

**Table 7-B: Warm Creek 1
Warm Season Monitoring Results**

DATE	Flow Rate (cfs)	Air Temp °C	Water Temp °C	pH	Dissolved oxygen	Electrical conductivity	<i>E. coli</i>	Total coliform	<i>E. coli</i> geometric mean
Objective	-	-	varies	6.5-8.5	> 5 mg/L	462 (uS/cm)	235 mpn	10000 mpn	126 mpn
7/17/08	0.97	30.6	26.3	8.8		1025	2	6867	
7/21/08	1.01	39.4	27.0	8.8		899	21.3	4611	
7/30/08	0.64	28.7	23.3	8.6	8.3	1015	76.7	>2419.6	
8/7/08	0.50	30.5	24.3	8.6	8.2	1091	31.3	>2419.6	17.88
8/11/08	0.76	27.6	24.1	8.6	8.3	1043	103.9	>2419.6	25.43
8/22/08	0.46	25.3	25.0	8.7	8.1	1148	42	>2419.6	56.89
8/26/08	0.60	34.6	26.9	8.8	7.9	1168	78.9	>2419.6	60.74
9/4/08	0.00	40.4	33.0	9.1	6.9	1190	12.1	>2419.6	41.98
9/10/08	0.22	28.8	24.9	9.0	8.9	1190	18.7	>2419.6	37.87
9/14/08	0.51	37.7	30.0	8.9	8.2	1121	28.5	>2419.6	29.24
9/25/08	0.31	32.0	23.0	8.5	8.8	1018	15.5	>2419.6	23.95
10/3/08	0.07	30.7	27.2	9.0	7.1	1184	28.5	>2419.6	19.54
10/9/08	0.61	30.0	20.7	8.5	9.3	1128	9.8	15531	18.73
10/16/08	0.53	29.0	20.0	8.5	9.2	1124	4.1	17329	11.54
10/25/08	0.18	33.4	25.6	8.8	7.4	1154	5.2	>2419.6	9.84
5/8/09	2.5	26.9	21.6	8.4	8.5	804	47.3	1986.3	
5/14/09	3.6	30.4	23.4	8.6	8.7	887	24.3	10462	
5/21/09	3.3	24.6	21.7	8.5	9.5	926	613.1	19863	-
5/27/09	4.4	15.4	19.7	8.3	8.5	901	73.3	14136	84.78
6/5/09	4.9	18.6	20.3	8.5	9.4	891	38.4	9208	72.4
6/9/09	4.4	15.7	20.2	8.3	8.9	862	31.3	12033	66.6
6/18/09	3.8	29.4	25.0	8.6	8.7	892	14.8	5794	60.3
6/25/09	1.4	28.2	23.2	8.5	8.4	977	35.9	8664	34.2
7/1/09	0.9	27.8	23.6	8.4	8.8	1080	52.1	7701	31.9
7/9/09	0.4	29.0	22.9	8.4	8.4	1161	46.4	12033	33.7
7/14/09	3.3	32.1	23.2	8.2	7.0	824	167	24196	46.4
7/22/09	0.1	32.3	23.3	8.3	8.6	1368	41	>24196	56.9
7/29/09	0.1	30.4	26.7	8.6	7.8	1237	88.2	19863	68.1
8/6/09	0.1	26.3	23.3	8.4	7.2	1236	104.6	19863	78.2
8/12/09	0.1	27.6	24.4	8.5	8.5	1257	91.1	77010	89.5
8/18/09	0.1	31.0	26.0	8.7	7.4	1265	40.4	19863	67.4
8/27/09	0.1	38.0	27.1	8.6	6.6	1265	41	46110	67.4
9/2/09	0.1	35.9	27.2	8.5	8.0	1280	613.1	48840	99.3
9/10/09	0.1	31.8	24.9	8.5	8.0	1293	193.5	15531	112.4
9/15/09	30.4	23.3	23.5	7.6	7.3	481	547.5	155310	160.8
9/23/09	0	32.1							-
9/30/09	0	31.3							
10/6/09	0	20.0							
10/16/09	0	31.9							
10/21/09	0	23.6							
10/27/09	0	22.2							
10/30/09	0	18.4							

**Table 7-C: Warm Creek 1
Cool Season Monitoring Results**

DATE	Flow Rate (cfs)	Air Temp °C	Water Temp °C	pH	Dissolved oxygen	Electrical conductivity	<i>E. coli</i>	Total coliform	<i>E. coli</i> geomean
Objective	-	-	<25.6	6.5-8.5	> 5 mg/L	462 (uS/cm)	235 mpn	10000 mpn	126 mpn
11/1/08	0.26	26.4	22.9	8.7	8.2	1134	37.7	17329	11.76
12/5/08	2.48	14.8	15.9	8.4	9.4	908	52.1	11199	
12/9/08	2.33	17.7	15.0	8.4	9.8	869	8.6	7701	
12/19/08	8.40	13.2	13.0	8.3	10.2	684	12.1	2419.6	
1/6/09	4.20	14.0	13.0	8.3	9.8	713	10.9	3448	
1/16/09	3.50	21.9	17.1	8.4	9.4	781	3.1	2723	
1/30/09	4.20	26.6	18.2	8.7	10.0	731	19.9	6867	
2/2/09	4.10	22.5	15.6	8.6	10.2	742	22.8	1553.1	<i>11.13</i>
2/12/09	11.40	10.0	11.4	8.3	10.9	469	23.1	2909	<i>13.43</i>
2/21/09	11.8	26.0	15.5	8.3	9.7	460			
2/26/09	9.00	11.5	12.8	8.3	9.6	523	24.3	1986.3	<i>22.46</i>
3/20/09	6.40	26.5	20.8	8.6	10.5	639	16.1	3076	
11/4/09	0	31.1							
11/12/09	0	23.2							
11/18/09	0	21.1							
11/23/09	0	23.1							

Results in red exceed objectives.

Geomeans in bold italics represent results from 4 samples in 30 days.

