



Off-Site RCRA Facility Investigation (RFI) Report

Appendices

Volume 3 of 4

Solutia Inc.
Anniston, Alabama

June 2000

BLASLAND, BOUCK & LEE, INC.

engineers & scientists

Appendix B

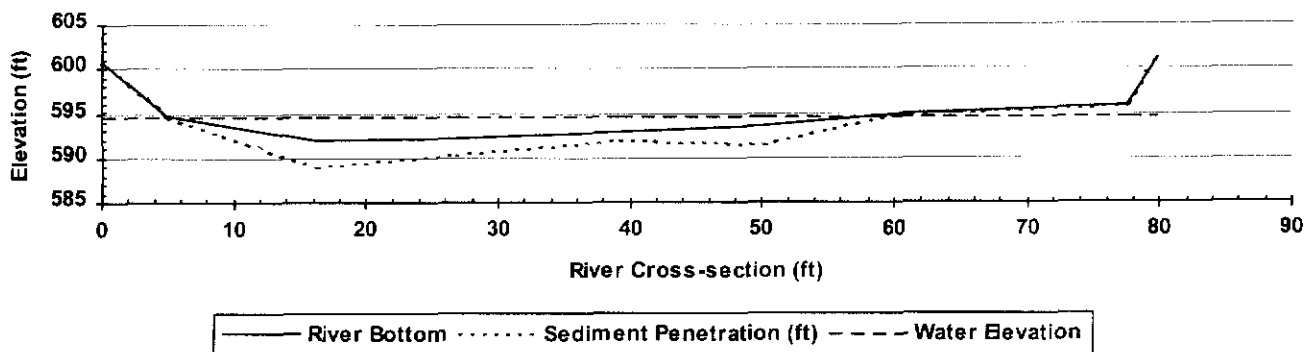
SOLUTIA - ANNISTON, ALABAMA

River Transect Cross-sectional Plots

TRANSECT ID: C-001

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

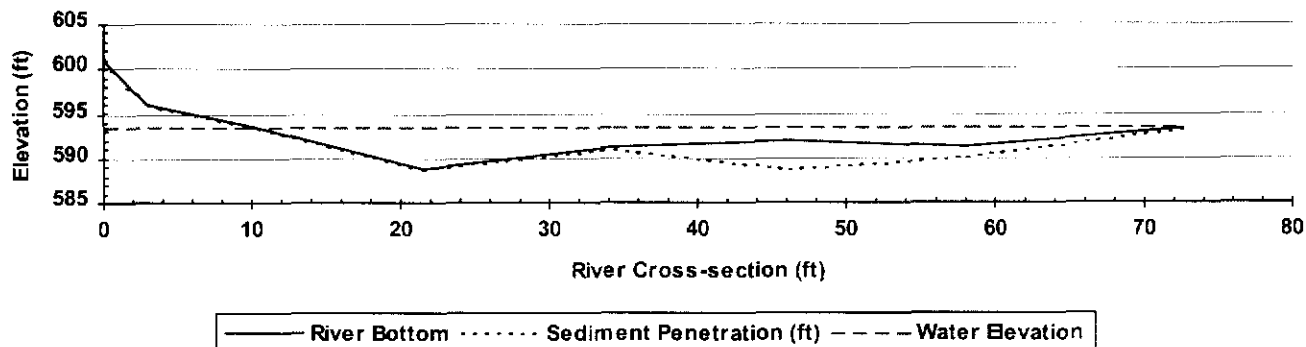


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	600.80	600.80	594.75	
4.95	594.68	594.68	594.75	
16.25	592.02	589.12	594.75	SM
26.71	592.20	590.30	594.75	GW
39.22	592.80	591.90	594.75	GW
50.08	593.50	591.50	594.75	GW
60.33	594.81	594.81	594.75	
77.56	595.79	595.79	594.75	
79.85	601.25	601.25	594.75	

TRANSECT ID: C-002

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



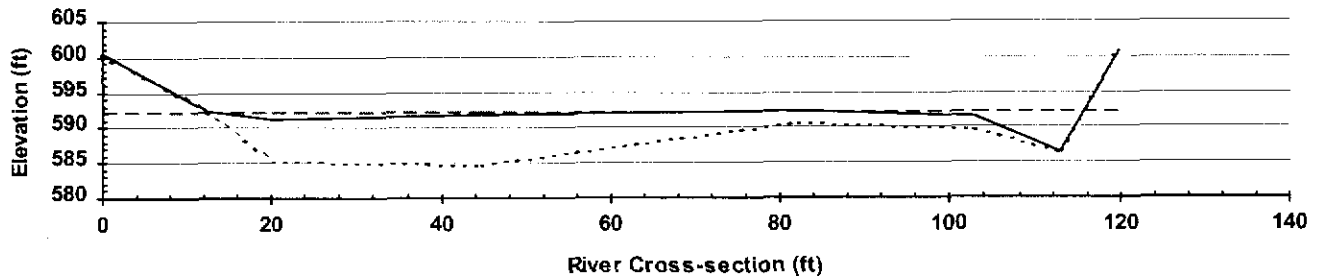
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	601.05	601.05	593.54	
2.95	596.03	596.03	593.54	
9.58	593.73	593.73	593.54	
21.46	588.83	588.83	593.54	NS
34.20	591.37	590.97	593.54	GW
46.12	592.00	588.80	593.54	GW
58.03	591.23	590.23	593.54	SW
72.70	593.35	593.35	593.54	

River Transect Cross-sectional Plots

TRANSECT ID: C-003

AVERAGE VELOCITY (ft/sec) 1.7488

Solutia Database: TRANSECT CROSS-SECTIONS

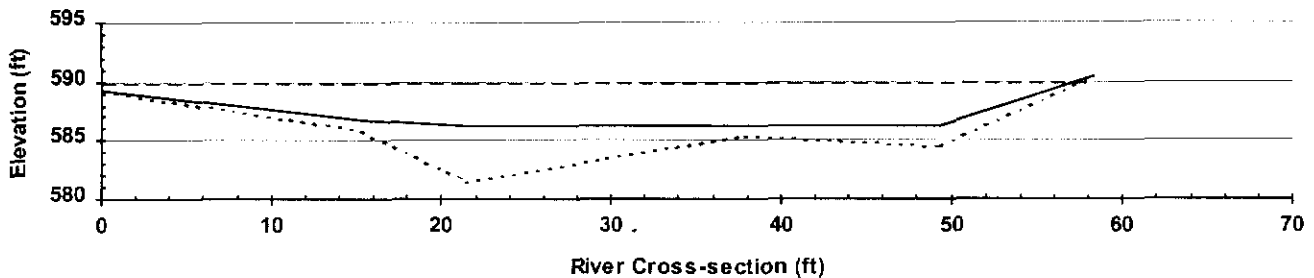


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	600.56	600.56	592.48	
12.42	592.48	592.48	592.48	
19.85	591.34	585.39	592.48	GW
44.65	591.68	584.68	592.48	GW
81.76	592.27	590.67	592.48	GW
102.70	591.56	589.86	592.48	GW
112.86	586.57	586.57	592.48	
119.73	600.66	600.66	592.48	

TRANSECT ID: C-004

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



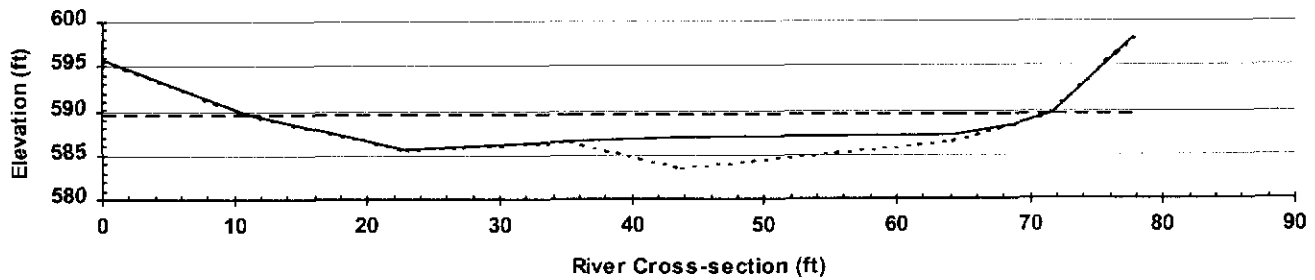
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	589.32	589.32	589.87	
15.35	586.70	585.90	589.87	SW
21.34	586.18	581.58	589.87	SC
37.76	586.26	585.31	589.87	SW
49.31	586.31	584.51	589.87	SW
58.31	590.41	590.41	589.87	

River Transect Cross-sectional Plots

TRANSECT ID: C-005

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

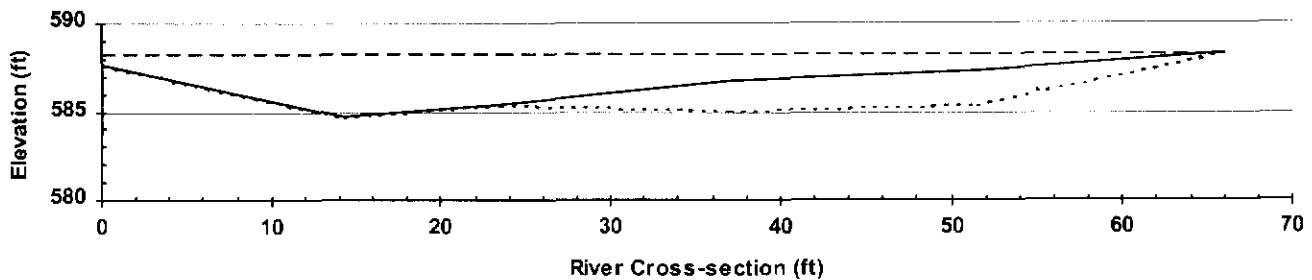


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	595.75	595.75	589.62	
10.91	589.56	589.56	589.62	
22.86	585.66	585.66	589.62	NS
35.22	586.52	586.52	589.62	NS
43.58	586.86	583.51	589.62	SM
64.24	587.28	586.58	589.62	SW
68.90	588.36	588.36	589.62	
71.65	589.68	589.68	589.62	
77.64	597.87	597.87	589.62	

TRANSECT ID: C-006

AVERAGE VELOCITY (ft/sec) 1.3958

Solutia Database: TRANSECT CROSS-SECTIONS

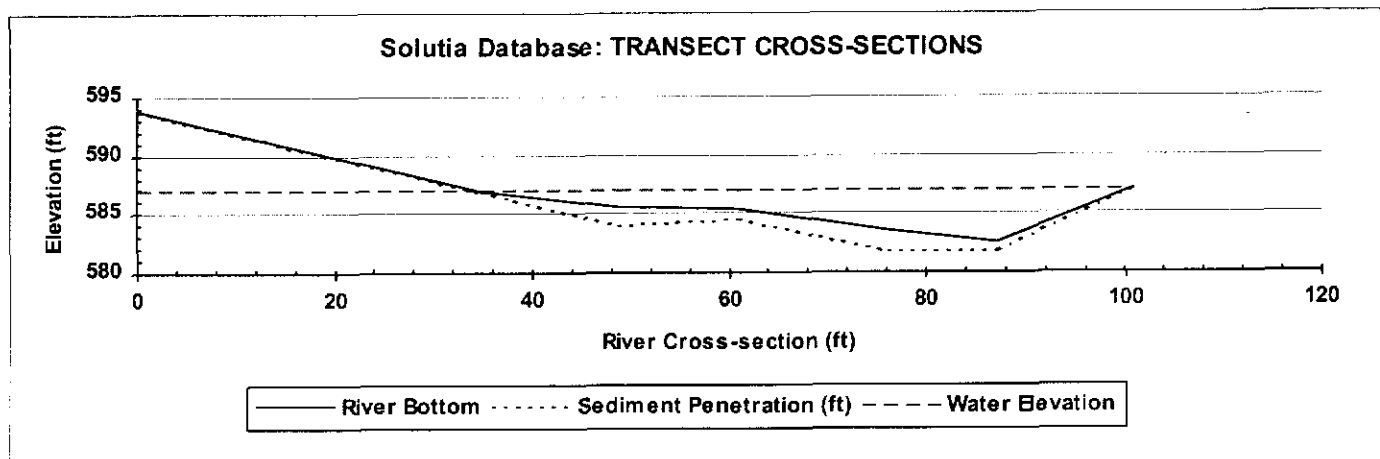


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	587.64	587.64	588.33	
14.27	584.73	584.73	588.33	NS
23.41	585.34	585.34	588.33	NS
36.93	586.75	585.10	588.33	SW
51.44	587.31	585.41	588.33	SP
66.05	588.33	588.33	588.33	

River Transect Cross-sectional Plots

TRANSECT ID: C-007

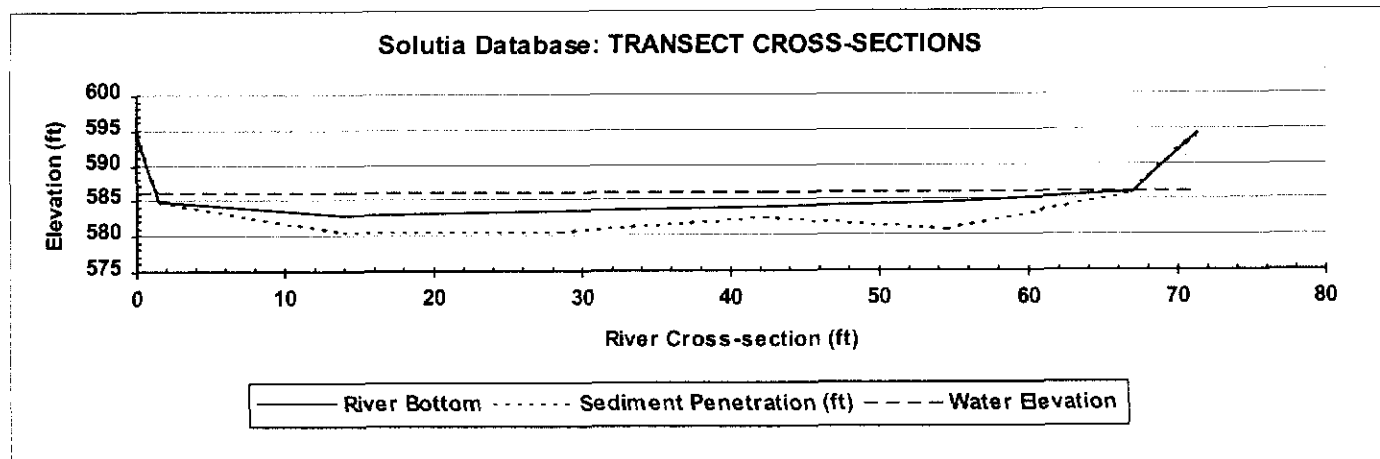
AVERAGE VELOCITY (ft/sec)



<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	593.78	593.78	587.02	
34.80	586.89	586.89	587.02	
48.74	585.60	584.05	587.02	SW
60.87	585.31	584.51	587.02	SW
75.89	583.52	581.82	587.02	SW
87.14	582.50	581.80	587.02	GM
100.84	587.02	587.02	587.02	

TRANSECT ID: C-008

AVERAGE VELOCITY (ft/sec)



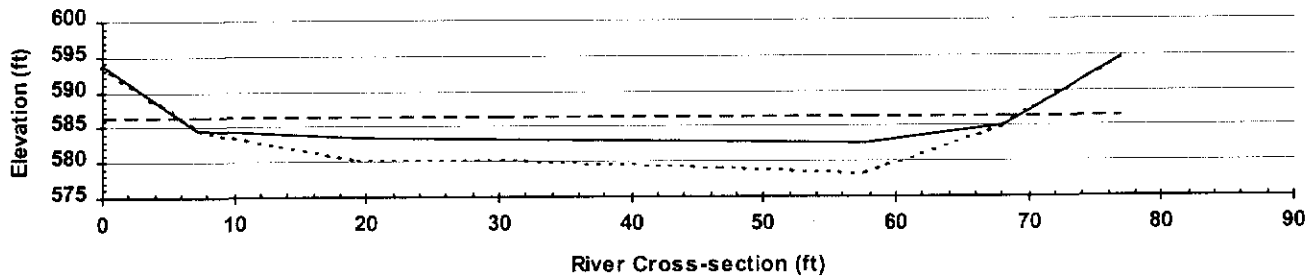
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	594.37	594.37	586.12	
1.51	584.94	584.94	586.12	
13.86	582.84	580.59	586.12	SM
28.50	583.49	580.59	586.12	SP
42.29	584.08	582.58	586.12	SP
54.54	584.47	580.77	586.12	SW
66.88	586.00	586.00	586.12	
71.37	594.37	594.37	586.12	

River Transect Cross-sectional Plots

TRANSECT ID: C-009

AVERAGE VELOCITY (ft/sec) 1.0992

Solutia Database: TRANSECT CROSS-SECTIONS

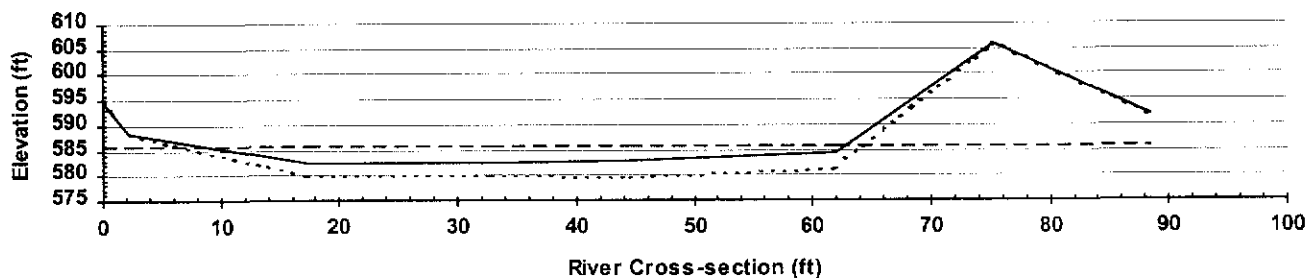


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	593.71	593.71	586.43	
7.23	584.69	584.69	586.43	
19.20	583.46	580.36	586.43	SW
30.22	583.26	580.41	586.43	GW
46.63	582.83	579.33	586.43	SW
57.65	582.70	578.30	586.43	SM
68.14	585.06	585.06	586.43	
76.94	594.55	594.55	586.43	

TRANSECT ID: C-010

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



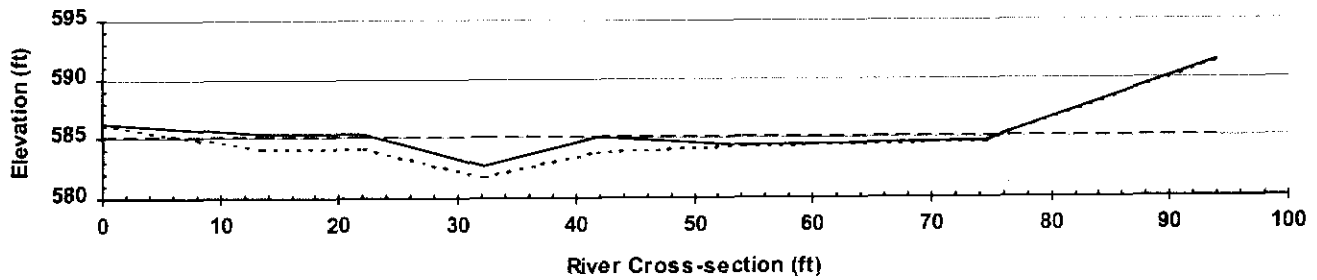
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	594.78	594.78	586.00	
2.20	588.31	588.31	586.00	
17.19	582.38	580.28	586.00	SM
32.59	582.33	580.03	586.00	GW
44.46	582.80	579.70	586.00	GW
61.96	584.36	581.26	586.00	GW
75.00	605.66	605.66	586.00	
75.00	606.00	606.00	586.00	
88.39	591.93	591.93	586.00	

River Transect Cross-sectional Plots

TRANSECT ID: C-011

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

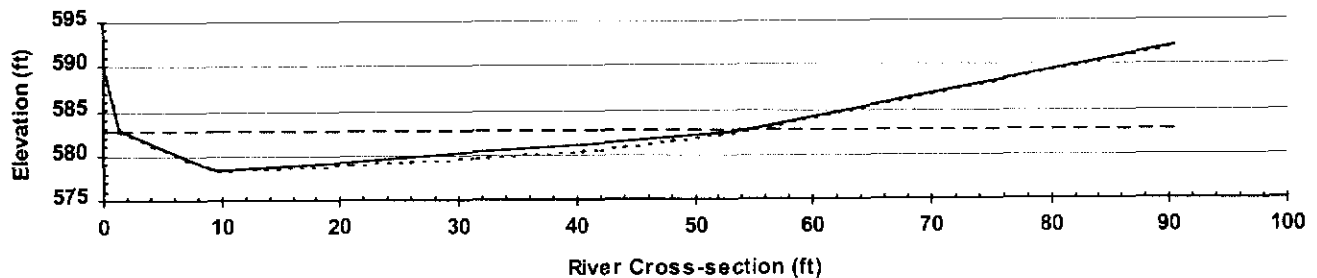


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	586.25	586.25	585.31	
13.32	585.41	584.16	585.31	SM
22.02	585.36	584.26	585.31	OL
32.22	582.71	581.91	585.31	GW
41.72	585.13	583.88	585.31	SW
54.11	584.36	584.36	585.31	
74.52	584.69	584.69	585.31	
93.90	591.45	591.45	585.31	

TRANSECT ID: C-012

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



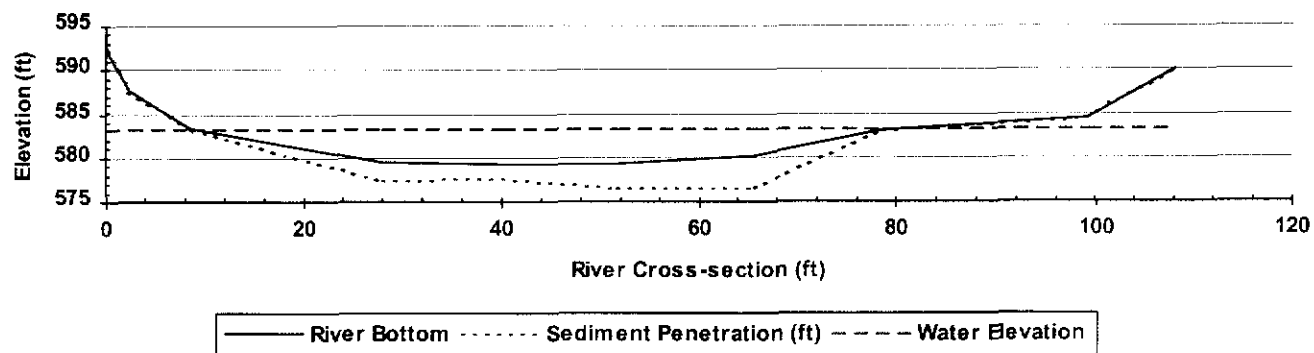
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	589.86	589.86	582.81	
1.33	582.88	582.88	582.81	
9.54	578.38	578.38	582.81	NS
20.88	579.34	578.94	582.81	NS
31.56	580.44	579.79	582.81	SW
42.02	581.35	580.65	582.81	SW
54.33	582.74	582.74	582.81	
90.50	592.12	592.12	582.81	

River Transect Cross-sectional Plots

TRANSECT ID: C-013

AVERAGE VELOCITY (ft/sec) 1.0783

Solutia Database: TRANSECT CROSS-SECTIONS

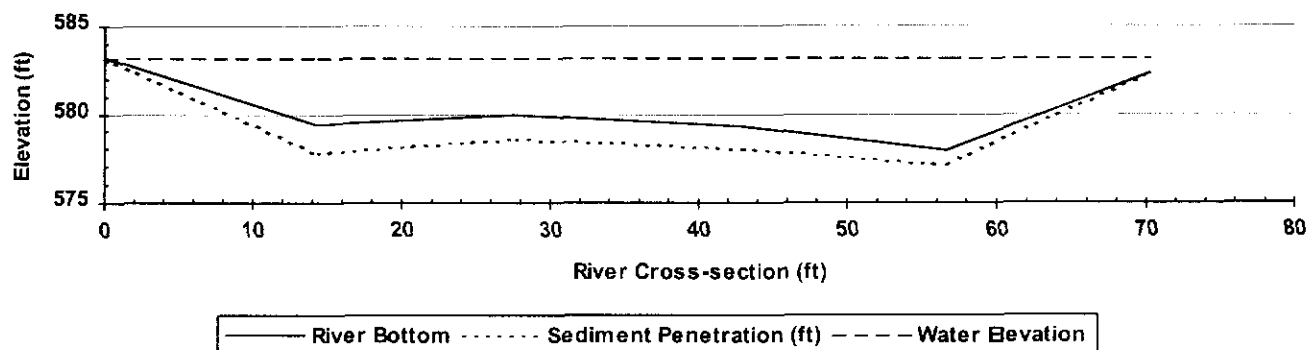


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	592.37	592.37	583.29	
2.33	587.61	587.61	583.29	
8.69	583.29	583.29	583.29	
27.92	579.56	577.56	583.29	SM
39.92	579.37	577.77	583.29	SP
51.73	579.35	576.50	583.29	SW
65.82	580.24	576.54	583.29	SW
78.57	583.00	583.00	583.29	
78.57	583.13	583.13	583.29	
99.21	584.54	584.54	583.29	
108.11	590.00	590.00	583.29	

TRANSECT ID: C-014

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



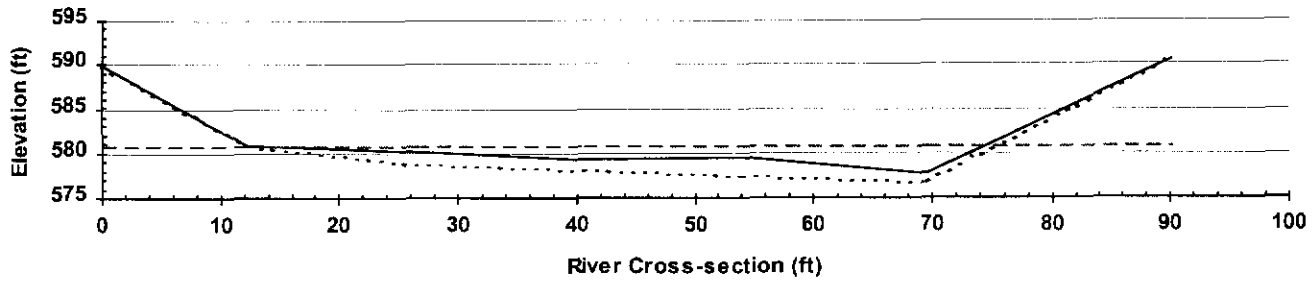
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	583.16	583.16	583.16	
14.23	579.38	577.83	583.16	SW
27.60	579.99	578.59	583.16	SW
42.96	579.26	578.06	583.16	SW
56.72	577.88	577.18	583.16	SW
70.28	582.33	582.33	583.16	

River Transect Cross-sectional Plots

TRANSECT ID: C-015

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

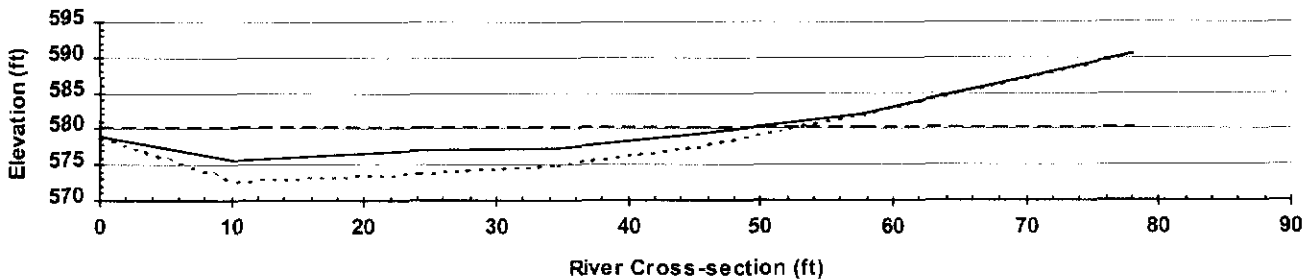


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	589.83	589.83	580.74	
12.22	580.74	580.74	580.74	
26.22	580.21	578.91	580.74	SW
40.51	579.23	578.18	580.74	SW
53.91	579.54	577.44	580.74	SW
69.50	577.72	577.72	580.74	SW
90.08	590.48	590.48	580.74	

TRANSECT ID: C-016

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



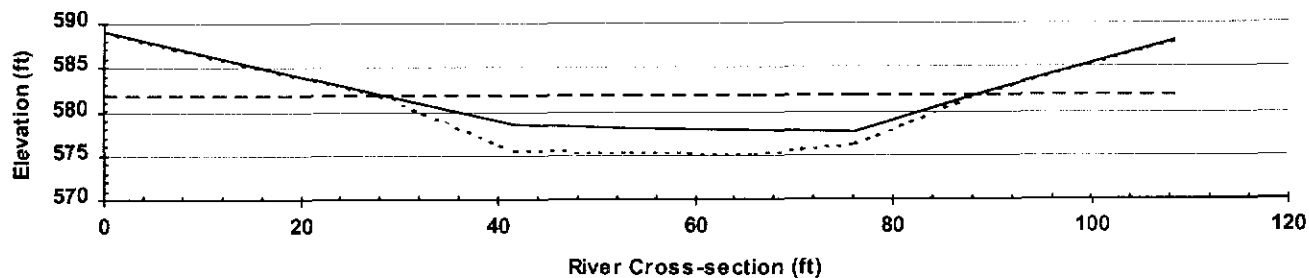
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	578.91	578.91	580.50	
10.40	575.57	572.92	580.50	ML
24.09	577.10	573.95	580.50	SW
34.53	577.33	574.98	580.50	SP
45.21	579.32	577.47	580.50	SP
57.61	582.08	582.08	580.50	
78.19	590.47	590.47	580.50	

River Transect Cross-sectional Plots

TRANSECT ID: C-017

AVERAGE VELOCITY (ft/sec) 1.1840

Solutia Database: TRANSECT CROSS-SECTIONS

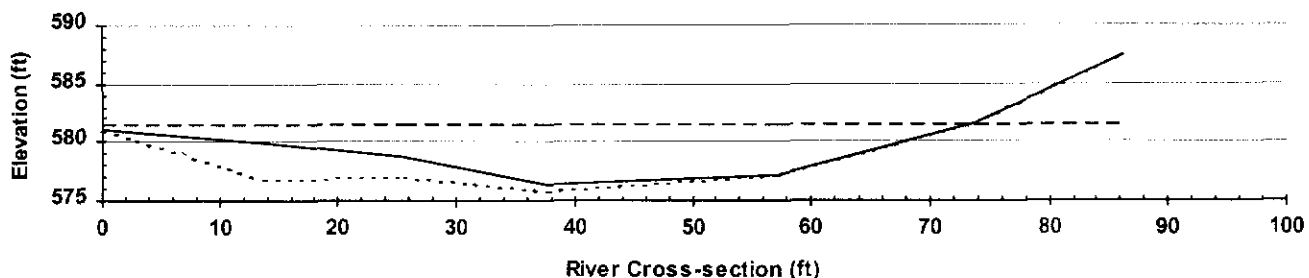


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	589.03	589.03	581.98	
27.94	581.90	581.90	581.98	
41.61	578.56	575.71	581.98	SP
53.27	578.07	575.32	581.98	SP
65.94	577.96	575.16	581.98	SW
76.25	577.57	576.37	581.98	SW
89.53	582.06	582.06	581.98	
108.45	588.09	588.09	581.98	

TRANSECT ID: C-021

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



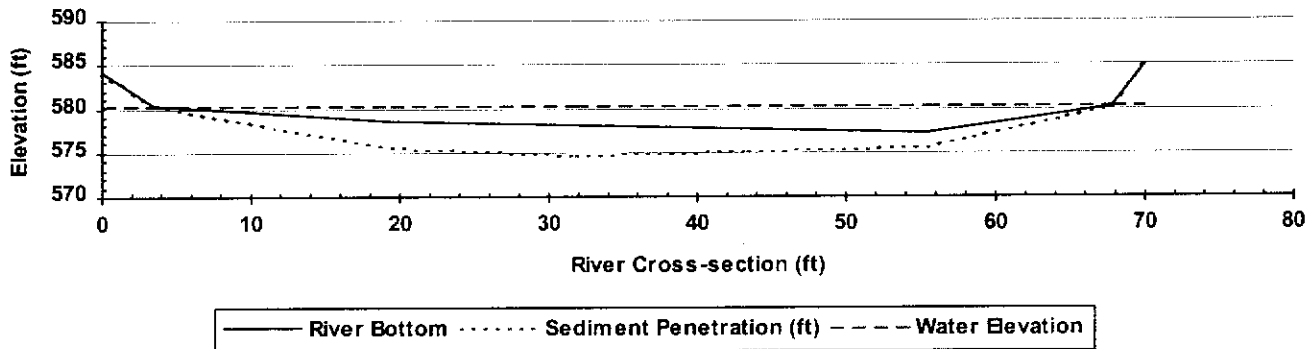
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	581.12	581.12	581.58	
13.74	579.82	576.82	581.58	SP
25.39	578.74	577.04	581.58	GW
37.69	576.30	575.90	581.58	GW
57.37	577.11	577.11	581.58	NS
73.64	581.58	581.58	581.58	
86.20	587.43	587.43	581.58	

River Transect Cross-sectional Plots

TRANSECT ID: C-022

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

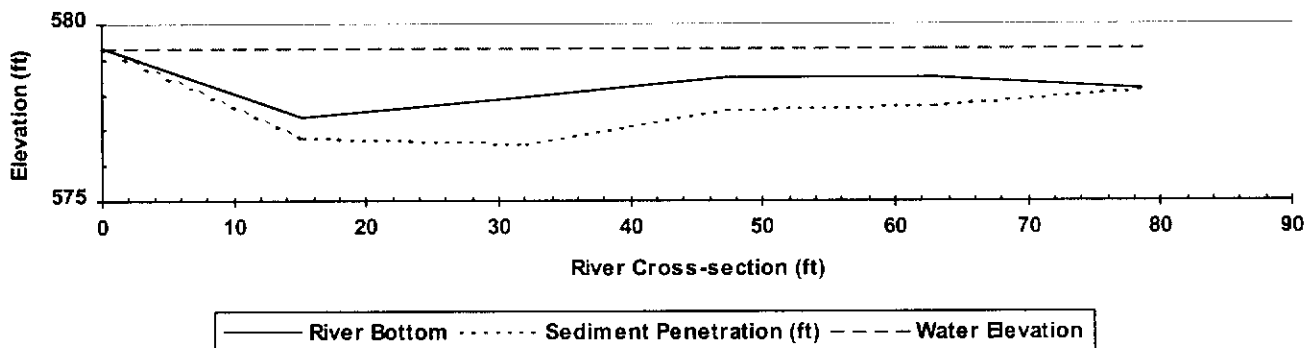


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	584.12	584.12	580.32	
3.48	580.32	580.32	580.32	
19.30	578.50	575.65	580.32	SW
31.75	578.04	574.69	580.32	SP
43.38	577.70	575.14	580.32	GP
55.28	577.12	575.67	580.32	SP
67.79	580.03	580.03	580.32	
69.94	585.16	585.16	580.32	

TRANSECT ID: C-023

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



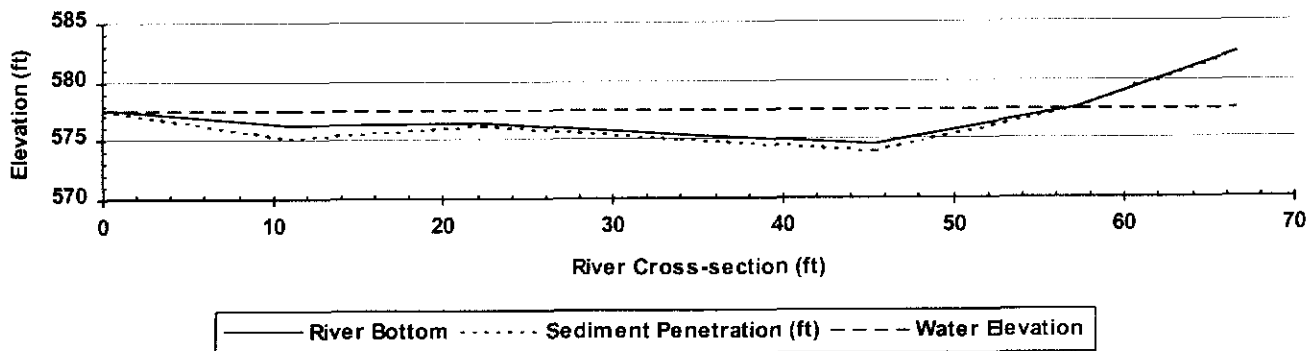
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	579.32	579.32	579.32	
15.13	577.37	576.82	579.32	GP
31.91	577.90	576.65	579.32	GP
47.32	578.47	577.57	579.32	GP
62.83	578.47	577.67	579.32	GM
78.53	578.16	578.16	579.32	

River Transect Cross-sectional Plots

TRANSECT ID: C-024

AVERAGE VELOCITY (ft/sec) 1.5870

Solutia Database: TRANSECT CROSS-SECTIONS

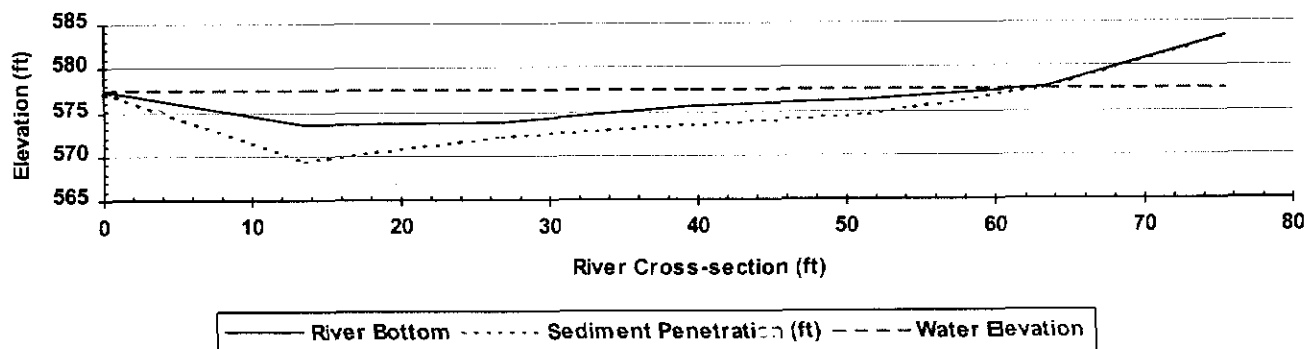


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	577.59	577.59	577.57	
10.96	576.18	575.18	577.57	SW
22.45	576.47	576.17	577.57	GW
33.93	575.43	575.13	577.57	SW
45.35	574.50	574.00	577.57	SW
57.21	577.55	577.55	577.57	
66.66	582.31	582.31	577.57	

TRANSECT ID: C-025

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



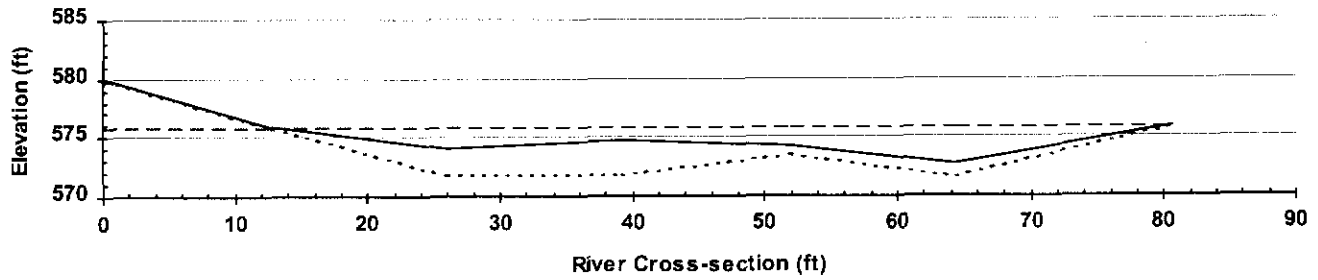
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	577.42	577.42	577.49	
13.46	573.56	569.56	577.49	SW
26.67	573.68	572.28	577.49	SW
39.49	575.46	573.56	577.49	SW
51.39	576.29	574.59	577.49	SW
63.33	577.55	577.55	577.49	
75.49	583.36	583.36	577.49	

River Transect Cross-sectional Plots

TRANSECT ID: C-026

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

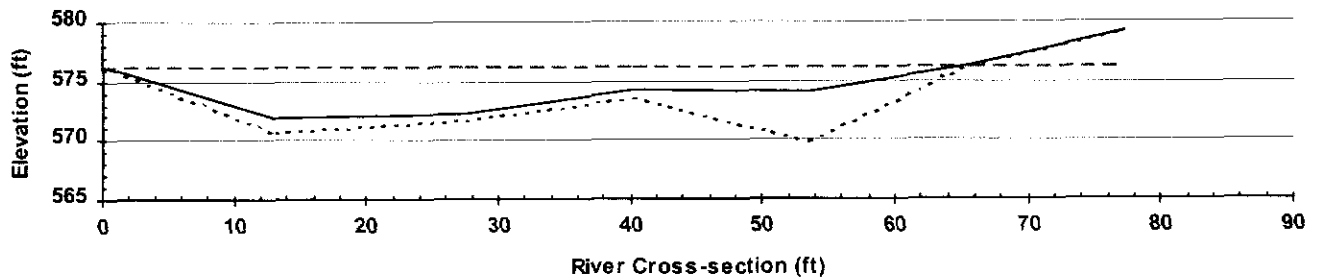


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	580.00	580.00	575.92	
12.77	575.96	575.96	575.92	
25.96	573.98	571.88	575.92	SW
39.17	574.64	571.79	575.92	SW
51.85	574.25	573.55	575.92	SW
64.41	572.76	571.76	575.92	SW
80.70	575.88	575.88	575.92	

TRANSECT ID: C-027

AVERAGE VELOCITY (ft/sec) 1.2150

Solutia Database: TRANSECT CROSS-SECTIONS



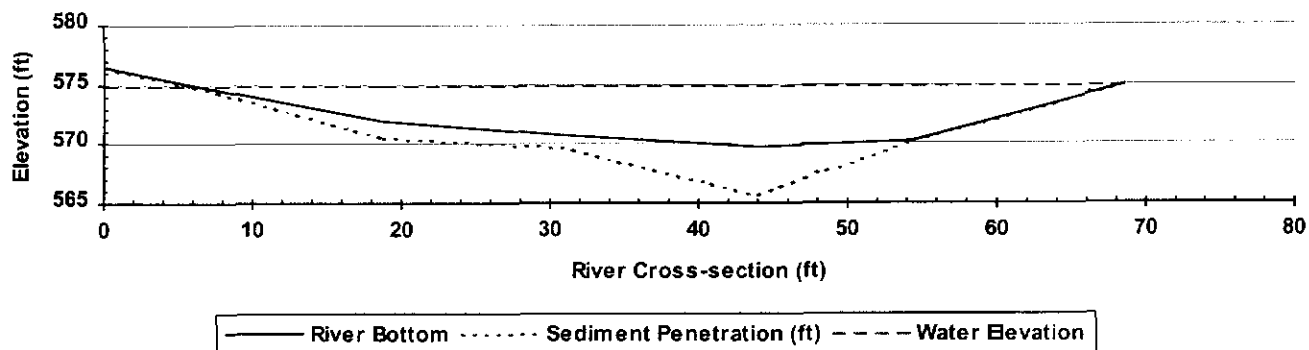
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	576.35	576.35	576.35	
13.05	571.88	570.78	576.35	SW
27.50	572.19	571.69	576.35	SW
40.13	574.27	573.57	576.35	SW
53.48	574.15	569.90	576.35	SW
65.74	576.36	576.36	576.35	
77.24	579.21	579.21	576.35	

River Transect Cross-sectional Plots

TRANSECT ID: C-028

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

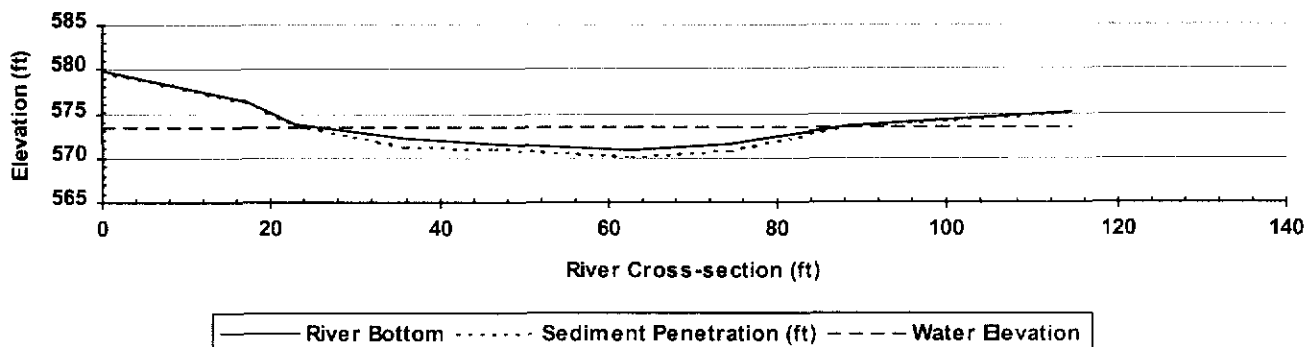


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation ft)</u>	<u>USCS Code</u>
0.00	576.46	576.46	574.98	
6.02	575.01	575.01	574.98	
18.72	571.88	570.63	574.98	SW
30.65	570.81	569.76	574.98	SW
44.04	569.72	565.72	574.98	SC
54.43	570.20	570.20	574.98	NS
68.55	574.94	574.94	574.98	

TRANSECT ID: C-029

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



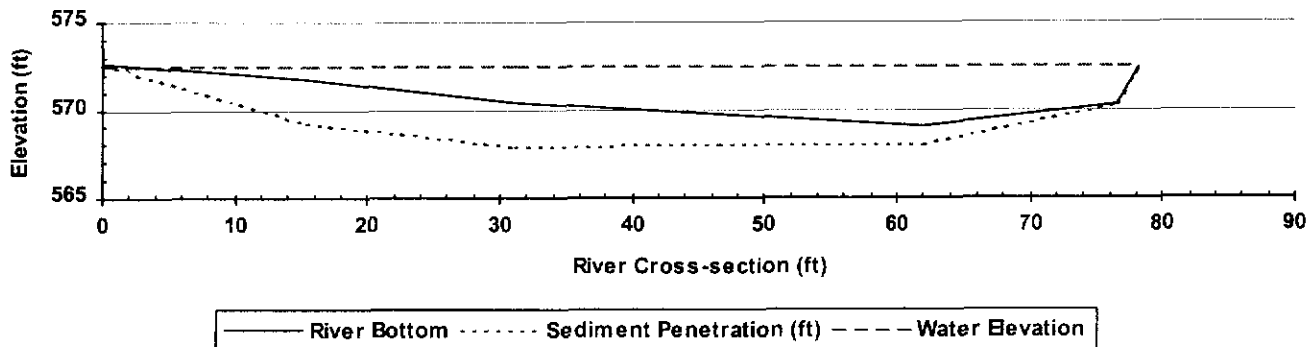
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation ft)</u>	<u>USCS Code</u>
0.00	579.73	579.73	573.63	
16.91	576.54	576.54	573.63	
22.92	573.73	573.73	573.63	
35.87	572.28	571.23	573.63	GW
46.38	571.41	571.01	573.63	GW
62.56	570.87	570.27	573.63	GW
74.23	571.49	570.84	573.63	GW
88.35	573.54	573.54	573.63	
114.62	575.01	575.01	573.63	

River Transect Cross-sectional Plots

TRANSECT ID: C-030

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

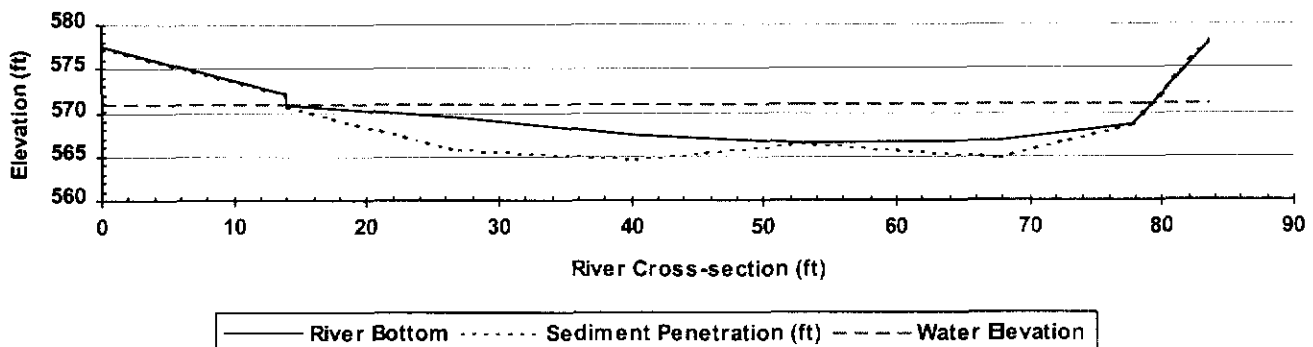


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	572.66	572.66	572.56	
15.34	571.69	569.29	572.56	SW
31.12	570.35	567.95	572.56	SW
46.47	569.67	568.02	572.56	SW
61.99	569.10	568.00	572.56	GW
76.44	570.24	570.24	572.56	
78.17	572.45	572.45	572.56	

TRANSECT ID: C-031

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



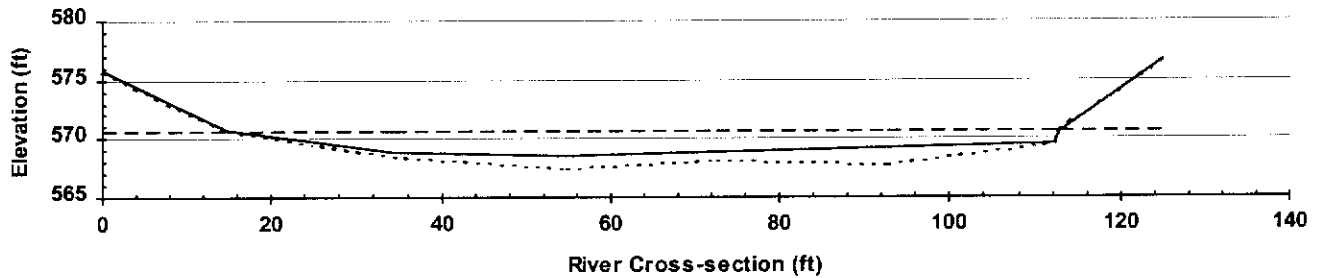
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	577.58	577.58	570.91	
13.76	572.06	572.06	570.91	
13.90	570.70	570.70	570.91	
26.92	569.40	565.95	570.91	SW
40.15	567.45	564.65	570.91	SW
52.82	566.47	566.47	570.91	NS
67.62	566.66	564.86	570.91	SW
77.73	568.57	568.57	570.91	
78.44	569.76	569.76	570.91	
83.54	577.81	577.81	570.91	

River Transect Cross-sectional Plots

TRANSECT ID: C-032

AVERAGE VELOCITY (ft/sec) 1.4283

Solutia Database: TRANSECT CROSS-SECTIONS

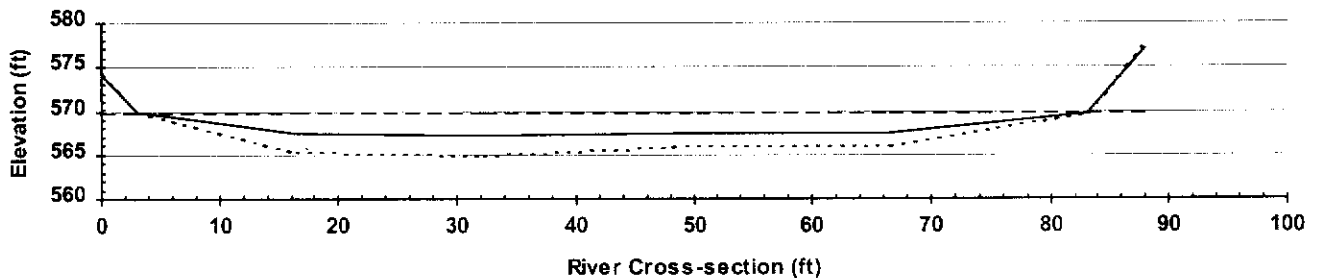


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	575.85	575.85	570.68	
14.80	570.74	570.74	570.68	
34.33	568.90	568.60	570.68	SW
54.53	568.52	567.57	570.68	SW
72.52	568.83	568.28	570.68	SW
92.67	569.13	567.93	570.68	GW
112.05	569.54	569.54	570.68	
112.74	570.61	570.61	570.68	
125.00	576.57	576.57	570.68	

TRANSECT ID: C-033

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



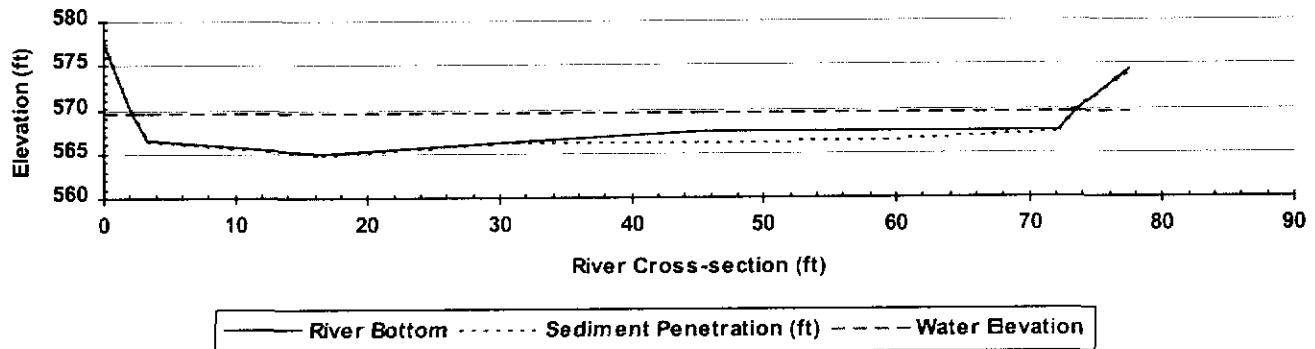
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	574.24	574.24	569.83	
3.08	569.96	569.96	569.83	
16.43	567.42	565.42	569.83	SW
32.17	567.25	564.95	569.83	SW
50.27	567.37	566.07	569.83	SW
66.53	567.34	566.04	569.83	SW
83.10	569.70	569.70	569.83	
88.02	577.14	577.14	569.83	

River Transect Cross-sectional Plots

TRANSECT ID: C-034

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

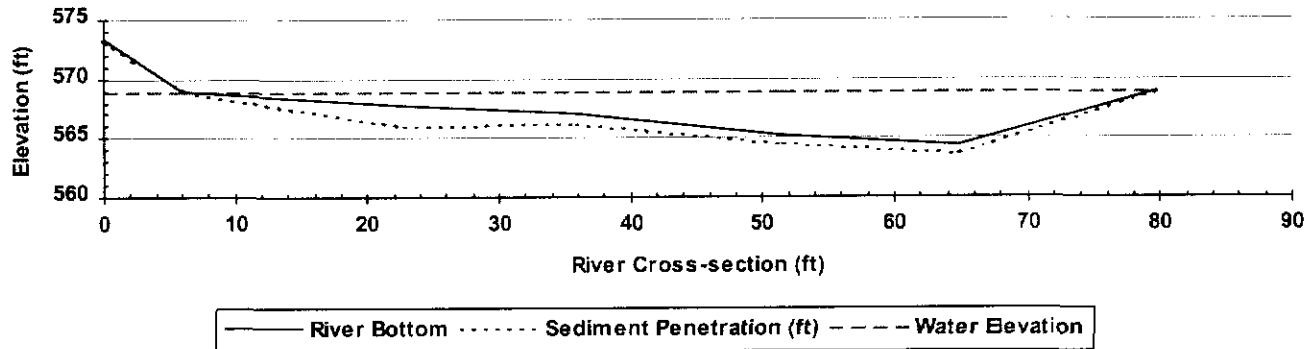


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	577.52	577.52	569.64	
2.13	569.67	569.67	569.64	
3.24	566.52	566.52	569.64	
16.50	565.02	565.02	569.64	NS
31.18	566.25	566.25	569.64	NS
45.43	567.34	566.34	569.64	SW
59.05	567.52	566.42	569.64	SW
72.08	567.34	567.34	569.64	
73.53	569.61	569.61	569.64	
77.57	574.35	574.35	569.64	

TRANSECT ID: C-035

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



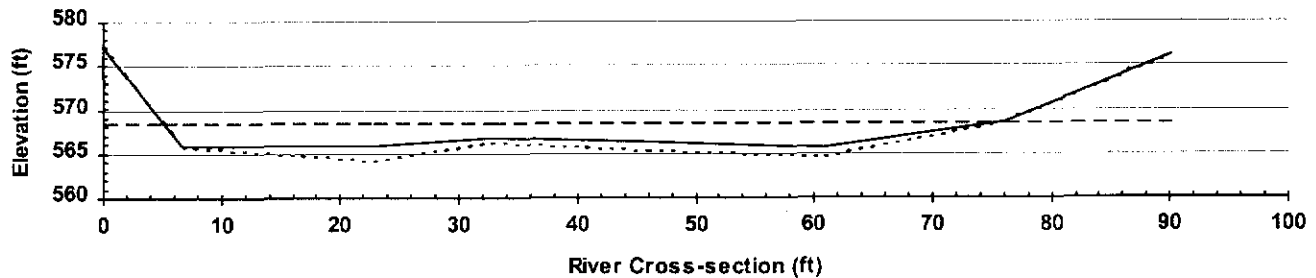
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	573.31	573.31	568.93	
5.94	568.89	568.89	568.93	
22.65	567.77	566.02	568.93	SW
35.77	567.11	566.31	568.93	SW
51.44	565.28	564.48	568.93	SW
64.85	564.45	563.65	568.93	SW
79.77	568.96	568.96	568.93	

River Transect Cross-sectional Plots

TRANSECT ID: C-036

AVERAGE VELOCITY (ft/sec) 1.8117

Solutia Database: TRANSECT CROSS-SECTIONS



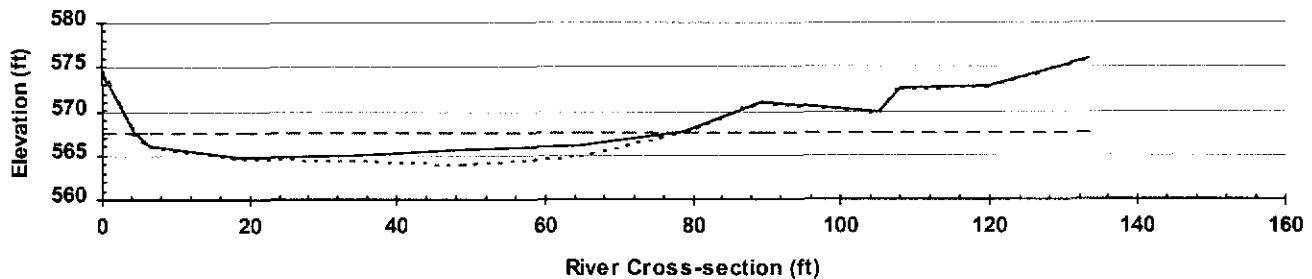
— River Bottom Sediment Penetration (ft) ---- Water Elevation

<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	577.09	577.09	568.61	
4.95	568.60	568.60	568.61	
6.76	565.77	565.77	568.61	
22.72	565.91	564.36	568.61	SW
32.64	566.71	566.21	568.61	SW
45.96	566.36	565.46	568.61	SW
60.78	565.71	564.66	568.61	SW
75.98	568.61	568.61	568.61	
90.12	576.07	576.07	568.61	

TRANSECT ID: C-037

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



— River Bottom Sediment Penetration (ft) ---- Water Elevation

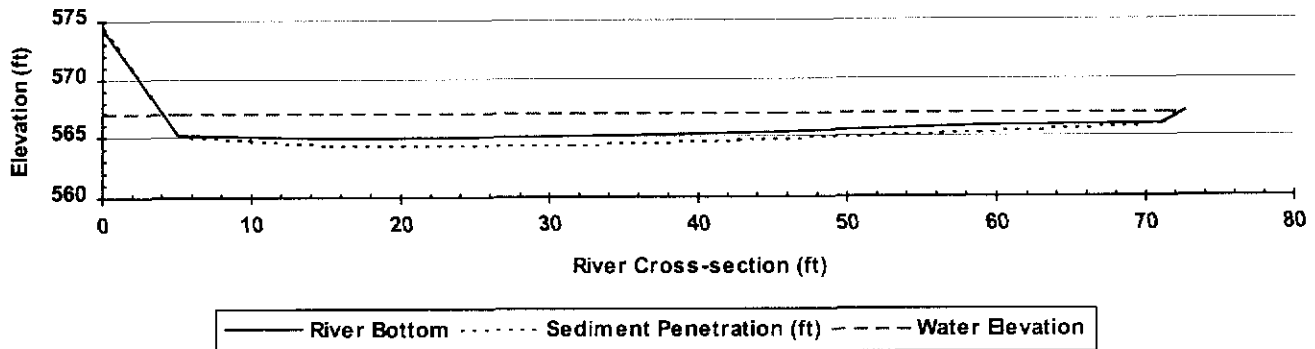
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	574.31	574.31	567.69	
4.24	567.70	567.70	567.69	
6.43	566.16	566.16	567.69	
19.00	564.77	564.77	567.69	NS
33.85	564.91	564.41	567.69	SW
48.91	565.68	564.08	567.69	SW
64.65	566.05	565.00	567.69	SW
78.89	567.67	567.67	567.69	
89.32	570.95	570.95	567.69	
105.02	569.93	569.93	567.69	
108.08	572.62	572.62	567.69	
119.71	572.76	572.76	567.69	
133.59	575.92	575.92	567.69	

River Transect Cross-sectional Plots

TRANSECT ID: C-038

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

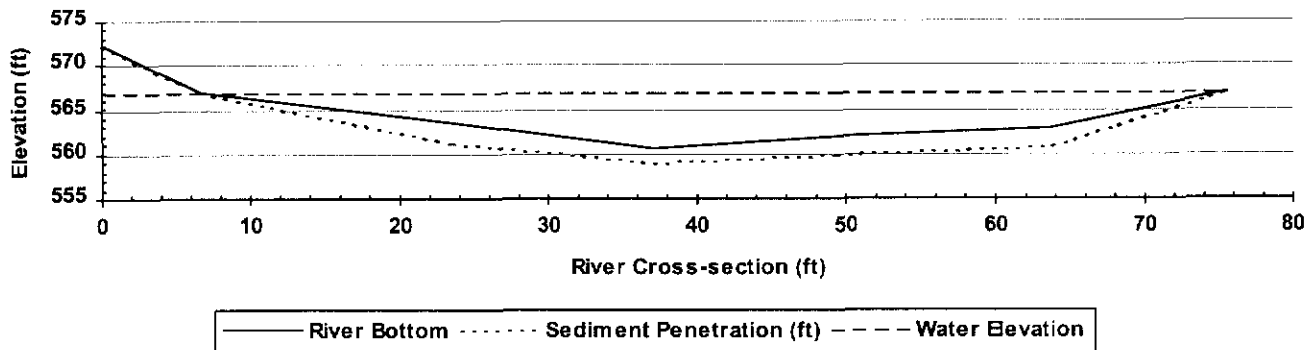


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	574.36	574.36	567.14	
5.04	565.26	565.26	567.14	
15.24	564.93	564.43	567.14	GW
31.43	565.10	564.45	567.14	SW
45.03	565.45	564.90	567.14	SW
58.75	565.91	565.36	567.14	GW
71.05	566.06	566.06	567.14	
72.64	567.14	567.14	567.14	

TRANSECT ID: C-039

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



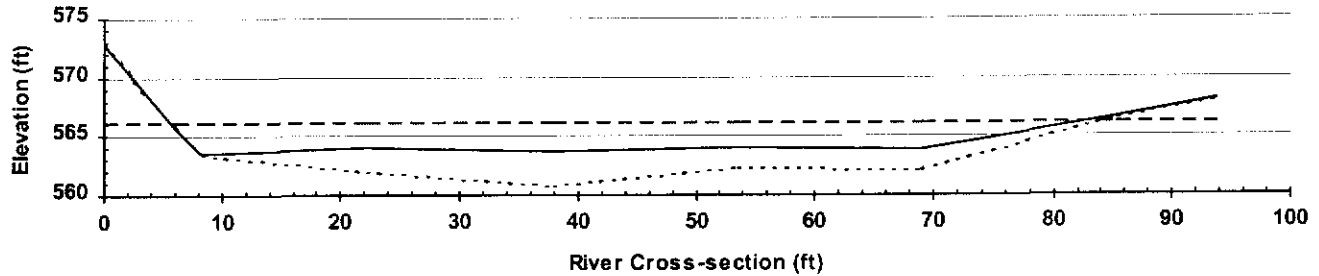
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	572.25	572.25	567.00	
6.61	566.98	566.98	567.00	
23.50	563.64	561.29	567.00	SW
37.04	560.68	558.98	567.00	SW
49.31	561.93	559.88	567.00	PT
63.73	562.84	560.94	567.00	SW
75.61	567.02	567.02	567.00	

River Transect Cross-sectional Plots

TRANSECT ID: C-040

AVERAGE VELOCITY (ft/sec) 1.0470

Solutia Database: TRANSECT CROSS-SECTIONS

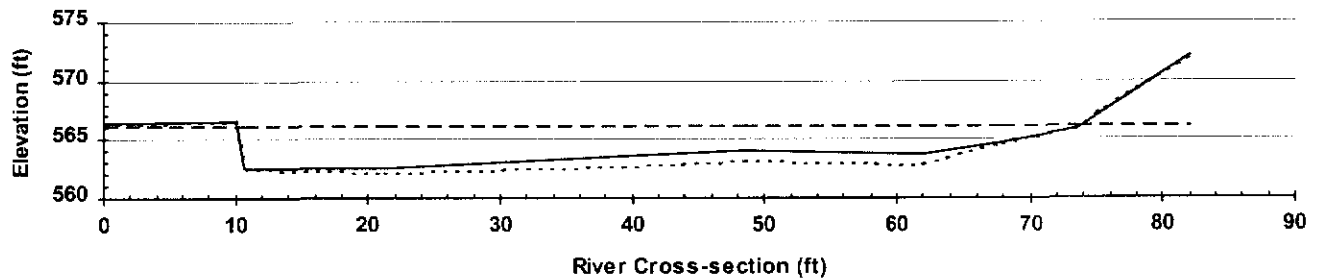


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	572.84	572.84	566.17	
5.98	565.73	565.73	566.17	
8.13	563.57	563.57	566.17	
22.14	564.05	561.95	566.17	ML
37.86	563.66	560.81	566.17	SW
53.49	564.01	562.41	566.17	SW
68.97	563.88	562.18	566.17	SW
85.20	566.61	566.61	566.17	
93.72	568.05	568.05	566.17	

TRANSECT ID: C-041

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

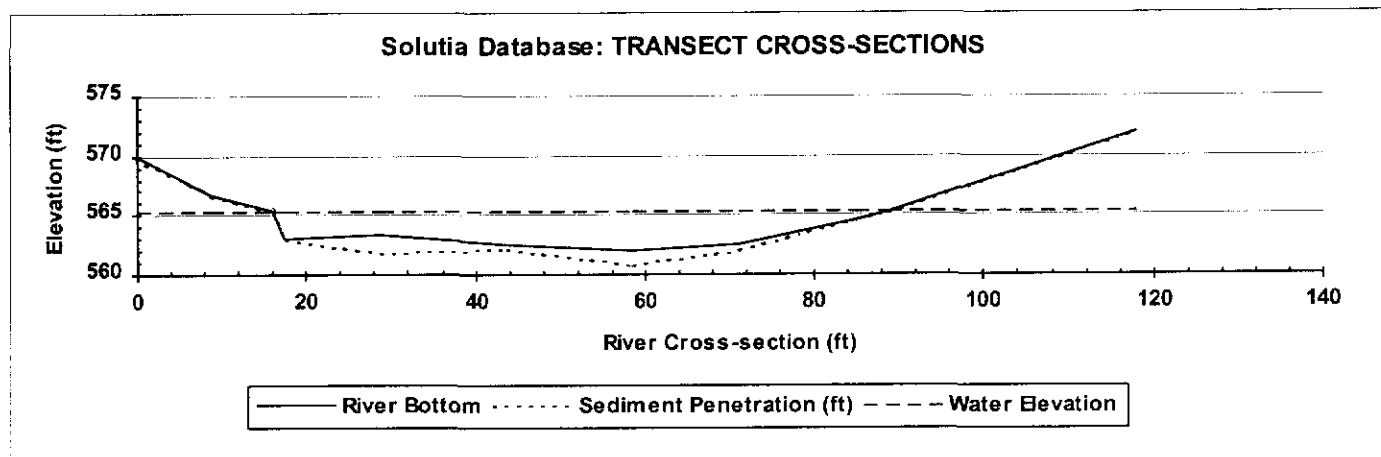


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	566.42	566.42	566.24	
9.99	566.56	566.56	566.24	
10.60	562.46	562.46	566.24	
21.08	562.58	562.23	566.24	GW
39.35	563.47	562.72	566.24	SW
48.38	564.04	563.24	566.24	SW
61.89	563.65	562.85	566.24	SW
67.76	564.79	564.79	566.24	
73.57	565.92	565.92	566.24	
82.05	572.21	572.21	566.24	

River Transect Cross-sectional Plots

TRANSECT ID: C-042

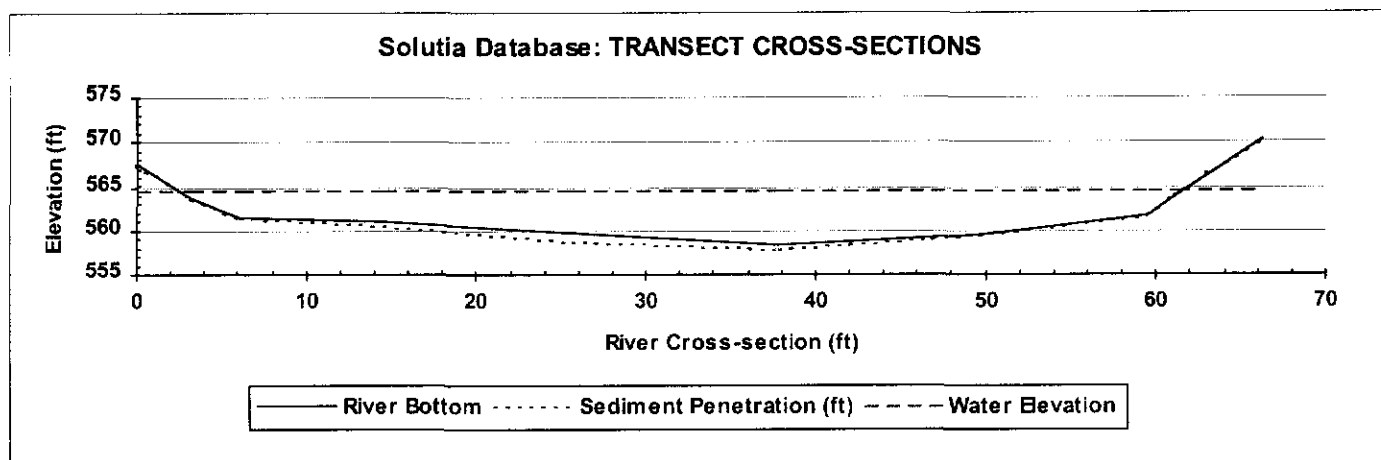
AVERAGE VELOCITY (ft/sec)



Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	569.92	569.92	565.44	
8.61	566.81	566.81	565.44	
15.98	565.44	565.44	565.44	
17.40	563.02	563.02	565.44	
28.51	563.37	561.92	565.44	SW
43.52	562.60	562.20	565.44	SW
58.49	561.94	560.84	565.44	SW
71.04	562.48	562.03	565.44	SW
84.90	564.47	564.47	565.44	
88.67	565.23	565.23	565.44	
117.99	571.93	571.93	565.44	

TRANSECT ID: C-043

AVERAGE VELOCITY (ft/sec)



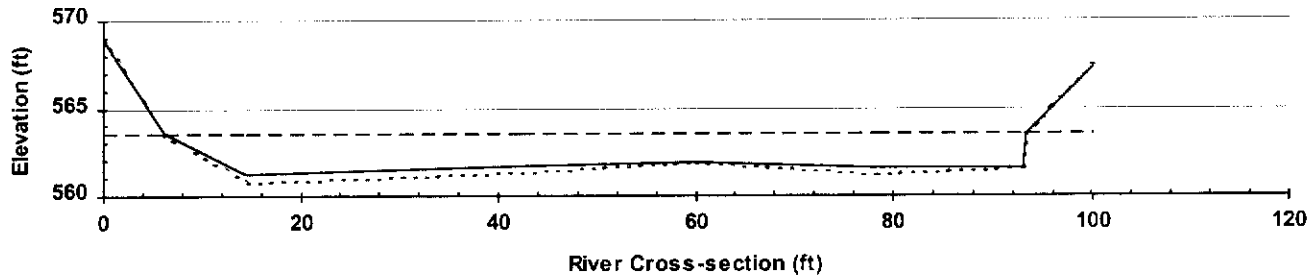
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	567.63	567.63	564.74	
3.14	563.82	563.82	564.74	
6.07	561.61	561.61	564.74	
14.43	561.02	560.62	564.74	SW
25.59	559.65	558.85	564.74	SW
37.82	558.45	557.85	564.74	GW
49.54	559.49	559.49	564.74	NS
59.48	561.68	561.68	564.74	
61.15	564.04	564.04	564.74	
66.32	570.19	570.19	564.74	

River Transect Cross-sectional Plots

TRANSECT ID: C-044

AVERAGE VELOCITY (ft/sec) 1.3300

Solutia Database: TRANSECT CROSS-SECTIONS

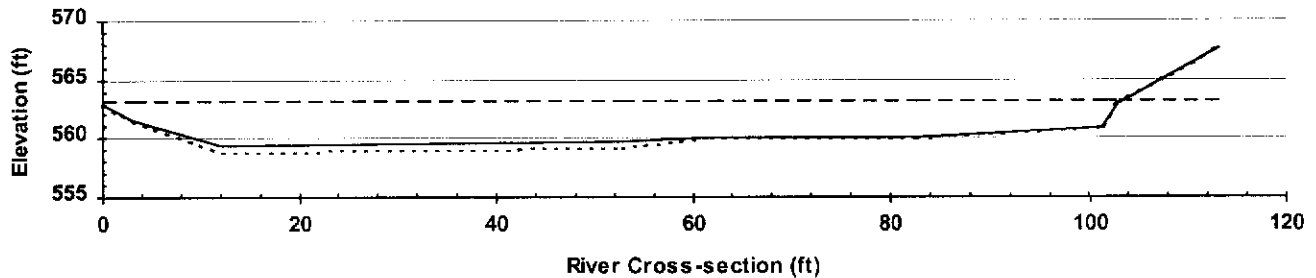


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	568.90	568.90	563.63	
6.25	563.55	563.55	563.63	
14.42	561.23	560.83	563.63	SW
42.26	561.74	561.34	563.63	GW
59.90	561.88	561.88	563.63	NS
78.19	561.61	561.21	563.63	GW
93.08	561.61	561.61	563.63	
93.33	563.43	563.43	563.63	
100.12	567.27	567.27	563.63	

TRANSECT ID: C-045

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

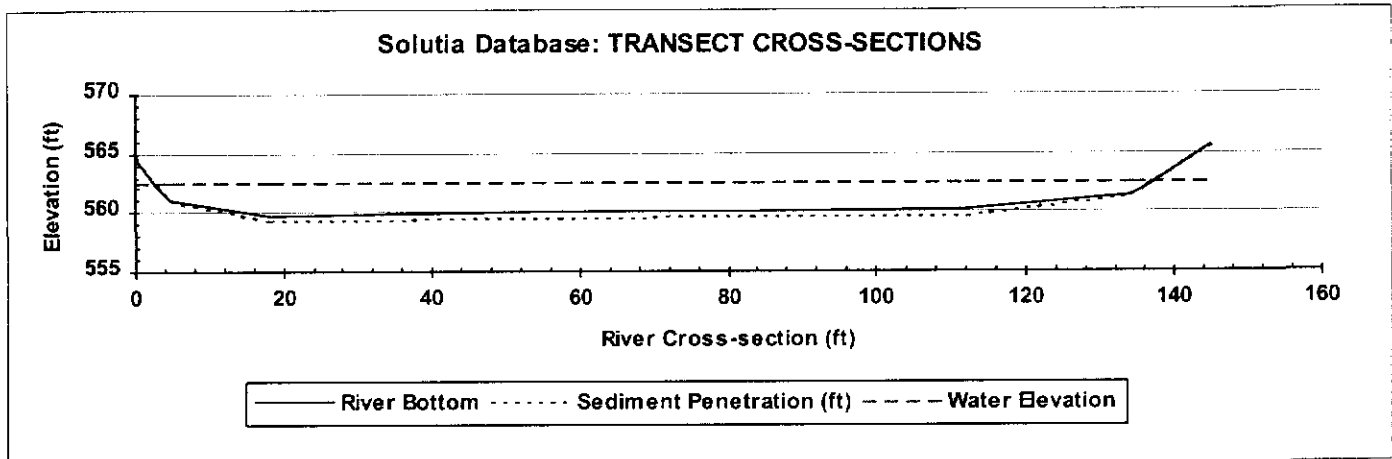


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	562.90	562.90	563.22	
3.08	561.50	561.50	563.22	
12.01	559.43	558.93	563.22	SW
52.72	559.76	559.16	563.22	SW
61.77	560.04	560.04	563.22	NS
82.59	560.08	560.08	563.22	NS
101.32	560.87	560.87	563.22	
102.86	562.89	562.89	563.22	
113.18	567.61	567.61	563.22	

River Transect Cross-sectional Plots

TRANSECT ID: C-046

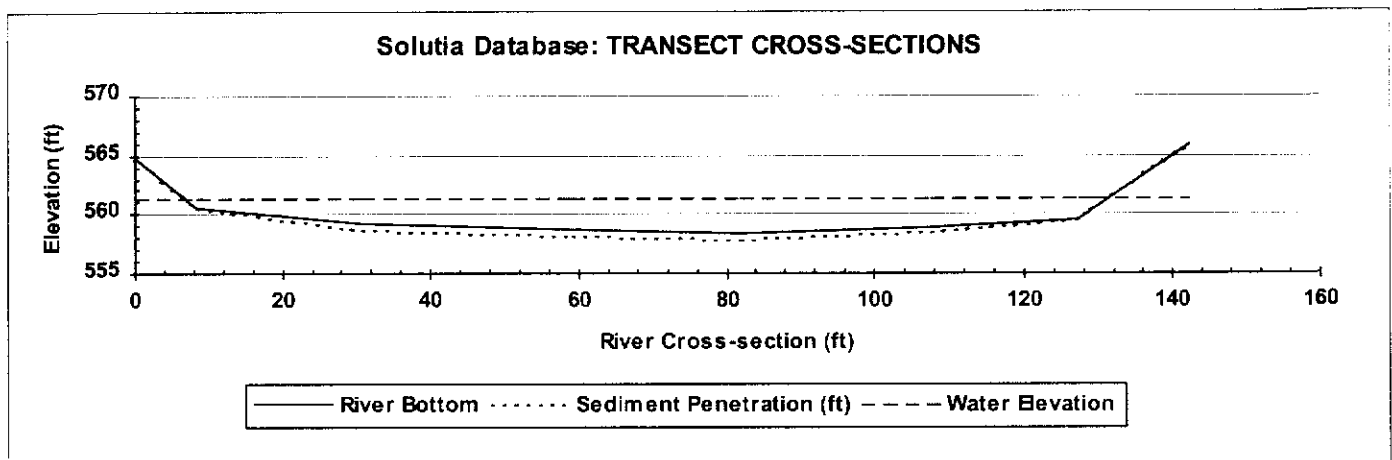
AVERAGE VELOCITY (ft/sec)



<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	564.69	564.69	562.57	
2.90	562.32	562.32	562.57	
4.85	561.14	561.14	562.57	
18.30	559.73	559.43	562.57	SW
57.02	560.05	559.55	562.57	SW
83.13	560.14	559.74	562.57	GW
111.93	560.21	559.71	562.57	GW
134.40	561.40	561.40	562.57	
136.56	562.24	562.24	562.57	
144.92	565.70	565.70	562.57	

TRANSECT ID: C-047

AVERAGE VELOCITY (ft/sec)



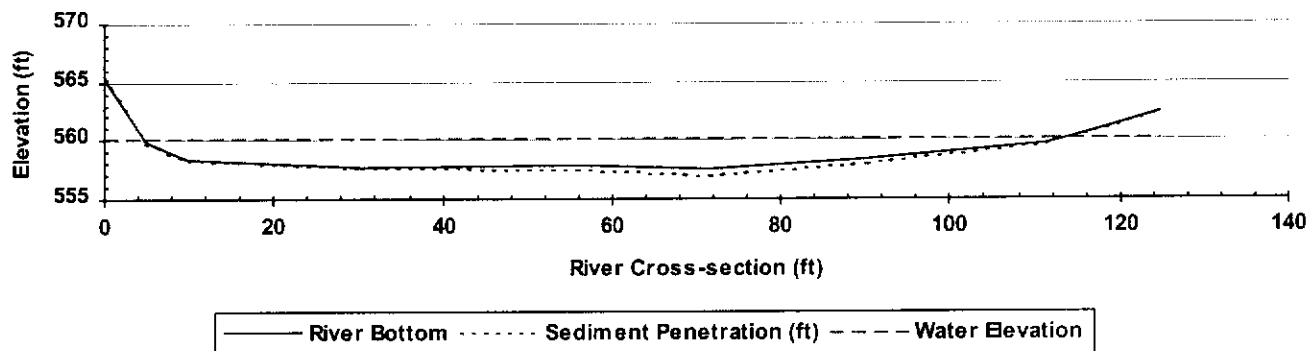
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	564.72	564.72	561.36	
8.29	560.54	560.54	561.36	
30.59	559.24	558.79	561.36	SW
59.00	558.72	558.27	561.36	GW
81.82	558.35	557.85	561.36	GW
107.36	558.90	558.50	561.36	SW
127.30	559.52	559.52	561.36	
129.08	560.40	560.40	561.36	
142.21	565.92	565.92	561.36	

River Transect Cross-sectional Plots

TRANSECT ID: C-048

AVERAGE VELOCITY (ft/sec) 1.3860

Solutia Database: TRANSECT CROSS-SECTIONS

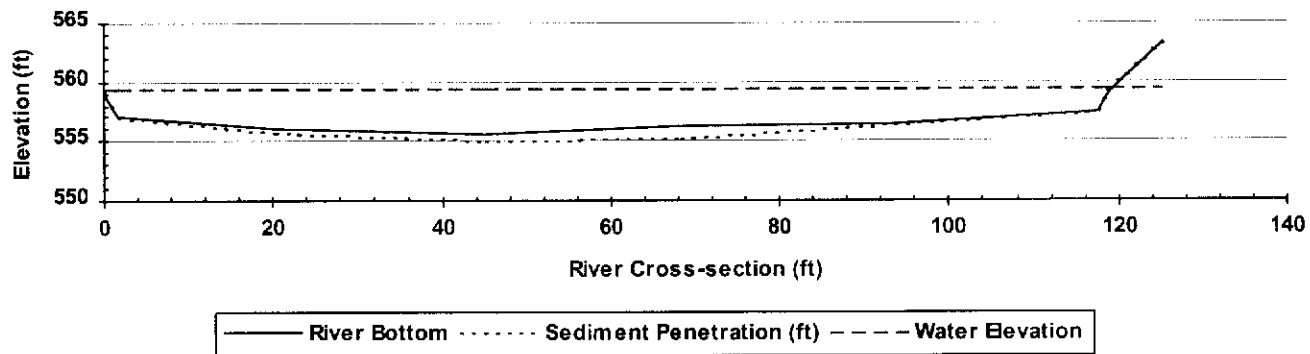


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	565.25	565.25	560.15	
4.87	559.88	559.88	560.15	
9.78	558.44	558.44	560.15	
30.20	557.68	557.68	560.15	NS
55.84	557.94	557.59	560.15	SW
71.42	557.55	557.10	560.15	SW
90.03	558.35	558.10	560.15	SW
111.34	559.77	559.77	560.15	
116.90	560.72	560.72	560.15	
124.81	562.42	562.42	560.15	

TRANSECT ID: C-049

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

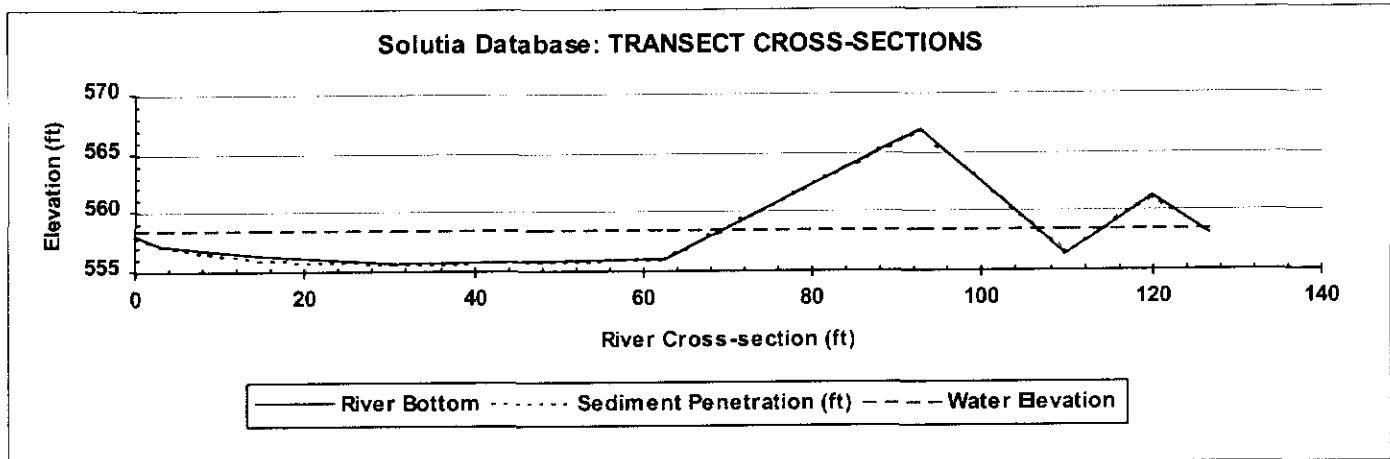


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	558.92	558.92	559.50	
1.59	557.04	557.04	559.50	
20.07	556.01	555.71	559.50	GW
45.04	555.52	555.02	559.50	SW
68.33	556.19	555.29	559.50	SW
93.64	556.46	556.46	559.50	NS
117.50	557.42	557.42	559.50	
118.80	559.11	559.11	559.50	
125.30	563.26	563.26	559.50	

River Transect Cross-sectional Plots

TRANSECT ID: C-050

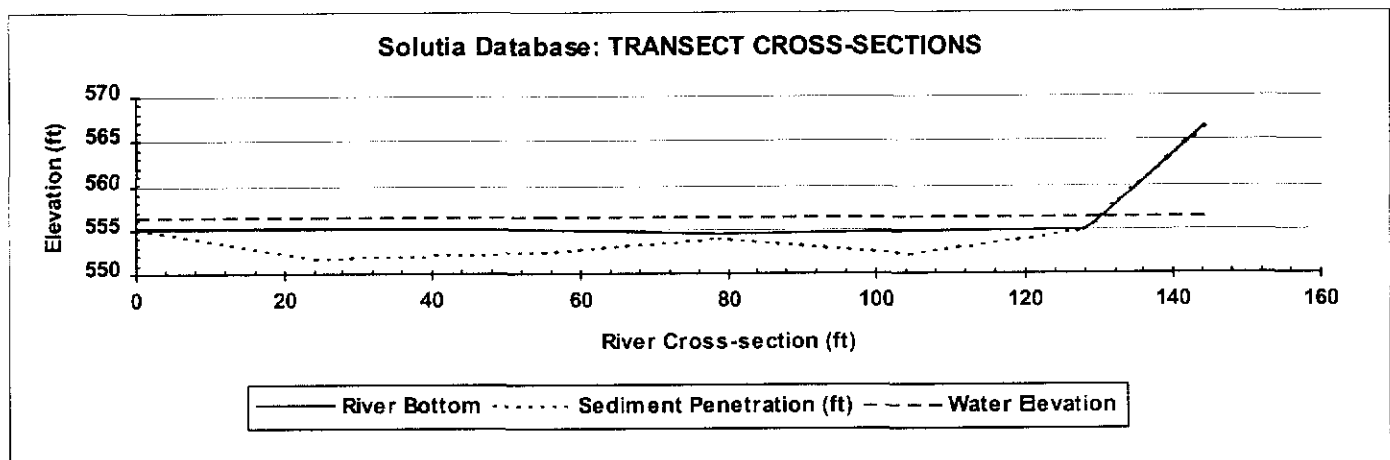
AVERAGE VELOCITY (ft/sec)



<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	557.95	557.95	558.50	
3.11	557.11	557.11	558.50	
14.45	556.39	556.04	558.50	SW
30.52	555.74	555.74	558.50	NS
47.55	555.77	555.77	558.50	NS
62.63	555.96	555.96	558.50	NS
92.60	566.96	566.96	558.50	
109.86	556.42	556.42	558.50	
119.83	561.16	561.16	558.50	
126.59	558.07	558.07	558.50	

TRANSECT ID: C-051

AVERAGE VELOCITY (ft/sec)



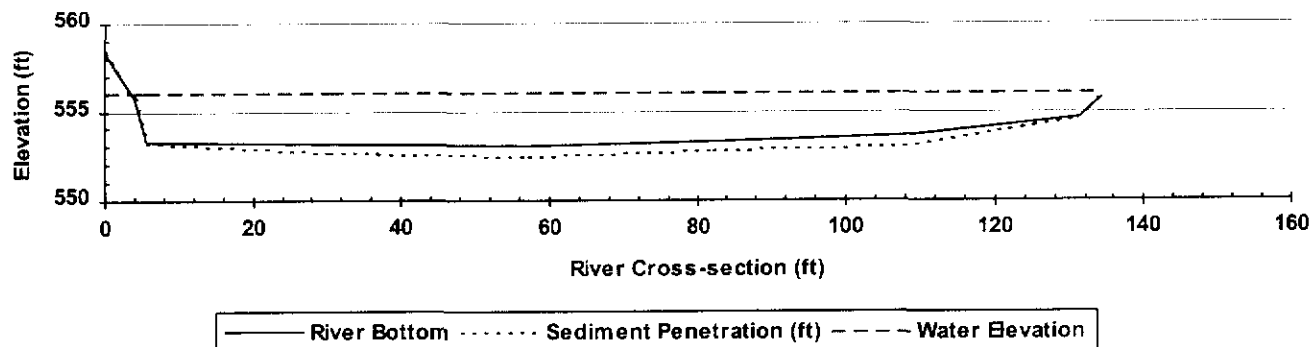
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	555.11	555.11	556.48	
24.13	555.27	551.77	556.48	SW
54.87	555.02	552.52	556.48	SW
78.53	554.43	554.13	556.48	SW
104.53	554.79	552.29	556.48	SW
128.21	555.00	555.00	556.48	
130.55	556.48	556.48	556.48	
144.30	566.67	566.67	556.48	

River Transect Cross-sectional Plots

TRANSECT ID: C-052

AVERAGE VELOCITY (ft/sec) 0.6100

Solutia Database: TRANSECT CROSS-SECTIONS

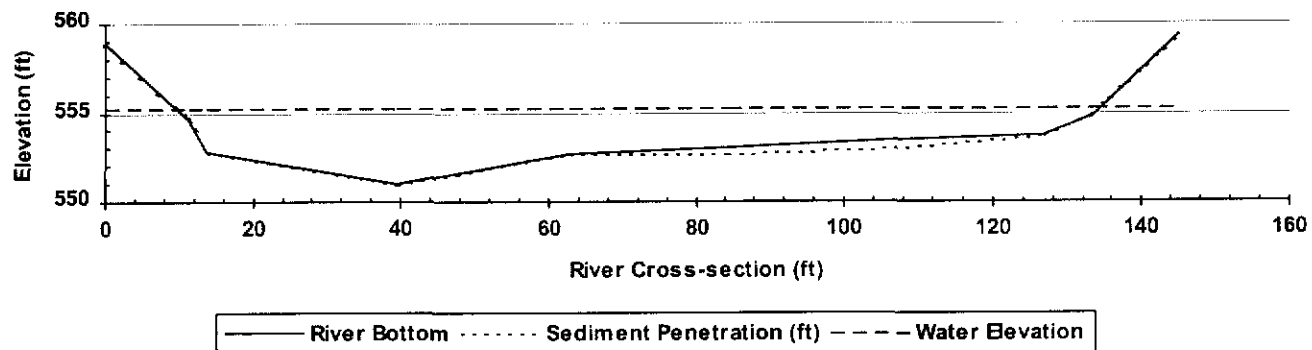


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	558.32	558.32	556.09	
3.97	555.72	555.72	556.09	
5.54	553.23	553.23	556.09	
30.26	553.09	552.69	556.09	SW
57.20	553.05	552.45	556.09	SW
81.89	553.23	552.78	556.09	SW
107.82	553.57	553.07	556.09	SW
131.24	554.56	554.56	556.09	
134.27	555.69	555.69	556.09	

TRANSECT ID: C-053

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



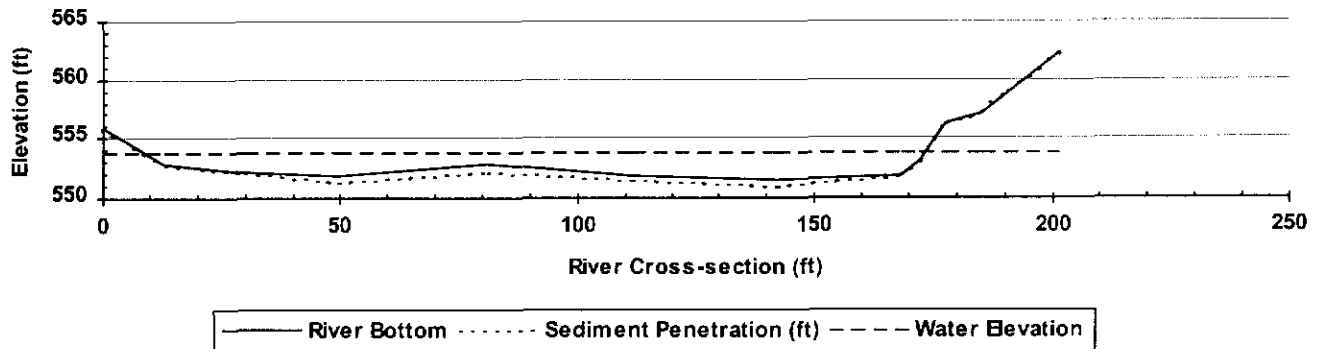
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	558.83	558.83	555.27	
11.21	554.64	554.64	555.27	
13.70	552.82	552.82	555.27	
39.52	551.04	551.04	555.27	NS
62.59	552.65	552.65	555.27	NS
84.19	553.07	552.67	555.27	SW
108.22	553.49	552.99	555.27	SW
126.80	553.69	553.69	555.27	
133.50	554.83	554.83	555.27	
145.10	559.31	559.31	555.27	

River Transect Cross-sectional Plots

TRANSECT ID: C-054

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

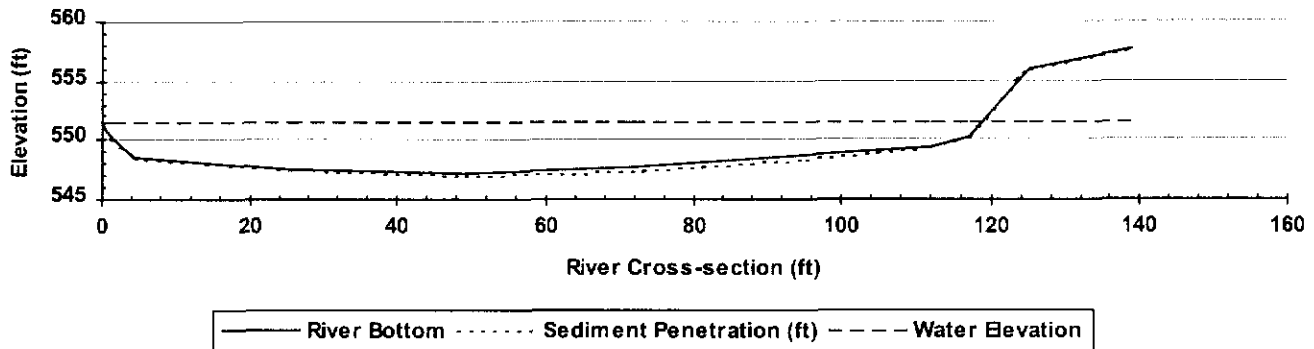


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	555.96	555.96	553.85	
12.81	552.92	552.92	553.85	
29.91	552.15	552.15	553.85	
49.48	551.78	551.33	553.85	SW
80.82	552.83	552.23	553.85	SW
111.48	551.78	551.48	553.85	SW
141.94	551.60	551.00	553.85	SW
168.32	551.89	551.89	553.85	
172.27	553.05	553.05	553.85	
177.51	556.20	556.20	553.85	
185.07	557.14	557.14	553.85	
201.44	562.25	562.25	553.85	

TRANSECT ID: C-055

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



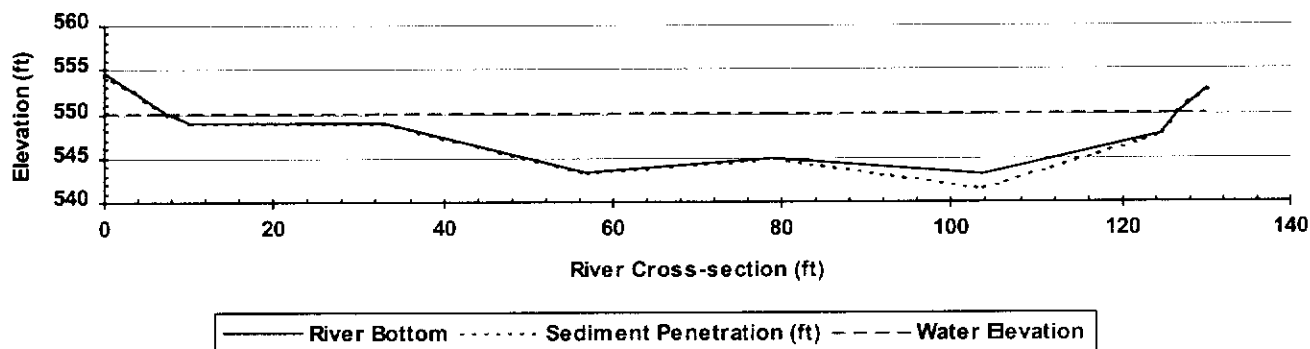
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	551.28	551.28	551.58	
1.39	550.20	550.20	551.58	
4.28	548.51	548.51	551.58	
25.19	547.58	547.58	551.58	NS
49.10	547.24	546.94	551.58	SW
71.53	547.72	547.42	551.58	SW
95.01	548.78	548.38	551.58	SW
112.16	549.38	549.38	551.58	
117.20	550.24	550.24	551.58	
125.21	556.02	556.02	551.58	
139.03	557.62	557.62	551.58	

River Transect Cross-sectional Plots

TRANSECT ID: C-056

AVERAGE VELOCITY (ft/sec) 0.3180

Solutia Database: TRANSECT CROSS-SECTIONS

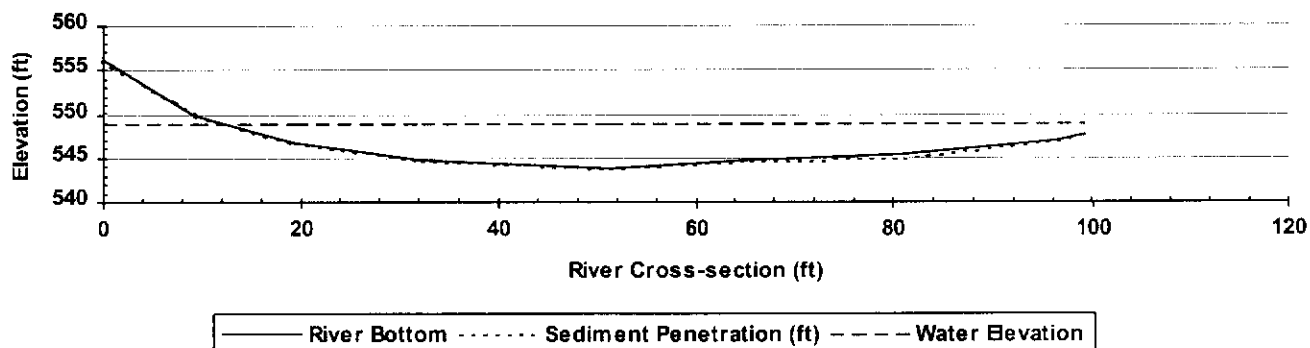


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	554.67	554.67	550.14	
7.36	550.14	550.14	550.14	
10.04	548.99	548.99	550.14	
32.78	548.90	548.90	550.14	NS
56.65	543.36	543.36	550.14	NS
79.11	544.98	544.98	550.14	NS
103.64	543.07	541.57	550.14	ML
124.60	547.62	547.62	550.14	
126.60	550.13	550.13	550.14	
130.03	552.49	552.49	550.14	

TRANSECT ID: C-057

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



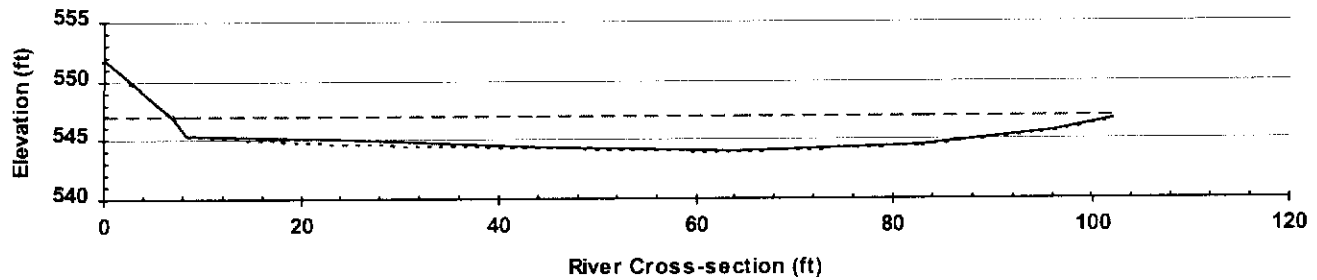
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	556.26	556.26	548.89	
9.28	549.91	549.91	548.89	
16.37	547.54	547.54	548.89	
19.21	546.63	546.63	548.89	
32.10	544.77	544.77	548.89	NS
51.20	543.80	543.80	548.89	NS
65.62	544.61	544.61	548.89	NS
81.04	545.42	544.87	548.89	SW
96.55	546.88	546.88	548.89	
99.30	547.59	547.59	548.89	

River Transect Cross-sectional Plots

TRANSECT ID: C-058

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

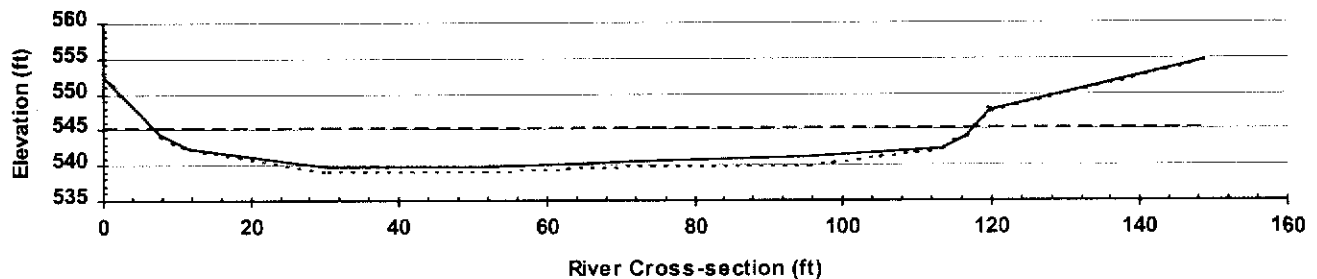


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	551.77	551.77	547.16	
7.09	546.86	546.86	547.16	
8.35	545.43	545.43	547.16	
24.27	545.05	544.75	547.16	SW
43.84	544.30	544.30	547.16	NS
64.13	544.03	544.03	547.16	NS
82.86	544.49	544.49	547.16	NS
96.14	545.77	545.77	547.16	
102.20	546.78	546.78	547.16	

TRANSECT ID: C-059

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



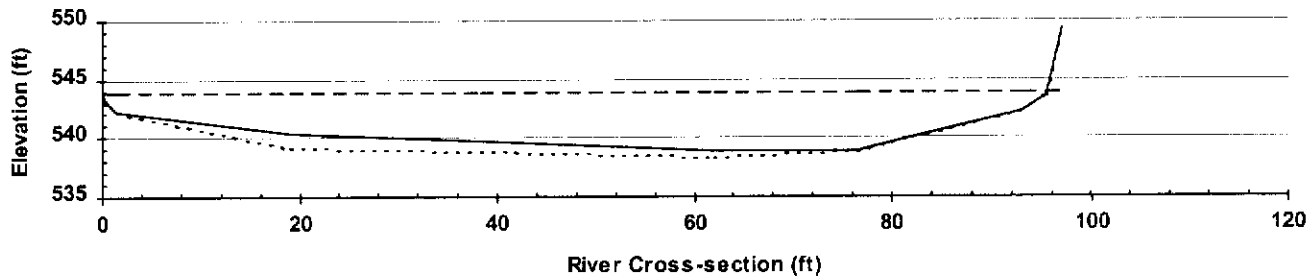
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	552.40	552.40	545.49	
7.86	544.24	544.24	545.49	
11.77	542.29	542.29	545.49	
30.23	539.68	539.08	545.49	SW
51.33	539.76	539.31	545.49	SW
74.20	540.54	539.94	545.49	SW
95.42	541.11	540.11	545.49	SW
113.28	542.25	542.25	545.49	
116.46	544.11	544.11	545.49	
119.84	547.57	547.57	545.49	
148.72	554.53	554.53	545.49	

River Transect Cross-sectional Plots

TRANSECT ID: C-060

AVERAGE VELOCITY (ft/sec) 0.5675

Solutia Database: TRANSECT CROSS-SECTIONS

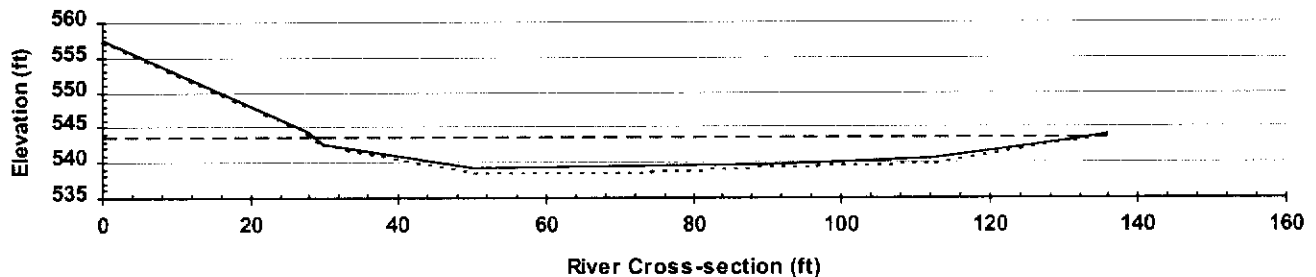


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	543.51	543.51	543.96	
1.47	542.20	542.20	543.96	
18.94	540.36	539.21	543.96	SW
38.25	539.70	538.95	543.96	SW
61.91	538.85	538.45	543.96	OL
76.41	538.90	538.90	543.96	NS
93.05	542.17	542.17	543.96	
95.55	543.67	543.67	543.96	
97.17	549.26	549.26	543.96	

TRANSECT ID: C-061

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



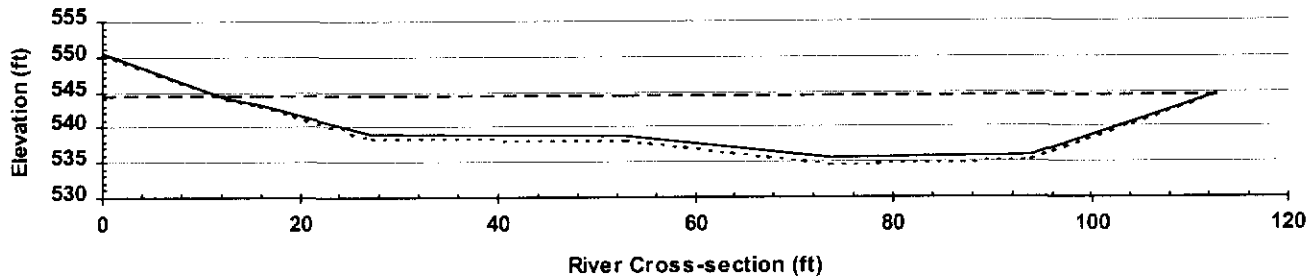
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	557.34	557.34	543.78	
27.85	544.32	544.32	543.78	
29.82	542.57	542.57	543.78	
50.19	539.23	538.63	543.78	OL
71.01	539.62	538.72	543.78	OL
91.91	539.75	539.45	543.78	SW
112.62	540.67	540.07	543.78	SW
131.05	543.23	543.23	543.78	
135.81	544.04	544.04	543.78	

River Transect Cross-sectional Plots

TRANSECT ID: C-062

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

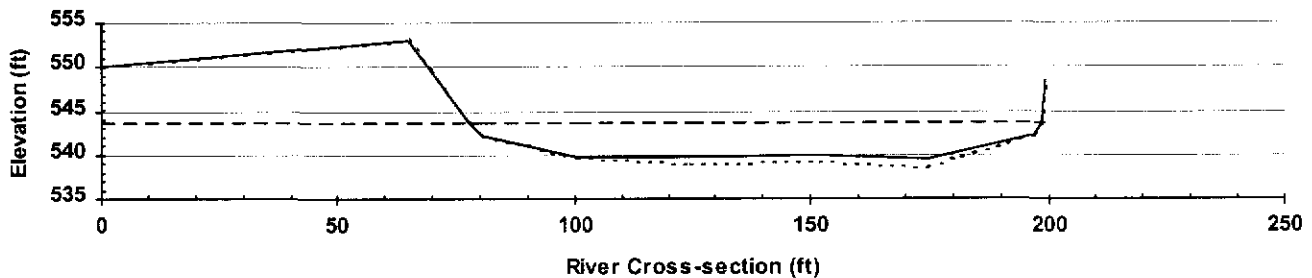


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	550.49	550.49	544.47	
12.60	543.99	543.99	544.47	
15.82	543.22	543.22	544.47	
27.08	538.85	538.45	544.47	SW
52.84	538.59	538.04	544.47	OL
73.55	535.75	534.75	544.47	SW
93.79	535.89	535.29	544.47	SW
112.86	544.62	544.62	544.47	

TRANSECT ID: C-063

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



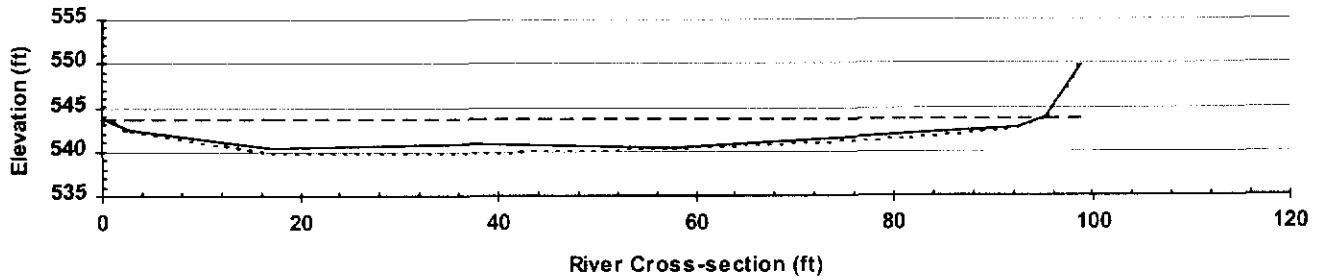
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	550.06	550.06	543.78	
64.85	553.04	553.04	543.78	
78.01	543.64	543.64	543.78	
80.30	542.26	542.26	543.78	
100.66	539.73	539.73	543.78	SW
124.54	539.64	539.09	543.78	SW
151.63	540.01	539.21	543.78	SW
174.47	539.59	538.59	543.78	SW
196.85	542.23	542.23	543.78	
198.55	543.56	543.56	543.78	
199.38	548.52	548.52	543.78	

River Transect Cross-sectional Plots

TRANSECT ID: C-064

AVERAGE VELOCITY (ft/sec) 0.8400

Solutia Database: TRANSECT CROSS-SECTIONS

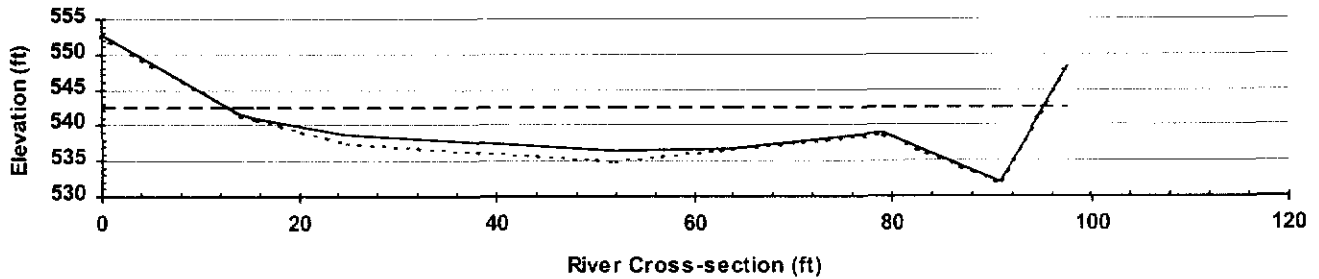


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	543.71	543.71	543.65	
2.75	542.38	542.38	543.65	
17.04	540.45	540.00	543.65	SW
37.34	540.79	539.89	543.65	SW
57.67	540.35	540.35	543.65	NS
81.52	542.02	541.52	543.65	SW
92.41	542.57	542.57	543.65	
95.28	543.67	543.67	543.65	
98.98	549.92	549.92	543.65	

TRANSECT ID: C-065

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



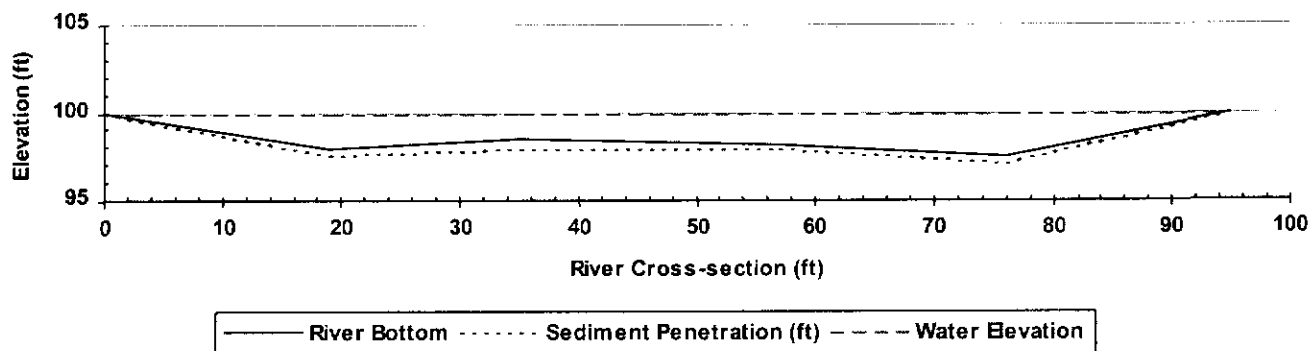
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	552.67	552.67	542.56	
13.98	541.58	541.58	542.56	
15.73	540.82	540.82	542.56	
24.67	538.66	537.66	542.56	SW
51.76	536.46	534.96	542.56	SW
63.75	536.78	536.78	542.56	NS
79.03	538.95	538.65	542.56	SW
90.94	532.05	532.05	542.56	
94.81	541.40	541.40	542.56	
97.72	548.27	548.27	542.56	

River Transect Cross-sectional Plots

TRANSECT ID: C-066

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

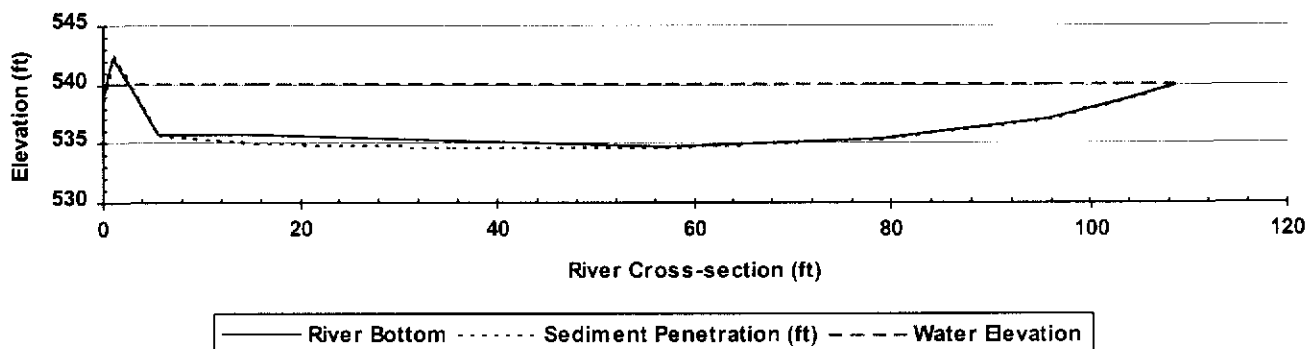


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	100.00	100.00	100.00	
19.00	97.90	97.60	100.00	SW
35.00	98.50	97.95	100.00	SW
57.00	98.20	97.90	100.00	GW
76.00	97.50	97.15	100.00	SW
95.00	100.00	100.00	100.00	

TRANSECT ID: C-067

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



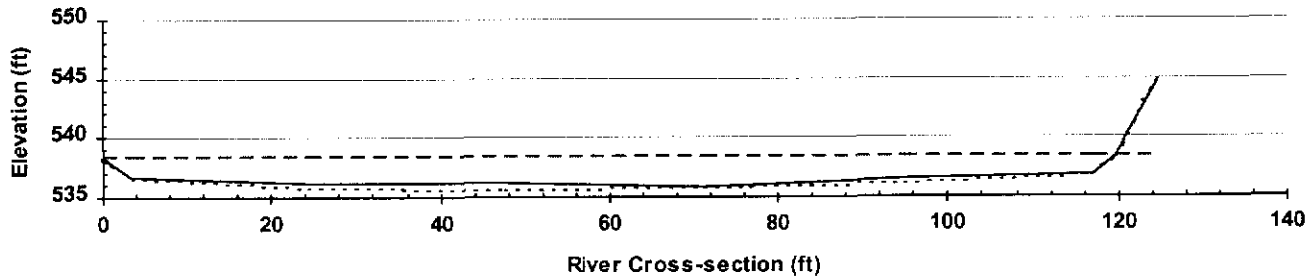
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	538.70	538.70	540.05	
0.96	542.26	542.26	540.05	
5.61	535.77	535.77	540.05	
15.53	535.79	535.09	540.05	SW
35.46	535.20	534.70	540.05	SW
57.02	534.71	534.71	540.05	NS
78.89	535.33	535.33	540.05	NS
95.66	537.03	537.03	540.05	
102.93	538.52	538.52	540.05	
108.53	539.94	539.94	540.05	

River Transect Cross-sectional Plots

TRANSECT ID: C-068

AVERAGE VELOCITY (ft/sec) 0.6900

Solutia Database: TRANSECT CROSS-SECTIONS

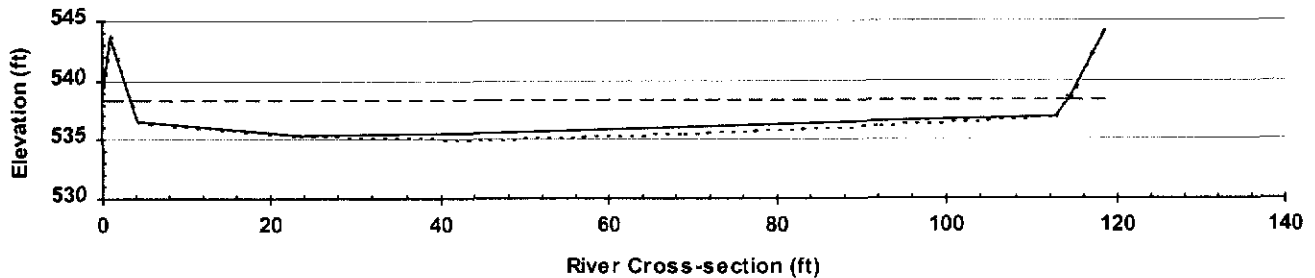


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	538.34	538.34	538.54	
3.36	536.71	536.71	538.54	
24.11	536.15	535.85	538.54	SW
47.27	536.11	535.66	538.54	SW
70.97	535.84	535.84	538.54	NS
94.81	536.54	536.19	538.54	SW
116.99	536.78	536.78	538.54	
119.66	538.37	538.37	538.54	
124.61	544.60	544.60	538.54	

