



WATER TREATMENT PLANT & DISTRIBUTION SYSTEM



2017 Annual Operations Performance Report

Facility Numbers 529 & 155

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OVERVIEW

Port Hardy, with a population of 4,132 residents and over 5,000 connected to the infrastructure is located at the northern end of Vancouver Island. In May 2000 the water treatment plant was commissioned and established Port Hardy's reputation for having some of British Columbia's best water quality.

Port Hardy's source water is the Tsulquate River. The water from this river is tinted brown from tannins and other leachates. Port Hardy's Water Treatment Plant uses a Dissolved Air Flotation (DAF) system which is very effective in treating highly colored water. Treatment is achieved using ISOPAC 6 and Soda Ash to remove the color, particles, sediment and organics that are present. A filter aid, Hydrofloc 400 is added in trace amounts after the DAF treatment and prior to the filters to improve coagulation of fine particles. Filtration is done through a mixed media consisting silica sand and anthracite. Lime slurry, carbon dioxide and sodium hypochlorite are injected post filtration for alkalinity, pH adjustment and disinfection.

In 2018, the plant continued to produce a very high level of treatment providing excellent water quality to the District of Port Hardy.

PERMIT TO OPERATE

The Port Hardy water treatment plant is a Level III facility as deemed by the Environmental Operators Certification Program (EOCP), certification number 529. The distribution system is a Level III system with a certification number of 155.

CERTIFIED OPERATORS

The Operational Permit from Vancouver Island Health Authority Operational requires that a certified operator is employed to match the Water Treatment Plant Certification, a level III plant. The District currently employs a Level IV operator and two, Level III operators. The District also employs a Level III Water Distribution Operator.

Operator	Title	Certification
Joe Jewell	Utilities Supervisor	WT IV, WD III, WWT II, WWC I
Justin Reusch	Chief Operator	WT III, WD II, WWT II
Roland LeFort	Operator	WWT III, WT III
Cory Henschke	Operator	WWT I, WD II
Robert Cousins	Operator	WT I, WWT I

OPERATIONAL HIGHLIGHTS

WATER TREATMENT PLANT

Throughout 2018, there were times where due to heavy rains and high river colour events, that the water treatment process was upset. In these events, the plant is taken offline and no water is pumped to the reservoir. Water is only pumped to the reservoirs once the treatment plant's process quality is restored. This will result in lower than desired reservoir levels but quality will not be compromised.

Many capital projects were undertaken in 2018. The backup raw water pump was sent out for a rebuild this year. Upon it's return, it was put online and the main pump sent out for its rebuild. The main pump had been in service over 10 years.

New online turbidimeters were purchased to monitor raw and treated water quality. The existing turbidimeters are now obsolete and parts are becoming more difficult to find.

Spare components for the water plant's multiple Programmable Logic Controllers (PLCs) were purchased this year. The water plant incorporates 5 PLCs that monitor several hundred inputs in the process. If any portion of the PLC was to fail, the water plant process would stop, ceasing production of potable water. The original PLCs were installed in 2000 with one being replaced in 2016.

Additional highlights:

- No violations to permit in 2018
- Quarterly samples for THMs and HAAs all returned within acceptable limits
- All bacteriological testing came back within expected parameters
- Seasonal low river levels due to dry weather triggered a Stage 2 water use restriction as per Port Hardy Water Conservation Bylaw No. 06-2005.
- A Stage 3 water use restriction was triggered when the water reservoir #1 was removed and while a replacement was being constructed
- 130 ML less water was treated in 2018 compared to 2017; this is the lowest production since the water treatment plant was commissioned in 2000. This is due to the utilities crew continuing to make needed repairs and the implementation of the water conservation bylaw

WATER DISTRIBUTION SYSTEM

In 2018, the District of Port Hardy commenced on a major upgrade to the water distribution system in the Storey's Beach area. A new 2000 cubic meter (m³) reservoir was constructed on Fort Rupert Road and 3000 meters of distribution pipe was replaced. The replacement distribution pipe was also increased in size from 150mm and 250mm to 300mm and 350mm. Additional hydrants were also installed insuring a fire flow of 150 Litres/second where required. The Fort Rupert Reservoir site is equipped with backup power generation and chlorine disinfection booster pumps. The reservoir level is controlled by an altitude control valve which keeps the tank at a predetermined level within 1.5 meters. A rolling diaphragm pressure reducing valve is also installed on site to regulate the pressure in the event the reservoir is offline. The entire site can be monitored remotely from the water treatment.

A new Pressure Reducing Station (PRV) was installed at the corner of Beaver Harbour Road and Storey's Beach Road. This station reduces the mainline pressure from Storey's Beach Road to Chatham Avenue.

Also, as part of the project, Reservoir #1 at the water treatment plant was replaced. In March, the existing reservoir was taken offline. A new concrete base was poured, and new inlet and outlet valves installed. The new tank, is a 2700 cubic meter (m³) glass fused to steel (GFS) construction, has much lower maintenance requirements and a larger capacity. A new check valve system in the tank ensures better mixing of the water. The new tank was brought online in June.

The Holgrem Flats PRV station was rebuilt this summer. The original installation was in 1990 and was beginning to have some operational issues. Both valves, the pressure relief system and the electrical components were all rebuilt by the Utilities staff.

Tree and brush removal along the water mains was also a capital project this year. Keeping the watermains clear of large vegetation makes identifying and repairing leaks much easier reducing time that the community is without water. Local contractors were solicited for this work. Part of this work involved removing trees under the power line to the water treatment plant. As a result, there has been less power bumps at the water plant and less operator call outs.

Staff have also been working on the mapping project. A new set of water distribution maps are being worked on. Utilities staff have been verifying the details of maps and noting changes that are needed. The maps will then be returned and adjustments made.

Additional Highlights:

- Water meters were installed in more commercial properties in 2018
- In January, the Port McNeill PRV station was found to be badly leaking. Repair parts were ordered and installed until the new water system was completed
- The 2" water meter serving the Gwa'Sala-Nakwaxda'xw First Nation was found inoperable and a new meter was installed
- In February, brief water outages were caused twice when the contractor broke the water services to the Fort Rupert School and Fort Rupert Liftstation. Bacteriological samples were sent out with good results returned
- A new water service was installed to Fire Hall #2 at Storey's Beach in March
- All hydrants were serviced in 2018
- The fibre optic installation continued in 2018. Utilities operators continued to locate and mark our utilities. As a result, many of our service cards and maps were corrected or new cards were created. Any services that were found in need of repair were fixed
- All Utilities operators received training on the Hydroexcavation truck this year and received the required Continuing Education Units (CEUs) credits for the course

CROSS CONNECTION CONTROL

A formal Cross Connection Control program, created by Maintenance Tracking Systems Inc (MTS) was presented to the District of Port Hardy in late 2010. Currently, backflow preventers are installed in all high risk areas of the treatment plants, liftstations with a washdown hose, public sani dumps and public gardens.

WATER WISE PROGRAM CONTINUATION

A total of 178 meters are being read including commercial users and multi-family dwellings. All new homes and constructions will have meter setters installed as part of this program. Continuing public education around proposed metering/rate changes and general information on water wise initiatives was conducted and will be ongoing until all users are metered. In 2016, new watering restrictions as per Port Hardy Water Conservation Bylaw No. 06-2005 were adopted. As part of the water system upgrade in 2018, water meter setters were installed on all single family dwellings on Beaver Harbour Road as new service lines were run to the property line.

WATERSHED PROTECTION PLAN

The District of Port Hardy has taken steps to implement a watershed protection plan. The purpose of this is to create a plan that guides users in the best management and preservation of the Tsulquate River and Kains Lake watershed as a drinking water source for the District of Port Hardy. The plan will develop a public awareness, identify stakeholders, increase knowledge and public awareness of the watershed and develop procedures for an emergency response.

Water Treatment Plant / Distribution Testing													
	January	February	March	April	May	June	July	August	September	October	November	December	Total
Raw Water pH	27	24	26	26	27	30	27	27	25	27	26	26	318
Reservoir Water pH Daily Grab Sample or Continuous 7.0 - 10.5	31	28	31	30	31	30	31	31	30	31	30	31	365
Colour (Reservoir) AO: <= 15 TCU	27	24	26	26	27	25	27	27	25	27	26	26	313
Free Chlorine Residual (Reservoir) Daily Grab Sample or Continuous	31	28	31	30	31	30	31	31	30	31	30	31	365
Free Chlorine Residual Distribution Grab Sample	48	40	46	42	44	47	48	46	42	44	42	42	531
Turbidity (Distribution) Grab Samples	48	40	46	42	44	47	48	46	42	44	42	42	531
Turbidity (Filter) Grab Sample or Continuous <= 0.3 NTU in at least 95%; never > 1.0 NTU	31	28	31	30	31	30	31	31	30	31	30	31	365
Turbidity (Reservoir) Daily Grab Sample or Continuous 1 NTU Maximum in finished water	31	28	31	30	31	30	31	31	30	31	30	31	365
Escherichia Coli (<i>E.coli</i>) 11 per month Distribution, 1 Raw MAC: 0 CFU/100mL	12	14	17	12	12	40	14	12	12	12	12	12	181
Total Coliforms 11 per month Distribution, 1 Raw MAC: 0 CFU/100mL	12	14	17	12	12	40	14	12	12	12	12	12	181
Chemical and Physical Parameter Tests Once every 5 years Due 2019													0
Trihalomethanes & Haloacetic Acids (THMs & HAAs) Quarterly <0.100 mg/L annual average	1			1			1			1			4
Monthly Report 15 th of the following month	1	1	1	1	1	1	1	1	1	1	1	1	12
Annual Report Before January 31 st	1												1
Permit Violations	0	0	0	0	0	0	0	0	0	0	0	0	0

