



Ministry of Environment

Sampling Results Aug. 4, 2014, Quesnel Lake by site compared to Drinking Water Guidelines

Parameter	Units	Quesnel Lk North Shore East of Cedar Creek	Quesnel lk, North Shore, West of 4 Cabins	Quesnel R @ Likely Townsite	Drinking Water Guidelines	
					BC	Health Canada
pH	pH units	7.79	7.81	7.82	<8.5	6.5-8.5
Conductivity	µS/cm	94.5	94.8	95.3		
Turbidity	NTU	0.18	0.18	0.19	Change of 1	
Total Suspended Solids	mg/L	<1.0	<1.0	<1.0		
Total Dissolved Solids	mg/L				500	500
Hardness - Total	mg/L	50.5	46.4	45.8		
Hardness - Dissolved	mg/L	45.3	45.1	47		
Microbiology						
E.coli	CFU/100mL	1	<1	1		
General Inorganics						
Alkalinity Total (CaCO ₃)	mg/L	44.1	43.5	43.8		
Anions						
Bromide - Dissolved	mg/L					
Chloride -Dissolved	mg/L				250	250
Sulphate	mg/L				500	500
Nutrients						
Total Kjeldahl Nitrogen	mg/L					
Total Nitrogen	mg/L					
Total Organic Nitrogen	mg/L					
Ammonia Nitrogen	mg/L					
Nitrate+Nitrite	mg/L				10	
Nitrate Nitrogen	mg/L				10	10
Nitrite Nitrogen	mg/L				1	1
Total Phosphorus	mg/L				0.01	
Total Metals						
Aluminum	µg/L	20.7	12.3	13.7		100
Antimony	µg/L	<0.5	<0.5	<0.5	14	6
Arsenic	µg/L	<0.1	0.11	0.14	25	10
Barium	µg/L	5.5	5	5.3		1000
Beryllium	µg/L	<0.1	<0.1	<0.1	4	
Bismuth	µg/L	<1.0	<1.0	<1.0		
Boron	µg/L	<50	<50	<50	5000	5000
Cadmium	µg/L	<0.010	<0.010	<0.010	5	5
Calcium	mg/L	16.9	15.6	15.4		
Chromium	µg/L	<1.0	<1.0	<1.0	50	50
Cobalt	µg/L	<0.5	<0.5	<0.5		
Copper	µg/L	<0.5	0.65	0.57	500	1000
Iron	µg/L	24	<10	16		300
Lead	µg/L	<0.20	<0.20	<0.20	50	10
Lithium	µg/L	N/A	<5.0	<5.0		
Magnesium	mg/L	2	1.81	1.78		
Manganese	µg/L	1.1	1	1.2		50
Mercury	µg/L	N/A	<0.01	<0.01	1	1
Molybdenum	µg/L	<1.0	<1.0	<1.0	250	
Nickel	µg/L	<1.0	<1.0	<1.0		
Phosphorus	µg/L	<10	<10	<10		
Potassium	mg/L	0.509	0.518	0.469		

Parameter	Units	Quesnel Lk North Shore East of Cedar Creek	Quesnel lk, North Shore, West of 4 Cabins	Quesnel R @ Likely Townsite	Drinking Water Guidelines	
					BC	Health Canada
Selenium	µg/L	0.17	0.15	0.17	10	10
Silicon	µg/L	1850	1660	1670		
Silver	µg/L	<0.02	<0.02	<0.02		
Sodium	mg/L	0.905	0.877	0.847		200
Strontium	µg/L	116	108	113		
Sulfur	mg/L	<3.0	<3.0	<3.0		
Tellurium	µg/L					
Thallium	µg/L	<0.05	<0.05	<0.05	2	
Tin	µg/L	<5.0	<5.0	<5.0		
Titanium	µg/L	<5.0	<5.0	<5.0		
Uranium	µg/L	0.14	0.14	0.13		20
Vanadium	µg/L	<5.0	<5.0	<5.0		
Zinc	µg/L	<5.0	<5.0	<5.0	5000	5000
Zirconium	µg/L	<0.5	N/A	N/A		
Dissolved Metals						
Aluminum	µg/L	12.3	10	11.1	200	
Antimony	µg/L	<0.5	<0.5	<0.5		
Arsenic	µg/L	0.11	0.11	0.13		
Barium	µg/L	5	4.8	5.2		
Beryllium	µg/L	<0.1	<0.1	<0.1		
Bismuth	µg/L	<1.0	<1.0	<1.0		
Boron	µg/L	<50	<50	<50		
Cadmium	µg/L	<0.01	<0.01	<0.01		
Calcium	mg/L	15.1	15.1	15.7		
Chromium	µg/L	<1.0	<1.0	<1.0		
Cobalt	µg/L	<0.5	<0.5	<0.5		
Copper	µg/L	0.79	0.71	0.5		
Iron	µg/L	<5.0	<5.0	<5.0		
Lead	µg/L	<0.2	<0.2	<0.2		
Lithium	µg/L	<5.0	<5.0	<5.0		
Magnesium	mg/L	1.85	1.8	1.92		
Manganese	µg/L	<1.0	<1.0	<1.0		
Mercury	µg/L	N/A	<0.010	<0.010		
Molybdenum	µg/L	<1.0	<1.0	<1.0		
Nickel	µg/L	<1.0	<1.0	<1.0		
Phosphorus	µg/L	<10	<10	<10		
Potassium	mg/L	0.471	0.475	0.485		
Selenium	µg/L	0.17	0.11	0.14		
Silicon	µg/L	1530	1600	1670		
Silver	µg/L	<0.02	<0.02	<0.02		
Sodium	mg/L	0.803	0.845	0.862		
Strontium	µg/L	110	104	113		
Sulfur	mg/L	3.8	<3.0	<3.0		
Thallium	µg/L	<0.05	<0.05	<0.05		
Tin	µg/L	<5.0	<5.0	<5.0		
Titanium	µg/L	<5.0	<5.0	<5.0		
Uranium	µg/L	0.12	0.12	0.13		
Vanadium	µg/L	<5.0	<5.0	<5.0		
Zinc	µg/L	<5.0	<5.0	<5.0		
Zirconium	µg/L	N/A	N/A	N/A		