

DRINKING WATER SYSTEM ANNUAL REPORT

Reporting Period: January 1st to December 31st, (year)

Water System

Water System Owner

Primary Contact Name (Operator or Manager)

Phone Number (Operator or Manager)

E-mail (Operator or Manager)

DESCRIBE YOUR WATER SUPPLY SYSTEM

What is the Source(s) of Raw Water?

Deep Well Shallow Well Surface Water Other

If other, specify details:

Does the Drinking Water System have Primary Disinfection? Yes No

Chlorination Ultraviolet Light Ozone Other

If other, specify details:

Does the Drinking Water System have Secondary Disinfection? Yes No

Chlorination Other

If other, specify details:

Does the Drinking Water System have Filtration? Yes No

Check all boxes that apply

Cartridge Filter(s) Carbon Filter Sand Filtration Reverse Osmosis Other

If other, specify details:

PUBLIC REPORTING

Emergency Response & Contingency Plan (ERCP)

Is your ERCP up to Date? Yes No

How do you Inform the System Users of the ERCP?

Hand Delivered Bulletin Board Newspaper Utility Bill Insert Website

Other (specify details) CVRD Engineering Services, 175 Ingram Street, Duncan, BC

Drinking Water System Annual Report

How do you Inform the System Users of the Annual Report?

Hand Delivered Bulletin Board Newspaper Utility Bill Insert Website

Other (specify details)

COMPLIANCE WITH OPERATING PERMIT

List the conditions of your Operating Permit (Contact the DWO for a copy if needed):

Are you in compliance with your Operating Permit? Yes No

BACTERIOLOGICAL TESTING AND DRINKING WATER PROTECTION REGULATION WATER QUALITY STANDARDS

How many bacteriological samples were collected during this reporting period? _____

What is the minimum required sampling frequency for this system? (#samples/month) _____

Additional sampling details: _____

Was the minimum required sampling frequency achieved? Yes No

Comments: _____

Bacteriological summary attached to this report? Yes No

If no, how do the users of the system view the results?

WATER QUALITY STANDARDS FOR POTABLE WATER

Parameter:	Standard:	Did this system meet standard?	
Escherichia coli (for all samples)	No detectable <i>Escherichia coli</i> per 100ml	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Total Coliform Bacteria (if only 1 sample collected in a 30 day period)	No detectable total coliform bacteria per 100ml	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Total Coliform Bacteria (if more than 1 sample collected in a 30 day period)	No more than 10% of samples contain total coliform bacteria, and No sample has more than 10 total coliform bacteria per 100ml	<input type="checkbox"/> Yes	<input type="checkbox"/> No

If the system did not meet any of above Drinking Water Protection Regulation standards, record the results in the table below; attach additional sheets if necessary.

Date	TC/100ml	E.coli/100ml	Reason	Corrective Action

CHEMICAL SAMPLING COMPLETED DURING THIS REPORTING PERIOD

Was any chemical sampling conducted during reporting period? Yes No

If no, when were the last chemical samples conducted for this system? (date) Don't know

If yes, attach a list of the chemical results

If any water samples did not meet the Guidelines for Canadian Drinking Water Quality, record the results in the table below; attach additional sheets if necessary.

Next scheduled full chemical test (date)

Parameter	Result	Corrective Action / Treatment / Comments

ADDITIONAL TESTING

Does the system have analyzers for continuous monitoring? Yes No

If yes, check all boxes that apply:

Chlorine Turbidity Other (details)

Are the results available on request?

If any additional testing or sampling was conducted, record results in the table below; attach additional sheets if necessary.

Additional Testing & Reason for Sampling	Corrective Action Taken

WATER QUALITY COMPLAINTS

Were there any water quality complaints in this reporting period? (e.g. taste, odour, colour etc.) Yes No

If yes, complete the table below; attach additional sheets if necessary.

