

Table D1: Monitoring Location Details

Location	Well Tag Number	Well Plate Identification Number	Well Type	UTM Coordinates (NAD 83)			Depth		Elevation (masl)				Formation Screened	Installation Date	Comments	
				Grid Zone	Easting	Northing	Borehole (mbgl)	Well (mbtoc)	Ground	Top of Casing	Screen					
											Top	Bottom				
Town of Gibsons Water Distribution Points and Spring Locations																
Davis Road WDP	-	-	-	10	462154	5472654	-	-	-	-	-	-	-	-	-	Located at the end of Davis Road near White Tower Park
Parkland Reservoir WDP	-	-	-	10	461839	5473181	-	-	-	-	-	-	-	-	-	Located in the Parkland Neighborhood
School Road WDP	-	-	-	10	463015	5472583	-	-	-	-	-	-	-	-	-	Located across from Wildwood Crescent
Goosebird Creek Spring	-	-	-	10	462907	5471422	-	-	-	-	-	-	-	-	-	Located along Glassford Road, near PID: 007-596-570
Town Hall Spring	-	-	-	10	463076	5472095	-	-	-	-	-	-	-	-	-	Located in Holland Park, behind Town Hall.
Town of Gibsons Monitoring and Town Well Locations																
MW06-1A	130781	-	Monitoring Well	10	462828	5472486	78.0	77.21	99.20	99.01	25.10	22.10	Pre-Vashon	2006-12-07	-	Spyglass Place
MW06-1B	130782	-	Monitoring Well	10	462828	5472486	-	11.81	99.20	99.07	90.69	87.69	Capilano	2006-12-07	-	Spyglass Place
MW06-2A	130783	-	Monitoring Well	10	462130	5472688	102.0	102.00	121.36	121.46	22.10	19.10	Pre-Vashon	2006-12-10	-	Behind Gibsons Aquatic Centre
MW06-2B	130784	-	Monitoring Well	10	462130	5472688	-	13.58	121.36	121.45	110.66	107.51	Capilano	2006-12-10	-	Behind Gibsons Aquatic Centre
MW18-01	117709	54958	Monitoring Well	10	463159	5472098	16.8	16.22	10.03	9.75	-5.46	-6.56	Pre-Vashon	2019-01-30	-	Winegarden Park
MW18-02	117708	54957	Monitoring Well	10	463103	5472157	17.1	16.55	24.15	23.90	6.25	7.35	Pre-Vashon	2019-01-27	-	Gower Pt Rd
MW24-01	131434	-	Monitoring Well	10	463018	5471743	10.7	5.91	13.60	13.67	9.28	7.76	Capilano	2024-01-18	-	Dougall Park
MW24-02	131435	-	Monitoring Well	10	462982	5471624	7.6	6.77	17.17	17.30	12.05	10.53	Capilano	2024-01-18	-	Glassford Rd
PZ15-01	-	-	Drive-Point Piezometer	10	462851	5471424	2.0	2.14	19.81	19.94	19.00	17.00	Capilano	2015-10-01	-	Located in Beachcomber Lane, near PID 007-596-545
School Board	-	-	Monitoring Well	10	460684	5473611	139.0	140.01	152.56	153.57	-	-	Pre-Vashon	1964-08-01	-	School Board Yard, Henry Rd
WL10-01	130787	33706	Monitoring Well	10	461597	5473033	140.2	141.13	139.50	140.42	2.34	-0.71	Pre-Vashon	2010-03-23	-	Payne Rd
TW1	19896	50683	Water Supply Well	10	463057	5472034	42.0	23.28	13.61	14.03	-6.31	-9.36	Pre-Vashon	1966-04-01	-	Gower Pt Rd
TW2 OBS	33950	50677	Observation Well	10	462924	5471757	14.6	13.88	18.52	17.77	4.87	3.37	Pre-Vashon	1975-12-11	-	Dougall Park
TW3	53237	50676	Water Supply Well	10	462943	5471715	24.7	22.80	18.69	16.79	-3.15	-6.20	Pre-Vashon	1984-08-30	-	Dougall Park
TW4	76196	50675	Water Supply Well	10	463143	5472141	19.5	15.40	13.44	12.56	1.15	-1.90	Pre-Vashon	2000-09-30	-	Gower Pt Rd
TW5	117705	54956	Water Supply Well	10	462908	5471762	22.3	22.38	19.23	20.01	2.43	-2.37	Pre-Vashon	2019-01-31	-	Dougall Park
TW6	118101	53547	Water Supply Well	10	462278	5472228	135.0	122.81	107.31	108.22	-4.03	-14.63	Pre-Vashon	2019-08-06	-	Oceanmount Boulevard
ENV Observation Wells and SCR D Monitoring Well Locations																
OW460 (WL10-02)	113189	33707	Observation Well	10	462267	5472236	157.0	124.20	107.50	108.31	-12.89	-15.89	Pre-Vashon	2010-04-08	-	ENV Observation Well. Oceanmount Boulevard.
OW497	123003	62854	Observation Well	10	459430	5472643	108.2	108.83	123.63	124.54	16.92	15.74	Pre-Vashon	2021-05-14	-	ENV Observation Well. Maple Street.
901 Sentinel Road Well	70718	-	Water Supply Well	10	464356	5473801	43.3	43.90	52.33	52.95	11.18	9.05	Pre-Vashon	1989-07-13	-	901 Sentinel Road
Chaster Well	23421	53866	Water Supply Well	10	460335	5471278	110.9	107.14	92.75	91.60	-6.32	-15.55	Pre-Vashon	1970-04-01	-	Velvet Road
Church Road MW1	117298	54928	Monitoring Well	10	464129	5473607	57.9	43.90	39.63	40.24	-2.27	-4.17	Pre-Vashon	2018-10-05	-	Church Road
Church Road MW2	128291	-	Monitoring Well	10	464153	5473552	46.5	46.39	28.85	28.76	-14.63	-17.63	Pre-Vashon	2022-06-02	-	Church Road
Church Road Well 2	118049	53545	Water Supply Well	10	464107	5473614	59.4	60.35	40.22	41.13	-9.16	-17.69	Pre-Vashon	2019-07-24	-	Church Road
Church Road Well 3	61103	121457	Water Supply Well	10	464146	5473607	59.4	60.44	39.28	40.32	-8.92	-18.02	Pre-Vashon	2020-07-10	-	Church Road
Esperanza Road MW	128281	-	Monitoring Well	10	463937	5474201	104.9	104.72	120.50	120.32	19.50	15.60	Pre-Vashon	1998-10-22	-	Esperanza Road
Granthams Landing Well	78231	53859	Water Supply Well	10	464210	5473634	15.9	16.60	18.37	19.12	5.72	2.52	Pre-Vashon	1990-08-24	-	Granthams Landing
Mahan Road Well	117296	54943	Water Supply Well	10	461974	5471994	132.6	119.51	107.65	108.26	-6.64	-10.54	Pre-Vashon	2018-10-01	-	Mahan Road
Maryanne West Park Well	-	-	Monitoring Well	10	460980	5471225	128.0	109.15	100.11	100.96	-3.89	-7.89	Pre-Vashon	2020-10-07	-	Maryanne West Park, not registered
Soames Well	65967	53855	Water Supply Well	10	464293	5473657	36.9	35.70	32.13	30.95	-0.18	-4.75	Pre-Vashon	1979-10-17	-	Ruffum Road

Notes: UTM means Universal Transverse Mercator; mbgl means metres below ground level; mbtoc means metres below top of casing; masl means metres above sea level; WDP means water distribution point; MW means monitoring well; - means no data available.

Table D2: Summary of the 2024 Water Sampling Program

Location	Field Sample ID	Sample Matrix	Date	Lab ID	Sampling Method	Comments
Town of Gibsons Water Distribution Points and Spring Locations						
Davis Road WDP	1578240912014	Water	2024-Sep-12	24I1659-14	Grab Sample	-
Parkland Reservoir WDP	1578240912013	Water	2024-Sep-12	24I1659-13	Grab Sample	-
School Road WDP	1578240912016	Water	2024-Sep-12	24I1659-16	Grab Sample	-
Goosebird Creek Spring	1578240912009	Water	2024-Sep-12	24I1659-09	Grab Sample	-
Town Hall Spring	1578240912008	Water	2024-Sep-12	24I1659-08	Grab Sample	-
MW06-1A	1578240911002	Water	2024-Sep-11	24I1659-02	HydraSleeve	-
MW06-1B	1578240911004	Water	2024-Sep-11	24I1659-04	Peristaltic Pump	-
MW18-01	1578240911001	Water	2024-Sep-11	24I1659-01	Purge (Artesian Flow)	-
MW18-01	1578240911003	Water	2024-Sep-11	24I1659-03	Purge (Artesian Flow)	Duplicate Sample
MW24-01	1578240911006	Water	2024-Sep-11	24I1659-06	Peristaltic Pump	-
MW24-02	1578240911007	Water	2024-Sep-11	24I1659-07	Peristaltic Pump	-
WL10-01	1578240911005	Water	2024-Sep-11	24I1659-05	HydraSleeve	-
Town of Gibsons Monitoring and Town Well Locations						
TW1	1578240912011	Water	2024-Sep-12	24I1659-11	ESP	-
TW3	1578240912010	Water	2024-Sep-12	24I1659-10	ESP	-
TW4	1578240912012	Water	2024-Sep-12	24I1659-12	ESP	-
TW6	1578240912015	Water	2024-Sep-12	24I1659-15	ESP	-

Notes: WDP means water distribution point; ESP means electric submersible pump; - means no data available.

