ALBERNI-CLAYOQUOT
REGIONAL DISTRICT

ALBERNI CLAYOQUOT REGIONAL DISTRICT

WATER SYSTEMS ANNUAL REPORT 2014

Alberni Clayoquot Regional District Water Systems:

Beaver Creek Water System
Bamfield Community Water System
Alberni Valley Regional Airport
Long Beach Airport Water System
Millstream Community Water System
Cougar Smith Park Water System

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1.0 Introduction to the Alberni Clayoquot Regional District Water System's

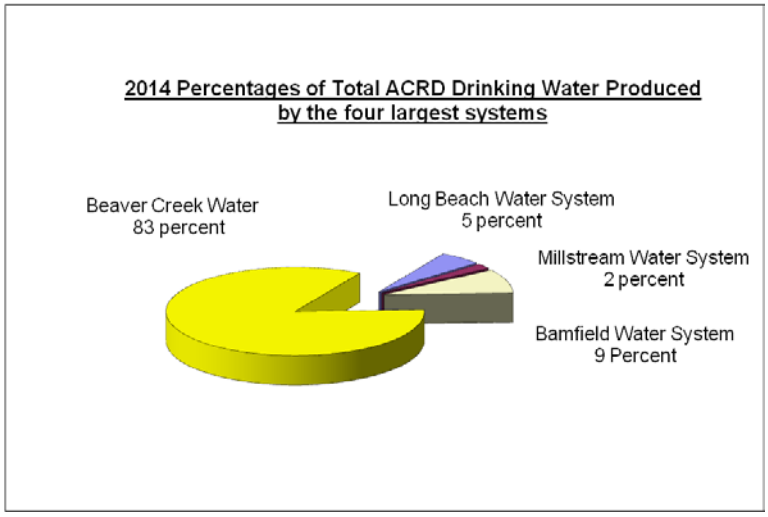
This annual water systems report provides an overview of the Alberni-Clayoquot Regional District's (ACRD) water services. It is our responsibility to the community and to the provincial health authority to share this information. This report is for the water consumers to review their water system to be confident of the service provided.

Within the Province of British Columbia the Drinking Water Protection Act and the Drinking Water Regulation prescribes the performance of the water suppliers. Examples of some of these are that the supplier must at all times provide potable water and monitor its sources. The Drinking Water Protection Act, Section 15, and the Drinking Water Protection Regulation Section 11, outline the basic requirements that pertain to this annual report. Please see Appendix C for drinking water quality web links for more information regarding legislative authority.

The Province of British Columbia is responsible for public health and the governance is distributed to local health authorities. The ACRD falls under the Island Health Authority (IHA), whose mission is to minimize health risks to the public. IHA's Drinking Water Program assists with safe drinking water to our communities. This is looked after by IHA's Public Health Engineer and the Environmental Health Officer, who evaluates water sources, grants permits and performs inspections.

The Alberni-Clayoquot Regional District owns and operates six individually distinct potable water systems. The water systems name's are in order below with the highest to lowest annual volumes of water produced:

1. Beaver Creek Water System
2. Bamfield Community Water System
3. Long Beach Airport Water System
4. Millstream Community Water System
5. Cougar Smith Park Water System
6. Alberni Valley Airport Water System



1.1 Management

The Environmental Services Department at the ACRD is responsible for the overall management of the water systems including administrative services. The water systems are maintained by Environmental Operators Certificate Program's (EOCP) certified employees. "The purpose of the EOCP Facility Classification and Operator Certification policy is to set out the standards and requirements for classifying facilities and certifying Operators to ensure that Operator qualifications and experience match the complexities of the facilities they operate." The Drinking Water Protection Act and its Regulation requires persons operating water supply systems to be qualified by the Environmental Operators Certification Program for that classification of the facility. Facility classification is to ensure that all facilities are classified based on the size and complexity of the facility in order to establish an appropriate level of skill and knowledge of the Operator(s) of the facility. The Small Water System (SWS) facility classification is the least complex classification that increases to a maximum classification of a Water Distribution Level 4 (WD 4).

The following is a list of ACRD water systems and operations:

Water System	EOCP Facility#	Level	Operation By:
Alberni Valley Airport	2139	SWS	ACRD employees
Cougar Smith Park	2141	SWS	ACRD employees
Beaver Creek	431	WD3	ACRD employees
Millstream	2143	SWS	Contracted employee
Long Beach Airport	2142	SWS	Contracted employee
Bamfield	2140	WD2	Contracted employee

1.2 Operations

The ACRD regularly performs tests to ensure that the water is meeting all standards. A complete water potability test of the water is performed regularly. The water systems operators regularly check the disinfection and safety of the drinking water. With the systems with chlorine disinfection, the Free Chlorine residual is measured daily. Free Chlorine is defined as the remaining chlorine in the water after initial disinfection that is available for chemical and biological reactions. The operators try to obtain a reading of 0.2 mg/l of Free Chlorine at all the ends of the distribution system. The systems with Ultraviolet Disinfection (UV) are checked weekly to make sure the light intensity is adequately disinfecting the water. UV systems disinfect water using light to inactivate organisms so that they cannot reproduce and cause health concerns.

Water samples for bacteria testing are currently taken monthly from the small water systems and weekly from the Beaver Creek Water System. These samples are submitted to IHA for monitoring for the purpose of the Drinking Water Protection Act. The water samples are analyzed by the British Columbia Center for Disease Control (BC CDC) for bacteria and specifically Total Coliforms and E. Coli. Many different pathogens may be present in the source water for drinking water systems. The Total Coliforms and E. Coli bacteria are typically only tested as they are good indicator organisms. Indicator organisms are easy and inexpensive to test for, can be correlated with the potential contamination level and are not present in unpolluted waters. The IHA's Environmental Health Officer immediately reports any positive test for indicator organism and regularly inspects all permitted drinking water systems.

Water systems mains are regularly flushed to ensure good water quality throughout the distribution system. This flushing action removes any accumulated silt in the water mains by creating an increase in velocity to scour the pipes. Flushing also refreshes the mains of any standing water (old) with clean water that has an active Free Chlorine level.

Regular sampling of drinking water is conducted for physical, chemical and biological parameters. This sampling is to ensure that the drinking water meets the Health Canada Canadian Drinking Water Guidelines. Each water system is provided with an Operational Certificate by Island Health that may outline specific requirements such as individual tests and the frequency. Where the requirements are not outlined, testing is performed at a frequency approved by IH and the ACRD Board of Directors.

ALBERNI CLAYOQUOT REGIONAL DISTRICT

BEAVER CREEK WATER SYSTEM
ANNUAL REPORT
2014

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2.1 Beaver Creek Water System Introduction

This is a community of 2,820 which borders the City of Port Alberni on the south, the Beaufort Electoral Area on the north and east, and the Sproat Lake Electoral Area on the west. The Stamp and Somass Rivers form the western boundary of Beaver Creek. The Beaver Creek Improvement District converted into a local service area of the ACRD on June 1st, 2012. Beaver Creek Water System has an Advisory Committee made up of the Beaver Creek Electoral Director and volunteer members of the community. This committee provides guidance and advice to ACRD management to do with the water system.

2.2 System Overview:

The majority of the Beaver Creek Water System (BCWS) was constructed in the 1960's. The water mains were originally constructed with asbestos cement pipe and more recent improvements were with polyvinyl pipe. Historically, the source water was from the Stamp River accessed through an infiltration gallery. In April, 2014 the BCWS changed the primary source water to the City of Port Alberni through the new Strick Road Pump Station. The change in source water allowed the residents of Beaver Creek to feel a sense of security of having uninterrupted safe water. The treated water from the City of Port Alberni prevented any need for any "boil water" orders by eliminating any high turbidity events from the Stamp River. The pump station was built on Strick Road to connect and to boost the pressure from the City to the BCWS. To accommodate the increase in pressure and flow the Strick Road water main was replaced in 2014.

The Beaver Creek Water System has three reservoirs:

- Concrete reservoir on Kitsuksis Road, Volume of 1,135 m3
- Bolted Steel Reservoir on Beaver Creek Road, Volume of 273 m3
- Glass Fused Reservoir on Kitsuksis Street, Volume of 1,135 m3

Distribution System:

- Disinfection: Chlorine
- Service connections: 987
- Length of mains: The distribution system consists of a mixture of 100, 150, 200 and 300 mm diameter piping with a total length of 43,600 meters
- Water main material:
  The majority (67.5%) of the distribution system is Asbestos Cement (AC)
  The remainder is made up of polyvinyl chloride (PVC)
- Average Daily Flow: 1299 cu. meters

2.3 Water Quality and Consumption:

The 2014 total water consumption for the BCWS was 474,187 cubic meters. In 2014 the BCWS used two different water sources, the Stamp River and the City of Port Alberni. The Stamp River was the only source of water until the end of April, which accounted for approximately a quarter of the annual use. The remainder was drawn from the City of Port Alberni's distribution system.

The BCWS had a completed potability test performed on the water entering the distribution system on August 7th and October 30th, 2014. The results from these tests are in Appendix A.

The August 7th results reported good water quality for all parameters. above the AO or MAC including the THA. The THA result was 14 ug/l which is well under the MAC.

The results from Oct 30th also came back with good water quality parameters with only the exception of Manganese being exceeded in the Aesthetic Objectives (AO). Aesthetic Objectives is established for parameters that may impair the taste, smell, or colour of water; or which may interfere with the supply of good quality water. They do not cause adverse health effects. The only test that exceeded the Drinking Water Guideline Maximum Allowable Concentration (MAC) was Total Halo Acetic Acids (HAA). The result came back with 110 micrograms per liter (ug/l) where the MAC is 80 ug/l based on a running average of a minimum of quarterly samples. http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/haloaceti/index-eng.php

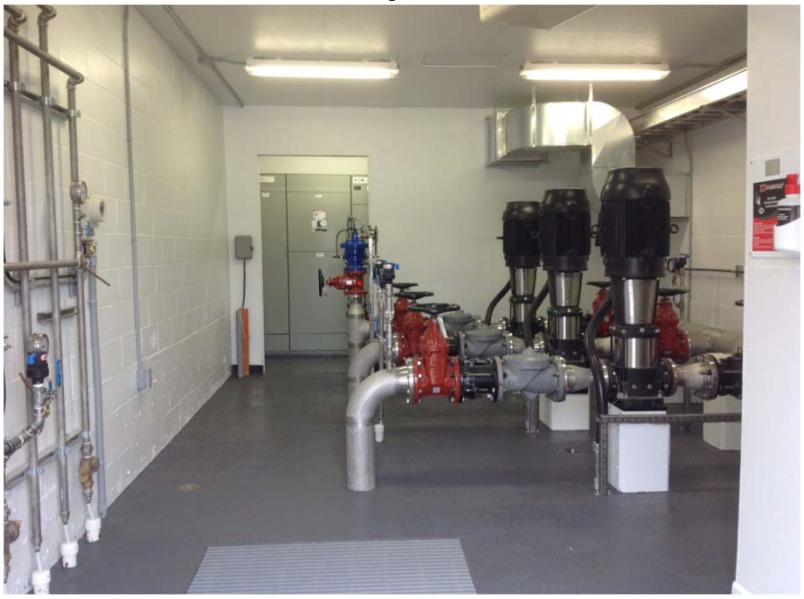
Appendix B shows the 2014 BCWS microbiological sampling history provided by Island Health. All the results show no Total Coliforms or E. Coli except for one sample coming back positive for Total Coliforms on August 12. This one positive sample is assumed to be a sampling error as no other samples have come back positive.

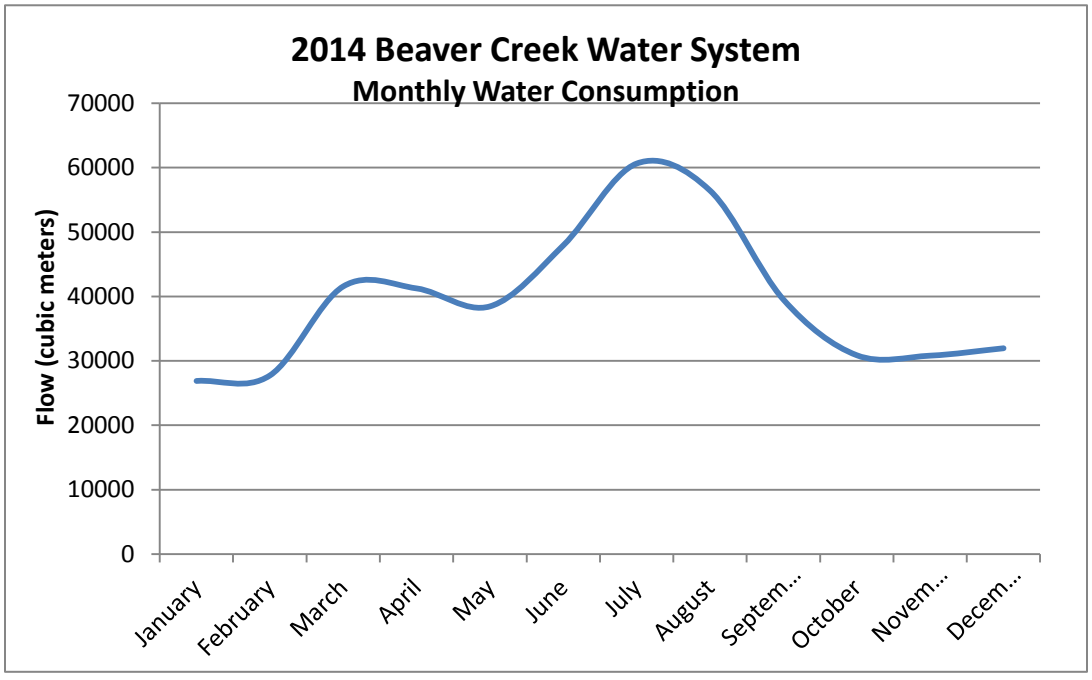
Island Health recently performed an inspection of the BCWS which can be found in Appendix D. No violations were found during the inspection and the facility was given a low hazard rating. "Low hazard rating" is the lowest rating in Island Health's scale.

2.4 2014 Projects:

- The primary projects for 2014 were the construction of the Strick Road Pump Station and the water main upgrade on Strick Road.
- All fire hydrants had annual servicing in 2014

Strick Road Pump Station





ALBERNI CLAYOQUOT REGIONAL DISTRICT

BAMFIELD WATER SYSTEM
ANNUAL REPORT
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3.1 Bamfield Community Water System Introduction

Bamfield is nestled quietly in a protected inlet on the south shore of Barkley Sound located on the outer west coast of Vancouver Island. Europeans founded a small outpost for fur trading and a fishing community sometime in the late 1800s. Bamfield is divided into two sections, separated by about 180 meters of the Bamfield Inlet. The west side of Bamfield is linked by a waterfront boardwalk that connects all the homes and docks on the harbour side. The east side of Bamfield contains most of the businesses, including a pub, a market and café.

In Bamfield there is a committee that works with the ACRD in determining the direction and operation of the water system. The committee is made of the Electoral Area "A" Director and volunteer members of the community. A contracted water operator runs the day to day operations of the Bamfield Water System (BWS). The water operator is certified through the Environmental Operator Certificate Program (EOCP) to operate small water systems.

3.2 System Overview:

- Water Source: Sugsaw Lake
- Treatment: Fine screen intake
- Disinfection: Chlorine
- Reservoir(s): Two Bolted Steel reservoirs, 214 m3 & 441 m3
- Service connections: 207
- Length of mains: App. 4550 meters of 150 mm
  App. 1300 meters of 100 mm
  App. 5175 meters of 50 mm
  App. 325 meters of 25 mm
- Water main material: Polyvinyl Chloride and Polyethylene
- Average Daily Flow: 137 cu. meters

The BWS was constructed in 1979 and 1980. Before then, water was collected from individual wells, local springs and rain water collection systems. The BWS complexity is partially due to the various subsurface water lines crossing the inlets in various locations. These marine water lines are challenging to repair, being under water and often under layers of sediment.

The BWS has experienced distribution leaks caused by dissimilar metals and exposed pipes, which are subject to freezing. During a power outage a backup generator provides electricity to prevent any disruption to the water supply.