Workplace Metrics													
	January	February	March	April	May	June	July	August	September	October	November	December	Total
Safety Meetings	1	1	1	1	1	11	1	1	1	1	1	1	22
Worksite Inspections	1	1	1	1	1	1	1	1	1	1	1	1	12
Kain's Lake Dam Inspections	2	2	2	4	4	4	6	6	6	6	4	2	48
Water Service Locates	5	1	1	3	6	20	3	1	1	6	3	1	51
Water Service Repairs	5	3	2	0	3	0	6	0	1	1	0	0	21
Water Main Repairs	1	0	1	0	0	0	1	0	0	0	0	0	3
BC One Calls	14	11	16	6	17	9	8	8	40	21	16	5	171
PRV Inspections	7	0	0	0	0	1	7	0	7	0	7	0	29
ERP Exercises	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Valve Inspections	2	2	2	0	0	0	5	0	0	12	18	0	41
Mainline Valve Locates/Inspections	0	3	1	0	1	6	14	24	0	1	0	0	50
Hydrant A - Services	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrant B - Services	0	0	0	0	0	0	82	60	66	0	0	0	208

RAW AND TREATED WATER PRODUCTION

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Raw Water Pumped in ML	124	119	125	118	131	128	142	151	123	130	112	111	1513
Treated Water Production in ML	120	117	122	112	128	124	138	147	119	122	109	108	1467
Rainfall in mm	129	157	91	85	9	106.7	19.6	16	169	173.6	264.8	396.2	1616
Backwashes	36	34	34	36	37	33	39	38	32	34	36	37	426

CHEMICAL USAGE

	January	February	March	April	May	June	July	August	September	October	November	December	Total
ISOPAC 6 Coagulant in kg	3355	2847	2859	2839	2276	3302	2811	1830	4105	5357	4892	4329	40802
Soda Ash in kg	1294	1158	1033	1339	817	1067	772	250	1203	1884	1952	2066	14835
Filter Aid (LT20) in kg	1.03	0.82	0.86	0.81	1.20	1.20	1.19	0.82	0.60	0.62	0.75	0.78	10.68
Salt for Chlorine Generator in kg	363	272	363	454	400	680	499	568	776	613	431	522	5942
Liquid Sodium Hypochlorite 12% in kg	20	0	0	0	4	0	0	0	0	0	0	0	24
Lime in kg	1935	1499	1614	1853	1834	1894	2043	2045	1854	2037	2004	2018	22629
Carbon Dioxide in kg	2248	1744	1708	2415	2471	2583	3049	2904	2587	2304	2776	1717	28507

FILTERED WATER QUALITY

Month	Filter 1		Filter 2		Filter 3		Filter 4	
	Avg	Max	Avg	Max	Avg	Max	Avg	Max
January	0.04	0.29	0.05	0.29	0.12	0.29	0.04	0.29
February	0.07	0.29	0.07	0.29	0.08	0.29	0.06	0.29
March	0.04	0.29	0.04	0.29	0.04	0.29	0.04	0.29
April	0.04	0.29	0.04	0.29	0.04	0.29	0.03	0.29
May	0.03	0.29	0.03	0.29	0.03	0.29	0.02	0.29
June	0.03	0.29	0.04	0.29	0.03	0.29	0.03	0.29
July	0.03	0.17	0.04	0.29	0.03	0.24	0.02	0.22
August	0.04	0.29	0.03	0.29	0.04	0.29	0.01	0.29
September	0.03	0.29	0.04	0.29	0.03	0.25	0.03	0.19
October	0.04	0.29	0.04	0.29	0.04	0.29	0.03	0.29
November	0.03	0.29	0.04	0.29	0.03	0.29	0.02	0.29
December	0.03	0.29	0.04	0.29	0.03	0.30	0.02	0.29
Average	0.04	0.28	0.04	0.29	0.05	0.28	0.03	0.28
Minimum	0.03	0.17	0.03	0.29	0.03	0.24	0.01	0.19
Maximum	0.07	0.29	0.07	0.29	0.12	0.30	0.06	0.29

RESERVOIR EFFLUENT

Month	Flow (m ³ /hour)		Free Chlorine (mg/L)		pH		Turbidity (NTU)
	Avg	Max	Avg	Max	Avg	Max	Avg
January	128	234	1.0	1.0	7.5	7.5	0.04
February	142	313	1.0	1.1	7.5	7.6	0.02
March	138	216	1.0	1.1	7.5	7.6	0.03
April	138	216	1.1	1.2	7.5	7.6	0.05
May	151	236	1.1	1.1	7.3	7.3	0.01
June	147	198	1.0	1.1	7.4	7.4	0.10
July	160	207	1.0	1.0	7.4	7.5	0.03
August	186	370	1.0	1.0	7.4	7.5	0.06
September	152	254	1.0	1.1	7.3	7.4	0.07
October	142	183	1.0	1.1	7.3	7.4	0.10
November	133	207	0.9	1.0	7.4	7.5	0.14
December	133	331	1.0	1.0	7.4	7.5	0.10
Avg	146	247	1.0	1.1	7.4	7.5	0.06
Min	128	183	0.9	1.0	7.3	7.3	0.01
Max	186	370	1.1	1.2	7.5	7.6	0.14

Note: Data from the above tables are accumulated from online instrumentation and SCADA trending. Maximum values can be influenced by cleaning, calibrating and flushing of online instrumentation which at that time does not reflect the actual quality of the water.