Table D3: 2024 Manual Groundwater Level Data

Location	Date	Time	Depth to Water		Elevation (masl)		
			mbtoc	mbgl	TOC	Ground	Water
Town of Gibsons Monitoring and Town Well Locations							
MW06-1A	2024-09-10	17:30	74.07	74.26	99.01	99.20	24.94
MW06-1B	2024-09-10	17:36	5.06	5.19	99.07	99.20	94.01
MW06-2A	2024-09-10	16:27	96.71	96.61	121.46	121.36	24.75
MW06-2B	2024-09-10	16:33	2.80	2.71	121.45	121.36	118.65
MW18-01	2024-09-11	08:21	-3.10	-2.82	9.75	10.03	12.85
MW18-02	2024-09-11	07:31	5.29	5.54	23.90	24.15	18.61
MW24-01	2024-09-10	14:15	3.53	3.46	13.67	13.60	10.14
MW24-02	2024-09-10	15:20	4.17	4.04	17.30	17.17	13.13
PZ15-01	2024-09-10	14:40	1.84	1.71	19.94	19.81	18.10
School Board	2024-09-10	14:42	119.19	118.18	153.57	152.56	34.38
WL10-01	2024-09-10	15:19	111.34	110.42	140.42	139.50	29.08
TW2 OBS*	2024-09-10	09:30	-2.32	-1.57	17.77	18.52	20.09
TW5*	2024-09-10	09:00	-1.27	-2.05	20.01	19.23	21.28
TW6	2024-01-19	10:35	87.85	86.94	108.22	107.31	20.37
SCRD Monitoring Well Locations							
Chaster Well	2024-09-26	12:15	70.15	71.30	91.60	92.75	21.45
Church Road MW1	2024-08-21	13:00	18.56	17.95	40.24	39.63	21.68
Church Road MW2	2024-08-21	14:11	7.64	7.73	28.76	28.85	21.12
Esperanza Road MW	2024-08-21	13:35	94.38	94.56	120.32	120.50	25.94
Granthams Landing Well	2024-08-21	10:15	1.02	0.27	19.12	18.37	18.10
Mahan Road Well	2024-08-21	13:50	85.15	84.25	108.26	107.65	23.40
Maryanne West Park Well	2024-10-31	15:45	80.98	80.13	100.96	100.11	19.98

Notes: **mbtoc** means metres below top of casing; **mbgl** means metres below ground level; **masl** means metres above sea level; **TOC** means top of casing. * indicates depth to water measured using pressure gauge

Table D4: Summary of Operational Data from the Town Wells in 2024

Town of Gibsons Water Supply Well Locations	TW1	TW3	TW4	TW6
Annual Groundwater Diversion Volume per Well* (m ³)	295,115	136,967	44,101	301,936
Total Annual Well Field Groundwater Use* (m ³ /year)	778,119			
Average Daily Well Field Pumping Rate (m ³ /day)	2,132			
Maximum Daily Well Field Pumping Rate (m ³ /day)	2,755			
Maximum Daily Non-Pumping Groundwater Elevation (masl)	14.71	20.41	15.01	23.50
Minimum Daily Pumping Groundwater Elevation (masl)	0.73	4.88	4.08	19.15
Maximum Drawdown (m)	13.98	15.53	10.93	4.35
Available Head** (m)	21.01	23.61	13.81	27.45
Maximum Drawdown as a % of Available head	67%	66%	79%	16%

Notes: m³ is cubic metres; m³/year means cubic metres per year; m³/day means cubic metres per day; masl means metres above sea level. * indicates the annual volume was calculated between September 26, 2023, to September 25, 2024. ** indicates that available head is the water column height measured from the top of screen elevation to the maximum daily non-pumping groundwater elevation.



Table D5: Capilano Aquifer - All Groundwater Quality Results

Sample Location	Units	Guidelines			MW06-1B	MW06-1B	MW06-1B	MW06-1B	MW06-1B	MW06-1B	MW06-1B	MW06-1B	MW06-1B	MW06-1B	MW06-1B	MW24-01	MW24-02
		BCWQG-AL (Approved Acute)	BCWQG-AL (Approved Chronic)	BCWQG-AL (Working)	2015-Sep-30	2016-Oct-18	2017-Oct-04	2019-Feb-06	2019-Sep-19	2020-Oct-07	2021-Sep-22	2022-Sep-14	2023-Sep-12	2024-Sep-11	2024-Sep-11	2024-Sep-11	
Field																	
Field Specific Conductivity	µS/cm	-	-	-	465	438	383	515	538	470	581	626	689	502	126	79	
Field Temperature	°C	-	-	-	17	13.1	13.7	11.6	14	13	13.6	15.1	14	14.2	13.1	12.7	
Field pH	-	-	-	-	5.75	6.81	6.55	8.45	6.78	7.76	6.49	7.07	6	6.49	6.92	6.43	
General Chemistry																	
Alkalinity, Total (as CaCO ₃)	mg/L	-	-	-	141	154	161	153	152	164	161	160	137	126	25.1	45.1	
Conductivity (EC)	µS/cm	-	-	-	461	459	484	517	548	518	556	599	605	588	128	177	
Hardness (as CaCO ₃)	mg/L	-	-	-	203	193	216	205	214	217	213	227	248	229	29.3	55.9	
Total Dissolved Solids	mg/L	-	-	1000	310	231	307	254	268	272	275	297	302	275	65.5	85.3	
pH	-	-	-	-	7.68	7.27	7.54	7.67	7.31	7.28	7.5	7.27	7.14	7.2	6.6	6.79	
Nitrate-N	mg/L	32.8	3	-	0.554	0.483	0.526	0.826	0.558	0.472	0.703	0.621	0.544	0.569	0.997	<0.010	
Nitrite-N	mg/L	Lookup Table ^(b)	Lookup Table ^(b)	-	<0.005	<0.01	<0.005	<0.0050	<0.010	<0.010	<0.0050	<0.010	<0.010	<0.010	<0.010	<0.010	
Major Ions																	
Bicarbonate (HCO ₃)	mg/L	-	-	-	172	154	161	187	186	200	196	195	168	154	30.6	55	
Calcium (Ca)-Dissolved	mg/L	-	-	-	26.9	24.7	28	25.9	27.7	30.2	27.7	31.4	34	32.7	6.98	14.8	
Carbonate (CO ₃)	mg/L	-	-	-	<0.5	<1	<1	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	<0.600	
Chloride (Cl)	mg/L	600^(a)	150^(a)	-	56	45.9	54.9	60.1	74.1	69.2	77.5	92.6	104	90.7	13.2	20.9	
Fluoride (F)	mg/L	Equation ^(o)	-	-	0.047	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
Hydroxide (OH)	mg/L	-	-	-	<0.5	<1	<1	<0.340	<0.340	<0.340	<0.340	<0.340	<0.340	<0.340	<0.340	<0.340	
Ion Balance	%	-	-	-	-	103	-	-	96.5	96.4	91.9	91.7	103	105	105	101	
Iron (Fe)-Dissolved	mg/L	0.35	-	-	0.012	<0.01	<0.01	0.012	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	6.21	
Magnesium (Mg)-Dissolved	mg/L	-	-	-	33	32	35.5	34	35.2	34.3	34.8	36.1	39.6	35.7	2.87	4.6	
Manganese (Mn)-Dissolved	mg/L	-	-	-	0.0057	0.0021	0.00517	0.00524	0.0125	0.0141	0.0146	0.0157	0.0179	0.0184	0.00093	0.143	
Potassium (K)-Dissolved	mg/L	-	-	-	3.99	4.06	4.5	4.2	4.14	5.23	4.3	4.89	5.03	4.88	2.4	2.79	
Sodium (Na)-Dissolved	mg/L	-	-	-	18.7	18.7	20.3	21	19.7	19.1	19.5	21.1	23.4	21.1	12.1	9.79	
Sulphate (SO ₄)	mg/L	-	Lookup Table ^(c)	1000	9.72	9.8	11	11.7	12.1	11.2	12.5	11	10.5	10.4	8.3	4.9	
Dissolved Metals																	
Barium (Ba)-Dissolved	mg/L	-	-	1	0.0109	0.01	0.0105	0.0158	0.0131	0.0137	0.0129	0.0162	0.0125	0.0128	<0.0050	0.0161	
Beryllium (Be)-Dissolved	mg/L	-	-	0.00013	<0.0001	<0.0001	<0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Cadmium (Cd)-Dissolved	mg/L	Equation ^(p)	Equation ^(q)	-	0.000015	0.00016	0.000025	0.000045	0.000028	<0.000010	0.000012	0.000017	0.00002	0.000017	<0.000010	<0.000010	
Copper (Cu)-Dissolved	mg/L	BC BLM Calculation	BC BLM Calculation	-	0.00119	0.0016	0.00174	0.00862	0.0012	<0.00040	0.00203	0.00271	0.00091	0.00051	<0.00040	<0.00040	
Selenium (Se)-Dissolved	mg/L	-	0.001 ^(e)	-	<0.0001	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	
Thallium (Tl)-Dissolved	mg/L	-	-	0.0008	<0.00005	<0.00002	<0.00002	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	
Uranium (U)-Dissolved	mg/L	-	-	0.0085	0.00107	0.00144	0.00144	0.0013	0.00113	0.00159	0.00111	0.00116	0.00078	0.00083	0.000044	<0.000020	
Zinc (Zn)-Dissolved	mg/L	Equation ^(q)	Equation ^(q)	-	0.0245	0.01	0.0123	0.035	0.0072	0.063	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	

Notes:

Bold - Value exceeds the Approved Water Quality Guideline (short-term acute).

Red highlight - Value exceeds the Approved Water Quality Guideline (long-term chronic).

Yellow highlight - Value exceeds the Working Water Quality Guideline.

µS/cm means micro Siemens per centimetre; °C means degrees Celsius; mg/L means milligrams per litre; BC BLM means British Columbia Biotic Ligand Model; - means no data available.

(a) When ambient Cl-concentrations exceed WQGs, increases in Cl-due to human activities should be avoided.

(b) Guideline is based on Chloride value of sample.

(c) Guideline is based on Hardness value of sample. When water hardness exceeds 250 mg/L CaCO₃, a site-specific assessment may be required.

(d) The guideline value is based on the Hardness of the sample and is equal to $e^{(0.736 \cdot \ln(\text{Hardness}) - 4.943)/1000}$ mg/L. Long-term chronic WQG applies to water hardnesses (mg/L CaCO₃) between 3.4 - 285 mg/L. When water hardness exceeds highest hardness tested (i.e. upper bound), a site-specific assessment may be required.

(e) A sample that exceeds the alert concentration of 0.001 mg/L requires followup, see guideline documentation for more details. WQG is 0.002 mg/L.

(f) If the Hardness value of the sample is less or equal to 90, the guideline is 0.0075 mg/L, otherwise $(7.5 + 0.75 \cdot (\text{Hardness} - 90))/1000$ mg/L.

(g) If the Hardness value of the sample is less or equal to 10 then the guideline is 0.4 mg/L otherwise, $-51.73 + 92.57 \cdot \log(\text{Hardness}) + 0.01$ mg/L.

(p) The guideline value is based on the Hardness of the sample and is equal to $e^{(1.03 \cdot \ln(\text{Hardness}) - 5.274)/1000}$ mg/L. Short-term acute WQG applies to water hardnesses (mg/L CaCO₃) between 7 - 455 mg/L. When water hardness exceeds highest hardness tested (i.e. upper bound), a site-specific assessment may be required.

(q) If the Hardness value of the sample is less or equal to 90, the guideline is 0.033 mg/L, otherwise $(33 + 0.75 \cdot (\text{Hardness} - 90))/1000$ mg/L.

