APPENDIX 1

Summary of Bottom Grain Size

Distributions From the Project

of Dr. J. De Pinto
Clarkson College

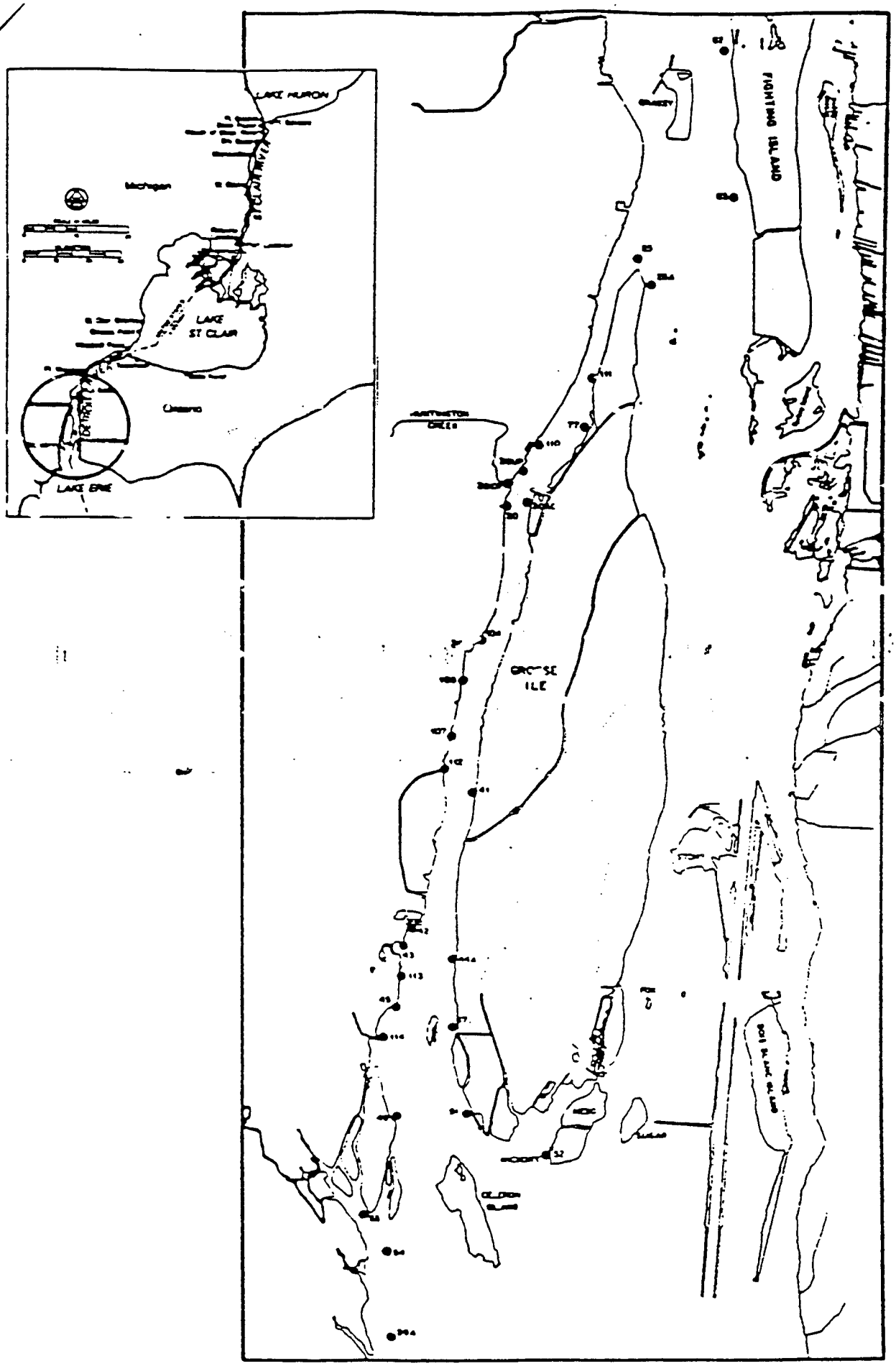

Figure In-Place Pollutants Study Station Array, 1986.

