Table 1
X-Ray Fluorescence Data
Sediment Samples from the I & M Canal

Sample No.	Sample Depth	XRF Number	Pb (lead)	As (arsenic)	Zn (zinc)	Ni (nickel)	Fe (iron)	Mn (manganese)
1A	0 - 1 foot	11	99.38	<LOD	406.52	<LOD	17041.06	531.15
1B	1 - 2 feet	12	112.55	<LOD	409.39	<LOD	16271.53	<LOD
1C	2 - 3 feet	13	208.82	<LOD	1211.5	<LOD	25395.65	553.98
1D	3 - 4 feet	14	279.84	<LOD	1664.24	<LOD	27068.57	556.8
2A	0 - 1 foot	15	63.87	<LOD	221.2	<LOD	17633.04	<LOD
3A	0 - 1 foot	16	128.06	<LOD	719.02	<LOD	18081.02	313.68
3B	1 - 2 feet	17	123.27	<LOD	753.75	<LOD	18467.05	363.31
3C	2 - 3 feet	18	<LOD	<LOD	1957.52	<LOD	27000.53	363.54
4A	0 - 1 foot	19	284.8	<LOD	1372.77	<LOD	25146.71	533.79
5A	0 - 1 foot	20	91.89	<LOD	429.93	<LOD	11956.98	239.48
5B	1 - 2 feet	21	84.2	<LOD	456.27	<LOD	12133.56	302.81
5C	2 - 3 feet	22	106.45	<LOD	533.11	<LOD	13959.18	284.15
5D	3 - 4 feet	35	87.79	<LOD	512.37	<LOD	15323.28	219.27
6A	0 - 1 foot	36	227.99	<LOD	1411.77	<LOD	28757.05	536.87
7A	0 - 1 foot	37	446.76	<LOD	2677.59	<LOD	24680.02	421.94
7B	1 - 2 feet	38	965.73	<LOD	4107.13	<LOD	57000.74	961.58
7C	2 - 3 feet	39	315.77	<LOD	1914.39	<LOD	31761.22	539.17
8A	0 - 1 feet	40	107.62	<LOD	508.83	<LOD	24622.87	678.64
9A	0 - 1 foot	41	95.2	<LOD	487	<LOD	12607.74	217
9B	1 - 2 feet	42	167.75	<LOD	712.49	<LOD	17446.62	318.39
9C	2 - 3 feet	43	345.67	<LOD	1875.45	<LOD	29699.35	413.91
9D	3 - 4 feet	44	154.1	<LOD	826.42	<LOD	19760.96	419.05
10A	0 - 1 foot	45	97.82	<LOD	694.4	<LOD	23225.61	512.04
11A	0 - 1 foot	55	58.35	<LOD	290.47	<LOD	21480.23	282.53
11B	1 - 2 feet	58	134.96	<LOD	428.28	<LOD	21066.75	315.53
11C	2 - 3 feet	57	60.99	<LOD	429.74	<LOD	15886.11	<LOD
12A	0 - 1 foot	56	189.85	<LOD	745.27	<LOD	27599.3	667.49
13A	0 - 1 foot	61	125.32	<LOD	687.47	<LOD	29135.08	689.25
13B	1 - 2 feet	60	137.27	<LOD	839.57	<LOD	41187.72	506.39
13C	2 - 3 feet	59	<LOD	<LOD	832.09	<LOD	30548.19	678.92
14A	0 - 1 foot	77	33.48	<LOD	232.67	<LOD	10011.83	<LOD
15A	0 - 1 foot	78	64.46	<LOD	271	<LOD	15625.91	220.01
15B	1 - 2 feet	79	69.45	<LOD	276.32	<LOD	19789.51	<LOD
15C	2 - 3 feet	80	125.06	<LOD	812.34	<LOD	17660.36	355.7
15D	3 - 4 feet	81	112.82	2.24	859.38	<LOD	17534.08	298.12
16A	0 - 1 foot	82	42.28	<LOD	352.42	<LOD	17764.6	285.7
17A	0 - 1 foot	83	18.74	<LOD	145.26	<LOD	7773.65	<LOD
18A	0 - 1 foot	84	37.39	<LOD	293.41	<LOD	16367.58	<LOD
18B	1 - 2 feet	85	15.34	<LOD	127.76	<LOD	14353.07	<LOD
18C	2 - 3 feet	86	32.58	<LOD	186.65	<LOD	13441.59	<LOD
18D	3 - 4 feet	87	73.56	<LOD	362.85	-88.44	20972.54	225.98
19A	0 - 1 foot	88	29.57	<LOD	137.14	<LOD	12555.32	226.94
20A	0 - 1 foot	89	32.88	<LOD	259.76	<LOD	12021.36	<LOD
21A	0 - 1 foot	90	24.27	<LOD	231.94	<LOD	13075.41	265.91
21B	1 - 2 feet	91	26.08	<LOD	233.61	<LOD	12476.11	<LOD
21C	2 - 3 feet	92	37	<LOD	191.2	<LOD	13235.63	<LOD
21D	3 - 4 feet	93	17.61	28.4	169.85	<LOD	14818.15	523.82
22A	0 - 1 foot	94	29.29	<LOD	175.83	<LOD	10765.81	279.07
22B	1 - 2 feet	95	37.32	<LOD	169.73	<LOD	12595.41	<LOD
22C	2 - 3 feet	96	15.79	<LOD	205.59	<LOD	11621.47	<LOD
22D	3 - 4 feet	97	34.28	<LOD	341.79	<LOD	15333.43	244.28
23A	0 - 1 foot	98	14.96	<LOD	230.26	<LOD	12779.94	319.7