TRANSECT ID: C-069

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



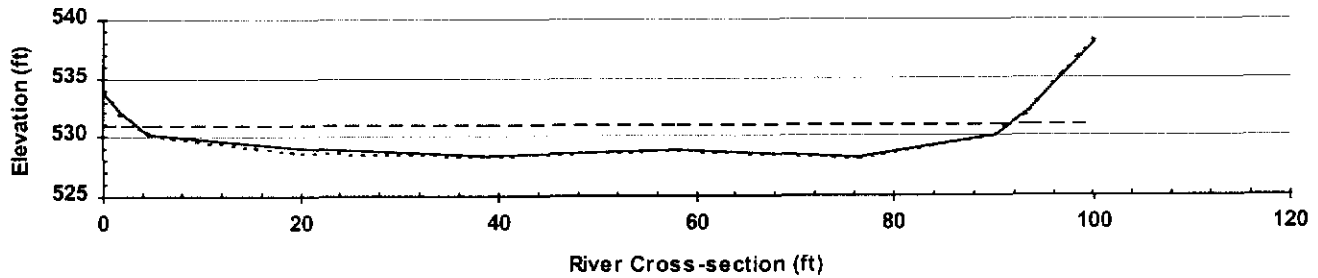
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	538.52	538.52	538.37	
0.89	543.59	543.59	538.37	
4.27	536.62	536.62	538.37	
23.46	535.44	535.44	538.37	NS
45.67	535.53	534.98	538.37	SW
68.88	536.05	535.60	538.37	SW
92.21	536.52	536.17	538.37	SW
112.84	536.95	536.95	538.37	
114.55	538.39	538.39	538.37	
118.66	544.08	544.08	538.37	

River Transect Cross-sectional Plots

TRANSECT ID: C-070

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

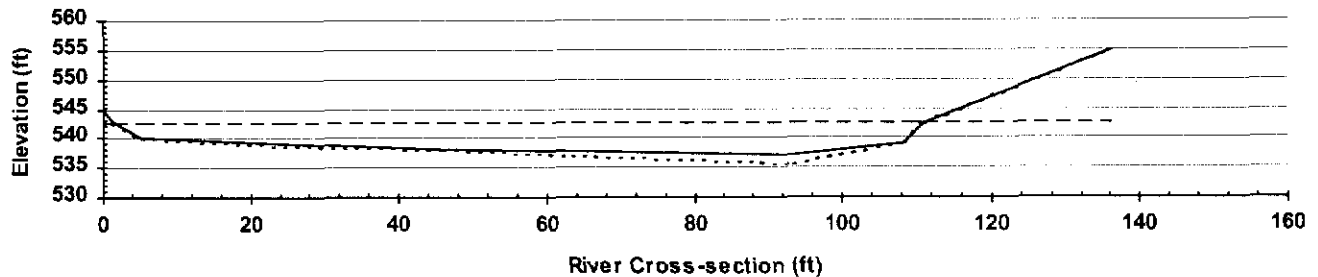


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	533.73	533.73	531.10	
1.82	532.08	532.08	531.10	
4.57	530.19	530.19	531.10	
20.08	529.03	528.68	531.10	SW
38.88	528.42	528.42	531.10	NS
58.12	528.85	528.85	531.10	NS
76.37	528.26	528.26	531.10	NS
90.32	530.08	530.08	531.10	
93.40	532.01	532.01	531.10	
100.20	537.99	537.99	531.10	

TRANSECT ID: C-071

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



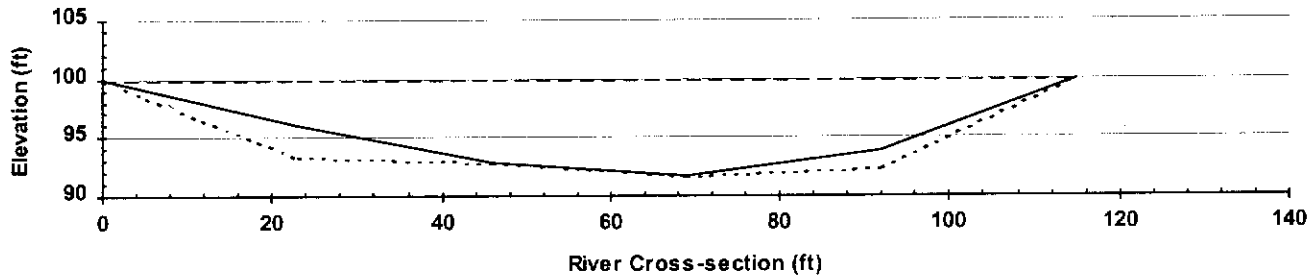
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	544.88	544.88	542.65	
1.41	542.71	542.71	542.65	
4.98	540.17	540.17	542.65	
24.31	539.18	538.68	542.65	SW
45.80	538.21	538.21	542.65	NS
63.35	537.79	536.94	542.65	SW
93.37	537.10	535.60	542.65	SM
108.34	539.06	539.06	542.65	
111.04	542.59	542.59	542.65	
136.23	554.94	554.94	542.65	

River Transect Cross-sectional Plots

TRANSECT ID: C-072

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

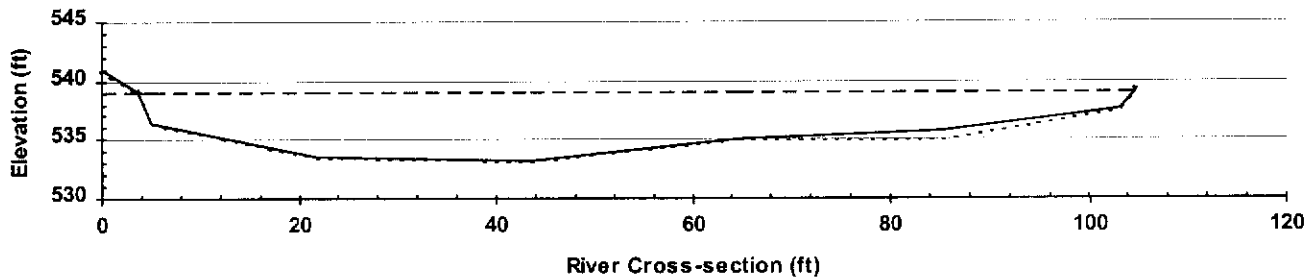


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	100.00	100.00	100.00	
23.00	96.00	93.40	100.00	SW
46.00	92.80	92.80	100.00	NS
69.00	91.70	91.70	100.00	NS
92.00	93.80	92.40	100.00	SW
115.00	100.00	100.00	100.00	

TRANSECT ID: C-073

AVERAGE VELOCITY (ft/sec) 1.5010

Solutia Database: TRANSECT CROSS-SECTIONS



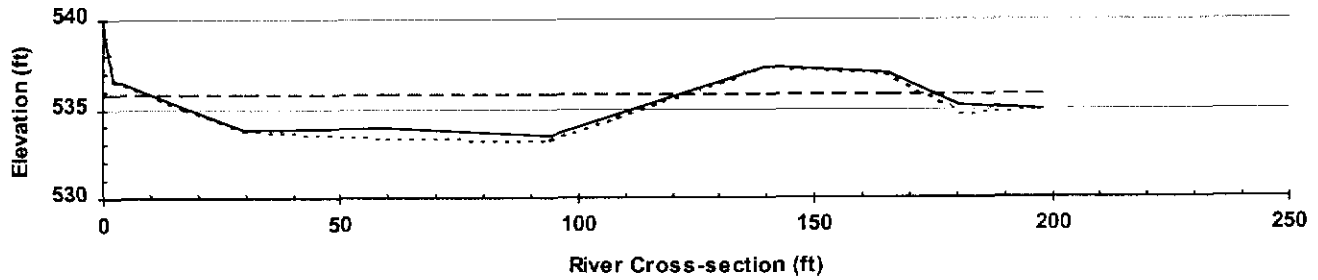
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	540.96	540.96	539.13	
3.59	539.13	539.13	539.13	
5.11	536.39	536.39	539.13	
21.71	533.59	533.59	539.13	NS
43.40	533.19	533.19	539.13	NS
64.81	535.01	535.01	539.13	NS
85.21	535.67	535.07	539.13	GW
103.16	537.54	537.54	539.13	
104.74	539.13	539.13	539.13	

River Transect Cross-sectional Plots

TRANSECT ID: C-074

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

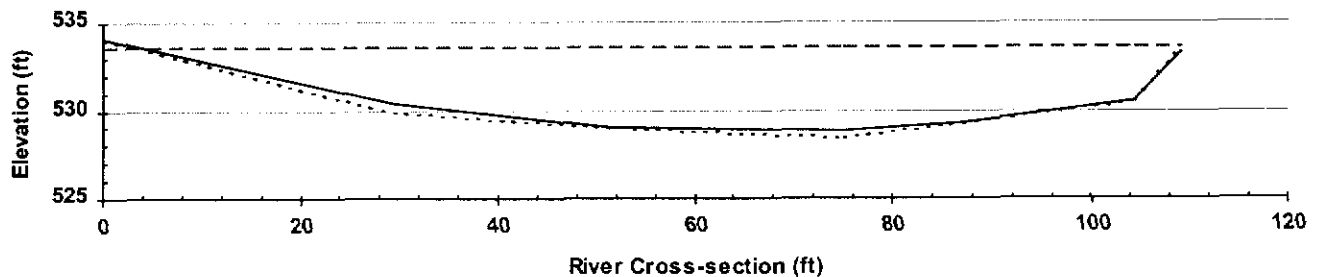


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	539.48	539.48	535.79	
1.89	536.67	536.67	535.79	
17.01	535.04	535.04	535.79	
29.93	533.84	533.84	535.79	NS
59.46	533.98	533.43	535.79	SW
94.28	533.53	533.23	535.79	SW
140.00	537.34	537.34	535.79	
165.51	537.02	537.02	535.79	
180.30	535.14	534.74	535.79	SW
196.61	534.98	534.98	535.79	
198.03	534.92	534.92	535.79	

TRANSECT ID: C-075

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



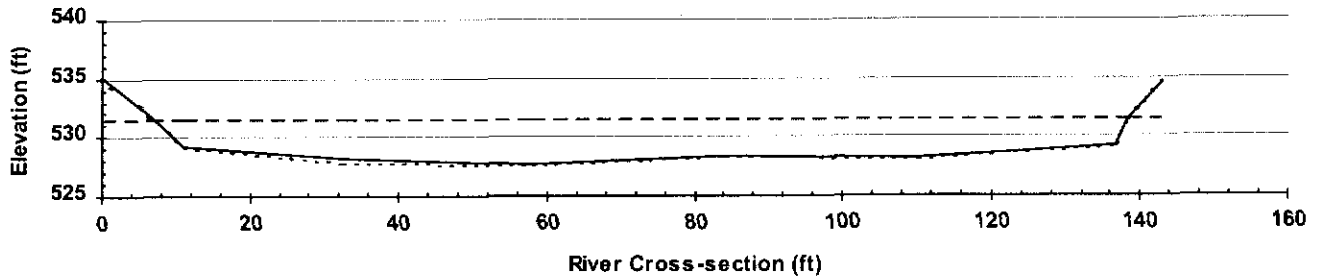
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	534.09	534.09	533.64	
29.32	530.39	529.94	533.64	SW
51.24	529.03	529.03	533.64	NS
74.97	528.79	528.49	533.64	GW
86.95	529.23	529.23	533.64	NS
104.28	530.54	530.54	533.64	
109.12	533.36	533.36	533.64	

River Transect Cross-sectional Plots

TRANSECT ID: C-076

AVERAGE VELOCITY (ft/sec) 1.1720

Solutia Database: TRANSECT CROSS-SECTIONS

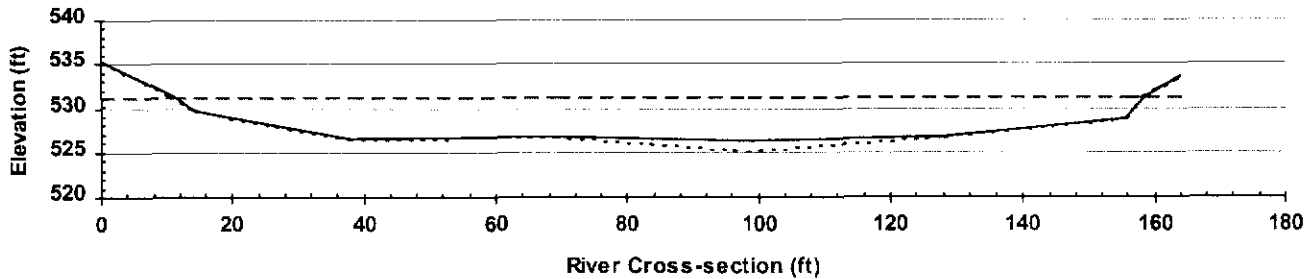


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	535.06	535.06	531.64	
6.56	531.86	531.86	531.64	
11.06	529.29	529.29	531.64	
32.53	528.22	527.92	531.64	SW
58.02	527.76	527.76	531.64	NS
84.20	528.43	528.43	531.64	NS
110.14	528.23	528.23	531.64	NS
136.68	529.23	529.23	531.64	
138.23	531.41	531.41	531.64	
142.85	534.50	534.50	531.64	

TRANSECT ID: C-077

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



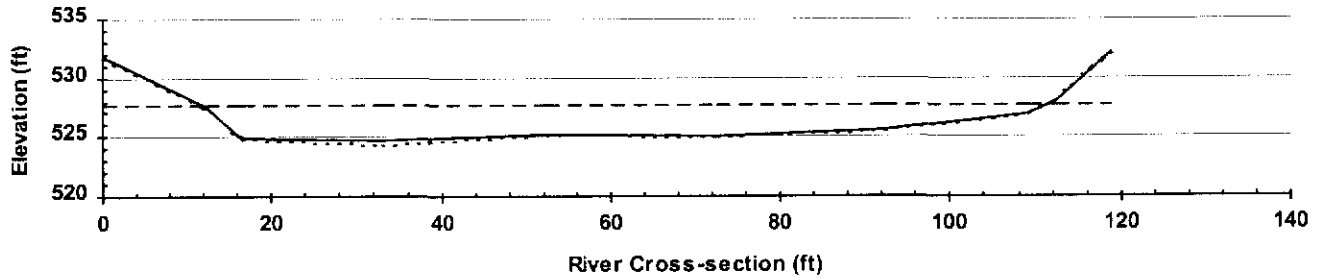
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	535.17	535.17	531.34	
10.99	531.40	531.40	531.34	
14.15	529.76	529.76	531.34	
37.79	526.63	526.63	531.34	NS
69.17	526.72	526.72	531.34	NS
98.24	526.30	525.10	531.34	SW
128.00	526.66	526.66	531.34	NS
155.70	528.73	528.73	531.34	
158.46	531.29	531.29	531.34	
163.98	533.48	533.48	531.34	

River Transect Cross-sectional Plots

TRANSECT ID: C-078

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

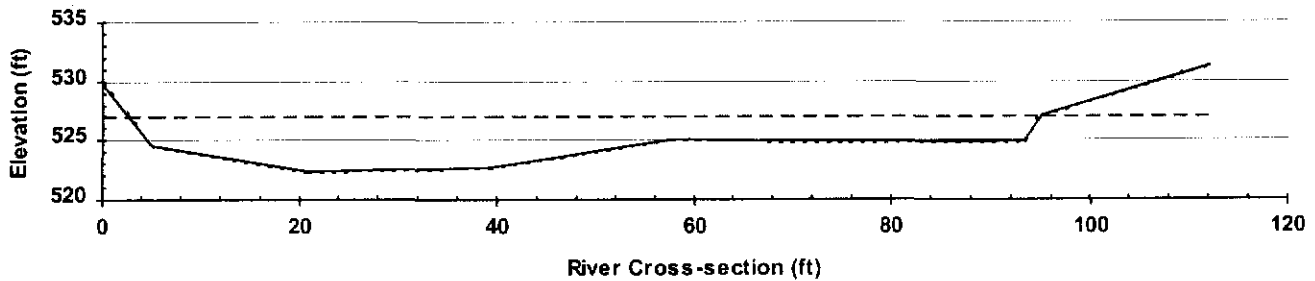


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	531.85	531.85	527.72	
12.24	527.57	527.57	527.72	
16.32	524.96	524.96	527.72	
32.78	524.69	524.34	527.72	SW
52.23	525.16	525.16	527.72	NS
72.51	525.02	525.02	527.72	NS
92.23	525.64	525.64	527.72	NS
109.05	526.89	526.89	527.72	
112.42	527.87	527.87	527.72	
119.01	532.08	532.08	527.72	

TRANSECT ID: C-079

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



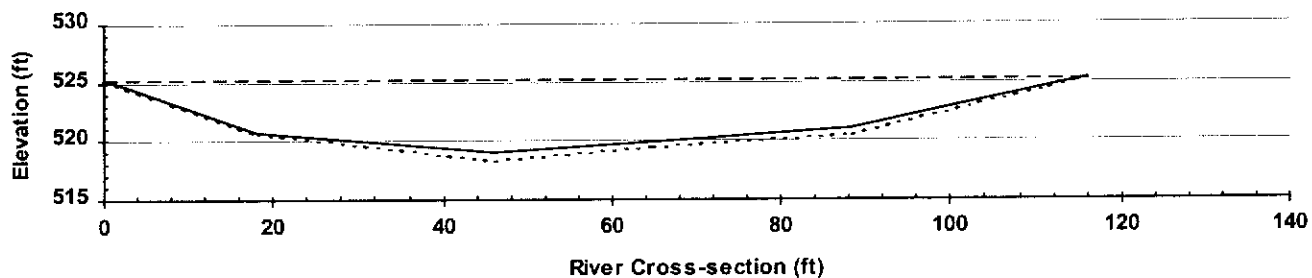
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	529.81	529.81	527.15	
2.34	527.20	527.20	527.15	
5.10	524.62	524.62	527.15	
20.89	522.32	522.32	527.15	NS
39.18	522.73	522.73	527.15	NS
57.69	525.12	525.12	527.15	NS
75.49	524.97	524.97	527.15	NS
93.22	524.96	524.96	527.15	
95.08	527.11	527.11	527.15	
112.07	531.21	531.21	527.15	

River Transect Cross-sectional Plots

TRANSECT ID: C-080

AVERAGE VELOCITY (ft/sec) 0.7360

Solutia Database: TRANSECT CROSS-SECTIONS

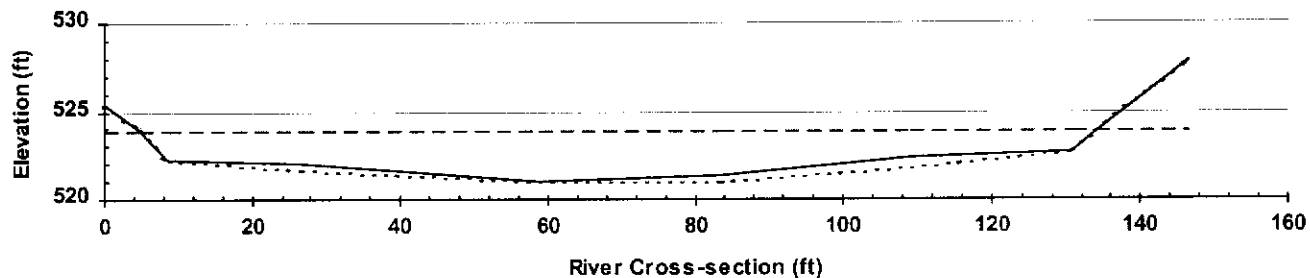


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	525.30	525.30	525.30	
18.00	520.72	520.72	525.30	NS
45.91	519.00	518.40	525.30	SW
64.78	519.83	519.53	525.30	SW
88.25	521.11	520.61	525.30	SW
116.00	525.30	525.30	525.30	

TRANSECT ID: C-081

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



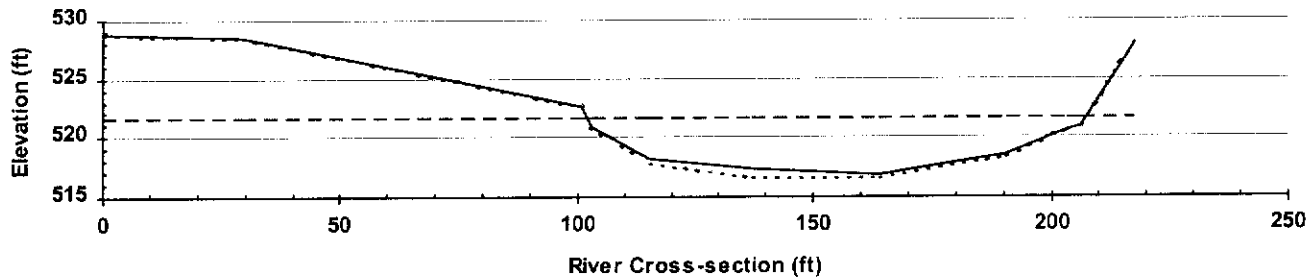
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	525.43	525.43	523.90	
4.87	523.93	523.93	523.90	
8.50	522.22	522.22	523.90	
26.55	522.03	521.68	523.90	SW
58.58	520.97	520.97	523.90	NS
83.31	521.32	520.97	523.90	SW
109.10	522.34	521.84	523.90	SW
130.75	522.64	522.64	523.90	
134.04	523.86	523.86	523.90	
146.55	527.91	527.91	523.90	

River Transect Cross-sectional Plots

TRANSECT ID: C-082

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

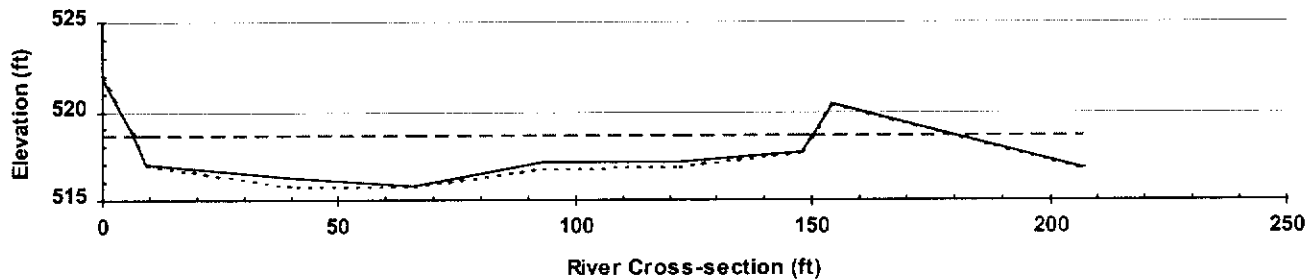


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	528.85	528.85	521.75	
29.40	528.55	528.55	521.75	
100.86	522.55	522.55	521.75	
102.86	520.92	520.92	521.75	
115.00	518.20	517.80	521.75	SW
136.93	517.30	516.70	521.75	SW
163.81	516.85	516.75	521.75	SW
190.68	518.52	518.32	521.75	SW
202.96	520.55	520.55	521.75	
206.09	520.95	520.95	521.75	
217.22	527.74	527.74	521.75	

TRANSECT ID: C-084

AVERAGE VELOCITY (ft/sec) 1.5360

Solutia Database: TRANSECT CROSS-SECTIONS

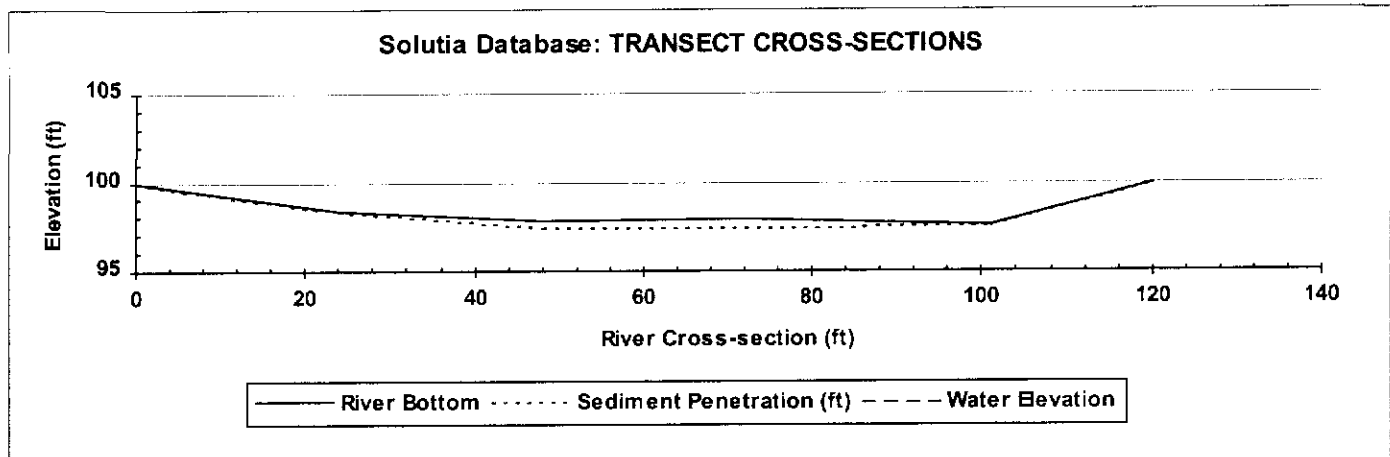


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	521.81	521.81	518.67	
6.29	518.81	518.81	518.67	
9.26	517.04	517.04	518.67	
40.87	516.23	515.83	518.67	SW
65.58	515.74	515.74	518.67	NS
92.96	517.09	516.79	518.67	SW
121.96	517.14	516.89	518.67	SW
147.82	517.72	517.72	518.67	
149.93	518.54	518.54	518.67	
154.51	520.44	520.44	518.67	
206.75	516.84	516.84	518.67	
206.75	516.88	516.88	518.67	

River Transect Cross-sectional Plots

TRANSECT ID: C-085

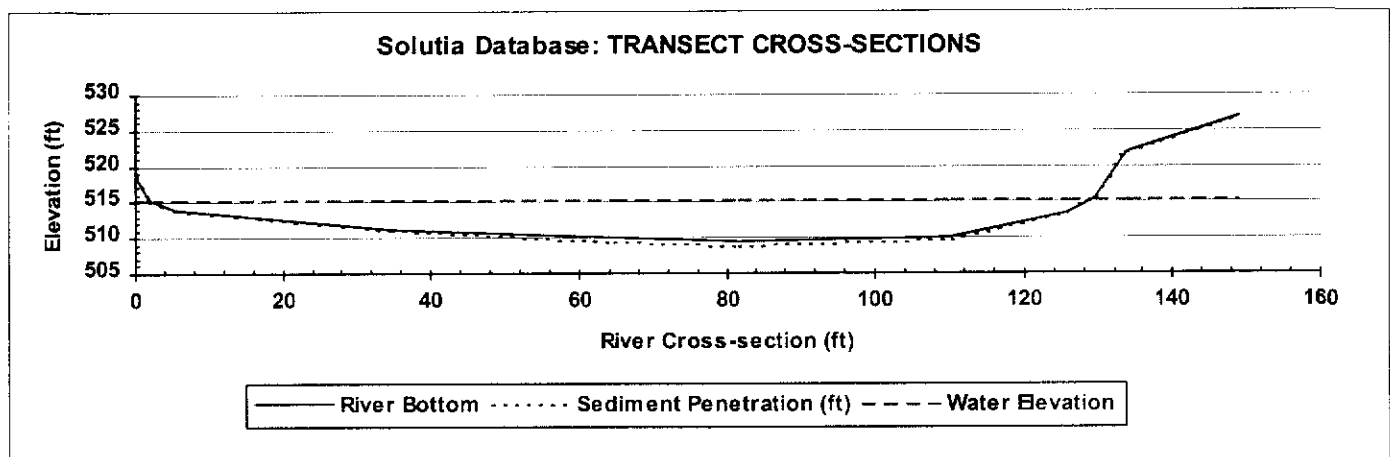
AVERAGE VELOCITY (ft/sec)



<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	100.00	100.00		
24.00	98.40	98.40		NS
48.00	97.80	97.45		SW
72.00	97.90	97.45		SW
101.00	97.60	97.60		NS
120.00	100.00	100.00		

TRANSECT ID: C-086

AVERAGE VELOCITY (ft/sec)



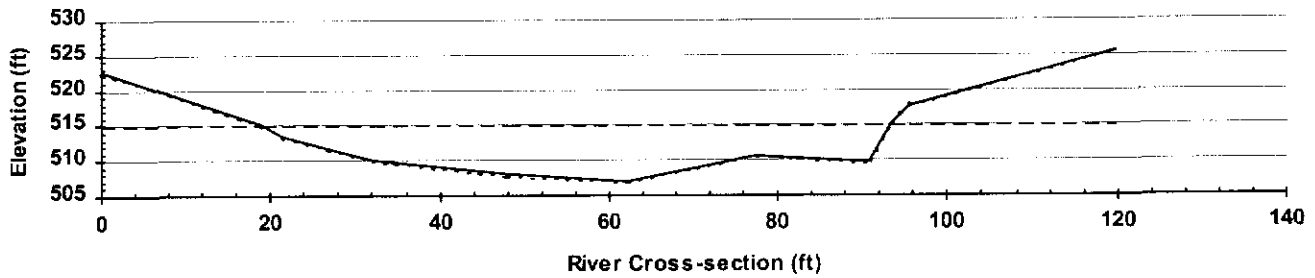
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	518.81	518.81	515.45	
1.88	515.44	515.44	515.45	
5.34	513.97	513.97	515.45	
34.64	511.10	511.10	515.45	NS
64.61	510.00	509.50	515.45	SW
81.56	509.55	509.05	515.45	SW
110.26	510.05	509.80	515.45	SW
125.60	513.30	513.30	515.45	
129.39	515.45	515.45	515.45	
133.80	521.88	521.88	515.45	
148.97	527.04	527.04	515.45	

River Transect Cross-sectional Plots

TRANSECT ID: C-087

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

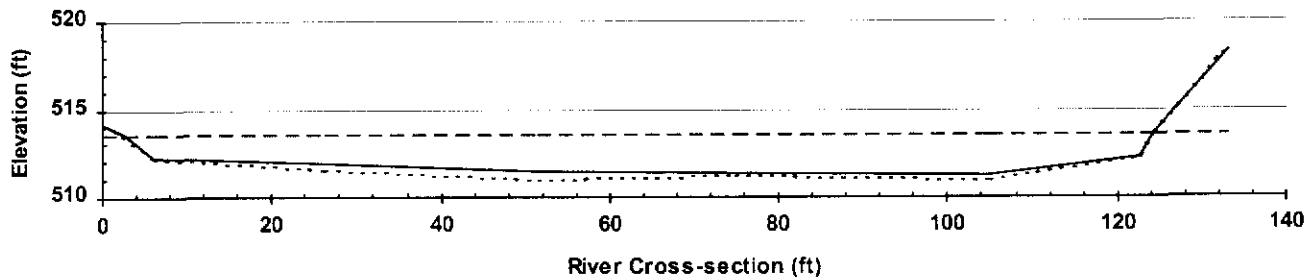


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	522.57	522.57	515.15	
18.99	515.11	515.11	515.15	
21.37	513.43	513.43	515.15	
31.94	510.18	510.18	515.15	NS
47.93	508.04	507.69	515.15	SW
62.24	506.86	506.86	515.15	NS
77.46	510.70	510.70	515.15	NS
90.78	509.81	509.81	515.15	
93.31	515.19	515.19	515.15	
95.50	517.61	517.61	515.15	
119.93	525.55	525.55	515.15	

TRANSECT ID: C-088

AVERAGE VELOCITY (ft/sec) 1.6780

Solutia Database: TRANSECT CROSS-SECTIONS



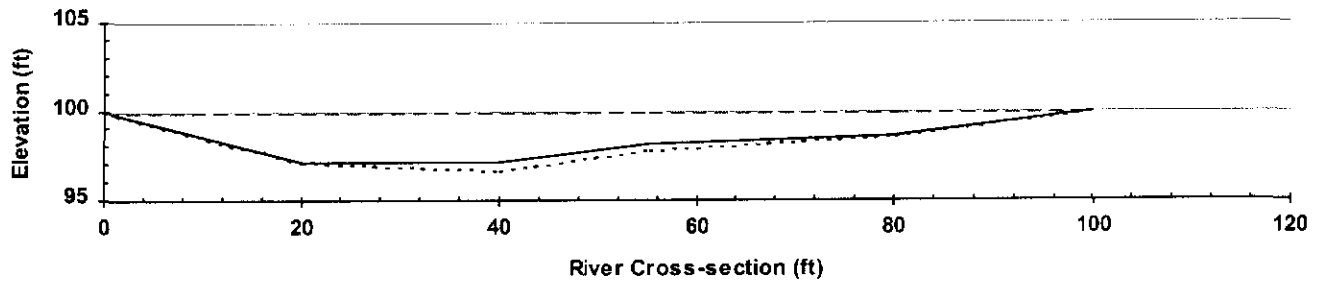
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	514.15	514.15	513.59	
2.54	513.64	513.64	513.59	
6.04	512.30	512.30	513.59	
26.25	511.88	511.58	513.59	SW
51.45	511.50	511.05	513.59	SW
74.83	511.39	511.29	513.59	SW
104.83	511.28	511.03	513.59	SW
122.74	512.28	512.28	513.59	
124.31	513.54	513.54	513.59	
133.15	518.35	518.35	513.59	

River Transect Cross-sectional Plots

TRANSECT ID: C-089

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



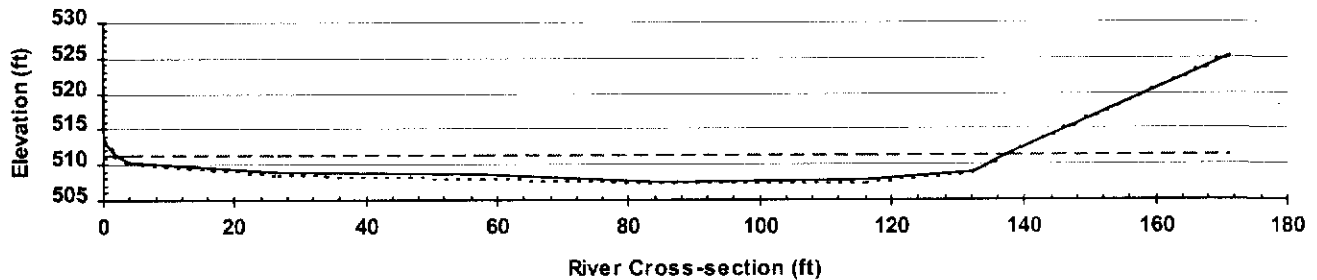
— River Bottom Sediment Penetration (ft) - - - - Water Elevation

<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	100.00	100.00	100.00	
20.00	97.10	97.10	100.00	NS
40.00	97.10	96.65	100.00	GW
55.00	98.10	97.80	100.00	GW
80.00	98.60	98.60	100.00	NS
100.00	100.00	100.00	100.00	

TRANSECT ID: C-090

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



— River Bottom Sediment Penetration (ft) - - - - Water Elevation

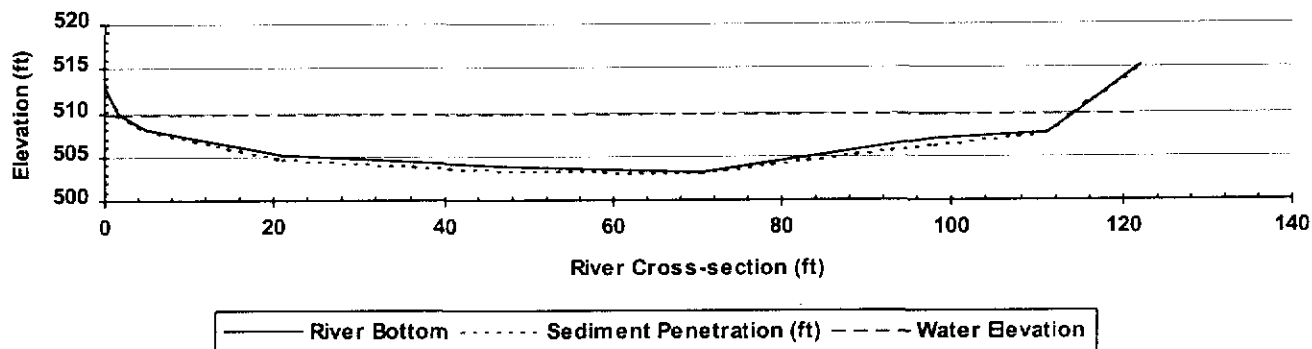
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	513.39	513.39	511.42	
1.79	511.42	511.42	511.42	
3.77	510.43	510.43	511.42	
26.48	508.96	508.66	511.42	GW
57.67	508.58	508.23	511.42	SW
84.73	507.53	507.43	511.42	SW
115.88	507.76	507.46	511.42	GW
132.43	509.03	509.03	511.42	
137.50	511.41	511.41	511.42	
171.34	525.36	525.36	511.42	

River Transect Cross-sectional Plots

TRANSECT ID: C-091

AVERAGE VELOCITY (ft/sec) 0.4140

Solutia Database: TRANSECT CROSS-SECTIONS

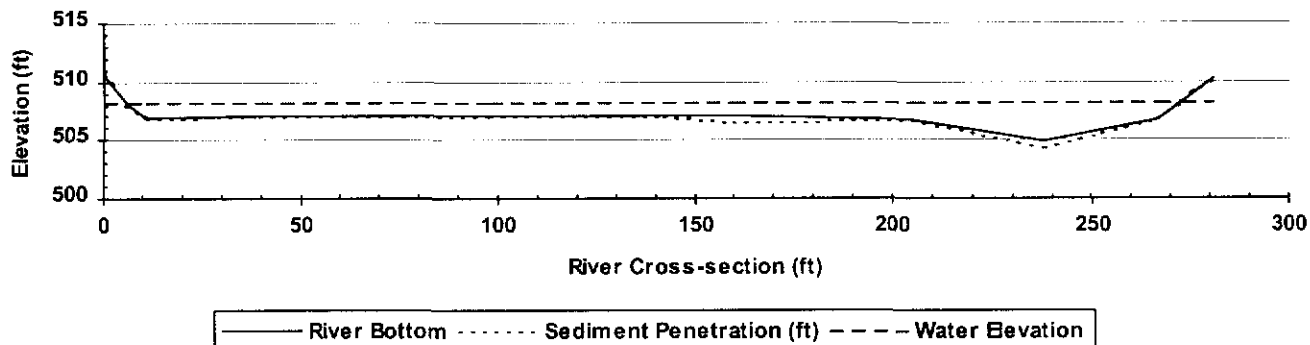


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	513.10	513.10	509.88	
1.70	509.91	509.91	509.88	
5.00	508.00	508.00	509.88	
20.87	505.21	504.81	509.88	SW
47.67	503.87	503.32	509.88	SW
70.39	503.10	503.10	509.88	NS
97.72	506.92	506.37	509.88	SW
111.14	507.68	507.68	509.88	
114.40	509.85	509.85	509.88	
122.13	515.19	515.19	509.88	

TRANSECT ID: C-092

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



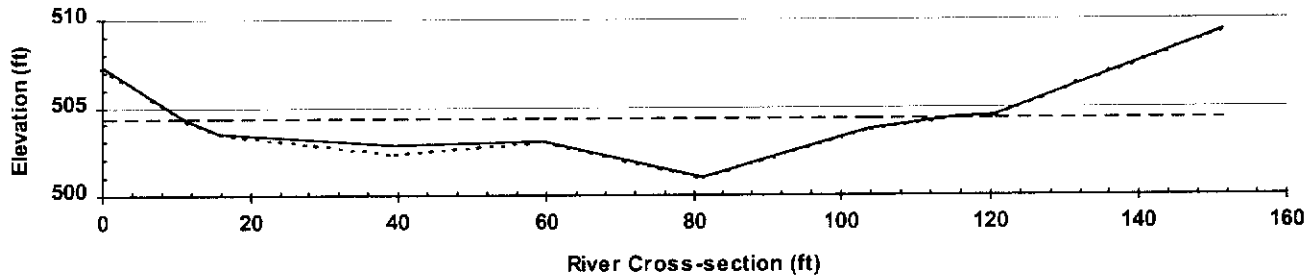
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	510.56	510.56	508.21	
6.22	508.16	508.16	508.21	
10.41	506.90	506.90	508.21	
39.23	507.02	507.02	508.21	NS
97.38	507.08	507.08	508.21	
141.66	507.07	507.07	508.21	
159.12	507.08	506.53	508.21	OL
204.30	506.76	506.78	508.21	NS
237.67	504.94	504.39	508.21	SW
266.57	506.68	506.68	508.21	
272.65	508.27	508.27	508.21	
280.84	510.30	510.30	508.21	

River Transect Cross-sectional Plots

TRANSECT ID: C-093

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

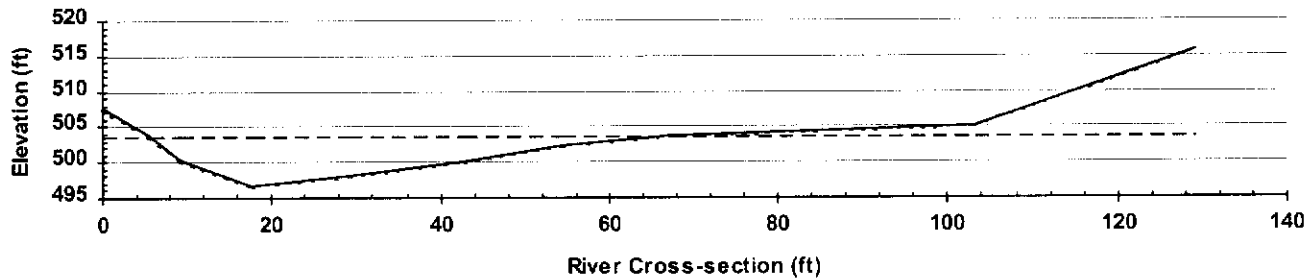


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	507.28	507.28	504.35	
11.16	504.22	504.22	504.35	
15.88	503.45	503.45	504.35	
39.40	502.85	502.35	504.35	SW
59.58	503.07	503.07	504.35	NS
81.30	500.96	500.96	504.35	NS
103.59	503.67	503.67	504.35	NS
115.43	504.38	504.38	504.35	
120.73	504.48	504.48	504.35	
151.40	509.38	509.38	504.35	

TRANSECT ID: C-094

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

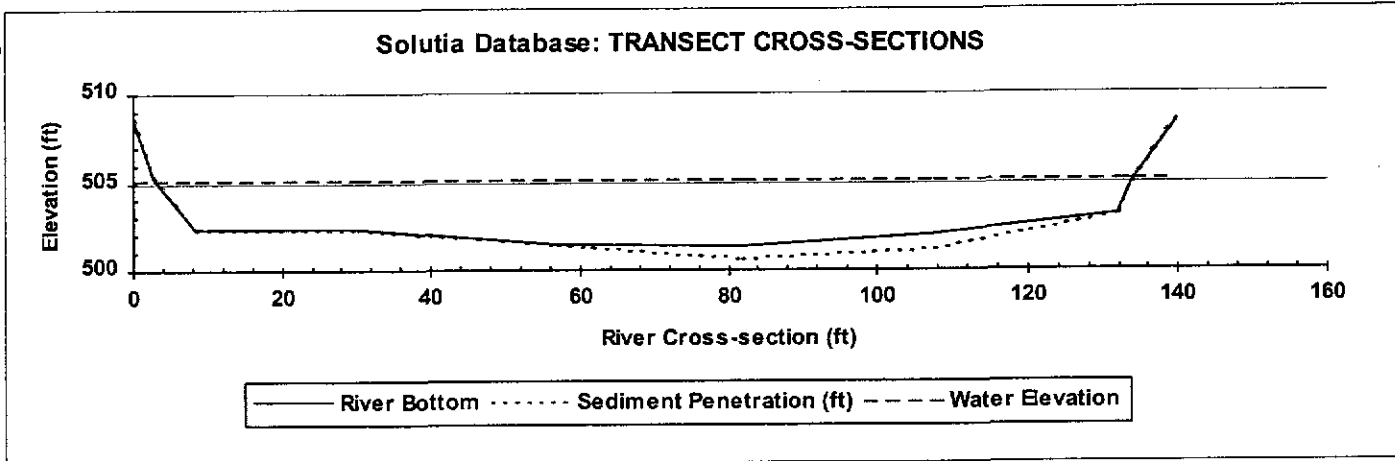


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	507.53	507.53	503.76	
5.62	503.76	503.76	503.76	
9.21	500.46	500.46	503.76	
17.51	496.76	496.76	503.76	NS
29.05	498.01	498.01	503.76	NS
42.59	500.15	500.15	503.76	NS
54.43	502.43	502.43	503.76	NS
67.32	503.76	503.76	503.76	
103.08	505.06	505.06	503.76	
129.18	515.68	515.68	503.76	

River Transect Cross-sectional Plots

TRANSECT ID: C-095

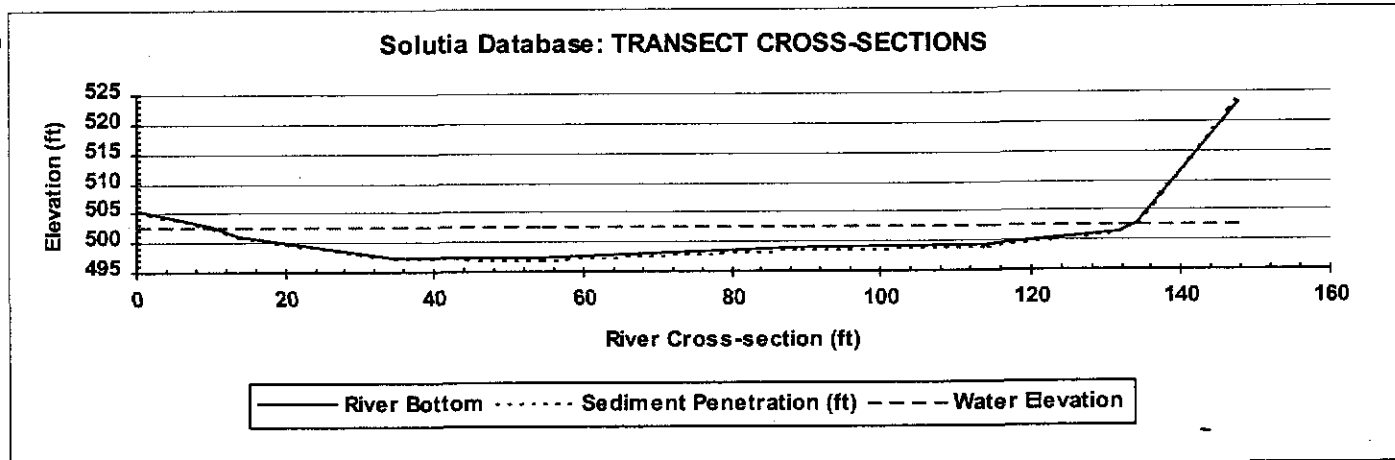
AVERAGE VELOCITY (ft/sec)



Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	508.59	508.59	505.13	
2.75	505.26	505.26	505.13	
8.28	502.41	502.41	505.13	
30.03	502.33	502.33	505.13	
56.83	501.41	501.41	505.13	NS
81.82	501.33	500.73	505.13	SW
107.59	502.00	501.25	505.13	GW
131.97	503.12	503.12	505.13	
133.76	504.99	504.99	505.13	
139.58	508.32	508.32	505.13	

TRANSECT ID: C-096

AVERAGE VELOCITY (ft/sec) 0.5090

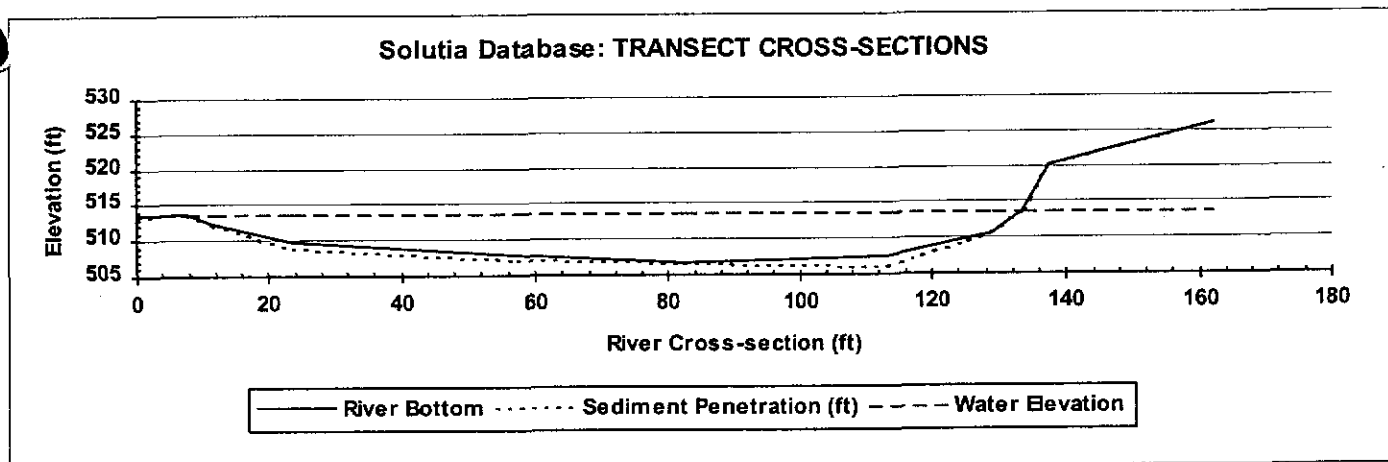


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	505.55	505.55	502.80	
10.12	502.78	502.78	502.80	
13.56	501.18	501.18	502.80	
34.53	497.24	497.24	502.80	NS
54.50	497.35	497.00	502.80	SW
89.36	498.88	498.58	502.80	SW
114.25	499.48	499.18	502.80	SW
131.52	501.50	501.50	502.80	
134.08	502.82	502.82	502.80	
147.73	523.35	523.35	502.80	

River Transect Cross-sectional Plots

TRANSECT ID: C-097

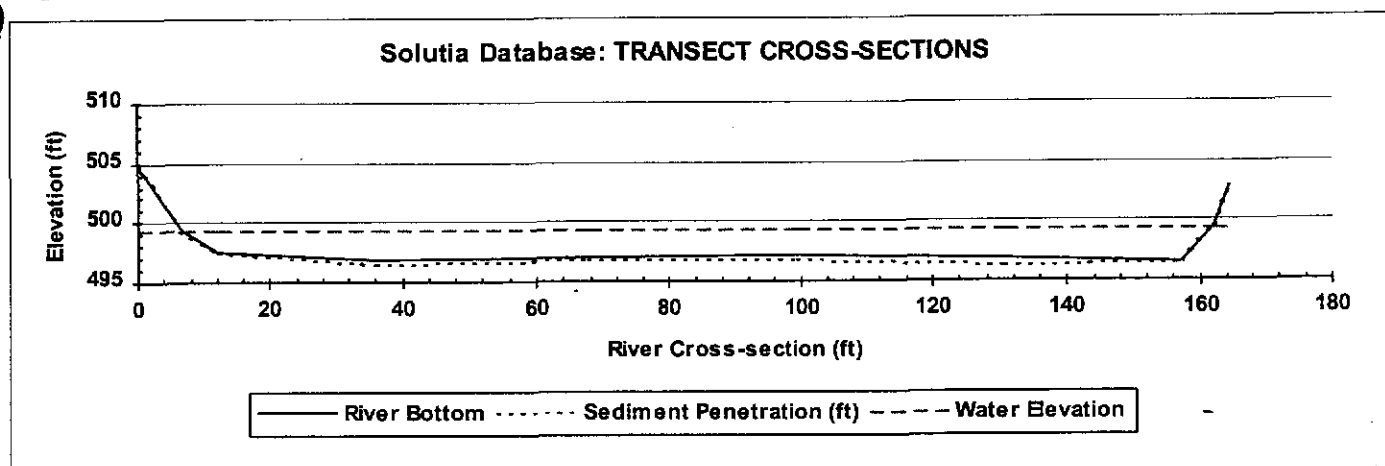
AVERAGE VELOCITY (ft/sec)



<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	513.35	513.35	513.64	
7.57	513.62	513.62	513.64	
11.58	512.32	512.32	513.64	
23.63	509.66	508.96	513.64	OL
57.15	507.85	507.20	513.64	SW
82.44	506.66	506.66	513.64	NS
113.27	507.61	506.21	513.64	OL
128.96	510.49	510.49	513.64	
133.61	513.67	513.67	513.64	
137.40	520.19	520.19	513.64	
162.35	526.13	526.13	513.64	

TRANSECT ID: C-098

AVERAGE VELOCITY (ft/sec)



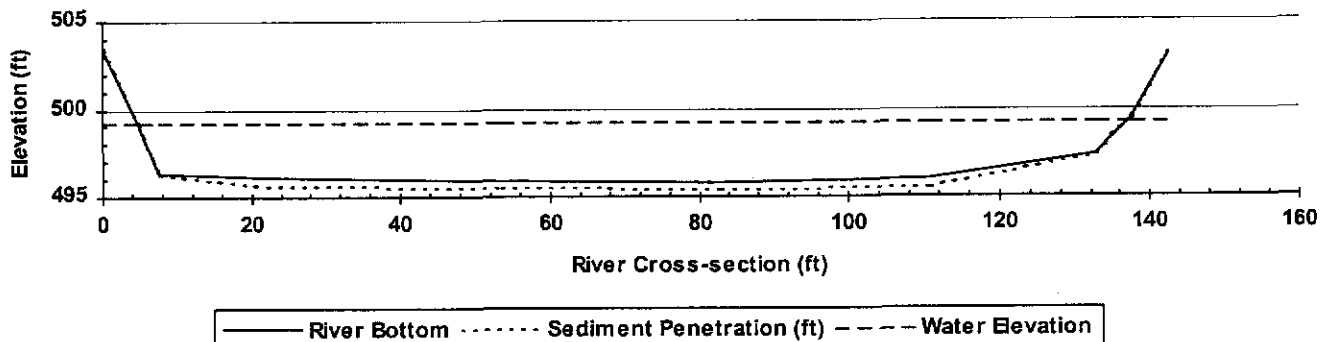
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	504.81	504.81	499.37	
6.53	499.33	499.33	499.37	
12.17	497.54	497.54	499.37	
35.83	496.77	496.57	499.37	GW
67.64	497.06	496.86	499.37	SW
99.28	497.17	496.77	499.37	SW
130.41	496.92	496.42	499.37	GW
157.10	496.51	496.51	499.37	
162.05	499.41	499.41	499.37	
164.39	502.98	502.98	499.37	

River Transect Cross-sectional Plots

TRANSECT ID: C-099

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

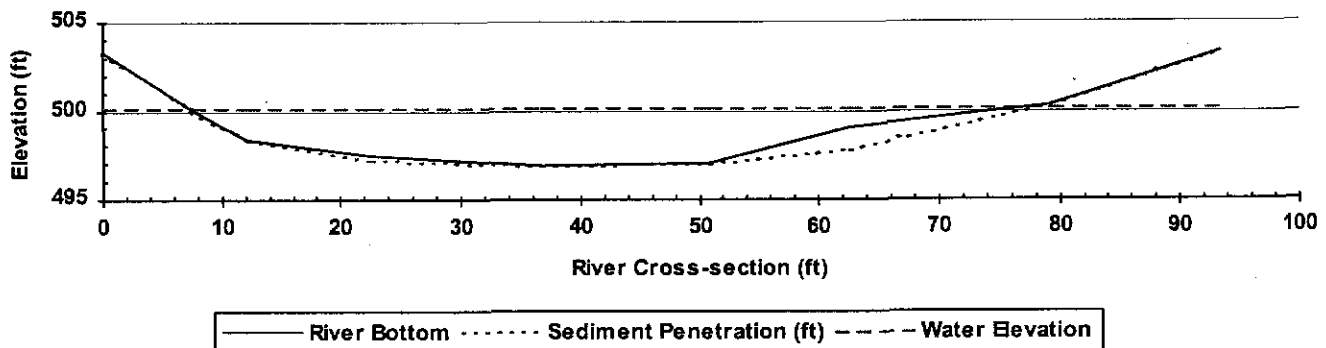


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	503.39	503.39	499.24	
4.77	499.13	499.13	499.24	
7.41	496.33	496.33	499.24	
21.85	496.14	495.69	499.24	GW
53.37	495.85	495.60	499.24	SW
82.76	495.79	495.49	499.24	GW
110.72	495.97	495.57	499.24	SW
132.58	497.38	497.38	499.24	
137.57	499.35	499.35	499.24	
142.30	502.97	502.97	499.24	

TRANSECT ID: C-100

AVERAGE VELOCITY (ft/sec) 1.1000

Solutia Database: TRANSECT CROSS-SECTIONS



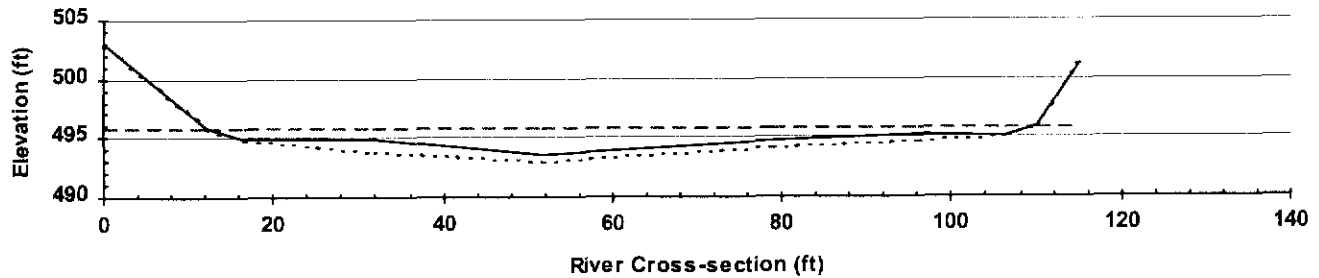
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	503.31	503.31	500.14	
7.60	500.01	500.01	500.14	
12.14	498.40	498.40	500.14	
22.48	497.42	497.22	500.14	SW
36.60	496.86	496.86	500.14	NS
50.80	497.00	497.00	500.14	NS
62.53	499.02	497.82	500.14	SW
79.24	500.28	500.28	500.14	
93.54	503.37	503.37	500.14	

River Transect Cross-sectional Plots

TRANSECT ID: C-101

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

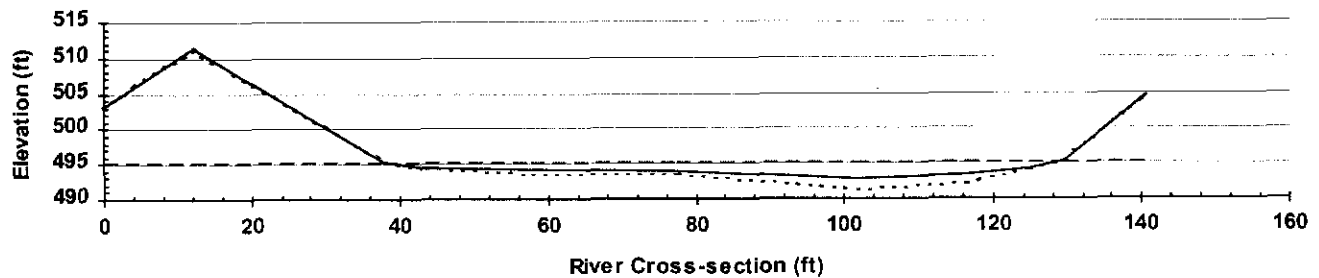


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	502.91	502.91	495.94	
12.16	495.94	495.94	495.94	
16.63	494.91	494.91	495.94	
31.66	494.82	493.92	495.94	SW
51.53	493.57	493.07	495.94	SW
78.74	494.78	494.13	495.94	SW
96.18	495.26	494.71	495.94	OL
106.17	495.14	495.14	495.94	
109.92	495.94	495.94	495.94	
115.25	501.33	501.33	495.94	

TRANSECT ID: C-102

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



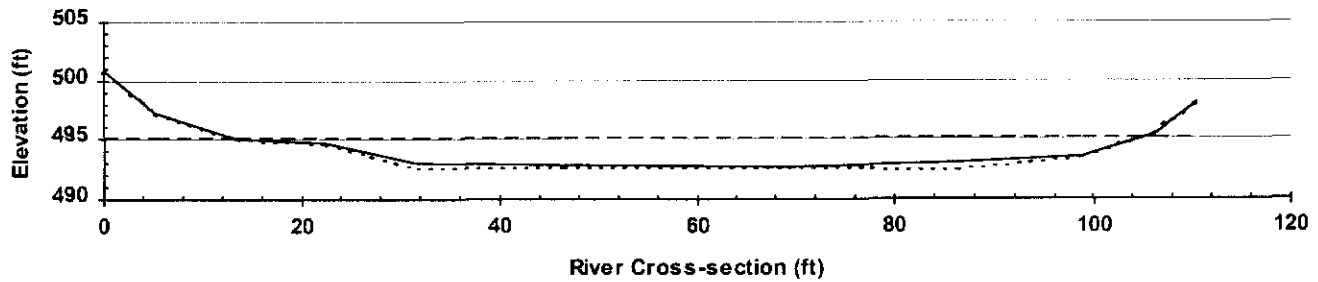
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	503.30	503.30	495.43	
12.14	511.39	511.39	495.43	
37.70	495.43	495.43	495.43	
43.49	494.45	494.45	495.43	
57.75	494.19	493.69	495.43	SW
77.38	494.02	493.52	495.43	SW
101.60	492.85	491.35	495.43	OL
116.20	493.34	492.19	495.43	OL
124.93	494.26	494.26	495.43	
129.63	495.46	495.46	495.43	
140.74	504.71	504.71	495.43	

River Transect Cross-sectional Plots

TRANSECT ID: C-103

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

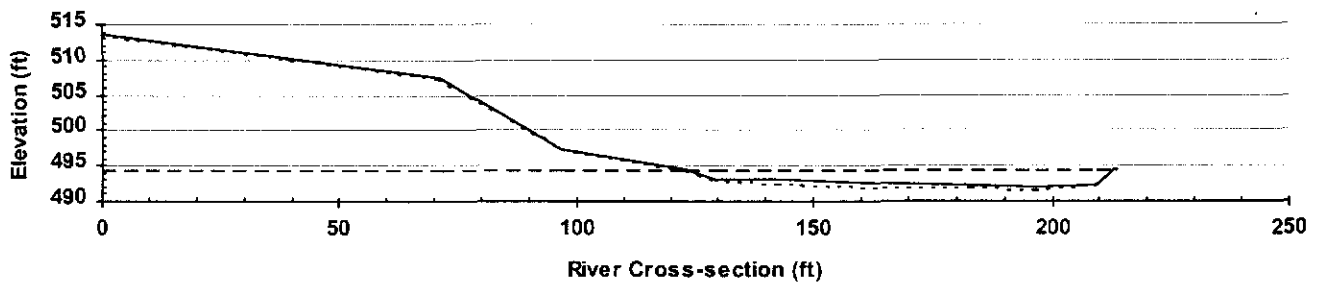


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	500.78	500.78	495.25	
5.32	497.23	497.23	495.25	
13.45	495.07	495.07	495.25	
22.31	494.68	494.68	495.25	
22.31	494.68	494.68	495.25	
31.62	493.05	492.75	495.25	SW
46.40	492.83	492.68	495.25	SW
69.20	492.62	492.62	495.25	NS
86.24	493.03	492.53	495.25	SW
98.81	493.56	493.56	495.25	
98.81	493.56	493.56	495.25	
106.08	495.42	495.42	495.25	
110.57	498.11	498.11	495.25	

TRANSECT ID: C-104

AVERAGE VELOCITY (ft/sec) 1.2160

Solutia Database: TRANSECT CROSS-SECTIONS



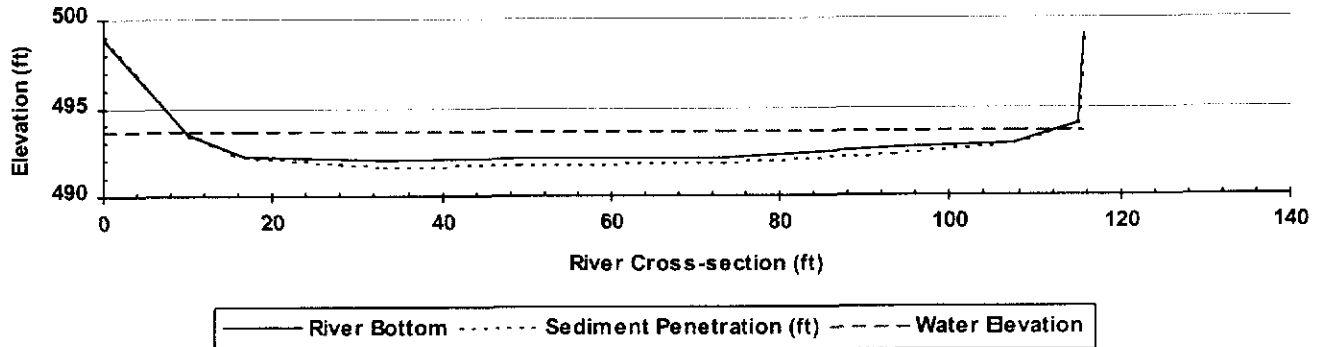
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	513.59	513.59	494.56	
71.13	507.34	507.34	494.56	
96.87	497.19	497.19	494.56	
123.28	494.50	494.50	494.56	
129.03	493.17	493.17	494.56	
142.20	493.17	492.62	494.56	GW
164.77	492.56	492.06	494.56	GW
182.90	492.18	491.88	494.56	GW
196.37	492.05	491.65	494.56	GW
209.47	492.28	492.28	494.56	
213.05	494.62	494.62	494.56	

River Transect Cross-sectional Plots

TRANSECT ID: C-105

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

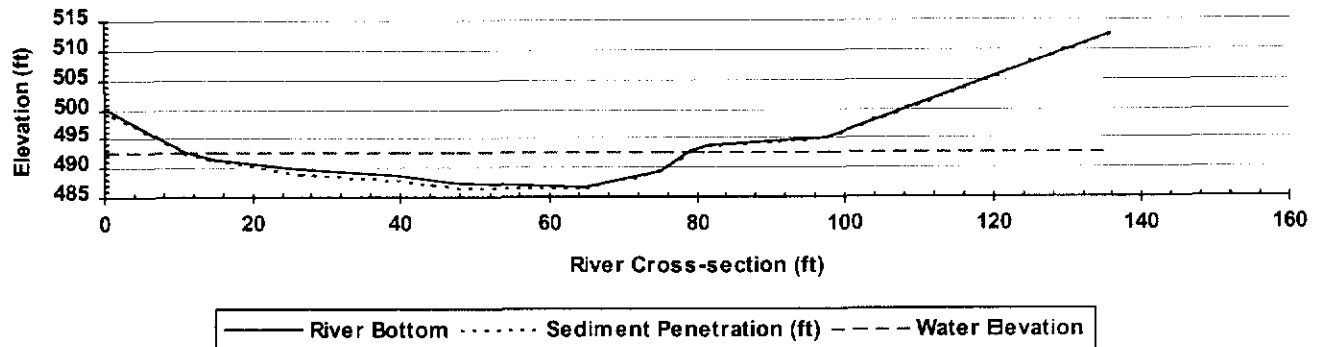


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	498.83	498.83	493.74	
10.19	493.48	493.48	493.74	
16.63	492.23	492.23	493.74	
33.12	491.99	491.64	493.74	GW
48.94	492.13	491.83	493.74	GW
73.24	492.10	491.90	493.74	GW
93.36	492.69	492.39	493.74	SW
107.34	492.94	492.94	493.74	
114.86	493.99	493.99	493.74	
115.68	499.08	499.08	493.74	

TRANSECT ID: C-106

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



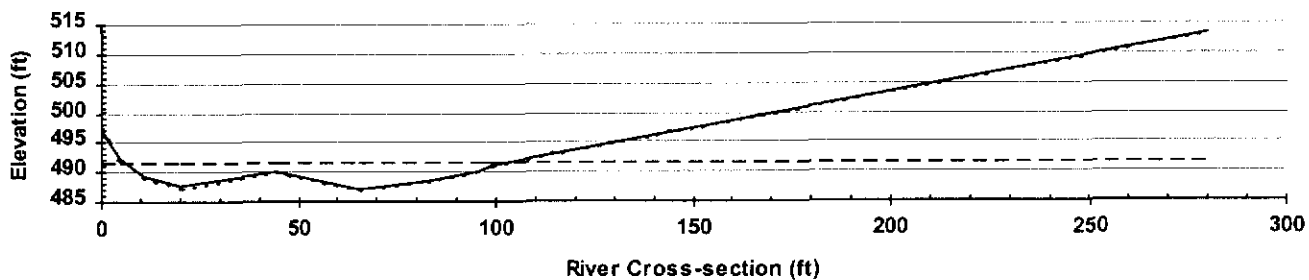
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	500.03	500.03	492.87	
10.61	492.84	492.84	492.87	
14.61	491.49	491.49	492.87	
26.41	489.76	489.16	492.87	SW
39.39	488.61	488.11	492.87	SW
47.54	487.24	486.79	492.87	SW
64.85	486.70	486.70	492.87	NS
75.13	489.48	489.48	492.87	
79.08	492.89	492.89	492.87	
81.56	493.77	493.77	492.87	
97.55	495.13	495.13	492.87	
135.97	512.76	512.76	492.87	

River Transect Cross-sectional Plots

TRANSECT ID: C-107

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

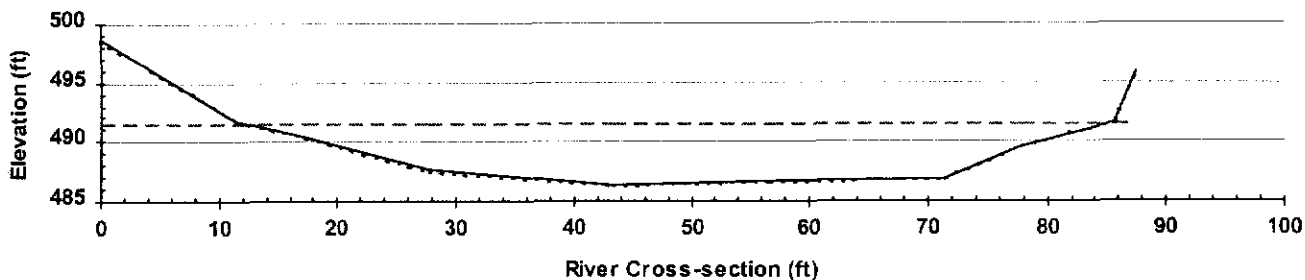


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	497.23	497.23	491.67	
4.62	492.37	492.37	491.67	
10.73	489.24	489.24	491.67	
19.88	487.69	487.44	491.67	SW
44.04	490.05	490.05	491.67	NS
65.16	486.91	486.91	491.67	NS
82.57	488.26	488.26	491.67	NS
95.48	489.90	489.90	491.67	
98.79	490.97	490.97	491.67	
279.87	513.29	513.29	491.67	

TRANSECT ID: C-108

AVERAGE VELOCITY (ft/sec) 0.6900

Solutia Database: TRANSECT CROSS-SECTIONS



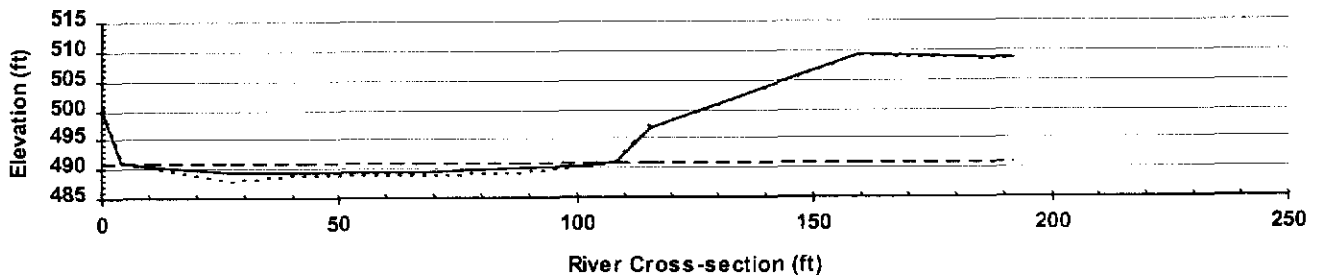
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	498.71	498.71	491.65	
11.40	491.69	491.69	491.65	
17.33	490.33	490.33	491.65	
27.70	487.72	487.52	491.65	SW
43.27	486.41	486.41	491.65	NS
56.59	486.70	486.70	491.65	NS
71.34	486.84	486.84	491.65	NS
77.64	489.47	489.47	491.65	
85.63	491.62	491.62	491.65	
87.46	495.95	495.95	491.65	

River Transect Cross-sectional Plots

TRANSECT ID: C-109

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

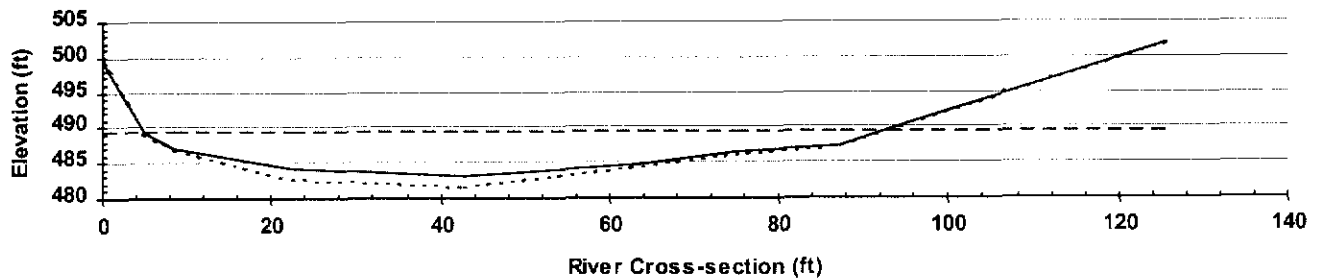


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	500.26	500.26	491.01	
4.21	490.99	490.99	491.01	
9.66	490.38	490.38	491.01	
27.09	489.54	488.19	491.01	SW
42.42	489.24	488.99	491.01	SW
67.61	489.33	489.03	491.01	SW
87.65	489.94	489.24	491.01	SW
102.59	490.35	490.35	491.01	
108.29	491.02	491.02	491.01	
115.59	496.66	496.66	491.01	
159.34	509.29	509.29	491.01	
192.34	508.51	508.51	491.01	

TRANSECT ID: C-110

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



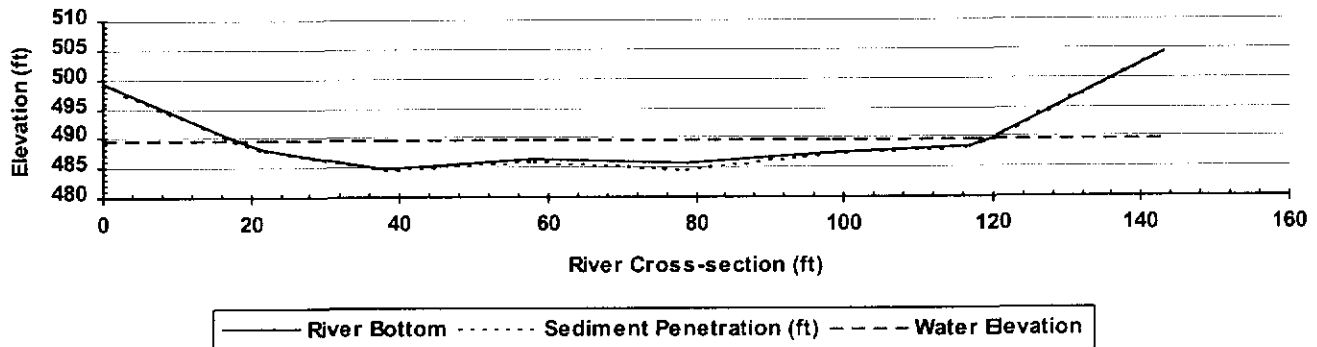
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	499.37	499.37	489.50	
5.00	489.37	489.37	489.50	
8.52	487.07	487.07	489.50	
22.25	484.18	482.78	489.50	SW
42.71	483.22	481.72	489.50	GW
63.83	484.82	484.42	489.50	SW
74.80	486.41	486.11	489.50	SW
87.31	487.22	487.22	489.50	
92.82	489.62	489.62	489.50	
125.66	502.03	502.03	489.50	

River Transect Cross-sectional Plots

TRANSECT ID: C-111

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

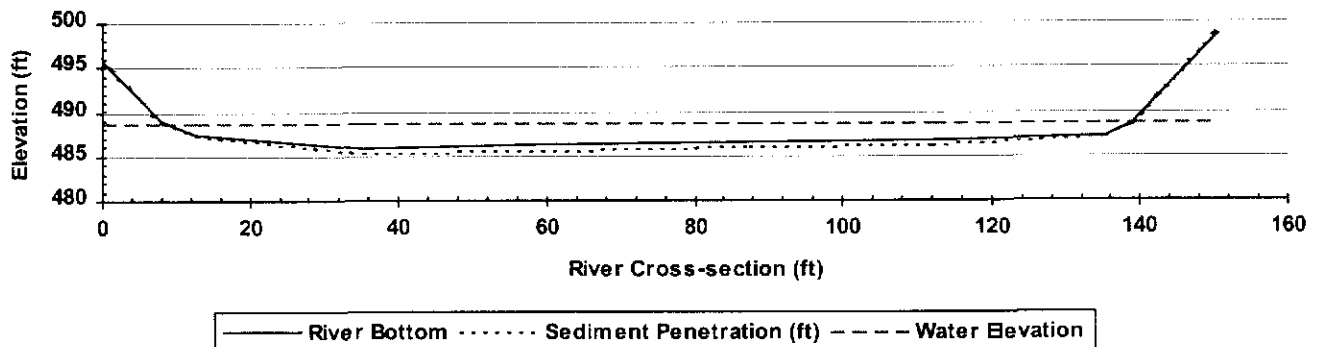


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	499.33	489.63	489.63	
17.58	489.61	489.61	489.63	
21.72	488.00	488.00	489.63	
37.75	484.56	484.56	489.63	NS
57.90	486.45	486.15	489.63	SW
78.58	485.66	484.76	489.63	SW
98.23	487.48	487.48	489.63	NS
116.85	488.40	488.40	489.63	
120.19	489.64	489.64	489.63	
143.00	504.42	504.42	489.63	

TRANSECT ID: C-112

AVERAGE VELOCITY (ft/sec) 0.7610

Solutia Database: TRANSECT CROSS-SECTIONS



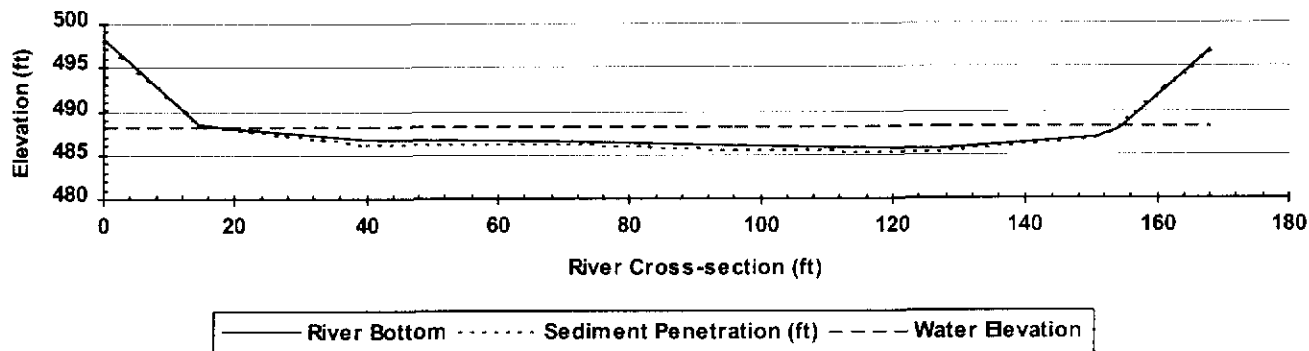
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	495.83	495.83	488.70	
8.10	488.90	488.90	488.70	
12.63	487.52	487.52	488.70	
35.00	485.84	485.49	488.70	SW
59.14	486.31	485.51	488.70	SW
87.42	486.56	486.01	488.70	SW
111.95	486.81	486.31	488.70	SW
135.29	487.23	487.23	488.70	
138.96	488.50	488.50	488.70	
150.74	498.74	498.74	488.70	

River Transect Cross-sectional Plots

TRANSECT ID: C-113

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

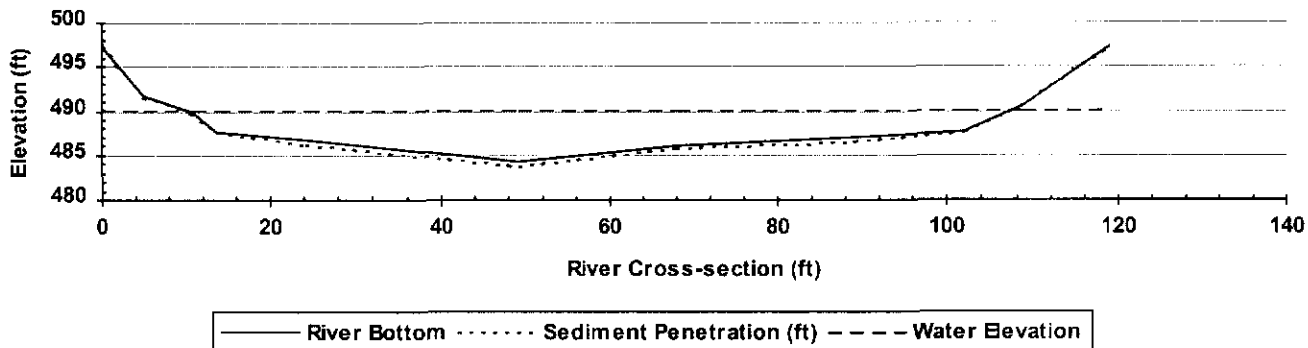


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	498.19	498.19	488.30	
14.41	488.65	488.65	488.30	
18.60	487.98	487.98	488.30	
39.90	486.73	486.38	488.30	SW
70.25	486.56	486.31	488.30	SW
95.85	486.14	485.64	488.30	SW
126.75	485.72	485.32	488.30	SW
150.83	487.00	487.00	488.30	
154.18	487.96	487.96	488.30	
167.89	496.83	496.83	488.30	

TRANSECT ID: C-114

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



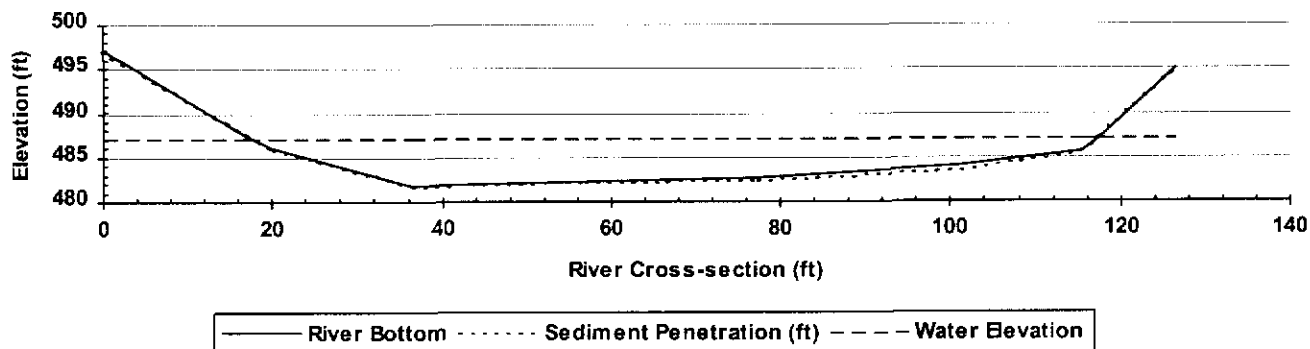
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	497.23	497.23	490.21	
4.89	491.61	491.61	490.21	
10.87	489.81	489.81	490.21	
13.56	487.67	487.67	490.21	
24.05	486.82	486.27	490.21	GW
49.26	484.31	483.76	490.21	SW
68.09	486.00	485.75	490.21	SW
87.70	487.02	486.57	490.21	SM
101.99	487.68	487.68	490.21	
108.73	490.61	490.61	490.21	
119.12	497.28	497.28	490.21	

River Transect Cross-sectional Plots

TRANSECT ID: C-115

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

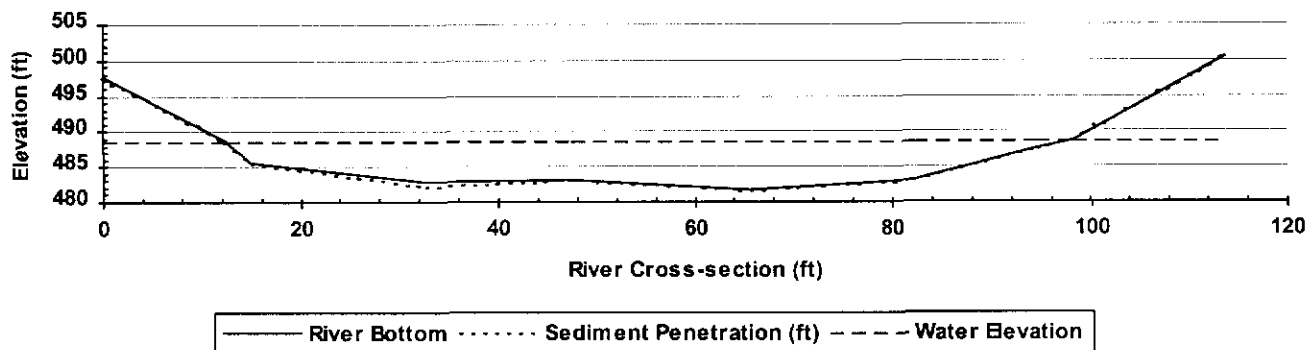


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	497.15	497.15	487.28	
16.86	487.37	487.37	487.28	
19.98	486.05	486.05	487.28	
36.45	481.77	481.77	487.28	NS
56.73	482.15	482.15	487.28	NS
77.18	482.67	482.57	487.28	SW
101.17	484.12	483.67	487.28	SW
115.40	485.64	485.64	487.28	
117.48	487.19	487.19	487.28	
126.37	495.05	495.05	487.28	

TRANSECT ID: C-116

AVERAGE VELOCITY (ft/sec) 0.4700

Solutia Database: TRANSECT CROSS-SECTIONS



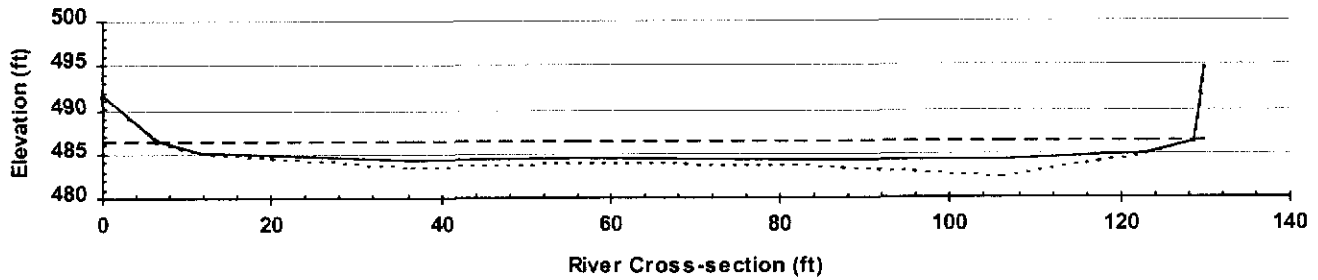
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	497.73	497.73	488.65	
12.49	488.71	488.71	488.65	
14.89	485.60	485.60	488.65	
32.62	482.77	482.27	488.65	SM
47.41	482.99	482.99	488.65	NS
65.53	481.58	481.58	488.65	NS
82.17	482.99	482.99	488.65	NS
94.44	487.51	487.51	488.65	
98.22	488.59	488.59	488.65	
113.70	500.37	500.37	488.65	

River Transect Cross-sectional Plots

TRANSECT ID: C-117

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

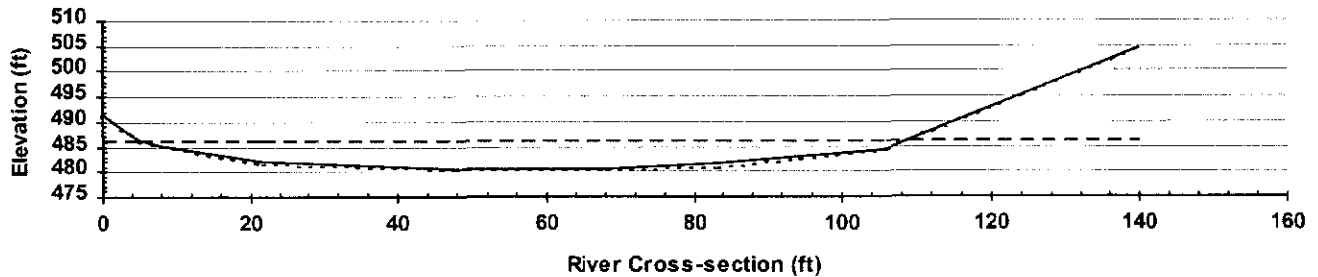


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	491.78	491.78	486.42	
6.42	486.45	486.45	486.42	
11.46	485.07	485.07	486.42	
36.46	484.27	483.62	486.42	SW
56.08	484.57	484.07	486.42	SW
81.67	484.29	483.89	486.42	SW
106.04	484.38	482.48	486.42	SW
122.85	484.85	484.85	486.42	
128.53	486.40	486.40	486.42	
129.98	494.72	494.72	486.42	

TRANSECT ID: C-118

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



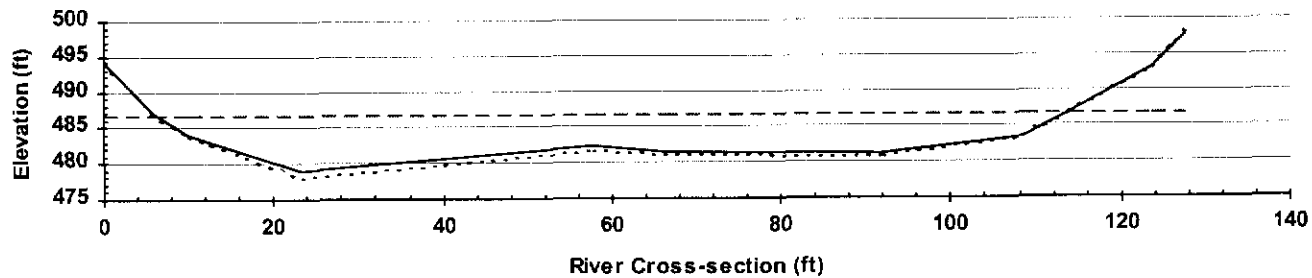
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	491.46	491.46	486.41	
4.94	486.37	486.37	486.41	
7.78	485.12	485.12	486.41	
21.48	482.09	481.64	486.41	SW
47.62	480.70	480.45	486.41	SW
68.07	480.33	480.33	486.41	NS
83.03	481.85	480.80	486.41	SC
105.73	484.59	484.59	486.41	
109.01	486.45	486.45	486.41	
139.81	504.53	504.53	486.41	

River Transect Cross-sectional Plots

TRANSECT ID: C-119

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

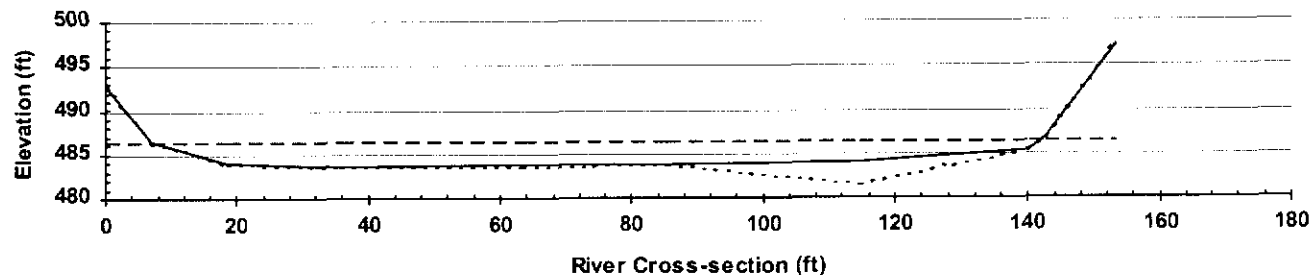


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	493.99	493.99	486.89	
5.86	487.01	487.01	486.89	
9.99	483.89	483.89	486.89	
23.16	478.93	477.98	486.89	SW
57.58	482.39	481.84	486.89	SW
66.07	481.51	481.21	486.89	SW
91.91	481.17	480.82	486.89	SW
108.56	483.31	483.31	486.89	
113.88	486.78	486.78	486.89	
123.66	493.06	493.06	486.89	
127.51	497.74	497.74	486.89	

TRANSECT ID: C-120

AVERAGE VELOCITY (ft/sec) 0.8037

Solutia Database: TRANSECT CROSS-SECTIONS



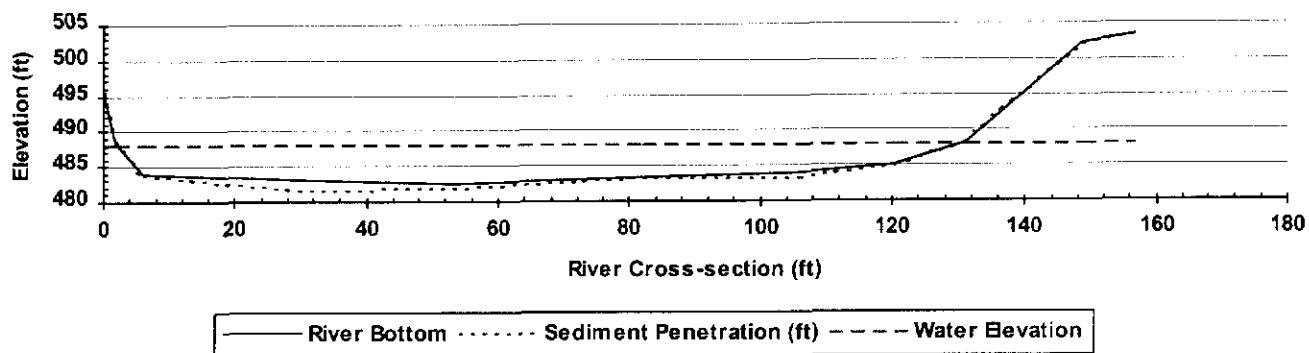
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	492.92	492.92	486.61	
7.08	486.56	486.56	486.61	
18.52	483.97	483.97	486.61	
35.71	483.56	483.56	486.61	NS
63.42	483.91	483.61	486.61	SW
85.31	483.76	483.76	486.61	NS
114.68	483.96	481.61	486.61	SM
140.20	485.37	485.37	486.61	
142.53	486.66	486.66	486.61	
153.60	497.40	497.40	486.61	

River Transect Cross-sectional Plots

TRANSECT ID: C-121

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

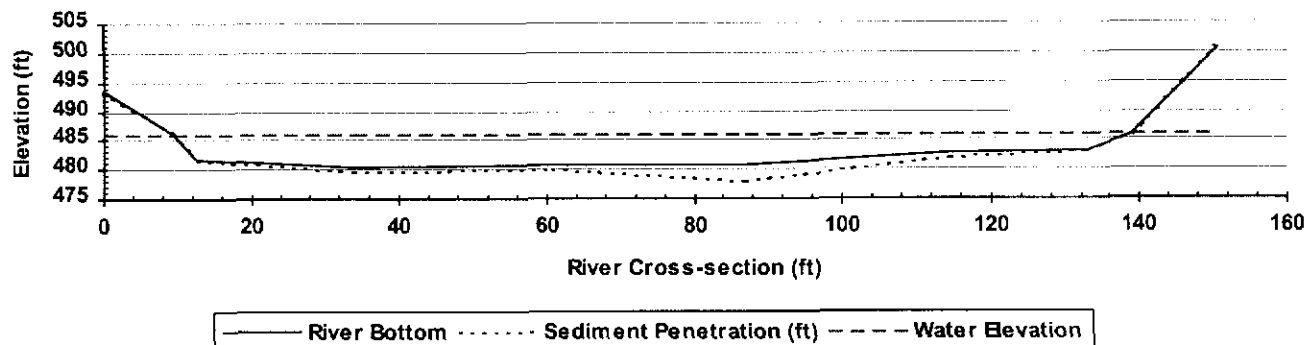


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	495.55	495.55	488.28	
1.90	488.45	488.45	488.28	
6.11	484.05	484.05	488.28	
29.47	483.02	481.82	488.28	SW
53.10	482.65	481.95	488.28	SW
81.88	483.50	483.50	488.28	NS
105.93	484.00	483.35	488.28	SW
120.42	484.92	484.92	488.28	
131.13	488.12	488.12	488.28	
148.78	502.12	502.12	488.28	
156.91	503.21	503.21	488.28	

TRANSECT ID: C-122

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



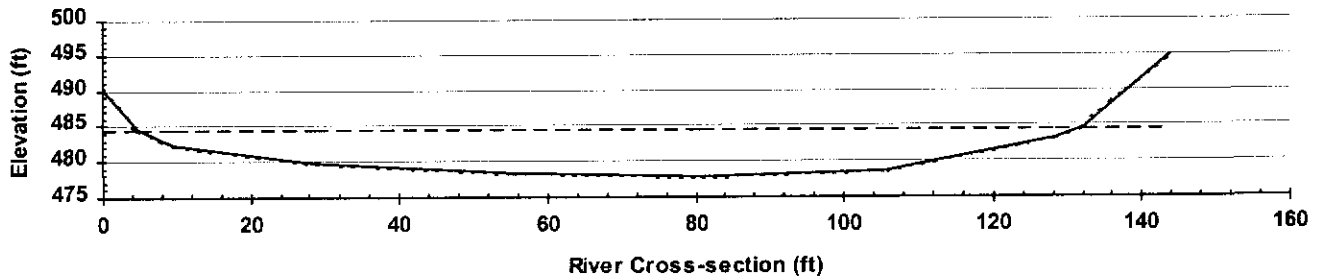
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	493.44	493.44	485.97	
9.34	486.02	486.02	485.97	
12.64	481.90	481.90	485.97	
33.75	480.38	479.68	485.97	SM
60.60	480.69	479.99	485.97	SW
86.88	480.83	478.03	485.97	SW
114.45	482.59	482.24	485.97	SW
132.85	482.96	482.96	485.97	
138.94	485.92	485.92	485.97	
150.64	500.70	500.70	485.97	

River Transect Cross-sectional Plots

TRANSECT ID: C-123

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

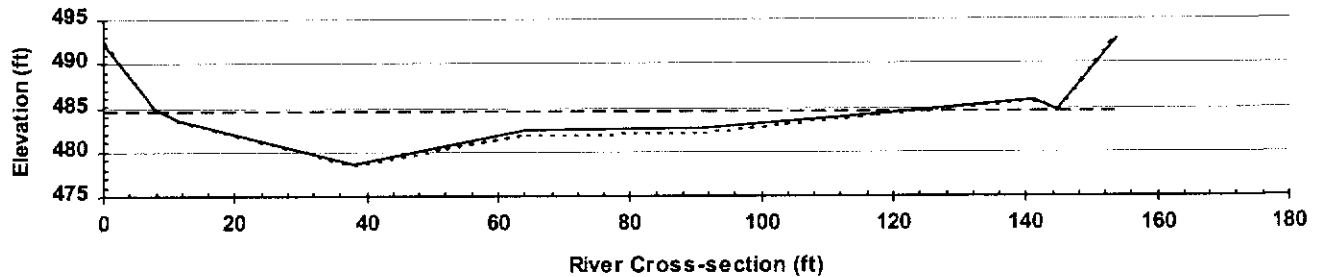


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	490.10	490.10	484.65	
4.84	484.62	484.62	484.65	
9.60	482.32	482.32	484.65	
28.80	479.78	479.78	484.65	NS
55.25	478.43	478.43	484.65	NS
80.78	477.93	477.93	484.65	NS
105.52	478.58	478.58	484.65	NS
128.36	483.07	483.07	484.65	
132.19	484.69	484.69	484.65	
144.05	494.87	494.87	484.65	

TRANSECT ID: C-124

AVERAGE VELOCITY (ft/sec) 0.3312

Solutia Database: TRANSECT CROSS-SECTIONS



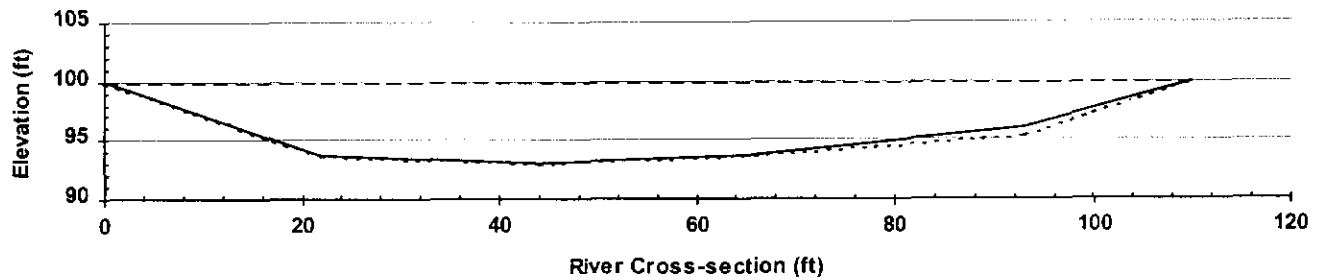
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	492.39	492.39	484.71	
7.71	484.79	484.79	484.71	
11.34	483.56	483.56	484.71	
38.12	478.65	478.65	484.71	NS
64.10	482.41	482.06	484.71	SW
91.20	482.55	482.25	484.71	SW
117.34	484.32	484.32	484.71	NS
141.10	485.78	485.78	484.71	
144.69	484.63	484.63	484.71	
153.88	492.73	492.73	484.71	

River Transect Cross-sectional Plots

TRANSECT ID: C-125

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

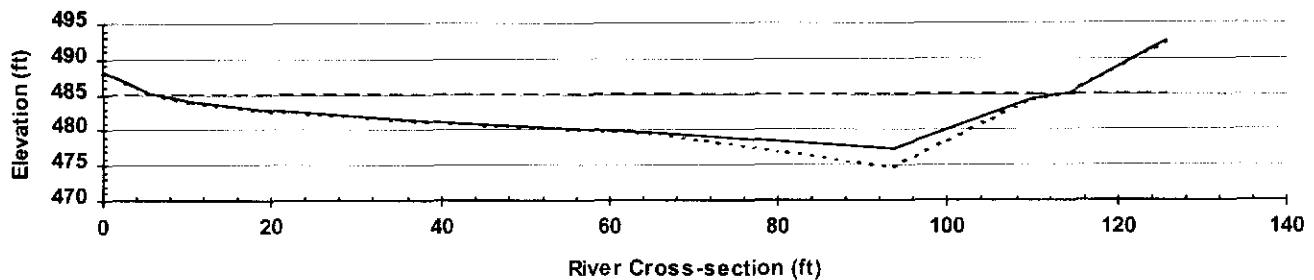


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	100.00	100.00	100.00	
22.00	93.70	93.70	100.00	NS
44.00	93.00	93.00	100.00	NS
66.00	93.70	93.70	100.00	NS
93.00	96.00	95.45	100.00	SM
110.00	100.00	100.00	100.00	

TRANSECT ID: C-126

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



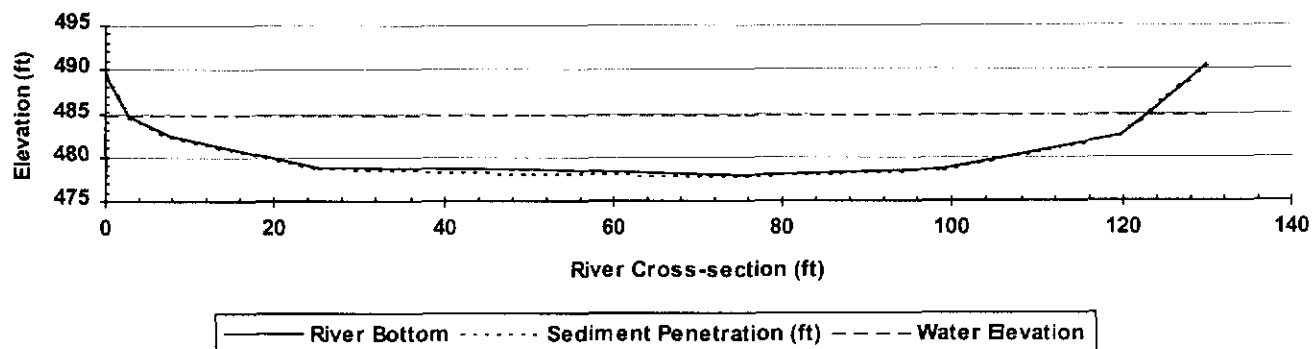
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	488.21	488.21	485.15	
5.70	485.13	485.13	485.15	
10.30	484.04	484.04	485.15	
18.29	482.87	482.87	485.15	NS
41.94	480.82	480.82	485.15	NS
65.76	479.57	479.57	485.15	NS
93.59	477.17	474.67	485.15	SM
109.79	484.24	484.24	485.15	
114.44	485.17	485.17	485.15	
125.63	492.58	492.58	485.15	

River Transect Cross-sectional Plots

TRANSECT ID: C-127

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

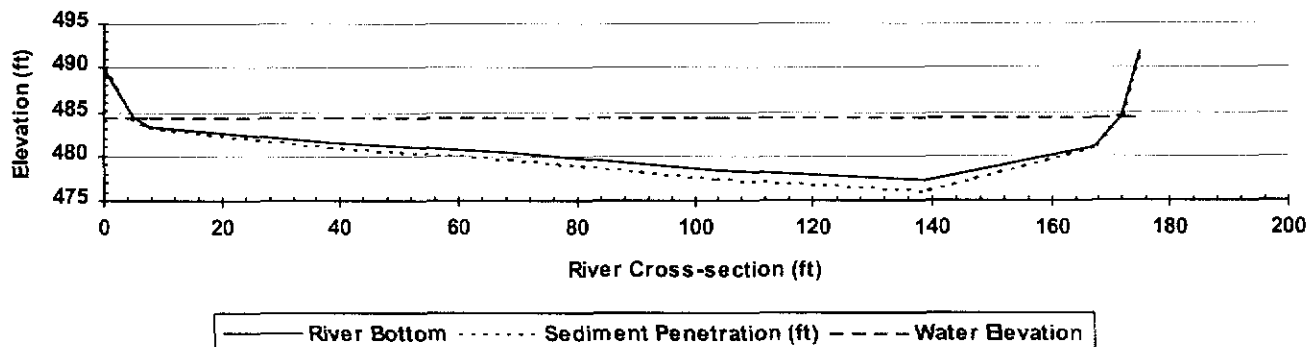


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	489.32	489.32	484.95	
2.91	484.77	484.77	484.95	
7.64	482.36	482.36	484.95	
25.03	478.80	478.80	484.95	NS
50.12	478.49	478.04	484.95	SW
75.59	477.89	477.89	484.95	NS
98.65	478.66	478.66	484.95	NS
119.76	482.48	482.48	484.95	
123.42	485.14	485.14	484.95	
129.96	490.42	490.42	484.95	

TRANSECT ID: C-128

AVERAGE VELOCITY (ft/sec) 0.4562

Solutia Database: TRANSECT CROSS-SECTIONS



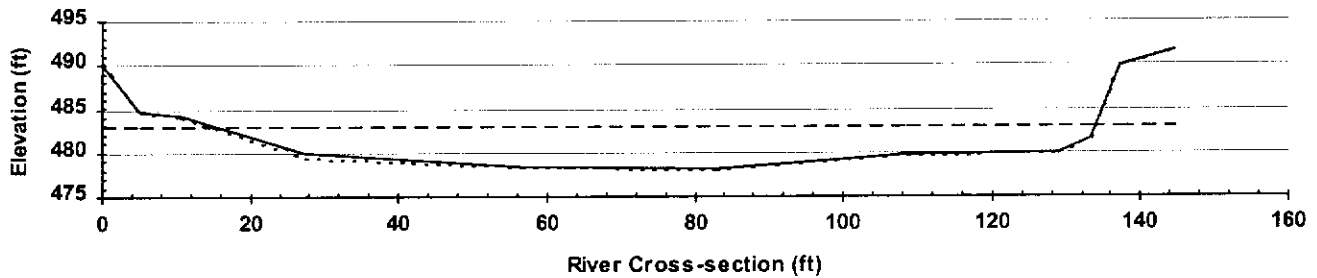
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	489.83	489.83	484.45	
4.96	484.52	484.52	484.45	
7.80	483.26	483.26	484.45	
38.34	481.45	481.10	484.45	SW
68.53	480.29	479.79	484.45	SW
103.45	478.44	477.49	484.45	SW
139.50	477.21	476.16	484.45	SM
167.47	480.96	480.96	484.45	
171.95	484.39	484.39	484.45	
174.84	491.95	491.95	484.45	

River Transect Cross-sectional Plots

TRANSECT ID: C-129

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

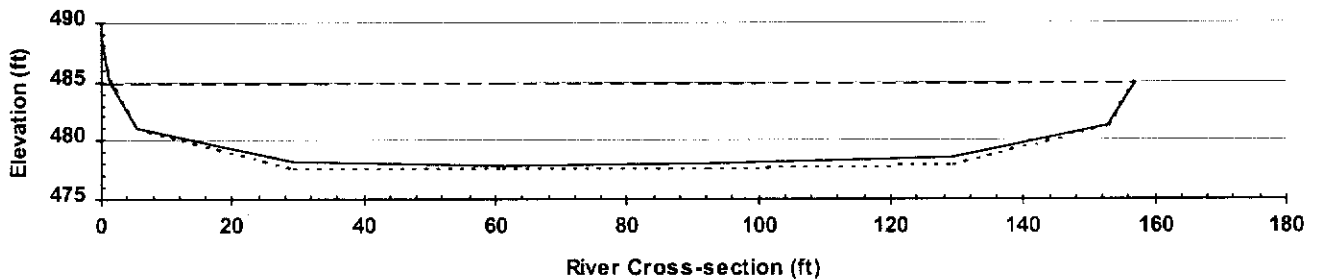


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	489.95	489.95	483.16	
5.11	484.72	484.72	483.16	
10.84	484.23	484.23	483.16	
27.34	479.99	479.54	483.16	SM
56.50	478.30	478.30	483.16	NS
82.89	478.12	478.12	483.16	NS
108.57	479.68	479.68	483.16	NS
129.02	480.03	480.03	483.16	
133.26	481.60	481.60	483.16	
137.30	489.94	489.94	483.16	
144.67	491.53	491.53	483.16	

TRANSECT ID: C-130

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



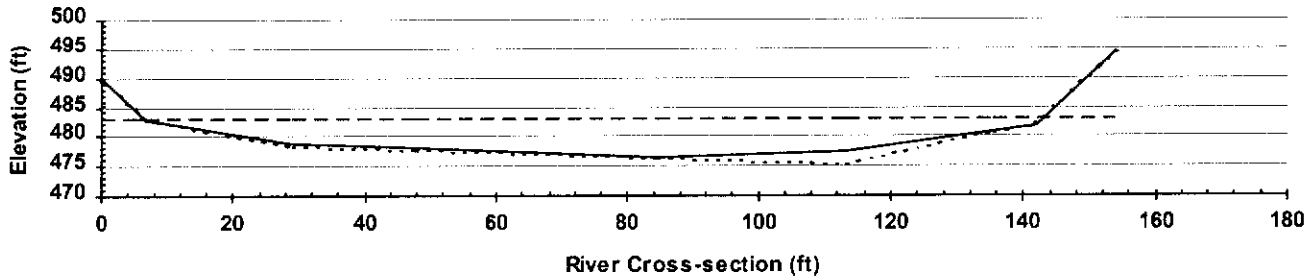
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	488.97	488.97	485.00	
1.28	485.05	485.05	485.00	
5.39	481.15	481.15	485.00	
29.15	477.27	477.77	485.00	SW
60.83	477.82	477.62	485.00	SW
92.23	477.95	477.70	485.00	SW
129.35	478.60	477.95	485.00	SW
152.82	481.31	481.31	485.00	
156.95	484.94	484.94	485.00	

River Transect Cross-sectional Plots

TRANSECT ID: C-131

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

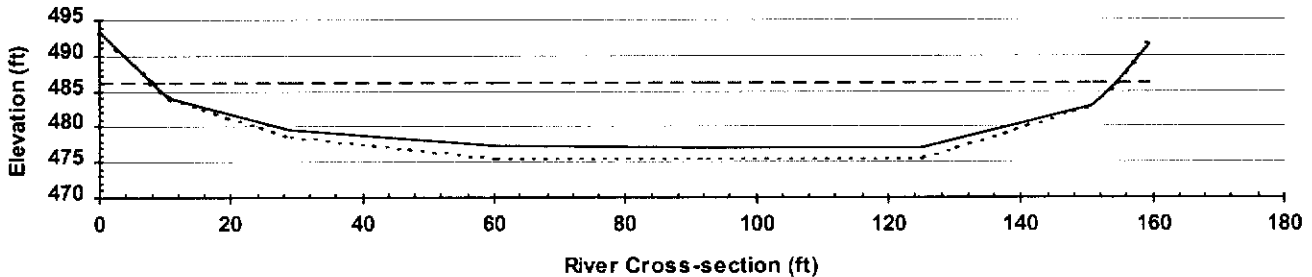


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	489.99	489.99	483.07	
5.15	484.40	484.40	483.07	
6.50	482.70	482.70	483.07	
29.06	478.82	478.32	483.07	SW
47.49	477.99	477.69	483.07	GW
84.40	476.49	476.49	483.07	NS
113.10	477.34	475.44	483.07	SM
135.30	480.75	480.75	483.07	
142.09	481.74	481.74	483.07	
153.88	494.19	494.19	483.07	

TRANSECT ID: C-132

AVERAGE VELOCITY (ft/sec) 0.2658

Solutia Database: TRANSECT CROSS-SECTIONS



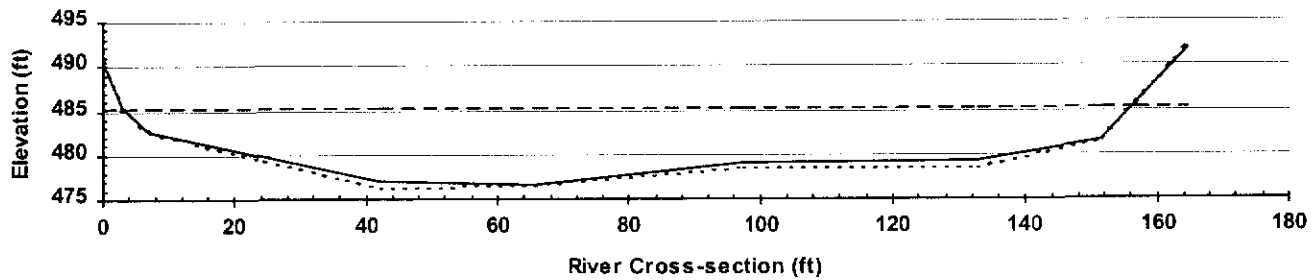
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	493.25	493.25	486.19	
7.90	486.26	486.26	486.19	
10.43	484.08	484.08	486.19	
29.08	479.53	478.73	486.19	SM
60.34	477.18	475.58	486.19	SW
92.31	477.15	475.75	486.19	SW
125.13	477.15	475.65	486.19	GM
150.76	482.86	482.86	486.19	
154.28	486.12	486.12	486.19	
159.58	491.55	491.55	486.19	

River Transect Cross-sectional Plots

TRANSECT ID: C-133

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

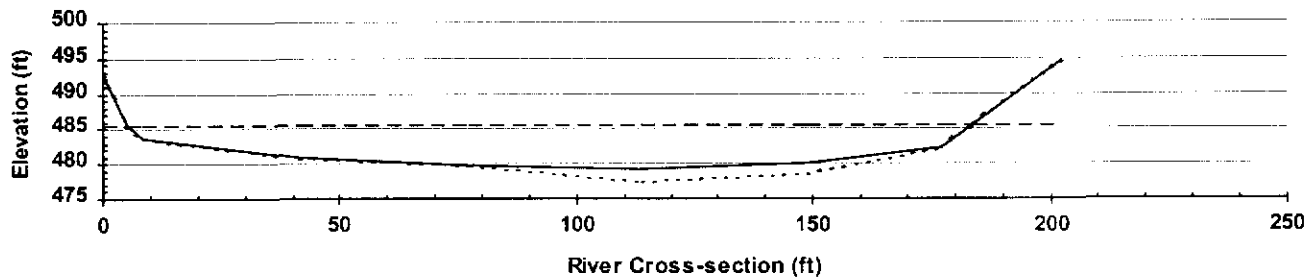


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	490.59	490.59	485.45	
3.04	485.26	485.26	485.45	
6.84	482.53	482.53	485.45	
41.89	476.92	476.32	485.45	SM
65.44	476.46	476.46	485.45	NS
97.17	479.09	478.49	485.45	SW
132.61	479.33	478.53	485.45	SM
151.30	481.60	481.60	485.45	
156.61	485.63	485.63	485.45	
164.70	491.82	491.82	485.45	

TRANSECT ID: C-134

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



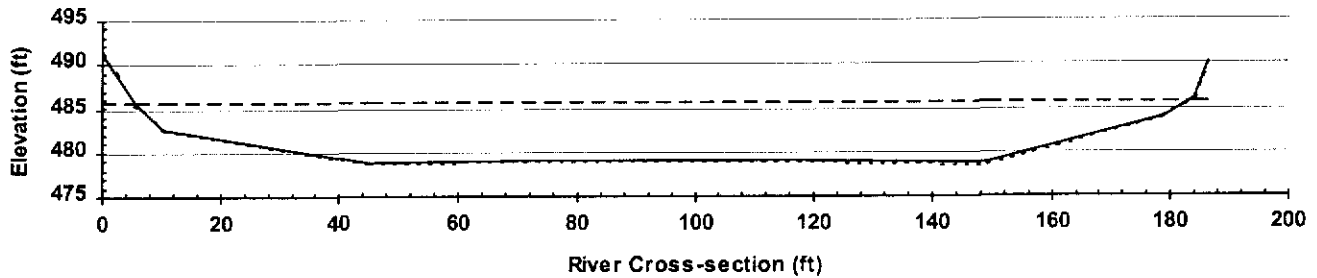
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	492.59	492.59	485.75	
5.20	485.79	485.79	485.75	
8.45	483.74	483.74	485.75	
41.63	480.85	480.85	485.75	NS
77.09	479.82	479.82	485.75	NS
113.64	479.14	477.54	485.75	SW
148.47	480.01	478.71	485.75	SM
177.13	482.33	482.33	485.75	
183.88	485.71	485.71	485.75	
202.38	494.69	494.69	485.75	

River Transect Cross-sectional Plots

TRANSECT ID: C-135

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

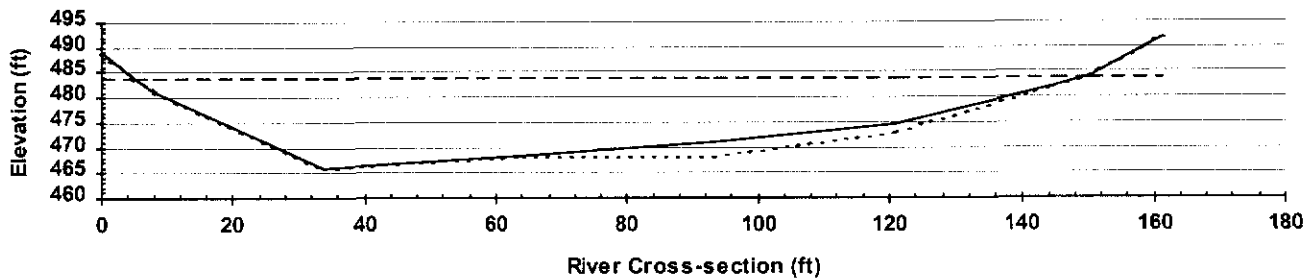


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	491.21	491.21	485.82	
5.70	485.56	485.56	485.82	
10.35	482.73	482.73	485.82	
44.75	478.72	478.72	485.82	NS
75.16	479.02	479.02	485.82	NS
117.19	478.93	478.93	485.82	NS
149.02	478.81	478.51	485.82	SM
178.86	484.00	484.00	485.82	
183.90	486.09	486.09	485.82	
186.32	490.06	490.06	485.82	

TRANSECT ID: C-136

AVERAGE VELOCITY (ft/sec) 0.1250

Solutia Database: TRANSECT CROSS-SECTIONS



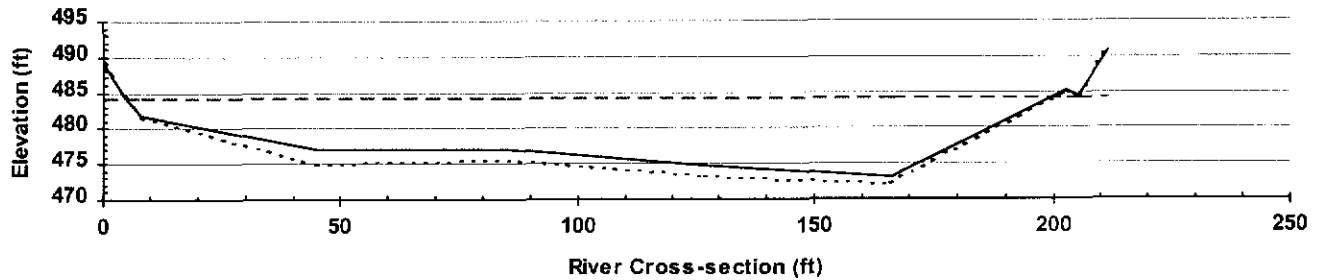
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	489.28	489.28	484.05	
4.70	484.14	484.14	484.05	
7.72	481.12	481.12	484.05	
33.69	466.07	466.07	484.05	NS
63.96	468.22	468.22	484.05	NS
93.05	470.93	468.13	484.05	SW
121.05	474.59	473.09	484.05	SM
144.74	481.97	481.97	484.05	
150.10	483.96	483.96	484.05	
161.25	491.67	491.67	484.05	

