

**Phase II Watershed Assessment and Restoration Plan for the
Upper Two Lick Creek Watershed
Analytical Data**

Field ID	Sample Date	Flow (gpm)	Conductivity (umhos/cm)	Lab pH	Alkalinity (mg/l)	Acidity (mg/l)	Total Fe (mg/l)	Total Mn (mg/l)	Total Al (mg/l)	Total Sulfate (mg/l)	TSS (mg/l)	TDS (mg/l)
TWO LICK CREEK ABOVE SAMPLE												
MP-1U	5/30/02		331	7.14	34.7	4.3	2.58	0.25	1.78	104.9	24	226
MP-1U	6/28/02		503	7.31	82.8	1.9	1.45	0.30	0.54	165.4	12	412
MP-1U	7/26/02		632	8.10	116.8	3.1	0.24	0.25	1.66	181.4	8	446
MP-1U	9/9/02		797	8.00	175.6	2.8	0.28	0.26	0.88	235.3	4	512
MP-1U	9/30/02		553	7.69	76.2	4.5	0.31	0.46	<0.10	187.7	<2	424
MP-1U	10/30/02		472	7.27	81.6	4.7	1.65	0.40	0.61	141.0	8	304
MP-1U	11/26/02		450	7.38	56.1	4.4	1.71	0.37	0.84	124.3	2	302
MP-1U	12/23/02		250	6.88	24.3	5.1	0.80	0.20	0.48	62.3	14	146
MP-1U	1/30/03		558	7.09	76.5	9.2	3.29	0.49	1.85	180.6	12	382
MP-1U	3/4/03		367	6.29	39.9	4.9	1.73	0.31	1.03	102.8	12	234
MP-1U	3/30/03		393	6.98	43.2	4.3	1.88	0.35	1.42	127.8	8	222
MP-1U	4/30/03		515	7.65	72.0	3.5	1.18	0.42	0.41	152.5	10	408
SAMPLE RUN												
MP-1	5/30/02	NA	1095	3.03	0.0	285.2	43.37	1.36	31.01	379.2	92	754
MP-1	6/28/02	NA	2508	2.62	0.0	1128.7	197.83	4.68	114.05	710.4	156	572
MP-1	7/26/02	NA	3586	2.64	0.0	2184.3	289.44	14.29	288.39	3144.2	184	5096
MP-1	9/9/02	39.1	3704	2.84	0.0	2382.3	221.15	17.19	312.87	3052.7	106	5394
MP-1	9/30/02	9.1	2496	2.91	0.0	1115.0	105.75	8.82	152.24	1586.2	74	3384
MP-1	10/30/02	2133.0	1210	3.18	0.0	359.3	40.01	2.94	48.65	611.5	62	942
MP-1	11/26/02	1165.6	1797	3.05	0.0	451.2	68.12	2.81	53.19	590.0	90	1056
MP-1	12/23/02	3174.2	748	4.22	0.0	173.2	35.02	0.82	17.34	239.3	2	400
MP-1	1/30/03	1190.4	2742	2.78	0.0	1203.0	176.77	6.36	142.42	1362.8	72	2466
MP-1	3/4/03	1099.0	1030	3.50	0.0	222.0	36.50	1.52	29.21	323.7	66	538
MP-1	3/30/03	1004.8	1594	2.77	0.0	451.5	72.82	2.48	53.77	663.2	64	974
MP-1	4/30/03	379.1	2930	2.59	0.0	1408.8	253.94	7.08	166.26	1732.1	164	3610
TWO LICK CREEK BELOW SAMPLE												
MP-1D	5/30/02		325	6.95	34.0	5.2	2.04	0.26	1.08	101.2	14	216
MP-1D	6/28/02		504	7.26	84.8	2.4	1.90	0.32	0.92	150.5	20	384
MP-1D	7/26/02		632	7.41	99.7	11.6	1.18	0.34	3.10	185.1	2	432
MP-1D	9/9/02		806	7.56	160.0	11.2	0.39	0.35	2.92	227.2	8	550
MP-1D	9/30/02		556	7.32	68.2	5.1	0.90	0.52	0.99	189.6	6	418

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MP-1D	10/30/02		466	7.15	77.7	5.3	2.89	0.45	1.28	140.4	14	310
MP-1D	11/26/02		449	7.36	55.5	5.3	2.10	0.38	1.16	116.8	4	292
MP-1D	12/23/02		250	6.85	23.5	6.9	0.99	0.20	0.80	61.9	16	176
MP-1D	1/30/03		550	7.10	71.6	17.3	3.98	0.49	2.66	180.0	10	374
MP-1D	3/4/03		372	5.73	32.0	5.7	1.89	0.33	1.29	101.6	12	228
MP-1D	3/30/03		394	6.86	41.1	5.2	2.15	0.36	1.85	125.4	<2	222
MP-1D	4/30/03		518	7.29	63.4	6.1	1.55	0.44	0.69	148.5	12	408
DIXON RUN ABOVE UN-NAMED TRIB												
MP-2U	5/30/02		464	6.72	33.0	6.9	1.72	0.44	1.74	196.7	10	382
MP-2U	6/28/02		546	6.71	37.3	5.2	1.91	0.55	2.85	204.5	36	442
MP-2U	7/26/02		675	5.36	4.5	12.3	2.91	0.88	5.96	306.2	32	566
MP-2U	9/9/02		896	4.53	<1.0	59.9	6.62	1.54	12.83	456.3	88	724
MP-2U	9/30/02		672	6.77	36.7	9.5	1.79	0.93	1.83	259.4	10	538
MP-2U	10/30/02		487	6.80	41.1	7.5	2.00	0.64	1.31	185.9	14	362
MP-2U	11/26/02		505	6.99	36.9	6.4	2.85	0.60	1.72	180.7	<2	328
MP-2U	12/23/02		342	6.45	25.8	17.3	2.14	0.32	1.32	119.9	18	246
MP-2U	1/30/03		621	6.33	19.8	10.4	3.80	0.86	3.75	256.1	24	456
MP-2U	3/4/03		460	6.70	30.7	15.6	2.13	0.52	1.79	162.8	22	306
MP-2U	3/30/03		479	6.72	29.3	5.6	2.74	0.60	2.55	185.1	12	306
MP-2U	4/30/03		554	7.16	28.2	3.6	2.66	0.75	2.69	219.6	28	464
UN-NAMED TRIB TO DIXON RUN												
MP-2	5/30/02	NA	1262	3.09	0.0	228.3	19.10	2.01	22.29	526.4	20	1132
MP-2	6/28/02	NA	772	6.02	5.7	8.4	6.27	2.11	4.34	360.1	56	746
MP-2	7/26/02	NA	1443	4.33	0.0	194.5	18.12	5.36	34.84	937.9	200	1660
MP-2	9/9/02	18	2220	2.87	0.0	699.5	43.81	5.64	85.33	1391.8	12	2956
MP-2	9/30/02	13	2346	2.98	0.0	736.7	51.56	6.27	89.28	1434.7	<2	3348
MP-2	10/30/02	11	2290	2.96	0.0	752.9	50.41	5.59	89.52	1481.2	6	2566
MP-2	11/26/02	12	2320	3.06	0.0	758.5	48.47	5.16	96.44	1457.0	<2	2318
MP-2	12/23/02	36	1311	3.18	0.0	313.9	15.97	2.12	34.63	648.9	4	1156
MP-2	1/30/03	12	1422	3.06	0.0	317.3	18.25	2.57	35.29	686.4	<2	1094
MP-2	3/4/03	36	1146	3.10	0.0	222.5	13.50	1.94	27.09	515.9	6	808
MP-2	3/30/03	36	1257	2.94	0.0	244.5	17.45	1.97	25.41	547.8	14	988

