Stream Pollutant Loading Reductions Resulting from Treatment Systems

Aluminum:

	JB#2	2.45	tons per yr.
	Hamilton	.9	tons per yr.
	Langeloth	.1	tons per yr.
Total		3.5	tons per yr.

Iron:

	JB#2	9.7	tons per yr.
	Hamilton	7	tons per yr.
	Langeloth	42	tons per yr.
Total		58.7	tons per yr.

Acidity:

	JB#2	47.26	tons per yr.
	Hamilton	8.6	tons per yr.
	Langeloth	61.45	tons per yr.
Total		117.31	tons per yr.

Biomost, Inc.
3016 Unionville Road
Cranberry Twp, PA 16066

1110102

61.45 tons/yr. complete removal 42 tons/yr. 77% less

.15 tons/yr. 95% less

SAMPLE ID	SAMPLE DATE	TAKEN BY	FLOW gpm	FIELD PH	LAB PH	COND. umhos	TEMP DEG C	FIELD ALK mg/L	ALK. mg/L	ACIDITY mg/L	IRON mg/L	DISS IRON mg/L	MANG. mg/L	DISS MANG mg/L	ALUM. mg/L	DISS ALUM mg/L	SO4 mg/L	TSS mg/L	LAB ID
Langeloth discharge (L2)	21-Mar-07	CFD	38	6.11	5.98	5760	14.0	354	263.28	146.69	293.00	287.00	3.56	2.19	9.31	0.27	2058.9	19	377494
L2A	21-Mar-07	CFD		6.44	5.90	3779	10.0	122	38.02	68.93	104.00	100.60	2.22	2.19	0.17	0.16	1646.9	9	377495
ALD	21-Mar-07	CFD	75	6.11	6.15	2830	14.0	364	344.74	-164.54	66.04	64.37	3.05	3.01	0.49	0.21	1457.5	11	377496
SP1	21-Mar-07	CFD		7.30	7.08	2556	9.0	216	208.52	-174.72	5.41	0.76	3.03	2.97	0.16	<0.04	975.3	6	377497
SP2	21-Mar-07	CFD		7.80	7.54	1830	10.0	151	151.84	-121.15	1.16	0.60	1.56	1.50	0.33	0.08	883.7	2	377498
Hamilton Discharge	21-Mar-07	CFD		6.54	5.54	1292	10.0	79	11.80	192.96	163.00	155.00	5.94	5.82	0.68	0.20	685.7	10	377499
VFW	21-Mar-07	CFD		6.71	6.04	1330	7.0	98	43.71	15.94	54.04	53.17	5.64	5.62	0.31	0.17	573.7	25	377500
SETTLING	21-Mar-07	CFD	200	6.64	4.68	1068	7.0	31	1.08	89.86	68.89	59.49	4.52	4.52	0.16	<0.04	508.5	5	377501
VFW EM SPILLWAY	21-Mar-07	CFD		6.45	5.40	1203	9.0	43	6.76	163.58	191.00	135.00	5.28	5.25	0.31	<0.04	547.9	15	377502
VFW	21-Mar-07	CFD		6.00	6.01	1573	12.0	43	36.66	16.13	20.43	20.00	3.57	3.54	1.03	0.35	797.6	10	377503
SETTLING POND	21-Mar-07	CFD	150	6.21	6.33	1570	13.0	43	35.77	21.50	20.44	19.77	3.55	3.53	1.46	0.19	849.3	6	377504
JB2 discharge	21-Mar-07	CFD		4.20	3.97	1635	14.0	0	ND	288.77	106.04	104.91	3.82	3.82	13.78	13.20	857.9	5	377505

	iron	AL	acidity
total all systems	9.7 JB#2	2.45	47.24
	42 L	.15	61.45
	7 Hamilton	.9	8.6
	58.7 tons/yr.	3.5 tons/yr	117.81 tons/yr.

N.D. - Not Detectable

Approved by _____

Water Quality Data Summary

"NAME" JB #2 site

"PROJECT" AMD 63(0657)101.1

County Washington **Township** Smith

SIS Monitoring Point Alias ID: AMD 63(0657) 101.1

Description: Raw Discharge

NOTES:

1					Acidity		Alkalinity		Iron								Total					Loading							
					Total	Net	Total	Net	Total	Ferrous		Calculated Ferric		Total	Total	Total	Susp.	Total	Total	Total	Acid		Alkalinity					
Sample		Flow	pH	Conductivity	Lab "Hot"	Calculated	Lab	Calculated	Fe	Fe^{+2}	% Total	Fe^{+3}	% Total	Al	Mn	Sulfate	Solids	Ca	Mg	Hardness	Total	Net	Total	Net	Fe	Al	Mn	Sulfate
Date	Source	(gpm)	(lab)	(umhos/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)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)
5/25/2005	7411-195	-	3.9	-	690.60	690.60	0.00	0.00	264.00	246.90	0.94	17.10	0.06	35.70	5.54	1457.70	8.00	222.00	85.90	909.00	-	-	-	-	-	-	-	-
6/14/2005	7411-195	-	3.8	2280.00	758.00	758.00	0.00	0.00	270.00	253.52	0.94	16.48	0.06	35.90	5.82	1256.50	4.00	217.00	90.00	-	-	-	-	-	-	-	-	-
7/7/2005	7411-195	-	3.8	2290.00	735.60	735.60	0.00	0.00	251.00	-	#VALUE!	#VALUE!	#VALUE!	36.60	5.94	1622.30	6.00	212.00	81.90	-	-	-	-	-	-	-	-	-
7/27/2005	7411-195	-	3.5	2340.00	704.00	704.00	0.00	0.00	276.00	-	#VALUE!	#VALUE!	#VALUE!	39.90	5.57	-	6.00	225.00	86.70	-	-	-	-	-	-	-	-	-
8/11/2005	7411-195	-	3.8	2330.00	678.20	678.20	0.00	0.00	268.00	261.86	0.98	6.14	0.02	40.20	5.94	1068.60	0.20	220.00	85.00		-	-	-	-	-	-	-	-
8/23/2005	7411-195	Samples were not analyzed																										
8/24/2005	7411-195	-	3.4	2360.00	754.40	754.40	0.00	0.00	252.00	254.92	1.00	0.00	0.00	37.30	5.61	1874.60	4.00	203.00	78.20	-	-	-	-	-	-	-	-	-
9/8/2005	7411-195	-	3.9	2360.00	756.40	756.40	0.00	0.00	275.00	266.82	0.97	8.18	0.03	40.90	5.27	1623.20	2.00	220.00	83.40	-	-	-	-	-	-	-	-	-
9/19/2005	7411-195	-	3.8	2430.00	726.60	726.60	0.00	0.00	296.00	285.26	0.96	10.74	0.04	43.60	5.62	1550.50	28.00	231.00	87.50	-	-	-	-	-	-	-	-	-
10/13/2005	7411-195	-	3.9	2460.00	753.80	752.20	1.60	0.00	278.00	-	#VALUE!	#VALUE!	#VALUE!	44.70	6.33	1603.40	16.00	211.00	82.50	-	-	-	-	-	-	-	-	-
10/26/2005	7411-195	-	4.0	2500.00	810.00	806.60	3.40	0.00	284.00	301.98	1.00	0.00	0.00	50.10	5.98	ND	10.00	218.00	83.00	-	-	-	-	-	-	-	-	-
4/2/2007	7329801	-	4.2	-	257.40	257.40	0.00	0.00	66.90	72.57	1.00	0.00	0.00	11.80	3.97	871.90	12.00	161.00	57.50	639.00	-	-	-	-	-	-	-	-
6/8/2007	7329801	-	3.9	-	329.20	329.20	0.00	0.00	149.00	-	#VALUE!	#VALUE!	#VALUE!	19.00	5.21	1070.90	12.00	240.00	87.00	958.00	-	-	-	-	-	-	-	-
						0.00																						
						0.00																						
Always insert a row here for entering new sample data in order for statistics to calculate correctly.																												
Number Of	Count	0.00	12.0	9.00	12.00	14.00	12.00	12.00	12.000	8.000	8.000	8.000	8.000	12.00	12.00	10.00	12.0	12.00	12.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sample Dates	Max	0.00	4.2	2500.00	810.00	806.60	3.40	0.00	296.000	301.980	#VALUE!	#VALUE!	#VALUE!	50.10	6.33	1874.60	28.0	240.00	90.00	958.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	Min	0.00	3.4	2280.00	257.40	0.00	0.00	0.00	66.900	72.570	#VALUE!	#VALUE!	#VALUE!	11.80	3.97	871.90	0.2	161.00	57.50	639.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Average	#DIV/0!	3.8	2372.22	652.85	667.80	0.42	0.00	244.158	242.979	#VALUE!	#VALUE!	#VALUE!	36.31	5.57	1399.96	9.0	215.00	82.38	835.33	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	75th Percentile	#NUM!	3.9	2430.00	754.90	753.85	0.00	0.00	276.500	271.430	#VALUE!	#VALUE!	#VALUE!	41.58	5.94	1617.58	12.0	222.75	86.78	933.50	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
	90th Percentile	#NUM!	4.0	2468.00	757.84	757.52	1.44	0.00	283.400	290.276	#VALUE!	#VALUE!	#VALUE!	44.59	5.98	1648.34	15.6	230.40	87.45	948.20	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
	St'd. Dev.	#DIV/0!	0.2	75.63	176.81	290.21	1.05	0.00	67.149	71.216	#VALUE!	#VALUE!	#VALUE!	10.72	0.59	317.88	7.5	19.49	8.43	171.79	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Percent of Times					#REF!		#REF!																				

