

SWCR Wetland 06 - Fall 2023 Monitoring Data Results

Project 102601-01  
Report To Ausenco Sustainability Inc.  
Bureau Veritas Job No. 095881

ROUTINE WATER & DISS. REGULATED METALS (WATER)

Bureau Veritas ID	CCG202			CCG203			CCG204			CCG205			CCG206			CCG207			
	Sampling Date	2023-10-19 10:25		2023-10-18 14:20			2023-10-18 13:55			2023-10-19 10:50			2023-10-18 13:24			2023-10-18 12:55			
COC Number	10F1		10F1			10F1			10F1			10F1			10F1				
Calculated Parameters	UNITS	WQ-Q2	RDL	QC Batch	WQ-4A	RDL	QC Batch	WQ-4B	RDL	QC Batch	WQ-4C	RDL	QC Batch	WQ-4D	RDL	QC Batch	WQ-5B	RDL	QC Batch
<b>Calculated Parameters</b>																			
Anion Sum	mg/L	11	N/A	B161844	9.0	N/A	B161844	9.1	N/A	B161844	9.9	N/A	B161844	8.7	N/A	B161844	12	N/A	B161844
Cation Sum	mg/L	13	N/A	B161844	9.1	N/A	B161844	10	N/A	B161844	11	N/A	B161844	9.5	N/A	B161844	14	N/A	B161844
Hardness (CaCO3)	mg/L	500	0.50	B161793	360	0.50	B161793	400	0.50	B161793	430	0.50	B161793	370	0.50	B161793	620	0.50	B161793
Ion Balance (% Difference)	%	8.7	N/A	B161242	0.78	N/A	B161242	5.5	N/A	B161242	5.2	N/A	B161242	4.2	N/A	B161242	10	N/A	B161242
Nitrate (NO3)	mg/L	<0.044	0.044	B161800	2.4	0.044	B161800	2.3	0.044	B161800	<0.044	0.044	B161800	<0.044	0.044	B161800	<0.044	0.044	B161800
Nitrite (NO2)	mg/L	<0.033	0.033	B161800	<0.033	0.033	B161800	<0.033	0.033	B161800	<0.033	0.033	B161800	<0.033	0.033	B161800	<0.033	0.033	B161800
Calculated Total Dissolved Solids	mg/L	590	10	B161845	560	10	B161845	480	10	B161845	520	10	B161845	460	10	B161845	640	10	B161845
<b>Elements</b>																			
Dissolved Cadmium (Cd)	mg/L	<0.00020	0.00020	B161789	<0.00020	0.00020	B161789	<0.00020	0.00020	B161789	<0.00020	0.00020	B161789	<0.00020	0.00020	B161789	<0.00020	0.00020	B161789
<b>Misc. Inorganics</b>																			
Conductivity	uS/cm	970	2.0	B166331	900	2.0	B166331	850	2.0	B166331	880	2.0	B166331	790	2.0	B166331	1000	2.0	B166331
pH	pH	8.25	N/A	B166311	6.54	N/A	B166311	8.21	N/A	B166311	8.34	N/A	B166311	8.47	N/A	B166311	8.26	N/A	B166311
<b>Al</b>																			
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B166328	<1.0	1.0	B166328	<1.0	1.0	B166328	<1.0	1.0	B166328	<1.0	1.0	B166328	<1.0	1.0	B166328
Alkalinity (Total as CaCO3)	mg/L	370	1.0	B166328	81	1.0	B166328	340	1.0	B166328	390	1.0	B166328	360	1.0	B166328	420	1.0	B166328
Bicarbonate (HCO3)	mg/L	450	1.0	B166328	98	1.0	B166328	410	1.0	B166328	450	1.0	B166328	390	1.0	B166328	510	1.0	B166328
Carbonate (CO3)	mg/L	<1.0	1.0	B166328	<1.0	1.0	B166328	<1.0	1.0	B166328	<1.0	1.0	B166328	<1.0	1.0	B166328	<1.0	1.0	B166328
Hydroxide (OH)	mg/L	<1.0	1.0	B166328	<1.0	1.0	B166328	<1.0	1.0	B166328	<1.0	1.0	B166328	<1.0	1.0	B166328	<1.0	1.0	B166328
Chloride (Cl)	mg/L	14	1.0	B167251	39	1.0	B167251	39	1.0	B167251	34	1.0	B167251	11	1.0	B167251	11	1.0	B167251
Sulphate (SO4)	mg/L	130	5.0	B167251	340	5.0	B167251	55	1.0	B167251	82	1.0	B167251	60	1.0	B167251	140	5.0	B167251
<b>Elements</b>																			
Dissolved Aluminum (Al)	mg/L	<0.030	0.030	B163053	<0.030	0.030	B163053	<0.030	0.030	B163053	<0.030	0.030	B163053	<0.030	0.030	B163053	<0.030	0.030	B163053
Dissolved Antimony (Sb)	mg/L	<0.0060	0.0060	B163053	<0.0060	0.0060	B163053	<0.0060	0.0060	B163053	<0.0060	0.0060	B163053	<0.0060	0.0060	B163053	<0.0060	0.0060	B163053
Dissolved Arsenic (As)	mg/L	0.0069	0.0020	B163053	<0.0020	0.0020	B163053	0.00023	0.0020	B163053	0.00043	0.0020	B163053	0.00024	0.0020	B163053	0.00092	0.0020	B163053
Dissolved Barium (Ba)	mg/L	0.099	0.010	B167951	0.076	0.010	B167951	0.076	0.010	B167951	0.11	0.010	B167951	0.078	0.010	B167951	0.20	0.010	B167951
