



**VILLAGE OF PORT ALICE  
2015 ANNUAL DRINKING WATER REPORT**

**Report of Water Quality Monitoring under Section 15 of the *Drinking Water Protection Act***

Reporting Period:	January 1, 2015 to December 31, 2015
Operating Permit Number:	Facilities No. 1440179
Drinking Water System Owner:	Village of Port Alice
Drinking Water System Contact: Name: Bonnie Danyk, Acting Chief Administrative Officer Phone No: (250) 284-3391 Email: info@portalice.ca	
Emergency Contact: Name: Jason Yunker, Public Works Foreman Phone No: (250) 284-6612	

**1 Microbiological testing completed during this reporting period:**

Adverse bacteriological results:

LOCATION	DATE	TOTAL COLIFORM UNITS PER 100 ML	ACTION
Wood Storage Tank, Belvedere Road	May 25, 2015	1	Retest
Wood Storage Tank, Belvedere Road	June 3, 2015	3	Retest
Wood Storage Tank, Belvedere Road	June 23, 2015	1	Tank taken offline

**2 Chemical results for this reporting period:**

The three production wells that provide water to the Port Alice system were tested for the parameters of the Canadian Drinking Water Guidelines in January 2015 and no health based parameters were exceeded.  
Document Attached

**3 Summarize additional testing and sampling carried out in accordance with the requirement of a Water Source approval, Written Order or as per the conditions of your Operating Permit.**       No additional testing

**4 Water Quality Complaints:** No formal complaints.

**5 Adverse results: Total number of adverse results during this reporting period for insufficient water supply, malfunction of disinfection equipment or elevated turbidity:**       No adverse results



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**6 Description of the system:**

Sources of raw water:  Groundwater

Does the drinking water system have disinfection?  Yes  No

Does the drinking water system have treatment?  Yes  No

**7 Major expenses incurred during the period covered by the report:** None

**8 Further communication with users:**

- a. Indicate how you notified system users that your annual report is available, and is free of charge:  
 public access/ notice via Rumble Sheet Newsletter
- b. Improvements or remedial actions required by the Drinking Water Officer:  
 no action required
- c. Future water system improvements:  
 More venting to be placed in Wood Storage Tank
- d. Emergency Response Plan can be accessed by:  
 contacting water system owner



# 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: Village of Port Alice  
Madeline McDonald  
PO Box 130  
Port Alice, BC  
V0N 2N0

Lab Number: 117259  
Date Reported: 4 Feb 15  
Date Completed: 4 Feb 15  
Date Received: 14 Jan 15 13:02

117259-01 Well # 2 water

Sampled By:

Sampling Date: 13 Jan 15 11:30

Test	Result	Units	Drinking Water Guideline
Alkalinity	93.1	mg/L	
Total Ammonia (N)	0.013	mg/L	
Chloride	4.3	mg/L	250 AO
Fluoride	0.061	mg/L	1.5 MAC
Nitrate (N)	0.733	mg/L	10 MAC
Nitrite (N)	<0.005	mg/L	1 MAC
Sulphate	9.62	mg/L	500 AO
Colour - Apparent	<5	Col. Unit	15
Conductivity	214	uS/cm	
Corrosivity	-0.262		
pH at 25 C	8.15	pH Units	6.5-8.5
Sulphide	<0.0050	mg/L	0.05 AO
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1
Total Dissolved Solids	124	mg/L	500 AO
Total Nitrogen (N)	0.709	mg/L	
Total Organic Carbon	<0.50	mg/L	
Total Organic Nitrogen	<0.020	mg/L	
T-Aluminum	0.0032	mg/L	0.1 Operational Std
T-Antimony	<0.00050	mg/L	0.006 MAC
T-Arsenic	0.00284	mg/L	0.010 MAC
T-Barium	0.0042	mg/L	1.0 MAC
T-Beryllium	<0.00010	mg/L	
T-Boron	<0.050	mg/L	5 MAC
T-Bismuth	<0.0010	mg/L	

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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.