Sample Source Code

Water Quality Data Summary

"NAME" JB #2 site

"PROJECT" AMD 63(0657)101.1

County Washington Township Smith

SIS Monitoring Point Alias ID: AMD 63(0657) 101.1

Description: VFW Influent

NOTES:

2					Acidity		Alkalinity		Iron								Total				Loading							
					Total	Net	Total	Net	Total	Ferrous		Calculated Ferric		Total	Total	Total	Susp.	Total	Total	Total	Acid		Alkalinity					
Sample		Flow	pH	Conductivity	Lab "Hot"	Calculated	Lab	Calculated	Fe	Fe^{+2}	% Total	Fe^{+3}	% Total	Al	Mn	Sulfate	Solids	Ca	Mg	Hardness	Total	Net	Total	Net	Fe	Al	Mn	Sulfate
Date	Source	(gpm)	(lab)	(umhos/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)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)
5/25/2005	7411-196	-	3.7	-	685.80	685.80	0.00	0.00	256.00	255.00	1.00	1.00	0.00	34.80	5.42	1474.80	18.00	215.00	83.00	879.00	-	-	-	-	-	-	-	-
6/14/2005	7411-196	-	3.0	2470.00	737.20	737.20	0.00	0.00	253.00	250.80	0.99	2.20	0.01	37.80	5.82	1055.60	72.00	211.00	87.50	-	-	-	-	-	-	-	-	-
7/7/2005	7411-196	-	3.7	2310.00	736.00	-	0.00	-	240.00	-	-	-	-	35.30	6.09	1456.40	12.00	205.00	79.00	-	-	-	-	-	-	-	-	-
7/27/2005	7411-196	-	3.3	2390.00	708.20	708.20	0.00	0.00	267.00	-	#VALUE!	#VALUE!	#VALUE!	37.80	5.40	-	48.00	222.00	85.10	-	-	-	-	-	-	-	-	-
8/11/2005	7411-196	-	3.4	2400.00	677.40	677.40	0.00	0.00	255.00	129.36	0.51	125.64	0.49	39.80	5.70	1319.90	8.00	220.00	84.00	-	-	-	-	-	-	-	-	-
8/23/2005	7411-196	Samples were not analyzed																										
8/24/2005	7411-196	-	3.2	2390.00	737.20	737.20	0.00	0.00	266.00	255.77	-	-	-	37.20	5.66	1675.80	12.00	218.00	83.50	-	-	-	-	-	-	-	-	-
9/8/2005	7411-196	-	3.7	2380.00	748.60	748.60	0.00	0.00	293.00	269.97	0.92	23.03	0.08	42.60	5.48	1510.90	4.00	237.00	90.20	-	-	-	-	-	-	-	-	-
9/19/2005	7411-196	-	3.4	2490.00	746.00	746.00	0.00	0.00	287.00	288.72	1.00	0.00	0.00	43.00	5.37	1742.30	38.00	227.00	85.90	-	-	-	-	-	-	-	-	-
10/13/2005	7411-196	-	3.8	2480.00	758.80	758.80	0.00	0.00	293.00	-	#VALUE!	#VALUE!	#VALUE!	46.10	5.73	1620.20	12.00	222.00	86.50	-	-	-	-	-	-	-	-	-
10/26/2005	7411-196	-	3.8	2490.00	814.00	814.00	0.00	0.00	272.00	293.25	1.00	0.00	0.00	48.80	5.84	ND	6.00	211.50	80.00	-	-	-	-	-	-	-	-	-
4/2/2007	7329802	-	4.2	-	224.40	224.40	0.00	0.00	67.50	70.08	1.00	0.00	0.00	122.20	3.69	892.00	30.00	166.00	60.00	662.00	-	-	-	-	-	-	-	-
6/8/2007	7329802	-	4.2	-	338.20	338.20	0.00	0.00	135.00	-	#VALUE!	#VALUE!	#VALUE!	17.30	4.99	1167.40	8.00	220.00	79.50	878.00	-	-	-	-	-	-	-	-
						0.00																						
Always insert a row here for entering new sample data in order for statistics to calculate correctly.																												
Number Of	Count	0.00	12.0	9.00	12.00	12.00	12.00	11.00	12.000	8.000	7.000	7.000	7.000	12.00	12.00	10.00	12.0	12.00	12.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sample Dates	Max	0.00	4.2	2490.00	814.00	814.00	0.00	0.00	293.000	293.250	#VALUE!	#VALUE!	#VALUE!	122.20	6.09	1742.30	72.0	237.00	90.20	879.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	Min	0.00	3.0	2310.00	224.40	0.00	0.00	0.00	67.500	70.080	#VALUE!	#VALUE!	#VALUE!	17.30	3.69	892.00	4.0	166.00	60.00	662.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Average	#DIV/0!	3.8	2422.22	659.32	597.98	0.00	0.00	240.375	226.619	#VALUE!	#VALUE!	#VALUE!	45.22	5.43	1391.53	22.3	214.54	82.02	806.33	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	75th Percentile	#NUM!	3.8	2480.00	746.65	746.65	0.00	0.00	275.750	274.658	#VALUE!	#VALUE!	#VALUE!	43.78	5.75	1592.88	32.0	222.00	86.05	878.50	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
	90th Percentile	#NUM!	4.2	2490.00	757.78	757.78	0.00	0.00	292.400	290.079	#VALUE!	#VALUE!	#VALUE!	48.53	5.83	1682.45	47.0	226.50	87.40	878.80	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
	St'd. Dev.	#DIV/0!	0.4	63.00	181.66	260.54	0.00	0.00	68.547	81.398	#VALUE!	#VALUE!	#VALUE!	25.48	0.62	278.74	20.9	17.35	7.71	125.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Percent of Times					#REF!		#REF!																				