River Transect Cross-sectional Plots

TRANSECT ID: C-137

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

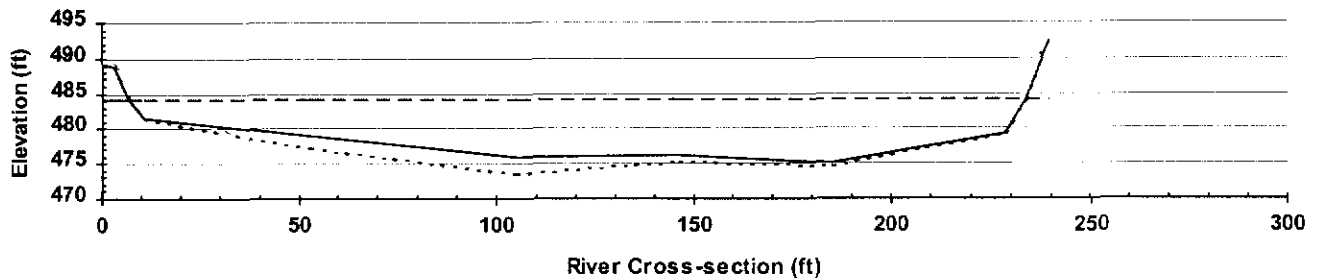


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	489.14	489.14	484.38	
4.68	484.35	484.35	484.38	
7.85	481.72	481.72	484.38	
44.70	476.92	474.92	484.38	SM
85.12	477.13	475.53	484.38	SM
126.29	474.70	473.50	484.38	SM
166.12	473.00	472.30	484.38	SM
202.54	485.17	485.17	484.38	
205.20	484.42	484.42	484.38	
211.38	490.68	490.68	484.38	

TRANSECT ID: C-138

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

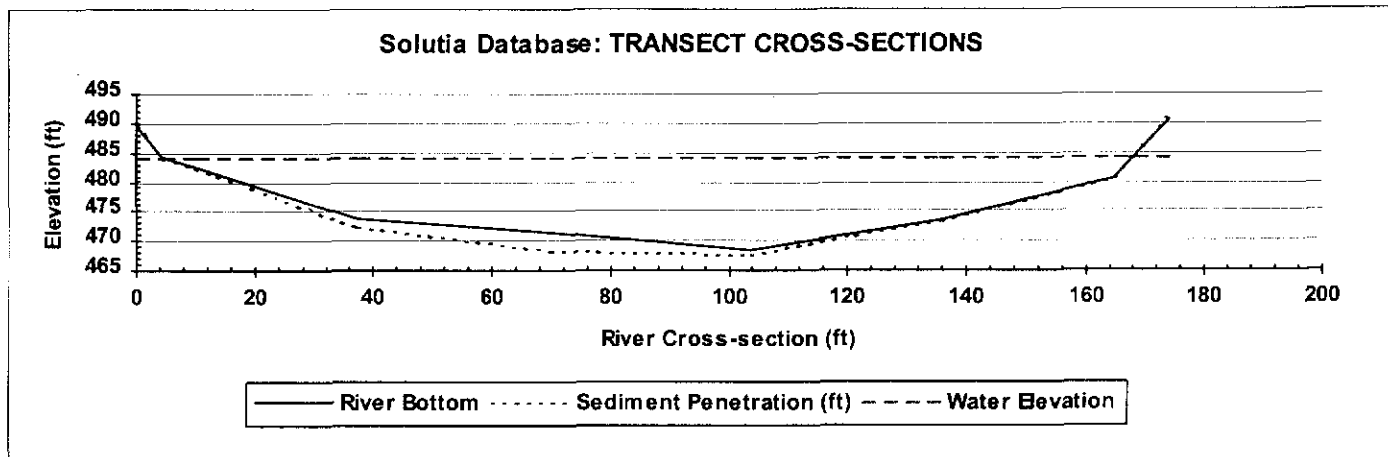


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	489.24	489.24	484.26	
3.24	488.73	488.73	484.26	
6.55	484.36	484.36	484.26	
10.53	481.61	481.61	484.26	
52.90	479.03	477.23	484.26	SW
104.99	475.81	473.61	484.26	SW
145.99	476.25	475.25	484.26	SM
184.72	475.14	474.64	484.26	SM
228.46	479.39	479.39	484.26	
233.49	484.16	484.16	484.26	
239.79	492.46	492.46	484.26	

River Transect Cross-sectional Plots

TRANSECT ID: C-139

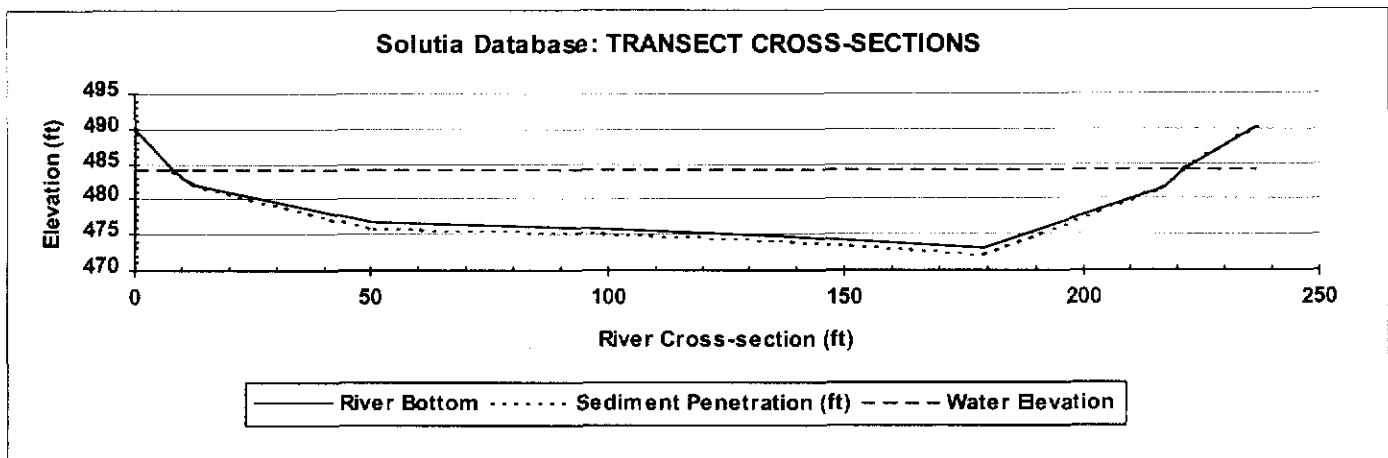
AVERAGE VELOCITY (ft/sec)



Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	489.53	489.53	484.29	
4.46	484.31	484.31	484.29	
10.02	482.42	482.42	484.29	
37.16	473.72	472.42	484.29	SM
69.83	471.52	468.52	484.29	SM
103.38	468.50	467.70	484.29	SM
135.83	473.58	473.58	484.29	NS
164.72	480.46	480.46	484.29	
168.24	484.28	484.28	484.29	
174.29	490.54	490.54	484.29	

TRANSECT ID: C-140

AVERAGE VELOCITY (ft/sec) 0.1530



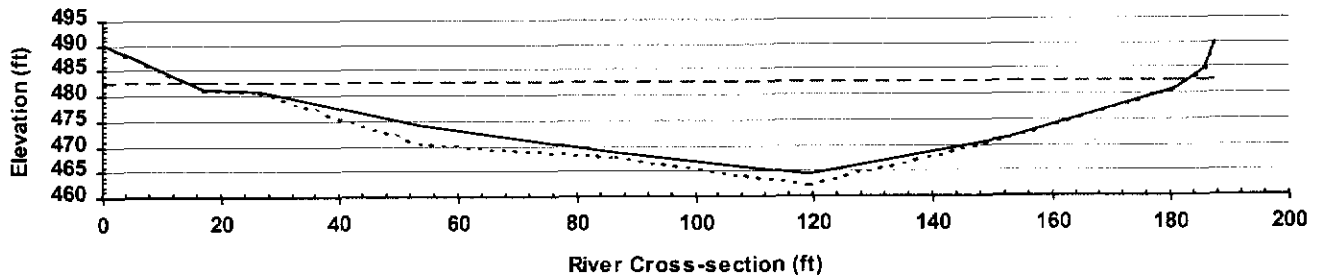
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	489.82	489.82	484.24	
8.32	484.12	484.12	484.24	
12.13	482.06	482.06	484.24	
50.05	476.78	475.78	484.24	SW
93.68	475.81	475.21	484.24	SW
136.22	474.85	474.35	484.24	SW
179.28	473.09	472.19	484.24	SM
216.93	481.44	481.44	484.24	
221.44	484.36	484.36	484.24	
236.65	490.11	490.11	484.24	

River Transect Cross-sectional Plots

TRANSECT ID: C-141

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

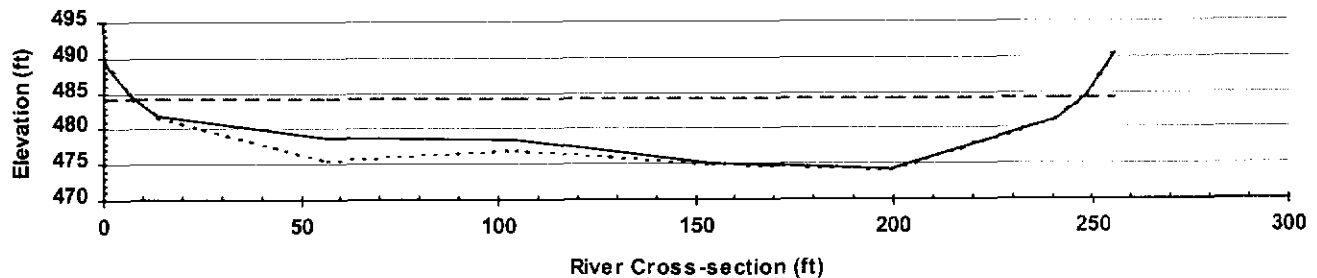


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	490.37	490.37	482.98	
17.16	481.22	481.22	482.98	
26.57	481.02	481.02	482.98	
53.22	473.98	470.48	482.98	SW
86.48	468.83	468.03	482.98	NS
119.38	464.23	462.53	482.98	SM
152.90	471.57	471.57	482.98	NS
180.55	481.03	481.03	482.98	
185.48	484.74	484.74	482.98	
187.20	489.85	489.85	482.98	

TRANSECT ID: C-142

AVERAGE VELOCITY (ft/sec) 0.1600

Solutia Database: TRANSECT CROSS-SECTIONS



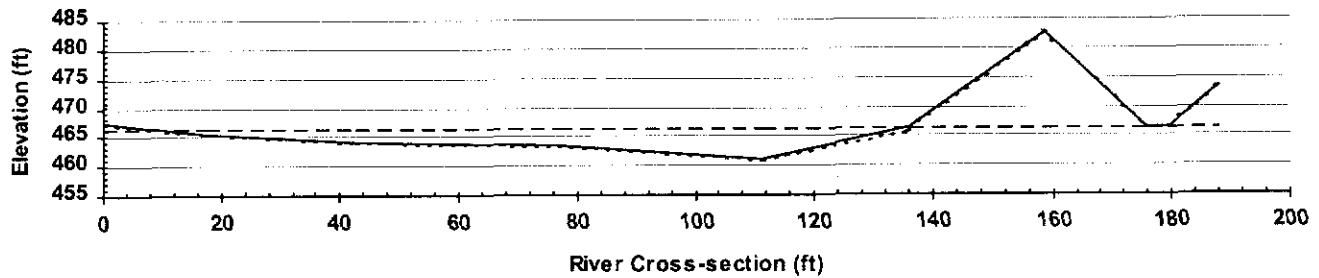
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	489.47	489.47	484.34	
7.42	484.45	484.45	484.34	
13.45	481.72	481.72	484.34	
56.32	478.58	475.58	484.34	SM
104.07	478.30	477.10	484.34	SW
153.54	475.16	475.16	484.34	NS
199.66	474.34	474.34	484.34	NS
241.14	481.24	481.24	484.34	
248.49	484.23	484.23	484.34	
255.74	490.49	490.49	484.34	

River Transect Cross-sectional Plots

TRANSECT ID: C-145

AVERAGE VELOCITY (ft/sec) 0.5590

Solutia Database: TRANSECT CROSS-SECTIONS

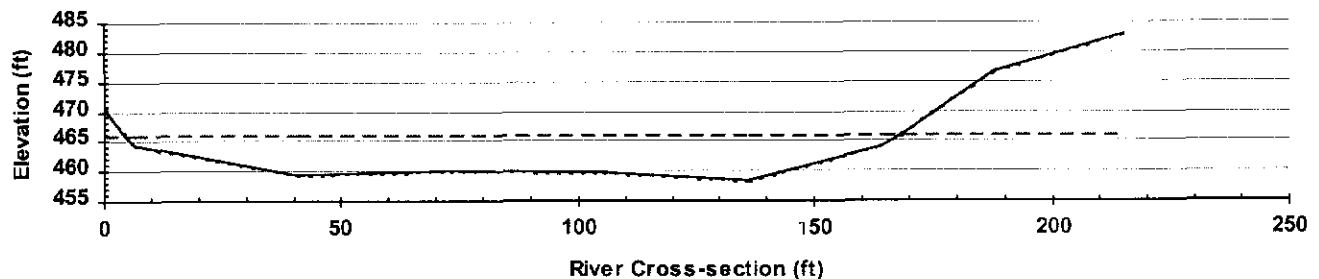


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	467.36	467.36	466.36	
8.44	466.34	466.34	466.36	
17.39	465.38	465.38	466.36	
42.50	464.17	463.97	466.36	GW
76.61	463.32	463.32	466.36	NS
111.35	461.03	461.03	466.36	NS
135.97	466.44	465.74	466.36	SW
158.52	482.81	482.81	466.36	
175.45	466.62	466.62	466.36	
179.52	466.38	466.38	466.36	
187.90	473.62	473.62	466.36	

TRANSECT ID: C-146

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



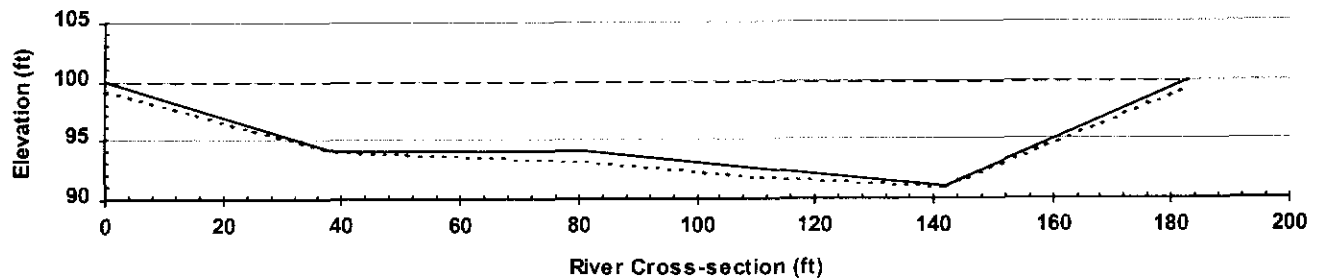
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	470.49	470.49	466.19	
4.08	466.29	466.29	466.19	
6.32	464.49	464.49	466.19	
40.70	459.45	459.45	466.19	NS
72.96	460.11	460.11	466.19	NS
105.20	459.65	459.65	466.19	NS
136.30	458.37	458.37	466.19	NS
164.03	464.22	464.22	466.19	
168.92	466.08	466.08	466.19	
187.77	476.48	476.48	466.19	
215.19	483.14	483.14	466.19	

River Transect Cross-sectional Plots

TRANSECT ID: C-147

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

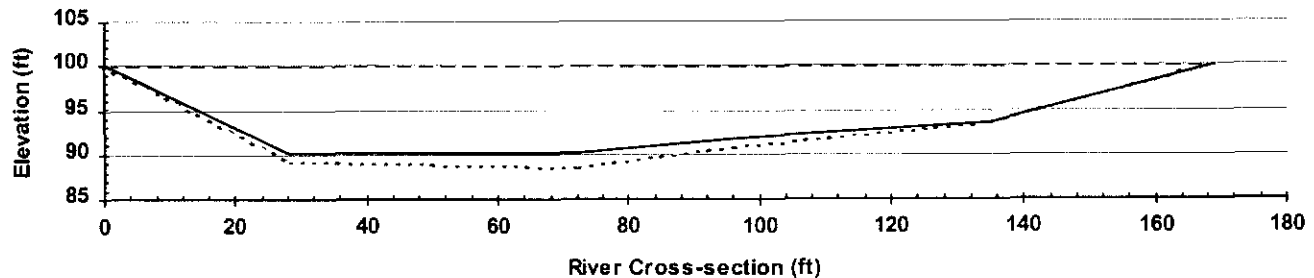


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	100.00	99.20	100.00	SW
39.00	94.10	94.10	100.00	
81.00	94.00	93.20	100.00	SW
111.00	92.50	91.80	100.00	SM
142.00	91.00	91.00	100.00	
183.00	100.00	99.30	100.00	SM

TRANSECT ID: C-148

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



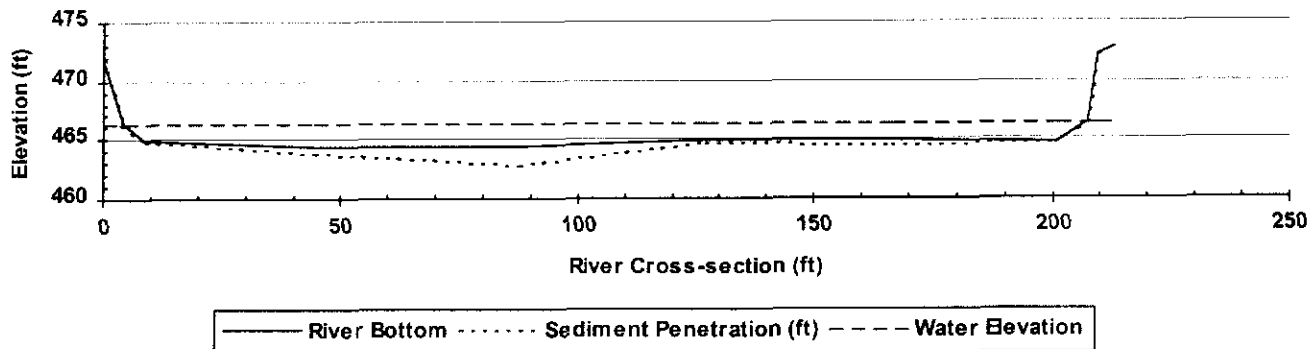
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	100.00	100.00	100.00	
28.00	90.20	89.20	100.00	SM
72.00	90.20	88.60	100.00	SM
96.00	91.70	90.90	100.00	SM
135.00	93.60	93.60	100.00	NS
169.00	100.00	100.00	100.00	

River Transect Cross-sectional Plots

TRANSECT ID: C-149

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

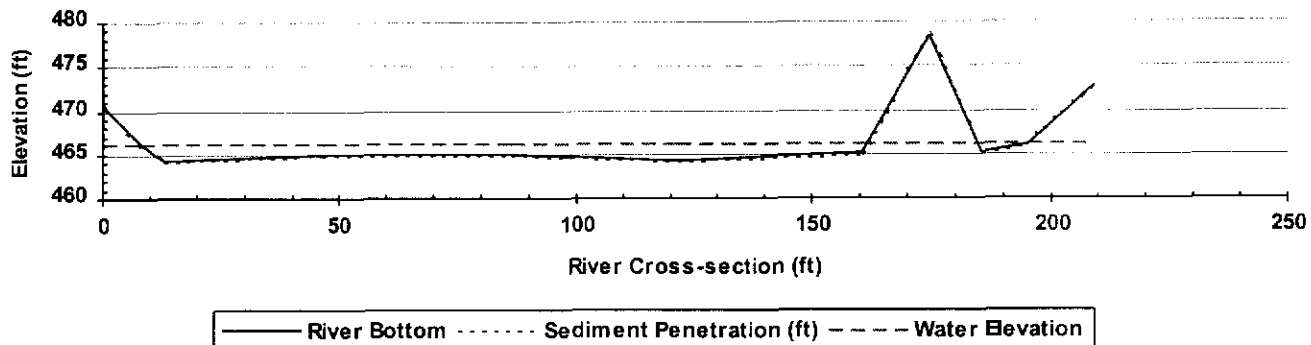


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	471.73	471.73	466.40	
4.38	466.41	466.41	466.40	
8.93	464.95	464.95	466.40	
44.52	464.37	463.87	466.40	GW
87.38	464.35	462.85	466.40	GP
126.98	464.93	464.68	466.40	GP
166.20	464.91	464.61	466.40	GP
201.06	464.74	464.74	466.40	
207.44	466.39	466.39	466.40	
209.32	472.19	472.19	466.40	
213.32	472.82	472.82	466.40	

TRANSECT ID: C-150

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



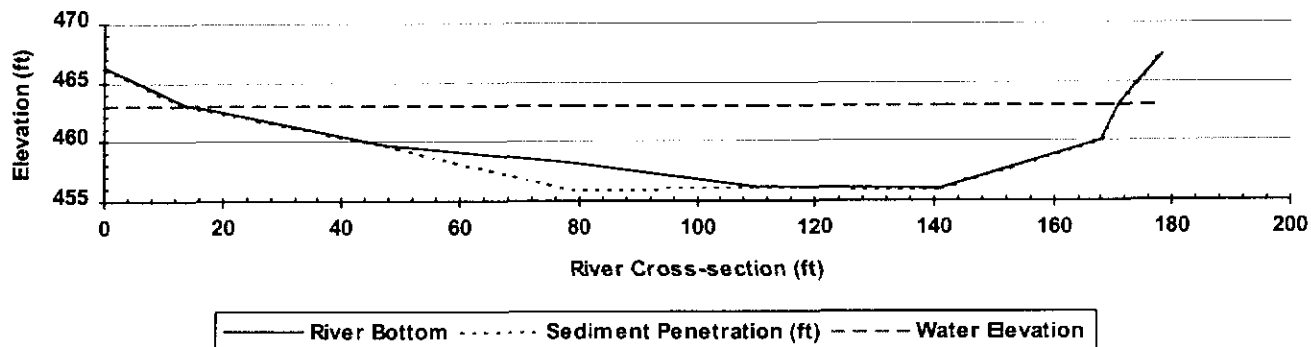
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	470.46	470.46	466.21	
8.12	466.33	466.33	466.21	
13.04	464.22	464.22	466.21	
46.58	464.85	464.85	466.21	NS
86.07	464.89	464.89	466.21	NS
121.37	464.18	464.18	466.21	NS
160.44	465.09	464.84	466.21	GP
174.70	478.51	478.51	466.21	
185.40	465.19	465.19	466.21	
195.00	466.08	466.08	466.21	
208.77	472.78	472.78	466.21	

River Transect Cross-sectional Plots

TRANSECT ID: C-151

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

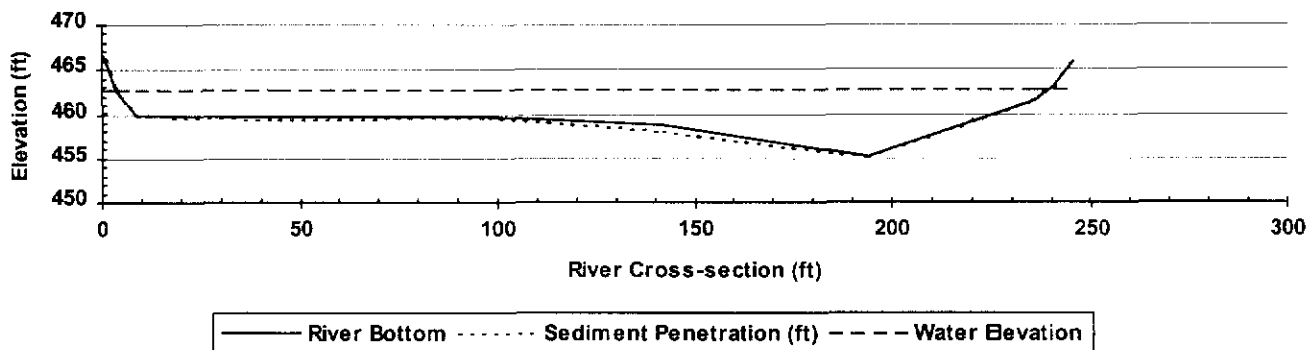


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	466.29	466.29	463.08	
13.59	463.07	463.07	463.08	
47.39	459.72	459.72	463.08	NS
78.83	458.19	455.94	463.08	SP
109.74	456.19	456.19	463.08	NS
140.93	456.09	456.09	463.08	NS
167.69	460.08	460.08	463.08	
171.02	463.10	463.10	463.08	
178.26	467.26	467.26	463.08	

TRANSECT ID: C-152

AVERAGE VELOCITY (ft/sec) 0.1938

Solutia Database: TRANSECT CROSS-SECTIONS



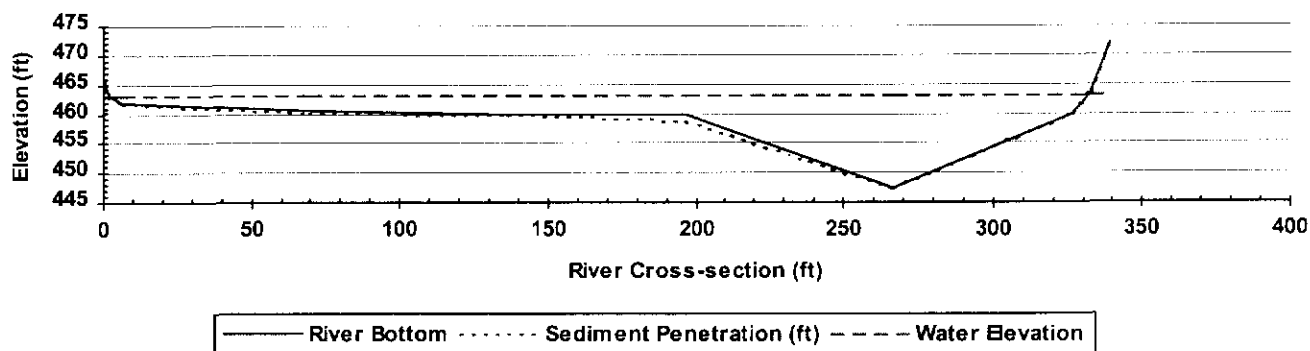
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	466.32	466.32	462.87	
0.87	466.03	466.03	462.87	
3.67	462.82	462.82	462.87	
8.61	460.00	460.00	462.87	
44.13	459.69	459.44	462.87	GP
97.47	459.61	459.61	462.87	NS
141.54	458.68	458.03	462.87	GP
194.02	455.24	455.24	462.87	NS
235.54	461.41	461.41	462.87	
240.60	462.92	462.92	462.87	
245.57	465.96	465.96	462.87	

River Transect Cross-sectional Plots

TRANSECT ID: C-153

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

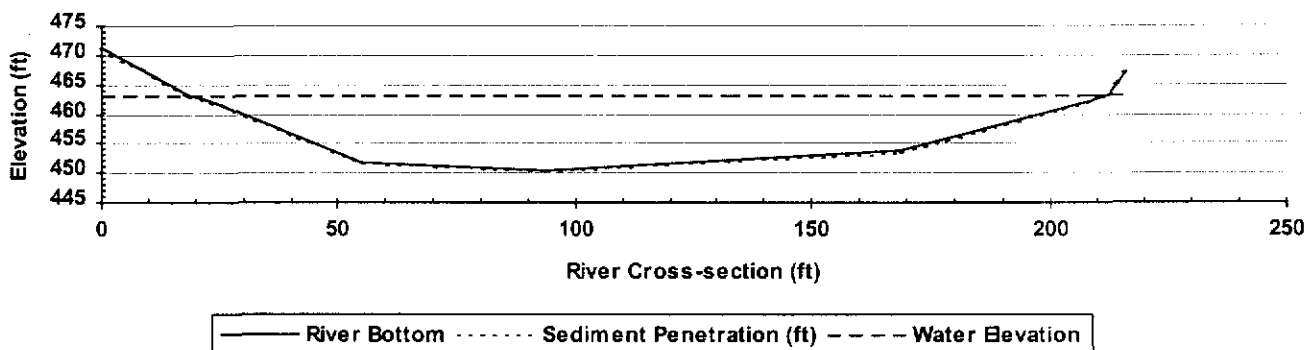


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	465.38	465.38	463.33	
2.02	463.35	463.35	463.33	
5.71	461.96	461.96	463.33	
69.02	460.46	460.06	463.33	GM
136.02	459.80	459.80	463.33	NS
196.16	459.69	458.84	463.33	SM
266.42	447.47	447.47	463.33	NS
326.46	459.69	459.69	463.33	
332.60	463.32	463.32	463.33	
339.08	472.09	472.09	463.33	

TRANSECT ID: C-154

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

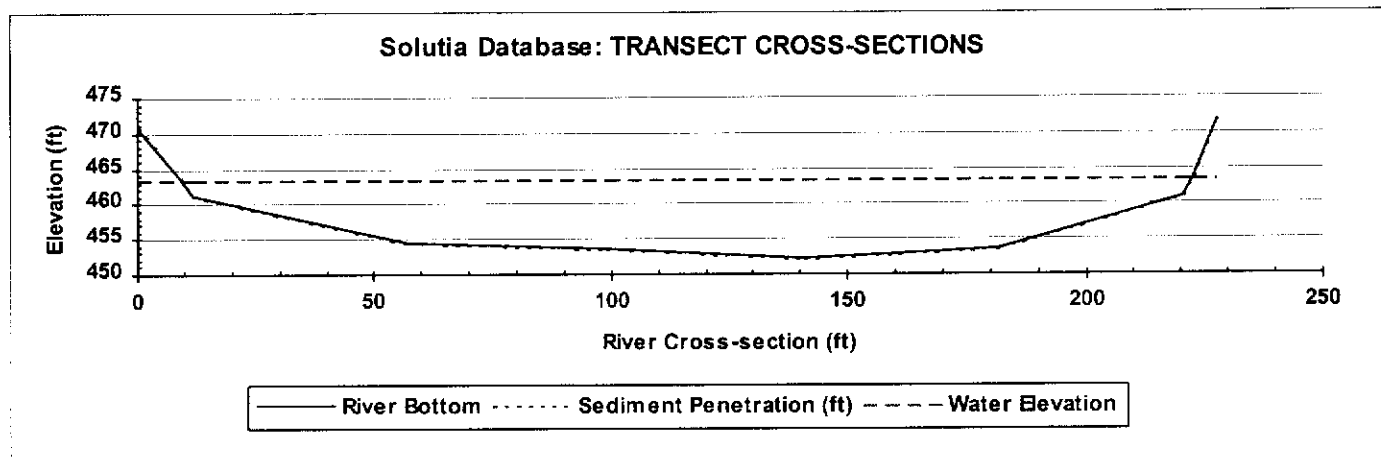


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	471.39	471.39	463.35	
18.28	463.34	463.34	463.35	
22.90	462.04	462.04	463.35	
54.89	451.76	451.76	463.35	NS
93.97	450.45	450.45	463.35	NS
132.03	452.04	452.04	463.35	NS
168.76	453.69	453.29	463.35	SW
208.48	462.30	462.30	463.35	
212.19	463.35	463.35	463.35	
216.19	467.19	467.19	463.35	

River Transect Cross-sectional Plots

TRANSECT ID: C-155

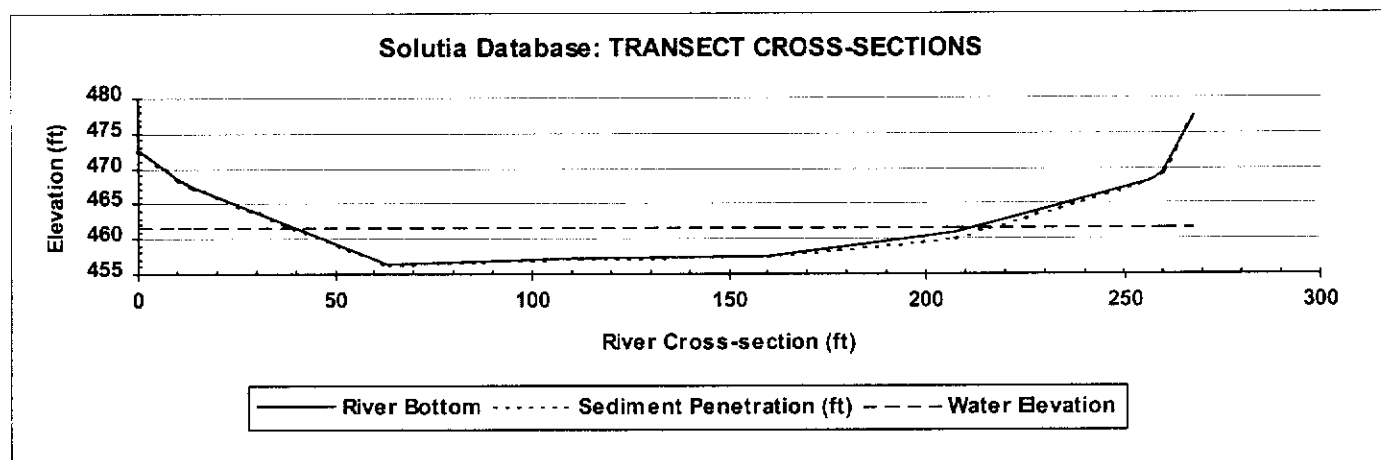
AVERAGE VELOCITY (ft/sec)



Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	470.87	470.87	463.53	
9.26	463.53	463.53	463.53	
11.59	461.19	461.19	463.53	
56.78	454.52	454.52	463.53	NS
98.80	453.73	453.73	463.53	NS
140.72	452.34	452.34	463.53	NS
181.66	453.79	453.79	463.53	NS
220.22	461.09	461.09	463.53	
222.49	463.53	463.53	463.53	
227.49	471.53	471.53	463.53	

TRANSECT ID: C-156

AVERAGE VELOCITY (ft/sec)



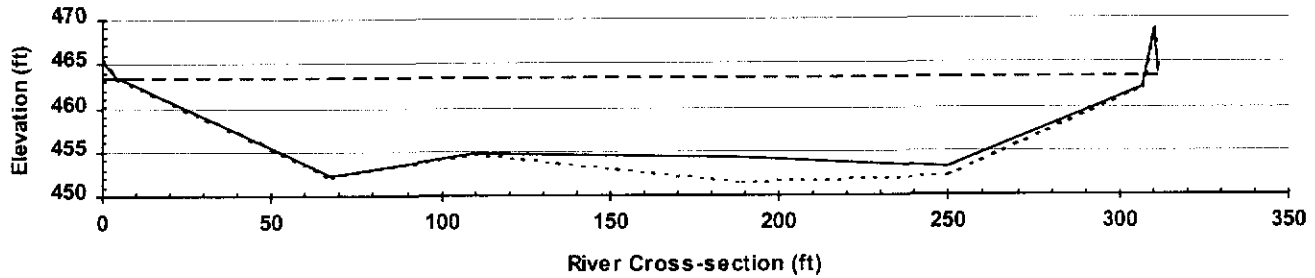
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	472.77	472.77	461.61	
10.29	468.38	468.38	461.61	
14.19	467.23	467.23	461.61	
63.23	456.39	456.39	461.61	NS
111.88	457.13	457.13	461.61	NS
159.99	457.42	457.42	461.61	NS
207.55	460.92	460.92	461.61	SM
256.57	468.22	468.22	461.61	
259.98	469.31	469.31	461.61	
267.79	477.52	477.52	461.61	

River Transect Cross-sectional Plots

TRANSECT ID: C-157

AVERAGE VELOCITY (ft/sec) 0.0570

Solutia Database: TRANSECT CROSS-SECTIONS

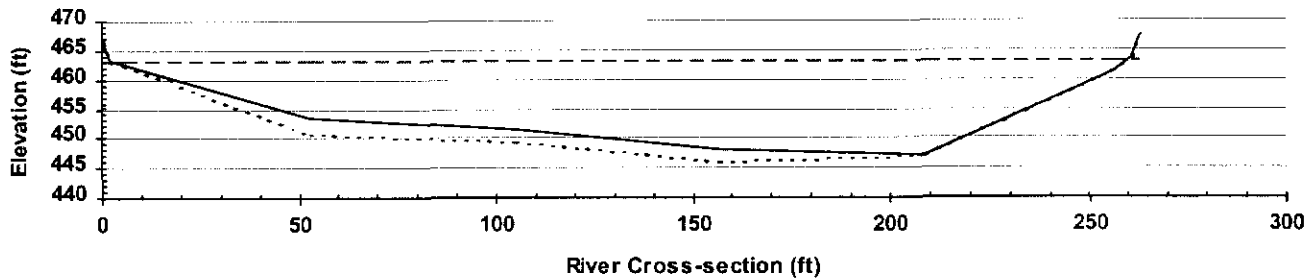


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	465.33	465.33	463.57	
3.95	463.50	463.50	463.57	
8.08	462.82	462.82	463.57	
67.23	452.32	452.32	463.57	NS
109.38	454.80	454.80	463.57	NS
188.58	454.38	451.48	463.57	SM
249.53	453.10	452.30	463.57	SM
306.70	462.03	462.03	463.57	
310.17	468.55	468.55	463.57	
311.53	463.64	463.64	463.57	

TRANSECT ID: C-158

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



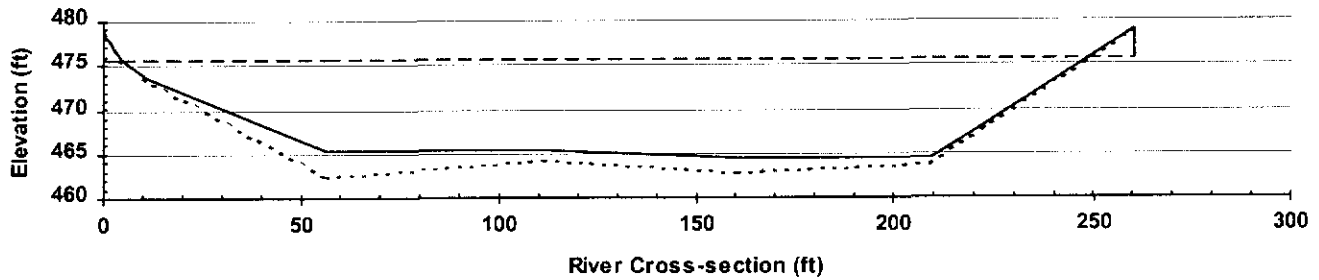
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	466.66	466.66	463.41	
1.87	463.36	463.36	463.41	
5.66	462.42	462.42	463.41	
52.81	453.42	450.87	463.41	SC
105.20	451.50	449.35	463.41	SP
156.66	448.21	445.96	463.41	SP
209.23	447.15	447.15	463.41	NS
256.11	461.34	461.34	463.41	
260.56	463.45	463.45	463.41	
262.84	467.41	467.41	463.41	

River Transect Cross-sectional Plots

TRANSECT ID: C-159

AVERAGE VELOCITY (ft/sec) 0.0610

Solutia Database: TRANSECT CROSS-SECTIONS

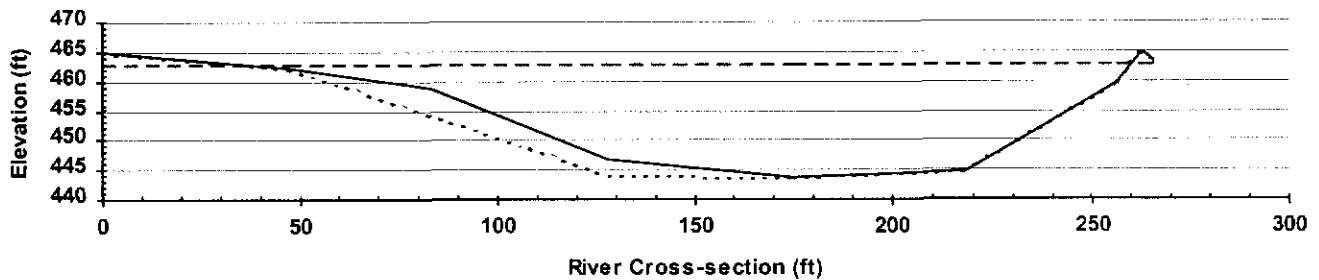


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	478.74	478.74	475.63	
4.59	475.63	475.63	475.63	
10.49	473.65	473.65	475.63	
56.23	465.44	462.44	475.63	SW
110.87	465.49	464.19	475.63	SW
160.28	464.40	462.90	475.63	SW
209.51	464.51	463.76	475.63	SW
260.06	478.90	478.90	475.63	
260.30	475.51	475.51	475.63	

TRANSECT ID: C-160

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



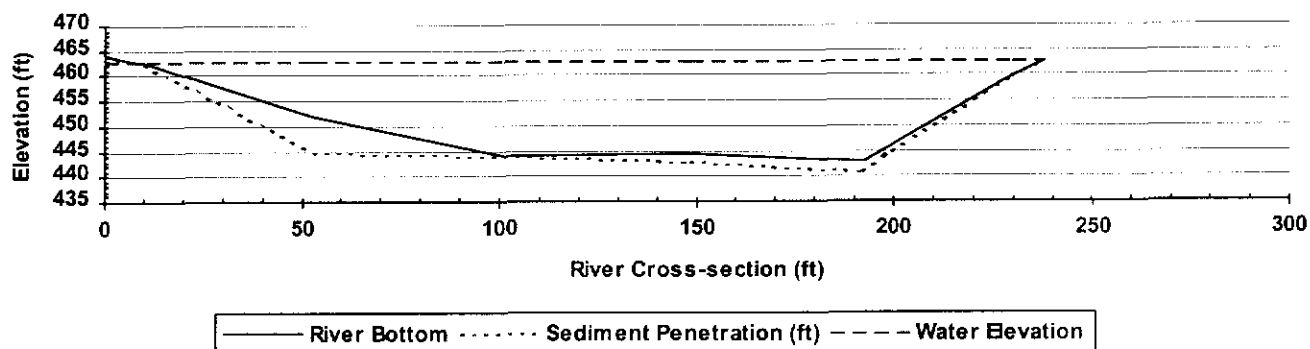
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	464.81	464.81	463.02	
34.70	462.90	462.90	463.02	
47.38	462.16	462.16	463.02	
82.24	458.94	454.34	463.02	SC
128.08	446.58	444.18	463.02	SW
174.69	443.76	443.76	463.02	NS
218.38	444.58	444.58	463.02	NS
256.53	459.56	459.56	463.02	
263.03	465.07	465.07	463.02	
265.64	463.14	463.14	463.02	

River Transect Cross-sectional Plots

TRANSECT ID: C-161

AVERAGE VELOCITY (ft/sec) 0.0050

Solutia Database: TRANSECT CROSS-SECTIONS

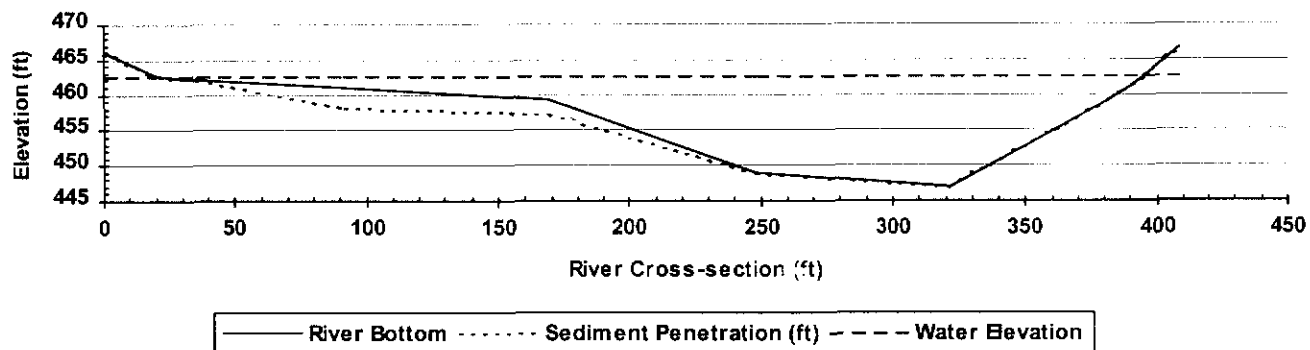


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	464.18	464.18	462.89	
6.33	462.89	462.89	462.89	
10.73	462.41	462.41	462.89	
52.82	451.84	444.64	462.89	SC
101.10	443.93	443.93	462.89	NS
148.08	444.53	442.68	462.89	SW
192.67	442.89	441.04	462.89	SW
229.87	459.61	459.61	462.89	
238.43	463.02	463.02	462.89	

TRANSECT ID: C-162

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



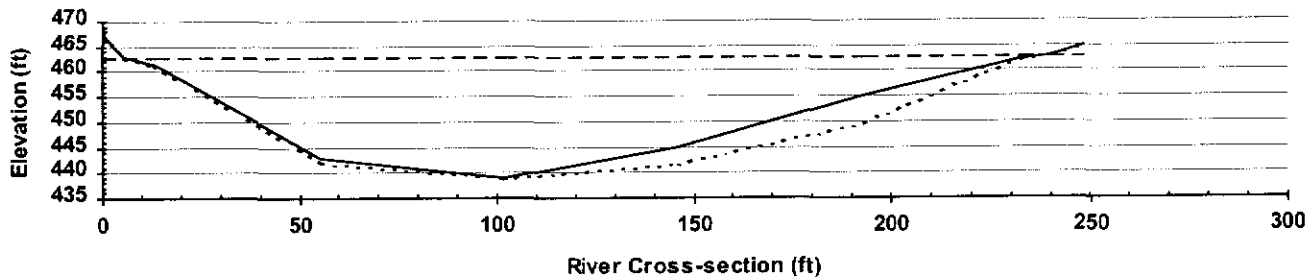
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	465.98	465.98	462.75	
20.45	462.75	462.75	462.75	
35.51	462.09	462.09	462.75	
91.20	460.92	458.22	462.75	SC
168.48	459.45	457.35	462.75	SM
247.79	449.07	449.07	462.75	NS
322.00	446.93	446.93	462.75	NS
387.68	460.43	460.43	462.75	
395.48	462.75	462.75	462.75	
408.56	466.56	466.56	462.75	

River Transect Cross-sectional Plots

TRANSECT ID: C-163

AVERAGE VELOCITY (ft/sec) 0.0425

Solutia Database: TRANSECT CROSS-SECTIONS

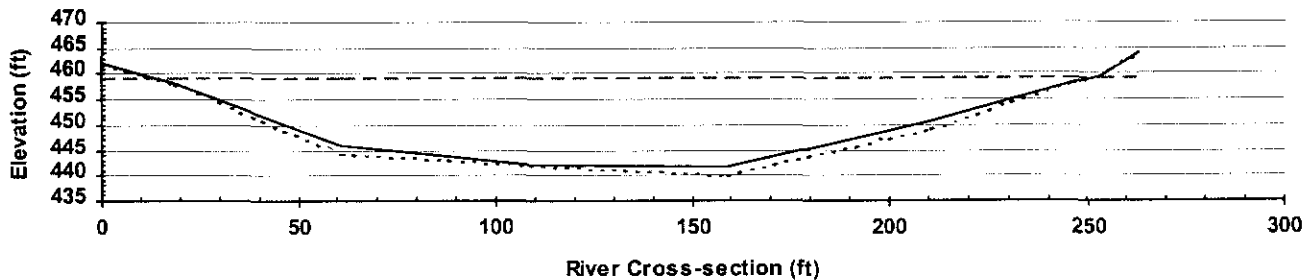


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	467.17	467.17	462.95	
5.63	462.97	462.97	462.95	
13.81	461.28	461.28	462.95	
55.24	442.91	442.01	462.95	SM
101.39	438.75	438.75	462.95	NS
145.55	444.95	441.75	462.95	SP
192.80	455.14	449.44	462.95	ML
231.96	462.08	462.08	462.95	
239.88	462.94	462.94	462.95	
248.13	464.84	464.84	462.95	

TRANSECT ID: C-164

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



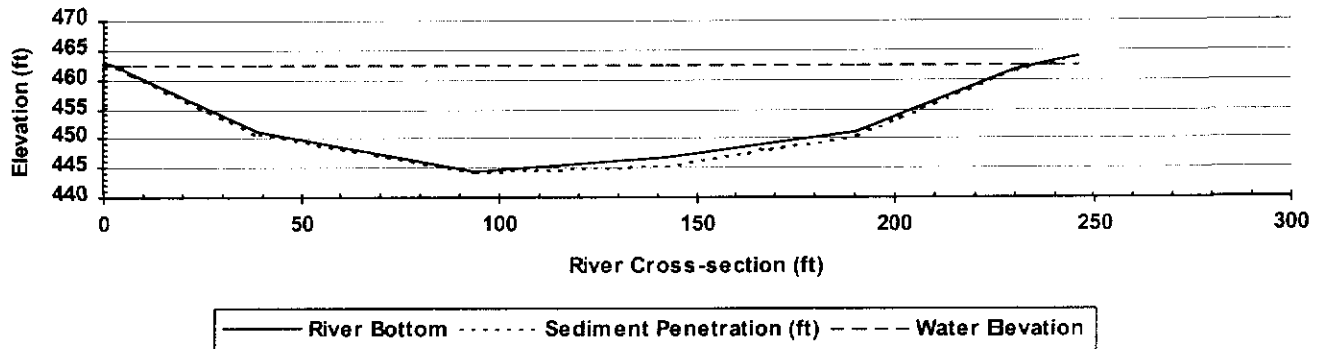
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	462.18	462.18	459.55	
11.30	459.58	459.58	459.55	
18.38	458.35	458.35	459.55	
60.84	446.10	444.40	459.55	ML
108.61	442.21	442.21	459.55	NS
158.73	441.74	439.94	459.55	SP
210.31	450.59	449.19	459.55	ML
246.48	458.15	458.15	459.55	
253.39	459.51	459.51	459.55	
262.76	464.26	464.26	459.55	

River Transect Cross-sectional Plots

TRANSECT ID: C-165

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

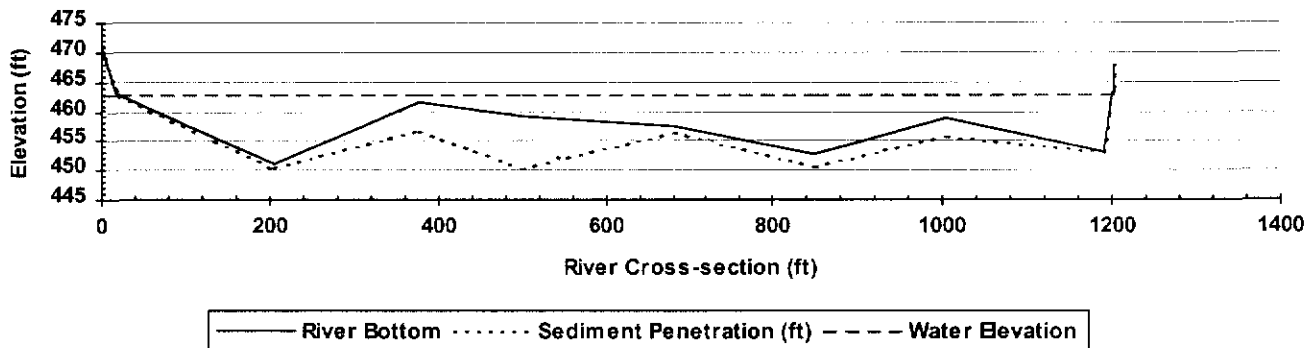


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	462.90	462.90	462.52	
3.71	462.12	462.12	462.52	
7.66	460.99	460.99	462.52	
39.41	451.00	450.69	462.52	SM
94.09	444.34	444.34	462.52	NS
142.04	446.68	445.43	462.52	SM
190.59	451.10	450.30	462.52	ML
230.11	461.54	461.54	462.52	
239.38	462.93	462.93	462.52	
246.34	464.05	464.05	462.52	

TRANSECT ID: C-166

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



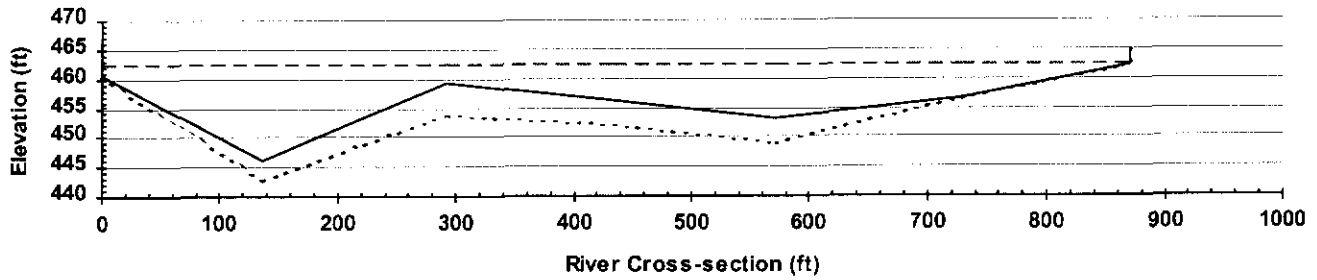
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	470.99	470.99	462.75	
16.84	463.59	463.59	462.75	
19.97	462.71	462.71	462.75	
204.27	451.13	450.53	462.75	CH
378.19	461.43	456.63	462.75	ML
499.73	459.15	450.40	462.75	SM
682.21	457.54	456.34	462.75	SW
848.94	452.81	450.81	462.75	??
1003.26	458.69	455.84	462.75	??
1189.44	453.20	453.20	462.75	
1198.79	462.78	462.78	462.75	
1201.70	463.67	463.67	462.75	
1202.20	467.80	467.80	462.75	

River Transect Cross-sectional Plots

TRANSECT ID: C-167

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

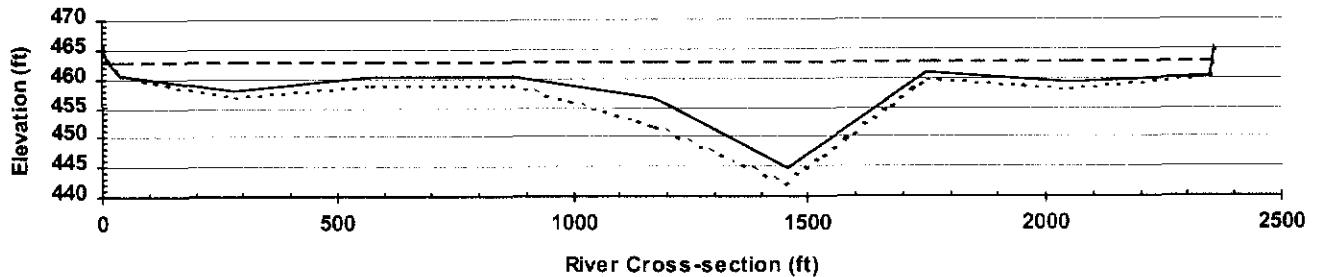


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	460.72	460.72	462.66	
135.64	446.09	442.59	462.66	SW
290.90	459.18	453.68	462.66	ML
432.46	456.10	452.24	462.66	MH
570.17	453.06	449.16	462.66	MH
726.62	456.60	456.60	462.66	NS
863.75	461.95	461.95	462.66	
870.73	462.37	462.37	462.66	
870.95	465.06	465.06	462.66	

TRANSECT ID: C-168

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



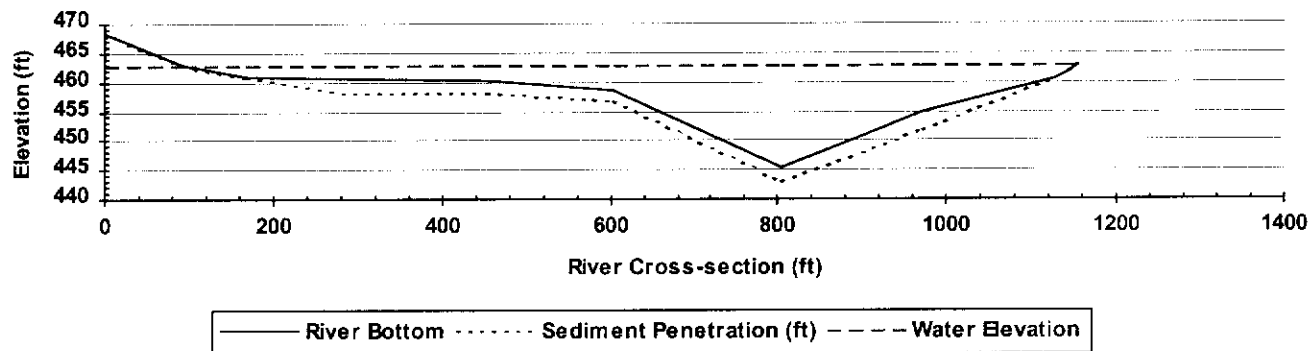
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	465.34	465.34	462.83	
11.72	462.96	462.96	462.83	
39.07	460.54	460.54	462.83	
280.18	457.89	456.69	462.83	ML
574.20	460.06	458.91	462.83	SC
871.41	460.22	458.72	462.83	SC
1175.82	456.37	451.72	462.83	ML
1454.13	444.72	442.12	462.83	MH
1749.46	460.74	459.74	462.83	ML
2049.86	459.18	458.18	462.83	ML
2346.46	460.37	460.37	462.83	
2353.60	462.71	462.71	462.83	
2356.60	465.27	465.27	462.83	

River Transect Cross-sectional Plots

TRANSECT ID: C-169

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

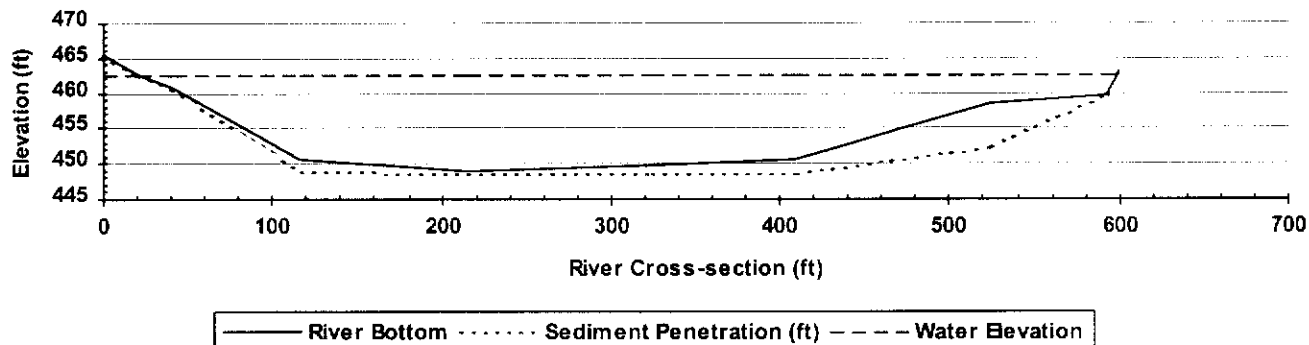


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	468.47	468.47	462.89	
93.05	462.90	462.90	462.89	
166.17	461.04	461.04	462.89	
280.78	460.57	458.32	462.89	ML
453.00	460.24	458.09	462.89	ML
603.13	458.46	456.86	462.89	ML
802.64	445.51	443.01	462.89	OL
971.54	454.82	451.72	462.89	ML
1129.63	460.60	460.60	462.89	
1145.32	461.88	461.88	462.89	
1153.82	462.88	462.88	462.89	

TRANSECT ID: C-170

AVERAGE VELOCITY (ft/sec) 0.0674

Solutia Database: TRANSECT CROSS-SECTIONS



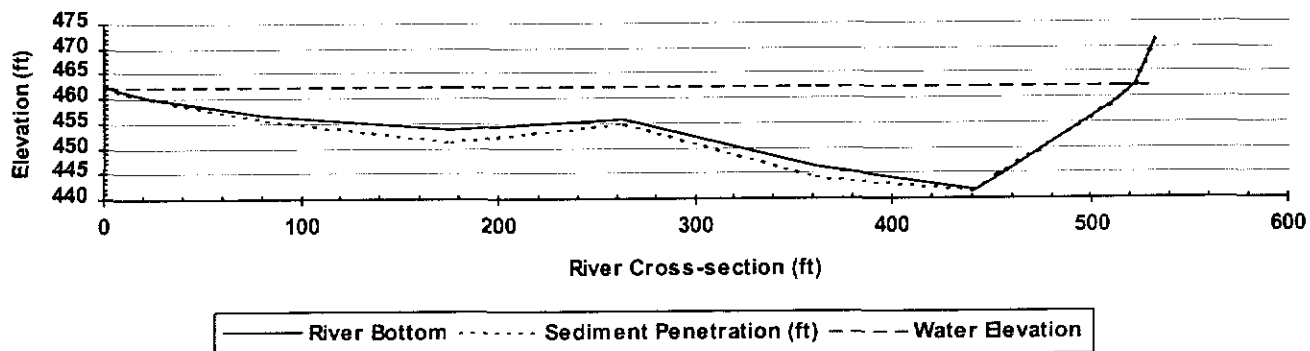
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	465.57	465.57	462.69	
19.86	462.65	462.65	462.69	
41.20	460.63	460.63	462.69	
116.53	450.68	448.93	462.69	MH
214.76	449.00	448.55	462.69	SW
323.55	449.68	448.53	462.69	ML
408.94	450.51	448.61	462.69	ML
523.93	458.38	452.38	462.69	OL
592.00	459.48	459.48	462.69	
599.02	462.73	462.73	462.69	

River Transect Cross-sectional Plots

TRANSECT ID: C-171

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

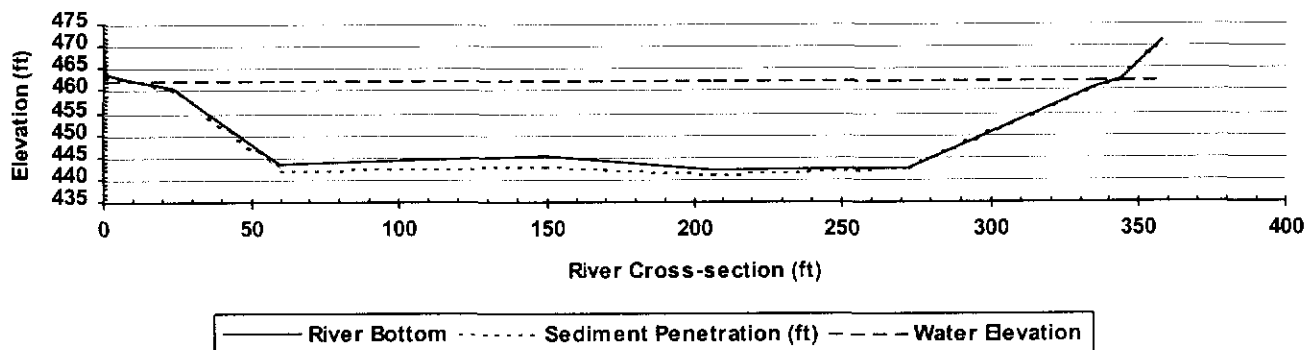


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	462.54	462.54	462.55	
23.10	460.22	460.22	462.55	
81.89	456.33	455.78	462.55	MH
175.17	453.88	451.58	462.55	OL
263.23	455.77	454.77	462.55	OL
361.15	448.24	444.24	462.55	OL
442.61	441.55	441.55	462.55	NS
512.07	459.33	459.33	462.55	
521.20	462.56	462.56	462.55	
531.60	471.05	471.05	462.55	

TRANSECT ID: C-172

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



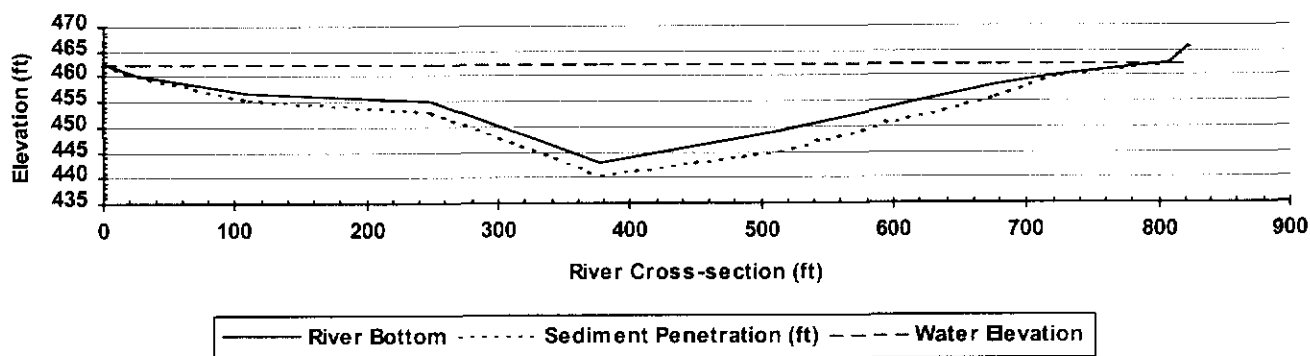
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	468.61	468.61	462.57	
0.48	463.86	463.86	462.57	
8.47	462.57	462.57	462.57	
23.66	460.41	460.41	462.57	
59.41	443.71	442.26	462.57	MH
149.20	445.30	442.90	462.57	ML
206.28	442.36	441.11	462.57	MH
272.69	442.75	442.75	462.57	NS
334.22	460.54	460.54	462.57	
343.51	462.56	462.56	462.57	
357.69	471.59	471.59	462.57	

River Transect Cross-sectional Plots

TRANSECT ID: C-173

AVERAGE VELOCITY (ft/sec) 0.0042

Solutia Database: TRANSECT CROSS-SECTIONS

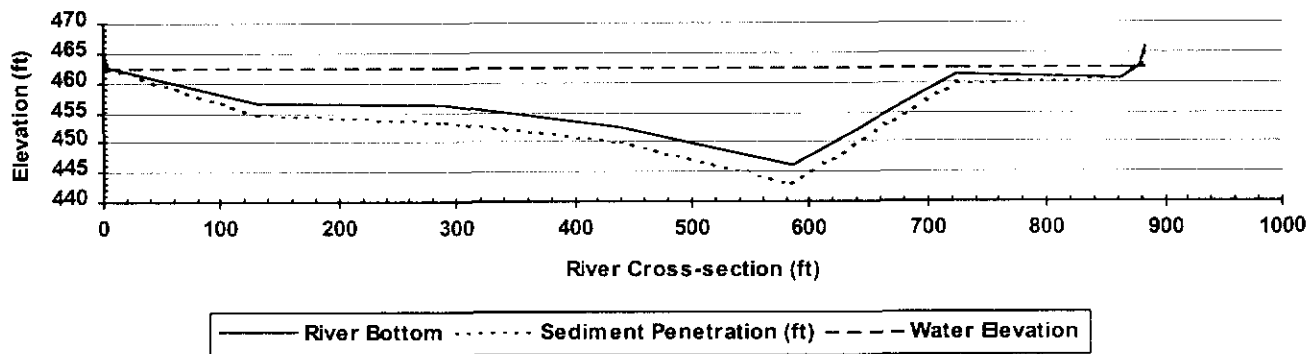


Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	462.51	462.51	462.56	
25.15	460.19	460.19	462.56	
109.58	456.74	455.44	462.56	ML
249.31	455.01	453.11	462.56	ML
376.80	442.78	440.33	462.56	ML
514.21	449.22	445.07	462.56	OL
676.16	458.34	455.74	462.56	ML
725.06	460.35	460.35	462.56	
808.39	462.60	462.60	462.56	
821.85	465.58	465.58	462.56	

TRANSECT ID: C-174

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



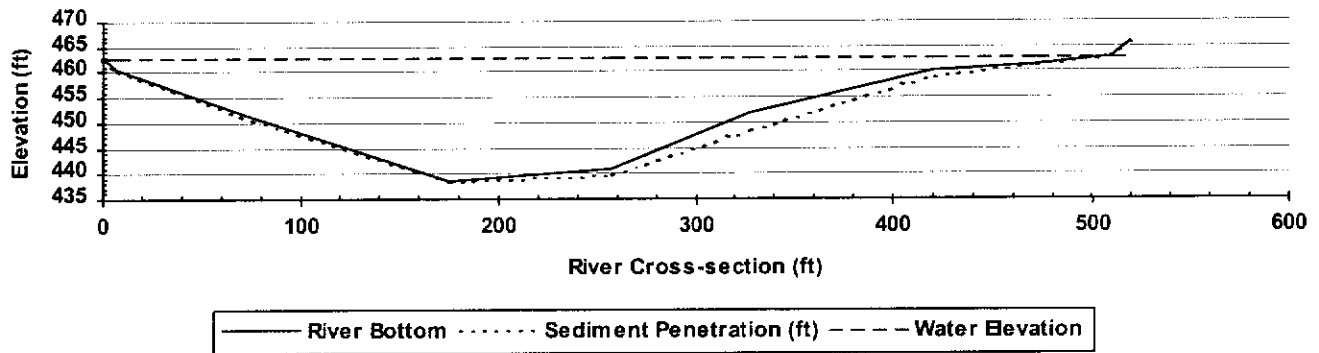
Cross-section (ft)	River Bottom (ft)	Sediment Penetration (ft)	Water Elevation (ft)	USCS Code
0.00	465.28	465.28	462.61	
2.68	462.66	462.66	462.61	
130.59	456.61	454.86	462.61	ML
289.95	456.08	453.53	462.61	ML
437.52	452.57	450.12	462.61	ML
586.07	443.10	443.10	462.61	SM
724.24	461.27	459.77	462.61	SP
863.49	460.44	460.44	462.61	
878.14	462.56	462.56	462.61	
883.92	465.80	465.80	462.61	

River Transect Cross-sectional Plots

TRANSECT ID: C-175

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

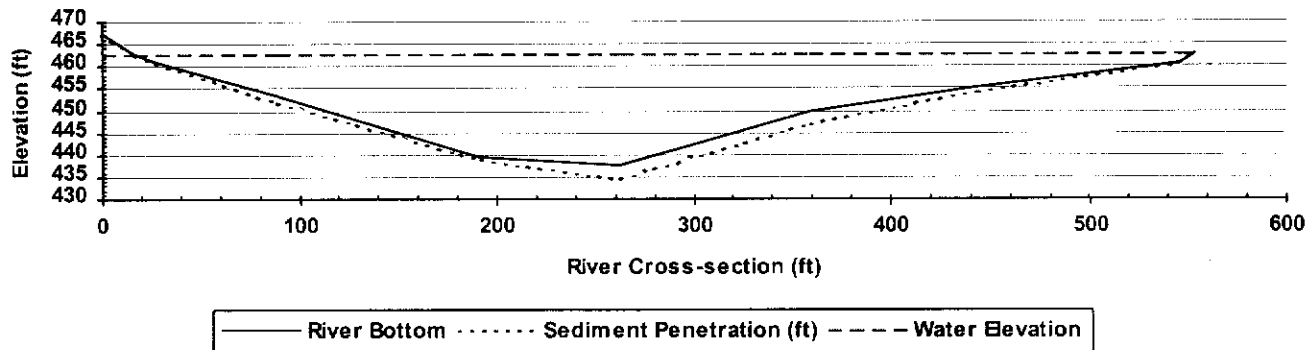


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	462.82	462.82	462.81	
6.82	460.62	460.62	462.81	
75.64	450.94	450.59	462.81	SC
174.70	438.51	438.51	462.81	NS
257.77	440.75	439.70	462.81	ML
327.75	452.01	448.51	462.81	SM
420.28	460.03	458.98	462.81	OL
470.91	461.17	461.17	462.81	
509.95	462.80	462.80	462.81	
519.05	465.70	465.70	462.81	

TRANSECT ID: C-176

AVERAGE VELOCITY (ft/sec) 0.0820

Solutia Database: TRANSECT CROSS-SECTIONS



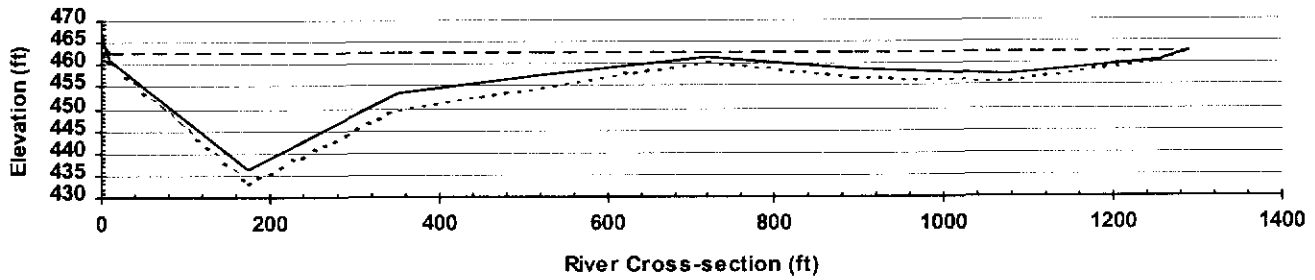
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	467.29	467.29	462.68	
15.59	462.66	462.66	462.68	
27.56	460.84	460.84	462.68	
88.69	453.20	451.80	462.68	ML
190.85	439.54	439.14	462.68	MH
262.15	437.78	434.63	462.68	MH
358.82	449.92	447.22	462.68	SM
442.73	455.13	454.13	462.68	ML
545.52	460.65	460.65	462.68	
553.80	462.71	462.71	462.68	

River Transect Cross-sectional Plots

TRANSECT ID: C-177

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

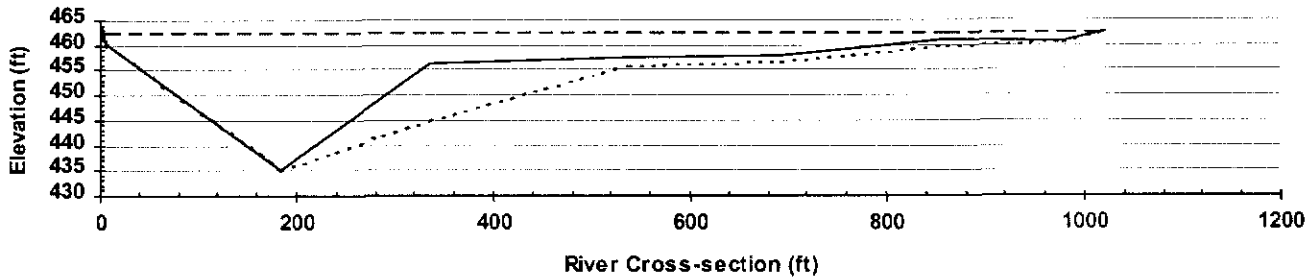


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	465.82	465.82	462.82	
7.99	462.93	462.93	462.82	
10.21	461.19	461.19	462.82	
174.92	436.44	432.94	462.82	MH
351.43	453.25	449.95	462.82	OL
520.12	457.43	454.93	462.82	SM
717.85	461.62	460.62	462.82	CL
893.66	458.68	457.03	462.82	ML
1074.72	457.30	456.00	462.82	MH
1253.91	460.51	460.51	462.82	
1289.32	462.70	462.70	462.82	

TRANSECT ID: C-178

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



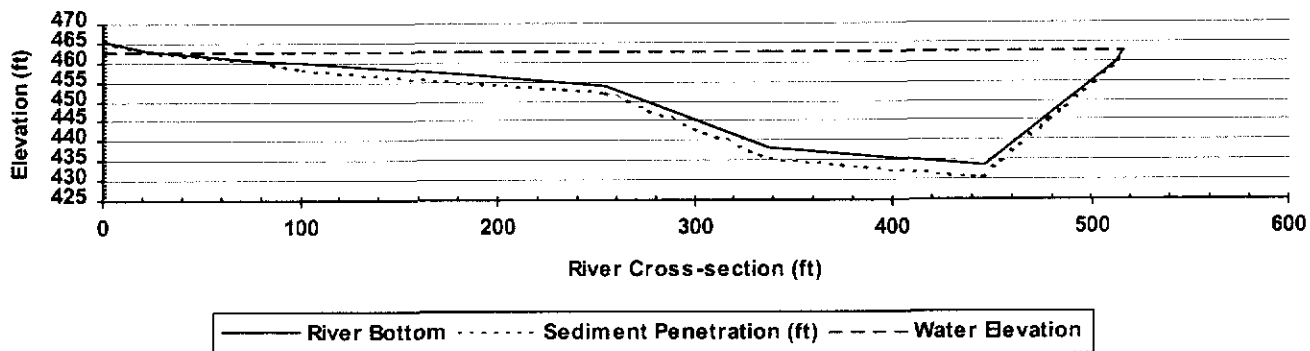
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	462.86	462.86	462.69	
6.13	460.20	460.20	462.69	
182.86	434.96	434.96	462.69	NS
336.07	456.37	444.87	462.69	SM
536.60	457.47	455.92	462.69	ML
692.92	457.97	456.62	462.69	ML
860.88	461.20	460.00	462.69	SC
978.22	460.60	460.60	462.69	
1022.35	462.53	462.53	462.69	

River Transect Cross-sectional Plots

TRANSECT ID: C-179

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

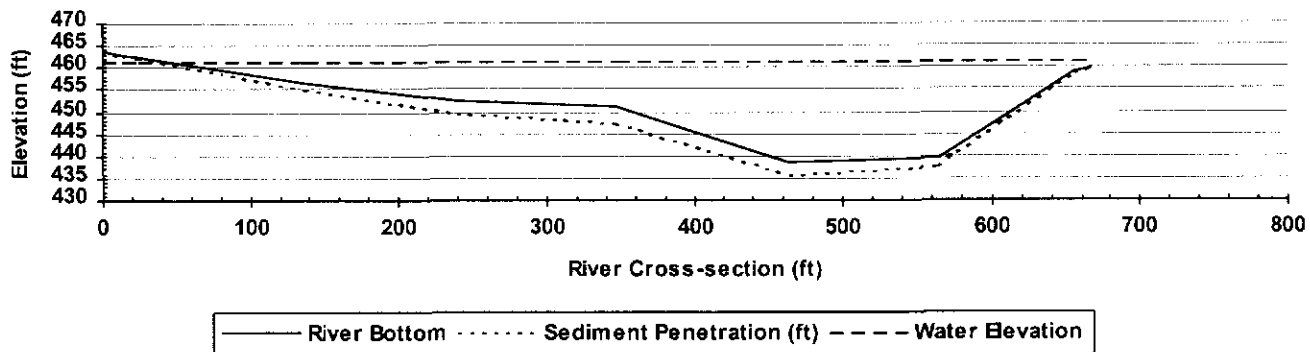


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	465.61	465.61	462.69	
21.95	462.72	462.72	462.69	
79.02	460.50	460.50	462.69	
100.17	459.98	458.53	462.69	ML
184.56	456.68	454.68	462.69	ML
254.49	453.96	452.06	462.69	ML
337.23	437.96	435.66	462.69	ML
446.17	433.77	430.67	462.69	ML
512.23	459.74	459.74	462.69	
515.20	462.66	462.66	462.69	

TRANSECT ID: C-180

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



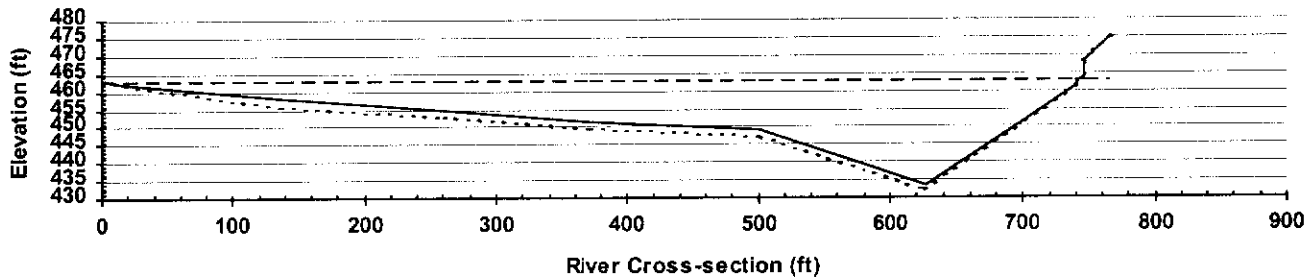
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	463.83	463.83	461.25	
13.03	462.77	462.77	461.25	
24.00	462.18	462.18	461.25	
136.75	456.41	455.31	461.25	ML
239.93	452.55	449.85	461.25	ML
347.15	451.11	447.51	461.25	ML
463.53	438.69	436.06	461.25	SM
565.48	439.49	437.49	461.25	MH
655.77	458.73	458.73	461.25	
667.81	459.72	459.72	461.25	

River Transect Cross-sectional Plots

TRANSECT ID: C-181

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

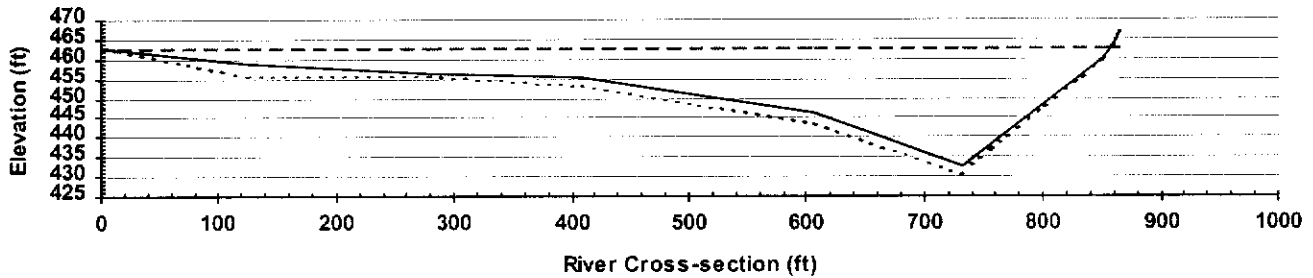


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	462.93	462.93	462.89	
16.59	462.08	462.08	462.89	
136.38	458.04	456.12	462.89	ML
258.77	454.99	452.89	462.89	ML
370.30	451.44	449.59	462.89	ML
500.35	449.28	447.48	462.89	ML
627.57	433.59	432.29	462.89	ML
738.02	461.05	461.05	462.89	
741.48	462.85	462.85	462.89	
745.50	463.76	463.76	462.89	
746.75	468.24	468.24	462.89	
765.55	475.02	475.02	462.89	

TRANSECT ID: C-182

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



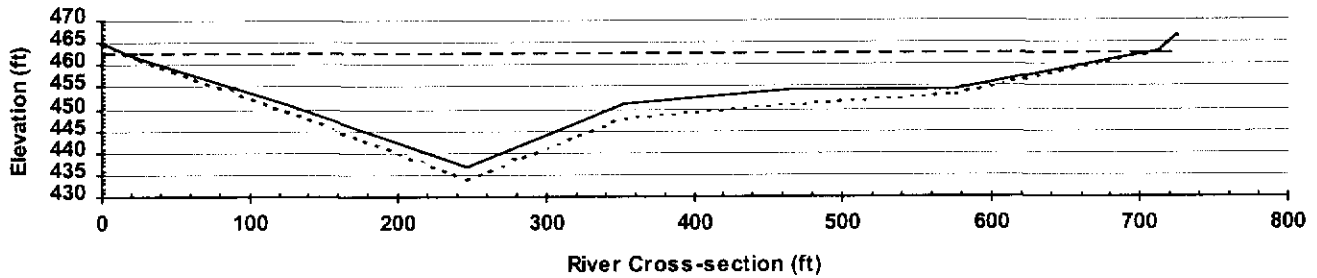
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	462.78	462.78	462.81	
12.67	462.27	462.27	462.81	
124.78	458.77	455.87	462.81	SC
277.73	456.48	455.88	462.81	CL
406.78	455.49	453.09	462.81	CL
606.38	446.07	443.77	462.81	CL
732.43	432.46	430.66	462.81	CH
850.92	459.67	459.67	462.81	
858.58	462.84	462.84	462.81	
864.54	466.85	466.85	462.81	

River Transect Cross-sectional Plots

TRANSECT ID: C-183

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

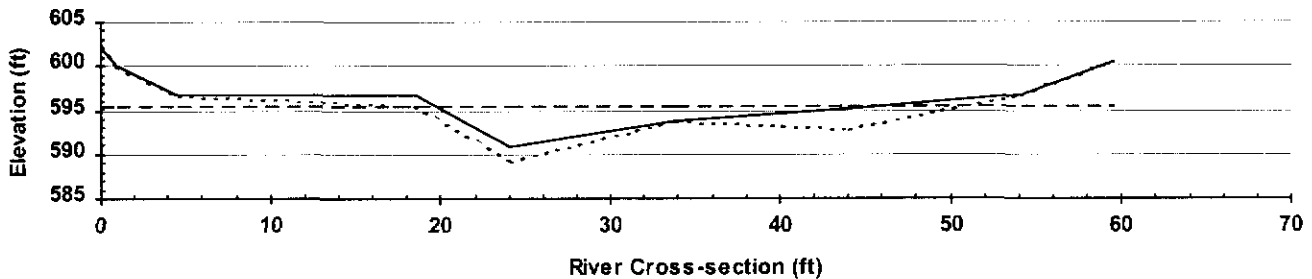


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	465.20	465.20	462.77	
14.96	462.66	462.66	462.77	
25.17	461.61	461.61	462.77	
124.52	451.16	449.86	462.77	SC
246.82	436.64	433.84	462.77	CL
352.53	450.98	447.98	462.77	CL
465.52	454.14	451.24	462.77	CL
574.76	454.33	453.47	462.77	CH
701.82	462.15	462.15	462.77	
711.79	462.77	462.77	462.77	
724.13	466.41	466.41	462.77	

TRANSECT ID: C-U1

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



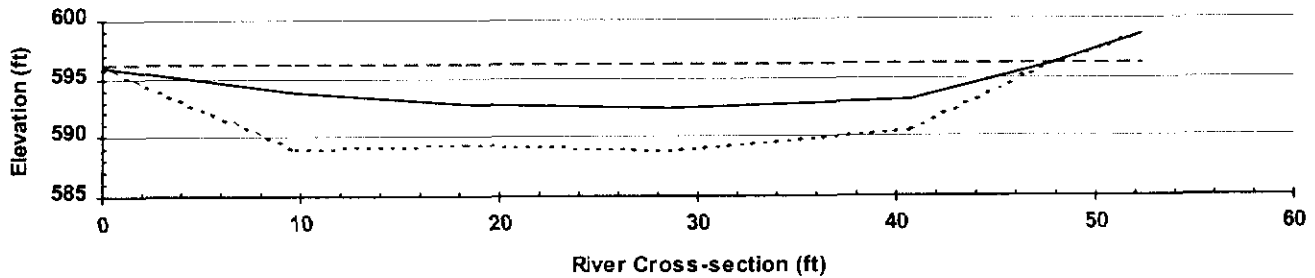
<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	602.18	602.18	595.47	
0.97	600.06	600.06	595.47	
4.50	596.66	596.66	595.47	
18.55	596.68	595.58	595.47	SM
24.03	590.95	589.25	595.47	GW
33.80	593.80	593.80	595.47	NS
44.02	595.06	592.96	595.47	GW
54.09	596.61	596.61	595.47	
59.58	600.48	600.48	595.47	

River Transect Cross-sectional Plots

TRANSECT ID: C-U2

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS

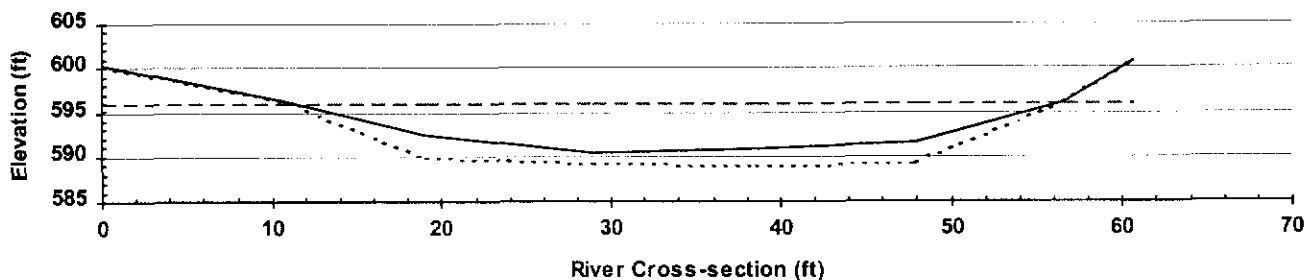


<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	595.94	595.94	596.35	
9.65	593.81	589.01	596.35	CL
18.30	592.76	589.46	596.35	CL
28.47	592.40	588.90	596.35	SM
40.68	593.02	590.52	596.35	SM
47.72	596.08	596.08	596.35	
52.25	596.60	596.60	596.35	

TRANSECT ID: C-U3

AVERAGE VELOCITY (ft/sec)

Solutia Database: TRANSECT CROSS-SECTIONS



<u>Cross-section (ft)</u>	<u>River Bottom (ft)</u>	<u>Sediment Penetration (ft)</u>	<u>Water Elevation (ft)</u>	<u>USCS Code</u>
0.00	600.39	600.39	596.00	
10.69	596.13	596.13	596.00	
19.04	592.49	589.99	596.00	SM
28.95	590.49	589.19	596.00	GM
38.52	590.85	588.95	596.00	SM
47.92	591.62	589.32	596.00	SM
56.59	596.06	596.06	596.00	
60.67	600.70	600.70	596.00	

BLASLAND, BOUCK & LEE, INC.

engineers & scientists

Appendix C

Thompson Engineering

MARCH 28, 2000

CLIENT: SAVANNAH LABORATORIES, INC.
PROJECT: SAVANNAH #: S9-17801

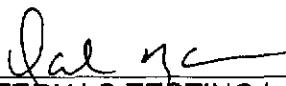
RE: LIST PERTAINING TO SAMPLE QUANTITIES

SAMPLE ID	DEPTH (IN.)	
C-026-SED-2	0-2"	*
C-042-SED-2	0-2.5"	*
C-015-SED-3	0-2"	
C-017-SED-2	0-2"	**
C-024-SED-2	0-3"	*
C-045-SED-4	0-2.5"	**
C-032-SED-3	0-2"	**
C-014-SED-3	0-2"	**
C-031-SED-1	0-2"	**
C-033-SED-2	0-2"	**
C-U2-SED-4	0-2"	*
C-013-SED-3	0-2"	**
C-U2-SED-3	0-2"	
C-U2-SED-1	0-2"	**
C-43-SED-4	0-2"	

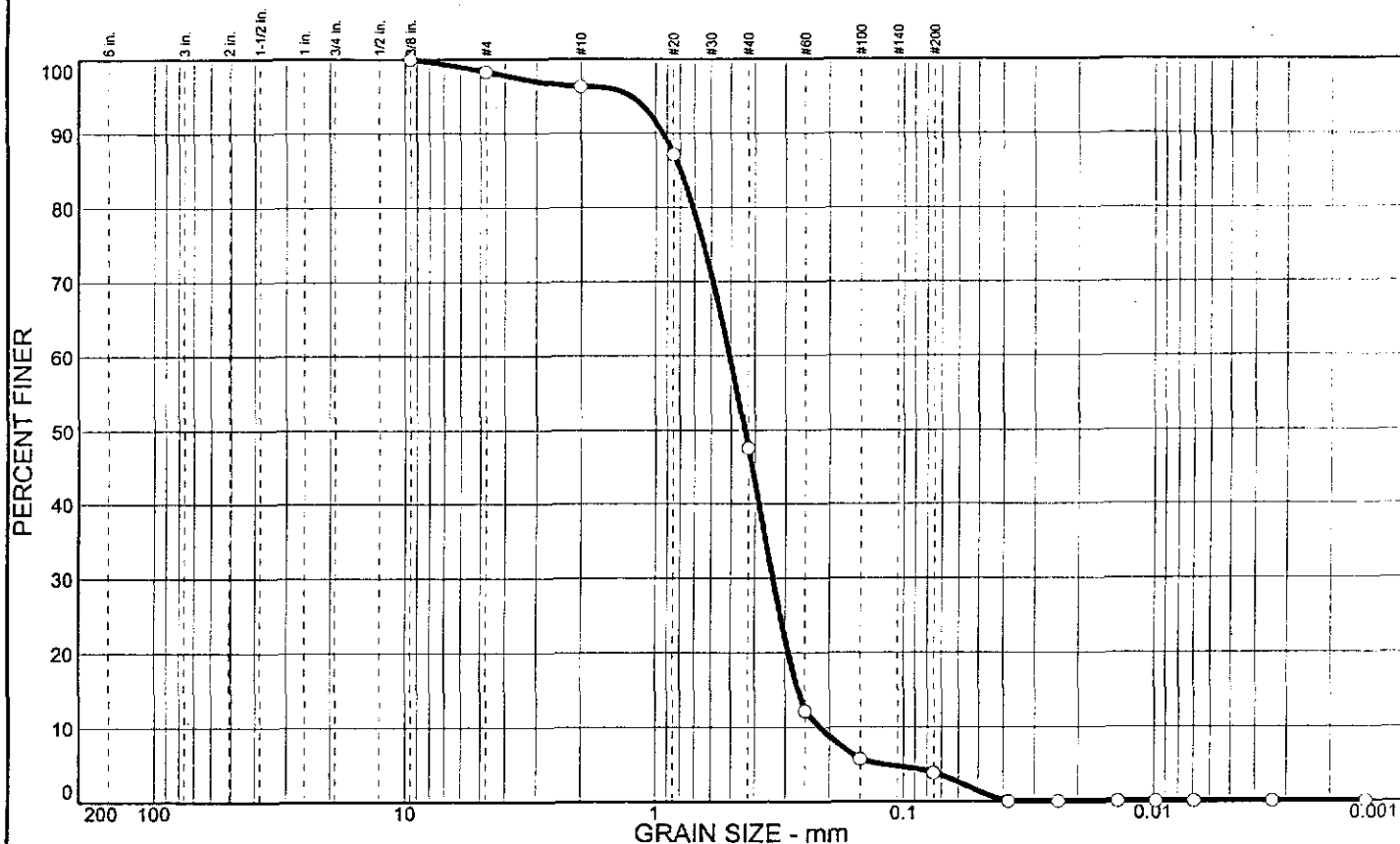
NOTE: EACH TEST PERFORMED USING ALL AVAILABLE MATERIAL.

* INSUFFICIENT MATERIAL AVAILABLE FOR TESTING.

**TEST PERFORMED, HOWEVER, ASTM RECOMMENDED QUANTITIES NOT AVAILABLE.


MATERIALS TESTING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	1.7	94.5	3.8	0.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.505		
D ₃₀	0.337		
D ₁₀	0.218		
COEFFICIENTS			
C _c	1.03		
C _u	2.32		

SIEVE number size	PERCENT FINER		
	○		
#4	98.3		
#10	96.3		
#20	87.2		
#40	47.6		
#60	12.2		
#100	5.7		
#200	3.8		

SOIL DESCRIPTION
 ○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-015-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project No.: 2000-00-0234

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project Number: 2000-00-0234

Sample Data

Source:

Sample No.: C-015-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 77.30
Tare = 0.00
Dry sample weight = 77.30
Sample split on number 10 sieve
Split sample data:
Sample and tare = 73.95 Tare = .00 Sample weight = 73.95
Cumulative weight retained tare= .00
Time for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	1.29	98.3
# 10	2.85	96.3
# 20	6.99	87.2
# 40	37.37	47.6
# 60	64.60	12.2
# 100	69.59	5.7
# 200	71.02	3.8

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 96.3
Weight of hydrometer sample: 73.95
Calculated biased weight= 76.79
Table of composite correction values:
Temp, deg C: 20.0 17.8
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.1	8.0	0.0	0.0138	8.0	15.0	0.0378	0.0
5.00	19.1	8.0	0.0	0.0138	8.0	15.0	0.0239	0.0
15.00	19.1	8.0	0.0	0.0138	8.0	15.0	0.0138	0.0
30.00	19.2	8.0	0.0	0.0138	8.0	15.0	0.0097	0.0
60.00	19.1	8.0	0.0	0.0138	8.0	15.0	0.0069	0.0
250.00	19.0	8.0	0.0	0.0138	8.0	15.0	0.0034	0.0
1440.00	17.8	8.0	0.0	0.0140	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 1.7 (% coarse = % fine = 1.7)

% SAND = 94.5 (% coarse = 2.0 % medium = 48.7 % fine = 43.8)

% FINES = 3.8

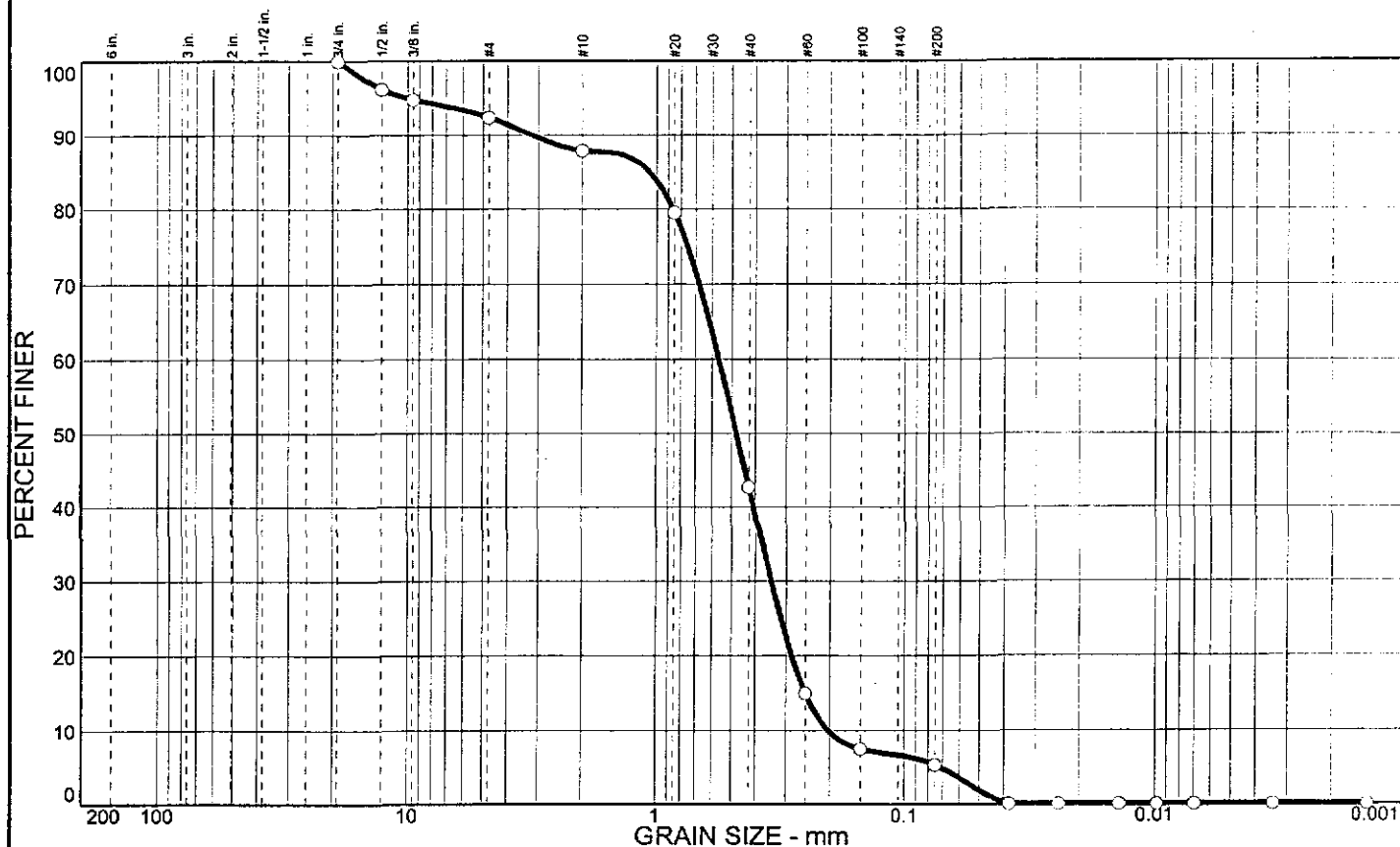
D₈₅= 0.80 D₆₀= 0.51 D₅₀= 0.44

D₃₀= 0.34 D₁₅= 0.27 D₁₀= 0.22

C_c= 1.0332 C_u= 2.323

Leroy Barley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	7.6	87.1	5.3	0.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	96.2		
.375	94.8		
X GRAIN SIZE			
D ₆₀	0.564		
D ₃₀	0.344		
D ₁₀	0.203		
X COEFFICIENTS			
C _c	1.04		
C _u	2.78		

SIEVE number size	PERCENT FINER		
	○		
#4	92.4		
#10	87.9		
#20	79.5		
#40	42.7		
#60	15.0		
#100	7.5		
#200	5.3		

SOIL DESCRIPTION ○ MEDIUM TO FINE SAND, TRACE GRAVEL
REMARKS: ○

○ Source:

Sample No.: C-017-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project No.: 2000-00-0234

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #:S9-17801
Project Number: 2000-00-0234

Sample Data

Source:
Sample No.: C-017-SED-2
Elev. or Depth: 0-2" Sample Length (in./cm.):
Location:
Description: MEDIUM TO FINE SAND, TRACE GRAVEL
Liquid Limit: - - - Plastic Limit: - - -
USCS Classification: - - - AASHTO Classification: - - -
Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 65.55
Tare = 0.00
Dry sample weight = 65.55
Sample split on number 10 sieve
Split sample data:
Sample and tare = 56.83 Tare = .00 Sample weight = 56.83
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	2.47	96.2
.375 inch	3.39	94.8
# 4	5.01	92.4
# 10	7.91	87.9
# 20	5.41	79.5
# 40	29.22	42.7
# 60	47.11	15.0
# 100	51.97	7.5
# 200	53.43	5.3

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 87.9
Weight of hydrometer sample: 56.83
Calculated biased weight= 64.65
Table of composite correction values:
Temp, deg C: 20.0 17.8
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent. finer
2.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0379	0.0
5.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0240	0.0
15.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0138	0.0
30.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0098	0.0
60.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0069	0.0
250.00	19.0	8.0	0.0	0.0138	8.0	15.0	0.0034	0.0
1440.00	17.8	8.0	0.0	0.0140	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 7.6 (% coarse = % fine = 7.6)

% SAND = 87.1 (% coarse = 4.5 % medium = 45.2 % fine = 37.4)

% FINES = 5.3

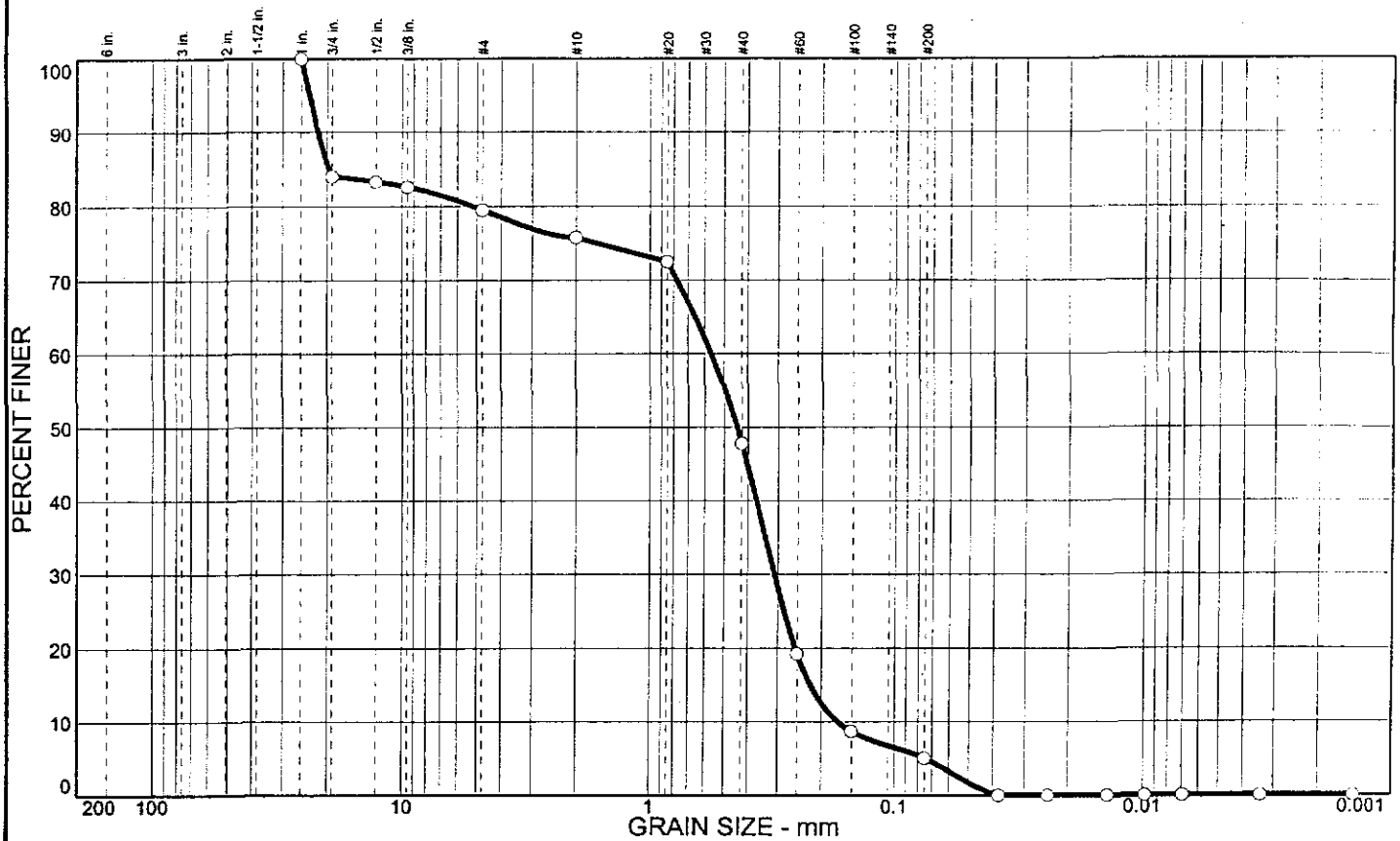
D₈₅= 1.07 D₆₀= 0.56 D₅₀= 0.48

D₃₀= 0.34 D₁₅= 0.25 D₁₀= 0.20

C_c= 1.0374 C_u= 2.7822


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	20.5	74.5	5.0	0.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
1	100.0		
.75	84.0		
.5	83.3		
.375	82.6		
GRAIN SIZE			
D ₆₀	0.565		
D ₃₀	0.310		
D ₁₀	0.171		
COEFFICIENTS			
C _c	1.00		
C _u	3.31		

SIEVE number size	PERCENT FINER		
	○		
#4	79.5		
#10	75.8		
#20	72.5		
#40	47.8		
#60	19.3		
#100	8.7		
#200	5.0		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND, WITH GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-045-SED-4

Elev./Depth: 0-2.5"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project No.: 2000-00-0234

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project Number: 2000-00-0234

Sample Data

Source:

Sample No.: C-045-SED-4

Elev. or Depth: 0-2.5"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 90.94
Tare = 0.00
Dry sample weight = 90.94
Sample split on number 10 sieve
Split sample data:
Sample and tare = 66.97 Tare = .00 Sample weight = 66.97
Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
1 inch	0.00	100.0
.75 inch	14.53	84.0
.5 inch	15.22	83.3
.375 inch	15.80	82.6
# 4	18.64	79.5
# 10	22.05	75.8
# 20	2.96	72.5
# 40	24.71	47.8
# 60	49.95	19.3
# 100	59.29	8.7
# 200	62.56	5.0

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 75.8
Weight of hydrometer sample: 66.97
Calculated biased weight= 88.35
Table of composite correction values:
Temp, deg C: 20.0 17.8
Comp. corr: -8.0 -8.0

scus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0379	0.0
5.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0239	0.0
15.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0138	0.0
30.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0098	0.0
60.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0069	0.0
250.00	19.1	8.0	0.0	0.0138	8.0	15.0	0.0034	0.0
1440.00	17.8	8.0	0.0	0.0140	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 20.5 (% coarse = 16.0 % fine = 4.5)

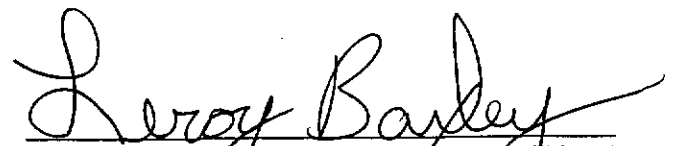
% SAND = 74.5 (% coarse = 3.7 % medium = 28.0 % fine = 42.8)

% FINES = 5.0

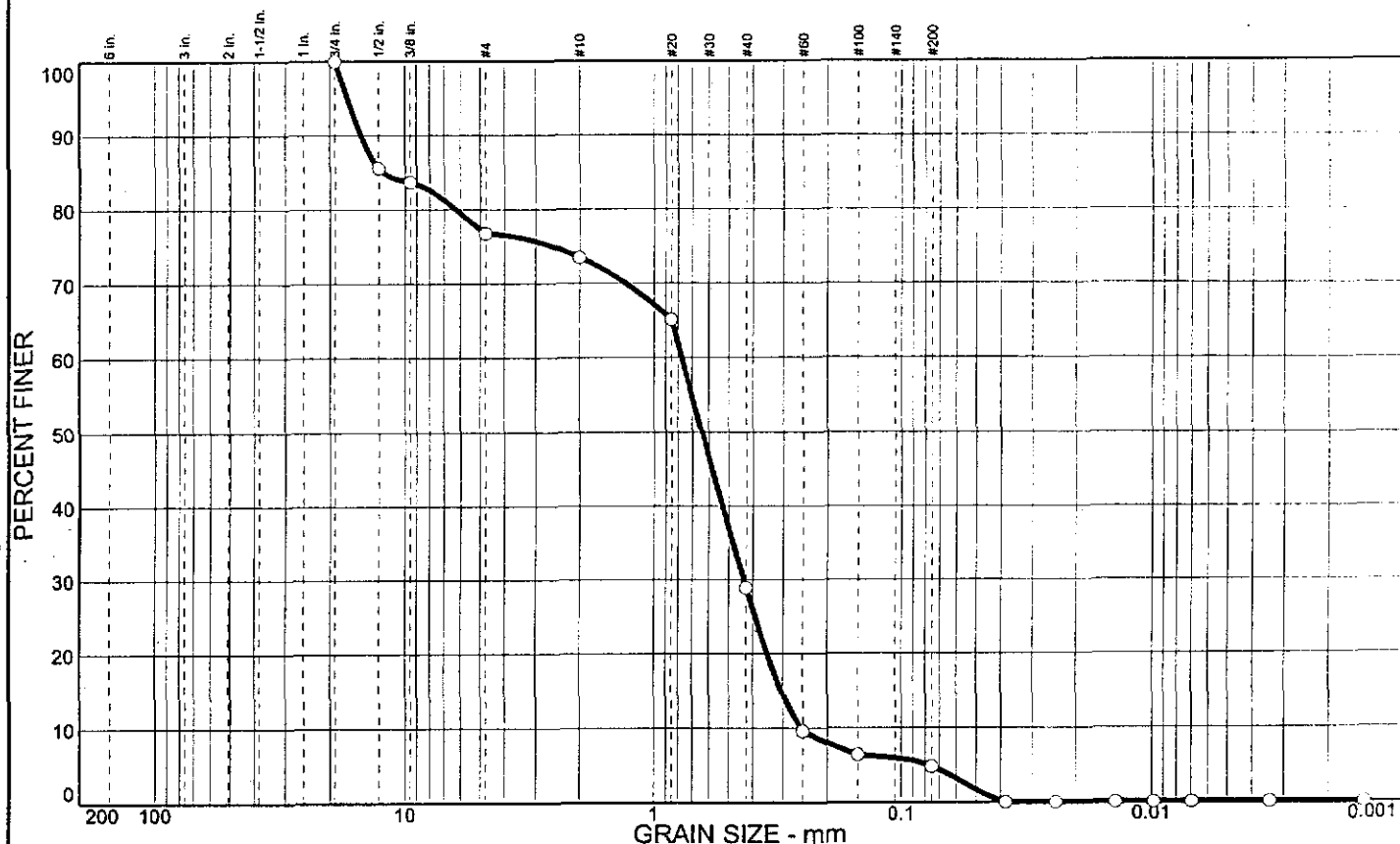
D₈₅= 19.61 D₆₀= 0.56 D₅₀= 0.44

D₃₀= 0.31 D₁₅= 0.22 D₁₀= 0.17

C_c= 0.9961 C_u= 3.3051


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	23.2	72.0	4.8	0.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	85.6		
.375	83.7		
GRAIN SIZE			
D ₆₀	0.773		
D ₃₀	0.435		
D ₁₀	0.255		
COEFFICIENTS			
C _c	0.96		
C _u	3.03		

SIEVE number size	PERCENT FINER		
	○		
#4	76.8		
#10	73.5		
#20	65.1		
#40	28.9		
#60	9.6		
#100	6.4		
#200	4.8		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND, WITH GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-032-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project No.: 2000-00-0234

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project Number: 2000-00-0234

Sample Data

Source:

Sample No.: C-032-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 69.31
Tare = 0.00
Dry sample weight = 69.31
Sample split on number 10 sieve
Split sample data:
Sample and tare = 50.47 Tare = .00 Sample weight = 50.47
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	9.97	85.6
.375 inch	11.30	83.7
# 4	16.07	76.8
# 10	18.40	73.5
# 20	5.77	65.1
# 40	30.63	28.9
# 60	43.86	9.6
# 100	46.11	6.4
# 200	47.17	4.8

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 73.5
Weight of hydrometer sample: 50.47
Calculated biased weight= 68.67
Table of composite correction values:
Temp, deg C: 20.0 17.8
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0379	0.0
5.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0240	0.0
15.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0138	0.0
30.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0098	0.0
60.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0069	0.0
250.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0034	0.0
1440.00	17.8	8.0	0.0	0.0140	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 23.2 (% coarse = % fine = 23.2)

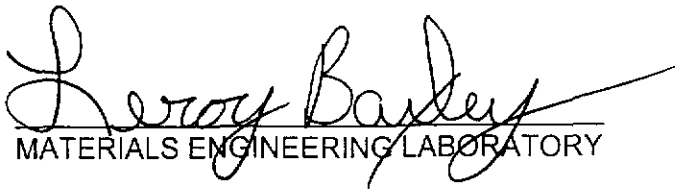
% SAND = 72.0 (% coarse = 3.3 % medium = 44.6 % fine = 24.1)

% FINES = 4.8

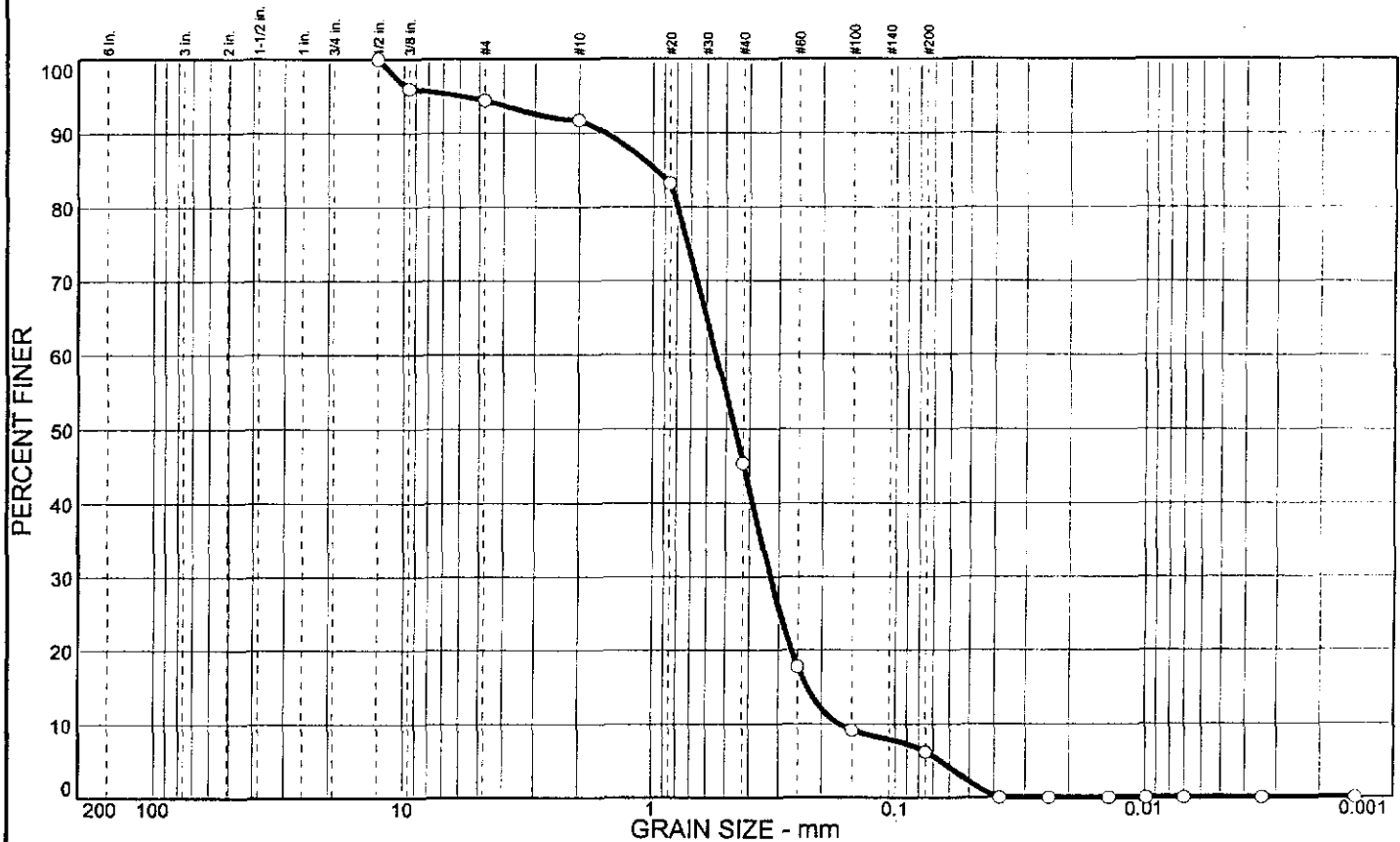
D₈₅= 12.21 D₆₀= 0.77 D₅₀= 0.64

D₃₀= 0.43 D₁₅= 0.30 D₁₀= 0.25

C_c= 0.9601 C_u= 3.032


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	5.6	88.2	6.2	0.0	---	---	---	---

SIEVE Inches size	PERCENT FINER		
	○		
5	100.0		
3/4	96.0		
GRAIN SIZE			
D ₆₀	0.549		
D ₃₀	0.326		
D ₁₀	0.169		
COEFFICIENTS			
C _c	1.14		
C _u	3.26		

SIEVE number size	PERCENT FINER		
	○		
#4	94.4		
#10	91.8		
#20	83.2		
#40	45.4		
#60	17.8		
#100	9.2		
#200	6.2		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-014-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project No.: 2000-00-0234

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project Number: 2000-00-0234

Sample Data

Source:

Sample No.: C-014-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 72.51
Tare = 0.00
Dry sample weight = 72.51
Sample split on number 10 sieve
Split sample data:
Sample and tare = 66.50 Tare = .00 Sample weight = 66.50
Cumulative weight retained tare= .00
Weight for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.5 inch	0.00	100.0
.375 inch	2.93	96.0
# 4	4.05	94.4
# 10	5.92	91.8
# 20	6.24	83.2
# 40	33.65	45.4
# 60	53.62	17.8
# 100	59.86	9.2
# 200	61.99	6.2

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 91.8
Weight of hydrometer sample: 66.50
Calculated biased weight= 72.44
Table of composite correction values:
Temp, deg C: 20.0 17.8
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0379	0.0
5.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0239	0.0
15.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0138	0.0
30.00	18.7	8.0	0.0	0.0139	8.0	15.0	0.0098	0.0
60.00	18.7	8.0	0.0	0.0139	8.0	15.0	0.0069	0.0
250.00	19.0	8.0	0.0	0.0138	8.0	15.0	0.0034	0.0
1440.00	17.8	8.0	0.0	0.0140	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 5.6 (% coarse = % fine = 5.6)

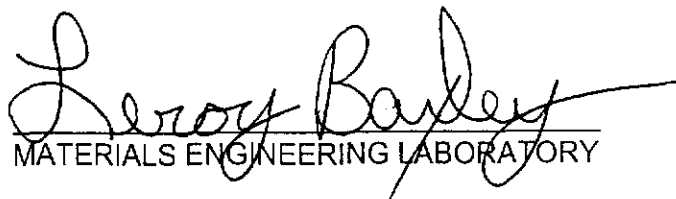
% SAND = 88.2 (% coarse = 2.6 % medium = 46.4 % fine = 39.2)