TABLE 5. IN-PLACE POLLUTANTS STUDY STATION COORDINATES

Station	Latitude	Longitude
83	4212.74	8307.55
54	4204.45	8311.25
47	4205.13	8310.52
44A	4206.75	8310.47
113	4206.61	8311.03
52	4505.17	8309.56
51	4205.51	8310.35
45	4206.34	8311.12
114	4206.13	8311.29
111	4211.25	8308.95
59A	4203.83	8311.20
53	4204.73	8311.46
49	4205.47	8311.16
43	4206.82	8311.04
30AC	4210.25	8309.64
25A	4212.02	8308.44
41	4208.09	8310.25
77	4210.05	8309.12
25	3212.13	8308.54
110	4210.81	8309.57
30UP	4210.48	8309.79
112	4208.19	8310.57
30CR	4210.41	8309.88
30	4210.28	8309.82
42	4206.98	8310.90
104	4209.15	8310.25
105	4208.89	8310.39
107	4208.45	8310.50
34	4209.11	8310.31
82	4213.83	8307.62

Appendix Sediment Survey Analyses

Serv. No.	Non-Metals CEC (meq/g)	TC (%)	IC (%)	TOC (%)	Phys. Variables Sp.Gr.	H2O (%)	LOI (%)	Percent With Diameter Less Than (um): 710	500	355	250	180	125	90	63	20	10	5	1
1	0.622	2.9	0.7	2.2	2.29	35.97	3.8	90.27	83.05	72.62	59.50	37.94	18.33	14.53	12.30	9.92	8.50	8.00	7.15
2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	0.583	2.2	0.4	1.8	2.31	25.92	2.1	92.17	82.10	69.38	55.29	34.20	29.89	16.69	14.73	12.98	11.66	11.15	10.17
4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	0.693	5.3	0.2	5.1	2.41	10.70	5.1	96.21	94.55	92.99	88.82	86.94	30.92	29.48	26.04	21.53	20.15	19.14	18.13
6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7	2.05	9.9	0.6	9.3	2.75	58.34	12.2	.	.	.	.	.	.	.	.	.	.	.	.
8	0.885	7.5	1.1	6.4	2.85	51.11	9.0	96.59	96.01	93.85	91.74	98.43	74.60	73.20	71.12	68.90	64.00	56.64	55.51
9	0.975	8.6	1.4	7.2	2.63	54.20	10.0	99.77	99.64	99.67	99.33	98.97	98.03	95.66	95.57	88.31	84.53	83.93	83.21
10	.	8.9	1.4	7.5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
11	1.11	9.1	1.2	7.9	2.70	61.07	10.6	99.35	99.30	99.20	97.95	97.64	96.85	96.84	92.21	92.19	92.10	88.32	85.52
12	0.815	7.9	1.8	6.1	2.46	26.23	8.5	99.86	99.59	99.54	98.56	90.63	83.73	79.19	78.59	77.37	75.63	73.58	72.13
13	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
15	1.673	10.6	0.6	10.0	2.79	55.31	11.6	99.36	99.19	99.13	98.80	98.40	98.31	97.80	96.91	91.14	83.76	82.73	81.93
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
17	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
18	0.355	2.2	0.5	1.7	2.49	16.73	2.9	99.93	61.35	61.27	61.17	61.00	60.07	57.86	57.12	52.14	51.06	50.44	50.02
19	0.363	2.5	0.6	1.9	2.32	20.28	2.7	99.97	97.84	97.81	93.24	91.26	85.67	84.51	84.49	79.72	69.04	67.45	62.41
20	1.28	3.9	1.0	2.9	2.43	37.61	4.2	99.93	99.81	98.80	98.00	96.41	95.84	93.84	90.34	73.11	69.49	62.28	59.08