Sample Source Code

Water Quality Data Summary

"NAME" JB #2 site

"PROJECT" AMD 63(0657)101.1

County Washington Township Smith

SIS Monitoring Point Alias ID: AMD 63(0657) 101.1

Description: VFW effluent

NOTES:

Sample Date	Source	Flow (gpm)	pH (lab)	Conductivity (umhos/cm)	Acidity Total Lab "Hot" (mg/l)	Acidity Net Calculated (mg/l)	Alkalinity Total Lab (mg/l)	Alkalinity Net Calculated (mg/l)	Iron Total Fe (mg/l)	Iron Ferrous Fe^{+2} (mg/l)	Iron Ferrous % Total %	Iron Calculated Ferric Fe^{+3} (mg/l)	Iron Calculated Ferric % Total %	Total Al (mg/l)	Total Mn (mg/l)	Total Sulfate (mg/l)	Total Susp. Solids (mg/l)	Total Ca (mg/l)	Total Mg (mg/l)	Total Hardness (mg/l)	Loading Acid Total (lbs/day)	Loading Acid Net (lbs/day)	Loading Alkalinity Total (lbs/day)	Loading Alkalinity Net (lbs/day)	Loading Fe (lbs/day)	Loading Al (lbs/day)	Loading Mn (lbs/day)	Loading Sulfate (lbs/day)
				3																								
5/25/2005	7411-197	-	3.4	-	631.60	631.60	0.00	0.00	224.00	198.06	88.42	25.94	0.12	31.90	5.89	-	12.00	237.00	84.70	941.00	-	-	-	-	-	-	-	-
7/7/2005	7411-197	-	3.5	2350.00	668.20	-	0.00	-	233.00	-	-	-	-	29.20	6.35	1453.40	16.00	232.00	82.50	-	-	-	-	-	-	-	-	-
7/27/2005	7411-197	-	3.6	2320.00	635.40	635.40	0.00	0.00	235.00	-	#VALUE!	#VALUE!	#VALUE!	31.90	5.57	-	22.00	235.00	82.80	-	-	-	-	-	-	-	-	-
8/11/2005	7411-197	-	3.5	2360.00	602.00	602.00	0.00	0.00	206.00	208.55	100.00	0.00	0.00	36.20	6.07	1483.70	0.20	232.00	81.00	-	-	-	-	-	-	-	-	-
8/23/2005	7411-197	Samples were not analyzed																										
8/24/2005	7411-197	-	3.3	2360.00	636.20	636.20	0.00	0.00	194.00	183.31	-	-	-	38.10	5.80	1547.80	4.00	245.00	84.60	-	-	-	-	-	-	-	-	-
9/8/2005	7411-197	Samples were not analyzed				0.00					#DIV/0!	0.00	#DIV/0!								-	-	-	-	-	-	-	-
9/19/2005	7411-197	-	3.4	2510.00	644.00	644.00	0.00	0.00	223.00	227.56	100.00	0.00	0.00	40.30	5.43	1658.20	14.00	267.00	87.70	-	-	-	-	-	-	-	-	-
10/13/2005	7411-197	-	3.4	2540.00	690.20	690.20	0.00	0.00	239.00	-	#VALUE!	#VALUE!	#VALUE!	47.20	5.84	1756.10	6.00	253.00	88.50	-	-	-	-	-	-	-	-	-
10/26/2005	7411-197	-	3.4	2430.00	657.60	657.60	0.00	0.00	181.50	-	#VALUE!	#VALUE!	#VALUE!	46.60	5.75	ND	2.00	218.50	75.00	-	-	-	-	-	-	-	-	-
4/2/2007	7329803	-	6.4	-	-6.20	0.00	62.20	68.40	8.30	8.31	100.00	0.00	0.00	1.91	3.57	904.20	22.00	241.00	57.50	839.00	-	-	-	-	-	-	-	-
6/8/2007	7329803	-	6.5	-	4.80	0.00	84.80	80.00	38.50	-	#VALUE!	#VALUE!	#VALUE!	0.20	5.16	1.18	24.00	366.00	84.50	1263.00	-	-	-	-	-	-	-	-
						0.00																						
Always insert a row here for entering new sample data in order for statistics to calculate correctly.																												
Number Of	Count	0.00	10.0	7.00	10.00	11.00	10.00	9.00	10.000	5.000	4.000	5.000	4.000	10.00	10.00	7.00	10.0	10.00	10.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sample Dates	Max	0.00	6.5	2540.00	690.20	690.20	84.80	80.00	239.000	227.560	#VALUE!	#VALUE!	#VALUE!	47.20	6.35	1756.10	24.0	366.00	88.50	1263.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Min	0.00	3.3	2320.00	-6.20	0.00	0.00	0.00	8.302	8.310	#VALUE!	#VALUE!	#VALUE!	0.20	3.57	1.18	0.2	218.50	57.50	839.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Average	#DIV/0!	4.0	2410.00	516.38	408.82	14.70	16.49	178.230	165.158	#VALUE!	#VALUE!	#VALUE!	30.34	5.52	1257.80	12.2	251.55	80.68	1014.33	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	75th Percentile	#NUM!	3.6	2470.00	654.20	640.10	0.00	0.00	230.750	208.550	#VALUE!	#VALUE!	#VALUE!	39.75	5.83	1603.00	20.5	251.00	84.68	1102.00	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
	90th Percentile	#NUM!	6.4	2522.00	670.40	657.60	64.46	70.72	235.400	219.956	#VALUE!	#VALUE!	#VALUE!	46.57	6.10	1697.36	22.2	267.90	87.78	1198.60	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
	Std. Dev.	#DIV/0!	1.3	85.63	273.54	324.79	31.44	32.85	83.961	89.149	#VALUE!	#VALUE!	#VALUE!	16.54	0.76	617.27	8.8	41.67	9.03	221.31	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Percent of Times					#REF!		#REF!																				