DISTRIBUTION WATER QUALITY AND BACTERIOLOGICAL RESULTS

January					February					March					
Distribution Sampling					Distribution Sampling					Distribution Sampling					
Location	Date	Free Chlorine mg/L	Turbidity NTU	pH	Location	Date	Free Chlorine mg/L	Turbidity NTU	pH	Location	Date	Free Chlorine mg/L	Turbidity NTU	pH	
Chatham Avenue	01-02-18	0.7	0.14	7.7	Chatham Avenue	02-05-18	0.8	0.17	7.5	Chatham Avenue	03-06-18	0.8	0.30	7.6	
	01-09-18	0.7	0.22	7.6		02-06-18	0.7	0.11	7.8		03-13-18	0.7	0.16	7.6	
	01-16-18	0.6	0.12	7.8		02-07-18	0.7	0.21	7.6		03-20-18	0.6	0.13	7.6	
	01-23-18	0.8	0.14	7.8		02-13-18	0.8	0.14	7.6		03-27-18	0.8	0.11	7.6	
	01-30-18	0.8	0.21	7.7		02-20-18	0.8	0.25	7.6		03-28-18	0.7	0.12	7.7	
Peel Street Liftstation	01-02-18	0.8	0.13	7.5	Peel Street Liftstation	02-27-18	0.8	0.23	7.6	Peel Street Liftstation	03-06-18	0.8	0.13	7.6	
	01-09-18	0.8	0.34	7.4		02-06-18	0.7	0.13	7.7		03-13-18	0.7	0.14	7.4	
	01-16-18	0.7	0.12	7.5		02-13-18	0.7	0.19	7.4		03-20-18	0.7	0.25	7.6	
	01-23-18	0.7	0.21	7.7		02-20-18	0.9	0.16	7.6		03-27-18	0.6	0.19	7.6	
	01-30-18	0.7	0.18	7.6		02-27-18	0.6	0.16	7.6		03-06-18	0.7	0.17	7.6	
Airport Wastewater Treatment Plant	01-02-18	0.6	0.23	7.5	Airport Wastewater Treatment Plant	02-13-18	0.6	0.19	7.6	Airport Wastewater Treatment Plant	03-13-18	0.2	0.19	7.6	
	01-09-18	0.6	0.31	8.2		02-20-18	0.8	0.25	7.6		03-20-18	0.6	0.17	7.6	
	01-16-18	0.6	0.22	7.7		02-27-18	0.2	0.54	7.7		03-27-18	0.7	0.17	7.7	
	01-23-18	0.7	0.13	7.7							03-28-18	0.6	0.18	7.6	
	01-30-18	0.7	0.17	7.8							03-06-18	0.3	0.12	8.8	
Public Works Yard	01-02-18	0.9	0.22	7.4	Public Works Yard	02-06-18	1.0	0.13	7.5	Public Works Yard	03-13-18	0.5	0.15	7.8	
	01-09-18	0.9	0.14	7.4		02-13-18	0.8	0.24	7.7		03-20-18	0.9	0.15	7.6	
	01-16-18	0.6	0.28	7.9		02-20-18	0.3	0.19	8.1		03-27-18	0.9	0.15	7.7	
	01-23-18	0.6	0.13	7.9											
	01-30-18	0.5	0.42	7.9											
Eagleview School	01-02-18	0.5	0.27	8.0	Eagleview School	02-06-18	0.3	0.20	8.2	Eagleview School	03-06-18	0.3	0.29	8.0	
	01-09-18	0.5	0.16	7.9		02-13-18	0.3	0.20	8.0		03-13-18	0.3	0.41	7.9	
	01-16-18	0.5	0.16	7.9		02-20-18	0.6	0.32	7.6		3/20/2018*	0.6	0.44	7.7	
	01-23-18	0.3	0.22	7.8		02-27-18	0.8	0.11	7.5		03-27-18	0.3	0.19	8.0	
	01-30-18	0.3	0.17	7.7											
Bear Cove Reservoir	01-02-18	0.8	0.23	7.5	Bear Cove Reservoir	02-06-18	0.7	0.15	7.5	Bear Cove Reservoir	03-06-18	0.8	0.29	7.6	
	01-09-18	0.7	0.17	7.5		02-13-18	0.7	0.18	7.5		03-13-18	0.8	0.14	7.5	
	01-16-18	0.7	0.14	7.5		02-20-18	0.8	0.28	7.5		03-20-18	0.8	0.15	7.6	
	01-23-18	0.8	0.18	7.6		02-27-18	0.8	0.16	7.6		03-27-18	0.7	0.21	7.6	
	01-30-18	0.7	0.11	7.5											
Ferry Terminal	01-02-18	0.6	0.10	7.5	Ferry Terminal	02-06-18	0.7	0.19	7.5	Ferry Terminal	03-06-18	0.7	0.21	7.6	
	01-09-18	0.5	0.14	7.5		02-13-18	0.7	0.14	7.4		03-13-18	0.7	0.22	7.5	
	01-16-18	0.6	0.11	7.5		02-20-18	0.9	0.19	7.4		03-20-18	0.5	0.13	7.6	
	01-23-18	0.7	0.16	7.6		02-27-18	0.6	0.08	7.5		03-27-18	0.6	0.15	7.5	
	01-30-18	0.6	0.15	7.5											
Highway 19 PRV	01-02-18	0.8	0.25	7.5	Highway 19 PRV	02-06-18	0.7	0.17	7.6	Highway 19 PRV	03-06-18	1.0	0.31	7.7	
	01-09-18	0.9	0.22	7.4		02-13-18	1.0	0.19	7.4		03-13-18	0.8	0.15	7.5	
	01-16-18	0.9	0.15	7.4		02-20-18	1.0	0.14	7.6		03-20-18	0.8	0.15	7.6	
	01-23-18	1.0	0.19	7.7		02-27-18	1.0	0.18	7.4		03-27-18	0.9	0.14	7.6	
	01-30-18	0.8	0.12	7.6											
Average		0.7	0.19	7.6	Average		0.7	0.20	7.6	Average		0.6	0.19	7.7	
Minimum		0.3	0.10	7.4	Minimum		0.2	0.08	7.4	Minimum		0.2	0.11	7.4	
Maximum		1.0	0.42	8.2	Maximum		1.0	0.54	8.2	Maximum		1.0	0.44	8.8	
April					May					June					
Distribution Sampling					Distribution Sampling					Distribution Sampling					
Location	Date	Free Chlorine mg/L	Turbidity NTU	pH	Location	Date	Free Chlorine mg/L	Turbidity NTU	pH	Location	Date	Free Chlorine mg/L	Turbidity NTU	pH	
Chatham Avenue	04-03-18	0.9	0.16	7.5	Chatham Avenue	05-01-18	0.5	0.16	8.0	Chatham Avenue	06-05-18	0.3	0.20	7.5	
	04-05-18	0.8	0.17	7.5		05-08-18	0.7	0.18	7.9		06-12-18	0.3	0.16	7.6	
	04-10-18	0.7	0.18	7.9		05-15-18	0.4	0.15	7.9		06-19-18	0.5	0.65	7.5	
	04-17-18	0.8	0.16	7.9		05-22-18	0.6	0.14	8.1		06-26-18	0.1	0.34	7.6	
	04-24-18	0.7	0.11	7.9		05-29-18	0.6	0.20	8.3						
Peel Street Liftstation	04-03-18	0.8	0.15	7.5	Peel Street Liftstation	05-01-18	0.8	0.14	7.5	Peel Street Liftstation	06-05-18	0.7	0.15	7.5	
	04-10-18	0.8	0.15	7.7		05-08-18	0.9	0.14	7.6		06-12-18	1.0	0.51	7.6	
	04-17-18	0.8	0.12	7.5		05-15-18	0.9	0.17	7.7		06-19-18	0.5	0.78	7.5	
	04-24-18	0.9	0.45	7.6		05-22-18	0.9	0.11	7.6		06-26-18	0.8	0.21	7.6	
						05-29-18	0.9	0.15	7.7						
Airport Wastewater Treatment Plant	04-03-18	0.3	0.45	7.7	Airport Wastewater Treatment Plant	05-01-18	0.7	0.21	7.7	Airport Wastewater Treatment Plant	06-05-18	0.4	0.30	7.5	
	04-10-18	0.6	0.20	7.8		05-08-18	0.6	0.22	7.7		06-12-18	0.4	0.18	7.6	
	04-17-18	0.5	0.74	7.9		05-15-18	0.6	0.27	7.7		06-19-18	0.3	0.53	7.5	
	04-24-18	0.4	0.41	7.6		05-22-18	0.6	0.21	7.7		06-26-18	0.2	0.32	7.5	
						05-29-18	0.3	0.30	7.7						
Public Works Yard	04-03-18	1.1	0.11	7.5	Public Works Yard	05-01-18	0.6	0.41	8.1	Public Works Yard	06-05-18	0.2	0.12	7.8	
	04-10-18	0.4	0.31	8.7		05-08-18	0.7	0.16	8.0		06-12-18	0.5	0.28	7.8	
	04-17-18	0.5	0.12	8.3		05-15-18	0.2	0.14	8.8		06-19-18	0.2	0.26	8.2	
	04-24-18	0.2	0.14	8.9		05-22-18	0.2	0.12	8.8		06-26-18	0.4	0.33	7.8	
						05-29-18	0.2	0.19	9.0						
Eagleview School	04-03-18	0.6	0.11	7.7	Eagleview School	05-01-18	0.5	0.18	7.9	Eagleview School	06-05-18	0.2	0.19	7.9	
	04-10-18	0.5	0.17	8.2		05-08-18	0.5	0.16	8.0		06-12-18	0.2	0.21	8.0	
	04-17-18	0.7	0.07	7.9		05-15-18	0.3	0.15	8.0		06-19-18	0.3	0.13	7.8	
	04-24-18	0.6	0.18	7.9		05-22-18	0.2	0.13	8.4		06-26-18	0.2	0.16	7.8	
						05-29-18	0.2	0.13	8.1						
Bear Cove Reservoir	04-03-18	0.7	0.66	7.5	Bear Cove Reservoir	05-01-18	0.7	0.16	7.6	Bear Cove Reservoir	06-05-18	0.7	0.15	7.6	
	04-10-18	0.8	0.17	7.7		05-08-18	0.7	0.14	7.7		06-12-18	0.7	0.58	7.6	
	04-17-18	0.7	0.15	7.6		05-15-18	0.9	0.15	7.8		06-19-18	0.5	0.20	7.5	
	04-24-18	0.8	0.12	7.6		05-22-18	0.6	0.16	7.7		06-26-18	0.5	0.19	7.6	
						05-29-18	0.8	0.15	7.6						
Ferry Terminal	04-03-18	0.4	0.13	7.5	Ferry Terminal	05-01-18	0.5	0.23	7.7	Ferry Terminal	06-05-18	0.6	0.13	7.4	
	04-10-18	0.4	0.23	7.6		05-08-18	0.7	0.21	7.6		06-12-18	0.4	0.16	7.4	
	04-17-18	0.6	0.12	7.6		05-15-18	0.5	0.17	7.4		06-19-18	0.3	0.21	7.2	
	04-24-18	0.7	0.12	7.5		05-22-18	0.5	0.12	7.7		06-26-18	0.4	0.22	7.4	
						05-29-18	0.5	0.13	7.7						
Highway 19 PRV	04-03-18	1.0	0.10	7.5	Highway 19 PRV	05-01-18	1.0	0.12	7.4	Highway 19 PRV	06-05-18	0.7	0.16	7.5	
	04-10-18	0.9	0.53	7.7		05-08-18	0.8	0.13	7.6		06-12-18	1.1	0.48	7.6	
	04-17-18	0.9	0.12	7.5		05-15-18	0.9	0.18	7.8		06-19-18	0.7	0.17	7.5	
	04-24-18	1.0	0.18	7.7		05-22-18	1.1	0.23	7.5		06-26-18	0.9	0.22	7.6	
						05-29-18	0.9	0.28	7.8						
Average		0.7	0.2	7.8	Average		0.6	0.18	7.9	Average		0.5	0.28	7.6	
Minimum		0.2	0.1	7.5	Minimum		0.2	0.11	7.4	Minimum		0.1	0.12	7.2	
Maximum		1.1	0.7	8.9	Maximum		1.1	0.41	9.0	Maximum		1.1	0.78	8.2	