21	0.33	5.1	0.7	14.4	2.60	[illegible]	5.7	99.96	54.05	[illegible]	28.06	[illegible]	[illegible]	[illegible]	11.07	10.65	10.23	9.86	9.56
22	.	4.9	0.4	4.5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
23	0.523	2.0	0.7	1.3	2.37	34.43	2.4	99.99	99.92	99.81	99.62	98.90	91.70	88.20	52.85	46.47	41.23	36.51	36.19
24	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
25	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
26	0.983	4.0	1.1	2.9	2.29	35.56	3.5	99.95	99.85	99.63	98.94	95.44	86.63	80.87	76.53	62.49	53.47	47.56	43.76
27	0.628	2.7	0.8	1.9	2.31	27.56	4.4	99.98	99.95	99.83	99.81	99.12	73.26	47.27	47.25	46.90	46.52	46.12	45.24
28	0.788	3.2	1.0	2.2	2.47	29.70	2.7	99.85	99.75	99.45	98.69	97.87	83.84	74.43	64.51	59.04	53.18	44.46	41.13
29	0.733	6.9	0.6	6.3	2.43	53.21	8.1	99.98	99.87	99.78	99.44	98.51	97.77	87.05	65.99	59.07	52.93	48.22	45.33
30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
31	0.798	5.7	0.9	4.8	2.41	51.81	6.6	99.81	99.00	97.11	96.02	93.17	92.87	92.54	83.11	76.24	68.91	68.02	67.14
32	.	5.5	0.8	4.7	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
33	0.886	3.6	0.9	2.7	2.45	33.17	4.3	99.98	99.05	98.83	98.86	98.75	98.48	85.71	80.11	79.92	77.07	77.14	75.91
34	0.708	2.9	0.9	2.0	2.48	30.87	2.5	99.79	98.48	98.34	98.27	97.86	97.79	96.76	94.97	93.73	89.19	87.68	85.96
35	.	3.0	0.7	2.3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
36	1.628	1.7	0.7	1.0	2.45	36.88	1.3	99.90	98.16	95.46	95.22	93.89	91.30	91.04	88.96	81.12	76.98	76.05	73.40
37	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
38	1.04	2.3	1.1	1.2	2.28	27.87	2.3	99.90	99.34	98.00	96.93	96.28	92.72	79.76	78.52	77.97	77.38	75.80	74.24
39	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
40	0.678	2.6	1.0	1.6	2.21	35.94	2.7	99.95	99.54	99.08	98.03	95.45	93.23	89.80	81.36	78.27	76.55	74.75	71.22
41	.	2.3	1.2	1.1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
42	0.518	4.4	1.9	2.5	2.40	34.86	4.8	99.89	99.77	98.84	96.52	80.02	79.94	79.28	78.04	71.89	69.08	66.76	66.09
43	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
44	0.555	4.6	1.7	2.9	2.42	33.39	4.4	99.85	99.64	98.57	94.37	77.50	77.33	77.09	76.41	75.73	72.77	71.04	70.18
45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
46	1.128	10.3	1.9	8.4	2.65	76.01	13.1	99.94	99.86	99.73	99.45	99.21	98.69	98.17	97.42	95.98	93.39	90.94	89.30
47	0.905	9.8	2.5	7.3	2.35	33.16	11.8	99.94	99.82	99.78	99.73	99.40	97.67	86.78	84.56	84.24	80.64	80.54	79.98
48	0.908	10.7	1.8	8.9	2.77	51.08	9.2	99.02	97.40	95.53	95.28	95.03	93.45	92.41	91.54	90.99	89.42	81.77	75.93
49	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