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MP-2	4/30/03	42	1328	2.93	0.0	242.5	18.10	2.07	26.54	508.2	6	1228
DIXON RUN BELOW UN-NAMED TRIB												
MP-2D	5/30/02		442	6.64	27.4	6.8	2.05	0.45	2.27	185.5	12	362
MP-2D	6/28/02		551	6.73	36.9	3.5	1.75	0.55	1.77	220.3	30	488
MP-2D	7/26/02		675	6.74	21.1	6.9	2.20	0.84	5.41	291.5	28	566
MP-2D	9/9/02		855	4.93	1.9	19.7	1.77	1.35	3.86	416.8	22	696
MP-2D	9/30/02		671	6.90	31.0	7.7	1.25	1.04	1.65	254.8	8	522
MP-2D	10/30/02		502	6.70	34.0	8.4	1.90	0.78	2.04	189.0	10	360
MP-2D	11/26/02		507	6.96	32.5	7.1	2.86	0.65	2.19	201.8	6	338
MP-2D	12/23/02		362	6.78	27.0	8.7	2.09	0.33	1.26	118.8	20	260
MP-2D	1/30/03		609	6.30	18.8	10.9	3.59	0.86	3.75	268.0	8	454
MP-2D	3/4/03		461	6.79	29.8	6.8	2.14	0.52	1.87	154.7	22	312
MP-2D	3/30/03		477	6.69	28.2	5.3	2.53	0.59	2.37	185.1	8	310
MP-2D	4/30/03		548	7.07	27.1	3.7	2.17	0.72	2.26	224.5	20	506
UN-NAMED TRIB TO BUCK RUN												
MP-3	5/30/02	NA	656	3.48	0.0	63.1	0.38	0.56	4.78	259.4	<2	524
MP-3	6/28/02	NA	658	3.47	0.0	64.5	0.32	0.52	4.51	257.6	16	526
MP-3	7/26/02	NA	766	3.29	0.0	77.9	0.46	0.71	7.03	327.3	2	628
MP-3	9/9/02	250.5	830	3.40	0.0	91.7	0.72	0.79	6.91	355.8	<2	684
MP-3	9/30/02	61.9	837	3.40	0.0	82.7	0.73	0.80	6.28	357.2	<2	738
MP-3	10/30/02	99.0	846	3.35	0.0	87.9	0.54	0.81	8.16	375.5	2	634
MP-3	11/26/02	136.8	700	3.56	0.0	72.8	0.28	0.56	5.01	283.0	<2	432
MP-3	12/23/02	121.7	643	3.41	0.0	67.6	0.29	0.50	4.19	254.2	<2	438
MP-3	1/30/03	0.0										
MP-3	3/4/03	178.2	694	3.24	0.0	67.5	0.35	0.59	5.38	284.8	6	436
MP-3	3/30/03	163.1	665	3.36	0.0	73.2	0.41	0.56	5.12	281.4	<2	416
MP-3	4/30/03	122.0	696	3.38	0.0	67.6	0.47	0.61	4.84	294.6	2	601
BUCK RUN BELOW UN-NAMED TRIB												
MP-3D	5/30/02		493	4.53	<1.0	40.8	1.91	0.38	3.22	228.4	10	430
MP-3D	6/28/02		513	4.59	<1.0	33.9	5.24	0.81	5.72	218.5	36	452
MP-3D	7/26/02		653	3.73	0.0	56.0	4.74	1.03	7.07	292.4	6	542

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MP-3D	9/9/02		688	4.17	0.0	41.5	0.36	1.48	3.32	327.7	<2	606
MP-3D	9/30/02		758	3.49	0.0	79.1	5.94	1.36	6.30	303.5	<2	604
MP-3D	10/30/02		454	6.35	22.6	10.0	0.90	0.70	1.82	160.7	12	344
MP-3D	11/26/02		524	6.61	21.8	6.5	1.42	0.76	3.14	210.5	16	360
MP-3D	12/23/02		377	6.16	12.5	12.5	0.67	0.42	2.06	149.0	16	306
MP-3D	1/30/03		567	4.65	1.2	50.9	2.40	0.93	6.31	263.4	12	442
MP-3D	3/4/03		434	4.79	<1.0	18.1	1.87	0.55	3.64	155.4	30	294
MP-3D	3/30/03		445	4.54	<1.0	34.5	2.09	0.62	5.14	196.0	4	322
MP-3D	4/30/03		536	4.30	0.0	51.3	3.67	0.78	6.91	244.3	<2	510

BUCK RUN ABOVE UN-NAMED TRIB

MP-4U	5/30/02		434	6.19	11.8	6.0	0.75	0.54	2.13	191.1	14	350
MP-4U	6/28/02		467	7.05	24.3	3.7	0.69	0.54	1.67	197.3	24	370
MP-4U	7/26/02		544	5.24	2.0	25.9	0.77	0.83	2.64	249.3	16	456
MP-4U	9/9/02		678	4.62	<1.0	33.5	0.27	1.54	3.33	332.2	<2	574
MP-4U	9/30/02		560	5.93	5.7	6.0	0.60	0.96	<0.10	229.1	<2	430
MP-4U	10/30/02		438	6.80	35.1	6.5	0.55	0.58	0.48	161.9	<2	296
MP-4U	11/26/02		508	6.83	28.8	9.7	0.48	0.62	1.88	213.3	6	366
MP-4U	12/23/02		371	6.71	22.3	7.6	0.46	0.36	1.35	128.0	14	250
MP-4U	1/30/03		522	5.63	4.1	10.3	0.79	0.81	3.54	232.4	18	398
MP-4U	3/4/03		408	6.55	13.5	5.6	0.45	0.43	1.74	138.7	14	278
MP-4U	3/30/03		403	6.53	13.1	5.3	0.59	0.53	2.40	162.8	<2	272
MP-4U	4/30/03		463	5.64	3.8	10.8	0.53	0.61	1.88	209.0	14	478

UN-NAMED TRIB TO BUCK RUN

MP-4	5/30/02	NA	1613	2.74	0.0	571.3	44.02	3.15	59.37	743.7	<2	1740
MP-4	6/28/02	NA	2312	2.63	0.0	996.0	137.58	5.20	97.05	1204.1	8	2160
MP-4	7/26/02	NA	2688	2.58	0.0	1553.4	202.16	6.96	164.47	1989.5	6	3638
MP-4	9/9/02	0.0										
MP-4	9/30/02	264.8	1813	2.71	0.0	636.3	63.86	4.69	54.95	764.5	<2	1888
MP-4	10/30/02	156.3	1788	2.73	0.0	580.3	39.42	5.05	62.20	849.6	<2	1704
MP-4	11/26/02	463.7	1434	2.95	0.0	460.1	35.74	3.85	45.98	624.1	2	1070
MP-4	12/23/02	471.1	985	3.07	0.0	243.1	9.64	1.79	24.19	359.6	2	736
MP-4	1/30/03	456.6	2170	2.87	0.0	1018.0	79.21	4.96	134.51	1303.5	14	2208