July				
Distribution Sampling				
Location	Date	Free Chlorine mg/L	Turbidity NTU	pH
Chatham Avenue	07-03-18	0.4	0.35	7.5
	07-10-18	0.4	0.62	7.6
	07-17-18	0.5	0.33	7.7
	07-24-18	0.5	0.20	7.8
	07-31-18	0.3	0.19	7.7
Peel Street Liftstation	07-03-18	0.6	0.25	7.4
	07-10-18	0.8	0.65	7.5
	07-17-18	0.6	0.31	7.4
	07-24-18	0.7	0.21	7.5
	07-31-18	0.5	0.20	7.4
Airport Wastewater Treatment Plant	07-03-18	0.3	0.20	7.5
	07-10-18	0.3	0.39	7.6
	07-17-18	0.2	0.30	7.5
	07-24-18	0.6	0.29	7.5
	07-31-18	0.3	0.30	7.6
Public Works Yard	07-03-18	0.1	0.22	7.8
	07-10-18	0.3	0.20	7.9
	07-17-18	0.4	0.21	7.9
	07-24-18	0.2	0.14	8.5
	07-31-18	0.4	0.14	7.9
Eagleview School	07-03-18	0.1	0.13	8.0
	07-10-18	0.6	0.56	7.8
	07-17-18	0.5	0.81	7.8
	07-24-18	0.6	0.20	7.7
	07-31-18	0.6	0.24	7.7
Bear Cove Reservoir	07-03-18	0.3	0.13	7.4
	07-10-18	0.6	0.17	7.4
	07-17-18	0.8	0.19	7.4
	07-24-18	0.6	0.14	7.6
	07-31-18	0.6	0.17	7.5
Ferry Terminal	07-03-18	0.6	0.14	7.2
	07-10-18	0.3	0.20	7.5
	07-17-18	0.2	0.16	7.3
	07-24-18	0.4	0.15	7.5
	07-31-18	0.6	0.16	7.4
Highway 19 PRV	07-03-18	0.8	0.13	7.4
	07-10-18	0.8	0.15	7.4
	07-17-18	0.9	0.21	7.4
	07-24-18	0.9	0.21	7.5
	07-31-18	0.8	0.25	7.4
Average		0.5	0.26	7.6
Minimum		0.1	0.81	7.2
Maximum		0.9	0.81	8.5

August				
Distribution Sampling				
Location	Date	Free Chlorine mg/L	Turbidity NTU	pH
Chatham Avenue	08-07-18	0.3	0.14	7.8
	08-14-18	0.2	0.18	7.9
	08-21-18	0.3	0.17	7.7
	08-28-18	0.6	0.15	7.8
Peel Street Liftstation	08-07-18	0.7	0.38	7.4
	08-14-18	0.7	0.18	7.2
	08-21-18	0.7	0.21	7.5
	08-28-18	0.7	0.15	7.8
Airport Wastewater Treatment Plant	08-07-18	0.4	0.39	7.6
	08-14-18	0.3	0.19	7.7
	08-21-18	0.3	0.25	7.8
	08-28-18	0.6	0.24	7.7
Public Works Yard	08-07-18	0.1	0.16	8.1
	08-14-18	0.4	0.17	7.8
	08-21-18	0.6	0.21	7.9
	08-28-18	0.2	0.13	8.0
Eagleview School	08-07-18	0.6	0.58	7.8
	08-14-18	0.7	0.18	7.3
	08-21-18	0.6	0.19	7.0
	08-28-18	0.6	0.19	7.6
Bear Cove Reservoir	08-07-18	0.6	0.14	7.6
	08-14-18	0.7	0.18	7.5
	08-21-18	0.6	0.17	7.7
	08-28-18	0.6	0.17	7.6
Ferry Terminal	08-07-18	0.5	0.15	7.5
	08-14-18	0.8	0.24	7.2
	08-21-18	0.7	0.12	7.8
	08-28-18	0.4	0.19	7.4
Highway 19 PRV	08-07-18	0.9	0.18	7.5
	08-14-18	0.9	0.12	7.3
	08-21-18	0.8	0.14	7.5
	08-28-18	0.9	0.10	7.5
Average		0.6	0.20	7.6
Minimum		0.1	0.10	7.0
Maximum		0.9	0.58	8.1

September				
Distribution Sampling				
Location	Date	Free Chlorine mg/L	Turbidity NTU	pH
Chatham Avenue	09-04-18	0.2	0.13	7.8
	09-11-18	0.2	0.14	8.3
	09-18-18	0.2	0.45	7.8
	09-25-18	0.2	0.16	7.8
Peel Street Liftstation	09-04-18	0.8	0.13	7.6
	09-11-18	0.2	0.17	7.4
	09-18-18	0.6	0.14	7.4
	09-25-18	0.6	0.14	7.5
Airport Wastewater Treatment Plant	09-04-18	0.5	0.13	7.6
	09-11-18	0.2	0.17	7.5
	09-19-18	0.3	0.14	7.4
	09-25-18	0.4	0.13	7.4
Public Works Yard	09-04-18	0.3	0.17	7.9
	09-11-18	0.2	0.15	8.0
	09-18-18	0.5	0.12	7.6
	09-25-18	0.7	0.13	7.4
Eagleview School	09-04-18	0.4	0.25	7.9
	09-11-18	0.2	0.17	7.5
	09-18-18	0.2	0.12	7.9
	09-25-18	0.3	0.13	7.8
Bear Cove Reservoir	09-04-18	0.6	0.13	7.6
	09-11-18	0.5	0.15	7.4
	09-18-18	0.4	0.13	7.5
	09-25-18	0.4	0.14	7.4
Ferry Terminal	09-04-18	0.4	0.14	7.6
	09-11-18	0.4	0.25	7.3
	09-18-18	0.3	0.20	7.6
	09-25-18	0.3	0.11	7.4
Highway 19 PRV	09-04-18	0.4	0.15	7.6
	09-11-18	0.7	0.24	7.3
	09-18-18	0.7	0.14	7.4
	09-25-18	0.6	0.14	7.4
Average		0.4	0.16	7.6
Minimum		0.2	0.11	7.3
Maximum		0.8	0.45	8.3

October				
Distribution Sampling				
Location	Date	Free Chlorine mg/L	Turbidity NTU	pH
Chatham Avenue	10-02-18	0.2	0.14	7.4
	10-09-18	0.2	0.15	7.5
	10-16-18	0.4	0.19	7.5
	10-22-18	0.2	0.16	7.6
	10-30-18	0.4	0.13	7.8
Peel Street Liftstation	10-02-18	0.4	0.14	7.3
	10-09-18	0.5	0.15	7.4
	10-16-18	0.8	0.19	7.3
	10-22-18	0.7	0.12	7.4
	10-30-18	0.6	0.13	7.6
Airport Wastewater Treatment Plant	10-02-18	0.4	0.14	7.6
	10-09-18	0.3	0.14	7.3
	10-16-18	0.8	0.20	7.6
	10-22-18	0.5	0.13	7.4
	10-30-18	0.4	0.26	7.6
Public Works Yard	10-02-18	0.3	0.13	7.9
	10-09-18	0.9	0.12	7.4
	10-16-18	0.2	0.21	7.8
	10-22-18	0.2	0.10	7.9
	10-30-18	0.5	0.12	7.8
Eagleview School	10-02-18	0.3	0.19	7.8
	10-09-18	0.3	0.22	8.0
	10-16-18	0.2	0.19	7.7
	10-22-18	0.2	0.19	8.1
	10-30-18	0.3	0.12	7.8
Bear Cove Reservoir	10-02-18	0.4	0.14	7.4
	10-09-18	0.4	0.12	7.6
	10-16-18	0.6	0.12	7.5
	10-22-18	0.7	0.11	7.4
	10-30-18	0.5	0.15	7.6
Ferry Terminal	10-02-18	0.3	0.19	7.4
	10-09-18	0.4	0.13	7.4
	10-16-18	0.4	0.14	7.4
	10-22-18	0.4	0.15	7.4
	10-30-18	0.3	0.15	7.6
Highway 19 PRV	10-02-18	0.7	0.13	7.4
	10-09-18	0.8	0.13	7.4
	10-16-18	0.9	0.21	7.3
	10-22-18	0.8	0.19	7.5
	10-30-18	0.7	0.13	7.5
Average		0.4	0.10	7.6
Minimum		0.2	0.26	7.3
Maximum		0.9	0.26	8.1