3.3 Water Quality and Consumption:

The 2014 water consumption for Bamfield was 50,000 cubic meters. Bamfield's water system is wholly supplied with surface water from Sugsaw Lake. Sugsaw Lake's water quality is typical of most west coast watersheds as the lake is surrounded by forests that produce soluble organics from the decomposition of the trees and vegetation. These natural organic substances are often described as Tannins and Lignins that create a "tea" colour to the water. The addition of chlorine for water disinfection reacts with organics and colour to create disinfection byproducts. These low levels of disinfection byproducts found in the Bamfield's distribution system have exceeded the Canadian Drinking Water Guidelines. The disinfection byproducts that are typically produced with chlorine disinfection are Trihalomethanes (THM's) and Total Halo Acetic Acids (HAA).

Quarterly sampling for Trihalomethanes (THM's) began in 2013 as there was a concern due to organics and colour in the water. Trihalomethanes are formed as a by-product predominantly when chlorine is used to disinfect water for drinking. Sample results showed values higher than the Canadian Drinking Water Guidelines. Due to the higher levels of THM's found, a Water Advisory was issued by Island Health on November 2, 2013. To try and alleviate the THM's the water system is now being flushed regularly to reduce the age of the water. THM's formation is partially due to the amount of contact time chlorine has with organics. Infrastructure upgrades are being investigated and the water quality is more frequently monitored to try and improve the quality (see Appendix A).

A "pilot" water treatment plant was installed in Bamfield in the fall of 2014 in order to determine if a Dissolved Air Floatation (DAF) plant would remove the organics and colour from the lake water. This plant operated for two weeks with raw water (un-chlorinated) from the water main. Water samples and subsequent laboratory analysis was taken of the raw water entering the plant, from the clarified water coming off the DAF plant and from the final filters (see Appendix A). The DAF system worked by the reduction in pH (level of acidity) and an additive of a flocculent (to join particles together) to create a larger surface area particle. The DAF tank would then introduce dissolved air to create air bubbles that would stick to the particles and float to the top of the tank for removal. The last step is that the water would then travel through a filter bed to remove any remaining particles. The chemical testing found that the system worked well in the removal of organics and colour thereby reducing the level of disinfection byproducts.

Raw Water Entering with Treatment Additives

Dissolved Air Floatation Tank (DAF)

Final Filters

The BWS had a completed potability test performed on Sugsaw Lake entering the distribution system and from the reservoirs on the same day (see Appendix A). The laboratory analyses of the two sites were performed at the same time to see if there were any differences. The differences of the two sites were only slight increases in metals that are associated with the part and fittings within the distribution system. The lake water showed the presence of low numbers of bacteria (coliforms) and the reservoir had no bacteria counts proving the chlorine disinfection effective.

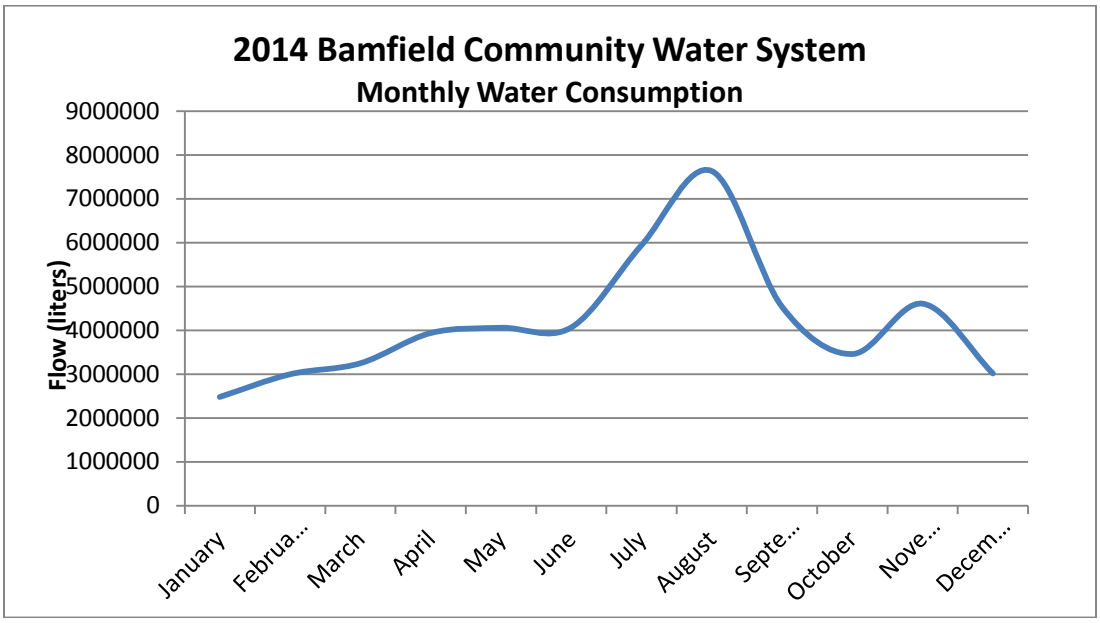
Sugsaw Lake is being testing monthly at three locations to determine if and where a new water intake should be located. The existing intake is in a shallow end of the lake that is thought to be of a poorer water quality. Testing will continue to determine if a deeper location has better water quality (see Appendix A).

Appendix B shows the 2014 Bamfield microbiological sampling history provided by Island Health. All the results showed no E. Coli but three events found small numbers of Total Coliforms. These events were determined to be sampling, transportation or laboratory error and were subsequently re-sampled.

Island Health performed an inspection of the BWS in April 2013 which can be found in Appendix D. One violation was reported during the inspection that the THM is above the MAC of the CDWG and ordered quarterly monitoring. The ACRD is exceeding the order by performing monthly testing in conjunction with the Sugsaw Lake testing. The BWS facility was given a low hazard rating, "Low hazard rating" is the lowest rating in Island Health's scale.

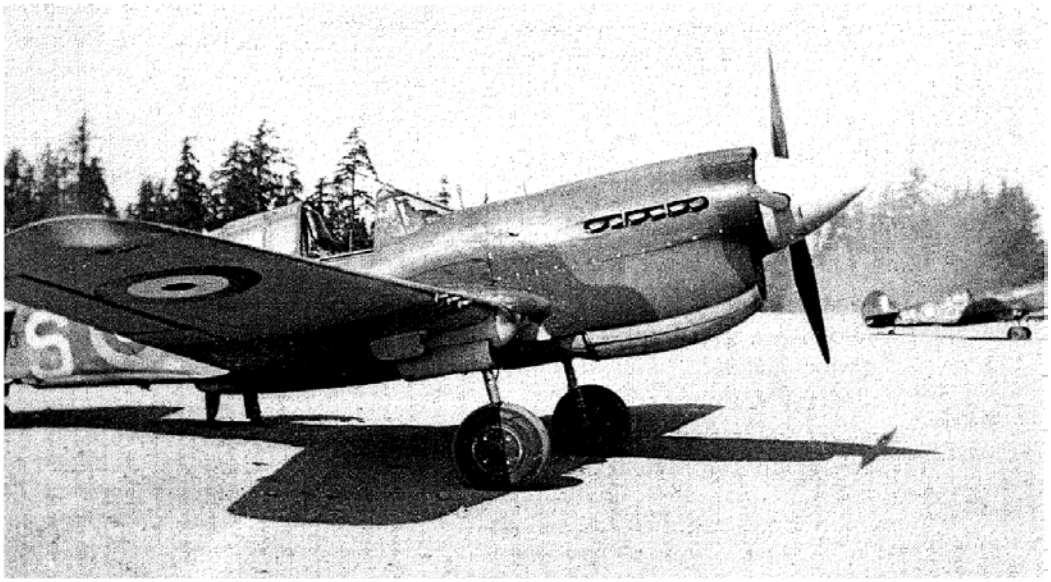
3.4 2014 Projects:

- Water quality was the primary objective as the treated drinking water was found to contain low levels of disinfection byproducts. The byproducts are called trihalomethanes and haloacetic acids. The concentrations are considered low by Island Health and are just above the Canadian Drinking Water Guidelines.
- A new location for the water intake is being investigated in Sugsaw Lake.
- A monthly sampling program is ongoing to gather seasonal water quality data from different locations in Sugsaw Lake.
- Monthly trihalomethanes sampling is taking place at the reservoirs
- A "*Pilot"* DAF water treatment plant was successfully operated in the fall that removed the disinfection byproduct precursors. A DAF plant uses "dissolved air floatation" to float out impurities in the raw (lake) water.
- Funding for the engineering and construction of a water treatment plant will be sourced in 2015.
- The automatic reservoir filling controls were upgraded to a SCADA (supervisory control and data acquisition) system using the internet. The operator and the ACRD office can now view live information regarding the distribution system using a computer.
- The water system received a Crown Land Tenure to cross under the Bamfield Inlet from Burlo Island to the west side of Bamfield. This tenure will enable the water distribution system to access a part of west Bamfield for future expansion.


2014 Bamfield Community Water System
Monthly Water Consumption
Flow (liters)
9000000
8000000
7000000
6000000
5000000
4000000
3000000
2000000
1000000
0
January
Februa...
March
April
May
June
July
August
Septe...
October
Nove...
Decem...

ALBERNI CLAYOQUOT REGIONAL DISTRICT

LONG BEACH AIRPORT WATER SYSTEM
ANNUAL REPORT
2014



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4.1 Long Beach Airport Water System Introduction

The Long Beach Airport Water System (LBAWS) is located within the Long Beach Airport across from Long Beach of the Pacific Rim National Park. The airport is located between the Districts of Tofino and Ucluelet, on the west coast of Vancouver Island. The LBAWS was originally constructed during World War II to service the military airport and related services. Currently, the supply and treatment system is comprised of a deep well water source, water softener, chlorination, pump house, reservoir and a distribution system. The water is supplied to the communities of Ty-Histanis and Esowista (Tla-O-Qui-Aht First Nation), airport service buildings and the Long Beach Golf Course. A contracted water operator runs the day to day operations of the LBAWS. The water operator is certified through the Environmental Operator Certificate Program (EOCP) to operate small water systems.

4.2 System Overview:

- Water Source: Deep drilled well
- Treatment: Ion Exchange (Sodium) water softener
- Disinfection: Chlorine
- Reservoir: One concrete reservoir, 1364 m3
- Service connections: 9 connections
- Length of mains: 2730 m of C.I. & 188 m of PVC
- Water main material: Cast Iron (CI), Polyvinyl Chloride (PVC)
- Average Daily Flow: 82 cu. meters

In 2013 and 2014 an additional water source was further investigated to assist with future demand. This was performed using exploratory drilling techniques to determine aquifer capacity. The potential for further aquifer reserves is still being determined.

The reservoir is monitored annually to determine when cleaning is required. Cleaning will remove any precipitate (insoluble solid) that is caused by the oxidation of the chlorine reacting with soluble metals to form small dark particles. A new water treatment method will be analyzed to facilitate future growth and environmental concerns.

4.3 Water Quality and Consumption:

The 2014 water consumption for Long Beach Airport Water System was 30,102 cubic meters. The majority of the water is supplied to the Tla-o-qui-aht First Nations' Esowista and Ty-Histanis community lands.

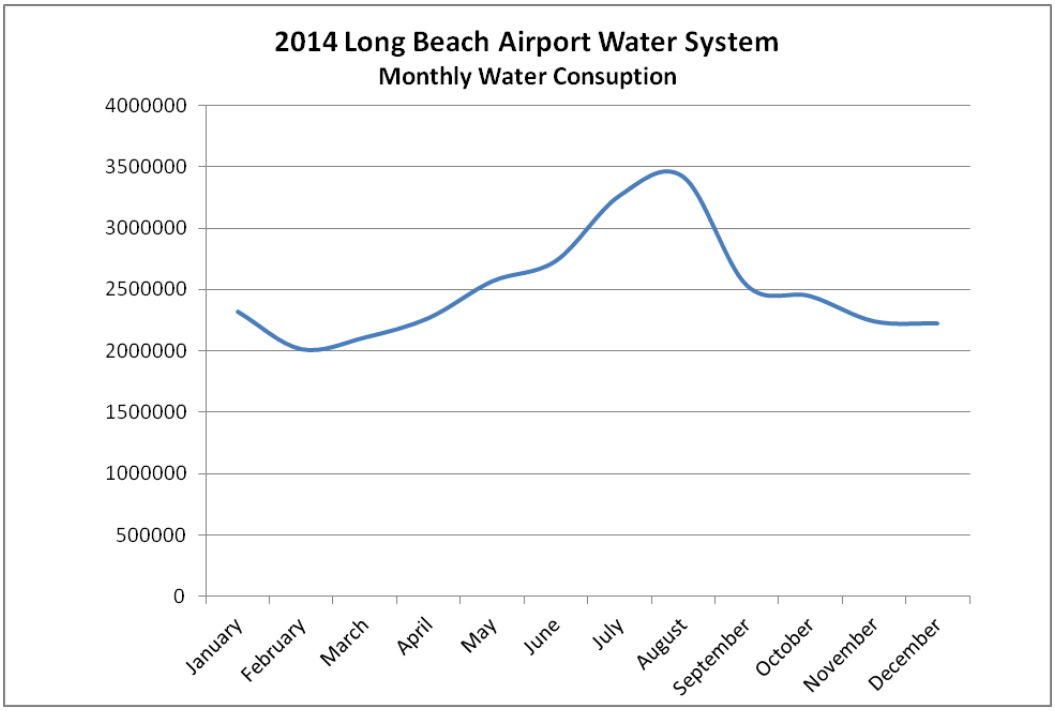
The Long Beach Airport raw well water is high in iron and manganese, which is typical of groundwater in that area (see Appendix A). The ion exchange water treatment removes these metals as well as the turbidity, as can be seen in the filtered water results. In the ion exchange treatment, sodium is released into the water which increased the results to 74 mg/L. This value is still lower than the Canadian Drinking Water Guidelines for aesthetic objectives of 200 mg/L.

Appendix B shows the 2014 Long Beach Airport microbiological sampling history provided by Island health. All the results show no Total Coliforms or E. Coli.

Island Health performed an inspection of the Long Beach Airport Water System in March 2013, which can be found in Appendix D. No violations were reported and the facility was given a low hazard rating, "Low hazard rating" is the lowest rating in Island Health's scale.

4.4 2014 Projects:

- In February a new Rates and Regulations Bylaw (Bylaw F1106) was established to assist in the regulation of the water system.
- A new fire hydrant was installed on the airside to enable fire fighting capabilities for aircraft emergencies.
- Hazard trees were removed from around the pumphouse and reservoir.
- A new water well was developed and tested to provide addition water supply.
- A new level control system was installed in the reservoir.



ALBERNI CLAYOQUOT REGIONAL DISTRICT

MILLSTREAM WATER SYSTEM
ANNUAL REPORT
2014

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5.1 Millstream Community Water System Introduction

Millstream is a small residential community located approximately 3.5 km north of the District of Ucluelet. The area was originally developed by a logging contractor to provide accommodation for employees and their families. The existing water system was constructed between July and October in 1969. The type of pipe used was asbestos cement (A.C.), which was the current technology at the time. The original wood reservoir was replaced with a metal reservoir in the early 1990's. A contracted water operator runs the day to day operations of the Millstream Community Water System. The water operator is certified through the Environmental Operator Certificate Program (EOCP) to operate small water systems.

5.2 System Overview:

- Water Source: Two shallow dug wells, 4.1 and 3.6 meters
- Treatment: none
- Disinfection: Chlorine
- Reservoir: Bolted steel, 656 m3
- Service connections: 50
- Length of mains: 725 m of 100mm & 255 m of 150mm
- Water main material: Asbestos Cement (AC) & Polyvinyl Chloride (PVC)
- Average Daily Flow: 29 cu. meters

5.3 Water Quality and Consumption:

The 2014 water consumption for the Millstream Water System was 10,719 cubic meters. The monthly water consumption graph shows a typical community with increasing use during the summer months. The exception is an addition peak in November which was caused by a water main leak.

