FINAL REPORT FOR
STEVENSON CREEK
CLEARWATER, FLORIDA

DELIVERY ORDER 0055
CONTRACT DACW17-97-D-0001

OCTOBER 2000

SUBMITTED TO:

U.S. Department of the Army
Corps of Engineers, Jacksonville District
P.O. Box 4970
Jacksonville, Florida 32232-0019

SUBMITTED BY:

PPB Environmental Laboratories, Inc.
6821 S.W. Archer Road
Gainesville, Florida 32608

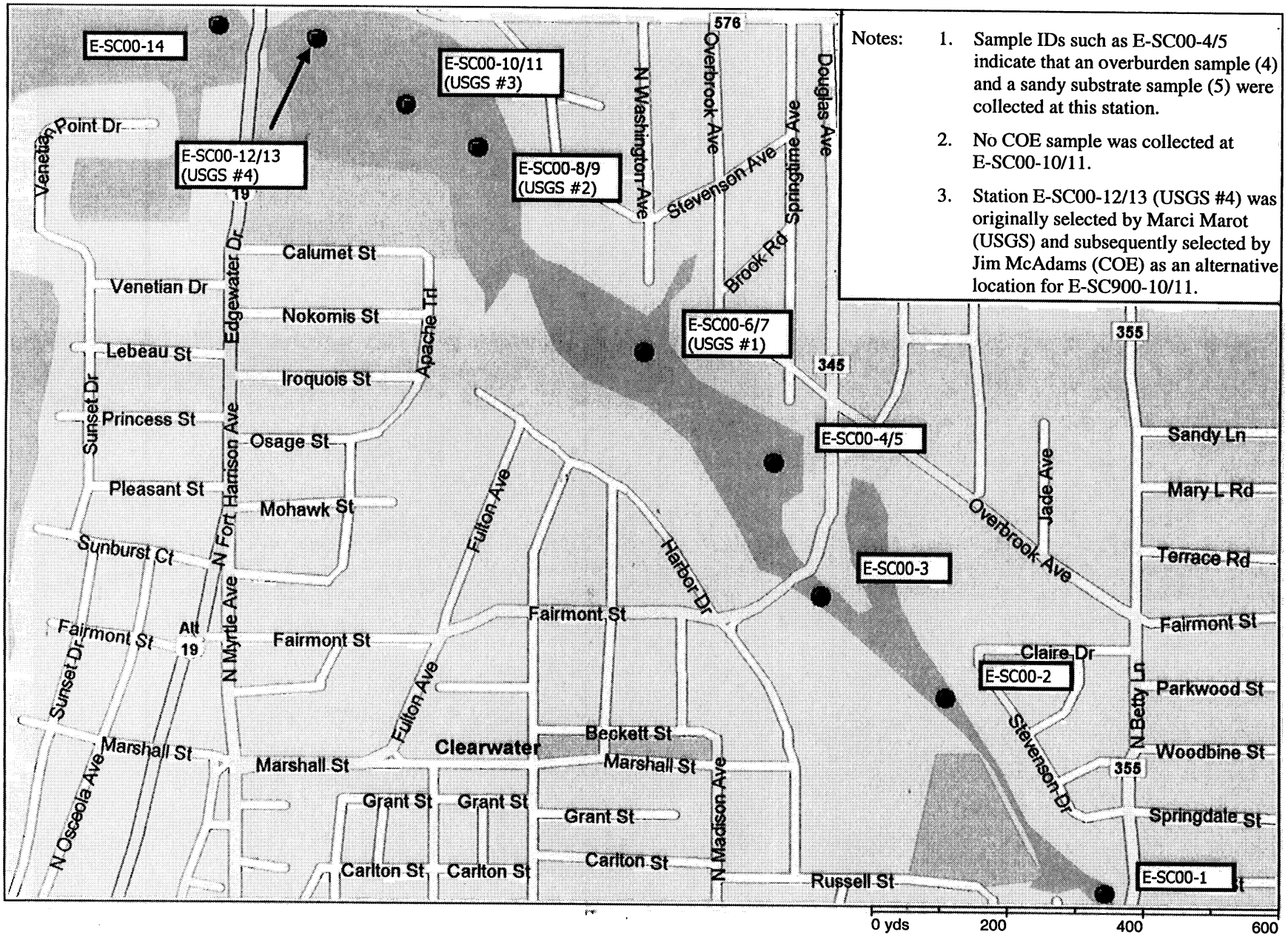

Figure 1. Stevenson Creek Stations Sampled July 19-22, 2000

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Table

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Table 1. Results of Metals Analyses for Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in ppm (μg/g) and presented on dry and wet weight basis] (Page 1 of 3)

Station ID	PPB #	Aluminum		Arsenic		Barium		Cadmium		Chromium	
		Dry/Wet		Dry/Wet		Dry/Wet		Dry/Wet		Dry/Wet	
E-SC00-01	190089	1,220	939	0.14	0.11	12.0	9.2	<0.10	<0.08	4.42	3.40
E-SC00-02	190090	4,890	2,840	1.94	1.12	31.8	18.4	0.38	0.22	18.1	10.5
E-SC00-03	190091	1,120	840	0.11	0.08	7.9	5.9	0.09	0.07	3.00	2.25
E-SC00-04	190099	25,400	9,400	2.38	0.88	114	42.2	1.76	0.65	101	37.4
E-SC00-05	190100	11,100	8,990	0.46	0.37	44.3	35.9	<0.10	<0.08	16.0	13.0
E-SC00-06	190095	3,060	2,260	1.00	0.74	11.6	8.6	0.13	0.10	10.1	7.5
E-SC00-07	190096	14,800	10,500	1.05	0.74	52.3	37.1	0.15	0.11	22.1	15.7
E-SC00-08	190101	17,200	8,940	2.67	1.39	70.3	36.6	0.81	0.42	40.2	20.9
E-SC00-09	190102	20,400	16,500	1.03	0.83	55.3	44.8	<0.10	<0.08	17.2	13.9
E-SC00-12	190093	13,700	5,620	4.44	1.82	57.2	23.4	0.97	0.40	51.8	21.2
E-SC00-13	190094	2,000	1,620	0.30	0.24	15.6	12.6	<0.10	<0.08	5.81	4.71
E-SC00-14	190092	9,160	3,940	2.79	1.20	43.8	18.8	0.55	0.24	30.8	13.2
E-SC00-15	190097	29,000	11,300	2.48	0.97	90.0	35.1	1.12	0.44	76.3	29.8
E-SC00-16	190098	17,400	14,100	0.52	0.42	53.0	42.9	<0.10	<0.08	18.5	15.0

NOTE: Sample E-SC00-15 is a field duplicate of E-SC00-12, and E-SC00-16 is a field duplicate of E-SC00-13.

Table 1. Results of Metals Analyses for Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in ppm (μg/g) and presented on dry and wet weight basis] (Page 2 of 3)

Station ID	PPB #	Copper		Iron		Lead		Mercury		Nickel	
		Dry/Wet		Dry/Wet		Dry/Wet		Dry/Wet		Dry/Wet	
E-SC00-01	190089	2.92	2.25	565	435	6.02	4.63	<0.05	<0.04	0.90	0.69
E-SC00-02	190090	50.1	29.0	2,210	1,280	60.5	35.1	0.13	0.08	4.75	2.76
E-SC00-03	190091	2.28	1.71	421	316	5.19	3.89	<0.05	<0.04	0.58	0.44
E-SC00-04	190099	70.6	26.1	7,820	2,890	154	57.0	0.53	0.20	32.0	11.8
E-SC00-05	190100	3.83	3.10	1,420	1,150	3.00	2.43	<0.05	<0.04	9.32	7.55
E-SC00-06	190095	5.33	3.94	1,200	888	12.6	9.32	<0.05	<0.04	1.96	1.45
E-SC00-07	190096	8.59	6.10	1,880	1,330	15.9	11.3	0.06	0.04	10.7	7.60
E-SC00-08	190101	22.8	11.8	4,950	2,570	47.7	24.8	0.10	0.05	10.8	5.62
E-SC00-09	190102	4.15	3.36	1,730	1,400	3.27	2.65	<0.05	<0.04	8.68	7.03
E-SC00-12	190093	28.0	11.5	6,900	2,830	64.4	26.4	0.14	0.06	10.2	4.18
E-SC00-13	190094	1.42	1.15	956	774	2.45	1.98	<0.05	<0.04	0.95	0.77
E-SC00-14	190092	18.1	7.78	4,640	2,000	27.0	11.6	0.12	0.05	4.66	2.00
E-SC00-15	190097	32.2	12.6	7,520	2,930	77.5	30.2	0.15	0.06	22.8	8.89
E-SC00-16	190098	3.20	2.59	1,660	1,340	3.14	2.54	<0.05	<0.04	9.26	7.50

NOTE: Sample E-SC00-15 is a field duplicate of E-SC00-12, and E-SC00-16 is a field duplicate of E-SC00-13.

Table 1. Results of Metals Analyses for Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in ppm (μg/g) and presented on dry and wet weight basis] (Page 3 of 3)

Station ID	PPB #	Selenium		Silver		Tin		Zinc		Solids, total (%)
		Dry/Wet		Dry/Wet		Dry/Wet		Dry/Wet		
E-SC00-01	190089	<0.50	<0.38	<0.05	<0.04	1.01	0.78	12.8	9.86	77
E-SC00-02	190090	<0.50	<0.29	0.61	0.35	2.18	1.26	71.4	41.4	58
E-SC00-03	190091	<0.50	<0.38	0.06	0.04	0.61	0.46	11.9	8.92	75
E-SC00-04	190099	0.65	0.24	3.66	1.35	1.88	0.70	230	85.1	37
E-SC00-05	190100	<0.50	<0.40	<0.05	<0.04	1.28	1.04	9.78	7.92	81
E-SC00-06	190095	<0.50	<0.37	0.09	0.07	1.16	0.86	24.2	17.9	74
E-SC00-07	190096	<0.50	<0.36	0.41	0.29	1.94	1.38	31.6	22.4	71
E-SC00-08	190101	<0.50	<0.26	0.99	0.51	1.02	0.53	68.9	35.8	52
E-SC00-09	190102	<0.50	<0.40	0.09	0.07	1.68	1.36	14.4	11.7	81
E-SC00-12	190093	0.97	0.40	1.03	0.42	2.76	1.13	76.0	31.2	41
E-SC00-13	190094	<0.50	<0.40	0.05	0.04	0.24	0.19	5.00	4.05	81
E-SC00-14	190092	0.62	0.27	0.28	0.12	1.28	0.55	47.8	20.6	43
E-SC00-15	190097	<0.50	<0.20	0.59	0.23	1.55	0.60	94.9	37.0	39
E-SC00-16	190098	<0.50	<0.40	<0.05	<0.04	1.66	1.34	14.5	11.7	81

NOTE: Sample E-SC00-15 is a field duplicate of E-SC00-12, and E-SC00-16 is a field duplicate of E-SC00-13.

Table 2. Results of Pesticides, Polynuclear Aromatic Hydrocarbons (PAHs), and Oil & Grease Analyses for Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in μg/g (ppm) or percent and presented on dry and wet weight basis] (Page 1 of 6)

Station ID:	E-SC00-01		E-SC00-02		E-SC00-03		E-SC00-04		E-SC00-05	
PPB #:	190089		190090		190091		190099		190100	
	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet
Aldrin	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
Chlordane	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
4,4'-DDT	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
4,4'-DDD	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
4,4'-DDE	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
Dieldrin	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
Endosulfan I	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
Endosulfan II	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
Endosulfan sulfate	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
Endrin	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
Endrin aldehyde	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
Heptachlor	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
Heptachlor epoxide	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
Lindane	<0.007	<0.005	<0.007	<0.004	<0.006	<0.005	<0.015	<0.005	<0.006	<0.005
Toxaphene	<0.069	<0.050	<0.072	<0.042	<0.064	<0.047	<0.150	<0.050	<0.061	<0.047
Methoxychlor	<0.028	<0.020	<0.029	<0.017	<0.025	<0.019	<0.059	<0.020	<0.024	<0.019

Table 2. Results of Pesticides, Polynuclear Aromatic Hydrocarbons (PAHs), and Oil & Grease Analyses for Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in μg/g (ppm) or percent and presented on dry and wet weight basis] (Page 2 of 6)

Station ID:	E-SC00-01		E-SC00-02		E-SC00-03		E-SC00-04		E-SC00-05	
PPB #:	190089		190090		190091		190099		190100	
	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet
Acenaphthene	<0.120	<0.088	<0.170	<0.100	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Acenaphthlyene	<0.120	<0.088	<0.170	<0.100	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Anthracene	<0.120	<0.088	<0.170	<0.100	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Benzo(a)anthracene	0.330	0.240	0.500	0.290	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Benzo(a)pyrene	0.330	0.240	0.580	0.340	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Benzo(g,h,i)perylene	0.260	0.190	0.450	0.260	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Benzo(k)fluoranthene	0.180	0.130	0.330	0.190	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Benzo(b)fluoranthene	0.490	0.350	0.840	0.490	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Chrysene	0.440	0.320	0.660	0.380	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Dibenzo(a,h)anthracene	<0.120	<0.088	<0.170	<0.100	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Fluoranthene	0.850	0.610	1.10	0.650	0.130	0.093	<0.290	<0.097	<0.110	<0.088
Fluorene	<0.120	<0.088	<0.170	<0.100	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Indeno(1,2,3-cd)pyrene	0.220	0.160	0.380	0.220	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Methylnaphthalene	<0.120	<0.088	<0.170	<0.100	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Naphthalene	<0.120	<0.088	<0.170	<0.100	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Phenanthrene	0.320	0.230	0.310	0.180	<0.120	<0.091	<0.290	<0.097	<0.110	<0.088
Pyrene	0.800	0.580	1.30	0.740	0.150	0.110	0.300	0.100	<0.110	<0.088
Oil & Grease	150	110	830	480	<100	<74	1,800	620	<100	<81

Table 2. Results of Pesticides, Polynuclear Aromatic Hydrocarbons (PAHs), and Oil & Grease Analyses for Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in μg/g (ppm) or percent and presented on dry and wet weight basis] (Page 3 of 6)

Station ID:	E-SC00-06		E-SC00-07		E-SC00-08		E-SC00-09		E-SC00-12	
PPB #:	190095		190096		190101		190102		190093	
	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet
Aldrin	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
Chlordane	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
4,4'-DDT	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
4,4'-DDD	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
4,4'-DDE	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
Dieldrin	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
Endosulfan I	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
Endosulfan II	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
Endosulfan sulfate	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
Endrin	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
Endrin aldehyde	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
Heptachlor	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
Heptachlor epoxide	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
Lindane	<0.007	<0.005	<0.006	<0.004	<0.008	<0.005	<0.006	<0.005	<0.012	<0.005
Toxaphene	<0.067	<0.047	<0.058	<0.047	<0.085	<0.046	<0.062	<0.049	<0.120	<0.046
Methoxychlor	<0.027	<0.019	<0.023	<0.018	<0.034	<0.018	<0.025	<0.020	<0.048	<0.018

Table 2. Results of Pesticides, Polynuclear Aromatic Hydrocarbons (PAHs), and Oil & Grease Analyses for Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in μg/g (ppm) or percent and presented on dry and wet weight basis] (Page 4 of 6)

Station ID:	E-SC00-06		E-SC00-07		E-SC00-08		E-SC00-09		E-SC00-12	
PPB #:	190095		190096		190101		190102		190093	
	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet
Acenaphthene	<0.130	<0.089	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Acenaphthlyene	<0.130	<0.089	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Anthracene	<0.130	<0.089	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Benzo(a)anthracene	<0.130	<0.089	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Benzo(a)pyrene	<0.130	<0.089	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Benzo(g,h,i)perylene	<0.130	<0.089	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Benzo(k)fluoranthene	<0.130	<0.089	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Benzo(b)fluoranthene	0.170	0.120	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Chrysene	0.130	0.093	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Dibenzo(a,h)anthracene	<0.130	<0.089	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Fluoranthene	0.200	0.140	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Fluorene	<0.130	<0.089	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Indeno(1,2,3-cd)pyrene	<0.130	<0.089	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Methylnaphthalene	<0.130	<0.089	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Naphthalene	<0.130	<0.089	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Phenanthrene	<0.130	<0.089	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Pyrene	0.200	0.140	<0.130	<0.096	<0.180	<0.100	<0.130	<0.100	<0.260	<0.100
Oil & Grease	160	110	<110	<80	440	240	<98	<78	660	250

Table 2. Results of Pesticides, Polynuclear Aromatic Hydrocarbons (PAHs), and Oil & Grease Analyses for Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in μg/g (ppm) or percent and presented on dry and wet weight basis] (Page 5 of 6)

Station ID:	E-SC00-13		E-SC00-14		E-SC00-15		E-SC00-16	
PPB #:	190094		190092		190097		190098	
	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet
Aldrin	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
Chlordane	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
4,4'-DDT	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
4,4'-DDD	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
4,4'-DDE	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
Dieldrin	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
Endosulfan I	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
Endosulfan II	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
Endosulfan sulfate	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
Endrin	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
Endrin aldehyde	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
Heptachlor	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
Heptachlor epoxide	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
Lindane	<0.006	<0.005	<0.011	<0.005	<0.013	<0.005	<0.006	<0.005
Toxaphene	<0.063	<0.049	<0.110	<0.050	<0.130	<0.050	<0.059	<0.048
Methoxychlor	<0.025	<0.019	<0.045	<0.020	<0.051	<0.020	<0.023	<0.019

NOTE: Sample E-SC00-15 is a field duplicate of E-SC00-12, and E-SC00-16 is a field duplicate of E-SC00-13.

Table 2. Results of Pesticides, Polynuclear Aromatic Hydrocarbons (PAHs), and Oil & Grease Analyses for Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in μg/g (ppm) or percent and presented on dry and wet weight basis] (Page 6 of 6)

Station ID:	E-SC00-13		E-SC00-14		E-SC00-15		E-SC00-16	
PPB #:	190094		190092		190097		190098	
	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet
Acenaphthene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Acenaphthlyene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Anthracene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Benzo(a)anthracene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Benzo(a)pyrene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Benzo(g,h,i)perylene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Benzo(k)fluoranthene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Benzo(b)fluoranthene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Chrysene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Dibenzo(a,h)anthracene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Fluoranthene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Fluorene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Indeno(1,2,3-cd)pyrene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Methylnaphthalene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Naphthalene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Phenanthrene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Pyrene	<0.130	<0.097	<0.210	<0.091	<0.250	<0.098	<0.120	<0.100
Oil & Grease	<100	<78	430	190	760	290	<100	<83

NOTE: Sample E-SC00-15 is a field duplicate of E-SC00-12, and E-SC00-16 is a field duplicate of E-SC00-13.

