

FNHA Water Quality Sample Results - Fraser River, August 18-19, 2014

Parameter	Units	Fraser River Skyline Rd	Fraser River Gang Ranch (Big Rock)	Fraser River Rudy Johnson Bridge	Drinking Water Quality Guidelines (approved and working)		Water Quality Guidelines (approved and working) for the Protection of Aquatic Life	
		18-Aug-14	19-Aug-14	19-Aug-14	BC DW	Health Can DW	Chronic	Acute
Sample Date		18-Aug-14	19-Aug-14	19-Aug-14				
Depth / Duplicate		Shoreline grab	Shoreline grab	Shoreline grab				
pH	pH units	7.97	8.00	8.00	<8.5	6.5-8.5		6.5-9.0
Conductivity	µS/cm	115	112	116				
Turbidity	NTU	33.1	29.8	43.4	Change of 1			Change of 5
Total Organic Carbon	mg/L	3.05	2.60	2.96				
Total Suspended Solids	mg/L	59.8	45.5	95.4			Change of 5	Change of 25
Total Dissolved Solids	mg/L	77	76	76	500	500		
Hardness - Total	mg/L	60.9	59.5	64.7				
Hardness - Dissolved	mg/L							
<b>Microbiology</b>								
E.coli	CFU/100mL				various			
<b>General Inorganics</b>								
Alkalinity Total (CaCO <sub>3</sub> )Alkalinity	mg/L	49.1	48.8	49.7				
Sample ID		L1505289-1	L1505297-1	L1505297-2				
<b>Anions</b>								
Bromide - Dissolved	mg/L							
Chloride - Dissolved	mg/L	0.73	0.57	0.6	250	250	150	600
Sulphate	mg/L	8.80	8.84	8.57	500	500	218	
<b>Nutrients</b>								
Total Kjeldahl Nitrogen	mg/L							
Total Nitrogen	mg/L							
Total Organic Nitrogen	mg/L							
Ammonia Nitrogen	mg/L						1	2.5
Nitrate+Nitrite	mg/L				10		1.07	7.82
Nitrate Nitrogen	mg/L	0.0301	0.0331	0.0395	10	10	3	32.8
Nitrite Nitrogen	mg/L	<0.0010	<0.0010	<0.0010	1	1	0.02	0.06
Total Phosphorus	mg/L	0.0557	0.0458	0.0599	0.01			0.005 - 0.015
OrthoPhosphorus	mg/L							
<b>Total Metals</b>								
Aluminum	µg/L	1480	1610	2090		100		
Antimony	µg/L	<0.50	<0.5	<0.5	14	6		20
Arsenic	µg/L	0.84	0.81	0.99		10		5
Barium	µg/L	27	28	33		1000	1000	5000
Beryllium	µg/L	<5.0	<5.0	<5.0	4		5.3	
Bismuth	µg/L	<200	<200	<200				
Boron	µg/L	<100	<100	<100	5000	5000		1200
Cadmium	µg/L	<0.20	<0.20	<0.20	5	5		Under review
Calcium	mg/L	17.4	17.2	18.6				
Chromium	µg/L	2.6	2.5	4.0	50	50		1
Cobalt	µg/L	<10	<10	<10			4	110
Copper	µg/L	3.2	3.7	4.9	500	1000	2	7
Iron	µg/L	2510	2310	3300		300		1000
Lead	µg/L	1.12	0.85	1.28	50	10	4.6	33.5
Lithium	µg/L	<10	<10	<10			14	870
Magnesium	mg/L	4.25	4.01	4.46				
Manganese	µg/L	57.5	52.1	67.1		50	800	1100
Mercury	µg/L	<0.20	<0.20	<0.20	1	1	0.02	0.1
Molybdenum	µg/L	<30	<30	<30	250		1000	2000
Nickel	µg/L	<50	<50	<50				2.5
Phosphorus	µg/L	<300	<300	<300				
Potassium	mg/L	0.78	0.85	0.93				373
Selenium	µg/L	<1.0	<1.0	<1.0	10	10	2	
Silicon	µg/L	4290	4980	5770				
Silver	µg/L	<10	<10	<10			0.05	0.1
Sodium	mg/L	2.3	2.3	2.3		200		
Strontium	µg/L	86.4	91.3	98.3				
Sulfur	mg/L							
Tellurium	µg/L							
Thallium	µg/L	<200	<200	<200	2			0.3
Tin	µg/L	<30	<30	<30				
Titanium	µg/L	63	79	103				2000

Uranium	µg/L	0.31	0.26	0.29		20		300
Vanadium	µg/L	<30	<30	<30				6
Zinc	µg/L	7.0	7.0	10.3	5000	5000	7.5	33
Zirconium	µg/L							
<b>Dissolved Metals</b>								
Aluminum	µg/L				200		50	100
Antimony	µg/L							
Arsenic	µg/L							
Barium	µg/L							
Beryllium	µg/L							
Bismuth	µg/L							
Boron	µg/L							
Cadmium	µg/L							
Calcium	mg/L							
Chromium	µg/L							
Cobalt	µg/L							
Copper	µg/L							
Iron	µg/L							350
Lead	µg/L							
Lithium	µg/L							
Magnesium	mg/L							
Manganese	µg/L							
Mercury	µg/L							
Molybdenum	µg/L							
Nickel	µg/L							
Phosphorus	µg/L							
Potassium	mg/L							
Selenium	µg/L							
Silicon	µg/L							
Silver	µg/L							
Sodium	mg/L							
Strontium	µg/L							
Sulfur	mg/L							
Thallium	µg/L							
Tin	µg/L							
Titanium	µg/L							
Uranium	µg/L							
Vanadium	µg/L							
Zinc	µg/L							
Zirconium	µg/L							

Beryllium - detection limit too high, historical sampling <0.5