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MP-4	3/4/03	333.8	1592	2.71	0.0	595.7	55.09	2.88	67.01	739.3	10	1360
MP-4	3/30/03	323.7	1862	2.67	0.0	711.5	53.28	2.94	80.37	851.1	<2	1748
MP-4	4/30/03	270.7	2272	2.70	0.0	1024.8	83.44	3.78	114.50	1280.6	<2	2744
UN-NAMED TRIB TO TWO LICK CREEK												
MP-5	5/30/02	NA	1727	2.57	0.0	519.1	32.11	1.84	34.59	777.8	<2	1596
MP-5	6/28/02	NA	2866	2.48	0.0	815.8	64.34	2.30	52.73	1106.3	2	2618
MP-5	7/26/02	NA	3450	2.29	0.0	1098.3	101.22	2.83	72.11	1502.4	8	3158
MP-5	9/9/02	20.0	3644	2.37	0.0	1202.7	105.74	3.42	60.19	1689.3	<2	3110
MP-5	9/30/02	24.0	3354	2.39	0.0	1116.0	106.27	3.45	78.07	1418.9	<2	3192
MP-5	10/30/02	40.2	2586	2.50	0.0	874.7	93.38	3.02	66.73	1227.6	2	2342
MP-5	11/26/02	30.0	2728	2.62	0.0	977.6	119.54	3.08	70.07	1266.4	2	2014
MP-5	12/23/02	36.0	1851	2.76	0.0	593.7	76.57	2.28	42.07	683.0	<2	1512
MP-5	1/30/03	30.0	2196	2.75	0.0	735.1	126.16	2.36	56.47	847.1	78	1782
MP-5	3/4/03	36.0	1813	2.61	0.0	559.3	82.65	1.79	42.31	752.3	6	1498
MP-5	3/30/03	36.0	1667	2.69	0.0	428.9	52.38	1.46	32.23	637.6	<2	1046
MP-5	4/30/03	36.0	2144	2.63	0.0	553.3	58.93	1.70	38.67	841.4	4	1857
TWO LICK CREEK BELOW UN-NAMED TRIB												
MP-5D	5/30/02		369	7.13	58.4	5.2	2.79	0.23	1.18	98.1	6	232
MP-5D	6/28/02		465	7.40	105.6	4.1	2.45	0.21	0.43	115.3	10	342
MP-5D	7/26/02		651	8.05	156.6	7.9	2.14	0.23	1.91	168.6	22	436
MP-5D	9/9/02		787	7.57	189.1	9.3	2.91	0.32	0.87	197.6	4	534
MP-5D	9/30/02		572	7.37	108.7	6.5	3.96	0.36	1.33	161.2	4	392
MP-5D	10/30/02		417	7.33	101.5	8.0	2.64	0.21	0.77	83.2	12	252
MP-5D	11/26/02		367	7.28	66.8	7.5	2.47	0.23	1.01	86.7	8	222
MP-5D	12/23/02		211	6.72	19.6	7.5	0.93	0.11	0.35	43.7	10	140
MP-5D	1/30/03											
MP-5D	3/4/03		306	7.17	38.8	6.0	2.00	0.16	0.84	69.8	16	214
MP-5D	3/30/03		350	7.05	51.6	4.8	2.75	0.27	1.77	95.7	<2	180
MP-5D	4/30/03		489	7.71	93.6	2.9	2.55	0.28	0.45	135.3	24	380
UN-NAMED TRIB TO TWO LICK CREEK												
MP-6	5/30/02	NA	489	4.07	0.0	34.1	0.52	2.04	3.10	221.5	<2	424

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MP-6	6/28/02	NA	557	3.85	0.0	48.0	0.93	2.70	2.69	234.3	2	498
MP-6	7/26/02	NA	703	3.68	0.0	64.9	1.30	3.99	4.95	330.0	2	638
MP-6	9/9/02	23.4	884	3.74	0.0	72.1	1.98	6.02	3.95	434.7	2	820
MP-6	9/30/02	86.6	813	3.88	0.0	56.3	1.36	6.08	4.95	423.3	<2	778
MP-6	10/30/02	1152.0	594	4.18	0.0	44.1	0.76	3.37	3.16	273.2	4	470
MP-6	11/26/02	282.2	734	4.18	0.0	63.9	0.87	4.42	5.44	377.0	2	596
MP-6	12/23/02	921.0	551	4.19	0.0	51.2	0.35	2.66	4.57	240.3	2	450
MP-6	1/30/03	0.0										
MP-6	3/4/03	581.0	556	4.15	0.0	47.3	0.82	2.55	4.18	263.5	14	446
MP-6	3/30/03	807.6	517	4.08	0.0	41.3	0.39	2.32	4.24	231.6	<2	346
MP-6	4/30/03	760.4	565	4.02	0.0	47.3	0.52	2.68	3.50	271.9	24	538
TWO LICK CREEK BELOW UN-NAMED TRIB												
MP-6D	6/28/02		472	7.30	99.6	2.0	2.36	0.32	0.51	127.7	16	142
MP-6D	7/26/02		648	8.13	154.2	3.7	2.04	0.32	1.53	171.3	2	438
MP-6D	9/9/02		781	7.77	201.0	4.3	2.05	0.34	2.54	191.4	6	558
MP-6D	9/30/02		567	7.51	111.3	5.2	3.16	0.35	1.28	149.8	6	374
MP-6D	10/30/02		429	7.21	99.2	6.7	2.90	0.24	0.86	90.0	8	270
MP-6D	11/26/02		364	7.30	67.1	4.8	2.43	0.26	0.79	98.7	10	218
MP-6D	12/23/02		210	6.91	22.4	3.5	0.91	0.12	0.34	46.0	8	134
MP-6D	1/30/03		522	7.19	95.7	10.3	5.15	0.36	2.32	147.7	16	350
MP-6D	3/4/03		319	7.24	41.5	4.0	2.08	0.22	1.11	81.3	20	192
MP-6D	3/30/03		351	7.04	52.0	4.4	2.33	0.25	1.51	103.3	20	184
MP-6D	4/30/03		488	7.78	94.5	2.5	2.73	0.29	0.73	132.6	36	408
TWO LICK CREEK ABOVE EGYPT MINE DISCHARGE												
MP-7U	5/30/02		280	7.04	44.3	4.3	1.76	0.12	0.87	75.8	14	190
MP-7U	6/28/02		468	7.51	111.9	3.3	2.55	0.20	<0.10	113.4	2	354
MP-7U	7/26/02		642	8.17	188.6	2.0	1.16	0.10	2.31	126.4	2	420
MP-7U	9/9/02		776	8.00	252.3	1.9	1.28	0.09	2.68	149.2	12	530
MP-7U	9/30/02		556	7.91	156.3	3.3	1.02	0.09	<0.10	115.9	<2	364
MP-7U	10/30/02		396	7.47	109.2	3.9	0.89	0.12	<0.10	75.3	<2	244
MP-7U	11/26/02		347	7.63	79.1	3.6	0.81	0.16	<0.10	77.5	<2	206
MP-7U	12/23/02		203	6.73	24.5	4.5	0.60	0.08	0.29	44.0	6	152