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053
Dissolved Boron (B)	mg/L	0.047	0.020	B167951	0.045	0.020	B167951	0.090	0.020	B167951	<0.10	0.10	B167951	0.041	0.020	B167951	<0.10	0.10	B167951
Dissolved Calcium (Ca)	mg/L	81	0.30	B167951	74	0.30	B167951	81	0.30	B167951	74	0.30	B167951	81	0.30	B167951	110	0.30	B167951
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053
Dissolved Cobalt (Co)	mg/L	<0.0030	0.0030	B163053	<0.0030	0.0030	B163053	<0.0030	0.0030	B163053	<0.0030	0.0030	B163053	<0.0030	0.0030	B163053	<0.0030	0.0030	B163053
Dissolved Copper (Cu)	mg/L	<0.010	0.010	B163053	<0.010	0.010	B163053	0.0014	0.010	B163053	0.0013	0.010	B163053	<0.010	0.010	B163053	<0.010	0.010	B163053
Dissolved Iron (Fe)	mg/L	<0.060	0.060	B167951	<0.060	0.060	B167951	<0.060	0.060	B167951	<0.060	0.060	B167951	<0.060	0.060	B167951	<0.060	0.060	B167951
Dissolved Lead (Pb)	mg/L	<0.0020	0.0020	B163053	<0.0020	0.0020	B163053	<0.0020	0.0020	B163053	<0.0020	0.0020	B163053	<0.0020	0.0020	B163053	<0.0020	0.0020	B163053
Dissolved Lithium (Li)	mg/L	0.025	0.020	B167951	0.020	0.020	B167951	0.022	0.020	B167951	<0.10	0.10	B167951	0.026	0.020	B167951	<0.10	0.10	B167951
Dissolved Magnesium (Mg)	mg/L	71	0.20	B167951	42	0.20	B167951	48	0.20	B167951	46	0.20	B167951	46	0.20	B167951	67	0.20	B167951
Dissolved Manganese (Mn)	mg/L	<0.0040	0.0040	B163053	<0.0060	0.0060	B163053	<0.0040	0.0040	B163053	<0.0020	0.0020	B163053	0.0045	0.0040	B163053	0.0045	0.0040	B163053
Dissolved Molybdenum (Mo)	mg/L	0.0017	0.0020	B163053	0.0025	0.0020	B163053	0.0014	0.0020	B163053	0.0015	0.0020	B163053	0.0014	0.0020	B163053	0.0018	0.0020	B163053
Dissolved Nickel (Ni)	mg/L	0.00068	0.00050	B163053	<0.00050	0.00050	B163053	<0.00050	0.00050	B163053	0.00050	0.00050	B163053	<0.00050	0.00050	B163053	0.00016	0.00050	B163053
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B167951	<0.10	0.10	B167951	<0.10	0.10	B167951	<0.10	0.10	B167951	<0.10	0.10	B167951	<0.50	0.50	B167951
Dissolved Potassium (K)	mg/L	6.0	0.30	B167951	4.0	0.30	B167951	4.7	0.30	B167951	5.3	0.30	B167951	6.3	0.30	B167951	6.3	0.30	B167951
Dissolved Selenium (Se)	mg/L	0.0061	0.0020	B163053	0.0022	0.0020	B163053	0.0020	0.0020	B163053	0.0068	0.0020	B163053	0.00057	0.0020	B163053	0.00036	0.0020	B163053
Dissolved Silicon (Si)	mg/L	4.9	0.50	B167951	4.1	0.50	B167951	3.4	0.50	B167951	5.3	0.50	B167951	5.3	0.50	B167951	3.9	0.50	B167951
Dissolved Silver (Ag)	mg/L	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053
Dissolved Sodium (Na)	mg/L	95	0.50	B167951	42	0.50	B167951	45	0.50	B167951	47	0.50	B167951	47	0.50	B167951	40	0.50	B167951
Dissolved Strontium (Sr)	mg/L	0.80	0.020	B167951	0.73	0.020	B167951	0.83	0.020	B167951	0.80	0.020	B167951	0.71	0.020	B167951	0.73	0.020	B167951
Dissolved Sulphur (S)	mg/L	36	0.20	B167951	17	0.20	B167951	18	0.20	B167951	27	0.20	B167951	20	0.20	B167951	44	0.20	B167951
Dissolved Thallium (Tl)	mg/L	<0.0020	0.0020	B163053	<0.0020	0.0020	B163053	<0.0020	0.0020	B163053	<0.0020	0.0020	B163053	<0.0020	0.0020	B163053	<0.0020	0.0020	B163053
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053
Dissolved Uranium (U)	mg/L	0.0042	0.0010	B163053	0.0043	0.0010	B163053	0.0035	0.0010	B163053	0.0039	0.0010	B163053	0.0030	0.0010	B163053	0.0063	0.0010	B163053
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053	<0.0010	0.0010	B163053
Dissolved Zinc (Zn)	mg/L	<0.030	0.030	B163053	<0.030	0.030	B163053	0.0036	0.030	B163053	0.0033	0.030	B163053	0.043	0.030	B163053			