Date	Water Quality Complaint	Corrective Action / Treatment

OPERATIONAL PROBLEMS

Were there any operational problems during this reporting period? (e.g. insufficient water supply, malfunction of disinfection equipment, line breaks, elevated turbidity etc.). Yes No

If yes, complete the table below; attach additional sheets if necessary.

Incident Date	Type of Operational Problem	Corrective Action Taken

MAJOR UPGRADES/REPAIRS & EXPENSES

Were there any major upgrades/repairs or any major costs incurred during this reporting period? Yes No

If yes, complete the table below; attach additional sheets if necessary.

Major Upgrades/Expenses	Details
Improvements required by DWO	
Additions/changes to system	
Purchase or install new equipment	
Equipment repair or replacement	
Annual maintenance of system	
Specialist report	
Other	

FUTURE IMPROVEMENTS

Are there any plans for future improvements? Yes No

If yes, complete the table below; attach additional sheets if necessary.

Future Upgrades or Improvements	Estimated Date of Completion

<p>Click here to enter a date. DATE COMPLETED:</p>	<p>COMPLETED BY:</p>
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Future upgrades or improvements	Estimated date of Completion
Groundwater source exploration	2020
Stocking Lake dam investigation	2020
Design for system PRV installations	2020
UV Filter replacement	2020/2021
PRV upgrades	2020/2021
Dam enhancement	2020/2021
4-3-2-1-0 treatment	2020/2021
Generator installation	2019
Groundwater monitoring (data collection) all wells	2020



SALTAIR WATER SYSTEM

Facility Location:

10631 South Watts Road
Saltair

Facility Information:

Facility Type: 301-10000 DWT

Facility Sampling History:

Location	Date	Total Coliform	E.Coli
11185 Baker Road, 11185 Baker Road	17-Dec-2018	L1	L1
3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	17-Dec-2018	L1	L1
10311 Old Victoria Road S-6 , 10311 Old Victoria Rd, Saltair	10-Dec-2018	L1	L1
10879 Chemainus Road, S-8, 10879 Chemainus Rd.	10-Dec-2018	L1	L1
10651 Olsen Road S-4, 10651 Olsen Road Saltair	5-Dec-2018	L1	L1
10980 Westdowne S-7, 10980 Westdowne Rd. Saltair	5-Dec-2018	L1	L1
3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	26-Nov-2018	L1	L1
10980 Westdowne S-7, 10980 Westdowne Rd. Saltair	19-Nov-2018	L1	L1
3771 Gardner Road - S-5, 3771 Gardner Road Saltair	19-Nov-2018	L1	L1
10311 Old Victoria Road S-6 , 10311 Old Victoria Rd, Saltair	13-Nov-2018	L1	L1
11185 Baker Road, 11185 Baker Road	13-Nov-2018	L1	L1
10879 Chemainus Road, S-8, 10879 Chemainus Rd.	5-Nov-2018	L1	L1
3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	5-Nov-2018	L1	L1
10651 Olsen Road S-4, 10651 Olsen Road Saltair	22-Oct-2018	L1	L1
3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	22-Oct-2018	L1	L1
10311 Old Victoria Road S-6 , 10311 Old Victoria Rd, Saltair	16-Oct-2018	L1	L1