**Phase II Watershed Assessment and Restoration Plan for the
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Analytical Data**

Field ID	Sample Date	Flow (gpm)	Conductivity (umhos/cm)	Lab pH	Alkalinity (mg/l)	Acidity (mg/l)	Total Fe (mg/l)	Total Mn (mg/l)	Total Al (mg/l)	Total Sulfate (mg/l)	TSS (mg/l)	TDS (mg/l)
MP-7U	1/30/03		518	7.23	111.2	5.9	3.18	0.30	1.40	140.4	10	340
MP-7U	3/4/03		301	7.32	49.2	4.8	1.12	0.15	0.66	64.6	16	208
MP-7U	3/30/03		340	7.24	61.0	3.7	1.21	0.17	1.00	86.1	18	188
MP-7U	4/30/03		474	7.86	108.0	2.4	1.28	0.20	0.20	118.8	44	350
EGYPT MINE DISCHARGE INTO TWO LICK CREEK BEING TREATED BY RICHARDS TREATMENT SYSTEM												
MP-7	5/30/02	NA	1139	3.08	0.0	168.3	9.96	1.35	12.88	364.3	14	846
MP-7	6/28/02	NA	1039	3.13	0.0	154.2	17.42	1.36	11.68	405.3	10	806
MP-7	7/26/02	NA	877	3.26	0.0	122.0	15.21	1.51	10.75	366.7	2	712
MP-7	9/9/02	24.0	805	3.82	0.0	95.3	14.83	1.55	9.37	349.2	8	658
MP-7	9/30/02	30.0	792	4.25	0.0	83.7	16.19	1.72	6.62	342.0	6	664
MP-7	10/30/02	2184.4	774	4.57	<1.0	72.0	15.32	1.56	5.11	339.6	<2	548
MP-7	11/26/02	413.1	844	3.55	0.0	106.4	14.79	1.58	8.42	357.8	16	566
MP-7	12/23/02	476.9	949	3.61	0.0	107.6	11.12	1.72	7.50	357.8	20	668
MP-7	1/30/03	388.7	891	3.40	0.0	133.6	8.74	1.37	11.14	380.3	6	590
MP-7	3/4/03	585.7	896	3.27	0.0	108.0	14.09	1.74	9.60	397.9	28	568
MP-7	3/30/03	550.3	924	3.47	0.0	120.1	20.77	1.73	11.09	419.0	84	594
MP-7	4/30/03	747.4	880	3.32	0.0	113.7	24.29	1.92	14.20	362.2	496	750
TWO LICK CREEK BELOW EGYPT MINE DISCHARGE												
MP-7D	5/30/02		296	6.74	37.2	7.5	2.57	0.15	1.28	87.8	14	210
MP-7D	6/28/02		510	7.15	89.3	5.7	2.56	0.34	0.33	140.2	24	384
MP-7D	7/26/02		667	7.86	150.4	8.3	3.33	0.32	2.25	196.1	22	464
MP-7D	9/9/02		801	7.17	210.5	11.9	5.92	0.25	3.33	190.5	26	560
MP-7D	9/30/02		572	7.48	141.9	7.5	3.66	0.18	0.39	140.6	4	354
MP-7D	10/30/02		403	7.24	102.5	5.1	1.76	0.13	<0.10	75.7	<2	232
MP-7D	11/26/02		358	7.42	74.8	4.3	2.15	0.18	0.59	81.5	12	204
MP-7D	12/23/02		207	6.84	32.9	11.2	0.91	0.10	0.26	42.8	8	144
MP-7D	1/30/03		508	7.30	113.2	6.1	4.79	0.28	2.21	114.8	12	336
MP-7D	3/4/03		306	7.15	46.2	12.4	1.57	0.18	0.88	72.0	18	192
MP-7D	3/30/03		365	6.92	49.8	6.0	3.08	0.28	1.92	110.1	28	202
MP-7D	4/30/03		502	7.59	85.0	4.0	5.19	0.40	1.54	143.6	70	416
TWO LICK CREEK ABOVE DIAMONDVILLE BOREHOLE												

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MP-8U	5/30/02		308	7.33	71.9	3.1	0.33	0.10	0.17	64.7	<2	218
MP-8U	6/28/02		453	7.66	135.1	2.1	0.33	0.10	0.55	81.7	10	314
MP-8U	7/26/02		652	8.42	215.6	0.0	0.40	0.07	1.86	121.8	2	420
MP-8U	9/9/02		767	8.34	269.4	0.0	0.21	0.06	1.74	145.6	8	514
MP-8U	9/30/02		593	8.23	183.9	1.2	0.34	0.11	<0.10	113.6	<2	364
MP-8U	10/30/02		394	7.58	106.3	4.5	0.44	0.16	<0.10	74.4	<2	240
MP-8U	11/26/02		355	7.42	85.4	7.5	0.29	0.13	<0.10	67.5	<2	194
MP-8U	12/23/02		202	6.95	27.6	4.5	0.30	0.06	<0.10	43.6	2	144
MP-8U	1/30/03		503	7.76	141.7	2.9	0.35	0.17	0.18	94.8	<2	322
MP-8U	3/4/03		304	7.69	64.5	3.3	0.29	0.10	0.10	53.5	4	188
MP-8U	3/30/03		329	7.35	75.0	3.9	0.29	0.13	0.43	69.9	2	184
MP-8U	4/30/03		478	8.10	133.0	1.2	0.28	0.14	<0.10	99.1	22	340

DIAMONDVILLE BOREHOLE DISCHARGE INTO TWO LICK CREEK

MP-8	5/30/02	F M L E O A W S U N R O E T D	1790	2.72	0.0	524.3	71.59	1.79	36.13	793.3	<2	1682
MP-8	6/28/02		1650	2.77	0.0	418.8	43.78	1.59	28.95	666.0	4	1550
MP-8	7/26/02		1590	2.77	0.0	401.5	50.81	1.62	32.63	760.6	<2	1412
MP-8	9/9/02		1635	2.99	0.0	430.7	57.17	1.67	33.77	790.3	<2	1562
MP-8	9/30/02		1712	2.96	0.0	434.5	32.57	1.84	37.00	705.5	<2	1542
MP-8	10/30/02		1786	2.94	0.0	469.9	75.61	1.80	38.31	852.1	<2	1518
MP-8	11/26/02		1788	2.86	0.0	462.9	75.74	1.82	37.43	844.2	26	1340
MP-8	12/23/02		1795	3.03	0.0	488.9	90.03	2.02	36.27	732.6	2	1502
MP-8	1/30/03		1744	2.88	0.0	490.4	61.50	1.89	40.11	783.7	2	1324
MP-8	3/4/03		1618	2.81	0.0	395.9	48.90	1.86	33.27	708.4	<2	1318
MP-8	3/30/03		1654	2.77	0.0	426.3	43.16	1.73	36.05	707.8	8	1262
MP-8	4/30/03		1601	2.84	0.0	390.1	36.60	1.50	31.57	689.1	24	1430