November				
Distribution Sampling				
Location	Date	Free Chlorine mg/L	Turbidity NTU	pH
Chatham Avenue	11-06-18	0.2	0.17	7.7
	11-13-18	0.3	0.16	7.7
	11-20-18	0.4	0.17	7.6
	11-27-18	0.4	0.16	7.7
Peel Street Liftstation	11-06-18	0.6	0.13	7.5
	11-13-18	0.8	0.13	7.8
	11-20-18	0.7	0.22	7.5
	11-27-18	0.9	0.18	7.7
Airport Wastewater Treatment Plant	11-06-18	0.6	0.17	7.5
	11-13-18	0.6	0.14	7.5
	11-20-18	0.6	0.30	7.6
	11-27-18	0.7	0.17	7.6
Public Works Yard	11-06-18	0.8	0.14	7.4
	11-13-18	0.6	0.15	7.6
	11-20-18	0.6	0.13	7.7
	11-27-18	0.7	0.28	7.8
Eagleview School	11-06-18	0.2	0.21	7.8
	11-13-18	0.3	0.21	7.9
	11-20-18	0.3	0.23	7.9
	11-27-18	0.4	0.22	7.9
Bear Cove Reservoir	11-06-18	0.2	0.12	7.6
	11-13-18	0.4	0.14	7.6
	11-20-18	0.5	0.18	7.5
	11-27-18	0.8	0.14	7.6
Ferry Terminal	11-06-18	0.3	0.13	7.6
	11-13-18	0.3	0.13	7.5
	11-20-18	0.7	0.16	7.4
	11-27-18	0.6	0.25	7.5
Highway 19 PRV	11-06-18	0.9	0.13	7.5
	11-13-18	0.8	0.17	7.5
	11-20-18	0.8	0.15	7.5
	11-27-18	1.1	0.38	7.7
Average		0.6	0.18	7.6
Minimum		0.2	0.12	7.4
Maximum		1.1	0.38	7.9

December				
Distribution Sampling				
Location	Date	Free Chlorine mg/L	Turbidity NTU	pH
Chatham Avenue	12-11-18	0.3	0.15	7.6
	12-18-18	0.6	0.31	7.9
	12-24-18	0.5	0.24	7.5
	12-31-18	0.6	0.13	7.7
Peel Street Liftstation	12-04-18	0.7	0.12	7.5
	12-11-18	0.6	0.20	7.4
	12-18-18	0.7	0.37	7.9
	12-24-18	0.8	0.27	7.5
	12-31-18	1.0	0.13	7.4
Airport Wastewater Treatment Plant	12-04-18	0.4	0.18	7.7
	12-11-18	0.5	0.25	7.6
	12-18-18	0.7	0.38	7.9
	12-24-18	0.8	0.24	7.6
	12-31-18	0.7	0.16	7.4
Public Works Yard	12-04-18	0.9	0.15	7.8
	12-11-18	0.7	0.15	7.5
	12-18-18	0.8	0.16	7.5
	12-24-18			

January							February						
Bacteriological Sampling							Bacteriological Sampling						
Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	E.Coli CFU/100ml	Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	E.Coli CFU/100ml
01-16-18	Hospital	0.7	0.40	7.5	L1	L1	02-20-18	Hospital	0.7	0.21	7.5	L1	L1
01-16-18	Airport Washroom	0.5	0.22	7.6	L1	L1	02-06-18	Airport Washroom	0.5	0.19	7.6	L1	L1
01-09-18	Chatham Ave.	0.7	0.22	7.6	L1	L1	02-06-18	Chatham Ave.	0.7	0.11	7.8	L1	L1
01-02-18	Bear Cove Reservoir	0.8	0.23	7.5	L1	L1	02-13-18	Bear Cove Reservoir	0.7	0.18	7.5	L1	L1
01-02-18	Highway 19 PRV	0.8	0.25	7.5	L1	L1	02-13-18	Highway 19 PRV	1.0	0.19	7.4	L1	L1
01-16-18	Pioneer Inn	0.8	0.13	7.4	L1	L1	02-20-18	Pioneer Inn	0.8	0.15	7.5	L1	L1
01-09-18	Public Works Yard	0.9	0.22	7.4	L1	L1	02-06-18	Public Works Yard	0.8	0.17	7.6	L1	L1
01-09-18	Glen Lyon Restaurant	0.5	0.22	7.4	L1	L1	02-06-18	Glen Lyon Restaurant	0.7	0.14	7.6	L1	L1
01-09-18	Airport Inn	0.7	0.18	7.4	L1	L1	02-20-18	Airport Inn	0.7	0.11	7.4	L1	L1
01-02-18	Peel St Liftstation	0.8	0.13	7.5	L1	L1	02-13-18	Peel St Liftstation	0.7	0.19	7.4	L1	L1
01-16-18	B.C. Ferry	0.6	0.11	7.5	L1	L1	02-20-18	B.C. Ferry	0.9	0.19	7.4	L1	L1
Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	E.Coli CFU/100ml	Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	E.Coli CFU/100ml
01-02-18	Tsulquate River (Untreated)		0.40	6.8			02-13-18	Tsulquate River (Untreated)		0.51	6.7		
March							April						
Bacteriological Sampling							Bacteriological Sampling						
Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	E.Coli CFU/100ml	Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	E.Coli CFU/100ml
03-27-18	Hospital	0.7	0.15	7.6	L1	L1	04-17-18	Hospital	0.7	0.14	7.7	L1	L1
03-06-18	Airport Washroom	0.5	0.18	7.8	L1	L1	04-03-18	Airport Washroom	0.3	0.20	7.7	L1	L1
03-06-18	Chatham Ave.	0.8	0.30	7.4	L1	L1	04-03-18	Chatham Ave.	0.9	0.16	7.5	L1	L1
03-03-18	Bear Cove Reservoir	0.8	0.14	7.5	L1	L1	04-10-18	Bear Cove Reservoir	0.8	0.17	7.7	L1	L1
03-03-18	Highway 19 PRV	0.8	0.15	7.5	L1	L1	04-10-18	Highway 19 PRV	0.9	0.53	7.7	L1	L1
03-27-18	Pioneer Inn	0.6	0.12	7.6	L1	L1	04-17-18	Pioneer Inn	0.8	0.15	7.5	L1	L1
03-06-18	Public Works Yard	0.3	0.12	8.8	L1	L1	04-03-18	Public Works Yard	1.1	0.11	7.5	L1	L1
03-06-18	Glen Lyon Restaurant	0.7	0.13	7.5	L1	L1	04-03-18	Glen Lyon Restaurant	0.8	0.22	7.6	L1	L1
03-27-18	Airport Inn	0.7	0.14	7.6	L1	L1	04-17-18	Airport Inn	0.6	0.16	7.6	L1	L1
03-03-18	Peel St Liftstation	0.7	0.14	7.4	L1	L1	04-17-18	Peel St Liftstation	0.8	0.15	7.7	L1	L1
03-27-18	B.C. Ferry	0.6	0.15	7.5	L1	L1	04-17-18	B.C. Ferry	0.6	0.12	7.6	L1	L1
Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	E.Coli CFU/100ml	Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	E.Coli CFU/100ml
03-03-18	Tsulquate River (Untreated)		0.40	6.7			04-10-18	Tsulquate River (Untreated)		0.97	6.8		
May							June						
Bacteriological Sampling							Bacteriological Sampling						
Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	E.Coli CFU/100ml	Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	E.Coli CFU/100ml
05-15-18	Hospital	0.6	0.13	7.8	L1	L1	06-05-18	Hospital	0.6	0.17	7.6	L1	L1
05-15-18	Airport Washroom	0.3	0.19	7.8	L1	L1	06-19-18	Airport Washroom	0.4	0.46	7.6	L1	L1
05-15-18	Chatham Ave.	0.4	0.15	7.9	L1	L1	06-05-18	Chatham Ave.	0.3	0.20	7.5	L1	L1
05-08-18	Bear Cove Reservoir	0.7	0.14	7.7	L1	L1	06-12-18	Bear Cove	0.7	0.58	7.6	L1	L1
05-15-18	Highway 19 PRV	0.9	0.18	7.8	L1	L1	06-19-18	Highway 19 PRV	0.7	0.17	7.5	L1	L1
05-15-18	Pioneer Inn	0.6	0.20	7.7	L1	L1	06-05-18	Pioneer Inn	0.7	0.12	7.5	L1	L1
05-15-18	Public Works Yard	0.2	0.14	8.8	L1	L1	06-12-18	Public Works Yard	0.5	0.28	7.8	L1	L1
05-08-18	Glen Lyon Restaurant	0.7	0.15	7.7	L1	L1	06-12-18	Glen Lyon Restaurant	1.0	0.52	7.6	L1	L1
05-08-18	Airport Inn	0.8	0.12	7.6	L1	L1	06-05-18	Airport Inn	0.6	0.18	7.5	L1	L1
05-15-18	Peel St Liftstation	0.9	0.17	7.7	L1	L1	06-12-18	Peel St Liftstation	1.0	0.51	7.6	L1	L1
05-15-18	B.C. Ferry	0.5	0.17	7.4	L1	L1	06-19-18	B.C. Ferry	0.3	0.21	7.2	L1	L1
Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	E.Coli CFU/100ml	Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	E.Coli CFU/100ml
05-15-18	Tsulquate River (Untreated)		0.39	7.2			06-19-18	Tsulquate River (Untreated)		0.35	7.0		

July						
Bacteriological Sampling						
Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	<i>E.Coli</i> CFU/100ml
07-03-18	Hospital	0.5	0.21	7.3	L1	L1
07-03-18	Airport Washroom	0.4	0.14	7.7	L1	L1
07-17-18	Chatham Ave.	0.5	0.33	7.7	L1	L1
07-10-18	Bear Cove Reservoir	0.6	0.17	7.4	L1	L1
07-10-18	Highway 19 PRV	0.8	0.15	7.4	L1	L1
07-03-18	Pioneer Inn	0.8	0.14	7.3	L1	L1
07-17-18	Public Works Yard	0.4	0.21	7.9	L1	L1
07-10-18	Glen Lyon Restaurant	0.7	0.16	7.4	L1	L1
07-10-18	Airport Inn	0.8	0.61	7.5	L1	L1
07-03-18	Peel St Liftstation	0.6	0.25	7.4	L1	L1
07-17-18	B.C. Ferry	0.2	0.16	7.3	L1	L1

Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	<i>E.Coli</i> CFU/100ml
07-17-18	Tsulquate River (Untreated)		0.23	7.3		

September						
Bacteriological Sampling						
Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	<i>E.Coli</i> CFU/100ml
09-04-18	Hospital	0.5	0.14	7.8	L1	L1
09-11-18	Airport Washroom	0.4	0.18	7.5	L1	L1
09-04-18	Chatham Ave.	0.4	0.14	7.6	L1	L1
09-11-18	Bear Cove Reservoir	0.5	0.15	7.4	L1	L1
09-04-18	Highway 19 PRV	0.4	0.15	7.6	L1	L1
09-11-18	Pioneer Inn	0.7	0.17	7.3	L1	L1
09-11-18	Public Works Yard	0.2	0.15	8.0	L1	L1
09-18-18	Glen Lyon Restaurant	0.5	0.13	7.3	L1	L1
09-18-18	Airport Inn	0.5	0.29	7.3	L1	L1
09-18-18	Peel St Liftstation	0.6	0.14	7.4	L1	L1
09-04-18	B.C. Ferry	0.4	0.14	7.6	L1	L1

Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	<i>E.Coli</i> CFU/100ml
09-18-18	Tsulquate River (Untreated)		0.47	6.9		

November						
Bacteriological Sampling						
Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	<i>E.Coli</i> CFU/100ml
11-06-18	Hospital	0.5	0.13	7.6	<1	<1
11-06-18	Airport Washroom	0.4	0.23	7.6	<1	<1
11-06-18	Chatham Ave.	0.2	0.17	7.7	<1	<1
11-13-18	Bear Cove Reservoir	0.4	0.14	7.6	<1	<1
11-13-18	Highway 19 PRV	0.8	0.17	7.5	<1	<1
11-06-18	Pioneer Inn	0.6	0.16	7.4	<1	<1
11-13-18	Public Works Yard	0.6	0.15	7.6	<1	<1
11-20-18	Glen Lyon Restaurant	0.7	0.19	7.5	<1	<1
11-13-18	Airport Inn	0.6	0.14	7.5	<1	<1
11-20-18	Peel St Liftstation	0.7	0.22	7.5	<1	<1
11-20-18	B.C. Ferry	0.7	0.16	7.4	<1	<1

Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	<i>E.Coli</i> CFU/100ml
11-20-18	Tsulquate River (Untreated)		0.41	6.8		

August						
Bacteriological Sampling						
Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	<i>E.Coli</i> CFU/100ml
08-07-18	Hospital	0.6	0.13	7.5	L1	L1
08-07-18	Airport Washroom	0.4	0.16	7.6	L1	L1
08-07-18	Chatham Ave.	0.3	0.14	7.8	L1	L1
08-14-18	Bear Cove Reservoir	0.7	0.18	7.5	L1	L1
08-28-18	Highway 19 PRV	0.9	0.10	7.5	L1	L1
08-07-18	Pioneer Inn	0.8	0.11	7.4	L1	L1
08-28-18	Public Works Yard	0.2	0.13	8.0	L1	L1
08-14-18	Glen Lyon Restaurant	0.6	0.17	7.4	L1	L1
08-14-18	Airport Inn	0.7	0.16	7.3	L1	L1
08-14-18	Peel St Liftstation	0.7	0.18	7.2	L1	L1
08-28-18	B.C. Ferry	0.4	0.19	7.4	L1	L1

Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	<i>E.Coli</i> CFU/100ml
08-28-18	Tsulquate River (Untreated)		0.27	7.2		

October						
Bacteriological Sampling						
Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	<i>E.Coli</i> CFU/100ml
10-02-18	Hospital	0.3	0.15	7.4	<1	<1
10-09-18	Airport Washroom	0.3	0.17	7.4	<1	<1
10-02-18	Chatham Ave.	0.2	0.14	7.4	<1	<1
10-09-18	Bear Cove Reservoir	0.4	0.12	7.6	<1	<1
10-02-18	Highway 19 PRV	0.7	0.13	7.4	<1	<1
10-09-18	Pioneer Inn	0.4	0.12	7.3	<1	<1
10-09-18	Public Works Yard	0.9	0.12	7.4	<1	<1
10-16-18	Glen Lyon Restaurant	0.5	0.38	7.4	<1	<1
10-16-18	Airport Inn	0.6	0.42	7.3	<1	<1
10-16-18	Peel St Liftstation	0.8	0.19	7.3	<1	<1
10-02-18	B.C. Ferry	0.3	0.19	7.4	<1	<1

Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	<i>E.Coli</i> CFU/100ml
10-16-18	Tsulquate River (Untreated)		0.34	6.9		

December						
Bacteriological Sampling						
Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	<i>E.Coli</i> CFU/100ml
12-04-18	Hospital	0.6	0.24	7.7	<1	<1
12-04-18	Airport Washroom	0.5	0.62	7.7	<1	<1
12-12-18	Chatham Ave.	0.6	0.31	7.9	<1	<1
12-11-18	Bear Cove Reservoir	0.6	0.14	7.5	<1	<1
12-11-18	Highway 19 PRV	0.9	0.14	7.4	<1	<1
12-04-18	Pioneer Inn	0.7	0.17	7.7	<1	<1
12-12-18	Public Works Yard	0.7	0.15	7.5	<1	<1
12-12-18	Glen Lyon Restaurant	0.8	0.17	7.8	<1	<1
12-12-18	Airport Inn	0.5	0.20	7.5	<1	<1
12-04-18	Peel St Liftstation	0.7	0.12	7.5	<1	<1
12-12-18	B.C. Ferry	0.7	0.23	7.6	<1	<1

Sample Date	Sample Location	Free Chlorine (mg/L)	Turbidity (NTU)	pH	Total Coliform CFU/100ml	<i>E.Coli</i> CFU/100ml
12-12-18	Tsulquate River (Untreated)		1.05	6.6		

TRIHALOMETHANE AND HALOACETIC ACID QUARTERLY RESULTS

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Page 1 of 2



Analytical Report

Bill To: District of Port Hardy Box 68 Port Hardy, BC, Canada V0N 2P0 Attn: Accounts Payable	Project ID: WP Quarterly Project Name: Project Location: LSD: P.O.:	Lot ID: 1248505 Control Number: Date Received: Jan 11, 2018 Date Reported: Jan 19, 2018 Report Number: 2256494
Sampled By: Justin Reusch Company: District of Port Hardy	Proj. Acct. code:	

Analyte	Units	Matrix		Results	Nominal Detection Limit
		Water	Water		
Trihalomethanes Screen - Water					
Chloroform	mg/L	0.025	0.037		0.001
Bromodichloromethane	mg/L	<0.001	0.001		0.001
Dibromochloromethane	mg/L	<0.001	<0.001		0.001
Bromoform	mg/L	<0.001	<0.001		0.001
Total Trihalomethanes	mg/L	0.025	0.038		0.001
Trihalomethanes - Surrogate Recovery					
Dibromofluoromethane	EPA Surrogate %	105	106		50-140
Toluene-d8	EPA Surrogate %	102	103		50-140
Bromofluorobenzene	EPA Surrogate %	96	94		50-140
Haloacetic Acids - Water					
Monochloroacetic Acid	µg/L	<2.0	<2.0		2.0
Monobromoacetic Acid	µg/L	<2.0	<2.0		2.0
Dichloroacetic Acid	µg/L	11.0	13.0		2.0
Bromochloroacetic Acid	µg/L	<2.0	<2.0		2.0
Dibromoacetic Acid	µg/L	<2.0	<2.0		2.0
Trichloroacetic Acid	µg/L	21.3	20.0		2.0
Total Haloacetic Acids (HAA6)	µg/L	32.3	33.0		2.0

Approved by: 
 Randy Neumann, BSc
 Vice President

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Analytical Report

Bill To: District of Port Hardy Box 68 Port Hardy, BC, Canada V0N 2P0 Attn: Accounts Payable Sampled By: Company: District of Port Hardy	Project ID: WTP Project Name: Project Location: LSD: P.O.: 2886 Proj. Acct. code:	Lot ID: 1263477 Control Number: Date Received: Apr 6, 2018 Date Reported: Apr 17, 2018 Report Number: 22761116
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Analyte	Units	Reference Number	Sample Date	Sample Time	Sample Location	Sample Description	Matrix	Results	Results	Results	Nominal Detection Limit
		1263477-1	Apr 05, 2018	NA	DPH / WTP Reservoir / 6.9°C	DPH / WTP Reservoir / 6.9°C	Water	Results	Results	Results	
Trihalomethanes Screen - Water											
Chloroform	mg/L						Water	0.027	0.041		0.001
Bromodichloromethane	mg/L						Water	0.001	0.002		0.001
Dibromochloromethane	mg/L						Water	<0.001	<0.001		0.001
Bromoform	mg/L						Water	<0.001	<0.001		0.001
Total Trihalomethanes	mg/L						Water	0.028	0.043		0.001
Trihalomethanes - Surrogate Recovery											
Dibromofluoromethane	EPA Surrogate							%	119	117	50-140
Toluene-d8	EPA Surrogate							%	97	95	50-140
Bromofluorobenzene	EPA Surrogate							%	101	95	50-140
Haloacetic Acids - Water											
Monochloroacetic Acid	µg/L							<2.0	<2.0		2.0
Monobromoacetic Acid	µg/L							<2.0	<2.0		2.0
Dichloroacetic Acid	µg/L							8.0	17.0		2.0
Bromochloroacetic Acid	µg/L							<2.0	<2.0		2.0
Dibromoacetic Acid	µg/L							<2.0	<2.0		2.0
Trichloroacetic Acid	µg/L							17.0	34.0		2.0
Total Haloacetic Acids (HAA6)	µg/L							25.0	51.0		2.0