10879 Chemainus Road, S-8, 10879 Chemainus Rd.	16-Oct-2018	L1	L1
3771 Gardner Road - S-5, 3771 Gardner Road Saltair	9-Oct-2018	L1	L1
10651 Olsen Road S-4, 10651 Olsen Road Saltair	1-Oct-2018	L1	L1
10980 Westdowne S-7, 10980 Westdowne Rd. Saltair	1-Oct-2018	L1	L1
10879 Chemainus Road, S-8, 10879 Chemainus Rd.	24-Sep-2018	L1	L1
10311 Old Victoria Road S-6 , 10311 Old Victoria Rd, Saltair	17-Sep-2018	L1	L1
11185 Baker Road, 11185 Baker Road	10-Sep-2018	L1	L1
3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	10-Sep-2018	L1	L1
3771 Gardner Road - S-5, 3771 Gardner Road Saltair	4-Sep-2018	L1	L1
10651 Olsen Road S-4, 10651 Olsen Road Saltair	27-Aug-2018	L1	L1
10311 Old Victoria Road S-6 , 10311 Old Victoria Rd, Saltair	20-Aug-2018	L1	L1
3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	20-Aug-2018	L1	L1
10879 Chemainus Road, S-8, 10879 Chemainus Rd.	13-Aug-2018	L1	L1
10980 Westdowne S-7, 10980 Westdowne Rd. Saltair	13-Aug-2018	L1	L1
3771 Gardner Road - S-5, 3771 Gardner Road Saltair	7-Aug-2018	L1	L1
10651 Olsen Road S-4, 10651 Olsen Road Saltair	30-Jul-2018	L1	L1
11185 Baker Road, 11185 Baker Road	30-Jul-2018	L1	L1
10879 Chemainus Road, S-8, 10879 Chemainus Rd.	24-Jul-2018	L1	L1
3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	24-Jul-2018	L1	L1
3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	9-Jul-2018	L1	L1
3771 Gardner Road - S-5, 3771 Gardner Road Saltair	9-Jul-2018	L1	L1
10311 Old Victoria Road S-6 , 10311 Old Victoria Rd, Saltair	3-Jul-2018	L1	L1
10651 Olsen Road S-4, 10651 Olsen Road Saltair	3-Jul-2018	L1	L1
10311 Old Victoria Road S-6 , 10311 Old Victoria Rd, Saltair	26-Jun-2018	L1	L1
10879 Chemainus Road, S-8, 10879 Chemainus Rd.	26-Jun-2018	L1	L1
10651 Olsen Road S-4, 10651 Olsen Road Saltair	19-Jun-2018	L1	L1
3771 Gardner Road - S-5, 3771 Gardner Road Saltair	13-Jun-2018	L1	L1
10980 Westdowne S-7, 10980 Westdowne Rd. Saltair	5-Jun-2018	L1	L1
11185 Baker Road, 11185 Baker Road	5-Jun-2018	L1	L1
11185 Baker Road, 11185 Baker Road	29-May-2018	L1	L1



3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	22-May-2018	L1	L1
10651 Olsen Road S-4, 10651 Olsen Road Saltair	15-May-2018	L1	L1
3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	15-May-2018	L1	L1
10879 Chemainus Road, S-8, 10879 Chemainus Rd.	8-May-2018	L1	L1
10980 Westdowne S-7, 10980 Westdowne Rd. Saltair	8-May-2018	L1	L1
11185 Baker Road, 11185 Baker Road	1-May-2018	L1	L1
3771 Gardner Road - S-5, 3771 Gardner Road Saltair	1-May-2018	L1	L1
10311 Old Victoria Road S-6 , 10311 Old Victoria Rd, Saltair	23-Apr-2018	L1	L1
10651 Olsen Road S-4, 10651 Olsen Road Saltair	23-Apr-2018	L1	L1
10980 Westdowne S-7, 10980 Westdowne Rd. Saltair	23-Apr-2018	L1	L1
11185 Baker Road, 11185 Baker Road	17-Apr-2018	L1	L1
3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	17-Apr-2018	L1	L1
10879 Chemainus Road, S-8, 10879 Chemainus Rd.	9-Apr-2018	L1	L1
3771 Gardner Road - S-5, 3771 Gardner Road Saltair	4-Apr-2018	L1	L1
10651 Olsen Road S-4, 10651 Olsen Road Saltair	26-Mar-2018	L1	L1
11185 Baker Road, 11185 Baker Road	20-Mar-2018	L1	L1
10311 Old Victoria Road S-6 , 10311 Old Victoria Rd, Saltair	14-Mar-2018	L1	L1
10879 Chemainus Road, S-8, 10879 Chemainus Rd.	14-Mar-2018	L1	L1
10980 Westdowne S-7, 10980 Westdowne Rd. Saltair	6-Mar-2018	L1	L1
3771 Gardner Road - S-5, 3771 Gardner Road Saltair	6-Mar-2018	L1	L1
10651 Olsen Road S-4, 10651 Olsen Road Saltair	27-Feb-2018	L1	L1
3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	27-Feb-2018	L1	L1
3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	19-Feb-2018	L1	L1
10879 Chemainus Road, S-8, 10879 Chemainus Rd.	13-Feb-2018	L1	L1
3771 Gardner Road - S-5, 3771 Gardner Road Saltair	13-Feb-2018	L1	L1
10980 Westdowne S-7, 10980 Westdowne Rd. Saltair	6-Feb-2018	L1	L1
11185 Baker Road, 11185 Baker Road	6-Feb-2018	L1	L1
10651 Olsen Road S-4, 10651 Olsen Road Saltair	30-Jan-2018	L1	L1
10651 Olsen Road S-4, 10651 Olsen Road Saltair	22-Jan-2018	L1	L1
3254 Dogwood Road - S-2, 3254 Dogwood Road, Saltair, B.C.	22-Jan-2018	L1	L1