% FINES = 6.2

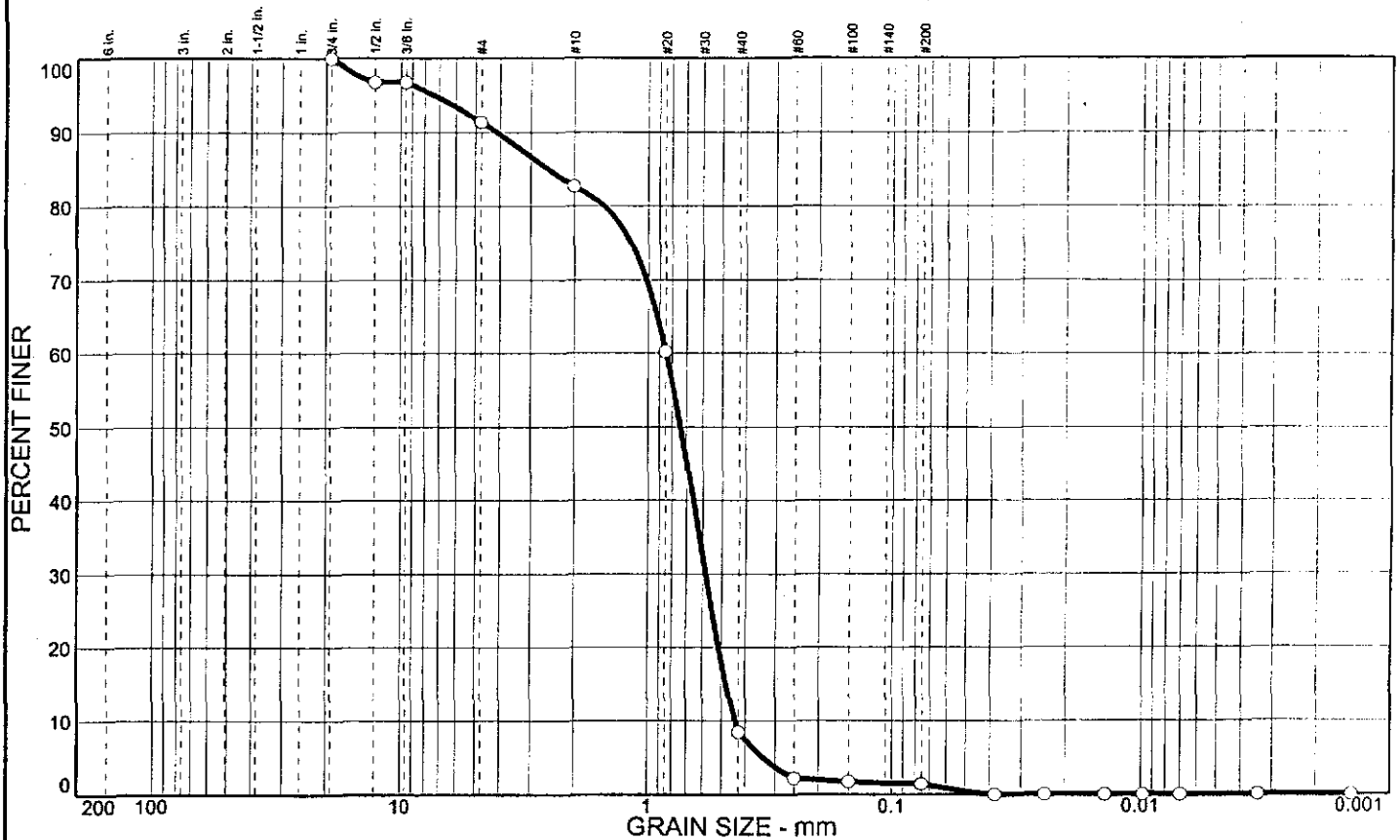
D₈₅ = 0.98 D₆₀ = 0.55 D₅₀ = 0.46

D₃₀ = 0.33 D₁₅ = 0.23 D₁₀ = 0.17

C_c = 1.1444 C_u = 3.2565


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
	8.6	90.0	1.4	0.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	96.8		
.375	96.8		
GRAIN SIZE			
D ₆₀	0.847		
D ₃₀	0.583		
D ₁₀	0.438		
COEFFICIENTS			
C _c	0.91		
C _u	1.93		

SIEVE number size	PERCENT FINER		
	○		
#4	91.4		
#10	82.7		
#20	60.2		
#40	8.5		
#60	2.2		
#100	1.7		
#200	1.4		

SOIL DESCRIPTION
○ MEDIUM SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-031-SED-1

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project No.: 2000-00-0234

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #:S9-17801
Project Number: 2000-00-0234

Sample Data

Source:
Sample No.: C-031-SED-1
Elev. or Depth: 0-2" Sample Length (in./cm.):
Location:
Description: MEDIUM SAND, TRACE GRAVEL
Liquid Limit: - - - Plastic Limit: - - -
USCS Classification: - - - AASHTO Classification: - - -
Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 59.80
Tare = 0.00
Dry sample weight = 59.80
Sample split on number 10 sieve
Split sample data:
 Sample and tare = 48.57 Tare = .00 Sample weight = 48.57
 Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	1.90	96.8
.375 inch	1.90	96.8
# 4	5.16	91.4
# 10	10.34	82.7
# 20	13.20	60.2
# 40	43.58	8.5
# 60	47.28	2.2
# 100	47.59	1.7
# 200	47.76	1.4

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 82.7
Weight of hydrometer sample: 48.57
Calculated biased weight= 58.73
Table of composite correction values:
 Temp, deg C: 19.0 17.8
 Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
 Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0379	0.0
5.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0240	0.0
15.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0138	0.0
30.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0098	0.0
60.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0069	0.0
250.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0034	0.0
1440.00	17.8	8.0	0.0	0.0140	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 8.6 (% coarse = % fine = 8.6)

% SAND = 90.0 (% coarse = 8.7 % medium = 74.2 % fine = 7.1)

% FINES = 1.4

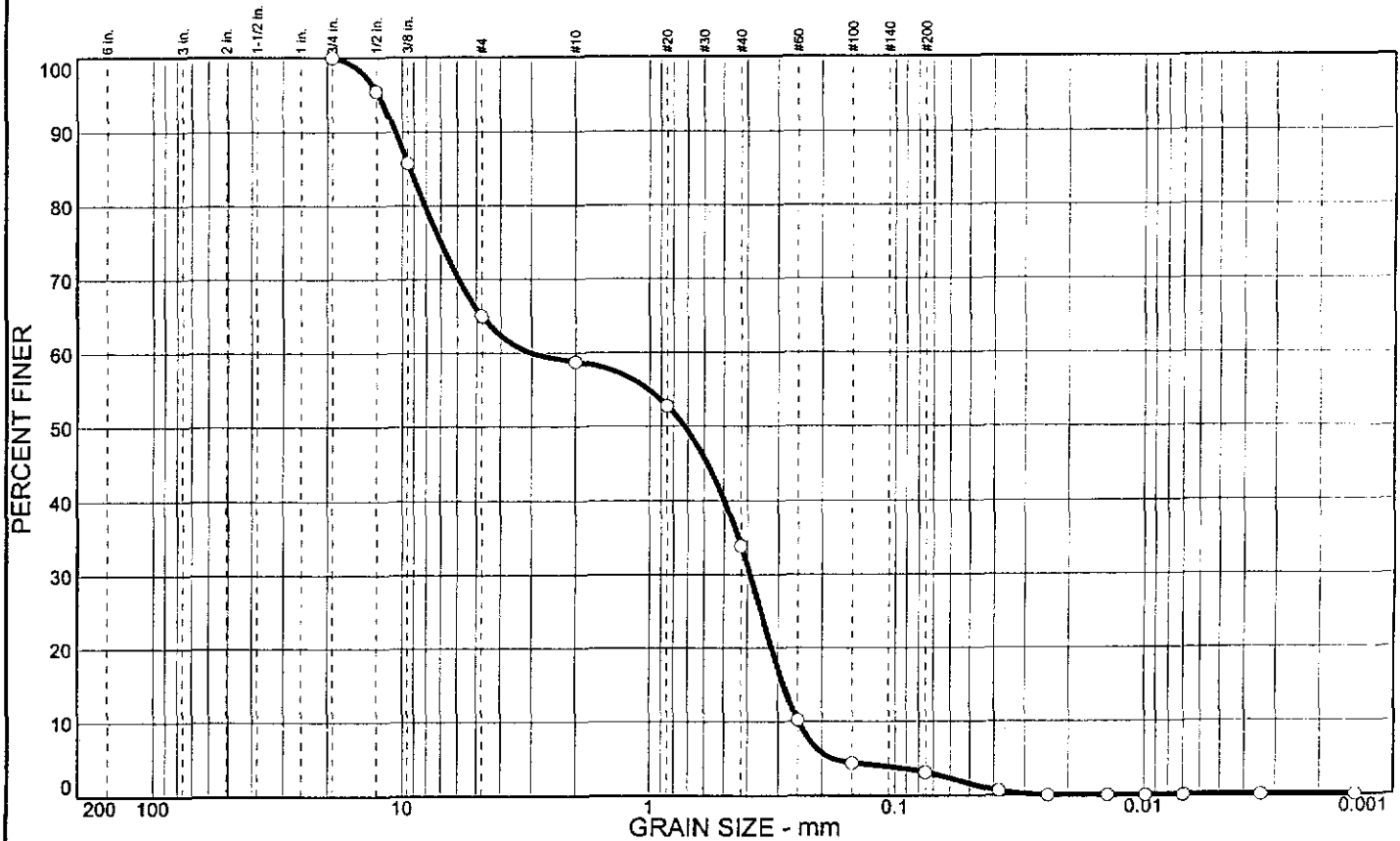
D₈₅= 2.55 D₆₀= 0.85 D₅₀= 0.74

D₃₀= 0.58 D₁₅= 0.48 D₁₀= 0.44

C_c= 0.9135 C_u= 1.9326


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	35.0	61.9	3.1	0.0	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.75	100.0		
.5	95.5		
.375	85.8		
GRAIN SIZE			
D ₆₀	3.01		
D ₃₀	0.390		
D ₁₀	0.248		
COEFFICIENTS			
C _c	0.20		
C _u	12.10		

SIEVE	PERCENT FINER		
number size	○		
#4	65.0		
#10	58.8		
#20	52.7		
#40	33.9		
#60	10.2		
#100	4.4		
#200	3.1		

SOIL DESCRIPTION
 ○ MEDIUM TO FINE SAND, WITH GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-033-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project No.: 2000-00-0234

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project Number: 2000-00-0234

Sample Data

Source:

Sample No.: C-033-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 89.94
Tare = 0.00
Dry sample weight = 89.94
Sample split on number 10 sieve
Split sample data:
Sample and tare = 51.94 Tare = .00 Sample weight = 51.94
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	4.05	95.5
.375 inch	12.80	85.8
# 4	31.51	65.0
# 10	37.10	58.8
# 20	5.35	52.7
# 40	22.00	33.9
# 60	42.97	10.2
# 100	48.05	4.4
# 200	49.25	3.1

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 58.8
Weight of hydrometer sample: 51.94
Calculated biased weight= 88.33
Table of composite correction values:
Temp, deg C: 19.0 17.8
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	8.5	0.5	0.0139	8.5	14.9	0.0380	0.6
5.00	18.5	8.0	0.0	0.0139	8.0	15.0	0.0241	0.0
15.00	18.5	8.0	0.0	0.0139	8.0	15.0	0.0139	0.0
30.00	18.6	8.0	0.0	0.0139	8.0	15.0	0.0098	0.0
60.00	18.7	8.0	0.0	0.0139	8.0	15.0	0.0069	0.0
250.00	18.4	8.0	0.0	0.0139	8.0	15.0	0.0034	0.0
1440.00	17.9	8.0	0.0	0.0140	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 35.0 (% coarse = % fine = 35.0)

% SAND = 61.9 (% coarse = 6.2 % medium = 24.9 % fine = 30.8)

% FINES = 3.1

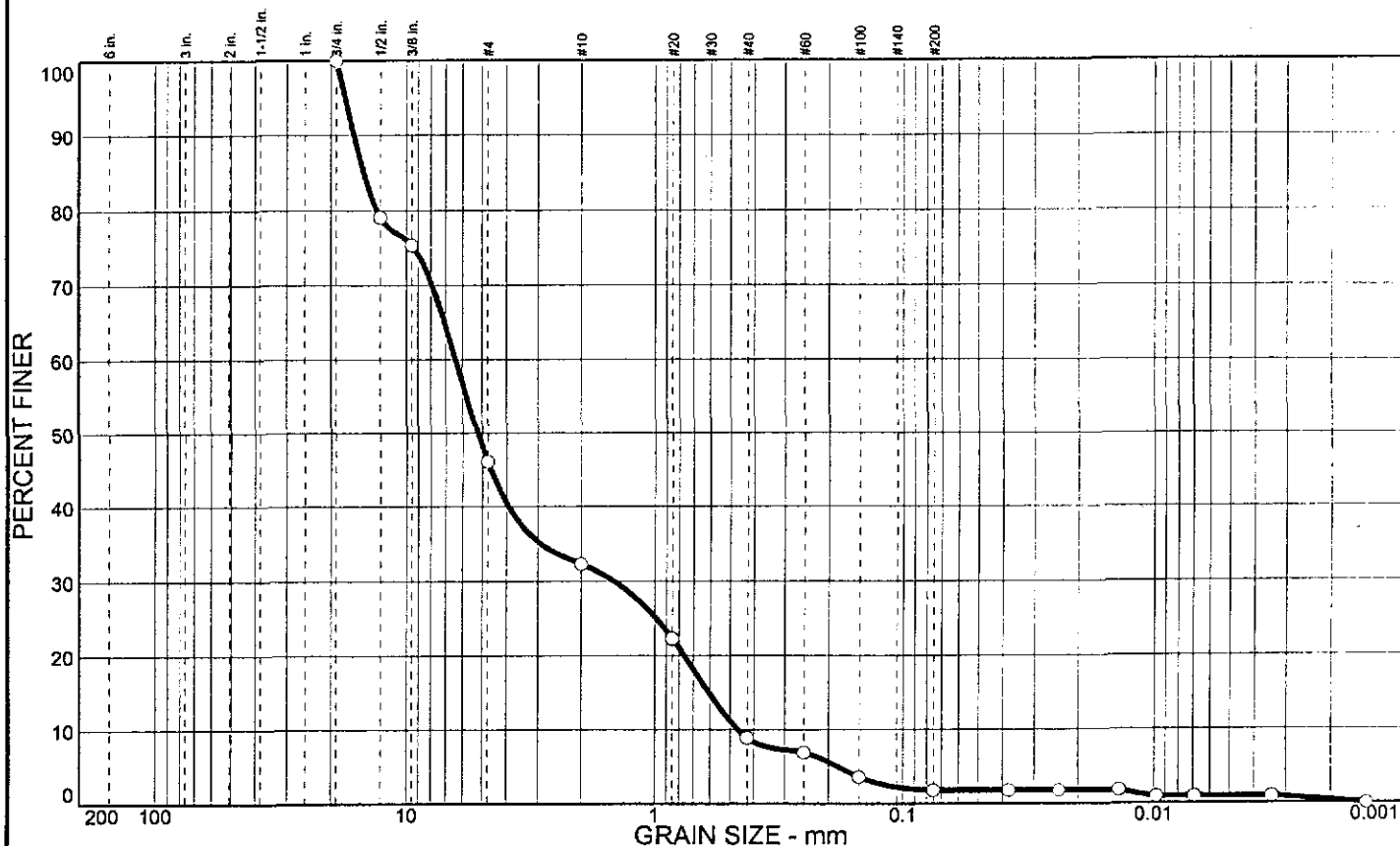
D₈₅= 9.32 D₆₀= 3.01 D₅₀= 0.72

D₃₀= 0.39 D₁₅= 0.28 D₁₀= 0.25

C_c= 0.2042 C_u= 12.1023


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	53.9	44.3	0.9	0.9	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.75	100.0		
.5	79.1		
.375	75.4		
GRAIN SIZE			
D ₆₀	6.38		
D ₃₀	1.47		
D ₁₀	0.464		
COEFFICIENTS			
C _c	0.73		
C _u	13.74		

SIEVE	PERCENT FINER		
number size	○		
#4	46.1		
#10	32.3		
#20	22.3		
#40	8.9		
#60	6.9		
#100	3.6		
#200	1.8		

SOIL DESCRIPTION
○ GRAVEL, WITH SAND

REMARKS:
○

○ Source:

Sample No.: C-013-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project No.: 2000-00-0234

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Test Number: 2000-00-0234

Sample Data

Source:

Sample No.: C-013-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: GRAVEL, WITH SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 115.02

Tare = 0.00

Dry sample weight = 115.02

Sample split on number 10 sieve

Split sample data:

Sample and tare = 35.46 Tare = .00 Sample weight = 35.46

Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	24.04	79.1
.375 inch	28.32	75.4
# 4	62.02	46.1
# 10	77.87	32.3
# 20	11.03	22.3
# 40	25.67	8.9
# 60	27.93	6.9
# 100	31.50	3.6
# 200	33.54	1.8

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 32.3

Weight of hydrometer sample: 35.46

Calculated biased weight= 109.78

Table of composite correction values:

Temp, deg C: 19.0 17.8

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0376	1.8
5.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0238	1.8
15.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0137	1.8
30.00	18.7	9.0	1.0	0.0139	9.0	14.8	0.0097	0.9
60.00	18.6	9.0	1.0	0.0139	9.0	14.8	0.0069	0.9
250.00	18.3	9.0	1.0	0.0139	9.0	14.8	0.0034	0.9
1440.00	17.9	8.0	0.0	0.0140	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 53.9 (% coarse = % fine = 53.9)

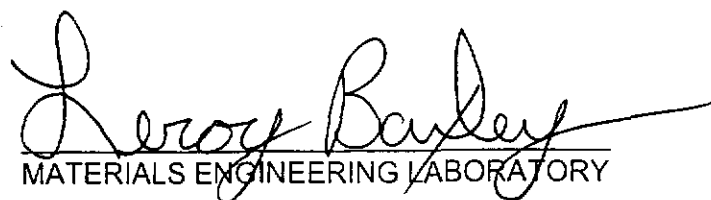
% SAND = 44.3 (% coarse = 13.8 % medium = 23.4 % fine = 7.1)

% SILT = 0.9 % CLAY = 0.9 (% CLAY COLLOIDS = 0.0)

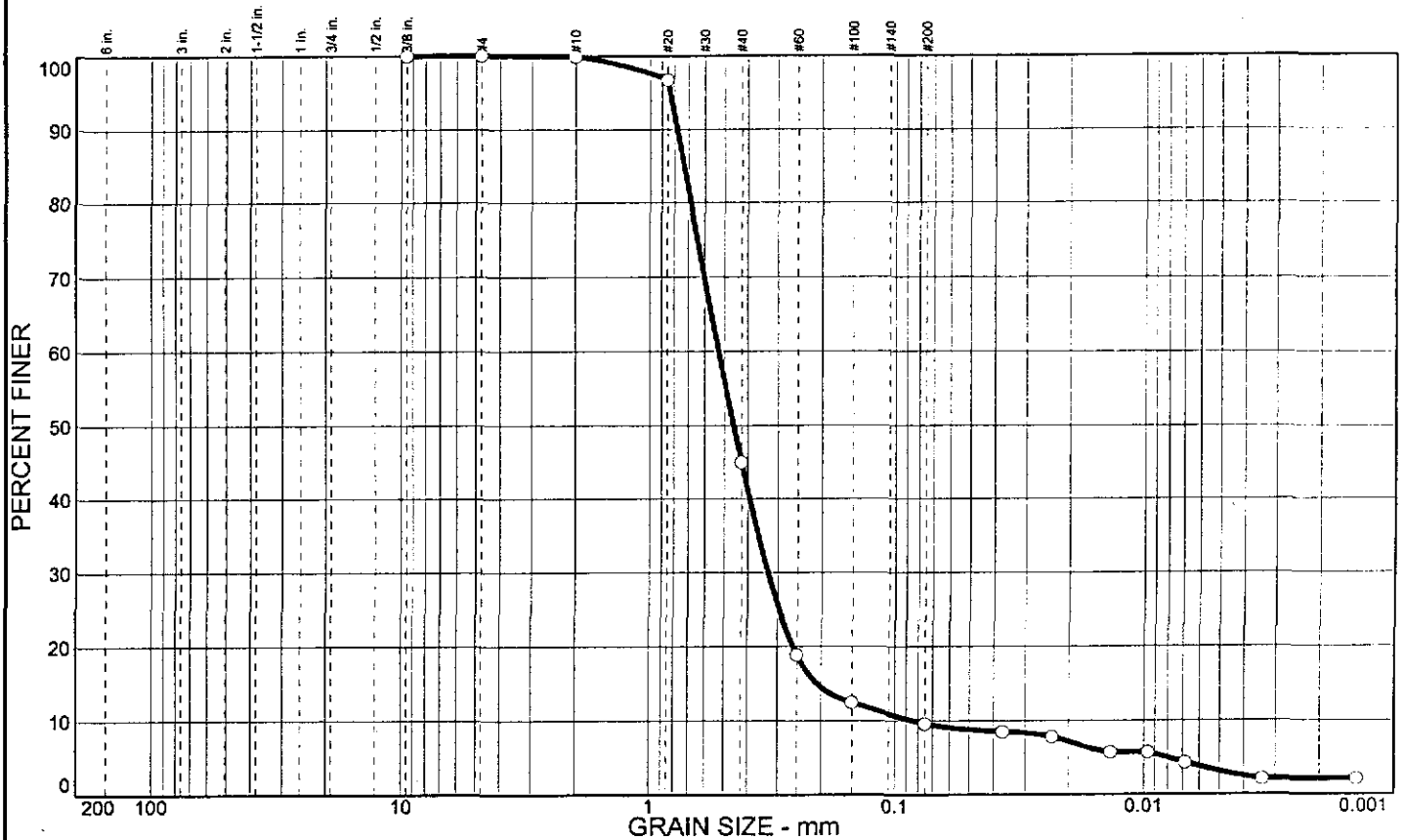
D₈₅ = 14.82 D₆₀ = 6.38 D₅₀ = 5.20

D₃₀ = 1.47 D₁₅ = 0.61 D₁₀ = 0.46

C_c = 0.7326 C_u = 13.7447


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project Number: 2000-00-0234

Sample Data

Source:

Sample No.: C-U2-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	70.40	
Tare =	0.00	
Dry sample weight =	70.40	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 70.25 Tare = .00 Sample weight = 70.25		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.10	99.9
# 20	2.19	96.8
# 40	38.63	45.0
# 60	56.97	18.9
# 100	61.43	12.5
# 200	63.53	9.6

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 99.9

Weight of hydrometer sample: 70.25

Calculated biased weight= 70.32

Table of composite correction values:

Temp, deg C:	19.0	17.8
Comp. corr:	-8.0	-8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	14.0	6.0	0.0139	14.0	14.0	0.0368	8.5
5.00	18.5	13.5	5.5	0.0139	13.5	14.1	0.0233	7.8
15.00	18.6	12.0	4.0	0.0139	12.0	14.3	0.0136	5.7
30.00	18.6	12.0	4.0	0.0139	12.0	14.3	0.0096	5.7
60.00	18.7	11.0	3.0	0.0139	11.0	14.5	0.0068	4.3
250.00	18.5	9.5	1.5	0.0139	9.5	14.7	0.0034	2.1
1440.00	17.9	9.5	1.5	0.0140	9.5	14.7	0.0014	2.1

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 90.4 (% coarse = 0.1 % medium = 54.9 % fine = 35.4)

% SILT = 6.5 % CLAY = 3.1

D₈₅ = 0.73 D₆₀ = 0.53 D₅₀ = 0.46

D₃₀ = 0.33 D₁₅ = 0.21 D₁₀ = 0.08

C_c = 2.4246 C_u = 6.2332

Leroy Bayley
MATERIALS ENGINEERING LABORATORY

Grain size distribution curve for a soil sample. The graph plots Percent Finer (Y-axis, 0 to 100) against Grain Size in mm (X-axis, logarithmic scale from 200 to 0.001). The curve shows a sharp drop between 0.425 mm and 0.075 mm, indicating a well-graded soil. Key data points are marked with circles and labeled with sieve numbers and corresponding percent finer values.

Sieve Size (mm)	Percent Finer (%)
6 in.	100
3 in.	100
2 in.	100
1 1/2 in.	100
1 in.	100
3/4 in.	100
1/2 in.	100
3/8 in.	100
#4	100
#10	100
#20	100
#30	100
#40	88
#60	52
#100	36
#140	30
#200	29
0.425 mm	29
0.25 mm	21
0.15 mm	17
0.075 mm	15
0.0425 mm	13
0.025 mm	1
0.0075 mm	1

[illegible]

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
	GRAIN SIZE		
D ₆₀	0.291		
D ₃₀	0.0908		
D ₁₀	0.0057		
	COEFFICIENTS		
C _c	4.94		
C _u	50.68		

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	100.0		
#20	98.8		
#40	87.7		
#60	51.2		
#100	35.6		
#200	29.5		

○ SILTY MEDIUM TO FINE SAND

REMARKS:

Elev./Depth: 0-2"

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Object Number: 2000-00-0234

Sample Data

Source:

Sample No.: C-U2-SED-1

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 24.91
Tare = 0.00
Dry sample weight = 24.91
Sample split on number 10 sieve
Split sample data:
Sample and tare = 24.53 Tare = .00 Sample weight = 24.53
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.01	100.0
# 20	0.30	98.8
# 40	3.02	87.7
# 60	11.97	51.2
# 100	15.81	35.6
# 200	17.29	29.5

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100.0
Weight of hydrometer sample: 24.53
Calculated biased weight= 24.53
Table of composite correction values:
Temp, deg C: 19.0 17.8
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	15.0	7.0	0.0139	15.0	13.8	0.0366	28.5
5.00	18.5	13.0	5.0	0.0139	13.0	14.2	0.0234	20.4
15.00	18.6	12.0	4.0	0.0139	12.0	14.3	0.0136	16.3
30.00	18.7	11.5	3.5	0.0139	11.5	14.4	0.0096	14.3
60.00	18.7	11.0	3.0	0.0139	11.0	14.5	0.0068	12.2
250.00	18.5	8.5	0.5	0.0139	8.5	14.9	0.0034	2.0
1440.00	17.9	8.5	0.5	0.0140	8.5	14.9	0.0014	2.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

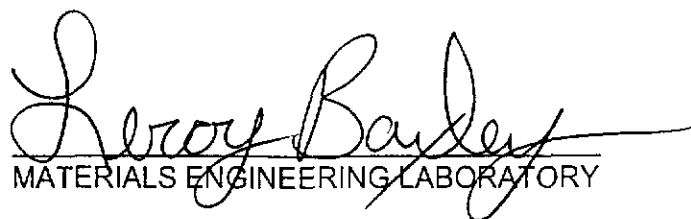
% SAND = 70.5 (% coarse = 0.0 % medium = 12.3 % fine = 58.2)

% SILT = 21.7 % CLAY = 7.8

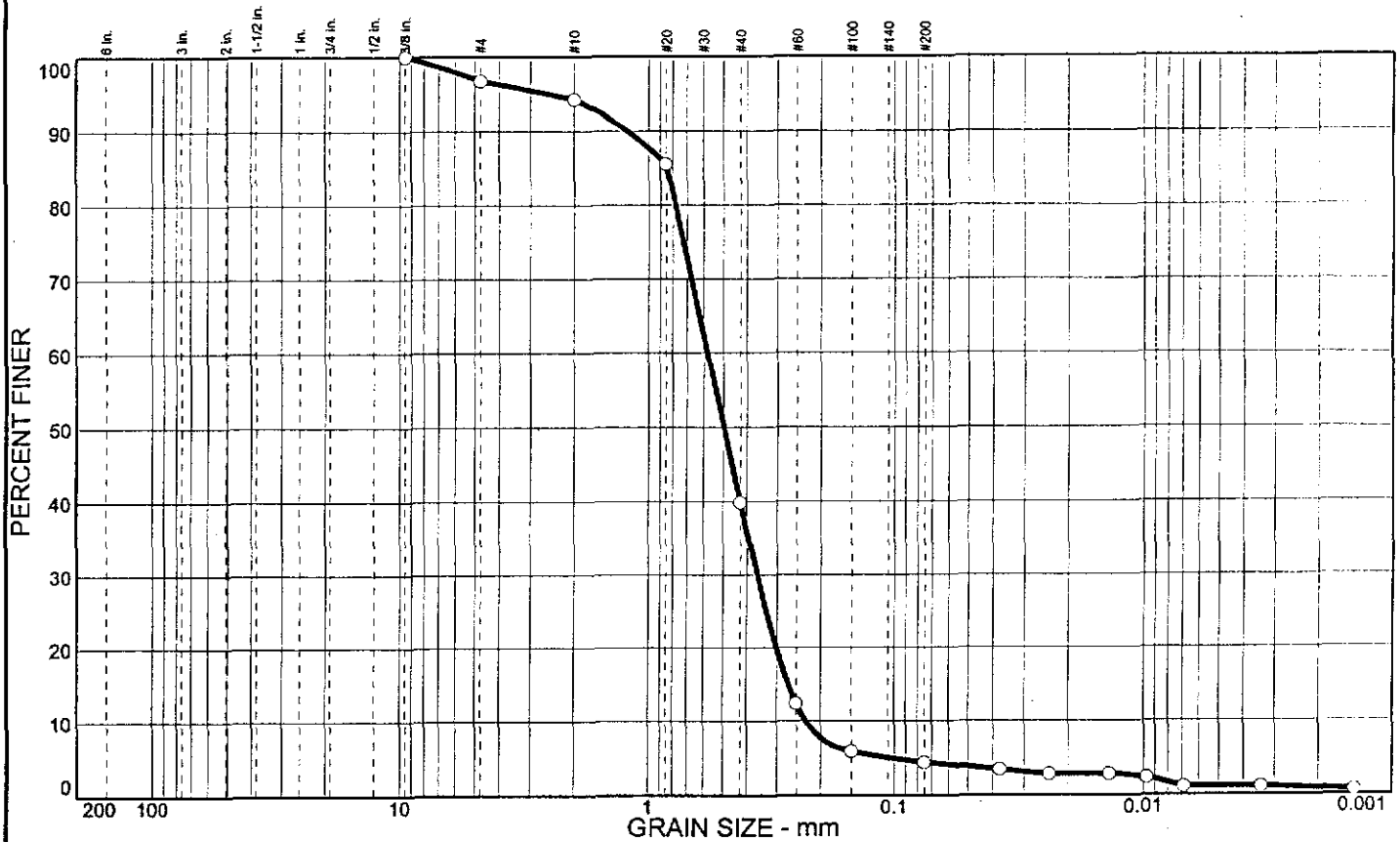
D₈₅ = 0.41 D₆₀ = 0.29 D₅₀ = 0.24

D₃₀ = 0.09 D₁₅ = 0.01 D₁₀ = 0.01

C_c = 4.9439 C_u = 50.6753


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
	3.2	92.4	3.3	1.1	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
X GRAIN SIZE			
D60	0.578		
D30	0.362		
D10	0.229		
X COEFFICIENTS			
C _c	0.99		
C _u	2.53		

SIEVE number size	PERCENT FINER		
	○		
#4	96.8		
#10	94.3		
#20	85.6		
#40	39.9		
#60	12.4		
#100	5.9		
#200	4.4		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-043-SED-4

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project No.: 2000-00-0234

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17801

Project Number: 2000-00-0234

Sample Data

Source:

Sample No.: C-043-SED-4

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	88.29	
Tare =	0.00	
Dry sample weight =	88.29	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare =	83.22	Tare = .00 Sample weight = 83.22
Cumulative weight retained tare=	.00	
Tare for cumulative weight retained=	.00	
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	2.79	96.8
# 10	5.06	94.3
# 20	7.69	85.6
# 40	47.99	39.9
# 60	72.29	12.4
# 100	78.00	5.9
# 200	79.31	4.4

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 94.3
Weight of hydrometer sample: 83.22
Calculated biased weight= 88.25
Table of composite correction values:
Temp, deg C: 19.0 17.8
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	11.0	3.0	0.0139	11.0	14.5	0.0374	3.4
5.00	18.5	10.5	2.5	0.0139	10.5	14.6	0.0237	2.8
15.00	18.6	10.5	2.5	0.0139	10.5	14.6	0.0137	2.8
30.00	18.8	10.0	2.0	0.0139	10.0	14.7	0.0097	2.3
60.00	18.8	9.0	1.0	0.0139	9.0	14.8	0.0069	1.1
250.00	18.4	9.0	1.0	0.0139	9.0	14.8	0.0034	1.1
1440.00	17.9	8.5	0.5	0.0140	8.5	14.9	0.0014	0.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 3.2 (% coarse = % fine = 3.2)

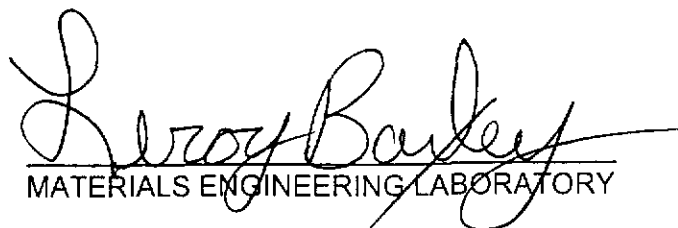
% SAND = 92.4 (% coarse = 2.5 % medium = 54.4 % fine = 35.5)

% SILT = 3.3 % CLAY = 1.1

D₈₅= 0.84 D₆₀= 0.58 D₅₀= 0.50

D₃₀= 0.36 D₁₅= 0.27 D₁₀= 0.23

C_c= 0.9929 C_u= 2.5279


MATERIALS ENGINEERING LABORATORY

Thompson Engineering

MARCH 28, 2000

CLIENT: SAVANNAH LABORATORIES, INC.
PROJECT: SAVANNAH #: S9-17840

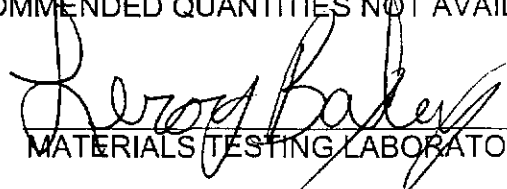
RE: LIST PERTAINING TO SAMPLE QUANTITIES

SAMPLE ID	DEPTH (IN.)	
C-053-SED-2	0-3.5"	**
C-054-SED-4	0-2"	
C-059-SED-4	0-2"	
C-060-SED-4	0-2"	
C-063-SED-1	0-2"	*
C-064-SED-1	0-2"	*
C-065-SED-3	0-2"	*
C-068-SED-1	0-3.5"	*
C-070-SED-4	0-2.5"	**
C-074-SED-1	0-3"	*
C-082-SED-2	0-1.5"	**
C-086-SED-3	0-2.5"	**
C-106-SED-3	0-2"	*
C-111-SED-2	0-2"	*

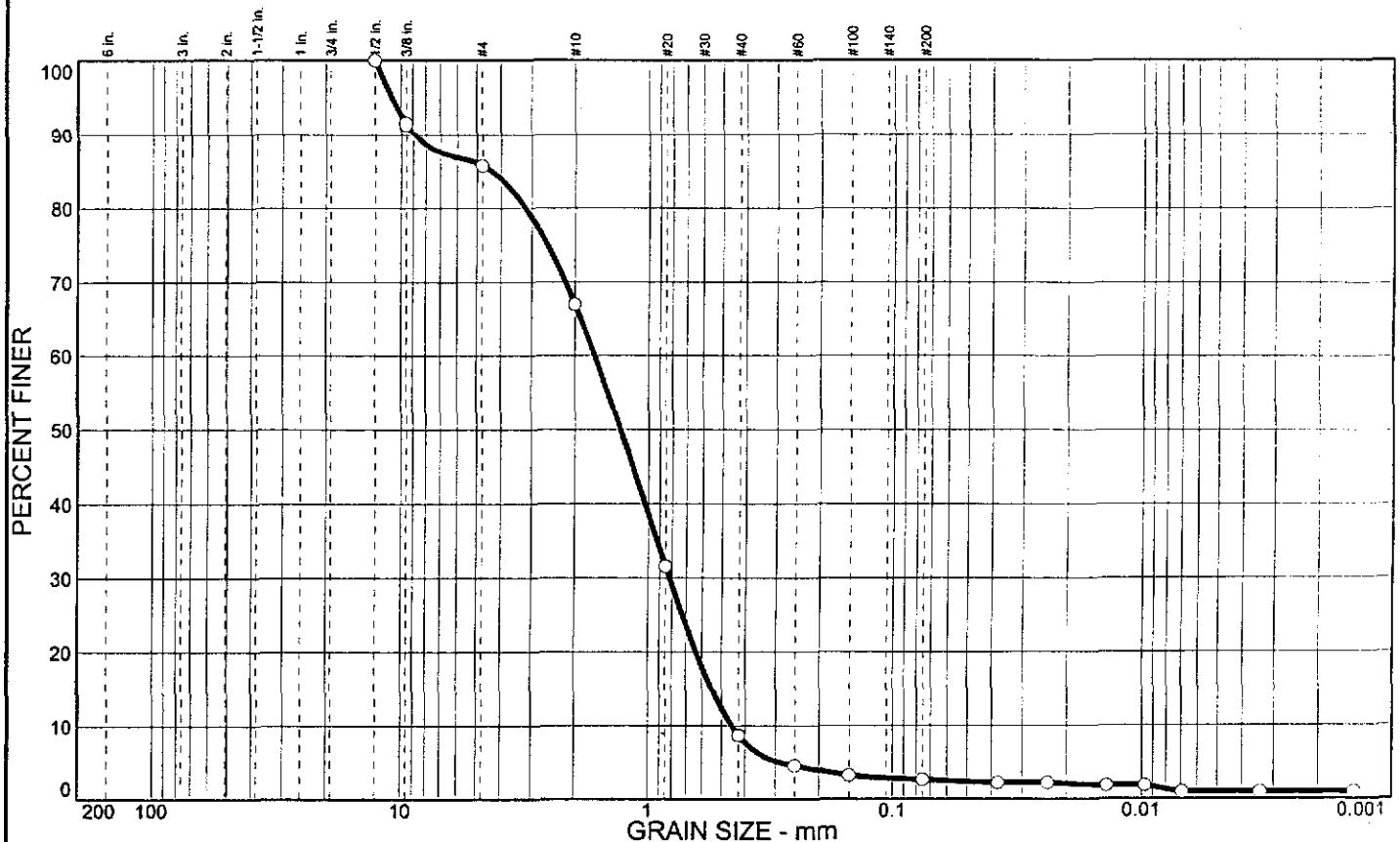
NOTE: EACH TEST PERFORMED USING ALL AVAILABLE MATERIAL.

* INSUFFICIENT MATERIAL AVAILABLE FOR TESTING.

**TEST PERFORMED, HOWEVER, ASTM RECOMMENDED QUANTITIES NOT AVAILABLE.


MATERIALS TESTING LABORATORY

Particle Size Distribution Report



Client: SAVANNAH LABORATORIES, INC.
Project: SAVANAH #: S9-17840
Project Number: 2000-00-0233

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.8	10.5	2.5	0.0139	10.5	14.6	0.0374	2.2
5.00	18.8	10.5	2.5	0.0139	10.5	14.6	0.0236	2.2
15.00	18.7	10.0	2.0	0.0139	10.0	14.7	0.0137	1.8
30.00	18.9	10.0	2.0	0.0138	10.0	14.7	0.0097	1.8
60.00	18.9	9.0	1.0	0.0138	9.0	14.8	0.0069	0.9
250.00	18.8	9.0	1.0	0.0139	9.0	14.8	0.0034	0.9
1440.00	17.8	9.0	1.0	0.0140	9.0	14.8	0.0014	0.9

Fractional Components

Gravel/Sand based on #4

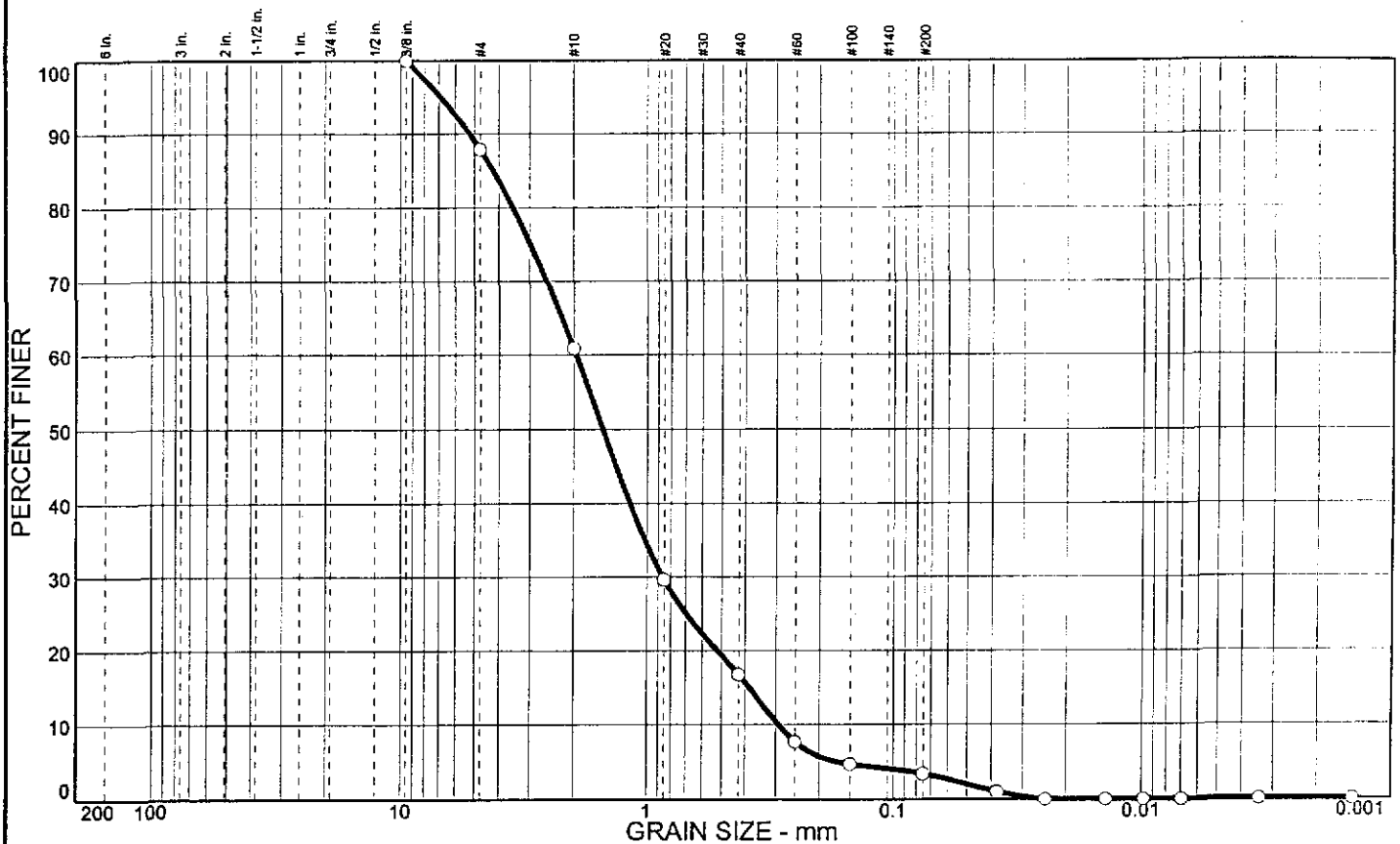
Sand/Fines based on #200

% COBBLES = % GRAVEL = 14.2 (% coarse = % fine = 14.2)
 % SAND = 83.2 (% coarse = 18.8 % medium = 58.3 % fine = 6.1)
 % SILT = 1.7 % CLAY = 0.9

D₈₅= 4.35 D₆₀= 1.66 D₅₀= 1.30
 D₃₀= 0.82 D₁₅= 0.55 D₁₀= 0.45
 C_c= 0.8909 C_u= 3.656

Leroy Barley
 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	12.1	84.5	3.4	0.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
.375	100.0		
GRAIN SIZE			
D ₆₀	1.95		
D ₃₀	0.863		
D ₁₀	0.292		
COEFFICIENTS			
C _c	1.30		
C _u	6.68		

SIEVE number size	PERCENT FINER		
#4	87.9		
#10	60.9		
#20	29.6		
#40	16.8		
#60	7.7		
#100	4.7		
#200	3.4		

SOIL DESCRIPTION
 ○ COARSE TO FINE SAND, LITTLE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-054-SED-4

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANAH #: S9-17840

Project No.: 2000-00-0233

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANAH #: S9-17840

Project Number: 2000-00-0233

Sample Data

Source:

Sample No.: C-054-SED-4

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: COARSE TO FINE SAND, LITTLE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Dry sample and tare= Initial
105.35

Tare = 0.00

Dry sample weight = 105.35

Sample split on number 10 sieve

Split sample data:

Sample and tare = 61.62 Tare = .00 Sample weight = 61.62

Cumulative weight retained tare= .00

Time for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	12.78	87.9
# 10	41.17	60.9
# 20	31.67	29.6
# 40	44.63	16.8
# 60	53.81	7.7
# 100	56.92	4.7
# 200	58.21	3.4

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 60.9

Weight of hydrometer sample: 61.62

Calculated biased weight= 101.18

Table of composite correction values:

Temp, deg C: 19.0 16.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	9.0	1.0	0.0139	9.0	14.8	0.0378	1.0
5.00	18.6	8.0	0.0	0.0139	8.0	15.0	0.0240	0.0
15.00	18.7	8.0	0.0	0.0139	8.0	15.0	0.0139	0.0
30.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0098	0.0
60.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0069	0.0
250.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0034	0.0
1440.00	17.8	8.0	0.0	0.0140	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 12.1 (% coarse = % fine = 12.1)

% SAND = 84.5 (% coarse = 27.0 % medium = 44.1 % fine = 13.4)

% FINES = 3.4

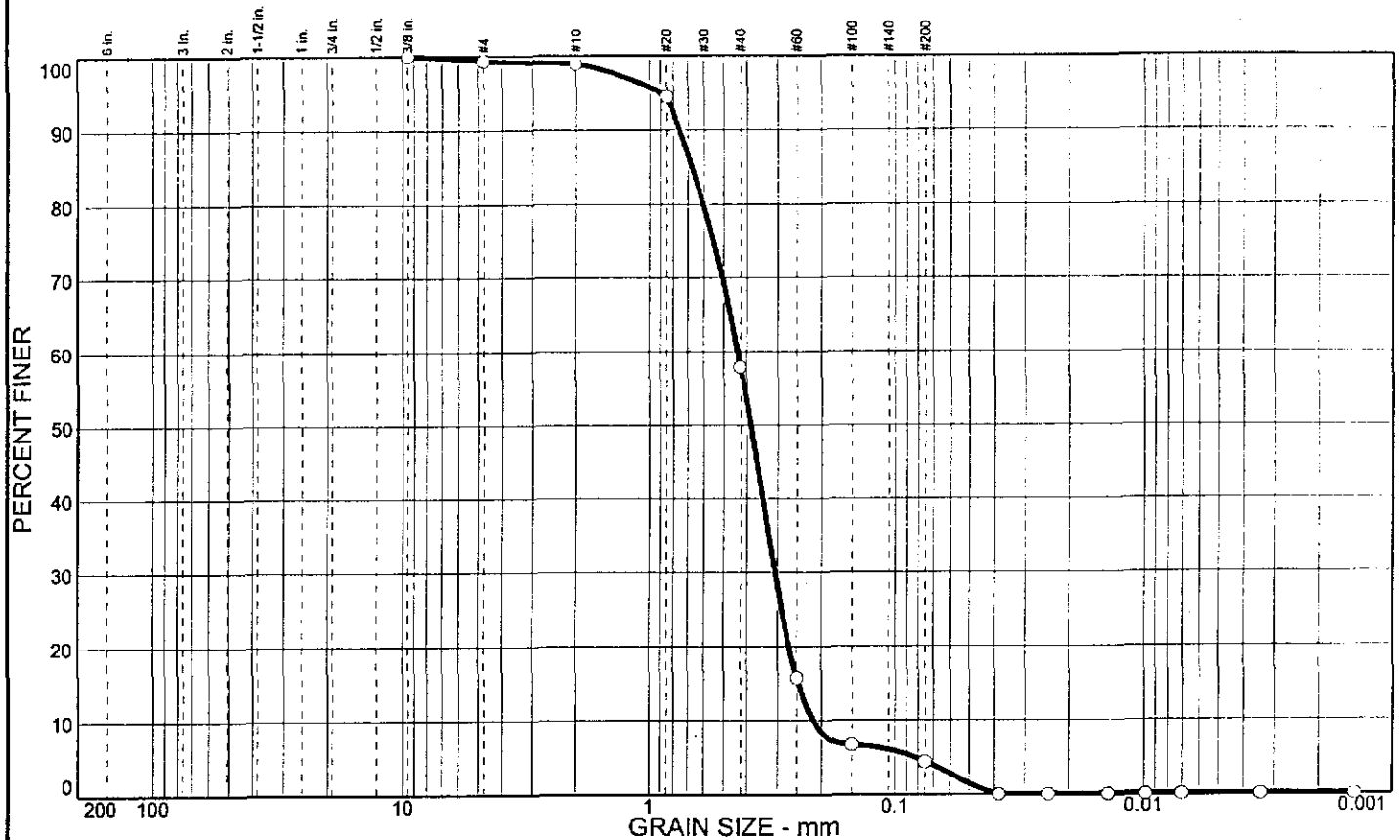
D₈₅= 4.21 D₆₀= 1.95 D₅₀= 1.52

D₃₀= 0.86 D₁₅= 0.38 D₁₀= 0.29

C_c= 1.303 C_u= 6.6837

Leroy Barber
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	0.7	94.9	4.4	0.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
0.375	100.0		
GRAIN SIZE			
D ₆₀	0.437		
D ₃₀	0.307		
D ₁₀	0.215		
COEFFICIENTS			
C _c	1.00		
C _u	2.03		

SIEVE number size	PERCENT FINER		
0			
#4	99.3		
#10	98.9		
#20	94.6		
#40	57.9		
#60	15.8		
#100	6.7		
#200	4.4		

SOIL DESCRIPTION
 ○ MEDIUM TO FINE SAND

REMARKS:
 ○

○ Source:

Sample No.: C-059-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANAH #: S9-17840

Project No.: 2000-00-0233

Plate

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANAH #: S9-17840
Project Number: 2000-00-0233

Testing Remarks:

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.7	8.0	0.0	0.0139	8.0	15.0	0.0380	0.0
5.00	18.7	8.0	0.0	0.0139	8.0	15.0	0.0240	0.0
15.00	18.7	8.0	0.0	0.0139	8.0	15.0	0.0139	0.0
30.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0098	0.0
60.00	18.0	8.0	0.0	0.0140	8.0	15.0	0.0070	0.0
250.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0034	0.0
1440.00	17.8	8.0	0.0	0.0140	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

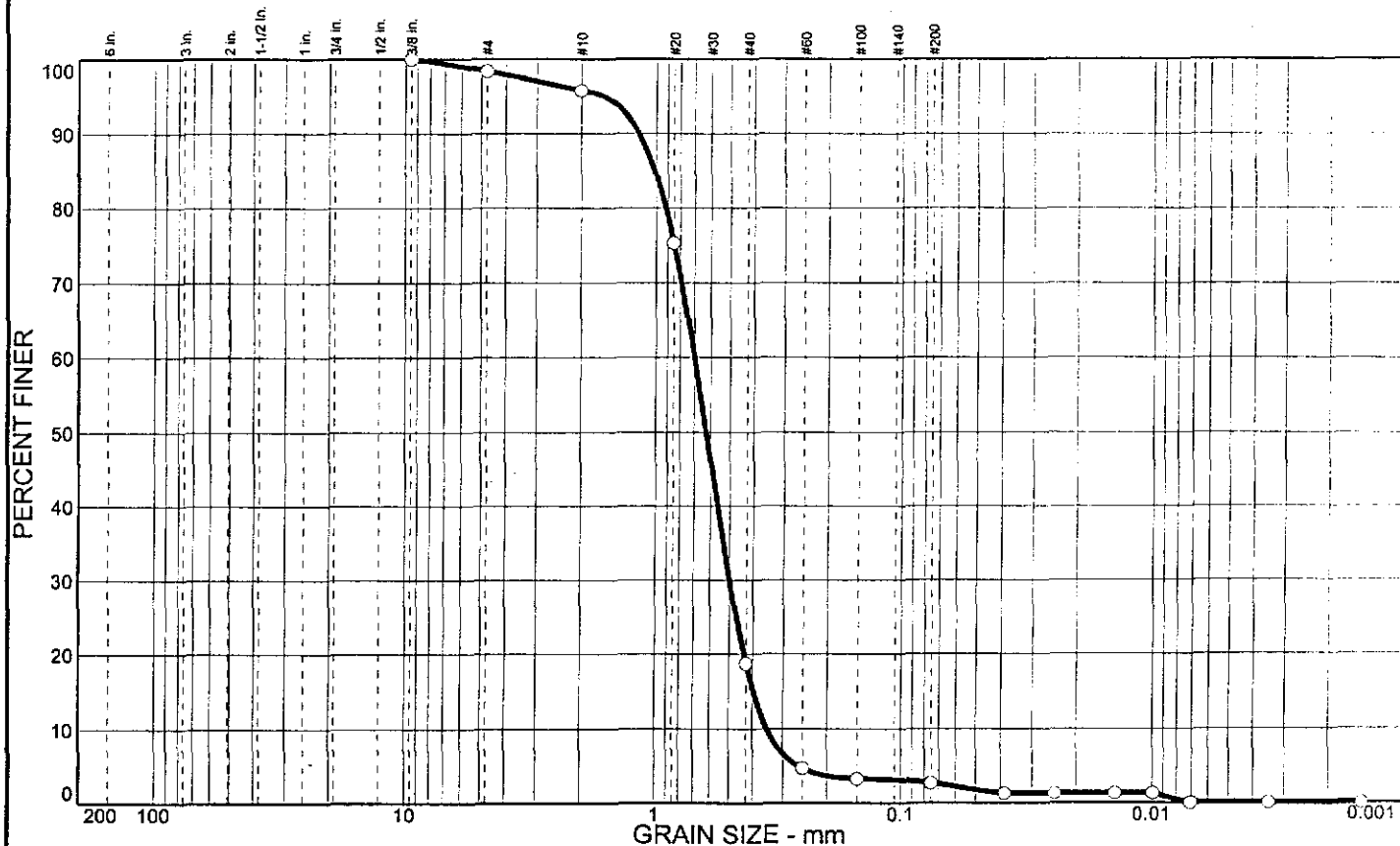
Sand/Fines based on #200

% COBBLES = % GRAVEL = 0.7 (% coarse = % fine = 0.7)
 % SAND = 94.9 (% coarse = 0.4 % medium = 41.0 % fine = 53.5)
 % FINES = 4.4

D₈₅ = 0.67 D₆₀ = 0.44 D₅₀ = 0.39
 D₃₀ = 0.31 D₁₅ = 0.25 D₁₀ = 0.22
 C_c = 1.0017 C_u = 2.0306

LeRoy Barber
 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	1.6	95.7	2.7	0.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.700		
D ₃₀	0.498		
D ₁₀	0.348		
COEFFICIENTS			
C _c	1.02		
C _u	2.01		

SIEVE number size	PERCENT FINER		
#4	98.4		
#10	95.8		
#20	75.3		
#40	18.7		
#60	4.7		
#100	3.3		
#200	2.7		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-060-SED-4

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANAH #: S9-17840

Project No.: 2000-00-0233

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANAH #: S9-17840

Project Number: 2000-00-0233

Sample Data

Source:

Sample No.: C-060-SED-4

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 74.72
Tare = 0.00
Dry sample weight = 74.72
Sample split on number 10 sieve
Split sample data:
Sample and tare = 71.56 Tare = .00 Sample weight = 71.56
Cumulative weight retained tare= .00
Time for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	1.20	98.4
# 10	3.13	95.8
# 20	15.35	75.3
# 40	57.61	18.7
# 60	68.09	4.7
# 100	69.12	3.3
# 200	69.54	2.7

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 95.8
Weight of hydrometer sample: 71.56
Calculated biased weight= 74.70
Table of composite correction values:
Temp, deg C: 19.0 16.0
Comp. corr: -5.0 -5.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer	
2.00	18.6	6.0	1.0	0.0139	6.0	15.3	0.0384	1.3
5.00	18.7	6.0	1.0	0.0139	6.0	15.3	0.0243	1.3
15.00	18.8	6.0	1.0	0.0139	6.0	15.3	0.0140	1.3
30.00	18.9	6.0	1.0	0.0138	6.0	15.3	0.0099	1.3
60.00	18.9	5.0	0.0	0.0138	5.0	15.5	0.0070	0.0
250.00	18.9	5.0	0.0	0.0138	5.0	15.5	0.0034	0.0
1440.00	17.8	5.0	0.0	0.0140	5.0	15.5	0.0015	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 1.6 (% coarse = % fine = 1.6)

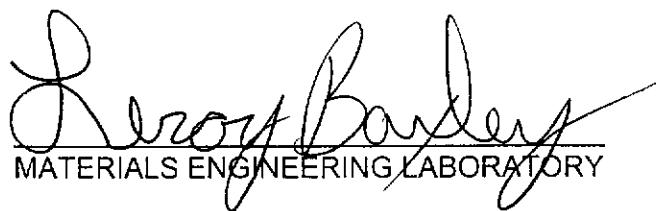
% SAND = 95.7 (% coarse = 2.6 % medium = 77.1 % fine = 16.0)

% FINES = 2.7

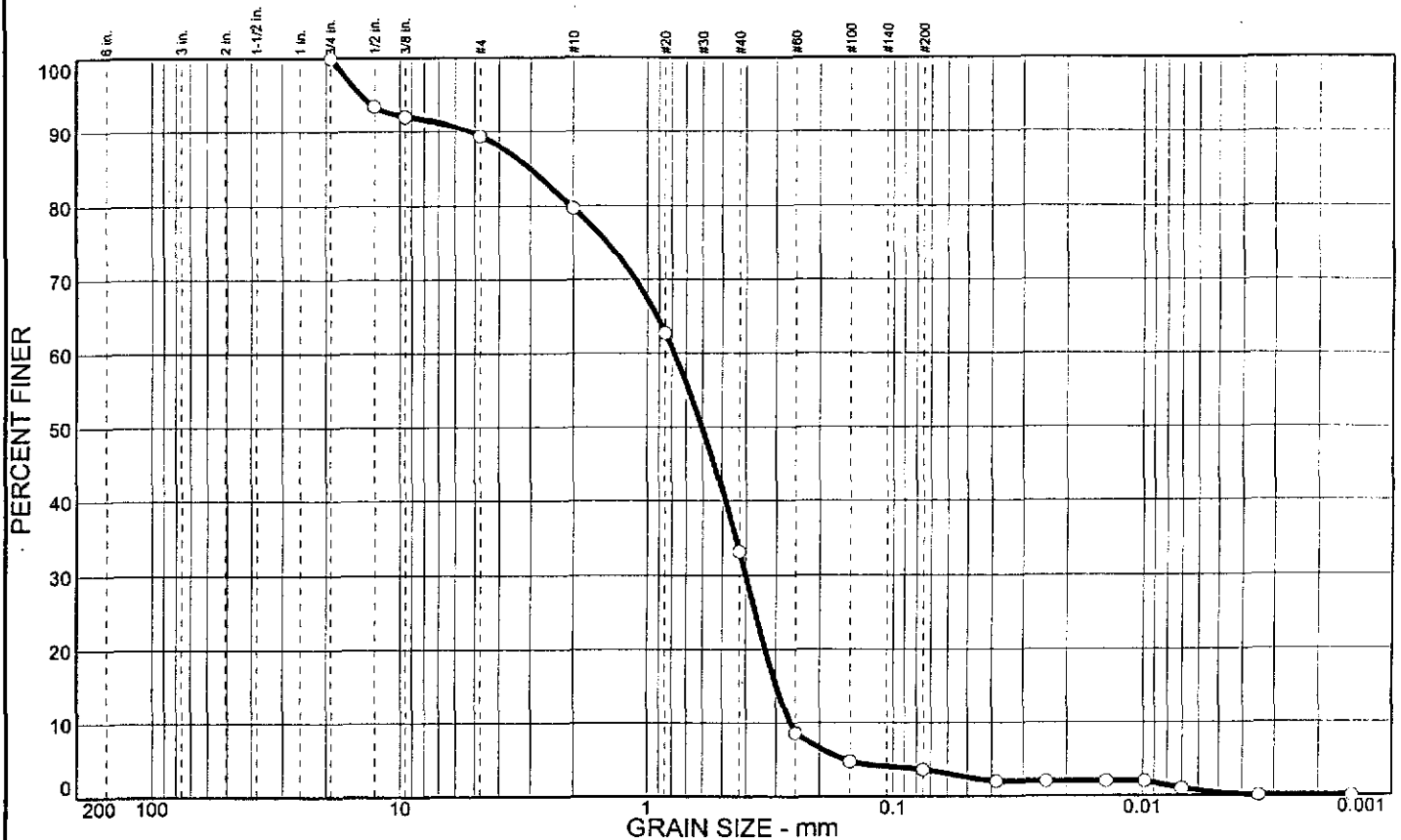
D₈₅= 1.02 D₆₀= 0.70 D₅₀= 0.63

D₃₀= 0.50 D₁₅= 0.40 D₁₀= 0.35

C_c= 1.0195 C_u= 2.0082


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
	10.6	85.8	3.3	0.3	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.75	100.0		
.5	93.4		
.375	92.0		
GRAIN SIZE			
D ₆₀	0.782		
D ₃₀	0.400		
D ₁₀	0.262		
COEFFICIENTS			
C _c	0.78		
C _u	2.99		

SIEVE	PERCENT FINER		
number size	○		
#4	89.4		
#10	79.7		
#20	62.7		
#40	33.2		
#60	8.6		
#100	4.7		
#200	3.6		

SOIL DESCRIPTION
 ○ MEDIUM TO FINE SAND, LITTLE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-070-SED-4

Elev./Depth: 0-2.5"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANAH #: S9-17840

Project No.: 2000-00-0233

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANAH #: S9-17840

Project Number: 2000-00-0233

Sample Data

Source:

Sample No.: C-070-SED-4

Elev. or Depth: 0-2.5"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, LITTLE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 103.94
Tare = 0.00
Dry sample weight = 103.94
Sample split on number 10 sieve
Split sample data:
Sample and tare = 81.57 Tare = .00 Sample weight = 81.57
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	6.83	93.4
.375 inch	8.31	92.0
# 4	11.05	89.4
# 10	21.06	79.7
# 20	17.42	62.7
# 40	47.60	33.2
# 60	72.80	8.6
# 100	76.79	4.7
# 200	77.92	3.6

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 79.7
Weight of hydrometer sample: 81.57
Calculated biased weight= 102.35
Table of composite correction values:
Temp, deg C: 19.0 16.0
Comp. corr: -5.0 -5.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.8	7.0	2.0	0.0139	7.0	15.1	0.0381	2.0
5.00	18.8	7.0	2.0	0.0139	7.0	15.1	0.0241	2.0
15.00	18.8	7.0	2.0	0.0139	7.0	15.1	0.0139	2.0
30.00	19.0	7.0	2.0	0.0138	7.0	15.1	0.0098	2.0
60.00	18.9	6.0	1.0	0.0138	6.0	15.3	0.0070	1.0
250.00	19.0	5.0	0.0	0.0138	5.0	15.5	0.0034	0.0
1440.00	17.8	5.0	0.0	0.0140	5.0	15.5	0.0015	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 10.6 (% coarse = % fine = 10.6)

% SAND = 85.8 (% coarse = 9.7 % medium = 46.5 % fine = 29.6)

% SILT = 3.3 % CLAY = 0.3 (% CLAY COLLOIDS = 0.0)

D₈₅= 3.00 D₆₀= 0.78 D₅₀= 0.60

D₃₀= 0.40 D₁₅= 0.30 D₁₀= 0.26

C_c= 0.7816 C_u= 2.9863

Leroy Barley
MATERIALS ENGINEERING LABORATORY

Grain size distribution curve for a sample. The graph plots Percent Finer (0-100) against Grain Size in mm (log scale, 200 to 0.001). The curve shows a well-graded soil with a peak at 0.075 mm (No. 20 sieve) and a tail extending to 0.001 mm.

Grain Size (mm)	Percent Finer (%)
200	100
100	100
60	100
40	100
30	100
25	100
20	100
15	100
12.5	100
10	100
7.5	100
6	100
4.75	100
3.75	100
3.0	100
2.5	100
2.0	100
1.5	100
1.18	100
0.85	100
0.75	100
0.6	100
0.425	100
0.3	100
0.25	100
0.2	100
0.15	100
0.125	100
0.106	100
0.085	100
0.075	100
0.063	100
0.05	100
0.0425	100
0.0375	100
0.03	100
0.025	100
0.02	100
0.015	100
0.0125	100
0.0106	100
0.0085	100
0.0075	100
0.0063	100
0.005	100
0.00425	100
0.00375	100
0.003	100
0.0025	100
0.002	100
0.0015	100
0.00125	100
0.00106	100
0.00085	100
0.00075	100
0.00063	100
0.0005	100
0.000425	100
0.000375	100
0.0003	100
0.00025	100
0.0002	100
0.00015	100
0.000125	100
0.000106	100
0.000085	100
0.000075	100
0.000063	100
0.00005	100
0.0000425	100
0.0000375	100
0.00003	100
0.000025	100
0.00002	100
0.000015	100
0.0000125	100
0.0000106	100
0.0000085	100
0.0000075	100
0.0000063	100
0.000005	100
0.00000425	100
0.00000375	100
0.000003	100
0.0000025	100
0.000002	100
0.0000015	100
0.00000125	100
0.00000106	100
0.00000085	100
0.00000075	100
0.00000063	100
0.0000005	100
0.000000425	100
0.000000375	100
0.0000003	100
0.00000025	100
0.0000002	100
0.00000015	100
0.000000125	100
0.000000106	100
0.000000085	100
0.000000075	100
0.000000063	100
0.00000005	100
0.0000000425	100
0.0000000375	100
0.00000003	100
0.000000025	100
0.00000002	100
0.000000015	100
0.0000000125	100
0.0000000106	100
0.0000000085	100
0.0000000075	100
0.0000000063	100
0.000000005	100
0.00000000425	100
0.00000000375	100
0.000000003	100
0.0000000025	100
0.000000002	100
0.0000000015	100
0.00000000125	100
0.00000000106	100
0.00000000085	100
0.00000000075	100
0.00000000063	100
0.0000000005	100
0.000000000425	100
0.000000000375	100

[illegible]

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
	GRAIN SIZE		
D ₆₀	0.770		
D ₃₀	0.431		
D ₁₀	0.271		
	COEFFICIENTS		
C _c	0.89		
C _u	2.85		

SIEVE number size	PERCENT FINER		
	○		
#4	98.4		
#10	85.0		
#20	64.2		
#40	29.3		
#60	7.9		
#100	3.7		
#200	2.4		

○ COARSE TO FINE SAND, TRACE GRAVEL

REMARKS:

○ Source:

Sample No.: C-082-SED-2

Elev./Depth: 0-1.5"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANAH #: S9-17840

Project No.: 2000-00-0233

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANAH #: S9-17840

Project Number: 2000-00-0233

Sample Data

Source:

Sample No.: C-082-SED-2

Elev. or Depth: 0-1.5"

Sample Length (in./cm.):

Location:

Description: COARSE TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 42.01
Tare = 0.00
Dry sample weight = 42.01
Sample split on number 10 sieve
Split sample data:
Sample and tare = 35.11 Tare = .00 Sample weight = 35.11
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.69	98.4
# 10	6.31	85.0
# 20	8.61	64.2
# 40	23.02	29.3
# 60	31.86	7.9
# 100	33.60	3.7
# 200	34.14	2.4

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 85.0
Weight of hydrometer sample: 35.11
Calculated biased weight= 41.31
Table of composite correction values:
Temp, deg C: 19.0 16.0
Comp. corr: -5.0 -5.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	5.0	0.0	0.0138	5.0	15.5	0.0385	0.0
5.00	18.9	5.0	0.0	0.0138	5.0	15.5	0.0243	0.0
15.00	18.9	5.0	0.0	0.0138	5.0	15.5	0.0141	0.0
30.00	19.0	5.0	0.0	0.0138	5.0	15.5	0.0099	0.0
60.00	19.0	5.0	0.0	0.0138	5.0	15.5	0.0070	0.0
250.00	18.9	5.0	0.0	0.0138	5.0	15.5	0.0034	0.0
1440.00	17.8	5.0	0.0	0.0140	5.0	15.5	0.0015	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 1.6 (% coarse = % fine = 1.6)

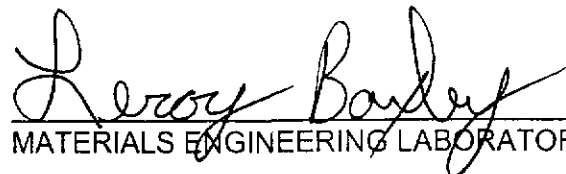
% SAND = 96.0 (% coarse = 13.4 % medium = 55.7 % fine = 26.9)

% FINES = 2.4

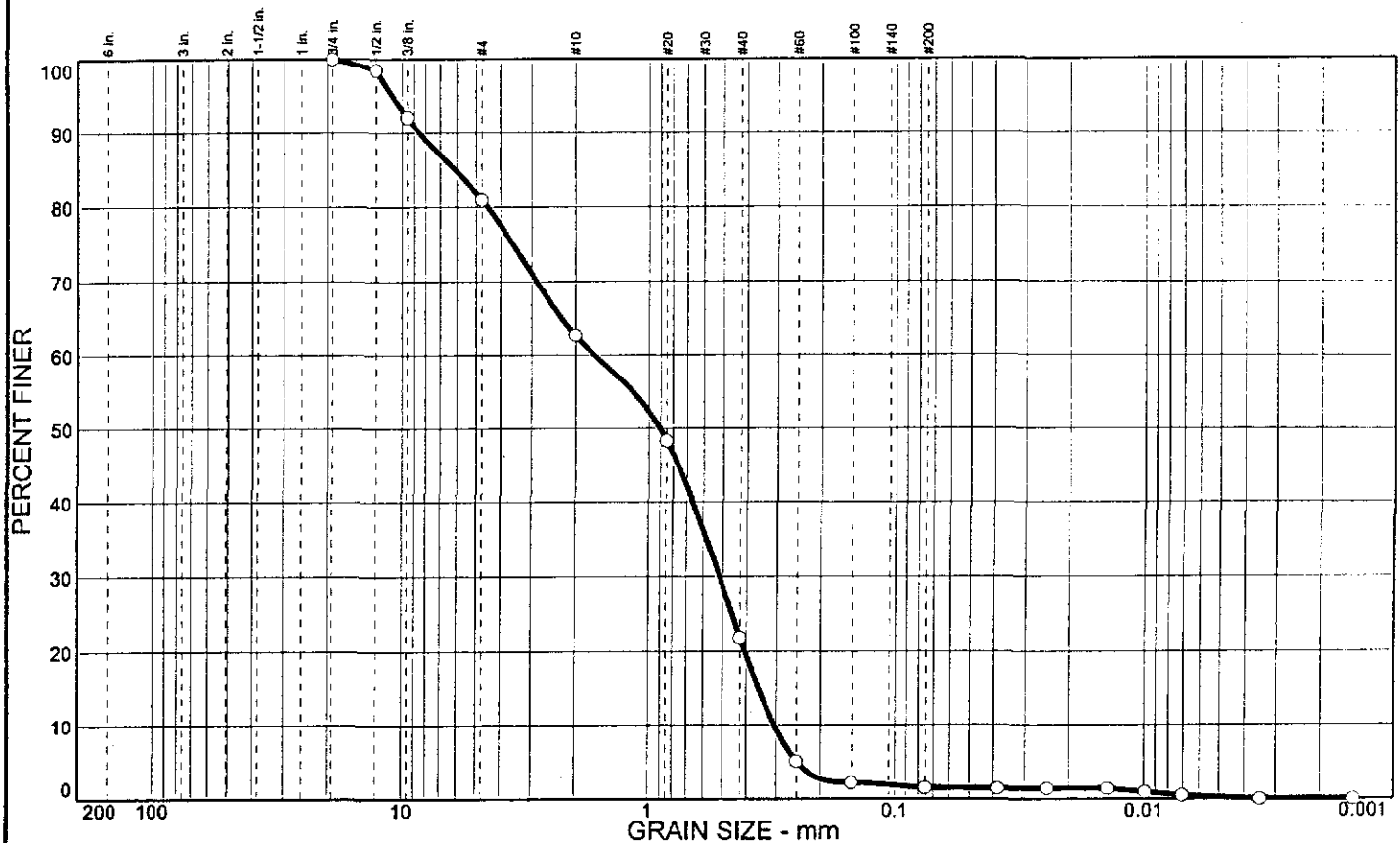
D₈₅= 2.00 D₆₀= 0.77 D₅₀= 0.63

D₃₀= 0.43 D₁₅= 0.31 D₁₀= 0.27

C_c= 0.8898 C_u= 2.8454


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	19.0	79.5	1.3	0.2	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	98.5		
.375	92.1		
GRAIN SIZE			
D ₆₀	1.67		
D ₃₀	0.517		
D ₁₀	0.306		
COEFFICIENTS			
C _c	0.52		
C _u	5.46		

SIEVE number size	PERCENT FINER		
	○		
#4	81.0		
#10	62.7		
#20	48.3		
#40	21.9		
#60	5.1		
#100	2.2		
#200	1.5		

SOIL DESCRIPTION
 ○ COARSE TO FINE SAND, WITH GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-086-SED-3

Elev./Depth: 0-2.5"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANAH #: S9-17840

Project No.: 2000-00-0233

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANAH #: S9-17840

Project Number: 2000-00-0233

Sample Data

Source:

Sample No.: C-086-SED-3

Elev. or Depth: 0-2.5"

Sample Length (in./cm.):

Location:

Description: COARSE TO FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 109.07
Tare = 0.00
Dry sample weight = 109.07
Sample split on number 10 sieve
Split sample data:

Sample and tare = 68.14 Tare = .00 Sample weight = 68.14

Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	1.69	98.5
.375 inch	8.65	92.1
# 4	20.71	81.0
# 10	40.72	62.7
# 20	15.66	48.3
# 40	44.32	21.9
# 60	62.64	5.1
# 100	65.79	2.2
# 200	66.55	1.5

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 62.7

Weight of hydrometer sample: 68.14

Calculated biased weight= 108.68

Table of composite correction values:

Temp, deg C: 19.0 16.0

Comp. corr: -4.5 -4.5

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	6.0	1.5	0.0138	6.0	15.3	0.0383	1.4
5.00	18.9	6.0	1.5	0.0138	6.0	15.3	0.0242	1.4
15.00	18.9	6.0	1.5	0.0138	6.0	15.3	0.0140	1.4
30.00	19.0	5.5	1.0	0.0138	5.5	15.4	0.0099	0.9
60.00	18.9	5.0	0.5	0.0138	5.0	15.5	0.0070	0.5
250.00	19.0	4.5	0.0	0.0138	4.5	15.6	0.0034	0.0
1440.00	17.8	4.5	0.0	0.0140	4.5	15.6	0.0015	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 19.0 (% coarse = % fine = 19.0)

% SAND = 79.5 (% coarse = 18.3 % medium = 40.8 % fine = 20.4)

% SILT = 1.3 % CLAY = 0.2 (% CLAY COLLOIDS = 0.0)

D₈₅= 6.10 D₆₀= 1.67 D₅₀= 0.91

D₃₀= 0.52 D₁₅= 0.36 D₁₀= 0.31

C_c= 0.5213 C_u= 5.4611


MATERIALS ENGINEERING LABORATORY

Thompson Engineering

MARCH 25, 2000

CLIENT: SAVANNAH LABORATORIES, INC.
PROJECT: SAVANNAH #: S9-18566

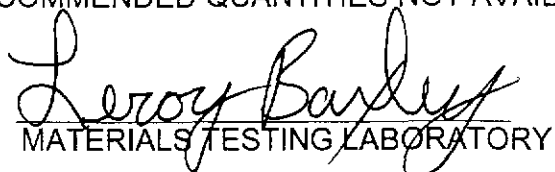
RE: LIST PERTAINING TO SAMPLE QUANTITIES

SAMPLE ID	DEPTH (IN.)	
S-1-1	0-2	
"	2-8	NO SAMPLE
S-1-2	0-2	**
S-1-4	0-2	**
S-1-5	0-2	**
S-1-8	0-2	*
S-1-10	0-2	**
S-1-11A	0-2	**
S-1-12	0-2	**
S-1-16	0-2	**
S-2-2	0-3.5	**
S-2-3A	0-3	*
S-2-5	0-2	**
S-2-8	0-2	**
S-2-6B	0-2	**
S-2-6C	0-2	**
S-2-6A	0-2	**
S-2-16	0-2	**
S-3-1	0-2	**
S-3-2	0-2	
S-3-5	0-2	
S-3-7	0-2	
S-4-2	0-2	*
S-5-1	0-3.5	**
S-5-2	0-3.5	**
S-5-3	0-2	*
S-5-4	0-2	**
S-5-5	0-2	**
S-5-6	0-2	**

NOTE: EACH TEST PERFORMED USING ALL AVAILABLE MATERIAL.

* INSUFFICIENT MATERIAL AVAILABLE FOR TESTING.

**TEST PERFORMED, HOWEVER, ATSM RECOMMENDED QUANTITIES NOT AVAILABLE.


MATERIALS TESTING LABORATORY

Thompson Engineering

MARCH 25, 2000

CLIENT: SAVANNAH LABORATORIES, INC.
PROJECT: SAVANNAH #: S9-18566

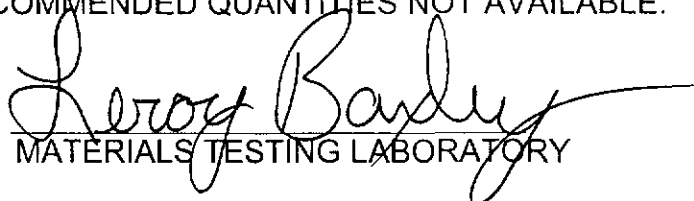
RE: LIST PERTAINING TO SAMPLE QUANTITIES

SAMPLE ID	DEPTH (IN.)	
S-5-13	0-3.5	**
S-5-14A	0-2	**
S-5-14B	0-2	**
S-5-24	0-2	**
S-6-1	0-2	**
S-6-2	0-2	**
S-6-5	0-2	
S-6-7	0-2	**
S-6-9	0-2	**
S-6-10	0-2	
S-6-10	2-12	DID NOT RECIEVED
S-6-13	0-2	
S-6-15	0-2	
S-6-4	0-3.5	**
S-6-17	0-2	
S-6-21	0-2	
S-6-23	0-2	*
S-6-25	0-2	*
S-6-26	0-2	
S-6-27	0-2	

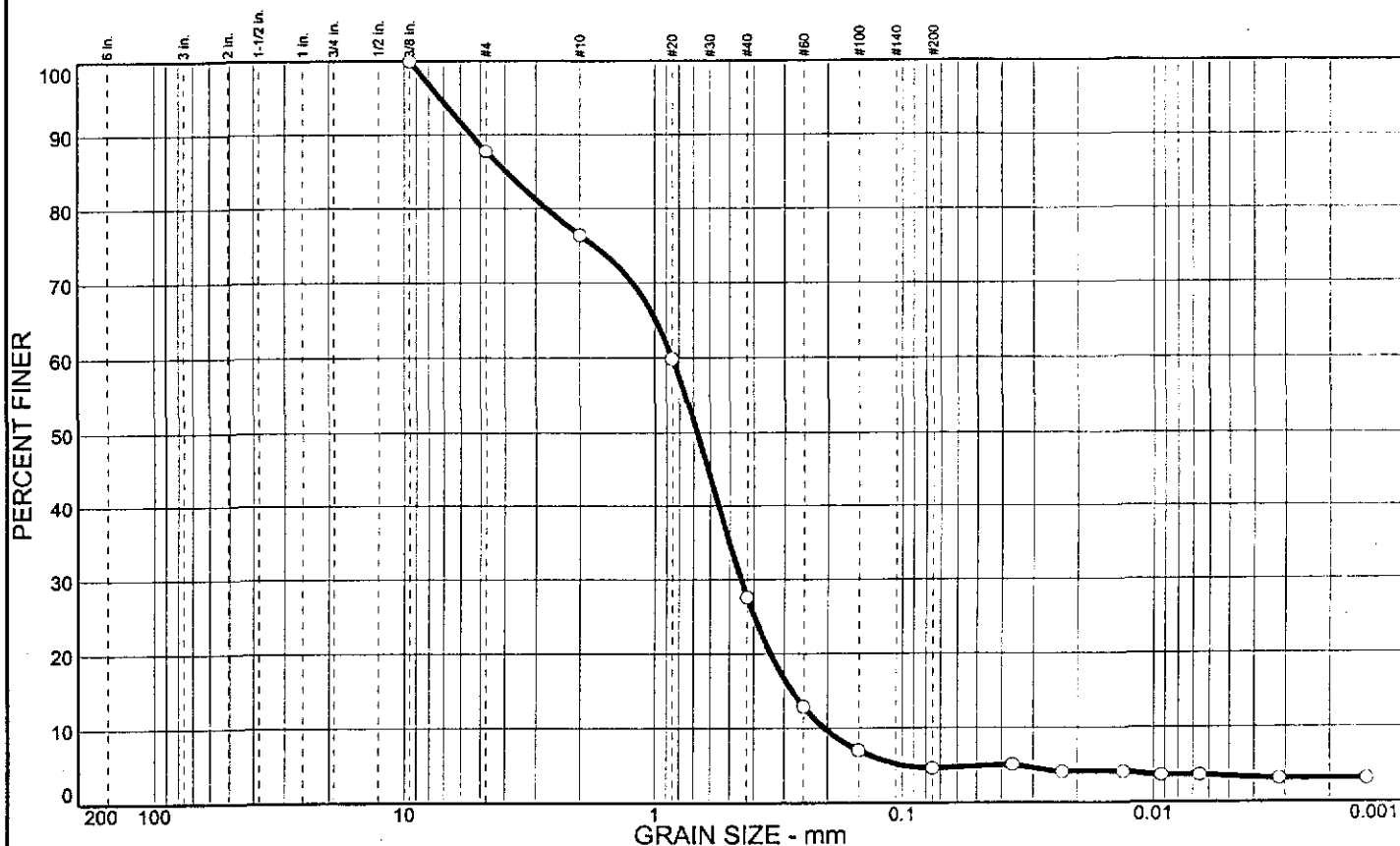
NOTE: EACH TEST PERFORMED USING ALL AVAILABLE MATERIAL.

* INSUFFICIENT MATERIAL AVAILABLE FOR TESTING.

**TEST PERFORMED, HOWEVER, ATSM RECOMMENDED QUANTITIES NOT AVAILABLE.


MATERIALS TESTING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
	12.2	83.2	1.2	3.4	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.852		
D ₃₀	0.450		
D ₁₀	0.206		
COEFFICIENTS			
C _c	1.16		
C _u	4.15		

SIEVE	PERCENT FINER		
number size	○		
#4	87.8		
#10	76.4		
#20	59.9		
#40	27.6		
#60	12.9		
#100	7.0		
#200	4.6		

SOIL DESCRIPTION
 ○ COARSE TO FINE SAND, LITTLE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: S-1-1

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #: S9-18566
Project Number: 2000-00-0237

Source:

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: COARSE TO FINE SAND, LITTLE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Initial

Dry sample and tare= 102.29

Tare = 0.00

Dry sample weight = 102.29

Sample split on number 10 sieve

Split sample data:

Sample and tare = 74.89 Tare = .00 Sample weight = 74.89

Cumulative weight retained tare= .00

Time for cumulative weight retained= .00

Level	Cumul. Wt. retained	Percent finer
-------	------------------------	------------------

.375 inch	0.00	100.0
-----------	------	-------

# 4	12.45	87.8
-----	-------	------

# 10	24.14	76.4
------	-------	------

#	20	16.20	59.9
---	----	-------	------

# 40	47.82	27.6
------	-------	------

# 60	62.29	12.9
------	-------	------

# 100	68.02	7.0
-------	-------	-----

# 200	70.41	4.6
-------	-------	-----

Separation sieve is #10

Percent -#10 based upon complete sample= 76.4

Weight of hydrometer sample: 74.89

Calculated biased weight= 98.02

Table of composite correction values:

Temp, deg C: 23.3 20.0 16.9

Comp. corr: -8.0 -8.0 -9.0

Meniscus correction only= 0

Specific gravity of solids = 2.65

Specific gravity correction factor= 1.000

Barometer type: 152H

Effective depth $L = 16.294964 - 0.164 \times R_m$

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.6	13.0	5.0	0.0135	13.0	14.2	0.0360	5.1
5.00	20.7	12.0	4.0	0.0135	12.0	14.3	0.0229	4.1
15.00	21.2	12.0	4.0	0.0134	12.0	14.3	0.0131	4.1
30.00	21.6	11.5	3.5	0.0134	11.5	14.4	0.0093	3.6
60.00	21.8	11.5	3.5	0.0133	11.5	14.4	0.0065	3.6
250.00	23.3	11.0	3.0	0.0131	11.0	14.5	0.0032	3.1
1440.00	16.9	12.0	3.0	0.0142	12.0	14.3	0.0014	3.1

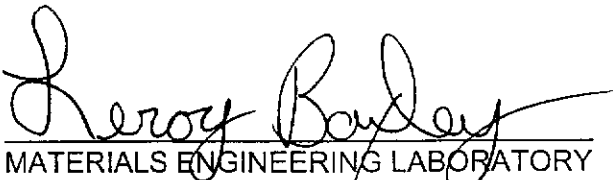
Fractional Components

Gravel/Sand based on #4

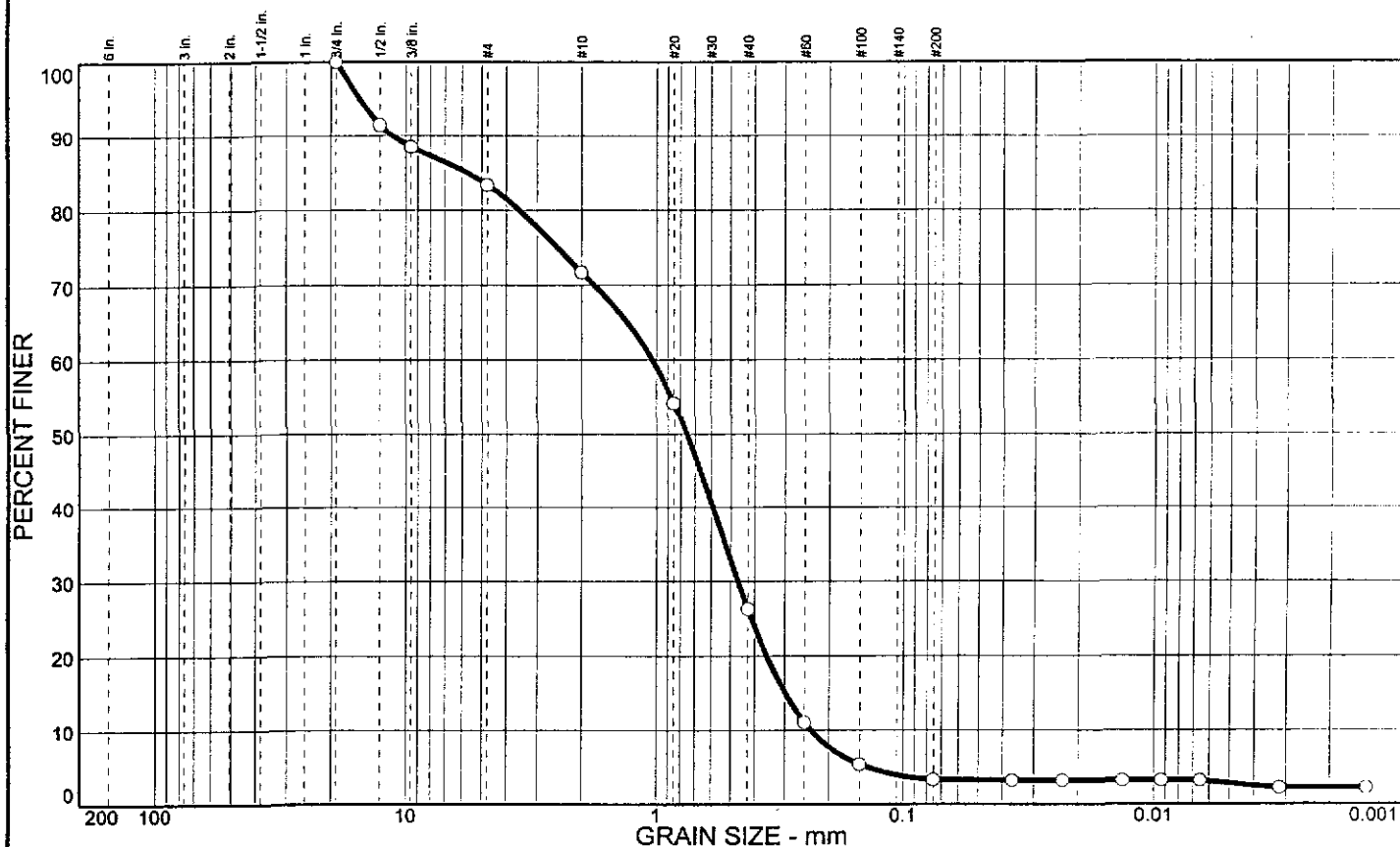
Sand/Fines based on #200

% COBBLES = % GRAVEL = 12.2 (% coarse = % fine = 12.2)
 % SAND = 83.2 (% coarse = 11.4 % medium = 48.8 % fine = 23.0)
 % SILT = 1.2 % CLAY = 3.4

D₈₅= 3.95 D₆₀= 0.85 D₅₀= 0.68
 D₃₀= 0.45 D₁₅= 0.28 D₁₀= 0.21
 C_c= 1.155 C_u= 4.1462


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	16.6	80.1	0.5	2.8	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.75	100.0		
.5	91.5		
.375	88.5		
GRAIN SIZE			
D ₆₀	1.04		
D ₃₀	0.467		
D ₁₀	0.235		
COEFFICIENTS			
C _c	0.89		
C _u	4.42		

SIEVE	PERCENT FINER		
number size	○		
#4	83.4		
#10	71.7		
#20	54.2		
#40	26.3		
#60	11.1		
#100	5.4		
#200	3.3		

SOIL DESCRIPTION
○ COARSE TO FINE SAND, WITH GRAVEL

REMARKS:
○

○ Source:

Sample No.: S-1-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-1-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: COARSE TO FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	93.88	
Tare =	0.00	
Dry sample weight =	93.88	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 66.68 Tare = .00 Sample weight = 66.68		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	7.97	91.5
.375 inch	10.81	88.5
# 4	15.62	83.4
# 10	26.53	71.7
# 20	16.27	54.2
# 40	42.18	26.3
# 60	56.36	11.1
# 100	61.66	5.4
# 200	63.59	3.3

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 71.7
Weight of hydrometer sample: 66.68
Calculated biased weight= 93.00
Table of composite correction values:
Temp, deg C: 24.0 20.0 17.0
Comp. corr: -8.0 -8.0 -9.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.6	11.0	3.0	0.0135	11.0	14.5	0.0365	3.2
5.00	20.9	11.0	3.0	0.0135	11.0	14.5	0.0230	3.2
15.00	20.9	11.0	3.0	0.0135	11.0	14.5	0.0133	3.2
30.00	21.6	11.0	3.0	0.0134	11.0	14.5	0.0093	3.2
60.00	22.2	11.0	3.0	0.0133	11.0	14.5	0.0065	3.2
250.00	23.5	10.0	2.0	0.0131	10.0	14.7	0.0032	2.2
1440.00	17.0	11.0	2.0	0.0142	11.0	14.5	0.0014	2.2

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 16.6 (% coarse = % fine = 16.6)

% SAND = 80.1 (% coarse = 11.7 % medium = 45.4 % fine = 23.0)

% SILT = 0.5 % CLAY = 2.8

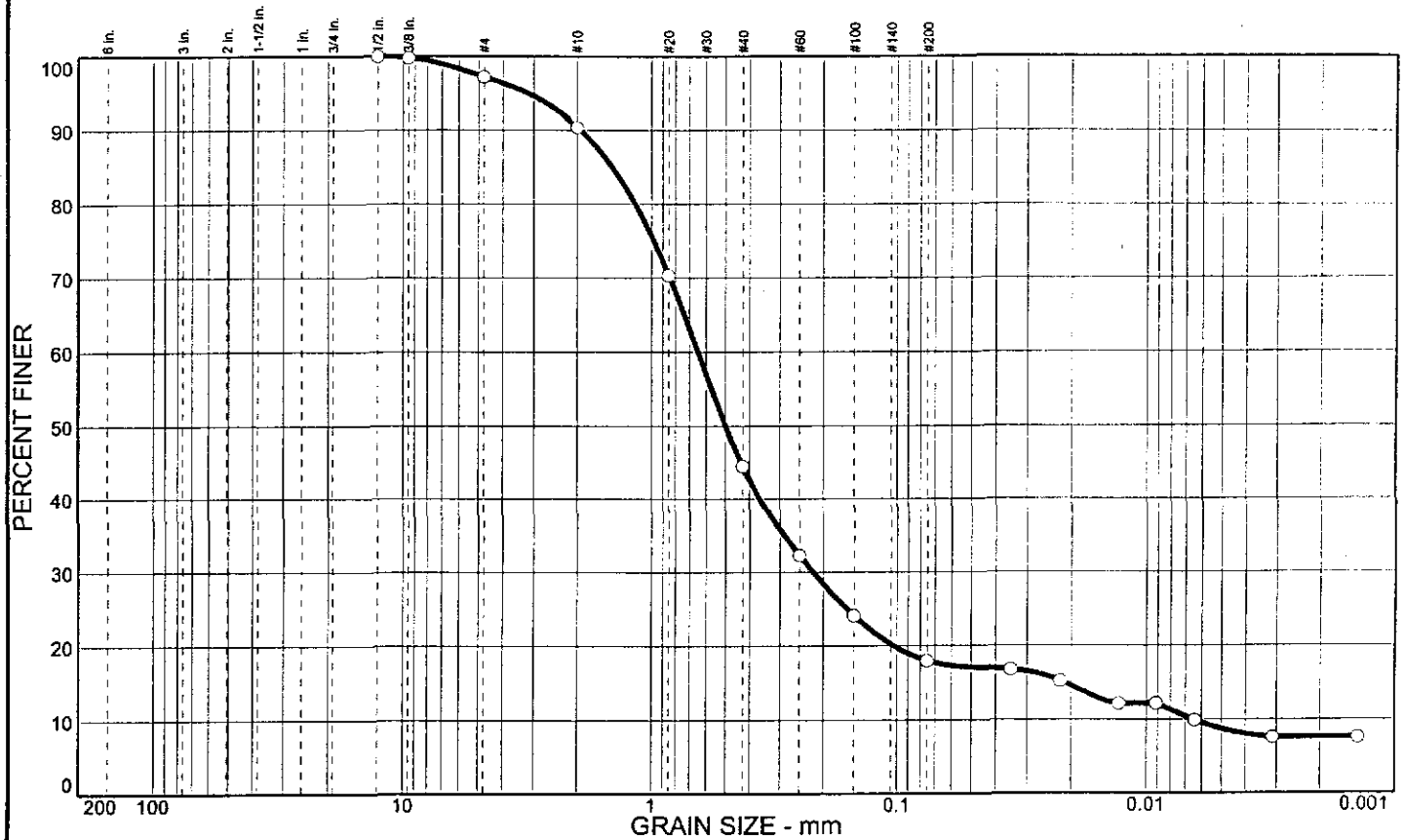
D₈₅ = 5.72 D₆₀ = 1.04 D₅₀ = 0.76

D₃₀ = 0.47 D₁₅ = 0.30 D₁₀ = 0.23

C_c = 0.8942 C_u = 4.4201

Leroy Barker
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	2.8	79.2	9.3	8.7	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.5	100.0		
.375	99.8		
GRAIN SIZE			
D ₆₀	0.648		
D ₃₀	0.220		
D ₁₀	0.0065		
COEFFICIENTS			
C _c	11.42		
C _u	99.39		

SIEVE	PERCENT FINER		
number size	○		
#4	97.2		
#10	90.5		
#20	70.3		
#40	44.5		
#60	32.3		
#100	24.1		
#200	18.0		

SOIL DESCRIPTION
 ○ SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: S-1-4

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-1-4

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 70.33
Tare = 0.00
Dry sample weight = 70.33
Sample split on number 10 sieve
Split sample data:
Sample and tare = 59.20 Tare = .00 Sample weight = 59.20
Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.5 inch	0.00	100.0
.375 inch	0.13	99.8
# 4	1.95	97.2
# 10	6.72	90.5
# 20	13.19	70.3
# 40	30.07	44.5
# 60	38.07	32.3
# 100	43.42	24.1
# 200	47.41	18.0

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 90.5
Weight of hydrometer sample: 59.20
Calculated biased weight= 65.41
Table of composite correction values:
Temp, deg C: 24.0 16.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.9	19.0	11.0	0.0135	19.0	13.2	0.0346	16.8
5.00	20.9	18.0	10.0	0.0135	18.0	13.3	0.0220	15.3
15.00	20.9	16.0	8.0	0.0135	16.0	13.7	0.0129	12.2
30.00	20.9	16.0	8.0	0.0135	16.0	13.7	0.0091	12.2
60.00	22.1	14.5	6.5	0.0133	14.5	13.9	0.0064	9.9
250.00	23.6	13.0	5.0	0.0131	13.0	14.2	0.0031	7.6
1440.00	17.0	13.0	5.0	0.0142	13.0	14.2	0.0014	7.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 2.8 (% coarse = % fine = 2.8)
 % SAND = 79.2 (% coarse = 6.7 % medium = 46.0 % fine = 26.5)
 % SILT = 9.3 % CLAY = 8.7

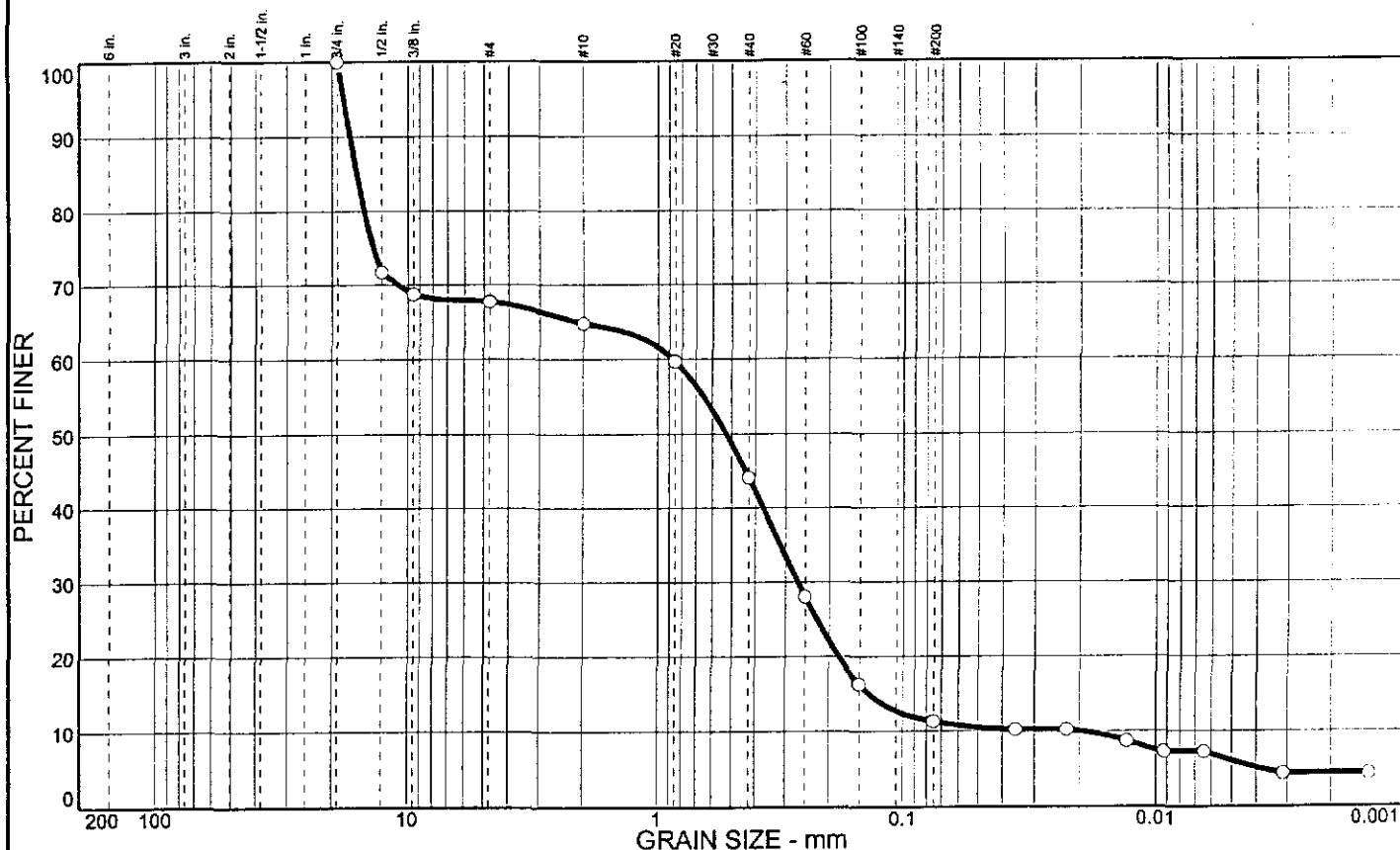
D₈₅ = 1.45 D₆₀ = 0.65 D₅₀ = 0.50

D₃₀ = 0.22 D₁₅ = 0.02 D₁₀ = 0.01

C_c = 11.4237 C_u = 99.3929

LeRoy Bailey
 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	32.3	56.4	5.2	6.1	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.75	100.0		
.5	71.7		
.375	68.7		
GRAIN SIZE			
D ₆₀	0.869		
D ₃₀	0.268		
D ₁₀	0.0202		
COEFFICIENTS			
C _c	4.08		
C _u	43.04		

SIEVE	PERCENT FINER		
number size	○		
#4	67.7		
#10	64.8		
#20	59.7		
#40	44.1		
#60	28.0		
#100	16.3		
#200	11.3		

SOIL DESCRIPTION
 ○ MEDIUM TO FINE SAND, WITH GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: S-1-5

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-1-5

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 71.28
Tare = 0.00
Dry sample weight = 71.28
Sample split on number 10 sieve
Split sample data:
Sample and tare = 44.61 Tare = .00 Sample weight = 44.61
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	20.16	71.7
.375 inch	22.30	68.7
# 4	23.05	67.7
# 10	25.07	64.8
# 20	3.54	59.7
# 40	14.26	44.1
# 60	25.37	28.0
# 100	33.37	16.3
# 200	36.84	11.3

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 64.8
Weight of hydrometer sample: 44.61
Calculated biased weight= 68.84
Table of composite correction values:
Temp, deg C: 24.0 20.0 17.2
Comp. corr: -8.0 -8.0 -9.0

Meniscus correction only= 0

Specific gravity of solids= 2.66

Specific gravity correction factor= 0.998

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.9	15.0	7.0	0.0135	15.0	13.8	0.0354	10.2
5.00	20.9	15.0	7.0	0.0135	15.0	13.8	0.0224	10.2
15.00	20.9	14.0	6.0	0.0135	14.0	14.0	0.0130	8.7
30.00	20.9	13.0	5.0	0.0135	13.0	14.2	0.0092	7.3
60.00	22.1	13.0	5.0	0.0133	13.0	14.2	0.0064	7.3
250.00	24.1	11.0	3.0	0.0129	11.0	14.5	0.0031	4.4
1440.00	17.2	12.0	3.0	0.0141	12.0	14.3	0.0014	4.4

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 32.3 (% coarse = % fine = 32.3)

% SAND = 56.4 (% coarse = 2.9 % medium = 20.7 % fine = 32.8)

% SILT = 5.2 % CLAY = 6.1

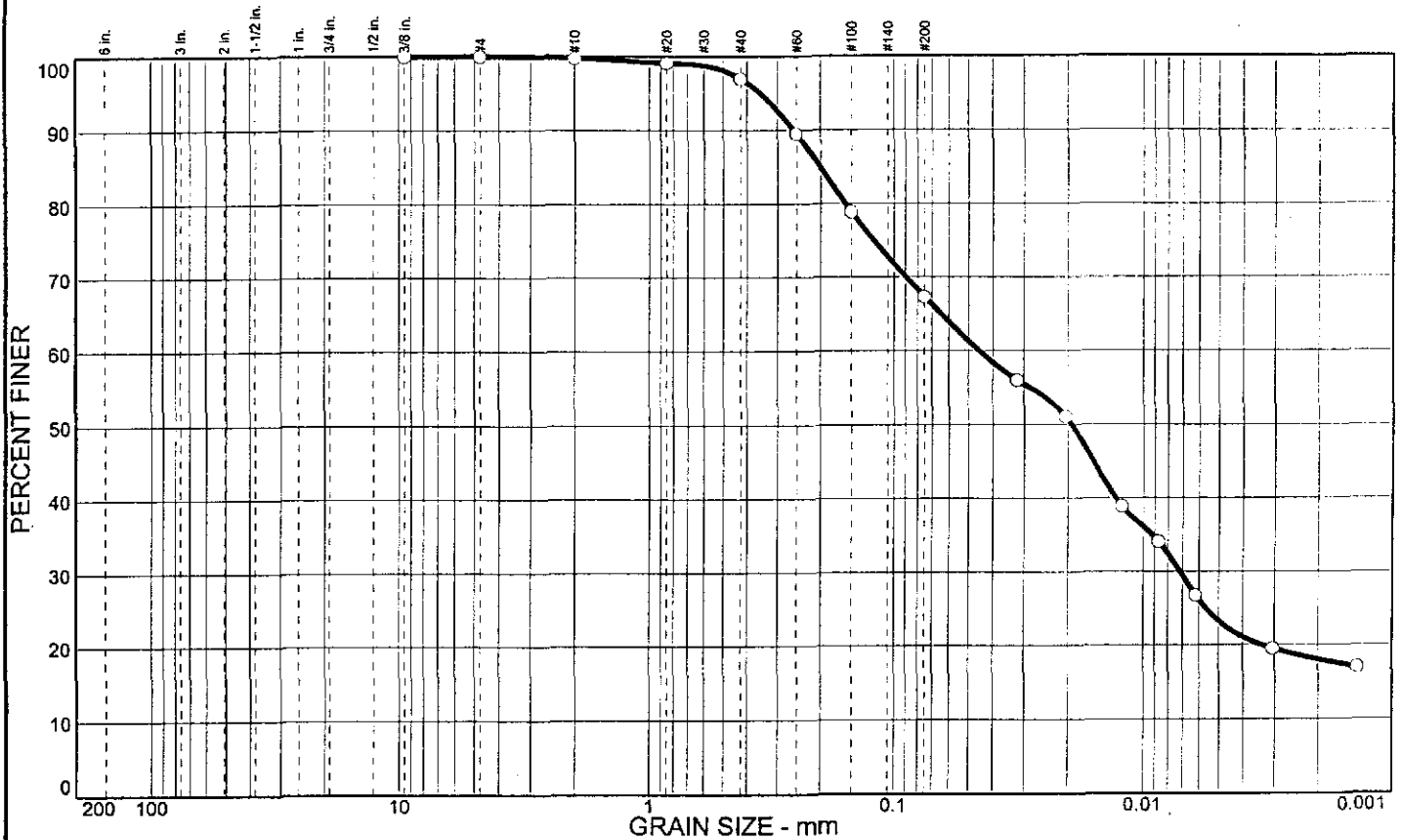
D₈₅ = 15.93 D₆₀ = 0.87 D₅₀ = 0.53

D₃₀ = 0.27 D₁₅ = 0.14 D₁₀ = 0.02

C_c = 4.0848 C_u = 43.0437

Leroy Barker
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
		32.7	44.0	23.3	---	---	---	---

SIEVE inches size	PERCENT FINER		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.0454		
D ₃₀	0.0072		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
#4	100.0		
#10	99.8		
#20	99.1		
#40	97.0		
#60	89.5		
#100	78.9		
#200	67.3		

SOIL DESCRIPTION
 ○ FINE SANDY SILT

REMARKS:
 ○

○ Source:

Sample No.: S-1-10

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-1-10

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: FINE SANDY SILT

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	42.21	
Tare =	0.00	
Dry sample weight =	42.21	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare =	41.01	Tare = .00 Sample weight = 41.01
Cumulative weight retained tare=	.00	
Tare for cumulative weight retained=	.00	
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.08	99.8
# 20	0.30	99.1
# 40	1.15	97.0
# 60	4.23	89.5
# 100	8.59	78.9
# 200	13.34	67.3

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 99.8

Weight of hydrometer sample: 41.01

Calculated biased weight= 41.09

Table of composite correction values:

Temp, deg C:	24.0	20.0	17.1
Comp. corr:	-8.0	-8.0	-9.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth $L = 16.294964 - 0.164 \times R_m$

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	21.1	31.0	23.0	0.0135	31.0	11.2	0.0319	56.0
5.00	20.8	29.0	21.0	0.0135	29.0	11.5	0.0205	51.1
15.00	21.2	24.0	16.0	0.0134	24.0	12.4	0.0122	38.9
30.00	21.5	22.0	14.0	0.0134	22.0	12.7	0.0087	34.1
60.00	22.5	19.0	11.0	0.0132	19.0	13.2	0.0062	26.8
250.00	24.1	16.0	8.0	0.0130	16.0	13.7	0.0030	19.5
1440.00	17.1	16.0	7.0	0.0142	16.0	13.7	0.0014	17.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 32.7 (% coarse = 0.2 % medium = 2.8 % fine = 29.7)

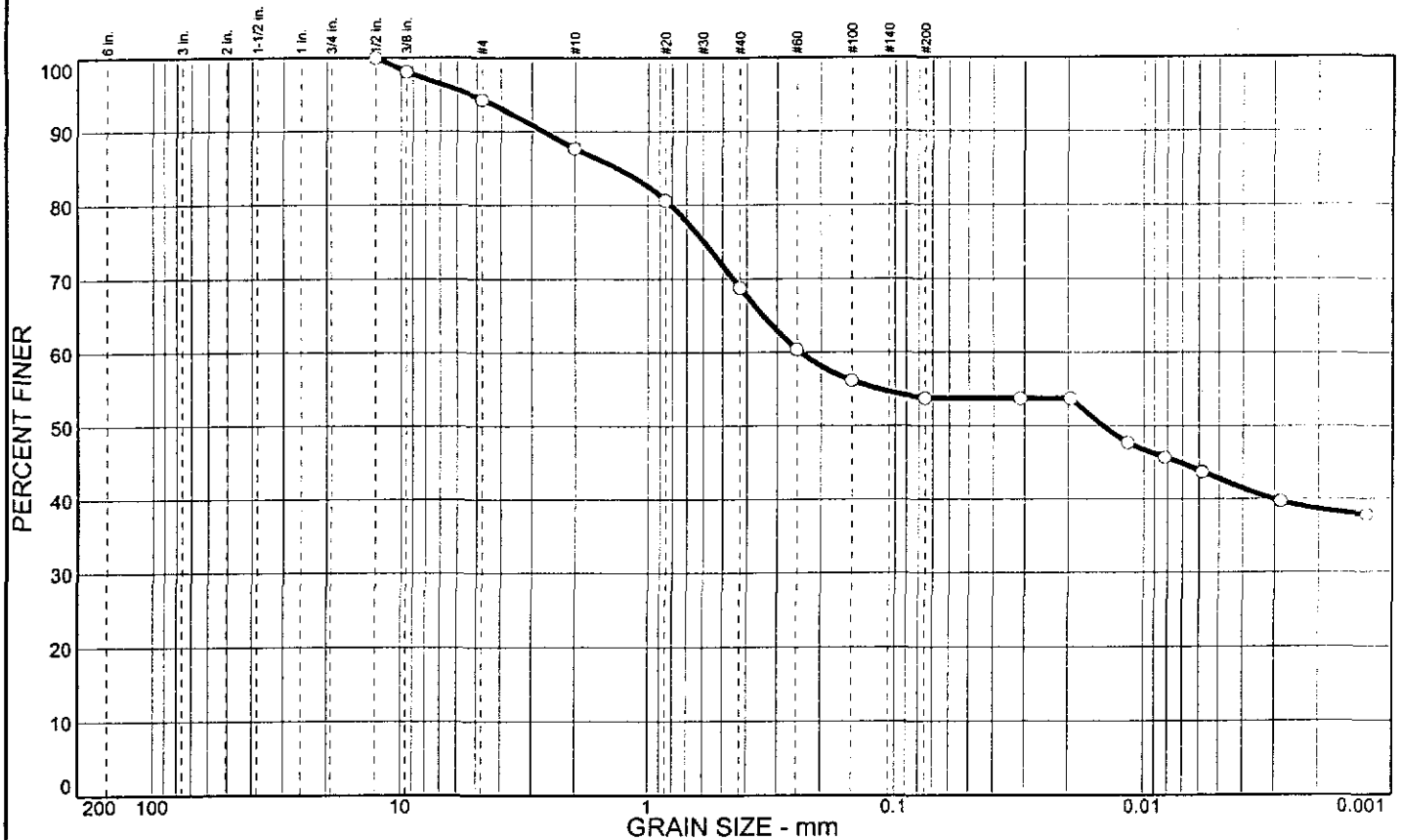
% SILT = 44.0 % CLAY = 23.3

D₈₅ = 0.20 D₆₀ = 0.05 D₅₀ = 0.02

D₃₀ = 0.01

Reroy Bayley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
	5.7	40.6	10.9	42.8	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.5	100.0		
.375	98.1		
GRAIN SIZE			
D ₆₀	0.242		
D ₃₀			
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	94.3		
#10	87.7		
#20	80.6		
#40	68.8		
#60	60.4		
#100	56.1		
#200	53.7		

SOIL DESCRIPTION
 ○ MEDIUM TO FINE SANDY CLAY, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: S-1-11A

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #: S9-18566
Project Number: 2000-00-0237

Sample Data

Source:
Sample No.: S-1-11A
Elev. or Depth: 0-2" Sample Length (in./cm.):
Location:
Description: MEDIUM TO FINE SANDY CLAY, TRACE GRAVEL
Liquid Limit: - - - Plastic Limit: - - -
USCS Classification: - - - AASHTO Classification: - - -
Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 54.64
Tare = 0.00
Dry sample weight = 54.64
Sample split on number 10 sieve
Split sample data:
Sample and tare = 44.14 Tare = .00 Sample weight = 44.14
Cumulative weight retained tare= .00
Time for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.5 inch	0.00	100.0
.375 inch	1.03	98.1
# 4	3.11	94.3
# 10	6.73	87.7
# 20	3.58	80.6
# 40	9.50	68.8
# 60	13.72	60.4
# 100	15.90	56.1
# 200	17.10	53.7

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 87.7
Weight of hydrometer sample: 44.14
Calculated biased weight= 50.33
Table of composite correction values:
Temp, deg C: 24.0 20.0 17.0
Comp. corr: -8.0 -8.0 -9.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.8	35.0	27.0	0.0135	35.0	10.6	0.0310	53.7
5.00	21.1	35.0	27.0	0.0135	35.0	10.6	0.0196	53.7
15.00	21.1	32.0	24.0	0.0135	32.0	11.0	0.0116	47.7
30.00	21.6	31.0	23.0	0.0134	31.0	11.2	0.0082	45.7
60.00	21.8	30.0	22.0	0.0133	30.0	11.4	0.0058	43.7
250.00	23.4	28.0	20.0	0.0131	28.0	11.7	0.0028	39.7
1440.00	17.0	28.0	19.0	0.0142	28.0	11.7	0.0013	37.8

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 5.7 (% coarse = % fine = 5.7)

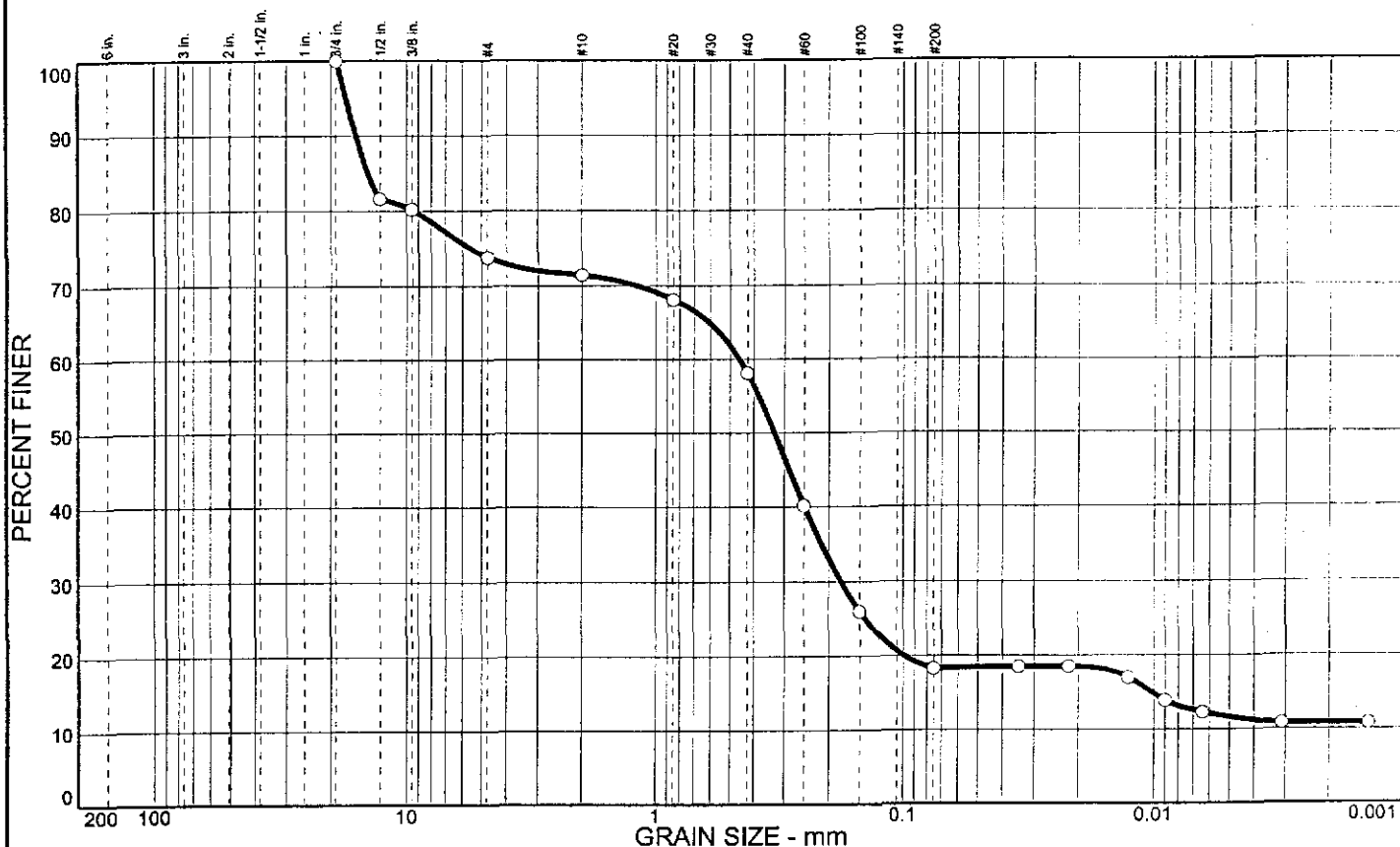
% SAND = 40.6 (% coarse = 6.6 % medium = 18.9 % fine = 15.1)

% SILT = 10.9 % CLAY = 42.8

D₈₅ = 1.34 D₆₀ = 0.24 D₅₀ = 0.01

Keroy Bailey
 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-1-12

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	72.05	
Tare =	0.00	
Dry sample weight =	72.05	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 46.28 Tare = .00 Sample weight = 46.28		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	13.27	81.6
.375 inch	14.30	80.2
# 4	18.89	73.8
# 10	20.58	71.4
# 20	2.14	68.1
# 40	8.63	58.1
# 60	20.23	40.2
# 100	29.40	26.0
# 200	34.43	18.3

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 71.4

Weight of hydrometer sample: 46.28

Calculated biased weight= 64.82

Table of composite correction values:

Temp, deg C: 24.0 20.0 16.9

Comp. corr: -8.0 -8.0 -9.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.9	20.0	12.0	0.0135	20.0	13.0	0.0344	18.5
5.00	20.9	20.0	12.0	0.0135	20.0	13.0	0.0218	18.5
15.00	20.9	19.0	11.0	0.0135	19.0	13.2	0.0126	17.0
30.00	21.2	17.0	9.0	0.0134	17.0	13.5	0.0090	13.9
60.00	21.5	16.0	8.0	0.0134	16.0	13.7	0.0064	12.3
250.00	23.2	15.0	7.0	0.0131	15.0	13.8	0.0031	10.8
1440.00	16.9	16.0	7.0	0.0142	16.0	13.7	0.0014	10.8

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 26.2 (% coarse = % fine = 26.2)

% SAND = 55.5 (% coarse = 2.4 % medium = 13.3 % fine = 39.8)

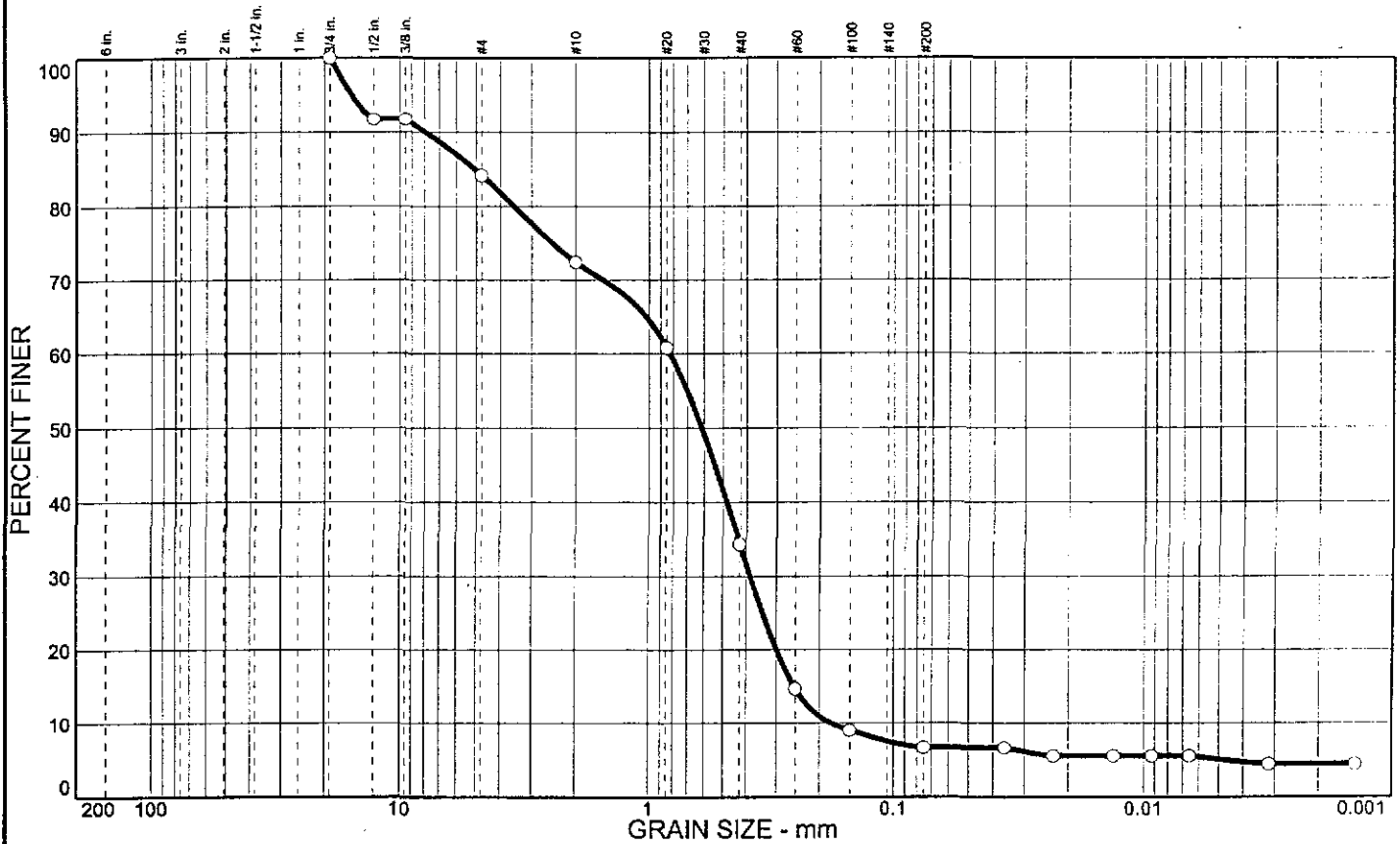
% SILT = 6.7 % CLAY = 11.6

D₈₅ = 14.23 D₆₀ = 0.46 D₅₀ = 0.33

D₃₀ = 0.18 D₁₅ = 0.01

Leroy Barley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
	15.8	77.6	1.6	5.0	---	---	---	---

