REGIONAL DISTRICT OF NANAIMO

French Creek Distribution Water Analysis
1228 Sunrise Drive (*Sample collected at French Creek Pump house)

CDWG=Canadian Drinking Water Guidelines
OG= Operational Guidance Value

MAC=Maximum Acceptable Concentration
AO= Asthetic Objective.

Orange font indicates non-compliance with the Aesthetic Objective in the Canadian Drinking Water Guidelines (CDWG)

Red font indicates non-compliance with the Maximum Acceptable Concentration (MAC) in the CDWG

	Units	CDWG		Nov. 17 1999*	Nov 29 2000	June 28 2001*	March 6 2002*	April 23 2003	2004	April 20 2005	May 17 2006	May 22 2007	May 27 2008	May 13 2009	May 19 2010	May 18 2011	May 16 2012	June 5 2013	May 13 2014	May 19 2015	May 10 2016
Miscellaneous Inorganics																					
Fluoride	mg/L	1.5	MAC	0.1	0.14	0.12	0.13	0.09	<1.0	<1.0	0.1	<1.0	<1.0	<1.0	<1.0	<1.0	0.11	0.1	0.1	0.11	0.11
Alkalinity (total as CaCO)	mg/L			137	135	134	131	138	130	140	150	130	140	140	150	130	140	130	140	128	141
Anions																					
Dissolved Sulphate	mg/L	500	AO	5.1	5	7.61	12.07	6.74	48.6	5.4	11.3	9.9	10.4	4.9	6	14.6	14.6	15.4	25.8	22	29.5
Dissolved Chloride	mg/L	250	AO	5.7	6.07	9.2	5.21	10.91	14.4	13	7.2	7.1	7.6	15.2	9.5	8.7	8.7	9.8	9.4	11	12
Nitrite	mg/L	1	MAC	0.05	0.08	<.002	0.03	<0.01	<0.1	<0.1	<0.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.0050	<0.0050
Miscellaneous																					
Apparent Colour	Colour Unit			25	5	37	7	22	39	60	20	7	17	6	14	24	31	37	36	10	30
Nutrients																					
Total Ammonia	mg/L																0.09	0.02	<0.02	0.0099	0.016
Physical Properties																					
Conductivity	µS/cm			279	309	324	281	326	327	311	309	309	312	330	333	316	313	297	337	331	350
pH	pH	7.0:10.5	AO	8.03	7.83	7.72	7.95	7.9	7.8	7.8	8.1	8	8.15	8.2	8.3	8.2	8.3	8.1	8.2	8.17	8.29
TDS	mg/L	500	AO	172	190	167	153	173	200	150	193	182	208	246	206	210	176	200	222	194	188
Turbidity	NTU			0.96	0.63	0.85	0.22	0.69	1.3	2.3	0.9	0.6	0.7	0.5	1.1	0.9	1.2	1	1.1	1.3	1.29
Microbiological Parameters																					
E.coli	MPN/100mL	<1	MAC								<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Coliforms	MPN/100mL	<1	MAC	<1	<1	<1			<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Calculated Parameters																					
Total Hardness (CaCO)	mg/L			103	115.2	124.9	136	116.3	120	120	140	140	130	200	140	120	140	140	160	135	145
Nitrate	mg/L	10	MAC	0.06	5.89	<0.004	0.03	0.06	0.2	<0.1	<0.01	<0.1	<0.1	2.7	0.6	<0.1	<0.05	<0.05	<0.05	<0.020	<0.020
Elements																					
Total Mercury	mg/L	0.001	MAC		<.0001	<.0001	<.0001	<0.0002	<0.0002	<0.0002	<0.0001	<0.0001	<0.01	<0.01	<0.01	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Metals																					
Total Aluminum	mg/L	0.1	OG	0.007	0.04	0.017	<.009	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	0.008	<0.005	<0.005	<0.005	<0.025	<0.003	<0.003
Total Antimony	mg/L	0.006	MAC			<.006	<.006	<0.0002	<0.0005	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005
Total Arsenic	mg/L	0.01	MAC		<.01	<.01	<.01	0.0006	0.0007	0.0009	0.0002	<0.0002	<0.001	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.00025	<0.00012	<0.0001