TWO LICK CREEK BELOW DIAMONDVILLE BOREHOLE

MP-8D	5/30/02		802	3.25	0.0	125.7	21.35	0.66	11.26	284.6	36	552
MP-8D	6/28/02		617	4.53	<1.0	64.0	14.56	0.64	9.56	271.6	50	532
MP-8D	7/26/02		650	8.02	210.7	2.3	0.80	0.08	1.94	123.6	2	432
MP-8D	9/9/02		758	8.25	266.0	<1.0	0.33	0.06	1.85	125.9	8	508
MP-8D	9/30/02		592	8.23	179.7	<1.0	0.57	0.12	<0.10	125.3	<2	390
MP-8D	10/30/02		394	7.37	101.2	3.6	0.54	0.12	<0.10	71.6	2	238

**Phase II Watershed Assessment and Restoration Plan for the
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MP-8D	11/26/02		355	7.26	82.1	3.7	0.43	0.13	<0.10	60.6	<2	222
MP-8D	12/23/02		202	6.96	25.7	6.4	0.56	0.07	0.24	38.8	4	134
MP-8D	1/30/03		513	7.33	132.0	7.2	3.39	0.23	1.76	108.4	10	326
MP-8D	3/4/03		303	7.48	60.4	3.9	0.46	0.12	0.22	50.9	4	174
MP-8D	3/30/03		331	7.32	71.5	4.7	0.33	0.11	0.43	73.7	6	178
MP-8D	4/30/03		476	7.94	129.9	2.1	0.27	0.13	0.26	95.8	16	354
UN-NAMED TRIB TO NORTH BRANCH TWO LICK CREEK												
MP-9	5/30/02	NA	390	3.92	0.0	34.3	0.35	0.46	2.29	160.9	<2	316
MP-9	6/28/02	NA	389	3.93	0.0	45.3	0.47	0.51	2.81	156.3	<2	306
MP-9	7/26/02	NA	423	3.85	0.0	38.0	0.76	0.62	3.54	182.8	<2	346
MP-9	9/9/02	270.0	461	3.91	0.0	41.9	0.27	0.62	3.83	212.0	<2	368
MP-9	9/30/02	25.3	491	3.85	0.0	38.4	2.97	0.89	3.08	231.2	<2	414
MP-9	10/30/02	301.5	458	4.12	0.0	34.9	0.66	1.22	2.62	206.2	<2	344
MP-9	11/26/02	3116.0	502	4.18	0.0	46.0	0.44	0.95	2.96	196.6	2	364
MP-9	12/23/02	890.7	398	3.83	0.0	47.6	0.46	1.01	3.15	137.8	<2	270
MP-9	1/30/03	2968.1	450	3.87	0.0	51.6	0.45	0.57	2.93	190.3	<2	306
MP-9	3/4/03	280.3	424	3.81	0.0	40.5	0.42	0.58	2.32	185.0	<2	288
MP-9	3/30/03	461.5	408	3.65	0.0	45.3	0.42	0.50	3.52	169.5	-2	242
MP-9	4/30/03	499.1	424	3.78	0.0	44.1	0.55	0.47	2.66	166.9	26	352
NORTH BRANCH TWO LICK CREEK BELOW UN-NAMED TRIB												
MP-9D	5/30/02		339	6.74	22.2	5.1	0.61	0.28	0.59	122.0	<2	268
MP-9D	6/28/02		410	6.71	32.0	2.9	0.57	0.39	1.16	163.7	2	354
MP-9D	7/26/02		520	7.19	40.0	4.5	0.71	0.43	0.72	218.1	4	448
MP-9D	9/9/02		568	6.88	42.6	4.3	0.89	0.45	2.50	233.5	<2	442
MP-9D	9/30/02		535	7.35	42.8	5.2	0.60	0.61	0.18	207.1	<2	420
MP-9D	10/30/02		386	6.87	36.8	5.2	1.11	0.88	<0.10	126.0	<2	274
MP-9D	11/26/02		383	6.79	28.9	3.9	0.53	0.36	0.32	143.8	<2	264
MP-9D	12/23/02		268	6.70	15.8	3.9	0.40	0.21	0.18	83.5	4	172
MP-9D	1/30/03		460	6.72	29.0	3.7	0.71	0.46	0.50	182.4	6	320
MP-9D	3/4/03		335	7.06	21.4	2.5	0.51	0.27	0.54	117.3	4	228
MP-9D	3/30/03		364	6.64	21.9	3.9	0.67	0.32	1.05	132.3	14	220
MP-9D	4/30/03		437	7.26	27.0	3.3	0.47	0.39	<0.10	179.4	20	356

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UN_NAMED TRIB TO NORTH BRANCH TWO												
MP-10	5/30/02	NA	761	3.46	0.0	75.7	0.20	0.70	6.46	334.9	2	700
MP-10	6/28/02	NA	777	3.45	0.0	95.2	0.21	0.85	8.05	320.0	<2	742
MP-10	7/26/02	0										
MP-10	9/9/02	0										
MP-10	10/30/02	0										
MP-10	12/23/02	30.0	654	3.50	0.0	79.6	0.26	0.87	6.52	274.7	<2	446
MP-10	1/30/03	0.0	773	3.55	0.0	88.5	0.55	0.78	9.10	354.7	8	594
MP-10	3/4/03	12.0	779	3.38	0.0	88.9	0.22	0.80	8.00	359.9	<2	604
MP-10	3/30/03	12.0	676	3.37	0.0	72.8	0.21	0.62	6.87	295.4	2	478
MP-10	4/30/03	6.0	758	3.45	0.0	87.6	0.26	0.76	7.16	338.0	8	654
TWO LICK CREEK NORTH BRANCE ABOVE UN-												
MP-11U	5/30/02		329	6.84	23.9	4.5	0.43	0.24	0.44	115.7	2	264
MP-11U	6/28/02		414	6.72	34.9	3.1	0.37	0.32	1.03	160.0	2	338
MP-11U	7/26/02		516	7.24	41.5	4.8	0.46	0.37	0.16	208.9	2	406
MP-11U	9/9/02		565	6.89	42.5	5.2	0.28	0.44	2.37	229.9	6	460
MP-11U	9/30/02		528	7.24	44.9	5.1	0.40	0.57	<0.10	202.5	2	410
MP-11U	10/30/02		368	6.84	37.3	5.9	1.05	0.77	<0.10	107.1	6	242
MP-11U	11/26/02		381	6.80	29.4	4.1	0.46	0.30	0.35	128.0	<2	240
MP-11U	12/23/02		269	6.78	17.1	3.9	0.28	0.18	0.19	74.9	2	190
MP-11U	1/30/03		456	6.80	32.5	4.3	0.50	0.41	0.46	167.2	<2	326
MP-11U	3/4/03		304	6.94	20.5	2.9	0.36	0.22	0.31	80.2	<2	230
MP-11U	3/30/03		358	6.74	24.3	9.1	0.56	0.27	1.11	120.1	10	214
MP-11U	4/30/03		432	7.05	28.9	2.9	0.28	0.33	0.37	152.4	8	346
UN-NAMED TRIB TO NORTH BRANCH TWO LICK												
MP-11	5/30/02	NA	678	3.60	0.0	65.7	0.23	0.90	6.30	281.8	<2	634
MP-11	6/28/02	NA	662	3.70	0.0	74.7	0.45	1.07	6.99	300.4	10	638
MP-11	7/26/02	NA	801	3.54	0.0	88.4	1.04	1.29	9.20	377.7	<2	748
MP-11	9/9/02	111	864	3.62	0.0	102.3	2.47	1.60	12.46	425.8	16	824
MP-11	9/30/02	65	779	3.83	0.0	72.0	2.86	1.91	8.11	344.8	<2	772
MP-11	10/30/02	288	676	4.02	0.0	61.2	0.76	1.88	7.08	361.7	<2	556