SIEVE Inches size	PERCENT FINER		
	○		
.75	100.0		
.5	91.8		
.375	91.8		
GRAIN SIZE			
D ₆₀	0.825		
D ₃₀	0.384		
D ₁₀	0.180		
COEFFICIENTS			
C _c	1.00		
C _u	4.60		

SIEVE number size	PERCENT FINER		
	○		
#4	84.2		
#10	72.4		
#20	60.8		
#40	34.4		
#60	14.7		
#100	9.0		
#200	6.6		

SOIL DESCRIPTION
○ COARSE TO FINE SAND, WITH GRAVEL

REMARKS:
○

○ Source:

Sample No.: S-1-16

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-1-16

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: COARSE TO FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	92.18	
Tare =	0.00	
Dry sample weight =	92.18	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 65.65 Tare = .00 Sample weight = 65.65		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	7.55	91.8
.375 inch	7.55	91.8
# 4	14.58	84.2
# 10	25.48	72.4
# 20	10.48	60.8
# 40	34.46	34.4
# 60	52.28	14.7
# 100	57.46	9.0
# 200	59.69	6.6

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 72.4
Weight of hydrometer sample: 65.65
Calculated biased weight= 90.68
Table of composite correction values:
Temp, deg C: 24.0 20.0 16.9
Comp. corr: -8.0 -8.0 -9.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.5	14.0	6.0	0.0136	14.0	14.0	0.0359	6.6
5.00	20.5	13.0	5.0	0.0136	13.0	14.2	0.0228	5.5
15.00	20.5	13.0	5.0	0.0136	13.0	14.2	0.0132	5.5
30.00	21.2	13.0	5.0	0.0134	13.0	14.2	0.0092	5.5
60.00	21.1	13.0	5.0	0.0135	13.0	14.2	0.0065	5.5
250.00	22.9	12.0	4.0	0.0132	12.0	14.3	0.0032	4.4
1440.00	16.9	13.0	4.0	0.0142	13.0	14.2	0.0014	4.4

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 15.8 (% coarse = % fine = 15.8)

% SAND = 77.6 (% coarse = 11.8 % medium = 38.0 % fine = 27.8)

% SILT = 1.6 % CLAY = 5.0

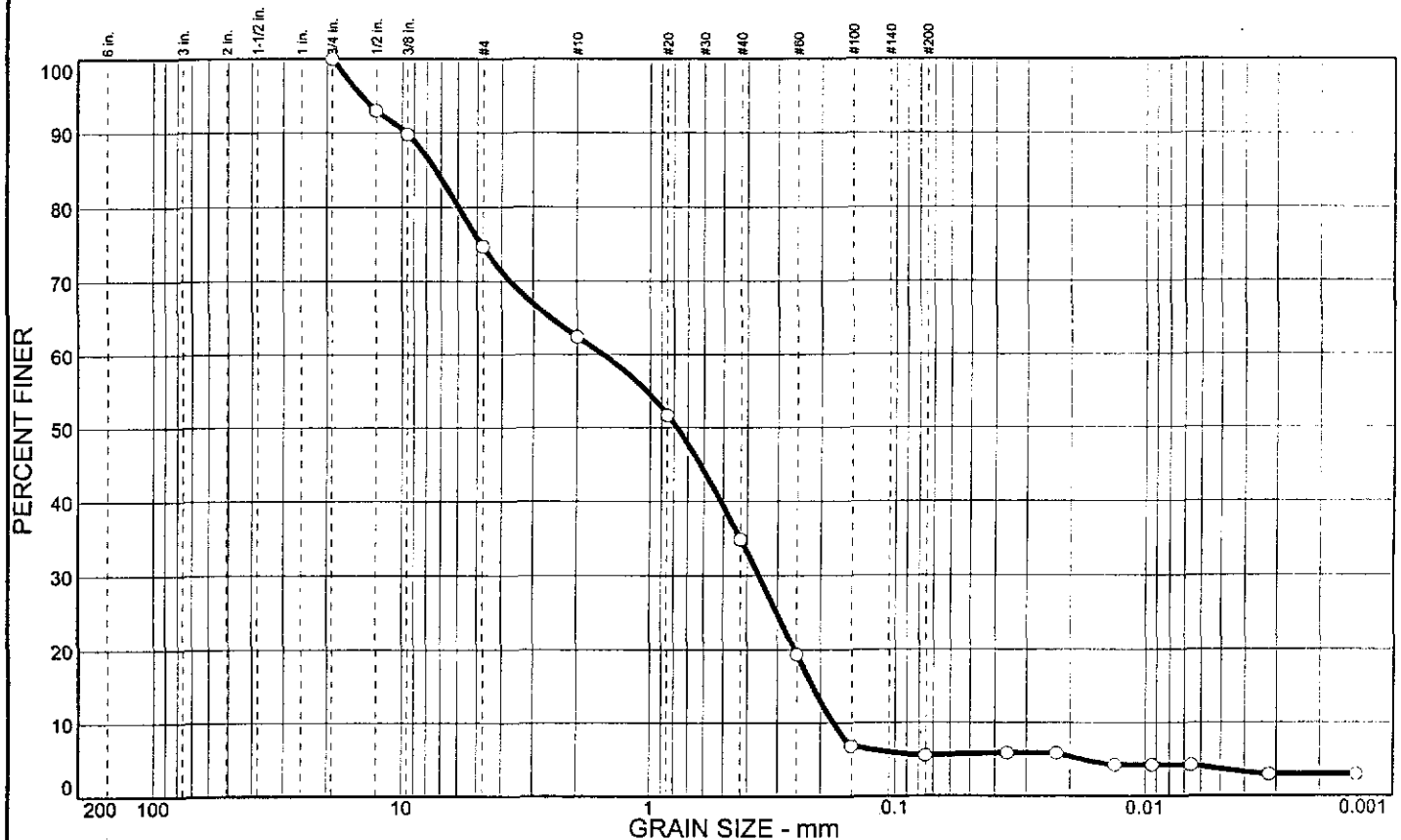
D₈₅ = 5.06 D₆₀ = 0.83 D₅₀ = 0.61

D₃₀ = 0.38 D₁₅ = 0.25 D₁₀ = 0.18

C_c = 0.9963 C_u = 4.5956

Leroy Bayley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	25.3	69.2	1.9	3.6	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.75	100.0		
.5	93.0		
.375	89.8		
GRAIN SIZE			
D ₆₀	1.57		
D ₃₀	0.358		
D ₁₀	0.178		
COEFFICIENTS			
C _c	0.46		
C _u	8.87		

SIEVE	PERCENT FINER		
number size	○		
#4	74.7		
#10	62.4		
#20	51.7		
#40	34.9		
#60	19.4		
#100	6.8		
#200	5.5		

SOIL DESCRIPTION
○ COARSE TO FINE SAND, WITH GRAVEL

REMARKS:
○

○ Source:

Sample No.: S-2-2

Elev./Depth: 0-3.5"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-2-2

Elev. or Depth: 0-3.5"

Sample Length (in./cm.):

Location:

Description: COARSE TO FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	123.85	
Tare =	0.00	
Dry sample weight =	123.85	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 74.76 Tare = .00 Sample weight = 74.76		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	8.66	93.0
.375 inch	12.65	89.8
# 4	31.33	74.7
# 10	46.63	62.4
# 20	12.85	51.7
# 40	32.98	34.9
# 60	51.54	19.4
# 100	66.66	6.8
# 200	68.14	5.5

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 62.4

Weight of hydrometer sample: 74.76

Calculated biased weight= 119.81

Table of composite correction values:

Temp, deg C:	24.0	20.0	16.7
Comp. corr:	-8.0	-8.0	-9.0

Miscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.7	15.0	7.0	0.0135	15.0	13.8	0.0356	5.8
5.00	20.3	15.0	7.0	0.0136	15.0	13.8	0.0226	5.8
15.00	20.3	13.0	5.0	0.0136	13.0	14.2	0.0132	4.2
30.00	20.2	13.0	5.0	0.0136	13.0	14.2	0.0094	4.2
60.00	21.1	13.0	5.0	0.0135	13.0	14.2	0.0065	4.2
250.00	22.2	11.5	3.5	0.0133	11.5	14.4	0.0032	2.9
1440.00	16.7	12.5	3.5	0.0142	12.5	14.2	0.0014	2.9

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 25.3 (% coarse = % fine = 25.3)

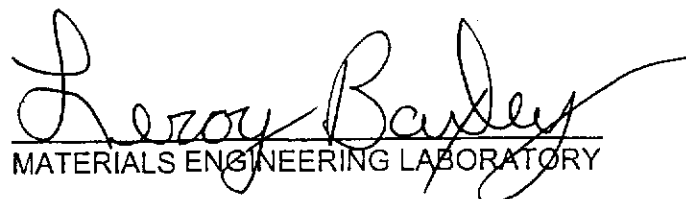
% SAND = 69.2 (% coarse = 12.3 % medium = 27.5 % fine = 29.4)

% SILT = 1.9 % CLAY = 3.6

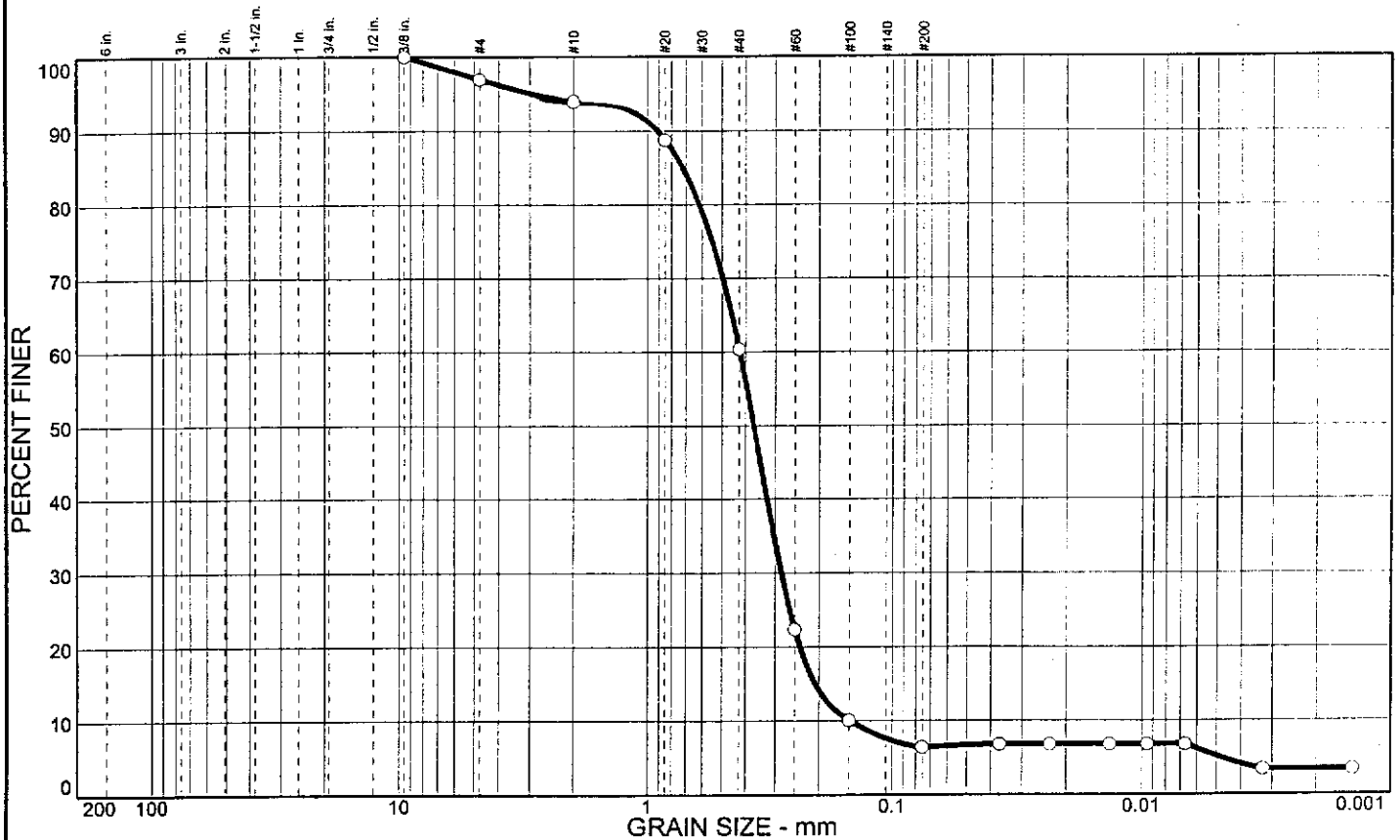
D₈₅= 7.36 D₆₀= 1.57 D₅₀= 0.78

D₃₀= 0.36 D₁₅= 0.22 D₁₀= 0.18

C_c= 0.4586 C_u= 8.8675


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	3.1	90.5	1.2	5.2	---	---	---	---

SIEVE inches size	PERCENT FINER		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.423		
D ₃₀	0.283		
D ₁₀	0.148		
COEFFICIENTS			
C _c	1.28		
C _u	2.85		

SIEVE number size	PERCENT FINER		
#4	96.9		
#10	94.0		
#20	88.8		
#40	60.4		
#60	22.4		
#100	10.1		
#200	6.4		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: S-2-5

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #: S9-18566
Project Number: 2000-00-0237

Sample Data

Source:
Sample No.: S-2-5
Elev. or Depth: 0-2" Sample Length (in./cm.):
Location:
Description: MEDIUM TO FINE SAND, TRACE GRAVEL
Liquid Limit: - - - Plastic Limit: - - -
USCS Classification: - - - AASHTO Classification: - - -
Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 29.49
Tare = 0.00
Dry sample weight = 29.49
Sample split on number 10 sieve
Split sample data:
Sample and tare = 27.58 Tare = .00 Sample weight = 27.58
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.93	96.9
# 10	1.77	94.0
# 20	1.53	88.8
# 40	9.87	60.4
# 60	21.01	22.4
# 100	24.61	10.1
# 200	25.69	6.4

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 94.0
Weight of hydrometer sample: 27.58
Calculated biased weight= 29.34
Table of composite correction values:
Temp, deg C: 21.1 20.0 16.6
Comp. corr: -9.0 -9.0 -10.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.2	11.0	2.0	0.0136	11.0	14.5	0.0366	6.8
5.00	20.2	11.0	2.0	0.0136	11.0	14.5	0.0232	6.8
15.00	20.2	11.0	2.0	0.0136	11.0	14.5	0.0134	6.8
30.00	20.0	11.0	2.0	0.0136	11.0	14.5	0.0095	6.8
60.00	20.2	11.0	2.0	0.0136	11.0	14.5	0.0067	6.8
250.00	21.1	10.0	1.0	0.0135	10.0	14.7	0.0033	3.4
1440.00	16.6	11.0	1.0	0.0142	11.0	14.5	0.0014	3.4

Fractional Components

Gravel/Sand based on #4

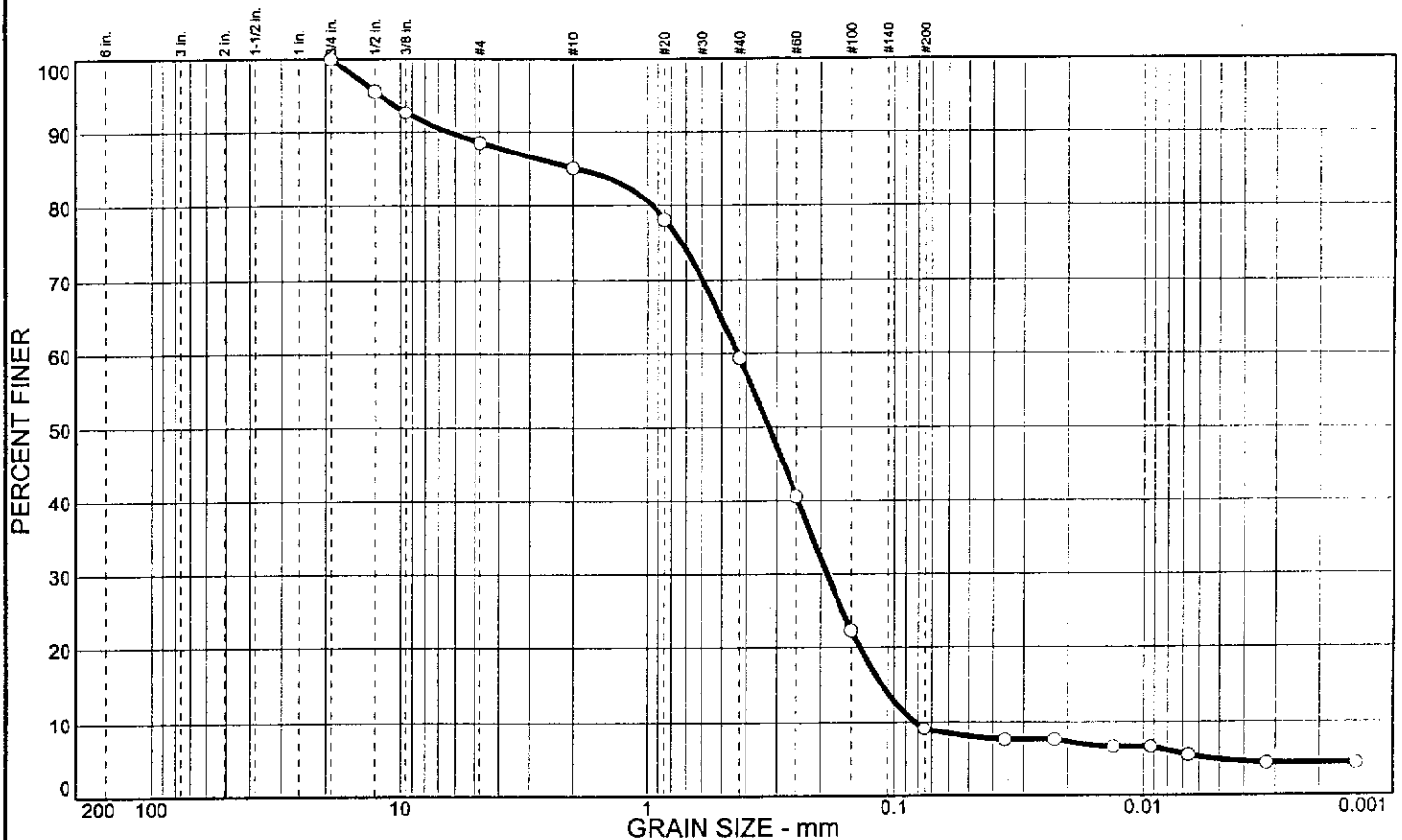
Sand/Fines based on #200

% COBBLES = % GRAVEL = 3.1 (% coarse = % fine = 3.1)
 % SAND = 90.5 (% coarse = 2.9 % medium = 33.6 % fine = 54.0)
 % SILT = 1.2 % CLAY = 5.2

D₈₅= 0.72 D₆₀= 0.42 D₅₀= 0.37
 D₃₀= 0.28 D₁₅= 0.21 D₁₀= 0.15
 C_c= 1.2812 C_u= 2.849

Leroy Bayley
 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	11.4	79.5	4.2	4.9	---	---	---	---

SIEVE	PERCENT FINER		
Inches size	○		
.75	100.0		
.5	95.6		
.375	92.7		
GRAIN SIZE			
D ₆₀	0.433		
D ₃₀	0.188		
D ₁₀	0.0821		
COEFFICIENTS			
C _c	1.00		
C _u	5.27		

SIEVE	PERCENT FINER		
number size	○		
#4	88.6		
#10	85.1		
#20	78.1		
#40	59.4		
#60	40.6		
#100	22.4		
#200	9.1		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND, LITTLE GRAVEL

REMARKS:
○

○ Source:

Sample No.: S-2-8

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-2-8

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, LITTLE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 93.54
Tare = 0.00
Dry sample weight = 93.54
Sample split on number 10 sieve
Split sample data:
Sample and tare = 77.94 Tare = .00 Sample weight = 77.94
Cumulative weight retained tare= .00
a for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	4.13	95.6
.375 inch	6.82	92.7
# 4	10.68	88.6
# 10	13.96	85.1
# 20	6.40	78.1
# 40	23.55	59.4
# 60	40.75	40.6
# 100	57.39	22.4
# 200	69.57	9.1

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 85.1
Weight of hydrometer sample: 77.94
Calculated biased weight= 91.59
Table of composite correction values:
Temp, deg C: 21.1 19.9 16.4
Comp. corr: -8.0 -8.0 -9.0

discus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.3	15.0	7.0	0.0136	15.0	13.8	0.0358	7.6
5.00	20.3	15.0	7.0	0.0136	15.0	13.8	0.0226	7.6
15.00	20.2	14.0	6.0	0.0136	14.0	14.0	0.0131	6.6
30.00	20.0	14.0	6.0	0.0136	14.0	14.0	0.0093	6.6
60.00	19.9	13.0	5.0	0.0137	13.0	14.2	0.0066	5.5
250.00	20.6	12.0	4.0	0.0135	12.0	14.3	0.0032	4.4
1440.00	16.4	13.0	4.0	0.0143	13.0	14.2	0.0014	4.4

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 11.4 (% coarse = % fine = 11.4)

% SAND = 79.5 (% coarse = 3.5 % medium = 25.7 % fine = 50.3)

% SILT = 4.2 % CLAY = 4.9

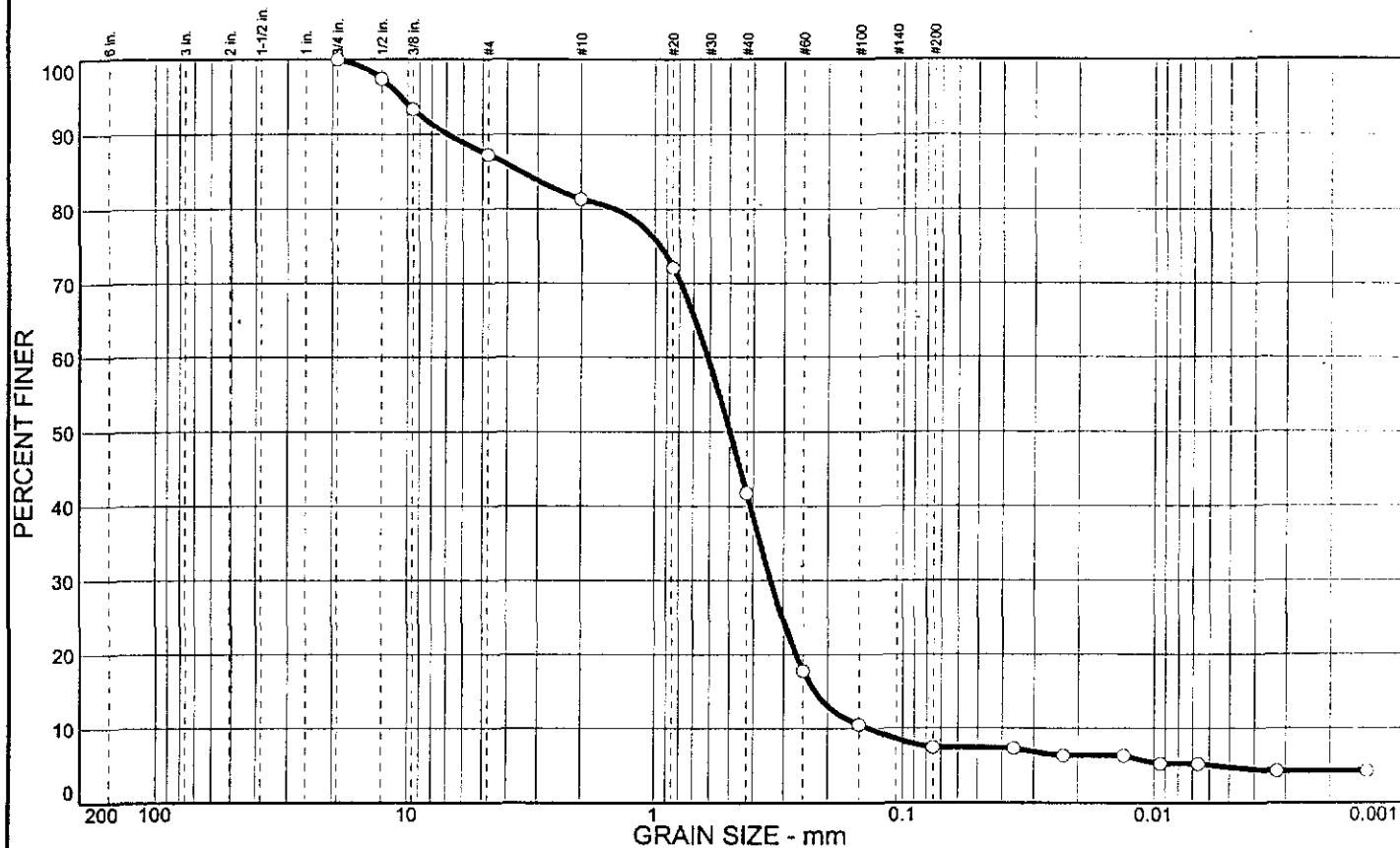
D₈₅= 1.95 D₆₀= 0.43 D₅₀= 0.32

D₃₀= 0.19 D₁₅= 0.11 D₁₀= 0.08

C_c= 0.9967 C_u= 5.274

Leroy Bayley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	12.7	79.9	2.7	4.7	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	97.4		
.375	93.4		
GRAIN SIZE			
D ₆₀	0.614		
D ₃₀	0.338		
D ₁₀	0.138		
COEFFICIENTS			
C _c	1.34		
C _u	4.44		

SIEVE number size	PERCENT FINER		
	○		
#4	87.3		
#10	81.4		
#20	72.1		
#40	41.8		
#60	17.8		
#100	10.5		
#200	7.4		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND, LITTLE GRAVEL

REMARKS:
○

○ Source:

Sample No.: S-2-6B

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-2-6B

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, LITTLE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -\

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 98.13
Tare = 0.00
Dry sample weight = 98.13
Sample split on number 10 sieve
Split sample data:
Sample and tare = 77.83 Tare = .00 Sample weight = 77.83
Cumulative weight retained tare= .00
Weight for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.75 inch 0.00 100.0
.5 inch 2.55 97.4
.375 inch 6.49 93.4
4 12.48 87.3
10 18.21 81.4
20 8.93 72.1
40 37.91 41.8
60 60.78 17.8
100 67.76 10.5
200 70.80 7.4

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 81.4
Weight of hydrometer sample: 77.83
Calculated biased weight= 95.61
Table of composite correction values:
Temp, deg C: 21.1 19.9 16.4
Comp. corr: -8.0 -8.0 -9.0
Viscosity correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.3	15.0	7.0	0.0136	15.0	13.8	0.0358	7.3
5.00	20.3	14.0	6.0	0.0136	14.0	14.0	0.0227	6.3
15.00	20.3	14.0	6.0	0.0136	14.0	14.0	0.0131	6.3
30.00	20.0	13.0	5.0	0.0136	13.0	14.2	0.0094	5.2
60.00	19.9	13.0	5.0	0.0137	13.0	14.2	0.0066	5.2
250.00	20.6	12.0	4.0	0.0135	12.0	14.3	0.0032	4.2
1440.00	16.4	13.0	4.0	0.0143	13.0	14.2	0.0014	4.2

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 12.7 (% coarse = % fine = 12.7)

% SAND = 79.9 (% coarse = 5.9 % medium = 39.6 % fine = 34.4)

% SILT = 2.7 % CLAY = 4.7

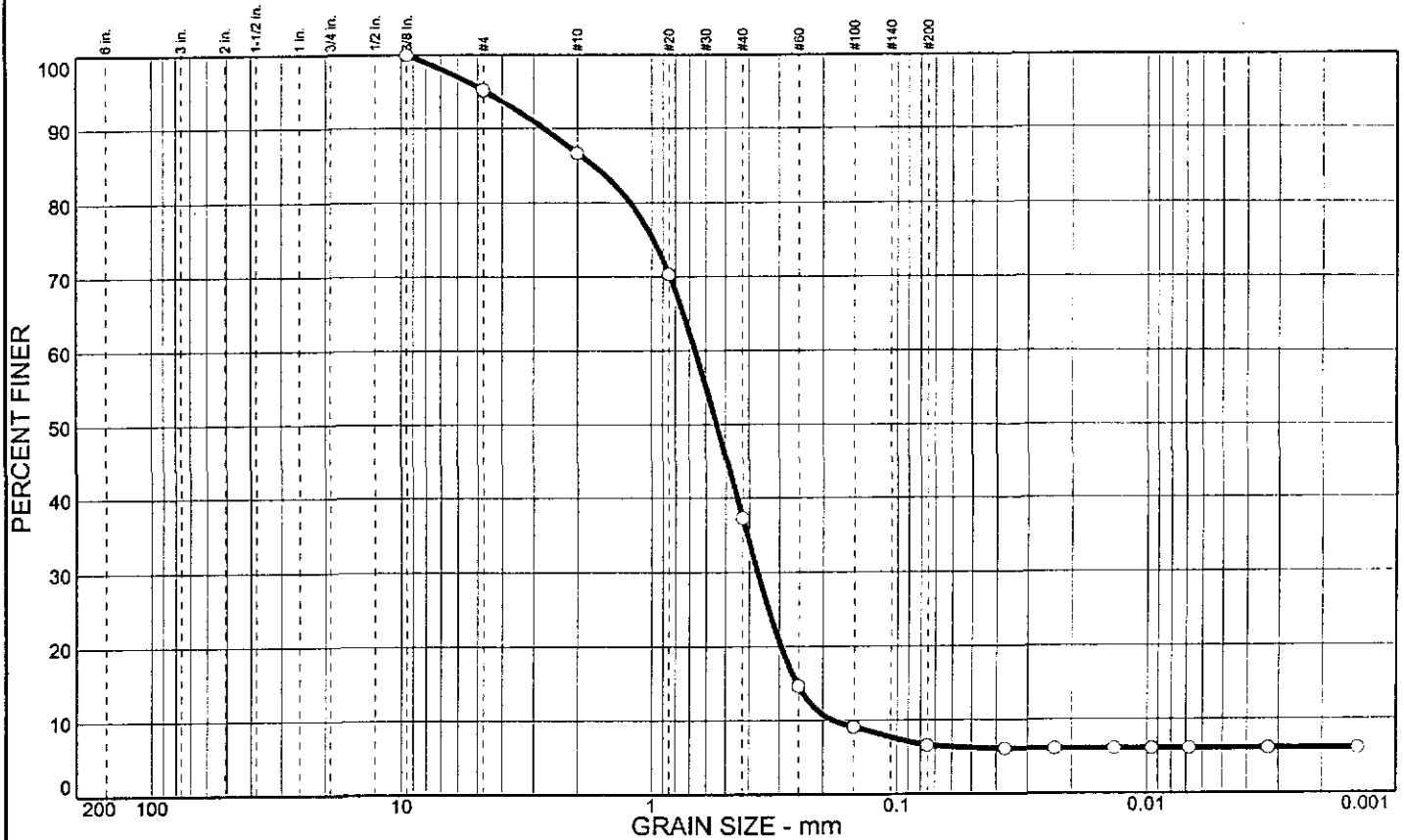
D₈₅ = 3.49 D₆₀ = 0.61 D₅₀ = 0.50

D₃₀ = 0.34 D₁₅ = 0.22 D₁₀ = 0.14

C_c = 1.3428 C_u = 4.4361

Leroy Bailey
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
	4.8	88.6	0.5	6.1	---	---	---	---

SIEVE	PERCENT FINER		
Inches size	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.663		
D ₃₀	0.368		
D ₁₀	0.182		
COEFFICIENTS			
C _c	1.12		
C _u	3.65		

SIEVE	PERCENT FINER		
number size	○		
#4	95.2		
#10	86.7		
#20	70.3		
#40	37.3		
#60	14.7		
#100	9.1		
#200	6.6		

SOIL DESCRIPTION
 ○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: S-2-6C

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-2-6C

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 33.05
Tare = 0.00
Dry sample weight = 33.05
Sample split on number 10 sieve
Split sample data:
Sample and tare = 28.26 Tare = .00 Sample weight = 28.26
Cumulative weight retained tare= .00
Weight for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.375 inch 0.00 100.0
4 1.59 95.2
10 4.41 86.7
20 5.36 70.3
40 16.10 37.3
60 23.48 14.7
100 25.28 9.1
200 26.12 6.6

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 86.7
Weight of hydrometer sample: 28.26
Calculated biased weight= 32.60
Table of composite correction values:
Temp, deg C: 20.5 19.8 16.6
Comp. corr: -8.0 -8.0 -9.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.3	10.0	2.0	0.0136	10.0	14.7	0.0368	6.1
5.00	20.3	10.0	2.0	0.0136	10.0	14.7	0.0233	6.1
15.00	20.3	10.0	2.0	0.0136	10.0	14.7	0.0134	6.1
30.00	20.0	10.0	2.0	0.0136	10.0	14.7	0.0095	6.1
60.00	19.8	10.0	2.0	0.0137	10.0	14.7	0.0068	6.1
250.00	20.5	10.0	2.0	0.0136	10.0	14.7	0.0033	6.1
1440.00	16.6	11.0	2.0	0.0142	11.0	14.5	0.0014	6.1

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 4.8 (% coarse = % fine = 4.8)

% SAND = 88.6 (% coarse = 8.5 % medium = 49.4 % fine = 30.7)

% SILT = 0.5 % CLAY = 6.1

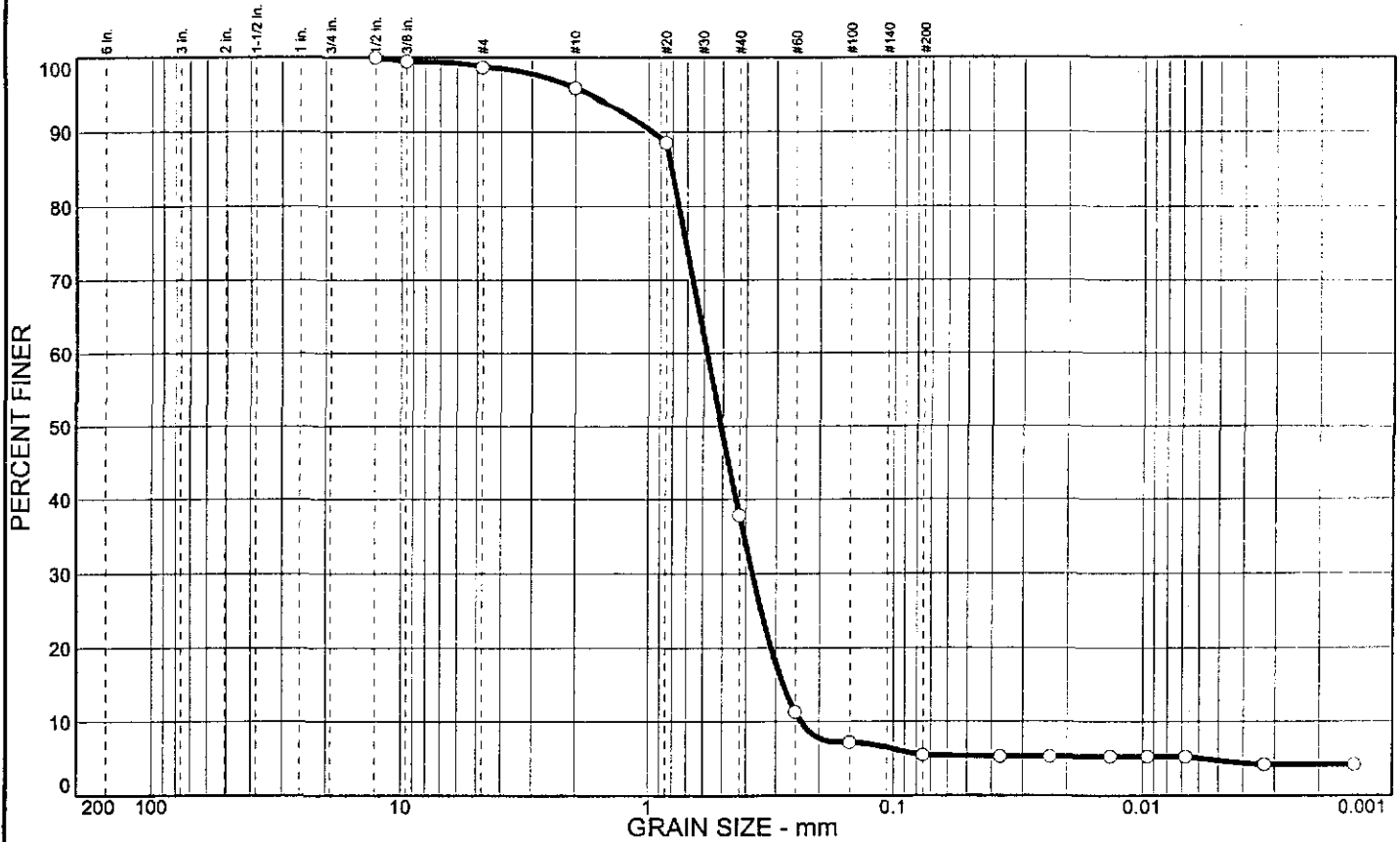
D₈₅= 1.72 D₆₀= 0.66 D₅₀= 0.54

D₃₀= 0.37 D₁₅= 0.25 D₁₀= 0.18

C_c= 1.1233 C_u= 3.6467

Heroy Bayley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
	1.3	93.2	0.7	4.8	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
5 .375	100.0 99.5		
GRAIN SIZE			
D ₆₀	0.582		
D ₃₀	0.375		
D ₁₀	0.237		
COEFFICIENTS			
C _c	1.02		
C _u	2.46		

SIEVE number size	PERCENT FINER		
	○		
#4	98.7		
#10	95.9		
#20	88.6		
#40	37.9		
#60	11.3		
#100	7.2		
#200	5.5		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: S-2-6A

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-2-6A

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	47.48	
Tare =	0.00	
Dry sample weight =	47.48	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 45.49 Tare = .00 Sample weight = 45.49		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.5 inch	0.00	100.0
.375 inch	0.26	99.5
# 4	0.62	98.7
# 10	1.97	95.9
# 20	3.47	88.6
# 40	27.51	37.9
# 60	40.12	11.3
# 100	42.07	7.2
# 200	42.89	5.5

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 95.9
Weight of hydrometer sample: 45.49
Calculated biased weight= 47.43
Table of composite correction values:
Temp, deg C: 20.5 19.8 16.5
Comp. corr: -8.0 -8.0 -9.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.1	10.5	2.5	0.0136	10.5	14.6	0.0368	5.3
5.00	20.1	10.5	2.5	0.0136	10.5	14.6	0.0233	5.3
15.00	20.2	10.5	2.5	0.0136	10.5	14.6	0.0134	5.3
30.00	20.0	10.5	2.5	0.0136	10.5	14.6	0.0095	5.3
60.00	19.8	10.5	2.5	0.0137	10.5	14.6	0.0067	5.3
250.00	20.5	10.0	2.0	0.0136	10.0	14.7	0.0033	4.2
1440.00	16.5	11.0	2.0	0.0143	11.0	14.5	0.0014	4.2

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 1.3 (% coarse = % fine = 1.3)

% SAND = 93.2 (% coarse = 2.8 % medium = 58.0 % fine = 32.4)

% SILT = 0.7 % CLAY = 4.8

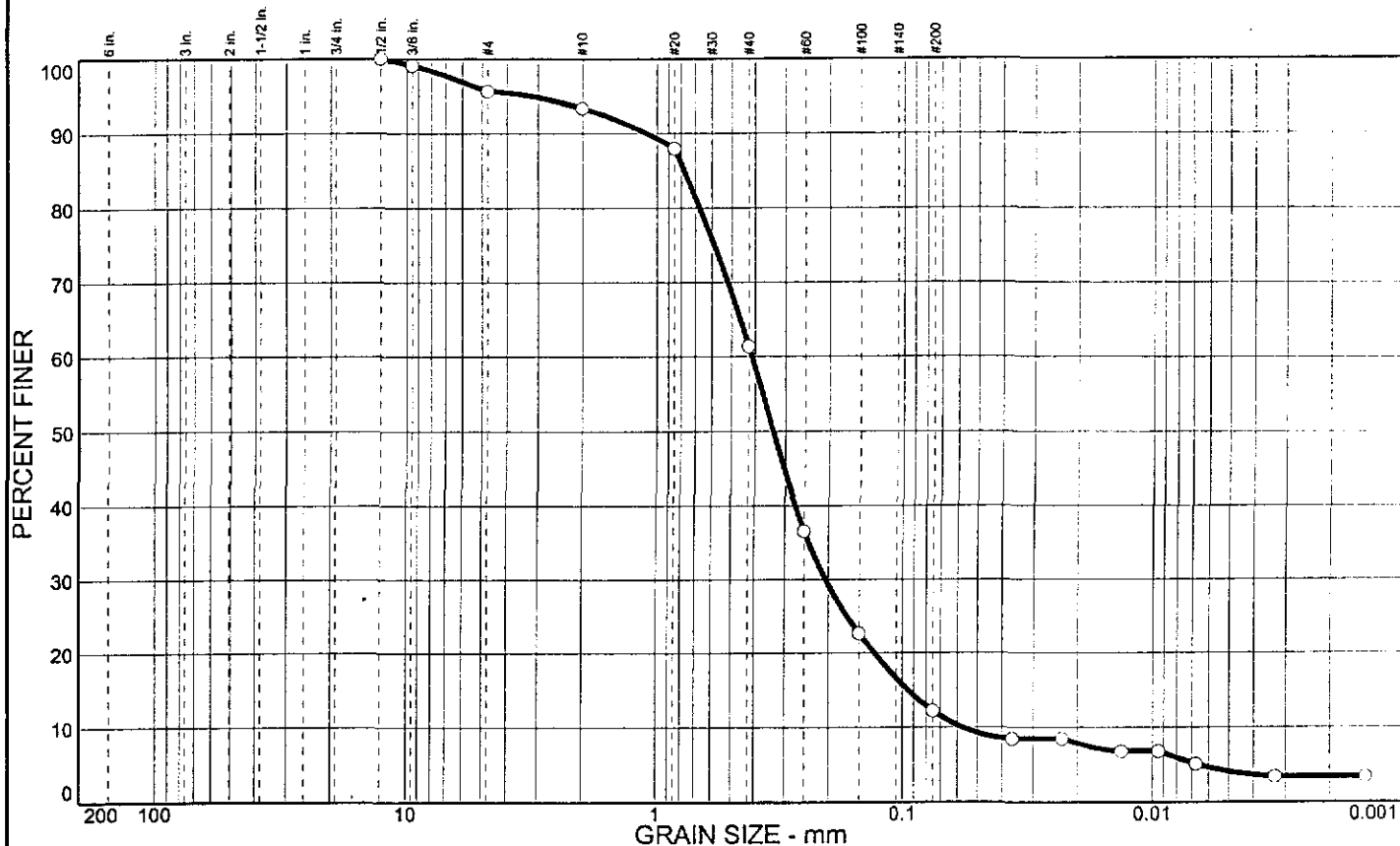
D₈₅ = 0.81 D₆₀ = 0.58 D₅₀ = 0.51

D₃₀ = 0.38 D₁₅ = 0.28 D₁₀ = 0.24

C_c = 1.0247 C_u = 2.4578

Leroy Bailey
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	4.3	83.5	8.1	4.1	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
5	100.0		
.375	99.1		
GRAIN SIZE			
D ₆₀	0.412		
D ₃₀	0.205		
D ₁₀	0.0574		
COEFFICIENTS			
C _c	1.78		
C _u	7.19		

SIEVE number size	PERCENT FINER		
	○		
#4	95.7		
#10	93.4		
#20	88.0		
#40	61.4		
#60	36.6		
#100	22.7		
#200	12.2		

SOIL DESCRIPTION
○ SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: S-2-16

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-2-16

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 60.53
Tare = 0.00
Dry sample weight = 60.53
Sample split on number 10 sieve
Split sample data:
Sample and tare = 54.78 Tare = .00 Sample weight = 54.78
Cumulative weight retained tare= .00
for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.5 inch 0.00 100.0
.375 inch 0.55 99.1
4 2.61 95.7
10 3.99 93.4
20 3.17 88.0
40 18.78 61.4
60 33.33 36.6
100 41.49 22.7
200 47.62 12.2

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 93.4
Weight of hydrometer sample: 54.78
Calculated biased weight= 58.65
Table of composite correction values:
Temp, deg C: 20.5 19.8 16.5
Comp. corr: -8.0 -8.0 -9.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.1	13.0	5.0	0.0136	13.0	14.2	0.0363	8.5
5.00	20.1	13.0	5.0	0.0136	13.0	14.2	0.0229	8.5
15.00	20.2	12.0	4.0	0.0136	12.0	14.3	0.0133	6.8
30.00	20.0	12.0	4.0	0.0136	12.0	14.3	0.0094	6.8
60.00	19.8	11.0	3.0	0.0137	11.0	14.5	0.0067	5.1
250.00	20.5	10.0	2.0	0.0136	10.0	14.7	0.0033	3.4
1440.00	16.5	11.0	2.0	0.0143	11.0	14.5	0.0014	3.4

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 4.3 (% coarse = % fine = 4.3)

% SAND = 83.5 (% coarse = 2.3 % medium = 32.0 % fine = 49.2)

% SILT = 8.1 % CLAY = 4.1

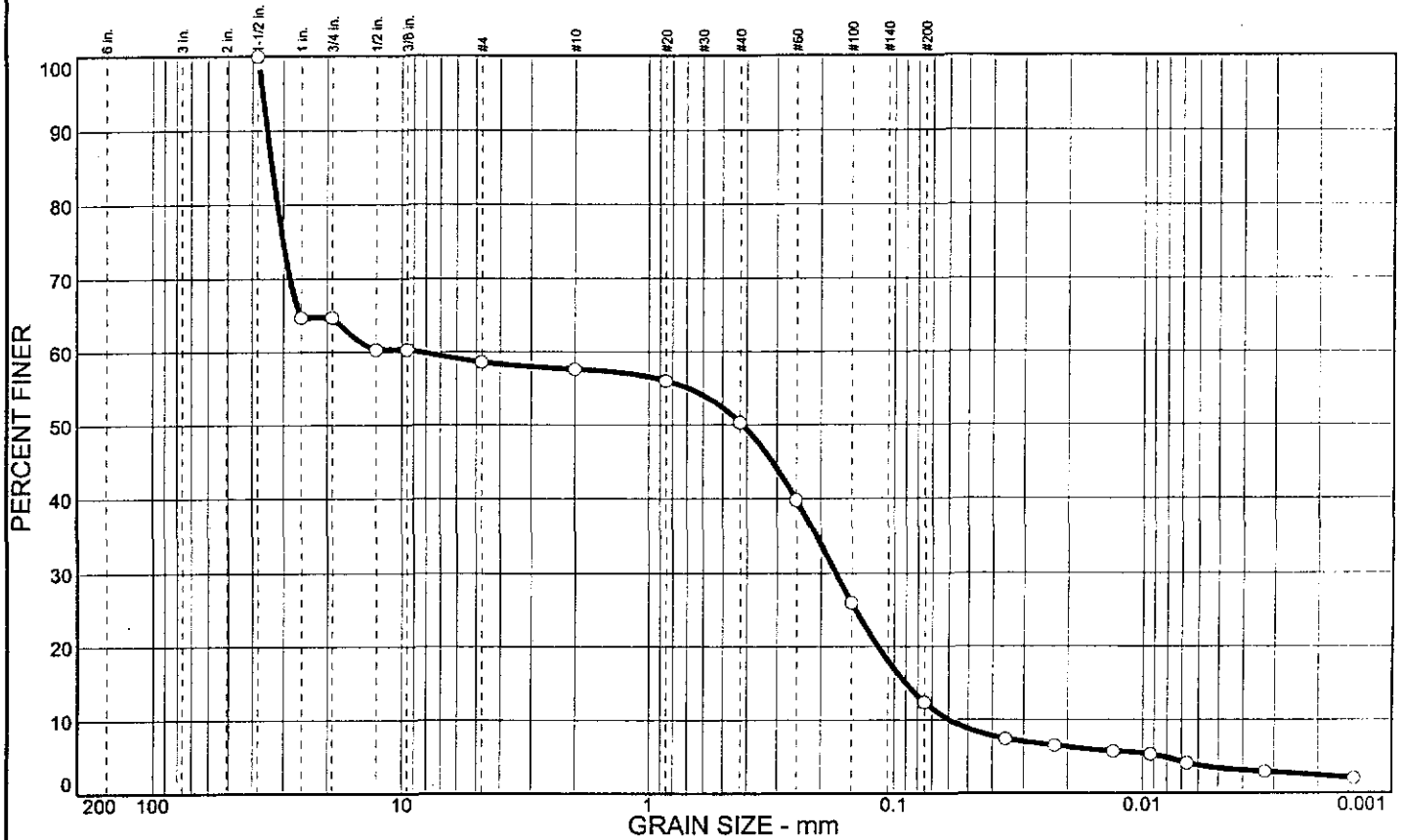
D₈₅= 0.78 D₆₀= 0.41 D₅₀= 0.34

D₃₀= 0.21 D₁₅= 0.09 D₁₀= 0.06

C_c= 1.7765 C_u= 7.1904

Leroy Bayley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-3-1

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 126.94
Tare = 0.00
Dry sample weight = 126.94
Sample split on number 10 sieve
Split sample data:
Sample and tare = 70.44 Tare = .00 Sample weight = 70.44

Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
1.5 inch	0.00	100.0
1 inch	44.84	64.7
.75 inch	44.84	64.7
.5 inch	50.35	60.3
.375 inch	50.35	60.3
# 4	52.60	58.6
# 10	53.85	57.6
# 20	1.96	56.0
# 40	8.92	50.3
# 60	21.79	39.8
# 100	38.62	26.0
# 200	55.23	12.4

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 57.6
Weight of hydrometer sample: 70.44
Calculated biased weight= 122.29
Table of composite correction values:
Temp, deg C: 20.5 19.9 16.4
Temp. corr: -8.0 -8.0 -9.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth $L = 16.294964 - 0.164 \times R_m$

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	R _m	Eff. depth	Diameter mm	Percent finer
2.00	20.2	17.0	9.0	0.0136	17.0	13.5	0.0354	7.4
5.00	20.2	16.0	8.0	0.0136	16.0	13.7	0.0225	6.5
15.00	20.1	15.0	7.0	0.0136	15.0	13.8	0.0131	5.7
30.00	20.0	14.5	6.5	0.0136	14.5	13.9	0.0093	5.3
60.00	19.9	13.0	5.0	0.0137	13.0	14.2	0.0066	4.1
250.00	20.5	11.5	3.5	0.0136	11.5	14.4	0.0033	2.9
1440.00	16.4	11.5	2.5	0.0143	11.5	14.4	0.0014	2.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 41.4 (% coarse = 35.3 % fine = 6.1)

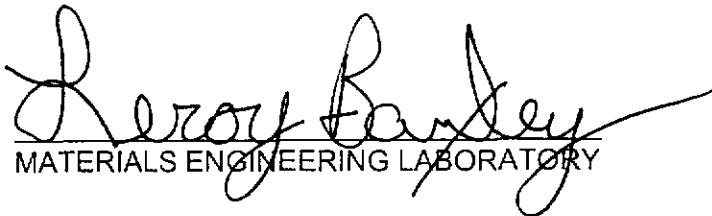
% SAND = 46.2 (% coarse = 1.0 % medium = 7.3 % fine = 37.9)

% SILT = 9.0 % CLAY = 3.4

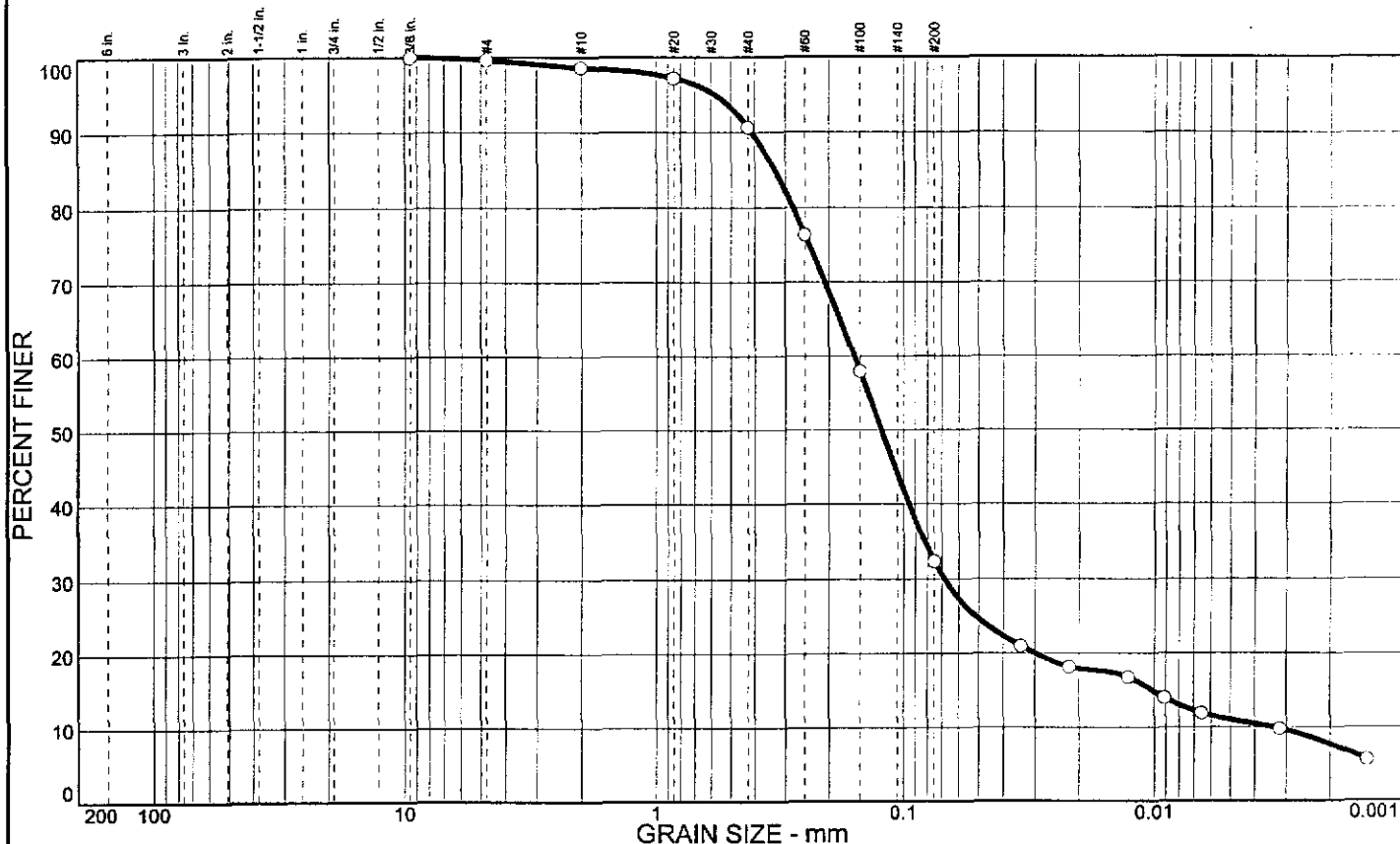
D₈₅ = 33.31 D₆₀ = 8.53 D₅₀ = 0.42

D₃₀ = 0.17 D₁₅ = 0.09 D₁₀ = 0.06

C_c = 0.0597 C_u = 143.2466


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	0.4	67.2	21.4	11.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.158		
D ₃₀	0.0682		
D ₁₀	0.0034		
COEFFICIENTS			
C _c	8.69		
C _u	46.62		

SIEVE number size	PERCENT FINER		
	○		
#4	99.6		
#10	98.6		
#20	97.2		
#40	90.7		
#60	76.4		
#100	58.0		
#200	32.4		

SOIL DESCRIPTION
○ SILTY FINE SAND

REMARKS:
○

○ Source:

Sample No.: S-3-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-3-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY FINE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 72.24

Tare = 0.00

Dry sample weight = 72.24

Sample split on number 10 sieve

Split sample data:

Sample and tare = 70.52 Tare = .00 Sample weight = 70.52

Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
-------	------------------------	------------------

.375 inch	0.00	100.0
-----------	------	-------

# 4	0.27	99.6
-----	------	------

# 10	1.02	98.6
------	------	------

# 20	1.04	97.2
------	------	------

# 40	5.63	90.7
------	------	------

# 60	15.89	76.4
------	-------	------

# 100	29.02	58.0
-------	-------	------

# 200	47.37	32.4
-------	-------	------

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 98.6

Weight of hydrometer sample: 70.52

Calculated biased weight= 71.52

Table of composite correction values:

Temp, deg C: 20.5 19.9 16.4

Comp. corr: -8.0 -8.0 -9.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.2	23.0	15.0	0.0136	23.0	12.5	0.0341	21.0
5.00	20.2	21.0	13.0	0.0136	21.0	12.9	0.0218	18.2
15.00	20.2	20.0	12.0	0.0136	20.0	13.0	0.0127	16.8
30.00	20.0	18.0	10.0	0.0136	18.0	13.3	0.0091	14.0
60.00	19.9	16.5	8.5	0.0137	16.5	13.6	0.0065	11.9
250.00	20.7	15.0	7.0	0.0135	15.0	13.8	0.0032	9.8
1440.00	16.4	13.0	4.0	0.0143	13.0	14.2	0.0014	5.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 0.4 (% coarse = % fine = 0.4)

% SAND = 67.2 (% coarse = 1.0 % medium = 7.9 % fine = 58.3)

% SILT = 21.4 % CLAY = 11.0

D₈₅ = 0.33 D₆₀ = 0.16 D₅₀ = 0.12

D₃₀ = 0.07 D₁₅ = 0.01 D₁₀ = 0.00

C_c = 8.6874 C_u = 46.6166

Heroy Bailey
MATERIALS ENGINEERING LABORATORY

The graph displays the grain size distribution of a sample. The y-axis represents the percentage of material finer than a given grain size, ranging from 0 to 100. The x-axis represents the grain size in millimeters on a logarithmic scale, ranging from 200 mm to 0.001 mm. The curve shows that approximately 100% of the sample is finer than 0.85 mm, and about 83% is finer than 0.425 mm. The distribution is relatively narrow, with most of the material falling between 0.075 mm and 0.0425 mm.

Sieve / Grain Size (mm)	Percent Finer (%)
10 (2.0 mm)	100
20 (0.85 mm)	100
40 (0.425 mm)	83
60 (0.25 mm)	50
100 (0.15 mm)	27
200 (0.075 mm)	16
400 (0.0375 mm)	9
600 (0.025 mm)	9
800 (0.018 mm)	6
1000 (0.015 mm)	6
1250 (0.012 mm)	5
1500 (0.01 mm)	2
2000 (0.0075 mm)	2

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
	GRAIN SIZE		
D ₆₀	0.295		
D ₃₀	0.169		
D ₁₀	0.0453		
	COEFFICIENTS		
C _c	2.13		
C _u	6.51		

SIEVE	PERCENT FINER		
number size	○		
#4	99.7		
#10	98.7		
#20	96.3		
#40	82.6		
#60	49.2		
#100	26.2		
#200	15.5		

REMARKS:

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-3-5

Elev. or Depth: 0-2'

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	82.02	
Tare =	0.00	
Dry sample weight =	82.02	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 80.81 Tare = .00 Sample weight = 80.81		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.23	99.7
# 10	1.11	98.7
# 20	2.01	96.3
# 40	13.22	82.6
# 60	40.56	49.2
# 100	59.38	26.2
# 200	68.13	15.5

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 98.7

Weight of hydrometer sample: 80.81

Calculated biased weight= 81.87

Table of composite correction values:

Temp, deg C:	20.5	19.9	16.5
Comp. corr:	-8.0	-8.0	-9.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.3	15.0	7.0	0.0136	15.0	13.8	0.0358	8.6
5.00	20.3	15.0	7.0	0.0136	15.0	13.8	0.0226	8.6
15.00	20.2	13.0	5.0	0.0136	13.0	14.2	0.0132	6.1
30.00	20.0	13.0	5.0	0.0136	13.0	14.2	0.0094	6.1
60.00	20.1	12.0	4.0	0.0136	12.0	14.3	0.0067	4.9
250.00	20.8	10.0	2.0	0.0135	10.0	14.7	0.0033	2.4
1440.00	16.5	11.0	2.0	0.0143	11.0	14.5	0.0014	2.4

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 0.3 (% coarse = % fine = 0.3)

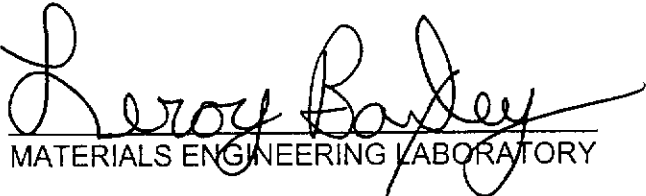
% SAND = 84.2 (% coarse = 1.0 % medium = 16.1 % fine = 67.1)

% SILT = 11.7 % CLAY = 3.8

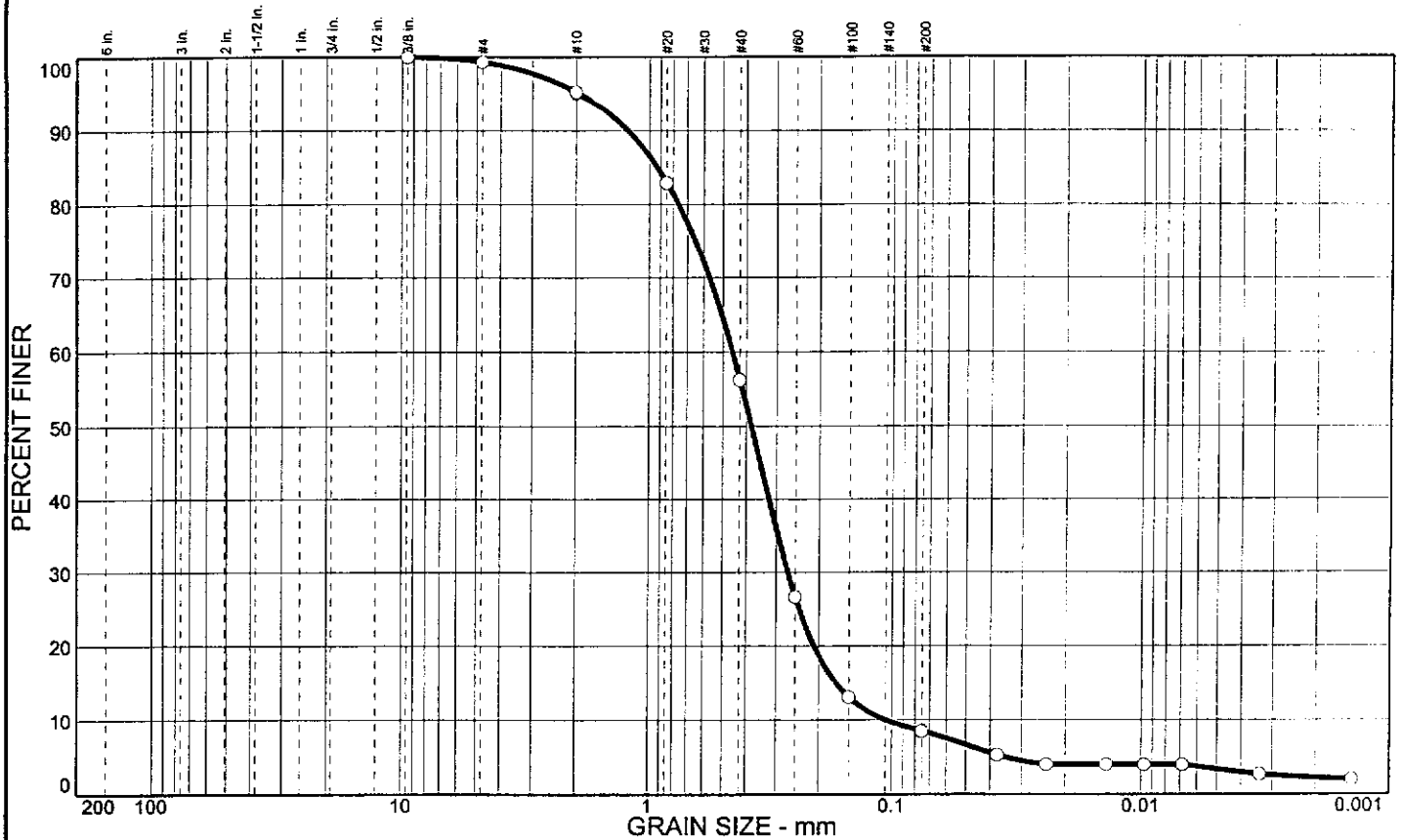
D₈₅= 0.45 D₆₀= 0.29 D₅₀= 0.25

D₃₀= 0.17 D₁₅= 0.07 D₁₀= 0.05

C_c= 2.1325 C_u= 6.5123


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	0.7	90.8	5.1	3.4	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.456		
D ₃₀	0.268		
D ₁₀	0.107		
COEFFICIENTS			
C _c	1.48		
C _u	4.28		

SIEVE	PERCENT FINER		
number size	○		
#4	99.3		
#10	95.2		
#20	82.9		
#40	56.3		
#60	26.7		
#100	13.1		
#200	8.5		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND

REMARKS:
○

○ Source:

Sample No.: S-3-7

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-J0-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #: S9-18566
Project Number: 2000-00-0237

Sample Data

Source:
Sample No.: S-3-7
Elev. or Depth: 0-2" Sample Length (in./cm.):
Location:
Description: MEDIUM TO FINE SAND
Liquid Limit: - - - Plastic Limit: - - -
USCS Classification: - - - AASHTO Classification: - - -
Testing Remarks:

Mechanical Analysis Data

```

Initial
Dry sample and tare= 77.55
Tare = 0.00
Dry sample weight = 77.55
Sample split on number 10 sieve
Split sample data:
Sample and tare = 71.64 Tare = .00 Sample weight = 71.64
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.375 inch 0.00 100.0
# 4 0.51 99.3
# 10 3.70 95.2
# 20 9.24 82.9
# 40 29.29 56.3
# 60 51.54 26.7
# 100 61.75 13.1
# 200 65.26 8.5

```

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 95.2
Weight of hydrometer sample: 71.64
Calculated biased weight= 75.25
Table of composite correction values:
Temp, deg C: 19.0 17.8
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Pyrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.1	12.0	4.0	0.0140	12.0	14.3	0.0374	5.3
5.00	18.1	11.0	3.0	0.0140	11.0	14.5	0.0238	4.0
15.00	18.1	11.0	3.0	0.0140	11.0	14.5	0.0137	4.0
30.00	18.2	11.0	3.0	0.0140	11.0	14.5	0.0097	4.0
60.00	18.5	11.0	3.0	0.0139	11.0	14.5	0.0068	4.0
250.00	18.7	10.0	2.0	0.0139	10.0	14.7	0.0034	2.7
1440.00	17.8	9.5	1.5	0.0140	9.5	14.7	0.0014	2.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 0.7 (% coarse = % fine = 0.7)

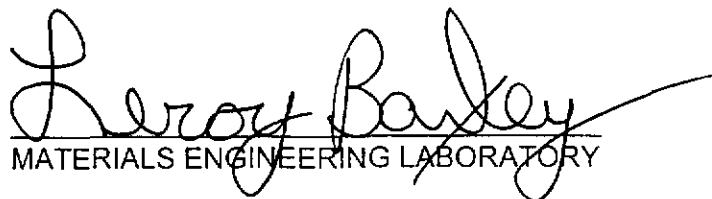
% SAND = 90.8 (% coarse = 4.1 % medium = 38.9 % fine = 47.8)

% SILT = 5.1 % CLAY = 3.4

D₈₅ = 0.93 D₆₀ = 0.46 D₅₀ = 0.38

D₃₀ = 0.27 D₁₅ = 0.17 D₁₀ = 0.11

C_c = 1.4782 C_u = 4.2806


MATERIALS ENGINEERING LABORATORY

The graph shows a grain size distribution curve for a soil sample. The y-axis represents 'PERCENT FINER' from 0 to 100. The x-axis represents 'GRAIN SIZE - mm' on a logarithmic scale from 200 to 0.001. A secondary x-axis at the top lists sieve sizes in inches and standard sieve numbers. The curve starts at 100% finer for 4.75 mm and drops to 0% finer for 0.075 mm.

Grain Size (mm)	Sieve Size	Percent Finer (%)
4.75	No. 40	100
2.0	No. 10	75
0.85	No. 20	27
0.425	No. 40	8
0.25	No. 60	3
0.15	No. 100	2
0.075	No. 200	0

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	74.4		
.375	71.3		
	GRAIN SIZE		
D ₆₀	3.82		
D ₃₀	0.974		
D ₁₀	0.482		
	COEFFICIENTS		
C _c	0.51		
C _u	7.92		

SOIL DESCRIPTION	
○ COARSE TO MEDIUM SAND, WITH GRAVEL	

REMARKS:	
○	

Elev./Depth: 0-2"

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-5-1

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: COARSE TO MEDIUM SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 88.07

Tare = 0.00

Dry sample weight = 88.07

Sample split on number 10 sieve

Split sample data:

Sample and tare = 41.04 Tare = .00 Sample weight = 41.04

Cumulative weight retained tare= .00

Weight for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	22.54	74.4
.375 inch	25.30	71.3
# 4	32.35	63.3
# 10	45.20	48.7
# 20	19.26	25.9
# 40	34.66	7.6
# 60	38.00	3.6
# 100	39.04	2.4
# 200	39.75	1.5

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 48.7

Weight of hydrometer sample: 41.04

Calculated biased weight= 84.27

Table of composite correction values:

Temp, deg C: 19.5 17.8

Comp. corr: -9.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	10.0	1.4	0.0138	10.0	14.7	0.0374	1.6
5.00	18.9	9.0	0.4	0.0138	9.0	14.8	0.0238	0.4
15.00	18.8	9.0	0.4	0.0139	9.0	14.8	0.0138	0.5
30.00	18.7	9.0	0.5	0.0139	9.0	14.8	0.0097	0.6
60.00	18.5	9.0	0.6	0.0139	9.0	14.8	0.0069	0.7
250.00	19.5	9.5	0.5	0.0137	9.5	14.7	0.0033	0.6
1440.00	16.7	8.5	0.5	0.0142	8.5	14.9	0.0014	0.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 36.7 (% coarse = % fine = 36.7)

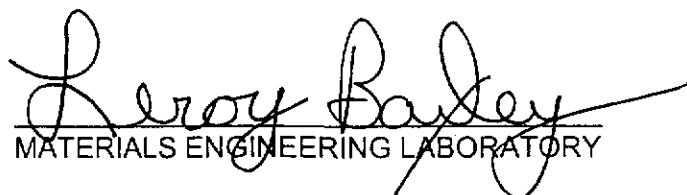
% SAND = 61.8 (% coarse = 14.6 % medium = 41.1 % fine = 6.1)

% SILT = 0.8 % CLAY = 0.7

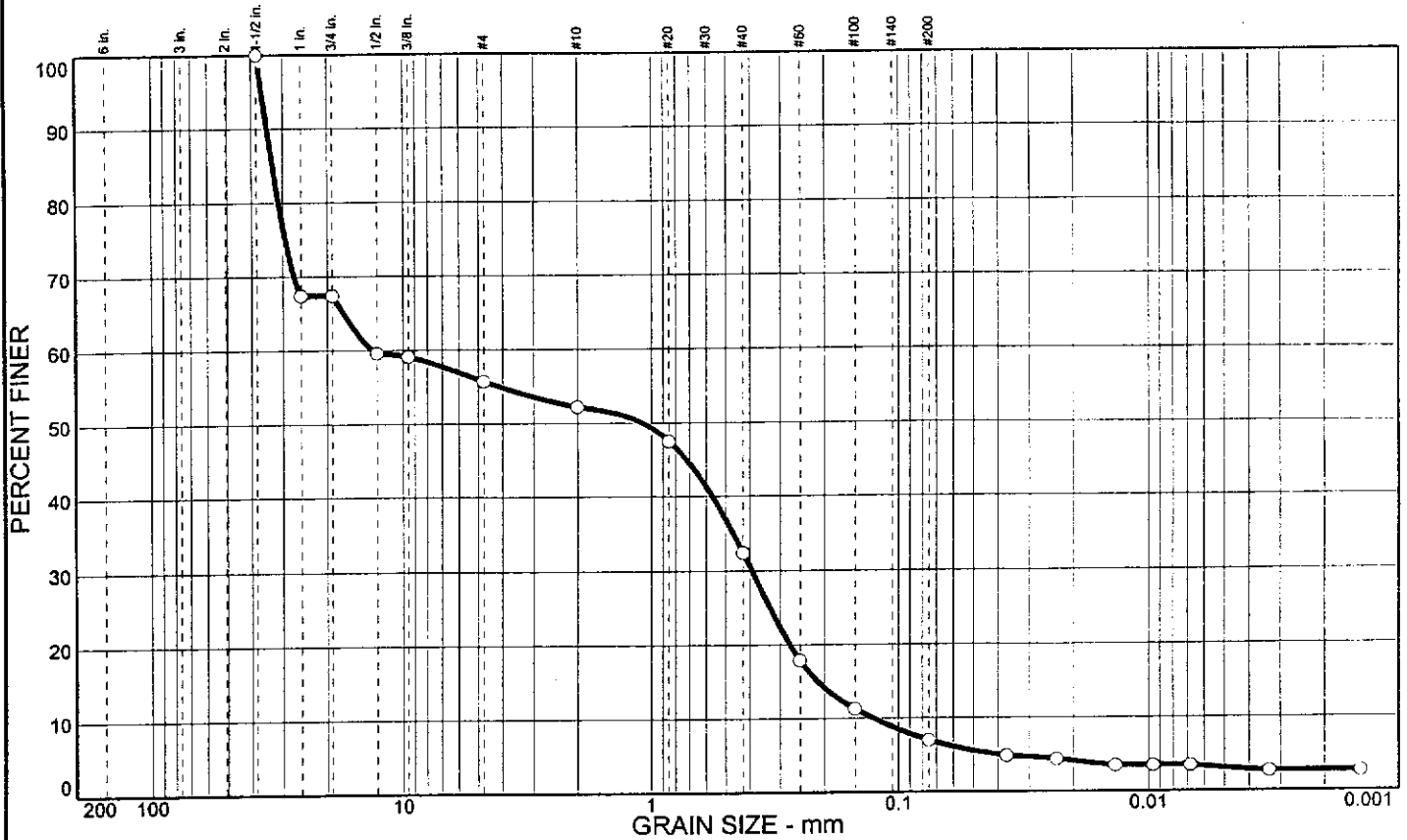
D₈₅ = 15.60 D₆₀ = 3.82 D₅₀ = 2.13

D₃₀ = 0.97 D₁₅ = 0.59 D₁₀ = 0.48

C_c = 0.5145 C_u = 7.9188


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report

[illegible]

SIEVE inches size	PERCENT FINER		
	○		
1.5	100.0		
1	67.4		
.75	67.4		
.5	59.6		
.375	59.1		
	GRAIN SIZE		
D ₆₀	13.2		
D ₃₀	0.391		
D ₁₀	0.126		
	COEFFICIENTS		
C _c	0.09		
C _u	104.54		

SIEVE number size	PERCENT FINER		
	○		
#4	55.7		
#10	52.2		
#20	47.5		
#40	32.4		
#60	17.9		
#100	11.3		
#200	7.0		

○ MEDIUM TO FINE SAND, WITH GRAVEL

[illegible]

0

○ Source:

Sample No.: S-5-2

Elev./Depth: 0-3.5'

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-5-2

Elev. or Depth: 0-3.5"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 119.98
Tare = 0.00
Dry sample weight = 119.98
Sample split on number 10 sieve
Split sample data:

Sample and tare = 58.94 Tare = .00 Sample weight = 58.94

Cumulative weight retained tare= .00

Weight for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
1.5 inch	0.00	100.0
1 inch	39.12	67.4
.75 inch	39.12	67.4
.5 inch	48.52	59.6
.375 inch	49.13	59.1
# 4	53.15	55.7
# 10	57.41	52.2
# 20	5.31	47.5
# 40	22.36	32.4
# 60	38.69	17.9
# 100	46.16	11.3
# 200	51.08	7.0

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 52.2
Weight of hydrometer sample: 58.94
Calculated biased weight= 112.91
Table of composite correction values:
Temp, deg C: 19.5 16.8
Temp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth $L = 16.294964 - 0.164 \times R_m$

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	13.5	5.5	0.0138	13.5	14.1	0.0367	4.9
5.00	18.9	13.0	5.0	0.0138	13.0	14.2	0.0233	4.4
15.00	18.7	12.0	4.0	0.0139	12.0	14.3	0.0136	3.5
30.00	18.7	12.0	4.0	0.0139	12.0	14.3	0.0096	3.5
60.00	18.4	12.0	4.0	0.0139	12.0	14.3	0.0068	3.5
250.00	19.2	11.0	3.0	0.0138	11.0	14.5	0.0033	2.7
1440.00	16.8	11.0	3.0	0.0142	11.0	14.5	0.0014	2.7

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 44.3 (% coarse = 32.6 % fine = 11.7)

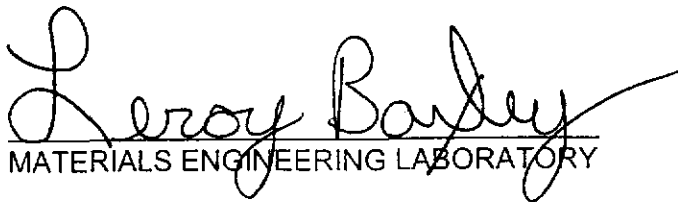
% SAND = 48.7 (% coarse = 3.5 % medium = 19.8 % fine = 25.4)

% SILT = 3.9 % CLAY = 3.1

$D_{85} = 32.96$ $D_{60} = 13.22$ $D_{50} = 1.09$

$D_{30} = 0.39$ $D_{15} = 0.21$ $D_{10} = 0.13$

$C_c = 0.0916$ $C_u = 104.543$


MATERIALS ENGINEERING LABORATORY

The graph shows the grain size distribution of a soil sample. The Y-axis represents the Percent Finer, ranging from 0 to 100. The X-axis represents the Grain Size in mm, on a logarithmic scale from 200 to 0.001. The curve starts at 100% finer for grain sizes down to approximately 0.075 mm (No. 20 sieve), then drops sharply, reaching about 10% finer at 0.0075 mm (No. 200 sieve), and finally levels off near 0% finer for grain sizes below 0.001 mm.

Grain Size (mm)	Percent Finer (%)
200	100
100	100
60	100
40	100
30	100
20	100
15	100
12.5	100
10	100
7.5	100
6	100
4.75	100
3.75	100
3.0	100
2.5	100
2.0	100
1.5	100
1.18	100
0.85	100
0.75	100
0.6	100
0.425	100
0.3	100
0.25	100
0.2	100
0.15	100
0.125	100
0.106	100
0.085	100
0.075	100
0.06	100
0.05	100
0.0425	100
0.0375	100
0.03	100
0.025	100
0.02	100
0.015	100
0.0125	100
0.0106	100
0.0085	100
0.0075	100
0.006	100
0.005	100
0.00425	100
0.00375	100
0.003	100
0.0025	100
0.002	100
0.0015	100
0.00125	100
0.00106	100
0.00085	100
0.00075	100
0.0006	100
0.0005	100
0.000425	100
0.000375	100
0.0003	100
0.00025	100
0.0002	100
0.00015	100
0.000125	100
0.000106	100
0.000085	100
0.000075	100
0.00006	100
0.00005	100
0.0000425	100
0.0000375	100
0.00003	100
0.000025	100
0.00002	100
0.000015	100
0.0000125	100
0.0000106	100
0.0000085	100
0.0000075	100
0.000006	100
0.000005	100
0.00000425	100
0.00000375	100
0.000003	100
0.0000025	100
0.000002	100
0.0000015	100
0.00000125	100
0.00000106	100
0.00000085	100
0.00000075	100
0.0000006	100
0.0000005	100
0.000000425	100
0.000000375	100
0.0000003	100
0.00000025	100
0.0000002	100
0.00000015	100
0.000000125	100
0.000000106	100
0.000000085	100
0.000000075	100
0.00000006	100
0.00000005	100
0.0000000425	100
0.0000000375	100
0.00000003	100
0.000000025	100
0.00000002	100
0.000000015	100
0.0000000125	100
0.0000000106	100
0.0000000085	100
0.0000000075	100
0.000000006	100
0.000000005	100
0.00000000425	100
0.00000000375	100
0.000000003	100
0.0000000025	100
0.000000002	100
0.0000000015	100
0.00000000125	100
0.00000000106	100
0.00000000085	100
0.00000000075	100
0.0000000006	100
0.0000000005	100
0.000000000425	100

[illegible]

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	92.3		
.375	91.0		
	GRAIN SIZE		
D ₆₀	0.975		
D ₃₀	0.590		
D ₁₀	0.388		
	COEFFICIENTS		
C _c	0.92		
C _u	2.51		

SIEVE number size	PERCENT FINER		
	○		
#4	89.8		
#10	82.4		
#20	52.8		
#40	12.9		
#60	4.7		
#100	3.5		
#200	2.5		

○ MEDIUM TO FINE SAND, LITTLE GRAVEL

REMARKS:

Elev./Depth: 0-2"

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-5-4

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, LITTLE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 101.47
Tare = 0.00
Dry sample weight = 101.47
Sample split on number 10 sieve
Split sample data:
Sample and tare = 82.16 Tare = .00 Sample weight = 82.16
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.75 inch 0.00 100.0
.5 inch 7.79 92.3
.375 inch 9.16 91.0
4 10.35 89.8
10 17.90 82.4
20 29.55 52.8
40 69.29 12.9
60 77.45 4.7
100 78.72 3.5
200 79.69 2.5

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 82.4
Weight of hydrometer sample: 82.16
Calculated biased weight= 99.71
Table of composite correction values:
Temp, deg C: 19.5 16.8
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.1	10.0	2.0	0.0138	10.0	14.7	0.0374	2.0
5.00	19.1	9.0	1.0	0.0138	9.0	14.8	0.0238	1.0
15.00	18.9	9.0	1.0	0.0138	9.0	14.8	0.0138	1.0
30.00	18.8	9.0	1.0	0.0139	9.0	14.8	0.0097	1.0
60.00	18.5	9.0	1.0	0.0139	9.0	14.8	0.0069	1.0
250.00	19.5	8.1	0.1	0.0137	8.1	15.0	0.0034	0.1
1440.00	16.6	8.1	0.1	0.0142	8.1	15.0	0.0015	0.1

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 10.2 (% coarse = % fine = 10.2)

% SAND = 87.3 (% coarse = 7.4 % medium = 69.5 % fine = 10.4)

% SILT = 2.0 % CLAY = 0.5

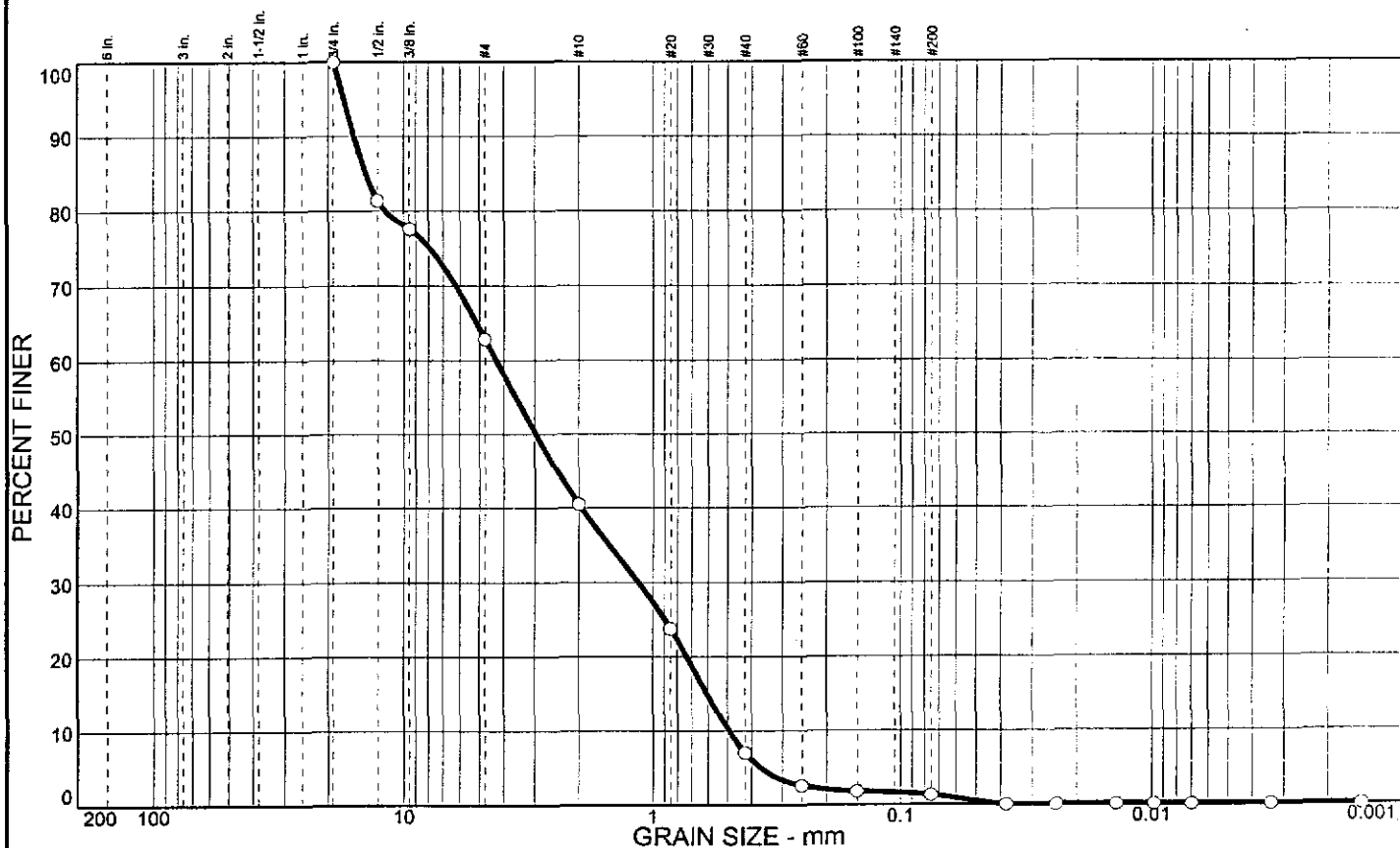
D₈₅ = 2.37 D₆₀ = 0.97 D₅₀ = 0.81

D₃₀ = 0.59 D₁₅ = 0.45 D₁₀ = 0.39

C_c = 0.9193 C_u = 2.5106

Leroy Bailey
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
	37.1	61.6	1.3	0.0	---	---	---	---

SIEVE	PERCENT FINER		
Inches size	○		
.75	100.0		
.5	81.4		
.375	77.6		
GRAIN SIZE			
D ₆₀	4.27		
D ₃₀	1.14		
D ₁₀	0.492		
COEFFICIENTS			
C _c	0.62		
C _u	8.68		

SIEVE	PERCENT FINER		
number size	○		
#4	62.9		
#10	40.5		
#20	23.8		
#40	7.1		
#60	2.6		
#100	1.8		
#200	1.3		

SOIL DESCRIPTION
 ○ COARSE TO MEDIUM SAND, WITH GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: S-5-5

Elev./Depth: 0-2"

Thompson Engineering

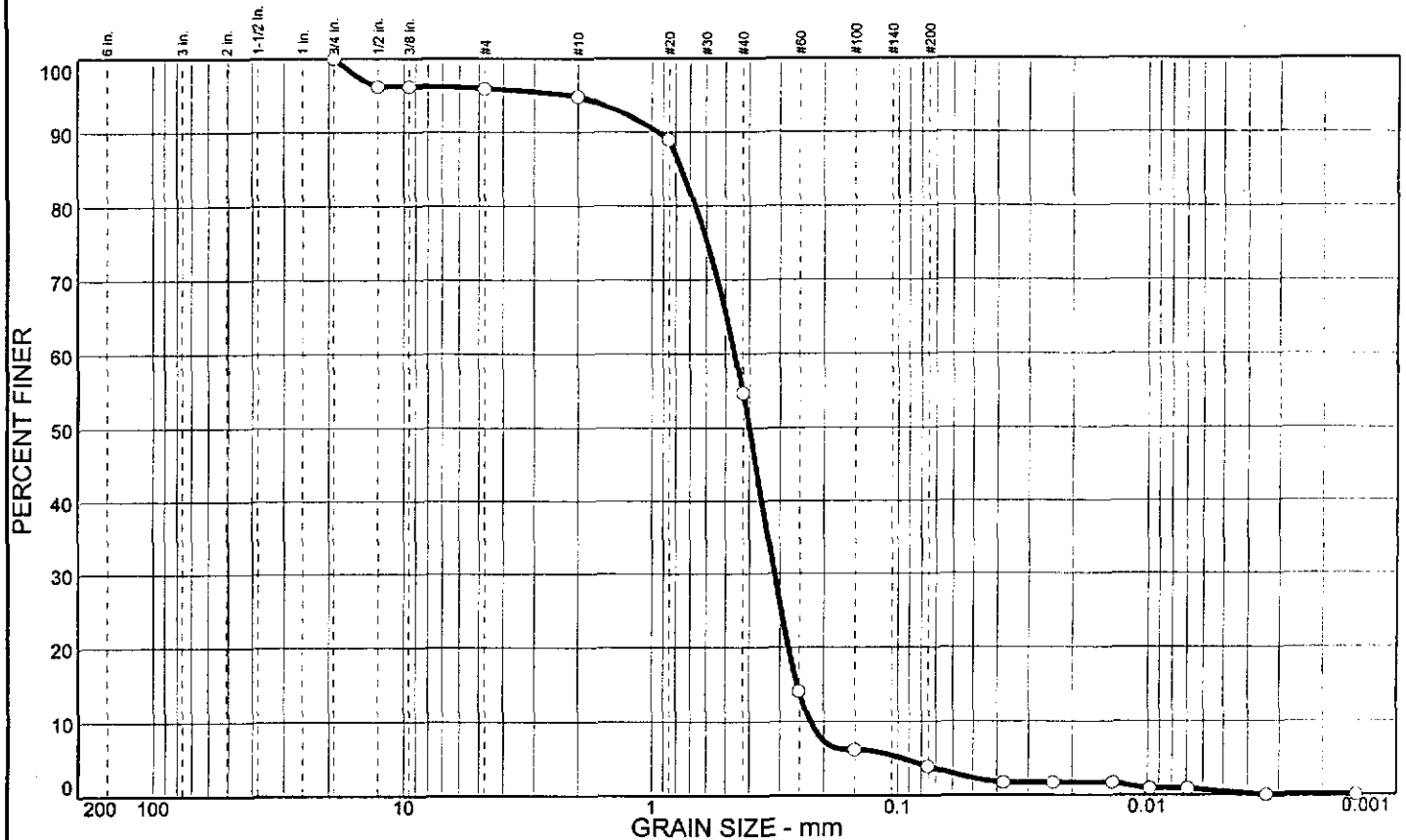
Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	4.1	92.0	3.5	0.4	---	---	---	---

SIEVE inches size	PERCENT FINER		
○	○		
.75	100.0		
.5	96.2		
.375	96.2		
X GRAIN SIZE			
D ₆₀	0.458		
D ₃₀	0.316		
D ₁₀	0.225		
X COEFFICIENTS			
C _c	0.97		
C _u	2.03		

SIEVE number size	PERCENT FINER		
○	○		
#4	95.9		
#10	94.9		
#20	89.0		
#40	54.7		
#60	14.1		
#100	6.2		
#200	3.9		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: S-5-6

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-5-6

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 57.98
Tare = 0.00
Dry sample weight = 57.98
Sample split on number 10 sieve
Split sample data:
Sample and tare = 54.96 Tare = .00 Sample weight = 54.96
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	2.19	96.2
.375 inch	2.19	96.2
# 4	2.39	95.9
# 10	2.95	94.9
# 20	3.43	89.0
# 40	23.31	54.7
# 60	46.80	14.1
# 100	51.40	6.2
# 200	52.70	3.9

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 94.9
Weight of hydrometer sample: 54.96
Calculated biased weight= 57.91
Table of composite correction values:
Temp, deg C: 19.8 16.6
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.2	9.0	1.0	0.0138	9.0	14.8	0.0375	1.7
5.00	19.2	9.0	1.0	0.0138	9.0	14.8	0.0237	1.7
15.00	19.1	9.0	1.0	0.0138	9.0	14.8	0.0137	1.7
30.00	18.7	8.5	0.5	0.0139	8.5	14.9	0.0098	0.9
60.00	18.8	8.5	0.5	0.0139	8.5	14.9	0.0069	0.9
250.00	19.8	8.0	0.0	0.0137	8.0	15.0	0.0033	0.0
1440.00	16.6	8.0	0.0	0.0142	8.0	15.0	0.0015	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 4.1 (% coarse = % fine = 4.1)

% SAND = 92.0 (% coarse = 1.0 % medium = 40.2 % fine = 50.8)

% SILT = 3.5 % CLAY = 0.4 (% CLAY COLLOIDS = 0.0)

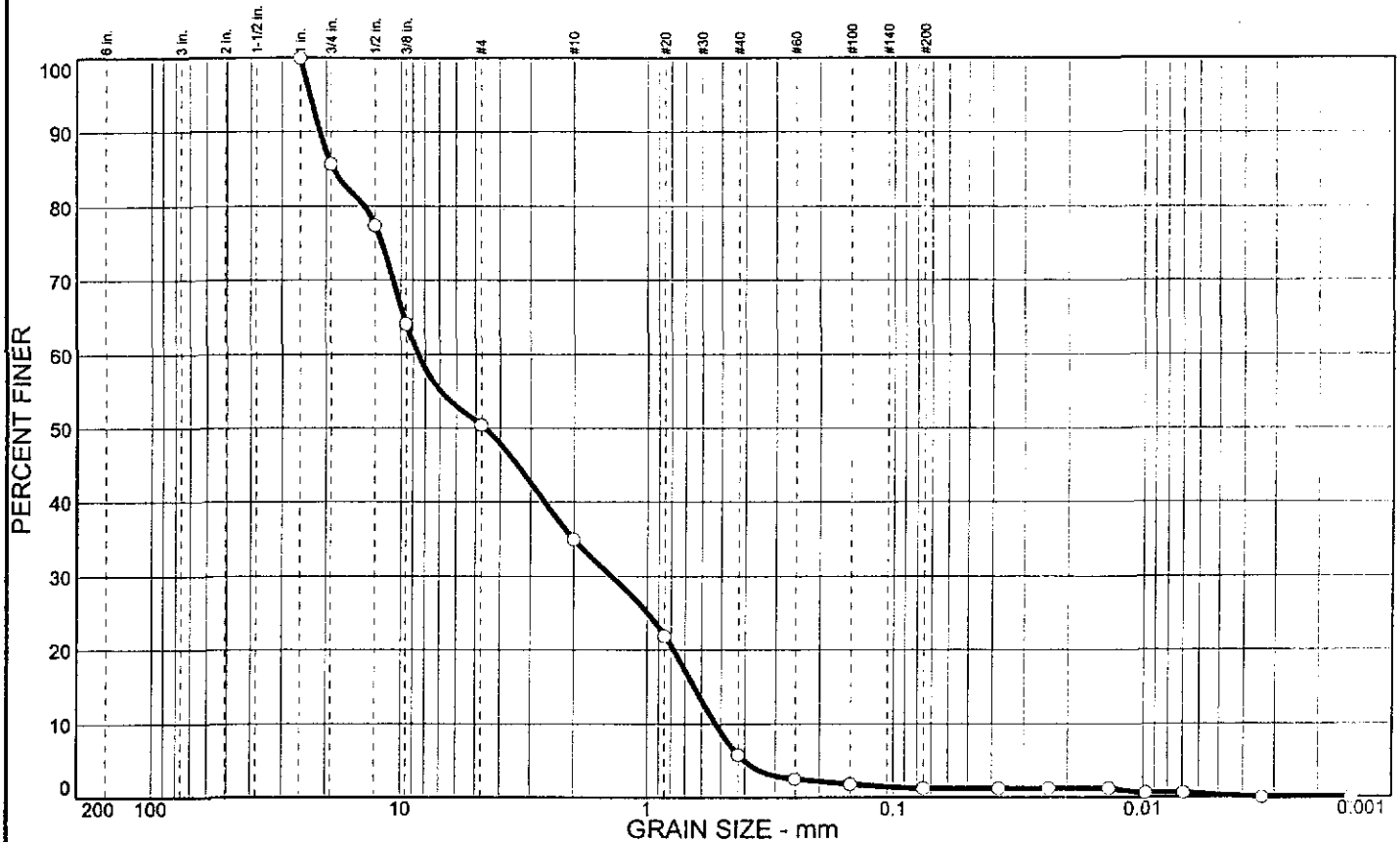
D₈₅ = 0.76 D₆₀ = 0.46 D₅₀ = 0.40

D₃₀ = 0.32 D₁₅ = 0.25 D₁₀ = 0.23

C_c = 0.9654 C_u = 2.0305

Leroy Bayley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	49.6	49.2	0.9	0.3	---	---	---	---

SIEVE	PERCENT FINER		
Inches size	○		
1	100.0		
.75	85.7		
.5	77.4		
.375	64.1		
GRAIN SIZE			
D ₆₀	8.55		
D ₃₀	1.40		
D ₁₀	0.526		
COEFFICIENTS			
C _c	0.44		
C _u	16.26		

SIEVE	PERCENT FINER		
number size	○		
#4	50.4		
#10	35.0		
#20	21.9		
#40	5.8		
#60	2.5		
#100	1.8		
#200	1.2		

SOIL DESCRIPTION
 ○ COARSE TO MEDIUM SAND, WITH GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: S-5-13

Elev./Depth: 0-3.5"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #: S9-18566
Project Number: 2000-00-0237

Sample Data

Source:
Sample No.: S-5-13
Elev. or Depth: 0-3.5" Sample Length (in./cm.):
Location:
Description: COARSE TO MEDIUM SAND, WITH GRAVEL
Liquid Limit: - - - Plastic Limit: - - -
USCS Classification: - - - AASHTO Classification: - - -
Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 174.48
Tare = 0.00
Dry sample weight = 174.48
Sample split on number 10 sieve
Split sample data:
Sample and tare = 59.07 Tare = .00 Sample weight = 59.07
Cumulative weight retained tare= .00
for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
1 inch	0.00	100.0
.75 inch	24.89	85.7
.5 inch	39.46	77.4
.375 inch	62.68	64.1
# 4	86.60	50.4
# 10	113.44	35.0
# 20	22.06	21.9
# 40	49.35	5.8
# 60	54.84	2.5
# 100	56.06	1.8
# 200	56.99	1.2

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 35.0
Weight of hydrometer sample: 59.07
Calculated biased weight= 168.77
Table of composite correction values:
Temp, deg C: 19.8 16.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.0	10.0	2.0	0.0138	10.0	14.7	0.0374	1.2
5.00	18.8	10.0	2.0	0.0139	10.0	14.7	0.0237	1.2
15.00	18.8	10.0	2.0	0.0139	10.0	14.7	0.0137	1.2
30.00	18.7	9.0	1.0	0.0139	9.0	14.8	0.0097	0.6
60.00	18.6	9.0	1.0	0.0139	9.0	14.8	0.0069	0.6
250.00	19.8	8.0	0.0	0.0137	8.0	15.0	0.0033	0.0
1440.00	16.4	8.0	0.0	0.0143	8.0	15.0	0.0015	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 49.6 (% coarse = 14.3 % fine = 35.3)

% SAND = 49.2 (% coarse = 15.4 % medium = 29.2 % fine = 4.6)

% SILT = 0.9 % CLAY = 0.3 (% CLAY COLLOIDS = 0.0)

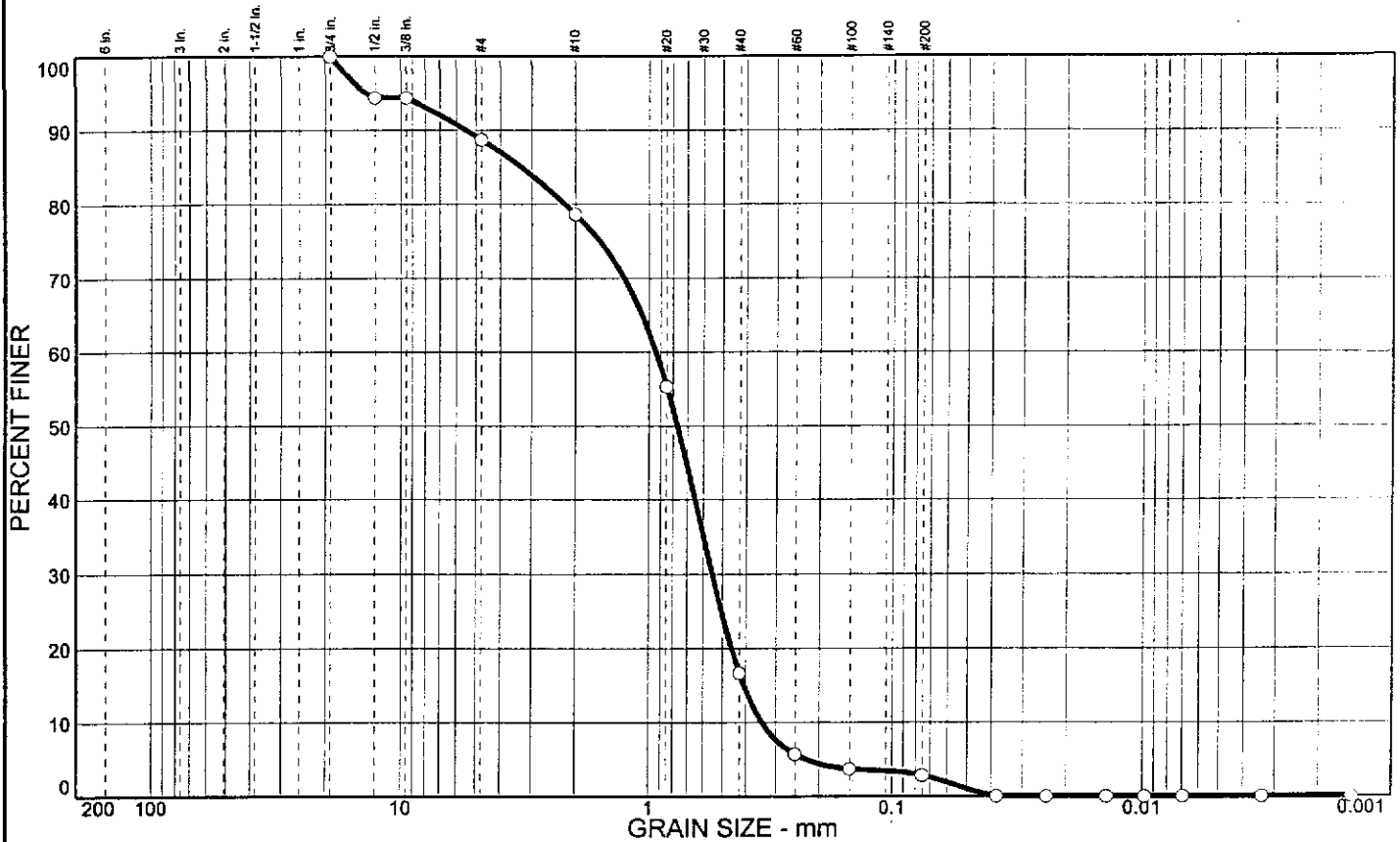
D₈₅= 18.61 D₆₀= 8.55 D₅₀= 4.60

D₃₀= 1.40 D₁₅= 0.64 D₁₀= 0.53

C_c= 0.4377 C_u= 16.2582


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	11.3	85.9	2.8	0.0	---	---	---	---

SIEVE Inches size	PERCENT FINER		
	○		
.75	100.0		
.5	94.4		
.375	94.4		
GRAIN SIZE			
D ₆₀	0.941		
D ₃₀	0.551		
D ₁₀	0.342		
COEFFICIENTS			
C _c	0.94		
C _u	2.75		

SIEVE number size	PERCENT FINER		
	○		
#4	88.7		
#10	78.6		
#20	55.3		
#40	16.7		
#60	5.7		
#100	3.7		
#200	2.8		

SOIL DESCRIPTION
○ COARSE TO FINE SAND, LITTLE GRAVEL

REMARKS:
○

○ Source:

Sample No.: S-5-14A

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-5-14A

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: COARSE TO FINE SAND, LITTLE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 43.18
Tare = 0.00
Dry sample weight = 43.18
Sample split on number 10 sieve
Split sample data:
Sample and tare = 33.10 Tare = .00 Sample weight = 33.10
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	2.41	94.4
.375 inch	2.41	94.4
# 4	4.88	88.7
# 10	9.23	78.6
# 20	9.81	55.3
# 40	26.05	16.7
# 60	30.71	5.7
# 100	31.56	3.7
# 200	31.94	2.8

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 78.6
Weight of hydrometer sample: 33.10
Calculated biased weight= 42.11
Table of composite correction values:
Temp, deg C: 19.8 16.0
Comp. corr: -8.0 -8.0
Discus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.1	8.0	0.0	0.0138	8.0	15.0	0.0378	0.0
5.00	19.1	8.0	0.0	0.0138	8.0	15.0	0.0239	0.0
15.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0138	0.0
30.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0098	0.0
60.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0069	0.0
250.00	19.8	8.0	0.0	0.0137	8.0	15.0	0.0033	0.0
1440.00	16.4	8.0	0.0	0.0143	8.0	15.0	0.0015	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 11.3 (% coarse = % fine = 11.3)

% SAND = 85.9 (% coarse = 10.1 % medium = 61.9 % fine = 13.9)

% FINES = 2.8

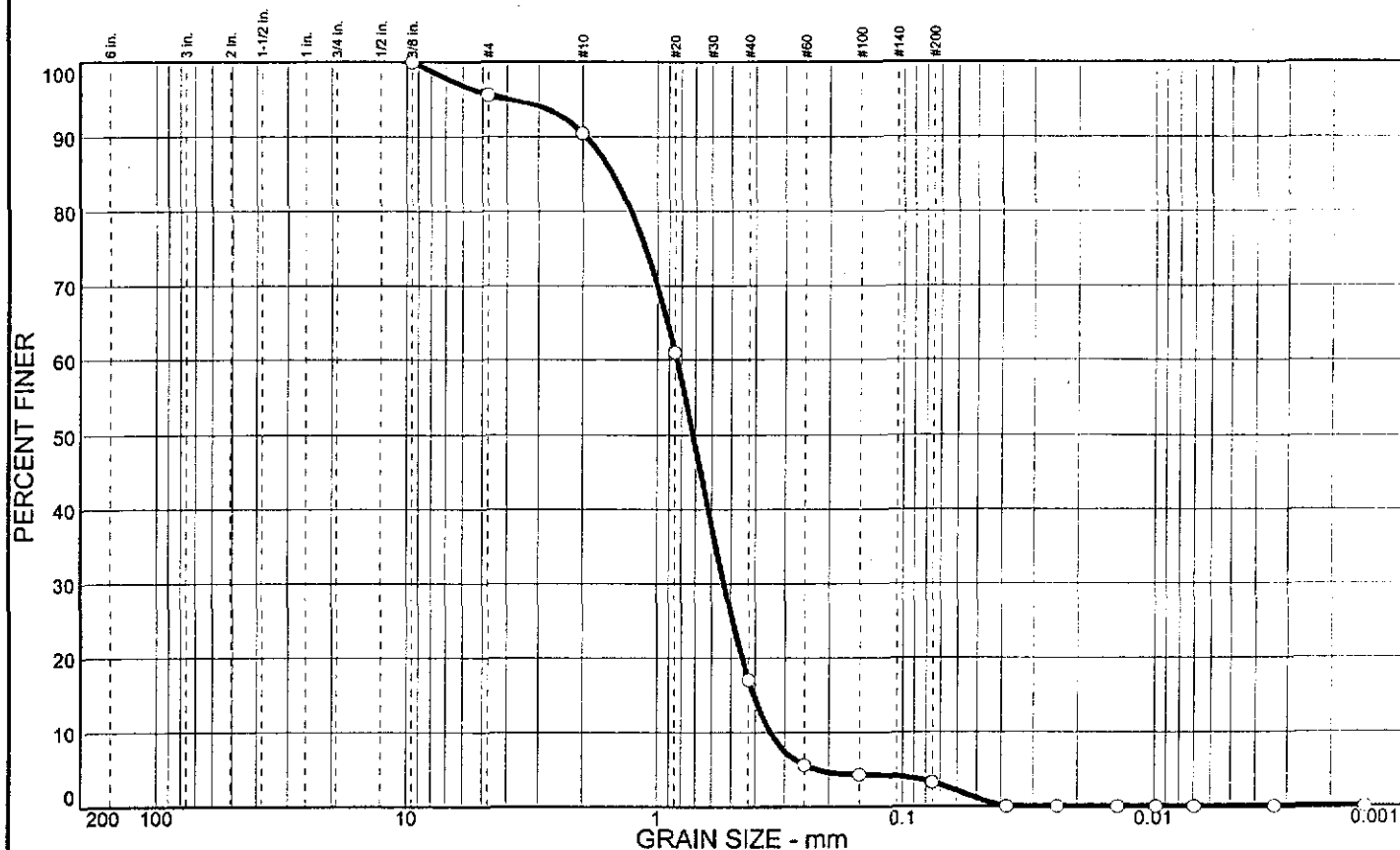
D₈₅= 3.31 D₆₀= 0.94 D₅₀= 0.77

D₃₀= 0.55 D₁₅= 0.41 D₁₀= 0.34

C_c= 0.9439 C_u= 2.7522


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
	4.3	92.5	3.2	0.0	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.836		
D ₃₀	0.536		
D ₁₀	0.344		
COEFFICIENTS			
C _c	1.00		
C _u	2.43		

SIEVE	PERCENT FINER		
number size	○		
#4	95.7		
#10	90.5		
#20	61.0		
#40	17.1		
#60	5.6		
#100	4.3		
#200	3.2		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: S-5-14B

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-5-14B

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 33.26
Tare = 0.00
Dry sample weight = 33.26
Sample split on number 10 sieve
Split sample data:
Sample and tare = 29.32 Tare = .00 Sample weight = 29.32
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	1.44	95.7
# 10	3.16	90.5
# 20	9.55	61.0
# 40	23.79	17.1
# 60	27.51	5.6
# 100	27.94	4.3
# 200	28.28	3.2

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 90.5
Weight of hydrometer sample: 29.32
Calculated biased weight= 32.40
Table of composite correction values:
Temp, deg C: 19.8 16.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.0	8.0	0.0	0.0138	8.0	15.0	0.0378	0.0
5.00	19.1	8.0	0.0	0.0138	8.0	15.0	0.0239	0.0
15.00	19.0	8.0	0.0	0.0138	8.0	15.0	0.0138	0.0
30.00	19.0	8.0	0.0	0.0138	8.0	15.0	0.0098	0.0
60.00	18.8	8.0	0.0	0.0139	8.0	15.0	0.0069	0.0
250.00	19.8	8.0	0.0	0.0137	8.0	15.0	0.0033	0.0
1440.00	16.5	8.0	0.0	0.0143	8.0	15.0	0.0015	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 4.3 (% coarse = % fine = 4.3)

% SAND = 92.5 (% coarse = 5.2 % medium = 73.4 % fine = 13.9)

% FINES = 3.2

D₈₅= 1.51 D₆₀= 0.84 D₅₀= 0.72

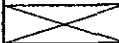
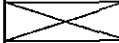
D₃₀= 0.54 D₁₅= 0.40 D₁₀= 0.34

C_c= 0.9978 C_u= 2.4314

Leroy Bailey
MATERIALS ENGINEERING LABORATORY

The graph shows a grain size distribution curve for a soil sample. The y-axis represents the percentage of soil finer than a given grain size, ranging from 0 to 100. The x-axis represents the grain size in millimeters on a logarithmic scale, ranging from 200 mm to 0.001 mm. The curve starts at 100% finer for 200 mm and decreases as the grain size decreases, reaching 0% finer at approximately 0.075 mm.