Table D6: Gibsons Springs - All Water Quality Results

Sample Location	Units	Guidelines			Goosebird Creek Spring	Goosebird Creek Spring	Town Hall Spring
		BCWQG-AL (Approved - Acute)	BCWQG-AL (Approved - Chronic)	BCWQG-AL (Working)	2023-Sep-13	2024-Sep-12	2024-Sep-12
Field							
Field Specific Conductivity	µS/cm	-	-	-	224	134	169
Field Temperature	°C	-	-	-	15.9	15.5	13.8
Field pH	-	-	-	-	5.91	6.79	6.61
General Chemistry							
Alkalinity, Total (as CaCO ₃)	mg/L	-	-	-	44.7	34.4	46
Conductivity (EC)	µS/cm	-	-	-	172	152	176
Hardness (as CaCO ₃)	mg/L	-	-	-	46.7	39.9	50.8
Total Dissolved Solids	mg/L	-	-	1000	94.6	78.7	87.9
pH	-	-	-	-	6.71	6.82	7
Nitrate-N	mg/L	32.8	3	-	0.678	1.47	1.06
Nitrite-N	mg/L	Lookup Table ^(c)	Lookup Table ^(c)	-	<0.010	<0.010	<0.010
Major Ions							
Bicarbonate (HCO ₃)	mg/L	-	-	-	54.6	41.9	56.1
Calcium (Ca)-Dissolved	mg/L	-	-	-	11.7	9.34	11.2
Carbonate (CO ₃)	mg/L	-	-	-	<1.0	<1.0	<1.0
Chloride (Cl)	mg/L	600 ^(a)	150 ^(a)	-	22	15.5	15.2
Fluoride (F)	mg/L	Equation ^(b)	-	-	<0.10	<0.10	<0.10
Hydroxide (OH)	mg/L	-	-	-	<1.0	<1.0	<1.0
Ion Balance	%	-	-	-	106	108	101
Iron (Fe)-Dissolved	mg/L	0.35	-	-	0.032	0.082	0.018
Magnesium (Mg)-Dissolved	mg/L	-	-	-	4.27	4.02	5.53
Manganese (Mn)-Dissolved	mg/L	-	-	-	0.00678	0.00894	0.00215
Potassium (K)-Dissolved	mg/L	-	-	-	5.34	4.06	3.33
Sodium (Na)-Dissolved	mg/L	-	-	-	16.1	12.8	11.6
Sulphate (SO ₄)	mg/L	-	Lookup Table ^(f)	1000	4.9	5.6	8.3
Dissolved Metals							
Barium (Ba)-Dissolved	mg/L	-	-	1	-	0.0086	0.0081
Beryllium (Be)-Dissolved	mg/L	-	-	0.00013	-	<0.00010	<0.00010
Cadmium (Cd)-Dissolved	mg/L	Equation ^(d)	Equation ^(g)	-	-	0.000012	<0.000010
Copper (Cu)-Dissolved	mg/L	BC BLM Calculation	BC BLM Calculation	-	-	0.00161	0.0004
Selenium (Se)-Dissolved	mg/L	-	0.001 ^(h)	-	-	<0.00050	<0.00050
Thallium (Tl)-Dissolved	mg/L	-	-	0.0008	-	<0.000020	<0.000020
Uranium (U)-Dissolved	mg/L	-	-	0.0085	-	0.000104	0.000087
Zinc (Zn)-Dissolved	mg/L	Equation ^(e)	Equation ⁽ⁱ⁾	-	-	<0.0040	<0.0040

Notes:

Bold - Value exceeds the Approved Water Quality Guideline (short-term acute).

Red highlight - Value exceeds the Approved Water Quality Guideline (long-term chronic).

Yellow highlight - Value exceeds the Working Water Quality Guideline.

µS/cm means micro Siemens per centimetre; °C means degrees Celsius; mg/L means milligrams per litre; **BC BLM** means British Columbia Biotic Ligand Model; - means no data available.

(a) When ambient Cl-concentrations exceed WQGs, increases in Cl-due to human activities should be avoided.

(b) If the Hardness value of the sample is less or equal to 10 then the guideline is 0.4 mg/L otherwise, $-51.73 + 92.57 * \log(\text{Hardness}) * 0.01$ mg/L.

(c) Guideline is based on Chloride value of sample.

(d) The guideline value is based on the Hardness of the sample and is equal to $e^{(1.03 * \ln(\text{Hardness}) - 5.274) / 1000}$ mg/L. Short-term acute WQG applies to water hardnesses (mg/L CaCO₃) between 7 - 455 mg/L. When water hardness exceeds highest hardness tested (i.e. upper bound), a site-specific assessment may be required.

(e) If the Hardness value of the sample is less or equal to 90, the guideline is 0.033 mg/L, otherwise $(33 + 0.75 * (\text{Hardness} - 90)) / 1000$ mg/L.

(f) Guideline is based on Hardness value of sample. When water hardness exceeds 250 mg/L CaCO₃, a site-specific assessment may be required.

(g) The guideline value is based on the Hardness of the sample and is equal to $e^{(0.736 * \ln(\text{Hardness}) - 4.943) / 1000}$ mg/L. Long-term chronic WQG applies to water hardnesses (mg/L CaCO₃) between 3.4 - 285 mg/L. When water hardness exceeds highest hardness tested (i.e. upper bound), a site-specific assessment may be required.

(h) A sample that exceeds the alert concentration of 0.001 mg/L requires followup, see guideline documentation for more details. WQG is 0.002 mg/L.

(i) If the Hardness value of the sample is less or equal to 90, the guideline is 0.0075 mg/L, otherwise $(7.5 + 0.75 * (\text{Hardness} - 90)) / 1000$ mg/L.

Table D7: Aquifer 560 - Routine Parameter Results (Monitoring Well Locations)

Sample Location	Sample Date	Field			General Chemistry							Major Ions														
		Field Specific Conductivity	Field Temperature	Field pH	Alkalinity, Total (as CaCO ₃)	Conductivity (EC)	Hardness (as CaCO ₃)	Total Dissolved Solids-Calculated	pH	Nitrate-N	Nitrite-N	Bicarbonate (HCO ₃)	Calcium (Ca)-Dissolved	Carbonate (CO ₃)	Chloride (Cl)	Fluoride (F)	Hydroxide (OH)	Ion Balance	Iron (Fe)-Dissolved	Magnesium (Mg)-Dissolved	Manganese (Mn)-Dissolved	Phenolphthalein	Potassium (K)-Dissolved	Sodium (Na)-Dissolved	Sulphate (SO ₄)	
Units		µs/cm	°C	-	mg/L	µS/cm	mg/L	mg/L	-	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	%	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Guidelines	BCWQG-AL (Approved - Acute)	-	-	-	-	-	-	-	-	32.8	Lookup Table ^(e)	-	-	-	600^(c)	Equation ^(d)	-	-	0.35	-	-	-	-	-	-	-
	BCWQG-AL (Approved - Chronic)	-	-	-	-	-	-	-	-	3	Lookup Table ^(e)	-	-	-	150^(c)	-	-	-	-	-	-	-	-	-	-	Lookup Table ^(f)
	BCWQG-AL (Working)	-	-	-	-	-	-	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000
MW06-1A	2015-Sep-30	172	11.7	6.58	56.8	154	57.5	-	7.62	0.79	<0.005	69.3	8.9	<0.5	4.3	0.078	<0.5	-	0.0142	8.58	0.0018	-	2.47	9.05	9.42	
MW06-1A	2016-Oct-18	153	9.9	6.86	63	160	57.3	82.7	7.69	0.723	<0.01	63	9.1	<1	3.88	<0.1	<1	100	<0.01	8.37	0.0009	<1	2.48	9	7.9	
MW06-1A	2017-Oct-04	218	10.9	6.49	65.8	153	58.2	-	6.95	0.572	<0.005	65.8	9.66	<1	4.16	0.34	<1	-	<0.01	8.26	<0.0002	<1	2.64	9.39	8.8	
MW06-1A	2019-Feb-07	174	8.5	8.62	66.7	159	59.9	86	7.68	0.616	<0.0050	81.4	9.03	<0.600	4.47	<0.10	<0.340	-	<0.010	9.07	0.00064	<1.0	2.45	8.75	8.7	
MW06-1A	2019-Sep-19	175	10.4	7.49	66.6	162	59.4	85.7	7.62	0.827	<0.010	81.3	8.5	<0.600	5.72	<0.10	<0.340	95.8	<0.010	9.27	0.00048	<1.0	2.37	8.62	6.9	
MW06-1A	2020-Oct-08	194	8.7	8.34	75.9	166	70.3	94.5	7.61	0.651	<0.010	92.6	10.9	<0.600	4.24	<0.10	<0.340	99.7	<0.010	10.4	0.00054	<1.0	3	8.45	8.2	
MW06-1A	2021-Sep-22	198	10	7.50	78	166	60.5	90.1	7.87	0.653	<0.0050	95.2	8.88	<0.600	4.58	0.1	<0.340	87.2	0.037	9.29	0.00196	<1.0	2.4	8.46	8.9	
MW06-1A	2022-Sep-14	200	11.4	7.19	84.8	176	66.5	99.1	7.48	0.698	<0.010	103	9.74	<0.600	4.58	<0.10	<0.340	87.2	<0.010	10.2	0.00064	<1.0	2.56	8.93	8.3	
MW06-1A	2023-Sep-13	237	11.6	6.6	81.9	167	77.4	99.9	7.4	0.568	<0.010	99.9	11	<0.600	3.9	<0.10	<0.340	105	<0.010	12.1	<0.00020	<1.0	2.97	9.82	7.6	
MW06-1A	2024-Sep-11	337	11.6	7.36	74.4	188	73.3	95.6	7.44	0.688	<0.010	90.8	10.8	<0.600	5.26	<0.10	<0.340	106	<0.010	11.2	0.00143	<1.0	2.85	9.5	7.5	
MW18-01	2019-Feb-14	95	6.9	9.1	37	88	27.8	23.9	7.76	0.153	<0.010	45.2	5.24	<2.0	2.11	<0.10	<2.0	-	0.867	3.56	0.041	-	2.03	5.72	4.5	
MW18-01	2019-Sep-19	88	15.5	7.81	33.9	83.1	26.6	43.3	7.35	0.04	<0.010	41.4	5.32	<0.600	2.23	<0.10	<0.340	94.9	1.35	3.24	0.126	<1.0	2	4.95	4.7	
MW18-01	2020-Oct-08	112	8.3	8.9	36.9	90.1	36	49.9	7.58	0.164	<0.010	45	7.83	<0.600	2.39	<0.10	<0.340	115	0.097	3.99	0.00666	<1.0	2.67	5.76	4	
MW18-01	2021-Sep-22	87	10	7.8	40.3	82.5	27.8	46.6	7.74	0.0649	<0.0050	49.2	5.69	<0.600	2.24	<0.10	<0.340	86.5	0.088	3.3	0.103	<1.0	2.09	4.85	3.8	
MW18-01	2022-Sep-14	106	12.3	7.76	47.4	87.6	29.5	53	7.17	0.167	<0.010	57.8	5.93	<0.600	2.5	<0.10	<0.340	79.2	0.151	3.56	0.0117	<1.0	2.19	5.34	3.8	
MW18-01	2023-Sep-13	117	10.3	6.45	45.7	91.3	32.1	52.9	7.16	0.141	<0.010	55.8	6.68	<0.600	2.49	<0.10	<0.340	87.8	0.131	3.73	0.0189	<1.0	2.36	5.5	3.7	
MW18-01	2024-Sep-11	115	11.1	7.57	38	95.2	31.7	48.2	6.93	0.13	<0.010	46.3	6.47	<0.600	3.59	<0.10	<0.340	98.2	0.465	3.76	0.0838	<1.0	2.28	5.22	3.2	
WL10-01	2015-Sep-30	224	12.1	7.37	109	231	26.4	-	8.12	0.153	<0.005	133	6.82	<0.5	3	0.3	<0.5	-	0.0451	2.27	0.0201	-	1.51	44	7.08	
WL10-01	2016-Oct-19	279	9.4	8.38	112	229	25.2	133	8.09	0.148	<0.01	112	6.6	<1	3.33	0.19	<1	99.9	0.011	2.13	0.0148	<1	1.49	44.5	6.2	
WL10-01	2017-Oct-04	170	9.9	7.4	112	224	26.3	-	7.05	0.159	0.011	112	6.9	<1	2.84	0.46	<1	-	0.017	2.2	0.0156	<1	1.52	45.4	6.6	
WL10-01	2019-Feb-06	236	7.4	8.1	116	224	25.4	134	7.98	0.049	0.0057	141	6.84	<0.600	2.83	0.26	<0.340	-	0.016	2.01	0.021	<1.0	1.44	42.8	6.4	
WL10-01	2019-Sep-19	230	10.5	8.14	112	221	24.1	129	7.95	0.066	<0.010	137	6.55	<0.600	2.85	0.28	<0.340	92.3	0.013	1.89	0.0122	<1.0	1.32	40.8	6.5	
WL10-01	2020-Oct-08	239	10.2	8.86	114	222	29.5	130	7.97	0.078	<0.010	139	8.28	<0.600	2.77	0.25	<0.340	93.6	<0.010	2.14	0.00855	<1.0	1.69	39.4	6.4	
WL10-01	2021-Sep-22	257	10.5	7.71	120	213	24.4	130	8.08	0.103	<0.0050	147	6.81	<0.600	2.89	0.31	<0.340	80.4	<0.010	1.79	0.00474	<1.0	1.28	37	6.8	
WL10-01	2022-Sep-14	249	13	7.88	138	215	26.9	146	7.68	0.16	<0.010	168	7.4	<0.600	3.03	0.3	<0.340	78.6	0.039	2.04	0.0028	<1.0	1.43	41	6.3	
WL10-01	2023-Sep-13	288	10.7	6.15	131	225	28.6	143	7.56	0.175	<0.010	160	7.95	<0.600	2.99	0.42	<0.340	85.7	<0.010	2.13	0.00108	<1.0	1.6	42.2	5.5	
WL10-01	2024-Sep-11	222	11.6	7.87	104	233	25.8	127	7.9	0.167	<0.010	126	6.99	<0.600	3.27	0.18	<0.340	105	<0.010	2.03	0.00145	<1.0	1.55	42.9	6.1	