Sample Source Code

Water Quality Data Summary

"NAME" JB #2 site

"PROJECT" AMD 63(0657)101.1

County Washington Township Smith

SIS Monitoring Point Alias ID: AMD 63(0657) 101.1

Description: Pond Effluent

NOTES:

4					Acidity		Alkalinity		Iron								Total						Loading							
					Total	Net	Total	Net	Total	Ferrous		Calculated Ferric		Total	Total	Total	Susp.	Total	Total	Total	Acid		Alkalinity					
Sample		Flow	pH	Conductivity	Lab "Hot"	Calculated	Lab	Calculated	Fe	Fe^{+2}	% Total	Fe^{+3}	% Total	Al	Mn	Sulfate	Solids	Ca	Mg	Hardness	Total	Net	Total	Net	Fe	Al	Mn	Sulfate
Date	Source	(gpm)	(lab)	(umhos/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)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)
5/25/2005	7411-198	-	3.0	-	603.80	603.80	0.00	0.00	179.00	95.48	0.53	83.52	0.47	31.20	5.82	1351.70	108.00	242.00	85.20	956.00	-	-	-	-	-	-	-	-
6/14/2005	7411-198	-	2.8	2620.00	629.20	629.20	0.00	0.00	-	-	#VALUE!	#VALUE!	#VALUE!	27.90	6.38	1058.60	76.00	239.00	90.00	-	-	-	-	-	-	-	-	-
7/7/2005	7411-198	-	3.0	2450.00	636.00	636.00	0.00	-	177.00					26.60	6.68	1362.90	40.00	225.00	78.70	-	-	-	-	-	-	-	-	-
7/27/2005	7411-198	-	2.8	2550.00	574.00	574.00	0.00	0.00	153.00		0.00	153.00	1.00	29.60	5.84	-	92.00	232.00	80.80	-	-	-	-	-	-	-	-	-
8/11/2005	7411-198	-	2.9	2480.00	569.80	569.80	0.00	0.00	130.00	17.74	0.14	112.26	0.86	37.30	6.29	1227.80	26.00	250.00	87.00	-	-	-	-	-	-	-	-	-
8/23/2005	7411-198	Samples were not analyzed																										
8/24/2005	7411-198	-	2.8	2540.00	595.20	595.20	0.00	-	161.00	34.27	-	-	-	36.50	6.00	1391.90	38.00	237.00	81.40	-	-	-	-	-	-	-	-	-
9/8/2005	7411-198	-	3.0	2430.00	607.40	607.40	0.00	0.00	141.00	45.61	0.32	95.39	0.68	41.30	5.82	1237.90	24.00	262.00	89.20	-	-	-	-	-	-	-	-	-
9/19/2005	7411-198	-	2.8	2710.00	497.00	497.00	0.00	0.00	176.00	83.38	0.47	92.62	0.53	40.50	5.57	1457.70	110.00	257.00	86.90	-	-	-	-	-	-	-	-	-
10/13/2005	7411-198	-	3.0	2530.00	647.80	647.80	0.00	0.00	178.00		0.00	178.00	1.00	43.50	6.22	1446.60	84.00	246.00	85.00	-	-	-	-	-	-	-	-	-
10/26/2005	7411-198	-	3.0	2420.00	620.00	620.00	0.00	0.00	144.50	67.47	0.47	77.03	0.53	45.60	6.01	ND	60.00	219.50	75.00	-	-	-	-	-	-	-	-	-
4/2/2007	7329804	-	6.7	-	5.20	0.00	62.80	57.60	7.09	7.49	1.00	0.00	0.00	0.99	3.49	870.30	16.00	254.00	60.00	882.00	-	-	-	-	-	-	-	-
6/8/2007	7329804	-	6.5	-	6.00	0.00	92.20	86.20	41.40		0.00	41.40	1.00	0.30	5.17	1189.10	20.00	344.00	79.50	1188.00	-	-	-	-	-	-	-	-
Always insert a row here for entering new sample data in order for statistics to calculate correctly.																												
Number Of	Count	0.00	12.0	9.00	12.00	12.00	12.00	10.00	11.000	7.000	9.000	9.000	9.000	12.00	12.00	10.00	12.0	12.00	12.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sample Dates	Max	0.00	6.7	2710.00	647.80	647.80	92.20	86.20	179.000	95.480	#VALUE!	#VALUE!	#VALUE!	45.60	6.68	1457.70	110.0	344.00	90.00	1188.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	Min	0.00	2.8	2420.00	5.20	0.00	0.00	0.00	7.094	7.490	#VALUE!	#VALUE!	#VALUE!	0.30	3.49	870.30	16.0	219.50	60.00	882.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Average	#DIV/0!	3.5	2525.56	499.28	498.35	12.92	14.38	135.272	50.206	#VALUE!	#VALUE!	#VALUE!	30.10	5.78	1259.45	57.8	250.63	81.56	1008.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	75th Percentile	#NUM!	3.0	2550.00	622.30	622.30	0.00	0.00	176.500	75.425	#VALUE!	#VALUE!	#VALUE!	40.70	6.24	1384.65	86.0	254.75	86.93	1072.00	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
	90th Percentile	#NUM!	6.2	2638.00	635.32	635.32	56.52	60.46	178.000	88.220	#VALUE!	#VALUE!	#VALUE!	43.28	6.37	1447.71	106.4	261.50	88.98	1141.60	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
	St'd. Dev.	#DIV/0!	1.4	94.75	233.94	236.09	30.81	31.06	57.880	33.171	#VALUE!	#VALUE!	#VALUE!	15.08	0.82	185.38	35.0	32.04	8.17	159.65	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Percent of Times					#REF!		#REF!																				