Grain Size (mm)	Percent Finer (%)
200	100
100	100
60	100
40	100
30	100
20	100
15	100
12.5	100
10	66
7.5	50
6	40
4.75	28
3.75	14
3.0	5
2.5	2
2.0	1
1.5	1
1.25	1
1.0	1
0.85	1
0.75	0
0.6	0
0.5	0
0.425	0
0.375	0
0.3	0
0.25	0
0.2	0
0.15	0
0.125	0
0.106	0
0.09	0
0.075	0

SIEVE inches size	PERCENT FINER		
	○		
.75 5 .375	100.0 77.4 65.9		
	GRAIN SIZE		
D ₆₀	7.83		
D ₃₀	0.997		
D ₁₀	0.360		
	COEFFICIENTS		
C _c	0.35		
C _u	21.78		

SIEVE number size	PERCENT FINER		
	○		
#4	49.6		
#10	38.8		
#20	27.3		
#40	13.1		
#60	5.0		
#100	2.5		
#200	1.6		



Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-5-24

Elev. or Depth: 0-24"

Sample Length (in./cm.):

Location:

Description: GRAVEL, WITH SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 93.40
Tare = 0.00
Dry sample weight = 93.40
Sample split on number 10 sieve
Split sample data:
Sample and tare = 35.43 Tare = .00 Sample weight = 35.43
Cumulative weight retained tare= .00
Weight for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.75 inch 0.00 100.0
.5 inch 21.09 77.4
.375 inch 31.88 65.9
4 47.04 49.6
10 57.16 38.8
20 10.53 27.3
40 23.43 13.1
60 30.84 5.0
100 33.16 2.5
200 33.95 1.6

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 38.8
Weight of hydrometer sample: 35.43
Calculated biased weight= 91.31
Table of composite correction values:
Temp, deg C: 19.9 16.0
Comp. corr: -8.0 -8.0
Discus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.2	9.0	1.0	0.0138	9.0	14.8	0.0375	1.1
5.00	19.1	8.0	0.0	0.0138	8.0	15.0	0.0239	0.0
15.00	19.1	8.0	0.0	0.0138	8.0	15.0	0.0138	0.0
30.00	18.9	8.0	0.0	0.0138	8.0	15.0	0.0098	0.0
60.00	18.7	8.0	0.0	0.0139	8.0	15.0	0.0069	0.0
250.00	19.9	8.0	0.0	0.0137	8.0	15.0	0.0033	0.0
1440.00	16.5	8.0	0.0	0.0143	8.0	15.0	0.0015	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 50.4 (% coarse = % fine = 50.4)

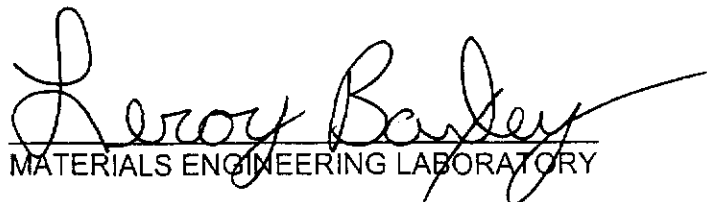
% SAND = 48.0 (% coarse = 10.8 % medium = 25.7 % fine = 11.5)

% FINES = 1.6

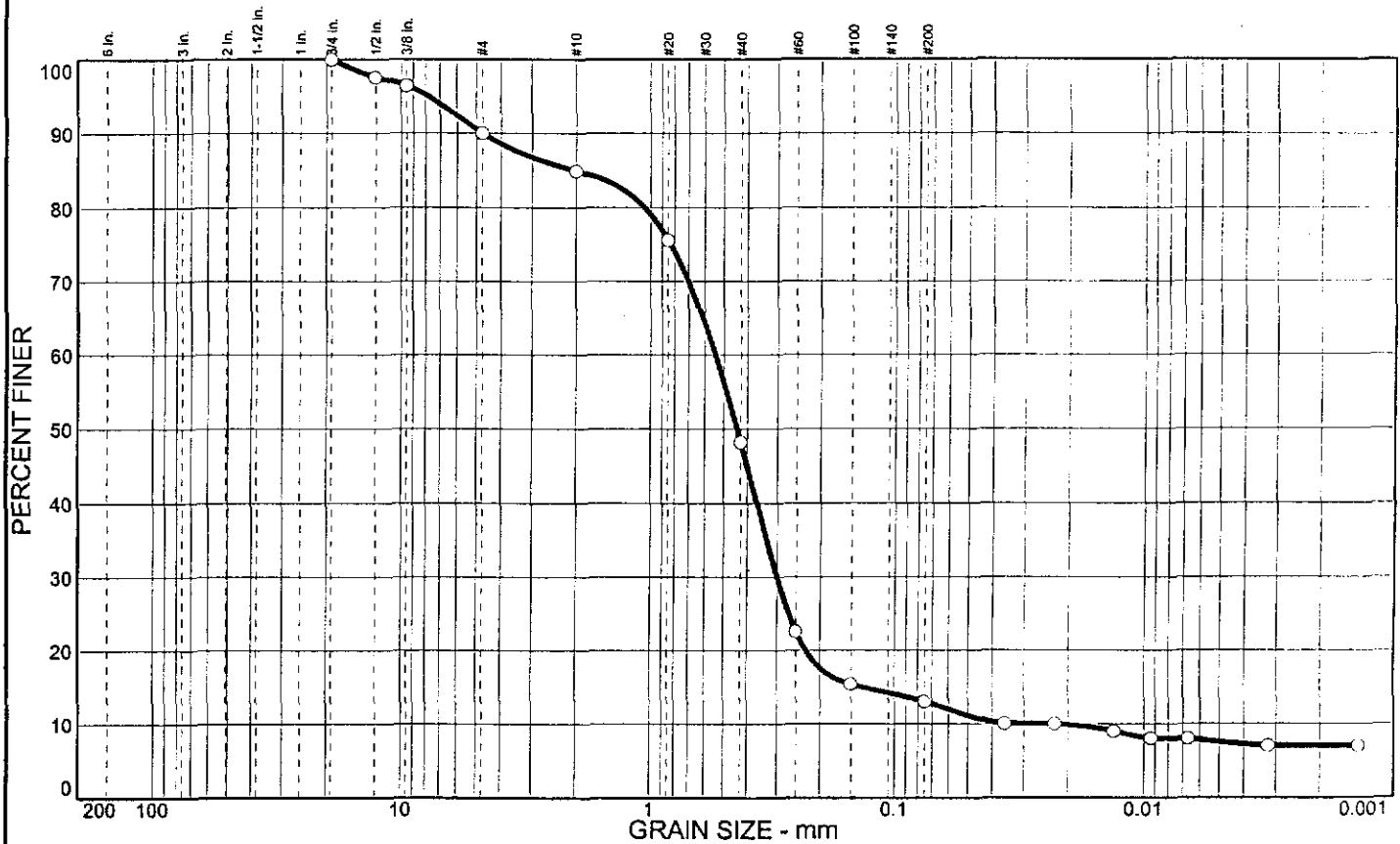
D₈₅= 14.72 D₆₀= 7.83 D₅₀= 4.87

D₃₀= 1.00 D₁₅= 0.47 D₁₀= 0.36

C_c= 0.353 C_u= 21.7774


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	10.0	77.0	5.5	7.5	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.75	100.0		
.5	97.6		
.375	96.5		
GRAIN SIZE			
D ₆₀	0.543		
D ₃₀	0.300		
D ₁₀	0.0226		
COEFFICIENTS			
C _c	7.35		
C _u	24.05		

SIEVE	PERCENT FINER		
number size	○		
#4	90.0		
#10	84.9		
#20	75.6		
#40	48.2		
#60	22.6		
#100	15.4		
#200	13.0		

SOIL DESCRIPTION
 ○ SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: S-6-1

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #: S9-18566
Project Number: 2000-00-0237

Sample Data

Source:
Sample No.: S-6-1
Elev. or Depth: 0-2" Sample Length (in./cm.):
Location:
Description: SILTY MEDIUM TO FINE SAND, TRACE GRAVEL
Liquid Limit: - - - Plastic Limit: - - -
USCS Classification: - - - AASHTO Classification: - - -
Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 104.37
Tare = 0.00
Dry sample weight = 104.37
Sample split on number 10 sieve
Split sample data:
Sample and tare = 85.00 Tare = .00 Sample weight = 85.00
Cumulative weight retained tare= .00
for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	2.51	97.6
.375 inch	3.69	96.5
# 4	10.46	90.0
# 10	15.73	84.9
# 20	9.30	75.6
# 40	36.76	48.2
# 60	62.33	22.6
# 100	69.54	15.4
# 200	71.96	13.0

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 84.9
Weight of hydrometer sample: 85.00
Calculated biased weight= 100.12
Table of composite correction values:
Temp, deg C: 20.0 16.0
Comp. corr: -8.0 -8.0
discus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.0	18.0	10.0	0.0138	18.0	13.3	0.0357	10.0
5.00	19.0	18.0	10.0	0.0138	18.0	13.3	0.0226	10.0
15.00	18.8	17.0	9.0	0.0139	17.0	13.5	0.0131	9.0
30.00	18.7	16.0	8.0	0.0139	16.0	13.7	0.0094	8.0
60.00	18.3	16.0	8.0	0.0139	16.0	13.7	0.0067	8.0
250.00	19.8	15.0	7.0	0.0137	15.0	13.8	0.0032	7.0
1440.00	16.5	15.0	7.0	0.0143	15.0	13.8	0.0014	7.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 10.0 (% coarse = % fine = 10.0)

% SAND = 77.0 (% coarse = 5.1 % medium = 36.7 % fine = 35.2)

% SILT = 5.5 % CLAY = 7.5

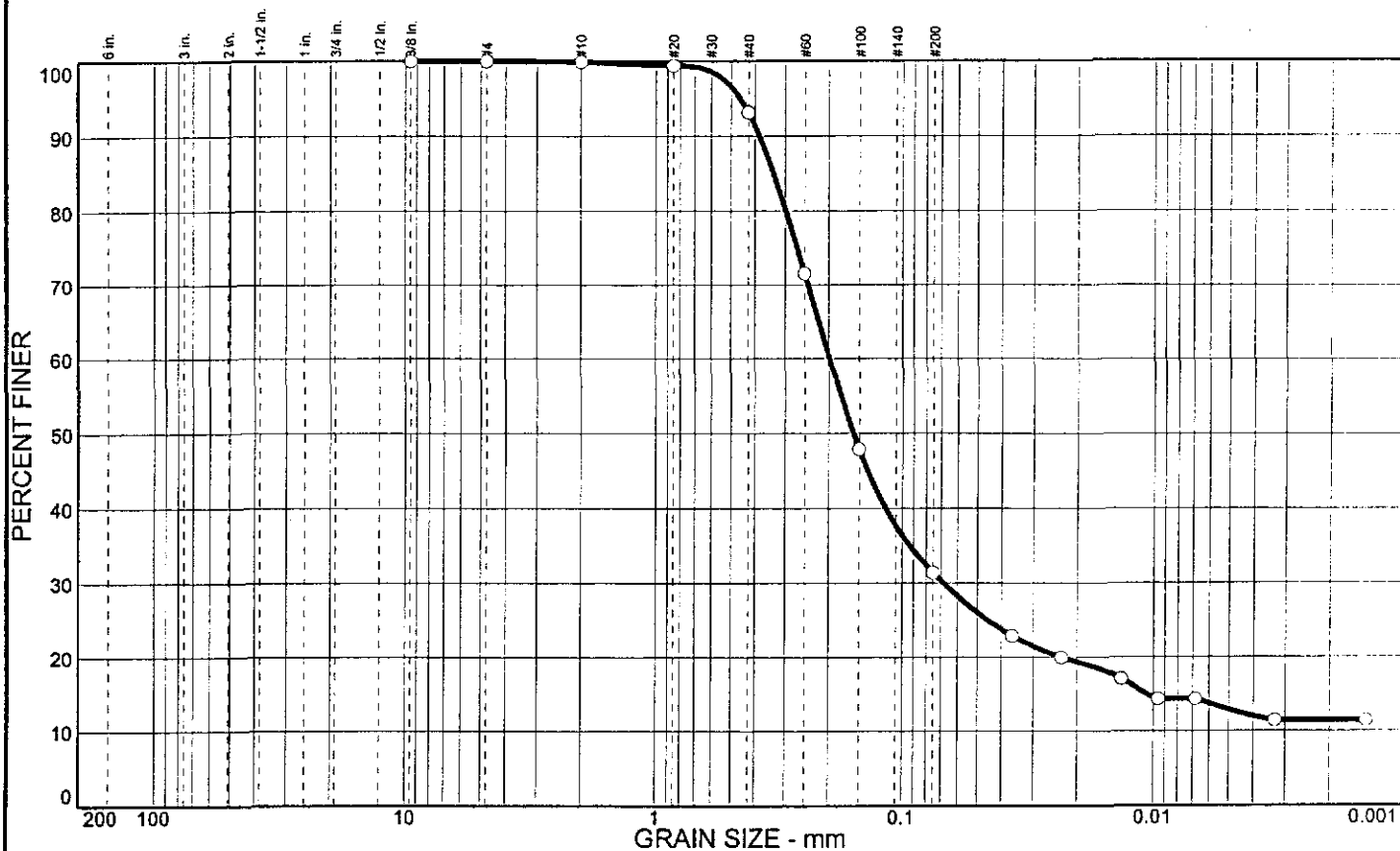
D₈₅ = 2.05 D₆₀ = 0.54 D₅₀ = 0.44

D₃₀ = 0.30 D₁₅ = 0.14 D₁₀ = 0.02

C_c = 7.3467 C_u = 24.0529

Leroy Bayley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		68.6	18.6	12.8	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.198		
D ₃₀	0.0682		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE	PERCENT FINER		
number size	○		
#4	100.0		
#10	99.9		
#20	99.4		
#40	93.2		
#60	71.5		
#100	47.9		
#200	31.4		

SOIL DESCRIPTION
○ SILTY FINE SAND
-

REMARKS:
○

○ Source:

Sample No.: S-6-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-6-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY FINE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 35.11
Tare = 0.00
Dry sample weight = 35.11
Sample split on number 10 sieve
Split sample data:
Sample and tare = 34.97 Tare = .00 Sample weight = 34.97
Cumulative weight retained tare= .00
Time for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.375 inch 0.00 100.0
4 0.00 100.0
10 0.03 99.9
20 0.17 99.4
40 2.35 93.2
60 9.93 71.5
100 18.21 47.9
200 23.99 31.4

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99.9
Weight of hydrometer sample: 34.97
Calculated biased weight= 35.01
Table of composite correction values:
Temp, deg C: 20.0 16.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.1	16.0	8.0	0.0138	16.0	13.7	0.0361	22.9
5.00	18.9	15.0	7.0	0.0138	15.0	13.8	0.0230	20.0
15.00	18.8	14.0	6.0	0.0139	14.0	14.0	0.0134	17.1
30.00	18.5	13.0	5.0	0.0139	13.0	14.2	0.0096	14.3
60.00	18.0	13.0	5.0	0.0140	13.0	14.2	0.0068	14.3
250.00	19.7	12.0	4.0	0.0137	12.0	14.3	0.0033	11.4
1440.00	16.6	12.0	4.0	0.0142	12.0	14.3	0.0014	11.4

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 68.6 (% coarse = 0.1 % medium = 6.7 % fine = 61.8)

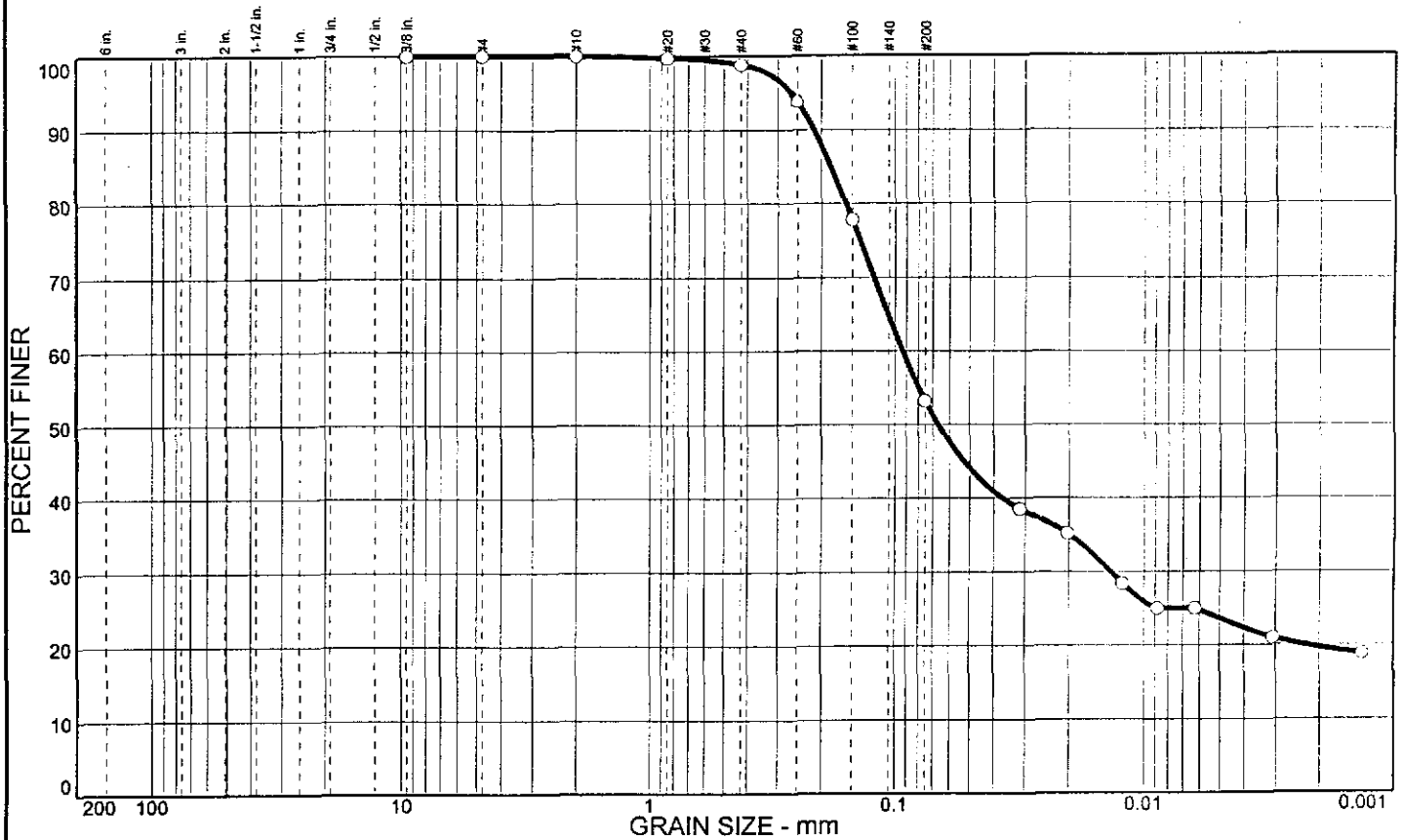
% SILT = 18.6 % CLAY = 12.8

D₈₅= 0.33 D₆₀= 0.20 D₅₀= 0.16

D₃₀= 0.07 D₁₅= 0.01

Leroy Bayley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #: S9-18566
Project Number: 2000-00-0237

Sample Data

Source:
Sample No.: S-6-5
Elev. or Depth: 0-2" Sample Length (in./cm.):
Location:
Description: FINE SANDY CLAY
Liquid Limit: - - - Plastic Limit: - - -
USCS Classification: - - - AASHTO Classification: - - -
Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 74.01
Tare = 0.00
Dry sample weight = 74.01
Sample split on number 10 sieve
Split sample data:
Sample and tare = 73.95 Tare = .00 Sample weight = 73.95
Cumulative weight retained tare= .00
for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.00	100.0
# 20	0.25	99.7
# 40	0.88	98.8
# 60	4.51	93.9
# 100	16.39	77.8
# 200	34.59	53.2

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100.0
Weight of hydrometer sample: 73.95
Calculated biased weight= 73.95
Table of composite correction values:
Temp, deg C: 20.0 16.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	36.5	28.5	0.0138	36.5	10.3	0.0314	38.5
5.00	18.8	34.0	26.0	0.0139	34.0	10.7	0.0203	35.2
15.00	18.5	29.0	21.0	0.0139	29.0	11.5	0.0122	28.4
30.00	18.2	26.5	18.5	0.0140	26.5	11.9	0.0088	25.0
60.00	17.9	26.5	18.5	0.0140	26.5	11.9	0.0063	25.0
250.00	19.5	23.5	15.5	0.0137	23.5	12.4	0.0031	21.0
1440.00	16.7	22.0	14.0	0.0142	22.0	12.7	0.0013	18.9

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 46.8 (% coarse = 0.0 % medium = 1.2 % fine = 45.6)

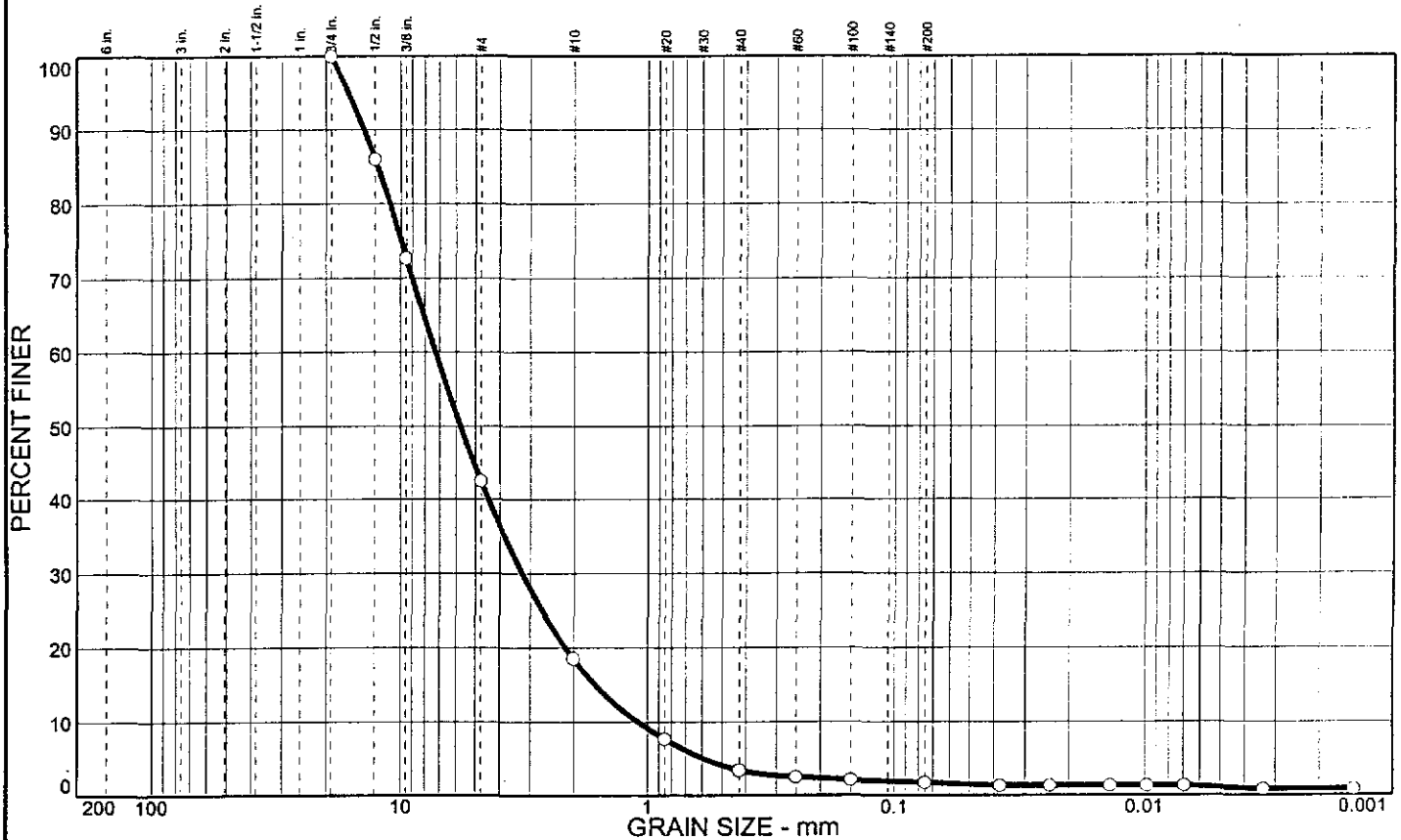
% SILT = 29.6 % CLAY = 23.6

D₈₅ = 0.18 D₆₀ = 0.09 D₅₀ = 0.07

D₃₀ = 0.01

Leroy Bailey
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-6-7

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: GRAVEL, WITH SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 132.78
Tare = 0.00
Dry sample weight = 132.78
Sample split on number 10 sieve
Split sample data:
Sample and tare = 22.06 Tare = .00 Sample weight = 22.06
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	18.61	86.0
.375 inch	36.20	72.7
# 4	76.42	42.5
# 10	108.15	18.6
# 20	12.91	7.7
# 40	18.01	3.4
# 60	19.11	2.5
# 100	19.62	2.1
# 200	20.00	1.7

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 18.6
Weight of hydrometer sample: 22.06
Calculated biased weight= 118.60
Table of composite correction values:
Temp, deg C: 20.0 16.0
Comp. corr: -8.0 -8.0

Discus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	9.5	1.5	0.0138	9.5	14.7	0.0376	1.3
5.00	18.9	9.5	1.5	0.0138	9.5	14.7	0.0238	1.3
15.00	18.7	9.5	1.5	0.0139	9.5	14.7	0.0137	1.3
30.00	18.2	9.5	1.5	0.0140	9.5	14.7	0.0098	1.3
60.00	18.1	9.5	1.5	0.0140	9.5	14.7	0.0069	1.3
250.00	19.3	9.0	1.0	0.0138	9.0	14.8	0.0034	0.8
1440.00	16.7	9.0	1.0	0.0142	9.0	14.8	0.0014	0.8

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 57.5 (% coarse = % fine = 57.5)

% SAND = 40.8 (% coarse = 23.9 % medium = 15.2 % fine = 1.7)

% SILT = 0.7 % CLAY = 1.0

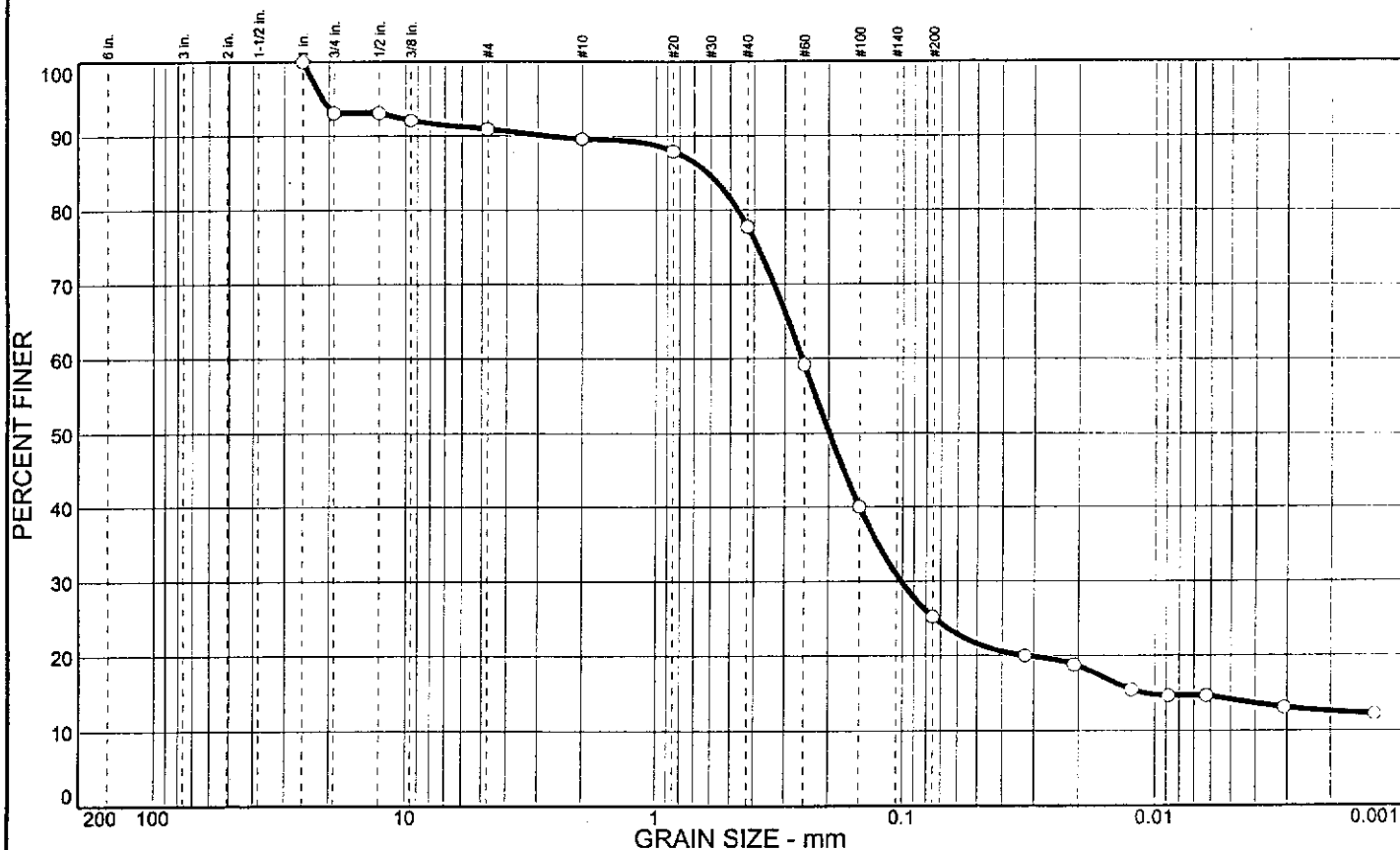
D₈₅= 12.40 D₆₀= 7.25 D₅₀= 5.75

D₃₀= 3.24 D₁₅= 1.62 D₁₀= 1.09

C_c= 1.3335 C_u= 6.6728

Leroy Bayley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	9.1	65.7	11.1	14.1	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
1	100.0		
.75	93.1		
.5	93.1		
.375	92.1		
X GRAIN SIZE			
D ₆₀	0.255		
D ₃₀	0.101		
D ₁₀			
X COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	90.9		
#10	89.6		
#20	87.9		
#40	77.7		
#60	59.2		
#100	40.0		
#200	25.2		

<u>SOIL DESCRIPTION</u>	
○ SILTY MEDIUM TO FINE SAND, TRACE GRAVEL	
-	

<u>REMARKS:</u>	
○	

○ Source:

Sample No.: S-6-9

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-6-9

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 128.67
Tare = 0.00
Dry sample weight = 128.67
Sample split on number 10 sieve
Split sample data:
Sample and tare = 109.89 Tare = .00 Sample weight = 109.89
Cumulative weight retained tare= .00
Weight for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
1 inch 0.00 100.0
.75 inch 8.88 93.1
.5 inch 8.88 93.1
.375 inch 10.19 92.1
4 11.74 90.9
10 13.42 89.6
20 2.09 87.9
40 14.63 77.7
60 37.32 59.2
100 60.82 40.0
200 79.01 25.2

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 89.6
Weight of hydrometer sample: 109.89
Calculated biased weight= 122.65
Table of composite correction values:
Temp, deg C: 20.0 16.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	32.5	24.5	0.0138	32.5	11.0	0.0324	20.0
5.00	18.9	31.0	23.0	0.0138	31.0	11.2	0.0207	18.8
15.00	18.8	27.0	19.0	0.0139	27.0	11.9	0.0123	15.5
30.00	18.6	26.0	18.0	0.0139	26.0	12.0	0.0088	14.7
60.00	18.4	26.0	18.0	0.0139	26.0	12.0	0.0062	14.7
250.00	19.2	24.0	16.0	0.0138	24.0	12.4	0.0031	13.1
1440.00	16.9	23.0	15.0	0.0142	23.0	12.5	0.0013	12.2

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 9.1 (% coarse = 6.9 % fine = 2.2)

% SAND = 65.7 (% coarse = 1.3 % medium = 11.9 % fine = 52.5)

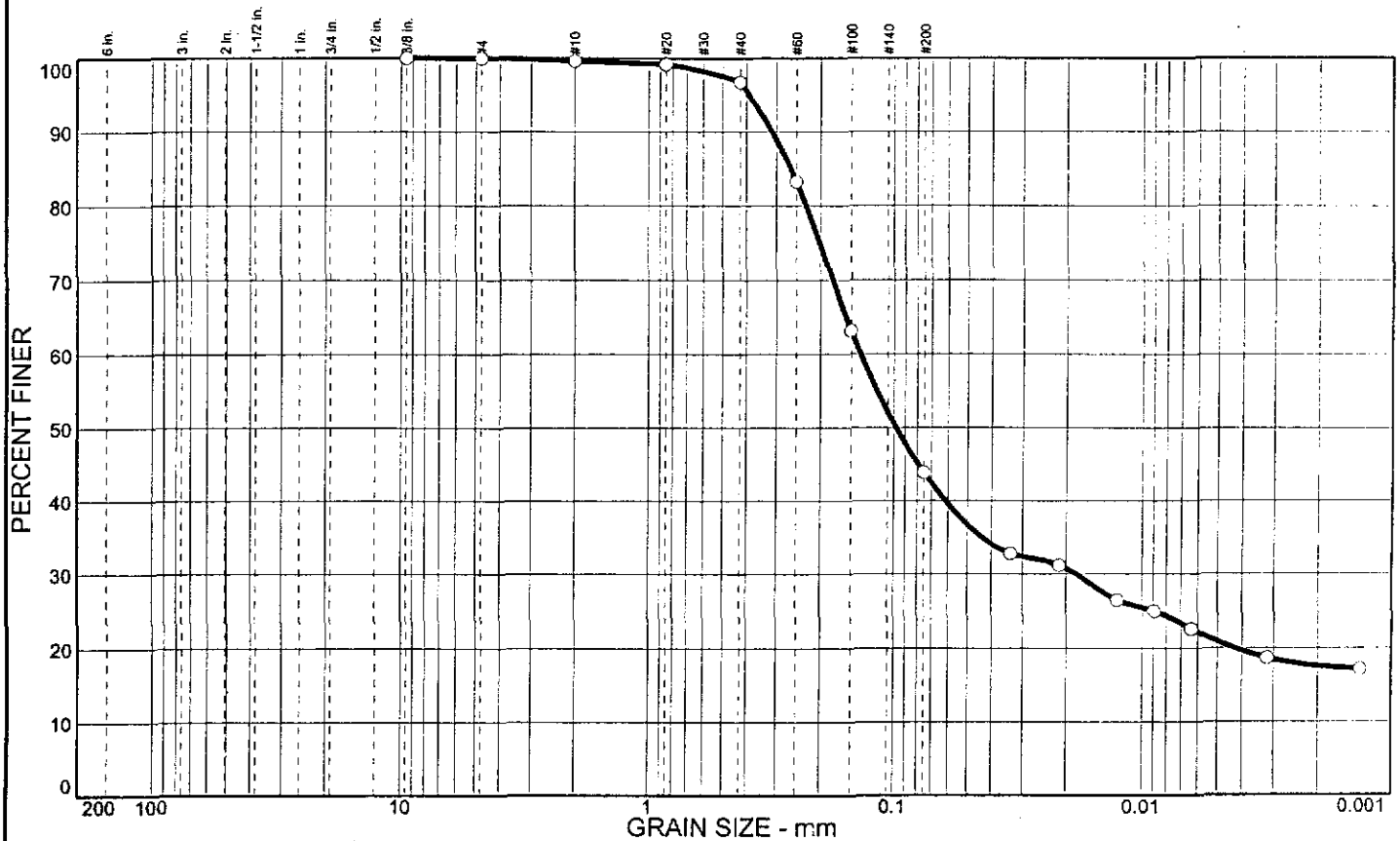
% SILT = 11.1 % CLAY = 14.1

D₈₅= 0.62 D₆₀= 0.26 D₅₀= 0.20

D₃₀= 0.10 D₁₅= 0.01

Leroy Bayley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		56.1	23.0	20.9	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.137		
D ₃₀	0.0183		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE	PERCENT FINER		
number size	○		
#4	100.0		
#10	99.6		
#20	99.2		
#40	96.8		
#60	83.3		
#100	63.2		
#200	43.9		

SOIL DESCRIPTION
○ CLAYEY FINE SAND

REMARKS:
○

○ Source:

Sample No.: S-6-10

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-6-10

Elev. or Depth: 0-2"

Location:

Description: CLAYEY FINE SAND

Liquid Limit: - - -

USCS Classification: - - -

Testing Remarks:

Sample Length (in./cm.):

Plastic Limit: - - -

AASHTO Classification: - - -

Mechanical Analysis Data

Initial

Dry sample and tare= 65.77

Tare = 0.00

Dry sample weight = 65.77

Sample split on number 10 sieve

Split sample data:

Sample and tare = 63.80 Tare = .00 Sample weight = 63.80

Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.03	100.0
# 10	0.28	99.6
# 20	0.24	99.2
# 40	1.81	96.8
# 60	10.47	83.3
# 100	23.31	63.2
# 200	35.68	43.9

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 99.6

Weight of hydrometer sample: 63.80

Calculated biased weight= 64.06

Table of composite correction values:

Temp, deg C: 19.0 16.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	29.0	21.0	0.0139	29.0	11.5	0.0334	32.8
5.00	18.5	28.0	20.0	0.0139	28.0	11.7	0.0213	31.2
15.00	18.6	25.0	17.0	0.0139	25.0	12.2	0.0125	26.5
30.00	18.6	24.0	16.0	0.0139	24.0	12.4	0.0089	25.0
60.00	18.7	22.5	14.5	0.0139	22.5	12.6	0.0064	22.6
250.00	18.4	20.0	12.0	0.0139	20.0	13.0	0.0032	18.7
1440.00	17.9	19.0	11.0	0.0140	19.0	13.2	0.0013	17.2

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 56.1 (% coarse = 0.4 % medium = 2.8 % fine = 52.9)

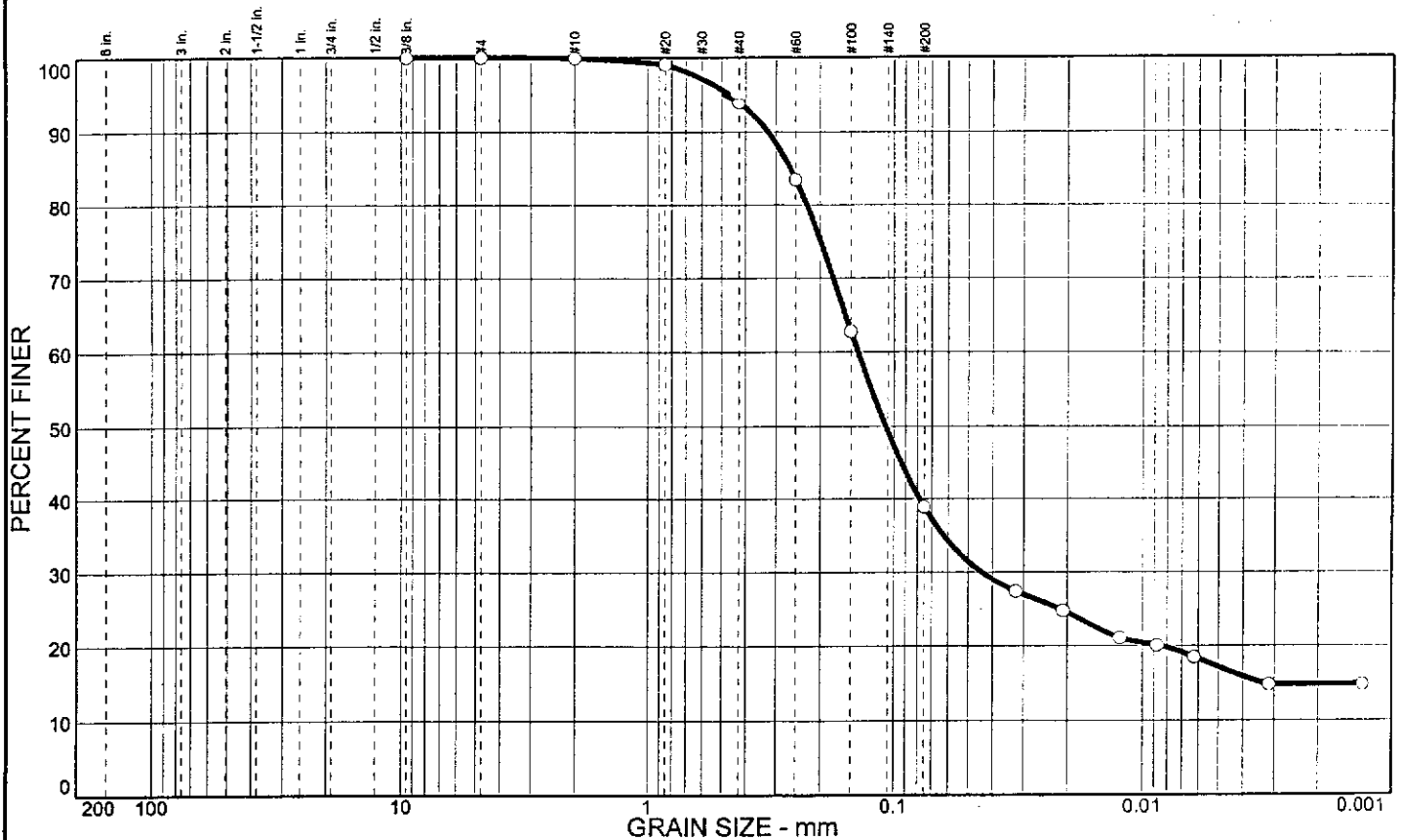
% SILT = 23.0 % CLAY = 20.9

D₈₅ = 0.26 D₆₀ = 0.14 D₅₀ = 0.10

D₃₀ = 0.02

Reroy Bayley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
		61.1	21.7	17.2	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.140		
D ₃₀	0.0442		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	99.9		
#20	99.1		
#40	94.0		
#60	83.5		
#100	62.8		
#200	38.9		

SOIL DESCRIPTION
○ SILTY FINE SAND

REMARKS:
○

○ Source:

Sample No.: S-6-13

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #: S9-18566
Project Number: 2000-00-0237

Sample Data

Source:
Sample No.: S-6-13
Elev. or Depth: 0-2" Sample Length (in./cm.):
Location:
Description: SILTY FINE SAND
Liquid Limit: - - - Plastic Limit: - - -
USCS Classification: - - - AASHTO Classification: - - -
Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 95.63
Tare = 0.00
Dry sample weight = 95.63
Sample split on number 10 sieve
Split sample data:
Sample and tare = 94.67 Tare = .00 Sample weight = 94.67
Cumulative weight retained tare= .00
Weight for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.11	99.9
# 20	0.77	99.1
# 40	5.60	94.0
# 60	15.55	83.5
# 100	35.17	62.8
# 200	57.79	38.9

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99.9
Weight of hydrometer sample: 94.67
Calculated biased weight= 94.76
Table of composite correction values:
Temp, deg C: 19.0 16.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	34.0	26.0	0.0139	34.0	10.7	0.0322	27.4
5.00	18.5	31.5	23.5	0.0139	31.5	11.1	0.0207	24.8
15.00	18.5	28.0	20.0	0.0139	28.0	11.7	0.0123	21.1
30.00	18.5	27.0	19.0	0.0139	27.0	11.9	0.0087	20.1
60.00	18.7	25.5	17.5	0.0139	25.5	12.1	0.0062	18.5
250.00	18.4	22.0	14.0	0.0139	22.0	12.7	0.0031	14.8
1440.00	18.0	22.0	14.0	0.0140	22.0	12.7	0.0013	14.8

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 61.1 (% coarse = 0.1 % medium = 5.9 % fine = 55.1)

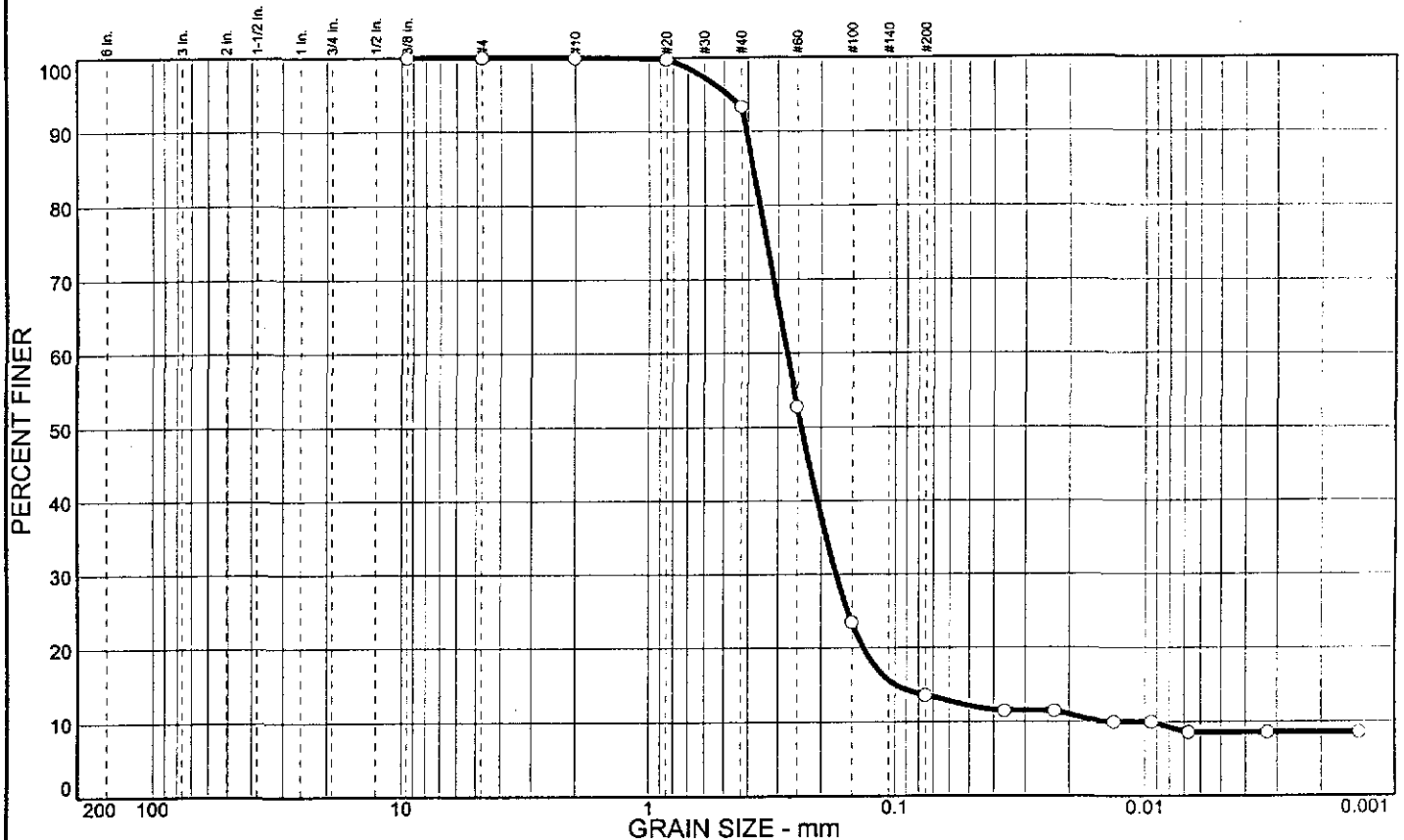
% SILT = 21.7 % CLAY = 17.2

D₈₅= 0.26 D₆₀= 0.14 D₅₀= 0.11

D₃₀= 0.04 D₁₅= 0.00


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		86.4	5.0	8.6	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.276		
D ₃₀	0.174		
D ₁₀	0.0094		
COEFFICIENTS			
C _c	11.62		
C _u	29.29		

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	100.0		
#20	99.8		
#40	93.4		
#60	52.8		
#100	23.5		
#200	13.6		

SOIL DESCRIPTION
○ SILTY FINE SAND

—

REMARKS:
○

○ Source:

Sample No.: S-6-15

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-6-15

Elev. or Depth: 0-2"

Location:

Description: SILTY FINE SAND

Liquid Limit: - - -

USCS Classification: - - -

Testing Remarks:

Sample Length (in./cm.):

Plastic Limit: - - -

AASHTO Classification: - - -

Mechanical Analysis Data

Initial
Dry sample and tare= 69.91
Tare = 0.00
Dry sample weight = 69.91
Sample split on number 10 sieve
Split sample data:
Sample and tare = 69.76 Tare = .00 Sample weight = 69.76
Cumulative weight retained tare= .00
Sample for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.00	100.0
# 20	0.16	99.8
# 40	4.64	93.4
# 60	32.92	52.8
# 100	53.39	23.5
# 200	60.27	13.6

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100.0
Weight of hydrometer sample: 69.76
Calculated biased weight= 69.76
Table of composite correction values:
Temp, deg C: 20.0 16.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.0	16.0	8.0	0.0138	16.0	13.7	0.0361	11.5
5.00	19.0	16.0	8.0	0.0138	16.0	13.7	0.0228	11.5
15.00	18.9	15.0	7.0	0.0138	15.0	13.8	0.0133	10.0
30.00	18.7	15.0	7.0	0.0139	15.0	13.8	0.0094	10.0
60.00	18.6	14.0	6.0	0.0139	14.0	14.0	0.0067	8.6
250.00	19.1	14.0	6.0	0.0138	14.0	14.0	0.0033	8.6
1440.00	16.9	14.0	6.0	0.0142	14.0	14.0	0.0014	8.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 86.4 (% coarse = 0.0 % medium = 6.6 % fine = 79.8)

% SILT = 5.0 % CLAY = 8.6

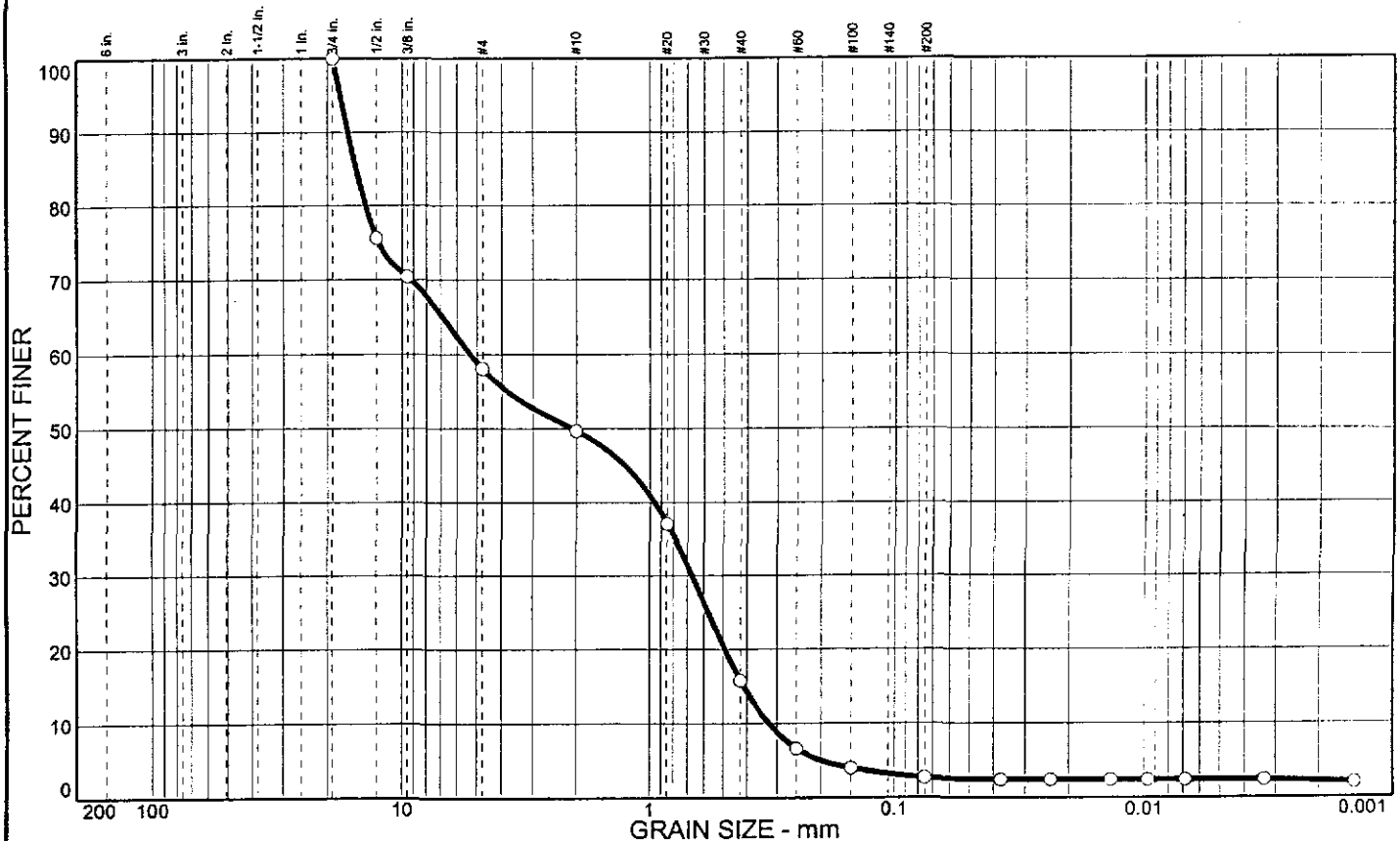
D₈₅= 0.38 D₆₀= 0.28 D₅₀= 0.24

D₃₀= 0.17 D₁₅= 0.10 D₁₀= 0.01

C_c= 11.6178 C_u= 29.2879

Leroy Bayley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	41.9	55.4	0.3	2.4	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.75	100.0		
.5	75.6		
.375	70.4		
GRAIN SIZE			
D ₆₀	5.30		
D ₃₀	0.670		
D ₁₀	0.324		
COEFFICIENTS			
C _c	0.26		
C _u	16.36		

SIEVE	PERCENT FINER		
number size	○		
#4	58.1		
#10	49.7		
#20	37.1		
#40	15.8		
#60	6.6		
#100	4.0		
#200	2.7		

SOIL DESCRIPTION
 ○ MEDIUM TO FINE SAND, WITH GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: S-6-4

Elev./Depth: 0-3.5"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-6-4

Elev. or Depth: 0-3.5"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 126.82
Tare = 0.00
Dry sample weight = 126.82
Sample split on number 10 sieve
Split sample data:
Sample and tare = 62.00 Tare = .00 Sample weight = 62.00
Cumulative weight retained tare= .00
Weight for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.75 inch 0.00 100.0
.5 inch 30.92 75.6
.375 inch 37.60 70.4
4 53.13 58.1
10 63.78 49.7
20 15.71 37.1
40 42.32 15.8
60 53.81 6.6
100 57.05 4.0
200 58.64 2.7

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 49.7
Weight of hydrometer sample: 62.00
Calculated biased weight= 124.75
Table of composite correction values:
Temp, deg C: 20.0 16.0
Comp. corr: -8.0 -8.0
Viscosity correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	11.0	3.0	0.0138	11.0	14.5	0.0372	2.4
5.00	18.9	11.0	3.0	0.0138	11.0	14.5	0.0236	2.4
15.00	18.8	11.0	3.0	0.0139	11.0	14.5	0.0136	2.4
30.00	18.5	11.0	3.0	0.0139	11.0	14.5	0.0097	2.4
60.00	18.5	11.0	3.0	0.0139	11.0	14.5	0.0068	2.4
250.00	19.1	11.0	3.0	0.0138	11.0	14.5	0.0033	2.4
1440.00	16.9	10.5	2.5	0.0142	10.5	14.6	0.0014	2.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 41.9 (% coarse = % fine = 41.9)

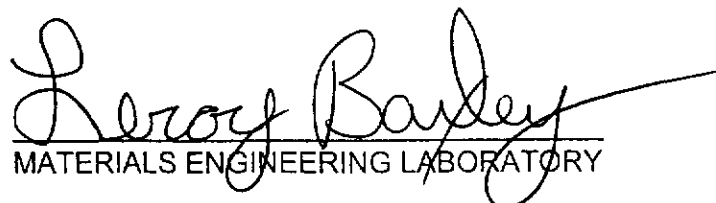
% SAND = 55.4 (% coarse = 8.4 % medium = 33.9 % fine = 13.1)

% SILT = 0.3 % CLAY = 2.4

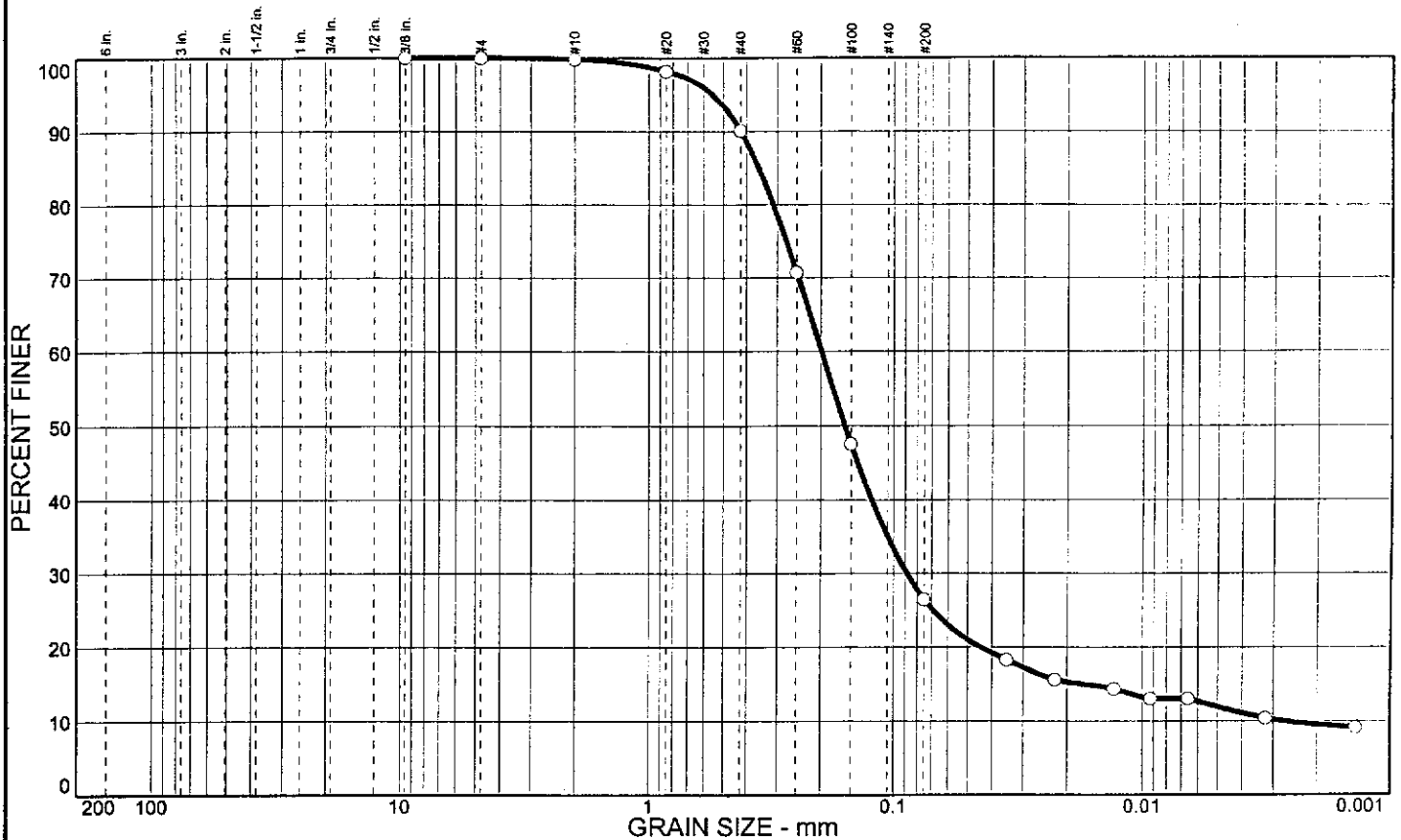
D₈₅= 15.34 D₆₀= 5.30 D₅₀= 2.08

D₃₀= 0.67 D₁₅= 0.41 D₁₀= 0.32

C_c= 0.261 C_u= 16.3555


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		73.5	14.6	11.9	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.198		
D ₃₀	0.0881		
D ₁₀	0.0027		
COEFFICIENTS			
C _c	14.36		
C _u	72.62		

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	99.8		
#20	98.2		
#40	90.1		
#60	70.7		
#100	47.6		
#200	26.5		

SOIL DESCRIPTION
○ SILTY FINE SAND

REMARKS:
○

○ Source:

Sample No.: S-6-17

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-6-17

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY FINE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 77.21
Tare = 0.00
Dry sample weight = 77.21
Sample split on number 10 sieve
Split sample data:
Sample and tare = 76.57 Tare = .00 Sample weight = 76.57
Cumulative weight retained tare= .00
Weight for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.375 inch 0.00 100.0
4 0.00 100.0
10 0.15 99.8
20 1.22 98.2
40 7.44 90.1
60 22.35 70.7
100 40.08 47.6
200 56.25 26.5

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99.8
Weight of hydrometer sample: 76.57
Calculated biased weight= 76.72
Table of composite correction values:
Temp, deg C: 20.0 16.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	22.0	14.0	0.0138	22.0	12.7	0.0348	18.3
5.00	18.8	20.0	12.0	0.0139	20.0	13.0	0.0223	15.6
15.00	18.8	19.0	11.0	0.0139	19.0	13.2	0.0130	14.3
30.00	18.8	18.0	10.0	0.0139	18.0	13.3	0.0092	13.0
60.00	18.7	18.0	10.0	0.0139	18.0	13.3	0.0065	13.0
250.00	19.1	16.0	8.0	0.0138	16.0	13.7	0.0032	10.4
1440.00	17.0	15.0	7.0	0.0142	15.0	13.8	0.0014	9.1

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 73.5 (% coarse = 0.2 % medium = 9.7 % fine = 63.6)

% SILT = 14.6 % CLAY = 11.9

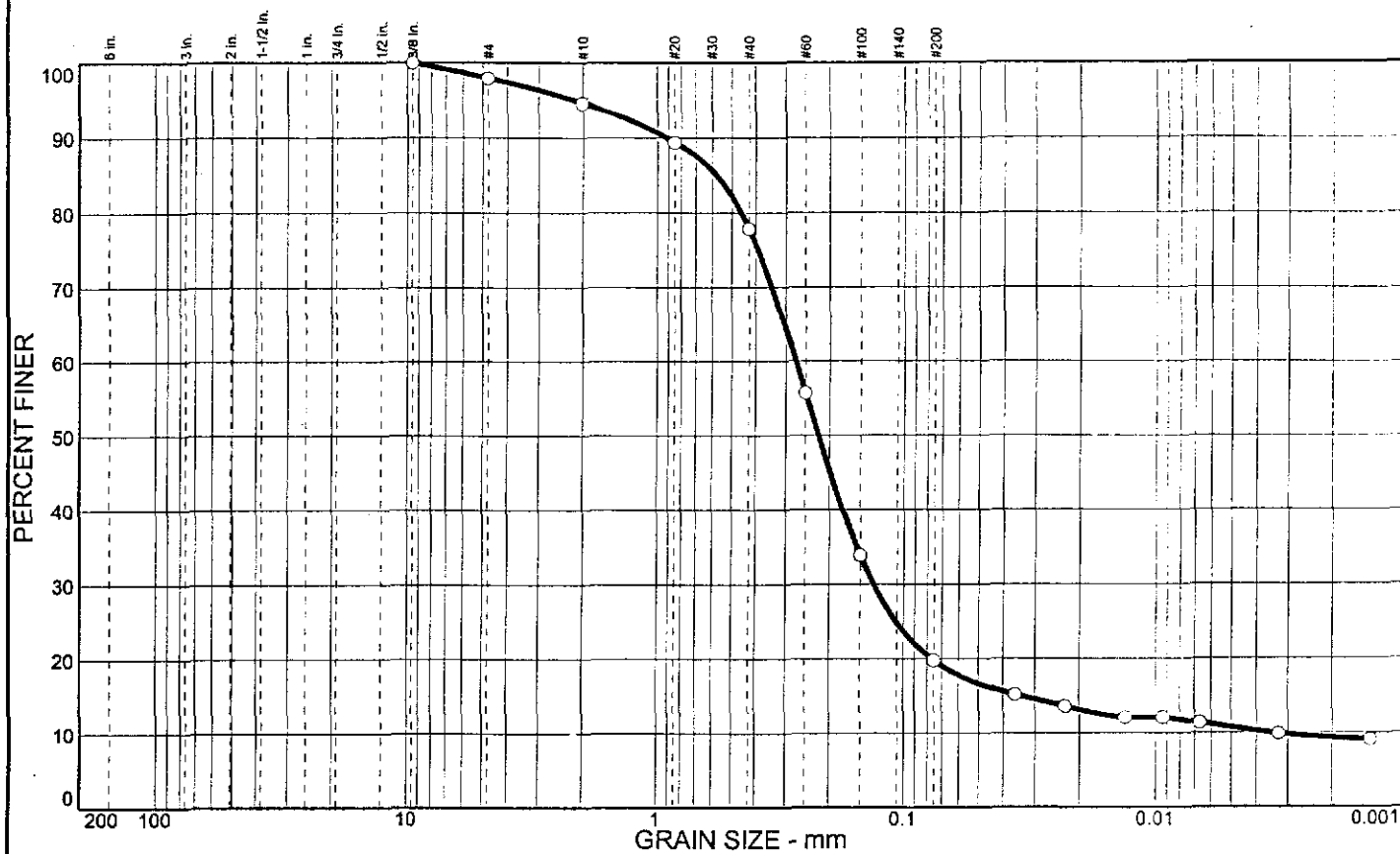
D₈₅ = 0.36 D₆₀ = 0.20 D₅₀ = 0.16

D₃₀ = 0.09 D₁₅ = 0.02 D₁₀ = 0.00

C_c = 14.3593 C_u = 72.62

Leroy Bailey
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	2.1	78.1	9.0	10.8	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
X GRAIN SIZE			
D ₆₀	0.274		
D ₃₀	0.132		
D ₁₀	0.0035		
X COEFFICIENTS			
C _c	18.46		
C _u	79.25		

SIEVE number size	PERCENT FINER		
	○		
#4	97.9		
#10	94.6		
#20	89.4		
#40	77.9		
#60	55.7		
#100	33.9		
#200	19.8		

SOIL DESCRIPTION
○ SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: S-6-21

Elev./Depth: 0-2'

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-6-21

Elev. or Depth: 0-2'

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 68.82
Tare = 0.00
Dry sample weight = 68.82
Sample split on number 10 sieve
Split sample data:
Sample and tare = 62.42 Tare = .00 Sample weight = 62.42
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	1.42	97.9
# 10	3.69	94.6
# 20	3.43	89.4
# 40	11.04	77.9
# 60	25.69	55.7
# 100	40.04	33.9
# 200	49.38	19.8

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 94.6
Weight of hydrometer sample: 62.42
Calculated biased weight= 65.98
Table of composite correction values:
Temp, deg C: 20.0 16.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.0	18.0	10.0	0.0138	18.0	13.3	0.0357	15.2
5.00	19.0	17.0	9.0	0.0138	17.0	13.5	0.0227	13.6
15.00	18.9	16.0	8.0	0.0138	16.0	13.7	0.0132	12.1
30.00	18.7	16.0	8.0	0.0139	16.0	13.7	0.0094	12.1
60.00	18.5	15.5	7.5	0.0139	15.5	13.8	0.0067	11.4
250.00	19.0	14.5	6.5	0.0138	14.5	13.9	0.0033	9.9
1440.00	17.0	14.0	6.0	0.0142	14.0	14.0	0.0014	9.1

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 2.1 (% coarse = % fine = 2.1)

% SAND = 78.1 (% coarse = 3.3 % medium = 16.7 % fine = 58.1)

% SILT = 9.0 % CLAY = 10.8

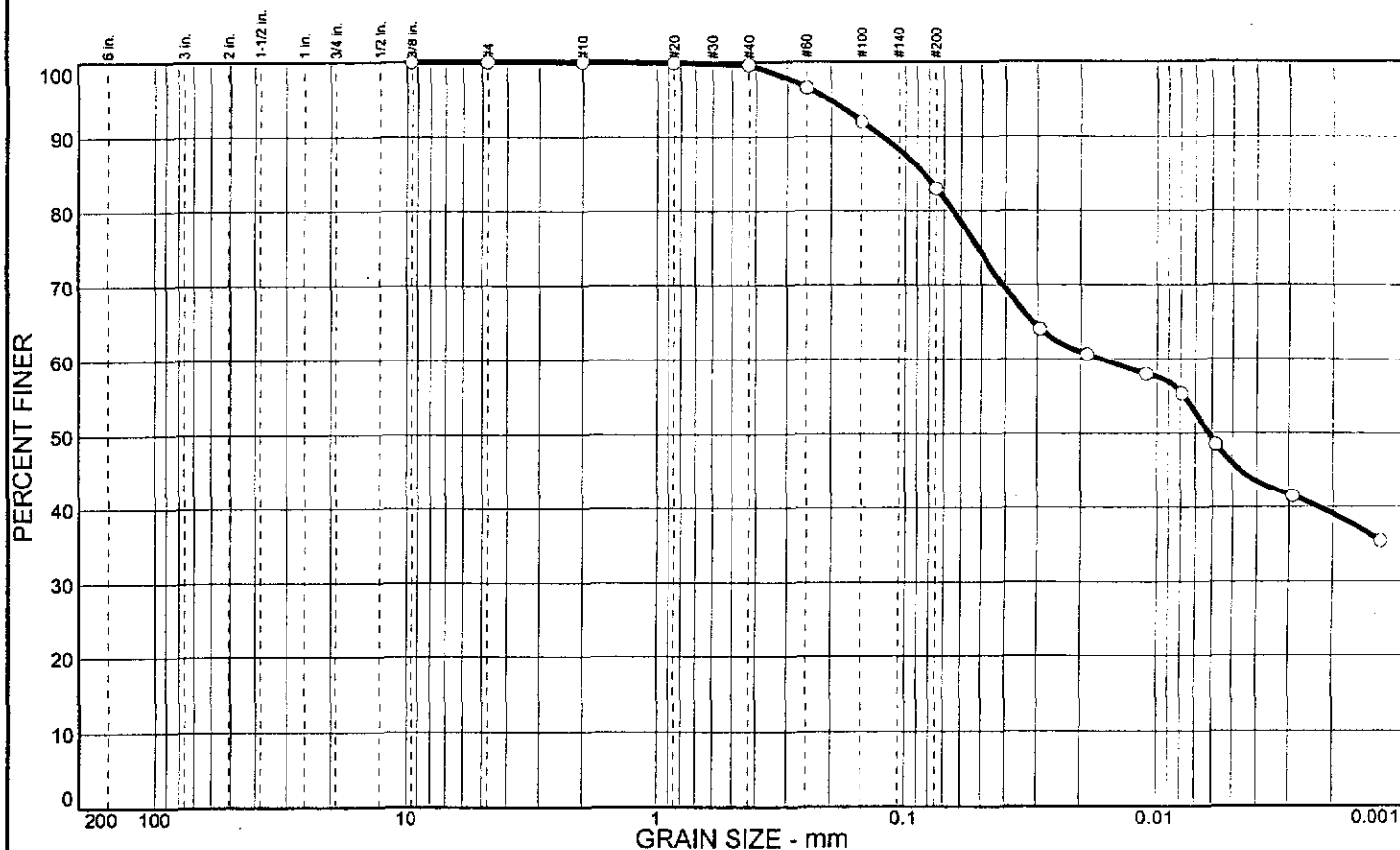
D₈₅ = 0.58 D₆₀ = 0.27 D₅₀ = 0.22

D₃₀ = 0.13 D₁₅ = 0.03 D₁₀ = 0.00

C_c = 18.4604 C_u = 79.2505

Leroy Bailey
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		17.0	37.1	45.9	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.0168		
D ₃₀			
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	100.0		
#20	99.9		
#40	99.6		
#60	96.6		
#100	92.0		
#200	83.0		

SOIL DESCRIPTION
○ CLAY, WITH SAND

REMARKS:
○

○ Source:

Sample No.: S-6-26

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-6-26

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: CLAY, WITH SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 57.84
Tare = 0.00
Dry sample weight = 57.84
Sample split on number 10 sieve
Split sample data:
Sample and tare = 57.79 Tare = .00 Sample weight = 57.79
Cumulative weight retained tare= .00
Weight for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.375 inch 0.00 100.0
4 0.00 100.0
10 0.00 100.0
20 0.06 99.9
40 0.21 99.6
60 1.96 96.6
100 4.65 92.0
200 9.85 83.0

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100.0
Weight of hydrometer sample: 57.79
Calculated biased weight= 57.79
Table of composite correction values:
Temp, deg C: 20.0 16.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.8	45.0	37.0	0.0139	45.0	8.9	0.0292	64.0
5.00	18.8	43.0	35.0	0.0139	43.0	9.2	0.0188	60.6
15.00	18.9	41.5	33.5	0.0138	41.5	9.5	0.0110	58.0
30.00	18.6	40.0	32.0	0.0139	40.0	9.7	0.0079	55.4
60.00	18.6	36.0	28.0	0.0139	36.0	10.4	0.0058	48.5
250.00	19.1	32.0	24.0	0.0138	32.0	11.0	0.0029	41.5
1440.00	17.0	28.5	20.5	0.0142	28.5	11.6	0.0013	35.5

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

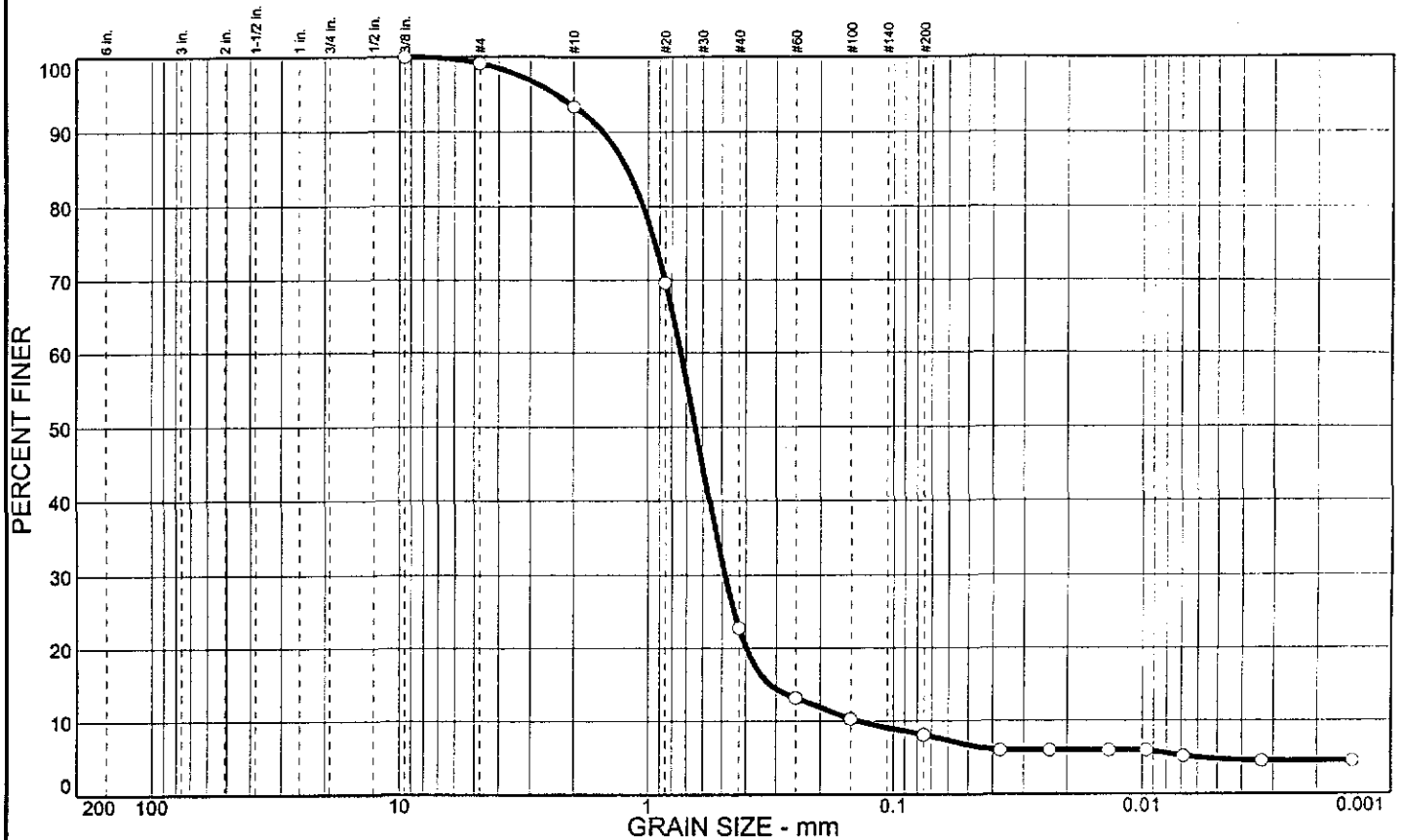
% SAND = 17.0 (% coarse = 0.0 % medium = 0.4 % fine = 16.6)

% SILT = 37.1 % CLAY = 45.9

D₈₅= 0.08 D₆₀= 0.02 D₅₀= 0.01

Leroy Bayley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	0.9	91.0	3.4	4.7	---	---	---	---

SIEVE Inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.736		
D ₃₀	0.486		
D ₁₀	0.140		
COEFFICIENTS			
C _c	2.29		
C _u	5.25		

SIEVE number size	PERCENT FINER		
	○		
#4	99.1		
#10	93.4		
#20	69.6		
#40	22.8		
#60	13.2		
#100	10.3		
#200	8.1		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND

REMARKS:
○

○ Source:

Sample No.: S-6-27

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project No.: 2000-00-0237

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #: S9-18566

Project Number: 2000-00-0237

Sample Data

Source:

Sample No.: S-6-27

Elev. or Depth: 0-2"

Location:

Description: MEDIUM TO FINE SAND

Liquid Limit: - - -

USCS Classification: - - -

Testing Remarks:

Sample Length (in./cm.):

Plastic Limit: - - -

AASHTO Classification: - - -

Mechanical Analysis Data

Initial

Dry sample and tare= 69.58
Tare = 0.00
Dry sample weight = 69.58
Sample split on number 10 sieve
Split sample data:
Sample and tare = 62.58 Tare = .00 Sample weight = 62.58
Cumulative weight retained tare= .00
Weight for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.61	99.1
# 10	4.60	93.4
# 20	15.93	69.6
# 40	47.31	22.8
# 60	53.74	13.2
# 100	55.65	10.3
# 200	57.16	8.1

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 93.4
Weight of hydrometer sample: 62.58
Calculated biased weight= 67.00
Table of composite correction values:
Temp, deg C: 20.0 16.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.8	12.0	4.0	0.0139	12.0	14.3	0.0371	6.0
5.00	18.8	12.0	4.0	0.0139	12.0	14.3	0.0234	6.0
15.00	18.6	12.0	4.0	0.0139	12.0	14.3	0.0136	6.0
30.00	18.6	12.0	4.0	0.0139	12.0	14.3	0.0096	6.0
60.00	18.4	11.5	3.5	0.0139	11.5	14.4	0.0068	5.2
250.00	19.1	11.0	3.0	0.0138	11.0	14.5	0.0033	4.5
1440.00	16.9	11.0	3.0	0.0142	11.0	14.5	0.0014	4.5

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 0.9 (% coarse = % fine = 0.9)

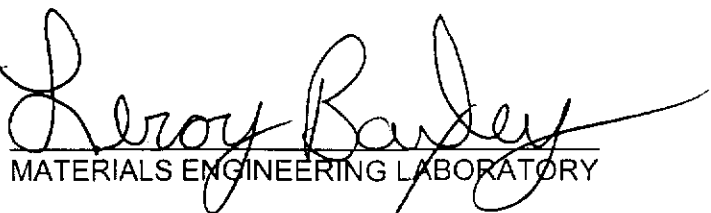
% SAND = 91.0 (% coarse = 5.7 % medium = 70.6 % fine = 14.7)

% SILT = 3.4 % CLAY = 4.7

D₈₅= 1.22 D₆₀= 0.74 D₅₀= 0.64

D₃₀= 0.49 D₁₅= 0.32 D₁₀= 0.14

C_c= 2.2892 C_u= 5.252


MATERIALS ENGINEERING LABORATORY

Thompson Engineering

MARCH 28, 2000

CLIENT: SAVANNAH LABORATORIES, INC.
PROJECT: SAVANNAH #: S9-17892E

RE: LIST PERTAINING TO SAMPLE QUANTITIES

SAMPLE ID	DEPTH (IN.)	
C-113-SED-3	0-2.5"	*
C-119-SED-2	0-2"	
C-119-SED-4	0-2"	**
C-121-SED-1	0-2"	*
C-121-SED-3	0-2"	*
C-122-SED-1	0-2.5"	*
C-124-SED-3	0-2"	
C-128-SED-2	0-2"	
C-130-SED-3	0-2.5"	**
C-130-SED-4	0-2"	**
C-132-SED-2	0-2"	**
C-132-SED-3	0-2"	*
C-136-SED-2	0-2"	*
C-138-SED-3	0-2"	**
C-141-SED-4	0-2"	**
C-125-SED-1	0-2.5"	**
C-126-SED-1	0-2"	*
C-131-SED-1	0-2"	*
C-133-SED-4	0-3"	**
C-135-SED-1	0-2"	*
C-137-SED-1	0-2"	**
C-137-SED-2	0-2"	
C-137-SED-3	0-2"	**
C-137-SED-4	0-2"	*
C-138-SED-1	0-2"	**
C-139-SED-3	0-2"	**
C-139-SED-4	0-2"	*
C-141-SED-2	0-2"	**
C-142-SED-3	0-2"	**
C-145-SED-1	0-2"	**
C-147-SED-1	0-2"	*
C-147-SED-3	0-2"	**
C-154-SED-1	0-3"	*

NOTE: EACH TEST PERFORMED USING ALL AVAILABLE MATERIAL.

* INSUFFICIENT MATERIAL AVAILABLE FOR TESTING.

**TEST PERFORMED, HOWEVER, ASTM RECOMMENDED QUANTITIES NOT AVAILABLE.


MATERIALS TESTING LABORATORY

Thompson Engineering

MARCH 28, 2000

CLIENT: SAVANNAH LABORATORIES, INC.
PROJECT: SAVANNAH #: S9-17892E

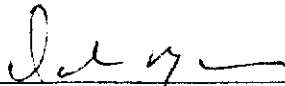
RE: LIST PERTAINING TO SAMPLE QUANTITIES

SAMPLE ID	DEPTH (IN.)	
C-142-SED-4	0-2	*
C-147-SED-2	0-2	**
C-148-SED-2	0-2	
C-148-SED-3	0-2	*
C-153-SED-2	0-2	*

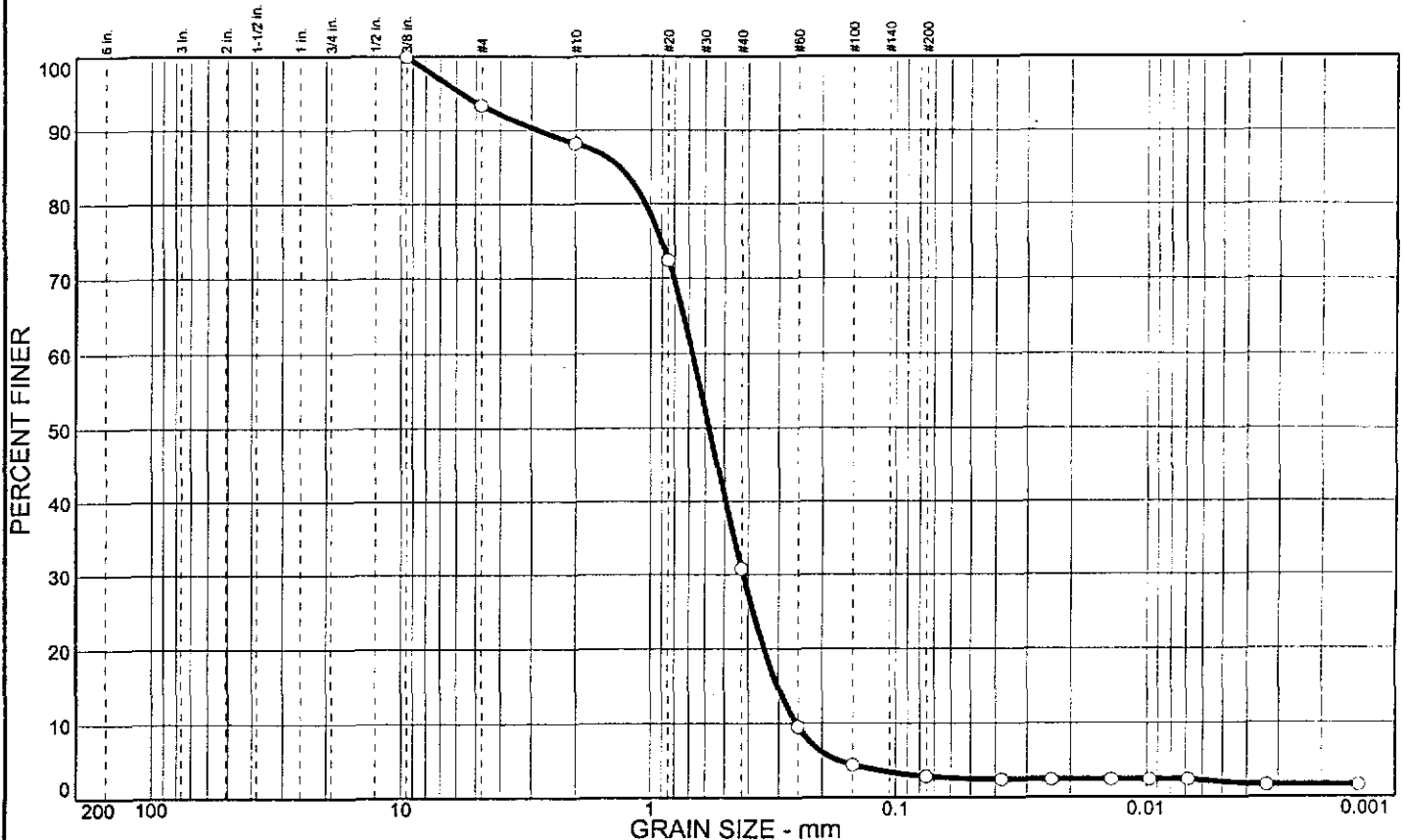
NOTE: EACH TEST PERFORMED USING ALL AVAILABLE MATERIAL.

* INSUFFICIENT MATERIAL AVAILABLE FOR TESTING.

**TEST PERFORMED, HOWEVER, ASTM RECOMMENDED QUANTITIES NOT AVAILABLE.


MATERIALS TESTING LABORATORY

Particle Size Distribution Report

[illegible]

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
X	GRAIN SIZE		
D ₆₀	0.676		
D ₃₀	0.419		
D ₁₀	0.254		
X	COEFFICIENTS		
C _c	1.02		
C _u	2.66		

SIEVE number size	PERCENT FINER		
	○		
#4	93.4		
#10	88.2		
#20	72.4		
#40	30.8		
#60	9.6		
#100	4.4		
#200	2.8		

SOIL DESCRIPTION

○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:

C

© Source:

Sample No.: C-119-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-119-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 62.53
Tare = 0.00
Dry sample weight = 62.53
Sample split on number 10 sieve
Split sample data:
Sample and tare = 54.55 Tare = .00 Sample weight = 54.55
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	4.16	93.4
# 10	7.39	88.2
# 20	9.76	72.4
# 40	35.49	30.8
# 60	48.60	9.6
# 100	51.83	4.4
# 200	52.82	2.8

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 88.2
Weight of hydrometer sample: 54.55
Calculated biased weight= 61.85
Table of composite correction values:
Temp, deg C: 20.0 18.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.7	9.5	1.5	0.0139	9.5	14.7	0.0376	2.4
5.00	18.7	9.5	1.5	0.0139	9.5	14.7	0.0238	2.4
15.00	18.8	9.5	1.5	0.0139	9.5	14.7	0.0137	2.4
30.00	18.9	9.5	1.5	0.0138	9.5	14.7	0.0097	2.4
60.00	19.3	9.5	1.5	0.0138	9.5	14.7	0.0068	2.4
250.00	20.0	9.0	1.0	0.0136	9.0	14.8	0.0033	1.6
1440.00	18.7	9.0	1.0	0.0139	9.0	14.8	0.0014	1.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 6.6 (% coarse = % fine = 6.6)

% SAND = 90.6 (% coarse = 5.2 % medium = 57.4 % fine = 28.0)

% SILT = 0.8 % CLAY = 2.0

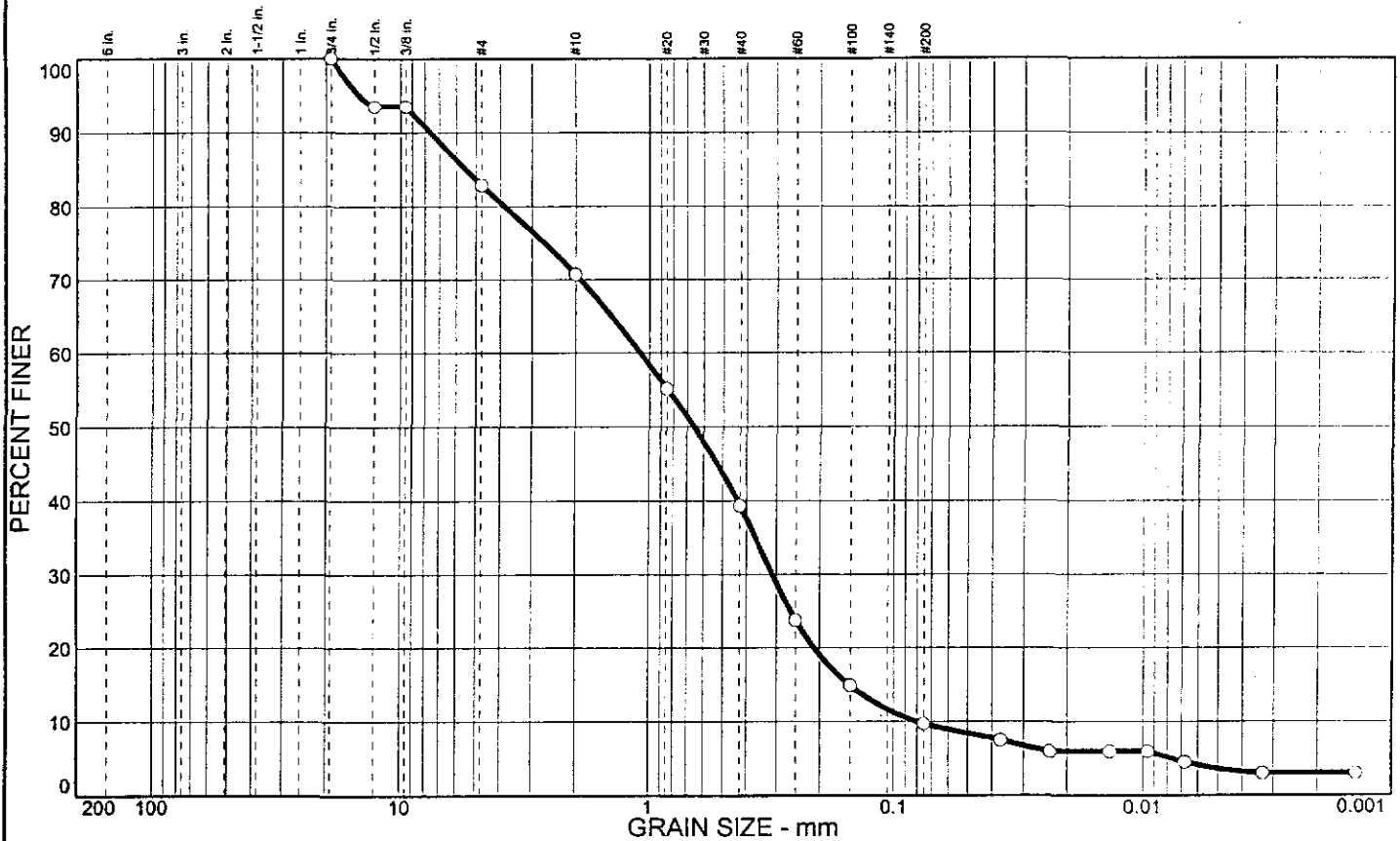
D₈₅ = 1.34 D₆₀ = 0.68 D₅₀ = 0.58

D₃₀ = 0.42 D₁₅ = 0.30 D₁₀ = 0.25

C_c = 1.021 C_u = 2.6571

dal yu
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	17.1	73.2	6.1	3.6	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	93.6		
.375	93.6		
GRAIN SIZE			
D ₆₀	1.09		
D ₃₀	0.312		
D ₁₀	0.0803		
COEFFICIENTS			
C _c	1.11		
C _u	13.63		

SIEVE number size	PERCENT FINER		
	○		
#4	82.9		
#10	70.7		
#20	55.1		
#40	39.4		
#60	23.8		
#100	14.9		
#200	9.7		

SOIL DESCRIPTION
 ○ COARSE TO FINE SAND, WITH GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-119-SED-4

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.8	13.0	5.0	0.0139	13.0	14.2	0.0369	7.5
5.00	18.8	12.0	4.0	0.0139	12.0	14.3	0.0234	6.0
15.00	18.8	12.0	4.0	0.0139	12.0	14.3	0.0135	6.0
30.00	19.0	12.0	4.0	0.0138	12.0	14.3	0.0095	6.0
60.00	19.2	11.0	3.0	0.0138	11.0	14.5	0.0068	4.5
250.00	20.1	10.0	2.0	0.0136	10.0	14.7	0.0033	3.0
1440.00	18.8	10.0	2.0	0.0139	10.0	14.7	0.0014	3.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 17.1 (% coarse = % fine = 17.1)

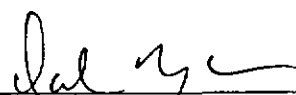
% SAND = 73.2 (% coarse = 12.2 % medium = 31.3 % fine = 29.7)

% SILT = 6.1 % CLAY = 3.6

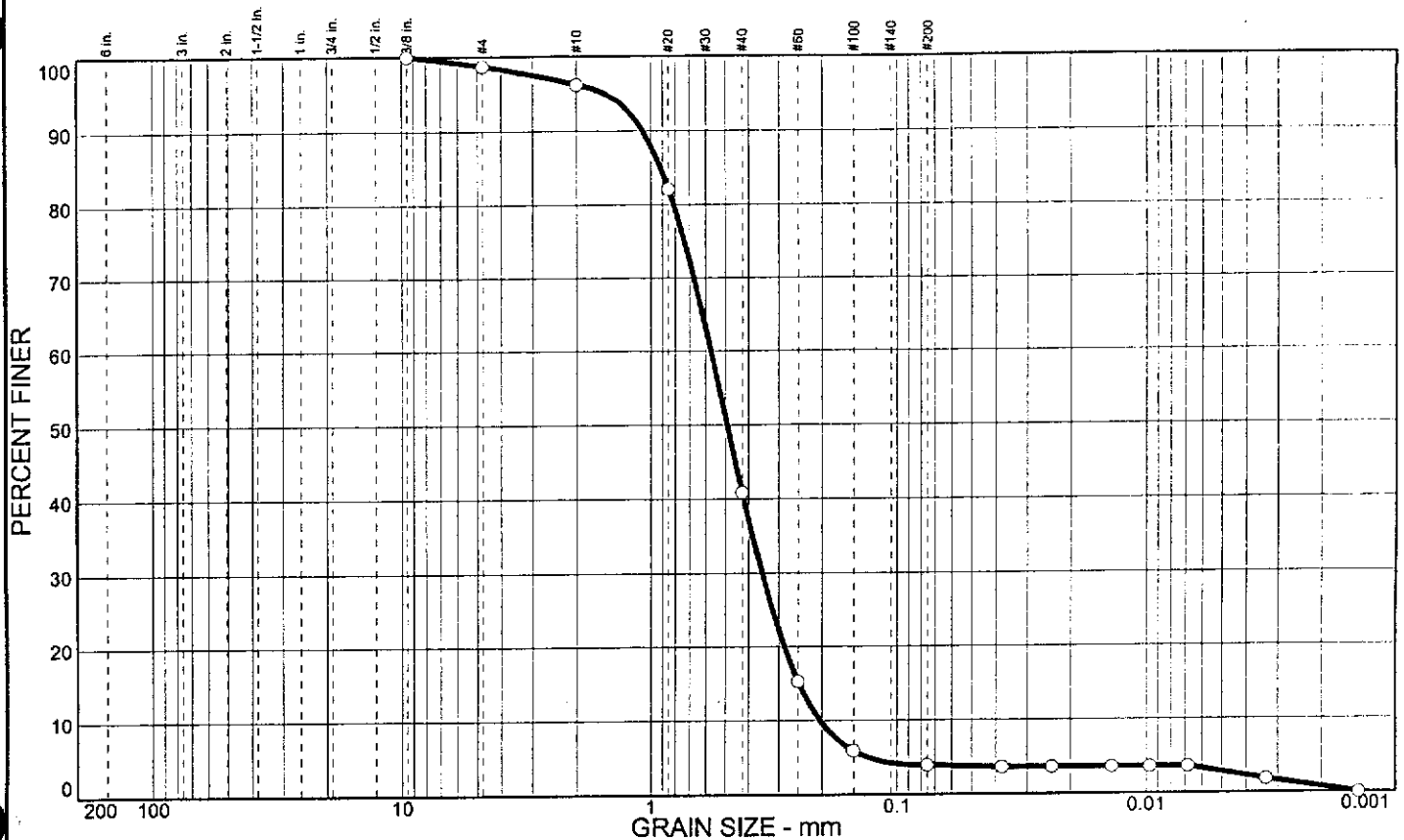
D₈₅= 5.48 D₆₀= 1.09 D₅₀= 0.66

D₃₀= 0.31 D₁₅= 0.15 D₁₀= 0.08

C_c= 1.1062 C_u= 13.6256


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	1.3	94.8	1.1	2.8	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.572		
D ₃₀	0.351		
D ₁₀	0.204		
COEFFICIENTS			
C _c	1.06		
C _u	2.81		

SIEVE number size	PERCENT FINER		
	○		
#4	98.7		
#10	96.2		
#20	82.1		
#40	40.9		
#60	15.3		
#100	5.9		
#200	3.9		

SOIL DESCRIPTION

○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:

○

○ Source:

Sample No.: C-124-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-124-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 56.25
Tare = 0.00
Dry sample weight = 56.25
Sample split on number 10 sieve
Split sample data:
Sample and tare = 53.80 Tare = .00 Sample weight = 53.80
Cumulative weight retained tare= .00
for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.74	98.7
# 10	2.12	96.2
# 20	7.89	82.1
# 40	30.95	40.9
# 60	45.23	15.3
# 100	50.48	5.9
# 200	51.62	3.9

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 96.2
Weight of hydrometer sample: 53.80
Calculated biased weight= 55.93
Table of composite correction values:
Temp, deg C: 20.0 18.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0376	3.6
5.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0238	3.6
15.00	18.7	10.0	2.0	0.0139	10.0	14.7	0.0137	3.6
30.00	18.9	10.0	2.0	0.0138	10.0	14.7	0.0097	3.6
60.00	19.2	10.0	2.0	0.0138	10.0	14.7	0.0068	3.6
250.00	19.9	9.0	1.0	0.0137	9.0	14.8	0.0033	1.8
1440.00	18.6	8.0	0.0	0.0139	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 1.3 (% coarse = % fine = 1.3)

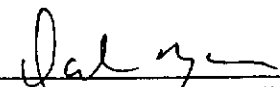
% SAND = 94.8 (% coarse = 2.5 % medium = 55.3 % fine = 37.0)

% SILT = 1.1 % CLAY = 2.8 (% CLAY COLLOIDS = 0.0)

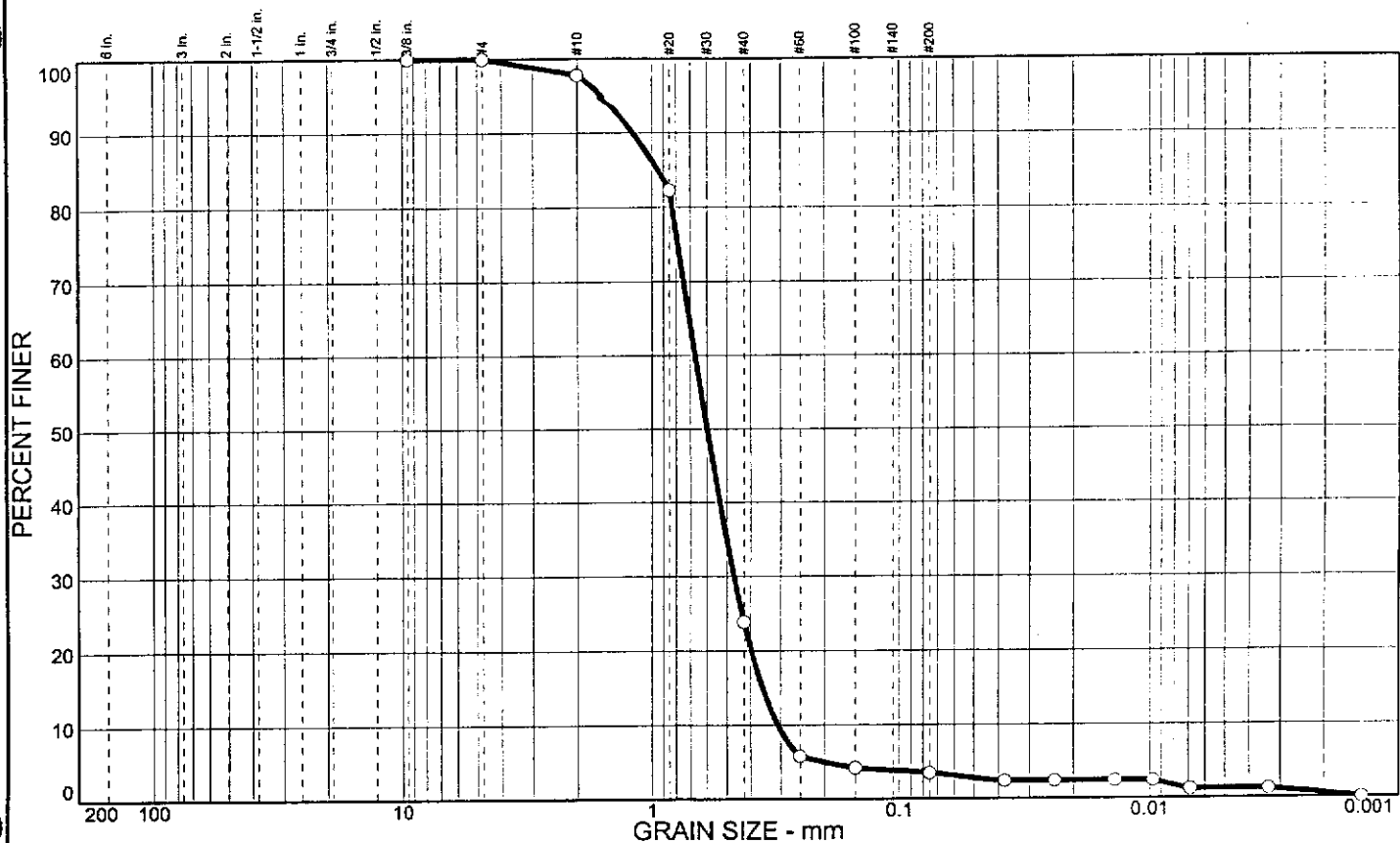
D₈₅ = 0.91 D₆₀ = 0.57 D₅₀ = 0.49

D₃₀ = 0.35 D₁₅ = 0.25 D₁₀ = 0.20

C_c = 1.0584 C_u = 2.8109


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		96.5	2.3	1.2	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.670		
D ₃₀	0.467		
D ₁₀	0.308		
COEFFICIENTS			
C _c	1.06		
C _u	2.18		

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	97.8		
#20	82.3		
#40	23.9		
#60	5.8		
#100	4.2		
#200	3.5		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND

REMARKS:

○ Source:

Sample No.: C-128-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #:S9-17892E
Project Number: 2000-00-0236

Sample Data

Source:
Sample No.: C-128-SED-2
Elev. or Depth: 0-2" Sample Length (in./cm.):
Location:
Description: MEDIUM TO FINE SAND
Liquid Limit: - - - Plastic Limit: - - -
USCS Classification: - - - AASHTO Classification: - - -
Testing Remarks:

Mechanical Analysis Data

```

Initial
Dry sample and tare=      82.47
Tare                    =      0.00
Dry sample weight      =      82.47
Sample split on number 10 sieve
Split sample data:
Sample and tare = 80.27 Tare = .00 Sample weight = 80.27
Cumulative weight retained tare= .00
for cumulative weight retained= .00
Sieve          Cumul. Wt.   Percent
                retained    finer
.375 inch      0.00        100.0
# 4             0.00        100.0
# 10            1.81        97.8
# 20            12.75       82.3
# 40            60.65       23.9
# 60            75.49       5.8
# 100           76.79       4.2
# 200           77.40       3.5

```

Hydrometer Analysis Data

```

Separation sieve is #10
Percent -#10 based upon complete sample= 97.8
Weight of hydrometer sample: 80.27
Calculated biased weight= 82.08
Table of composite correction values:
  Temp, deg C:  19.0  17.0
  Comp. corr:   -8.0  -8.0

```

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0376	2.4
5.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0238	2.4
15.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0137	2.4
30.00	18.7	10.0	2.0	0.0139	10.0	14.7	0.0097	2.4
60.00	19.0	9.0	1.0	0.0138	9.0	14.8	0.0069	1.2
250.00	19.8	9.0	1.0	0.0137	9.0	14.8	0.0033	1.2
1440.00	18.4	8.0	0.0	0.0139	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

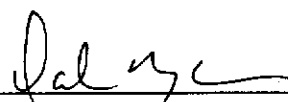
% SAND = 96.5 (% coarse = 2.2 % medium = 73.9 % fine = 20.4)

% SILT = 2.3 % CLAY = 1.2 (% CLAY COLLOIDS = 0.0)

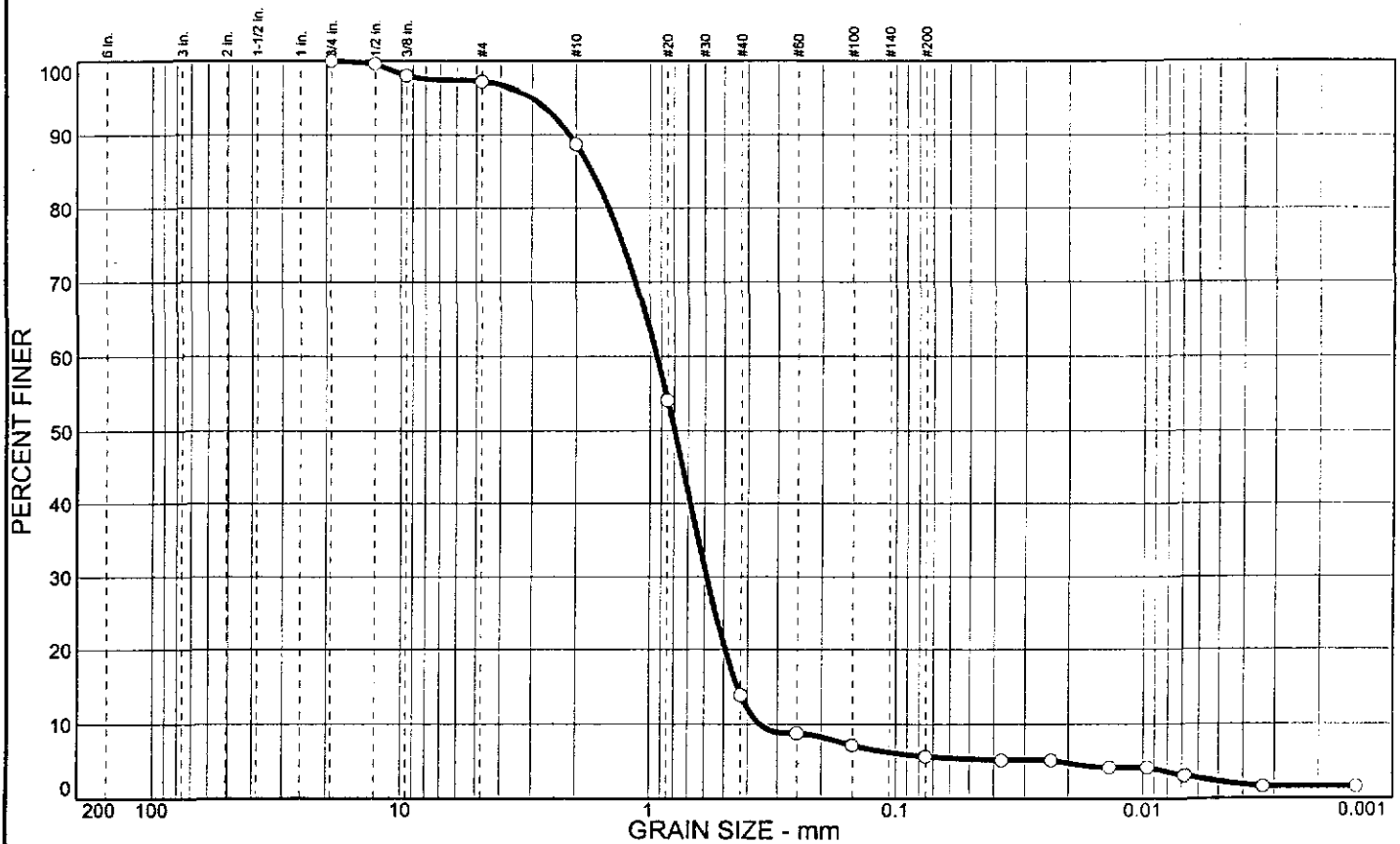
D₈₅= 0.95 D₆₀= 0.67 D₅₀= 0.60

D₃₀= 0.47 D₁₅= 0.36 D₁₀= 0.31

C_c= 1.0568 C_u= 2.1762


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	2.8	91.5	3.4	2.3	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	99.6		
.375	98.0		
GRAIN SIZE			
D ₆₀	0.940		
D ₃₀	0.587		
D ₁₀	0.355		
COEFFICIENTS			
C _c	1.03		
C _u	2.65		

SIEVE number size	PERCENT FINER		
	○		
#4	97.2		
#10	88.7		
#20	54.1		
#40	13.9		
#60	8.8		
#100	7.2		
#200	5.7		

SOIL DESCRIPTION
○ MEDIUM SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-130-SED-3

Elev./Depth: 0-2.5"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Subject: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-130-SED-3

Elev. or Depth: 0-2.5"

Location:

Description: MEDIUM SAND, TRACE GRAVEL

Liquid Limit: - - -

USCS Classification: - - -

Testing Remarks:

Sample Length (in./cm.):

Plastic Limit: - - -

AASHTO Classification: - - -

Mechanical Analysis Data

	Initial
Dry sample and tare=	97.00
Tare =	0.00
Dry sample weight =	97.00
Sample split on number 10 sieve	
Split sample data:	

Sample and tare = 84.99 Tare = .00 Sample weight = 84.99

Cumulative weight retained tare= .00

for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
-------	------------------------	------------------

.75 inch	0.00	100.0
.5 inch	0.42	99.6
.375 inch	1.96	98.0
# 4	2.71	97.2
# 10	10.95	88.7
# 20	33.17	54.1
# 40	71.69	13.9
# 60	76.55	8.8
# 100	78.11	7.2
# 200	79.58	5.7

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 88.7

Weight of hydrometer sample: 84.99

Calculated biased weight= 95.82

Table of composite correction values:

Temp, deg C: 19.0 17.0

Comp. corr: -8.0 -8.0

Discus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth $L = 16.294964 - 0.164 \times R_m$

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.3	13.0	5.0	0.0139	13.0	14.2	0.0371	5.2
5.00	18.3	13.0	5.0	0.0139	13.0	14.2	0.0235	5.2
15.00	18.4	12.0	4.0	0.0139	12.0	14.3	0.0136	4.2
30.00	18.5	12.0	4.0	0.0139	12.0	14.3	0.0096	4.2
60.00	18.9	11.0	3.0	0.0138	11.0	14.5	0.0068	3.1
250.00	19.9	9.5	1.5	0.0137	9.5	14.7	0.0033	1.6
1440.00	18.6	9.5	1.5	0.0139	9.5	14.7	0.0014	1.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 2.8 (% coarse = % fine = 2.8)

% SAND = 91.5 (% coarse = 8.5 % medium = 74.8 % fine = 8.2)

% SILT = 3.4 % CLAY = 2.3

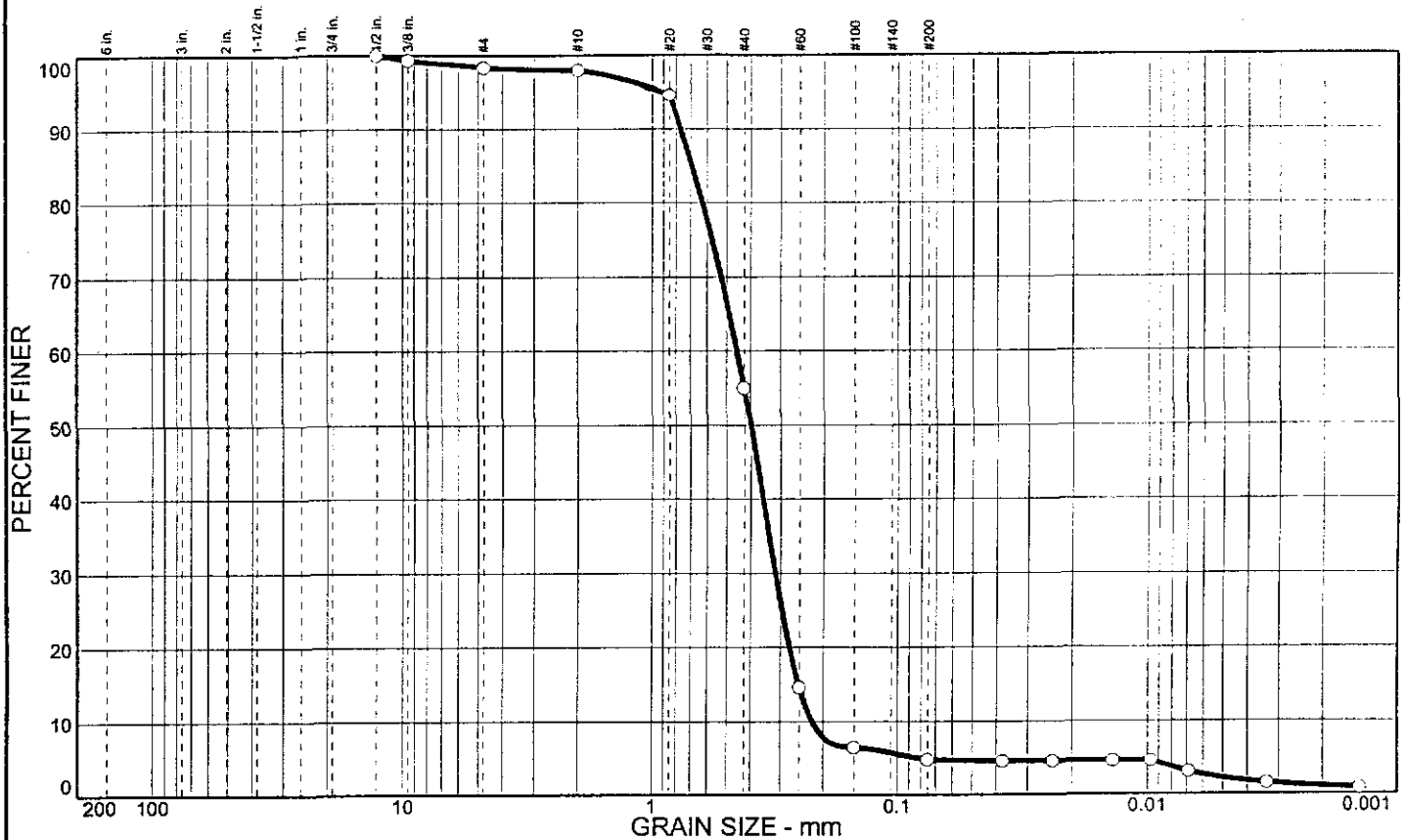
D₈₅ = 1.72 D₆₀ = 0.94 D₅₀ = 0.80

D₃₀ = 0.59 D₁₅ = 0.44 D₁₀ = 0.35

C_c = 1.0334 C_u = 2.6508


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	1.6	93.6	2.6	2.2	---	---	---	---

SIEVE Inches size	PERCENT FINER		
	○		
5	100.0		
.375	99.3		
GRAIN SIZE			
D ₆₀	0.454		
D ₃₀	0.315		
D ₁₀	0.221		
COEFFICIENTS			
C _c	0.99		
C _u	2.05		

SIEVE number size	PERCENT FINER		
	○		
#4	98.4		
#10	98.0		
#20	94.7		
#40	55.0		
#60	14.6		
#100	6.5		
#200	4.8		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-130-SED-4

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-130-SED-4

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 65.24
Tare = 0.00
Dry sample weight = 65.24
Sample split on number 10 sieve
Split sample data:
Sample and tare = 63.73 Tare = .00 Sample weight = 63.73

Cumulative weight retained tare= .00
T for cumulative weight retained= .00
Sieve

Cumul. Wt.
retained Percent
finer

.5 inch	0.00	100.0
.375 inch	0.49	99.3
# 4	1.07	98.4
# 10	1.30	98.0
# 20	2.18	94.7
# 40	27.95	55.0
# 60	54.21	14.6
# 100	59.48	6.5
# 200	60.63	4.8

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 98.0
Weight of hydrometer sample: 63.73
Calculated biased weight= 65.03
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.1	11.0	3.0	0.0140	11.0	14.5	0.0376	4.6
5.00	18.2	11.0	3.0	0.0140	11.0	14.5	0.0238	4.6
15.00	18.3	11.0	3.0	0.0139	11.0	14.5	0.0137	4.6
30.00	18.4	11.0	3.0	0.0139	11.0	14.5	0.0097	4.6
60.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0069	3.1
250.00	19.5	9.0	1.0	0.0137	9.0	14.8	0.0033	1.5
1440.00	18.4	8.5	0.5	0.0139	8.5	14.9	0.0014	0.8

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 1.6 (% coarse = % fine = 1.6)

% SAND = 93.6 (% coarse = 0.4 % medium = 43.0 % fine = 50.2)

% SILT = 2.6 % CLAY = 2.2

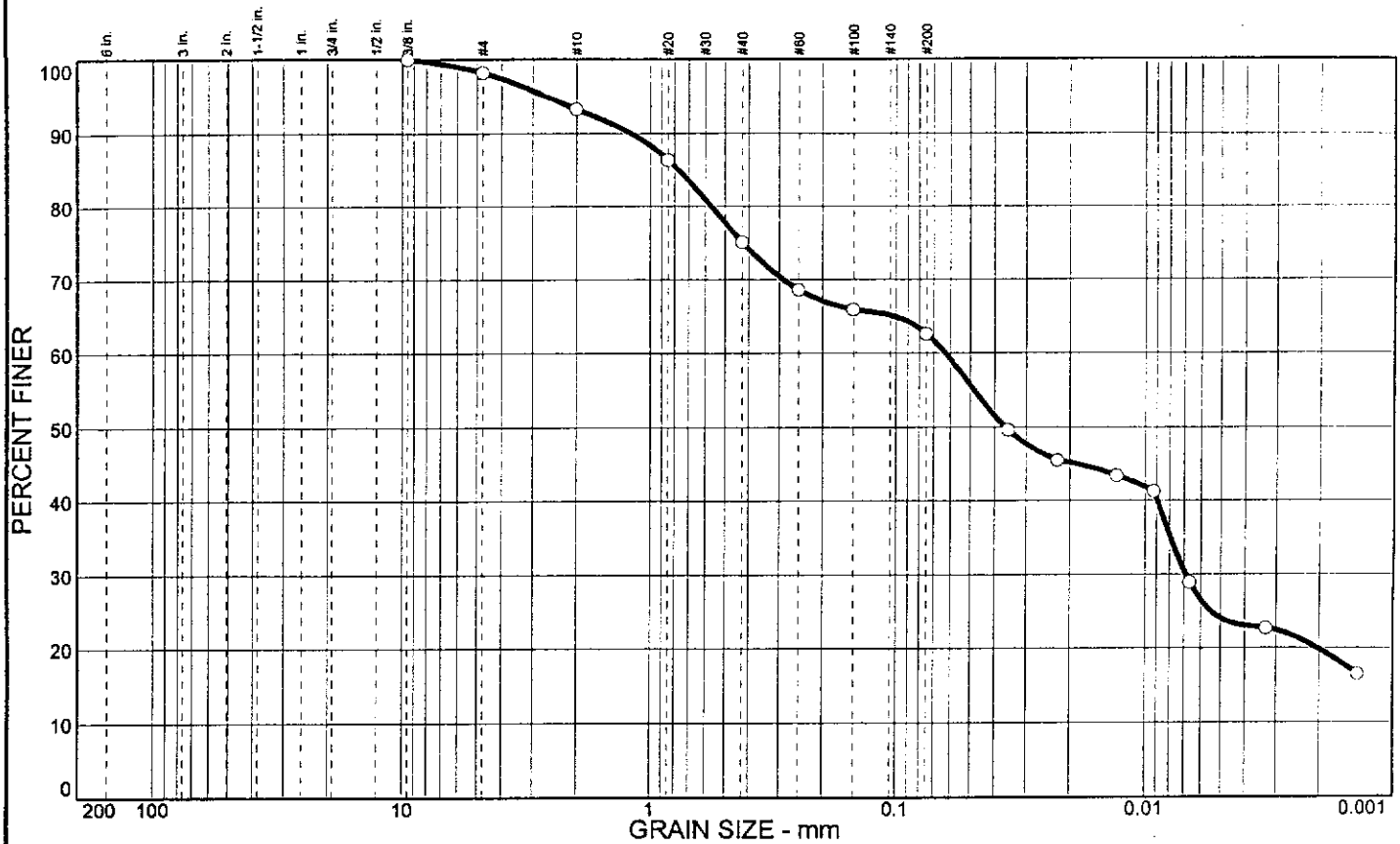
D₈₅= 0.69 D₆₀= 0.45 D₅₀= 0.40

D₃₀= 0.31 D₁₅= 0.25 D₁₀= 0.22

C_c= 0.9857 C_u= 2.0529


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	1.8	35.6	38.6	24.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
0.375	100.0		
GRAIN SIZE			
D ₆₀	0.0629		
D ₃₀	0.0069		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
#4	98.2		
#10	93.3		
#20	86.4		
#40	75.1		
#60	68.6		
#100	65.9		
#200	62.6		

SOIL DESCRIPTION
 ○ MEDIUM TO FINE SANDY SILT, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-132-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Subject: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-132-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SANDY SILT, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 24.99

Tare = 0.00

Dry sample weight = 24.99

Sample split on number 10 sieve

Split sample data:

Sample and tare = 22.58 Tare = .00 Sample weight = 22.58

Cumulative weight retained tare= .00

for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
-------	------------------------	------------------

.375 inch	0.00	100.0
-----------	------	-------

# 4	0.46	98.2
-----	------	------

#	10	1.68	93.3
---	----	------	------

# 20	1.67	86.4
------	------	------

# 40	4.41	75.1
------	------	------

# 60	5.97	68.6
------	------	------

# 100	6.64	65.9
-------	------	------

# 200	7.42	62.6
-------	------	------

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 93.3

Weight of hydrometer sample: 22.58

Calculated biased weight= 24.20

Table of composite correction values:

Temp, deg C: 19.0 17.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth $L = 16.294964 - 0.164 \times R_m$

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	20.0	12.0	0.0138	20.0	13.0	0.0353	49.6
5.00	19.0	19.0	11.0	0.0138	19.0	13.2	0.0224	45.5
15.00	19.0	18.5	10.5	0.0138	18.5	13.3	0.0130	43.4
30.00	19.0	18.0	10.0	0.0138	18.0	13.3	0.0092	41.3
60.00	19.0	15.0	7.0	0.0138	15.0	13.8	0.0066	28.9
250.00	18.7	13.5	5.5	0.0139	13.5	14.1	0.0033	22.7
1440.00	17.9	12.0	4.0	0.0140	12.0	14.3	0.0014	16.5

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

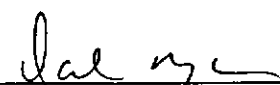
% COBBLES = % GRAVEL = 1.8 (% coarse = % fine = 1.8)

% SAND = 35.6 (% coarse = 4.9 % medium = 18.2 % fine = 12.5)

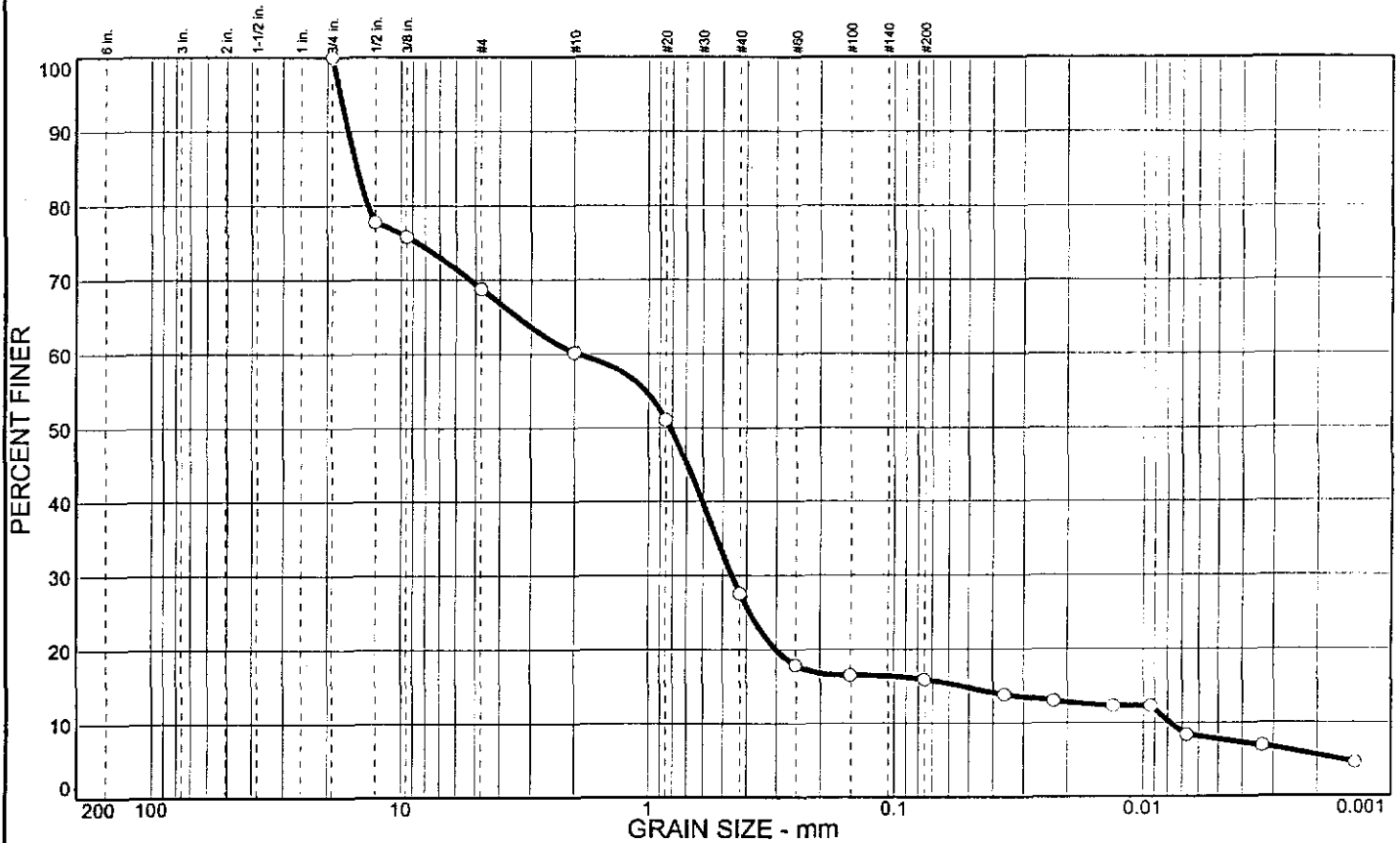
% SILT = 38.6 % CLAY = 24.0

D₈₅= 0.77 D₆₀= 0.06 D₅₀= 0.04

D₃₀= 0.01


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	31.2	52.9	8.1	7.8	---	---	---	---

SIEVE Inches size	PERCENT FINER		
	○		
.75	100.0		
.5	77.8		
.375	75.8		
GRAIN SIZE			
D ₆₀	1.93		
D ₃₀	0.459		
D ₁₀	0.0078		
COEFFICIENTS			
C _c	13.94		
C _u	247.74		

SIEVE number size	PERCENT FINER		
	○		
#4	68.8		
#10	60.2		
#20	51.1		
#40	27.6		
#60	17.9		
#100	16.5		
#200	15.9		

SOIL DESCRIPTION
○ SILTY MEDIUM TO FINE SAND, WITH GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-138-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.0	17.0	9.0	0.0138	17.0	13.5	0.0359	13.8
5.00	19.0	16.5	8.5	0.0138	16.5	13.6	0.0228	13.0
15.00	19.0	16.0	8.0	0.0138	16.0	13.7	0.0132	12.3
30.00	19.0	16.0	8.0	0.0138	16.0	13.7	0.0093	12.3
60.00	19.1	13.5	5.5	0.0138	13.5	14.1	0.0067	8.4
250.00	18.7	12.5	4.5	0.0139	12.5	14.2	0.0033	6.9
1440.00	17.9	11.0	3.0	0.0140	11.0	14.5	0.0014	4.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 31.2 (% coarse = % fine = 31.2)

% SAND = 52.9 (% coarse = 8.6 % medium = 32.6 % fine = 11.7)