*** all values reported in parts per million (ppm)**

*** For specfic location of samples refer to Figures 4 and 5**

<LOD - below the limit of detection of the instrument for that particular compound

Table 1 (con't)
X-Ray Fluorescence Data
Sediment Samples from the I & M Canal

Sample No.	Sample Depth	XRF Number	Pb (lead)	As (arsenic)	Zn (zinc)	Ni (nickel)	Fe (iron)	Mn (manganese)
24A	0 - 1 foot	72	31.15	<LOD	143.02	<LOD	11922.43	<LOD
24B	1 - 2 feet	73	<LOD	<LOD	211.2	454.4	12998.4	<LOD
24C	2 - 3 feet	74	<LOD	<LOD	256.8	948	20992	<LOD
24D	3 - 4 feet	75	35.08	<LOD	241.81	<LOD	12108.21	280.58
25A	0 - 1 foot	76	18.43	<LOD	150.61	<LOD	8974.1	<LOD
26A	0 - 1 foot	77	21.59	<LOD	154.92	<LOD	9305	<LOD
26B	1 - 2 feet	78	48.9	<LOD	197.6	<LOD	12697.6	<LOD
26C	2 - 3 feet	79	17.02	<LOD	194.22	<LOD	10577.52	226.08
27A	0 - 1 foot	80	26.6	<LOD	170.8	297.6	11097.6	<LOD
28A	0 - 1 foot	81	35.1	<LOD	190.3	397.6	11897.6	<LOD
28B	1 - 2 feet	82	28.8	<LOD	188.2	402	10796.8	499.2
28C	2 - 3 feet	83	<LOD	<LOD	240.8	415.6	12800	<LOD
28D	3 - 4 feet	85	<LOD	<LOD	330.6	<LOD	16793.6	<LOD
29A	0 - 1 foot	86	41.8	<LOD	210.2	522.4	13388.8	<LOD
30A	0 - 1 foot	87	34.1	<LOD	138.9	293.6	10400	<LOD
30B	1 - 2 feet	89	<LOD	<LOD	201.1	<LOD	13388.8	<LOD
30C	2 - 3 feet	90	<LOD	<LOD	139	<LOD	12697.6	<LOD
30D	3 - 4 feet	91	<LOD	<LOD	278.2	<LOD	19699.2	<LOD
31A	0 - 1 foot	129	23.4	<LOD	236.68	<LOD	12977.3	197.5
32A	0 - 1 foot	135	47.37	<LOD	188.29	<LOD	13085.24	<LOD
32B	1 - 2 feet	136	30.12	<LOD	251.01	<LOD	16705.21	290.2
32C	2 - 3 feet	137	21.87	<LOD	270.5	<LOD	17807.17	<LOD
32D	3 - 4 feet	138	42.2	<LOD	261.79	<LOD	15851.33	<LOD
33A	0 - 1 foot	130	19.3	<LOD	249.47	<LOD	15040.45	<LOD
34A	0 - 1 foot	131	38.36	<LOD	259.64	<LOD	16734.95	<LOD
34B	1 - 2 feet	132	33.31	<LOD	284.23	<LOD	15875.09	269.73
34C	2 - 3 feet	133	43.95	<LOD	333.19	<LOD	16388.33	254.91
34D	3 - 4 feet	134	34.2	<LOD	258.39	<LOD	14995.37	<LOD
35A	0 - 1 foot	143	11.57	<LOD	178.41	<LOD	8474.52	<LOD

*** all values reported in parts per million (ppm)**

*** For specfic location of samples refer to Figures 4 and 5**

<LOD - below the limit of detection of the instrument for that particular compound

Table 2
X-Ray Fluorescence Results
Rail Yard Adjacent to I & M Canal
June 19 - 20, 2006