Total Barium	mg/L	1	MAC	0.008	0.01	0.0139	0.0159	0.01	0.015	0.014	0.015	0.016	0.01	0.011	0.016	0.016	0.013	0.015	0.0169	0.0151	0.016
Total Beryllium	mg/L																<0.00004	<0.00004	<0.00025	<0.0001	<0.0001
Total Bismuth	mg/L																<0.001	<0.0010	<0.0005	<0.001	<0.001
Total Boron	mg/L	5	MAC		0.041	0.036	0.022	0.037	0.039	0.034	0.018	0.023	<0.02	0.013	0.024	0.022	0.023	0.021	0.027	<0.050	<0.050
Total Cadmium	mg/L	0.005	MAC		<.0006	<.0006	<.0006	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.0003	<0.00001	0.00007	<0.00001	<0.00001	<0.00001	<0.00005	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC		<0.0009	<0.0009	<0.0009	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.003	0.0006	<0.0004	<0.0004	0.0004	<0.0004	<0.0025	<0.001	<0.001
Total Cobalt	mg/L																0.0001	0.00076	<0.0005	<0.0005	<0.0005
Total Copper	mg/L	1	AO		<0.001	0.002	<0.001	0.004	0.002	0.001	0.002	0.002	<0.005	0.049	0.002	0.001	0.002	0.002	0.0025	0.00148	0.00069
Total Iron	mg/L	0.3	AO	0.2	**0.41**	**0.461**	0.203	**0.4**	**0.5**	**1**	0.1	0.1	0.12	0.03	0.094	0.13	0.137	0.125	0.143	0.113	0.117
Total Lead	mg/L	0.01	MAC		<0.002	0.002	<0.002	0.0002	0.0002	0.0002	<0.0001	0.0002	<0.0005	0.0008	0.0003	0.0003	0.0001	0.0001	<0.0005	<0.0002	<0.0002
Total Manganese	mg/L	0.05	AO	**0.13**	**0.17**	**0.213**	**0.152**	**0.174**	**0.385**	**0.34**	**0.124**	**0.136**	**0.13**	0.0013	**0.132**	**0.114**	**0.145**	**0.124**	**0.139**	**0.125**	**0.123**
Total Molybdenum	mg/L																0.0005	0.0006	0.00056	<0.001	<0.001
Total Nickel	mg/L													0.001	<0.001	<0.001	<0.001	<0.001	<0.0010	<0.001	<0.001
Total Selenium	mg/L	0.05	MAC		<.004	0.005	<.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.003	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0005	<0.0001	<0.0001
Total Silicon	mg/L																11.6	11.5	12.5	11.5	12.4
Total Silver	mg/L													<0.00001	0.00004	0.00001	<0.00001	<0.00001	<0.00025	<0.00002	<0.00002
Total Strontium	mg/L																0.132	0.138	0.146	0.136	0.146
Total Thallium	mg/L																<0.00001	<0.00001	<0.00005	<0.00005	<0.00005
Total Tin	mg/L																<0.0001	0.0002	<0.0005	<0.005	<0.005
Total Titanium	mg/L																<0.001	<0.0010	<0.0025	<0.005	<0.005
Total Uranium	mg/L	0.02	MAC		<.06	<.06	<.02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00005	<0.0001	<0.0001
Total Vanadium	mg/L																0.0003	0.0003	<0.0005	<0.005	<0.005
Total Zinc	mg/L	5	AO		0.0069	0.0027	0.0034	0.005	0.012	0.009	0.004	0.011	<0.005	0.118	0.003	0.003	0.002	0.002	0.0188	<0.005	<0.005
Total Zirconium	mg/L																			<0.0005	<0.0005
Total Calcium	mg/L				28	29.9	33.3	27.1	28.9	28.2	33.5	34.3	30.6	49.1	33.6	29.4	35.2	34.3	39	34	34.6
Total Magnesium	mg/L			10.4	11	12.2	12.8	11.8	11.9	11.7	12.6	13.6	12.3	17.7	13.4	12.2	13.6	13.4	15.1	12.2	14.2
Total Potassium	mg/L				<4	2.2	204	2.4	2.5	2	2.4	2.3	2.2	1.1	2.6	2.4	2.6	2.68	2.6	2.29	2.48
Total Sodium	mg/L	200	AO		15	20.2	11.9	19.6	21	20	12.5	12.9	13.4	7.72	13.7	14.3	13.2	13.6	15.4	11.3	12.5
Total Sulphur	mg/L																			8.8	8.8