10/2/2018	L1	L1	

10/9/2018	L1	L1
10/15/2018	L1	L1
10/22/2018	L1	L1
10/29/2018	L1	L1
11/5/2018	L1	L1
11/26/2018	L1	L1
12/18/2018	<u>L1</u>	<u>L1</u>
Total Positive :	0	0

7493 Urdal Road,
Adjacent to 7493
Urdal Road

1/16/2018	L1	L1
1/22/2018	L1	L1
3/26/2018	L1	L1
4/3/2018	L1	L1
4/9/2018	L1	L1
4/16/2018	L1	L1
4/25/2018	L1	L1
4/30/2018	L1	L1
5/7/2018	L1	L1
5/15/2018	L1	L1
5/23/2018	L1	L1
5/28/2018	L1	L1
6/4/2018	L1	L1
6/12/2018	L1	L1
6/18/2018	L1	L1
6/26/2018	L1	L1
7/4/2018	L1	L1
7/10/2018	L1	L1
7/16/2018	L1	L1
7/23/2018	L1	L1
7/31/2018	L1	L1
8/7/2018	L1	L1
8/13/2018	L1	L1
8/20/2018	L1	L1
8/27/2018	L1	L1
9/4/2018	L1	L1
9/10/2018	L1	L1
9/18/2018	L1	L1
9/24/2018	L1	L1
10/2/2018	L1	L1
10/9/2018	L1	L1
10/15/2018	L1	L1
10/22/2018	L1	L1
10/29/2018	L1	L1
11/5/2018	L1	L1
11/13/2018	L1	L1
11/26/2018	<u>L1</u>	<u>L1</u>
Total Positive :	0	0

7620 Pemberton
Meadows Rd.

Opposite 7620PembertonMeadows Rd

1/8/2018	L1	L1
1/22/2018	L1	L1
1/30/2018	L1	L1
2/5/2018	L1	L1
3/20/2018	L1	L1
3/26/2018	L1	L1
4/3/2018	L1	L1
4/9/2018	L1	L1
4/16/2018	L1	L1
4/25/2018	L1	L1
4/30/2018	L1	L1
5/7/2018	L1	L1
5/15/2018	L1	L1
5/23/2018	L1	L1
5/28/2018	L1	L1
6/4/2018	L1	L1
6/12/2018	L1	L1
6/18/2018	L1	L1
6/26/2018	L1	L1
7/4/2018	L1	L1
7/10/2018	L1	L1
7/16/2018	L1	L1
7/23/2018	L1	L1
7/31/2018	L1	L1
8/7/2018	L1	L1
8/13/2018	L1	L1
8/20/2018	L1	L1
8/27/2018	L1	L1
9/4/2018	L1	L1
9/10/2018	L1	L1
9/18/2018	L1	L1
9/24/2018	L1	L1
10/2/2018	L1	L1
10/9/2018	L1	L1
10/15/2018	L1	L1
10/22/2018	L1	L1
10/29/2018	L1	L1
11/5/2018	L1	L1
11/26/2018	L1	L1
12/18/2018	L1	L1
Total Positive :	0	0