DETROIT RIVER CONNECTING CHANNELS
QUALITATIVE SEDIMENT SURVEY
SAMPLING DATE, MAY 13 -17, 1986

STATION NO.	DESCRIPTION
25	SANDY WITH PEBBLES, GRAY-BROWN
25A	NO SAMPLE COLLECTED (SOME PEBBLES)
29	SAND WITH SILT AND PEBBLES, SEPTIC ODOR
30AC	SILTY, GRAY-BLACK, VERY STRONG OILY ODOR
30CR	TWO STRATIFIED LAYERS OF SAND AND SILTY CLAY, SOME PEBBLES PRESENT, GRAY, VERY OILY SMELL
30UP	GELATINOUS GRAY SANDY-SILT, OILY ODOR
30	BROWN-GREY SAND WITH SOME SILT, STONES AND PEBBLES, SHELLS PRESENT
32	
33	GELATINOUS SILT, OILY SLICKS AND SMELL, LARGE AMOUNTS OF ENTRAPPED GAS
34	NO SAMPLE COLLECTED (SMALL AMOUNT SAND AND PEBBLES)
38	CLAY AND SAND WITH SOME PEBBLES, MOLLUSK AND SNAIL SHELLS PRESENT, INSECT LARVAE PRESENT
41	SILTY-SAND WITH PEBBLES, OILY SLICKS AND SMELL, ENTRAPPED GASES PRESENT
42	SANDY WITH PEBBLES, SOME OILY SLICKS, EARTHY SMELL
43	SILTY-SAND WITH CLAY, VEGETATION PRESENT
44A	SANDY WITH LARGE PEBBLES AND SOME CLAY, EARTHY SMELL
45	SILT AND CLAY WITH SOME SAND, LARGE AMOUNTS OF VEGETATION
47	SILTY SAND, EARTHY SMELL, LARGE AMOUNTS OF VEGETATIVE DETRITUS, SOME NEW VEGETATION PRESEN
49	NO SAMPLE COLLECTED (SOME PEBBLES)
49A	SANDY SILT, EARTHY SMELL, LIVING AND DEAD VEGETATION
51	SILTY CLAY, SLIGHT OILY SMELL, SHELLS PRESENT
52	NO SAMPLE COLLECTED
52A	SILTY, GRAY-BROWN, OILY MALODOROUS SMELL, SHELLS PRESENT
53	SANDY, GRAY-BROWN, OILY SMELL, SHELLS PRESENT
54	NO SAMPLE COLLECTED
54A	SANDY, GRAY, MILD OILY SMELL, SHELLS PRESENT
59A	BROWN SILTY SAND, VEGETATION PRESENT, EARTHY SMELL
77	SANDY-CLAY, SHELLS AND VEGETATION PRESENT
82	SANDY-CLAY, WORMS AND VEGETATION PRESENT
83	BLACK SILT, OIL SLICKS AND OILY SMELL
104	DARK BROWN CLAY (IN GLOBULAR MASSES), OILY SMELL
105	CLAY WITH SILT, OILY SLICKS AND SMELL
107	

DETROIT RIVER CONNECTING CHANNELS, IN PLACE POLLUTANTS STUDY
FIELD SEDIMENT/METALS RESUSPENSION EXPERIMENTS
FIELD SAMPLING DATE 5/13/86- 5/17/86