% SILT = 8.1 % CLAY = 7.8

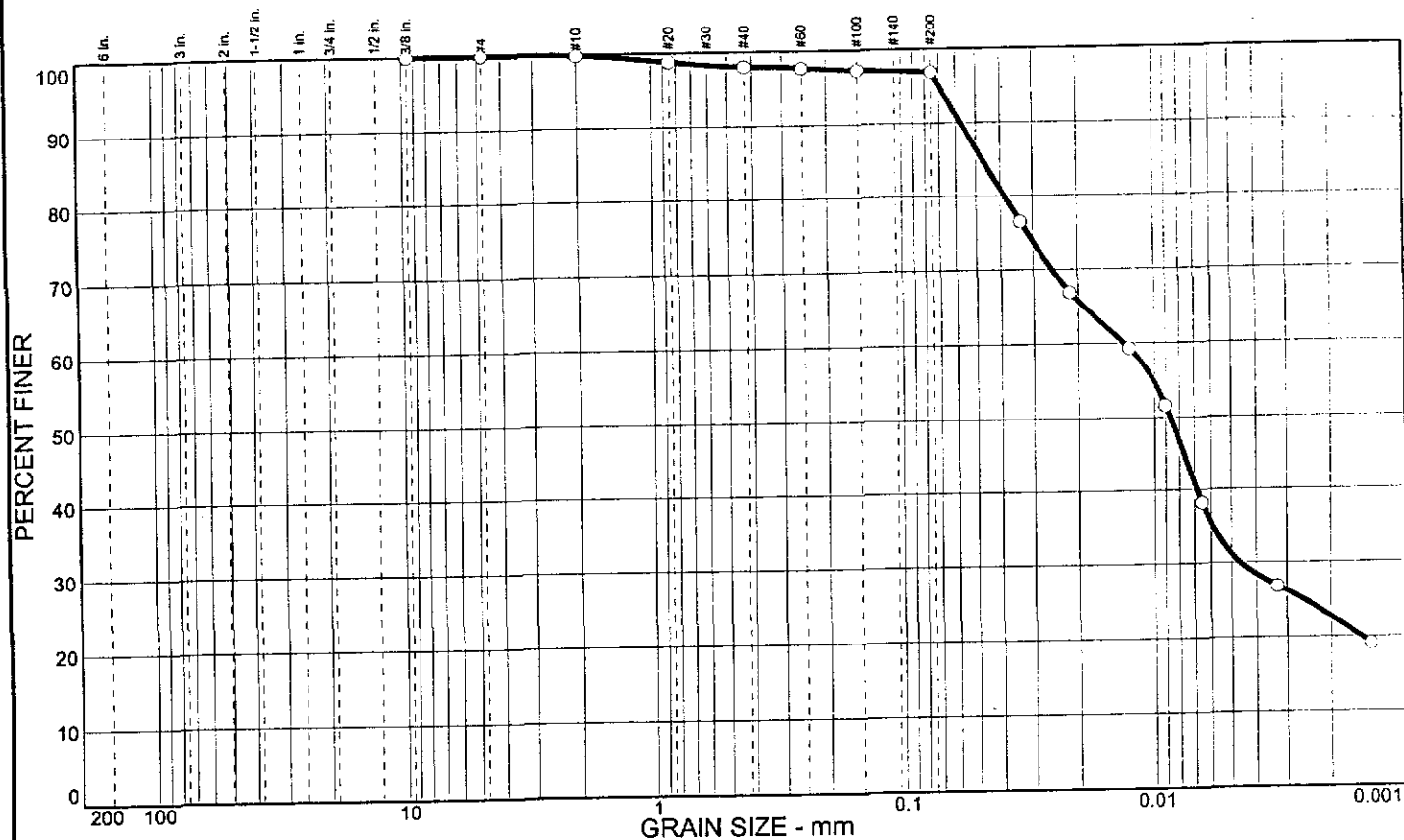
D₈₅= 15.10 D₆₀= 1.93 D₅₀= 0.82

D₃₀= 0.46 D₁₅= 0.05 D₁₀= 0.01

C_c= 13.9435 C_u= 247.7437


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
		3.1	65.7	31.2	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.0132		
D ₃₀	0.0046		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	99.8		
#20	98.8		
#40	98.0		
#60	97.7		
#100	97.3		
#200	96.9		

SOIL DESCRIPTION
○ SILT, TRACE SAND

REMARKS:
○

○ Source:

Sample No.: C-141-SED-4

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-141-SED-4

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, TRACE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	26.45	
Tare =	0.00	
Dry sample weight =	26.45	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 26.10 Tare = .00 Sample weight = 26.10		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.06	99.8
# 20	0.27	98.8
# 40	0.47	98.0
# 60	0.55	97.7
# 100	0.65	97.3
# 200	0.77	96.9

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99.8
Weight of hydrometer sample: 26.10
Calculated biased weight= 26.15
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	28.0	20.0	0.0138	28.0	11.7	0.0335	76.5
5.00	19.0	25.5	17.5	0.0138	25.5	12.1	0.0215	66.9
15.00	18.9	23.5	15.5	0.0138	23.5	12.4	0.0126	59.3
30.00	18.9	21.5	13.5	0.0138	21.5	12.8	0.0090	51.6
60.00	18.9	18.0	10.0	0.0138	18.0	13.3	0.0065	38.2
250.00	18.6	15.0	7.0	0.0139	15.0	13.8	0.0033	26.8
1440.00	17.9	13.0	5.0	0.0140	13.0	14.2	0.0014	19.1

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

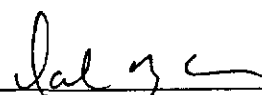
% COBBLES = % GRAVEL =

% SAND = 3.1 (% coarse = 0.2 % medium = 1.8 % fine = 1.1)

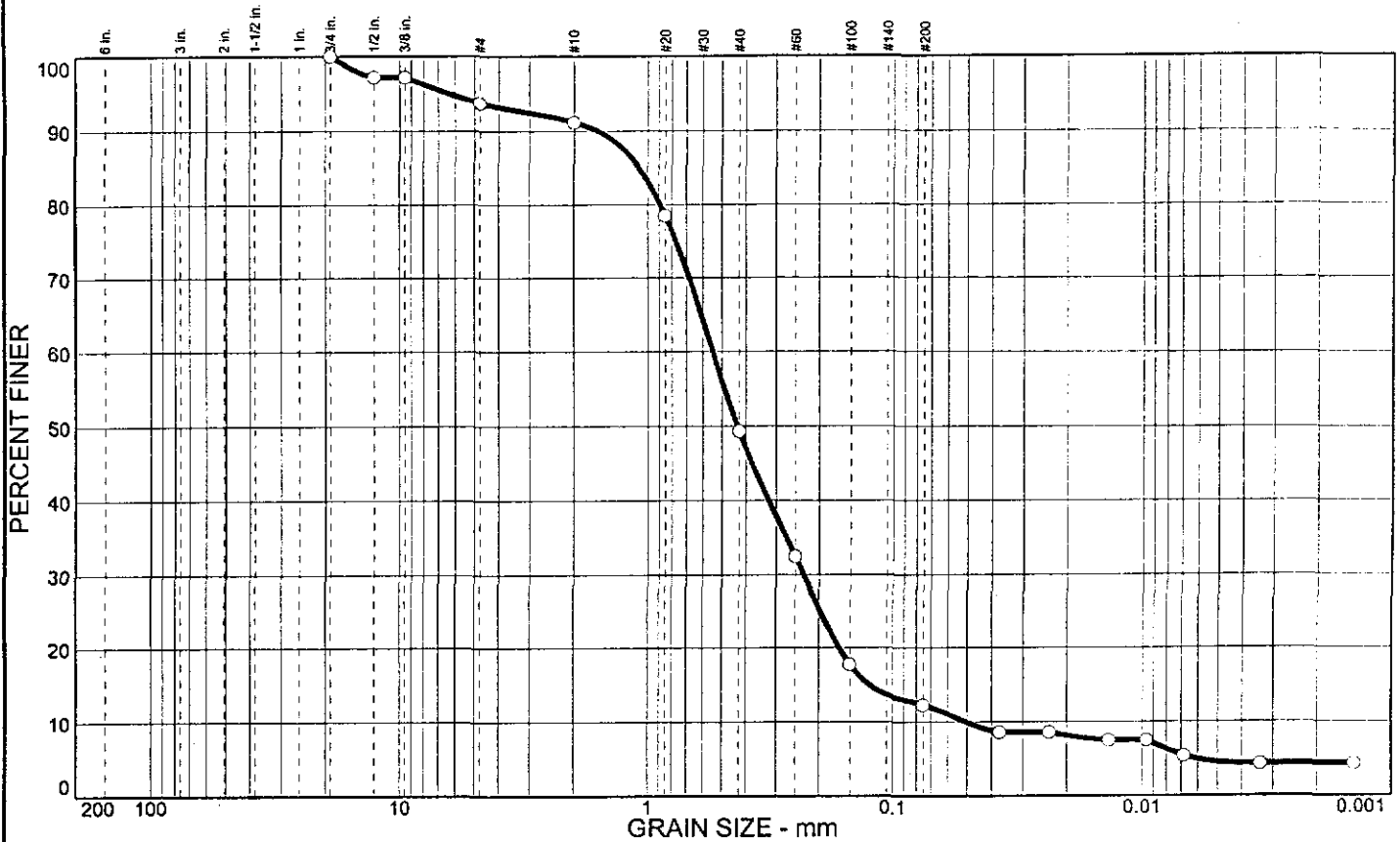
% SILT = 65.7 % CLAY = 31.2

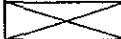
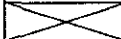
D₈₅ = 0.05 D₆₀ = 0.01 D₅₀ = 0.01

D₃₀ = 0.00


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report

[illegible]

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	97.2		
.375	97.2		
	GRAIN SIZE		
D ₆₀	0.546		
D ₃₀	0.231		
D ₁₀	0.0507		
	COEFFICIENTS		
C _c	1.92		
C _u	10.78		

SIEVE number size	PERCENT FINER		
	○		
#4	93.8		
#10	91.2		
#20	78.5		
#40	49.3		
#60	32.5		
#100	17.8		
#200	12.3		

SOIL DESCRIPTION	
1	0-10 cm
2	10-20 cm
3	20-30 cm
4	30-40 cm
5	40-50 cm
6	50-60 cm
7	60-70 cm
8	70-80 cm
9	80-90 cm
10	90-100 cm

○ SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:

C

○ Source:

Sample No.: C-125-SED-1

Elev./Depth: 0-2.5"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #:S9-17892E
Project Number: 2000-00-0236

Sample Data

Source:
Sample No.: C-125-SED-1
Elev. or Depth: 0-2.5" Sample Length (in./cm.):
Location:
Description: SILTY MEDIUM TO FINE SAND, TRACE GRAVEL
Liquid Limit: - - - Plastic Limit: - - -
USCS Classification: - - - AASHTO Classification: - - -
Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 48.39
Tare = 0.00
Dry sample weight = 48.39
Sample split on number 10 sieve
Split sample data:
Sample and tare = 42.59 Tare = .00 Sample weight = 42.59
Cumulative weight retained tare= .00
for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	1.35	97.2
.375 inch	1.35	97.2
# 4	2.98	93.8
# 10	4.26	91.2
# 20	5.93	78.5
# 40	19.58	49.3
# 60	27.42	32.5
# 100	34.30	17.8
# 200	36.84	12.3

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 91.2
Weight of hydrometer sample: 42.59
Calculated biased weight= 46.70
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.8	12.0	4.0	0.0139	12.0	14.3	0.0371	8.6
5.00	18.8	12.0	4.0	0.0139	12.0	14.3	0.0234	8.6
15.00	18.9	11.5	3.5	0.0138	11.5	14.4	0.0136	7.5
30.00	18.8	11.5	3.5	0.0139	11.5	14.4	0.0096	7.5
60.00	18.9	10.5	2.5	0.0138	10.5	14.6	0.0068	5.4
250.00	18.4	10.0	2.0	0.0139	10.0	14.7	0.0034	4.3
1440.00	17.9	10.0	2.0	0.0140	10.0	14.7	0.0014	4.3

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 6.2 (% coarse = % fine = 6.2)

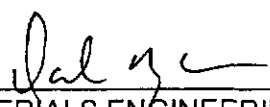
% SAND = 81.5 (% coarse = 2.6 % medium = 41.9 % fine = 37.0)

% SILT = 7.8 % CLAY = 4.5

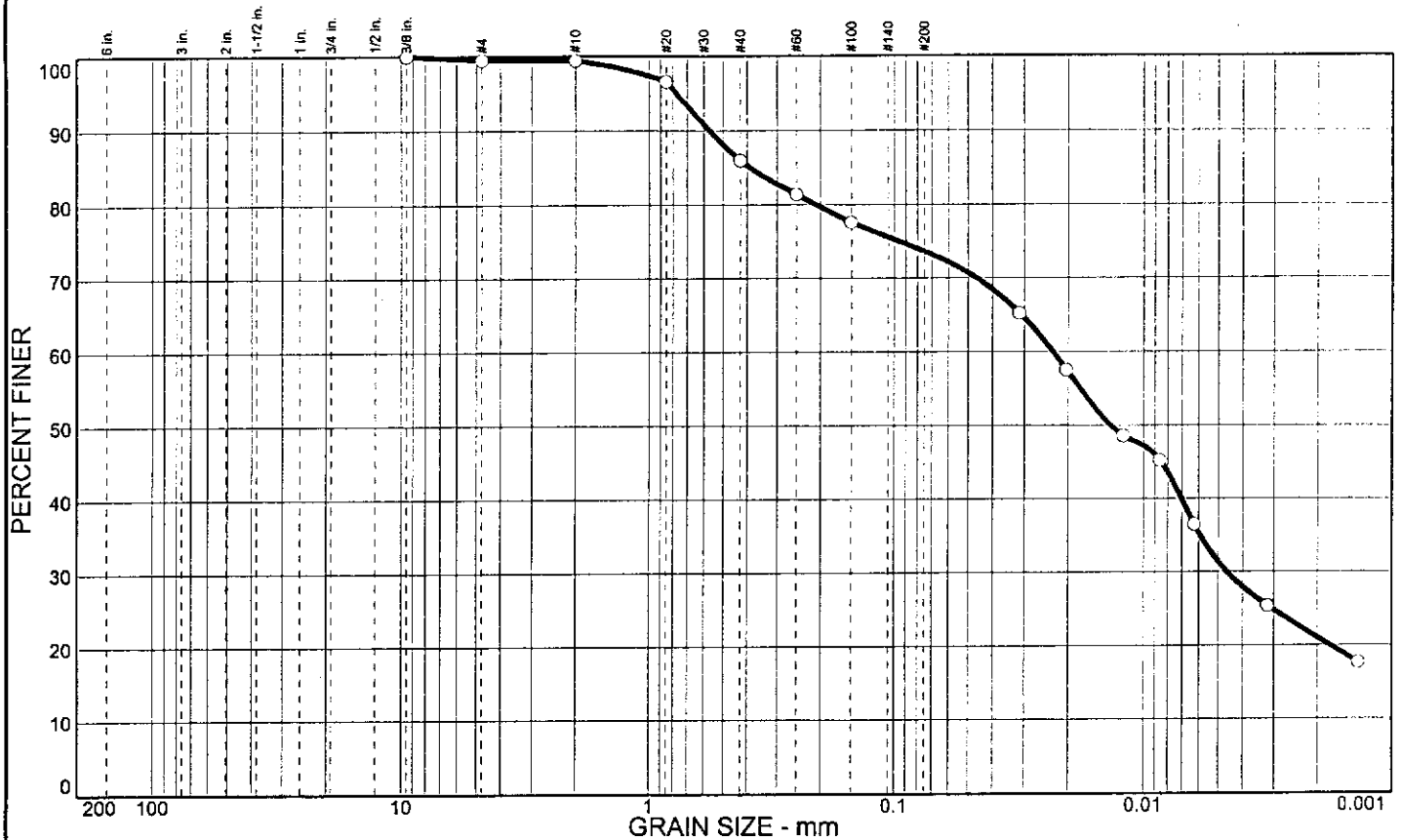
D₈₅ = 1.09 D₆₀ = 0.55 D₅₀ = 0.43

D₃₀ = 0.23 D₁₅ = 0.12 D₁₀ = 0.05

C_c = 1.9238 C_u = 10.7754


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	0.5	25.9	42.2	31.4	---	---	---	---

SIEVE Inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.0231		
D ₃₀	0.0046		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	99.5		
#10	99.4		
#20	96.6		
#40	86.0		
#60	81.4		
#100	77.6		

SOIL DESCRIPTION
○ SILT, WITH SAND

REMARKS:
○

○ Source:

Sample No.: C-133-SED-4

Elev./Depth: 0-3"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-133-SED-4

Elev. or Depth: 0-3"

Sample Length (in./cm.):

Location:

Description: SILT, WITH SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	45.55	
Tare =	0.00	
Dry sample weight =	45.55	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 44.96 Tare = .00 Sample weight = 44.96		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.24	99.5
# 10	0.26	99.4
# 20	1.26	96.6
# 40	6.07	86.0
# 60	8.13	81.4
# 100	9.87	77.6

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 99.4

Weight of hydrometer sample: 44.96

Calculated biased weight= 45.23

Table of composite correction values:

Temp, deg C:	19.0	17.0
Comp. corr:	-8.0	-8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	37.5	29.5	0.0139	37.5	10.1	0.0313	65.2
5.00	18.7	34.0	26.0	0.0139	34.0	10.7	0.0203	57.5
15.00	18.8	30.0	22.0	0.0139	30.0	11.4	0.0121	48.6
30.00	18.9	28.5	20.5	0.0138	28.5	11.6	0.0086	45.3
60.00	18.9	24.5	16.5	0.0138	24.5	12.3	0.0063	36.5
250.00	18.6	19.5	11.5	0.0139	19.5	13.1	0.0032	25.4
1440.00	17.9	16.0	8.0	0.0140	16.0	13.7	0.0014	17.7

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 0.5 (% coarse = % fine = 0.5)

% SAND = 25.9 (% coarse = 0.1 % medium = 13.4 % fine = 12.4)

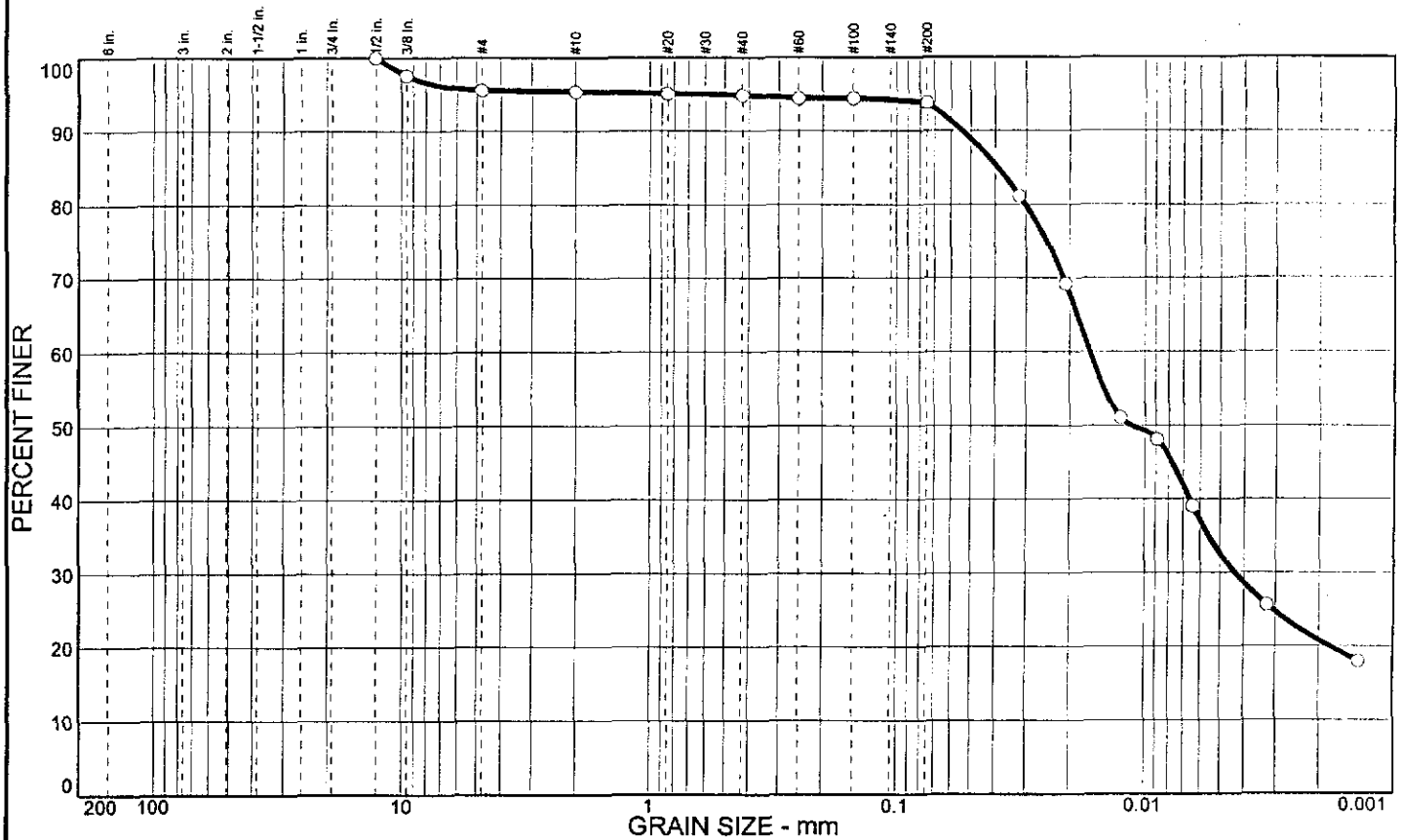
% SILT = 42.2 % CLAY = 31.4

D₈₅ = 0.39 D₆₀ = 0.02 D₅₀ = 0.01

D₃₀ = 0.00

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MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	4.4	1.7	61.2	32.7	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
5	100.0		
3/4	97.6		
GRAIN SIZE			
D ₆₀	0.0166		
D ₃₀	0.0044		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE	PERCENT FINER		
number size	○		
#4	95.6		
#10	95.4		
#20	95.1		
#40	94.9		
#60	94.5		
#100	94.5		
#200	93.9		

SOIL DESCRIPTION
○ SILT, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-137-SED-1

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-137-SED-1

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 33.54
Tare = 0.00
Dry sample weight = 33.54
Sample split on number 10 sieve
Split sample data:

Sample and tare = 31.73 Tare = .00 Sample weight = 31.73

Cumulative weight retained tare= .00

for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.5 inch	0.00	100.0
.375 inch	0.80	97.6
# 4	1.47	95.6
# 10	1.53	95.4
# 20	0.09	95.1
# 40	0.18	94.9
# 60	0.29	94.5
# 100	0.31	94.5
# 200	0.51	93.9

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 95.4

Weight of hydrometer sample: 31.73

Calculated biased weight= 33.26

Table of composite correction values:

Temp, deg C: 19.0 17.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	35.0	27.0	0.0139	35.0	10.6	0.0319	81.2
5.00	18.6	31.0	23.0	0.0139	31.0	11.2	0.0208	69.2
15.00	18.7	25.0	17.0	0.0139	25.0	12.2	0.0125	51.1
30.00	18.7	24.0	16.0	0.0139	24.0	12.4	0.0089	48.1
60.00	18.7	21.0	13.0	0.0139	21.0	12.9	0.0064	39.1
250.00	18.6	16.5	8.5	0.0139	16.5	13.6	0.0032	25.6
1440.00	17.9	14.0	6.0	0.0140	14.0	14.0	0.0014	18.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 4.4 (% coarse = % fine = 4.4)

% SAND = 1.7 (% coarse = 0.2 % medium = 0.5 % fine = 1.0)

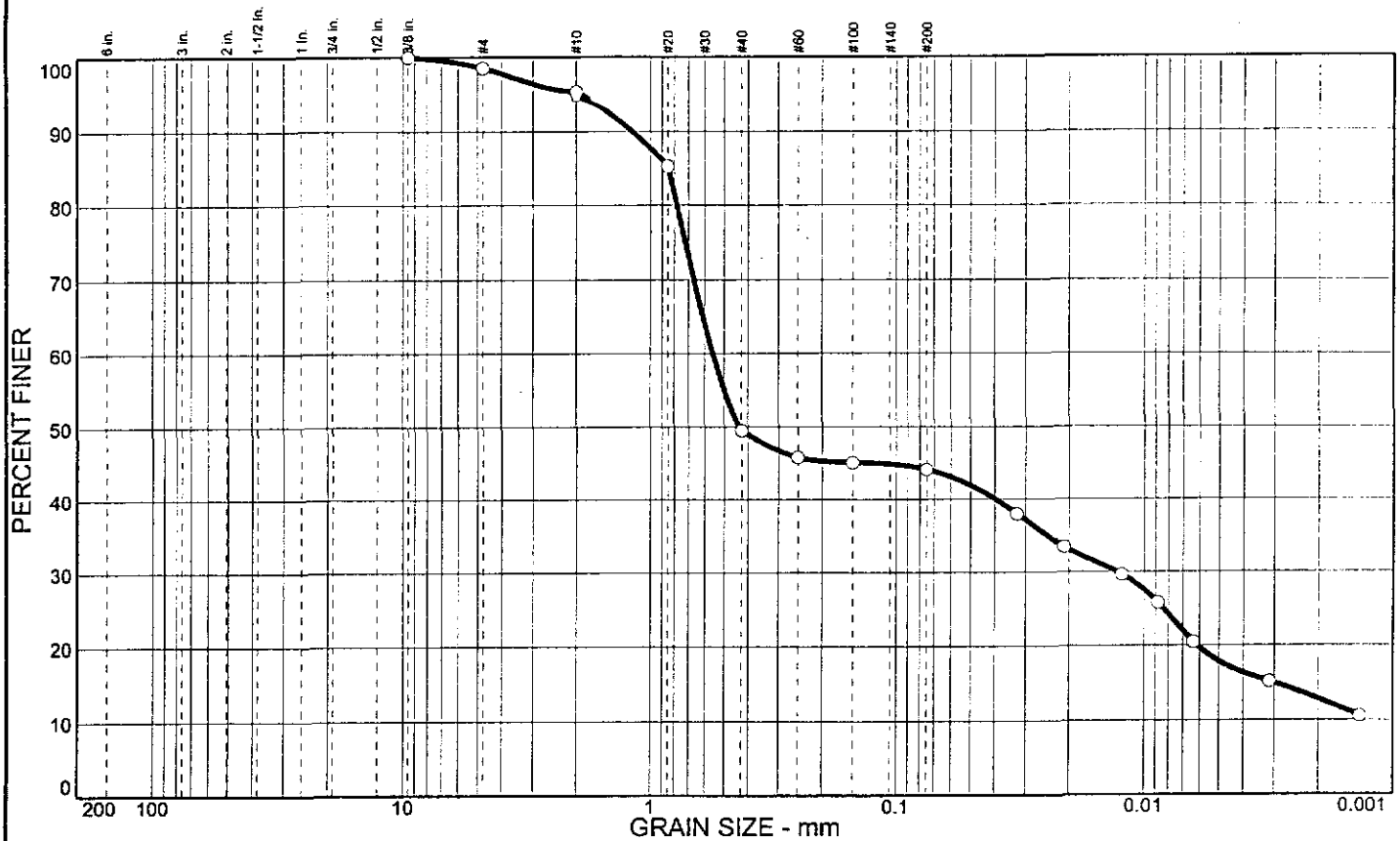
% SILT = 61.2 % CLAY = 32.7

D₈₅= 0.04 D₆₀= 0.02 D₅₀= 0.01

D₃₀= 0.00

Valley
MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	1.5	54.4	26.3	17.8	---	---	---	---

SIEVE Inches size	PERCENT FINER		
	○		
.375	100.0		
X GRAIN SIZE			
D ₆₀	0.555		
D ₃₀	0.0129		
D ₁₀			
X COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	98.5		
#10	95.3		
#20	85.3		
#40	49.5		
#60	45.8		
#100	45.1		
#200	44.1		

SOIL DESCRIPTION
○ SILTY MEDIUM SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-137-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-137-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	67.50	
Tare =	0.00	
Dry sample weight =	67.50	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 62.78 Tare = .00 Sample weight = 62.78		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	1.00	98.5
# 10	3.20	95.3
# 20	6.62	85.3
# 40	30.20	49.5
# 60	32.62	45.8
# 100	33.06	45.1
# 200	33.73	44.1

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 95.3
Weight of hydrometer sample: 62.78
Calculated biased weight= 65.88
Table of composite correction values:
Temp, deg C: 20.5 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	33.0	25.0	0.0139	33.0	10.9	0.0324	38.0
5.00	18.6	30.0	22.0	0.0139	30.0	11.4	0.0209	33.4
15.00	18.8	27.5	19.5	0.0139	27.5	11.8	0.0123	29.6
30.00	19.0	25.0	17.0	0.0138	25.0	12.2	0.0088	25.8
60.00	19.3	21.5	13.5	0.0138	21.5	12.8	0.0064	20.5
250.00	20.3	18.0	10.0	0.0136	18.0	13.3	0.0031	15.2
1440.00	18.7	15.0	7.0	0.0139	15.0	13.8	0.0014	10.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 1.5 (% coarse = % fine = 1.5)

% SAND = 54.4 (% coarse = 3.2 % medium = 45.8 % fine = 5.4)

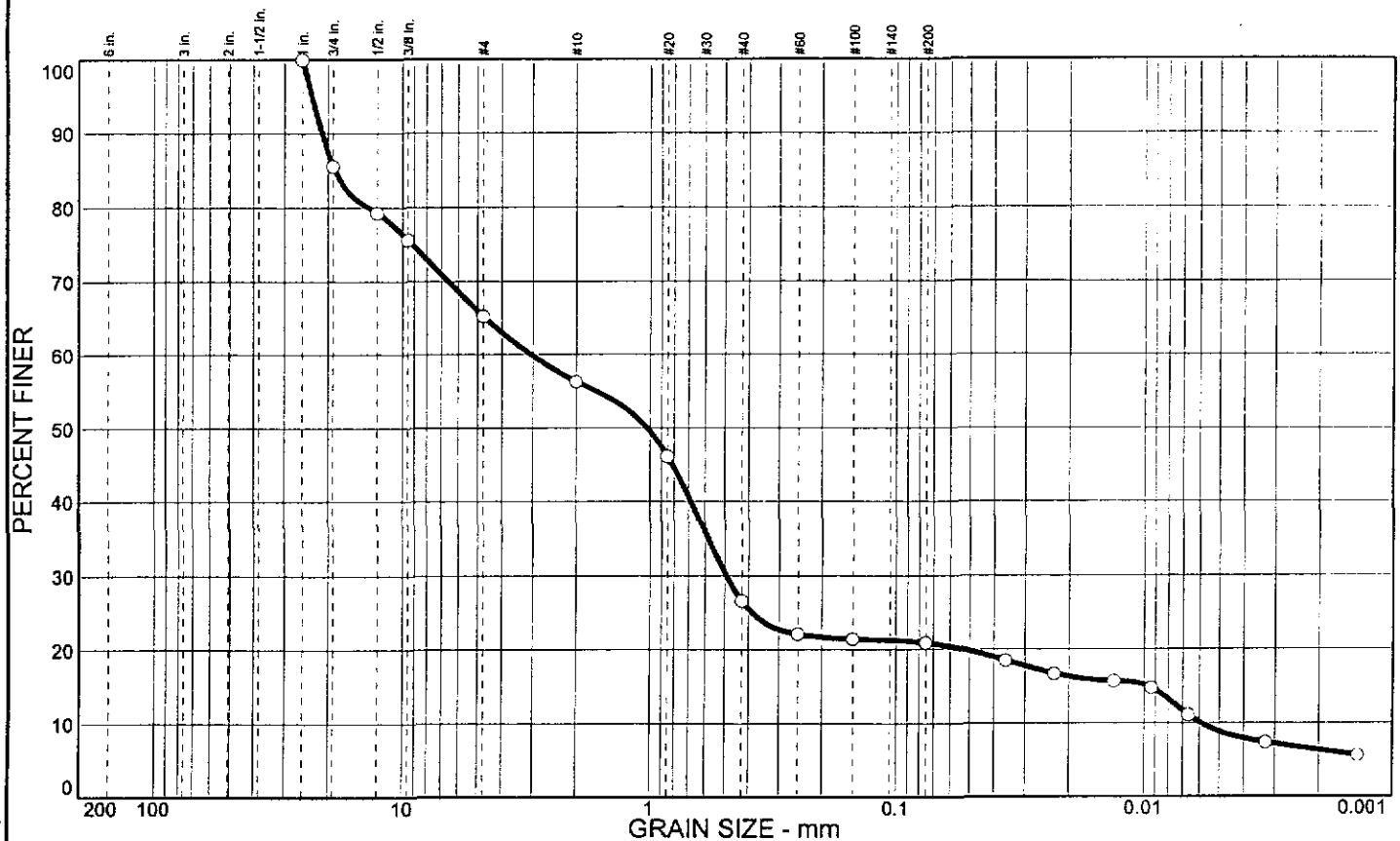
% SILT = 26.3 % CLAY = 17.8

D₈₅ = 0.85 D₆₀ = 0.56 D₅₀ = 0.43

D₃₀ = 0.01 D₁₅ = 0.00

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MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	34.8	44.3	12.1	8.8	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
1	100.0		
.75	85.6		
.5	79.3		
.375	75.6		
GRAIN SIZE			
D ₆₀	3.06		
D ₃₀	0.491		
D ₁₀	0.0059		
COEFFICIENTS			
C _c	13.31		
C _u	517.56		

SIEVE number size	PERCENT FINER		
	○		
#4	65.2		
#10	56.3		
#20	46.1		
#40	26.6		
#60	22.1		
#100	21.4		
#200	20.9		

SOIL DESCRIPTION
○ SILTY MEDIUM SAND, WITH GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-137-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-137-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 71.63
Tare = 0.00
Dry sample weight = 71.63
Sample split on number 10 sieve
Split sample data:
Sample and tare = 30.43 Tare = .00 Sample weight = 30.43
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
1 inch	0.00	100.0
.75 inch	10.30	85.6
.5 inch	14.80	79.3
.375 inch	17.50	75.6
# 4	24.90	65.2
# 10	31.30	56.3
# 20	5.52	46.1
# 40	16.04	26.6
# 60	18.51	22.1
# 100	18.86	21.4
# 200	19.15	20.9

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 56.3
Weight of hydrometer sample: 30.43
Calculated biased weight= 54.05
Table of composite correction values:
Temp, deg C: 20.5 17.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.7	18.0	10.0	0.0139	18.0	13.3	0.0358	18.5
5.00	18.7	17.0	9.0	0.0139	17.0	13.5	0.0228	16.7
15.00	18.8	16.5	8.5	0.0139	16.5	13.6	0.0132	15.7
30.00	19.0	16.0	8.0	0.0138	16.0	13.7	0.0093	14.8
60.00	19.3	14.0	6.0	0.0138	14.0	14.0	0.0066	11.1
250.00	20.2	12.0	4.0	0.0136	12.0	14.3	0.0033	7.4
1440.00	18.8	11.0	3.0	0.0139	11.0	14.5	0.0014	5.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 34.8 (% coarse = 14.4 % fine = 20.4)

% SAND = 44.3 (% coarse = 8.9 % medium = 29.7 % fine = 5.7)

% SILT = 12.1 % CLAY = 8.8

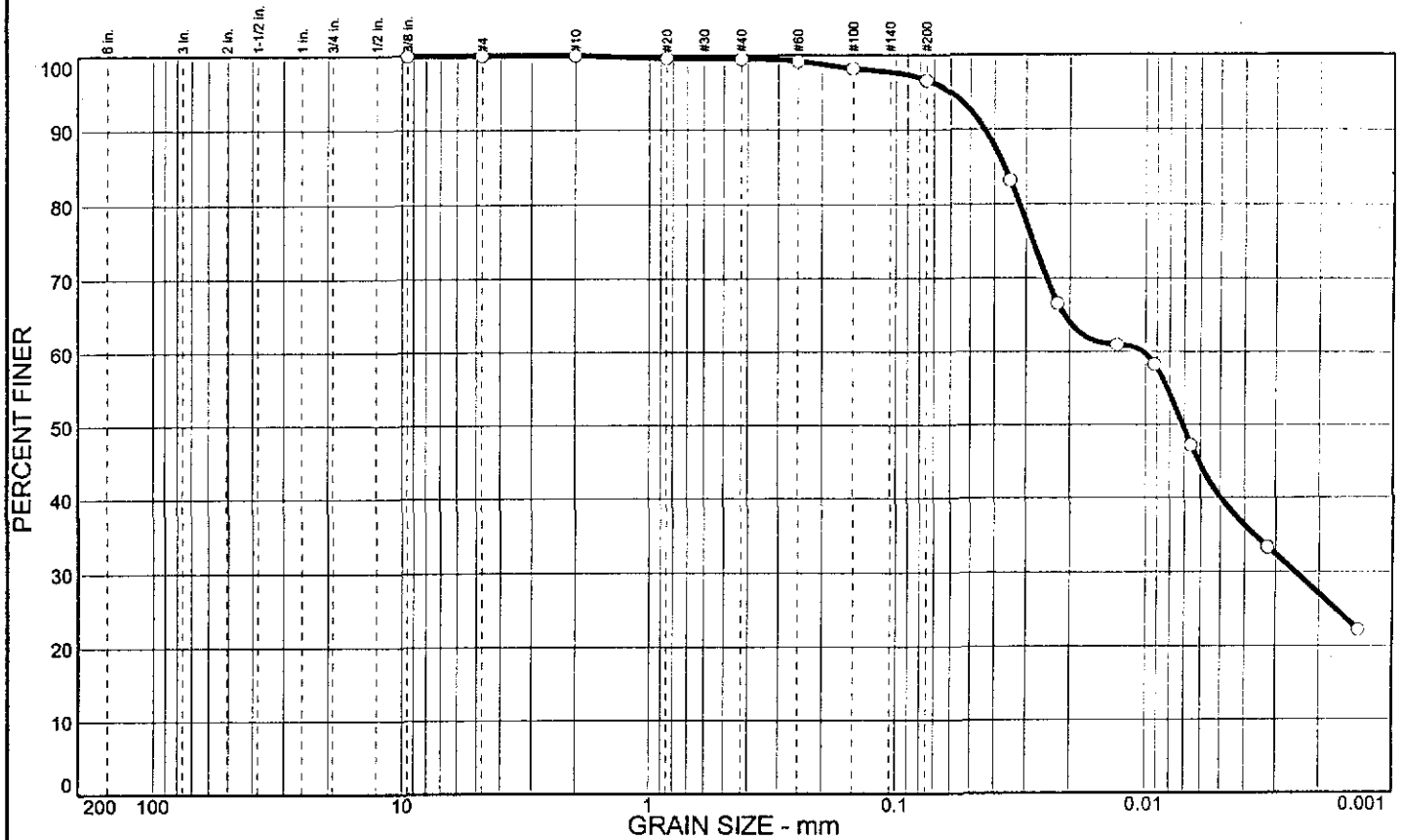
D₈₅= 18.71 D₆₀= 3.06 D₅₀= 1.03

D₃₀= 0.49 D₁₅= 0.01 D₁₀= 0.01

C_c= 13.307 C_u= 517.5576


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-138-SED-1

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, TRACE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 18.02
Tare = 0.00
Dry sample weight = 18.02
Sample split on number 10 sieve
Split sample data:

Sample and tare = 18.02 Tare = .00 Sample weight = 18.02

Cumulative weight retained tare= .00

for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.00	100.0
# 20	0.07	99.6
# 40	0.10	99.5
# 60	0.15	99.2
# 100	0.32	98.2
# 200	0.62	96.6

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100.0
Weight of hydrometer sample: 18.02
Calculated biased weight= 18.02
Table of composite correction values:
Temp, deg C: 20.5 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.8	23.0	15.0	0.0139	23.0	12.5	0.0347	83.2
5.00	18.8	20.0	12.0	0.0139	20.0	13.0	0.0223	66.6
15.00	18.9	19.0	11.0	0.0138	19.0	13.2	0.0130	61.0
30.00	18.9	18.5	10.5	0.0138	18.5	13.3	0.0092	58.3
60.00	19.2	16.5	8.5	0.0138	16.5	13.6	0.0066	47.2
250.00	20.0	14.0	6.0	0.0136	14.0	14.0	0.0032	33.3
1440.00	18.8	12.0	4.0	0.0139	12.0	14.3	0.0014	22.2

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

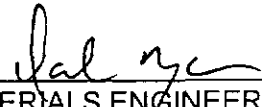
% COBBLES = % GRAVEL =

% SAND = 3.4 (% coarse = 0.0 % medium = 0.5 % fine = 2.9)

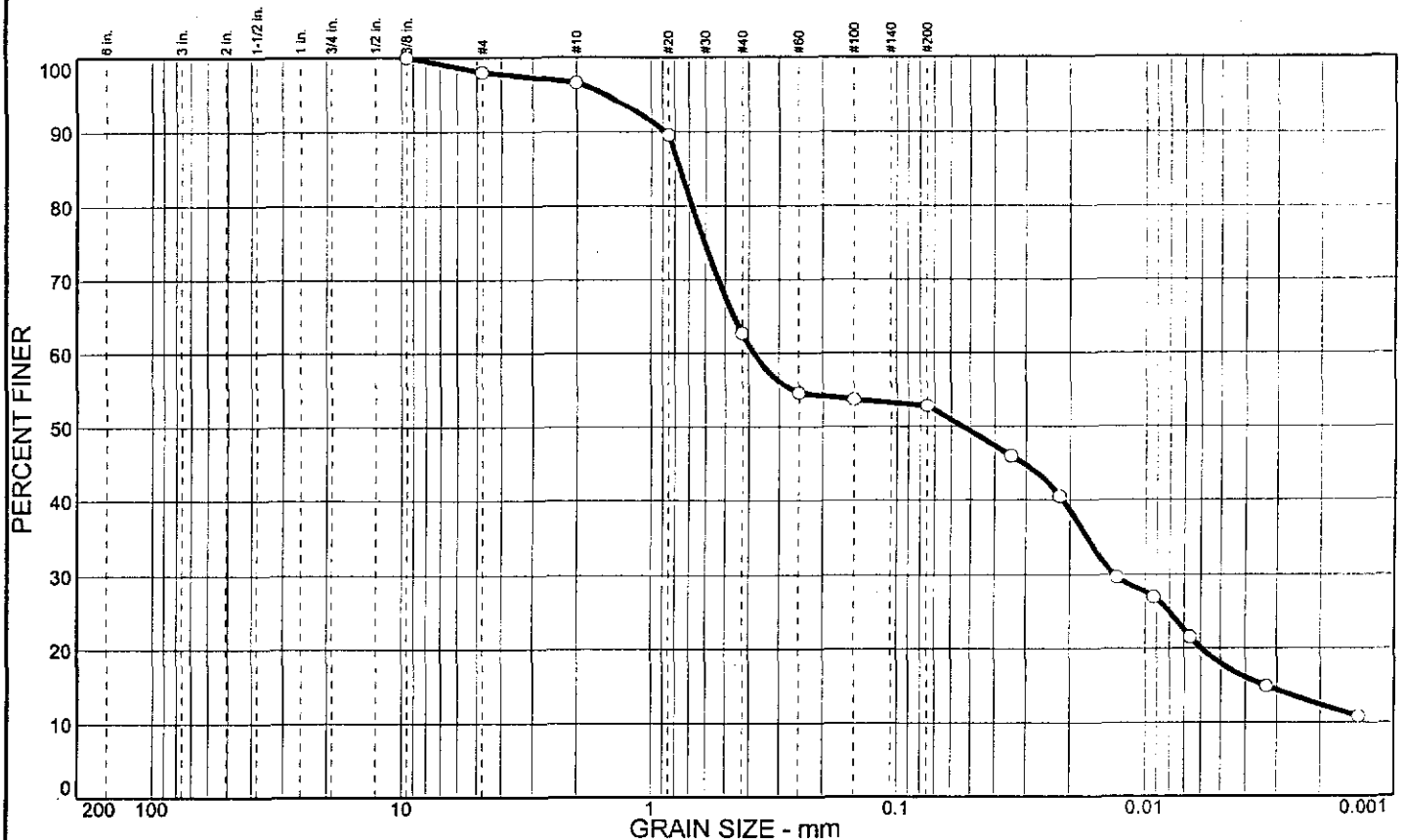
% SILT = 56.6 % CLAY = 40.0

D₈₅ = 0.04 D₆₀ = 0.01 D₅₀ = 0.01

D₃₀ = 0.00


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	2.0	45.2	34.8	18.0	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.380		
D ₃₀	0.0133		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE	PERCENT FINER		
number size	○		
#4	98.0		
#10	96.6		
#20	89.6		
#40	62.7		
#60	54.6		
#100	53.7		
#200	52.8		

SOIL DESCRIPTION
○ MEDIUM SANDY SILT, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-139-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-139-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM SANDY SILT, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 38.34
Tare = 0.00
Dry sample weight = 38.34
Sample split on number 10 sieve
Split sample data:
Sample and tare = 35.74 Tare = .00 Sample weight = 35.74
Cumulative weight retained tare= .00
for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.375 inch 0.00 100.0
4 0.78 98.0
10 1.30 96.6
20 2.60 89.6
40 12.56 62.7
60 15.55 54.6
100 15.86 53.7
200 16.22 52.8

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 96.6
Weight of hydrometer sample: 35.74
Calculated biased weight= 37.00
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	25.0	17.0	0.0139	25.0	12.2	0.0343	46.0
5.00	18.6	23.0	15.0	0.0139	23.0	12.5	0.0220	40.5
15.00	18.7	19.0	11.0	0.0139	19.0	13.2	0.0130	29.7
30.00	18.7	18.0	10.0	0.0139	18.0	13.3	0.0092	27.0
60.00	18.8	16.0	8.0	0.0139	16.0	13.7	0.0066	21.6
250.00	18.6	13.5	5.5	0.0139	13.5	14.1	0.0033	14.9
1440.00	17.9	12.0	4.0	0.0140	12.0	14.3	0.0014	10.8

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

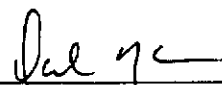
% COBBLES = % GRAVEL = 2.0 (% coarse = % fine = 2.0)

% SAND = 45.2 (% coarse = 1.4 % medium = 33.9 % fine = 9.9)

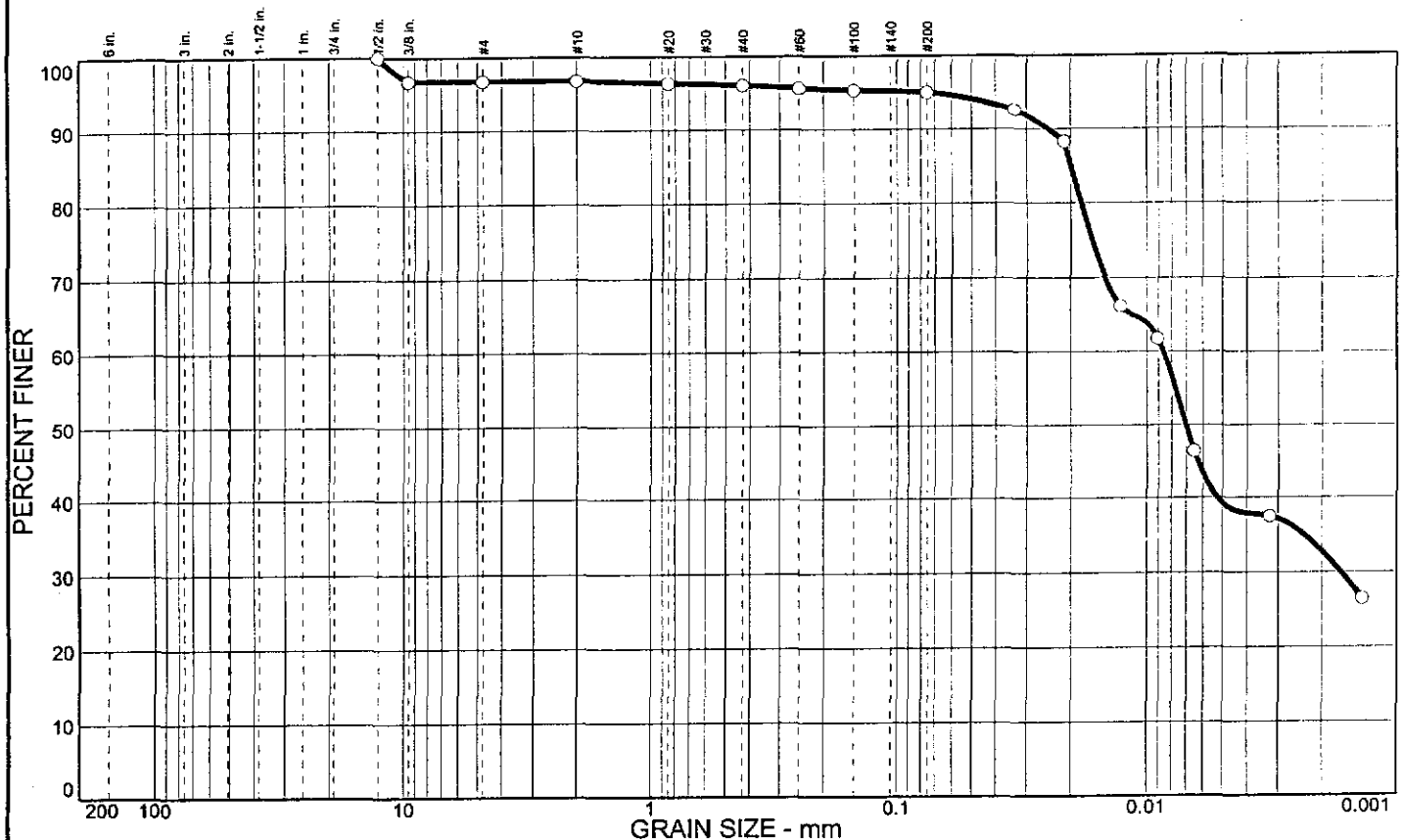
% SILT = 34.8 % CLAY = 18.0

D₈₅ = 0.76 D₆₀ = 0.38 D₅₀ = 0.05

D₃₀ = 0.01 D₁₅ = 0.00


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	3.2	1.7	55.8	39.3	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
5 .375	100.0 96.8		
GRAIN SIZE			
D ₆₀	0.0086		
D ₃₀	0.0017		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	96.8		
#10	96.8		
#20	96.4		
#40	96.1		
#60	95.7		
#100	95.4		
#200	95.1		

SOIL DESCRIPTION
○ SILT, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-141-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-141-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 22.92
Tare = 0.00
Dry sample weight = 22.92
Sample split on number 10 sieve
Split sample data:
Sample and tare = 21.93 Tare = .00 Sample weight = 21.93
Cumulative weight retained tare= .00
for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.5 inch 0.00 100.0
.375 inch 0.74 96.8
4 0.74 96.8
10 0.74 96.8
20 0.09 96.4
40 0.15 96.1
60 0.24 95.7
100 0.31 95.4
200 0.39 95.1

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 96.8
Weight of hydrometer sample: 21.93
Calculated biased weight= 22.65
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	29.0	21.0	0.0139	29.0	11.5	0.0334	92.7
5.00	18.6	28.0	20.0	0.0139	28.0	11.7	0.0212	88.3
15.00	18.7	23.0	15.0	0.0139	23.0	12.5	0.0127	66.2
30.00	18.6	22.0	14.0	0.0139	22.0	12.7	0.0090	61.8
60.00	18.8	18.5	10.5	0.0139	18.5	13.3	0.0065	46.4
250.00	18.6	16.5	8.5	0.0139	16.5	13.6	0.0032	37.5
1440.00	17.9	14.0	6.0	0.0140	14.0	14.0	0.0014	26.5

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

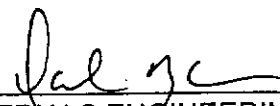
% COBBLES = % GRAVEL = 3.2 (% coarse = % fine = 3.2)

% SAND = 1.7 (% coarse = 0.0 % medium = 0.7 % fine = 1.0)

% SILT = 55.8 % CLAY = 39.3

D₈₅ = 0.02 D₆₀ = 0.01 D₅₀ = 0.01

D₃₀ = 0.00


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		47.4	27.5	25.1	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.333		
D ₃₀	0.0074		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	95.5		
#20	77.5		
#40	64.5		
#60	55.8		
#100	53.6		
#200	52.6		

SOIL DESCRIPTION
○ MEDIUM TO FINE SANDY SILT

REMARKS:
○

○ Source:

Sample No.: C-142-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-142-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SANDY SILT

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 44.09
Tare = 0.00
Dry sample weight = 44.09
Sample split on number 10 sieve
Split sample data:
Sample and tare = 40.67 Tare = .00 Sample weight = 40.67
Cumulative weight retained tare= .00
for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.375 inch 0.00 100.0
4 0.00 100.0
10 1.99 95.5
20 7.66 77.5
40 13.20 64.5
60 16.91 55.8
100 17.84 53.6
200 18.26 52.6

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 95.5
Weight of hydrometer sample: 40.67
Calculated biased weight= 42.59
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	29.0	21.0	0.0139	29.0	11.5	0.0334	49.3
5.00	18.6	28.0	20.0	0.0139	28.0	11.7	0.0212	47.0
15.00	18.6	24.0	16.0	0.0139	24.0	12.4	0.0126	37.6
30.00	18.6	22.0	14.0	0.0139	22.0	12.7	0.0090	32.9
60.00	18.6	20.0	12.0	0.0139	20.0	13.0	0.0065	28.2
250.00	18.5	17.0	9.0	0.0139	17.0	13.5	0.0032	21.1
1440.00	17.9	14.0	6.0	0.0140	14.0	14.0	0.0014	14.1

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 47.4 (% coarse = 4.5 % medium = 31.0 % fine = 11.9)

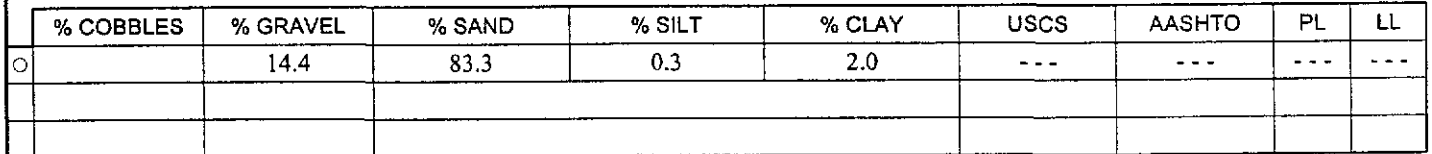
% SILT = 27.5 % CLAY = 25.1

D₈₅= 1.18 D₆₀= 0.33 D₅₀= 0.04

D₃₀= 0.01 D₁₅= 0.00


 MATERIALS ENGINEERING LABORATORY

PERCENT FINER



SOIL DESCRIPTION
○ COARSE TO FINE SAND, LITTLE GRAVEL

REMARKS:
○

Elev./Depth: 0-2"

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-145-SED-1

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: COARSE TO FINE SAND, LITTLE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 51.97
Tare = 0.00
Dry sample weight = 51.97
Sample split on number 10 sieve
Split sample data:
Sample and tare = 35.37 Tare = .00 Sample weight = 35.37
Cumulative weight retained tare= .00

for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.5 inch	0.00	100.0
.375 inch	1.26	97.6
# 4	7.48	85.6
# 10	15.44	70.3
# 20	7.80	54.8
# 40	22.12	26.3
# 60	30.75	9.2
# 100	33.45	3.8
# 200	34.21	2.3

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 70.3
Weight of hydrometer sample: 35.37
Calculated biased weight= 50.31
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	9.0	1.0	0.0139	9.0	14.8	0.0378	2.0
5.00	18.6	9.0	1.0	0.0139	9.0	14.8	0.0239	2.0
15.00	18.6	9.0	1.0	0.0139	9.0	14.8	0.0138	2.0
30.00	18.7	9.0	1.0	0.0139	9.0	14.8	0.0097	2.0
60.00	18.7	9.0	1.0	0.0139	9.0	14.8	0.0069	2.0
250.00	18.4	9.0	1.0	0.0139	9.0	14.8	0.0034	2.0
1440.00	17.9	8.0	0.0	0.0140	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 14.4 (% coarse = % fine = 14.4)

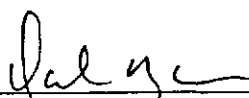
% SAND = 83.3 (% coarse = 15.3 % medium = 44.0 % fine = 24.0)

% SILT = 0.3 % CLAY = 2.0 (% CLAY COLLOIDS = 0.0)

D₈₅ = 4.61 D₆₀ = 1.03 D₅₀ = 0.74

D₃₀ = 0.46 D₁₅ = 0.31 D₁₀ = 0.26

C_c = 0.8041 C_u = 3.9719


MATERIALS ENGINEERING LABORATORY

The graph shows the grain size distribution of a soil sample. The Y-axis represents the percentage of soil finer than a given grain size, ranging from 0 to 100. The X-axis represents the grain size in millimeters on a logarithmic scale, ranging from 200 mm to 0.001 mm. The curve starts at 100% finer for grain sizes down to approximately 12 mm, then drops sharply between 1 mm and 0.075 mm, and finally levels off near 0% finer for grain sizes below 0.075 mm.

Grain Size (mm)	Percent Finer (%)
12	100
6	95
4.75	85
2.5	80
0.85	72
0.425	32
0.25	17
0.15	10
0.075	5
0.0425	3
0.025	2
0.015	1
0.0075	0.5
0.00425	0.2
0.0025	0.1

[illegible]

SIEVE inches size	PERCENT FINER		
	○		
.5 .375	100.0 93.8		
	GRAIN SIZE		
D ₆₀	0.705		
D ₃₀	0.400		
D ₁₀	0.153		
	COEFFICIENTS		
C _c	1.48		
C _u	4.61		

SIEVE number size	PERCENT FINER	
	○	
#4	85.2	
#10	80.0	
#20	71.8	
#40	32.4	
#60	17.1	
#100	9.8	
#200	6.0	

○ MEDIUM TO FINE SAND, LITTLE GRAVEL

10

Elev./Depth: 0-2"

Plate

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0376	3.8
5.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0238	3.8
15.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0137	3.8
30.00	18.7	9.5	1.5	0.0139	9.5	14.7	0.0097	2.9
60.00	18.8	9.0	1.0	0.0139	9.0	14.8	0.0069	1.9
250.00	18.4	9.0	1.0	0.0139	9.0	14.8	0.0034	1.9
1440.00	17.9	9.0	1.0	0.0140	9.0	14.8	0.0014	1.9

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 14.8 (% coarse = % fine = 14.8)

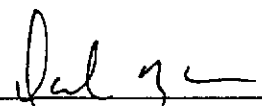
% SAND = 79.2 (% coarse = 5.2 % medium = 47.6 % fine = 26.4)

% SILT = 4.1 % CLAY = 1.9

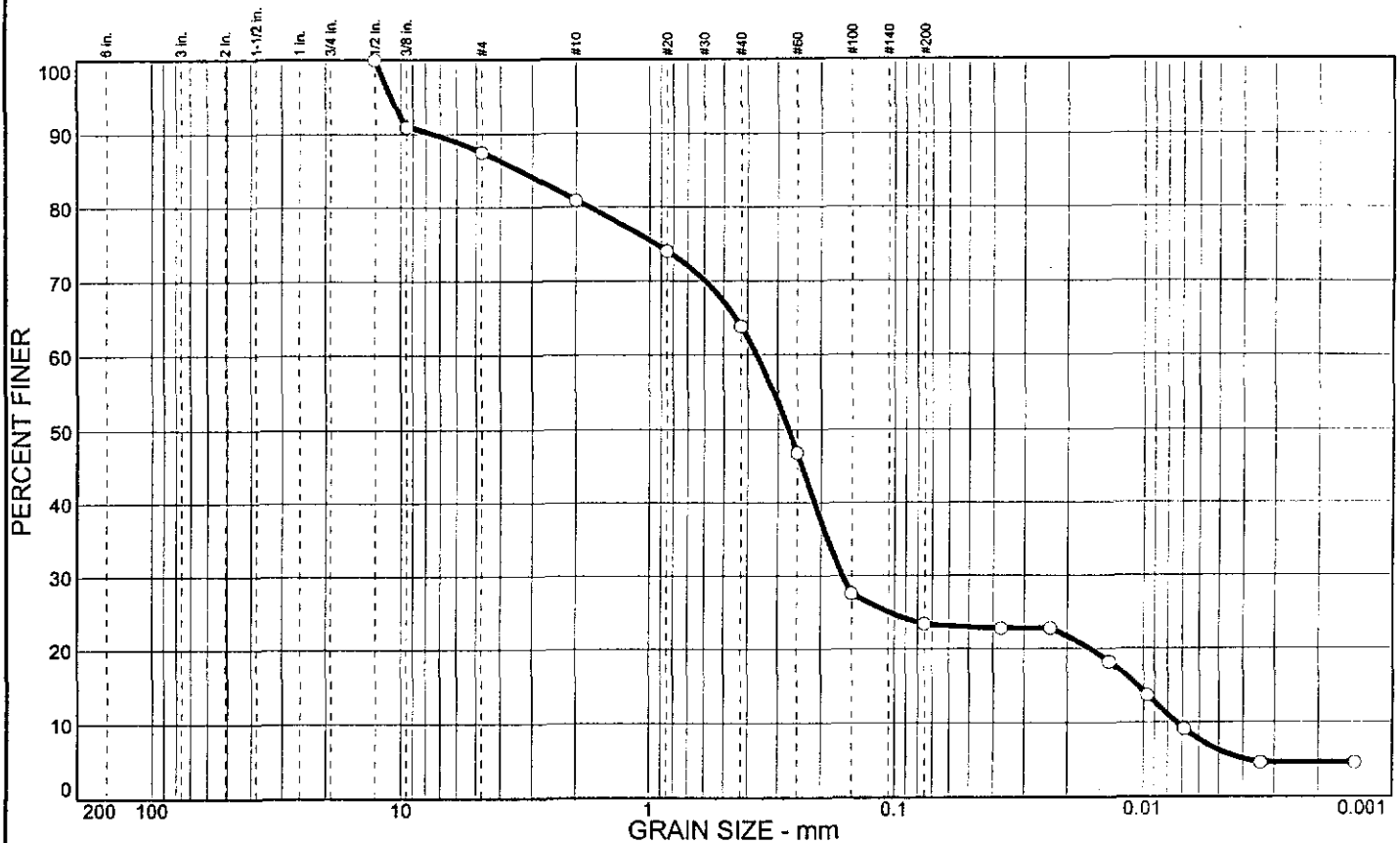
D₈₅= 4.53 D₆₀= 0.71 D₅₀= 0.60

D₃₀= 0.40 D₁₅= 0.22 D₁₀= 0.15

C_c= 1.4846 C_u= 4.6054


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	12.5	64.1	17.1	6.3	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
5	100.0		
.375	91.0		
GRAIN SIZE			
D ₆₀	0.367		
D ₃₀	0.163		
D ₁₀	0.0074		
COEFFICIENTS			
C _c	9.84		
C _u	49.72		

SIEVE number size	PERCENT FINER		
	○		
#4	87.5		
#10	80.9		
#20	74.0		
#40	63.8		
#60	46.8		
#100	27.6		
#200	23.4		

SOIL DESCRIPTION
○ SILTY MEDIUM TO FINE SAND, LITTLE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-147-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-147-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND, LITTLE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 23.86

Tare = 0.00

Dry sample weight = 23.86

Sample split on number 10 sieve

Split sample data:

Sample and tare = 17.74 Tare = .00 Sample weight = 17.74

Cumulative weight retained tare= .00

Weight for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.5 inch	0.00	100.0
.375 inch	2.16	91.0
# 4	2.98	87.5
# 10	4.56	80.9
# 20	1.51	74.0
# 40	3.76	63.8
# 60	7.47	46.8
# 100	11.69	27.6
# 200	12.61	23.4

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 80.9

Weight of hydrometer sample: 17.74

Calculated biased weight= 21.93

Table of composite correction values:

Temp, deg C: 19.0 17.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	13.0	5.0	0.0139	13.0	14.2	0.0370	22.8
5.00	18.5	13.0	5.0	0.0139	13.0	14.2	0.0234	22.8
15.00	18.6	12.0	4.0	0.0139	12.0	14.3	0.0136	18.2
30.00	18.7	11.0	3.0	0.0139	11.0	14.5	0.0096	13.7
60.00	18.7	10.0	2.0	0.0139	10.0	14.7	0.0069	9.1
250.00	18.5	9.0	1.0	0.0139	9.0	14.8	0.0034	4.6
1440.00	17.9	9.0	1.0	0.0140	9.0	14.8	0.0014	4.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 12.5 (% coarse = % fine = 12.5)

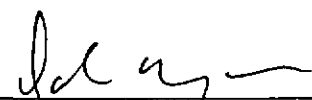
% SAND = 64.1 (% coarse = 6.6 % medium = 17.1 % fine = 40.4)

% SILT = 17.1 % CLAY = 6.3

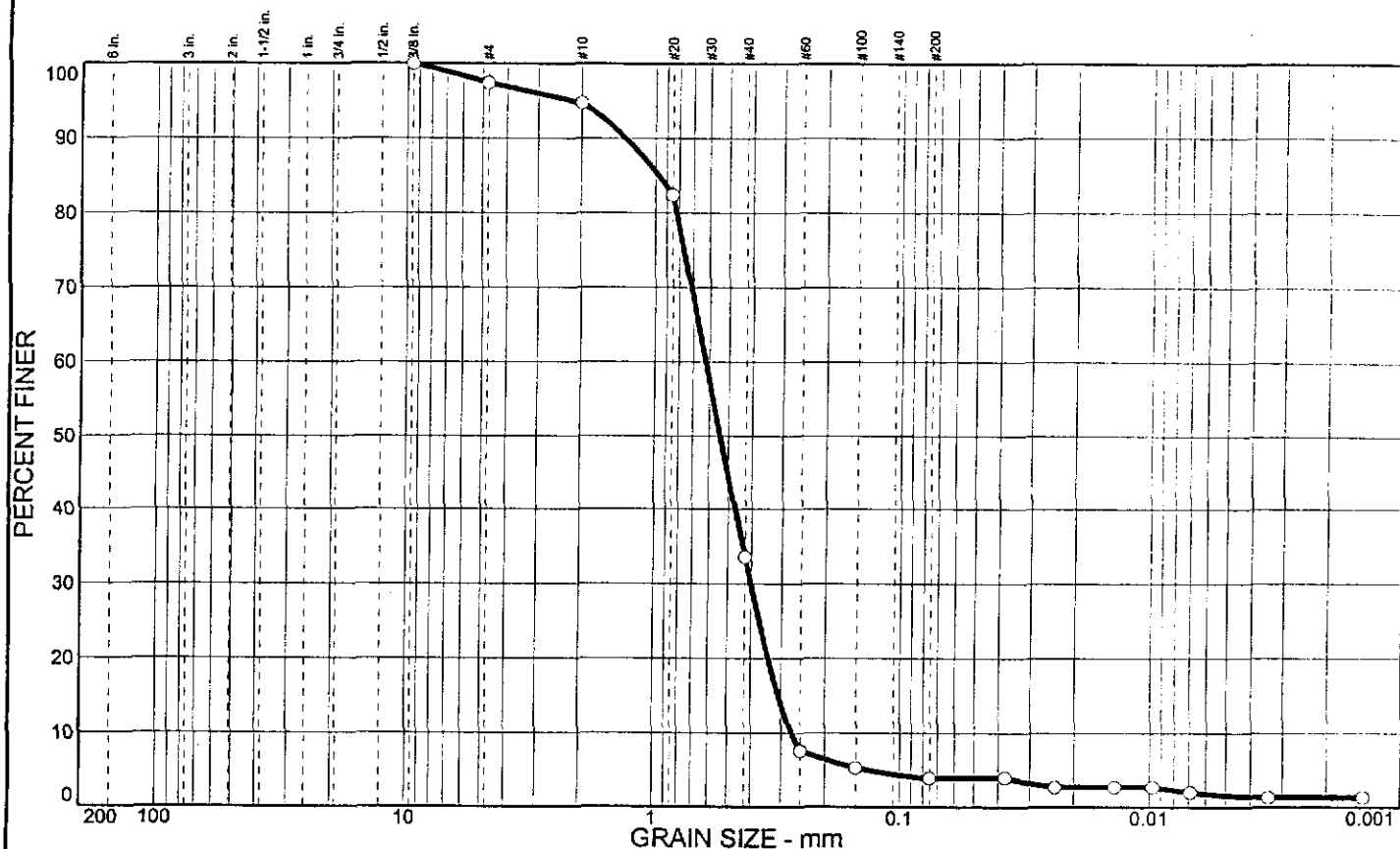
D₈₅= 3.38 D₆₀= 0.37 D₅₀= 0.27

D₃₀= 0.16 D₁₅= 0.01 D₁₀= 0.01

C_c= 9.837 C_u= 49.7156


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	2.6	93.5	2.3	1.6	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.622		
D ₃₀	0.402		
D ₁₀	0.272		
COEFFICIENTS			
C _c	0.96		
C _u	2.29		

SIEVE number size	PERCENT FINER		
	○		
#4	97.4		
#10	94.7		
#20	82.4		
#40	33.6		
#60	7.6		
#100	5.3		
#200	3.9		

SOIL DESCRIPTION
 ○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-148-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Object Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-148-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	75.56	
Tare =	0.00	
Dry sample weight =	75.56	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare =	70.53	Tare = .00 Sample weight = 70.53
Cumulative weight retained tare=	.00	
Tare for cumulative weight retained=	.00	
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	1.98	97.4
# 10	4.04	94.7
# 20	9.13	82.4
# 40	45.49	33.6
# 60	64.86	7.6
# 100	66.60	5.3
# 200	67.62	3.9

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 94.7
Weight of hydrometer sample: 70.53
Calculated biased weight= 74.48
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	11.0	3.0	0.0139	11.0	14.5	0.0374	4.0
5.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0238	2.7
15.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0137	2.7
30.00	18.7	10.0	2.0	0.0139	10.0	14.7	0.0097	2.7
60.00	18.7	9.5	1.5	0.0139	9.5	14.7	0.0069	2.0
250.00	18.4	9.0	1.0	0.0139	9.0	14.8	0.0034	1.3
1440.00	17.9	9.0	1.0	0.0140	9.0	14.8	0.0014	1.3

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 2.6 (% coarse = % fine = 2.6)

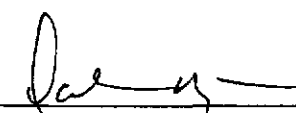
% SAND = 93.5 (% coarse = 2.7 % medium = 61.1 % fine = 29.7)

% SILT = 2.3 % CLAY = 1.6

D₈₅ = 0.97 D₆₀ = 0.62 D₅₀ = 0.54

D₃₀ = 0.40 D₁₅ = 0.31 D₁₀ = 0.27

C_c = 0.9562 C_u = 2.2909


MATERIALS ENGINEERING LABORATORY

Thompson Engineering

MARCH 28, 2000

CLIENT: SAVANNAH LABORATORIES, INC.
PROJECT: SAVANNAH #: S9-17892E

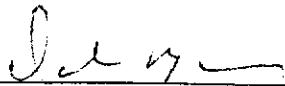
RE: LIST PERTAINING TO SAMPLE QUANTITIES

SAMPLE ID	DEPTH (IN.)	
C-142-SED-4	0-2	*
C-147-SED-2	0-2	**
C-148-SED-2	0-2	
C-148-SED-3	0-2	*
C-153-SED-2	0-2	*

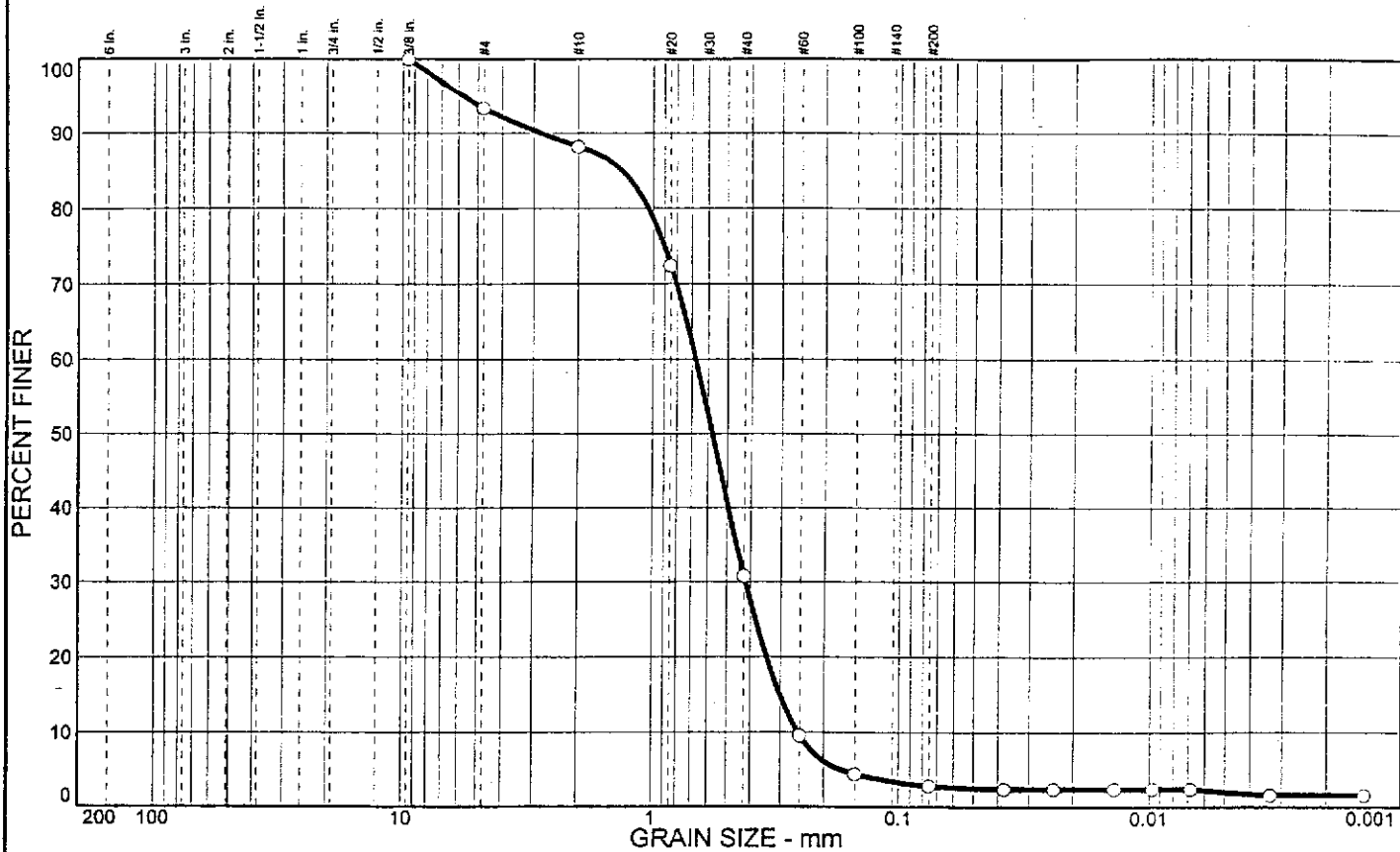
NOTE: EACH TEST PERFORMED USING ALL AVAILABLE MATERIAL.

* INSUFFICIENT MATERIAL AVAILABLE FOR TESTING.

**TEST PERFORMED, HOWEVER, ASTM RECOMMENDED QUANTITIES NOT AVAILABLE.


MATERIALS TESTING LABORATORY

Particle Size Distribution Report

[illegible]

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
	GRAIN SIZE		
D ₆₀	0.676		
D ₃₀	0.419		
D ₁₀	0.254		
	COEFFICIENTS		
C _C	1.02		
C _u	2.66		

SIEVE number size	PERCENT FINER		
	○		
#4	93.4		
#10	88.2		
#20	72.4		
#40	30.8		
#60	9.6		
#100	4.4		
#200	2.8		

○ MEDIUM TO FINE SAND, TRACE GRAVEL

Q

Elev./Depth: 0-2"

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-119-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 62.53
Tare = 0.00
Dry sample weight = 62.53
Sample split on number 10 sieve
Split sample data:

Sample and tare = 54.55 Tare = .00 Sample weight = 54.55

Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	4.16	93.4
# 10	7.39	88.2
# 20	9.76	72.4
# 40	35.49	30.8
# 60	48.60	9.6
# 100	51.83	4.4
# 200	52.82	2.8

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 88.2

Weight of hydrometer sample: 54.55

Calculated biased weight= 61.85

Table of composite correction values:

Temp, deg C: 20.0 18.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.7	9.5	1.5	0.0139	9.5	14.7	0.0376	2.4
5.00	18.7	9.5	1.5	0.0139	9.5	14.7	0.0238	2.4
15.00	18.8	9.5	1.5	0.0139	9.5	14.7	0.0137	2.4
30.00	18.9	9.5	1.5	0.0138	9.5	14.7	0.0097	2.4
60.00	19.3	9.5	1.5	0.0138	9.5	14.7	0.0068	2.4
250.00	20.0	9.0	1.0	0.0136	9.0	14.8	0.0033	1.6
1440.00	18.7	9.0	1.0	0.0139	9.0	14.8	0.0014	1.6

Fractional Components

Gravel/Sand based on #4

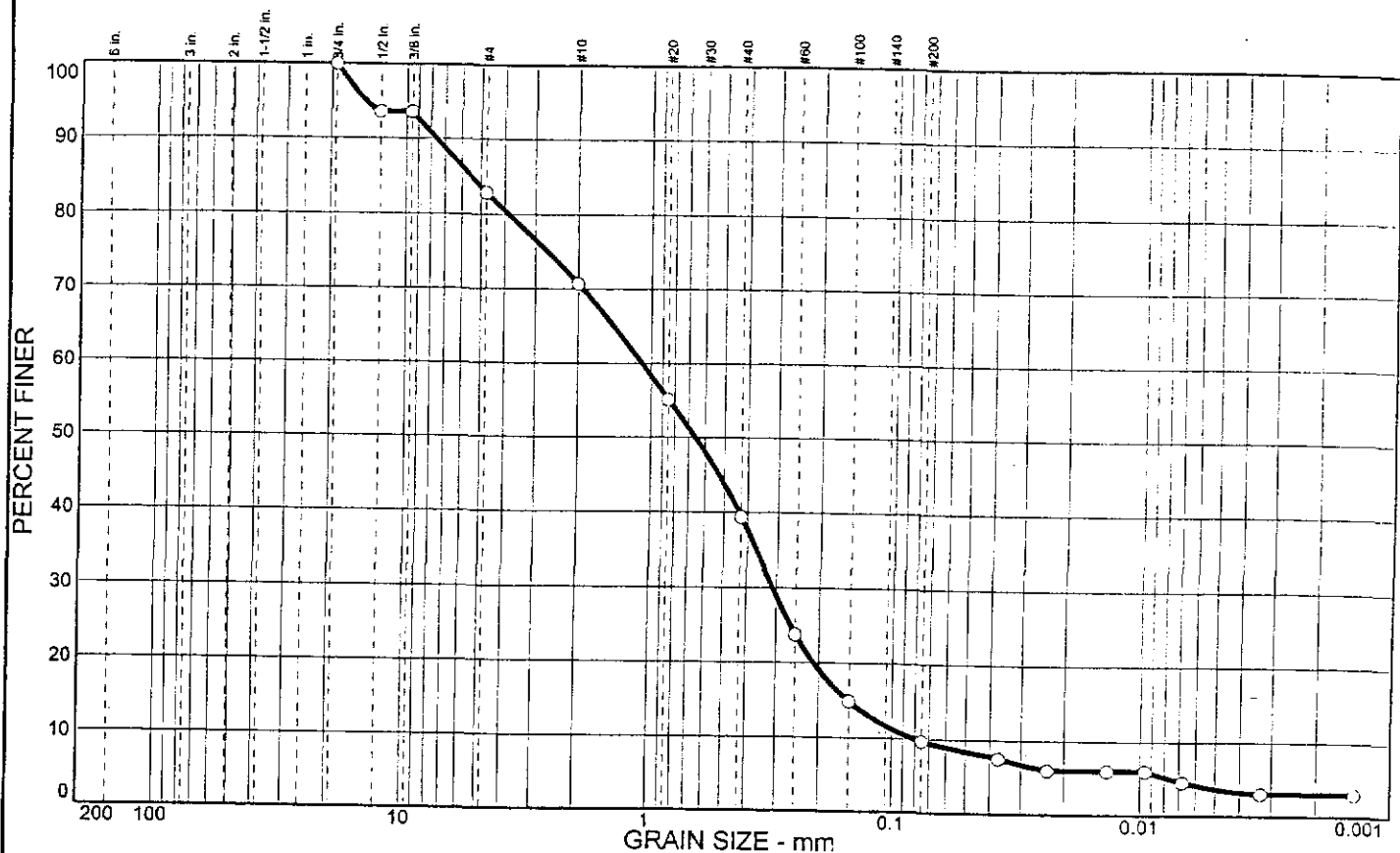
Sand/Fines based on #200

% COBBLES = % GRAVEL = 6.6 (% coarse = % fine = 6.6)
 % SAND = 90.6 (% coarse = 5.2 % medium = 57.4 % fine = 28.0)
 % SILT = 0.8 % CLAY = 2.0

D₈₅ = 1.34 D₆₀ = 0.68 D₅₀ = 0.58
 D₃₀ = 0.42 D₁₅ = 0.30 D₁₀ = 0.25
 C_c = 1.021 C_u = 2.6571

dal yu
 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	17.1	73.2	6.1	3.6	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	93.6		
.375	93.6		
GRAIN SIZE			
D ₆₀	1.09		
D ₃₀	0.312		
D ₁₀	0.0803		
COEFFICIENTS			
C _c	1.11		
C _u	13.63		

SIEVE number size	PERCENT FINER		
	○		
#4	82.9		
#10	70.7		
#20	55.1		
#40	39.4		
#60	23.8		
#100	14.9		
#200	9.7		

SOIL DESCRIPTION
○ COARSE TO FINE SAND, WITH GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-119-SED-4

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-119-SED-4

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: COARSE TO FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 67.61
Tare = 0.00
Dry sample weight = 67.61
Sample split on number 10 sieve
Split sample data:

Sample and tare = 46.95 Tare = .00 Sample weight = 46.95

Cumulative weight retained tare= .00

Weight for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	4.36	93.6
.375 inch	4.36	93.6
# 4	11.56	82.9
# 10	19.78	70.7
# 20	10.35	55.1
# 40	20.79	39.4
# 60	31.17	23.8
# 100	37.09	14.9
# 200	40.49	9.7

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 70.7

Weight of hydrometer sample: 46.95

Calculated biased weight= 66.41

Table of composite correction values:

Temp, deg C: 20.0 18.0

Comp. corr: -8.0 -8.0

Discus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.8	13.0	5.0	0.0139	13.0	14.2	0.0369	7.5
5.00	18.8	12.0	4.0	0.0139	12.0	14.3	0.0234	6.0
15.00	18.8	12.0	4.0	0.0139	12.0	14.3	0.0135	6.0
30.00	19.0	12.0	4.0	0.0138	12.0	14.3	0.0095	6.0
60.00	19.2	11.0	3.0	0.0138	11.0	14.5	0.0068	4.5
250.00	20.1	10.0	2.0	0.0136	10.0	14.7	0.0033	3.0
1440.00	18.8	10.0	2.0	0.0139	10.0	14.7	0.0014	3.0

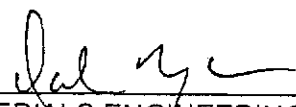
Fractional Components

Gravel/Sand based on #4

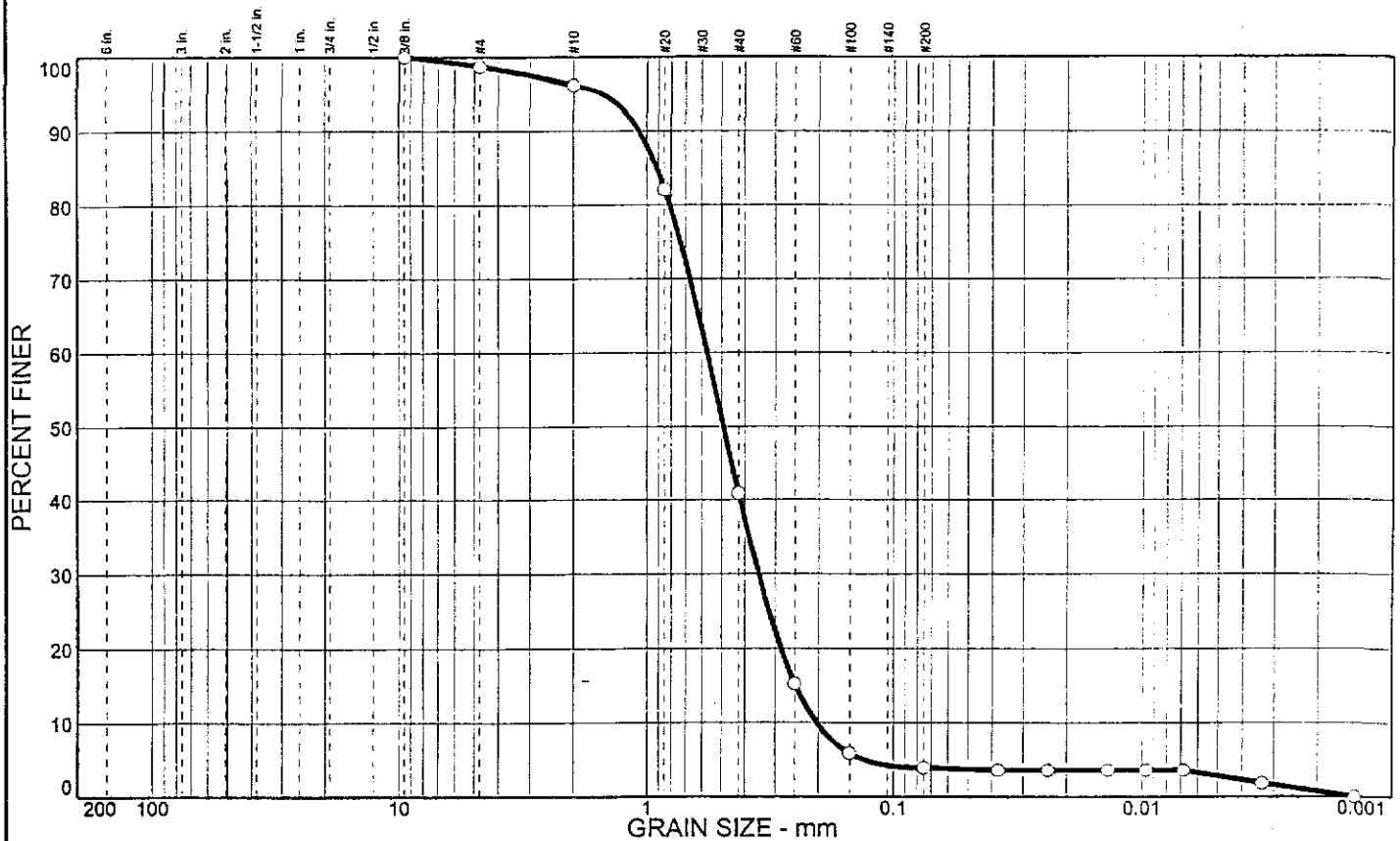
Sand/Fines based on #200

% COBBLES = % GRAVEL = 17.1 (% coarse = % fine = 17.1)
 % SAND = 73.2 (% coarse = 12.2 % medium = 31.3 % fine = 29.7)
 % SILT = 6.1 % CLAY = 3.6

D₈₅= 5.48 D₆₀= 1.09 D₅₀= 0.66
 D₃₀= 0.31 D₁₅= 0.15 D₁₀= 0.08
 C_c= 1.1062 C_u= 13.6256


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	1.3	94.8	1.1	2.8	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.572		
D ₃₀	0.351		
D ₁₀	0.204		
COEFFICIENTS			
C _c	1.06		
C _u	2.81		

SIEVE number size	PERCENT FINER		
	○		
#4	98.7		
#10	96.2		
#20	82.1		
#40	40.9		
#60	15.3		
#100	5.9		
#200	3.9		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-124-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-124-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 56.25
Tare = 0.00
Dry sample weight = 56.25
Sample split on number 10 sieve
Split sample data:

Sample and tare = 53.80 Tare = .00 Sample weight = 53.80

Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.74	98.7
# 10	2.12	96.2
# 20	7.89	82.1
# 40	30.95	40.9
# 60	45.23	15.3
# 100	50.48	5.9
# 200	51.62	3.9

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 96.2

Weight of hydrometer sample: 53.80

Calculated biased weight= 55.93

Table of composite correction values:

Temp, deg C: 20.0 18.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0376	3.6
5.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0238	3.6
15.00	18.7	10.0	2.0	0.0139	10.0	14.7	0.0137	3.6
30.00	18.9	10.0	2.0	0.0138	10.0	14.7	0.0097	3.6
60.00	19.2	10.0	2.0	0.0138	10.0	14.7	0.0068	3.6
250.00	19.9	9.0	1.0	0.0137	9.0	14.8	0.0033	1.8
1440.00	18.6	8.0	0.0	0.0139	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 1.3 (% coarse = % fine = 1.3)

% SAND = 94.8 (% coarse = 2.5 % medium = 55.3 % fine = 37.0)

% SILT = 1.1 % CLAY = 2.8 (% CLAY COLLOIDS = 0.0)

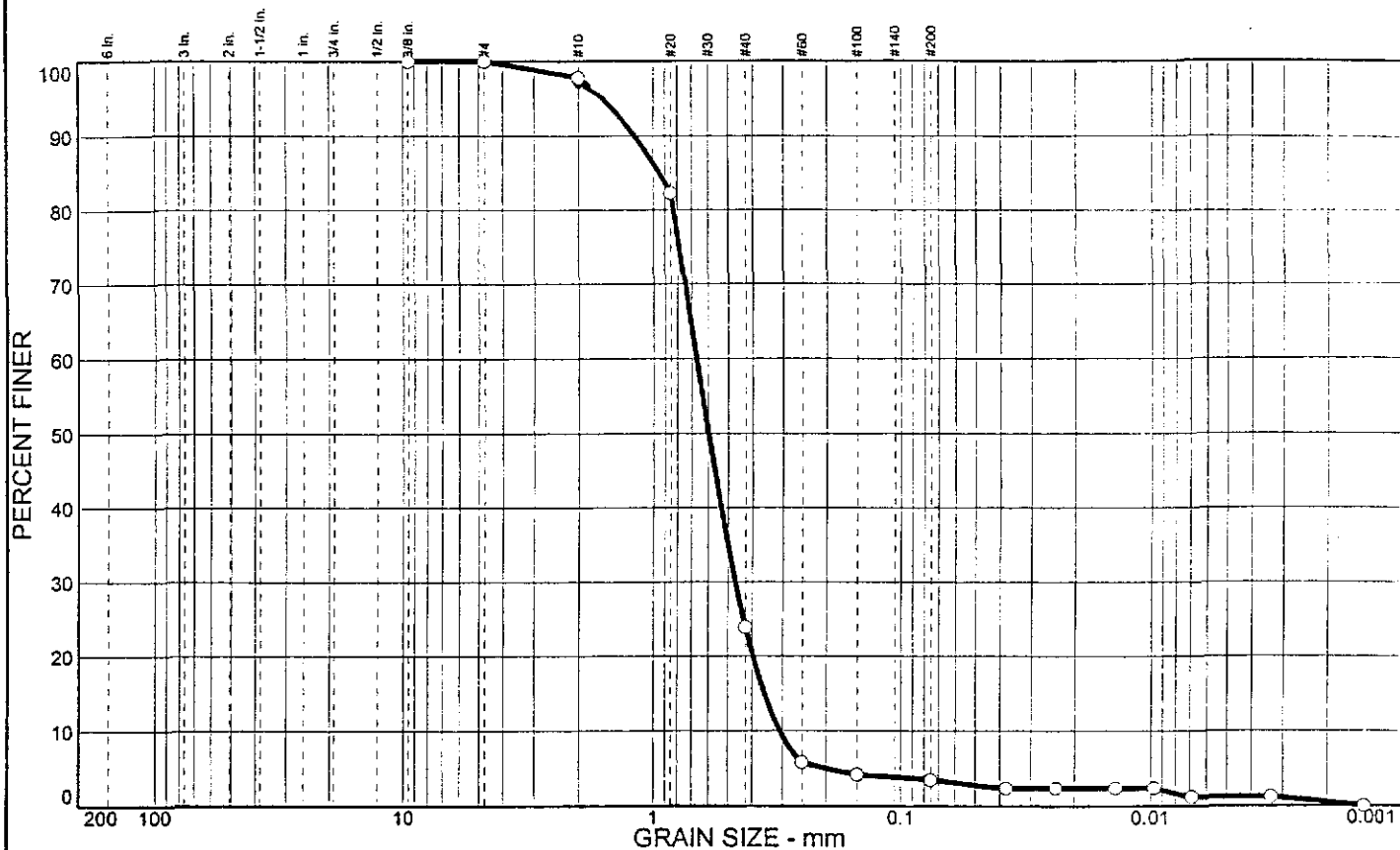
D₈₅ = 0.91 D₆₀ = 0.57 D₅₀ = 0.49

D₃₀ = 0.35 D₁₅ = 0.25 D₁₀ = 0.20

C_c = 1.0584 C_u = 2.8109


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
		96.5	2.3	1.2	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.670		
D ₃₀	0.467		
D ₁₀	0.308		
COEFFICIENTS			
C _c	1.06		
C _u	2.18		

SIEVE	PERCENT FINER		
number size	○		
#4	100.0		
#10	97.8		
#20	82.3		
#40	23.9		
#60	5.8		
#100	4.2		
#200	3.5		

SOIL DESCRIPTION
○ MEDIUM TO FINE SAND

REMARKS:
○

○ Source:

Sample No.: C-128-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-128-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 82.47
Tare = 0.00
Dry sample weight = 82.47
Sample split on number 10 sieve
Split sample data:
Sample and tare = 80.27 Tare = .00 Sample weight = 80.27
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	1.81	97.8
# 20	12.75	82.3
# 40	60.65	23.9
# 60	75.49	5.8
# 100	76.79	4.2
# 200	77.40	3.5

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 97.8
Weight of hydrometer sample: 80.27
Calculated biased weight= 82.08
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0376	2.4
5.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0238	2.4
15.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0137	2.4
30.00	18.7	10.0	2.0	0.0139	10.0	14.7	0.0097	2.4
60.00	19.0	9.0	1.0	0.0138	9.0	14.8	0.0069	1.2
250.00	19.8	9.0	1.0	0.0137	9.0	14.8	0.0033	1.2
1440.00	18.4	8.0	0.0	0.0139	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 96.5 (% coarse = 2.2 % medium = 73.9 % fine = 20.4)

% SILT = 2.3 % CLAY = 1.2 (% CLAY COLLOIDS = 0.0)

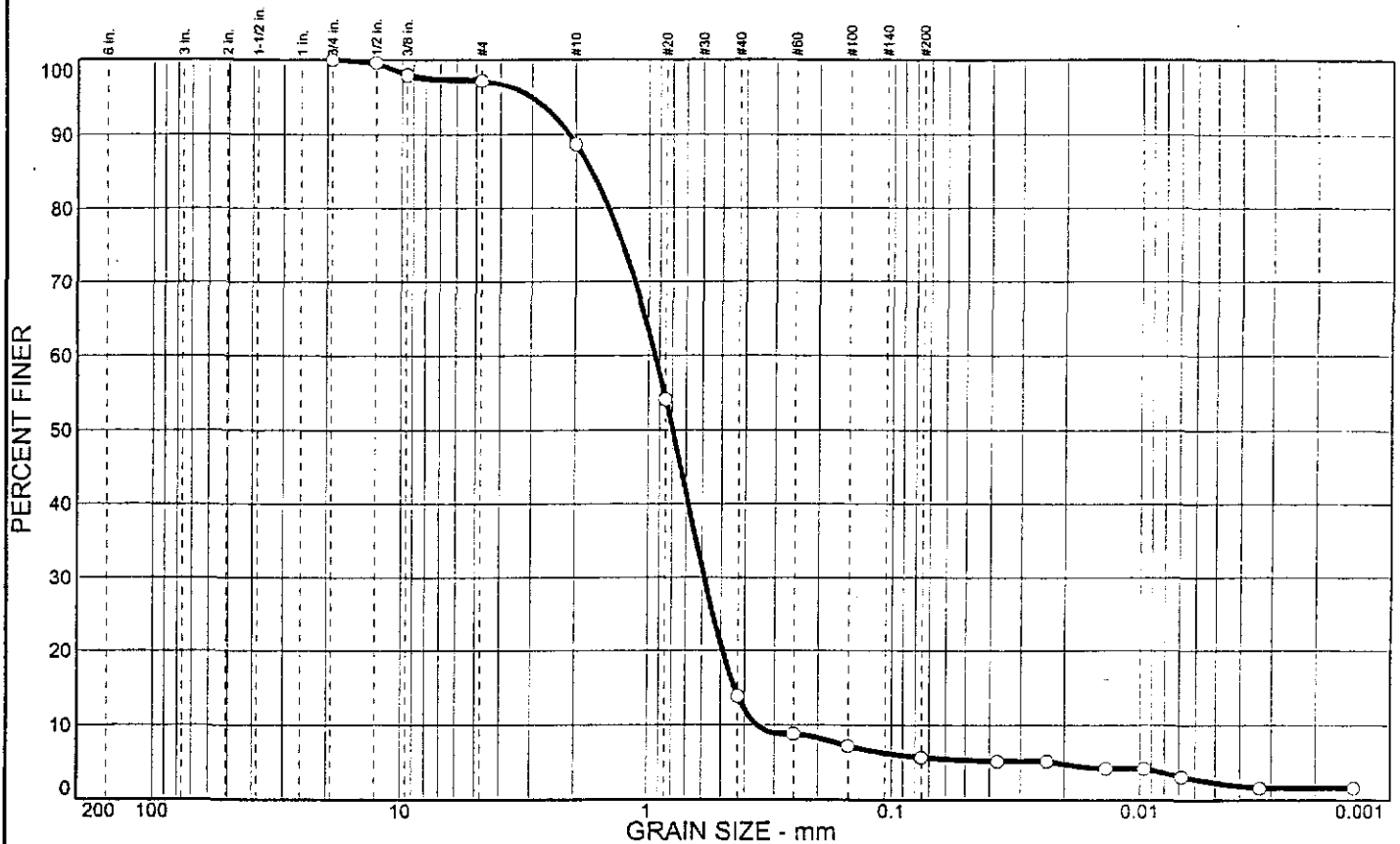
D₈₅ = 0.95 D₆₀ = 0.67 D₅₀ = 0.60

D₃₀ = 0.47 D₁₅ = 0.36 D₁₀ = 0.31

C_c = 1.0568 C_u = 2.1762


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
	2.8	91.5	3.4	2.3	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	99.6		
.375	98.0		
GRAIN SIZE			
D ₆₀	0.940		
D ₃₀	0.587		
D ₁₀	0.355		
COEFFICIENTS			
C _c	1.03		
C _u	2.65		

SIEVE number size	PERCENT FINER		
	○		
#4	97.2		
#10	88.7		
#20	54.1		
#40	13.9		
#60	8.8		
#100	7.2		
#200	5.7		

SOIL DESCRIPTION
○ MEDIUM SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-130-SED-3

Elev./Depth: 0-2.5"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #:S9-17892E
Project Number: 2000-00-0236

Sample Data

Source:
Sample No.: C-130-SED-3
Elev. or Depth: 0-2.5" Sample Length (in./cm.):
Location:
Description: MEDIUM SAND, TRACE GRAVEL
Liquid Limit: - - - Plastic Limit: - - -
USCS Classification: - - - AASHTO Classification: - - -
Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 97.00
Tare = 0.00
Dry sample weight = 97.00
Sample split on number 10 sieve
Split sample data:
Sample and tare = 84.99 Tare = .00 Sample weight = 84.99
Cumulative weight retained tare= .00
for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	0.42	99.6
.375 inch	1.96	98.0
# 4	2.71	97.2
# 10	10.95	88.7
# 20	33.17	54.1
# 40	71.69	13.9
# 60	76.55	8.8
# 100	78.11	7.2
# 200	79.58	5.7

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 88.7
Weight of hydrometer sample: 84.99
Calculated biased weight= 95.82
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0
Discus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.3	13.0	5.0	0.0139	13.0	14.2	0.0371	5.2
5.00	18.3	13.0	5.0	0.0139	13.0	14.2	0.0235	5.2
15.00	18.4	12.0	4.0	0.0139	12.0	14.3	0.0136	4.2
30.00	18.5	12.0	4.0	0.0139	12.0	14.3	0.0096	4.2
60.00	18.9	11.0	3.0	0.0138	11.0	14.5	0.0068	3.1
250.00	19.9	9.5	1.5	0.0137	9.5	14.7	0.0033	1.6
1440.00	18.6	9.5	1.5	0.0139	9.5	14.7	0.0014	1.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 2.8 (% coarse = % fine = 2.8)
 % SAND = 91.5 (% coarse = 8.5 % medium = 74.8 % fine = 8.2)
 % SILT = 3.4 % CLAY = 2.3

D₈₅ = 1.72 D₆₀ = 0.94 D₅₀ = 0.80
 D₃₀ = 0.59 D₁₅ = 0.44 D₁₀ = 0.35
 C_c = 1.0334 C_u = 2.6508


 MATERIALS ENGINEERING LABORATORY

Grain size distribution curve showing Percent Finer versus Grain Size (mm) on a semi-logarithmic scale. The curve indicates a sharp drop in percent finer between 0.075 mm and 0.06 mm, suggesting a fine-grained material.

Grain Size (mm)	Percent Finer (%)
200	100
100	100
75	100
60	100
40	100
30	100
25	100
20	100
15	100
12.5	100
10	100
7.5	100
6	100
4.75	100
3.75	100
3.0	100
2.5	100
2.0	100
1.5	100
1.18	100
0.85	100
0.75	100
0.6	100
0.425	100
0.3	100
0.25	100
0.2	100
0.15	100
0.125	100
0.106	100
0.085	100
0.075	100
0.06	96
0.05	55
0.0425	15
0.0375	6
0.03	4
0.025	4
0.02	4
0.015	4
0.0125	4
0.0106	4
0.0085	3
0.0075	1
0.006	0.5
0.005	0.2
0.00425	0.1
0.003	0.05
0.0025	0.02
0.002	0.01
0.0015	0.005
0.00125	0.002
0.00106	0.001
0.00085	0.0005
0.00075	0.0002
0.0006	0.0001
0.0005	0.00005
0.000425	0.00002
0.0003	0.00001
0.00025	0.000005
0.0002	0.000002
0.00015	0.000001
0.000125	0.0000005
0.000106	0.0000002
0.000085	0.0000001
0.000075	0.00000005
0.00006	0.00000002
0.00005	0.00000001
0.0000425	0.000000005
0.00003	0.000000002
0.000025	0.000000001
0.00002	0.0000000005
0.000015	0.0000000002
0.0000125	0.0000000001
0.0000106	0.00000000005
0.0000085	0.00000000002
0.0000075	0.00000000001
0.000006	0.000000000005
0.000005	0.000000000002
0.00000425	0.000000000001
0.000003	0.0000000000005
0.0000025	0.0000000000002
0.000002	0.0000000000001
0.0000015	0.00000000000005
0.00000125	0.00000000000002
0.00000106	0.00000000000001
0.00000085	0.000000000000005
0.00000075	0.000000000000002
0.0000006	0.000000000000001
0.0000005	0.0000000000000005
0.000000425	0.0000000000000002
0.0000003	0.0000000000000001
0.00000025	0.00000000000000005
0.0000002	0.00000000000000002
0.00000015	0.00000000000000001
0.000000125	0.000000000000000005
0.000000106	0.000000000000000002
0.000000085	0.000000000000000001
0.000000075	0.0000000000000000005
0.00000006	0.0000000000000000002
0.00000005	0.0000000000000000001
0.0000000425	0.00000000000000000005
0.00000003	0.00000000000000000002
0.000000025	0.00000000000000000001
0.00000002	0.000000000000000000005
0.000000015	0.000000000000000000002
0.0000000125	0.000000000000000000001
0.0000000106	0.0000000000000000000005
0.0000000085	0.0000000000000000000002
0.0000000075	0.0000000000000000000001
0.000000006	0.00000000000000000000005
0.000000005	0.00000000000000000000002
0.00000000425	0.00000000000000000000001
0.000000003	0.000000000000000000000005
0.0000000025	0.000000000000000000000002
0.000000002	0.000000000000000000000001
0.0000000015	0.0000000000000000000000005
0.000000	

[illegible]

SIEVE inches size	PERCENT FINER		
	○		
.5 .375	100.0 99.3		
	GRAIN SIZE		
D ₆₀	0.454		
D ₃₀	0.315		
D ₁₀	0.221		
	COEFFICIENTS		
C _c	0.99		
C _u	2.05		

SIEVE		PERCENT FINER	
number	size		
#4	98.4		
#10	98.0		
#20	94.7		
#40	55.0		
#60	14.6		
#100	6.5		
#200	4.8		

○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:

Elev./Depth: 0-2"

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-130-SED-4

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 65.24
Tare = 0.00
Dry sample weight = 65.24
Sample split on number 10 sieve
Split sample data:
Sample and tare = 63.73 Tare = .00 Sample weight = 63.73
Cumulative weight retained tare= .00
Weight for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.5 inch 0.00 100.0
.375 inch 0.49 99.3
4 1.07 98.4
10 1.30 98.0
20 2.18 94.7
40 27.95 55.0
60 54.21 14.6
100 59.48 6.5
200 60.63 4.8

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 98.0
Weight of hydrometer sample: 63.73
Calculated biased weight= 65.03
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.1	11.0	3.0	0.0140	11.0	14.5	0.0376	4.6
5.00	18.2	11.0	3.0	0.0140	11.0	14.5	0.0238	4.6
15.00	18.3	11.0	3.0	0.0139	11.0	14.5	0.0137	4.6
30.00	18.4	11.0	3.0	0.0139	11.0	14.5	0.0097	4.6
60.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0069	3.1
250.00	19.5	9.0	1.0	0.0137	9.0	14.8	0.0033	1.5
1440.00	18.4	8.5	0.5	0.0139	8.5	14.9	0.0014	0.8

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 1.6 (% coarse = % fine = 1.6)

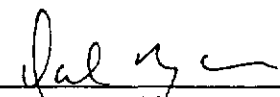
% SAND = 93.6 (% coarse = 0.4 % medium = 43.0 % fine = 50.2)

% SILT = 2.6 % CLAY = 2.2

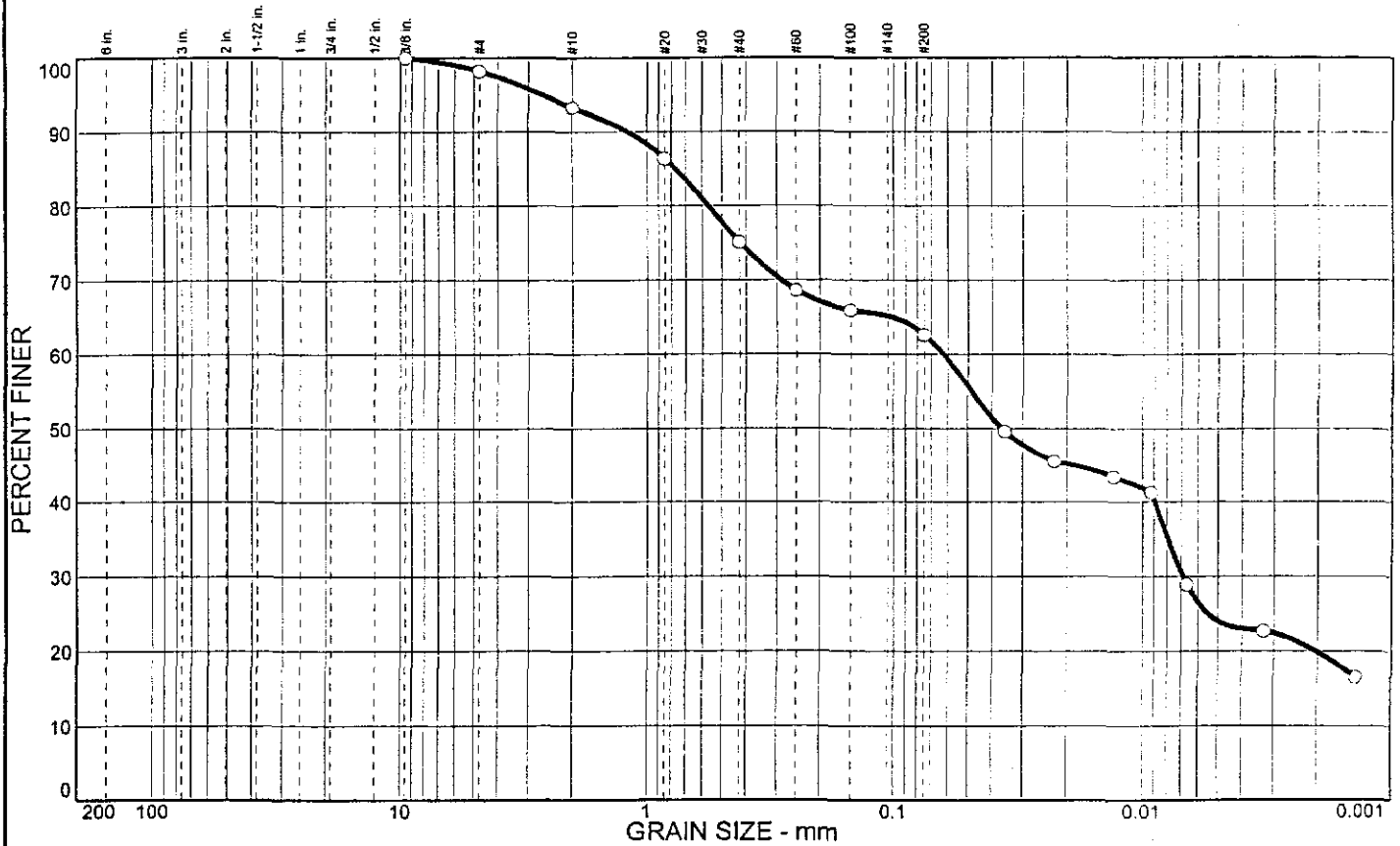
D₈₅= 0.69 D₆₀= 0.45 D₅₀= 0.40

D₃₀= 0.31 D₁₅= 0.25 D₁₀= 0.22

C_c= 0.9857 C_u= 2.0529


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	1.8	35.6	38.6	24.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.0629		
D ₃₀	0.0069		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	98.2		
#10	93.3		
#20	86.4		
#40	75.1		
#60	68.6		
#100	65.9		
#200	62.6		

SOIL DESCRIPTION
 ○ MEDIUM TO FINE SANDY SILT, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-132-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-132-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SANDY SILT, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	24.99	
Tare =	0.00	
Dry sample weight =	24.99	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 22.58 Tare = .00 Sample weight = 22.58		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.46	98.2
# 10	1.68	93.3
# 20	1.67	86.4
# 40	4.41	75.1
# 60	5.97	68.6
# 100	6.64	65.9
# 200	7.42	62.6

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 93.3
Weight of hydrometer sample: 22.58
Calculated biased weight= 24.20
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	20.0	12.0	0.0138	20.0	13.0	0.0353	49.6
5.00	19.0	19.0	11.0	0.0138	19.0	13.2	0.0224	45.5
15.00	19.0	18.5	10.5	0.0138	18.5	13.3	0.0130	43.4
30.00	19.0	18.0	10.0	0.0138	18.0	13.3	0.0092	41.3
60.00	19.0	15.0	7.0	0.0138	15.0	13.8	0.0066	28.9
250.00	18.7	13.5	5.5	0.0139	13.5	14.1	0.0033	22.7
1440.00	17.9	12.0	4.0	0.0140	12.0	14.3	0.0014	16.5

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 1.8 (% coarse = % fine = 1.8)

% SAND = 35.6 (% coarse = 4.9 % medium = 18.2 % fine = 12.5)

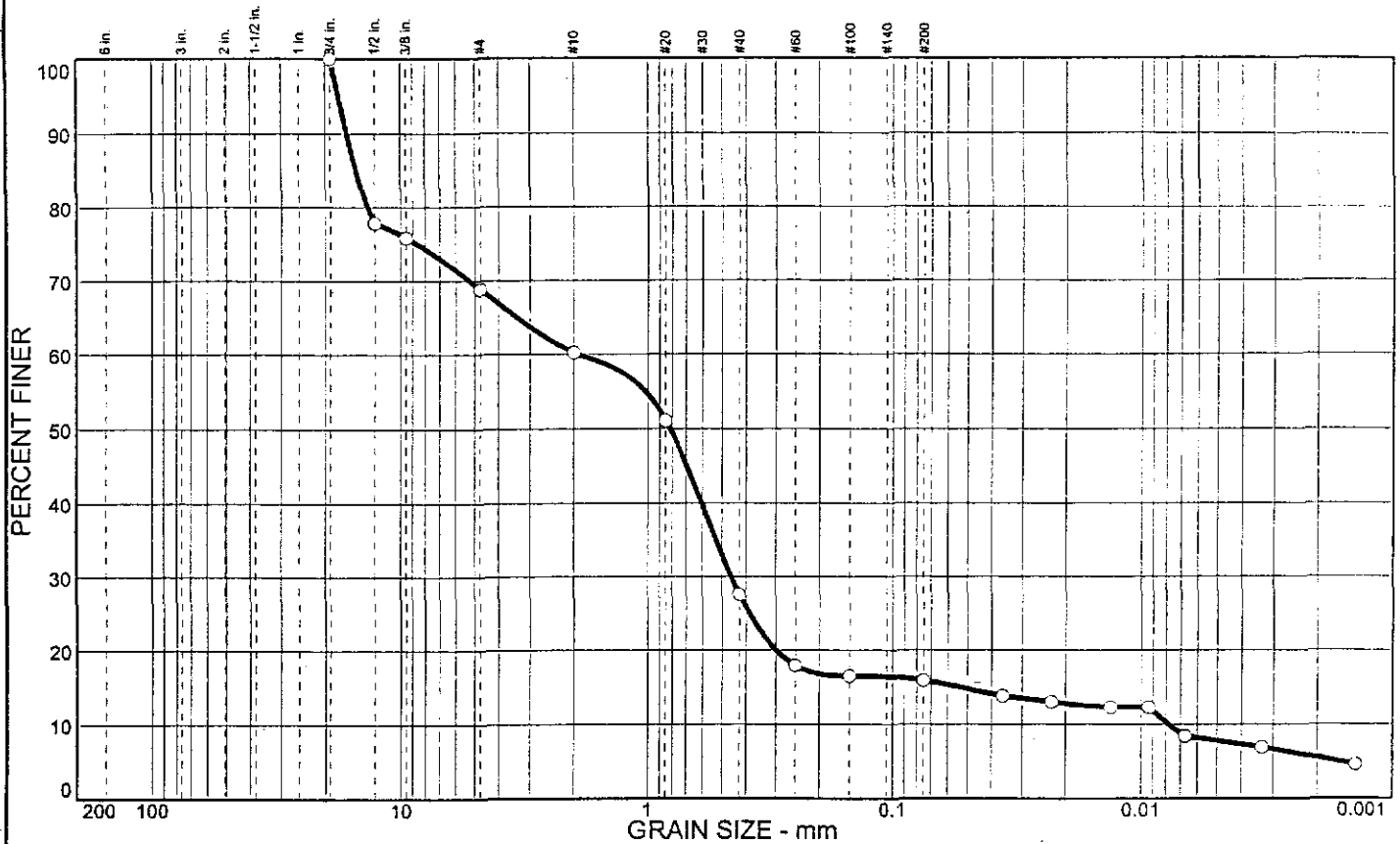
% SILT = 38.6 % CLAY = 24.0

D₈₅ = 0.77 D₆₀ = 0.06 D₅₀ = 0.04

D₃₀ = 0.01

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 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	31.2	52.9	8.1	7.8	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	77.8		
.375	75.8		
GRAIN SIZE			
D ₆₀	1.93		
D ₃₀	0.459		
D ₁₀	0.0078		
COEFFICIENTS			
C _c	13.94		
C _u	247.74		

SIEVE number size	PERCENT FINER		
	○		
#4	68.8		
#10	60.2		
#20	51.1		
#40	27.6		
#60	17.9		
#100	16.5		
#200	15.9		

SOIL DESCRIPTION
○ SILTY MEDIUM TO FINE SAND, WITH GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-138-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-138-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	69.94	
Tare =	0.00	
Dry sample weight =	69.94	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 39.24 Tare = .00 Sample weight = 39.24		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	15.50	77.8
.375 inch	16.93	75.8
# 4	21.80	68.8
# 10	27.86	60.2
# 20	5.95	51.1
# 40	21.24	27.6
# 60	27.60	17.9
# 100	28.48	16.5
# 200	28.87	15.9

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 60.2
Weight of hydrometer sample: 39.24
Calculated biased weight= 65.18
Table of composite correction values:
Temp, deg C: 20.5 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.0	17.0	9.0	0.0138	17.0	13.5	0.0359	13.8
5.00	19.0	16.5	8.5	0.0138	16.5	13.6	0.0228	13.0
15.00	19.0	16.0	8.0	0.0138	16.0	13.7	0.0132	12.3
30.00	19.0	16.0	8.0	0.0138	16.0	13.7	0.0093	12.3
60.00	19.1	13.5	5.5	0.0138	13.5	14.1	0.0067	8.4
250.00	18.7	12.5	4.5	0.0139	12.5	14.2	0.0033	6.9
1440.00	17.9	11.0	3.0	0.0140	11.0	14.5	0.0014	4.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 31.2 (% coarse = % fine = 31.2)

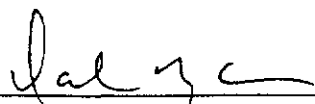
% SAND = 52.9 (% coarse = 8.6 % medium = 32.6 % fine = 11.7)

% SILT = 8.1 % CLAY = 7.8

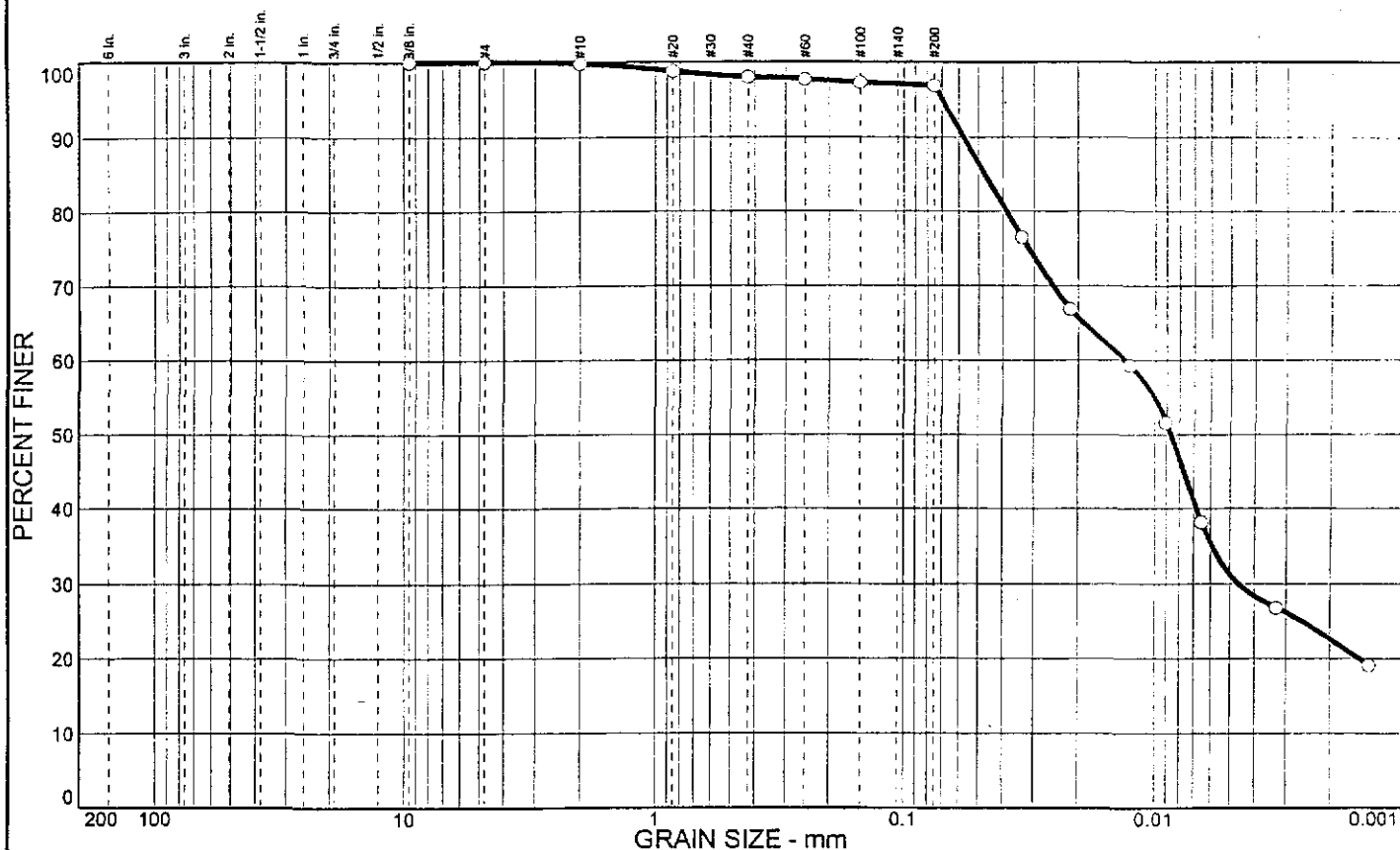
D₈₅ = 15.10 D₆₀ = 1.93 D₅₀ = 0.82

D₃₀ = 0.46 D₁₅ = 0.05 D₁₀ = 0.01

C_c = 13.9435 C_u = 247.7437


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		3.1	65.7	31.2	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
X GRAIN SIZE			
D ₆₀	0.0132		
D ₃₀	0.0046		
D ₁₀			
X COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	99.8		
#20	98.8		
#40	98.0		
#60	97.7		
#100	97.3		
#200	96.9		