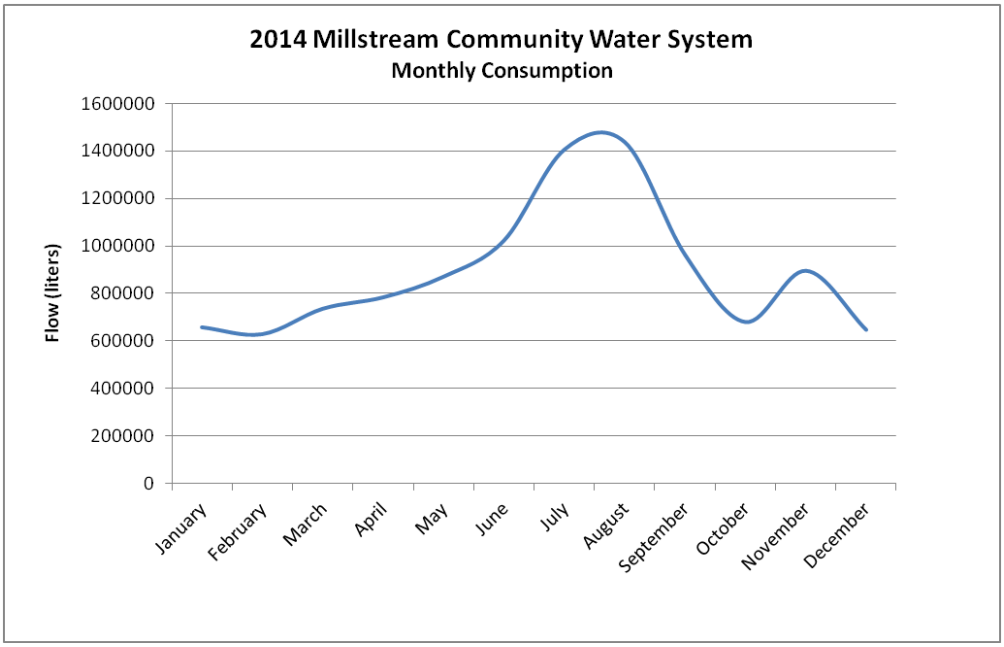
Appendix B shows the 2014 Millstream microbiological monthly sampling history provided by Island Health. All the results show no Total Coliforms or E. Coli.

Island Health performed an inspection of the Millstream Water System in March 2013, which can be found in Appendix D. No violations were reported and the facility was given a low hazard rating, "Low hazard rating" is the lowest rating in Island Health's scale.

The most recent potability test was completed on the well water (raw) in December 2013 as can be seen in Appendix A. The water quality is very good with very little bacteria, which shows there is very little surface influence.

5.4 2014 Projects

- A secondary water supply was added by connecting to the District of Ucluelet's water distribution system. This will provide an alternative source of water in case of an emergency or maintenance.
- Infrastructure upgrades involved the replacement of asbestos cement water mains with 150mm PVC pipe on Lee Street and Mavis Avenue.



ALBERNI CLAYOQUOT REGIONAL DISTRICT

COUGAR SMITH PARK WATER SYSTEM
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6.1 Cougar Smith Park Small Water System Introduction

Cougar Smith Park is in the Sproat Lake area within the Alberni Valley. The park is located on Faber Road situated approximately 13 km northwest of Port Alberni. It has a bike skills park, baseball diamond, tennis courts and playgrounds.

6.2 System Overview:

- Water Source: Sproat Lake
- Treatment: micro filtration
- Disinfection: Ultraviolet (UV)
- Reservoir capacity and type: No reservoir
- Service connections: Two connections, one for the caretaker residence and one for the public building
- Length of mains: 144 m of 31.75 mm
- Water main material: Polyethylene (PE)
- Average Daily Flow: 7.3 cu. meters

The water system infrastructure is located within the public building within the park. Within the building are a pressure tank, an ultraviolet light disinfection system and a five micron particulate filter. The water system supplies two public washrooms, an irrigation system, a drinking fountain and the caretaker's residence.

6.4 2014 Projects

- The irrigation system was fully implemented in 2014, providing water to the baseball fields and the bike park. This increase in summer flow can be seen on the Monthly Water Consumption graph.

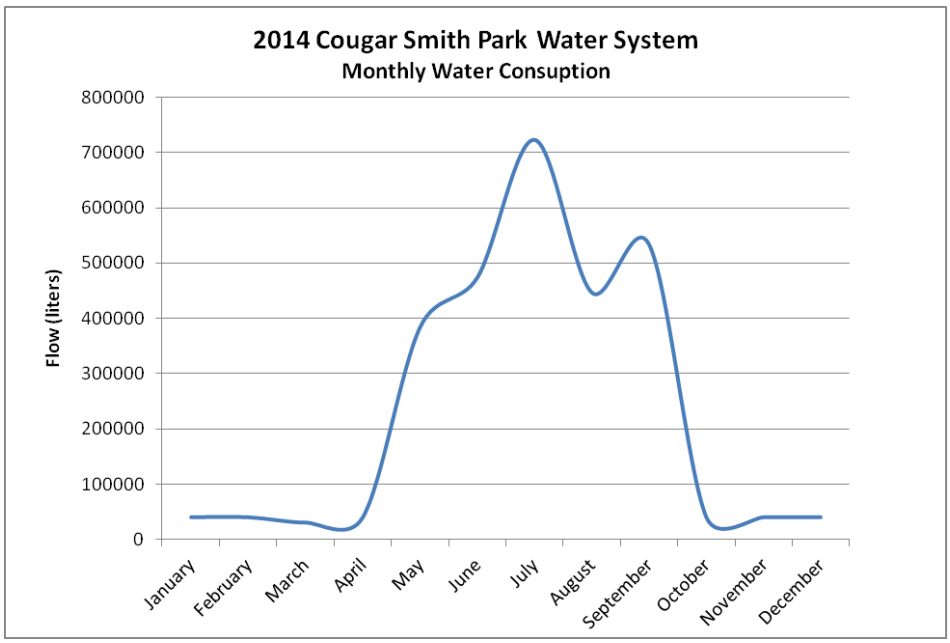
6.3 Water Quality and Consumption:

The 2014 water consumption for Cougar Smith Park was 2,659 cubic meters. The monthly consumption graph shows a dramatic seasonal increase due to irrigation of the baseball diamond and water used for the bike park. The bike park uses water in maintaining the bike runs and jumps.

Appendix B shows the 2014 Cougar Smith Park microbiological sampling history provided by North Island Health. All the results show no Total Coliforms or E. Coli in the distribution system. Island Health is now providing the bacteria analysis and monthly results are being reported.

Island Health is currently reviewing an application to certify the water system. Once certified, Island Health will perform regular inspections. The water system's operation is currently being checked weekly by ACRD staff and by the resident caretaker. The water system has a failsafe shut off switch if the UV system fails, which prevents untreated entering the water system.

The most recent potability test was completed in December 2013 as can be seen in Appendix A. The water quality is good and there is no health concerns indicated from the potability test.



ALBERNI CLAYOQUOT REGIONAL DISTRICT

ALBERNI VALLEY REGIONAL AIRPORT WATER SYSTEM
ANNUAL REPORT
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7.1 Alberni Valley Regional Airport Small Water System Introduction

The Alberni Valley Regional Airport (AVRA) is located approximately 7 kilometers west of Port Alberni. This small water system at the Alberni Valley Regional Airport was constructed in 1993 to service the site caretaker's residence and the Airport Terminal Building. The Terminal Building has washroom facilities available to the personnel working in three offices and to the public. There is an exterior hose bib that is used for watering plants and washing vehicles.

The microbiological activity in the well water appears to be active during times of high water level. This has been documented in previous years linking it to higher precipitation in the winter. With Island Health's recommendation and approval, the system was equipped with micro filtration and UV disinfection.

7.2 System Overview:

- Water Source: Shallow dug well to 5.5 m deep
- Treatment: micro filtration
- Disinfection: Ultraviolet (UV)
- Reservoir capacity and type: No reservoir
- Service connections: Three connections, two caretaker connections and airport terminal building
- Length of mains: approximately 350 meters of 38 mm.
- Water main material: Polyethylene (PE)
- Average Daily Flow: 1.07 cu. meters

7.3 Water Quality and Consumption:

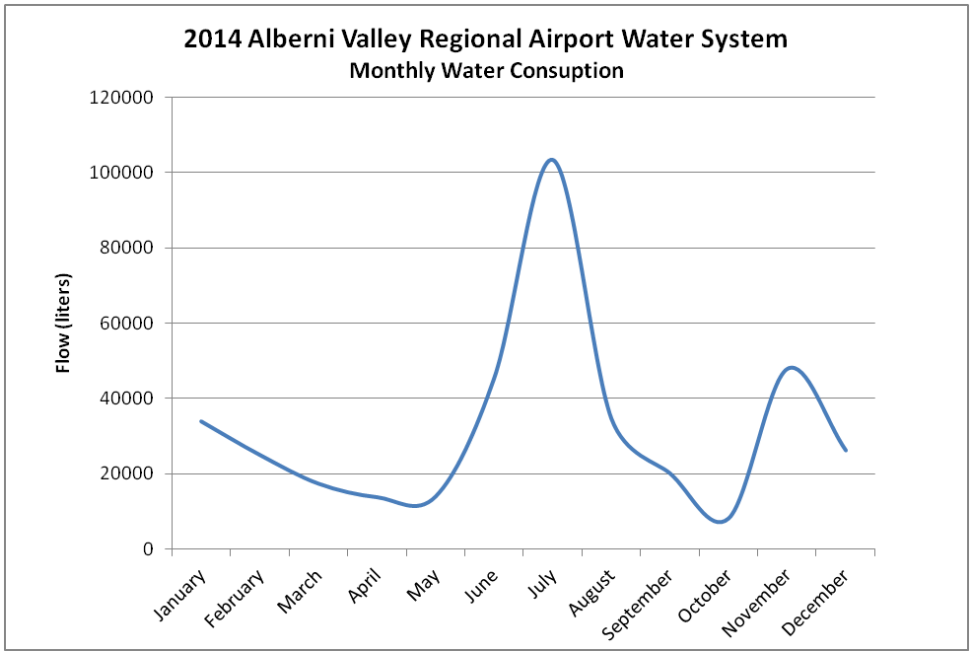
The 2014 water consumption for the AVRA was 391 cubic meters. The monthly water consumption graph shows a significant peak in water demand during the summer months due to an increase of use of the airport terminal building, irrigation and the annual drag racing event "Thunder in the Valley". There is a lesser peak of water use during the winter months where water has been left running to reduce the risk of freezing of pipes.

Appendix B shows the 2014 AVRA microbiological monthly sampling history provided by Island health. All the results show no Total Coliforms or E. Coli.

Island Health performed an inspection of the AVRA Water System in February 2014, which can be found in Appendix D. No significant violations were reported and the facility was given a low hazard rating, "Low hazard rating" is the lowest rating in Island Health's scale. At the time of the inspection the UV disinfection System was in alarm and

a recommendation was written that the system be monitored frequently to ensure the system is working properly. The water system's operation is currently being checked weekly by ACRD staff and by resident caretakers. The water system has a failsafe shut off switch if the UV system fails which prevents untreated entering the water system.

The most recent potability test was completed in January 2012 as can be seen in Appendix A. Iron (0.626 mg/l) was higher than the Canadian Drinking Water Guidelines Aesthetic Objective of 0.3 mg/l. higher levels of Iron is typical of groundwater in the area and is not a concern.



Appendix A

Certificate of Analysis

Water Chemistry including: Physical, Chemical, Biological

North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To: Regional District of Alberni & Clayoquot
John Thomas
3008 5th Ave.
Port Alberni, BC V9Y 2E3
V9Y 2E3

Lab Number: 113093
Date Reported: 19 Aug 14
Date Completed: 19 Aug 14
Date Received: 7 Aug 14 13:02

113093-01 Strick Road Pumphouse **Beaver Creek Water System** **Inside tap**

Sampled By: Keith Looker
Sampling Date: 7 Aug 14 10:00

Test	Result	Units	Drinking Water Guideline
Colour - Apparent	<5	Colour Units	15
UV Transmittance	97.9	%/cm	
Fluoride	0.02	mg/L	1.5 MAC
Chloride	6	mg/L	250 AO
Nitrate (N)	0.07	mg/L	10 MAC
Nitrite (N)	<0.01	mg/L	1 MAC
Sulphate	2.8	mg/L	500 AO
T-Aluminium	<0.025	mg/L	0.1 Operational Std.
T-Antimony	<0.0005	mg/L	0.006 MAC
T-Arsenic	0.00117	mg/L	0.010 MAC
T-Barium	0.0167	mg/L	1.0 MAC
T-Beryllium	<0.00025	mg/L	
T-Bismuth	<0.0005	mg/L	
T-Boron	0.018	mg/L	5 IMAC
T-Cadmium	<0.00005	mg/L	0.005 MAC
T-Calcium	29	mg/L	
T-Chromium	<0.0025	mg/L	0.05 MAC
T-Cobalt	<0.0005	mg/L	
T-Copper	0.0042	mg/L	1.0 AO
T-Iron	0.106	mg/L	0.3 AO
T-Lead	<0.0005	mg/L	0.010 MAC
T-Lithium	<0.0025	mg/L	
T-Magnesium	1.3	mg/L	
T-Manganese	<0.0050	mg/L	0.05 AO
T-Molybdenum	<0.00025	mg/L	

Test results are in the results column. Your results should be below or with the values listed in the Drinking Water guidelines column on the right hand side of the report. AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC > = Greater than; < = Less than

Results relate only to samples as submitted. This certificate must not be reproduced, except in its entirety, without written consent from the laboratory.

Canadian Drinking Water Guidelines as listed on Dec. 5th, 2005 and are subject to change. Method uncertainties for specified analyses are available upon request.

North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

113093-01 Strick Road Pumphouse **Beaver Creek Water System** **Inside tap**

Sampled By: Keith Looker

Sampling Date: 7 Aug 14 10:00

Test	Result	Units	Drinking Water Guideline
T-Nickel	<0.0010	mg/L	
T-Potassium	<0.5	mg/L	
T-Selenium	<0.0005	mg/L	0.01 MAC
T-Silicon	2.29	mg/L	
T-Silver	<0.00025	mg/L	
T-Sodium	3.4	mg/L	200 AO
T-Strontium	0.0636	mg/L	
T-Thallium	<0.00005	mg/L	
T-Tin	<0.0005	mg/L	
T-Titanium	<0.0025	mg/L	
T-Uranium	<0.00005	mg/L	0.02 MAC
T-Vanadium	0.0006	mg/L	
T-Zinc	<0.0025	mg/L	5 AO
Hardness (CaCO3)	78	mg/L	
Tannins & Lignins	<0.1	mg/L	0.4 AO
pH at 25 C	7.9	pH Units	6.5-8.5
Alkalinity	62	mg/L (CaCO3)	
Turbidity	<0.5	NTU's	5 AO
Total Dissolved Solids (conductivity ca	102	mg/L	500 AO
Bromoacetic Acid	<2.0	ug/L	
Bromochloroacetic Acid	<2.0	ug/L	
Chloroacetic Acid	<2.0	ug/L	
Dibromoacetic Acid	<2.0	ug/L	
Dichloroacetic Acid	6.2	ug/L	
Trichloroacetic Acid	7.8	ug/L	
Total Halo Acetic Acids	14	ug/L	
Bromodichloromethane	0.003	mg/L	0.016 MAC
Bromoform	<0.001	mg/L	
Chloroform	0.014	mg/L	
Dibromochloromethane	<0.001	mg/L	
Total Trihalomethanes	0.017	mg/L	0.100 MAC

Test results are in the results column. Your results should be below or with the values listed in the Drinking Water guidelines column on the right hand side of the report. AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC >= Greater than; <= Less than

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To:	Regional District of Alberni & Clayoquot John Thomas 3008 5th Ave. Port Alberni, BC V9Y 2E3 V9Y 2E3	Lab Number:	115491
		Date Reported:	12 Nov 14
		Date Completed:	12 Nov 14
		Date Received:	30 Oct 14 12:03