**AT1 METALS & SALINITY IN SOIL (SOIL)**

Bureau Veritas ID	CCG208			CCG209			CCG210			CCG211			CCG212			CCG213			CCG214			CCG215		
Sampling Date	2023-10-19 10:25			2023-10-18 14:20			2023-10-18 13:55			2023-10-19 10:50			2023-10-18 13:24			2023-10-19 10:18			2023-10-19 10:07			2023-10-19 11:20		
COC Number	1094			1094			1094			1094			1094			1094			1094			1094		
Calculated Parameters	UNITS	WQ-02 SOIL	RDL	WQ-4A SOIL	RDL	WQ-4B SOIL	RDL	QC Batch	WQ-4C SOIL	RDL	QC Batch	WQ-4D SOIL	RDL	QC Batch	WQ-06	RDL	WQ-07	RDL	QC Batch	WQ-03	RDL	QC Batch		
Anion Sum	meq/L	9.0	N/A	46	N/A	24	N/A	B176849	4.2	N/A	B176849	23	N/A	B176849	95	N/A	70	N/A	B176849	55	N/A	B176849		
Cation Sum	meq/L	19	N/A	52	N/A	17	N/A	B176849	10	N/A	B176849	120	N/A	B176849	120	N/A	100	N/A	B176849	63	N/A	B176849		
Cation/EC Ratio	N/A	14	0.10	15	0.10	12	0.10	B176836	13	0.10	B176836	13	0.10	B176836	18	0.10	14	0.10	B176836	16	0.10	B176836		
Calculated Calcium (Ca)	mg/Kg	120	1.2	660	1.7	99	0.89	B176870	35	0.81	B176870	150	1.4	B176870	440	1.0	420	1.1	B176870	470	1.2	B176870		
Calculated Magnesium (Mg)	mg/Kg	75	0.80	240	1.1	36	0.60	B176870	22	0.54	B176870	82	0.94	B176870	830	0.88	500	0.75	B176870	280	0.82	B176870		
Calculated Sodium (Na)	mg/Kg	59	2.0	110	2.8	47	1.5	B176870	40	1.4	B176870	110	2.4	B176870	270	2.2	310	1.9	B176870	100	2.1	B176870		
Calculated Potassium (K)	mg/Kg	11	1.0	25	1.5	9.5	0.77	B176870	7.0	0.70	B176870	24	1.3	B176870	38	1.1	29	0.98	B176870	35	1.1	B176870		
Calculated Boron (B)	mg/Kg	<0.080	0.080	<0.11	0.11	<0.060	0.060	B175913	0.12	0.054	B175913	0.24	0.095	B175913	0.15	0.088	<0.076	0.076	B175913	0.20	0.082	B175913		
Calculated Chloride (Cl)	mg/Kg	14	8.0	150	11	150	6.0	B176870	14	5.4	B176870	85	9.4	B176870	79	8.8	110	7.5	B176870	56	8.2	B176870		
Calculated Sulphate (SO4)	mg/Kg	330	4.0	2300	5.6	490	3.0	B176870	91	2.7	B176870	920	4.7	B176870	3900	4.4	2400	3.8	B176870	2100	4.1	B176870		
<b>Elements</b>																								
Hex. Chromium (Cr 6+)	mg/Kg	<0.080	0.080	<0.21 (1)	0.21	<0.080	0.080	B185721	<0.080	0.080	B185721	<0.17 (1)	0.17	B187162	<0.080	0.080	<0.080	0.080	B185721	<0.080	0.080	B187162		
<b>Soluble Parameters</b>																								