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MP-11	11/26/02	180	773	3.79	0.0	92.8	0.44	1.46	8.35	385.3	<2	602
MP-11	12/23/02	228	596	3.75	0.0	67.9	0.15	1.08	5.59	253.3	<2	434
MP-11	1/30/03	163	710	3.68	0.0	66.4	0.19	1.05	7.10	339.2	<2	522
MP-11	3/4/03	99	687	3.55	0.0	72.4	0.20	1.04	6.79	307.1	<2	524
MP-11	3/30/03	110	607	3.53	0.0	61.3	0.15	0.76	6.06	273.2	<2	392
MP-11	4/30/03	310	684	3.28	0.0	74.4	0.38	0.88	6.54	313.4	20	608
TWO LICK CREEK ABOVE WHERE A SMALL TRIB ENTERS THAT ORIGINATES FROM												
MP-12U	5/30/02		333	7.13	40.8	4.5	0.46	0.18	0.67	114.2	6	252
MP-12U	6/28/02		405	6.85	43.3	4.8	0.47	0.22	0.90	137.0	2	330
MP-12U	7/26/02		501	7.35	50.2	4.4	0.79	0.31	0.60	193.3	6	376
MP-12U	9/9/02		540	7.05	51.9	8.5	0.60	0.32	2.66	190.5	6	420
MP-12U	9/30/02		514	7.50	54.1	4.1	0.51	0.37	<0.10	186.0	8	394
MP-12U	10/30/02		355	6.95	41.4	4.4	0.55	0.24	<0.10	94.6	4	278
MP-12U	11/26/02		392	6.94	36.2	3.2	0.54	0.21	0.22	126.6	2	232
MP-12U	12/23/02		275	6.53	21.1	3.7	0.31	0.13	0.17	70.8	8	178
MP-12U	1/30/03		438	6.80	39.1	3.2	0.52	0.24	0.25	155.6	<2	298
MP-12U	3/4/03		312	7.04	25.6	2.5	0.41	0.15	0.29	90.2	2	198
MP-12U	3/30/03		362	6.87	30.3	3.6	0.51	0.18	0.82	116.8	12	210
MP-12U	4/30/03		423	7.26	36.1	2.8	0.57	0.23	0.42	145.8	14	352
SMALL TRIB ENTERS THAT ORIGINATES FROM ABANDONED DEEP MINE												
MP-12	5/30/02	NA	1003	3.53	0.0	51.9	1.80	4.30	2.51	455.6	NA	888
MP-12	6/28/02	NA	987	3.44	0.0	64.7	2.06	3.48	3.00	446.2	NA	910
MP-12	7/26/02	NA	1056	3.30	0.0	73.7	1.77	3.32	3.90	438.1	NA	824
MP-12	9/9/02	427.5	1155	3.18	0.0	101.6	2.65	2.99	7.26	537.0	NA	938
MP-12	9/30/02	612.0	1182	3.23	0.0	88.5	2.52	3.13	4.90	518.3	NA	1042
MP-12	10/30/02	536.3	1173	3.23	0.0	91.2	2.73	3.03	5.68	546.4	NA	944
MP-12	11/26/02	272.0	1176	3.31	0.0	107.6	2.54	2.61	5.46	519.6	NA	814
MP-12	12/23/02	237.8	1041	3.31	0.0	94.8	2.34	3.50	4.04	437.7	NA	746
MP-12	1/30/03	241.6	1061	3.37	0.0	68.1	2.39	3.79	3.91	515.9	NA	774
MP-12	3/4/03	257.2	1037	3.28	0.0	79.3	1.52	3.56	3.70	508.5	NA	786
MP-12	3/30/03	249.8	950	3.39	0.0	61.7	1.70	3.77	3.35	426.7	NA	668
MP-12	4/30/03	168.1	992	3.46	0.0	65.2	1.59	3.93	2.33	439.2	NA	848

**Phase II Watershed Assessment and Restoration Plan for the
Upper Two Lick Creek Watershed
Analytical Data**

Field ID	Sample Date	Flow (gpm)	Conductivity (umhos/cm)	Lab pH	Alkalinity (mg/l)	Acidity (mg/l)	Total Fe (mg/l)	Total Mn (mg/l)	Total Al (mg/l)	Total Sulfate (mg/l)	TSS (mg/l)	TDS (mg/l)
TWO LICK CREEK ABOVE WHERE A SMALL												
MP-13U	5/30/02		342	6.68	30.5	5.3	0.32	0.18	0.65	121.7	<2	278
MP-13U	6/28/02		418	6.75	45.1	4.0	0.43	0.21	1.45	150.7	6	330
MP-13U	7/26/02		507	7.33	51.7	5.1	0.36	0.28	1.16	187.8	<2	316
MP-13U	9/9/02		553	7.08	56.2	6.3	0.39	0.34	3.51	208.4	<2	446
MP-13U	9/30/02		529	7.24	64.0	4.5	0.36	0.40	<0.10	182.3	2	408
MP-13U	10/30/02		417	6.83	48.7	5.3	0.36	0.27	<0.10	145.3	4	294
MP-13U	11/26/02		450	7.00	48.0	5.2	0.31	0.25	1.00	165.2	6	306
MP-13U	12/23/02		312	6.60	23.9	6.1	0.20	0.13	0.30	106.1	2	226
MP-13U	1/30/03		461	6.89	42.9	3.7	0.22	0.22	0.52	174.5	4	318
MP-13U	3/4/03		382	7.07	31.5	5.7	0.29	0.17	0.46	132.7	4	298
MP-13U	3/30/03		382	6.86	32.5	5.3	0.29	0.18	1.35	145.3	14	266
MP-13U	4/30/03		441	7.48	39.5	1.2	0.34	0.21	1.21	182.7	4	360
SMALL TRIB THAT FLOWS INTO WEMPAND												
MP-13	5/30/02	NA	391	6.28	28.1	12.9	8.22	0.83	<0.10	142.8	4	316
MP-13	6/28/02	NA	367	7.07	30.7	7.3	8.12	0.80	0.55	124.1	18	304
MP-13	7/26/02	NA	339	6.58	19.0	13.9	10.09	0.96	0.25	127.6	8	232
MP-13	9/9/02	565	344	6.11	22.9	29.6	11.98	0.95	2.06	140.8	16	262
MP-13	9/30/02	1040	373	6.39	30.0	20.8	10.71	1.02	<0.10	146.4	16	268
MP-13	10/30/02	896	424	6.62	49.2	17.1	8.33	0.70	0.17	148.4	32	338
MP-13	11/26/02	569	442	6.71	37.5	9.9	10.75	1.18	0.85	123.0	108	294
MP-13	12/23/02	411	371	6.43	27.6	13.6	9.32	0.87	<0.10	141.5	16	268
MP-13	1/30/03	557	442	6.37	37.7	12.3	9.06	1.47	<0.10	181.2	20	316
MP-13	3/4/03	411	435	6.55	35.0	23.5	7.43	0.85	<0.10	156.0	24	276
MP-13	3/30/03	441	443	6.67	35.2	13.1	8.08	0.88	0.81	166.8	36	274
MP-13	4/30/03	236	391	7.16	26.6	2.1	8.90	1.01	<0.10	135.2	26	338
TWO LICK CREEK ABOVE WHERE A SMALL AMD												
MP-14U	5/30/02		546	6.36	8.9	7.7	0.30	0.48	0.88	234.3	<2	464
MP-14U	6/28/02		607	5.92	4.1	4.1	0.54	0.74	1.75	288.3	2	568
MP-14U	7/26/02		781	4.54	<1.0	30.9	0.29	1.18	3.62	399.7	2	712
MP-14U	9/9/02		868	4.12	0.0	55.6	0.21	1.87	7.65	490.3	<2	836