**Table 7-D: Warm Creek 1
Warm Season Physical Observations**

Date	d.o.w.	Water Color	Water Clarity	Water Odor	Sediment Color	Sediment Comp.	Sediment Odor
7/17/08	R	CLEAR	CLEAR	NONE	BROWN	COURSE SAND, GRAVEL	NONE
7/21/08	M	CLEAR	CLEAR	NONE	GRAY	COURSE SAND	NONE
7/30/08	W	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
8/7/08	R	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
8/11/08	M	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
8/22/08	F	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
8/26/08	T	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
9/4/08	R	GREEN	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
9/10/08	W	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
9/14/08	SUN	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
9/25/08	R	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
10/3/08	F	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
10/9/08	R	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
10/16/08	R	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
10/25/08	SAT	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
5/8/09	F	CLEAR	CLEAR	MIXED	GRAY	COURSE SAND COBBLE	NONE
5/14/09	R	CLEAR	CLEAR	MIXED	GRAY	COURSE SAND COBBLE	NONE
5/21/09	R	CLEAR	CLEAR	MIXED	GRAY	COURSE SAND COBBLE	NONE
5/27/09	W	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
6/5/09	F	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
6/9/09	T	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
6/18/09	R	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
6/25/09	R	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
7/1/09	W	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
7/9/09	R	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
7/14/09	T	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
7/22/09	W	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
7/28/09	W	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
8/6/09	R	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
8/12/09	W	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
8/18/09	T	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
8/27/09	R	CLEAR	CLEAR	NONE	GRAY	COURSE SAND COBBLE	NONE
9/2/09	W	CLEAR	CLEAR	NONE	GRAY	COURSE SAND/COBBLE	NONE
9/10/09	R	CLEAR	CLEAR	NONE	GRAY	COURSE SAND/COBBLE	NONE
9/15/09	T	BROWN	TURBID	MIXED	GRAY	COURSE SAND/COBBLE	NONE
9/23/09	W	DRY					
9/30/09	W	DRY					
10/16/09	F	DRY					
10/21/09	W	DRY					
10/27/09	T	DRY					
10/30/09	F	DRY					

**Table 7-E: Warm Creek 1
Cool Season Physical Observations**

Date	d.o.w.	Water Color	Water Clarity	Water Odor	Sediment Color	Sediment Comp.	Sediment Odor
11/1/08	SAT	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
12/5/08	F	CLEAR	CLEAR	NONE	BROWN	COURSE SAND, COBBLE	MIXED
12/9/08	T	CLEAR	CLEAR	-	BROWN	COURSE SAND, COBBLE	MIXED
12/19/08	F	CLEAR	CLEAR	NONE	BROWN	COURSE SAND, COBBLE	NONE
1/6/09	T	CLEAR	CLEAR	NONE	GRAY	COURSE Sand, gravel	NONE
1/16/09	F	CLEAR	CLEAR	NONE	GRAY	MIXED	NONE
1/30/09	F	CLEAR	CLEAR	-	GRAY	COURSE SAND, COBBLE	NONE
2/2/09	M	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
2/12/09	R	CLEAR	CLEAR	NONE	BROWN	COURSE SAND,COBBLE	NONE
2/21/09	Sat	CLEAR	CLEAR	NONE	GRAY	COURSE SAND,COBBLE	NONE
2/26/09	R	CLEAR	CLEAR	NONE	GRAY	COURSE SAND,COBBLE	-
3/20/09	F	CLEAR	CLEAR	NONE	GRAY	COURSE SAND, COBBLE	NONE
11/4/09	W	DRY					
11/12/09	R	DRY					
11/18/09	W	DRY					
11/23/09	M	DRY					

**Table 7-F: Warm Creek 1
Lab Contract Results**

	12/19/ 08	1/30 /09	2/2 /09	5/14 /09	6/18 /09	7/29 /09	9/10 /09	10/16 /09	11/18 /09	Objective	Units
<i>Cations</i>											
Total Hardness	130	130	130	120	120	130	130	DRY	DRY	190	mg/L
Calcium	37	38	40	36	36	43	42			-	mg/L
Magnesium	8.4	8.1	8.3	6.8	6.6	6.7	6.6			-	mg/L
Sodium	84	97	100	110	140	190	210			30	mg/L
Potassium	4.7	5.4	5.3	5.4	6.2	7.7	8.4			-	mg/L
<i>Anions</i>											
Chloride	28	30	28	31	36	56	62			20	mg/L
Sulfate	150	170	170	200	240	350	380			60	mg/L
Nitrate as N	0.56	0.18	0.14	0.16	0.14	0.18	0.11			-	mg/L
<i>Aggregate Properties</i>											
Sp. Conductance	680	740	720	770	880	1200	1300			462	uS/cm
<i>Solids</i>											
TDS	430	510	510	520	580	830	890			300	mg/L
<i>Aggregate Organic Compounds</i>											
COD	7.5	9.8	14	21	ND	28	17			25	mg/L
<i>Nutrients</i>											
Nitrite as N	0.050	0.060	0.060	0.050	0.060	0.060	0.070			-	mg/L
Ammonia-nitrogen	ND	0.074	ND	ND	0.075	0.085	ND			0.098	mg/L
Kjeldahl-nitrogen	ND	0.22	0.21	0.30	0.70	0.074	0.20			-	mg/L
Ortho-phosphate phosphorus	0.022	0.013	0.0090	0.013	0.0040	0.0060	0.0070			-	mg/L
Total phosphorus	0.04	0.02	0.02	0.04	0.07	0.03	0.04			-	mg/L
Total inorganic nitrogen	0.6	0.3	0.2	0.2	0.3	0.2	0.2			5	mg/L
Total organic nitrogen	ND	0.1	0.2	0.3	0.6	ND	0.2			5	mg/L
Total nitrogen	0.6	0.5	0.4	0.5	0.9	0.3	0.4			-	mg/L

Results in red exceed objectives. Please refer to QAPP Table 3 for sources and descriptions of objectives.

**Table 7-F: Warm Creek 1
Lab Contract Results Continued**

	12/19/ 08	1/30 /09	2/2 /09	5/14 /09	6/18 /09	7/29 /09	9/10 /09	10/16 /09	11/18 /09	Objectiv e	Units
<i>Metals and Metalloids</i>											
Antimony	ND	ND	ND	ND	ND	ND	ND			4300	ug/L
Arsenic	18	24	22	29	35	47	52			150/340	ug/L
Beryllium	ND	ND	ND	ND	ND	ND	ND			4	ug/L
Cadmium	ND	ND	ND	ND	ND	ND	ND			Calculati on	ug/L
Copper	2.5	1.9	ND	ND	ND	3.0	3.5			Calculati on	ug/L
Lead	ND	ND	ND	ND	ND	ND	ND			Calculati on	ug/L
Mercury	0.17	ND	ND	ND	ND	ND	ND			2	ug/L
Nickel	1.8	ND	ND	ND	1.7	1.9	ND			4600	ug/L
Selenium	ND	ND	ND	ND	ND	ND	ND			5/20	ug/L
Silver	ND	ND	ND	ND	ND	ND	ND			100	ug/L
Thallium	ND	ND	ND	ND	ND	ND	ND			6.3	ug/L
Zinc	2.5	4.1	1.6	3.5	4.8	7	1.8			5000	ug/L
<i>Organochlorine Pesticides and PCBs by EPA 608</i>											
Pesticides & PCBs	ALL ND	ALL ND	ALL ND	ALL ND	ALL ND	ALL ND	ALL ND			various	ug/L