10879 Chemainus Road, S-8, 10879 Chemainus Rd.	15-Jan-2018	L1	L1
10980 Westdowne S-7, 10980 Westdowne Rd. Saltair	15-Jan-2018	L1	L1
11185 Baker Road, 11185 Baker Road	9-Jan-2018	L1	L1
10311 Old Victoria Road S-6 , 10311 Old Victoria Rd, Saltair	3-Jan-2018	L1	L1
3771 Gardner Road - S-5, 3771 Gardner Road Saltair	3-Jan-2018	L1	L1

Alkalinity (bicarbonate, as CaCO3)	Sampling Point Name
08/08/2018 12:20 10.7 mg/L	Stocking Lake-inlet pipe in PRV chamber
Alkalinity (carbonate, as CaCO3)	Sampling Point Name
08/08/2018 12:20 < 1.0 mg/L	Stocking Lake-inlet pipe in PRV chamber
Alkalinity (hydroxide, as CaCO3)	Sampling Point Name
08/08/2018 12:20 < 1.0 mg/L	Stocking Lake-inlet pipe in PRV chamber
Alkalinity (total, as CaCO3)	Sampling Point Name
08/08/2018 12:20 10.7 mg/L	Stocking Lake-inlet pipe in PRV chamber
Aluminum (total)	Sampling Point Name
08/08/2018 12:20 0.022 mg/L	Stocking Lake-inlet pipe in PRV chamber
Ammonia (total, as N)	Sampling Point Name
08/08/2018 12:20 < 0.0050 mg/L	Stocking Lake-inlet pipe in PRV chamber
Antimony (total)	Sampling Point Name
08/08/2018 12:20 < 0.00050 mg/L	Stocking Lake-inlet pipe in PRV chamber
Arsenic (total)	Sampling Point Name
08/08/2018 12:20 0.00017 mg/L	Stocking Lake-inlet pipe in PRV chamber
Background Bacteria	Sampling Point Name
08/08/2018 12:20 < 1 CFU/100ml	Stocking Lake-inlet pipe in PRV chamber
Barium (total)	Sampling Point Name
08/08/2018 12:20 < 0.010 mg/L	Stocking Lake-inlet pipe in PRV chamber
Beryllium (total)	Sampling Point Name
08/08/2018 12:20 < 0.0050 mg/L	Stocking Lake-inlet pipe in PRV chamber