Analytical Report

Bill To: District of Port Hardy Box 68 Port Hardy, BC, Canada V0N 2P0	Project ID: Project Name: Project Location: LSD: P.O.:	Lot ID: 1285168 Control Number: Date Received: Jul 17, 2018 Date Reported: Jul 25, 2018 Report Number: 2305813
Attn: Accounts Payable Sampled By: R> Lefort Company: District of Port Hardy	Proj. Acct. code:	

Reference Number	1285168-1	1285168-2			
Sample Date	Jul 16, 2018	Jul 16, 2018			
Sample Time	09:50	10:30			
Sample Location					
Sample Description	DPH / Reservoir / 5.8°C	DPH / Chatham Ave. / 5.8°C			
Matrix	Water	Water			
Analyte	Units	Results	Results	Results	Nominal Detection Limit
Trihalomethanes Screen - Water					
Chloroform	mg/L	0.039	0.053		0.001
Bromodichloromethane	mg/L	0.003	0.003		0.001
Dibromochloromethane	mg/L	<0.001	<0.001		0.001
Bromoform	mg/L	<0.001	<0.001		0.001
Total Trihalomethanes	mg/L	0.042	0.056		0.001
Trihalomethanes - Surrogate Recovery					
Dibromofluoromethane	EPA Surrogate %	113	118		50-140
Toluene-d8	EPA Surrogate %	98	92		50-140
Bromofluorobenzene	EPA Surrogate %	101	101		50-140
Haloacetic Acids - Water					
Monochloroacetic Acid	µg/L	<2.0	<2.0		2.0
Monobromoacetic Acid	µg/L	<2.0	<2.0		2.0
Dichloroacetic Acid	µg/L	16.0	20.2		2.0
Bromochloroacetic Acid	µg/L	<2.0	<2.0		2.0
Dibromoacetic Acid	µg/L	<2.0	<2.0		2.0
Trichloroacetic Acid	µg/L	12.5	20.8		2.0
Total Haloacetic Acids (HAA6)	µg/L	28.5	41.0		2.0

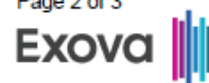
Approved by: 
 Mathieu Simoneau
 Operations Manager

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Analytical Report

Bill To: District of Port Hardy Box 68 Port Hardy, BC, Canada V0N 2P0 Attn: Accounts Payable Sampled By: Company: District of Port Hardy	Project ID: Project Name: Project Location: LSD: P.O.: 3354 Proj. Acct. code:	Lot ID: 1303153 Control Number: Date Received: Oct 4, 2018 Date Reported: Oct 16, 2018 Report Number: 2330261
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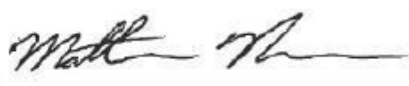
	Reference Number	1303153-1	1303153-2	1303153-3	
	Sample Date	Oct 03, 2018	Oct 03, 2018	Oct 03, 2018	
	Sample Time	NA	NA	NA	
	Sample Location				
	Sample Description	DPH / Reservoir / 8°C	DPH / Reservoir Dup. / 8°C	DPH / Chatham / 8°C	
	Matrix	Water	Water	Water	
Analyte	Units	Results	Results	Results	Nominal Detection Limit
Trihalomethanes Screen - Water					
Chloroform	mg/L	0.026	0.024	0.051	0.001
Bromodichloromethane	mg/L	0.001	<0.001	0.002	0.001
Dibromochloromethane	mg/L	<0.001	<0.001	<0.001	0.001
Bromoform	mg/L	<0.001	<0.001	<0.001	0.001
Total Trihalomethanes	mg/L	0.027	0.024	0.053	0.001
Trihalomethanes - Surrogate Recovery					
Dibromofluoromethane	EPA Surrogate %	94	99	100	50-140
Toluene-d8	EPA Surrogate %	92	87	93	50-140
Bromofluorobenzene	EPA Surrogate %	112	103	89	50-140
Haloacetic Acids - Water					
Monochloroacetic Acid	µg/L	<2.0	<2.0	<2.0	2.0
Monobromoacetic Acid	µg/L	<2.0	<2.0	<2.0	2.0
Dichloroacetic Acid	µg/L	17.9	17.8	20.6	2.0
Bromochloroacetic Acid	µg/L	<2.0	<2.0	<2.0	2.0
Dibromoacetic Acid	µg/L	<2.0	<2.0	<2.0	2.0
Trichloroacetic Acid	µg/L	21.5	21.4	43.1	2.0
Total Haloacetic Acids (HAA6)	µg/L	39.4	39.2	63.7	2.0



Analytical Report

Bill To: District of Port Hardy Box 68 Port Hardy, BC, Canada V0N 2P0	Project ID: Project Name: Project Location: LSD: P.O.: 3354 Proj. Acct. code:	Lot ID: 1303153 Control Number: Date Received: Oct 4, 2018 Date Reported: Oct 16, 2018 Report Number: 2330261
Attn: Accounts Payable Sampled By: Company: District of Port Hardy		

Reference Number		1303153-4	
Sample Date		Oct 03, 2018	
Sample Time		NA	
Sample Location		DPH / Chatham Dup.. / 8°C	
Sample Description		DPH / Chatham Dup.. / 8°C	
Matrix		Water	
Analyte	Units	Results	Nominal Detection Limit
Trihalomethanes Screen - Water			
Chloroform	mg/L	0.057	0.001
Bromodichloromethane	mg/L	0.002	0.001
Dibromochloromethane	mg/L	<0.001	0.001
Bromoform	mg/L	<0.001	0.001
Total Trihalomethanes	mg/L	0.059	0.001
Trihalomethanes - Surrogate Recovery			
Dibromofluoromethane	EPA Surrogate %	110	50-140
Toluene-d8	EPA Surrogate %	93	50-140
Bromofluorobenzene	EPA Surrogate %	90	50-140
Haloacetic Acids - Water			
Monochloroacetic Acid	µg/L	<2.0	2.0
Monobromoacetic Acid	µg/L	<2.0	2.0
Dichloroacetic Acid	µg/L	20.9	2.0
Bromochloroacetic Acid	µg/L	<2.0	2.0
Dibromoacetic Acid	µg/L	<2.0	2.0
Trichloroacetic Acid	µg/L	45.5	2.0
Total Haloacetic Acids (HAA6)	µg/L	66.4	2.0

Approved by: 
 Matthew Norman, BSc, PChem
 Operations Chemist

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ADDITIONAL SAMPLING RESULTS

External Lab Results after Line Break on Beaver Harbour Road



Success Through Science®

Maxxam Job #: B809043
Report Date: 2018/02/07

DISTRICT OF PORT HARDY
Your P.O. #: 1936

MICROBIOLOGY (WATER)

Maxxam ID			SX6203	SX6204	
Sampling Date			2018/02/05 09:20	2018/02/05 09:40	
COC Number			G124325	G124325	
	UNITS	MAC	FORT RUPERT SCHOOL	CHATHAM AVE	QC Batch
Microbiological Param.					
Total Coliforms (QT)	MPN/100mL	0	0	0	8905104
E. coli (QT)	MPN/100mL	0	0	0	8905104
No Fill	No Exceedance				
Grey	Exceeds 1 criteria policy/level				
Black	Exceeds both criteria/levels				



Success Through Science®

Maxxam Job #: B809746
Report Date: 2018/02/09

DISTRICT OF PORT HARDY
Your P.O. #: 1936

MICROBIOLOGY (DRINKING WATER)

Maxxam ID			SX9692	SX9693	
Sampling Date			2018/02/07 11:15	2018/02/07 11:00	
COC Number			G124875	G124875	
	UNITS	MAC	F.R. SCHOOL	CHATHAM	QC Batch
Microbiological Param.					
Total Coliforms (QT)	MPN/100mL	0	0	0	8907370
E. coli (QT)	MPN/100mL	0	0	0	8907370
No Fill	No Exceedance				
Grey	Exceeds 1 criteria policy/level				
Black	Exceeds both criteria/levels				

External Lab Results after Air Valve Repair March 27th, 2018



Success Through Science®

Maxxam Job #: B823298
Report Date: 2018/04/02

DISTRICT OF PORT HARDY
Your P.O. #: 1936

MICROBIOLOGY (DRINKING WATER)