**Table 8-B: Warm Creek 2
Warm Season Monitoring Results**

Date	Flow Rate (cfs)	Air Temp °C	Water Temp °C	pH	Dissolved Oxygen	Electrical conductivity	<i>E. coli</i>	Total coliform	<i>E. coli</i> geo mean
Objective	-	-	varies	6.5-8.5	> 5 mg/L	462 (uS/cm)	235 mpn	10000 mpn	126 mpn
7/17/08	0						<1.0	116.2	
7/21/08	0								
7/30/08	0	27.6	33.8	9.2			56.3	>2419.6	
8/7/08	0	32.5	32.6	9.1		1946.5	81.3	>2419.6	
8/11/08	0	34.4	33.0	10.4		805	<1.0	7.5	
8/22/08	0	30.3	32.0	10.2		635	3.1	>24196	
8/26/08	0	35.0	34.6	10.2		818	2	>2419.6	12.98
9/4/08	0	38.5						-	
9/10/08	0	30.6	34.3	10.2	9.3	1030	62.7	365.4	
9/14/08	0							-	
9/25/08	0	31.0	28.4	10.1	8	880	2419.6	>2419.6	
10/3/08	0							-	
10/9/08	0	31.5	27.6	10.0	9	837	10462	>2419.6	
10/16/08	NO ACCESS								
10/25/08	NO ACCESS	33.0						-	
5/8/09	0	28.0	32.2	9.5	9.0	914	37.3	15531	
5/14/09	0	30.0							
5/21/09	0	23.4	22.3	8.6	9.0	2160	2613	>24196	
5/27/09	0	19.0	19.8	8.5	9.0	2420	4611	>24196	
6/5/09	0		22.1	9.0	8.0	1711	4884	>24196	1217.2
6/9/09	0	18.7	21.9	8.8	10.0	1915	14136	120330	5370.4
6/18/09	0	27.6	22.2	8.5	8.0	781	1299.7	>24196	4043.7
6/25/09	0	28.4							
7/1/09	0	28.9	23.0	8.2	5.0	2750	19863	>241960	6497.5
7/9/09	0	29.3	22.1	8.1	8.0	1710	2489	>241960	5489.8
7/14/09	0	29.1	24.4	8.1	6.0	1145	2909	>241960	3697.6
7/22/09	0	30.3	25.3	8.2	6.4	1654	2909	>241960	4522.6
7/29/09	0	28.9	27.1	8.5	5.0	5490	727	173290	3137.7
8/6/09	0		25.2	8.5		4500	19863	>241960	3137.7
8/12/09	0	28.9	23.5	8.3	4.5	2060	727	54750	2453.1
8/18/09	0	27.7	23.1	8.6	5.0	2170	5794	57940	2815.6
8/27/09	0	35.6	27.8	9.3	6.0	1806	88.2	>241960	1399.3
9/2/09	0	35.3	27.8	8.2	7	1831	48840	173290	3246.1
9/10/09	0	29.2	25.3	8.3	6	951	46110	>241960	3841.6
9/15/09	0	24.1	21.4	8.0	4	1432	15531	>241960	7086.7
9/23/09	0	33.2	21.9	7.7	3.5	1245	613.1	46110	4522.2
9/30/09	0	28.9							
10/6/09	0	18.2	16.0	8.0	5	1008	648.8	19863	4108.3
10/16/09	0	32.7	21.8	7.7	4	861	43520	>241960	4049.3
10/21/09	0	23.8	17.1	7.8	4	1003			
10/27/09	0	22.6	18.9	9.8	10	2843	20.9	1011.2	
10/30/09	0	17.3	12.2	7.9	5	957	>241960	>241960	

**Table 8-C: Warm Creek 2
Cool Season Monitoring Results**

	Flow Rate (cfs)	Air Temp °C	Water Temp °C	pH	Dissolved oxygen	Electrical conductivity	<i>E. coli</i>	Total coliform	<i>E. coli</i> geo mean
Objective	-	-	< 25.6	6.5-8.5	>5 mg/L	462 uS/cm	235 mpn	10000 mpn	126 mpn
11/1/08	NO ACCESS								
12/5/08	0	21.4	11.2	8.8	10	534	2419.6	>2419.6	
12/9/08	0	25.0	20.9	10.3	10	496	90.8	3873	
12/19/08	0	15.1	20.8	8.8	7	311	11	3654	
1/6/09	0	13.0	10.5	8.6	8	2620	8.6	3448	
1/16/09	0	23.2	22.8	8.2	6	727	1203.3	>24196	
1/30/09	0	26.0	27.9	8.6	9	684	770.1	>24196	
2/2/09	0	24.0	14.9	8.5		780	7270	>24196	<i>490.61</i>
2/12/09	0	12.6	15.7	8.5	8	475	2613	>24196	<i>2048.32</i>
2/21/09	0								
2/26/09	0	15.0	18.7	8.7	10	1636	1553.1	8664	<i>2183.26</i>
3/20/09	0	28.0	31.0	10.2	10	2250	5.2	387.3	
11/4/09	0	28.2	18.1	8.0	5	684.6	24196	198630	<i>1943.9</i>
11/12/09	0	21.4	15.6	7.8	5	910	980.4	24196	<i>2155.2</i>
11/18/09	0	18.6	12.8	8.2	6	904	5475	129970	<i>1283.6</i>
11/23/09	0	21.7	13.4	8.2	6	853	1299.7	38730	<i>3604.5</i>

Results in red exceed objectives.

Geomeans in bold italics are results from 4 samples in 30 days.