Bismuth (total)		Sampling Point Name
08/08/2018 12:20	< 0.20 mg/L	Stocking Lake-inlet pipe in PRV chamber
Boron (total)		Sampling Point Name
08/08/2018 12:20	< 0.10 mg/L	Stocking Lake-inlet pipe in PRV chamber
Bromide		Sampling Point Name
08/08/2018 12:20	< 0.050 mg/L	Stocking Lake-inlet pipe in PRV chamber
Bromochloroacetic acid		Sampling Point Name
02/13/2018 10:20	< 0.0010 mg/L	S8-10879 Chemainus RD
06/14/2018 11:30	< 0.0010 mg/L	S8-10879 Chemainus RD
08/08/2018 12:20	< 0.0010 mg/L	Stocking Lake-inlet pipe in PRV chamber
11/27/2018 11:00	< 0.0010 mg/L	S8-10879 Chemainus RD
Bromodichloromethane (dichlorobromomethane)		Sampling Point Name
02/13/2018 10:20	0.0012 mg/L	S8-10879 Chemainus RD
06/14/2018 11:30	0.0021 mg/L	S8-10879 Chemainus RD
08/08/2018 12:20	< 0.0010 mg/L	Stocking Lake-inlet pipe in PRV chamber
11/27/2018 11:00	0.0021 mg/L	S8-10879 Chemainus RD
Bromoform		Sampling Point Name
02/13/2018 10:20	< 0.0010 mg/L	S8-10879 Chemainus RD
06/14/2018 11:30	< 0.0010 mg/L	S8-10879 Chemainus RD
08/08/2018 12:20	< 0.0010 mg/L	Stocking Lake-inlet pipe in PRV chamber
11/27/2018 11:00	< 0.0010 mg/L	S8-10879 Chemainus RD
Cadmium (total)		Sampling Point Name
08/08/2018 12:20	< 0.00020 mg/L	Stocking Lake-inlet pipe in PRV chamber

Calcium (total)		Sampling Point Name
08/08/2018 12:20	3.15 mg/L	Stocking Lake-inlet pipe in PRV chamber
Chloride		Sampling Point Name
08/08/2018 12:20	1.34 mg/L	Stocking Lake-inlet pipe in PRV chamber
Chloroform		Sampling Point Name
02/13/2018 10:20	0.0998 mg/L	S8-10879 Chemainus RD
06/14/2018 11:30	0.109 mg/L	S8-10879 Chemainus RD
08/08/2018 12:20	< 0.0010 mg/L	Stocking Lake-inlet pipe in PRV chamber
11/27/2018 11:00	0.0767 mg/L	S8-10879 Chemainus RD
Chromium (total)		Sampling Point Name
08/08/2018 12:20	< 0.0020 mg/L	Stocking Lake-inlet pipe in PRV chamber
Cobalt (total)		Sampling Point Name
08/08/2018 12:20	< 0.010 mg/L	Stocking Lake-inlet pipe in PRV chamber
Colour		Sampling Point Name
08/08/2018 12:20	7.3 TCU	Stocking Lake-inlet pipe in PRV chamber
Conductivity		Sampling Point Name
08/08/2018 12:20	27.3 uS/cm	Stocking Lake-inlet pipe in PRV chamber
Copper (total)		Sampling Point Name
08/08/2018 12:20	< 0.0010 mg/L	Stocking Lake-inlet pipe in PRV chamber
Dibromoacetic acid		Sampling Point Name
02/13/2018 10:20	< 0.0010 mg/L	S8-10879 Chemainus RD
06/14/2018 11:30	< 0.0010 mg/L	S8-10879 Chemainus RD
08/08/2018 12:20	< 0.0010 mg/L	Stocking Lake-inlet pipe in PRV chamber