Notes:

Bold - Value exceeds the Approved Water Quality Guideline (short-term acute).

Red highlight - Value exceeds the Approved Water Quality Guideline (long-term chronic).

Yellow highlight - Value exceeds the Working Water Quality Guideline.

°C means degrees Celsius; mg/L means milligrams per litre; µS/cm means micro Siemens per centimetre; - means no data available.

(c) When ambient Cl-concentrations exceed WQGs, increases in Cl-due to human activities should be avoided.

(d) If the Hardness value of the sample is less or equal to 10 then the guideline is 0.4 mg/L otherwise, $-51.73 + 92.57 * \log(\text{Hardness}) * 0.01$ mg/L.

(e) Guideline is based on Chloride value of sample.

(f) Guideline is based on Hardness value of sample. When water hardness exceeds 250 mg/L CaCO₃, a site-specific assessment may be required.



Table D8: Aquifer 560 - Dissolved Metal Results (Monitoring Well Locations)

Sample Location	Sample Date	Barium (Ba)-Dissolved	Beryllium (Be)-Dissolved	Cadmium (Cd)-Dissolved	Copper (Cu)-Dissolved	Selenium (Se)-Dissolved	Thallium (Tl)-Dissolved	Uranium (U)-Dissolved	Zinc (Zn)-Dissolved
Units		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Guidelines	BCWQG-AL (Approved - Acute)	-	-	Equation ^(a)	BC BLM Calculation	-	-	-	Equation ^(b)
	BCWQG-AL (Approved - Chronic)	-	-	Equation ^(f)	BC BLM Calculation	0.001 ^(g)	-	-	Equation ^(h)
	BCWQG-AL (Working)	1	0.00013	-	-	-	0.0008	0.0085	-
MW06-1A	2015-Sep-30	0.0051	<0.0001	0.000021	0.00145	0.00059	<0.00005	0.00023	0.0161
MW06-1A	2016-Oct-18	<0.005	<0.0001	0.00005	0.0005	0.0007	<0.00002	0.0003	0.004
MW06-1A	2017-Oct-04	<0.005	<0.0001	<0.00001	<0.0004	0.00078	<0.00002	0.000341	<0.004
MW06-1A	2019-Feb-07	<0.0050	<0.00010	<0.000010	0.00485	<0.00050	<0.000020	0.000293	0.0073
MW06-1A	2019-Sep-19	0.0106	<0.00010	<0.000010	0.00126	<0.00050	<0.000020	0.000311	0.0053
MW06-1A	2020-Oct-08	<0.0050	<0.00010	<0.000010	0.00112	<0.00050	<0.000020	0.000401	0.0948
MW06-1A	2021-Sep-22	0.0079	<0.00010	<0.000010	0.00324	<0.00050	<0.000020	0.000332	0.0051
MW06-1A	2022-Sep-14	0.0104	<0.00010	<0.000010	0.00193	<0.00050	<0.000020	0.000393	0.0078
MW06-1A	2023-Sep-13	<0.0050	<0.00010	<0.000010	<0.00040	<0.00050	<0.000020	0.000458	0.0066
MW06-1A	2024-Sep-11	<0.0050	<0.00010	<0.000010	<0.00040	<0.00050	<0.000020	0.00042	0.0162
MW18-01	2019-Feb-14	0.007	<0.00010	<0.000010	<0.00040	<0.00050	<0.000020	0.000103	0.0079
MW18-01	2019-Sep-19	<0.0050	<0.00010	<0.000010	<0.00040	<0.00050	<0.000020	0.000069	<0.0040
MW18-01	2020-Oct-08	0.0081	<0.00010	<0.000010	<0.00040	<0.00050	<0.000020	0.000122	0.0089
MW18-01	2021-Sep-22	<0.0050	<0.00010	<0.000010	0.00093	<0.00050	<0.000020	0.00007	<0.0040
MW18-01	2022-Sep-14	0.0056	<0.00010	<0.000010	0.00205	<0.00050	<0.000020	0.000115	<0.0040
MW18-01	2023-Sep-13	<0.0050	<0.00010	<0.000010	<0.00040	<0.00050	<0.000020	0.000112	<0.0040
MW18-01	2024-Sep-11	<0.0050	<0.00010	<0.000010	<0.00040	<0.00050	<0.000020	0.000098	<0.0040
WL10-01	2015-Sep-30	0.0033	<0.0001	0.000016	0.00031	<0.0001	<0.00005	<0.0001	0.0074
WL10-01	2016-Oct-19	<0.005	<0.0001	0.00002	0.0005	<0.0005	<0.00002	0.00005	0.01
WL10-01	2017-Oct-04	<0.005	<0.0001	<0.00001	<0.0004	<0.0005	<0.00002	0.000049	0.0078
WL10-01	2019-Feb-06	<0.0050	<0.00010	0.000013	0.017	<0.00050	<0.000020	0.00005	0.0074
WL10-01	2019-Sep-19	0.0104	<0.00010	<0.000010	0.00205	<0.00050	<0.000020	0.000045	0.0096
WL10-01	2020-Oct-08	<0.0050	<0.00010	0.000013	0.00068	<0.00050	<0.000020	0.000041	1.02
WL10-01	2021-Sep-22	0.0081	<0.00010	<0.000010	0.00421	<0.00050	<0.000020	0.000037	0.0096
WL10-01	2022-Sep-14	0.0091	<0.00010	<0.000010	0.00423	<0.00050	<0.000020	0.000036	0.0267
WL10-01	2023-Sep-13	<0.0050	<0.00010	<0.000010	0.00042	<0.00050	<0.000020	0.000036	0.33
WL10-01	2024-Sep-11	<0.0050	<0.00010	<0.000010	<0.00040	<0.00050	<0.000020	0.000042	0.0195

Notes:

Bold - Value exceeds the Approved Water Quality Guideline (short-term acute).

Red highlight - Value exceeds the Approved Water Quality Guideline (long-term chronic).

Yellow highlight - Value exceeds the Working Water Quality Guideline.

mg/L means milligrams per litre; **BC BLM** means British Columbia Biotic Ligand Model; - means no data available.

(a) The guideline value is based on the Hardness of the sample and is equal to $e^{(1.03 \cdot \ln(\text{Hardness}) - 5.274)} / 1000$ mg/L. Short-term acute WQG applies to water hardnesses (mg/L CaCO₃) between 7 - 455 mg/L. When water hardness exceeds highest hardness tested (i.e. upper bound), a site-specific assessment

(b) If the Hardness value of the sample is less or equal to 90, the guideline is 0.033 mg/L, otherwise $(33 + 0.75 \cdot (\text{Hardness} - 90)) / 1000$ mg/L.

(f) The guideline value is based on the Hardness of the sample and is equal to $e^{(0.736 \cdot \ln(\text{Hardness}) - 4.943)} / 1000$ mg/L. Long-term chronic WQG applies to water hardnesses (mg/L CaCO₃) between 3.4 - 285 mg/L. When water hardness exceeds highest hardness tested (i.e. upper bound), a site-specific assessment may be required.

(g) A sample that exceeds the alert concentration of 0.001 mg/L requires followup, see guideline documentation for more details. WQG is 0.002 mg/L.

(h) If the Hardness value of the sample is less or equal to 90, the guideline is 0.0075 mg/L, otherwise $(7.5 + 0.75 \cdot (\text{Hardness} - 90)) / 1000$ mg/L.