**Table 8-D: Warm Creek 2
Warm Season Physical Observations**

Date	d.o.w.	Water Color	Water Clarity	Water Odor	Sediment Color	Sediment Comp.	Sediment Odor
7/17/08	R	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
7/21/08	M	DRY			OTHER	OTHER	NONE
7/30/08	W	GREEN, YELLOW	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
8/7/08	R	BROWN	CLEAR	NONE	OTHER	OTHER	NONE
8/11/08	M	BROWN	CLEAR	NONE	OTHER	OTHER	NONE
8/22/08	F	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
8/26/08	T	GREEN	CLEAR	NONE	OTHER	OTHER	NONE
9/4/08	R	DRY					
9/10/08	W	GREEN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
9/14/08	SUN	DRY			OTHER	OTHER	NONE
9/25/08	R	YELLOW	CLEAR	MIXED	OTHER	OTHER	NONE
10/3/08	F	DRY					
10/9/08	R	YELLOW	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
10/16/08	R	NO ACCESS					
10/25/08	SAT	NO ACCESS					
5/8/09	F	GREEN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
5/14/09	R	DRY					
5/21/09	R	YELLOW BROWN	TURBID	MIXED	OTHER	OTHER	NONE
5/27/09	W	YELLOW	CLEAR	NONE	OTHER	OTHER	NONE
6/5/09	F	YELLOW	SEMI-CLEAR	SEWAGE	OTHER	OTHER	NONE
6/9/09	T	YELLOW	SEMI-CLEAR	MIXED	OTHER	OTHER	MIXED
6/18/09	R	YELLOW	CLEAR	MIXED	OTHER	OTHER	NONE
6/25/09	R	DRY					
7/1/09	W	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
7/9/09	R	YELLOW	CLEAR	MIXED	OTHER	OTHER	NONE
7/14/09	T	YELLOW	CLEAR	MIXED	OTHER	OTHER	NONE
7/22/09	W	YELLOW BROWN	CLEAR	MIXED	OTHER	OTHER	MIXED
7/28/09	W	YELLOW BROWN	CLEAR	MIXED	OTHER	OTHER	NONE
8/6/09	R	BROWN	TURBID	SEWAGE	BROWN	MIXED	MIXED
8/12/09	W	YELLOW	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
8/18/09	T	YELLOW	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
8/27/09	R	YELLOW	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
9/2/09	W	YELLOW	CLEAR	MIXED	OTHER	OTHER	NONE
9/10/09	R	BROWN	TURBID	MIXED	OTHER	OTHER	MIXED
9/15/09	T	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
9/23/09	W	YELLOW	SEMI-CLEAR	NONE	OYH	OTHER	NONE
9/30/09	W	DRY					
10/16/09	F	BROWN	TURBID	MIXED	OTHER	OTHER	SEWAGE
10/21/09	W	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
10/27/09	T	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
10/30/09	F	BROWN	SEMI-CLEAR	NONE	OTHER	OTHER	NONE

**Table 8-E: Warm Creek 2
Cool Season Physical Observations**

Date	d.o.w.	Water Color	Water Clarity	Water Odor	Sediment Color	Sediment Comp.	Sediment Odor
11/1/08	SAT	NO ACCESS					
12/5/08	F	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
12/9/08	T	CLEAR	SEMI-CLEAR	NONE	OTHER	OTHER	NONE
12/19/08	F	YELLOW	SEMI-CLEAR	NONE	OTHER	OTHER	MIXED
1/6/09	T	GREEN	TURBID	MIXED	OTHER	OTHER	NONE
1/16/09	F	YELLOW	CLEAR	MIXED	OTHER	OTHER	NONE
1/30/09	F	YELLOW	SEMI-CLEAR	MIXED	OTHER	OTHER	MIXED
2/2/09	M	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
2/12/09	R	YELLOW	CLEAR	MIXED	OTHER	OTHER	NONE
2/26/09	R	YELLOW	CLEAR	-	-	-	-
3/20/09	F	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	MIXED
11/4/09	W	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
11/12/09	R	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
11/18/09	W	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
11/23/09	M	BROWN	CLEAR	MIXED	OTHER	OTHER	NONE

**Table 8-F: Warm Creek 2
Contract Lab Results**

	12/19/ 08	1/30 /09	2/2 /09	5/14 /09	6/18 /09	7/29 /09	9/10 /09	10/16/ 09	11/18/ 09	Objective	Units
<i>Cations</i>											
Total Hardness	100	220	280	DRY	260	600	400	360	330	190	mg/L
Calcium	34	70	90		88	200	130	120	110	-	mg/L
Magnesium	4.6	12	14		10	22	16	12	12	-	mg/L
Sodium	19	54	53		67	310	66	61	67	30	mg/L
Potassium	4.1	12	15		16	31	11	9.5	11	-	mg/L
<i>Anions</i>											
Chloride	11	29	31		51	830	53	48	48	20	mg/L
Sulfate	26	80	95		120	400	250	240	240	60	mg/L
Nitrate as N	1.3	7.3	11		6.1	3.1	1.7	2.7	2.8	-	mg/L
<i>Aggregate Properties</i>											
Sp. Conductance	320	650	750		840	3700	940	870	880	462	uS/cm
<i>Solids</i>											
TDS	190	480	550		570	2600	700	600	610	300	mg/L
<i>Aggregate Organic Compounds</i>											
COD	21	88	110		75	270	160	ND	62	25	mg/L
<i>Nutrients</i>											
Nitrite as N	0.10	0.16	0.18		0.45	0.47	0.12	0.15	0.040	-	mg/L
Ammonia-nitrogen	ND	0.094	0.41		0.28	2.3	0.13	0.27	0.080	0.098	mg/L
Kjeldahl-nitrogen	0.73	3.5	4.8		3.5	11	4.9	4.2	2.0	-	mg/L
Ortho-phosphate phosphorus	0.13	0.056	0.24		3.4	0.28	0.38	0.10	1.0	-	mg/L
Total phosphorus	0.21	0.49	0.75		4.3	0.99	1.4	0.53	3.0	-	mg/L
Total inorganic nitrogen	1.4	7.6	11.6		6.8	5.9	2.0	3.1	2.9	5	mg/L
Total organic nitrogen	0.7	3.4	4.4		3.2	8.7	4.8	3.9	1.9	5	mg/L
Total nitrogen	2.1	11.0	16.0		10.1	14.6	6.7	7.1	4.8	-	mg/L

**Table 8-F: Warm Creek 2
Contract Lab Results Continued**

	12/19 /08	1/30 /09	2/2 /09	5/14 /09	6/18 /09	7/29 /09	9/10 /09	10/16 /09	11/18 /09	Objective	Unit
<i>Metals and Metalloids</i>											
Antimony	ND	ND	ND		ND	ND	ND	ND	ND	-	ug/L
Arsenic	ND	ND	2.7		2.7	3.1	2.4	1.7	ND	150	ug/L
Beryllium	ND	ND	0.25		ND	ND	ND	0.19	ND	4	ug/L
Cadmium	ND	0.19	0.11		0.11	0.15	0.27	0.27	0.17	CALCULATION	ug/L
Copper	8.4	20	28		23	47	30	28	13	CALCULATION	ug/L
Lead	1.9	7.4	9.3		4.4	7.7	18	17	7	CALCULATION	ug/L
Mercury	0.089	ND	ND		ND	ND	ND	ND	0.043	2	ug/L
Nickel	2.8	4.8	7.8		7.4	15	6.7	10	4.6	4600	ug/L
Selenium	ND	ND	ND		ND	ND	ND	ND	ND	-	ug/L
Silver	ND	ND	ND		ND	ND	ND	ND	ND	-	ug/L
Thallium	ND	ND	ND		ND	ND	ND	ND	ND	-	ug/L
Zinc	20	110	84		55	110	170	200	88	5000	ug/L
<i>Organochlorine Pesticides and PCBs by EPA 608</i>											
Pesticides & PCBs	ALL ND	ALL ND	ALL ND		ALL ND	ALL ND	ALL ND	4,4-DDE= 0.012	ALL ND	4,4-DDE = 0.00059	ug/L

Results in red exceed objectives.