OBS	STATION	EXPER. #	SECONDS/ STROKE	TIME OF SAMPLE min.	SUSPEN. SOLIDS g/L	pH
1	53	1	0.14	0.00	0.06	7.4
2	53	1	0.14	15	0.38	7.6
3	53	2	0.08	0.00	0.16	7.5
4	53	2	0.08	0.5	1.31	.
5	53	2	0.08	7	4.26	.
6	53	2	0.08	15	4.6	7.51
7	53	3	0.14	0.0	0.06	7.5
8	53	3	0.14	15	0.47	7.65
9	53	4	0.08	0.0	0.11	7.68
10	53	4	0.08	15	1.98	7.79
11	83	5	0.14	0.0	0.46	.
12	83	5	0.14	15	0.55	.
13	83	6	0.08	0.0	0.58	.
14	83	6	0.08	15	0.76	.
15	83	7	0.14	0.0	0.60	.
16	83	7	0.14	15	0.66	.
17	83	8	0.08	0.0	0.51	
18	83	8	0.08	15	0.90	.
19	30	9	0.14	0.0	1.6	.
20	30	9	0.14	5	2.9	.
21	30	9	0.14	10	2.9	.
22	30	9	0.14	20	2.7	.
23	30	10	0.08	0.0	1.3	.
24	30	10	0.08	0.5	4.6	.
25	30	10	0.08	5	10.7	.
26	30	10	0.08	10	9.65	.
27	30	10	0.08	20	10.8	.
28	34	11	0.14	0.0	0.8	.
29	34	11	0.14	0.5	1.9	.
30	34	11	0.14	5	2.4	.
31	34	11	0.14	10	2.2	.
32	34	11	0.14	20	1.9	.
33	34	12	0.08	0.0	0.9	.
34	34	12	0.08	0.5	4.0	.
35	34	12	0.08	5	7.4	.
36	34	12	0.08	10	7.6	.
37	34	12	0.08	20	7.8	.

DETROIT RIVER CONNECTING CHANNELS, IN PLACE POLLUTANTS STUDY
FIELD SEDIMENT/METALS RESUSPENSION EXPERIMENTS
FIELD SAMPLING DATE 9/3/86-9/5/86

OBSER-VATION #	STATION	EXPER. #	SECONDS/STROKE	TIME OF SAMPLE min.	SUSPEN. SOLIDS g/L	pH
1	53	13	0.14	0.0	0.02	.
2	53	13	0.14	0.5	0.33	.
3	53	13	0.14	5	0.56	.
4	53	13	0.14	10	0.46	.
5	53	13	0.14	15	0.32	.
6	53	13	0.14	20	0.25	.
7	53	13	0.14	25	0.19	.
8	53	13	0.14	30	0.2	.
9	53	13	0.14	30	0.21	.
10	53	14	0.08	0.0	0.01	
11	53	14	0.08	0.5	2.08	.
12	53	14	0.08	5	4.81	.
13	53	14	0.08	10	4.67	.
14	53	14	0.08	15	4.26	.
15	53	14	0.08	20	4.24	.
16	53	14	0.08	25	4.38	.
17	53	14	0.08	30	4.17	.
18	53	14	0.08	30	4.18	.
19	53	15	0.14	0.0	0.01	.
20	53	15	0.14	0.5	0.33	.
21	53	15	0.14	5	0.56	.
22	53	15	0.14	10	0.51	.
23	53	15	0.14	15	0.48	.
24	53	15	0.14	20	0.42	.
25	53	15	0.14	25	0.41	.
26	53	15	0.14	30	0.4	.
27	53	15	0.14	30	0.39	.
28	83	16	0.08	0.0	0.05	.
29	83	16	0.08	0.5	1.11	.
30	83	16	0.08	5	1.9	.
31	83	16	0.08	10	1.64	.
32	83	16	0.08	15	1.56	.
33	83	16	0.08	20	1.42	.
34	83	16	0.08	25	1.4	.
35	83	16	0.08	30	1.35	.
36	83	16	0.08	30	1.33	.
37	83	17	0.14	0.0	0.02	.
38	83	17	0.14	0.5	0.24	.
39	83	17	0.14	5	0.37	.
40	83	17	0.14	10	0.43	.
41	83	17	0.14	15	0.36	.
42	83	17	0.14	20	0.39	.
43	83	17	0.14	25	0.32	.
44	83	17	0.14	30	0.34	.
45	83	17	0.14	30	0.33	.