Soluble Boron (B)	mg/L	<0.10	0.10	<0.10	0.10	<0.10	0.10	B191443	0.22	0.10	B186342	0.25	0.10	B186342	0.18	0.10	<0.10	0.10	B191443	0.24	0.10	B186342		
Soluble Chloride (Cl)	mg/L	17	10	130	10	250	10	B186244	26	10	B186244	90	10	B186244	90	10	150	10	B191531	69	10	B186244		
Soluble Conductivity	dS/m	1.4	0.020	0.4	0.020	1.4	0.020	B186247	1.5	0.020	B186247	6.6	0.020	B191618	3.9	0.020	0.020	0.020	B191618	3.9	0.020	B186247		
Soluble (CaCl2) pH	pH	7.72	N/A	7.40	N/A	7.54	N/A	B185383	7.81	N/A	B185380	7.57	N/A	B185380	7.77	N/A	7.69	N/A	B185383	7.55	N/A	B185380		
Sodium Adsorption Ratio	N/A	1.2	0.10	0.87	0.10	1.3	0.10	B176859	1.8	0.10	B176859	1.8	0.10	B176859	1.9	0.10	2.8	0.10	B176859	0.99	0.10	B176859		
Soluble Calcium (Ca)	mg/L	150	1.5	990	1.5	170	1.5	B191443	64	1.5	B186342	150	1.5	B186342	500	1.5	670	1.5	B191443	580	1.5	B186342		
Soluble Magnesium (Mg)	mg/L	93	1.0	210	1.0	60	1.0	B191443	40	1.0	B186342	87	1.0	B186342	940	1.0	560	1.0	B191443	340	1.0	B186342		
Soluble Sodium (Na)	mg/L	73	2.5	97	2.5	78	2.5	B191443	75	2.5	B186342	110	2.5	B186342	310	2.5	410	2.5	B191443	120	2.5	B186342		
Soluble Potassium (K)	mg/L	13	1.3	22	1.3	16	1.3	B191443	13	1.3	B186342	26	1.3	B186342	32	1.3	39	1.3	B191443	43	1.3	B186342		
Saturation %	%	80	N/A	N/A	110	N/A	N/A	B185382	54	N/A	B185380	94	N/A	B185380	88	N/A	75	N/A	B185382	82	N/A	B185380		
Soluble Sulphate (SO4)	mg/L	410	5.0	2000	5.0	830	5.0	B191443	170	5.0	B186342	870	5.0	B186342	4400	5.0	3100	5.0	B191443	2600	5.0	B186342		
Theoretical Gypsum Requirement	tonnes/ha	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	B176880	<0.20	<0.20	B176880	<0.20	<0.20	B176880	<0.20	<0.20	<0.20	<0.20	B176880	<0.20	<0.20	B176880		
<b>Elements</b>																								
Total Antimony (Sb)	mg/Kg	<0.50	0.50	<0.50	0.50	<0.50	0.50	B188501	<0.50	0.50	B186205	<0.50	0.50	B186205	0.51	0.50	0.61	0.50	B188501	<0.50	0.50	B186205		
Total Arsenic (As)	mg/Kg	4.4	1.0	1.9	1.0	5.1	1.0	B188501	4.0	1.0	B186205	4.4	1.0	B186205	6.1	1.0	6.5	1.0	B188501	4.4	1.0	B186205		
Total Barium (Ba)	mg/Kg	240	1.0	110	1.0	170	1.0	B188501	220	1.0	B186205	220	1.0	B186205	220	1.0	270	1.0	B188501	250	1.0	B186205		