**Table 9-B: Warm Creek 3
Warm Season Monitoring Results**

Date	Flow Rate (cfs)	Air Temp °C	Water Temp °C	pH	Dissolved Oxygen	Electrical conductivity	<i>E. coli</i>	Total coliform	<i>E. coli</i> geo mean
Objective	-	-	varies	6.5-8.5	> 5 mg/L	462 (uS/cm)	235 mpn	10000 mpn	126 mpn
7/17/08	3.16	32.0	27.2	9.0		593	249.5	111990	
7/21/08	4.36	36.7	27.6	9.0		552	53.8	>24196	
7/30/08	0.224	23.4	24.4	10.6		820	40.6	>2419.6	
8/7/08	0.116	30.5	31.5	10.1		463	139.6	>2419.6	93.39
8/11/08		27.5	30.2	9.9		444	18.7	>2419.6	67.71
8/22/08	0.001	26.0	30.0	10.8		695	2	435.2	21.46
8/26/08	0.002	32.2	33.3	10.7		685	<1.0	387.3	
9/4/08	0	39.0							
9/10/08	0.12	25.8	32.5	10.7	10.2	624	<1.0	365.4	
9/14/08	0								
9/25/08	0.01	31.0	26.9	10.7	9	587	980.4	>2419.6	
10/3/08	0	30.0							
10/9/08	0.13	30.0	23.5	10.8	8	577	721.5	>2419.6	
10/16/08	0	28.3	23.0	9.6	8.5	533	54.6	>2419.6	
10/25/08	0	33.0							
5/8/09	0	27.0							
5/14/09	0	32.0							
5/21/09	0	25.0							
5/27/09	0	15.4							
6/5/09	0	20.0							
6/9/09	0.2	18.0	20.0	10.4	8.0	362	547.5	61310	
6/18/09	0	30.0							
6/25/09	0	28.0							
7/1/09	0	28.0							
7/9/09	0	29.7	32.6	9.0	8.0	565	<1.0	173290	
7/14/09	0	32.3							
7/22/09	0	31.2							
7/29/09	0.6	30.7	36.1	8.8	8.7	636	3255	>241960	
8/6/09	0	29.1							
8/12/09	0.6	29.0	31.3	9.1	8.8	797	3873	155310	
8/18/09	0	31.2							
8/27/09	0	38.0							
9/2/09	1.1	37.9	33.1	8.5	8	600	9804	241960	
9/10/09	0	32.1							
9/15/09	0	24.1							
9/23/09	0	33.1	26.6	9.7	10	569	4884	>241960	
9/30/09	0	28.7							
10/6/09	0	19.7							
10/16/09	0	34.3	30.5	10.3	8	408	10.6	241960	
10/21/09	0	24.3	21.4	10.1	9	456			
10/27/09	0	22.5							
10/30/09	0	19.9							

**Table 9-C: Warm Creek 3
Cool Season Monitoring Results**

Date	Flow Rate (cfs)	Air Temp °C	Water Temp °C	pH	Dissolved Oxygen	Electrical conductivity	<i>E. coli</i>	Total coliform	<i>E. coli</i> geo mean
Objective	-	-	varies	6.5-8.5	> 5 mg/L	462 (uS/cm)	235 mpn	10000 mpn	126 mpn
11/1/08	0.05	26.1	22.3	9.7	9	1264	37.6	>2419.6	
12/5/08	0	12.4	11.4	8.9	8	600	139.6	>2419.6	
12/9/08	0	18.0							
12/19/08	4.3	12.3	13.7	8.5	10.67	545	68.3	11199	
1/6/09	0.03	14.0	8.7	8.6	10	686	6.3	19863	
1/16/09	0.18	22.5	13.2	8.5	8	766	24196	>24196	
1/30/09	0	26.0							
2/2/09	0.3	24.0	19.3	8.1	7	588	41	677	
2/12/09	10.1	11.0	11.5	8.4	11.7	447	31.3	7270	
2/21/09									
2/26/09	5.6	14.7	13.5	9.0	9	514	17.3	5794	
3/20/09	0	26.5							
11/4/09	0	31.4							
11/12/09	0	23.1							
11/18/09	0	21.9							
11/23/09	0	23.8							

Results in red exceed objectives.

**Table 9-D: Warm Creek 3
Warm Season Physical Observations**

Date	d.o.w.	Water Color	Water Clarity	Water Odor	Sediment Color	Sediment Comp.	Sediment Odor
7/17/08	R	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
7/21/08	M	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
7/30/08	W	YELLOW, BROWN	SEMI-CLEAR	SEWAGE	OTHER	OTHER	NONE
8/7/08	R	YELLOW	CLEAR	NONE	OTHER	OTHER	NONE
8/11/08	M	BROWN	CLEAR	SEWAGE	OTHER	OTHER	NONE
8/22/08	F	BROWN	TURBID	MIXED	OTHER	OTHER	MIXED
8/26/08	T	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
9/4/08	R	DRY			OTHER	OTHER	NONE
9/10/08	W	GREEN	CLEAR	MIXED	OTHER	OTHER	NONE
9/14/08	SUN	DRY			OTHER	OTHER	NONE
9/25/08	R	YELLOW	CLEAR	MIXED	OTHER	OTHER	MIXED
10/3/08	F	DRY					
10/9/08	R	YELLOW, BROWN	TURBID	MIXED	OTHER	OTHER	NONE
10/16/08	R	BROWN	CLEAR	MIXED	OTHER	OTHER	NONE
10/25/08	SAT	DRY					
5/8/09	F	DRY					
5/14/09	R	DRY					
5/21/09	R	DRY					
5/27/09	W	DRY					
6/5/09	F	DRY					
6/9/09	T	BROWN	SEMI-CLEAR	NONE	OTHER	OTHER	NONE
6/18/09	R	DRY					
6/25/09	R	DRY					
7/1/09	W	DRY					
7/9/09	R	BROWN	TURBID	MIXED	OTHER	OTHER	HYDROGEN SULFIDE
7/14/09	T	DRY					
7/22/09	W	DRY					
7/28/09	W	YELLOW	CLEAR	MIXED PUNGENT	OTHER	OTHER	NONE
8/6/09	R	DRY					
8/12/09	W	CLEAR	SEMI-CLEAR	NONE	OTHER	OTHER	NONE
8/18/09	T	DRY					
8/27/09	R	DRY					
9/2/09	W	CLEAR	CLEAR	MIXED	OTHER	OTHER	NONE
9/10/09	R	DRY					
9/15/09	T	DRY					
9/23/09	W	BROWN	SEMI-CLEAR	NONE	OTHER	OTHER	NONE
9/30/09	W	DRY					
10/16/09	F	YELLOW	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
10/21/09	W	BROWN	TURBID	MIXED	OTHER	OTHER	NONE
10/27/09	T	DRY			OTHER	OTHER	NONE
10/30/09	F	DRY			OTHER	OTHER	NONE