DETROIT RIVER CONNECTING CHANNELS, IN PLACE POLLUTANTS STUDY
FIELD SEDIMENT/METALS RESUSPENSION EXPERIMENTS
FIELD SAMPLING DATE 9/3/86-9/5/86

OBSER-VATION #	STATION	EXPER. #	SECONDS/STROKE	TIME OF SAMPLE min.	SUSPEN. SOLIDS g/L	pH
46	30	18	0.08	0.0	0.01	7.84
47	30	18	0.08	0.5	0.68	7.7
48	30	18	0.08	5	2.34	7.51
49	30	18	0.08	10	2.97	7.53
50	30	18	0.08	15	3.58	7.45
51	30	18	0.08	20	3.48	7.71
52	30	18	0.08	25	3.29	7.95
53	30	18	0.08	30	2.8	7.62
54	30	18	0.08	30	2.83	7.63
55	30	19	0.14	0.0	0.06	7.17
56	30	19	0.14	0.5	0.3	7.3
57	30	19	0.14	5	0.37	7.36
58	30	19	0.14	10	0.39	7.76
59	30	19	0.14	15	0.45	7.72
60	30	19	0.14	20	0.42	8.06
61	30	19	0.14	25	0.42	7.4
62	30	19	0.14	30	0.4	7.45
63	30	19	0.14	30	0.43	.
64	30	20	0.08	0.0	0.01	.
65	30	20	0.08	0.5	2.35	.
66	30	20	0.08	5	4.4	.
67	30	20	0.08	10	5.13	.
68	30	20	0.08	15	5.54	.
69	30	20	0.08	20	5.42	.
70	30	20	0.08	25	5.26	.
71	30	20	0.08	30	4.88	.
72	30	20	0.08	30	5.39	.
73	30	21	0.14	0.0	0.005	.
74	30	21	0.14	0.5	0.19	.
75	30	21	0.14	5	0.26	.
76	30	21	0.14	10	0.26	.
77	30	21	0.14	15	0.25	.
78	30	21	0.14	20	0.23	.
79	30	21	0.14	25	0.25	.
80	30	21	0.14	30	0.24	.
81	30	21	0.14	30	0.23	.
82	34	22	0.14	0.0	0.005	7.65
83	34	22	0.14	0.5	0.14	7.5
84	34	22	0.14	5	0.52	7.6
85	34	22	0.14	10	0.57	7.6
86	34	22	0.14	15	0.55	7.6
87	34	22	0.14	20	0.54	7.6
88	34	22	0.14	25	0.6	7.6
89	34	22	0.14	30	0.53	7.6

DETROIT RIVER CONNECTING CHANNELS, IN PLACE POLLUTANTS STUDY
FIELD SEDIMENT/METALS RESUSPENSION EXPERIMENTS
FIELD SAMPLING DATE 9/3/86-9/5/86

OBSER-VATION #	STATION	EXPER. #	SECONDS/STROKE	TIME OF SAMPLE min.	SUSPEN. SOLIDS g/L	pH
90	34	22	0.14	30	0.55	.
91	34	23	0.08	0.0	0.001	7.1
92	34	23	0.08	0.5	1.94	7.2
93	34	23	0.08	5	5.31	7.2
94	34	23	0.08	10	5.49	7.6
95	34	23	0.08	15	5.46	7.5
96	34	23	0.08	20	4.77	7.9
97	34	23	0.08	25	4.51	7.9
98	34	23	0.08	30	4.15	8.0
99	34	23	0.08	30	4.31	.
100	34	24	0.08	0.0	0.01	7.0
101	34	24	0.08	0.5	1.25	7.3
102	34	24	0.08	5	4.2	7.2
103	34	24	0.08	10	4.66	7.5
104	34	24	0.08	15	4.97	7.7
105	34	24	0.08	20	4.6[illegible]	7.7
106	34	24	0.08	25	4.23	.
107	34	24	0.08	30	4.39	.
108	34	24	0.08	30	4.28	.