Table 3. Results of Metals Analyses for Elutriates Prepared from Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in ppb (μg/L)] (Page 1 of 2)

Station ID	PPB #	Arsenic	Barium	Cadmium	Chromium	Copper	Iron
Elutriate Water	190793	<3.0	8.1	0.2	<0.5	10.5	<4.0
Background Water	190103	5.0	21.1	<0.2	2.4	2.0	65.2
E-SC00-01	190794	5.8	59.1	0.2	<0.5	1.4	<4.0
E-SC00-02	190795	11.1	105	0.6	7.2	15.1	824
E-SC00-03	190796	6.0	13.7	<0.2	<0.5	<0.5	<4.0
E-SC00-04	190802	5.6	139	<0.2	3.2	2.0	95.3
E-SC00-05	190803	4.5	16.6	<0.5	<0.5	0.6	<4.0
E-SC00-06	190800	10.6	16.9	<0.2	2.0	1.6	62.0
E-SC00-07	190801	6.4	20.9	<0.2	1.4	<0.5	38.0
E-SC00-08	190804	26.3	97.5	<0.5	1.8	2.2	5.1
E-SC00-09	190805	7.5	8.5	<0.5	1.7	<0.5	<4.0
E-SC00-12	190798	24.8	50.2	0.2	0.6	1.0	30.5
E-SC00-13	190799	10.1	12.6	0.5	1.2	1.8	<4.0
E-SC00-14	190797	6.4	18.6	0.2	<0.5	0.5	64.6

Table 3. Results of Metals Analyses for Elutriates Prepared from Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in ppb (μg/L)] (Page 2 of 2)

Station ID	PPB #	Lead	Mercury	Nickel	Selenium	Silver	Tin	Zinc
Elutriate Water	190793	<3.0	<0.10	<2.0	<5.0	<0.10	<20	9.5
Background Water	190103	<3.0	<0.10	<2.0	<5.0	<0.10	<20	13.2
E-SC00-01	190794	<3.0	<0.10	<2.0	<5.0	<0.10	<20	3.9
E-SC00-02	190795	29.2	<0.10	<2.0	<5.0	0.30	<20	40.0
E-SC00-03	190796	<3.0	<0.10	<2.0	<5.0	<0.10	<20	4.1
E-SC00-04	190802	<3.0	<0.10	<2.0	<5.0	<0.10	<20	3.3
E-SC00-05	190803	<3.0	<0.10	<2.0	<5.0	<0.10	<20	7.8
E-SC00-06	190800	<3.0	0.26	<2.0	<5.0	<0.10	<20	6.7
E-SC00-07	190801	<3.0	0.18	<2.0	<5.0	<0.10	<20	22.1
E-SC00-08	190804	<3.0	0.10	<2.0	<5.0	<0.10	<20	11.0
E-SC00-09	190805	<3.0	<0.10	<2.0	<5.0	<0.10	<20	8.2
E-SC00-12	190798	<3.0	<0.10	<2.0	<5.0	<0.10	<20	6.3
E-SC00-13	190799	<3.0	<0.10	<2.0	<5.0	<0.10	<20	8.4
E-SC00-14	190797	<3.0	<0.10	<2.0	<5.0	<0.10	<20	4.6

Table 4. Results of Pesticides and Polynuclear Aromatic Hydrocarbons (PAHs) for Elutriates Prepared from Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in μg/L (ppb)] (Page 1 of 6)

Station ID:	Elutriate Water	Background Water	E-SC00-01	E-SC00-02	E-SC00-03
PPB #:	190793	190103	190794	190795	190796
Aldrin	<0.014	<0.014	<0.014	<0.014	<0.014
Chlordane	<0.026	<0.027	<0.026	<0.026	<0.026
4,4'-DDT	<0.004	<0.004	<0.004	<0.004	<0.004
4,4'-DDD	<0.007	<0.007	<0.007	<0.007	<0.007
4,4'-DDE	<0.013	<0.013	<0.013	<0.013	<0.013
Dieldrin	<0.012	<0.012	<0.012	<0.012	<0.012
Endosulfan I	<0.011	<0.012	<0.011	<0.011	<0.011
Endosulfan II	<0.006	<0.006	<0.006	<0.006	<0.006
Endosulfan sulfate	<0.006	<0.006	<0.006	<0.006	<0.006
Endrin	<0.009	<0.009	<0.009	<0.009	<0.009
Endrin aldehyde	<0.008	<0.008	<0.008	<0.008	<0.008
Heptachlor	<0.016	<0.016	<0.016	<0.016	<0.016
Heptachlor epoxide	<0.010	<0.010	<0.010	<0.010	<0.010
Lindane	<0.008	<0.009	<0.008	<0.008	<0.008
Toxaphene	<0.14	<0.14	<0.14	<0.14	<0.14
Methoxychlor	<0.004	<0.004	<0.004	<0.004	<0.004

Table 4. Results of Pesticides and Polynuclear Aromatic Hydrocarbons (PAHs) for Elutriates Prepared from Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in μg/L (ppb)] (Page 2 of 6)

Station ID:	Elutriate Water	Background Water	E-SC00-01	E-SC00-02	E-SC00-03
PPB #:	190793	190103	190794	190795	190796
Acenaphthene	<0.65	<0.67	<0.65	<0.65	<0.65
Acenaphthlyene	<0.70	<0.72	<0.70	<0.70	<0.70
Anthracene	<0.50	<0.51	<0.50	<0.50	<0.50
Benzo(a)anthracene	<0.58	<0.60	<0.58	<0.58	<0.58
Benzo(a)pyrene	<0.53	<0.54	<0.53	<0.53	<0.53
Benzo(g,h,i)perylene	<0.98	<1.0	<0.98	<0.98	<0.98
Benzo(k)fluoranthene	<0.82	<0.84	<0.82	<0.82	<0.82
Benzo(b)fluoranthene	<0.50	<0.51	<0.50	<0.50	<0.50
Chrysene	<0.31	<0.32	<0.31	<0.31	<0.31
Dibenzo(a,h)anthracene	<1.1	<1.1	<1.1	<1.1	<1.1
Fluoranthene	<0.44	<0.45	<0.44	<0.44	<0.44
Fluorene	<0.45	<0.46	<0.45	<0.45	<0.45
Indeno(1,2,3-cd)pyrene	<0.90	<0.92	<0.90	<0.90	<0.90
Methylnaphthalene	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	<0.69	<0.71	<0.69	<0.69	<0.69
Phenanthrene	<0.30	<0.31	<0.30	<0.30	<0.30
Pyrene	<0.19	<0.20	<0.19	<0.19	<0.19

Table 4. Results of Pesticides and Polynuclear Aromatic Hydrocarbons (PAHs) for Elutriates Prepared from Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in μg/L (ppb)] (Page 3 of 6)

Station ID:	E-SC00-04	E-SC00-05	E-SC00-06	E-SC00-07
PPB #:	190802	190803	190800	190801
Aldrin	<0.014	<0.014	<0.014	<0.014
Chlordane	<0.026	<0.027	<0.027	<0.027
4,4'-DDT	<0.004	<0.004	<0.004	<0.004
4,4'-DDD	<0.007	<0.007	<0.007	<0.007
4,4'-DDE	<0.013	<0.013	<0.013	<0.013
Dieldrin	<0.012	<0.012	<0.012	<0.012
Endosulfan I	<0.011	<0.012	<0.012	<0.012
Endosulfan II	<0.006	<0.006	<0.006	<0.006
Endosulfan sulfate	<0.006	<0.006	<0.006	<0.006
Endrin	<0.009	<0.009	<0.009	<0.009
Endrin aldehyde	<0.008	<0.008	<0.008	<0.008
Heptachlor	<0.016	<0.016	<0.016	<0.016
Heptachlor epoxide	<0.010	<0.010	<0.010	<0.010
Lindane	<0.008	<0.009	<0.009	<0.009
Toxaphene	<0.14	<0.14	<0.14	<0.14
Methoxychlor	<0.004	<0.004	<0.004	<0.004

Table 4. Results of Pesticides and Polynuclear Aromatic Hydrocarbons (PAHs) for Elutriates Prepared from Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in μg/L (ppb)] (Page 4 of 6)

Station ID:	E-SC00-04	E-SC00-05	E-SC00-06	E-SC00-07
PPB #:	190802	190803	190800	190801
Acenaphthene	<0.65	<0.65	<0.65	<0.65
Acenaphthlyene	<0.70	<0.70	<0.70	<0.70
Anthracene	<0.50	<0.50	<0.50	<0.50
Benzo(a)anthracene	<0.58	<0.58	<0.58	<0.58
Benzo(a)pyrene	<0.53	<0.53	<0.53	<0.53
Benzo(g,h,i)perylene	<0.98	<0.98	<0.98	<0.98
Benzo(k)fluoranthene	<0.82	<0.82	<0.82	<0.82
Benzo(b)fluoranthene	<0.50	<0.50	<0.50	<0.50
Chrysene	<0.31	<0.31	<0.31	<0.31
Dibenzo(a,h)anthracene	<1.1	<1.1	<1.1	<1.1
Fluoranthene	<0.44	<0.44	<0.44	<0.44
Fluorene	<0.45	<0.45	<0.45	<0.45
Indeno(1,2,3-cd)pyrene	<0.90	<0.90	<0.90	<0.90
Methylnaphthalene	<1.0	<1.0	<1.0	<1.0
Naphthalene	<0.69	<0.69	<0.69	<0.69
Phenanthrene	<0.30	<0.30	<0.30	<0.30
Pyrene	<0.19	<0.19	<0.19	<0.19

Table 4. Results of Pesticides and Polynuclear Aromatic Hydrocarbons (PAHs) for Elutriates Prepared from Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in μg/L (ppb)] (Page 5 of 6)

Station ID:	E-SC00-08	E-SC00-09	E-SC00-12	E-SC00-13	E-SC00-14
PPB #:	190804	190805	1920798	190799	190797
Aldrin	<0.014	<0.014	<0.014	<0.014	<0.014
Chlordane	<0.027	<0.027	<0.027	<0.027	<0.027
4,4'-DDT	<0.004	<0.004	<0.004	<0.004	<0.004
4,4'-DDD	<0.007	<0.007	<0.007	<0.007	<0.007
4,4'-DDE	<0.013	<0.013	<0.013	<0.013	<0.013
Dieldrin	<0.012	<0.012	<0.012	<0.012	<0.012
Endosulfan I	<0.012	<0.012	<0.012	<0.012	<0.012
Endosulfan II	<0.006	<0.006	<0.006	<0.006	<0.006
Endosulfan sulfate	<0.006	<0.006	<0.006	<0.006	<0.006
Endrin	<0.009	<0.009	<0.009	<0.009	<0.009
Endrin aldehyde	<0.008	<0.008	<0.008	<0.008	<0.008
Heptachlor	<0.016	<0.016	<0.016	<0.016	<0.016
Heptachlor epoxide	<0.010	<0.010	<0.010	<0.010	<0.010
Lindane	<0.009	<0.009	<0.009	<0.009	<0.009
Toxaphene	<0.14	<0.14	<0.14	<0.14	<0.14
Methoxychlor	<0.004	<0.004	<0.004	<0.004	<0.004

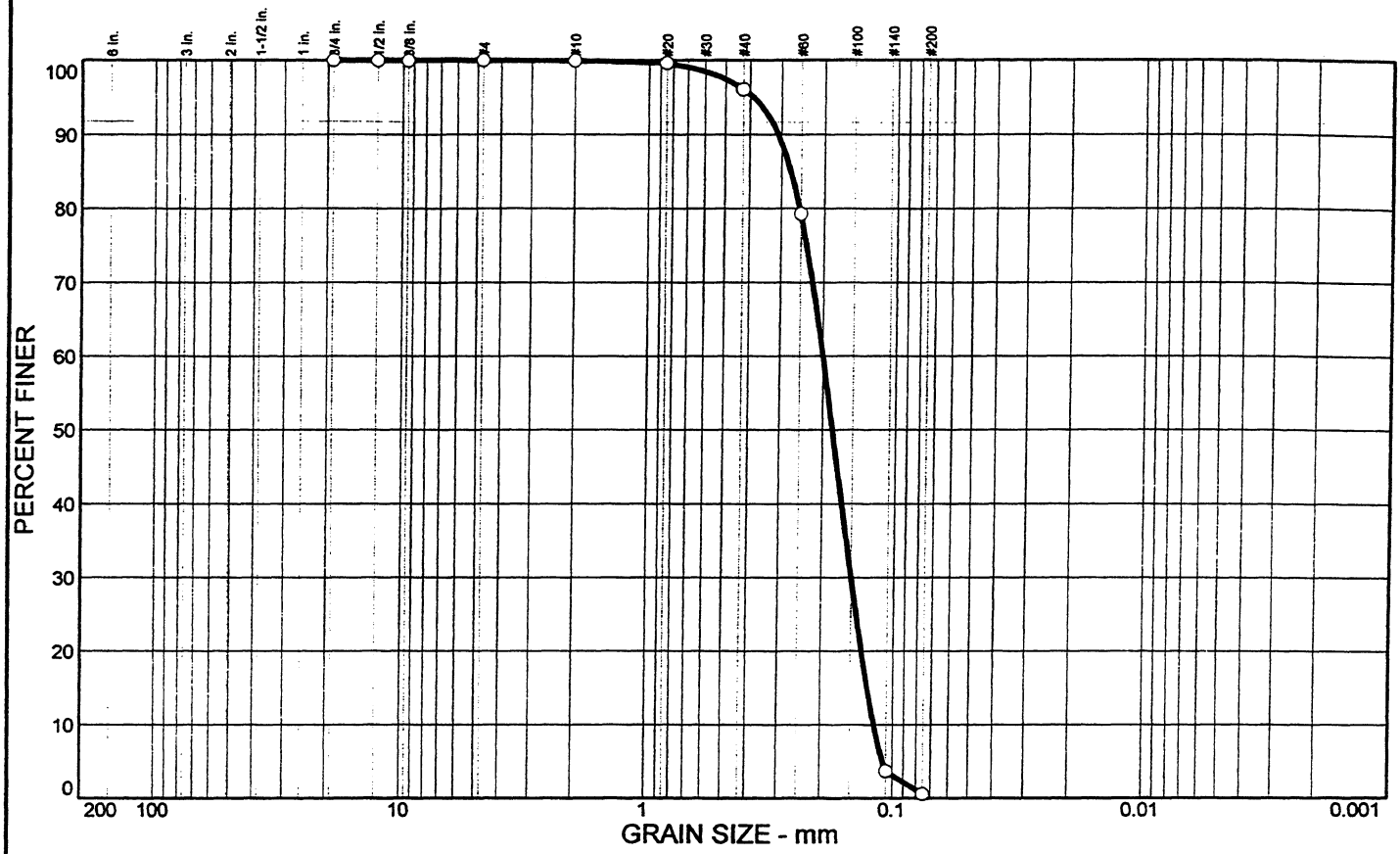
Table 4. Results of Pesticides and Polynuclear Aromatic Hydrocarbons (PAHs) for Elutriates Prepared from Sediments Collected at Stevenson Creek, Clearwater, Florida, July 19-22, 2000 [all data reported in μg/L (ppb)] (Page 6 of 6)

Station ID:	E-SC00-08	E-SC00-09	E-SC00-12	E-SC00-13	E-SC00-14
PPB #:	190804	190805	1920798	190799	190797
Acenaphthene	<0.65	<0.65	<0.65	<0.65	<0.65
Acenaphthlyene	<0.70	<0.70	<0.70	<0.70	<0.70
Anthracene	<0.50	<0.50	<0.50	<0.50	<0.50
Benzo(a)anthracene	<0.58	<0.58	<0.58	<0.58	<0.58
Benzo(a)pyrene	<0.53	<0.53	<0.53	<0.53	<0.53
Benzo(g,h,i)perylene	<0.98	<0.98	<0.98	<0.98	<0.98
Benzo(k)fluoranthene	<0.82	<0.82	<0.82	<0.82	<0.82
Benzo(b)fluoranthene	<0.50	<0.50	<0.50	<0.50	<0.50
Chrysene	<0.31	<0.31	<0.31	<0.31	<0.31
Dibenzo(a,h)anthracene	<1.1	<1.1	<1.1	<1.1	<1.1
Fluoranthene	<0.44	<0.44	<0.44	<0.44	<0.44
Fluorene	<0.45	<0.45	<0.45	<0.45	<0.45
Indeno(1,2,3-cd)pyrene	<0.90	<0.90	<0.90	<0.90	<0.90
Methylnaphthalene	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	<0.69	<0.69	<0.69	<0.69	<0.69
Phenanthrene	<0.30	<0.30	<0.30	<0.30	<0.30
Pyrene	<0.19	<0.19	<0.19	<0.19	<0.19

TABLE 5

GRAIN SIZE DISTRIBUTION REPORTS FOR SEDIMENTS COLLECTED AT STEVENSON CREEK, CLEARWATER, FLORIDA, ON JULY 19-22, 2000

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			99.4	0.6		SP	A-3		

SIEVE inches size	PERCENT FINER ○		
.750	100.0		
.500	100.0		
.375	100.0		
	GRAIN SIZE		
D_{60}	0.200		
D_{30}	0.150		
D_{10}	0.119		
	COEFFICIENTS		
C_c	0.94		
C_u	1.68		

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	99.9		
#20	99.6		
#40	96.1		
#60	79.3		
#140	3.7		
#200	0.6		

SOIL DESCRIPTION

○ Brown Fine SAND w/ some small shell

REMARKS:

○

○ Source: Station No. E-SC00-1

Sample No.: PPB Sample No. 190089

Law Engineering and Environmental Services, Inc.

Client: PPB Environmental Laboratories

Project: COE Stevenson Creek

Project No.: 40564-5-1484-26

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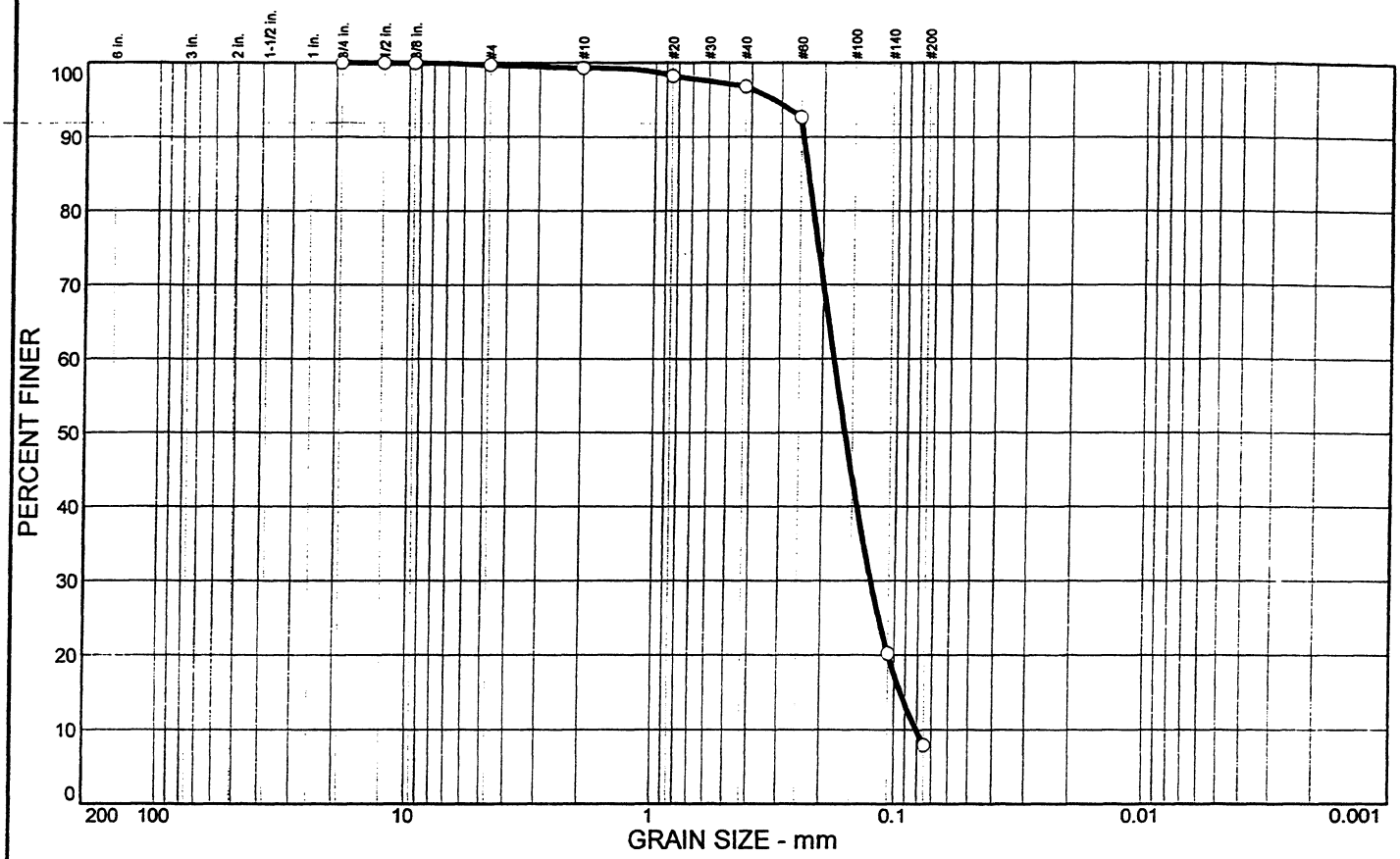
JOHN A. UNTERSPAN, P.E.