**Phase II Watershed Assessment and Restoration Plan for the
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MP-14U	9/30/02		812	4.52	<1.0	36.7	0.31	1.99	4.72	392.1	8	798
MP-14U	10/30/02		694	4.72	1.2	24.0	0.39	1.50	3.04	311.9	14	556
MP-14U	11/26/02		641	4.71	1.1	31.2	0.60	1.04	3.21	273.7	8	480
MP-14U	12/23/02		360	6.34	7.8	3.1	0.24	0.28	0.36	113.2	10	232
MP-14U	1/30/03		655	4.68	<1.0	25.7	0.46	0.93	2.52	309.1	2	502
MP-14U	3/4/03		605	5.35	1.8	7.9	0.51	0.66	1.89	229.2	4	414
MP-14U	3/30/03		583	6.30	7.3	5.3	0.47	0.52	2.32	205.6	22	414
MP-14U	4/30/03		650	4.87	<1.0	6.0	0.32	0.61	1.36	306.4	14	588
SMALL TRIB CARRYING AMD FROM ABANDONED DEEP MINE												
MP-14	5/30/02	NA	748	4.01	0.0	88.4	0.06	0.71	11.80	388.0	<2	798
MP-14	6/28/02	NA	676	3.91	0.0	82.8	<0.04	0.51	9.15	319.1	<2	668
MP-14	7/26/02	NA	725	3.79	0.0	78.4	0.16	0.58	9.18	346.5	<2	594
MP-14	9/9/02	135.0	803	3.79	0.0	90.3	0.08	0.68	11.75	386.3	<2	790
MP-14	9/30/02	193.5	816	3.77	0.0	77.6	<0.04	0.76	10.07	406.8	2	808
MP-14	10/30/02	263.3	831	3.76	0.0	83.7	0.08	0.75	10.62	428.1	<2	778
MP-14	11/26/02	435.2	808	3.74	0.0	94.8	<0.04	0.70	10.11	374.5	2	624
MP-14	12/23/02	558.7	682	3.77	0.0	77.6	<0.04	0.51	6.12	304.4	<2	534
MP-14	1/30/03	437.1	612	4.00	0.0	53.1	<0.04	0.46	5.61	302.7	2	442
MP-14	3/4/03	598.0	698	3.78	0.0	71.2	0.12	0.57	7.26	361.7	<2	538
MP-14	3/30/03	859.6	642	3.86	0.0	66.5	<0.04	0.51	8.34	327.3	10	468
MP-14	4/30/03	813.9	649	3.78	0.0	57.5	0.05	0.55	9.38	318.3	10	596
TWO LCIK CREEK ABOVE A SEWAGE OVERFLOW ENTERS												
MP-15U	5/30/02		189	6.81	27.1	4.5	0.32	0.12	0.22	45.7	<2	152
MP-15U	6/28/02		247	6.94	47.3	2.9	0.36	0.14	1.05	58.7	20	184
MP-15U	7/26/02		375	7.40	62.4	5.2	0.66	0.36	1.31	109.3	6	258
MP-15U	9/9/02		570	4.61	<1.0	44.3	2.59	1.09	6.56	273.0	10	494
MP-15U	9/30/02		314	6.73	27.2	9.1	0.94	0.53	0.83	117.7	<2	254
MP-15U	10/30/02		210	6.73	33.0	4.7	0.30	0.15	0.14	54.3	<2	170
MP-15U	11/26/02		249	6.79	32.5	5.3	0.28	0.15	0.56	58.2	2	154
MP-15U	12/23/02		200	6.61	18.9	4.8	0.14	0.06	0.15	54.0	4	124
MP-15U	1/30/03		314	7.06	48.7	3.5	0.53	0.20	0.48	92.6	10	182
MP-15U	3/4/03		233	7.07	29.9	4.0	0.24	0.09	<0.10	57.6	<2	156

**Phase II Watershed Assessment and Restoration Plan for the
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MP-15U	3/30/03		224	6.89	31.8	3.1	0.32	0.11	0.63	64.1	18	124
MP-15U	4/30/03		303	7.48	48.6	1.2	0.44	0.17	0.43	87.4	12	230
SEWAGE SYSTEM OVERFLOW												
MP-15	5/30/02	NA	437	6.54	43.0	12.3	0.21	0.18	0.21	148.2	<2	342
MP-15	6/28/02	NA	446	6.83	48.8	5.2	0.19	0.16	0.88	163.7	2	380
MP-15	7/26/02	NA	495	7.22	57.2	11.1	0.21	0.18	0.86	193.8	<2	360
MP-15	9/9/02	NA	536	6.60	56.7	12.8	0.33	0.23	2.49	184.2	<2	440
MP-15	9/30/02	NA	529	6.75	62.7	10.0	0.25	0.23	0.62	198.1	12	400
MP-15	10/30/02	NA	534	6.62	61.9	12.5	0.19	0.19	<0.10	187.4	2	412
MP-15	11/26/02	NA	508	6.56	47.7	10.4	0.05	0.18	0.47	178.9	2	350
MP-15	12/23/02	NA	456	6.49	36.7	13.3	0.21	0.15	0.29	152.8	2	328
MP-15	1/30/03	NA	489	6.68	45.9	6.4	0.11	0.18	<0.10	186.1	2	322
MP-15	3/4/03	NA	483	6.95	43.8	9.6	0.05	0.15	<0.10	165.2	<2	370
MP-15	3/30/03	NA	455	6.84	42.5	7.1	0.15	0.14	0.58	185.5	14	294
MP-15	4/30/03	NA	462	7.50	46.3	1.6	0.18	0.15	0.29	166.2	6	384
TWO LCIK CREEK BELOW A SEWAGE OVERFLOW												
MP-15D	5/30/02		379	6.62	41.3	9.9	0.32	0.16	0.10	126.9	<2	300
MP-15D	6/28/02		447	6.84	49.1	5.9	3.82	0.53	3.22	156.3	64	376
MP-15D	7/26/02		487	7.36	64.4	9.6	0.77	0.18	1.50	168.7	26	338
MP-15D	9/9/02		520	6.83	71.9	10.9	1.01	0.21	2.89	170.7	10	412
MP-15D	9/30/02		516	6.92	71.6	10.7	1.38	0.24	1.22	163.0	32	388
MP-15D	10/30/02		516	6.80	71.5	10.9	2.46	0.32	1.67	173.6	38	392
MP-15D	11/26/02		502	6.74	52.8	10.1	0.27	0.17	0.46	181.7	2	346
MP-15D	12/23/02		401	6.57	34.1	9.6	0.15	0.12	0.10	135.4	2	274
MP-15D	1/30/03		466	6.87	51.7	7.7	1.27	0.24	1.45	167.2	30	302
MP-15D	3/4/03		386	6.93	41.0	7.1	1.42	0.22	1.41	122.0	16	266
MP-15D	3/30/03		399	6.88	43.0	6.4	0.82	0.16	1.23	133.2	24	236
MP-15D	4/30/03		395	7.48	50.1	1.9	1.49	0.21	1.46	140.4	42	308
NORTH BRANCH TWO LICK CREEK AT CONFLUENCE WITH												
MP-16	5/30/02	NA	321	7.32	61.4	3.5	0.39	0.17	<0.10	80.7	<2	246
MP-16	6/28/02	NA	443	7.64	119.1	1.7	0.29	0.19	0.74	98.5	24	286