Sample Source Code

Water Quality Data Summary

"NAME" JB #2 site

"PROJECT" AMD 63(0657)101.1

County Washington Township Smith

SIS Monitoring Point Alias ID: AMD 63(0657) 101.1

Description: Racoon Creek Upstream

NOTES:

5					Acidity		Alkalinity		Iron									Total				Loading							
					Total	Net	Total	Net	Total	Ferrous		Calculated Ferric		Total	Total	Total	Total	Susp.	Total	Total	Total	Acid		Alkalinity					
Sample		Flow	pH	Conductivity	Lab "Hot"	Calculated	Lab	Calculated	Fe	Fe^{+2}	% Total	Fe^{+3}	% Total	Al	Mn	Sulfate	Solids	Ca	Mg	Hardness	Total	Net	Total	Net	Fe	Al	Mn	Sulfate
Date	Source	(gpm)	(lab)	(umhos/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)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)
5/25/2005	7411-199	-	6.6	-	-21.60	0.00	94.80	116.40	30.90	30.97	1.00	0.00	0.00	7.01	0.81	304.20	90.00	102.00	32.30	388.00	-	-	-	-	-	-	-	-
6/14/2005	7411-199	-	5.8	1212.00	105.20	73.40	31.80	0.00	612.00	56.28	0.09	555.72	0.91	15.90	1.68	608.30	80.00	131.00	45.50	-	-	-	-	-	-	-	-	-
7/7/2005	7411-199	-	5.2	1296.00	164.00	-	13.40	-	64.30	-	-	-	-	6.72	1.84	771.70	44.00	128.00	42.20	-	-	-	-	-	-	-	-	-
7/27/2005	7411-199	-	6.1	1158.00	87.40	55.80	31.60	0.00	54.20	-	#VALUE!	#VALUE!	#VALUE!	8.94	1.50	-	78.00	120.00	46.00	-	-	-	-	-	-	-	-	-
8/11/2005	7411-199	-	8.3	490.00	-151.00	0.00	186.00	337.00	0.49	0.04	0.08	0.45	0.92	0.41	0.07	107.10	2.00	60.40	17.20	-	-	-	-	-	-	-	-	-
8/23/2005	7411-199	Samples were not analyzed																										
8/24/2005	7411-199	-	8.1	437.00	-117.80	-	170.00	-	1.25	0.05	-	-	-	0.86	0.10	42.00	26.00	56.50	15.00	-	-	-	-	-	-	-	-	-
9/8/2005	7411-199	-	8.3	572.00	-138.00	0.00	209.00	347.00	0.53	0.48	0.90	0.05	0.10	0.25	0.06	64.20	6.00	72.40	21.00	-	-	-	-	-	-	-	-	-
9/19/2005	7411-199	-	8.2	451.00	-118.00	0.00	167.00	285.00	0.86	0.28	0.32	0.60	0.68	0.54	0.09	46.90	28.00	55.70	14.30	-	-	-	-	-	-	-	-	-
10/13/2005	7411-199	-	8.0	508.00	-141.40	0.00	196.60	338.00	0.75	-	#VALUE!	#VALUE!	#VALUE!	0.32	0.09	50.70	18.00	62.10	16.40	-	-	-	-	-	-	-	-	-
10/26/2005	7411-199	-	7.8	403.00	-99.60	0.00	147.20	246.80	2.21	0.07	0.03	2.14	0.97	1.95	0.24	ND	36.00	54.00	12.50	-	-	-	-	-	-	-	-	-