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

117259-01 Well # 2

water

Sampled By:

Sampling Date: 13 Jan 15 11:30

Test	Result	Units	Drinking Water Guideline
T-Cadmium	<0.000010	mg/L	0.005 MAC
T-Calcium	33.7	mg/L	
T-Chromium	<0.0010	mg/L	0.05 MAC
T-Cobalt	<0.00050	mg/L	
T-Copper	<0.00050	mg/L	1.0 AO
T-Iron	<0.010	mg/L	0.3 AO
T-Lead	<0.00020	mg/L	0.010 MAC
T-Lithium	<0.0050	mg/L	
T-Magnesium	5.89	mg/L	
T-Manganese	<0.0010	mg/L	0.05 AO
T-Molybdenum	<0.0010	mg/L	
T-Nickel	<0.0010	mg/L	
T-Potassium	0.45	mg/L	
T-Selenium	0.00015	mg/L	0.01 MAC
T-Silicon	5.86	mg/L	
T-Silver	<0.000020	mg/L	
T-Sodium	4.34	mg/L	200 AO
T-Strontium	0.251	mg/L	
T-Thallium	<0.000050	mg/L	
T-Tin	<0.0050	mg/L	
T-Titanium	<0.0050	mg/L	
T-Uranium	0.00075	mg/L	
T-Vanadium	<0.0050	mg/L	
T-Zinc	<0.0050	mg/L	5.0 AO
Hardness (CaCO <sub>3</sub> )	108	mg/L	80-100
Turbidity	0.17	NTU	0.1 Operational Stand

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

117259-02 Well # 3

water

Sampled By:

Sampling Date: 13 Jan 15 11:00

Test	Result	Units	Drinking Water Guideline
Alkalinity	131	mg/L	
Total Ammonia (N)	0.022	mg/L	
Chloride	8.5	mg/L	250 AO
Fluoride	0.037	mg/L	1.5 MAC
Nitrate (N)	0.841	mg/L	10 MAC
Nitrite (N)	<0.0050	mg/L	1 MAC
Sulphate	8.38	mg/L	500 AO
Colour - Apparent	<5	Col. Unit	15
Conductivity	302	uS/cm	
Corrosivity	0.077		
pH at 25 C	8.19	pH Units	6.5-8.5
Sulphide	0.0063	mg/L	0.05 AO
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1
Total Dissolved Solids	156	mg/L	500 AO
Total Nitrogen (N)	0.812	mg/L	
Total Organic Carbon	<0.50	mg/L	
Total Organic Nitrogen	<0.020	mg/L	
T-Aluminum	<0.0030	mg/L	0.1 Operational Std
T-Antimony	<0.00050	mg/L	0.006 MAC
T-Arsenic	0.0004	mg/L	0.010 MAC
T-Barium	0.0027	mg/L	1.0 MAC
T-Beryllium	<0.00010	mg/L	
T-Boron	<0.050	mg/L	5 MAC
T-Bismuth	<0.0010	mg/L	
T-Cadmium	<0.000010	mg/L	0.005 MAC
T-Calcium	48.9	mg/L	
T-Chromium	<0.0010	mg/L	0.05 MAC
T-Cobalt	<0.00050	mg/L	
T-Copper	0.00069	mg/L	1.0 AO
T-Iron	<0.010	mg/L	0.3 AO
T-Lead	<0.00020	mg/L	0.010 MAC

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117259-02 Well # 3

water

Sampled By:

Sampling Date: 13 Jan 15 11:00

Test	Result	Units	Drinking Water Guideline
T-Lithium	<0.0050	mg/L	
T-Magnesium	6.33	mg/L	
T-Manganese	<0.0010	mg/L	0.05 AO
T-Molybdenum	<0.0010	mg/L	
T-Nickel	<0.0010	mg/L	
T-Potassium	0.667	mg/L	
T-Selenium	0.00013	mg/L	0.01 MAC
T-Silicon	6.35	mg/L	
T-Silver	<0.000020	mg/L	
T-Sodium	5.22	mg/L	200 AO
T-Strontium	0.224	mg/L	
T-Thallium	<0.000050	mg/L	
T-Tin	<0.0050	mg/L	
T-Titanium	<0.0050	mg/L	
T-Uranium	0.00027	mg/L	
T-Vanadium	<0.0050	mg/L	
T-Zinc	<0.0050	mg/L	5.0 AO
Hardness (CaCO3)	148	mg/L	80-100
Turbidity	<0.1	NTU	0.1 Operatonal Stand

117259-03 Well # 4

water

Sampled By:

Sampling Date: 13 Jan 15 10:30

Test	Result	Units	Drinking Water Guideline
Alkalinity	131	mg/L	
Total Ammonia (N)	0.02	mg/L	
Chloride	9.8	mg/L	250 AO
Fluoride	0.17	mg/L	1.5 MAC
Nitrate (N)	0.608	mg/L	10 MAC
Nitrite (N)	<0.0050	mg/L	1 MAC
Sulphate	10.8	mg/L	500 AO