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		0.3	91.8	7.9		SP-SM	A-3		

SIEVE inches size	PERCENT FINER ○		
.750	100.0		
.500	100.0		
.375	100.0		
	GRAIN SIZE		
D_{60}	0.179		
D_{30}	0.125		
D_{10}	0.0807		
	COEFFICIENTS		
C_c	1.08		
C_u	2.22		

SIEVE number size	PERCENT FINER ○		
#4	99.7		
#10	99.3		
#20	98.2		
#40	96.8		
#60	92.7		
#140	20.2		
#200	7.9		

SOIL DESCRIPTION

○ Brown Slightly Silty Fine SAND w/ some small shell

REMARKS:

○

○ Source: Station No. E-SC00-2

Sample No.: PPB Sample No. 190090

Law Engineering and Environmental Services, Inc.

Client: PPB Environmental Laboratories

Project: COE Stevenson Creek

Project No.: 40564-5-1484-26

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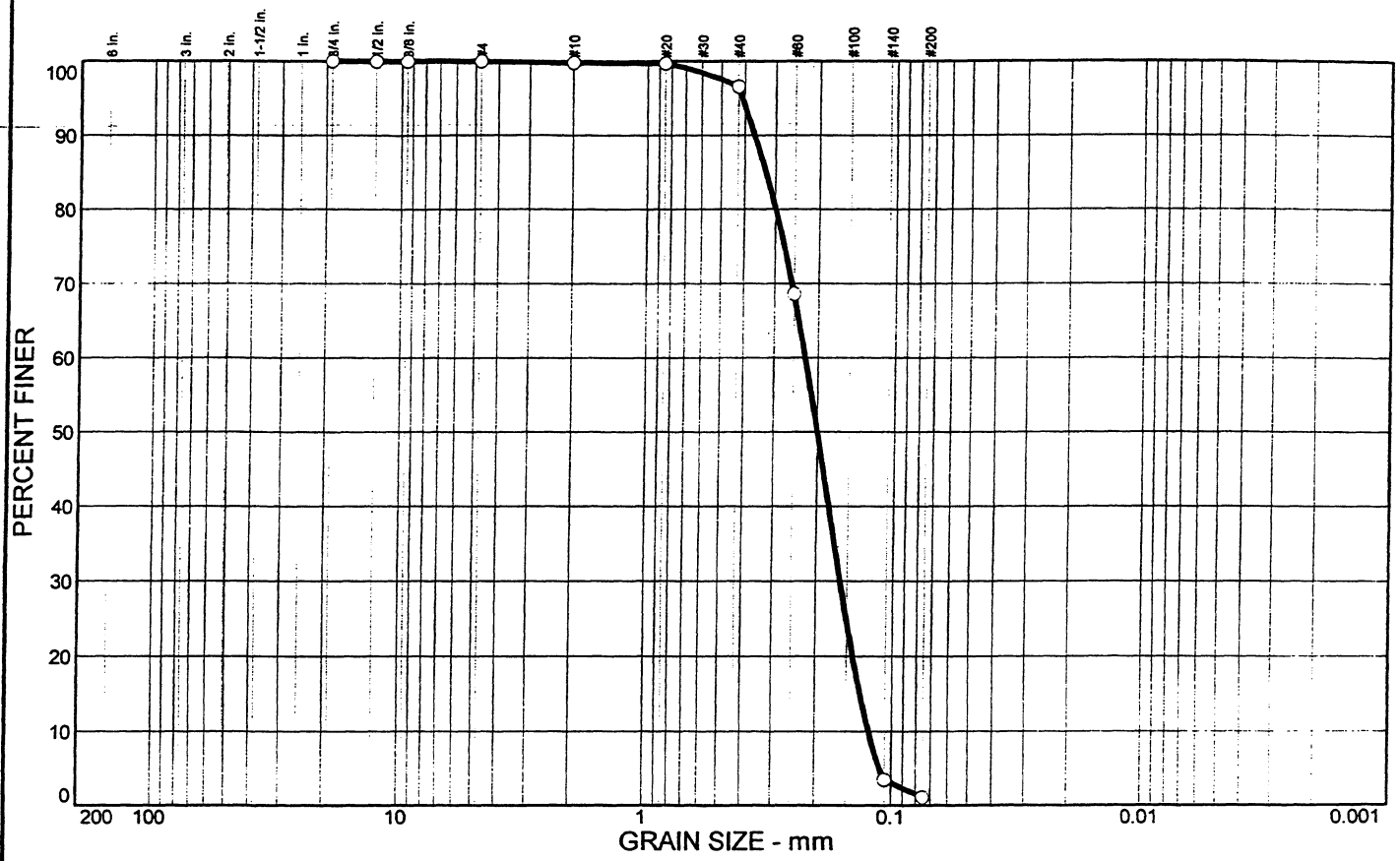
Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			98.9	1.1		SP	A-3		

SIEVE inches size	PERCENT FINER ○		
.750	100.0		
.500	100.0		
.375	100.0		
GRAIN SIZE			
D_{60}	0.224		
D_{30}	0.160		
D_{10}	0.122		
COEFFICIENTS			
C_c	0.93		
C_u	1.83		

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	99.8		
#20	99.7		
#40	96.6		
#60	68.6		
#140	3.5		
#200	1.1		

SOIL DESCRIPTION

○ Brown Fine SAND w/ some small shell

REMARKS:

○

○ Source: Station No. E-SC00-3

Sample No.: PPB Sample No. 190091

Law Engineering and Environmental Services, Inc.

Client: PPB Environmental Laboratories

Project: COE Stevenson Creek

Project No.: 40564-5-1484-26

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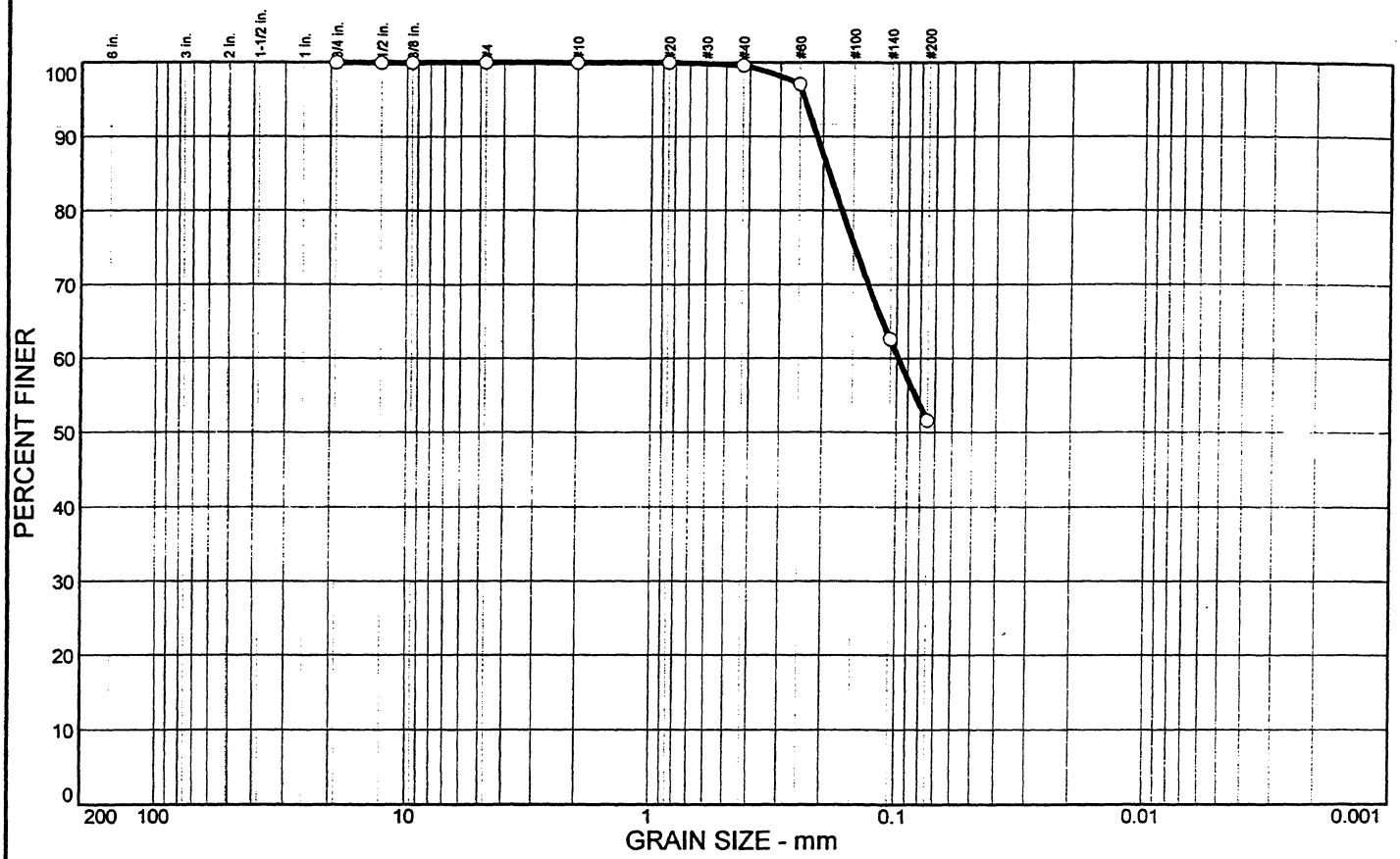
JOHN A. UNTERSPAN, P.E.

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			48.4	51.6		ML	A-4(0)		

SIEVE inches size	PERCENT FINER ○		
.75	100.0		
.50	100.0		
.375	100.0		
GRAIN SIZE			
D_{60}	0.0981		
D_{30}			
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	100.0		
#20	100.0		
#40	99.6		
#60	97.1		
#140	62.6		
#200	51.6		

SOIL DESCRIPTION

○ Brown Very Sandy SILT

REMARKS:

○

○ Source: Station No. E-SC00-4

Sample No.: PPB Sample No. 190099

Law Engineering and Environmental Services, Inc.

Client: PPB Environmental Laboratories

Project: COE Stevenson Creek

Project No.: 40564-5-1484-26

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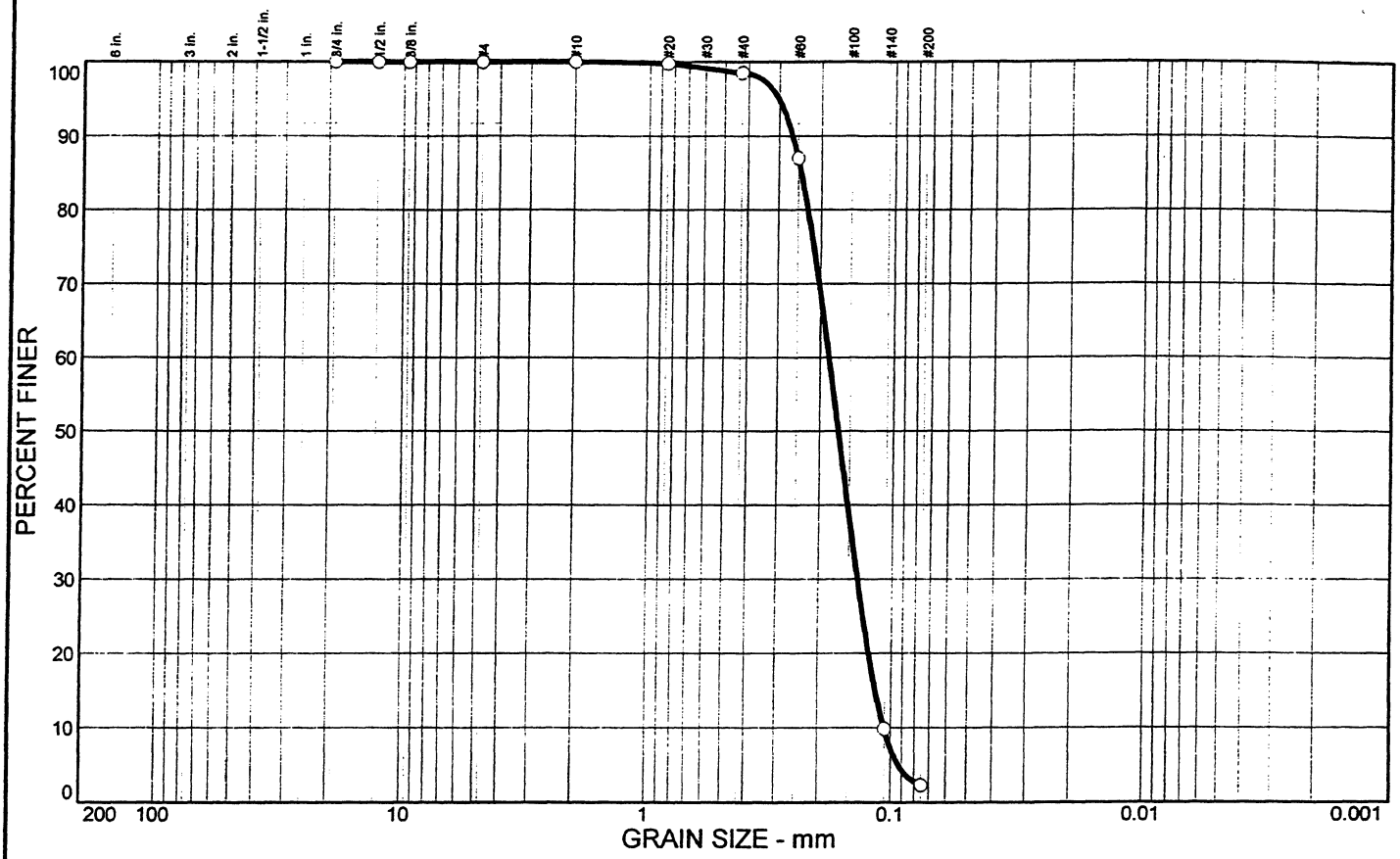
Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			97.7	2.3		SP	A-3		

SIEVE inches size	PERCENT FINER ○		
.750	100.0		
.500	100.0		
.375	100.0		

GRAIN SIZE			
D_{60}	0.184		
D_{30}	0.138		
D_{10}	0.106		

COEFFICIENTS			
C_c	0.97		
C_u	1.72		

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	100.0		
#20	99.8		
#40	98.5		
#60	87.0		
#140	9.8		
#200	2.3		

SOIL DESCRIPTION

○ Brown Fine SAND

REMARKS:

○

○ Source: Station No. E-SC00-5

Sample No.: PPB Sample No. 199100

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Client: PPB Environmental Laboratories

Project: COE Stevenson Creek

Project No.: 40564-5-1484-26

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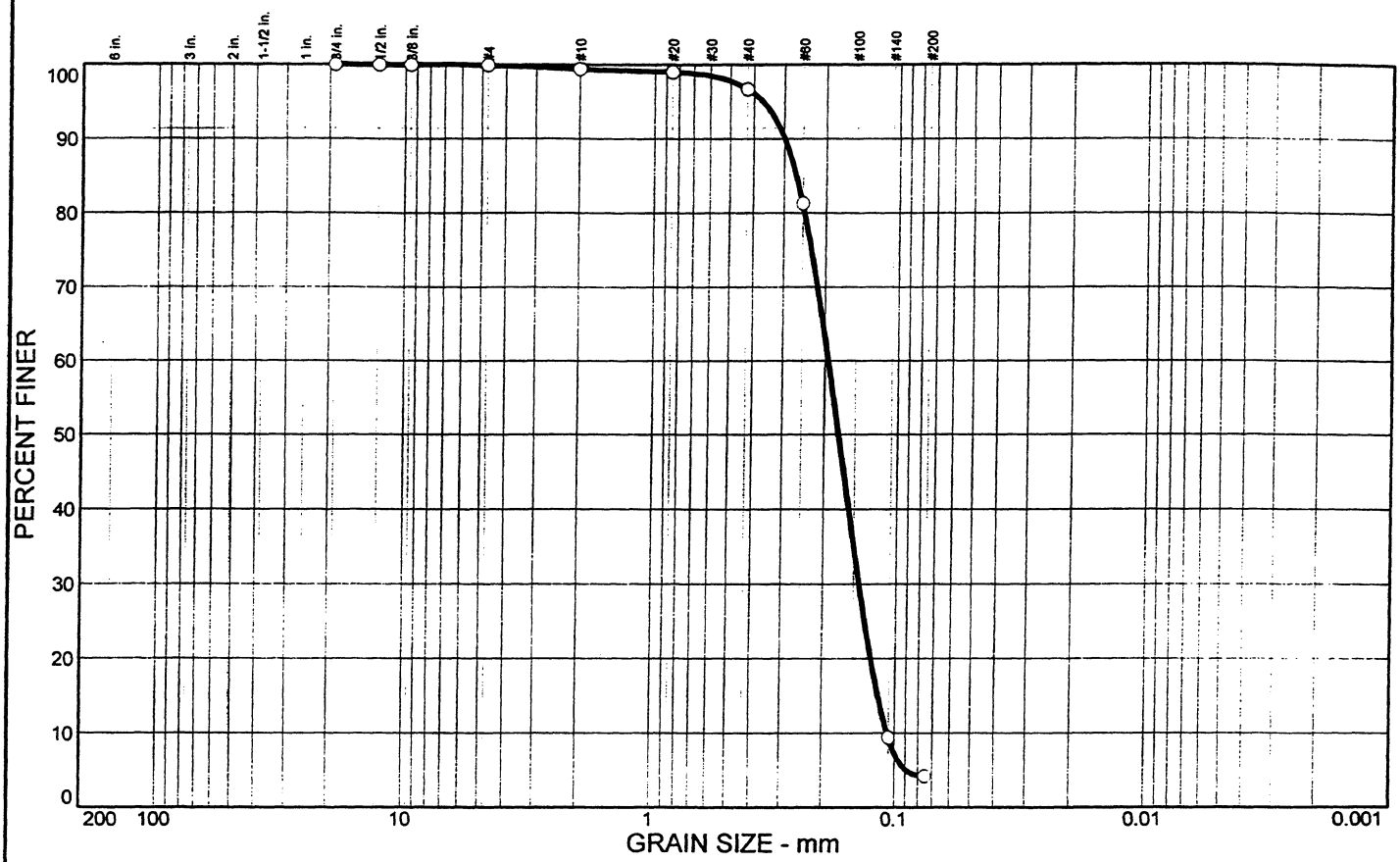
Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		0.1	95.7	4.2		SP	A-3		

SIEVE inches size	PERCENT FINER ○		
.750	100.0		
.500	100.0		
.375	100.0		
	GRAIN SIZE		
D_{60}	0.193		
D_{30}	0.142		
D_{10}	0.107		
	COEFFICIENTS		
C_c	0.97		
C_u	1.80		

SIEVE number size	PERCENT FINER ○		
#4	99.9		
#10	99.4		
#20	99.0		
#40	96.7		
#60	81.3		
#140	9.4		
#200	4.2		

SOIL DESCRIPTION

○ Brown Fine SAND w/ some small shell

REMARKS:

○

○ Source: Station No. E-SC00-6

Sample No.: PPB Sample No. 190095

Law Engineering and Environmental Services, Inc.