400-m South of
Collins Road, 400-m
South of Collins
Road

1/8/2018	L1	L1
1/16/2018	L1	L1
1/22/2018	L1	L1
1/30/2018	L1	L1
2/5/2018	L1	L1

2/27/2018	L1	L1
3/5/2018	L1	L1
3/12/2018	L1	L1
3/20/2018	L1	L1
3/26/2018	L1	L1
4/3/2018	L1	L1
4/9/2018	L1	L1
4/16/2018	L1	L1
4/25/2018	L1	L1
4/30/2018	L1	L1
5/7/2018	L1	L1
5/15/2018	L1	L1
5/23/2018	L1	L1
5/28/2018	L1	L1
6/4/2018	L1	L1
6/12/2018	L1	L1
6/18/2018	L1	L1
6/26/2018	L1	L1
7/16/2018	L1	L1
7/23/2018	L1	L1
7/31/2018	L1	L1
8/7/2018	L1	L1
8/13/2018	L1	L1
8/20/2018	L1	L1
8/27/2018	L1	L1
9/4/2018	L1	L1
9/10/2018	L1	L1
9/18/2018	L1	L1
9/24/2018	L1	L1
10/2/2018	L1	L1
10/9/2018	L1	L1
10/15/2018	L1	L1
10/22/2018	L1	L1
10/29/2018	L1	L1
11/5/2018	L1	L1
11/26/2018	L1	L1
12/18/2018	<u>L1</u>	<u>L1</u>
Total Positive :	0	0

Result Values: **E - estimated** **L - less than** **G - greater than**

Samples that contain total coliform:	0	0.00% of total
Samples that contain e. coli:	0	0.00% of total
Samples that contain fecal coliform:	0	0.00% of total
Number of consecutive samples that contain total coliform:	0	
Number of samples that contain total coliform in last 30 days:	0/0	
Total number of samples:	162	

Comments:

Sample Range Report

Vancouver Coastal Health

Facility Name: Pemberton Industrial Park Water System
Date Range: Jan 1 2018 to Dec 31 2018

Operator Jeff Westlake
Attn: Jeff Westlake Box 100
Pemberton, BC V0N 2L0

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>Yard Hydrant, Pemberton Industrial Park</u>				
	1/3/2018	L1	L1	
	1/8/2018	L1	L1	
	1/16/2018	L1	L1	
	1/22/2018	L1	L1	
	1/30/2018	L1	L1	
	2/5/2018	L1	L1	
	2/13/2018	L1	L1	
	2/20/2018	L1	L1	
	2/27/2018	L1	L1	
	3/5/2018	L1	L1	
	3/12/2018	L1	L1	
	3/20/2018	L1	L1	
	5/15/2018	L1	L1	
	6/26/2018	L1	L1	
	7/4/2018	L1	L1	
	8/20/2018	L1	L1	
	8/27/2018	L1	L1	
	9/18/2018	L1	L1	
	9/24/2018	L1	L1	
	10/2/2018	L1	L1	
	10/9/2018	L1	L1	
	10/15/2018	L1	L1	
	10/22/2018	L1	L1	
	10/29/2018	1	L1	
	11/5/2018	L1	L1	
	11/13/2018	L1	L1	
	11/19/2018	L1	L1	
	11/26/2018	L1	L1	
	12/3/2018	L1	L1	
	12/10/2018	<u>L1</u>	<u>L1</u>	
Total Positive :	1		0	

<u>Sample Station at Meter Chamber, Pemberton Industrial Park</u>	3/26/2018	L1	L1
-------------------------------------------------------------------------------	-----------	----	----

4/3/2018	L1	L1
4/9/2018	L1	L1
4/16/2018	L1	L1
4/24/2018	L1	L1
4/30/2018	L1	L1
5/7/2018	L1	L1
5/23/2018	L1	L1
5/28/2018	L1	L1
6/4/2018	L1	L1
6/12/2018	L1	L1
6/18/2018	L1	L1
7/10/2018	L1	L1
7/16/2018	L1	L1
7/23/2018	L1	L1
7/31/2018	L1	L1
8/7/2018	L1	L1
8/13/2018	L1	L1
9/4/2018	L1	L1
12/18/2018	<u>L1</u>	<u>L1</u>
Total Positive :	0	0

Result Values:	E - estimated	L - less than	G - greater than
Samples that contain total coliform:	1		2.00% of total
Samples that contain e. coli:	0		0.00% of total
Samples that contain fecal coliform:	0		0.00% of total
Number of consecutive samples that contain total coliform:	0		
Number of samples that contain total coliform in last 30 days:	0/0		
Total number of samples:	50		

Comments:

Environmental Health Officer

Feb 15 2019

FOR FURTHER INFORMATION PLEASE CALL: Dan Glover (604) 892-2293