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117259-03 Well # 4 water

Sampled By:

Sampling Date: 13 Jan 15 10:30

Test	Result	Units	Drinking Water Guideline
Colour - Apparent	<5	Col. Unit	15
Conductivity	310	uS/cm	
Corrosivity	0.0280		
pH at 25 C	8.20	pH Units	6.5-8.5
Sulphide	0.0056	mg/L	0.05 AO
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1
Total Dissolved Solids	184	mg/L	500 AO
Total Nitrogen (N)	0.604	mg/L	
Total Organic Carbon	<0.50	mg/L	
Total Organic Nitrogen	<0.020	mg/L	
T-Aluminum	<0.0030	mg/L	0.1 Operational Std
T-Antimony	<0.00050	mg/L	0.006 MAC
T-Arsenic	0.00102	mg/L	0.010 MAC
T-Barium	0.0123	mg/L	1.0 MAC
T-Beryllium	<0.00010	mg/L	
T-Boron	<0.050	mg/L	5 MAC
T-Bismuth	<0.0010	mg/L	
T-Cadmium	<0.000010	mg/L	0.005 MAC
T-Calcium	43.4	mg/L	
T-Chromium	<0.0010	mg/L	0.05 MAC
T-Cobalt	<0.00050	mg/L	
T-Copper	<0.00050	mg/L	1.0 AO
T-Iron	0.195	mg/L	0.3 AO
T-Lead	<0.00020	mg/L	0.010 MAC
T-Lithium	<0.0050	mg/L	
T-Magnesium	9.44	mg/L	
T-Manganese	0.0012	mg/L	0.05 AO
T-Molybdenum	0.0025	mg/L	
T-Nickel	<0.0010	mg/L	
T-Potassium	0.659	mg/L	
T-Selenium	0.00041	mg/L	0.01 MAC

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117259-01

Test	Method	Analyst	Date
Alkalinity	Maxxam, SM 22 2320 B m	Maxx	1/17/2015
Chloride	Maxxam SM 22 4500-cl m	Maxx	1/16/2015
Colour - Apparent	Maxxam SM 22 2120 B m	Maxx	1/16/2015
Conductivity	Maxxam SM 22 2510 B m	Maxx	1/17/2015
Corrosivity	Langelier Saturation Index, www.awwa.org	Maxx	1/16/2015
Corrosivity	Langelier Saturation Indcx, www.awwa.org	Maxx	1/23/2015
E. coli (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	1/14/2015
Fluoride	Maxxam SM 22 4500-F- G m	Maxx	1/16/2015
Hardness (CaCO3)	Hardness by Calculation, EPA6020a R1-modified	Maxx	1/19/2015
Nitrate (N)	Maxxam-SM-4500-NO3 1- modified	Maxx	1/16/2015
Nitrite (N)	Maxxam-SM-4500-NO2 1- modified	Maxx	1/16/2015
pH at 25 C	Maxxam SM 22 4500-H+ B m	Maxx	1/16/2015
Sulphate	Maxxam-SM 22 4500-SO42- E m	Maxx	1/16/2015
Sulphide	Maxxam SM 22 4500-S2- D m	Maxx	1/19/2015
T-Aluminum	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Antimony	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Arsenic	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Barium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Beryllium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Bismuth	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Boron	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Cadmium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Calcium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/19/2015
T-Chromium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Cobalt	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Copper	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Iron	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Lead	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Lithium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Magnesium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/19/2015
T-Manganese	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Molybdenum	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Nickel	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Potassium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/19/2015

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T-Selenium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Silicon	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Silver	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Sodium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/19/2015
T-Strontium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Thallium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Tin	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Titanium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Uranium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Vanadium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
T-Zinc	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/16/2015
Total Ammonia (N)	Maxxam SM 22 4500-NH3- G m	Maxx	1/19/2015
Total Coliforms (DES)	Enzyme Substrate, APHA 9223 B -modified	NI&L	1/14/2015
Total Dissolved Solids	Maxxam SM 22 2540 C m	Maxx	1/19/2015
Total Nitrogen (N)	Maxxam Subcontract, SM 22 4500-N C -modified	Maxx	1/20/2015
Total Organic Carbon	SM 22 5310 C m	Maxx	1/16/2015
Total Organic Nitrogen	Auto Calc	Maxx	1/21/2015
Turbidity	Maxxam SM 22 2130 B m	Maxx	1/16/2015

Approved By:

Catherine Black, Owner/Operator

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