Client: PPB Environmental Laboratories

Project: COE Stevenson Creek

Project No.: 40564-5-1484-26

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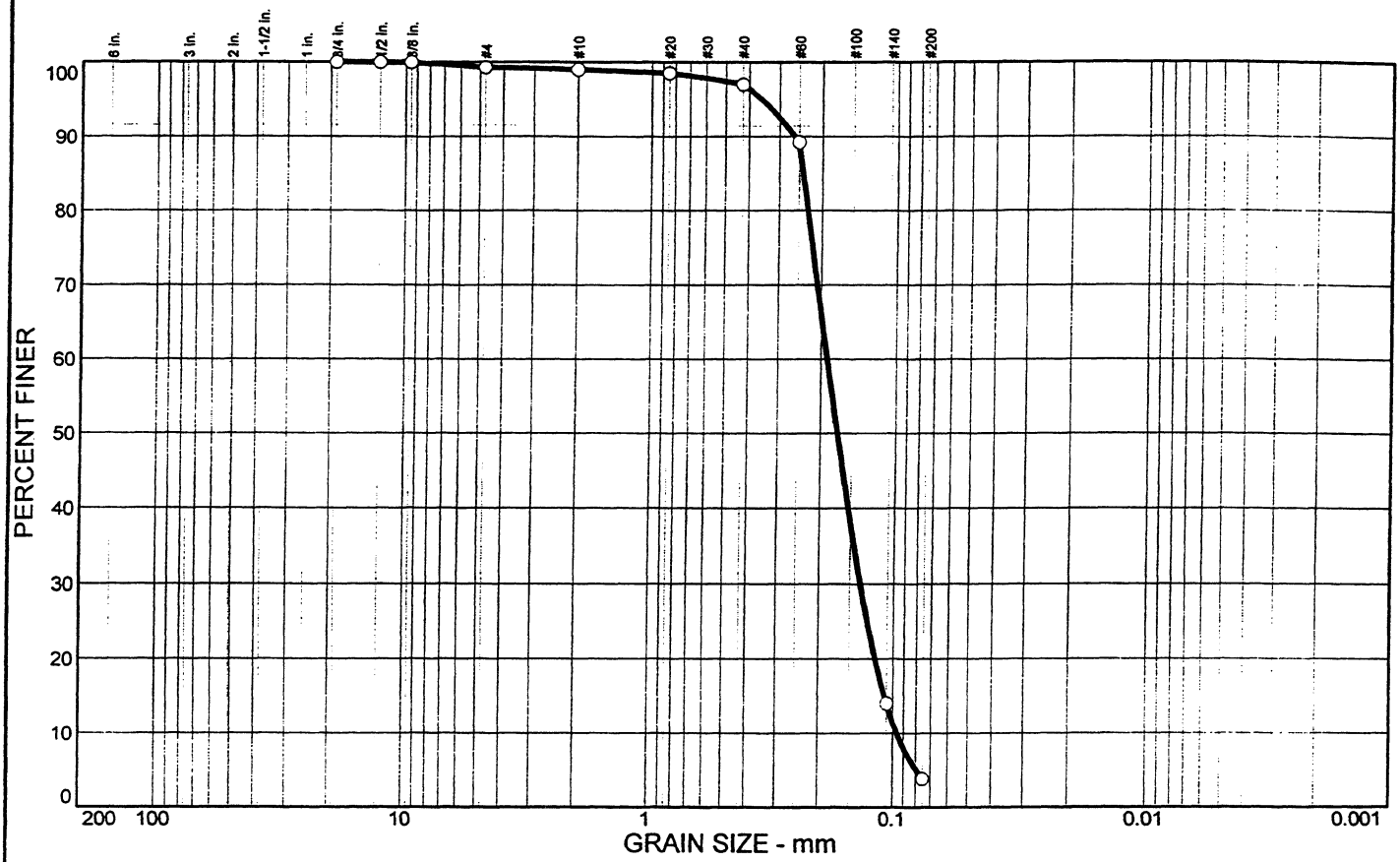
Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		0.7	95.5	3.8		SP	A-3		

SIEVE inches size	PERCENT FINER ○		
.750	100.0		
.500	100.0		
.375	100.0		
	GRAIN SIZE		
D_{60}	0.189		
D_{30}	0.136		
D_{10}	0.0960		
	COEFFICIENTS		
C_c	1.02		
C_u	1.97		

SIEVE number size	PERCENT FINER ○		
#4	99.3		
#10	99.0		
#20	98.5		
#40	97.0		
#60	89.2		
#140	14.0		
#200	3.8		

SOIL DESCRIPTION

○ Brown Fine SAND w/ some small shell

REMARKS:

○

Source: Station No. E-SC00-7

Sample No.: PPB Sample No. 190096

Law Engineering and Environmental Services, Inc.

Client: PPB Environmental Laboratories

Project: COE Stevenson Creek

Project No.: 40564-5-1484-26

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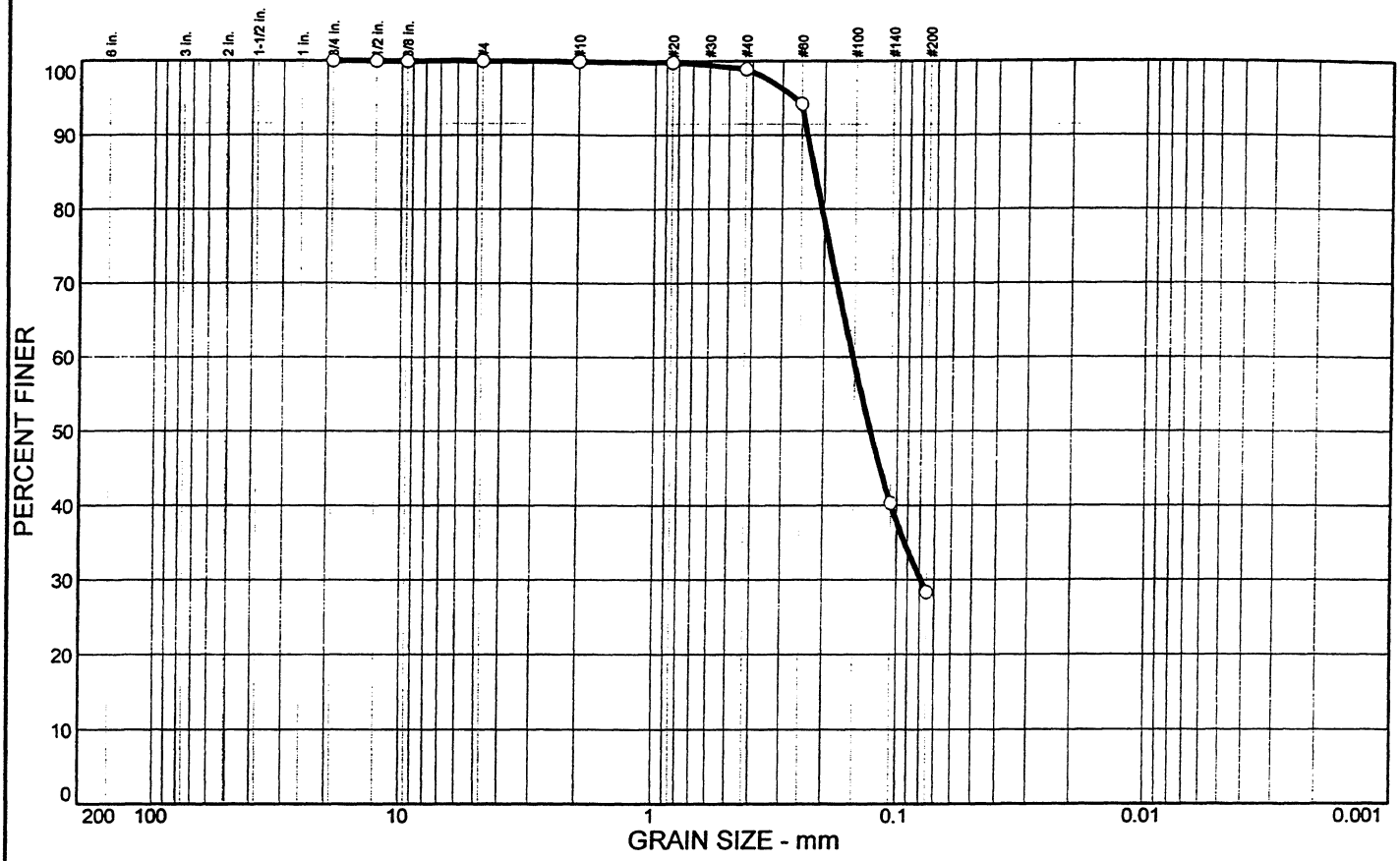
Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			71.7	28.3		SM	A-2-4(0)		

SIEVE inches size	PERCENT FINER ○		
.750	100.0		
.500	100.0		
.375	100.0		
	GRAIN SIZE		
D_{60}	0.152		
D_{30}	0.0793		
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	99.9		
#20	99.8		
#40	98.9		
#60	94.2		
#140	40.3		
#200	28.3		

SOIL DESCRIPTION

○ Grey Silty Fine SAND

REMARKS:

○

○ Source: Station No. E-SC00-8

Sample No.: PPB Sample No. 190101

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Client: PPB Environmental Laboratories

Project: COE Stevenson Creek

Project No.: 40564-5-1484-26

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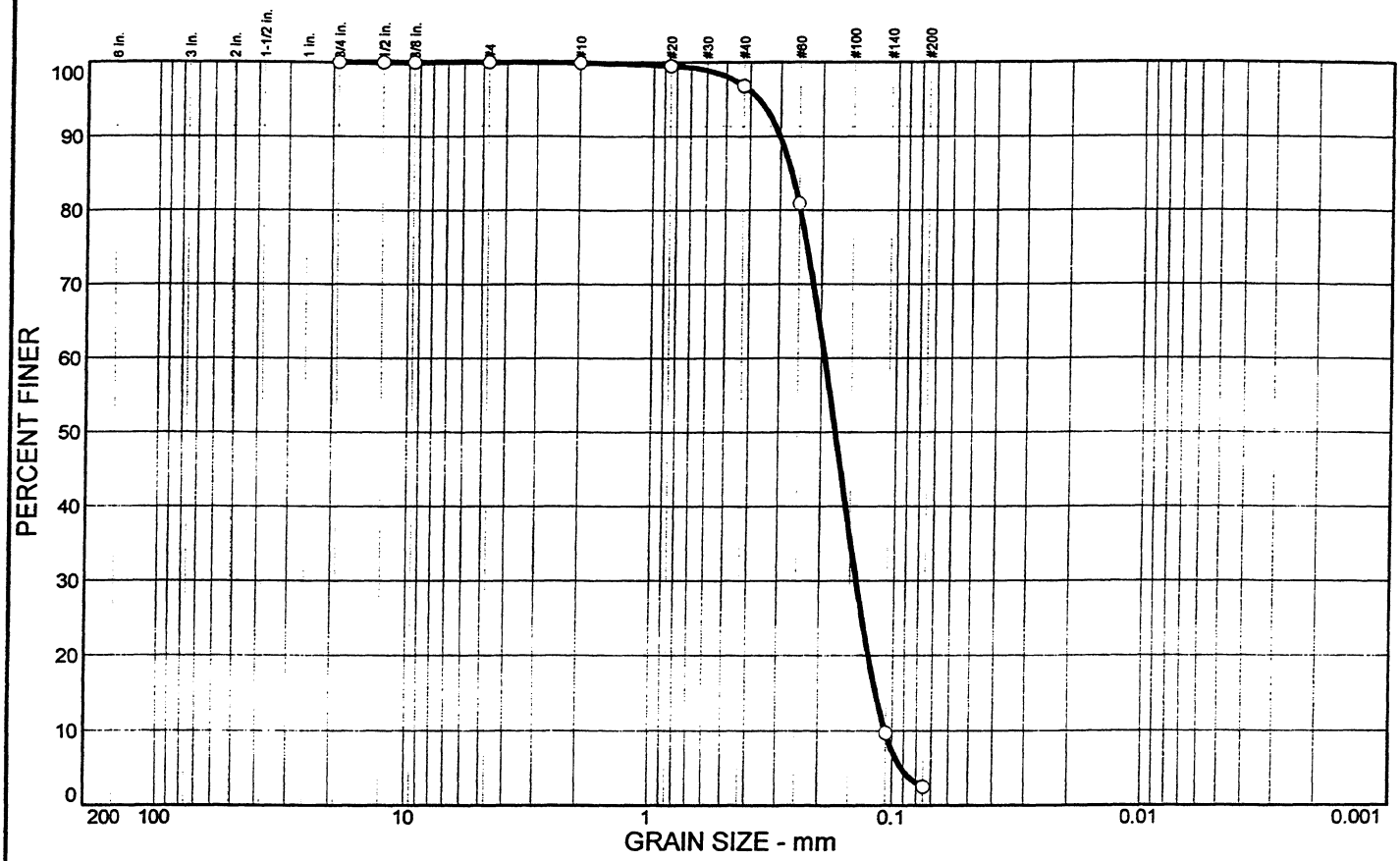
Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			97.5	2.5		SP	A-3		

SIEVE inches size	PERCENT FINER ○		
.750	100.0		
.500	100.0		
.375	100.0		
	GRAIN SIZE		
D_{60}	0.193		
D_{30}	0.141		
D_{10}	0.107		
	COEFFICIENTS		
C_c	0.97		
C_u	1.81		

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	99.9		
#20	99.5		
#40	96.8		
#60	80.9		
#140	9.7		
#200	2.5		

SOIL DESCRIPTION

○ Brown Fine SAND w/ some small shell

REMARKS:

○

○ Source: Station No. E-SC00-9

Sample No.: PPB Sample No. 190102

Law Engineering and Environmental Services, Inc.

Client: PPB Environmental Laboratories

Project: COE Stevenson Creek

Project No.: 40564-5-1484-26

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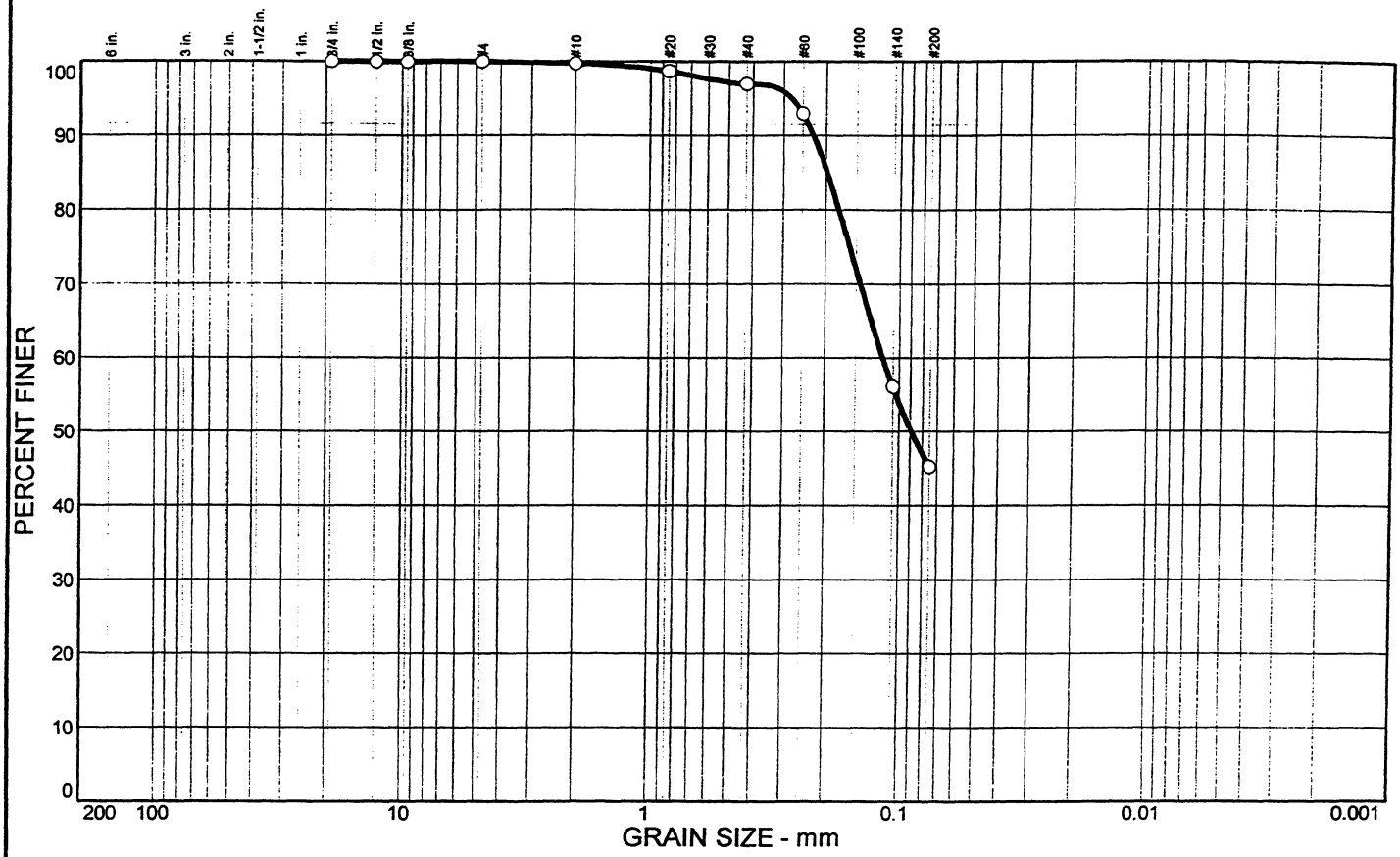
Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			54.8	45.2		SM	A-4(0)		

SIEVE inches size	PERCENT FINER ○		
.750	100.0		
.500	100.0		
.375	100.0		
	GRAIN SIZE		
D_{60}	0.116		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	99.7		
#20	98.7		
#40	97.0		
#60	93.0		
#140	56.1		
#200	45.2		

SOIL DESCRIPTION

○ Grey Very Silty Fine SAND

REMARKS:

○

○ Source: Station No. E-SC00-12

Sample No.: PPB Sample No. 190093

Law Engineering and Environmental Services, Inc.