Table D9: Aquifer 560 - Routine and Microbiological Parameter Results (Town Wells and Water Distribution Points)

Sample Location	Sample Date	Field			General Chemistry										Major Ions										Microbiological Analysis					
		Field Specific Conductivity	Field Temperature	Field pH	Colour	Alkalinity, Total (as CaCO ₃)	Conductivity (EC)	Hardness (as CaCO ₃)	Langelier Index	Total Dissolved Solids-Calculated	Turbidity	pH	Nitrate-N	Nitrite-N	Bicarbonate (HCO ₃)	Calcium (Ca)-Dissolved	Carbonate (CO ₃)	Chloride (Cl)	Fluoride (F)	Hydroxide (OH)	Iron (Fe)-Dissolved	Magnesium (Mg)-Dissolved	Manganese (Mn)-Dissolved	Phenolphthalein	Potassium (K)-Dissolved	Sodium (Na)-Dissolved	Sulphate (SO ₄)	E. Coli	Total Coliforms	Heterotrophic Plate Count
Units		µS/cm	°C	-	TCU	mg/L	µS/cm	mg/L	-	mg/L	NTU	-	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	CFU/100 mL	CFU/100 mL	CFU/mL
Guidelines	GCDWQ AO	-	15	7-10.5	15	-	-	-	-	500	1*	7-10.5	10	1	-	-	-	250	1.5	-	0.3	-	0.02	-	-	200	500	0	0	-
	GCDWQ MAC	-	-	-	-	-	-	-	-	-	-	-	10	1	-	-	-	-	1.5	-	-	-	0.12	-	-	-	-	0	0	-
Davis Road WDP	2021-Sep-24	131.2	15.3	7.37	<5.0	51.8	121	39.2	-1	64.4	0.13	7.83	0.453	<0.0050	63.2	8.31	<1.0	4.44	<0.10	<1.0	<0.010	4.49	<0.00020	<1.0	2.29	6.14	7.1	<1	<1	<1
Davis Road WDP	2022-Sep-15	138	16.7	6.57	<5.0	64.7	124	42.3	-1.5	77.1	<0.10	7.28	0.531	<0.010	78.9	8.66	<1.0	5.12	<0.10	<1.0	<0.010	5.03	0.00026	<1.0	2.56	7.29	6.6	<1	<1	3
Davis Road WDP	2022-Sep-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
Davis Road WDP	2022-Oct-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
Davis Road WDP	2023-Sep-14	147	16.3	6.8	<5.0	61.8	136	49.6	-1.2	79.1	0.17	7.45	0.46	<0.010	75.4	11	<1.0	6.07	<0.10	<1.0	<0.010	5.89	<0.00020	<1.0	2.88	7.8	6.9	<1	<1	<1
Davis Road WDP	2024-Sep-12	142	17	7.48	<5.0	54.2	159	57.2	-1.4	82.4	0.16	7.28	0.437	<0.010	66.1	13.3	<1.0	8.33	<0.10	<1.0	<0.010	5.84	<0.00020	<1.0	3.1	7.53	9.1	<1	<1	150
Parkland Reservoir WDP	2021-Sep-24	126.4	11.9	7.24	<5.0	52	119	42.8	-1	65.4	0.12	7.81	0.46	<0.0050	63.4	8.71	<1.0	3.96	<0.10	<1.0	<0.010	5.1	<0.00020	<1.0	2.52	6.47	7.1	<1	<1	<1
Parkland Reservoir WDP	2022-Sep-15	137	13.4	6.88	<5.0	66.6	126	42	-1.4	76.9	<0.10	7.35	0.531	<0.010	81.3	8.42	<1.0	4.62	<0.10	<1.0	<0.010	5.1	<0.00020	<1.0	2.56	6.8	6.6	<1	<1	6
Parkland Reservoir WDP	2022-Sep-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
Parkland Reservoir WDP	2022-Oct-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
Parkland Reservoir WDP	2023-Sep-14	146	12.5	6.73	<5.0	64.2	134	49.3	-1.4	77.8	0.12	7.28	0.462	<0.010	78.3	10.2	<1.0	4.9	<0.10	<1.0	<0.010	5.97	<0.00020	<1.0	2.85	7.42	5.6	<1	<1	<1
Parkland Reservoir WDP	2024-Sep-12	139	12.1	7.47	<5.0	53.9	155	56.1	-1.3	79.9	0.11	7.4	0.403	<0.010	65.8	13.1	<1.0	7.64	<0.10	<1.0	<0.010	6.32	<0.00020	<1.0	3.16	7.52	8.7	<1	<1	55
School Road WDP	2021-Sep-23	123.9	12.7	7.3	<5.0	51.1	119	42.3	-1	63.6	0.12	7.81	0.458	<0.0050	62.3	8.6	<1.0	4.15	<0.10	<1.0	<0.010	5.05	<0.00020	<1.0	2.47	6.35	6.8	<1	<1	<1
School Road WDP	2022-Sep-15	141	11.3	6.36	<5.0	35.8	70.3	42.7	-2	58.8	<0.10	7	0.544	<0.010	43.7	8.25	<1.0	4.73	<0.10	<1.0	<0.010	5.36	<0.00020	<1.0	2.58	6.99	6.5	<1	<1	75
School Road WDP	2022-Sep-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
School Road WDP	2022-Oct-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
School Road WDP	2023-Sep-14	138	11.4	6.63	<5.0	64.6	129	46.4	-1.5	76.1	0.13	7.22	0.477	<0.010	78.8	9.83	<1.0	4.85	<0.10	<1.0	<0.010	5.82	<0.00020	<1.0	2.76	7.22	5.3	<1	<1	<1
School Road WDP	2024-Sep-12	112	13.4	7.61	<5.0	46.8	128	46.4	-1.7	66.1	<0.10	7.19	0.441	<0.010	57.1	9.6	<1.0	5.2	<0.10	<1.0	<0.010	5.25	<0.00020	<1.0	2.65	6.35	6.1	<1	<1	56
TW1	2015-Oct-01	-	-	-	<5	41.4	103	38.8	-	-	<0.1	7.74	0.364	<0.005	50.5	-	<1.0	2.8	0.056	<1.0	-	-	-	-	-	-	7.21	<1	<1	-
TW1	2016-Oct-18	94	9.3	7.66	<5	45	119	37.6	-	59.5	<0.1	7.6	0.404	<0.01	45	8	<1.0	3.07	<0.1	<1.0	<0.1	4.26	<0.002	<1	2.27	5.53	7.3	<2	<2	-
TW1	2017-Oct-03	83	9.2	7.37	<5	49.8	113	42.1	-	-	<0.1	6.94	0.572	<0.005	49.8	9.6	<1.0	2.93	<0.1	<1.0	<0.01	4.95	<0.0002	<1	2.81	6.65	7.8	-	-	-
TW1	2019-Feb-06	118	9.1	7.65	-	43.5	111	39.6	-	60	-	7.61	0.42	<0.0050	53.1	8.3	<1.0	2.54	<0.10	<1.0	<0.010	4.57	0.00023	<1.0	2.44	5.94	8	-	-	-
TW1	2019-Sep-19	117	10.4	7.52	<5.0	43.4	112	38.2	-1.5	59.7	<0.10	7.47	0.373	<0.010	53	8.26	<1.0	2.63	<0.10	<1.0	<0.010	4.27	<0.00020	<1.0	2.33	5.8	8.2	<2	<2	-
TW1	2020-Oct-09	131	8.5	8.80	-	40.7	114	38.2	-	57.9	0.23	7.62	0.402	<0.010	49.7	8.19	<1.0	2.91	<0.10	<1.0	<0.010	4.31	0.0002	<1.0	2.37	5.72	7.8	<1.8	<1.8	-
TW1	2021-Sep-23	87.3	9.3	7.30	<5.0	51.2	117	39.3	-1	66	0.11	7.81	0.414	<0.0050	62.5	8.4	<1.0	3.06	<0.10	<1.0	<0.010	4.44	<0.00020	<1.0	2.35	5.87	8.5	<1	<1	<1
TW1	2022-Sep-15	136	10.5	6.11	<5.0	68.7	122	43.9	-1.4	79.1	<0.10	7.28	0.498	<0.010	83.8	9.24	<1.0	4.07	<0.10	<1.0	<0.010	5.04	<0.00020	<1.0	2.46	6.38	7.8	<1	<1	1
TW1	2022-Sep-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
TW1	2022-Oct-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
TW1	2023-Sep-14	142	9.5	6.65	<5.0	71.7	131	47.9	-1.5	82.4	0.11	7.12	0.446	<0.010	87.5	10.9	<1.0	4.03	<0.10	<1.0	<0.010	5.48	<0.00020	<1.0	2.76	6.84	7.6	<1	<1	<1
TW1	2024-Sep-12	122	10	7.57	<5.0	50.4	138	49.4	-1.5	70.7	<0.10	7.3	0.481	<0.010	61.5	10.7	<1.0	4.55	0.14	<1.0	<0.010	5.45	<0.00020	<1.0	2.75	6.65	7.6	<1	<1	1



Table D9: Aquifer 560 - Routine and Microbiological Parameter Results (Town Wells and Water Distribution Points)