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MP-16	7/26/02	NA	660	8.33	213.9	0.0	0.46	0.15	0.99	129.1	4	424
MP-16	9/9/02	3662.6	773	8.29	274.0	<1.0	0.31	0.12	0.94	141.1	<2	534
MP-16	9/30/02	11812.5	626	8.16	200.7	1.5	0.28	0.22	<0.10	117.3	<2	426
MP-16	10/30/02	29133.0	385	7.21	86.4	4.7	0.53	0.46	0.23	91.4	6	246
MP-16	11/26/02	19964.9	360	7.49	81.0	3.7	0.32	0.18	0.20	73.6	<2	226
MP-16	12/23/02	102135.0	219	6.87	25.5	3.9	0.19	0.11	<0.10	49.6	4	154
MP-16	1/30/03	19964.0	511	7.83	144.1	1.2	0.59	0.22	0.21	104.3	8	302
MP-16	3/4/03	100105.6	311	7.55	59.1	3.2	0.31	0.13	0.19	61.7	4	178
MP-16	3/30/03	91277.6	338	7.48	70.8	6.3	0.37	0.14	0.68	74.9	22	178
MP-16	4/30/03	21471.7	488	8.01	132.8	<1.0	0.31	0.18	<0.10	105.7	6	328
UN-NAMED TRIB TO NORTH BRANCH TWO LICK												
MP-17	5/30/02	NA	150	6.91	24.9	2.8	0.28	0.03	<0.10	28.6	<2	112
MP-17	6/28/02	NA	158	6.77	35.2	2.5	0.36	<0.02	1.15	28.7	26	120
MP-17	7/26/02	NA	320	7.37	54.2	2.3	0.38	0.05	0.93	85.4	<2	248
MP-17	9/9/02	18.8	218	7.33	97.8	5.2	0.61	0.17	1.92	23.2	32	128
MP-17	9/30/02	37.1	208	7.52	62.9	2.9	0.20	0.05	0.15	32.6	<2	156
MP-17	10/30/02	8496.0	184	6.69	30.0	3.7	0.16	0.08	<0.10	40.8	6	132
MP-17	11/26/02	1070.2	192	6.76	23.3	3.7	0.05	0.03	<0.10	41.2	<2	126
MP-17	12/23/02	3564.3	169	6.93	26.0	5.3	0.04	<0.02	<0.10	36.7	<2	112
MP-17	1/30/03	107.2	214	6.84	31.0	2.5	0.06	0.03	<0.10	54.9	4	116
MP-17	3/4/03	3512.0	193	7.05	21.6	1.3	0.08	<0.02	0.10	44.0	<2	130
MP-17	3/30/03	4292.4	160	6.71	22.1	2.9	0.12	<0.02	0.48	39.4	20	88
MP-17	4/30/03	3485.8	206	7.19	33.4	1.2	0.16	0.02	<0.10	51.2	8	156
UN-NAMED TRIB TO NORTH BRANCH TWO LICK CREEK												
MP-18	9/9/02	91.5	874	4.35	0.0	30.8	<0.04	0.72	3.79	422.2	<2	796
MP-18	9/30/02	131.3	873	4.38	0.0	27.7	0.05	0.64	2.20	443.5	<2	776
MP-18	10/30/02	209.4	863	4.33	0.0	32.1	4.14	0.58	2.89	417.3	8	744
MP-18	11/26/02	538.7	852	4.07	0.0	67.1	0.10	1.19	5.49	432.2	<2	654
MP-18	12/23/02	278.8	739	3.91	0.0	46.7	0.19	0.92	3.80	363.0	<2	648
MP-18	1/30/03	538.7	797	4.65	<1.0	26.1	0.09	1.20	2.50	377.5	12	586
MP-18	3/4/03	278.8	751	3.93	0.0	29.5	0.16	1.14	3.13	374.7	<2	574
MP-18	3/30/03	192.4	670	4.61	<1.0	22.9	0.06	0.81	2.00	329.3	12	492

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Field ID	Sample Date	Flow	Conductivity	Lab pH	Alkalinity	Acidity	Total Fe	Total Mn	Total Al	Total Sulfate	TSS	TDS
		(gpm)	(umhos/cm)		(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
MP-18	4/30/03	143.6	688	4.61	<1.0	15.5	0.13	1.02	1.70	367.6	8	652
UN-NAMED TRIB TO NORTH BRANCH TWO LICK CREEK												
MP-19	9/9/02		484	6.90	104.6	10.7	0.85	0.14	2.04	138.4	<2	344
MP-19	9/30/02		493	7.19	103.6	9.2	0.72	0.17	<0.10	144.9	<2	356
MP-19	10/30/02		492	7.15	104.1	10.3	0.52	0.13	<0.10	135.5	2	336
MP-19	11/26/02		482	7.03	92.4	11.3	0.43	0.08	0.26	140.4	<2	336
MP-19	12/23/02		452	6.80	95.6	8.5	0.36	0.06	<0.10	111.3	<2	336
MP-19	1/30/03		465	6.92	86.9	5.3	0.37	0.08	<0.10	134.3	2	280
MP-19	3/4/03		457	7.05	83.5	10.7	0.39	0.06	<0.10	126.3	<2	314
MP-19	3/30/03		434	7.20	83.7	7.5	0.29	0.05	0.41	135.9	12	268
MP-19	4/30/03	8	433	7.66	81.8	1.6	0.37	0.06	<0.10	126.1	10	308