

Nicholson Area Groundwater Quality Monitoring  
May 2019

	Sample ID	Date Sampled		LOC-12 Nicholson Elementary	LOC-16 Habart	LOC-19 Nicholson	LOC-20 Nicholson	LOC-21 Nicholson	LOC-24 Nicholson	LOC-25 Nicholson	LOC-26 Nicholson	LOC-27 Nicholson	LOC-30	LOC-33 Nicholson	LOC-34	LOC-35	LOC-36	
		2019-05-29	2019-05-30	2019-05-30	2019-05-30	2019-05-29	2019-05-30	2019-05-30	2019-05-30	2019-05-30	2019-05-30	2019-05-29	2019-05-30	2019-05-30	2019-05-30	2019-05-30	2019-05-29	
Analyte	Units	GCDWQ MAC	GCDWQ AO															
Field Measurements	Specific Conductance	µs/cm	NG	839	644	985	1091	820	898	650	860	746	1247	1143	955	966	975	
	Dissolved Oxygen	mg/L	NG	6.06	7.16	8.53	7.13	9.42	5.41	8.6	9.1	10.25	6.95	9.02	8.59	8.55	8.77	
	Oxidation Reduction Potential	mV	NG	-8.9	-16	58.6	19.1	1.6	10.8	44.3	15.1	-7.9	29.6	61.1	25.2	16.4	-3.1	
	pH	-	NG	7.0-10.5	7.45	7.52	7.30	7.36	7.36	7.25	7.67	7.52	7.78	7.13	7.46	7.27	7.30	7.33
	Temperature	°C	NG	14.6	10.7	14.7	11.2	13.9	15.2	9.8	9.4	11.0	14.7	12.3	9.2	11.4	12.6	
Dissolved Metals	Aluminum	mg/L	NG	<0.0050	<0.0050	0.0084	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0057	<0.0050	
	Antimony	mg/L	0.006	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
	Arsenic	mg/L	0.01	NG	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	
	Barium	mg/L	1	NG	0.18	0.155	0.282	0.859	0.302	0.255	0.172	0.267	0.44	0.542	0.351	0.32	0.316	0.302
	Beryllium	mg/L	NG	NG	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Bismuth	mg/L	NG	NG	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Boron	mg/L	5	NG	0.0134	0.0216	0.018	0.0161	0.0476	0.021	0.0096	0.0081	0.0275	0.0662	0.0105	0.0177	0.041	
	Cadmium	mg/L	0.005	NG	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.00005	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
	Calcium	mg/L	NG	NG	72.7	79.6	83.6	104	90.4	102	61.8	64	83.9	131	75.7	89.2	87.2	96.2
	Chromium	mg/L	0.05	NG	0.00127	0.00139	0.00104	0.00096	0.00103	0.00103	0.00112	0.0012	0.00126	0.00138	0.00172	0.0012	0.00111	0.00107
	Cobalt	mg/L	NG	NG	<0.00010	<0.00010	<0.00010	<0.00010	0.00012	<0.00010	<0.00010	<0.00010	<0.00010	0.00034	<0.00010	<0.00010	<0.00010	0.00014
	Copper	mg/L	NG	1	0.0351	0.00657	0.0122	0.00849	0.0181	0.00736	0.00526	0.0112	0.00299	0.0255	0.00253	0.00358	0.00352	0.00383
	Iron	mg/L	NG	0.3	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
	Lead	mg/L	0.005	NG	0.00284	0.00024	0.00044	<0.00020	0.0007	0.0003	0.00025	0.00029	<0.00020	0.00064	<0.00020	0.00022	<0.00020	<0.00020
	Lithium	mg/L	NG	NG	0.015	0.00539	0.00684	0.00627	0.00512	0.00832	0.0118	0.00634	0.00565	0.00749	0.00926	0.00616	0.00607	0.00613
	Magnesium	mg/L	NG	NG	64.7	40.3	65.3	56.2	51.2	58.6	61.1	59.3	52.7	83.9	63.7	63.9	62.8	
	Manganese	mg/L	NG	0.05	0.00072	0.00029	0.00025	<0.00020	0.00035	0.00047	<0.00020	0.00026	<0.00020	<0.00020	0.00037	<0.00020	<0.00020	<0.00020
	Mercury	mg/L	0.001	NG	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Molybdenum	mg/L	NG	NG	0.00115	0.00199	0.00077	0.00044	0.00071	0.00062	0.0011	0.00105	0.00071	0.00045	0.00094	0.00077	0.00076	0.00071