115491-01 Strick Road Pumphouse Beaver Creek Water System Inside tap

Sampled By: Keith Looker

Sampling Date: 30 Oct 14 9:40

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1
Colour - Apparent	30	Colour Units	15
UV Transmittance	81.2	%/cm	
Fluoride	<0.05	mg/L	1.5 MAC
Chloride	4.6	mg/L	250 AO
Nitrate (N)	<0.05	mg/L	10 MAC
Nitrite (N)	0.06	mg/L	1 MAC
Sulphate	1.4	mg/L	500 AO
T-Aluminium	0.048	mg/L	0.1 Operational Std.
T-Antimony	<0.0001	mg/L	0.006 MAC
T-Arsenic	0.00048	mg/L	0.010 MAC
T-Barium	0.0128	mg/L	1.0 MAC
T-Beryllium	<0.00005	mg/L	
T-Bismuth	<0.0001	mg/L	
T-Boron	0.014	mg/L	5 IMAC
T-Cadmium	<0.00001	mg/L	0.005 MAC
T-Calcium	10.8	mg/L	
T-Chromium	<0.0005	mg/L	0.05 MAC
T-Cobalt	0.0001	mg/L	
T-Copper	0.0067	mg/L	1.0 AO
T-Iron	0.227	mg/L	0.3 AO
T-Lead	0.0004	mg/L	0.010 MAC
T-Lithium	<0.0005	mg/L	
T-Magnesium	0.86	mg/L	

Test results are in the results column. Your results should be below or with the values listed in the Drinking Water guidelines column on the right hand side of the report. AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC > = Greater than; < = Less than

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

115491-01 Strick Road Pumphouse **Beaver Creek Water System** **Inside tap**

Sampled By: Keith Looker

Sampling Date: 30 Oct 14 9:40

Test	Result	Units	Drinking Water Guideline
T-Manganese	0.079	mg/L	0.05 AO
T-Molybdenum	<0.00005	mg/L	
T-Nickel	<0.0002	mg/L	
T-Potassium	0.2	mg/L	
T-Selenium	<0.0001	mg/L	0.01 MAC
T-Silicon	2.16	mg/L	
T-Silver	<0.00005	mg/L	
T-Sodium	1.8	mg/L	200 AO
T-Strontium	0.0265	mg/L	
T-Thallium	<0.00001	mg/L	
T-Tin	<0.0001	mg/L	
T-Titanium	0.0011	mg/L	
T-Uranium	<0.00001	mg/L	0.02 MAC
T-Vanadium	0.0003	mg/L	
T-Zinc	0.0037	mg/L	5 AO
Hardness (CaCO3)	31	mg/L	
Tannins & Lignins	0.3	mg/L	0.4 AO
pH at 25 C	7.0	pH Units	6.5-8.5
Alkalinity	24	mg/L (CaCO3)	
Turbidity	1.8	NTU's	5 AO
Total Dissolved Solids (conductivity ca	46	mg/L	500 AO
Bromoacetic Acid	<2.0	ug/L	
Bromochloroacetic Acid	<2.0	ug/L	
Chloroacetic Acid	<2.0	ug/L	
Dibromoacetic Acid	<2.0	ug/L	
Dichloroacetic Acid	44.1	ug/L	
Trichloroacetic Acid	68.5	ug/L	
Total Halo Acetic Acids	110	ug/L	
Bromodichloromethane	0.003	mg/L	0.016 MAC
Bromoform	<0.001	mg/L	
Chloroform	0.073	mg/L	
Dibromochloromethane	<0.001	mg/L	

Test results are in the results column. Your results should be below or with the values listed in the Drinking Water guidelines column on the right hand side of the report. AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC > = Greater than; < = Less than

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

115491-01 Strick Road Pumphouse **Beaver Creek Water System** **Inside tap**

Sampled By: Keith Looker

Sampling Date: 30 Oct 14 9:40

Test	Result	Units	Drinking Water Guideline
Total Trihalomethanes	0.076	mg/L	0.100 MAC

Test results are in the results column. Your results should be below or with the values listed in the Drinking Water guidelines column on the right hand side of the report. AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC >= Greater than; <= Less than

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Canadian Drinking Water Guidelines as listed on Dec. 5th, 2005 and are subject to change. Method uncertainties for specified analyses are available upon request.

North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To: Regional District of Alberni & Clayoquot
John Thomas
3008 5th Ave.
Port Alberni, BC V9Y 2E3
V9Y 2E3

Lab Number: 114496
Date Reported: 3 Oct 14
Date Completed: 3 Oct 14
Date Received: 19 Sep 14 10:09

114496-01 BWS Reservoir
Sampled By: John Thomas
Sampling Date: 17 Sep 14 0:00

Test	Result	Units	Drinking Water Guideline
Bromodichloromethane	0.008	mg/L	0.016 MAC
Bromoform	<0.001	mg/L	
Chloroform	0.261	mg/L	
Dibromochloromethane	<0.001	mg/L	
Total Trihalomethanes	0.269	mg/L	0.100 MAC

114496-01

Test	Method	Analyst	Date
Bromodichloromethane	Exova Subcontract-EPA 8260B/5035 - modified	EXL	9/26/2014
Bromoform	Exova Subcontract-EPA 8260B/5035 - modified	EXL	9/26/2014
Chloroform	Exova Subcontract-EPA 8260B/5035 - modified	EXL	9/26/2014
Dibromochloromethane	Exova Subcontract-EPA 8260B/5035 - modified	EXL	9/26/2014
Total Trihalomethanes	Exova Subcontract-EPA 8260B/5035 - modified	EXL	9/26/2014

Approved By: Catherine Black

Catherine Black, Owner/Operator

AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC
> = Greater than; < = Less than
Results relate only to samples as submitted. This certificate must not be reproduced, except in its entirety, without written consent from the laboratory.
Canadian Drinking Water Guidelines as listed on Dec. 5th, 2005 and are subject to change. Method uncertainties for specified analyses are available upon request.

North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To:	Regional District of Alberni & Clayoquot John Thomas 3008 5th Ave. Port Alberni, BC V9Y 2E3 V9Y 2E3	Lab Number: Date Reported: Date Completed: Date Received:	115470 12 Nov 14 12 Nov 14 29 Oct 14 15:38

Sampled By: John Thomas
Sampling Date: 27 Oct 14 0:00

Test	Result	Units	Detection Limit
115470-01 Sugsaw Lk Intake existing			
Colour - True	40	Colour Units	5 Colour Units
Conductivity	30.7	uS/cm	1 uS/cm
DOC - Dissolved Organic Carbon	6	mg/L	0.5 mg/L
Fecal Coliforms (MF)	39	CFU/100ml	1 CFU/100ml
T-Iron	0.086	mg/L	0.002 mg/L
T-Manganese	0.0064	mg/L	0.001 mg/L
.	.		
Total Coliforms (DES)	>200.5	MPN/100mL	1 MPN/100mL
E. coli (DES)	42.9	MPN/100mL	1 MPN/100mL
Total Organic Carbon	6	mg/L	0.5 mg/L
Total Suspended Solids	<5.0	mg/L	5 mg/L
Turbidity	1.0	NTU's	0.5 NTU's
115470-02 Sugsaw Lk Location # 1			
Colour - True	32	Colour Units	5 Colour Units
Conductivity	29.5	uS/cm	1 uS/cm
DOC - Dissolved Organic Carbon	4.5	mg/L	0.5 mg/L
Fecal Coliforms (MF)	2	CFU/100ml	1 CFU/100ml
T-Iron	0.086	mg/L	0.002 mg/L
T-Manganese	0.0085	mg/L	0.001 mg/L
.	.		
Total Coliforms (DES)	129.8	MPN/100mL	1 MPN/100mL
E. coli (DES)	5.3	MPN/100mL	1 MPN/100mL
Total Organic Carbon	4.4	mg/L	0.5 mg/L
Total Suspended Solids	<5.0	mg/L	5 mg/L
Turbidity	0.8	NTU's	0.5 NTU's

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

115470-02 **Sugsaw Lk Location # 1**

115470-03 **Sugsaw Lk Location # 2**

Colour - True	33	Colour Units	5 Colour Units
Conductivity	29.3	uS/cm	1 uS/cm
DOC - Dissolved Organic Carbon	4.8	mg/L	0.5 mg/L
Fecal Coliforms (MF)	5	CFU/100ml	1 CFU/100ml
T-Iron	0.08	mg/L	0.002 mg/L
T-Manganese	0.0077	mg/L	0.001 mg/L
.	.		
Total Coliforms (DES)	>200.5	MPN/100mL	1 MPN/100mL
E. coli (DES)	7.5	MPN/100mL	1 MPN/100mL
Total Organic Carbon	5	mg/L	0.5 mg/L
Total Suspended Solids	<5.0	mg/L	5 mg/L
Turbidity	0.7	NTU's	0.5 NTU's

115470-01

Test	Method	Analyst	Date
.		EXL	
Colour - True	Spectrophotometer, APHA 2120 C -modified	NIsL	10/30/2014
Conductivity	Conductivity @25C, APHA 2510 B -modified	NIsL	10/29/2014
DOC - Dissolved Organic Carbo	Exova Subcontract Exova Subcontract	EXL	11/5/2014
E. coli (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	10/29/2014
Fecal Coliforms (MF)	Membrane Filtration, APHA 9222 D -modified	NIsL	10/29/2014
T-Iron	Exova Subcontract, ICP, APHA 3120B - modified	EXL	11/3/2014
T-Manganese	Exova Subcontract, ICP, APHA 3120B	EXL	11/3/2014
Total Coliforms (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	10/29/2014
Total Organic Carbon	Exova Subcontract, Ch.34 SSSA BookSeries5-modified	EXL	11/3/2014
Total Suspended Solids	Gravimetric,dried @103-105C,TSS EPA 160.2-modified	NIsL	10/31/2014
Turbidity	Nephelometric, APHA 2130 B -modified	NIsL	10/29/2014

Approved By: Catherine Black

Catherine Black, Owner/Operator

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To:	Regional District of Alberni & Clayoquot John Thomas 3008 5th Ave. Port Alberni, BC V9Y 2E3 V9Y 2E3	Lab Number: Date Reported: Date Completed: Date Received:	115846 17 Nov 14 16:27

Sampled By:
Sampling Date: 17 Nov 14 0:00

Test	Result	Units	Detection Limit
115846-01 BWS Pilot Plant Raw Monday			
T-Aluminum		mg/L	0.005 mg/L
Colour - Apparent	51	Colour Units	5 Colour Units
Colour - True	41	Colour Units	5 Colour Units
DOC - Dissolved Organic Carbon		mg/L	0.5 mg/L
T-Iron		mg/L	0.01 mg/L
T-Manganese		mg/L	0.005 mg/L
pH at 25 C	7.0	pH Units	pH Units
.	.		
Total Organic Carbon		mg/L	0.5 mg/L
Total Suspended Solids		mg/L	5 mg/L
Turbidity	<0.5	NTU's	0.5 NTU's
UV Transmittance	56.8	%/cm	0.1 %/cm
115846-02 BWS Pilot Plant Clarified Monday			
T-Aluminum		mg/L	0.005 mg/L
Colour - Apparent	9	Colour Units	5 Colour Units
Colour - True	<5	Colour Units	5 Colour Units
DOC - Dissolved Organic Carbon		mg/L	0.5 mg/L
T-Iron		mg/L	0.01 mg/L
T-Manganese		mg/L	0.005 mg/L
pH at 25 C	5.9	pH Units	pH Units
.	.		
Total Organic Carbon		mg/L	0.5 mg/L
Total Suspended Solids		mg/L	5 mg/L
Turbidity	0.9	NTU's	0.5 NTU's
UV Transmittance	91.6	%/cm	0.1 %/cm

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

115846-02 **BWS Pilot Plant Clarified** **Monday**

115846-03 **BWS Pilot Plant Filtered** **Monday**

T-Aluminum		mg/L	0.005 mg/L
Colour - Apparent	<5	Colour Units	5 Colour Units
Colour - True	<5	Colour Units	5 Colour Units
DOC - Dissolved Organic Carbon		mg/L	0.5 mg/L
T-Iron		mg/L	0.01 mg/L
T-Manganese		mg/L	0.005 mg/L
pH at 25 C	6.0	pH Units	pH Units
Total Organic Carbon		mg/L	0.5 mg/L
Total Suspended Solids		mg/L	5 mg/L
Turbidity	<0.5	NTU's	0.5 NTU's
UV Transmittance	94.7	%/cm	0.1 %/cm

115846-01

Test	Method	Analyst	Date
		EXL	
Colour - Apparent	Spectrophotometer, APHA 2120 C -modified	NIsL	11/18/2014
Colour - True	Spectrophotometer, APHA 2120 C -modified	NIsL	11/18/2014
DOC - Dissolved Organic Carbo	Exova Subcontract Exova Subcontract	EXL	
pH at 25 C	Electrometric, APHA 4500 B -modified	NIsL	11/18/2014
T-Aluminum	Exova Subcontract, ICP-MS,USEPA 200.8-modified	EXL	
T-Iron	Exova Subcontract, ICP, APHA 3120B - modified	EXL	
T-Manganese	Exova Subcontract, ICP, APHA 3120B	EXL	
Total Organic Carbon	Exova Subcontract, Ch.34 SSSA BookSeries5-modified	EXL	
Total Suspended Solids	Gravimetric,dried @103-105C,TSS EPA 160.2-modified	NIsL	
Turbidity	Nephelometric, APHA 2130 B -modified	NIsL	11/18/2014
UV Transmittance	APHA 5910 B -modified	NIsL	11/18/2014

Approved By: _____

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To: Regional District of Alberni & Clayoquot
John Thomas
3008 5th Ave.
Port Alberni, BC V9Y 2E3
V9Y 2E3

Lab Number: 116092
Date Reported: 16 Dec 14
Date Completed: 16 Dec 14
Date Received: 27 Nov 14 16:58

116092-01 Raw Sample Pail #2 10 Day

Sampled By:
Sampling Date: 27 Nov 14 0:00

Test	Result	Units	Drinking Water Guideline
Bromoacetic Acid	<2.0	ug/L	
Bromochloroacetic Acid	3.3	ug/L	
Chloroacetic Acid	<2.0	ug/L	
Dibromoacetic Acid	<2.0	ug/L	
Dichloroacetic Acid	273	ug/L	
Trichloroacetic Acid	619	ug/L	
Total Halo Acetic Acids	900	ug/L	
Bromodichloromethane	0.01	mg/L	0.016 MAC
Bromoform	<0.001	mg/L	
Chloroform	0.555	mg/L	
Dibromochloromethane	<0.001	mg/L	
Total Trihalomethanes	0.565	mg/L	0.100 MAC

116092-02 Filtered Sample Pail #2 10 Day

Sampled By:
Sampling Date: 27 Nov 14 0:00

Test	Result	Units	Drinking Water Guideline
Bromoacetic Acid	<2.0	ug/L	
Bromochloroacetic Acid	<2.0	ug/L	
Chloroacetic Acid	<2.0	ug/L	
Dibromoacetic Acid	<2.0	ug/L	
Dichloroacetic Acid	15.6	ug/L	
Trichloroacetic Acid	28.8	ug/L	
Total Halo Acetic Acids	44	ug/L	

Test results are in the results column. Your results should be below or within the values listed in the Drinking Water guidelines column on the right hand side of the report. AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC >= Greater than; <= Less than

Results relate only to samples as submitted. This certificate must not be reproduced, except in its entirety, without written consent from the laboratory.

Canadian Drinking Water Guidelines as listed on Dec. 5th, 2005 and are subject to change. Method uncertainties for specified analyses are available upon request.