Sample Location	Sample Date	Field			General Chemistry										Major Ions										Microbiological Analysis					
		Field Specific Conductivity	Field Temperature	Field pH	Colour	Alkalinity, Total (as CaCO ₃)	Conductivity (EC)	Hardness (as CaCO ₃)	Langelier Index	Total Dissolved Solids-Calculated	Turbidity	pH	Nitrate-N	Nitrite-N	Bicarbonate (HCO ₃)	Calcium (Ca)-Dissolved	Carbonate (CO ₃)	Chloride (Cl)	Fluoride (F)	Hydroxide (OH)	Iron (Fe)-Dissolved	Magnesium (Mg)-Dissolved	Manganese (Mn)-Dissolved	Phenolphthalein	Potassium (K)-Dissolved	Sodium (Na)-Dissolved	Sulphate (SO ₄)	E. Coli	Total Coliforms	Heterotrophic Plate Count
Units		µS/cm	°C	-	TCU	mg/L	µS/cm	mg/L	-	mg/L	NTU	-	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	CFU/100 mL	CFU/100 mL	CFU/mL
Guidelines	GCDWQ AO	-	15	7-10.5	15	-	-	-	-	500	1*	7-10.5	10	1	-	-	-	250	1.5	-	0.3	-	0.02	-	-	200	500	0	0	-
	GCDWQ MAC	-	-	-	-	-	-	-	-	-	-	-	10	1	-	-	-	-	1.5	-	-	-	0.12	-	-	-	-	0	0	-
TW3	2015-Oct-01	121	9.4	6.74	<5	49.4	136	48.9	-	-	<0.1	7.69	0.969	<0.005	60.2	-	<1.0	6.7	<0.01	<1.0	-	-	-	-	-	-	7.08	<1	<1	-
TW3	2016-Oct-18	117	9.6	7.49	<5	52	148	47.2	-	73.5	<0.1	7.48	0.978	<0.01	52	8.9	<1.0	6.12	<0.1	<1.0	<0.1	6.06	<0.002	<1	2.69	7.22	6.7	<2	<2	-
TW3	2017-Oct-03	107	10	7.19	<5	54.5	145	55.7	-	-	<0.1	7.16	0.951	<0.005	54.5	10.4	<1.0	7.33	<0.1	<1.0	<0.01	7.2	<0.0002	<1	3.27	8.76	7.1	-	-	-
TW3	2019-Feb-06	-	-	-	-	51.5	143	51.2	-	77	-	7.48	0.918	<0.0050	62.8	9.19	<1.0	7.17	<0.10	<1.0	<0.010	6.85	0.00066	<1.0	2.93	7.96	7.2	-	-	-
TW3	2019-Sep-19	154	11.2	8.06	<5.0	51.9	146	49.2	-1.4	76	<0.10	7.46	0.917	<0.010	63.4	9.06	<1.0	7.52	<0.10	<1.0	<0.010	6.45	0.00061	<1.0	2.73	7.58	7.1	<2	<2	-
TW3	2020-Oct-09	152	8.7	8.47	-	54.5	148	48.4	-	77.4	<0.10	7.51	0.911	<0.010	66.5	8.95	<1.0	7.69	<0.10	<1.0	0.016	6.31	0.00219	<1.0	2.7	7.36	7.1	<1.8	<1.8	-
TW3	2021-Sep-23	147.8	10.4	7.21	<5.0	57.3	142	45.2	-1	74	0.13	7.74	0.83	<0.0050	69.9	8.46	<1.0	6.8	<0.10	<1.0	<0.010	5.83	0.00029	<1.0	2.54	6.81	7.8	<1	<1	<1
TW3	2022-Sep-15	157	10.6	6.09	<5.0	79.8	140	50.5	-1.5	94.4	<0.10	7.15	1.01	<0.010	97.4	9.43	<1.0	7.1	<0.10	<1.0	<0.010	6.55	0.00026	<1.0	2.77	7.68	7	<1	<1	1
TW3	2022-Sep-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
TW3	2022-Oct-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
TW3	2023-Sep-14	160	9.8	6.57	<5.0	74.6	152	54.7	-1.5	91.4	0.12	7.12	0.891	<0.010	91.0	10.4	<1.0	6.77	<0.10	<1.0	<0.010	7.19	0.00059	<1.0	3.13	8.08	6.6	<1	<1	<1
TW3	2024-Sep-12	125	13.2	7.51	<5.0	49	137	49.1	-1.6	69.9	<0.10	7.22	0.482	<0.010	59.9	10.6	<1.0	4.53	0.15	<1.0	<0.010	5.37	<0.00020	<1.0	2.72	6.57	7.6	<1	61	79
TW3	2024-Sep-23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
TW3	2024-Oct-21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
TW4	2015-Oct-01	90	9.4	6.16	<5	42.7	103	37.7	-	-	<0.1	7.78	0.339	<0.005	52.1	-	<1.0	3.6	0.046	<1.0	-	-	-	-	-	4.55	<1	<1	-	
TW4	2016-Oct-18	122	11.3	7.55	<5	54	150	49.7	-	75.6	0.49	7.51	0.905	<0.01	54	9.7	<1.0	5.88	<0.1	<1.0	<0.1	6.17	0.0073	<1	2.71	7.39	6.9	<2	<2	-
TW4	2017-Oct-03	86	12.2	7.52	<5	50	106	40.3	-	-	<0.1	6.93	0.42	<0.005	50	8.09	<1.0	3.5	<0.1	<1.0	<0.01	4.98	0.00055	<1	2.57	6.5	4.9	-	-	-
TW4	2019-Feb-06	116	9.9	8.71	-	44.5	107	38.6	-	58	-	7.6	0.389	<0.0050	54.3	7.39	<1.0	3.56	<0.10	<1.0	<0.010	4.88	0.00035	<1.0	2.42	6.18	4.9	-	-	-
TW4	2019-Sep-19	112	10.3	8.3	<5.0	42	107	36.5	-1.6	56.1	<0.10	7.45	0.367	<0.010	51.2	7.22	<1.0	3.78	<0.10	<1.0	<0.010	4.47	<0.00020	<1.0	2.22	5.78	4.9	<2	<2	-
TW4	2020-Oct-09	128	8.5	7.22	-	45.3	108	37.1	-	58.1	<0.10	7.61	0.384	<0.010	55.3	7.45	<1.0	4.03	<0.10	<1.0	<0.010	4.5	<0.00020	<1.0	2.26	5.75	4.7	<1.8	<1.8	-
TW4	2021-Sep-23	81.4	10	7.19	<5.0	49	109	36.2	-1.1	59.4	0.64	7.82	0.366	<0.0050	59.8	7.21	<1.0	3.83	<0.10	<1.0	<0.010	4.42	<0.00020	<1.0	2.17	5.56	5.5	<1	<1	<1
TW4	2022-Sep-15	126	10.6	6.93	<5.0	67.2	113	39.3	-1.5	73.7	<0.10	7.24	0.409	<0.010	82	7.84	<1.0	4.52	<0.10	<1.0	<0.010	4.79	<0.00020	<1.0	2.3	6.18	5	<1	3	16
TW4	2022-Sep-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
TW4	2022-Oct-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	<1	-	
TW4	2023-Sep-14	126	9.8	6.6	<5.0	63.7	120	43.4	-1.5	72.5	0.19	7.25	0.374	<0.010	77.7	8.76	<1.0	4.4	<0.10	<1.0	<0.010	5.44	<0.00020	<1.0	2.62	6.66	4.6	<1	<1	<1
TW4	2024-Sep-12	108	10.3	7.52	<5.0	46	124	42.7	-1.6	61.7	<0.10	7.26	0.39	<0.010	56.1	8.88	<1.0	4.97	0.13	<1.0	<0.010	5.08	<0.00020	<1.0	2.53	6.07	4.4	<1	<1	60
TW6	2019-Aug-11	126	14	7.16	-	54.3	141	52.8	-	78.1	0.17	7.7	0.513	<0.010	66.3	11.8	<1.0	6.55	<0.10	<1.0	0.011	5.64	0.00054	<1.0	3	6.99	8.7	-	-	-
TW6	2019-Aug-12	126	11.5	7.21	<5.0	51.7	144	51.8	-1	76.7	0.16	7.63	0.48	<0.010	63.1	11.7	<1.0	6.02	<0.10	<1.0	0.011	5.49	0.00052	<1.0	2.96	6.9	10	<1	<1	-
TW6	2023-Sep-14	165	9.9	6.53	<5.0	68.6	154	57.8	-1.3	87.1	<0.10	7.32	0.465	<0.010	83.7	13	<1.0	5.63	<0.10	<1.0	<0.010	6.38	<0.00020	<1.0	3.12	7.66	7.8	<1	<1	<1
TW6	2024-Sep-12	144	10.1	7.49	<5.0	53.7	160	57.3	-1.5	81.7	<0.10	7.21	0.435	<0.010	65.5	13.2	<1.0	8.16	<0.10	<1.0	<0.010	6.16	<0.00020	<1.0	3.17	7.22	9.3	<1	<1	44

Notes:

GCDWQ represents the Guidelines for Canadian Drinking Water Quality, Summary Table (Health Canada, 2024). Guidelines are health based and listed as maximum acceptable concentrations (MAC), or based on aesthetic considerations and listed as aesthetic objectives (AO).

Laboratory results that were less than detection limits and greater than the applied guidelines are not shown as exceedances.

Purple highlight - Value exceeds the Aesthetic Objectives (AO).

Yellow highlight - Value exceeds the Maximum Acceptable Concentration (MAC).

µS/cm means micro Siemens per centimetre; °C means degrees Celsius; TCU means total colour units; mg/L means milligrams per litre; NTU means nephelometric turbidity units; CFU/100mL means colony forming units per 100 millilitres; - means no data available.

*The GCDWQ AO of 0.1 NTU is the standard for treated water (Health Canada, 2024). For systems that use groundwater, turbidity of the raw water should generally be <1.0 NTU (Health Canada, 2024).



Table D10: Aquifer 560 - Dissolved Metal Results (Town Wells and Water Distribution Points)

Sample Location	Sample Date	Aluminum (Al)-Dissolved	Antimony (Sb)-Dissolved	Arsenic (As)-Dissolved	Barium (Ba)-Dissolved	Boron (B)-Dissolved	Cadmium (Cd)-Dissolved	Chromium (Cr)-Dissolved	Copper (Cu)-Dissolved	Lead (Pb)-Dissolved	Mercury (Hg)-Dissolved	Selenium (Se)-Dissolved	Strontium (Sr)-Dissolved	Uranium (U)-Dissolved	Zinc (Zn)-Dissolved
Units		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Guidelines	GCDWQ AO	0.1	0.006	0.01	2	5	0.007	0.05	1	0.005	0.001	0.05	7	0.02	5
	GCDWQ MAC	2.9	0.006	0.01	2	5	0.007	0.05	2	0.005	0.001	0.05	7	0.02	-
Davis Road WDP	2021-Sep-24	<0.0050	<0.00020	0.00306	0.0357	<0.0500	<0.000010	0.00071	0.00838	0.00051	<0.000010	<0.00050	0.0293	0.000187	0.0041
Davis Road WDP	2022-Sep-15	<0.0050	<0.00020	0.00338	<0.0050	<0.0500	<0.000010	0.00083	0.00657	0.00047	<0.000010	<0.00050	0.0336	0.00022	0.0063
Davis Road WDP	2023-Sep-14	<0.0050	<0.00020	0.0033	<0.0050	<0.0500	<0.000010	0.00062	0.0159	0.00028	<0.000010	<0.00050	0.0384	0.000289	0.0054
Davis Road WDP	2024-Sep-12	<0.0050	<0.00020	0.00293	<0.0050	<0.0500	<0.000010	<0.00050	0.00422	<0.00020	<0.000010	<0.00050	0.0458	0.000407	<0.0040
Parkland Reservoir WDP	2021-Sep-24	<0.0050	<0.00020	0.00337	<0.0050	<0.0500	<0.000010	0.0008	0.00372	<0.00020	<0.000010	<0.00050	0.0309	0.000219	0.0065
Parkland Reservoir WDP	2022-Sep-15	<0.0050	<0.00020	0.0034	<0.0050	<0.0500	<0.000010	0.00075	0.0025	<0.00020	<0.000010	<0.00050	0.0334	0.000241	0.0086
Parkland Reservoir WDP	2023-Sep-14	<0.0050	<0.00020	0.00337	<0.0050	<0.0500	<0.000010	0.00064	0.00492	<0.00020	<0.000010	<0.00050	0.0378	0.000285	0.0144
Parkland Reservoir WDP	2024-Sep-12	<0.0050	<0.00020	0.00302	<0.0050	<0.0500	<0.000010	<0.00050	0.00158	<0.00020	<0.000010	<0.00050	0.0454	0.000409	0.0056
School Road WDP	2021-Sep-23	<0.0050	<0.00020	0.00305	<0.0050	<0.0500	<0.000010	0.00073	0.00049	<0.00020	<0.000010	<0.00050	0.0304	0.00021	0.0083
School Road WDP	2022-Sep-15	<0.0050	<0.00020	0.00335	<0.0050	<0.0500	<0.000010	0.00078	<0.00040	<0.00020	<0.000010	<0.00050	0.0337	0.000228	0.0075
School Road WDP	2023-Sep-14	<0.0050	<0.00020	0.00321	<0.0050	<0.0500	<0.000010	0.00075	0.00075	<0.00020	<0.000010	<0.00050	0.0352	0.000233	0.0061
School Road WDP	2024-Sep-12	<0.0050	<0.00020	0.00333	<0.0050	<0.0500	<0.000010	0.00085	0.00107	<0.00020	<0.000010	<0.00050	0.0326	0.000239	0.007
TW1	2017-Oct-03	<0.005	<0.0002	0.00382	<0.005	0.0108	<0.00001	0.0006	0.00206	<0.0002	-	0.00065	0.0318	0.000303	0.0043
TW1	2019-Feb-06	<0.0050	<0.00020	0.00381	0.0073	0.0067	0.000073	0.00069	0.00321	<0.00020	<0.000010	0.00065	0.0302	0.00028	0.014
TW1	2019-Sep-19	<0.0050	<0.00020	0.00373	0.0104	0.0109	<0.000010	0.00074	0.0032	<0.00020	<0.000010	0.00055	0.0308	0.000305	0.0093
TW1	2020-Oct-09	<0.0050	<0.00020	0.00383	0.0061	<0.0500	<0.000010	0.00069	0.00545	0.00023	<0.000010	0.00057	0.0309	0.000282	0.0084
TW1	2021-Sep-23	<0.0050	<0.00020	0.00316	<0.0050	<0.0500	<0.000010	0.00064	0.00243	<0.00020	<0.000010	0.00051	0.0286	0.000266	<0.0040
TW1	2022-Sep-15	<0.0050	<0.00020	0.00361	<0.0050	<0.0500	<0.000010	0.00068	0.00059	<0.00020	<0.000010	0.0005	0.0333	0.000323	<0.0040
TW1	2023-Sep-14	<0.0050	<0.00020	0.00357	<0.0050	<0.0500	<0.000010	0.00059	0.00057	<0.00020	<0.000010	0.00056	0.0361	0.000337	<0.0040
TW1	2024-Sep-12	<0.0050	<0.00020	0.00348	<0.0050	<0.0500	<0.000010	0.00061	0.00043	<0.00020	<0.000010	0.00052	0.037	0.000322	<0.0040
TW3	2017-Oct-03	<0.005	<0.0002	0.00251	<0.005	0.0146	<0.00001	<0.0005	0.00746	0.00054	-	<0.0005	0.0514	0.000178	0.0044
TW3	2019-Feb-06	<0.0050	<0.00020	0.00239	<0.0050	0.0099	<0.000010	<0.00050	0.012	0.00054	<0.000010	<0.00050	0.0488	0.000164	0.0074
TW3	2019-Sep-19	<0.0050	<0.00020	0.00237	<0.0050	0.0124	<0.000010	0.00066	0.00757	0.0003	<0.000010	<0.00050	0.0488	0.000177	0.007
TW3	2020-Oct-09	<0.0050	<0.00020	0.00224	<0.0050	<0.0500	<0.000010	<0.00050	0.00696	0.00045	<0.000010	<0.00050	0.0474	0.000178	0.0098
TW3	2021-Sep-23	<0.0050	<0.00020	0.00199	<0.0050	<0.0500	<0.000010	<0.00050	0.0048	0.00037	<0.000010	<0.00050	0.0403	0.000154	0.0073
TW3	2022-Sep-15	<0.0050	<0.00020	0.00222	0.0098	<0.0500	<0.000010	<0.00050	0.00476	0.00023	<0.000010	<0.00050	0.0484	0.000177	0.0101
TW3	2023-Sep-14	0.0054	<0.00020	0.00224	<0.0050	<0.0500	<0.000010	<0.00050	0.0063	0.00037	<0.000010	<0.00050	0.0507	0.000187	0.0224
TW3	2024-Sep-12	<0.0050	<0.00020	0.0035	<0.0050	<0.0500	<0.000010	0.00062	0.00496	0.00038	<0.000010	0.00051	0.0375	0.000332	0.0079