Client: PPB Environmental Laboratories

Project: COE Stevenson Creek

Project No.: 40564-5-1484-26

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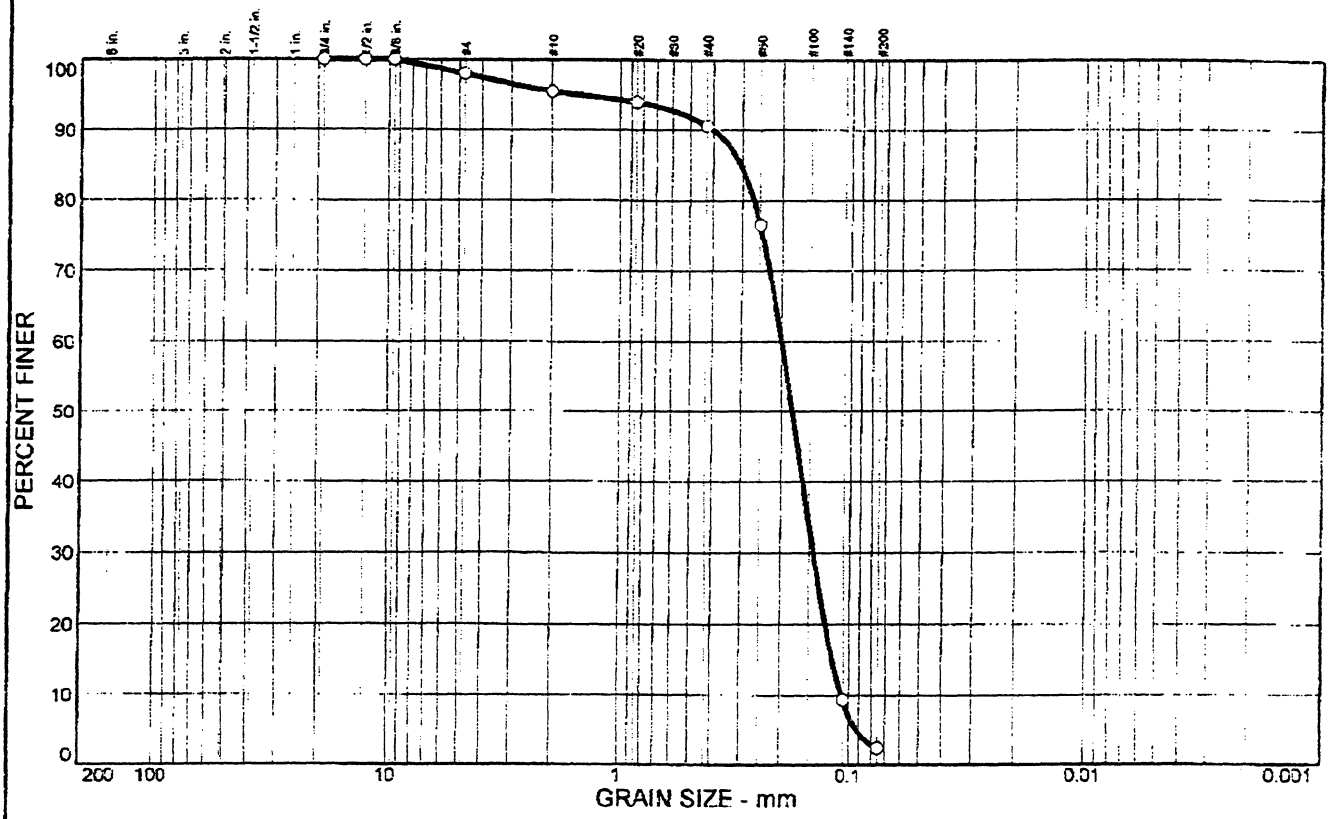
Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		2.0	95.6	2.4		SP	A-3		

SIEVE inches size	PERCENT FINER ○		
.750	100.0		
.500	100.0		
.375	100.0		
	GRAIN SIZE		
D_{60}	0.200		
D_{30}	0.143		
D_{10}	0.108		
	COEFFICIENTS		
C_c	0.96		
C_u	1.86		

SIEVE number size	PERCENT FINER ○		
#4	98.0		
#10	95.5		
#20	94.0		
#40	90.6		
#60	76.5		
#140	9.3		
#200	2.4		

SOIL DESCRIPTION

○ Brown Fine SAND w/ some small shell

REMARKS:

○

○ Source: Station No. E-SC00-13

Sample No.: PPB Sample No. 190094

Law Engineering and Environmental Services, Inc.

Client: PPB Environmental Laboratories

Project: COE Stevenson Creek

Project No.: 40564-5-1484-26

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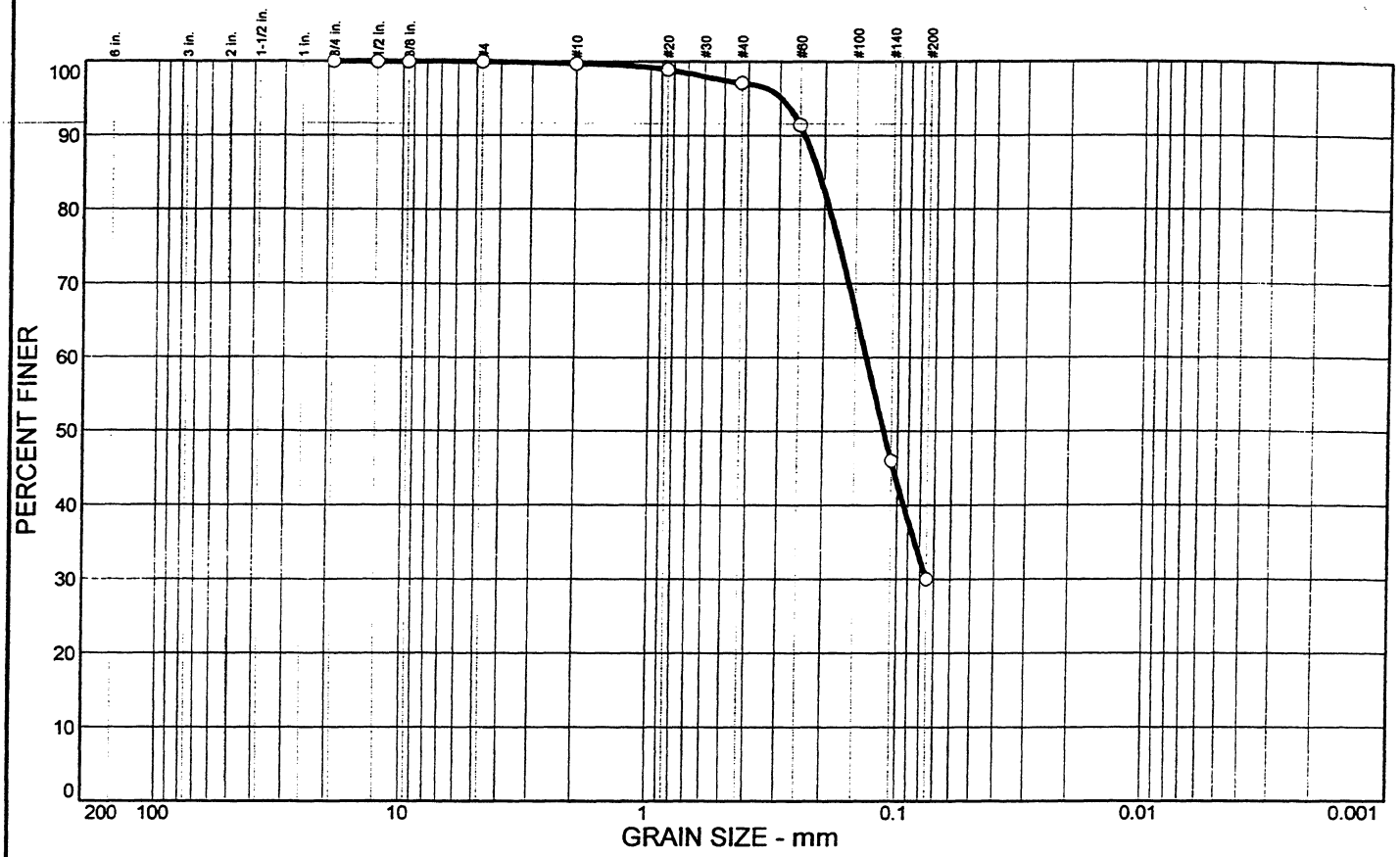
Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			70.0	30.0		SM	A-2-4(0)		

SIEVE inches size	PERCENT FINER ○		
.750	100.0		
.500	100.0		
.375	100.0		
GRAIN SIZE			
D_{60}	0.135		
D_{30}	0.0750		
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	99.7		
#20	98.9		
#40	97.1		
#60	91.4		
#140	46.0		
#200	30.0		

SOIL DESCRIPTION

○ Grey Very Silty Fine SAND w/ some organics

REMARKS:

○

○ Source: Station No. E-SC00-14

Sample No.: PPB Sample No. 190092

Law Engineering and Environmental Services, Inc.

Client: PPB Environmental Laboratories

Project: COE Stevenson Creek

Project No.: 40564-5-1484-26

JOHN A. UNTERSPAN, P.E.

TABLE 6

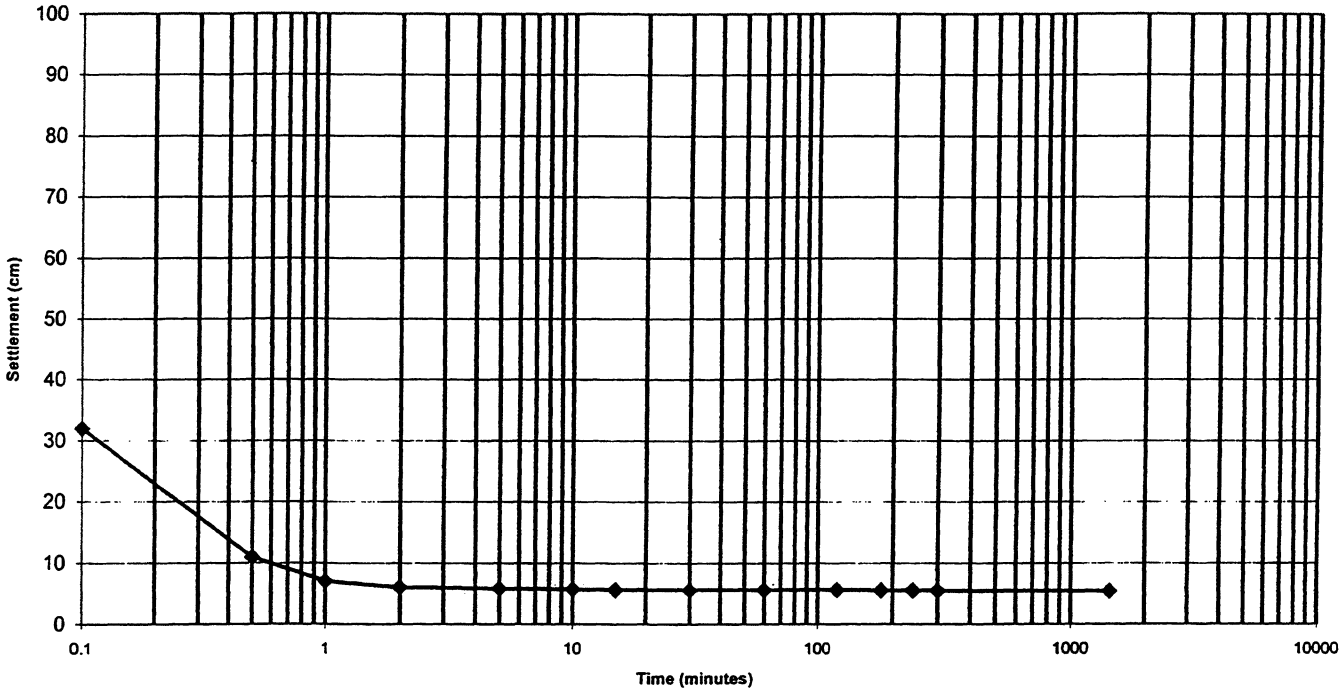
SETTLING RATE REPORTS FOR SEDIMENTS COLLECTED AT STEVENSON CREEK, CLEARWATER, FLORIDA, ON JULY 19-22, 2000

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES
3901 CARMICHAEL AVENUE
JACKSONVILLE, FLORIDA 32207
(904)396-5173

REPORT OF SETTLING RATE TESTING

LAW PROJECT NO: 40564-5-1484-26
PROJECT: COE Stevenson Creek
CLIENT: PPB Environmental Labs

Sample No 190089
Station No. E-SC00-1
CONCENTRATION: 100g/L



TIME	INTERFACE (cm)	TIME	INTERFACE (cm)
0.1	32	30	5.6
0.5	11	60	5.6
1	7	120	5.6
2	6	180	5.5
5	5.8	240	5.5
10	5.7	300	5.5
15	5.6	1440	5.4

Reviewed By:

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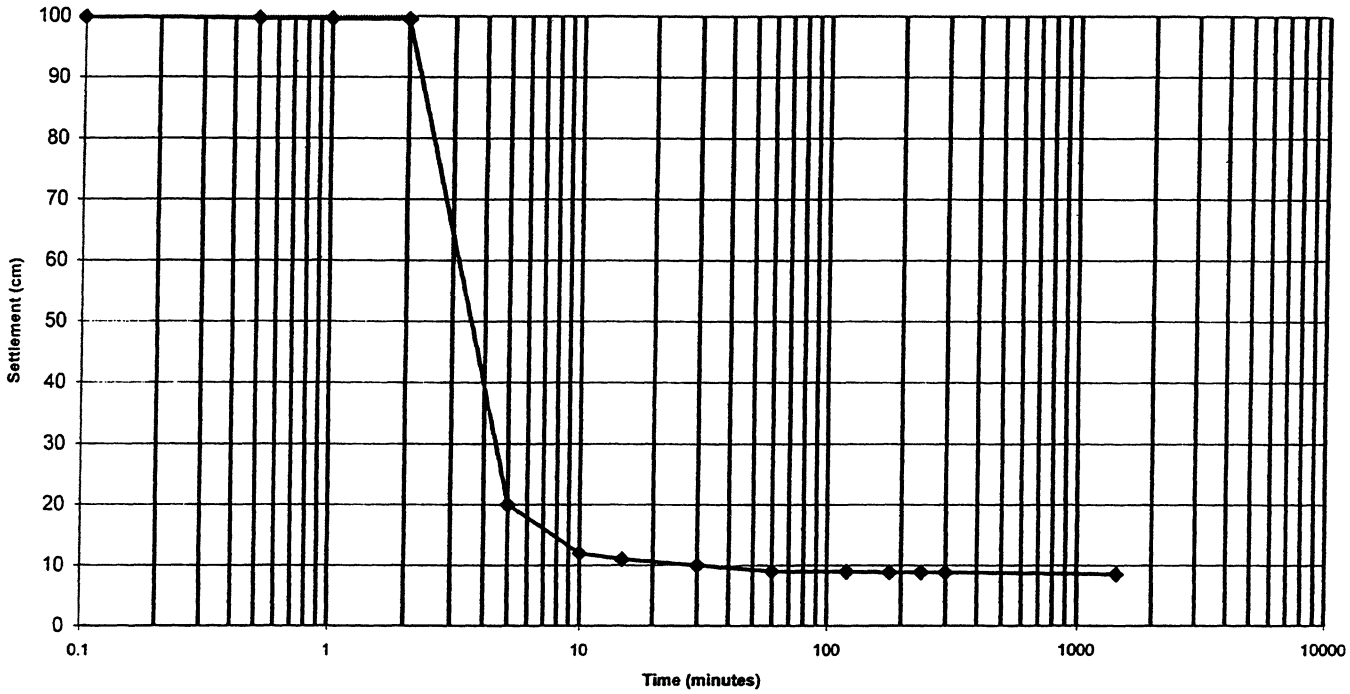
ENGINEERING AND ENVIRONMENTAL SERVICES
3901 CARMICHAEL AVENUE
JACKSONVILLE, FLORIDA 32207
(904)396-5173

REPORT OF SETTLING RATE TESTING

LAW PROJECT NO: 40564-5-1484-26
PROJECT: COE Stevenson Creek
CLIENT: PPB Environmental Labs

Sample No 190090
Station No. E-SC00-2
CONCENTRATION: 100g/L



TIME	INTERFACE (cm)	TIME	INTERFACE (cm)
0.1	99.9	30	10
0.5	99.7	60	9
1	99.6	120	8.9
2	99.5	180	8.8
5	20	240	8.8
10	12	300	8.8
15	11	1440	8.5

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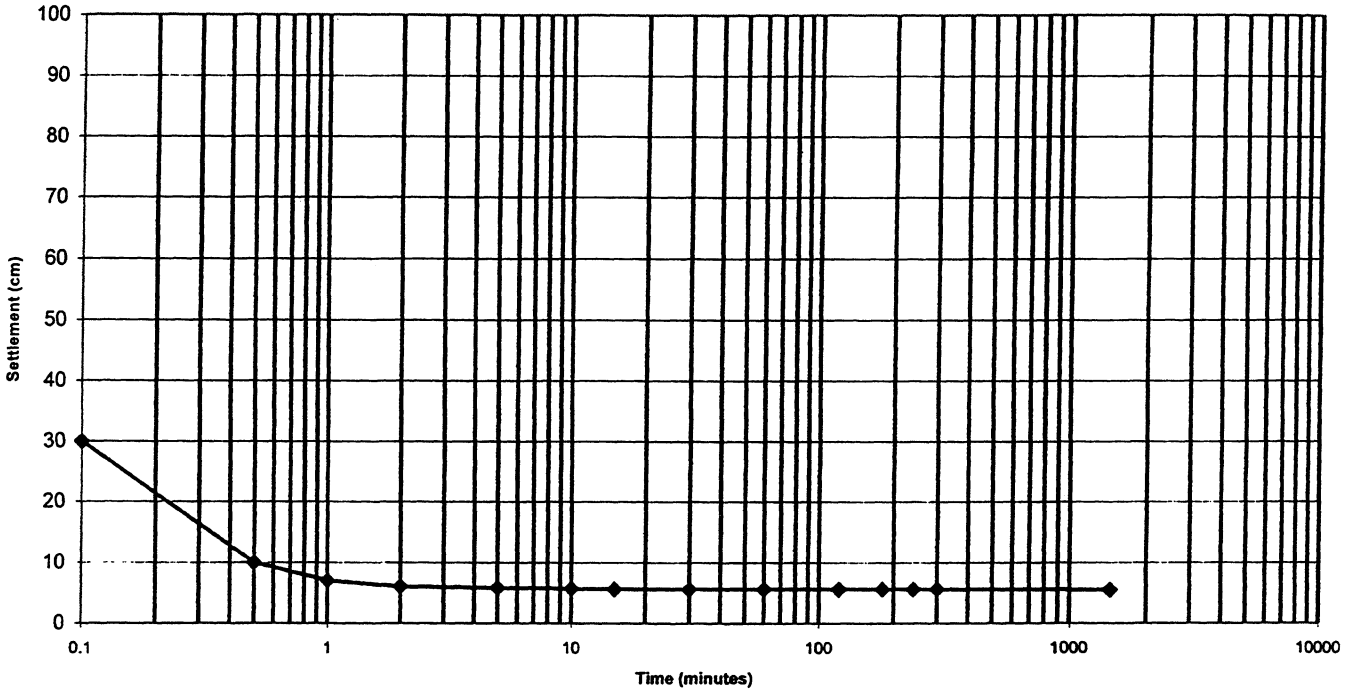
REPORT OF SETTLING RATE TESTING

LAW PROJECT NO: 40564-5-1484-26
PROJECT: COE Stevenson Creek
CLIENT: PPB Environmental Labs

Sample No 190091
Station No. E-SC00-3
CONCENTRATION: 100g/L



TIME	INTERFACE (cm)	TIME	INTERFACE (cm)
0.1	30	30	5.6
0.5	10	60	5.6
1	7	120	5.6
2	6	180	5.6
5	5.8	240	5.6
10	5.7	300	5.6
15	5.6	1440	5.5

