

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: Public Works
Village of Cumberland
Box 340
Cumberland, BC
V0R 1S0

Lab Number: 116730
Date Reported: 16 Jan 15
Date Completed: 16 Jan 15
Date Received: 7 Jan 15 12:54

116730-01 Raw Site #8

Wellhouse

Sample Port

Sampled By:

Sampling Date: 7 Jan 15 11:50

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	0.018	mg/L	1.5 MAC
Chloride	8.8	mg/L	250 AO
Nitrate (N)	0.096	mg/L	10 MAC
Nitrite (N)	<0.0050	mg/L	1 MAC
Sulphate	2.02	mg/L	500 AO
T-Aluminium	<0.0030	mg/L	0.1 Operational Std.
T-Antimony	<0.00050	mg/L	0.006 MAC
T-Arsenic	<0.00010	mg/L	0.010 MAC
T-Barium	0.0019	mg/L	1.0 MAC
T-Beryllium	<0.00010	mg/L	
T-Bismuth	<0.0010	mg/L	
T-Boron	0.227	mg/L	5 IMAC
T-Cadmium	<0.000010	mg/L	0.005 MAC
T-Calcium	8.18	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	0.019	mg/L	0.3 AO
T-Lead	<0.00020	mg/L	0.010 MAC
T-Lithium	<0.0050	mg/L	
T-Magnesium	1.9	mg/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.

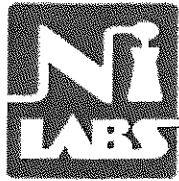
AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC
> = Greater than; < = Less than

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Sampled By:

Sampling Date: 7 Jan 15 11:50

Test	Result	Units	Drinking Water Guideline
T-Manganese	0.0085	mg/L	0.05 AO
T-Molybdenum	<0.0010	mg/L	
T-Nickel	<0.0010	mg/L	
T-Potassium	0.267	mg/L	
T-Selenium	<0.00010	mg/L	0.01 MAC
T-Silicon	4.97	mg/L	
T-Silver	<0.000020	mg/L	
T-Sodium	7.03	mg/L	200 AO
T-Strontium	0.0279	mg/L	
T-Thallium	<0.000050	mg/L	
T-Tin	<0.0050	mg/L	
T-Titanium	<0.0050	mg/L	
T-Uranium	<0.00010	mg/L	0.02 MAC
T-Vanadium	<0.0050	mg/L	
T-Zinc	<0.0050	mg/L	5 AO
Hardness (CaCO3)	28.3	mg/L	
Tannins & Lignins	<0.10	mg/L	0.4 AO
pH at 25 C	6.9	pH Units	6.5-8.5
Alkalinity	32	mg/L (CaCO3)	
Turbidity	<0.5	NTU's	0.1 Operatonal Stand
Total Dissolved Solids (conductivity ca	63	mg/L	500 AO

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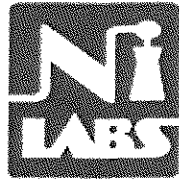
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116730-01

Test	Method	Analyst	Date
Alkalinity	Titration to 4.5, APHA 2320 B -modified	NIsL	1/8/2015
Chloride	Colourmetric	Maxx	1/9/2015
Colour - Apparent	Spectrophotometer, APHA 2120 C -modified	NIsL	1/7/2015
E. coli (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	1/7/2015
Fluoride	Colourmetric	Maxx	1/9/2015
Hardness (CaCO3)	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
Nitrate (N)	Maxxam-SM-4500-NO3 1- modified	Maxx	1/10/2015
Nitrite (N)	Colourmetric	Maxx	1/9/2015
pH at 25 C	Electrometric, APHA 4500 B -modified	NIsL	1/8/2015
Sulphate	Colourmetric	Maxx	1/9/2015
T-Aluminium	Maxxam Subcontract, ICPMS,EPA 6020A-modified		1/12/2015
T-Antimony	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Arsenic	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Barium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Beryllium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Bismuth	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Boron	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Cadmium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Calcium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Chromium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Cobalt	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Copper	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Iron	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Lead	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Lithium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Magnesium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Manganese	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Molybdenum	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Nickel	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Potassium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Selenium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Silicon	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Silver	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Sodium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015

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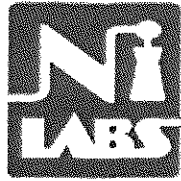
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T-Strontium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Thallium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Tin	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Titanium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Uranium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Vanadium	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
T-Zinc	Maxxam Subcontract, ICPMS,EPA 6020A-modified	Maxx	1/12/2015
Tannins & Lignins	Maxxam Subcontract,,APHA 5550B-modified	Maxx	1/12/2015
Total Coliforms (DES)	Enzyme Substrate, APHA 9223 B -modified	NIsL	1/7/2015
Total Dissolved Solids (conducti	Conductivity @25C, APHA 2510 A -modified	NIsL	1/8/2015
Turbidity	Nephelometric, APHA 2130 B -modified	NIsL	1/7/2015
UV Transmittance	APHA 5910 B -modified	NIsL	1/7/2015

Approved By:

Catherine Black, Owner/Operator

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