Table D10: Aquifer 560 - Dissolved Metal Results (Town Wells and Water Distribution Points)

Sample Location	Sample Date	Aluminum (Al)-Dissolved	Antimony (Sb)-Dissolved	Arsenic (As)-Dissolved	Barium (Ba)-Dissolved	Boron (B)-Dissolved	Cadmium (Cd)-Dissolved	Chromium (Cr)-Dissolved	Copper (Cu)-Dissolved	Lead (Pb)-Dissolved	Mercury (Hg)-Dissolved	Selenium (Se)-Dissolved	Strontium (Sr)-Dissolved	Uranium (U)-Dissolved	Zinc (Zn)-Dissolved
Units		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Guidelines	GCDWQ AO	0.1	0.006	0.01	2	5	0.007	0.05	1	0.005	0.001	0.05	7	0.02	5
	GCDWQ MAC	2.9	0.006	0.01	2	5	0.007	0.05	2	0.005	0.001	0.05	7	0.02	-
TW4	2017-Oct-03	<0.005	<0.0002	0.00374	<0.005	0.0087	<0.00001	0.00086	0.00343	0.00021	-	<0.0005	0.0267	0.000163	0.0334
TW4	2019-Feb-06	<0.0050	<0.00020	0.00373	<0.0050	0.0052	<0.000010	0.0013	0.00525	0.00035	<0.000010	<0.00050	0.0263	0.00017	0.0082
TW4	2019-Sep-19	<0.0050	<0.00020	0.00357	0.0077	0.0089	<0.000010	0.00101	0.00652	0.00026	<0.000010	<0.00050	0.0263	0.000172	0.0061
TW4	2020-Oct-09	<0.0050	<0.00020	0.00348	<0.0050	<0.0500	<0.000010	0.00097	0.00151	0.00027	<0.000010	<0.00050	0.0265	0.000166	0.0084
TW4	2021-Sep-23	<0.0050	<0.00020	0.00303	<0.0050	<0.0500	<0.000010	0.00087	0.00164	<0.00020	<0.000010	<0.00050	0.0237	0.000151	<0.0040
TW4	2022-Sep-15	<0.0050	<0.00020	0.00345	0.0086	<0.0500	<0.000010	0.00094	0.00454	0.00024	<0.000010	<0.00050	0.0267	0.000157	0.0047
TW4	2023-Sep-14	<0.0050	<0.00020	0.00354	<0.0050	<0.0500	<0.000010	0.00091	0.00369	<0.00020	<0.000010	<0.00050	0.0295	0.000194	0.0146
TW4	2024-Sep-12	<0.0050	<0.00020	0.00326	<0.0050	<0.0500	<0.000010	0.00091	0.00091	<0.00020	<0.000010	<0.00050	0.0292	0.000172	0.0049
TW6	2019-Aug-11	<0.0050	<0.00020	0.00362	0.0106	0.0104	<0.000010	0.00088	0.0024	<0.00020	<0.000010	<0.00050	0.0487	0.00051	0.0059
TW6	2019-Aug-12	<0.0050	<0.00020	0.00365	0.0108	0.0095	<0.000010	0.00077	0.00136	<0.00020	<0.000010	<0.00050	0.0478	0.000483	0.0109
TW6	2023-Sep-14	<0.0050	<0.00020	0.00338	<0.0050	<0.0500	<0.000010	<0.00050	0.0012	<0.00020	<0.000010	<0.00050	0.0475	0.000466	<0.0040
TW6	2024-Sep-12	<0.0050	<0.00020	0.00288	<0.0050	<0.0500	<0.000010	<0.00050	0.00116	<0.00020	<0.000010	<0.00050	0.0474	0.000419	0.004

Notes:

GCDWQ represents the Guidelines for Canadian Drinking Water Quality, Summary Table (Health Canada, September 2024). Guidelines are health based and listed as maximum acceptable concentrations (MAC), or based on aesthetic considerations and listed as aesthetic objectives (AO).

Purple highlight - Value exceeds the Aesthetic Objectives (AO).

Yellow highlight - Value exceeds the Maximum Acceptable Concentration (MAC).

mg/L means milligrams per litre; - means no data available.

Table D11: Aquifer 560 - Total Metal Results (Town Wells and Water Distribution Points)