	Nickel	mg/L	NG	NG	0.00103	0.00179	0.00119	0.00061	0.00182	0.0009	<0.00040	0.00097	0.00078	0.00413	<0.00040	0.00132	0.00142	0.00197
	Selenium	mg/L	0.05	NG	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Silicon	mg/L	NG	NG	7	5.2	6.4	7.4	7.2	7.4	6.4	5.8	6.9	9.1	6.8	7.1	6.9	7.3
	Silver	mg/L	NG	NG	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Sodium	mg/L	NG	200	21.3	15.4	45.7	69.5	26	25.1	4.95	40.7	21.1	74.3	64.7	39.6	39.4	37.4
	Strontium	mg/L	NG	NG	0.458	0.309	0.367	0.338	0.243	0.35	0.368	0.335	0.288	0.384	0.419	0.306	0.303	0.302
	Sulfur	mg/L	NG	NG	13.4	27.6	8.9	8	12.3	12.8	12.7	7.1	11.7	16.5	7.8	9.4	8.6	11.4
	Tellurium	mg/L	NG	NG	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Thallium	mg/L	NG	NG	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
	Thorium	mg/L	NG	NG	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Tin	mg/L	NG	NG	<0.00020	0.00042	<0.00020	<0.00020	0.00306	<0.00020	0.00035	<0.00020	<0.00020	<0.00020	0.00024	<0.00020	0.0003	<0.00020
	Titanium	mg/L	NG	NG	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Tungsten	mg/L	NG	NG	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Uranium	mg/L	0.02	NG	0.00336	0.00423	0.00235	0.0023	0.00184	0.00199	0.00291	0.00202	0.00225	0.00273	0.00287	0.0022	0.00217	0.00223	
Vanadium	mg/L	NG	NG	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Zinc	mg/L	NG	5	0.0308	0.0065	0.024	0.0093	0.0096	0.0118	0.0046	0.0058	<0.0040	0.102	0.0061	0.0174	0.0073	0.0044	
Zirconium	mg/L	NG	NG	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
General Parameters	Alkalinity, Total (as CaCO3)	mg/L	NG	383	302	422	478	430	478	399	377	418	564	399	423	423	457	
	Alkalinity, Phenolphthalein (as CaCO3)	mg/L	NG	NG	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	Alkalinity, Bicarbonate (as CaCO3)	mg/L	NG	NG	383	302	422	478	430	478	399	377	418	564	399	423	423	457
	Alkalinity, Carbonate (as CaCO3)	mg/L	NG	NG	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Alkalinity, Hydroxide (as CaCO3)	mg/L	NG	NG	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Bicarbonate (HCO3)	mg/L	NG	NG	468	368	515	583	525	584	486	460	510	688	578	516	516	557
	Bromide	mg/L	NG	NG	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	Chloride	mg/L	NG	250	50.6	11.8	83.7	109	31	36.3	1.79	74	26	78.8	136	71.9	73.6	60.4
	Carbonate (CO3)	mg/L	NG	NG	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600
	Hydroxide (OH)	mg/L	NG	NG	<0.340	<0.340	<0.340	<0.340	<0.340	<0.340	<0.340	<0.340	<0.340	<0.340	<0.340	<0.340	<0.340	<0.340
	Hardness, Total (as CaCO3)	mg/L	NG	NG	448	365	478	491	437	496	406	404	427	588	535	485	481	499
	pH	pH units	NG	7.0-10.5	8.09	8.13	8.18	8	8.01	7.98	8.06	8.12	8.17	8.12	8.1	8.29	8.18	8
Conductivity (EC)	uS/cm	NG	NG	887	709	1050	1160	864	966	693	922	816	1330	1220	996	1020	1020	
Nutrients	Ammonia, Total (as N)	mg/L	NG	0.056	0.077	0.065	0.065	0.051	0.063	0.049	0.057	0.064	0.066	0.126	0.055	0.1	0.103	
	Nitrate (as N)	mg/L	10	NG	4.36	5.47	6.56	0.502	3.96	5.52	0.399	4.47	2.91	14.7	0.714	7.05	7.29	6.25
	Nitrite (as N)	mg/L	1	NG	<0.010	<0.010	<0.010											