Total Beryllium (Be)	mg/Kg	0.56	0.40	<0.40	0.40	0.57	0.40	B188501	0.43	0.40	B186205	0.41	0.40	B186205	0.60	0.40	0.68	0.40	B188501	0.54	0.40	B186205		
Total Cadmium (Cd)	mg/Kg	0.49	0.050	0.65	0.050	0.34	0.050	B188501	0.41	0.050	B186205	0.36	0.050	B186205	0.45	0.050	0.49	0.050	B188501	0.47	0.050	B186205		
Total Chromium (Cr)	mg/Kg	14	1.0	10	1.0	15	1.0	B188501	11	1.0	B186205	12	1.0	B186205	14	1.0	15	1.0	B188501	14	1.0	B186205		
Total Cobalt (Co)	mg/Kg	6.2	0.50	3.1	0.50	8.3	0.50	B188501	6.7	0.50	B186205	5.5	0.50	B186205	6.9	0.50	6.9	0.50	B188501	6.0	0.50	B186205		
Total Copper (Cu)	mg/Kg	17	1.0	15	1.0	15	1.0	B188501	10	1.0	B186205	12	1.0	B186205	18	1.0	19	1.0	B188501	16	1.0	B186205		
Total Lead (Pb)	mg/Kg	10	0.50	8.3	0.50	9.8	0.50	B188501	6.9	0.50	B186205	7.1	0.50	B186205	11	0.50	11	0.50	B188501	10	0.50	B186205		
Total Mercury (Hg)	mg/Kg	<0.050	0.050	<0.050	0.050	<0.050	0.050	B188501	<0.050	0.050	B186205	<0.050	0.050	B186205	<0.050	0.050	<0.050	0.050	B188501	<0.050	0.050	B186205		
Total Molybdenum (Mo)	mg/Kg	0.69	0.40	1.8	0.40	0.53	0.40	B188501	0.55	0.40	B186205	0.57	0.40	B186205	1.0	0.40	1.6	0.40	B188501	0.70	0.40	B186205		
Total Nickel (Ni)	mg/Kg	20	1.0	12	1.0	18	1.0	B188501	14	1.0	B186205	14	1.0	B186205	21	1.0	22	1.0	B188501	20	1.0	B186205		
Total Selenium (Se)	mg/Kg	2.0	0.50	5.9	0.50	0.66	0.50	B188501	1.8	0.50	B186205	2.7	0.50	B186205	1.4	0.50	1.3	0.50	B188501	1.4	0.50	B186205		
Total Silver (Ag)	mg/Kg	<0.20	0.20	<0.20	0.20	<0.20	0.20	B188501	<0.20	0.20	B186205	<0.20	0.20	B186205	<0.20	0.20	<0.20	0.20	B188501	<0.20	0.20	B186205		
Total Thallium (Tl)	mg/Kg	0.21	0.10	0.10	0.10	0.17	0.10	B188501	0.14	0.10	B186205	0.16	0.10	B186205	0.21	0.10	0.23	0.10	B188501	0.19	0.10	B186205		
Total Tin (Sn)	mg/Kg	<1.0	1.0	1.1	1.0	<1.0	1.0	B188501	<1.0	1.0	B186205	<1.0	1.0	B186205	<1.0	1.0	<1.0	1.0	B188501	<1.0	1.0	B186205		
Total Uranium (U)	mg/Kg	1.4	0.20	3.4	0.20	0.57	0.20	B188501	0.80	0.20	B186205	0.79	0.20	B186205	2.2	0.20	2.3	0.20	B188501	1.4	0.20	B186205		
Total Vanadium (V)	mg/Kg	24	1.0	13	1.0	23	1.0	B188501	18	1.0	B186205	18	1.0	B186205	25	1.0	27	1.0	B188501	23	1.0	B186205		
Total Zinc (Zn)	mg/Kg	87	10	47	10	85	10	B188501	91	10	B186205	1500	50	B186205	78	10	81	10	B188501	74	10	B186205		

