



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: Don Buchner
330 Horne Lake Rd.
Qualicum Beach, BC V9K 1Z6

Lab Number: 111443
Date Reported: 7 Jul 14
Date Completed: 7 Jul 14
Date Received: 23 Jun 14 12:46

111443-01 Little Qual River Village Reservoir

Sampled By: Don Buchner
Sampling Date: 23 Jun 14 11:00

Test	Result	Units	Drinking Water Guideline
Total ammonia - N	<0.02	mg/L	
Total Coliforms (DES)	<1.0	MPN/100mL	<1
E. coli (DES)	<1.0	MPN/100mL	<1
Colour - Apparent	<5	Colour Units	15
UV Transmittance	98.9	%/cm	
Fluoride	0.02	mg/L	1.5 MAC
Chloride	1.94	mg/L	250 AO
Nitrate (N)	0.40	mg/L	10 MAC
Nitrite (N)	<0.01	mg/L	1 MAC
Sulphate	1.8	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	<0.00025	mg/L	0.010 MAC
T-Barium	0.0044	mg/L	1.0 MAC
T-Beryllium	<0.00025	mg/L	
T-Bismuth	<0.0005	mg/L	
T-Boron	<0.010	mg/L	5 IMAC
T-Cadmium	<0.00005	mg/L	0.005 MAC
T-Calcium	12.9	mg/L	
T-Chromium	<0.0025	mg/L	0.05 MAC
T-Cobalt	<0.0005	mg/L	
T-Copper	0.0022	mg/L	1.0 AO
T-Iron	0.028	mg/L	0.3 AO
T-Lead	<0.0005	mg/L	0.010 MAC
T-Lithium	<0.0025	mg/L	
T-Magnesium	2.12	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 change. Method uncertainties for specified analyses are available upon request.

7/7/2014 14:02

Page 1 of 4



North Island Laboratories

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

111443-01 Little Qual River Village Reservoir

Sampled By: Don Buchner

Sampling Date: 23 Jun 14 11:00

Test	Result	Units	Drinking Water Guideline
T-Manganese	<0.0050	mg/L	0.05 AO
T-Molybdenum	<0.00025	mg/L	
T-Nickel	<0.0010	mg/L	
T-Potassium	<0.5	mg/L	
T-Selenium	<0.0005	mg/L	0.01 MAC
T-Silicon	7.8	mg/L	
T-Silver	<0.00025	mg/L	
T-Sodium	2.2	mg/L	200 AO
T-Strontium	0.0285	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	0.001	mg/L	
T-Zinc	0.0165	mg/L	5 AO
Hardness (CaCO ₃)	41	mg/L	
Tannins & Lignins	<0.1	mg/L	0.4 AO
pH at 25 C	6.5	pH Units	6.5-8.5
Alkalinity	40	mg/L (CaCO ₃)	
Turbidity	<0.5	NTU's	5 AO
Total Dissolved Solids (conductivity ca	64	mg/L	500 AO
Total Nitrogen (N)	0.52	mg/L	
Total Organic Nitrogen	0.5	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 change. Method uncertainties for specified analyses are available upon request.

7/7/2014 14:02

Page 2 of 4



North Island Laboratories

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

111443-01

Test	Method	Analyst	Date
Alkalinity	Titration to 4.5, APHA 2320 B -modified	NiSL	6/23/2014
Chloride	Ion Chromatography, EPA 300.1 -modified	EXL	6/26/2014
Colour - Apparent	Spectrophotometer, APHA 2120 C -modified	NiSL	6/25/2014
E. coli (DES)	Enzyme Substrate, APHA 9223 B -modified	NiSL	6/23/2014
Fluoride	Ion Chromatography, EPA 300.1 -modified	EXL	6/26/2014
Hardness (CaCO ₃)	Hardness by Calculation, APHA 2340 B -modified	NiSL	7/4/2014
Nitrate (N)	Ion Chromatography, EPA 300.1 -modified	EXL	6/25/2014
Nitrite (N)	Ion Chromatography, EPA 300.1 -modified	EXL	6/25/2014
pH at 25 C	Electrometric, APHA 4500 B -modified	NiSL	6/23/2014
Sulphate	Ion Chromatography, EPA 300.1 -modified	EXL	6/26/2014
T-Aluminium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Antimony	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Arsenic	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Barium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Beryllium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Bismuth	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Boron	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Cadmium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Calcium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Chromium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Cobalt	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Copper	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Iron	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Lead	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Lithium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Magnesium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Manganese	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Molybdenum	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Nickel	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Potassium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Selenium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Silicon	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Silver	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Sodium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Strontium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014

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.

7/7/2014 14:02

Page 3 of 4



North Island Laboratories

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

T-Thallium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Tin	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Titanium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Uranium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Vanadium	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
T-Zinc	Exova Subcontract, ICP-AES,EPA6010C,200.8-modified	EXL	6/30/2014
Tannins & Lignins	Exova Subcontract,Colorimetric,APHA 5550B-modified	EXL	6/27/2014
Total ammonia - N	Hach 10205, Salicylate -modified	NiSL	6/25/2014
Total Coliforms (DES)	Enzyme Substrate, APHA 9223 B -modified	NiSL	6/23/2014
Total Dissolved Solids (conducti	Conductivity @25C, APHA 2510 A -modified	NiSL	6/24/2014
Total Nitrogen (N)	Exova Subcontract, ISO/TR 11905-2 -modified	EXL	6/30/2014
Total Organic Nitrogen	Exova Subcontract, Ch.34 SSSA BookSeries5-modified	NiSL	7/4/2014
Turbidity	Nephelometric, APHA 2130 B -modified	NiSL	6/24/2014
UV Transmittance	APHA 5910 B -modified	NiSL	6/25/2014

Approved By:

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.

7/7/2014 14:02

Page 4 of 4