North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

116092-02 Filtered Sample Pail #2 10 Day

Sampled By:

Sampling Date: 27 Nov 14 0:00

Test	Result	Units	Drinking Water Guideline
Bromodichloromethane	0.003	mg/L	0.016 MAC
Bromoform	<0.001	mg/L	
Chloroform	0.031	mg/L	
Dibromochloromethane	<0.001	mg/L	
Total Trihalomethanes	0.034	mg/L	0.100 MAC

116092-03 Raw Sample Pail #3 3 Day

Sampled By:

Sampling Date: 27 Nov 14 0:00

Test	Result	Units	Drinking Water Guideline
Bromoacetic Acid	<2.0	ug/L	
Bromochloroacetic Acid	3.5	ug/L	
Chloroacetic Acid	4.3	ug/L	
Dibromoacetic Acid	<2.0	ug/L	
Dichloroacetic Acid	174	ug/L	
Trichloroacetic Acid	253	ug/L	
Total Halo Acetic Acids	440	ug/L	
Bromodichloromethane	0.005	mg/L	0.016 MAC
Bromoform	<0.001	mg/L	
Chloroform	0.199	mg/L	
Dibromochloromethane	<0.001	mg/L	
Total Trihalomethanes	0.204	mg/L	0.100 MAC

116092-04 Filtered Sample Pail #3 3 Day

Sampled By:

Sampling Date: 27 Nov 14 0:00

Test	Result	Units	Drinking Water Guideline
Bromoacetic Acid	<2.0	ug/L	
Bromochloroacetic Acid	<2.0	ug/L	
Chloroacetic Acid	<2.0	ug/L	

Test results are in the results column. Your results should be below or within the values listed in the Drinking Water guidelines column on the right hand side of the report. AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC >= Greater than; <= Less than

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

116092-04 Filtered Sample Pail #3 3 Day

Sampled By:

Sampling Date: 27 Nov 14 0:00

Test	Result	Units	Drinking Water Guideline
Dibromoacetic Acid	<2.0	ug/L	
Dichloroacetic Acid	17.1	ug/L	
Trichloroacetic Acid	31.1	ug/L	
Total Halo Acetic Acids	48	ug/L	
Bromodichloromethane	0.003	mg/L	0.016 MAC
Bromoform	<0.001	mg/L	
Chloroform	0.036	mg/L	
Dibromochloromethane	<0.001	mg/L	
Total Trihalomethanes	0.039	mg/L	0.100 MAC

116092-01

Test	Method	Analyst	Date
Bromoacetic Acid	Exova Subcontract,US EPA 552.3	EXL	12/16/2014
Bromochloroacetic Acid	Exova Subcontract Exova Subcontract	EXL	12/11/2014
Bromodichloromethane	Exova Subcontract-EPA 8260B/5035 - modified	EXL	12/8/2014
Bromoform	Exova Subcontract-EPA 8260B/5035 - modified	EXL	12/8/2014
Chloroacetic Acid	Exova Subcontract Exova Subcontract	EXL	12/16/2014
Chloroform	Exova Subcontract-EPA 8260B/5035 - modified	EXL	12/8/2014
Dibromoacetic Acid	Exova Subcontract Exova Subcontract	EXL	12/11/2014
Dibromochloromethane	Exova Subcontract-EPA 8260B/5035 - modified	EXL	12/8/2014
Dichloroacetic Acid	Exova Subcontract Exova Subcontract	EXL	12/11/2014
Total Halo Acetic Acids	Exova Subcontract Exova Subcontract	EXL	12/16/2014
Total Trihalomethanes	Exova Subcontract-EPA 8260B/5035 - modified	EXL	12/8/2014
Trichloroacetic Acid	Exova Subcontract Exova Subcontract	EXL	12/11/2014

Approved By: Catherine Black

Catherine Black, Owner/Operator

Test results are in the results column. Your results should be below or within the values listed in the Drinking Water guidelines column on the right hand side of the report. AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC >= Greater than; <= Less than

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12/16/2014 14:15

North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To: Regional District of Alberni & Clayoquot
John Thomas
3008 5th Ave.
Port Alberni, BC V9Y 2E3
V9Y 2E3

Lab Number: 107673
Date Reported: 31 Dec 13
Date Completed: 31 Dec 13
Date Received: 19 Dec 13 10:14

107673-01 BWS Reservoir

Sampled By:

Sampling Date: 18 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1
Colour - Apparent	14	Colour Units	15
UV Transmittance	72.6	%/cm	
Fluoride	<0.05	mg/L	1.5 MAC
Chloride	9.6	mg/L	250 AO
Nitrate (N)	0.06	mg/L	10 MAC
Nitrite (N)	<0.05	mg/L	1 MAC
Sulphate	1.6	mg/L	500 AO
T-Aluminium	0.15	mg/L	0.1 Operational Std.
T-Antimony	<0.0001	mg/L	0.006 MAC
T-Arsenic	<0.00005	mg/L	0.010 MAC
T-Barium	0.00612	mg/L	1.0 MAC
T-Beryllium	0.00036	mg/L	
T-Bismuth	<0.0001	mg/L	
T-Boron	0.024	mg/L	5 IMAC
T-Cadmium	<0.00001	mg/L	0.005 MAC
T-Calcium	2.58	mg/L	
T-Chromium	<0.0005	mg/L	0.05 MAC
T-Cobalt	<0.0001	mg/L	
T-Copper	0.0018	mg/L	1.0 AO
T-Iron	0.133	mg/L	0.3 AO
T-Lead	0.0004	mg/L	0.010 MAC
T-Lithium	<0.0005	mg/L	
T-Magnesium	0.47	mg/L	
T-Manganese	0.0043	mg/L	0.05 AO

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> = Greater than; < = Less than

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

107673-01 BWS Reservoir

Sampled By:

Sampling Date: 18 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
T-Molybdenum	0.00009	mg/L	
T-Nickel	<0.0002	mg/L	
T-Potassium	<0.1	mg/L	
T-Selenium	<0.0001	mg/L	0.01 MAC
T-Silicon	1.64	mg/L	
T-Silver	<0.00005	mg/L	
T-Sodium	8.5	mg/L	200 AO
T-Strontium	0.0124	mg/L	
T-Thallium	<0.00001	mg/L	
T-Tin	0.0017	mg/L	
T-Titanium	0.0008	mg/L	
T-Uranium	0.00002	mg/L	0.02 MAC
T-Vanadium	0.0002	mg/L	
T-Zinc	0.0096	mg/L	5 AO
Hardness (CaCO3)	8.4	mg/L	
Tannins & Lignins	0.5	mg/L	0.4 AO
pH at 25 C	6.8	pH Units	6.5-8.5
Alkalinity	<20	mg/L (CaCO3)	
Turbidity	<0.5	NTU's	5 AO
Total Dissolved Solids (conductivity ca	39	mg/L	500 AO

107673-02 BWS Lake

Sampled By:

Sampling Date: 18 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	27.1	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1
Colour - Apparent	46	Colour Units	15
UV Transmittance	58.3	%/cm	
Fluoride	<0.05	mg/L	1.5 MAC
Chloride	3.2	mg/L	250 AO
Nitrate (N)	0.07	mg/L	10 MAC
Nitrite (N)	<0.05	mg/L	1 MAC

AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC
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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

107673-02 BWS Lake

Sampled By:

Sampling Date: 18 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
Sulphate	1.5	mg/L	500 AO
T-Aluminium	0.148	mg/L	0.1 Operational Std.
T-Antimony	<0.0001	mg/L	0.006 MAC
T-Arsenic	<0.00005	mg/L	0.010 MAC
T-Barium	0.00469	mg/L	1.0 MAC
T-Beryllium	0.00014	mg/L	
T-Bismuth	<0.0001	mg/L	
T-Boron	0.019	mg/L	5 IMAC
T-Cadmium	<0.00001	mg/L	0.005 MAC
T-Calcium	2.27	mg/L	
T-Chromium	<0.0005	mg/L	0.05 MAC
T-Cobalt	<0.0001	mg/L	
T-Copper	0.0003	mg/L	1.0 AO
T-Iron	0.123	mg/L	0.3 AO
T-Lead	<0.0001	mg/L	0.010 MAC
T-Lithium	<0.0005	mg/L	
T-Magnesium	0.47	mg/L	
T-Manganese	0.0143	mg/L	0.05 AO
T-Molybdenum	0.00007	mg/L	
T-Nickel	0.0003	mg/L	
T-Potassium	<0.1	mg/L	
T-Selenium	<0.0001	mg/L	0.01 MAC
T-Silicon	1.58	mg/L	
T-Silver	<0.00005	mg/L	
T-Sodium	2.6	mg/L	200 AO
T-Strontium	0.0112	mg/L	
T-Thallium	<0.00001	mg/L	
T-Tin	0.0018	mg/L	
T-Titanium	0.0006	mg/L	
T-Uranium	0.00001	mg/L	0.02 MAC
T-Vanadium	0.0002	mg/L	
T-Zinc	0.0018	mg/L	5 AO
Hardness (CaCO3)	7.6	mg/L	
Tannins & Lignins	1.2	mg/L	0.4 AO

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107673-02 BWS Lake

Sampled By:

Sampling Date: 18 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
pH at 25 C	6.5	pH Units	6.5-8.5
Alkalinity	<20	mg/L (CaCO3)	
Turbidity	0.5	NTU's	5 AO
Total Dissolved Solids (conductivity ca	19	mg/L	500 AO

AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC
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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To: Regional District of Alberni & Clayoquot
John Thomas
3008 5th Ave.
Port Alberni, BC V9Y 2E3
V9Y 2E3

Lab Number: 107647
Date Reported: 31 Dec 13
Date Completed: 31 Dec 13
Date Received: 18 Dec 13 9:53

107647-01 Millstream RAW

Sampled By:
Sampling Date: 17 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1
Colour - Apparent	<5	Colour Units	15
UV Transmittance	99.2	%/cm	
Fluoride	<0.05	mg/L	1.5 MAC
Chloride	13.2	mg/L	250 AO
Nitrate (N)	0.88	mg/L	10 MAC
Nitrite (N)	<0.05	mg/L	1 MAC
Sulphate	5.7	mg/L	500 AO
T-Aluminium	0.009	mg/L	0.1 Operational Std.
T-Antimony	<0.0001	mg/L	0.006 MAC
T-Arsenic	0.00033	mg/L	0.010 MAC
T-Barium	0.00251	mg/L	1.0 MAC
T-Beryllium	<0.00005	mg/L	
T-Bismuth	<0.0001	mg/L	
T-Boron	0.029	mg/L	5 IMAC
T-Cadmium	0.00002	mg/L	0.005 MAC
T-Calcium	32	mg/L	
T-Chromium	<0.0005	mg/L	0.05 MAC
T-Cobalt	<0.0001	mg/L	
T-Copper	0.0008	mg/L	1.0 AO
T-Iron	0.014	mg/L	0.3 AO
T-Lead	0.0001	mg/L	0.010 MAC
T-Lithium	0.0008	mg/L	
T-Magnesium	5.96	mg/L	
T-Manganese	0.0042	mg/L	0.05 AO

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

107647-01 Millstream RAW

Sampled By:

Sampling Date: 17 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
T-Molybdenum	0.00023	mg/L	
T-Nickel	0.0005	mg/L	
T-Potassium	0.7	mg/L	
T-Selenium	0.0003	mg/L	0.01 MAC
T-Silicon	8.65	mg/L	
T-Silver	<0.00005	mg/L	
T-Sodium	11.7	mg/L	200 AO
T-Strontium	0.0802	mg/L	
T-Thallium	<0.00001	mg/L	
T-Tin	0.0002	mg/L	
T-Titanium	<0.0005	mg/L	
T-Uranium	0.00005	mg/L	0.02 MAC
T-Vanadium	0.0008	mg/L	
T-Zinc	0.0015	mg/L	5 AO
Hardness (CaCO3)	100	mg/L	
Tannins & Lignins	<0.1	mg/L	0.4 AO
pH at 25 C	6.9	pH Units	6.5-8.5
Alkalinity	96	mg/L (CaCO3)	
Turbidity	<0.5	NTU's	5 AO
Total Dissolved Solids (conductivity ca	170	mg/L	500 AO

107647-02 Tofino Airport RAW

Sampled By:

Sampling Date: 17 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1
Colour - Apparent	430	Colour Units	15
UV Transmittance	78.4	%/cm	
Fluoride	0.07	mg/L	1.5 MAC
Chloride	11.3	mg/L	250 AO
Nitrate (N)	<0.05	mg/L	10 MAC
Nitrite (N)	<0.05	mg/L	1 MAC

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

107647-02 Tofino Airport RAW

Sampled By:

Sampling Date: 17 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
Sulphate	19.2	mg/L	500 AO
T-Aluminium	0.005	mg/L	0.1 Operational Std.
T-Antimony	<0.0001	mg/L	0.006 MAC
T-Arsenic	0.00076	mg/L	0.010 MAC
T-Barium	0.00766	mg/L	1.0 MAC
T-Beryllium	0.00005	mg/L	
T-Bismuth	<0.0001	mg/L	
T-Boron	0.024	mg/L	5 IMAC
T-Cadmium	<0.00001	mg/L	0.005 MAC
T-Calcium	37	mg/L	
T-Chromium	<0.0005	mg/L	0.05 MAC
T-Cobalt	0.001	mg/L	
T-Copper	0.0023	mg/L	1.0 AO
T-Iron	5.37	mg/L	0.3 AO
T-Lead	0.0002	mg/L	0.010 MAC
T-Lithium	0.0036	mg/L	
T-Magnesium	6.17	mg/L	
T-Manganese	0.411	mg/L	0.05 AO
T-Molybdenum	0.00028	mg/L	
T-Nickel	0.0022	mg/L	
T-Potassium	1.4	mg/L	
T-Selenium	0.0001	mg/L	0.01 MAC
T-Silicon	16.1	mg/L	
T-Silver	<0.00005	mg/L	
T-Sodium	11.1	mg/L	200 AO
T-Strontium	0.12	mg/L	
T-Thallium	<0.00001	mg/L	
T-Tin	0.0003	mg/L	
T-Titanium	<0.0005	mg/L	
T-Uranium	<0.00001	mg/L	0.02 MAC
T-Vanadium	<0.0001	mg/L	
T-Zinc	0.0046	mg/L	5 AO
Hardness (CaCO3)	120	mg/L	
Tannins & Lignins	<0.1	mg/L	0.4 AO

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North Island Laboratories

• 9755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

107647-02 Tofino Airport RAW

Sampled By:

Sampling Date: 17 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
pH at 25 C	7.2	pH Units	6.5-8.5
Alkalinity	100	mg/L (CaCO3)	
Turbidity	57.5	NTU's	5 AO
Total Dissolved Solids (conductivity ca	190	mg/L	500 AO

107647-03 Tofino Airport Filtered

Sampled By:

Sampling Date: 17 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1
Colour - Apparent	<5	Colour Units	15
UV Transmittance	99.7	%/cm	
Fluoride	0.07	mg/L	1.5 MAC
Chloride	12.6	mg/L	250 AO
Nitrate (N)	<0.05	mg/L	10 MAC
Nitrite (N)	<0.05	mg/L	1 MAC
Sulphate	19.2	mg/L	500 AO
T-Aluminium	<0.005	mg/L	0.1 Operational Std.
T-Antimony	<0.0001	mg/L	0.006 MAC
T-Arsenic	0.00078	mg/L	0.010 MAC
T-Barium	0.0001	mg/L	1.0 MAC
T-Beryllium	0.00008	mg/L	
T-Bismuth	<0.0001	mg/L	
T-Boron	0.023	mg/L	5 IMAC
T-Cadmium	<0.00001	mg/L	0.005 MAC
T-Calcium	0.28	mg/L	
T-Chromium	<0.0005	mg/L	0.05 MAC
T-Cobalt	<0.0001	mg/L	
T-Copper	0.001	mg/L	1.0 AO
T-Iron	0.009	mg/L	0.3 AO
T-Lead	0.0003	mg/L	0.010 MAC
T-Lithium	0.0006	mg/L	

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

107647-03 Tofino Airport Filtered

Sampled By:

Sampling Date: 17 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
T-Magnesium	<0.04	mg/L	
T-Manganese	<0.0010	mg/L	0.05 AO
T-Molybdenum	0.00024	mg/L	
T-Nickel	0.0004	mg/L	
T-Potassium	<0.1	mg/L	
T-Selenium	0.0001	mg/L	0.01 MAC
T-Silicon	15.8	mg/L	
T-Silver	<0.00005	mg/L	
T-Sodium	74.3	mg/L	200 AO
T-Strontium	0.001	mg/L	
T-Thallium	<0.00001	mg/L	
T-Tin	<0.0001	mg/L	
T-Titanium	<0.0005	mg/L	
T-Uranium	<0.00001	mg/L	0.02 MAC
T-Vanadium	<0.0001	mg/L	
T-Zinc	0.0011	mg/L	5 AO
Hardness (CaCO3)	0.70	mg/L	
Tannins & Lignins	<0.1	mg/L	0.4 AO
pH at 25 C	7.8	pH Units	6.5-8.5
Alkalinity	120	mg/L (CaCO3)	
Turbidity	<0.5	NTU's	5 AO
Total Dissolved Solids (conductivity ca	200	mg/L	500 AO