Dibromoacetic acid		Sampling Point Name
11/27/2018 11:00	< 0.0010 mg/L	S8-10879 Chemainus RD
Dibromochloromethane (Chlorodibromomethane)		Sampling Point Name
02/13/2018 10:20	< 0.0010 mg/L	S8-10879 Chemainus RD
06/14/2018 11:30	< 0.0010 mg/L	S8-10879 Chemainus RD
08/08/2018 12:20	< 0.0010 mg/L	Stocking Lake-inlet pipe in PRV chamber
11/27/2018 11:00	< 0.0010 mg/L	S8-10879 Chemainus RD
Dichloroacetic acid		Sampling Point Name
02/13/2018 10:20	0.0696 mg/L	S8-10879 Chemainus RD
06/14/2018 11:30	0.0398 mg/L	S8-10879 Chemainus RD
08/08/2018 12:20	< 0.0010 mg/L	Stocking Lake-inlet pipe in PRV chamber
11/27/2018 11:00	0.0253 mg/L	S8-10879 Chemainus RD
Escherichia coli / E. coli (counts)		Sampling Point Name
* 08/08/2018 12:20	3 counts/100ml	Stocking Lake-inlet pipe in PRV chamber
Fecal (thermal tolerant) Coliforms (counts)		Sampling Point Name
* 08/08/2018 12:20	3 counts/100ml	Stocking Lake-inlet pipe in PRV chamber
Fluoride		Sampling Point Name
08/08/2018 12:20	< 0.020 mg/L	Stocking Lake-inlet pipe in PRV chamber
Haloacetic acids 5 / HAA5		Sampling Point Name
* 02/13/2018 10:20	0.162 mg/L	S8-10879 Chemainus RD
* 06/14/2018 11:30	0.109 mg/L	S8-10879 Chemainus RD
08/08/2018 12:20	< 0.0054 mg/L	Stocking Lake-inlet pipe in PRV chamber
11/27/2018 11:00	0.0762 mg/L	S8-10879 Chemainus RD

Hardness (total, as CaCO3)		Sampling Point Name
08/08/2018 12:20	10.0 mg/L	Stocking Lake-inlet pipe in PRV chamber
Heterotrophic Plate Count / HPC		Sampling Point Name
* 08/08/2018 12:20	47,000 CFU/100ml	Stocking Lake-inlet pipe in PRV chamber
Iron (total)		Sampling Point Name
08/08/2018 12:20	0.054 mg/L	Stocking Lake-inlet pipe in PRV chamber
Iron Bacteria (MPN / PA)		Sampling Point Name
08/08/2018 12:20	SC	Stocking Lake-inlet pipe in PRV chamber
Langelier Index		Sampling Point Name
08/08/2018 12:20	-2.5	Stocking Lake-inlet pipe in PRV chamber
Langelier Index (@ 20 C)		Sampling Point Name
08/08/2018 12:20	20	Stocking Lake-inlet pipe in PRV chamber
Lead (total)		Sampling Point Name
08/08/2018 12:20	< 0.00050 mg/L	Stocking Lake-inlet pipe in PRV chamber
Lithium (total)		Sampling Point Name
08/08/2018 12:20	< 0.010 mg/L	Stocking Lake-inlet pipe in PRV chamber
Magnesium (total)		Sampling Point Name
08/08/2018 12:20	0.52 mg/L	Stocking Lake-inlet pipe in PRV chamber
Manganese (total)		Sampling Point Name
08/08/2018 12:20	0.0044 mg/L	Stocking Lake-inlet pipe in PRV chamber
Mercury (total)		Sampling Point Name
08/08/2018 12:20	< 0.00020 mg/L	Stocking Lake-inlet pipe in PRV chamber
Molybdenum (total)		Sampling Point Name
08/08/2018 12:20	< 0.030 mg/L	Stocking Lake-inlet pipe in PRV chamber