Sample Location	Sample Date	Aluminum (Al)-Total	Antimony (Sb)-Total	Arsenic (As)-Total	Barium (Ba)-Total	Boron (B)-Total	Cadmium (Cd)-Total	Calcium (Ca)-Total	Chromium (Cr)-Total	Copper (Cu)-Total	Iron (Fe)-Total	Lead (Pb)-Total	Magnesium (Mg)-Total	Manganese (Mn)-Total	Mercury (Hg)-Total	Potassium (K)-Total	Selenium (Se)-Total	Sodium (Na)-Total	Strontium (Sr)-Total	Uranium (U)-Total	Zinc (Zn)-Total
Units		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Guidelines	GCDWQ AO	0.1	0.006	0.01	2	5	0.007	-	0.05	1	0.3	0.005	-	0.02	0.001	-	0.05	200	7	0.02	5
	GCDWQ MAC	2.9	0.006	0.01	2	5	0.007	-	0.05	2	-	0.005	-	0.12	0.001	-	0.05	-	7	0.02	-
Davis Road WDP	2021-Sep-24	<0.0050	<0.00020	0.00309	<0.0050	<0.0500	<0.000010	8.7	0.00084	0.00726	<0.010	0.0006	4.39	<0.00020	<0.000010	2.37	0.00051	5.82	0.0268	0.000203	<0.0040
Davis Road WDP	2022-Sep-15	<0.0050	<0.00020	0.00326	<0.0050	<0.0500	<0.000010	9.35	0.00079	0.0067	<0.010	0.00068	4.93	<0.00020	<0.000010	2.5	<0.00050	6.73	0.0337	0.000238	0.0048
Davis Road WDP	2023-Sep-14	0.0153	<0.00020	0.0032	<0.0050	<0.0500	<0.000010	10.6	0.00094	0.0558	<0.010	0.00026	5.59	<0.00020	<0.000010	2.76	<0.00050	7.36	0.0381	0.00029	0.0055
Davis Road WDP	2024-Sep-12	<0.0050	<0.00020	0.00292	<0.0050	<0.0500	<0.000010	12.8	<0.00050	0.00531	<0.010	0.00053	6.08	<0.00020	<0.000010	3.1	<0.00050	7.95	0.0461	0.000464	0.004
Parkland Reservoir WDP	2021-Sep-24	<0.0050	<0.00020	0.00359	<0.0050	<0.0500	<0.000010	8.79	0.00098	0.00258	<0.010	<0.00020	4.96	<0.00020	<0.000010	2.57	<0.00050	6.27	0.0281	0.000226	0.0053
Parkland Reservoir WDP	2022-Sep-15	<0.0050	<0.00020	0.00324	<0.0050	<0.0500	<0.000010	9.02	0.00074	0.00332	<0.010	<0.00020	4.99	<0.00020	<0.000010	2.48	<0.00050	6.26	0.033	0.000236	0.0044
Parkland Reservoir WDP	2023-Sep-14	<0.0050	<0.00020	0.00329	<0.0050	<0.0500	<0.000010	10.3	0.0009	0.00442	<0.010	<0.00020	5.74	<0.00020	<0.000010	2.77	<0.00050	7.29	0.0374	0.00029	0.0141
Parkland Reservoir WDP	2024-Sep-12	<0.0050	<0.00020	0.00299	<0.0050	<0.0500	<0.000010	12.3	<0.00050	0.00303	<0.010	<0.00020	6.16	<0.00020	<0.000010	3.06	<0.00050	7.38	0.0449	0.000456	<0.0040
School Road WDP	2021-Sep-23	<0.0050	<0.00020	0.00332	<0.0050	<0.0500	<0.000010	8.26	0.00077	<0.00040	<0.010	0.00023	4.81	<0.00020	<0.000010	2.49	<0.00050	5.87	0.0268	0.000186	0.0059
School Road WDP	2022-Sep-15	<0.0050	<0.00020	0.00323	<0.0050	<0.0500	<0.000010	9.15	0.00075	<0.00040	<0.010	<0.00020	5.18	<0.00020	<0.000010	2.54	<0.00050	6.53	0.0338	0.00023	0.0045
School Road WDP	2023-Sep-14	<0.0050	<0.00020	0.00318	<0.0050	<0.0500	<0.000010	9.46	0.00077	<0.00040	<0.010	<0.00020	5.53	<0.00020	<0.000010	2.67	<0.00050	6.85	0.0352	0.00024	0.0066
School Road WDP	2024-Sep-12	<0.0050	<0.00020	0.00329	<0.0050	<0.0500	<0.000010	9.6	0.0008	<0.00040	<0.010	<0.00020	5.44	<0.00020	<0.000010	2.61	<0.00050	6.67	0.0321	0.000285	<0.0040
TW1	2015-Oct-01	<0.003	<0.0005	0.00394	0.0026	<0.050	<0.00001	8.63	<0.001	0.00161	<0.005	<0.0002	4.19	<0.001	<0.00005	2.43	0.00058	5.87	0.0295	0.00019	<0.005
TW1	2016-Oct-18	<0.005	<0.0001	0.004	<0.005	0.01	<0.00001	9.5	0.0011	0.0034	<0.01	0.0001	4.3	<0.0002	<0.00002	2.38	0.0006	5.99	0.033	0.0003	0.005
TW1	2017-Oct-03	<0.005	<0.0002	0.00357	<0.005	0.0123	<0.00001	8.46	0.0011	0.00242	<0.01	<0.0002	5.08	<0.0002	<0.00001	2.52	0.00068	6.79	0.0311	0.000323	0.0041
TW1	2019-Sep-19	<0.0050	<0.00020	0.00348	<0.0050	0.012	<0.000010	8.07	0.00074	0.00234	<0.010	<0.00020	4.21	<0.00020	<0.000010	2.41	0.00051	6.04	0.0303	0.000298	0.0079
TW1	2020-Oct-09	<0.0050	<0.00020	0.00389	<0.0050	<0.0500	<0.000010	9.68	0.00069	0.00295	<0.010	<0.00020	4.93	<0.00020	<0.000010	2.53	0.00061	6.32	0.0323	0.000304	0.0053
TW1	2021-Sep-23	<0.0050	<0.00020	0.00391	<0.0050	<0.0500	0.000017	9.46	0.00091	0.00048	<0.010	0.00075	4.8	<0.00020	<0.000010	2.63	0.00058	6.26	0.0284	0.000368	<0.0040
TW1	2022-Sep-15	<0.0050	<0.00020	0.00344	<0.0050	<0.0500	<0.000010	9.36	0.00065	0.00052	<0.010	<0.00020	4.91	<0.00020	<0.000010	2.5	<0.00050	6.34	0.0326	0.000311	<0.0040
TW1	2023-Sep-14	<0.0050	<0.00020	0.00343	<0.0050	<0.0500	<0.000010	10.5	0.00078	0.00052	<0.010	<0.00020	5.27	<0.00020	<0.000010	2.68	0.00052	6.61	0.0357	0.000378	<0.0040
TW1	2024-Sep-12	<0.0050	<0.00020	0.00348	<0.0050	<0.0500	<0.000010	10.5	0.00063	0.00049	<0.010	<0.00020	5.61	<0.00020	<0.000010	2.71	0.00055	6.86	0.0365	0.000385	<0.0040
TW3	2015-Oct-01	<0.003	<0.0005	0.0023	0.0029	<0.050	<0.00001	9.41	<0.001	0.00381	<0.005	0.00037	6.16	<0.001	<0.00005	2.87	0.00032	7.28	0.0471	0.00013	<0.005
TW3	2016-Oct-18	<0.005	<0.0001	0.0023	<0.005	0.008	<0.00001	10.5	0.0009	0.0085	<0.01	0.0007	6.44	<0.0002	<0.00002	2.83	<0.0005	7.66	0.052	0.00018	0.013
TW3	2017-Oct-03	<0.005	<0.0002	0.00228	<0.005	0.021	<0.00001	9.41	0.00073	0.00889	<0.01	0.00069	7.22	<0.0002	<0.00001	3.01	<0.0005	8.79	0.0498	0.000185	0.0046
TW3	2019-Sep-19	<0.0050	<0.00020	0.00214	<0.0050	0.0144	<0.000010	8.82	0.00061	0.00805	0.033	0.00036	6.29	0.00089	<0.000010	2.76	<0.00050	7.7	0.0479	0.000175	0.0081
TW3	2020-Oct-09	<0.0050	<0.00020	0.00253	<0.0050	<0.0500	<0.000010	10.6	<0.00050	0.00773	<0.010	0.00047	7.02	0.00089	<0.000010	2.91	<0.00050	8.01	0.0512	0.00019	0.0115
TW3	2021-Sep-23	<0.0050	<0.00020	0.00209	<0.0050	<0.0500	<0.000010	8.95	<0.00050	0.00482	<0.010	0.00033	5.9	0.00021	<0.000010	2.74	<0.00050	6.77	0.038	0.000153	0.0063
TW3	2022-Sep-15	<0.0050	<0.00020	0.00214	<0.0050	<0.0500	<0.000010	9.55	<0.00050	0.00369	<0.010	0.00027	6.59	<0.00020	<0.000010	2.87	<0.00050	8.19	0.0484	0.00018	0.005
TW3	2023-Sep-14	0.0182	<0.00020	0.00224	<0.0050	<0.0500	<0.000010	10.5	0.00101	0.00691	<0.010	0.00043	6.94	0.00063	<0.000010	3.04	<0.00050	8.2	0.0517	0.000197	0.0182
TW3	2024-Sep-12	<0.0050	<0.00020	0.00349	<0.0050	<0.0500	<0.000010	10.4	0.00064	0.00424	<0.010	0.00036	5.62	<0.00020	<0.000010	2.76	<0.00050	6.99	0.0367	0.000389	0.0067

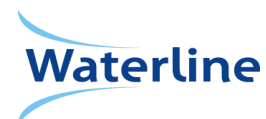


Table D11: Aquifer 560 - Total Metal Results (Town Wells and Water Distribution Points)

Sample Location	Sample Date	Aluminum (Al)-Total	Antimony (Sb)-Total	Arsenic (As)-Total	Barium (Ba)-Total	Boron (B)-Total	Cadmium (Cd)-Total	Calcium (Ca)-Total	Chromium (Cr)-Total	Copper (Cu)-Total	Iron (Fe)-Total	Lead (Pb)-Total	Magnesium (Mg)-Total	Manganese (Mn)-Total	Mercury (Hg)-Total	Potassium (K)-Total	Selenium (Se)-Total	Sodium (Na)-Total	Strontium (Sr)-Total	Uranium (U)-Total	Zinc (Zn)-Total	
Units		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Guidelines		GCDWQ AO	0.1	0.006	0.01	2	5	0.007	-	0.05	1	0.3	0.005	-	0.02	0.001	-	0.05	200	7	0.02	5
		GCDWQ MAC	2.9	0.006	0.01	2	5	0.007	-	0.05	2	-	0.005	-	0.12	0.001	-	0.05	-	7	0.02	-
TW4	2015-Oct-01	<0.003	<0.0005	0.00355	0.0026	<0.050	<0.00001	7.69	<0.001	0.00193	<0.005	<0.0002	4.48	<0.001	<0.00005	2.4	0.00034	5.78	0.0247	0.00012	<0.005	
TW4	2016-Oct-18	<0.005	<0.0001	0.0022	<0.005	0.007	<0.00001	11.3	0.0009	0.0057	0.06	0.0008	6.23	0.008	<0.00002	2.77	<0.0005	7.46	0.05	0.0002	0.681	
TW4	2017-Oct-03	<0.005	<0.0002	0.00347	<0.005	0.0095	<0.00001	7.39	0.00108	0.00397	<0.01	0.00036	5.3	0.00081	<0.00001	2.45	<0.0005	6.77	0.0268	0.000176	0.034	
TW4	2019-Sep-19	<0.0050	<0.00020	0.00344	<0.0050	0.0106	<0.000010	7.2	0.00104	0.00208	0.035	0.00024	4.5	<0.00020	<0.000010	2.33	<0.00050	6.17	0.0264	0.000164	0.0199	
TW4	2020-Oct-09	<0.0050	<0.00020	0.00381	<0.0050	<0.0500	<0.000010	8.68	0.00108	0.00191	<0.010	0.00026	5.01	<0.00020	<0.000010	2.39	<0.00050	6.17	0.0282	0.000175	0.0048	
TW4	2021-Sep-23	<0.0050	<0.00020	0.00368	<0.0050	<0.0500	<0.000010	7.56	0.00103	0.00204	<0.010	0.00029	4.62	<0.00020	<0.000010	2.39	<0.00050	5.64	0.023	0.000147	0.0048	
TW4	2022-Sep-15	<0.0050	<0.00020	0.0034	<0.0050	<0.0500	<0.000010	8.06	0.00108	0.00138	<0.010	<0.00020	4.9	<0.00020	<0.000010	2.39	<0.00050	6.11	0.0271	0.00017	<0.0040	
TW4	2023-Sep-14	<0.0050	<0.00020	0.00349	<0.0050	<0.0500	<0.000010	8.75	0.00097	0.00374	<0.010	<0.00020	5.22	<0.00020	<0.000010	2.56	<0.00050	6.55	0.0291	0.000185	0.0169	
TW4	2024-Sep-12	<0.0050	<0.00020	0.00323	<0.0050	<0.0500	<0.000010	8.64	0.00098	0.00143	<0.010	0.00024	5.13	<0.00020	<0.000010	2.46	<0.00050	6.21	0.0285	0.000193	0.0041	
TW6	2019-Aug-12	0.0054	<0.00020	0.0033	<0.0050	0.0143	<0.000010	11.6	0.00059	0.00096	0.012	<0.00020	5.4	0.00044	<0.000040	2.63	0.00053	6.73	0.0446	0.000516	<0.0040	
TW6	2023-Sep-14	0.0066	<0.00020	0.00324	<0.0050	<0.0500	<0.000010	13	0.00063	0.00111	<0.010	<0.00020	6.15	<0.00020	<0.000010	3.03	<0.00050	7.55	0.0467	0.000478	<0.0040	
TW6	2024-Sep-12	<0.0050	<0.00020	0.00286	<0.0050	<0.0500	<0.000010	12.7	<0.00050	0.00073	<0.010	<0.00020	6.23	<0.00020	<0.000010	3.09	<0.00050	7.52	0.0457	0.000485	<0.0040	

Notes:

GCDWQ represents the Guidelines for Canadian Drinking Water Quality, Summary Table (Health Canada, September 2024). Guidelines are health based and listed as maximum acceptable concentrations (MAC), or based on aesthetic considerations and listed as aesthetic objectives (AO).

Purple highlight - Value exceeds the Aesthetic Objectives (AO).

Yellow highlight - Value exceeds the Maximum Acceptable Concentration (MAC).

mg/L means milligrams per litre; **-** means no data available.