XRF Number	Pb (lead)	As (arsenic)	Zn (zinc)	Ni (nickel)	Fe (iron)	Mn (manganese)	Cd (cadmium)
6	191.2	<LOD	968.8	<LOD	19289.6	946.4	NA
7	132.1	<LOD	904	<LOD	32281.6	<LOD	NA
8	239.4	<LOD	2200	389.8	21388.8	2849.6	NA
9	369.4	<LOD	1260	275	13990.4	8774.4	NA
10	93.3	<LOD	847.2	568.8	20889.6	2320	NA
11	474.8	<LOD	1819.2	600	29184	6438.4	NA
12	<LOD	<LOD	1280	1389.6	16896	6745.6	NA
13	231.6	<LOD	1589.6	546.4	42393.6	2009.6	NA
14	138.9	<LOD	2000	1160	28083.2	3680	NA
15	NA	NA	NA	NA	NA	NA	<LOD
16	79.6	<LOD	810	1329.6	18099.2	<LOD	NA
17	63.9	<LOD	1229.6	2760	20697.6	1819.2	NA
18	299.6	<LOD	3619.2	2388.8	46182.4	2409.6	NA
19	452	<LOD	94668.8	<LOD	93388.8	3638.4	NA
20	130	<LOD	1320	<LOD	19392	2960	NA
21	169.5	<LOD	5840	1020	30387.2	3337.6	NA
22	123.3	<LOD	2969.6	<LOD	45798.4	2089.6	NA
23	65.5	<LOD	598	856.8	29081.6	<LOD	NA
24	156.8	<LOD	1739.2	670.8	22899.2	1409.6	NA
25	145.7	<LOD	3638.4	<LOD	28876.8	3188.8	NA
26	94.9	<LOD	1460	<LOD	30284.8	9388.8	NA
27	173.2	<LOD	3268.8	1659.2	26291.2	2019.2	NA
28	195.8	<LOD	1988.8	<LOD	21299.2	1620	NA
29	91.8	<LOD	1149.6	464	28390.4	2988.8	NA
30	1729.6	<LOD	20992	<LOD	87398.4	2769.6	NA
31	NA	NA	NA	NA	NA	NA	274.6
32	184.1	<LOD	635.2	335.6	17395.2	852	NA
33	119.4	<LOD	805.6	<LOD	27392	<LOD	NA
34	187.9	<LOD	1009.6	802	27494.4	<LOD	NA
35	<LOD	<LOD	<LOD	<LOD	13094.4	<LOD	NA
36	475.6	<LOD	2649.6	1939.2	26675.2	<LOD	NA
42	126.4	<LOD	1520	<LOD	25792	<LOD	NA
43	162.2	<LOD	3059.2	<LOD	40396.8	2419.2	NA
44	221.4	<LOD	6019.2	<LOD	33894.4	1020	NA
45	249.8	<LOD	2619.2	405.6	38988.8	1089.6	NA
46	188	<LOD	2089.6	<LOD	63897.6	<LOD	NA
47	785.2	<LOD	6377.6	1889.6	34892.8	<LOD	NA
48	318.2	<LOD	2619.2	<LOD	51276.8	<LOD	NA
49	140.4	<LOD	743.2	1340	16192	<LOD	NA
50	502	<LOD	4249.6	1260	28876.8	<LOD	NA
51	265.2	<LOD	3459.2	1349.6	41497.6	2369.6	NA
52	132.6	<LOD	935.2	<LOD	20595.2	1069.6	NA
53	268.4	<LOD	1380	1708.8	36198.4	<LOD	NA
54	111.5	<LOD	260.4	<LOD	17996.8	<LOD	NA
55	27.2	<LOD	55.3	<LOD	14092.8	<LOD	NA
56	182.8	<LOD	1189.6	<LOD	38092.8	<LOD	NA
57	82.8	<LOD	824.8	<LOD	26393.6	<LOD	NA
58	664.4	<LOD	3718.4	<LOD	31078.4	<LOD	NA
59	166.1	<LOD	857.6	3028.8	34483.2	<LOD	NA
60	171.5	78	472.4	1769.6	26880	1060	NA
61	97.3	<LOD	893.6	3408	24998.4	<LOD	NA
62	197.8	<LOD	733.6	1649.6	27878.4	<LOD	NA
63	156.7	<LOD	940.8	2819.2	21696	1960	NA
64	217	<LOD	496	2348.8	22489.6	<LOD	NA

*** all values reported in parts per million (ppm)**

*** for specfic location of samples, refer to Figure 6**

< LOD - denotes below the limit of detection of the XRF for that compound

NA - not applicable

Table 5
Laboratory Data Summary
Inorganic Toxicity Characteristics Leaching Procedure (TCLP)

Sample Number Sample Date Sample Depth	T101 6/20/2006 0 - 2 inches	T102 6/21/2006 6 - 10 inches	T103 6/21/2006 6 - 10 inches	T104 6/21/2006 6 - 12 inches	T105 6/21/2006 2 - 3 feet
Mercury	ND	ND	ND	ND	ND
Antimony	ND	ND	ND	ND	ND
Arsenic	ND	0.12	0.1	0.036	0.063
Barium	0.78	1.1	1.1	0.69	0.75
Beryllium	ND	0.003	0.004	0.004	0.003
Cadmium	2.1	0.071	0.075	0.078	0.045
Chromium	ND	0.005	0.006	0.008	0.009
Lead	1.9	0.3	0.4	0.29	0.17
Nickel	0.057	0.13	0.13	0.12	0.12
Selenium	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND
Thallium	ND	ND	ND	ND	ND
Vanadium	ND	0.013	0.007	ND	ND
Zinc	170	8.4	12	7.8	4.8

* all values reported in mg/l (ppm)

ND - non detect