Monobromoacetic acid		Sampling Point Name
02/13/2018 10:20	< 0.0010 mg/L	S8-10879 Chemainus RD
06/14/2018 11:30	< 0.0010 mg/L	S8-10879 Chemainus RD
08/08/2018 12:20	< 0.0010 mg/L	Stocking Lake-inlet pipe in PRV chamber
11/27/2018 11:00	< 0.0010 mg/L	S8-10879 Chemainus RD
Monochloroacetic acid		Sampling Point Name
02/13/2018 10:20	< 0.0050 mg/L	S8-10879 Chemainus RD
06/14/2018 11:30	< 0.0050 mg/L	S8-10879 Chemainus RD
08/08/2018 12:20	< 0.0050 mg/L	Stocking Lake-inlet pipe in PRV chamber
11/27/2018 11:00	< 0.0050 mg/L	S8-10879 Chemainus RD
Nickel (total)		Sampling Point Name
08/08/2018 12:20	< 0.050 mg/L	Stocking Lake-inlet pipe in PRV chamber
Nitrate (as N)		Sampling Point Name
08/08/2018 12:20	< 0.0050 mg/L	Stocking Lake-inlet pipe in PRV chamber
Nitrate + Nitrite (as N)		Sampling Point Name
08/08/2018 12:20	< 0.0051 mg/L	Stocking Lake-inlet pipe in PRV chamber
Nitrite (as N)		Sampling Point Name
08/08/2018 12:20	< 0.0010 mg/L	Stocking Lake-inlet pipe in PRV chamber
pH		Sampling Point Name
08/08/2018 12:20	7.2	Stocking Lake-inlet pipe in PRV chamber
08/08/2018 12:20	7.28	Stocking Lake-inlet pipe in PRV chamber
Phosphorus (total)		Sampling Point Name
08/08/2018 12:20	< 0.30 mg/L	Stocking Lake-inlet pipe in PRV chamber

Potassium (total)		Sampling Point Name
08/08/2018 12:20	0.28 mg/L	Stocking Lake-inlet pipe in PRV chamber
Selenium (total)		Sampling Point Name
08/08/2018 12:20	< 0.0010 mg/L	Stocking Lake-inlet pipe in PRV chamber
Silicon (total, as Si)		Sampling Point Name
08/08/2018 12:20	1.75 mg/L	Stocking Lake-inlet pipe in PRV chamber
Silver (total)		Sampling Point Name
08/08/2018 12:20	< 0.010 mg/L	Stocking Lake-inlet pipe in PRV chamber
Sodium (total)		Sampling Point Name
08/08/2018 12:20	< 2.0 mg/L	Stocking Lake-inlet pipe in PRV chamber
Strontium (total)		Sampling Point Name
08/08/2018 12:20	0.0097 mg/L	Stocking Lake-inlet pipe in PRV chamber
Sulfate Reducing Bacteria		Sampling Point Name
08/08/2018 12:20	SC	Stocking Lake-inlet pipe in PRV chamber
Sulphate		Sampling Point Name
08/08/2018 12:20	0.94 mg/L	Stocking Lake-inlet pipe in PRV chamber
Sulphide (total, as S)		Sampling Point Name
08/08/2018 12:20	< 0.018 mg/L	Stocking Lake-inlet pipe in PRV chamber
Tannins and Lignins		Sampling Point Name
08/08/2018 12:20	0.40 mg/L	Stocking Lake-inlet pipe in PRV chamber
Temperature		Sampling Point Name
* 08/08/2018 12:20	22 degrees C	Stocking Lake-inlet pipe in PRV chamber
Thallium (total)		Sampling Point Name
08/08/2018 12:20	< 0.20 mg/L	Stocking Lake-inlet pipe in PRV chamber

Tin (total)		Sampling Point Name
08/08/2018 12:20	< 0.030 mg/L	Stocking Lake-inlet pipe in PRV chamber
Titanium (total)		Sampling Point Name
08/08/2018 12:20	< 0.010 mg/L	Stocking Lake-inlet pipe in PRV chamber
Total Coliforms (counts)		Sampling Point Name
* 08/08/2018 12:20	> 80 counts/100ml	Stocking Lake-inlet pipe in PRV chamber
Total Dissolved Solids / TDS		Sampling Point Name
08/08/2018 12:20	30 mg/L	Stocking Lake-inlet pipe in PRV chamber
Total Kjeldahl Nitrogen / TKN		Sampling Point Name
08/08/2018 12:20	0.118 mg/L	Stocking Lake-inlet pipe in PRV chamber
Total Organic Carbon / TOC		Sampling Point Name
08/08/2018 12:20	3.10 mg/L	Stocking Lake-inlet pipe in PRV chamber
Total Trihalomethanes / TTHM		Sampling Point Name
* 02/13/2018 10:20	0.101 mg/L	S8-10879 Chemainus RD
* 06/14/2018 11:30	0.111 mg/L	S8-10879 Chemainus RD
08/08/2018 12:20	< 0.0020 mg/L	Stocking Lake-inlet pipe in PRV chamber
11/27/2018 11:00	0.0787 mg/L	S8-10879 Chemainus RD
Trichloroacetic acid		Sampling Point Name
02/13/2018 10:20	0.0921 mg/L	S8-10879 Chemainus RD
06/14/2018 11:30	0.0694 mg/L	S8-10879 Chemainus RD
08/08/2018 12:20	< 0.0010 mg/L	Stocking Lake-inlet pipe in PRV chamber
11/27/2018 11:00	0.0509 mg/L	S8-10879 Chemainus RD