Maxxam ID			TE5982	TE5983	TE5984	TE5985	TE5986	
Sampling Date			2018/03/29 12:00	2018/03/29 12:00	2018/03/29 12:00	2018/03/29 12:00	2018/03/29 12:00	
COC Number			135873	135873	135873	135873	135873	
	UNITS	MAC	CHATHAM	PEEL ST	AWWTP	KT K	PIONEER	QC Batch
Microbiological Param.								
Total Coliforms	CFU/100mL	0	0	0	0	0	0	8949448
E. coli	CFU/100mL	0	0	0	0	0	0	8949448
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							

RESERVOIR #1 EXTERNAL LABORATORY WATER QUALITY RESULTS



Success Through Science®

Maxxam Job #: B844045
Report Date: 2018/06/08

DISTRICT OF PORT HARDY
Your P.O. #: 1936

MICROBIOLOGY (WATER)

Maxxam ID			TO7062	
Sampling Date			2018/06/05 11:30	
COC Number			G135941	
	UNITS	MAC	RESERVOIR #1	QC Batch
Microbiological Param.				
Total Coliforms (QT)	MPN/100mL	0	0	9017171
E. coli (QT)	MPN/100mL	0	0	9017171
No Fill	No Exceedance			
Grey	Exceeds 1 criteria policy/level			
Black	Exceeds both criteria/levels			

Maxxam Job #: B845195
Report Date: 2018/06/14

DISTRICT OF PORT HARDY
Your P.O. #: 1936

MICROBIOLOGY (DRINKING WATER)

Maxxam ID			TP2756	
	Sampling Date			2018/06/07 11:50
		COC Number		135942
	UNITS	MAC	RESERVOIR 1	QC Batch
Microbiological Param.				
Total Coliforms	CFU/100mL	0	0	9020660
E. coli	CFU/100mL	0	0	9020660
No Fill	No Exceedance			
Grey	Exceeds 1 criteria policy/level			
Black	Exceeds both criteria/levels			

Note: Tests sent out on June 6th were too long in transit, arrived over temperature and could not be tested.

NEW WATERMAIN DISINFECTION EXTERNAL LABORATORY WATER QUALITY RESULTS



Success Through Science®

Maxxam Job #: B846401
Report Date: 2018/06/15

STANTEC CONSULTING LTD
Client Project #: 111720046
Site Location: PORT HARDY WATERMAIN REPLACEMENT

MICROBIOLOGY (WATER)

Maxxam ID			TP9938	TP9939	TP9940	
	Sampling Date		2018/06/11 14:30	2018/06/11 14:22	2018/06/11 14:20	
		COC Number		W116i897	W116i897	W116i897
	UNITS		MAC	3500 BYNG RD FLUSH OUT - TAP	3000 BYNG RD FLUSH OUT L- TAP	3500 HYDRANT F.R. / BYNG - TAP

Microbiological Param.						
Total Coliforms (QT)	MPN/100mL	0	0	0	0	9024174
E. coli (QT)	MPN/100mL	0	0	0	0	9024174
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					

Maxxam ID			TP9941	TP9942	TP9948	
	Sampling Date		2018/06/11 14:25	2018/06/11 14:13	2018/06/11 14:10	
		COC Number		W116i897	W116i897	W116898
	UNITS		MAC	FORT RUPERT SOURCE - TAP	3000 F.R. RES. FLUSH OUT - TAP	3500 F.R. RES FLUSH OUT - TAP

Microbiological Param.						
Total Coliforms (QT)	MPN/100mL	0	0	0	0	9024174
E. coli (QT)	MPN/100mL	0	0	0	0	9024174
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					

Maxxam ID			TP9949	TP9950	TP9951	
	Sampling Date		2018/06/11 18:35	2018/06/11 18:27	2018/06/11 18:26	
		COC Number		W116898	W116898	W116898
	UNITS		MAC	BEAVER H. BYNG FLUSH OUT - TAP	BEAVER H. PEEL - TAP	BEAVER H. TSAKIS - TAP

Microbiological Param.						
Total Coliforms (QT)	MPN/100mL	0	0	0	0	9024174
E. coli (QT)	MPN/100mL	0	0	0	0	9024174
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					

Maxxam Job #: B846401
Report Date: 2018/06/15

STANTEC CONSULTING LTD
Client Project #: 111720046
Site Location: PORT HARDY WATERMAIN REPLACEMENT

MICROBIOLOGY (WATER)

Maxxam ID			TP9952	TP9953	TP9954	
Sampling Date			2018/06/11 18:21	2018/06/11 18:41	2018/06/11 18:40	
COC Number			WI16898	WI16910	WI16910	
	UNITS	MAC	BEAVER H. N. LIHT FLUSH OUT - TAP	BEAVER H SE LIMIT - TAP	BEAVER H. SOURCE - TAP	QC Batch
Microbiological Param.						
Total Coliforms (QT)	MPN/100mL	0	0	0	0	9024174
E. coli (QT)	MPN/100mL	0	0	0	0	9024174
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					

Maxxam Job #: B846409
Report Date: 2018/06/15

STANTEC CONSULTING LTD
Client Project #: 111720046
Site Location: PORT HARDY WATERMAIN REPLACEMENT

MICROBIOLOGY (WATER)

Maxxam ID			TP9970	TP9971	TP9972	
Sampling Date			2018/06/12 13:11	2018/06/12 13:01	2018/06/12 12:57	
COC Number			WI16899	WI16899	WI16899	
	UNITS	MAC	3500 BYNG RD FLUSH OUT - TAP	3000 BYNG RD FLUSH OUT - TAP	3500 HYDRANT F.R. / BYNG - TAP	QC Batch

Microbiological Param.						
Total Coliforms (QT)	MPN/100mL	0	0	0	0	9024174
E. coli (QT)	MPN/100mL	0	0	0	0	9024174
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					

Maxxam ID			TP9973	TP9974	TP9980	
Sampling Date			2018/06/12 12:48	2018/06/12 12:50	2018/06/12 13:35	
COC Number			WI16899	WI16899	WI16900	
	UNITS	MAC	3000 F.R. RES FLUSH OUT - TAP	3500 F.R. RES FLUSH OUT - TAP	BEAVER H. BYNG FLUSH OUT - TAP	QC Batch

Microbiological Param.						
Total Coliforms (QT)	MPN/100mL	0	0	0	0	9024174
E. coli (QT)	MPN/100mL	0	0	0	0	9024174
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					

Maxxam ID			TP9981	TP9982	TP9983	
Sampling Date			2018/06/12 13:42	2018/06/12 13:46	2018/06/12 13:52	
COC Number			WI16900	WI16900	WI16900	
	UNITS	MAC	BEAVER H. PEEL - TAP	BEAVER H. TSAKIS - TAP	BEAVER H. N. LIMIT FLUSH OUT - TAP	QC Batch

Microbiological Param.						
Total Coliforms (QT)	MPN/100mL	0	0	0	0	9024174
E. coli (QT)	MPN/100mL	0	0	0	0	9024174
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					

Maxxam Job #: 8846409
Report Date: 2018/06/15

STANTEC CONSULTING LTD
Client Project #: 111720046
Site Location: PORT HARDY WATERMAIN REPLACEMENT

MICROBIOLOGY (WATER)

Maxxam ID			TP9984	
Sampling Date			2018/06/12 13:18	
COC Number			WI16900	
	UNITS	MAC	BEAVER H. SE. LIMIT - TAP	QC Batch
Microbiological Param.				
Total Coliforms (QT)	MPN/100mL	0	0	9024174
E. coli (QT)	MPN/100mL	0	0	9024174
No Fill	No Exceedance			
Grey	Exceeds 1 criteria policy/level			
Black	Exceeds both criteria/levels			

BYNG ROAD AND BEAVER HARBOUR ROAD NEW WATERMAIN CONNECTION - JUNE 21ST



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Maxxam Job #: B850383
Report Date: 2018/06/25

DISTRICT OF PORT HARDY
Your P.O. #: 1936

MICROBIOLOGY (WATER)

Maxxam ID			TS1658	TS1659	
	Sampling Date		2018/06/22 09:55	2018/06/22 10:10	
		COC Number		G135951	G135951
	UNITS	MAC	API	BUDGET	QC Batch
Microbiological Param.					
Total Coliforms (QT)	MPN/100mL	0	0	0	9037335
E. coli (QT)	MPN/100mL	0	0	0	9037335
No Fill	No Exceedance				
Grey	Exceeds 1 criteria policy/level				
Black	Exceeds both criteria/levels				

BEAVER HARBOUR ROAD AND STOREY'S BEACH ROAD NEW WATERMAIN CONNECTION - JUNE 24TH



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Maxxam Job #: B851245
Report Date: 2018/06/27

DISTRICT OF PORT HARDY
Your P.O. #: 1936

MICROBIOLOGY (WATER)

Maxxam ID			TS6133	TS6134	
	Sampling Date		2018/06/25 09:40	2018/06/25 10:00	
		COC Number		G135962	G135962
	UNITS	MAC	BEACH SANI DUMP	CHATHAM AVE.	QC Batch
Microbiological Param.					
Total Coliforms (QT)	MPN/100mL	0	0	0	9041801
E. coli (QT)	MPN/100mL	0	0	0	9041801
No Fill	No Exceedance				
Grey	Exceeds 1 criteria policy/level				
Black	Exceeds both criteria/levels				