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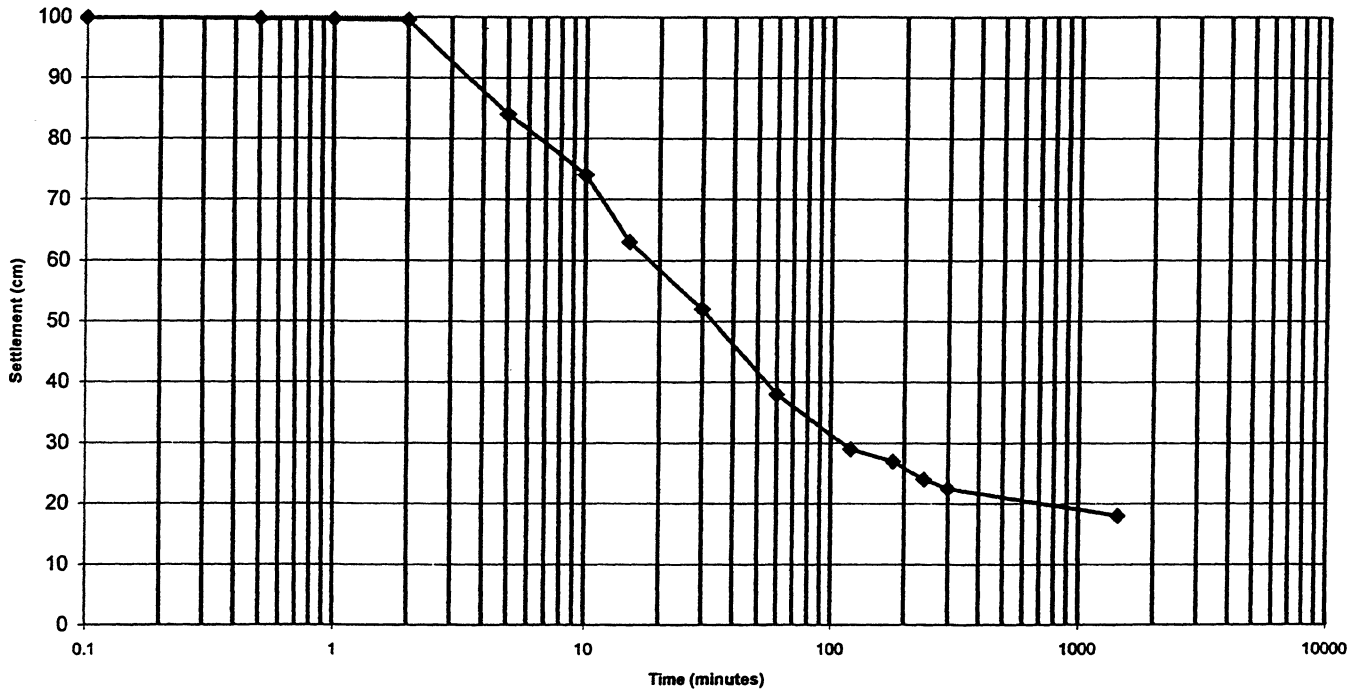
REPORT OF SETTLING RATE TESTING

LAW PROJECT NO: 40564-5-1484-26
PROJECT: COE Stevenson Creek
CLIENT: PPB Environmental Labs

Sample No. 190099
Station No. E-SC00-4
CONCENTRATION: 100g/L



TIME	INTERFACE (cm)	TIME	INTERFACE (cm)
0.1	99.9	30	52
0.5	99.7	60	38
1	99.6	120	29
2	99.5	180	27
5	84	240	24
10	74	300	22.5
15	63	1440	18

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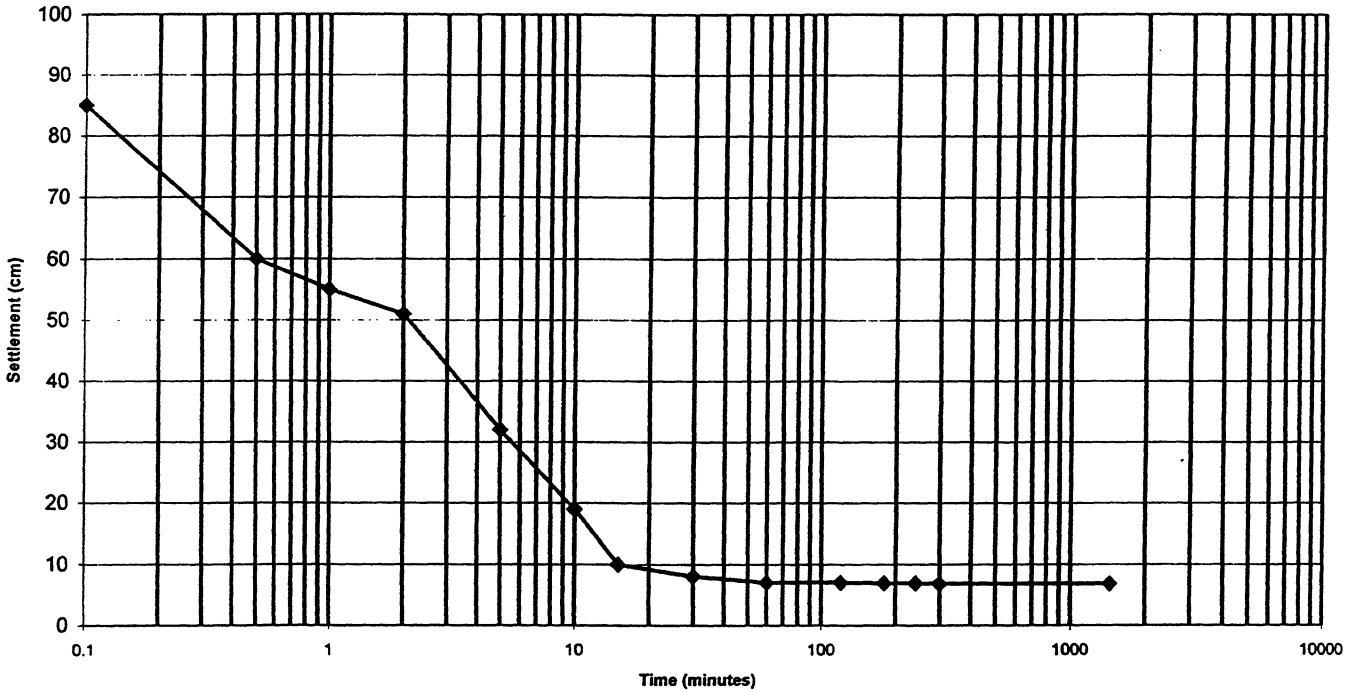
REPORT OF SETTLING RATE TESTING

LAW PROJECT NO: 40564-5-1484-26
PROJECT: COE Stevenson Creek
CLIENT: PPB Environmental Labs

Sample No ~~190100~~ 199100
Station No. E-SC00-5
CONCENTRATION: 100g/L



TIME	INTERFACE (cm)	TIME	INTERFACE (cm)
0.1	85	30	8
0.5	60	60	7
1	55	120	7
2	51	180	6.9
5	32	240	6.9
10	19	300	6.8
15	10	1440	6.8

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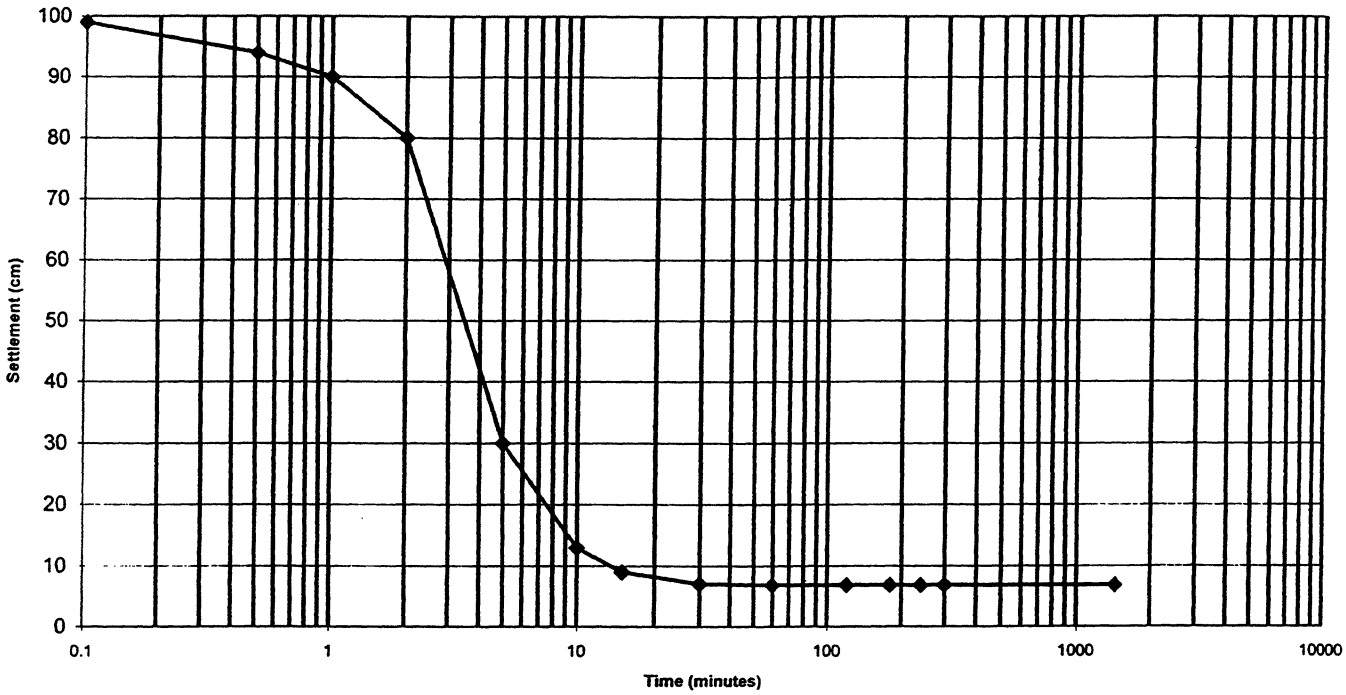
REPORT OF SETTLING RATE TESTING

LAW PROJECT NO: 40564-5-1484-26
PROJECT: COE Stevenson Creek
CLIENT: PPB Environmental Labs

Sample No 190095
Station No. E-SC00-6
CONCENTRATION: 100g/L



TIME	INTERFACE (cm)	TIME	INTERFACE (cm)
0.1	99	30	7
0.5	94	60	6.8
1	90	120	6.8
2	80	180	6.8
5	30	240	6.8
10	13	300	6.8
15	9	1440	6.8

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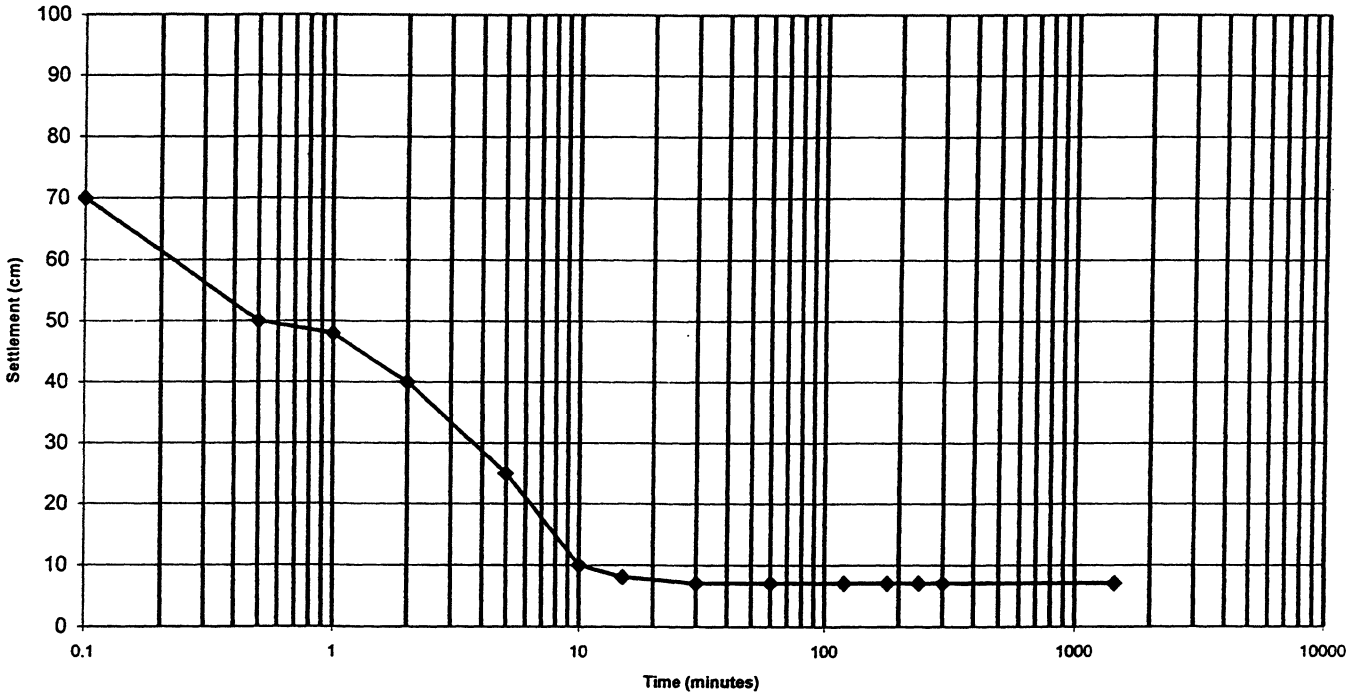
REPORT OF SETTLING RATE TESTING

LAW PROJECT NO: 40564-5-1484-26
PROJECT: COE Stevenson Creek
CLIENT: PPB Environmental Labs

Sample No 190096
Station No. E-SC00-7
CONCENTRATION: 100g/L



TIME	INTERFACE (cm)	TIME	INTERFACE (cm)
0.1	70	30	7
0.5	50	60	7
1	48	120	7
2	40	180	7
5	25	240	7
10	10	300	7
15	8	1440	7

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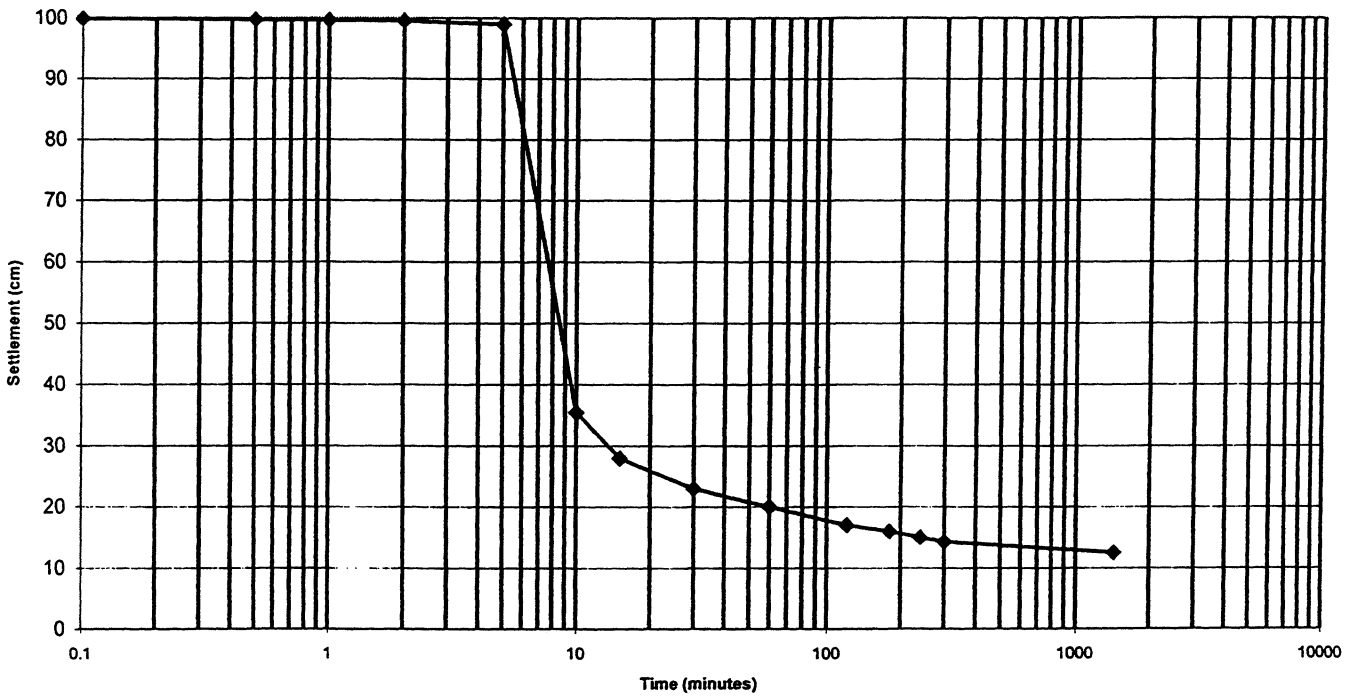
REPORT OF SETTLING RATE TESTING

LAW PROJECT NO: 40564-5-1484-26
PROJECT: COE Stevenson Creek
CLIENT: PPB Environmental Labs

Sample No 190101
Station No. E-SC00-8
CONCENTRATION: 100g/L



TIME	INTERFACE (cm)	TIME	INTERFACE (cm)
0.1	99.9	30	23
0.5	99.7	60	20
1	99.6	120	17
2	99.5	180	16
5	99	240	15
10	35.5	300	14.3
15	28	1440	12.5

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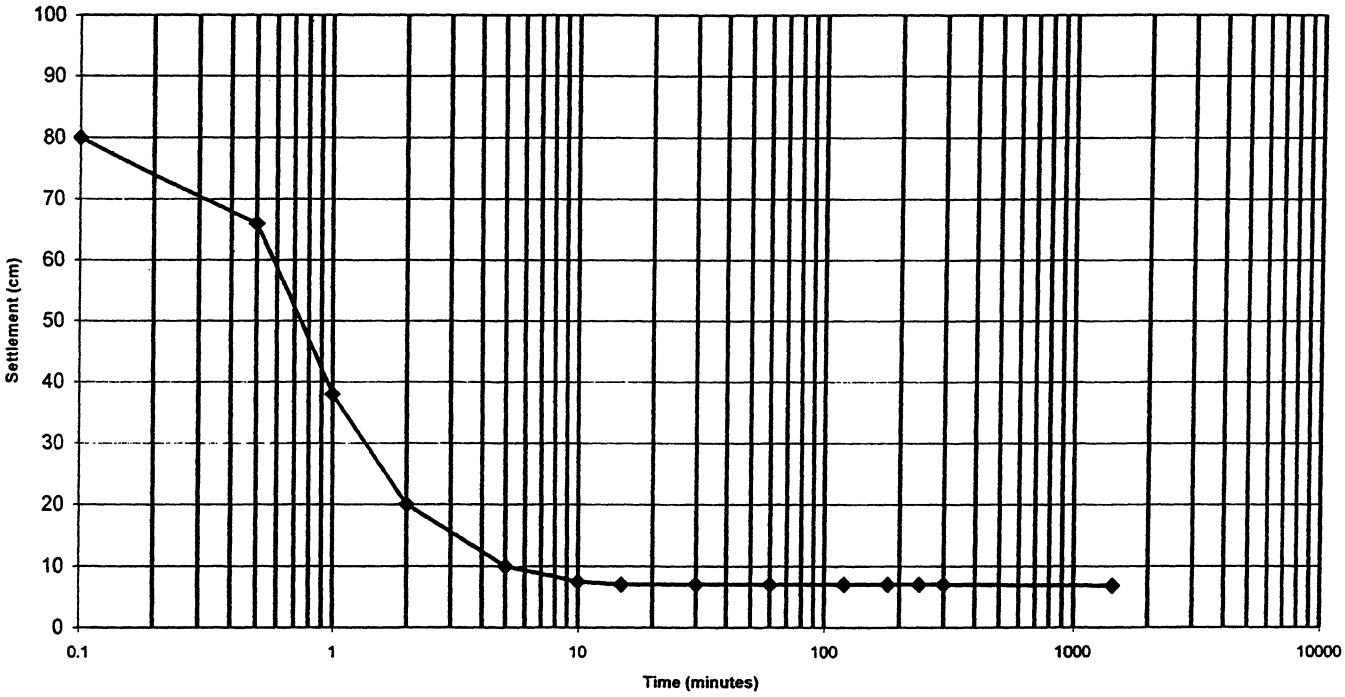
REPORT OF SETTLING RATE TESTING