**Table 9-E: Warm Creek 3
Cool Season Physical Observations**

Date	d.o.w.	Water Color	Water Clarity	Water Odor	Sediment Color	Sediment Comp.	Sediment Odor
11/1/08	SAT	BROWN	CLEAR	MIXED	OTHER	OTHER	NONE
12/5/08	F	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
12/9/08	T	DRY	-	-	-	-	-
12/19/08	F	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
1/6/09	T	GREEN YELLOW	CLEAR	HYDROGEN SULFIDE	OTHER	OTHER	HYDROGEN SULFIDE
1/16/09	F	YELLOW	CLEAR	MIXED	OTHER	OTHER	NONE
1/30/09	F	-	-	-	-	-	-
2/2/09	M	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
2/12/09	R	GREEN	CLEAR	NONE	OTHER	OTHER	NONE
2/26/09	R	CLEAR	CLEAR	MIXED	OTHER	OTHER	NONE
3/20/09	F	DRY	-	-	-	-	-
11/4/09	W	DRY					
11/12/09	R	DRY					
11/18/09	W	DRY					
11/23/09	M	DRY					

**Table 9-F: Warm Creek 3
Contract Lab Results**

	12/19 /08	1/30 /09	2/2 /09	5/14 /09	6/18 /09	7/29 /09	9/10 /09	10/16/ 09	11/18/ 09	Objective	Units
<i>Cations</i>											
Total Hardness	130	DRY	260	DRY	DRY	240	DRY	160	DRY	190	mg/L
Calcium	37		78			68		56		-	mg/L
Magnesium	8.4		15			16		5.0		-	mg/L
Sodium	77		16			22		24		30	mg/L
Potassium	4.8		3.7			25		18		-	mg/L
<i>Anions</i>											
Chloride	14		18			35		26		20	mg/L
Sulfate	61		52			53		30		60	mg/L
Nitrate as N	0.54		4.4			0.63		ND		-	mg/L
<i>Aggregate Properties</i>											
Sp. Conductance	370		560			610		400		462	uS/cm
<i>Solids</i>											
TDS	250		380			400		380		300	mg/L
<i>Aggregate Organic Compounds</i>											
COD	19		12			41		300		25	mg/L
<i>Nutrients</i>											
Nitrite as N	0.060		0.06			0.11		0.060		-	mg/L
Ammonia-nitrogen	ND		ND			0.11		0.19		0.098	mg/L
Kjeldahl-nitrogen	0.35		ND			0.89		8.0		-	mg/L
Ortho-phosphate phosphorus	0.097		0.11			0.66		0.11		-	mg/L
Total phosphorus	0.07		0.19			0.78		1.1		-	mg/L
Total inorganic nitrogen	0.6		4.5			0.9		0.3		5	mg/L
Total organic nitrogen	0.4		ND			0.8		7.8		5	mg/L
Total nitrogen	1.0		4.5			1.6		8.1		-	

**Table 9-F: Warm Creek 3
Contract Lab Results Continued**

	12/19 /08	1/30 /09	2/2 /09	5/14 /09	6/18 /09	7/29 /09	9/10 /09	10/16/ 09	11/18 / 09	Objective	Units
<i>Metals and Metalloids</i>											
Antimony	ND		ND			ND		4.2		-	ug/L
Arsenic	14		1.7			3.8		5.9		150	ug/L
Beryllium	ND		ND			ND		0.71		4	ug/L
Cadmium	ND		ND			ND		0.73		Calculation	ug/L
Copper	3.2		ND			24		51		Calculation	ug/L
Lead	1.3		0.45			0.25		8.0		Calculation	ug/L
Mercury	ND		ND			ND		ND		2	ug/L
Nickel	2.0		2.5			3.6		10		4600	ug/L
Selenium	ND		ND			ND		ND		-	ug/L
Silver	ND		ND			ND		ND		-	ug/L
Thallium	ND		ND			ND		ND		-	ug/L
Zinc	9.7		6.3			7.7		51		5000	ug/L
<i>Organochlorine Pesticides and PCBs by EPA 608</i>											
Pesticide & PCBs	ALL ND		ALL ND			ALL ND		All ND		-	ug/L

Results in red exceed objectives.

