
Project: City of Wasilla WWTP Pilot Study Field Crew: Rose Hart John Marshall

File: 204700415 Date: May 19 and 20, 2020

Subsurface Surface Vegetation Plot

Reference: May Water Sampling Event

1.1 BACKGROUND

May sampling events took place on the 19th and 20th and were for surface water. All surface sites were sampled except for SW17 due to time constraints. The Shaw property was also sampled. The weather was mild and all surface ice had melted.

The effluent discharge remained shut off during May.

1.2 SAMPLING EVENT HIGHLIGHTS

SURFACE

Sample sites SW1-SW7, Berm East, Berm West, and Effluent were sampled on May 19. Sample sites SW8-SW13, SW17, SW18 and Shaw were sampled on May 20. A peristaltic pump and dipping were used to collect the samples. Intrinsic data was collected at all sites sampled.

BERM

The berm had recently been rebuilt. There were a few locations that it appears the berm is beginning to settle, however not at an alarming rate. The status of the berm will be monitored as the ground below the newly placed gravel begins to thaw.

1.3 SAMPLE RESULT

The attached tables summarize detected analytes. All other were below detectable limits. Complete results can be found in the SGS reports.

Site ID	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10	SW11	SW12
Date Collected	5/19/2020	5/19/2020	5/19/2020	5/19/2020	5/19/2020	5/19/2020	5/19/2020	5/20/2020	5/20/2020	5/20/2020	5/20/2020	5/20/2020
Time	11:00	11:35	12:06	14:57	15:10	14:36	14:15	9:50	10:11	10:32	11:15	11:34
Sample Type	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Water Temperature (°C)	3.66	5.05	5.74	11.11	12.28	8.02	9.07	4.9	5.42	7.43	7.76	1/3/1900
Conductivity	602	871	1097	587	358	848	651	519	668	579	373	2/10/1901
pH	5.32	6.04	6.41	7.33	7.38	6.74	6.37	6.02	6.2	7.18	6.76	6.53
DO	1.27	1.61	5.06	8.21	7.98	5.51	9.91	2.19	10.62	2.46	4.43	4.32
TSS												
TKN	3.19	16.7	33	ND(0.500)	ND(0.500)	10.1	1.66	ND(0.500)	3.15	1.21	ND(0.500)	1.64
Ammonia	2.15	12.8	24.5	0.111	ND(0.0500)	10.4	1.21	0.318	3.36	0.831	ND(0.0500)	ND(0.0500)
Total P	0.379	0.631	5.21	ND(0.0200)	ND(0.0200)	1.21	ND(0.0200)	0.113	0.0554	ND(0.0200)	ND(0.0200)	0.324
BOD	13.7	13.7	26.3	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)	2.74	ND(2.00)	ND(2.00)	ND(2.00)	ND(2.00)
FC	ND(1)	16	6.7	ND(2)	210	9.1	ND(1)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)
E. Coli	ND(1)	ND(20)	ND(20)	ND(1)	260	2	ND(1)	10	ND(1)	ND(1)	ND(1)	ND(1)
TC	276	80	1600	866	17320	276	461	276	410	1203	34	261

Site ID	SW13	SW15	SW16	SW17	Dup	SW18	Shaw	Berm East	Berm West	Effluent
Date Collected	5/20/2020	5/20/2020	5/20/2020	5/20/2020	5/20/2020	5/20/2020	5/20/2020	5/20/2020	5/20/2020	5/20/2020
Time	11:50	14:01	14:16	14:47	14:49	15:02	12:42	12:40	12:37	13:00
Sample Type	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Water Temperature (°C)	19:55	10	8.12	7.6		8.21	3.63	4.07	6.77	
Conductivity	0:00	329	479	530		627	316	1006	871	
pH	6.43	6.77	7.31	6.76		6.59	6.32	6.27		
DO	3.63	9.66	2.71	10.77		10.03	4.25	1.45	7.7	
Nitrate	ND(0.100)	ND(0.100)	ND(0.100)	1.02	1.02	1.73	ND(0.100)	ND(0.100)	ND(0.100)	0.366
Nitrite	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	ND(0.100)	0.518
Total Nitrate/Nitrite	ND(0.100)	ND(0.100)	ND(0.100)	1.02	1.04	1.78	ND(0.100)	ND(0.100)	ND(0.100)	0.884
TSS										
TKN	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	ND(0.500)	1.08			36.8
Ammonia	0.125	ND(0.0500)	ND(0.0500)	ND(0.0500)	0.115	0.562	0.189	16	3.5	33.9
Total P	0.0715	ND(0.0200)	ND(0.0200)	0.0556	0.0904	1/0/1900	1/0/1900			1/5/1900
BOD	2.42	ND(2.00)	2.71	ND(2.00)	ND(2.00)	10:33	ND(2.00)			0:00
FC	ND(2)	ND(2)	ND(2)	ND(2)	5	5	15			120
E. Coli	ND(1)	ND(1)	ND(1)	1	ND(1)	3	1			80
TC	1120	579	1120	435	179	126	83			2880

May Photo Log



Photo 1:
Looking South Down Berm



Photo 2:
SW1



Photo 3:
SW3



Photo 4:
SW9



Photo 5:
SW10



Photo 6:
SW17