107647-04 Cougar Smith Park

Sampled By:

Sampling Date: 17 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1
Colour - Apparent	5	Colour Units	15
UV Transmittance	95.7	%/cm	
Fluoride	<0.05	mg/L	1.5 MAC
Chloride	1.4	mg/L	250 AO

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

107647-04 Cougar Smith Park

Sampled By:

Sampling Date: 17 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
Nitrate (N)	<0.05	mg/L	10 MAC
Nitrite (N)	0.05	mg/L	1 MAC
Sulphate	1.1	mg/L	500 AO
T-Aluminium	0.008	mg/L	0.1 Operational Std.
T-Antimony	<0.0001	mg/L	0.006 MAC
T-Arsenic	0.00015	mg/L	0.010 MAC
T-Barium	0.00263	mg/L	1.0 MAC
T-Beryllium	<0.00005	mg/L	
T-Bismuth	<0.0001	mg/L	
T-Boron	0.014	mg/L	5 IMAC
T-Cadmium	<0.00001	mg/L	0.005 MAC
T-Calcium	8.8	mg/L	
T-Chromium	<0.0005	mg/L	0.05 MAC
T-Cobalt	<0.0001	mg/L	
T-Copper	0.0192	mg/L	1.0 AO
T-Iron	0.006	mg/L	0.3 AO
T-Lead	0.0013	mg/L	0.010 MAC
T-Lithium	<0.0005	mg/L	
T-Magnesium	3.52	mg/L	
T-Manganese	<0.0010	mg/L	0.05 AO
T-Molybdenum	0.00018	mg/L	
T-Nickel	0.0003	mg/L	
T-Potassium	<0.1	mg/L	
T-Selenium	<0.0001	mg/L	0.01 MAC
T-Silicon	0.99	mg/L	
T-Silver	<0.00005	mg/L	
T-Sodium	1.2	mg/L	200 AO
T-Strontium	0.0123	mg/L	
T-Thallium	<0.00001	mg/L	
T-Tin	<0.0001	mg/L	
T-Titanium	<0.0005	mg/L	
T-Uranium	<0.00001	mg/L	0.02 MAC
T-Vanadium	0.0002	mg/L	
T-Zinc	0.0114	mg/L	5 AO

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

107647-04 Cougar Smith Park

Sampled By:

Sampling Date: 17 Dec 13 0:00

Test	Result	Units	Drinking Water Guideline
Hardness (CaCO3)	37	mg/L	
Tannins & Lignins	<0.1	mg/L	0.4 AO
pH at 25 C	9.5	pH Units	6.5-8.5
Alkalinity	34	mg/L (CaCO3)	
Turbidity	<0.5	NTU's	5 AO
Total Dissolved Solids (conductivity ca	49	mg/L	500 AO

AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC
> = Greater than; < = Less than

Results relate only to samples as submitted. This certificate must not be reproduced, except in its entirety, without written consent from the laboratory.

Canadian Drinking Water Guidelines as listed on Dec. 5th, 2005 and are subject to change. Method uncertainties for specified analyses are available upon request.

North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To: Regional District of Alberni & Clayoquot
John Thomas
3008 5th Ave.
Port Alberni, BC V9Y 2E3
V9Y 2E3

Lab Number: 92717
Date Reported: 18 Jan 12
Date Completed: 18 Jan 12
Date Received: 10 Jan 12 10:50

92717-01 Alberni Valley Reg Airport

Sampled By: John
Sampling Date: 9 Jan 12 0:00

Test	Result	Units	Drinking Water Guideline
Fluoride	<0.05	mg/L	1.5 MAC
Chloride	3.0	mg/L	250 AO
Nitrate (N)	0.07	mg/L	10 MAC
Nitrite (N)	<0.05	mg/L	1 MAC
Sulphate	<0.5	mg/L	500 AO
T-Aluminium	0.041	mg/L	0.1 Operational Std.
T-Antimony	<0.0002	mg/L	0.006 MAC
T-Arsenic	<0.0002	mg/L	0.010 MAC
T-Barium	0.001	mg/L	1.0 MAC
T-Beryllium	<0.00004	mg/L	
T-Bismuth	<0.001	mg/L	
T-Boron	0.006	mg/L	5 IMAC
T-Cadmium	<0.00001	mg/L	0.005 MAC
T-Calcium	3.75	mg/L	
T-Chromium	0.0012	mg/L	0.05 MAC
T-Cobalt	0.00006	mg/L	
T-Copper	0.048	mg/L	1.0 AO
T-Iron	0.626	mg/L	0.3 AO
T-Lead	0.0083	mg/L	0.010 MAC
T-Lithium	<0.001	mg/L	
T-Magnesium	0.63	mg/L	
T-Manganese	0.04	mg/L	0.05 AO
T-Molybdenum	<0.0001	mg/L	
T-Nickel	<0.001	mg/L	
T-Phosphorus	<0.01	mg/L	
T-Potassium	<0.1	mg/L	

AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC
> = Greater than; < = Less than

Results relate only to samples as submitted. This certificate must not be reproduced, except in its entirety, without written consent from the laboratory.

Canadian Drinking Water Guidelines as listed on Dec. 5th, 2005 and are subject to

North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

92717-01 Alberni Valley Reg Airport

Sampled By: John

Sampling Date: 9 Jan 12 0:00

Test	Result	Units	Drinking Water Guideline
T-Selenium	<0.0006	mg/L	0.01 MAC
T-Silicon	3.68	mg/L	
T-Silver	0.00007	mg/L	
T-Sodium	3.3	mg/L	200 AO
T-Strontium	0.014	mg/L	
T-Thallium	<0.00001	mg/L	
T-Tin	0.0012	mg/L	
T-Titanium	0.002	mg/L	
T-Uranium	<0.0004	mg/L	0.02 MAC
T-Vanadium	0.0053	mg/L	
T-Zinc	0.014	mg/L	5 AO
Hardness (CaCO3)	12	mg/L	
Colour - Apparent	6	Colour units	15 AO
Tannins & Lignins	<0.1	mg/L	0.4 AO
UV Transmittance	98.4	%/cm	
pH	6.2	pH Units	6.5-8.5
Alkalinity	<20	mg/L (CaCO3)	
Turbidity	0.9	NTU's	5 AO
Total Dissolved Solids (conductivity ca	29	mg/L	500 AO

AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC

> = Greater than; < = Less than

Results relate only to samples as submitted. This certificate must not be reproduced, except in its entirety, without written consent from the laboratory.

Canadian Drinking Water Guidelines as listed on Dec. 5th, 2005 and are subject to

Appendix B

Facility Microbiological Sampling History

Total Coliforms & E.Coli

BEAVER CREEK WATER SYSTEM

Facility Location:
3008 5th Avenue
Port Alberni

Facility Information:
Facility Type: DWT

Facility Sampling History:

Location	Date	Total Coliform	E. Coli
6038 Beaver Creek Road, Shop Building Tap	27-Jan-2015	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	27-Jan-2015	L1	L1
Springfield Road, 6287 Springfield Road	27-Jan-2015	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	20-Jan-2015	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	20-Jan-2015	L1	L1
Strick Road Pumphouse	20-Jan-2015	L1	L1
Swanson Road, 7000 Swanson Road	20-Jan-2015	L1	L1
Thompson Road, 7271 Thompson Road	20-Jan-2015	L1	L1
5667 Chapman Road, 5667 Chapman Road	14-Jan-2015	L1	L1
6210 Drinkwater Road, 6210 Drinkwater Road	14-Jan-2015	L1	L1
6825 Lamarque Road, 6825 Lamarque Road	14-Jan-2015	L1	L1
Dashwood Road, 7296 Dashwood Road	14-Jan-2015	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	14-Jan-2015	L1	L1
6038 Beaver Creek Road, Shop Building Tap	6-Jan-2015	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	6-Jan-2015	L1	L1
North Reservoir, 7656 Beaver Creek Road	6-Jan-2015	L1	L1
Strick Road Pumphouse	6-Jan-2015	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	16-Dec-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	16-Dec-2014	L1	L1
Strick Road Pumphouse	16-Dec-2014	L1	L1
Swanson Road, 7000 Swanson Road	16-Dec-2014	L1	L1
Thompson Road, 7271 Thompson Road	16-Dec-2014	L1	L1
5667 Chapman Road, 5667 Chapman Road	9-Dec-2014	L1	L1
6210 Drinkwater Road, 6210 Drinkwater Road	9-Dec-2014	L1	L1
6825 Lamarque Road, 6825 Lamarque Road	9-Dec-2014	L1	L1
Dashwood Road, 7296 Dashwood Road	9-Dec-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	9-Dec-2014	L1	L1
5535 Maple Road, 5535 Maple Road	3-Dec-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	3-Dec-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	3-Dec-2014	L1	L1

North Reservoir, 7656 Beaver Creek Road	3-Dec-2014	L1	L1
Strick Road Pumphouse	3-Dec-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	27-Nov-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	27-Nov-2014	L1	L1
Springfield Road, 6287 Springfield Road	27-Nov-2014	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	19-Nov-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	19-Nov-2014	L1	L1
Strick Road Pumphouse	19-Nov-2014	L1	L1
Swanson Road, 7000 Swanson Road	19-Nov-2014	L1	L1
Thompson Road, 7271 Thompson Road	19-Nov-2014	L1	L1
5667 Chapman Road, 5667 Chapman Road	12-Nov-2014	L1	L1
6210 Drinkwater Road, 6210 Drinkwater Road	12-Nov-2014	L1	L1
6825 Lamarque Road, 6825 Lamarque Road	12-Nov-2014	L1	L1
Dashwood Road, 7296 Dashwood Road	12-Nov-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	12-Nov-2014	L1	L1
5535 Maple Road, 5535 Maple Road	4-Nov-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	4-Nov-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	4-Nov-2014	L1	L1
North Reservoir, 7656 Beaver Creek Road	4-Nov-2014	L1	L1
Strick Road Pumphouse	4-Nov-2014	L1	L1
5780 Beaver Creek Road	28-Oct-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	28-Oct-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	28-Oct-2014	L1	L1
Springfield Road, 6287 Springfield Road	28-Oct-2014	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	21-Oct-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	21-Oct-2014	L1	L1
Strick Road Pumphouse	21-Oct-2014	L1	L1
Swanson Road, 7000 Swanson Road	21-Oct-2014	L1	L1
Thompson Road, 7271 Thompson Road	21-Oct-2014	L1	L1
5667 Chapman Road, 5667 Chapman Road	14-Oct-2014	L1	L1
6210 Drinkwater Road, 6210 Drinkwater Road	14-Oct-2014	L1	L1
6825 Lamarque Road, 6825 Lamarque Road	14-Oct-2014	L1	L1
Dashwood Road, 7296 Dashwood Road	14-Oct-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	14-Oct-2014	L1	L1
5535 Maple Road, 5535 Maple Road	8-Oct-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	8-Oct-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	8-Oct-2014	L1	L1
North Reservoir, 7656 Beaver Creek Road	8-Oct-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	30-Sep-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	30-Sep-2014	L1	L1

Springfield Road, 6287 Springfield Road	30-Sep-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	23-Sep-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	23-Sep-2014	L1	L1
Springfield Road, 6287 Springfield Road	23-Sep-2014	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	16-Sep-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	16-Sep-2014	L1	L1
Strick Road Pumphouse	16-Sep-2014	L1	L1
Swanson Road, 7000 Swanson Road	16-Sep-2014	L1	L1
Thompson Road, 7271 Thompson Road	16-Sep-2014	L1	L1
5667 Chapman Road, 5667 Chapman Road	9-Sep-2014	L1	L1
6210 Drinkwater Road, 6210 Drinkwater Road	9-Sep-2014	L1	L1
6825 Lamarque Road, 6825 Lamarque Road	9-Sep-2014	L1	L1
Dashwood Road, 7296 Dashwood Road	9-Sep-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	9-Sep-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	2-Sep-2014	L1	L1
5535 Maple Road, 5535 Maple Road	2-Sep-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	2-Sep-2014	L1	L1
North Reservoir, 7656 Beaver Creek Road	2-Sep-2014	L1	L1
Strick Road Pumphouse	2-Sep-2014	L1	L1
Springfield Road, 6287 Springfield Road	27-Aug-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	26-Aug-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	26-Aug-2014	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	19-Aug-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	19-Aug-2014	L1	L1
Strick Road Pumphouse	19-Aug-2014	L1	L1
Swanson Road, 7000 Swanson Road	19-Aug-2014	L1	L1
Thompson Road, 7271 Thompson Road	19-Aug-2014	L1	L1
5667 Chapman Road, 5667 Chapman Road	12-Aug-2014	L1	L1
6210 Drinkwater Road, 6210 Drinkwater Road	12-Aug-2014	6	L1
6825 Lamarque Road, 6825 Lamarque Road	12-Aug-2014	L1	L1

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NEXT

BEAVER CREEK WATER SYSTEM

Facility Location:
3008 5th Avenue
Port Alberni

Facility Information:
Facility Type: DWT

Facility Sampling History:

Location	Date	Total Coliform	E. Coli
Dashwood Road, 7296 Dashwood Road	12-Aug-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	12-Aug-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	30-Jul-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	29-Jul-2014	L1	L1
Pumphouse Treated, 7702 Sportsman Road	29-Jul-2014	L1	L1
Strick Road Pumphouse	29-Jul-2014	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	15-Jul-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	15-Jul-2014	L1	L1
Strick Road Pumphouse	15-Jul-2014	L1	L1
Swanson Road, 7000 Swanson Road	15-Jul-2014	L1	L1
Thompson Road, 7271 Thompson Road	15-Jul-2014	L1	L1
5667 Chapman Road, 5667 Chapman Road	9-Jul-2014	L1	L1
6210 Drinkwater Road, 6210 Drinkwater Road	9-Jul-2014	L1	L1
6825 Lamarque Road, 6825 Lamarque Road	9-Jul-2014	L1	L1
Dashwood Road, 7296 Dashwood Road	9-Jul-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	9-Jul-2014	L1	L1
5535 Maple Road, 5535 Maple Road	2-Jul-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	2-Jul-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	2-Jul-2014	L1	L1
North Reservoir, 7656 Beaver Creek Road	2-Jul-2014	L1	L1
Strick Road Pumphouse	2-Jul-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	24-Jun-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	24-Jun-2014	L1	L1
Springfield Road, 6287 Springfield Road	24-Jun-2014	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	18-Jun-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	18-Jun-2014	L1	L1
Strick Road Pumphouse	18-Jun-2014	L1	L1
Swanson Road, 7000 Swanson Road	18-Jun-2014	L1	L1
Thompson Road, 7271 Thompson Road	18-Jun-2014	L1	L1
5667 Chapman Road, 5667 Chapman Road	10-Jun-2014	L1	L1

6210 Drinkwater Road, 6210 Drinkwater Road	10-Jun-2014	L1	L1
6825 Lamarque Road, 6825 Lamarque Road	10-Jun-2014	L1	L1
Dashwood Road, 7296 Dashwood Road	10-Jun-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	10-Jun-2014	L1	L1
5535 Maple Road, 5535 Maple Road	3-Jun-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	3-Jun-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	3-Jun-2014	L1	L1
North Reservoir, 7656 Beaver Creek Road	3-Jun-2014	L1	L1
Strick Road Pumphouse	3-Jun-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	27-May-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	27-May-2014	L1	L1
Springfield Road, 6287 Springfield Road	27-May-2014	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	20-May-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	20-May-2014	L1	L1
Strick Road Pumphouse	20-May-2014	L1	L1
Swanson Road, 7000 Swanson Road	20-May-2014	L1	L1
Thompson Road, 7271 Thompson Road	20-May-2014	L1	L1
5667 Chapman Road, 5667 Chapman Road	13-May-2014	L1	L1
6210 Drinkwater Road, 6210 Drinkwater Road	13-May-2014	L1	L1
6825 Lamarque Road, 6825 Lamarque Road	13-May-2014	L1	L1
Dashwood Road, 7296 Dashwood Road	13-May-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	13-May-2014	L1	L1
5535 Maple Road, 5535 Maple Road	6-May-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	6-May-2014	L1	L1
North Reservoir, 7656 Beaver Creek Road	6-May-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	6-May-2014	L1	L1
5535 Maple Road, 5535 Maple Road	29-Apr-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	29-Apr-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	29-Apr-2014	L1	L1
North Reservoir, 7656 Beaver Creek Road	29-Apr-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	22-Apr-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	22-Apr-2014	L1	L1
Springfield Road, 6287 Springfield Road	22-Apr-2014	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	16-Apr-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	16-Apr-2014	L1	L1
Swanson Road, 7000 Swanson Road	16-Apr-2014	L1	L1
Thompson Road, 7271 Thompson Road	16-Apr-2014	L1	L1
5667 Chapman Road, 5667 Chapman Road	8-Apr-2014	L1	L1
6210 Drinkwater Road, 6210 Drinkwater Road	8-Apr-2014	L1	L1
6825 Lamarque Road, 6825 Lamarque Road	8-Apr-2014	L1	L1