**Table 10-B: Warm Creek 4
Warm Season Monitoring Results**

DATE	Flow Rate (cfs)	Air Temp °C	Water Temp °C	pH	Dissolved oxygen	Electrical conductivity	<i>E. coli</i>	Total coliform	<i>E. coli</i> geomean
Objective	-	-	varies	6.5-8.5	> 5 mg/L	462 (uS/cm)	235 mpn	10000 mpn	126 mpn
7/17/08	6.59	36.0	35.0	9.2		501	56.3	54750	
7/21/08	6.57	36.3	34.0	9.4		411	3	>24196	
7/30/08	2.498	30.6	30.9	9.4	8.9	601	29.2	>2419.6	
8/7/08	5.14	35.9	34.0	9.4	9.9	603	387.3	>2419.6	37.18
8/11/08	3.02	32.8	33.4	9.8	9.7	532	10.9	>2419.6	29.09
8/22/08	3.39	32.5	33.0	9.6	8.5	572	307.6	>2419.6	78.47
8/26/08	2.86	36.8	34.9	9.6	8.5	536	6.3	>2419.6	47.38
9/4/08	11.81	37.5	32.0	8.9	9.6	494	166.4	>2419.6	67.11
9/10/08	15.43	32.0	31.4	9.1	9.1	465	25.9	>2419.6	39.07
9/14/08	11.08	37.1	31.1	9.5	9.0	453	13.2	>2419.6	40.59
9/25/08	5.72	34.7	29.7	9.3	9.9	618	1986.3	>2419.6	58.95
10/3/08	2.65	25.6	25.4	10.2	9.2	530	20.1	>2419.6	74.35
10/9/08	7.67	30.3	26.6	9.0	10.3	564	1986.3	>2419.6	122.08
10/16/08	3.52	32.2	24.8	8.9	8.6	618	4352	>2419.6	179.87
10/25/08	2.6	29.4	21.8	9.9	8.9	511	49.6	>2419.6	443.29
5/8/09	2.6	32.0	30.2	9.3	11.2	505	108.1	7701	
5/14/09	4.1		32.6	9.2	9.3	664	547.5	>24196	
5/21/09	3.2	27.4	30.0	9.1	9.7	625	204.6	>24196	
5/27/09	12.8	20.3	22.5	8.6	9.5	586	3169	>24196	442.60
6/5/09	2.1	20.4	23.8	9.3	10.4	506	172.5	>24196	366.6
6/9/09	3.5	18.8	21.7	9.4	9.8	508	770.1	>24196	542.9
6/18/09	2.1	33.9	33.5	9.6	8.1	497	920.8	>24196	602.4
6/25/09	10.6	31.1	31.1	8.8	8.5	721	2419.6	>24196	987.3
7/1/09	14.2	32.0	29.0	8.8	9.5	587	727	32550	735.5
7/9/09	3.0	32.1	34.3	9.2	9.4	522	133.3	72700	681.7
7/14/09	1.5	35.9	32.4	9.4	9.8	521	30.9	24196	367.2
7/22/09	1.4	35.2	34.4	9.5	9.5	608	24.3	24196	177.5
7/29/09	1.2	33.7	35.9	9.7	8.5	542	8.6	24196	57.4
8/6/09	1.0	29.0	32.0	9.2	8.5	481	344.8	86640	49.5
8/12/09	1.1	33.7	33.3	9.4	8.1	511	12.1	61310	30.6
8/18/09	2.0	32.0	32.1	9.6	8.3	506	17.3	24890	27.3
8/27/09	3.0	41.6	35.0	9.1	7.2	514	275.5	86640	44.3
9/2/09	2.0	39.9	35.3	9.3	7.7	669	60.2	24196	65.4
9/10/09	2.8	35.6	33.5	9.0	7.9	530	579.4	104620	72.6
9/15/09	1.9	29.8	32.8	9.5	7.3	537	45.9	68670	94.7
9/23/09	1.7	38.1	30.5	8.9	7.3	517	178.2	19863	151.0
9/30/09	0.7	29.9	30.6	9.4	8.0	448	71.2	14136	115.2
10/6/09	1.1	24.0	26.1	9.4	8.4	490	139.6	9208	136.3
10/16/09	2.4	36.0	30.7	9.6	10.8	450	410.6	>24196	164.2
10/21/09	2.3	28.7	23.9	9.3	10.6	474			
10/27/09	2.4	23.8	22.7	9.6	10.6	427	83.9	>24196	136.0
10/30/09	2.3	22.6	18.2	9.0	10.3	407	115.3	19863	153.5

**Table 10-C: Warm Creek 4
Cool Season Monitoring Results**

DATE	Flow Rate (cfs)	Air Temp °C	Water Temp °C	pH	Dissolved oxygen	Electrical conductivity	<i>E. coli</i>	Total coliform	<i>E. coli</i> geomean
Objective	-	-	< 25.6	6.5-8.5	> 5 mg/L	462 (uS/cm)	235 mpn	10000 mpn	126 mpn
11/1/08	1.75	26.0	20.8	9.9	9.9	508	93.3	>2419.6	240.47
12/5/08	10.90	20.0	16.6	8.8	12.4	511	121.1	24196	
12/9/08	3.17	20.0	16.9	9.5	11.9	449	387.3	19863	
12/19/08	2	14.6	15.7	9.4	10.6	242	135.4	30760	
1/6/09	2.40	13.6	16.5	9.5	12.6	480	40.8	>24196	
1/16/09	2.6	24.4	21.6	9.8	13.1	456	7.4	4352	
1/30/09	10.3	26.0	25.7	9.4	12.1	664	19.5	10462	
2/2/09	9.9	25.0	24.2	9.4	10.7	646	25.3	5475	19.65
2/12/09	12.9	14.7	17.5	8.9	11.5	427	76.3	19863	22.97
2/21/09									
2/26/09	8.8	14.3	19.5	9.5	12.8	412	461.1	14136	64.55
3/20/09	2.4	27.5	29.0	9.8	10.6	492	6.3	3873	
11/4/09	1.7	31.8	26.1	9.7	10.8	442	32.7	24196	112.6
11/12/09	2	23.6	21.6	9.6	11.6	434	727	24196	156.7
11/18/09	3	24.6	21.2	9.5	11.4	429	139.6	24196	126.3
11/23/09	1.5	24.8	21.1	10.1	13.8	431	49.6	12033	113.7

Results in red exceed objectives.

Geomeans in bold italics are results from 4 samples in 30 days.

Table 10-D: Warm Creek 4
Warm Season Physical Observations

Date	d.o.w.	Water Color	Water Clarity	Water Odor	Sediment Color	Sediment Comp.	Sediment Odor
7/17/08	R	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
7/21/08	M	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
7/30/08	W	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
8/7/08	R	YELLOW	CLEAR	NONE	OTHER	OTHER	NONE
8/11/08	M	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
8/22/08	F	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
8/26/08	T	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
9/4/08	R	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
9/10/08	W	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
9/14/08	SUN	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
9/25/08	R	GREEN YELLOW	SEMI-CLEAR	NONE	OTHER	OTHER	NONE
10/3/08	F	YELLOW	CLEAR	NONE	OTHER	OTHER	NONE
10/9/08	R	YELLOW	CLEAR	MIXED	OTHER	OTHER	NONE
10/16/08	R	BROWN	SEMI-CLEAR	NONE	OTHER	OTHER	NONE
10/25/08	SAT	YELLOW	CLEAR	NONE	OTHER	OTHER	NONE
5/8/09	F	CLEAR	CLEAR	SEWAGE	OTHER	OTHER	NONE
5/14/09	R	YELLOW	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
5/21/09	R	CLEAR	CLEAR	MIXED	OTHER	OTHER	NONE
5/27/09	W	BROWN	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
6/5/09	F	CLEAR	CLEAR	MIXED	OTHER	OTHER	NONE
6/9/09	T	YELLOW	CLEAR	MIXED	OTHER	OTHER	NONE
6/18/09	R	YELLOW	SEMI-CLEAR	MIXED	OTHER	OTHER	NONE
6/25/09	R	GREEN	SEMI-CLEAR	SEWAGE	OTHER	OTHER	NONE
7/1/09	W	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
7/9/09	R	YELLOW	CLEAR	MIXED	OTHER	OTHER	NONE
7/14/09	T	CLEAR	CLEAR	MIXED	OTHER	OTHER	NONE
7/22/09	W	YELLOW BROWN	CLEAR	MIXED	OTHER	OTHER	NONE
7/28/09	W	YELLOW	SEMI-CLEAR	NONE	OTHER	OTHER	NONE
8/6/09	R	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
8/12/09	W	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
8/18/09	T	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
8/27/09	R	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
9/2/09	W	YELLOW	CLEAR	NONE	OTHER	OTHER	NONE
9/10/09	R	YELLOW	CLEAR	NONE	OTHER	OTHER	NONE
9/15/09	T	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
9/23/09	W	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
9/30/09	W	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
10/16/09	F	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
10/21/09	W	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
10/27/09	T	YELLOW	CLEAR	SEWAGE	OTHER	OTHER	NONE
10/30/09	F	CLEAR	CLEAR	MIXED	OTHER	OTHER	NONE