LAW PROJECT NO: 40564-5-1484-26
PROJECT: COE Stevenson Creek
CLIENT: PPB Environmental Labs

Sample No 190102
Station No. E-SC00-9
CONCENTRATION: 100g/L



TIME	INTERFACE (cm)	TIME	INTERFACE (cm)
0.1	80	30	7
0.5	66	60	7
1	38	120	7
2	20	180	7
5	10	240	7
10	7.5	300	7
15	7	1440	6.8

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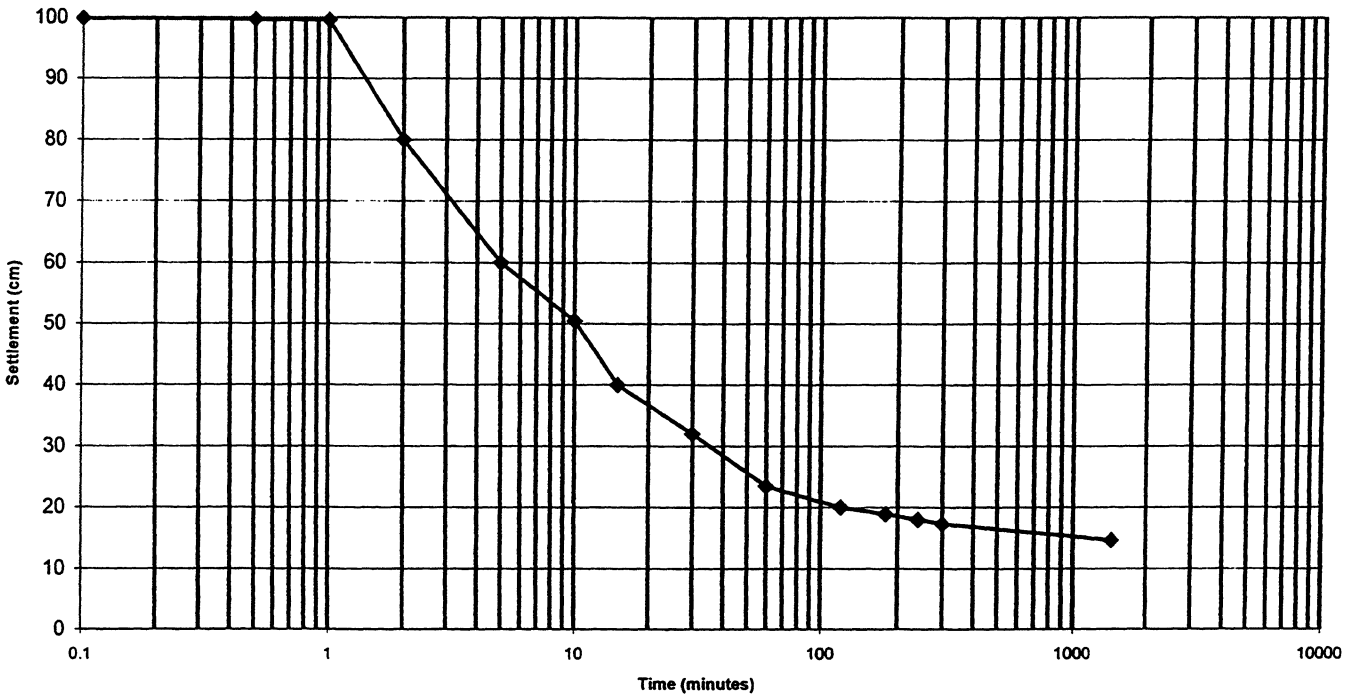
(904)396-5173

REPORT OF SETTLING RATE TESTING

LAW PROJECT NO: 40564-5-1484-26
PROJECT: COE Stevenson Creek
CLIENT: PPB Environmental Labs

Sample No 190093
Station No. E-SC00-12
CONCENTRATION: 100g/L



TIME	INTERFACE (cm)	TIME	INTERFACE (cm)
0.1	99.9	30	32
0.5	99.7	60	23.5
1	99.6	120	20
2	80	180	18.9
5	60	240	18
10	50.5	300	17.3
15	40	1440	14.6

Reviewed By:

JOHN A. UNTERSPAN, P.E.

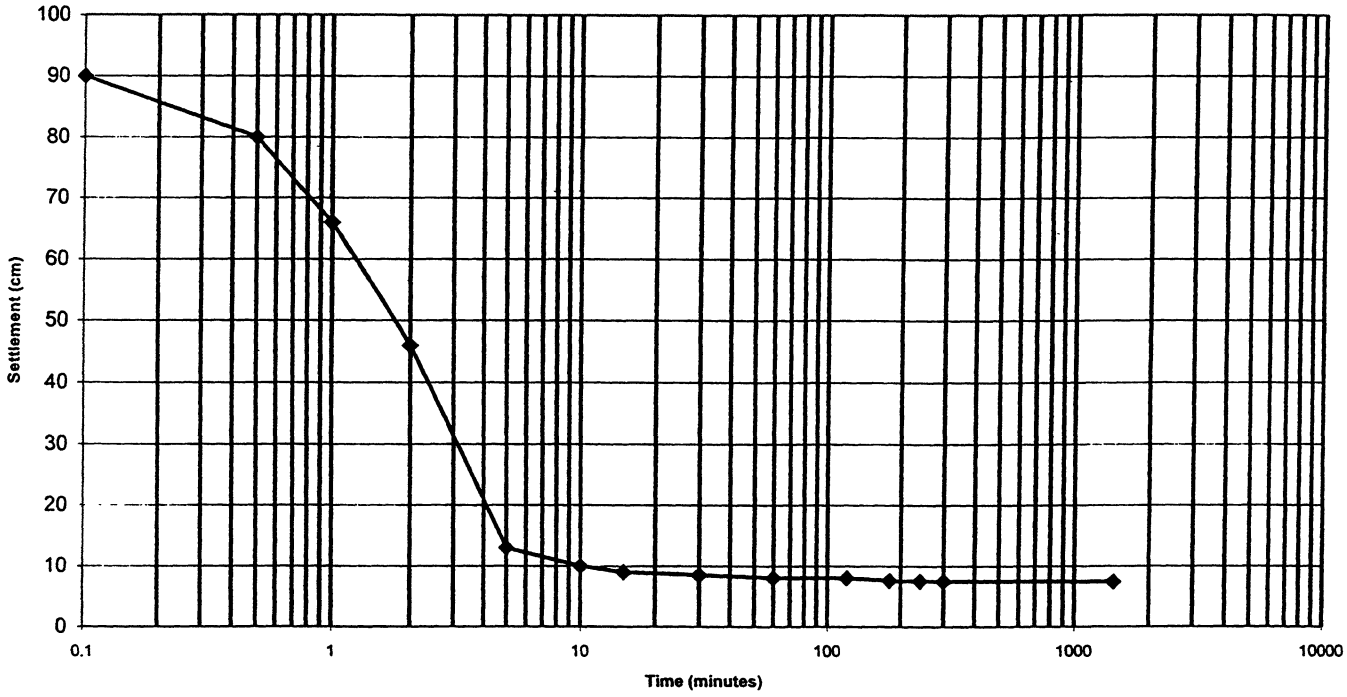
A signed and sealed original of this document is maintained in our files.

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES
3901 CARMICHAEL AVENUE
JACKSONVILLE, FLORIDA 32207
(904)396-5173

REPORT OF SETTLING RATE TESTING

LAW PROJECT NO: 40564-5-1484-26
PROJECT: COE Stevenson Creek
CLIENT: PPB Environmental Labs

Sample No 190094
Station No. E-SC00-13
CONCENTRATION: 100g/L



TIME	INTERFACE (cm)	TIME	INTERFACE (cm)
0.1	90	30	8.5
0.5	80	60	8
1	66	120	8
2	46	180	7.6
5	13	240	7.5
10	10	300	7.5
15	9	1440	7.4

Reviewed By:

JOHN A. UNTERSPAN, P.E.

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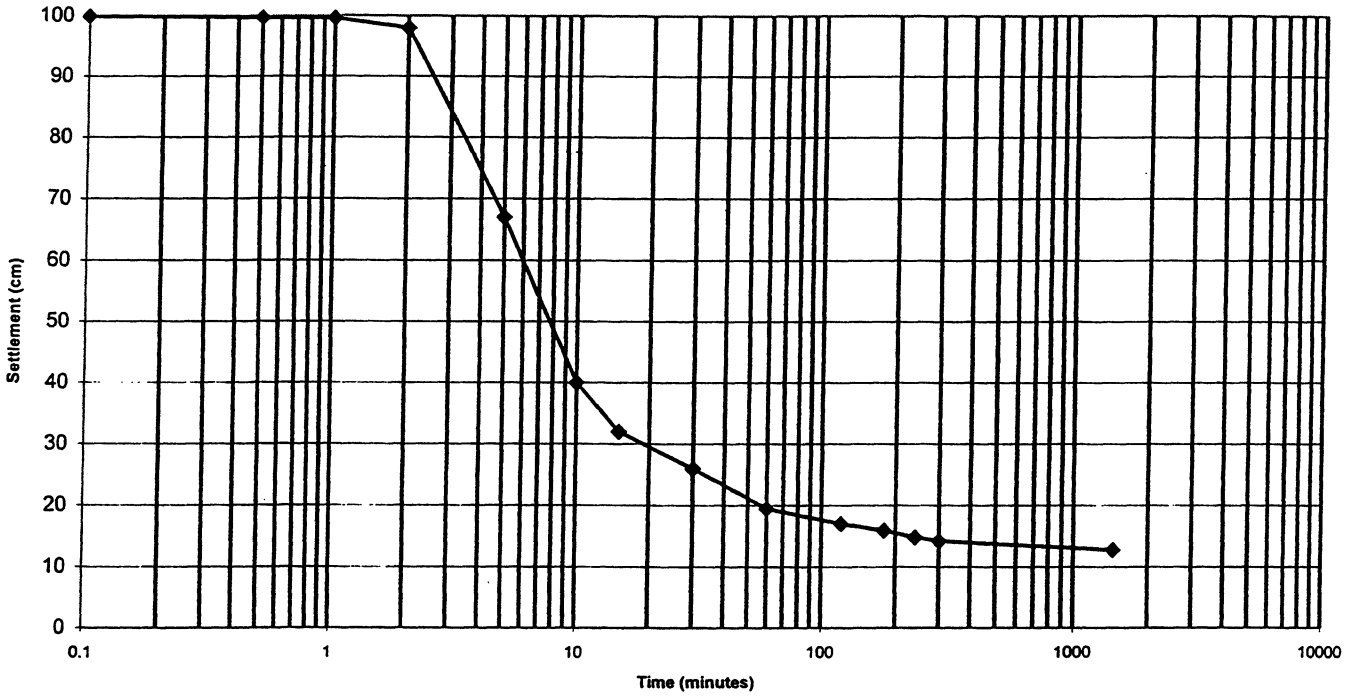
JACKSONVILLE, FLORIDA 32207
(904)396-5173

REPORT OF SETTLING RATE TESTING

LAW PROJECT NO: 40564-5-1484-26
PROJECT: COE Stevenson Creek
CLIENT: PPB Environmental Labs

Sample No 190092
Station No. E-SC00-14
CONCENTRATION: 100g/L



TIME	INTERFACE (cm)	TIME	INTERFACE (cm)
0.1	99.9	30	26
0.5	99.7	60	19.5
1	99.6	120	17
2	98	180	15.9
5	67	240	14.8
10	40	300	14.2
15	32	1440	12.7

Reviewed By:

JOHN A. UNTERSPAN, P.E.

A signed and sealed original of this document is maintained in our files.

FIELD DATA SHEETS
FOR SEDIMENTS COLLECTED AT
STEVENSON CREEK, CLEARWATER, FLORIDA,
ON JULY 19-22, 2000

Water and Sediment Field Sheet
PPB/COE Stevenson Creek Project #00-7333-55

Water & Air Research, Inc.
6821 S.W. Archer Road
Gainesville, Florida 32608
Phone: (352) 372-1500

SampleStation: E-SC00-1
Sampled By: JDH & TWM
Field Measurement Date: 7/19/00
Field Measurement Time: 1619

Sampling Location Description: Approx 15 feet SW of Betty Lane Bridge. On east side of creek (stream) channel.

Field Measurements and Weather:

Station Lat/Long (NAD 83): N 27.97910 W 82.78381 Total Water Depth (ft): 2.5

Air Temp ~~(°F)~~: 30°C Wind: Slight Breeze Prevailing Weather: Hot and Sunny

Water Sampling Depth (ft): 1.25 pH: 7.79 Conductivity: 390 mmho/cm Temp: 30 °C

Dissolved Oxygen: 6.8 mg/L Turbidity: 5 NTUs

Water Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-Gal Glass (for Bk Grd)	Elutriate testing for metals and organics	4°C	—
7/19/00	1619	1/2-Gal Plastic	Settling test	4°C	E-SC00-1

Water Sample Collection Method: 1/2 Gallon plastic Container

Sample Appearance (color,suspended solids): Clear, No suspended solids

Sediment Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
7/19/00	1619	3-1Gal Glass (muck/ponar)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00-1
—	—	1 1/2-Gal(min) Glass (sand)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	—

Sediment Sample Collection Method: Stainless Steel Ponar

Description of Organic "Overburden" Sediment: Sed Surface to ~~Ponar~~ Grab Gray - Fine to very fine grain Sand

___ to ___ ft

___ to ___ ft

Description of Deeper, Sandy Substrate: ___ to ___ ft

Comments and Additional Observations: JDH = James D. Hirsch, Professional Geologist
TWM = Todd W. Morris, Technician

~~JDH Apparent instrument malfunction Salinity = 0 ‰~~

All field sampling equipment was cleaned per the Water and Air Research, Inc, Comp Qap # 90021 prior to collecting samples at each project location.

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Sampler Signature: James D. Hirsch

7/17/00 @ 1457

pH standards	4	7	10
pH readings	4.01	7.00	10.01
Turbidity standards	5.15 NTUs	52.7 NTUs	594 NTUs
Turbidity readings	5 NTUs	53 NTUs	595 NTUs
D.O. Air Temp	37°C	Reading	6.8 mg/L
Table Air Temp	37°C	Table	6.8 mg/L

---

otes: pH readings recorded using a cole parmer pH Tester 3.
Conductivity recorded using a YSI Model 33 S-C-T Meter

D.O. Recorded using a YSI Model 51-B meter
Turbidity recorded using a HACH 2100P Turbidimeter

Water and Sediment Field Sheet
PPB/COE Stevenson Creek Project #00-7333-55

Water & Air Research, Inc.
6821 S.W. Archer Road
Gainesville, Florida 32608
Phone: (352) 372-1500

SampleStation: E-SC00-2
Sampled By: JDH & TWM
Field Measurement Date: 7/19/00
Field Measurement Time: 1812

Sampling Location Description: East of waste water treatment plant. On east side of stream channel.

Field Measurements and Weather:

Station Lat/Long (NAD 83): N 27.98196 W 82.78633 Total Water Depth (ft): 2

Air Temp (~~°F~~): 33°C Wind: Breeze from SW Prevailing Weather: Hot and Cloudy

Water Sampling Depth (ft): 1 pH: 7.82 Conductivity: 500 mmho/cm Temp: 30 °C

Dissolved Oxygen: 6.4 mg/L Turbidity: 7 NTUs

Water Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-Gal Glass (for Bk Grd)	Elutriate testing for metals and organics	4°C	—
7/19/00	1812	1/2-Gal Plastic	Settling test	4°C	E-SC00-2

Water Sample Collection Method: 1/2 Gallon Plastic Container

Sample Appearance (color,suspended solids): Clear with a slight brown color. No suspended solids.

Sediment Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
7/19/00	1735	3-1Gal Glass (muck/ponar)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00-2
—	—	1 1/2-Gal(min) Glass (sand)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	—

Sediment Sample Collection Method: Stainless Steel Ponar

Description of Organic "Overburden" Sediment Sed Surface to Pan Grab Gray – Fine grain sand and black silt.

_____ to _____ ft

_____ to _____ ft

Description of Deeper, Sandy Substrate _____ to _____ ft

Comments and Additional Observations: JDH Apparent instrument Malfunction ~~Salinity = 0 ‰~~

Sampler Signature James D. Hirsch

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Water and Sediment Field Sheet
PPB/COE Stevenson Creek Project #00-7333-55

Water & Air Research, Inc.
6821 S.W. Archer Road
Gainesville, Florida 32608
Phone: (352) 372-1500

SampleStation: E-SC00-3
Sampled By: JDH & TWM
Field Measurement Date: 7/19/00
Field Measurement Time: 1910

Sampling Location Description: Just northeast of the Douglas Avenue Bridge

Field Measurements and Weather:

Station Lat/Long (NAD 83): N 27.98322 W 82.78808 Total Water Depth (ft): 3
Air Temp ~~(°F)~~ 31°C Wind: No Breeze Prevailing Weather: Hot - overcast with Clouds
Water Sampling Depth (ft): 1.5 pH: 7.80 Conductivity: 500 mmho/cm Temp: 30 °C
Dissolved Oxygen: 7.8 mg/L Turbidity: 8 NTUs

Water Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-Gal Glass (for Bk Grd)	Elutriate testing for metals and organics	4°C	—
7/19/00	1910	1/2-Gal Plastic	Settling test	4°C	E-SC00-3

Water Sample Collection Method: 1/2 Gallon Plastic Container

Sample Appearance (color, suspended solids): Clear with slight brown color and minor amounts of suspended solids

Sediment Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
7/19/00	1850	3-1Gal Glass (muck/ponar)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00-3
—	—	1 1/2-Gal(min) Glass (sand)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	—

Sediment Sample Collection Method: Stainless Steel Ponar

Description of Organic "Overburden" Sediment: Sed Surface to ~~Ponar Gab~~ Gray - Fine grain Sand and a trace amount of silt.