Dashwood Road, 7296 Dashwood Road	8-Apr-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	8-Apr-2014	L1	L1
5535 Maple Road, 5535 Maple Road	1-Apr-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	1-Apr-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	1-Apr-2014	L1	L1
North Reservoir, 7656 Beaver Creek Road	1-Apr-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	25-Mar-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	25-Mar-2014	L1	L1
Springfield Road, 6287 Springfield Road	25-Mar-2014	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	19-Mar-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	19-Mar-2014	L1	L1
Swanson Road, 7000 Swanson Road	19-Mar-2014	L1	L1
Thompson Road, 7271 Thompson Road	19-Mar-2014	L1	L1
5667 Chapman Road, 5667 Chapman Road	11-Mar-2014	L1	L1
6210 Drinkwater Road, 6210 Drinkwater Road	11-Mar-2014	L1	L1
6825 Lamarque Road, 6825 Lamarque Road	11-Mar-2014	L1	L1
Dashwood Road, 7296 Dashwood Road	11-Mar-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	11-Mar-2014	L1	L1
5535 Maple Road, 5535 Maple Road	4-Mar-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	4-Mar-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	4-Mar-2014	L1	L1
North Reservoir, 7656 Beaver Creek Road	4-Mar-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	25-Feb-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	25-Feb-2014	L1	L1
Springfield Road, 6287 Springfield Road	25-Feb-2014	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	18-Feb-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	18-Feb-2014	L1	L1
Swanson Road, 7000 Swanson Road	18-Feb-2014	L1	L1
Thompson Road, 7271 Thompson Road	18-Feb-2014	L1	L1
5667 Chapman Road, 5667 Chapman Road	11-Feb-2014	L1	L1

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PREVIOUS NEXT

BEAVER CREEK WATER SYSTEM

Facility Location:
3008 5th Avenue
Port Alberni

Facility Information:
Facility Type: DWT

Facility Sampling History:

Location	Date	Total Coliform	E. Coli
Kitsuksis Road, 6000 Kitsuksis Road	4-Mar-2014	L1	L1
North Reservoir, 7656 Beaver Creek Road	4-Mar-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	25-Feb-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	25-Feb-2014	L1	L1
Springfield Road, 6287 Springfield Road	25-Feb-2014	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	18-Feb-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	18-Feb-2014	L1	L1
Swanson Road, 7000 Swanson Road	18-Feb-2014	L1	L1
Thompson Road, 7271 Thompson Road	18-Feb-2014	L1	L1
5667 Chapman Road, 5667 Chapman Road	11-Feb-2014	L1	L1
6210 Drinkwater Road, 6210 Drinkwater Road	11-Feb-2014	L1	L1
6825 Lamarque Road, 6825 Lamarque Road	11-Feb-2014	L1	L1
Dashwood Road, 7296 Dashwood Road	11-Feb-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	11-Feb-2014	L1	L1
5535 Maple Road, 5535 Maple Road	4-Feb-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	4-Feb-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	4-Feb-2014	L1	L1
North Reservoir, 7656 Beaver Creek Road	4-Feb-2014	L1	L1
5535 Maple Road, 5535 Maple Road	28-Jan-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	28-Jan-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	28-Jan-2014	L1	L1
North Reservoir, 7656 Beaver Creek Road	28-Jan-2014	L1	L1
6038 Beaver Creek Road, Shop Building Tap	22-Jan-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	22-Jan-2014	L1	L1
Springfield Road, 6287 Springfield Road	22-Jan-2014	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	14-Jan-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	14-Jan-2014	L1	L1
Swanson Road, 7000 Swanson Road	14-Jan-2014	L1	L1
Thompson Road, 7271 Thompson Road	14-Jan-2014	L1	L1
5667 Chapman Road, 5667 Chapman Road	8-Jan-2014	L1	L1

6210 Drinkwater Road, 6210 Drinkwater Road	7-Jan-2014	L1	L1
6825 Lamarque Road, 6825 Lamarque Road	7-Jan-2014	L1	L1
Dashwood Road, 7296 Dashwood Road	7-Jan-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	7-Jan-2014	L1	L1
Kitsuksis Road, 6000 Kitsuksis Road	18-Dec-2013	L1	L1
Dashwood Road, 7296 Dashwood Road	17-Dec-2013	L1	L1
Gill School Hydrant, 5520 Beaver Creek Road	17-Dec-2013	L1	L1
Springfield Road, 6287 Springfield Road	17-Dec-2013	L1	L1
Swanson Road, 7000 Swanson Road	17-Dec-2013	L1	L1
Thompson Road, 7271 Thompson Road	17-Dec-2013	L1	L1

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PREVIOUS NEXT

BAMFIELD COMMUNITY WWS

Facility Location:
3008 Fifth Avenue
Bamfield

Facility Information:
Facility Type: DWC

Facility Sampling History:

Location	Date	Total Coliform	E. Coli
Bamfield Marine Station, Bamfield	5-Jan-2015	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	5-Jan-2015	L1	L1
Butler Residence, Bamfield	5-Jan-2015	L1	L1
Canadian Coast Guard Post, Bamfield	5-Jan-2015	L1	L1
Pump House Grappler Rd, Bamfield	5-Jan-2015	L1	L1
Bamfield Marine Station, Bamfield	3-Dec-2014	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	3-Dec-2014	L1	L1
Butler Residence, Bamfield	3-Dec-2014	L1	L1
Canadian Coast Guard Post, Bamfield	3-Dec-2014	L1	L1
Pump House Grappler Rd, Bamfield	3-Dec-2014	L1	L1
Butler Residence, Bamfield	18-Nov-2014	L1	L1
Canadian Coast Guard Post, Bamfield	18-Nov-2014	L1	L1
Bamfield Marine Station, Bamfield	12-Nov-2014	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	12-Nov-2014	L1	L1
Butler Residence, Bamfield	12-Nov-2014	L1	L1
Canadian Coast Guard Post, Bamfield	12-Nov-2014	2	L1
Pump House Grappler Rd, Bamfield	12-Nov-2014	L1	L1
Bamfield Marine Station, Bamfield	15-Oct-2014	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	15-Oct-2014	L1	L1
Butler Residence, Bamfield	15-Oct-2014	L1	L1
Canadian Coast Guard Post, Bamfield	15-Oct-2014	L1	L1
Pump House Grappler Rd, Bamfield	15-Oct-2014	4	L1
Bamfield Marine Station, Bamfield	8-Sep-2014	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	8-Sep-2014	1	L1
Butler Residence, Bamfield	8-Sep-2014	L1	L1
Canadian Coast Guard Post, Bamfield	8-Sep-2014	L1	L1
Pump House Grappler Rd, Bamfield	8-Sep-2014		L1
Bamfield Marine Station, Bamfield	11-Aug-2014	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	11-Aug-2014	L1	L1
Butler Residence, Bamfield	11-Aug-2014	L1	L1

Canadian Coast Guard Post, Bamfield	11-Aug-2014	L1	L1
Pump House Grappler Rd, Bamfield	11-Aug-2014	L1	L1
Bamfield Marine Station, Bamfield	7-Jul-2014	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	7-Jul-2014	L1	L1
Butler Residence, Bamfield	7-Jul-2014	L1	L1
Canadian Coast Guard Post, Bamfield	7-Jul-2014	L1	L1
Pump House Grappler Rd, Bamfield	7-Jul-2014	L1	L1
Bamfield Marine Station, Bamfield	2-Jun-2014	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	2-Jun-2014	L1	L1
Butler Residence, Bamfield	2-Jun-2014	L1	L1
Canadian Coast Guard Post, Bamfield	2-Jun-2014	L1	L1
Pump House Grappler Rd, Bamfield	2-Jun-2014	L1	L1
Bamfield Marine Station, Bamfield	5-May-2014	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	5-May-2014	L1	L1
Butler Residence, Bamfield	5-May-2014	L1	L1
Canadian Coast Guard Post, Bamfield	5-May-2014	L1	L1
Pump House Grappler Rd, Bamfield	5-May-2014	L1	L1
Bamfield Marine Station, Bamfield	7-Apr-2014	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	7-Apr-2014	L1	L1
Butler Residence, Bamfield	7-Apr-2014	L1	L1

Show: 50 results per page

NEXT

BAMFIELD COMMUNITY WWS

Facility Location:
3008 Fifth Avenue
Bamfield

Facility Information:
Facility Type: DWC

Facility Sampling History:

Location	Date	Total Coliform	E. Coli
Canadian Coast Guard Post, Bamfield	7-Apr-2014	L1	L1
Pump House Grappler Rd, Bamfield	7-Apr-2014	L1	L1
Bamfield Marine Station, Bamfield	3-Mar-2014	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	3-Mar-2014	L1	L1
Butler Residence, Bamfield	3-Mar-2014	L1	L1
Canadian Coast Guard Post, Bamfield	3-Mar-2014	L1	L1
Pump House Grappler Rd, Bamfield	3-Mar-2014	L1	L1
Bamfield Marine Station, Bamfield	3-Feb-2014	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	3-Feb-2014	L1	L1
Butler Residence, Bamfield	3-Feb-2014	L1	L1
Canadian Coast Guard Post, Bamfield	3-Feb-2014	L1	L1
Pump House Grappler Rd, Bamfield	3-Feb-2014	L1	L1
Bamfield Marine Station, Bamfield	8-Jan-2014	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	8-Jan-2014	L1	L1
Butler Residence, Bamfield	8-Jan-2014	L1	L1
Canadian Coast Guard Post, Bamfield	8-Jan-2014	L1	L1
Pump House Grappler Rd, Bamfield	8-Jan-2014	L1	L1
Bamfield Marine Station, Bamfield	3-Dec-2013	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	3-Dec-2013	L1	L1
Butler Residence, Bamfield	3-Dec-2013	L1	L1
Canadian Coast Guard Post, Bamfield	3-Dec-2013	L1	L1
Pump House Grappler Rd, Bamfield	3-Dec-2013	L1	L1
Bamfield Marine Station, Bamfield	13-Nov-2013	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	13-Nov-2013	L1	L1
Butler Residence, Bamfield	13-Nov-2013	L1	L1
Canadian Coast Guard Post, Bamfield	13-Nov-2013	L1	L1
Pump House Grappler Rd, Bamfield	13-Nov-2013	L1	L1
Burlo Island, Bamfield	2-Oct-2013	L1	L1
Bamfield Marine Station, Bamfield	2-Oct-2013	L1	L1
Binnacle Road Reservoir, Binnacle Road -Bamfield	2-Oct-2013	L1	L1

MILLSTREAM COMMUNITY WATER SYSTEM

Facility Location:
3008 Fifth Street
Port Alberni

Facility Information:
Facility Type: DWC

Facility Sampling History:

Location	Date	Total Coliform	E. Coli
AUDIT - Daley Residence Hose Bib, 2355 Ucluelet & Tofino Highway	21-Jan-2015	L1	L1
John Gouweleeuw's Residence	21-Jan-2015	L1	L1
McConnell Residence, 262 Karn Avenue	21-Jan-2015	L1	L1
John Gouweleeuw's Residence	10-Dec-2014	L1	L1
McConnell Residence, 262 Karn Avenue	10-Dec-2014	L1	L1
John Gouweleeuw's Residence	17-Nov-2014	L1	L1
McConnell Residence, 262 Karn Avenue	17-Nov-2014	L1	L1
John Gouweleeuw's Residence	21-Oct-2014	L1	L1
McConnell Residence, 262 Karn Avenue	21-Oct-2014	L1	L1
John Gouweleeuw's Residence	15-Sep-2014	L1	L1
McConnell Residence, 262 Karn Avenue	15-Sep-2014	L1	L1
John Gouweleeuw's Residence	13-Aug-2014	L1	L1
McConnell Residence, 262 Karn Avenue	13-Aug-2014	L1	L1
John Gouweleeuw's Residence	23-Jul-2014	L1	L1
McConnell Residence, 262 Karn Avenue	23-Jul-2014	L1	L1
John Gouweleeuw's Residence	10-Jun-2014	L1	L1
McConnell Residence, 262 Karn Avenue	10-Jun-2014	L1	L1
John Gouweleeuw's Residence	12-May-2014	L1	L1
McConnell Residence, 262 Karn Avenue	12-May-2014	L1	L1
John Gouweleeuw's Residence	15-Apr-2014	L1	L1
McConnell Residence, 262 Karn Avenue	15-Apr-2014	L1	L1
John Gouweleeuw's Residence	19-Mar-2014	L1	L1
McConnell Residence, 262 Karn Avenue	19-Mar-2014	L1	L1
John Gouweleeuw's Residence	25-Feb-2014	L1	L1
McConnell Residence, 262 Karn Avenue	25-Feb-2014	L1	L1
John Gouweleeuw's Residence	28-Jan-2014	L1	L1
McConnell Residence, 262 Karn Avenue	28-Jan-2014	L1	L1
John Gouweleeuw's Residence	8-Jan-2014	L1	L1
McConnell Residence, 262 Karn Avenue	8-Jan-2014	L1	L1

TOFINO AIRPORT WATER SYSTEM

Facility Location:
3008 5th Avenue
Port Alberni

Facility Information:
Facility Type: DWC

Facility Sampling History:

Location	Date	Total Coliform	E. Coli
Pumphouse/Estowista	21-Jan-2015	L1	L1
Reservoir/pumphouse	21-Jan-2015	L1	L1
Terminal Building , Tofino Airport	21-Jan-2015	L1	L1
Pumphouse/Estowista	10-Dec-2014	L1	L1
Reservoir/pumphouse	10-Dec-2014	L1	L1
Terminal Building , Tofino Airport	10-Dec-2014	L1	L1
Pumphouse/Estowista	17-Nov-2014	L1	L1
Reservoir/pumphouse	17-Nov-2014	L1	L1
Terminal Building , Tofino Airport	17-Nov-2014	L1	L1
Pumphouse/Estowista	21-Oct-2014	L1	L1
Reservoir/pumphouse	21-Oct-2014	L1	L1
Terminal Building , Tofino Airport	21-Oct-2014	L1	L1
Pumphouse/Estowista	15-Sep-2014	L1	L1
Reservoir/pumphouse	15-Sep-2014	L1	L1
Terminal Building , Tofino Airport	15-Sep-2014	L1	L1
Pumphouse/Estowista	13-Aug-2014	L1	L1
Reservoir/pumphouse	13-Aug-2014	L1	L1
Terminal Building , Tofino Airport	13-Aug-2014	L1	L1
Pumphouse/Estowista	23-Jul-2014	L1	L1
Reservoir/pumphouse	23-Jul-2014	L1	L1
Terminal Building , Tofino Airport	23-Jul-2014	L1	L1
Pumphouse/Estowista	10-Jun-2014	L1	L1
Reservoir/pumphouse	10-Jun-2014	L1	L1
Terminal Building , Tofino Airport	10-Jun-2014	L1	L1
Pumphouse/Estowista	12-May-2014	L1	L1
Reservoir/pumphouse	12-May-2014	L1	L1
Terminal Building , Tofino Airport	12-May-2014	L1	L1
Pumphouse/Estowista	15-Apr-2014	L1	L1
Reservoir/pumphouse	15-Apr-2014	L1	L1
Terminal Building , Tofino Airport	15-Apr-2014	L1	L1

Pumphouse/Estowista	19-Mar-2014	L1	L1
Reservoir/pumphouse	19-Mar-2014	L1	L1
Terminal Building , Tofino Airport	19-Mar-2014	L1	L1
Pumphouse/Estowista	25-Feb-2014	L1	L1
Reservoir/pumphouse	25-Feb-2014	L1	L1
Terminal Building , Tofino Airport	25-Feb-2014	L1	L1
Pumphouse/Estowista	28-Jan-2014	L1	L1
Reservoir/pumphouse	28-Jan-2014	L1	L1
Terminal Building , Tofino Airport	28-Jan-2014	L1	L1
Pumphouse/Estowista	8-Jan-2014	L1	L1
Reservoir/pumphouse	8-Jan-2014	L1	L1
Terminal Building , Tofino Airport	8-Jan-2014	L1	L1
Pumphouse/Estowista	27-Nov-2013	L1	L1
Reservoir/pumphouse	27-Nov-2013	L1	L1
Terminal Building , Tofino Airport	27-Nov-2013	L1	L1
Pumphouse/Estowista	16-Oct-2013	L1	L1
Reservoir/pumphouse	16-Oct-2013	L1	L1
Terminal Building , Tofino Airport	16-Oct-2013	L1	L1
Pumphouse/Estowista	11-Sep-2013	L1	L1
Reservoir/pumphouse	11-Sep-2013	L1	L1

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NEXT

North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To:	Regional District of Alberni & Clayoquot John Thomas 3008 5th Ave. Port Alberni, BC V9Y 2E3 V9Y 2E3	Lab Number: Date Reported: Date Completed: Date Received:	115271 23 Oct 14 23 Oct 14 22 Oct 14 10:21

115271-01 Cougar Smith Park water

Sampled By: John

Sampling Date: 20 Oct 14 12:00

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1

115271-01

HE: notified sample is now beyond recommended holding time

Test	Method	Analyst	Date
E. coli (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	10/22/2014
Total Coliforms (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	10/22/2014

Approved By: Ramona S, Lab Tech

AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC
> = Greater than; < = Less than

Results relate only to samples as submitted. This certificate must not be reproduced, except in its entirety, without written consent from the laboratory.