Turbidity		Sampling Point Name
08/08/2018 12:20	0.49 NTU	Stocking Lake-inlet pipe in PRV chamber
Uranium (total)		Sampling Point Name
08/08/2018 12:20	< 0.00010 mg/L	Stocking Lake-inlet pipe in PRV chamber
Vanadium (total)		Sampling Point Name
08/08/2018 12:20	< 0.030 mg/L	Stocking Lake-inlet pipe in PRV chamber
Zinc (total)		Sampling Point Name
08/08/2018 12:20	< 0.0050 mg/L	Stocking Lake-inlet pipe in PRV chamber

Result Legend:

P=present, A=absent, PR=presumptive, ND=non-detect, OR=over-range, OG=overgrown, Y=yes, N=no, TNTC=too numerous to count, NR=no result, NT=not tested, IG=ignore, ER=external report, SC=see comment

- < means less than lower detection limit shown
- > means greater than upper detection limit shown
- « means detected & less than number shown
- » means detected & greater than number shown

* Indicates Criteria is exceeded



Client/Code

Cowichan Valley Reg. Dist. - E
175 Ingram Street
Duncan, BC
V9L 1N8

Date 09Aug18 2:24p No. W141966
Source FWS
Type of Sample 1um wound filter
No. of Samples 1

TEL: (250) 746-2530
group

CommentsArrival temp.: 21.0C
Sampler: Rod Cama

Sample: Saltair Water Treatment Bldg

PARASITE ANALYSIS

<u>Sample</u>	<u>Cysts/100L</u>	<u>Organisms Identified</u>	<u>Comments</u>
Raw Water Sample	ND	Giardia (cysts)	-protozoan; enteric parasite
08Aug18 12:16p 150 Liters	0.67	Cryptosporidium (oocysts)	-protozoan; enteric parasite

Detection Limit = 1 per 100L *

Lab Test Recovery = 94.6%

* test is strongly influenced by volume collected, amount & type of sediment present

ND = none detected

ref: Direct Antibody -Hydrofluor Meridian

Monitoring for Giardia & Cryptosporidium, JL Clancy, WD Gollnitz & Z Tabib, 1994
 Prop. ICR Protozoan Methods for Detection of Giardia Cysts and Cryptosporidium Oocysts
 in Water by Fluorescent Antibody Procedures 1993
 US EPA Consensus Method for Determing Groundwaters Under the Direct
 Influence of Surface Water Using Microscopic Particulate Analysis (MPA),
 Vasconcelos, J., S. Harris., 1992
 Manual of Clinical Microbiology, EH Lennette etal. Am. Soc for Microbiology
 Clinical Diagnosis by Laboratory Methods, Davidson & Henry
 Veterinary Clinical Parastiology, MW Sloss, RL Kemp. Iowa State Univ. Press 5th ed.
 Parasitology for Vetinarians, JR Georgi & ME Georgi. WB Saunders & Co, 1990
 Personal Communications re methodologies & taxonomy: US EPA -S. Harris,
 US EPA (Cinc) F. Schaefer
 US EPA (retired) J.Vasconcelos
 BC CDC Magda Moricz (1995)

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