_____ to _____ ft

_____ to _____ ft

Description of Deeper, Sandy Substrate _____ to _____ ft

Comments and Additional Observations: JDH Apparent instrument malfunction ~~Salinity = 0 ‰~~

Sampler Signature: James D. Hirsch

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7/19/00 @ 1950

pH standards	4	7	10
pH Readings	4.01	7.00	10
Turbidity standards	5.15 NTUs	52.7 NTUs	594 NTUs
Turbidity readings	5 NTUs	54 NTUs	597 NTUs

D.O. Air Temp	37°C	Reading	6.6 mg/L
D.O. Air Temp	37° C	Reading	6.8 mg/L

Water and Sediment Field Sheet
PPB/COE Stevenson Creek Project #00-7333-55

Water & Air Research, Inc.
6821 S.W. Archer Road
Gainesville, Florida 32608
Phone: (352) 372-1500

SampleStation: E-SC00- 4/5
Sampled By: JOH, TWM & Jim McAdams
Field Measurement Date: 7/20/00 & 7/21/00
Field Measurement Time: 1530

Sampling Location Description: Just Southwest of Douglas Avenue Bridge.

Field Measurements and Weather:

Station Lat/Long (NAD 83): N 27.98452 W 82.78828 Total Water Depth (ft): 3.2
Air Temp (°F): 31°C Wind: From West Prevailing Weather: Hot, Cloudy and Breezy
Water Sampling Depth (ft): 1.5 pH: 8.06 Conductivity: 300 mmho/cm Temp: 30 °C
Dissolved Oxygen: 8.6 mg/L Turbidity: 5 NTUs

Water Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
7/20/00	1900	3-Gal Glass (for Bk Grd)	Elutriate testing for metals and organics	4°C	E-SC00-4/5
7/21/00	1530	1/2-Gal Plastic	Settling test	4°C	E-SC00-4/5

Water Sample Collection Method: 1/2 Gallon Plastic Container

Sample Appearance (color, suspended solids): Clear w/ slight brown color. A minor amount of suspended solids.

Sediment Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
7/21/00	1541	3-1Gal Glass (muck/ponar)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00-4
7/21/00	1541	1 1/2-Gal(min) Glass (sand)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00-5

Sediment Sample Collection Method: Stainless Steel, 2-inch diameter core barrels.

Description of Organic "Overburden" Sediment: Sed Surface to 2 ft — Black organic muck

____ to ____ ft

____ to ____ ft

Description of Deeper, Sandy Substrate: 2 to 3.5 ft — Brown/tan - fine grain Sand.

Comments and Additional Observations: Apparent instrument malfunction ~~Salinity = 12 ‰~~

The 3x1 gallon site background water samples were collected at this station on 7/20/00

Sampler Signature: [signature]

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7/21/00 @ 1700 Calibration of Instruments

pH standards	4	7	10
pH Readings	4.00	7.01	10.00
Turbidity standards	5 NTU	52.7 NTU	594 NTU
Turbidity Readings	6 NTU	55 NTU	597 NTU

D.O. Temp 27°C D.O. Reading 8 mg/L

D.O. Task Temp 27°C Task D.O. Reading 8.1 mg/L

Water and Sediment Field Sheet
PPB/COE Stevenson Creek Project #00-7333-55

Water & Air Research, Inc.
6821 S.W. Archer Road
Gainesville, Florida 32608
Phone: (352) 372-1500

SampleStation: E-SC00-6/7
Sampled By: JDH & TWM
Field Measurement Date: 7/22/00
Field Measurement Time: 1332

Sampling Location Description: Between Douglas Ave Bridge and Pinellas Trail Bridge. Southwest of a tributary creek that enters Stevenson Creek from the North.

Field Measurements and Weather:

Station Lat/Long (NAD 83): N 27.98588 W 82.79048 Total Water Depth (ft): 1.9

Air Temp ~~(°F)~~: 32°C Wind: From SW Prevailing Weather: Overcast and Hot

Water Sampling Depth (ft): 1 pH: 7.70 Conductivity: ★ mmho/cm Temp: 33 °C

Dissolved Oxygen: 5.7 mg/L Turbidity: 7 NTUs

Water Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-Gal Glass (for Bk Grd)	Elutriate testing for metals and organics	4°C	—
7/22/00	1332	1/2-Gal Plastic	Settling test	4°C	E-SC00-6/7

Water Sample Collection Method: 1/2 Gallon Plastic Container

Sample Appearance (color,suspended solids): Clear with Slight brown color. No suspended solids.

Sediment Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
7/22/00	1345	3-1Gal Glass (muck/ponar)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00-6
7/22/00	1345	1 1/2-Gal(min) Glass (sand)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00-6/7

Sediment Sample Collection Method: Stainless steel, 2-inch diameter core barrels.

Description of Organic "Overburden" Sediment Sed Surface to 0.5 ft: Fine grain sand and silty muck.

to ft

to ft

Description of Deeper, Sandy Substrate 0.5 to 2.5 ft: Gray to white - Fine grain sand with layers of muck and fine to medium grain sand.

Comments and Additional Observations: ★ = No conductivity or salinity readings because field instrument is not operational.

Sampler Signature: [signature]

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7/22/00 @ 1640 Calibration of Instruments

pH standards	4	7	10
pH Readings	4.01	7.01	10.00

Turbidity Standards	5 NTUs	52.7 NTUs	594 NTUs
Turbidity Readings	5 NTUs	54 NTUs	597 NTUs

D.O. Temp 31°C D.O. Reading 7.4 mg/L

D.O. Table Temp 31°C D.O. Table Reading 7.5 mg/L

Water and Sediment Field Sheet
PPB/COE Stevenson Creek Project #00-7333-55

Water & Air Research, Inc.
6821 S.W. Archer Road
Gainesville, Florida 32608
Phone: (352) 372-1500

SampleStation: E-SC00-8/9
Sampled By: JDH & TWM
Field Measurement Date: 7/22/00
Field Measurement Time: 1133

Sampling Location Description: Between N. Fort Harrison Bridge and Pinellas Bridge. Approx 600 ft west of Pinellas Bridge.

Field Measurements and Weather:

Station Lat/Long (NAD 83): N 2798862 W 82.79271 Total Water Depth (ft): 2.6

Air Temp ~~(°F)~~: 31°C Wind: From NW Prevailing Weather: Overcast, Moderately Hot

Water Sampling Depth (ft): 1.25 pH: 7.73 Conductivity: 2200 mmho/cm Temp: 28 °C

Dissolved Oxygen: 10.2 mg/L Turbidity: 8 NTUs

Water Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-Gal Glass (for Bk Grd)	Elutriate testing for metals and organics	4°C	—
7/22/00	1133	1/2-Gal Plastic	Settling test	4°C	E-SC00-8/9

Water Sample Collection Method: 1/2 Gallon Plastic Container

Sample Appearance (color, suspended solids): Clear with Slight brown Color. No suspended Solids

Sediment Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
7/22/00	1140	3-1Gal Glass (muck/ponar)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00-8
7/22/00	1140	1 1/2-Gal(min) Glass (sand)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00-9

Sediment Sample Collection Method: Stainless Steel, 2-inch diameter Core barrels.

Description of Organic "Overburden" Sediment Sed Surface to 1.5 ft: Black/brown - organic muck and sandy organic muck.

to ft

to ft

Description of Deeper, Sandy Substrate 1.5 to 2.5 ft: Brown - Fine grain sand with a trace amount of silt.

Comments and Additional Observations: ~~Salinity = 10 ‰~~ Salt Apparent instrument malfunction

Sampler Signature: James D. Hinsch

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7/22/00 @ 1040 Calibration of Instruments

pH standards	4	7	10
pH Readings	4.01	7.00	10.01
Turbidity standards	5 NTUs	527 NTUs	594 NTUs
Turbidity Readings	6 NTUs	55 NTUs	599 NTUs

D.O. Temp 27°C D.O. Reading 8 mg/L

D.O. Temp from Table 27°C D.O. Table Reading 8.1 mg/L

Water and Sediment Field Sheet
PPB/COE Stevenson Creek Project #00-7333-55

Water & Air Research, Inc.
6821 S.W. Archer Road
Gainesville, Florida 32608
Phone: (352) 372-1500

SampleStation: E-SC00-12/13
Sampled By: JDH, TWM & Jim McAdams
Field Measurement Date: 7/21/00
Field Measurement Time: 1137

Sampling Location Description: ≈ 350 feet east of N. Fort Harrison Bridge

Field Measurements and Weather:

Station Lat/Long (NAD 83): N 27.98964 W 82.79479 Total Water Depth (ft): 3.25
Air Temp (°F): 38°C Wind: From SW Prevailing Weather: Hot and Cloudy
Water Sampling Depth (ft): 1.5 pH: 8.21 Conductivity: 50,000 mmho/cm Temp: 33 °C
Dissolved Oxygen: 5.75 mg/L Turbidity: 7 NTUs

Water Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-Gal Glass (for Bk Grd)	Elutriate testing for metals and organics	4°C	—
7/21/00	1137	1/2-Gal Plastic	Settling test	4°C	E-SC00-12/13

Water Sample Collection Method: 1/2 Gallon Plastic Container

Sample Appearance (color, suspended solids): Clear with slight brown color

Sediment Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
7/21/00	1205	3-1Gal Glass (muck/ponar)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00-12
7/21/00	1205	1 1/2-Gal(min) Glass (sand)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00-13

Sediment Sample Collection Method: Stainless Steel, 2-inch diameter core barrels

Description of Organic "Overburden" Sediment: Sed Surface to 3.5 ft — Black organic Muck

___ to ___ ft

___ to ___ ft

Description of Deeper, Sandy Substrate: 3.5 to 4.5 ft — Tan-fine grain sand with trace amounts of whole shells and shell pieces.

Comments and Additional Observations: JDH Apparent instrument malfunction ~~Salinity = > 40 0/00~~

Sample E-SC00-15 is the duplicate of Sample E-SC00-12.
Sample E-SC00-16 is the duplicate of Sample E-SC00-13.

Sampler Signature: [signature]

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7/21/00 @ 1045 Calibration of Instrumentation

pH standards	4	7	10
pH Readings	4.01	7.00	10.00

Turbidity Standards	5.15 NTUs	52.7 NTUs	594 NTUs
Turbidity Readings	5 NTUs	51 NTUs	595 NTUs

D.O. Temp 30°C D.O. 7.6 mg/L

D.O. Table Temp 30°C D.O. 7.7 mg/L

Water and Sediment Field Sheet
PPB/COE Stevenson Creek Project #00-7333-55

Water & Air Research, Inc.
6821 S.W. Archer Road
Gainesville, Florida 32608
Phone: (352) 372-1500

SampleStation: E-SC00-14
Sampled By: JDH & TWM
Field Measurement Date: 7/20/00
Field Measurement Time: 1731

Sampling Location Description: Approx 200 feet Southwest of N. Fort Harrison Bridge.

Field Measurements and Weather:

Station Lat/Long (NAD 83): N 27.98980 W 82.79620 Total Water Depth (ft): 5

Air Temp ~~(°F)~~: 31°C Wind: From West Prevailing Weather: Hot and Cloudy

Water Sampling Depth (ft): 2.5 pH: 8.10 Conductivity: >50,000 mmho/cm Temp: 29 °C

Dissolved Oxygen: 10 mg/L Turbidity: 5 NTUs

Water Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-Gal Glass (for Bk Grd)	Elutriate testing for metals and organics	4°C	—
7/20/00	1731	1/2-Gal Plastic	Settling test	4°C	E-SC00-14

Water Sample Collection Method: 1/2-Gal Plastic Bottle

Sample Appearance (color,suspended solids): Clear with slight brown color.

Sediment Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
7/20/00	1755	3-1Gal Glass (muck/ponar)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00-14
—	—	1 1/2-Gal(min) Glass (sand)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	—

Sediment Sample Collection Method: Stainless Steel Ponar

Description of Organic "Overburden" Sediment Sed Surface to Ponar Grab: Black organic Muck

_____ to _____ ft

_____ to _____ ft

Description of Deeper, Sandy Substrate _____ to _____ ft

Comments and Additional Observations: JDH Apparent instrument malfunction Salinity = > 40 ‰

Sampler Signature: [signature]

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7/20/00 @ 1628 Calibration

pH standards	4	7	10
pH readings	4.01	7.00	10.01

Turbidity standards	5.15 NTUs	52.7 NTUs	594 NTUs
Turbidity readings	5 NTUs	54 NTUs	595 NTUs

D.O. #2 Air Temp 34°C D.O. Reading = ~~7.2~~ 7.3 mg/L

Table Air Temp 34°C Table Reading = ~~7.5~~ 8.04 7.2 mg/L

Core Samples Collected with U.S.G.S.

Water and Sediment Field Sheet
PPB/COE Stevenson Creek Project #00-7333-55

Water & Air Research, Inc.
6821 S.W. Archer Road
Gainesville, Florida 32608
Phone: (352) 372-1500

SampleStation: E-SC00- 6/7
Sampled By: JDH & TWM & Marci Marot
Field Measurement Date: 7/20/00
Field Measurement Time: 1325

Sampling Location Description: South of Small Creek that flows into Stevenson Creek, northeast of Pinellas Trail Bridge

Field Measurements and Weather:

Station Lat/Long (NAD 83): N 27.98588 W 82.79048 Total Water Depth (ft): 3

Air Temp (°F): — Wind: From South Prevailing Weather: Hot with pillow clouds

Water Sampling Depth (ft): — pH: — Conductivity: — mmho/cm Temp: — °C

Dissolved Oxygen: — mg/L Turbidity: — NTUs

Water Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-Gal Glass (for Bk Grd)	Elutriate testing for metals and organics	4°C	—
—	—	1/2-Gal Plastic	Settling test	4°C	E-SC00- —

Water Sample Collection Method _____

Sample Appearance (color,suspended solids) _____

Sediment Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-1Gal Glass (muck/ponar)	Bulk Analyses for Grain size, metals, organics, and settling rate.	4°C	E-SC00- —
—	—	1 1/2-Gal(min) Glass (sand)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	—

Sediment Sample Collection Method _____

Description of Organic "Overburden" Sediment Sed Surface to ____ ft

____ to ____ ft

____ to ____ ft

Assisted U.S.G.S in Core Sample collection. U.S.G.S transported Samples back to their laboratory.

Description of Deeper, Sandy Substrate ____ to ____ ft

Comments and Additional Observations: 7/20/00 Collected 4-inch diameter cores w/ Marci Marot, USGS personnel. The collected core was 1.3 feet in length.

Sampler Signature James D. Hanch

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Core Samples Collected with U.S.G.S.

Water and Sediment Field Sheet
PPB/COE Stevenson Creek Project #00-7333-55

Water & Air Research, Inc.
6821 S.W. Archer Road
Gainesville, Florida 32608
Phone: (352) 372-1500

SampleStation: E-SC00- 8/9
Sampled By: JOH & TWM & Marc Marot
Field Measurement Date: 7/20/00
Field Measurement Time: 1400

Sampling Location Description: Core collected between Pinellas Trail Bridge and N. Fort Harrison Bridge. East of Station E-SC00 10/11

Field Measurements and Weather:

Station Lat/Long (NAD 83): N 27.98862 W 82.79271 Total Water Depth (ft): 3.4

Air Temp (°F): — Wind: From South Prevailing Weather: Hot Sunny

Water Sampling Depth (ft): — pH: — Conductivity: — mmho/cm Temp: — °C

Dissolved Oxygen: — mg/L Turbidity: — NTUs

Water Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-Gal Glass (for Bk Grd)	Elutriate testing for metals and organics	4°C	—
—	—	1/2-Gal Plastic	Settling test	4°C	E-SC00- —

Water Sample Collection Method

Sample Appearance (color,suspended solids)

Sediment Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-1Gal Glass (muck/ponar)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00- —
—	—	1 1/2-Gal(min) Glass (sand)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	—

Sediment Sample Collection Method

Description of Organic "Overburden" Sediment Sed Surface to ____ ft

____ to ____ ft

____ to ____ ft

Description of Deeper, Sandy Substrate ____ to ____ ft

Assisted U.S.G.S. in collecting core samples. U.S.G.S. transported samples back to their laboratory.

Comments and Additional Observations: 7/20/00 The length of the collected core sample is 2.33 feet.

Sampler Signature [signature]

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Core Samples Collected with the U.S.G.S.

Water and Sediment Field Sheet
PPB/COE Stevenson Creek Project #00-7333-55

Water & Air Research, Inc.
6821 S.W. Archer Road
Gainesville, Florida 32608
Phone: (352) 372-1500

SampleStation: E-SC00- 10/11
Sampled By: JDH, TWM & Marci Marot
Field Measurement Date: 7/20/00
Field Measurement Time: 1445

Sampling Location Description: West of station E-SC00-8/9 and in line with the center of the N. Fort Harison Bridge

Field Measurements and Weather:

Station Lat/Long (NAD 83): N 27.98903 W 82.79389 Total Water Depth (ft): 3.3

Air Temp (°F): — Wind: From South Prevailing Weather: Hot and Sunny

Water Sampling Depth (ft): — pH: — Conductivity: — mmho/cm Temp: — °C

Dissolved Oxygen: — mg/L Turbidity: — NTUs

Water Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-Gal Glass (for Bk Grd)	Elutriate testing for metals and organics	4°C	—
—	—	1/2-Gal Plastic	Settling test	4°C	E-SC00- —

Water Sample Collection Method

Sample Appearance (color, suspended solids)

Sediment Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-1Gal Glass (muck/ponar)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00- —
—	—	1 1/2-Gal(min) Glass (sand)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	—

Sediment Sample Collection Method

Description of Organic "Overburden" Sediment Sed Surface to ____ ft

____ to ____ ft

____ to ____ ft

Description of Deeper, Sandy Substrate ____ to ____ ft

Assisted U.S.G.S. in collecting core samples. U.S.G.S transported samples back to their laboratory.

Comments and Additional Observations: 7/20/00 The collected core sample length is 2.5 feet.

Sampler Signature [signature]

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Core Samples Collected with U.S.G.S.

Water and Sediment Field Sheet
PPB/COE Stevenson Creek Project #00-7333-55

Water & Air Research, Inc.
6821 S.W. Archer Road
Gainesville, Florida 32608
Phone: (352) 372-1500

SampleStation: E-SC00- 12/13
Sampled By: JDH, TWM & Maci Mart
Field Measurement Date: 7/20/00
Field Measurement Time: 1520

Sampling Location Description: Approx 350 feet east of N. Fort Harrison Bridge, in the approx center of channel.

Field Measurements and Weather:

Station Lat/Long (NAD 83): N 27.98964 W 82.79479 Total Water Depth (ft): 4.5

Air Temp (°F): — Wind: From SW Prevailing Weather: Hot and Sunny

Water Sampling Depth (ft): — pH: — Conductivity: — mmho/cm Temp: — °C

Dissolved Oxygen: — mg/L Turbidity: — NTUs

Water Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-Gal Glass (for Bk Grd)	Elutriate testing for metals and organics	4°C	—
—	—	1/2-Gal Plastic	Settling test	4°C	E-SC00- —

Water Sample Collection Method

Sample Appearance (color, suspended solids)

Sediment Samples

Collection Date	Collection Time	Container Type	Parameters to be Analyzed	Preservation	Container ID
—	—	3-1Gal Glass (muck/ponar)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	E-SC00- —
—	—	1 1/2-Gal(min) Glass (sand)	Bulk Analyses for Grain size, metals, organics, and settling rate	4°C	—

Sediment Sample Collection Method

Description of Organic "Overburden" Sediment

Sed Surface to 2.5 ft: Black Organic Muck Material.

2.5 to 3.5 ft: Tan-Fine grain Sand with trace amounts of whole Shells and Shell pieces.

_____ to _____ ft: Assisted U.S.G.S. in Collecting core

Description of Deeper, Sandy Substrate _____ to _____ ft: Samples. U.S.G.S. transported core Samples back to their laboratory.

Comments and Additional Observations: 7/20/00 Core Sample length 3.5 feet.

Sampler Signature: [signature]

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