RDL = Reportable Detection Limit

N/A = Not Applicable

(1) Detection limits raised due to matrix interference. Detection limits raised due to high moisture content, samples contain >= 50% moisture.

(2) Detection limits raised due to high moisture content, samples contain >= 50% moisture.

(3) Detection limits raised due to high moisture content, samples contain >= 50% moisture. Detection limits raised due to matrix interference.

Results relate only to the items tested.



**RESULTS OF CHEMICAL ANALYSES OF WATER**

Bureau Veritas ID		CCG202		CCG203		CCG204		CCG205		CCG206		CCG207				
Sampling Date		2023-10-19 10:25		2023-10-18 14:20		2023-10-18 13:55		2023-10-19 10:50		2023-10-18 13:24		2023-10-18 12:55				
COC Number		10F1		10F1		10F1		10F1		10F1		10F1				
	UNITS	WQ-02	QC Batch	WQ-4A	RDL	QC Batch	WQ-4B	RDL	QC Batch	WQ-4C	QC Batch	WQ-4D	QC Batch	WQ-5B	RDL	QC Batch
<b>Calculated Parameters</b>																
Nitrate plus Nitrite (N)	mg/L	<0.014	B167733	0.54	0.014	B167486	0.51	0.014	B167486	<0.014	B167733	<0.014	B167486	<0.014	0.014	B167486
Total Total Kjeldahl Nitrogen (Calc)	mg/L	0.290	B161152	0.613	0.020	B161152	0.121	0.020	B161152	0.227	B161152	0.336	B161851	0.524	0.020	B161851
<b>Demand Parameters</b>																
Biochemical Oxygen Demand	mg/L	<2.0	B160996	<3.0	2.0	B160996	<2.0	2.0	B160996	<2.0	B160996	<2.0	B160996	<2.5	2.0	B160996
Chemical Oxygen Demand	mg/L	26	B165855	55	10	B165855	38	10	B165855	19	B165855	25	B165855	40	10	B165855
<b>Misc. Inorganics</b>																
Dissolved Oxygen (O2)	mg/L	11	B162488	4.6	0.10	B162488	16	0.10	B162488	10	B162488	13	B162488	>5 (1)	0.10	B162488
Total Dissolved Solids	mg/L	530	B166885	420	10	B166885	460	10	B166885	500	B166885	440	B166885	590	10	B166885
Total Suspended Solids	mg/L	35	B165224	210	1.0	B165224	<0.98	0.98	B165224	13	B165224	110	B165224	5.7	1.0	B165224
<b>Nutrients</b>																
Total Ammonia (N)	mg/L	<0.015	B163091	<0.015	0.015	B163091	<0.015	0.015	B163091	<0.015	B163091	<0.015	B163091	<0.015	0.015	B163091
Orthophosphate (P)	mg/L	<0.0030	B166593	<0.0030	0.0030	B166593	<0.0030	0.0030	B166593	<0.0030	B166593	<0.0030	B166593	0.0035	0.0030	B166593
Dissolved Phosphorus (P)	mg/L	<0.0030	B165681	<0.0030	0.0030	B164442	<0.0030	0.0030	B164442	<0.0030	B164442	<0.0030	B165681	<0.0030 (2)	0.0030	B164442
Total Phosphorus (P)	mg/L	0.0088	B165729	0.11	0.0030	B165729	<0.0030	0.0030	B165729	<0.0030	B165729	0.008	B165729	0.025	0.0030	B165186
Total Nitrogen (N)	mg/L	0.290	B168711	1.15	0.020	B168711	0.632	0.020	B168711	0.227	B168711	0.336	B168711	0.524	0.020	B168711
Nitrite (N)	mg/L	<0.010	B169779	<0.010	0.010	B169753	<0.010	0.010	B169786	<0.010	B169786	<0.010	B169786	<0.010	0.010	B169786
Nitrate (N)	mg/L	<0.010	B169779	0.54	0.010	B169753	0.51	0.010	B169786	<0.010	B169786	<0.010	B169786	<0.010	0.010	B169786
<b>Physical Properties</b>																
Turbidity	NTU	19	B163746	70	0.10	B163745	1.5	0.10	B163745	10	B163746	39	B163745	3.6	0.10	B163745