**Table 10-E: Warm Creek 4
Cool Season Physical Observations**

Date	d.o.w.	Water Color	Water Clarity	Water Odor	Sediment Color	Sediment Comp.	Sediment Odor
11/1/08	SAT	YELLOW	CLEAR	NONE	OTHER	OTHER	NONE
12/5/08	F	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
12/9/08	T	CLEAR	SEMI-CLEAR	NONE	OTHER	OTHER	NONE
12/19/08	F	BROWN	TURBID	MIXED	OTHER	OTHER	MIXED
1/6/09	T	CLEAR	CLEAR	MIXED	OTHER	OTHER	NONE
1/16/09	F	CLEAR	CLEAR	MIXED	OTHER	OTHER	NONE
1/30/09	F	CLEAR	CLEAR	PETROLEUM	OTHER	OTHER	NONE
2/2/09	M	CLEAR	CLEAR	PETROLEUM	OTHER	OTHER	NONE
2/12/09	R	YELLOW	CLEAR	MIXED	OTHER	OTHER	NONE
2/26/09	R	BROWN	TURBID	MIXED	OTHER	OTHER	NONE
3/20/09	F	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
11/4/09	W	CLEAR	CLEAR	MIXED	OTHER	OTHER	NONE
11/12/09	R	CLEAR	CLEAR	MIXED	OTHER	OTHER	NONE
11/18/09	W	CLEAR	CLEAR	NONE	OTHER	OTHER	NONE
11/23/09	M	YELLOW	CLEAR	HYDROGEN SULFIDE	OTHER	OTHER	NONE

**Table 10-F: Warm Creek 4
Contract Lab Results**

	12/19/ 08	1/30 /09	2/2 /09	5/14 /09	6/18 /09	7/29 /09	9/10 /09	10/16 /09	11/18 /09	Objective	Units
<i>Cations</i>											
Total Hardness	60	180	180	150	68	50	92	51	82	190	mg/L
Calcium	16	62	62	45	22	16	27	16	25	-	mg/L
Magnesium	4.9	6.0	5.8	8.5	3.0	2.5	6.0	2.6	4.4	-	mg/L
Sodium	7.6	59	57	58	85	72	66	76	59	30	mg/L
Potassium	1.8	3.9	3.8	5.3	2.7	20	3.7	2.2	2.1	-	mg/L
<i>Anions</i>											
Chloride	12	37	35	53	54	34	56	29	25	20	mg/L
Sulfate	20	170	150	69	35	40	43	34	29	60	mg/L
Nitrate as N	0.63	1.6	1.9	0.68	0.20	ND	0.52	ND	1.4	-	mg/L
<i>Aggregate Properties</i>											
Sp. Conductance	270	640	620	570	500	510	500	440	400	462	uS/cm
<i>Solids</i>											
TDS	310	510	490	350	300	330	360	250	250	300	mg/L
<i>Aggregate Organic Compounds</i>											
COD	110	9.8	ND	82	68	66	39	12	22	25	mg/L
<i>Nutrients</i>											
Nitrite as N	0.070	0.060	0.060	0.090	0.060	0.060	0.080	0.060	0.070	-	mg/L
Ammonia-nitrogen	ND	ND	ND	ND	0.07	0.093	0.12	0.11	ND	0.098	mg/L
Kjeldahl-nitrogen	1.5	0.15	0.37	2.6	2.2	1.1	0.80	0.85	0.26	-	mg/L
Ortho-phosphate phosphorus	0.049	0.019	0.0090	0.0060	0.0060	0.0040	0.0030	ND	0.057	-	mg/L
Total phosphorus	1.4	0.04	0.04	0.23	0.25	0.12	0.06	0.09	0.08	-	mg/L
Total inorganic nitrogen	0.7	1.7	2.0	0.8	0.3	0.2	0.7	0.2	1.5	5	mg/L
Total organic nitrogen	1.5	0.2	0.4	2.6	2.1	1.0	0.7	0.7	0.3	5	mg/L
Total nitrogen	2.2	1.8	2.4	3.4	2.5	1.2	1.4	0.9	1.7	-	mg/L

**Table 10-F: Warm Creek 4
Contract Lab Results Continued**

	12/19/08	1/30/09	2/2/09	5/14/09	6/18/09	7/29/09	9/10/09	10/16/09	11/18/09	Objective	Unit
<i>Metals and Metalloids</i>											
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ug/L
Arsenic	9.2	24	23	16	56	77	31	76	50	150	ug/L
Beryllium	0.22	ND	ND	ND	ND	ND	ND	0.62	ND	4	ug/L
Cadmium	0.13	ND	ND	0.13	0.080	ND	ND	0.57	ND	Calculation	ug/L
Copper	14	ND	ND	13	9.9	7.2	6.3	5.7	3.5	Calculation	ug/L
Lead	14	0.58	0.48	3.5	7.8	0.99	0.69	1.4	0.52	Calculation	ug/L
Mercury	1.1	ND	ND	ND	ND	ND	ND	ND	0.046	2	ug/L
Nickel	7.0	3.3	2.1	3.2	3.3	ND	ND	2.2	ND	4600	ug/L
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ug/L
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ug/L
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ug/L
Zinc	46	7.2	5.9	35	56	14	6.3	15	5.9	5000	ug/L
<i>Organochlorine Pesticides and PCBs by EPA 608</i>											
Pesticide & PCBs	ALL ND	ALL ND	ALL ND	ALL ND	ALL ND	ALL ND	ALL ND	ALL ND	ALL ND	-	ug/L