4/2/2007	7329805	-	7.3	-	-31.40	0.00	79.40	110.80	1.29	1.26	0.98	0.02	0.02	1.16	1.30	476.60	22.00	133.00	47.80	529.00	-	-	-	-	-	-	-	-
6/8/2007	7329805	-	6.4	-	54.80	9.60	45.20	0.00	45.60	-	#VALUE!	#VALUE!	#VALUE!	3.66	1.74	601.70	40.00	135.00	44.90	522.00	-	-	-	-	-	-	-	-
						0.00																						
						0.00																						
						0.00																						
Always insert a row here for entering new sample data in order for statistics to calculate correctly.																												
Number Of	Count	0.00	12.0	9.00	12.00	13.00	12.00	10.00	12.000	8.000	7.000	7.000	7.000	12.00	12.00	10.00	12.0	12.00	12.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sample Dates	Max	0.00	8.3	1296.00	164.00	73.40	209.00	347.00	612.000	56.280	#VALUE!	#VALUE!	#VALUE!	15.90	1.84	771.70	90.0	135.00	47.80	529.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	Min	0.00	5.2	403.00	-151.00	0.00	13.40	0.00	0.490	0.040	#VALUE!	#VALUE!	#VALUE!	0.25	0.06	42.00	2.0	54.00	12.50	388.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Average	#DIV/0!	7.2	725.22	-33.95	10.68	114.38	178.10	67.886	11.179	#VALUE!	#VALUE!	#VALUE!	3.97	0.79	307.34	39.2	92.51	29.59	479.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	75th Percentile	#NUM!	8.1	1158.00	62.95	0.00	174.00	324.00	47.750	8.688	#VALUE!	#VALUE!	#VALUE!	6.80	1.54	570.43	52.5	128.75	45.05	525.50	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
	90th Percentile	#NUM!	8.3	1228.80	103.42	46.56	195.54	338.90	63.290	38.563	#VALUE!	#VALUE!	#VALUE!	8.75	1.74	624.64	79.8	132.80	45.95	527.60	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
	St'd. Dev.	#DIV/0!	1.1	377.18	111.10	24.34	72.64	148.69	173.045	21.142	#VALUE!	#VALUE!	#VALUE!	4.84	0.76	283.79	29.1	35.07	14.75	79.46	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Percent of Times					#REF!		#REF!																				

Sample Source Code

Water Quality Data Summary

"NAME" JB #2 site

"PROJECT" AMD 63(0657)101.1

County Washington Township Smith

SIS Monitoring Point Alias ID: AMD 63(0657) 101.1

Description: Racoon Creek downstream

NOTES:

6

Sample Date	Source	Flow (gpm)	pH (lab)	Conductivity (umhos/cm)	Acidity Total Lab "Hot" (mg/l)	Acidity Net Calculated (mg/l)	Alkalinity Total Lab (mg/l)	Alkalinity Net Calculated (mg/l)	Iron Total Fe (mg/l)	Iron Ferrous Fe^{+2} (mg/l)	Iron Ferrous % Total	Iron Calculated Ferric Fe^{+3} (mg/l)	Iron Calculated Ferric % Total	Al (mg/l)	Mn (mg/l)	Sulfate (mg/l)	Total Susp. Solids (mg/l)	Ca (mg/l)	Mg (mg/l)	Hardness (mg/l)	Loading Acid Total (lbs/day)	Loading Acid Net (lbs/day)	Loading Alkalinity Total (lbs/day)	Loading Alkalinity Net (lbs/day)	Loading Fe (lbs/day)	Loading Al (lbs/day)	Loading Mn (lbs/day)	Loading Sulfate (lbs/day)
5/25/2005	7411-200	-	6.5	-	21.80	0.00	78.40	56.60	40.30	31.36	0.78	8.94	0.22	8.63	1.12	422.10	88.00	110.00	35.40	421.00	-	-	-	-	-	-	-	-
6/14/2005	7411-200	-	4.8	1335.00	170.00	160.00	10.00	0.00	77.00	64.20	0.83	12.80	0.17	13.50	2.01	481.60	94.00	139.00	48.00	-	-	-	-	-	-	-	-	-
7/7/2005	7411-200	-	4.4	1414.00	207.60	-	7.60	-	73.70	-	-	-	-	7.19	2.36	662.80	18.00	137.00	45.90	-	-	-	-	-	-	-	-	-
7/27/2005	7411-200	-	5.5	1218.00	118.80	105.60	13.20	0.00	61.50	-	#VALUE!	#VALUE!	#VALUE!	8.17	1.82	-	74.00	136.00	47.80	-	-	-	-	-	-	-	-	-
8/11/2005	7411-200	-	3.4	1602.00	194.40	194.40	0.00	0.00	72.00	65.58	0.91	6.42	0.09	8.86	2.59	1243.10	30.00	149.00	50.00	-	-	-	-	-	-	-	-	-
8/23/2005	7411-200	Samples were not analyzed																										
8/24/2005	7411-200	-	3.0	1745.00	215.60	-	0.00	-	78.50	66.21	-	-	-	11.70	2.73	1088.60	114.00	158.00	55.50	-	-	-	-	-	-	-	-	-
9/8/2005	7411-200	-	4.9	1407.00	154.20	142.20	12.00	0.00	65.40	54.08	0.83	11.32	0.17	5.64	2.12	1045.40	40.00	147.00	50.50	-	-	-	-	-	-	-	-	-
9/19/2005	7411-200	-	5.2	1261.00	112.60	101.00	11.60	0.00	60.00	52.56	0.88	7.44	0.12	3.87	1.76	953.10	50.00	129.00	45.10	-	-	-	-	-	-	-	-	-
10/13/2005	7411-200	-	5.4	1355.00	122.60	106.40	16.20	0.00	65.40	ND	#VALUE!	#VALUE!	#VALUE!	4.77	1.98	723.80	30.00	139.00	50.00	-	-	-	-	-	-	-	-	-
10/26/2005	7411-200	-	7.1	481.00	-32.40	0.00	131.20	163.60	6.77	1.44	0.21	5.33	0.79	2.58	0.41	ND	86.00	61.90	15.50	-	-	-	-	-	-	-	-	-
4/2/2007	7329806	-	6.7	-	-16.20	0.00	66.40	82.60	5.56	5.82	1.00	0.00	0.00	1.09	2.94	743.30	2.00	215.00	54.50	762.00	-	-	-	-	-	-	-	-
6/8/2007	7329806	-	6.4	-	51.60	5.60	46.00	0.00	43.80	-	#VALUE!	#VALUE!	#VALUE!	2.74	2.07	644.30	28.00	150.00	47.70	572.00	-	-	-	-	-	-	-	-
						0.00																						

Always insert a row here for entering new sample data in order for statistics to calculate correctly.

Number Of	Count	0.00	12.0	9.00	12.00	11.00	12.00	10.00	12.000	8.000	7.000	7.000	7.000	12.00	12.00	10.00	12.0	12.00	12.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sample Dates	Max	0.00	7.1	1745.00	215.60	194.40	131.20	163.60	78.500	66.210	#VALUE!	#VALUE!	#VALUE!	13.50	2.94	1243.10	114.0	215.00	55.50	762.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	Min	0.00	3.0	481.00	-32.40	0.00	0.00	0.00	5.559	1.440	#VALUE!	#VALUE!	#VALUE!	1.09	0.41	422.10	2.0	61.90	15.50	421.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Average	#DIV/0!	5.3	1313.11	119.05	74.11	32.72	30.28	54.161	42.658	#VALUE!	#VALUE!	#VALUE!	6.56	1.99	798.81	54.5	139.24	45.38	585.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	75th Percentile	#NUM!	6.4	1414.00	176.10	124.30	51.10	42.45	72.425	64.545	#VALUE!	#VALUE!	#VALUE!	8.69	2.42	1022.33	86.5	149.25	50.13	667.00	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
	90th Percentile	#NUM!	6.7	1630.60	206.28	160.00	77.20	90.70	76.670	65.769	#VALUE!	#VALUE!	#VALUE!	11.42	2.72	1104.05	93.4	157.20	54.10	724.00	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
	St'd. Dev.	#DIV/0!	1.3	352.74	85.81	74.77	40.35	55.40	25.338	26.609	#VALUE!	#VALUE!	#VALUE!	3.80	0.69	273.39	35.4	34.80	10.72	170.87	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Percent of Times					#REF!		#REF!																				

Sample Source Code