Flow Data For Oct 19, 2023

Site	Channel Width (m)	Depth*(m)			Velocity* (m/sec)			Discharge (m3/sec)	Comments
		RMID	MID	LMID	RMID	MID	LMID		
FL 1	-	-	-	-	-	-	-	-	Channel was dry and contained some stagnant water with no flow at the time of the survey
FL 2	-	-	-	-	-	-	-	-	Channel was dry at the time of the survey
FL 3	-	-	-	-	-	-	-	-	Channel was dry at the time of the survey
FL 4	-	-	-	-	-	-	-	-	Channel was dry at the time of the survey

\* RMID= right mid channel, MID= mid channel, LMID= left mid channel  
 (-)= null result

In-situ Water Quality Parameters - Oct 18-19, 2022

Site	Temp	Turbidity	Dissolved Oxygen (mg/l)	pH	Conductivity (µS/cm)	Depth (m)	Date Sampled	Status
WQ1	-	-	-	-	-	-	2023-10-19	Dry
WQ2	7.79	0.47	3.50	8.42	2299.00	0.05	2023-10-19	Water levels extremely low, stagnant water, no flow.
WQ3	-	-	-	-	-	-	2023-10-19	Dry, soil taken
WQ4a	9.23	63.81	0.01	7.99	688.03	0.05	2023-10-18	Water levels extremely low
WQ4b	11.49	1.77	10.87	8.89	796.66	0.05	2023-10-18	High algae growth
WQ4c	5.55	32.10	10.14	8.89	827.19	-	2023-10-19	Water levels extremely low
WQ4d	7.95	6.93	10.54	9.31	750.02	0.20	2023-10-18	Water levels extremely low
WQ5a	-	-	-	-	-	-	2023-10-18	Dry, soil taken
WQ5b	10.65	72.22	11.22	8.67	1204.80	0.10	2023-10-18	Water levels extremely low
WQ5c*	-	-	-	-	-	-	2023-10-19	Permanently dry
WQ06	-	-	-	-	-	-	2023-10-19	Dry, soil taken
WQ07	-	-	-	-	-	-	2023-10-19	Dry, soil taken

(-)= null result due to site being dry

(\*) = site has been encompassed by the construction area and is permanently dry