Canadian Drinking Water Guidelines as listed on Dec. 5th, 2005 and are subject to change. Method uncertainties for specified analyses are available upon request.

North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To: Regional District of Alberni & Clayoquot
John Thomas
3008 5th Ave.
Port Alberni, BC V9Y 2E3
V9Y 2E3

Lab Number: 114353
Date Reported: 17 Sep 14
Date Completed: 17 Sep 14
Date Received: 16 Sep 14 9:44

114353-01 Cougar Smith Park water

Sampled By: John
Sampling Date: 15 Sep 14 0:00

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1

114353-01

Test	Method	Analyst	Date
E. coli (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	9/16/2014
Total Coliforms (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	9/16/2014

Approved By: Catherine Black

Catherine Black, Owner/Operator

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To: Regional District of Alberni & Clayoquot
John Thomas
3008 5th Ave.
Port Alberni, BC V9Y 2E3
V9Y 2E3

Lab Number: 113531
Date Reported: 22 Aug 14
Date Completed: 22 Aug 14
Date Received: 21 Aug 14 9:42

113531-01 Cougar Smith Park water

Sampled By: John
Sampling Date: 20 Aug 14 0:00

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1

113531-01

We suggest the following Health Canada website for further information regarding the latest drinking water quality guidelines to help you assess your results:
http://www.hc-sc.gc.ca/ewh-semt/water-eau/drink-potab/guide/index-eng.php

Test	Method	Analyst	Date
E. coli (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	8/21/2014
Total Coliforms (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	8/21/2014

Approved By: Catherine Black

Catherine Black, Owner/Operator

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To: Regional District of Alberni & Clayoquot
John Thomas
3008 5th Ave.
Port Alberni, BC V9Y 2E3
V9Y 2E3

Lab Number: 112178
Date Reported: 16 Jul 14
Date Completed: 16 Jul 14
Date Received: 15 Jul 14 11:44

112178-01 Cougar Smith Park water

Sampled By: John
Sampling Date: 14 Jul 14 0:00

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1

112178-01

Test	Method	Analyst	Date
E. coli (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	7/15/2014
Total Coliforms (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	7/15/2014

Approved By: Catherine Black

Catherine Black, Owner/Operator

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To: Regional District of Alberni & Clayoquot
John Thomas
3008 5th Ave.
Port Alberni, BC V9Y 2E3
V9Y 2E3

Lab Number: 110614
Date Reported: 28 May 14
Date Completed: 28 May 14
Date Received: 27 May 14 10:20

110614-01 Cougar Smith Park water

Sampled By: John
Sampling Date: 26 May 14 10:00

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1

110614-01

Test	Method	Analyst	Date
E. coli (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	5/27/2014
Total Coliforms (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	5/27/2014

Approved By: Catherine Black

Catherine Black, Owner/Operator

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North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To: Regional District of Alberni & Clayoquot
John Thomas
3008 5th Ave.
Port Alberni, BC V9Y 2E3
V9Y 2E3

Lab Number: 109579
Date Reported: 16 Apr 14
Date Completed: 16 Apr 14
Date Received: 15 Apr 14 9:45

109579-01 Cougar Smith Park water

Sampled By: John
Sampling Date: 14 Apr 14 0:00

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1

109579-01

Test	Method	Analyst	Date
E. coli (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	4/15/2014
Total Coliforms (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	4/15/2014

Approved By: Catherine Black

Catherine Black, Owner/Operator

AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC
> = Greater than; < = Less than
Results relate only to samples as submitted. This certificate must not be reproduced, except in its entirety, without written consent from the laboratory.
Canadian Drinking Water Guidelines as listed on Dec. 5th, 2005 and are subject to change. Method uncertainties for specified analyses are available upon request.

North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

Certificate of Analysis

Report To: Regional District of Alberni & Clayoquot
John Thomas
3008 5th Ave.
Port Alberni, BC V9Y 2E3
V9Y 2E3

Lab Number: 109137
Date Reported: 26 Mar 14
Date Completed: 26 Mar 14
Date Received: 25 Mar 14 9:32

109137-01 Cougar Smith Park water

Sampled By: John
Sampling Date: 24 Mar 14 0:00

Test	Result	Units	Drinking Water Guideline
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1

109137-01

Test	Method	Analyst	Date
E. coli (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	3/25/2014
Total Coliforms (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	3/25/2014

Approved By:

Melissa McIntosh, Lab Technician

AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC
> = Greater than; < = Less than
Results relate only to samples as submitted. This certificate must not be reproduced, except in its entirety, without written consent from the laboratory.
Canadian Drinking Water Guidelines as listed on Dec. 5th, 2005 and are subject to change. Method uncertainties for specified analyses are available upon request.

ALBERNI VALLEY AIRPORT

Facility Location:
7500 AIRPORT Road
Port Alberni

Facility Information:
Facility Type: DWS

Facility Sampling History:

Location	Date	Total Coliform	E. Coli
Alberni Valley Airport, Airport	13-Jan-2015	L1	L1
Alberni Valley Airport, Airport	16-Dec-2014	L1	L1
Alberni Valley Airport, Airport	26-Nov-2014	L1	L1
Alberni Valley Airport, Airport	20-Oct-2014	L1	L1
Alberni Valley Airport, Airport	15-Sep-2014	L1	L1
Alberni Valley Airport, Airport	20-Aug-2014	L1	L1
Alberni Valley Airport, Airport	14-Jul-2014	L1	L1
Alberni Valley Airport, Airport	9-Jun-2014	L1	L1
Alberni Valley Airport, Airport	26-May-2014	L1	L1
Alberni Valley Airport, Airport	14-Apr-2014	L1	L1
Alberni Valley Airport, Airport	24-Mar-2014	L1	L1
Alberni Valley Airport, Airport	5-Mar-2014	L1	L1
Alberni Valley Airport, Airport	26-Feb-2014	L1	L1
Alberni Valley Airport, Airport	15-Jan-2014	L1	L1
Alberni Valley Airport, Airport	10-Dec-2013	L1	L1
Alberni Valley Airport, Airport	13-Nov-2013	L1	L1
Alberni Valley Airport, Airport	18-Sep-2013	L1	L1
Alberni Valley Airport, Airport	13-Aug-2013	L1	L1
Alberni Valley Airport, Airport	23-Jul-2013	L1	L1
Alberni Valley Airport, Airport	18-Jun-2013	L1	L1

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Appendix C

Drinking Water Quality Links

Drinking Water Quality Links:

- Guidelines for Canadian Drinking Water Quality
http://www.hc-sc.gc.ca/ewh-semt/water-eau/drink-potab/guide/index-eng.php

- Drinking Water Protection Act:
http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/00_01009_01

- Drinking Water Protection Regulation:
http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/10_200_2003

- The Environmental Operators Certificate Program:
http://www.eocp.org/

- British Columbia Water and Wastewater Association:
http://www.bcwwa.org/

- Vancouver Island Health Authority – Water Quality
http://www.viha.ca/mho/water/

Appendix D

Island Health Authority Inspection Reports

BEAVER CREEK WATER SYSTEM - Inspection Report

Inspection Information:
Facility Type: DWT
Inspection type: Routine
Inspection date: January 08, 2015
Follow-up Required: No

This facility was given a **low** hazard rating.
More information on hazard ratings.

Violations:
No violations were found during the inspection

Comments: System operation is reviewed with ACRD Chief Administrative Office, Water System Operator and District Staff. Inspection is conducted with Operator and District Staff. Strict Road Pump Station, North Reservoir and Kitsuksis Reservoirs are visited. - The new Strict Road Pump Station is completed and operating. System received bulk potable water supply from Port Alberni Water Works via the new pump station. A copy of arrangement agreement is received by VIHA. BCWS operating permit will be updated with new terms and conditions to reflect change. - Incoming potable water is post-chlorinated at Strict Station. Chlorine residual of incoming and outgoing water from station are 0.70 ppm and 1.17 respectively during the inspection. Other reservoirs are also equipped with post-chlorination stations to maintain chlorine residuals through out the distribution system. - SCADA system is in place to monitor chlorine residuals and turbidity levels. Turbidity at Strict station is at 0.24 NTU. - Manual records of both parameters are available and up-to-date. Meters are calibrated annually. - Bacteriological water samples are submitted weekly. Results are satisfactory. - Chemical analysis is done quarterly. Results are available on annual report. - 2013 annual report is posted on ACRD website for public access. Please incorporate recent change of water source, contact information and other pertinent information onto 2014 annual report. - Emergency response plan is available. Please incorporate contingency plans as discussed during the meeting and update contacts. Ensure public has access to information upon request. - Stamp River will remain as emergency water source. Please incorporate appropriate procedures and contacts into emergency response plan. - All stations visited are fenced and locked to prevent unauthorized entry. Fence at North Reservoir is damaged by fallen tree during the December 2014 storm. Repair order is in place. - Appropriate EDCP certification is maintained. Water system has one level III and two Level II EDCP certified operators.

BAMFIELD COMMUNITY WWS - Inspection Report

Inspection Information:

Facility Type: DWC
Inspection type: Routine
Inspection date: April 03, 2013
Follow-up Required: No

This facility was given a **low** hazard rating.
More information on hazard ratings.

Violations:

A summary of the violations found during the inspection are listed below.

Code	Description / Observation / Corrective Action
319	Inadequate Chemical Analysis Data Observation: *Samples collected Nov 2012 and Feb 2013 show THM's above the maximum acceptable concentration on the "Guideline's for Canadian Drinking Water Quality"; continue to monitor quarterly.*

Comments: Review of operation of the water system with the operator and ACRD management: - Surface source (Sugsaw Lake); screens are cleaned monthly. Turbidity is taken daily at the pumphouse with a hand-held turbidity meter; results are documented and normal results are <0.5 NTU. Looking at adding signage around the lake and near the submarine line to indicate it is a drinking water source. The Emergency Response Plan is up-to-date and present in the pumphouse; BWA signage is available. - A new chlorine analyzer was installed in 2012 and a new quill has installed at the chlorine injection point. - Operator maintains a chlorine residual of 0.2 ppm at the pumphouse. - Chlorine analyzer is alarmed with a call out to the operator and audible alarm when analyzer goes into alarm mode. - Distribution is flushed quarterly in the winter, operator has recently adjusted this to doing various branches of the system weekly. - System has two reservoirs; one reservoir was cleaned in 2012, the other was pressure-washed. - A new sampling port has been installed at the reservoirs. - Operator has been manually chlorinating at the reservoirs to maintain better residuals throughout the system; reports that this is working. - An automatic rechlorination station is being installed, a construction permit waiver was issued for this work January 2013. - Water system should be classified with the EOCP to ensure that the operator has the appropriate level of certification. - Recent bacteriological water sampling are satisfactory.

MILLSTREAM COMMUNITY WATER SYSTEM - Inspection Report

Inspection Information:

Facility Type: DWC
Inspection type: Routine
Inspection date: January 16, 2014
Follow-up Required: No

This facility was given a **low** hazard rating.
- More information on hazard ratings.

Violations:

No violations were found during the inspection

Comments: There has been no recent changes to the system. System consists of two shallow wells, chlorination for disinfection and a storage reservoir. All recent bacteriological samples are good, raw sample to be added. A sample has recently been submitted for chemical analysis; please forward results to the EHO. Water system operator has the appropriate training. An annual report for the system is incorporated into the ACRD report and is available on the ACRD website. The pump house and reservoir are secured. Chlorine residuals are monitored daily; good records are maintained for the system. Chlorine residual was 0.3 mg/L at the pump house and reservoir at the time of inspection. Ensure upgrades to the system are done in consultation with Island Health and that necessary construction permits are obtained.

TOFINO AIRPORT WATER SYSTEM - Inspection Report

Inspection Information:
Facility Type: DWS
Inspection type: Routine
Inspection date: March 05, 2013
Follow-up Required: No

This facility was given a **low** hazard rating.
More information on hazard ratings.

Violations:
No violations were found during the inspection

Comments: - Water system includes: two wells (only one in use), treatment for removal of iron and manganese, chlorination of water, reservoir, re-chlorination before entering distribution. Test wells have been drilled; the intent is to bring on an additional source to address concerns with the yield of the existing wells. Prior to wells being used, source approval must be obtained from VIHA. Information on this process has been provided to the operator of the system. Operator is to check with the well driller to ensure the well located next to the pumphouse is properly sealed. - Chemical/physical analysis was conducted on the raw water in 2011. Turbidity, iron, manganese and colour were above the aesthetic objectives of the Guidelines for Canadian Drinking Water Quality; these parameters are addressed with the ion exchange treatment. - Samples are submitted monthly from three sites for bacteriological monitoring; all recent samples are satisfactory. - An Emergency Response Plan is in place, ensure that this is reviewed annually and provide any revisions to the EHO. - Component of the system (wells, pumphouse, reservoir) are secured by means of fencing and locked doors/hatches. - Chlorine residuals are monitored and recorded regularly. - Annual report for 2012 is now posted on the ACRD website.

ALBERNI VALLEY AIRPORT - Inspection Report

Inspection Information:

Facility Type: DWS
Inspection type: Routine
Inspection date: February 28, 2014
Follow-up Required: No

This facility was given a **low** hazard rating.
More information on hazard ratings.

Violations:

A summary of the violations found during the inspection are listed below.

Code	Description / Observation / Corrective Action
320	Interruption of Treatment Corrective Action: *UV system was in alarm mode at the time of inspection. Service technician has been called to look at the UV unit. Users have been notified that water should be boiled prior to use.*

Comments: A new UV unit was added to the system in 2012; prior to 2012 the system consisted of a shallow dug well with no disinfection. It is recommended that the treatment be monitored frequently to ensure the UV is working properly (currently only checked monthly). Samples are submitted monthly for bacteriological testing, all recent results are satisfactory. Most recent chemical results are from 2012, results are below the requirement of the Canadian Drinking Water Guidelines. Building that houses the well and treatment is secure and well maintained. Ensure the UV equipment is maintained as recommended by the manufacturer or as required by the operation including filter changes, bulb replacement and sleeve cleaning. An annual flushing and disinfection program is recommended. An emergency response plan is available for this water system and has recently been reviewed. *Information about the filters and UV must be added to the ERP. Follow up March 6th: UV sensor has been fixed and a follow up sample was submitted on March 5th.