SOIL DESCRIPTION
○ SILT, TRACE SAND

REMARKS:
○

○ Source:

Sample No.: C-141-SED-4

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-141-SED-4

Elev. or Depth: 0-2"

Location:

Description: SILT, TRACE SAND

Liquid Limit: - - -

USCS Classification: - - -

Testing Remarks:

Sample Length (in./cm.):

Plastic Limit: - - -

AASHTO Classification: - - -

Mechanical Analysis Data

Initial
Dry sample and tare= 26.45
Tare = 0.00
Dry sample weight = 26.45
Sample split on number 10 sieve
Split sample data:
Sample and tare = 26.10 Tare = .00 Sample weight = 26.10
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.375 inch 0.00 100.0
4 0.00 100.0
10 0.06 99.8
20 0.27 98.8
40 0.47 98.0
60 0.55 97.7
100 0.65 97.3
200 0.77 96.9

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99.8
Weight of hydrometer sample: 26.10
Calculated biased weight= 26.15
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	28.0	20.0	0.0138	28.0	11.7	0.0335	76.5
5.00	19.0	25.5	17.5	0.0138	25.5	12.1	0.0215	66.9
15.00	18.9	23.5	15.5	0.0138	23.5	12.4	0.0126	59.3
30.00	18.9	21.5	13.5	0.0138	21.5	12.8	0.0090	51.6
60.00	18.9	18.0	10.0	0.0138	18.0	13.3	0.0065	38.2
250.00	18.6	15.0	7.0	0.0139	15.0	13.8	0.0033	26.8
1440.00	17.9	13.0	5.0	0.0140	13.0	14.2	0.0014	19.1

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

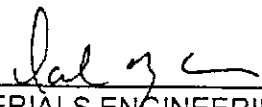
% COBBLES = % GRAVEL =

% SAND = 3.1 (% coarse = 0.2 % medium = 1.8 % fine = 1.1)

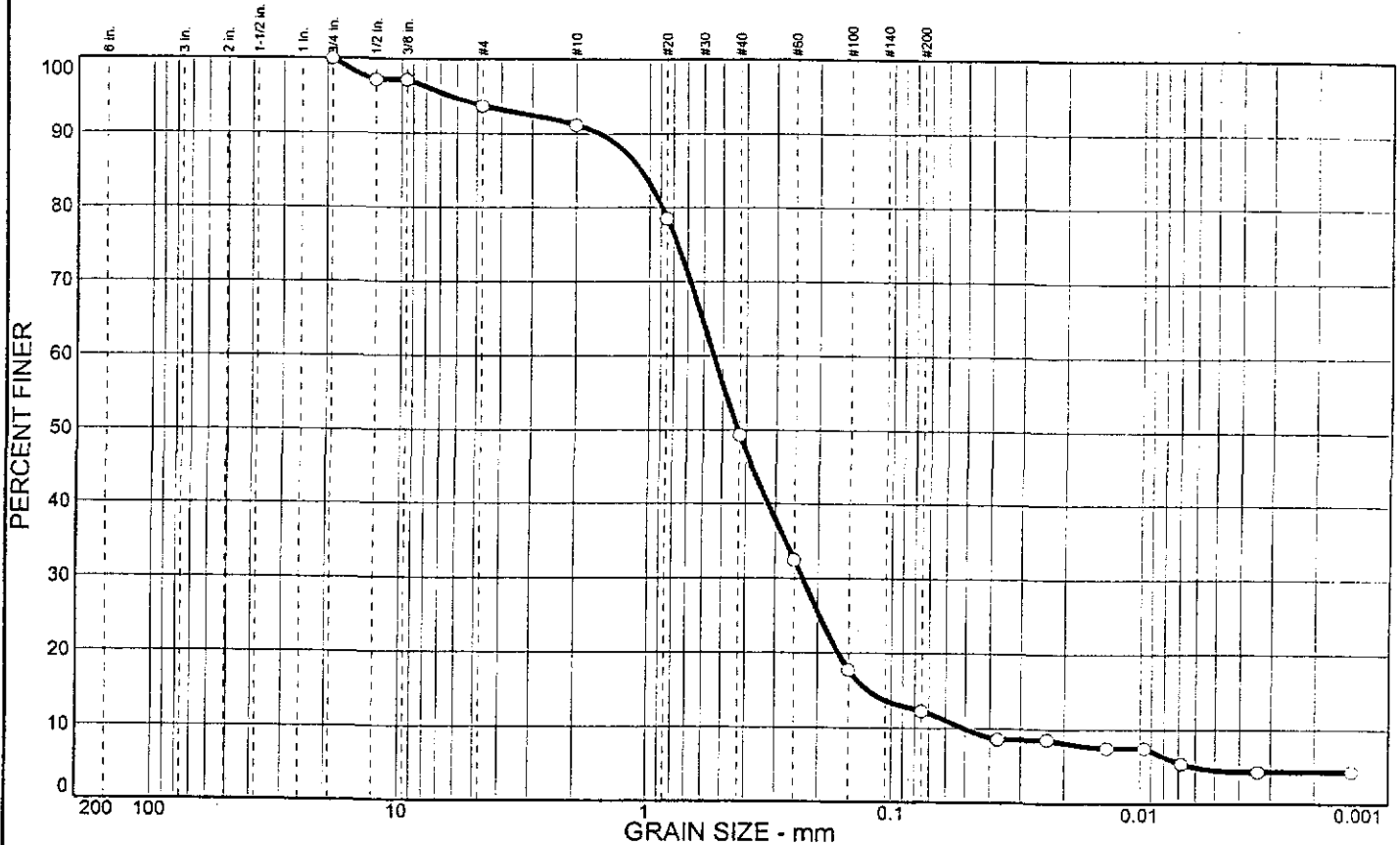
% SILT = 65.7 % CLAY = 31.2

D₈₅= 0.05 D₆₀= 0.01 D₅₀= 0.01

D₃₀= 0.00


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	6.2	81.5	7.8	4.5	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.75	100.0		
.5	97.2		
.375	97.2		
GRAIN SIZE			
D ₆₀	0.546		
D ₃₀	0.231		
D ₁₀	0.0507		
COEFFICIENTS			
C _c	1.92		
C _u	10.78		

SIEVE number size	PERCENT FINER		
	○		
#4	93.8		
#10	91.2		
#20	78.5		
#40	49.3		
#60	32.5		
#100	17.8		
#200	12.3		

SOIL DESCRIPTION
 ○ SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-125-SED-1

Elev./Depth: 0-2.5"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-125-SED-1

Elev. or Depth: 0-2.5"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	48.39	
Tare =	0.00	
Dry sample weight =	48.39	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare =	42.59	Tare = .00 Sample weight = 42.59
Cumulative weight retained tare=	.00	
for cumulative weight retained=	.00	
Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	1.35	97.2
.375 inch	1.35	97.2
# 4	2.98	93.8
# 10	4.26	91.2
# 20	5.93	78.5
# 40	19.58	49.3
# 60	27.42	32.5
# 100	34.30	17.8
# 200	36.84	12.3

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 91.2
Weight of hydrometer sample: 42.59
Calculated biased weight= 46.70
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0

scus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.8	12.0	4.0	0.0139	12.0	14.3	0.0371	8.6
5.00	18.8	12.0	4.0	0.0139	12.0	14.3	0.0234	8.6
15.00	18.9	11.5	3.5	0.0138	11.5	14.4	0.0136	7.5
30.00	18.8	11.5	3.5	0.0139	11.5	14.4	0.0096	7.5
60.00	18.9	10.5	2.5	0.0138	10.5	14.6	0.0068	5.4
250.00	18.4	10.0	2.0	0.0139	10.0	14.7	0.0034	4.3
1440.00	17.9	10.0	2.0	0.0140	10.0	14.7	0.0014	4.3

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 6.2 (% coarse = % fine = 6.2)

% SAND = 81.5 (% coarse = 2.6 % medium = 41.9 % fine = 37.0)

% SILT = 7.8 % CLAY = 4.5

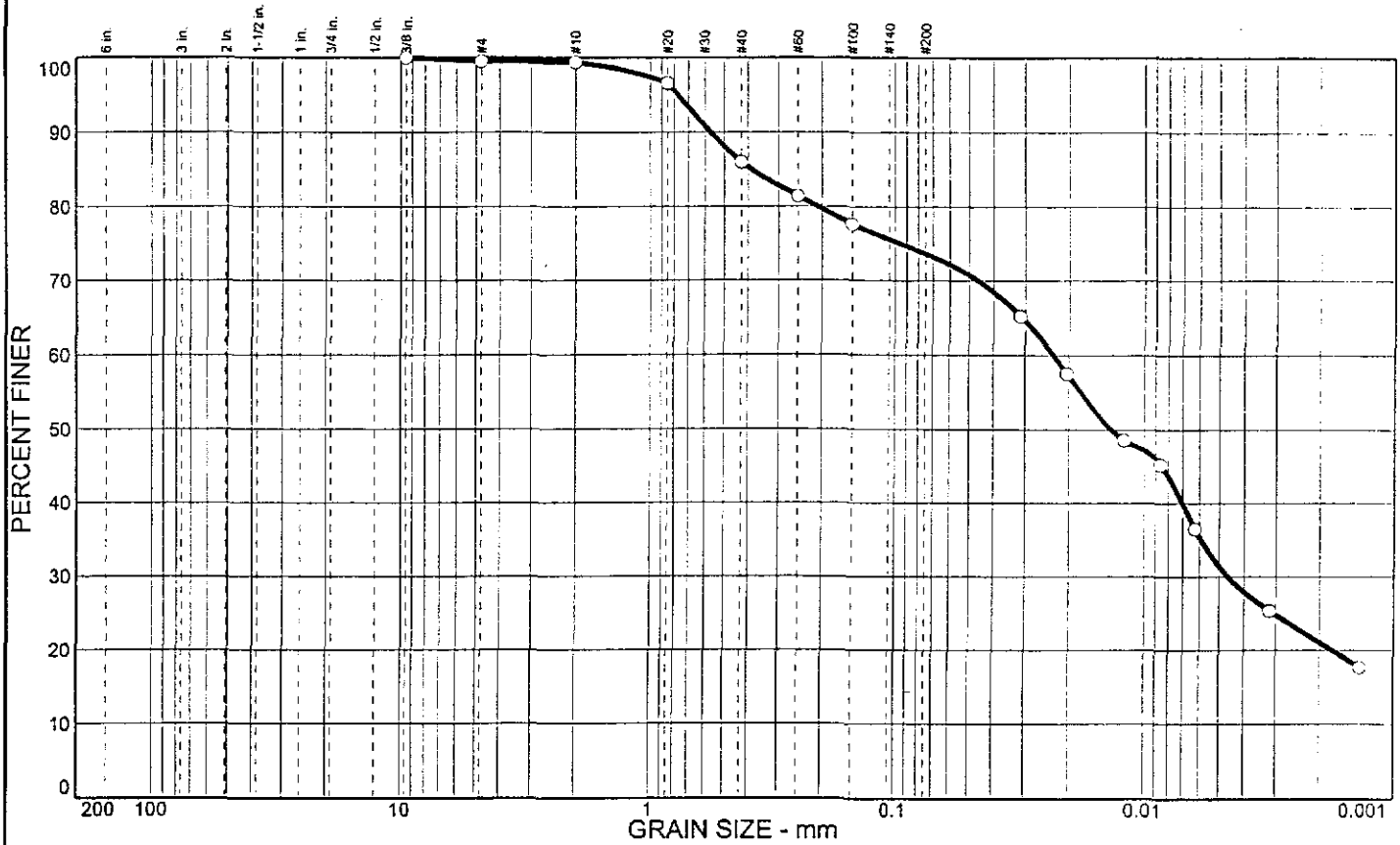
D₈₅= 1.09 D₆₀= 0.55 D₅₀= 0.43

D₃₀= 0.23 D₁₅= 0.12 D₁₀= 0.05

C_c= 1.9238 C_u= 10.7754

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MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	0.5	25.9	42.2	31.4	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.0231		
D ₃₀	0.0046		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	99.5		
#10	99.4		
#20	96.6		
#40	86.0		
#60	81.4		
#100	77.6		

SOIL DESCRIPTION
○ SILT, WITH SAND

REMARKS:
○

○ Source:

Sample No.: C-133-SED-4

Elev./Depth: 0-3"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-133-SED-4

Elev. or Depth: 0-3"

Sample Length (in./cm.):

Location:

Description: SILT, WITH SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 45.55
Tare = 0.00
Dry sample weight = 45.55
Sample split on number 10 sieve

Split sample data:

Sample and tare = 44.96 Tare = .00 Sample weight = 44.96

Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.24	99.5
# 10	0.26	99.4
# 20	1.26	96.6
# 40	6.07	86.0
# 60	8.13	81.4
# 100	9.87	77.6

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 99.4

Weight of hydrometer sample: 44.96

Calculated biased weight= 45.23

Table of composite correction values:

Temp, deg C: 19.0 17.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	37.5	29.5	0.0139	37.5	10.1	0.0313	65.2
5.00	18.7	34.0	26.0	0.0139	34.0	10.7	0.0203	57.5
15.00	18.8	30.0	22.0	0.0139	30.0	11.4	0.0121	48.6
30.00	18.9	28.5	20.5	0.0138	28.5	11.6	0.0086	45.3
60.00	18.9	24.5	16.5	0.0138	24.5	12.3	0.0063	36.5
250.00	18.6	19.5	11.5	0.0139	19.5	13.1	0.0032	25.4
1440.00	17.9	16.0	8.0	0.0140	16.0	13.7	0.0014	17.7

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 0.5 (% coarse = % fine = 0.5)

% SAND = 25.9 (% coarse = 0.1 % medium = 13.4 % fine = 12.4)

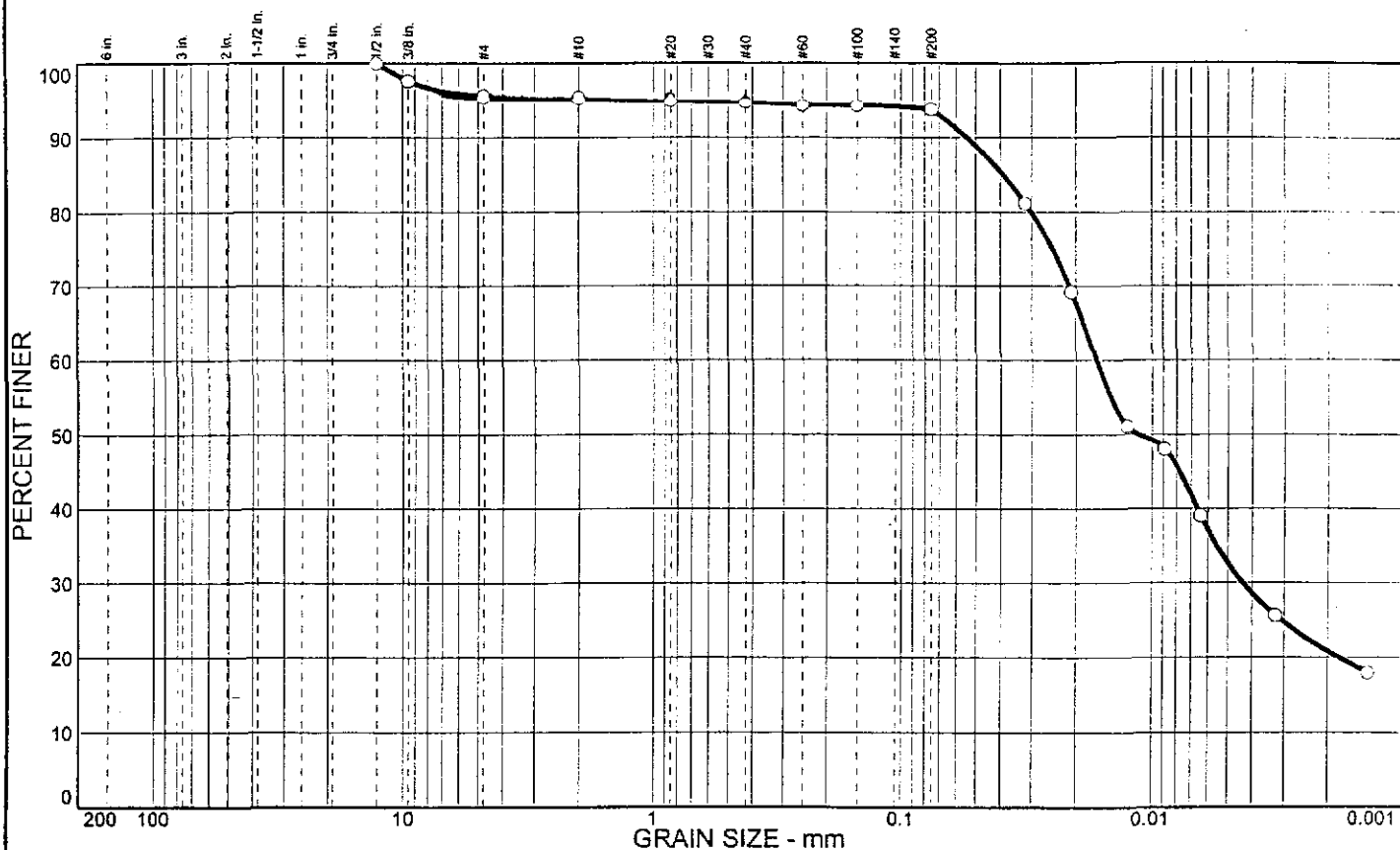
% SILT = 42.2 % CLAY = 31.4

D₈₅ = 0.39 D₆₀ = 0.02 D₅₀ = 0.01

D₃₀ = 0.00

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 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	4.4	1.7	61.2	32.7	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
5	100.0		
3/4	97.6		
GRAIN SIZE			
D60	0.0166		
D30	0.0044		
D10			
COEFFICIENTS			
Cc			
Cu			

SIEVE	PERCENT FINER		
number size	○		
#4	95.6		
#10	95.4		
#20	95.1		
#40	94.9		
#60	94.5		
#100	94.5		
#200	93.9		

SOIL DESCRIPTION
○ SILT, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-137-SED-1

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-137-SED-1

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 33.54
Tare = 0.00
Dry sample weight = 33.54
Sample split on number 10 sieve
Split sample data:

Sample and tare = 31.73 Tare = .00 Sample weight = 31.73

Cumulative weight retained tare= .00

for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.5 inch	0.00	100.0
.375 inch	0.80	97.6
# 4	1.47	95.6
# 10	1.53	95.4
# 20	0.09	95.1
# 40	0.18	94.9
# 60	0.29	94.5
# 100	0.31	94.5
# 200	0.51	93.9

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 95.4

Weight of hydrometer sample: 31.73

Calculated biased weight= 33.26

Table of composite correction values:

Temp, deg C: 19.0 17.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	35.0	27.0	0.0139	35.0	10.6	0.0319	81.2
5.00	18.6	31.0	23.0	0.0139	31.0	11.2	0.0208	69.2
15.00	18.7	25.0	17.0	0.0139	25.0	12.2	0.0125	51.1
30.00	18.7	24.0	16.0	0.0139	24.0	12.4	0.0089	48.1
60.00	18.7	21.0	13.0	0.0139	21.0	12.9	0.0064	39.1
250.00	18.6	16.5	8.5	0.0139	16.5	13.6	0.0032	25.6
1440.00	17.9	14.0	6.0	0.0140	14.0	14.0	0.0014	18.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 4.4 (% coarse = % fine = 4.4)

% SAND = 1.7 (% coarse = 0.2 % medium = 0.5 % fine = 1.0)

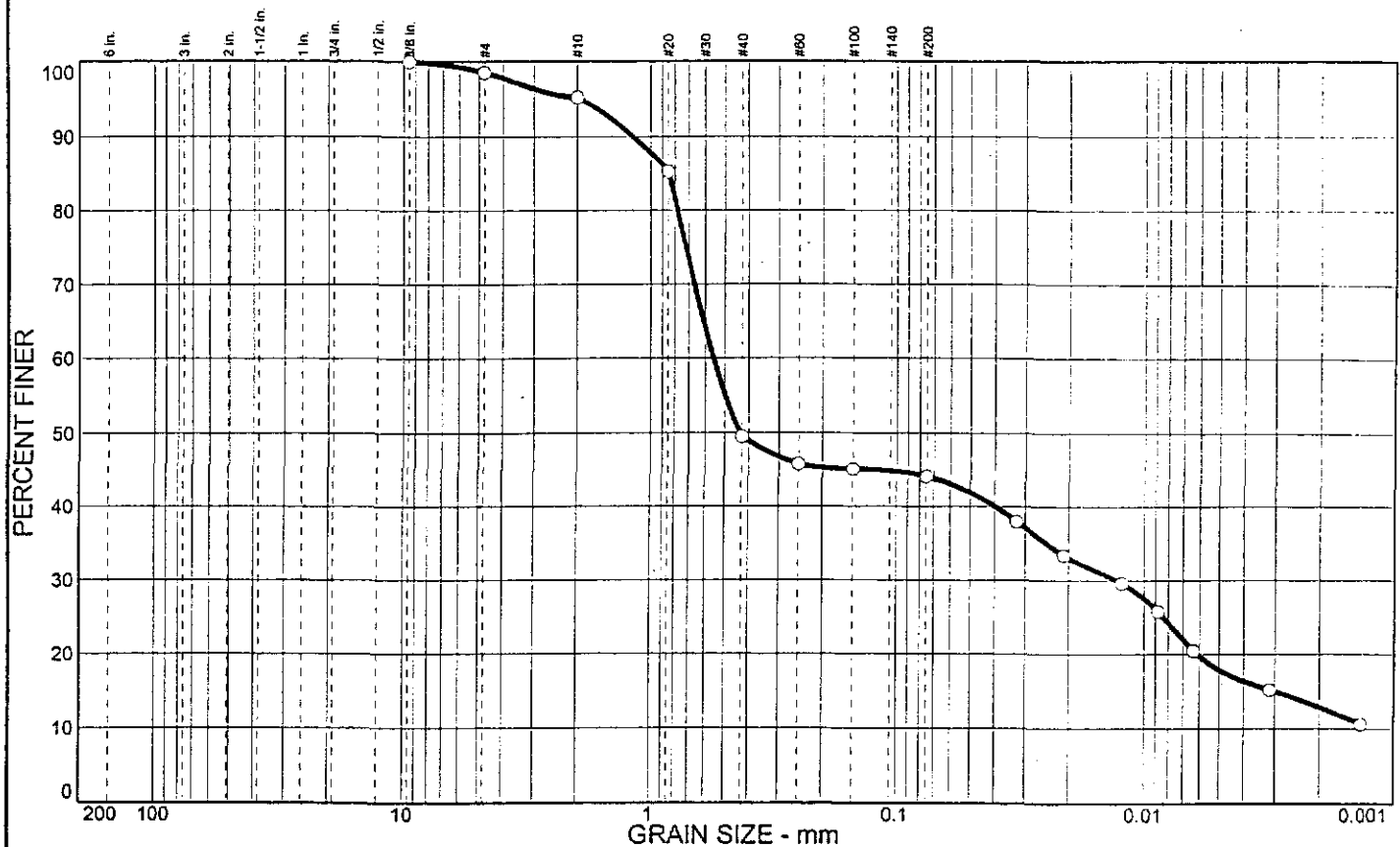
% SILT = 61.2 % CLAY = 32.7

D₈₅ = 0.04 D₆₀ = 0.02 D₅₀ = 0.01

D₃₀ = 0.00


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	1.5	54.4	26.3	17.8	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.555		
D ₃₀	0.0129		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	98.5		
#10	95.3		
#20	85.3		
#40	49.5		
#60	45.8		
#100	45.1		
#200	44.1		

SOIL DESCRIPTION
○ SILTY MEDIUM SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-137-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-137-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 67.50
Tare = 0.00
Dry sample weight = 67.50
Sample split on number 10 sieve
Split sample data:

Sample and tare = 62.78 Tare = .00 Sample weight = 62.78

Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	1.00	98.5
# 10	3.20	95.3
# 20	6.62	85.3
# 40	30.20	49.5
# 60	32.62	45.8
# 100	33.06	45.1
# 200	33.73	44.1

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 95.3

Weight of hydrometer sample: 62.78

Calculated biased weight= 65.88

Table of composite correction values:

Temp, deg C: 20.5 17.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	33.0	25.0	0.0139	33.0	10.9	0.0324	38.0
5.00	18.6	30.0	22.0	0.0139	30.0	11.4	0.0209	33.4
15.00	18.8	27.5	19.5	0.0139	27.5	11.8	0.0123	29.6
30.00	19.0	25.0	17.0	0.0138	25.0	12.2	0.0088	25.8
60.00	19.3	21.5	13.5	0.0138	21.5	12.8	0.0064	20.5
250.00	20.3	18.0	10.0	0.0136	18.0	13.3	0.0031	15.2
1440.00	18.7	15.0	7.0	0.0139	15.0	13.8	0.0014	10.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 1.5 (% coarse = % fine = 1.5)

% SAND = 54.4 (% coarse = 3.2 % medium = 45.8 % fine = 5.4)

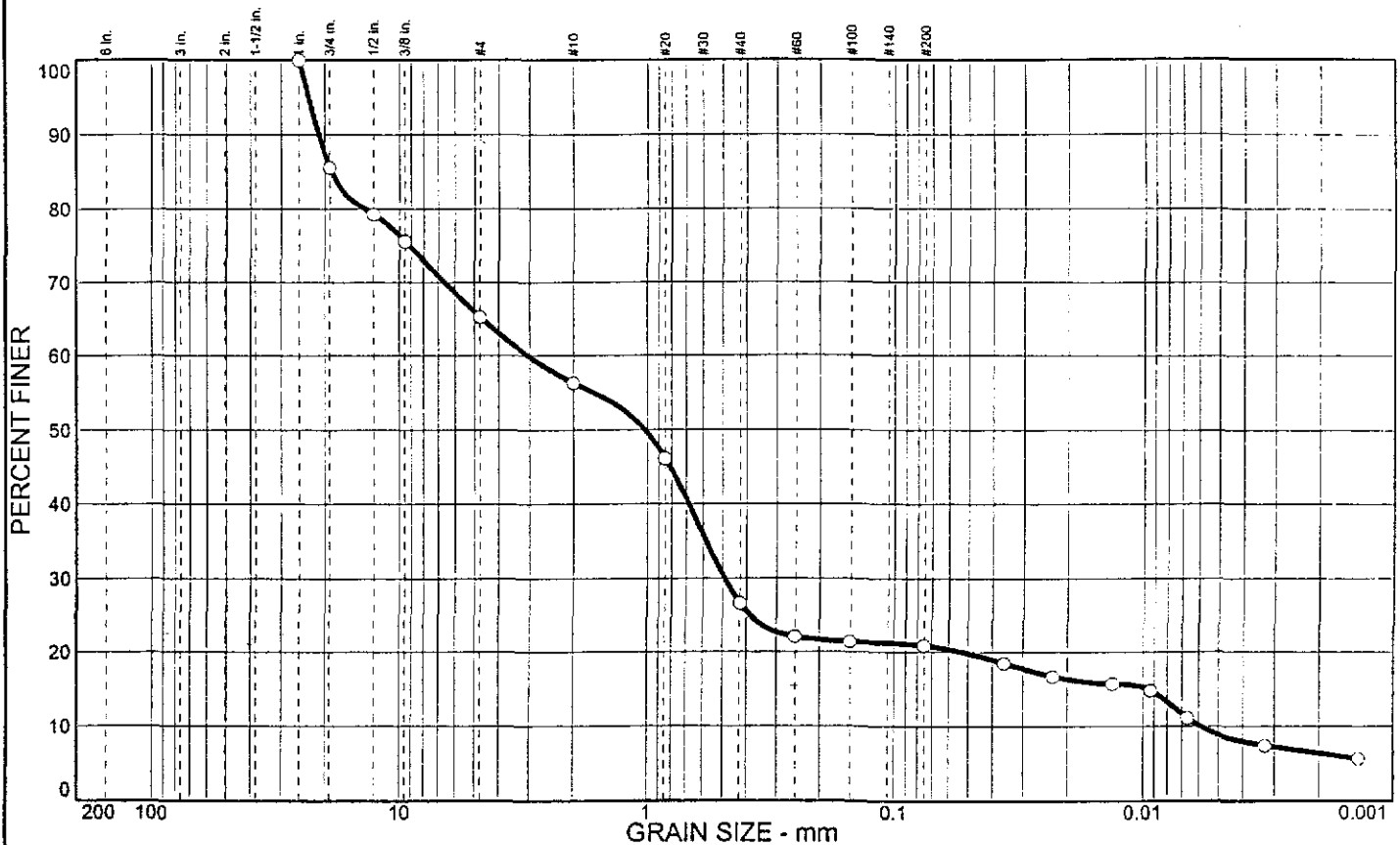
% SILT = 26.3 % CLAY = 17.8

D₈₅= 0.85 D₆₀= 0.56 D₅₀= 0.43

D₃₀= 0.01 D₁₅= 0.00

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 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	34.8	44.3	12.1	8.8	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
1	100.0		
.75	85.6		
.5	79.3		
.375	75.6		
GRAIN SIZE			
D ₆₀	3.06		
D ₃₀	0.491		
D ₁₀	0.0059		
COEFFICIENTS			
C _c	13.31		
C _u	517.56		

SIEVE number size	PERCENT FINER		
	○		
#4	65.2		
#10	56.3		
#20	46.1		
#40	26.6		
#60	22.1		
#100	21.4		
#200	20.9		

SOIL DESCRIPTION
○ SILTY MEDIUM SAND, WITH GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-137-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-137-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 71.63
Tare = 0.00
Dry sample weight = 71.63
Sample split on number 10 sieve
Split sample data:
Sample and tare = 30.43 Tare = .00 Sample weight = 30.43
Cumulative weight retained tare= .00
for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
1 inch 0.00 100.0
.75 inch 10.30 85.6
.5 inch 14.80 79.3
.375 inch 17.50 75.6
4 24.90 65.2
10 31.30 56.3
20 5.52 46.1
40 16.04 26.6
60 18.51 22.1
100 18.86 21.4
200 19.15 20.9

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 56.3
Weight of hydrometer sample: 30.43
Calculated biased weight= 54.05
Table of composite correction values:
Temp, deg C: 20.5 17.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer	
2.00	18.7	18.0	10.0	0.0139	18.0	13.3	0.0358	18.5
5.00	18.7	17.0	9.0	0.0139	17.0	13.5	0.0228	16.7
15.00	18.8	16.5	8.5	0.0139	16.5	13.6	0.0132	15.7
30.00	19.0	16.0	8.0	0.0138	16.0	13.7	0.0093	14.8
60.00	19.3	14.0	6.0	0.0138	14.0	14.0	0.0066	11.1
250.00	20.2	12.0	4.0	0.0136	12.0	14.3	0.0033	7.4
1440.00	18.8	11.0	3.0	0.0139	11.0	14.5	0.0014	5.6

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 34.8 (% coarse = 14.4 % fine = 20.4)

% SAND = 44.3 (% coarse = 8.9 % medium = 29.7 % fine = 5.7)

% SILT = 12.1 % CLAY = 8.8

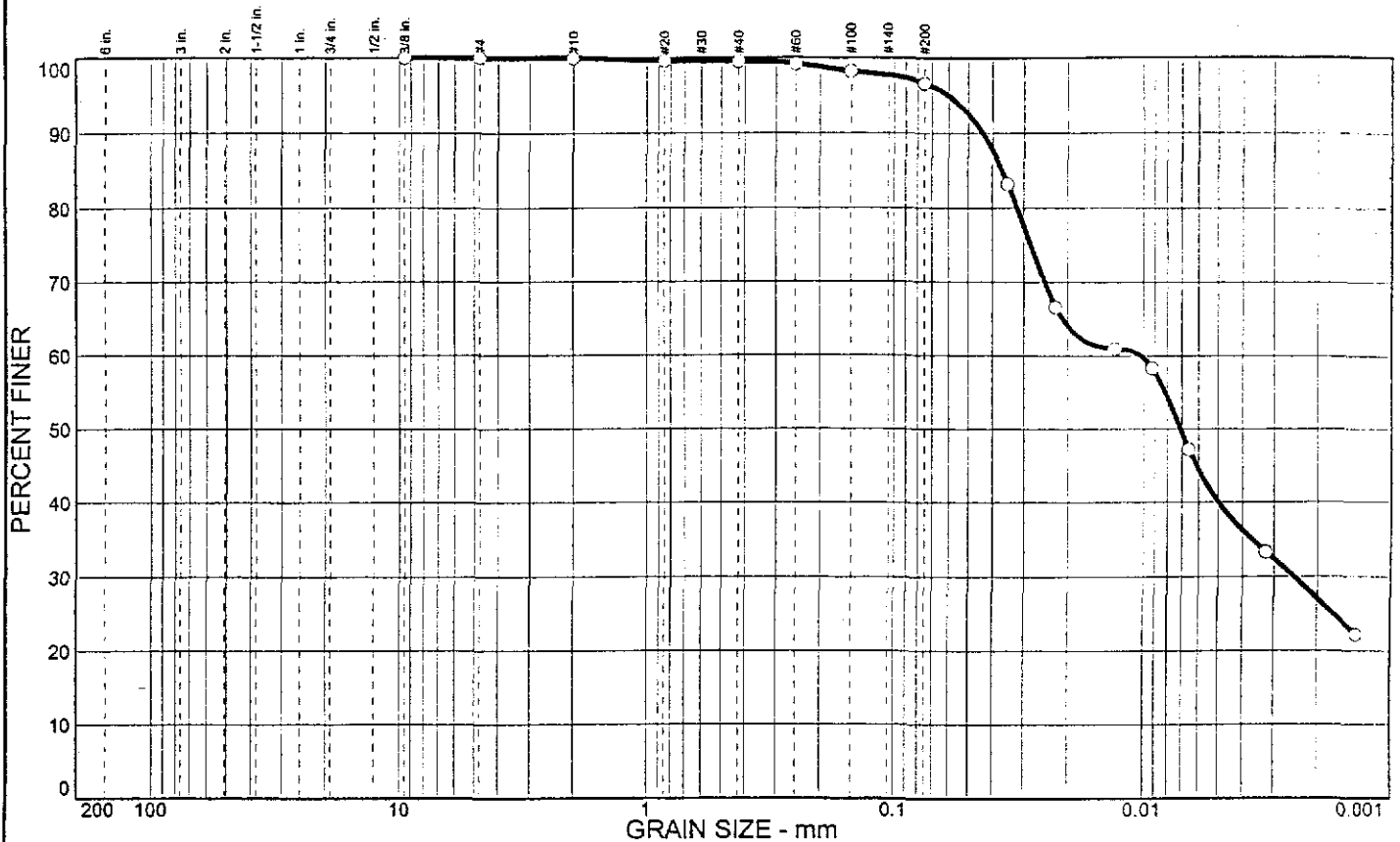
D₈₅= 18.71 D₆₀= 3.06 D₅₀= 1.03

D₃₀= 0.49 D₁₅= 0.01 D₁₀= 0.01

C_c= 13.307 C_u= 517.5576


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-138-SED-1

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, TRACE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 18.02

Tare = 0.00

Dry sample weight = 18.02

Sample split on number 10 sieve

Split sample data:

Sample and tare = 18.02 Tare = .00 Sample weight = 18.02

Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.00	100.0
# 20	0.07	99.6
# 40	0.10	99.5
# 60	0.15	99.2
# 100	0.32	98.2
# 200	0.62	96.6

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 100.0

Weight of hydrometer sample: 18.02

Calculated biased weight= 18.02

Table of composite correction values:

Temp, deg C: 20.5 17.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.8	23.0	15.0	0.0139	23.0	12.5	0.0347	83.2
5.00	18.8	20.0	12.0	0.0139	20.0	13.0	0.0223	66.6
15.00	18.9	19.0	11.0	0.0138	19.0	13.2	0.0130	61.0
30.00	18.9	18.5	10.5	0.0138	18.5	13.3	0.0092	58.3
60.00	19.2	16.5	8.5	0.0138	16.5	13.6	0.0066	47.2
250.00	20.0	14.0	6.0	0.0136	14.0	14.0	0.0032	33.3
1440.00	18.8	12.0	4.0	0.0139	12.0	14.3	0.0014	22.2

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

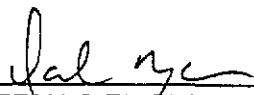
% COBBLES = % GRAVEL =

% SAND = 3.4 (% coarse = 0.0 % medium = 0.5 % fine = 2.9)

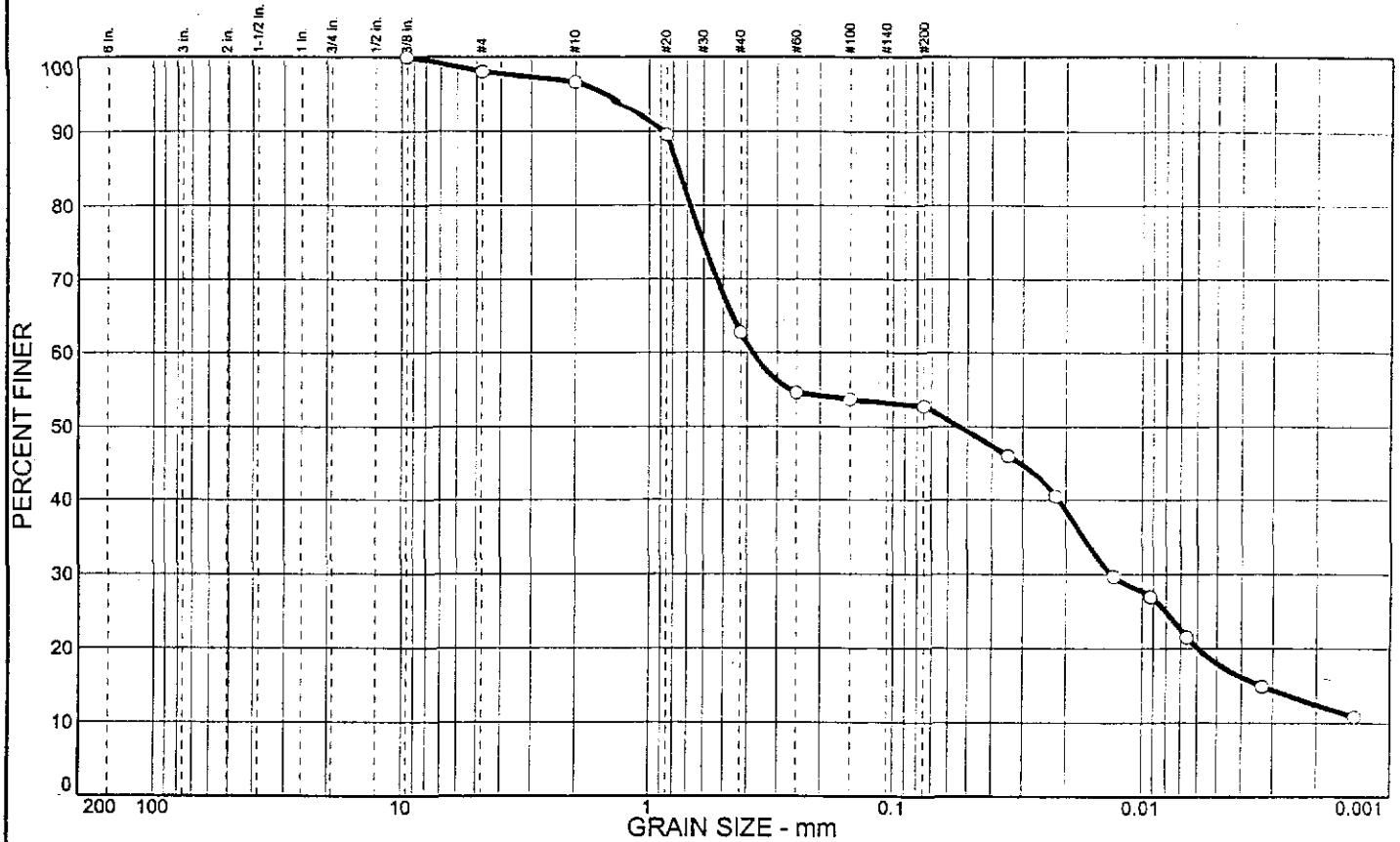
% SILT = 56.6 % CLAY = 40.0

D₈₅ = 0.04 D₆₀ = 0.01 D₅₀ = 0.01

D₃₀ = 0.00


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	2.0	45.2	34.8	18.0	---	---	---	---

SIEVE Inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.380		
D ₃₀	0.0133		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	98.0		
#10	96.6		
#20	89.6		
#40	62.7		
#60	54.6		
#100	53.7		
#200	52.8		

SOIL DESCRIPTION
○ MEDIUM SANDY SILT, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-139-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-139-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM SANDY SILT, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 38.34
Tare = 0.00
Dry sample weight = 38.34
Sample split on number 10 sieve
Split sample data:
Sample and tare = 35.74 Tare = .00 Sample weight = 35.74
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.375 inch 0.00 100.0
4 0.78 98.0
10 1.30 96.6
20 2.60 89.6
40 12.56 62.7
60 15.55 54.6
100 15.86 53.7
200 16.22 52.8

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 96.6
Weight of hydrometer sample: 35.74
Calculated biased weight= 37.00
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	25.0	17.0	0.0139	25.0	12.2	0.0343	46.0
5.00	18.6	23.0	15.0	0.0139	23.0	12.5	0.0220	40.5
15.00	18.7	19.0	11.0	0.0139	19.0	13.2	0.0130	29.7
30.00	18.7	18.0	10.0	0.0139	18.0	13.3	0.0092	27.0
60.00	18.8	16.0	8.0	0.0139	16.0	13.7	0.0066	21.6
250.00	18.6	13.5	5.5	0.0139	13.5	14.1	0.0033	14.9
1440.00	17.9	12.0	4.0	0.0140	12.0	14.3	0.0014	10.8

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 2.0 (% coarse = % fine = 2.0)

% SAND = 45.2 (% coarse = 1.4 % medium = 33.9 % fine = 9.9)

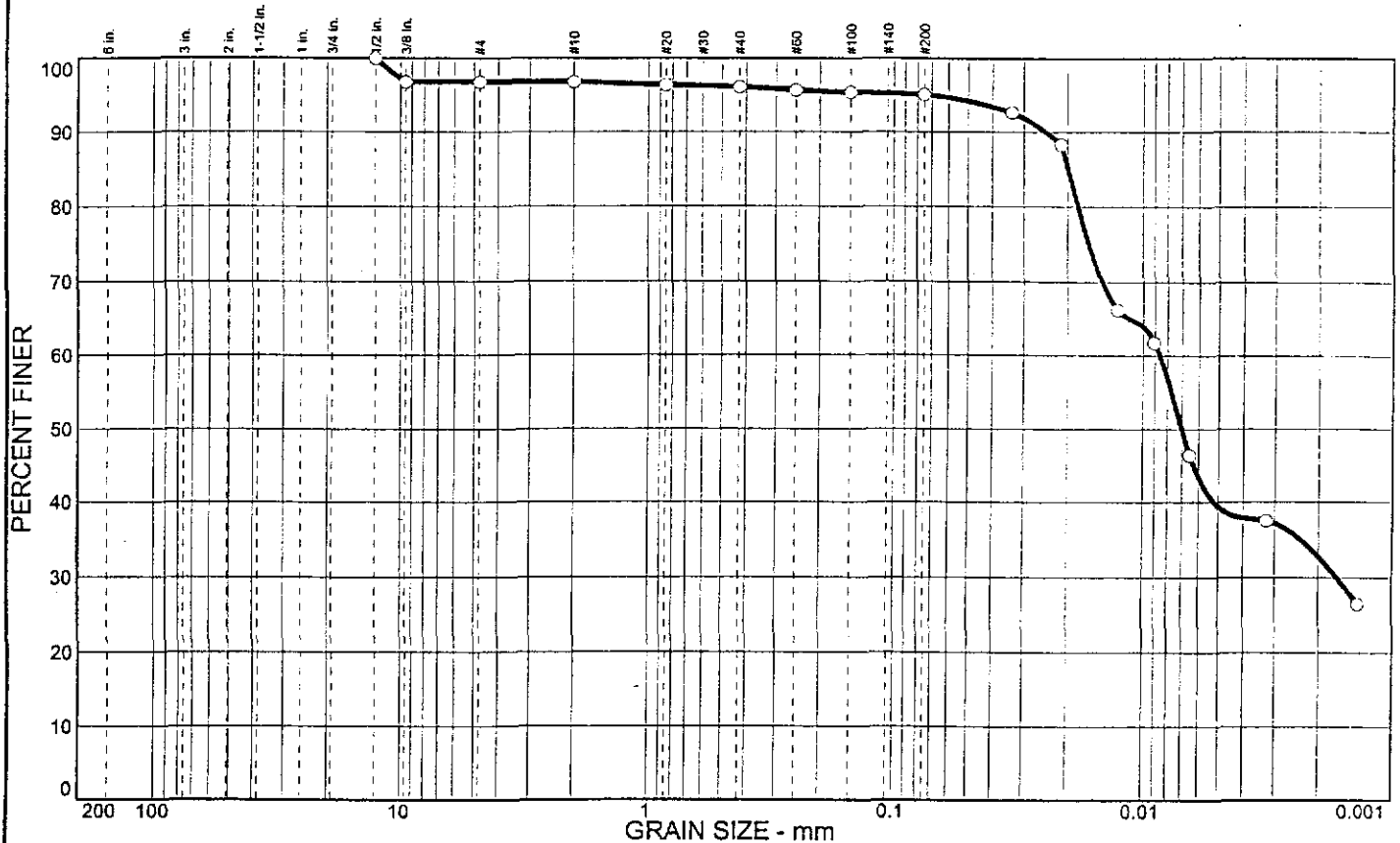
% SILT = 34.8 % CLAY = 18.0

D₈₅ = 0.76 D₆₀ = 0.38 D₅₀ = 0.05

D₃₀ = 0.01 D₁₅ = 0.00

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 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	3.2	1.7	55.8	39.3	---	---	---	---

SIEVE	PERCENT FINER		
Inches size	○		
5	100.0		
.375	96.8		
GRAIN SIZE			
D ₆₀	0.0086		
D ₃₀	0.0017		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE	PERCENT FINER		
number size	○		
#4	96.8		
#10	96.8		
#20	96.4		
#40	95.1		
#60	95.7		
#100	95.4		
#200	95.1		

SOIL DESCRIPTION
○ SILT, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-141-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

Client: SAVANNAH LABORATORIES, INC.
Project: SAVANNAH #:S9-17892E
Project Number: 2000-00-0236

Source:	
Sample No.: C-141-SED-2	
Elev. or Depth: 0-2"	Sample Length (in./cm.):
Location:	
Description: SILT, TRACE GRAVEL	
Liquid Limit: - - -	Plastic Limit: - - -
USCS Classification: - - -	AASHTO Classification: - - -
Testing Remarks:	

```

Initial
Dry sample and tare= 22.92
Tare = 0.00
Dry sample weight = 22.92
Sample split on number 10 sieve
Split sample data:
    Sample and tare = 21.93 Tare = .00 Sample weight = 21.93
    Cumulative weight retained tare= .00
    Tare for cumulative weight retained= .00

```

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth $L = 16.294964 - 0.164 \times R_m$

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	29.0	21.0	0.0139	29.0	11.5	0.0334	92.7
5.00	18.6	28.0	20.0	0.0139	28.0	11.7	0.0212	88.3
15.00	18.7	23.0	15.0	0.0139	23.0	12.5	0.0127	66.2
30.00	18.6	22.0	14.0	0.0139	22.0	12.7	0.0090	61.8
60.00	18.8	18.5	10.5	0.0139	18.5	13.3	0.0065	46.4
250.00	18.6	16.5	8.5	0.0139	16.5	13.6	0.0032	37.5
1440.00	17.9	14.0	6.0	0.0140	14.0	14.0	0.0014	26.5

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

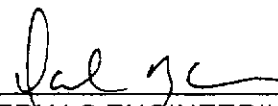
% COBBLES = % GRAVEL = 3.2 (% coarse = % fine = 3.2)

% SAND = 1.7 (% coarse = 0.0 % medium = 0.7 % fine = 1.0)

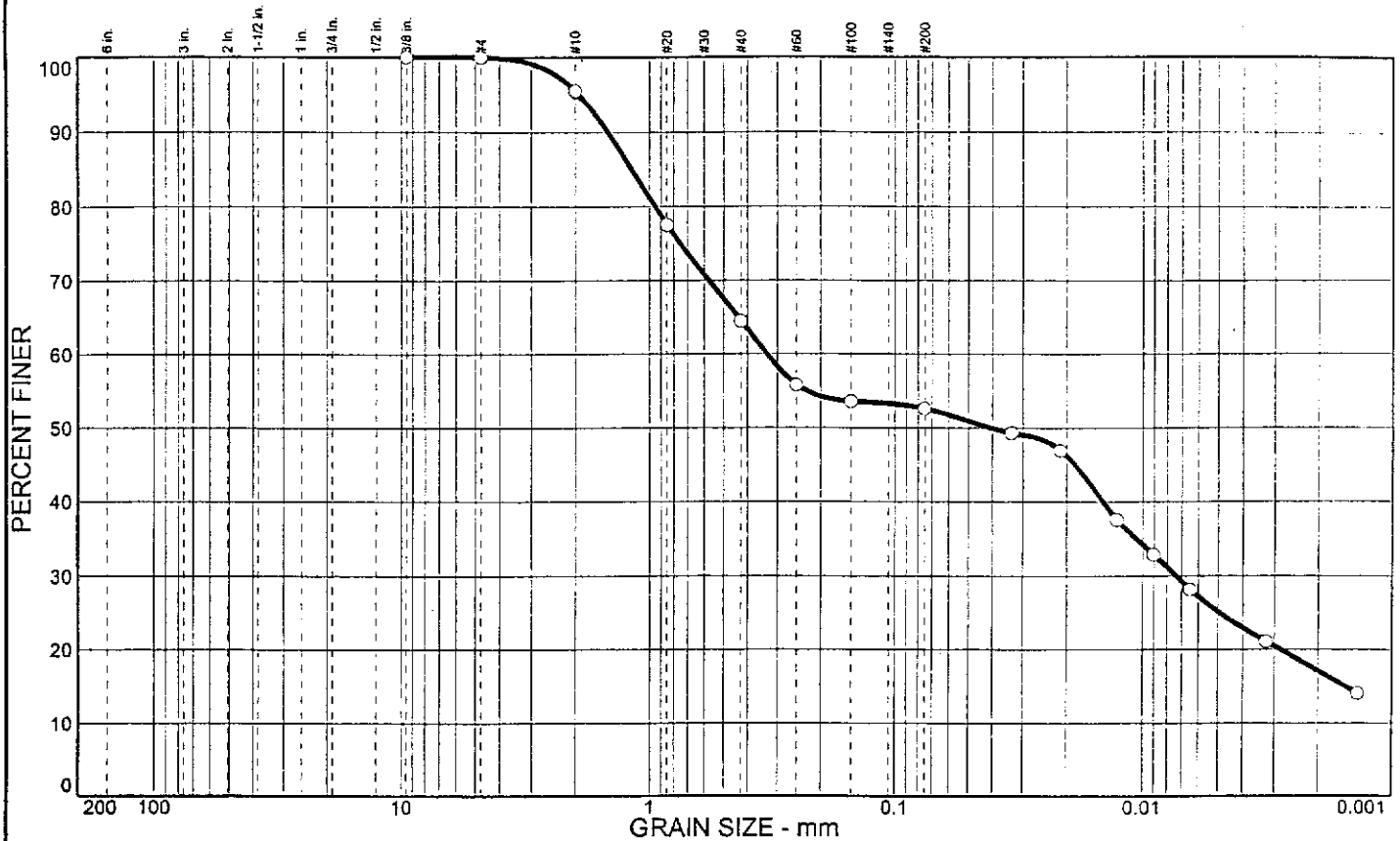
% SILT = 55.8 % CLAY = 39.3

D₈₅ = 0.02 D₆₀ = 0.01 D₅₀ = 0.01

D₃₀ = 0.00


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		47.4	27.5	25.1	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D60	0.333		
D30	0.0074		
D10			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	95.5		
#20	77.5		
#40	64.5		
#60	55.8		
#100	53.6		
#200	52.6		

SOIL DESCRIPTION
○ MEDIUM TO FINE SANDY SILT

REMARKS:
○

○ Source:

Sample No.: C-142-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-142-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SANDY SILT

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	44.09	
Tare =	0.00	
Dry sample weight =	44.09	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 40.67 Tare = .00 Sample weight = 40.67		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	1.99	95.5
# 20	7.66	77.5
# 40	13.20	64.5
# 60	16.91	55.8
# 100	17.84	53.6
# 200	18.26	52.6

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 95.5
Weight of hydrometer sample: 40.67
Calculated biased weight= 42.59
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	29.0	21.0	0.0139	29.0	11.5	0.0334	49.3
5.00	18.6	28.0	20.0	0.0139	28.0	11.7	0.0212	47.0
15.00	18.6	24.0	16.0	0.0139	24.0	12.4	0.0126	37.6
30.00	18.6	22.0	14.0	0.0139	22.0	12.7	0.0090	32.9
60.00	18.6	20.0	12.0	0.0139	20.0	13.0	0.0065	28.2
250.00	18.5	17.0	9.0	0.0139	17.0	13.5	0.0032	21.1
1440.00	17.9	14.0	6.0	0.0140	14.0	14.0	0.0014	14.1

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

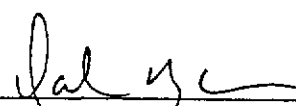
% COBBLES = % GRAVEL =

% SAND = 47.4 (% coarse = 4.5 % medium = 31.0 % fine = 11.9)

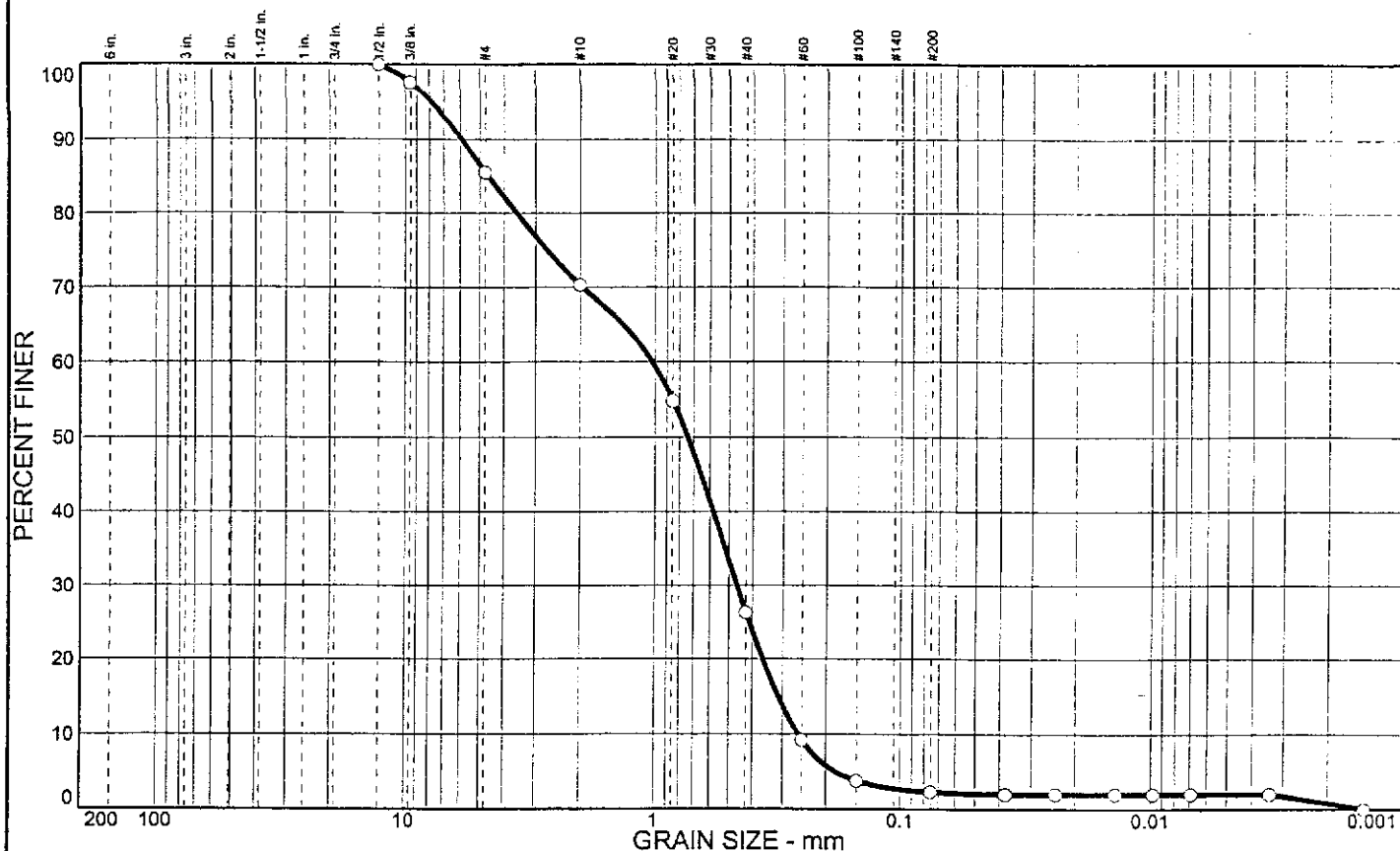
% SILT = 27.5 % CLAY = 25.1

D₈₅ = 1.18 D₆₀ = 0.33 D₅₀ = 0.04

D₃₀ = 0.01 D₁₅ = 0.00


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	14.4	83.3	0.3	2.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
5	100.0		
3/4	97.6		
GRAIN SIZE			
D ₆₀	1.03		
D ₃₀	0.464		
D ₁₀	0.259		
COEFFICIENTS			
C _c	0.80		
C _u	3.97		

SIEVE number size	PERCENT FINER		
	○		
#4	85.6		
#10	70.3		
#20	54.8		
#40	26.3		
#60	9.2		
#100	3.8		
#200	2.3		

SOIL DESCRIPTION
 ○ COARSE TO FINE SAND, LITTLE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-145-SED-1

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	9.0	1.0	0.0139	9.0	14.8	0.0378	2.0
5.00	18.6	9.0	1.0	0.0139	9.0	14.8	0.0239	2.0
15.00	18.6	9.0	1.0	0.0139	9.0	14.8	0.0138	2.0
30.00	18.7	9.0	1.0	0.0139	9.0	14.8	0.0097	2.0
60.00	18.7	9.0	1.0	0.0139	9.0	14.8	0.0069	2.0
250.00	18.4	9.0	1.0	0.0139	9.0	14.8	0.0034	2.0
1440.00	17.9	8.0	0.0	0.0140	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 14.4 (% coarse = % fine = 14.4)

% SAND = 83.3 (% coarse = 15.3 % medium = 44.0 % fine = 24.0)

% SILT = 0.3 % CLAY = 2.0 (% CLAY COLLOIDS = 0.0)

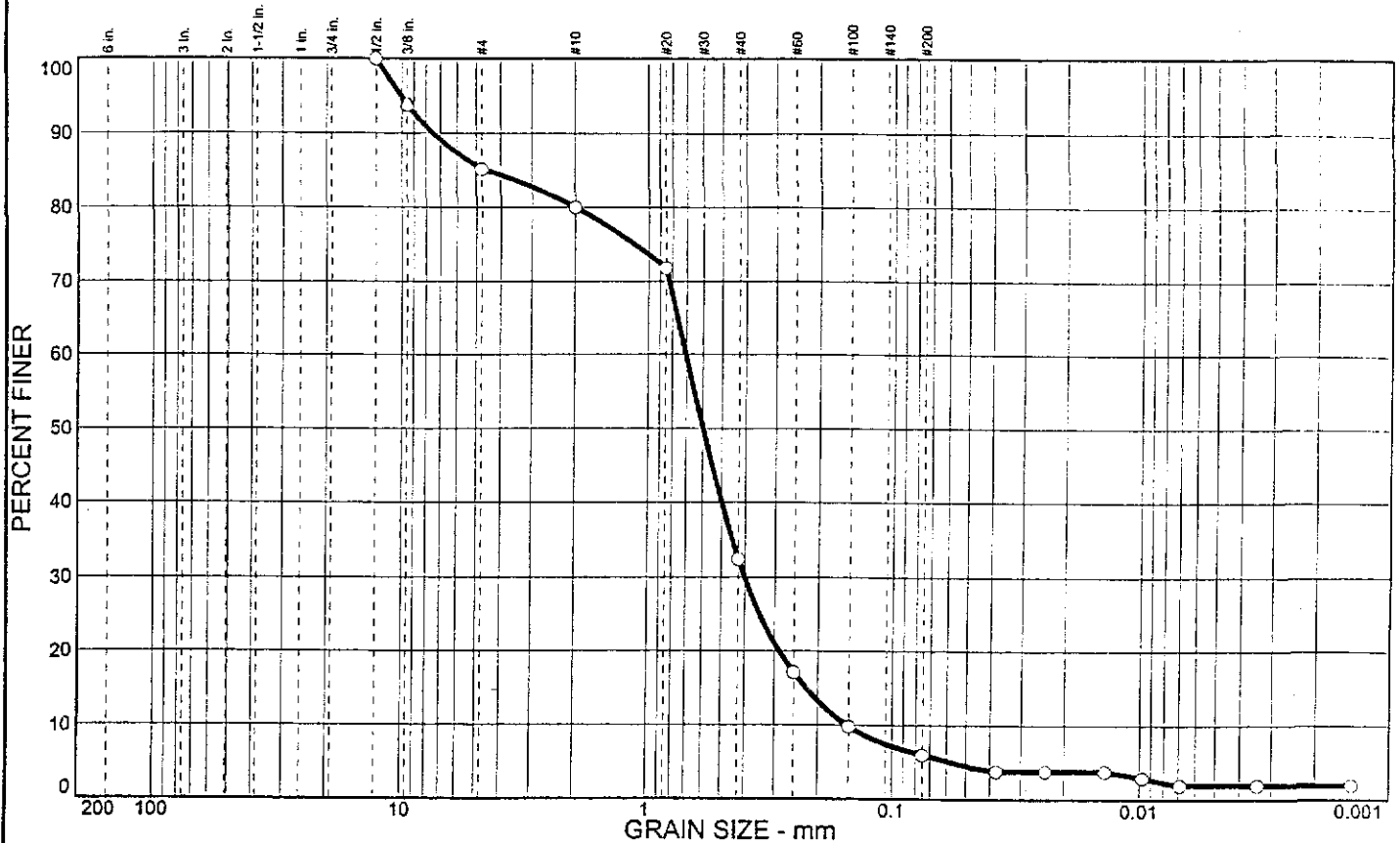
D₈₅ = 4.61 D₆₀ = 1.03 D₅₀ = 0.74

D₃₀ = 0.46 D₁₅ = 0.31 D₁₀ = 0.26

C_c = 0.8041 C_u = 3.9719


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-147-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, LITTLE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 53.98
Tare = 0.00
Dry sample weight = 53.98
Sample split on number 10 sieve
Split sample data:
Sample and tare = 42.18 Tare = .00 Sample weight = 42.18
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.5 inch 0.00 100.0
.375 inch 3.35 93.8
4 7.99 85.2
10 10.82 80.0
20 4.34 71.8
40 25.09 32.4
60 33.18 17.1
100 37.01 9.8
200 39.02 6.0

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 80.0
Weight of hydrometer sample: 42.18
Calculated biased weight= 52.72
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0376	3.8
5.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0238	3.8
15.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0137	3.8
30.00	18.7	9.5	1.5	0.0139	9.5	14.7	0.0097	2.9
60.00	18.8	9.0	1.0	0.0139	9.0	14.8	0.0069	1.9
250.00	18.4	9.0	1.0	0.0139	9.0	14.8	0.0034	1.9
1440.00	17.9	9.0	1.0	0.0140	9.0	14.8	0.0014	1.9

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 14.8 (% coarse = % fine = 14.8)

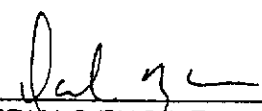
% SAND = 79.2 (% coarse = 5.2 % medium = 47.6 % fine = 26.4)

% SILT = 4.1 % CLAY = 1.9

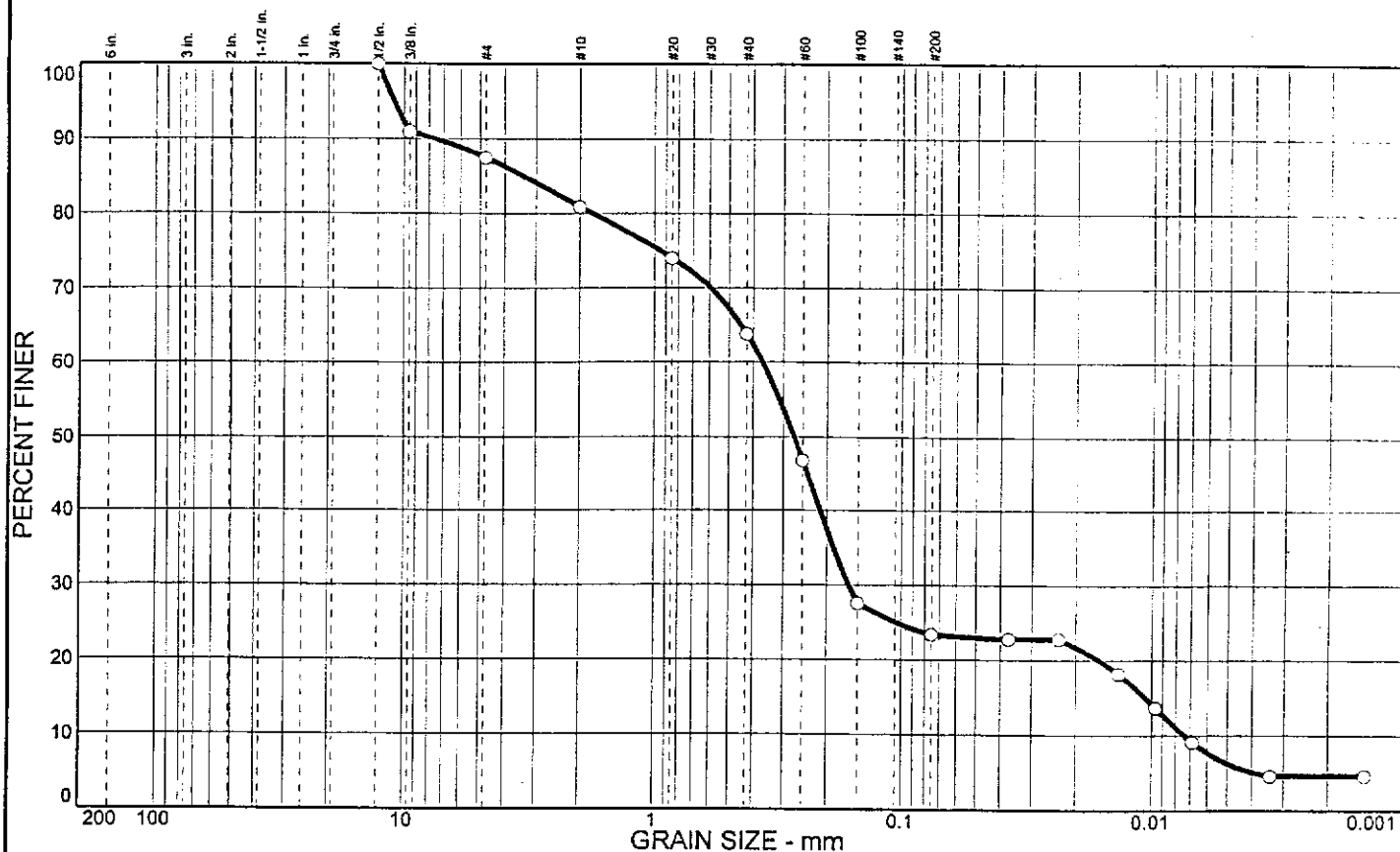
D₈₅ = 4.53 D₆₀ = 0.71 D₅₀ = 0.60

D₃₀ = 0.40 D₁₅ = 0.22 D₁₀ = 0.15

C_c = 1.4846 C_u = 4.6054


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	12.5	64.1	17.1	6.3	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
5 .375	100.0 91.0		
GRAIN SIZE			
D ₆₀	0.367		
D ₃₀	0.163		
D ₁₀	0.0074		
COEFFICIENTS			
C _c	9.84		
C _u	49.72		

SIEVE number size	PERCENT FINER		
	○		
#4	87.5		
#10	80.9		
#20	74.0		
#40	63.8		
#60	46.8		
#100	27.6		
#200	23.4		

SOIL DESCRIPTION
 ○ SILTY MEDIUM TO FINE SAND, LITTLE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-147-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-147-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND, LITTLE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 23.86
Tare = 0.00
Dry sample weight = 23.86
Sample split on number 10 sieve
Split sample data:
Sample and tare = 17.74 Tare = .00 Sample weight = 17.74
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.5 inch	0.00	100.0
.375 inch	2.16	91.0
# 4	2.98	87.5
# 10	4.56	80.9
# 20	1.51	74.0
# 40	3.76	63.8
# 60	7.47	46.8
# 100	11.69	27.6
# 200	12.61	23.4

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 80.9
Weight of hydrometer sample: 17.74
Calculated biased weight= 21.93
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	13.0	5.0	0.0139	13.0	14.2	0.0370	22.8
5.00	18.5	13.0	5.0	0.0139	13.0	14.2	0.0234	22.8
15.00	18.6	12.0	4.0	0.0139	12.0	14.3	0.0136	18.2
30.00	18.7	11.0	3.0	0.0139	11.0	14.5	0.0096	13.7
60.00	18.7	10.0	2.0	0.0139	10.0	14.7	0.0069	9.1
250.00	18.5	9.0	1.0	0.0139	9.0	14.8	0.0034	4.6
1440.00	17.9	9.0	1.0	0.0140	9.0	14.8	0.0014	4.6

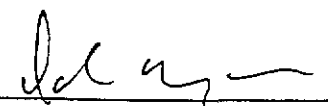
Fractional Components

Gravel/Sand based on #4

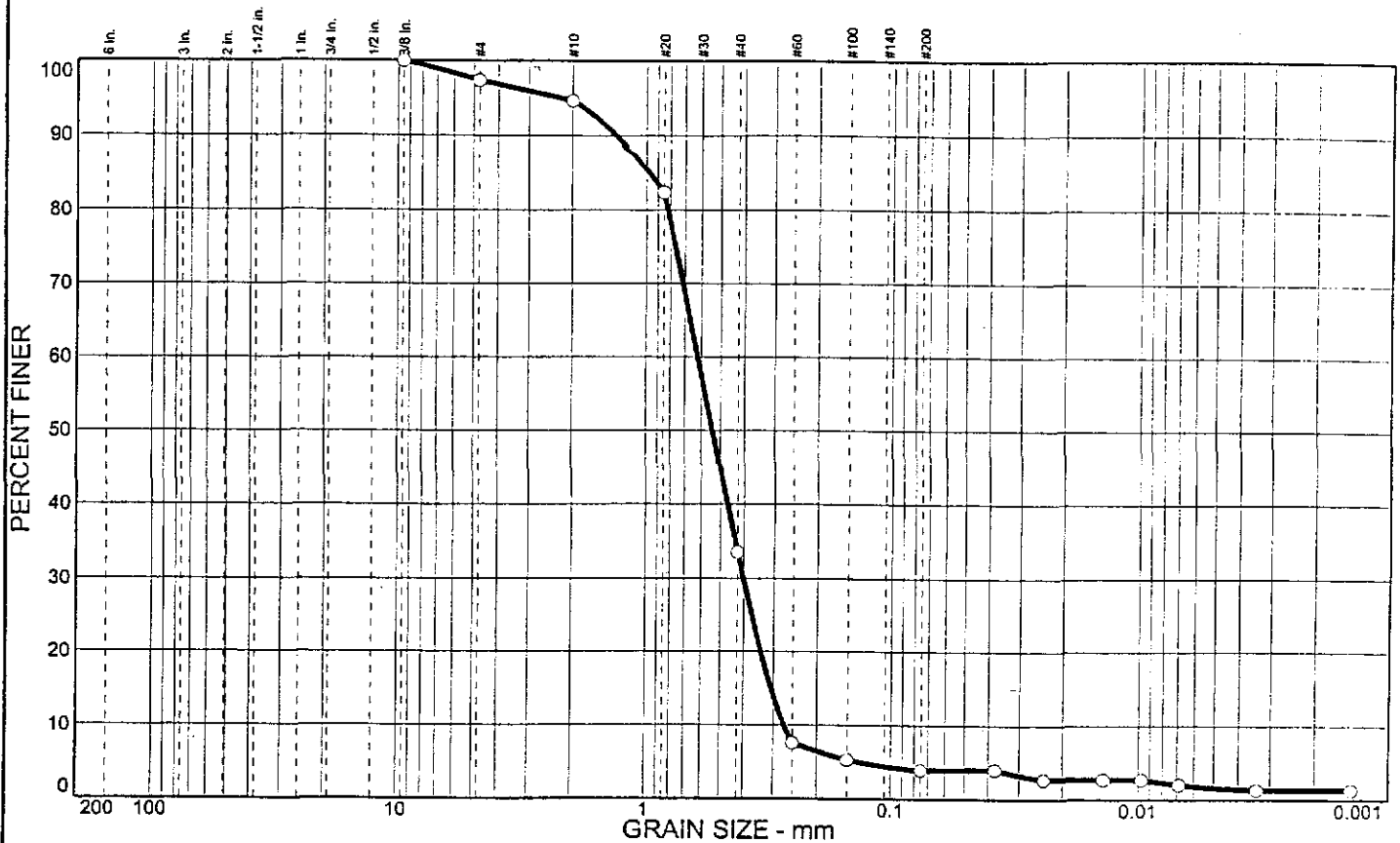
Sand/Fines based on #200

% COBBLES = % GRAVEL = 12.5 (% coarse = % fine = 12.5)
 % SAND = 64.1 (% coarse = 6.6 % medium = 17.1 % fine = 40.4)
 % SILT = 17.1 % CLAY = 6.3

D₈₅ = 3.38 D₆₀ = 0.37 D₅₀ = 0.27
 D₃₀ = 0.16 D₁₅ = 0.01 D₁₀ = 0.01
 C_c = 9.837 C_u = 49.7156


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	2.6	93.5	2.3	1.6	---	---	---	---

SIEVE Inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.622		
D ₃₀	0.402		
D ₁₀	0.272		
COEFFICIENTS			
C _c	0.96		
C _u	2.29		

SIEVE number size	PERCENT FINER		
	○		
#4	97.4		
#10	94.7		
#20	82.4		
#40	33.6		
#60	7.6		
#100	5.3		
#200	3.9		

SOIL DESCRIPTION
 ○ MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-148-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project No.: 2000-00-0236

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17892E

Project Number: 2000-00-0236

Sample Data

Source:

Sample No.: C-148-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 75.56
Tare = 0.00
Dry sample weight = 75.56
Sample split on number 10 sieve
Split sample data:
Sample and tare = 70.53 Tare = .00 Sample weight = 70.53
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	1.98	97.4
# 10	4.04	94.7
# 20	9.13	82.4
# 40	45.49	33.6
# 60	64.86	7.6
# 100	66.60	5.3
# 200	67.62	3.9

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 94.7
Weight of hydrometer sample: 70.53
Calculated biased weight= 74.48
Table of composite correction values:
Temp, deg C: 19.0 17.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	11.0	3.0	0.0139	11.0	14.5	0.0374	4.0
5.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0238	2.7
15.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0137	2.7
30.00	18.7	10.0	2.0	0.0139	10.0	14.7	0.0097	2.7
60.00	18.7	9.5	1.5	0.0139	9.5	14.7	0.0069	2.0
250.00	18.4	9.0	1.0	0.0139	9.0	14.8	0.0034	1.3
1440.00	17.9	9.0	1.0	0.0140	9.0	14.8	0.0014	1.3

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 2.6 (% coarse = % fine = 2.6)
 % SAND = 93.5 (% coarse = 2.7 % medium = 61.1 % fine = 29.7)
 % SILT = 2.3 % CLAY = 1.6

D₈₅ = 0.97 D₆₀ = 0.62 D₅₀ = 0.54

D₃₀ = 0.40 D₁₅ = 0.31 D₁₀ = 0.27

C_c = 0.9562 C_u = 2.2909


 MATERIALS ENGINEERING LABORATORY

Thompson Engineering

MARCH 28, 2000

CLIENT: SAVANNAH LABORATORIES, INC.
PROJECT: SAVANNAH #: S9-17912

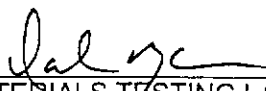
RE: LIST PERTAINING TO SAMPLE QUANTITIES

SAMPLE ID	DEPTH (IN.)	
C-158-SED-3	0-2"	NO SAMPLE
C-159-SED-3	0-3.5"	**
C-160-SED-3	0-2"	**
C-161-SED-1	0-3.5"	
C-161-SED-2	0-2"	**
C-157-SED-1	0-2"	**
C-162-SED-3	0-2"	**
C-164-SED-1	0-2"	
C-164-SED-4	0-2"	**
C-165-SED-2	0-2"	*
C-166-SED-6	0-2"	**
C-168-SED-2	0-2"	**
C-170-SED-1	0-2"	
C-170-SED-5	0-2"	**
C-172-SED-2	0-2"	*
C-174-SED-5	0-2"	NO SAMPLE
C-177-SED-2	0-2"	**
C-173-SED-4	0-2"	**
C-175-SED-1	0-2"	**
C-176-SED-5	0-2"	**
C-177-SED-3	0-2"	
C-178-SED-3	0-2"	**
C-181-SED-3	0-2"	**
C-181-SED-5	0-2"	**
C-183-SED-5	0-2"	**
C-002-SED-3	0-2"	*
C-029-SED-2	0-3"	*
C-049-SED-4	0-2.5"	*
C-066-SED-2	0-1.5"	*
C-099-SED-4	0-2"	*
C-150-SED-1	0-2.5"	**
C-153-SED-4	0-2.5"	*

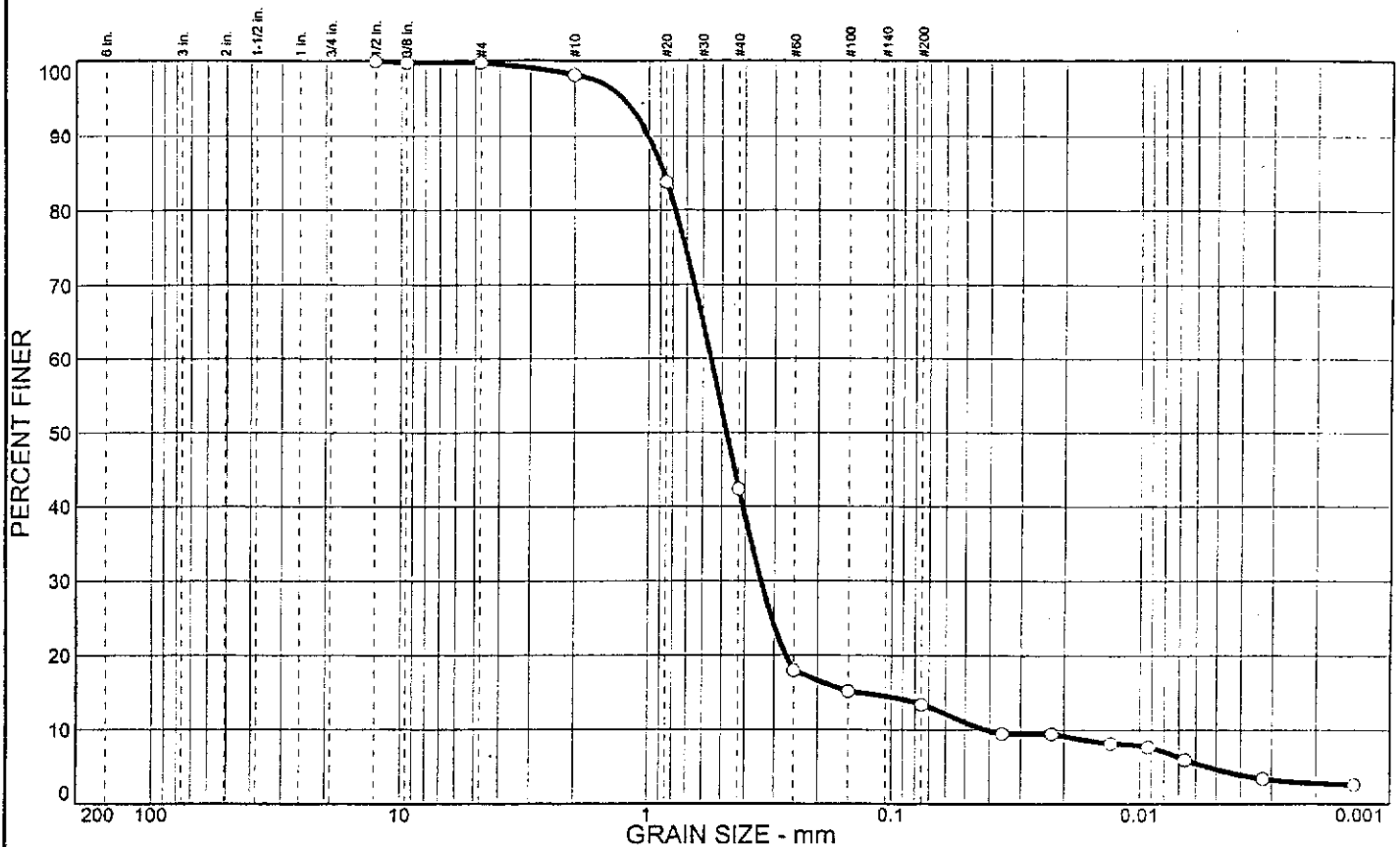
NOTE: EACH TEST PERFORMED USING ALL AVAILABLE MATERIAL.

* INSUFFICIENT MATERIAL AVAILABLE FOR TESTING.

**TEST PERFORMED, HOWEVER, ASTM RECOMMENDED QUANTITIES NOT AVAILABLE.


MATERIALS TESTING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0.0	0.3	86.3	8.7	4.7	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
5 .375	100.0 99.8		
GRAIN SIZE			
D ₆₀	0.558		
D ₃₀	0.342		
D ₁₀	0.0416		
COEFFICIENTS			
C _c	5.04		
C _u	13.43		

SIEVE number size	PERCENT FINER		
	○		
#4	99.7		
#10	98.1		
#20	83.8		
#40	42.4		
#60	18.0		
#100	15.2		
#200	13.4		

SOIL DESCRIPTION
 ○ SILTY MEDIUM TO FINE SAND

REMARKS:
 ○

○ Source:

Sample No.: C-159-SED-3

Elev./Depth: 0-3.5"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-159-SED-3

Elev. or Depth: 0-3.5"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 118.37
Tare = 0.00
Dry sample weight = 118.37
Sample split on number 10 sieve
Split sample data:
Sample and tare = 114.25 Tare = .00 Sample weight = 114.25
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.5 inch	0.00	100.0
.375 inch	0.27	99.8
# 4	0.40	99.7
# 10	2.27	98.1
# 20	16.63	83.8
# 40	64.86	42.4
# 60	93.31	18.0
# 100	96.53	15.2
# 200	98.70	13.4

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 98.1
Weight of hydrometer sample: 114.25
Calculated biased weight= 116.46
Table of composite correction values:
Temp, deg C: 20.5 17.8
Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	19.0	11.0	0.0138	19.0	13.2	0.0355	9.5
5.00	18.9	19.0	11.0	0.0138	19.0	13.2	0.0225	9.5
15.00	18.9	17.5	9.5	0.0138	17.5	13.4	0.0131	8.2
30.00	19.0	17.0	9.0	0.0138	17.0	13.5	0.0093	7.7
60.00	19.1	15.0	7.0	0.0138	15.0	13.8	0.0066	6.0
250.00	20.3	12.0	4.0	0.0136	12.0	14.3	0.0033	3.4
1440.00	18.4	11.0	3.0	0.0139	11.0	14.5	0.0014	2.6

Fractional Components

Gravel/Sand based on #4

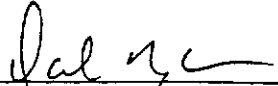
Sand/Fines based on #200

% COBBLES = % GRAVEL = 0.3 (% coarse = % fine = 0.3)
 % SAND = 86.3 (% coarse = 1.6 % medium = 55.7 % fine = 29.0)
 % SILT = 8.7 % CLAY = 4.7

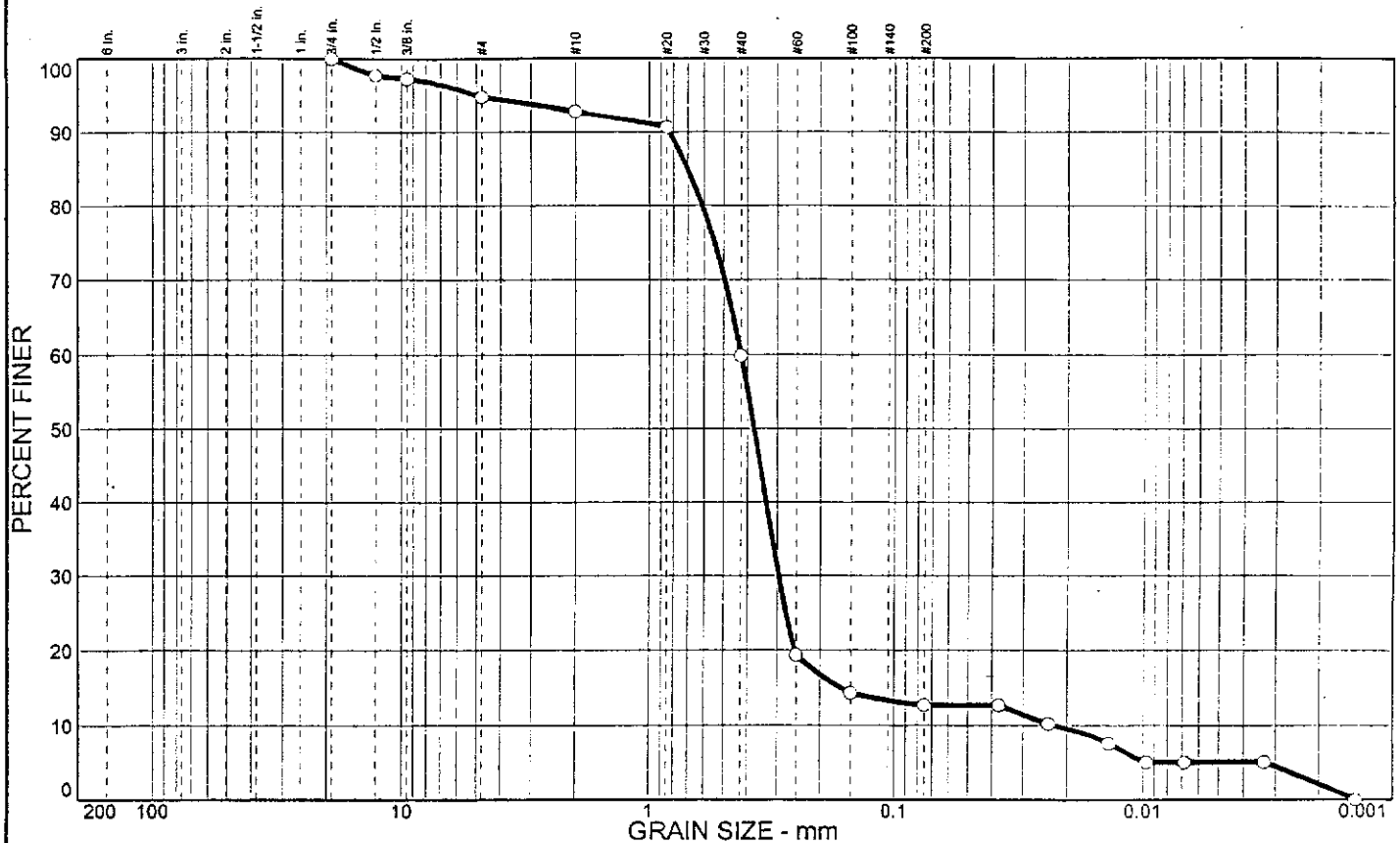
D₈₅ = 0.87 D₆₀ = 0.56 D₅₀ = 0.48

D₃₀ = 0.34 D₁₅ = 0.14 D₁₀ = 0.04

C_c = 5.0441 C_u = 13.4319


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	5.2	82.1	7.6	5.1	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.75	100.0		
.5	97.8		
.375	97.3		
GRAIN SIZE			
D ₆₀	0.426		
D ₃₀	0.296		
D ₁₀	0.0226		
COEFFICIENTS			
C _c	9.10		
C _u	18.82		

SIEVE	PERCENT FINER		
number size	○		
#4	94.8		
#10	92.8		
#20	90.7		
#40	59.9		
#60	19.4		
#100	14.3		
#200	12.7		

SOIL DESCRIPTION
 ○ SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-160-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-160-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 25.92
Tare = 0.00
Dry sample weight = 25.92
Sample split on number 10 sieve
Split sample data:
Sample and tare = 18.26 Tare = .00 Sample weight = 18.26
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	0.56	97.8
.375 inch	0.71	97.3
# 4	1.36	94.8
# 10	1.87	92.8
# 20	0.41	90.7
# 40	6.48	59.9
# 60	14.44	19.4
# 100	15.45	14.3
# 200	15.76	12.7

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 92.8
Weight of hydrometer sample: 18.26
Calculated biased weight= 19.68
Table of composite correction values:
Temp, deg C: 20.5 17.8
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	10.5	2.5	0.0138	10.5	14.6	0.0373	12.7
5.00	18.9	10.0	2.0	0.0138	10.0	14.7	0.0237	10.2
15.00	18.9	9.5	1.5	0.0138	9.5	14.7	0.0137	7.6
30.00	19.1	9.0	1.0	0.0138	9.0	14.8	0.0097	5.1
60.00	19.3	9.0	1.0	0.0138	9.0	14.8	0.0068	5.1
250.00	20.2	9.0	1.0	0.0136	9.0	14.8	0.0033	5.1
1440.00	18.4	8.0	0.0	0.0139	8.0	15.0	0.0014	0.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 5.2 (% coarse = % fine = 5.2)

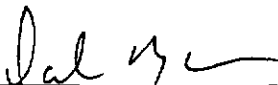
% SAND = 82.1 (% coarse = 2.0 % medium = 32.9 % fine = 47.2)

% SILT = 7.6 % CLAY = 5.1 (% CLAY COLLOIDS = 0.0)

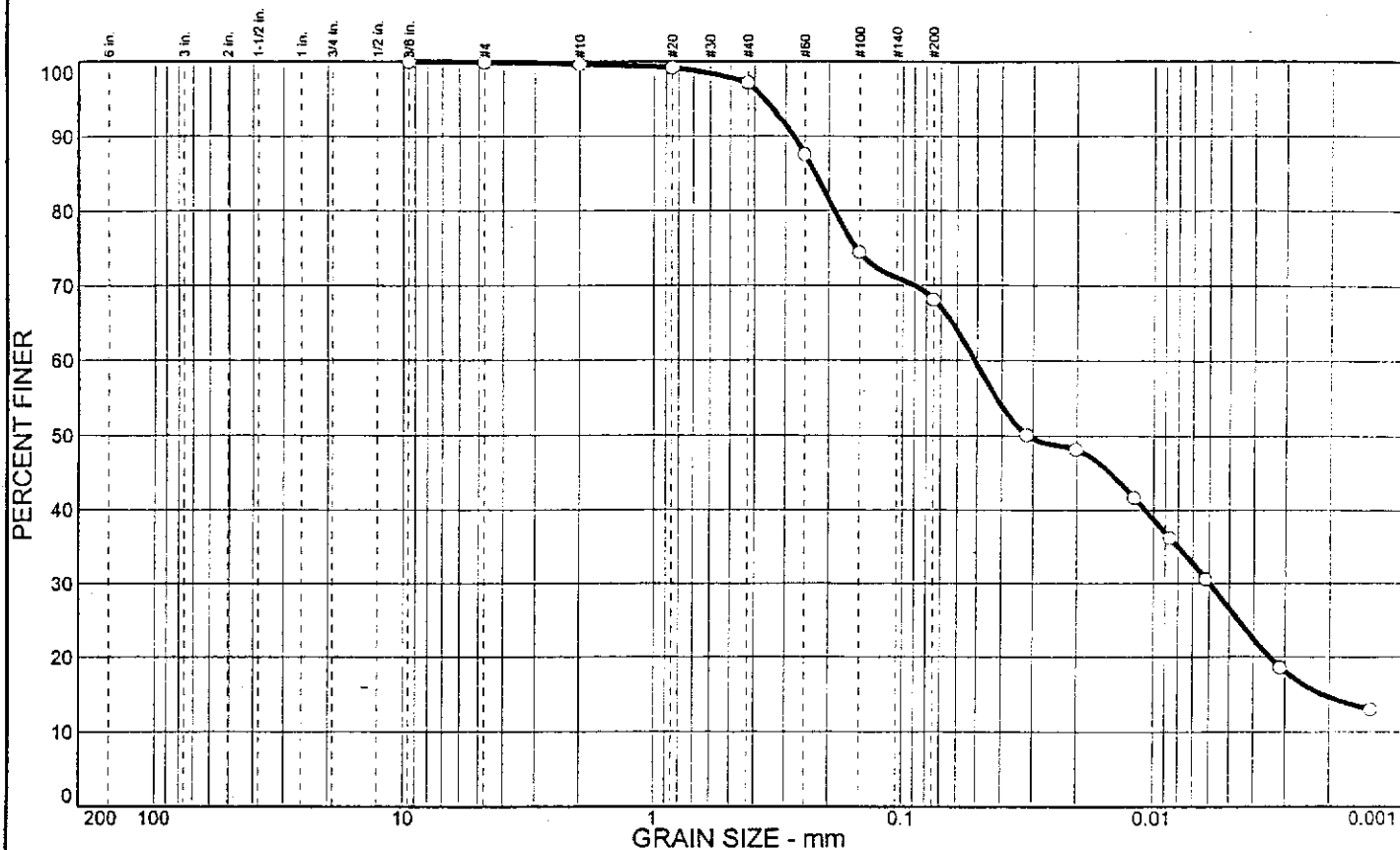
D₈₅ = 0.71 D₆₀ = 0.43 D₅₀ = 0.38

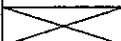
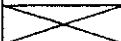
D₃₀ = 0.30 D₁₅ = 0.17 D₁₀ = 0.02

C_c = 9.0989 C_u = 18.8248


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report

[illegible]

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
	GRAIN SIZE		
D ₆₀	0.0513		
D ₃₀	0.0060		
D ₁₀			
	COEFFICIENTS		
C _c			
C _u			

SIEVE number size	PERCENT FINER	
	C	
#4	99.9	
#10	99.6	
#20	99.2	
#40	97.2	
#60	87.6	
#100	74.4	
#200	68.1	

○ FINE SANDY SILT

1. *Journal of the American Medical Association*, 1997; 277: 1033-1037.

○

1

○ Source:

Sample No.: C-161-SED-1

Elev./Depth: 0-3.5"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-161-SED-1

Elev. or Depth: 0-3.5"

Sample Length (in./cm.):

Location:

Description: FINE SANDY SILT

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 54.47
Tare = 0.00
Dry sample weight = 54.47
Sample split on number 10 sieve
Split sample data:
Sample and tare = 53.70 Tare = .00 Sample weight = 53.70
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.03	99.9
# 10	0.22	99.6
# 20	0.23	99.2
# 40	1.28	97.2
# 60	6.45	87.6
# 100	13.58	74.4
# 200	16.96	68.1

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99.6
Weight of hydrometer sample: 53.70
Calculated biased weight= 53.92
Table of composite correction values:
Temp, deg C: 20.0 18.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.0	35.0	27.0	0.0138	35.0	10.6	0.0317	50.1
5.00	19.1	34.0	26.0	0.0138	34.0	10.7	0.0202	48.2
15.00	19.2	30.5	22.5	0.0138	30.5	11.3	0.0120	41.7
30.00	19.2	27.5	19.5	0.0138	27.5	11.8	0.0086	36.2
60.00	19.5	24.5	16.5	0.0137	24.5	12.3	0.0062	30.6
250.00	20.4	18.0	10.0	0.0136	18.0	13.3	0.0031	18.6
1440.00	18.8	15.0	7.0	0.0139	15.0	13.8	0.0014	13.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 0.1 (% coarse = % fine = 0.1)

% SAND = 31.8 (% coarse = 0.3 % medium = 2.4 % fine = 29.1)

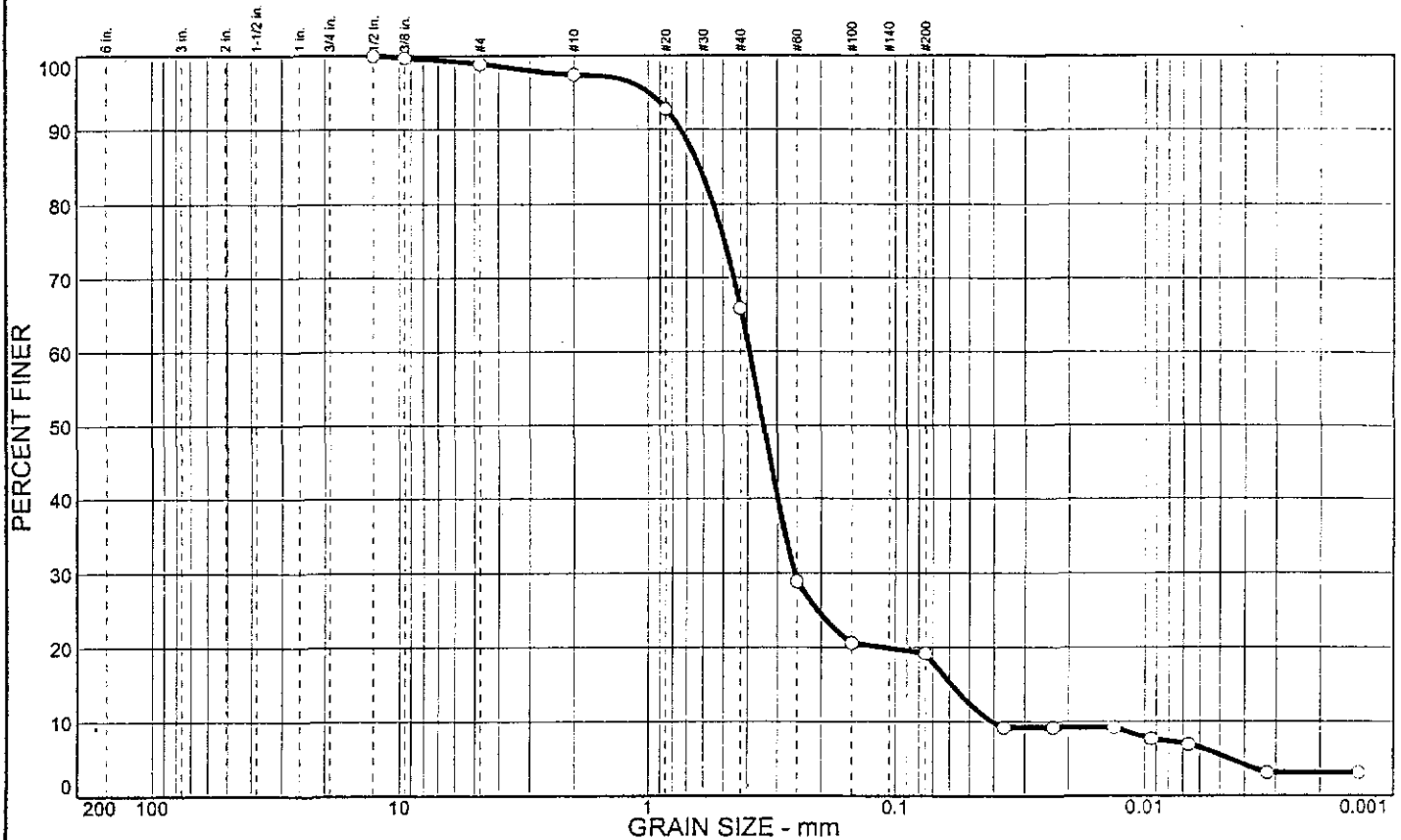
% SILT = 41.5 % CLAY = 26.6

D₈₅ = 0.23 D₆₀ = 0.05 D₅₀ = 0.03

D₃₀ = 0.01 D₁₅ = 0.00


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
	1.1	79.7	13.7	5.5	---	---	---	---

SIEVE	PERCENT FINER		
Inches size	○		
5	100.0		
.375	99.7		
GRAIN SIZE			
D ₆₀	0.391		
D ₃₀	0.256		
D ₁₀	0.0407		
COEFFICIENTS			
C _c	4.11		
C _u	9.62		

SIEVE	PERCENT FINER		
number size	○		
#4	98.9		
#10	97.4		
#20	92.8		
#40	65.9		
#60	28.9		
#100	20.6		
#200	19.2		

SOIL DESCRIPTION
 ○ SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-161-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-161-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 66.36
Tare = 0.00
Dry sample weight = 66.36
Sample split on number 10 sieve
Split sample data:
Sample and tare = 63.60 Tare = .00 Sample weight = 63.60
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.5 inch	0.00	100.0
.375 inch	0.17	99.7
# 4	0.74	98.9
# 10	1.73	97.4
# 20	2.98	92.8
# 40	20.59	65.9
# 60	44.70	28.9
# 100	50.18	20.6
# 200	51.07	19.2

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 97.4
Weight of hydrometer sample: 63.60
Calculated biased weight= 65.30
Table of composite correction values:
Temp, deg C: 22.0 17.8
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.5	14.0	6.0	0.0137	14.0	14.0	0.0363	9.2
5.00	19.4	14.0	6.0	0.0137	14.0	14.0	0.0230	9.2
15.00	19.7	14.0	6.0	0.0137	14.0	14.0	0.0132	9.2
30.00	19.9	13.0	5.0	0.0137	13.0	14.2	0.0094	7.7
60.00	20.0	12.5	4.5	0.0136	12.5	14.2	0.0066	6.9
250.00	21.5	10.0	2.0	0.0134	10.0	14.7	0.0032	3.1
1440.00	19.2	10.0	2.0	0.0138	10.0	14.7	0.0014	3.1

Fractional Components

Gravel/Sand based on #4

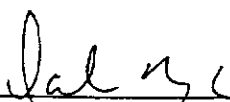
Sand/Fines based on #200

% COBBLES = % GRAVEL = 1.1 (% coarse = % fine = 1.1)
 % SAND = 79.7 (% coarse = 1.5 % medium = 31.5 % fine = 46.7)
 % SILT = 13.7 % CLAY = 5.5

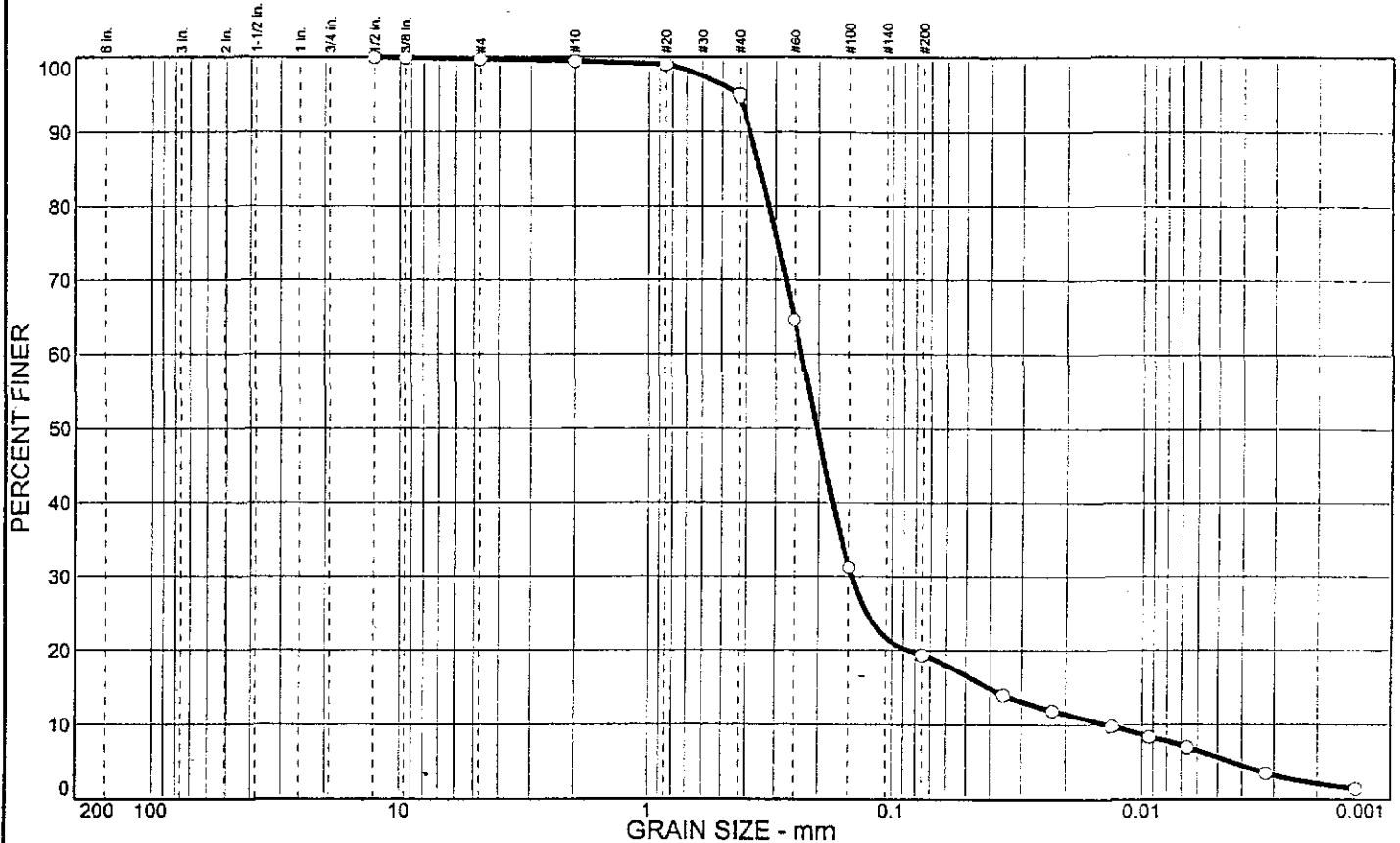
D₈₅ = 0.62 D₆₀ = 0.39 D₅₀ = 0.34

D₃₀ = 0.26 D₁₅ = 0.06 D₁₀ = 0.04

C_c = 4.1085 C_u = 9.6168


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	0.3	80.3	13.8	5.6	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
.5	100.0		
.375	99.9		
GRAIN SIZE			
D ₆₀	0.234		
D ₃₀	0.146		
D ₁₀	0.0138		
COEFFICIENTS			
C _c	6.58		
C _u	16.94		

SIEVE	PERCENT FINER		
number size	○		
#4	99.7		
#10	99.4		
#20	99.0		
#40	95.0		
#60	64.6		
#100	31.3		
#200	19.4		

SOIL DESCRIPTION
○ SILTY FINE SAND

REMARKS:
○

○ Source:

Sample No.: C-157-SED-1

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-1~912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-157-SED-1

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY FINE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Dry sample and tare= Initial
71.91

Tare = 0.00

Dry sample weight = 71.91

Sample split on number 10 sieve

Split sample data:

Sample and tare = 70.97 Tare = .00 Sample weight = 70.97

Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.5 inch	0.00	100.0
.375 inch	0.11	99.9
# 4	0.24	99.7
# 10	0.40	99.4
# 20	0.27	99.0
# 40	3.16	95.0
# 60	24.86	64.6
# 100	48.65	31.3
# 200	57.10	19.4

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 99.4

Weight of hydrometer sample: 70.97

Calculated biased weight= 71.40

Table of composite correction values:

Temp, deg C: 22.0 19.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.7	18.0	10.0	0.0137	18.0	13.3	0.0354	14.0
5.00	19.8	16.5	8.5	0.0137	16.5	13.6	0.0226	11.9
15.00	19.8	15.0	7.0	0.0137	15.0	13.8	0.0131	9.8
30.00	20.0	14.0	6.0	0.0136	14.0	14.0	0.0093	8.4
60.00	20.3	13.0	5.0	0.0136	13.0	14.2	0.0066	7.0
250.00	21.8	10.5	2.5	0.0133	10.5	14.6	0.0032	3.5
1440.00	19.5	9.0	1.0	0.0137	9.0	14.8	0.0014	1.4

Fractional Components

Gravel/Sand based on #4

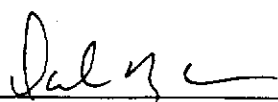
Sand/Fines based on #200

% COBBLES = % GRAVEL = 0.3 (% coarse = % fine = 0.3)
 % SAND = 80.3 (% coarse = 0.3 % medium = 4.4 % fine = 75.6)
 % SILT = 13.8 % CLAY = 5.6

D₈₅ = 0.35 D₆₀ = 0.23 D₅₀ = 0.20

D₃₀ = 0.15 D₁₅ = 0.04 D₁₀ = 0.01

C_c = 6.5752 C_u = 16.9396


 MATERIALS ENGINEERING LABORATORY

PERCENT FINER

GRAIN SIZE - mm

Grain Size (mm)	Percent Finer (%)
200	100
100	100
60	100
40	100
30	100
20	100
10	100
7.5	100
60	83
100	58
200	45
425	32
600	30
750	28
1000	22
1500	19
2500	10
5000	8

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
	GRAIN SIZE		
D ₆₀	0.156		
D ₃₀	0.0231		
D ₁₀	0.0034		
	COEFFICIENTS		
C _C	1.02		
C _u	46.43		

SIEVE		PERCENT FINER	
number size	○		
#4	100.0		
#10	100.0		
#20	99.9		
#40	98.4		
#60	82.3		
#100	58.4		
#200	45.1		

C SILTY FINE SAND

REMARKS:

Elev./Depth: 0-2"

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-162-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY FINE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 31.73
Tare = 0.00
Dry sample weight = 31.73
Sample split on number 4 sieve
Split sample data:
Sample and tare = 31.73 Tare = .00 Sample weight = 31.73
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.00	100.0
# 20	0.02	99.9
# 40	0.50	98.4
# 60	5.61	82.3
# 100	13.19	58.4
# 200	17.43	45.1

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100.0
Weight of hydrometer sample: 31.73
Calculated biased weight= 31.73
Table of composite correction values:
Temp, deg C: 22.0 19.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.9	18.0	10.0	0.0137	18.0	13.3	0.0353	31.5
5.00	19.8	17.5	9.5	0.0137	17.5	13.4	0.0224	29.9
15.00	20.0	17.0	9.0	0.0136	17.0	13.5	0.0129	28.4
30.00	20.2	15.0	7.0	0.0136	15.0	13.8	0.0092	22.1
60.00	20.4	14.0	6.0	0.0136	14.0	14.0	0.0066	18.9
250.00	21.9	11.0	3.0	0.0133	11.0	14.5	0.0032	9.5
1440.00	19.5	10.5	2.5	0.0137	10.5	14.6	0.0014	7.9

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

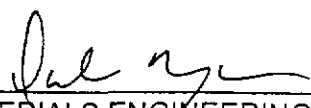
% SAND = 54.9 (% coarse = 0.0 % medium = 1.6 % fine = 53.3)

% SILT = 29.6 % CLAY = 15.5

D₈₅= 0.27 D₆₀= 0.16 D₅₀= 0.11

D₃₀= 0.02 D₁₅= 0.00 D₁₀= 0.00

C_c= 1.0165 C_u= 46.4333


MATERIALS ENGINEERING LABORATORY

PERCENT FINER

GRAIN SIZE - mm

Grain Size (mm)	Percent Finer (%)
6.0	100
3.0	100
2.0	100
1.5	100
1.0	100
0.75	100
0.6	100
0.425	100
0.3	100
0.25	100
0.2	100
0.15	100
0.106	100
0.075	100
0.06	100
0.0425	100
0.03	100
0.025	100
0.02	100
0.015	100
0.0106	100
0.0075	100
0.006	100
0.00425	100
0.003	100
0.0025	100
0.002	100
0.0015	100
0.00106	100
0.00075	100
0.0006	100
0.000425	100
0.0003	100
0.00025	100
0.0002	100
0.00015	100
0.000106	100
0.000075	100
0.00006	100
0.0000425	100
0.00003	100
0.000025	100
0.00002	100
0.000015	100
0.0000106	100
0.0000075	100
0.000006	100
0.00000425	100
0.000003	100
0.0000025	100
0.000002	100
0.0000015	100
0.00000106	100
0.00000075	100
0.0000006	100
0.000000425	100
0.0000003	100
0.00000025	100
0.0000002	100
0.00000015	100
0.000000106	100
0.000000075	100
0.00000006	100
0.0000000425	100
0.00000003	100
0.000000025	100
0.00000002	100
0.000000015	100
0.0000000106	100
0.0000000075	100
0.000000006	100
0.00000000425	100
0.000000003	100
0.0000000025	100
0.000000002	100
0.0000000015	100
0.00000000106	100
0.00000000075	100
0.0000000006	100
0.000000000425	100
0.0000000003	100
0.00000000025	100
0.0000000002	100
0.00000000015	100
0.000000000106	100
0.000000000075	100
0.00000000006	100
0.0000000000425	100
0.00000000003	100
0.000000000025	100
0.00000000002	100
0.000000000015	100
0.0000000000106	100
0.0000000000075	100
0.000000000006	100
0.00000000000425	100
0.000000000003	100
0.0000000000025	100
0.000000000002	100
0.0000000000015	100
0.00000000000106	100
0.00000000000075	100
0.0000000000006	100
0.000000000000425	100
0.0000000000003	100
0.00000000000025	100
0.0000000000002	100
0.00000000000015	100
0.000000000000106	100
0.000000000000075	100
0.00000000000006	100
0.0000000000000425	100
0.00000000000003	100
0.000000000000025	100
0.00000000000002	100
0.000000000000015	100
0.0000000000000106	100
0.0000000000000075	100
0.000000000000006	100
0.00000000000000425	100
0.0000000000000	

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
	GRAIN SIZE		
D ₆₀	0.0332		
D ₃₀	0.0049		
D ₁₀			
	COEFFICIENTS		
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	99.9		
#10	99.4		
#20	99.4		
#40	98.9		
#60	97.7		
#100	90.5		
#200	79.7		

SOIL DESCRIPTION	
○ SILT, WITH SAND	-

REMARKS:	
○	

Elev./Depth: 0-2"

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Test Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-164-SED-1

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, WITH SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 63.70
Tare = 0.00
Dry sample weight = 63.70
Sample split on number 10 sieve
Split sample data:
Sample and tare = 63.16 Tare = .00 Sample weight = 63.16
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.375 inch 0.00 100.0
4 0.05 99.9
10 0.37 99.4
20 0.00 99.4
40 0.30 98.9
60 1.08 97.7
100 5.66 90.5
200 12.51 79.7

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99.4
Weight of hydrometer sample: 63.16
Calculated biased weight= 63.54
Table of composite correction values:
Temp, deg C: 23.0 19.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.8	44.0	36.0	0.0137	44.0	9.1	0.0291	56.7
5.00	19.9	39.0	31.0	0.0137	39.0	9.9	0.0192	48.8
15.00	20.0	37.0	29.0	0.0136	37.0	10.2	0.0113	45.6
30.00	20.3	32.5	24.5	0.0136	32.5	11.0	0.0082	38.6
60.00	20.6	29.0	21.0	0.0135	29.0	11.5	0.0059	33.1
250.00	22.4	22.0	14.0	0.0132	22.0	12.7	0.0030	22.0
1440.00	19.5	19.0	11.0	0.0137	19.0	13.2	0.0013	17.3

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

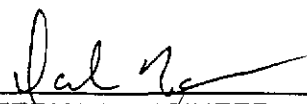
% COBBLES = % GRAVEL = 0.1 (% coarse = % fine = 0.1)

% SAND = 20.2 (% coarse = 0.5 % medium = 0.5 % fine = 19.2)

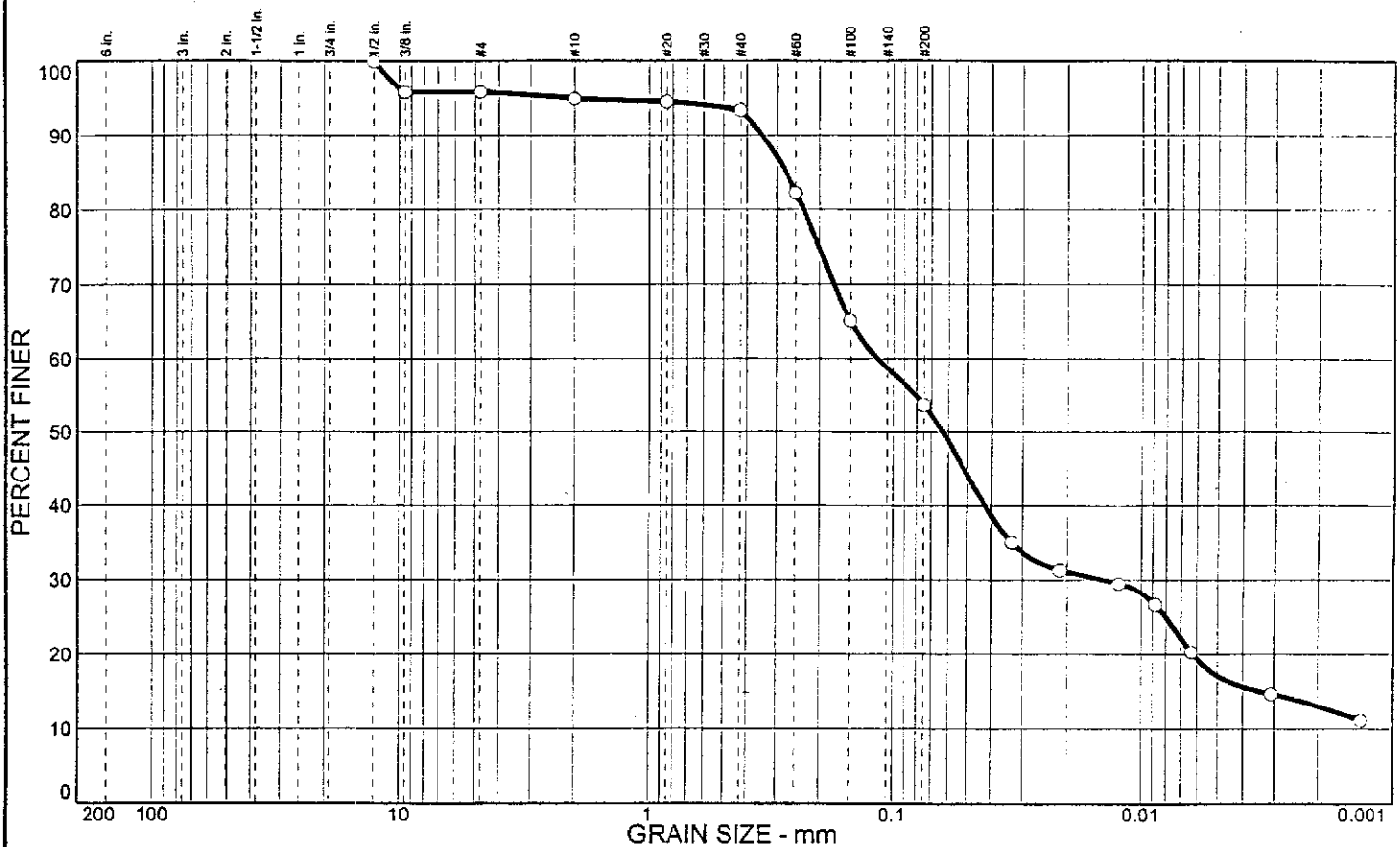
% SILT = 49.5 % CLAY = 30.2

D85= 0.10 D60= 0.03 D50= 0.02

D30= 0.00


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	4.2	42.1	36.6	17.1	---	---	---	---

SIEVE	PERCENT FINER		
inches size	○		
5	100.0		
.375	95.8		
GRAIN SIZE			
D ₆₀	0.117		
D ₃₀	0.0142		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE	PERCENT FINER		
number size	○		
#4	95.8		
#10	94.9		
#20	94.5		
#40	93.4		
#60	82.3		
#100	65.1		
#200	53.7		

SOIL DESCRIPTION
 ○ FINE SANDY SILT, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-164-SED-4

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-164-SED-4

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: FINE SANDY SILT, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 51.49
Tare = 0.00
Dry sample weight = 51.49
Sample split on number 10 sieve
Split sample data:

Sample and tare = 48.56 Tare = .00 Sample weight = 48.56

Cumulative weight retained tare= .00

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.5 inch	0.00	100.0
.375 inch	2.16	95.8
# 4	2.16	95.8
# 10	2.61	94.9
# 20	0.23	94.5
# 40	0.78	93.4
# 60	6.46	82.3
# 100	15.25	65.1
# 200	21.11	53.7

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 94.9

Weight of hydrometer sample: 51.49

Calculated biased weight= 54.26

Table of composite correction values:

Temp, deg C: 23.0 19.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.0	27.0	19.0	0.0136	27.0	11.9	0.0332	35.0
5.00	20.1	25.0	17.0	0.0136	25.0	12.2	0.0213	31.3
15.00	20.1	24.0	16.0	0.0136	24.0	12.4	0.0124	29.5
30.00	20.3	22.5	14.5	0.0136	22.5	12.6	0.0088	26.7
60.00	20.7	19.0	11.0	0.0135	19.0	13.2	0.0063	20.3
250.00	22.9	16.0	8.0	0.0132	16.0	13.7	0.0031	14.7
1440.00	19.7	14.0	6.0	0.0137	14.0	14.0	0.0014	11.1

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

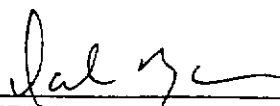
% COBBLES = % GRAVEL = 4.2 (% coarse = % fine = 4.2)

% SAND = 42.1 (% coarse = 0.9 % medium = 1.5 % fine = 39.7)

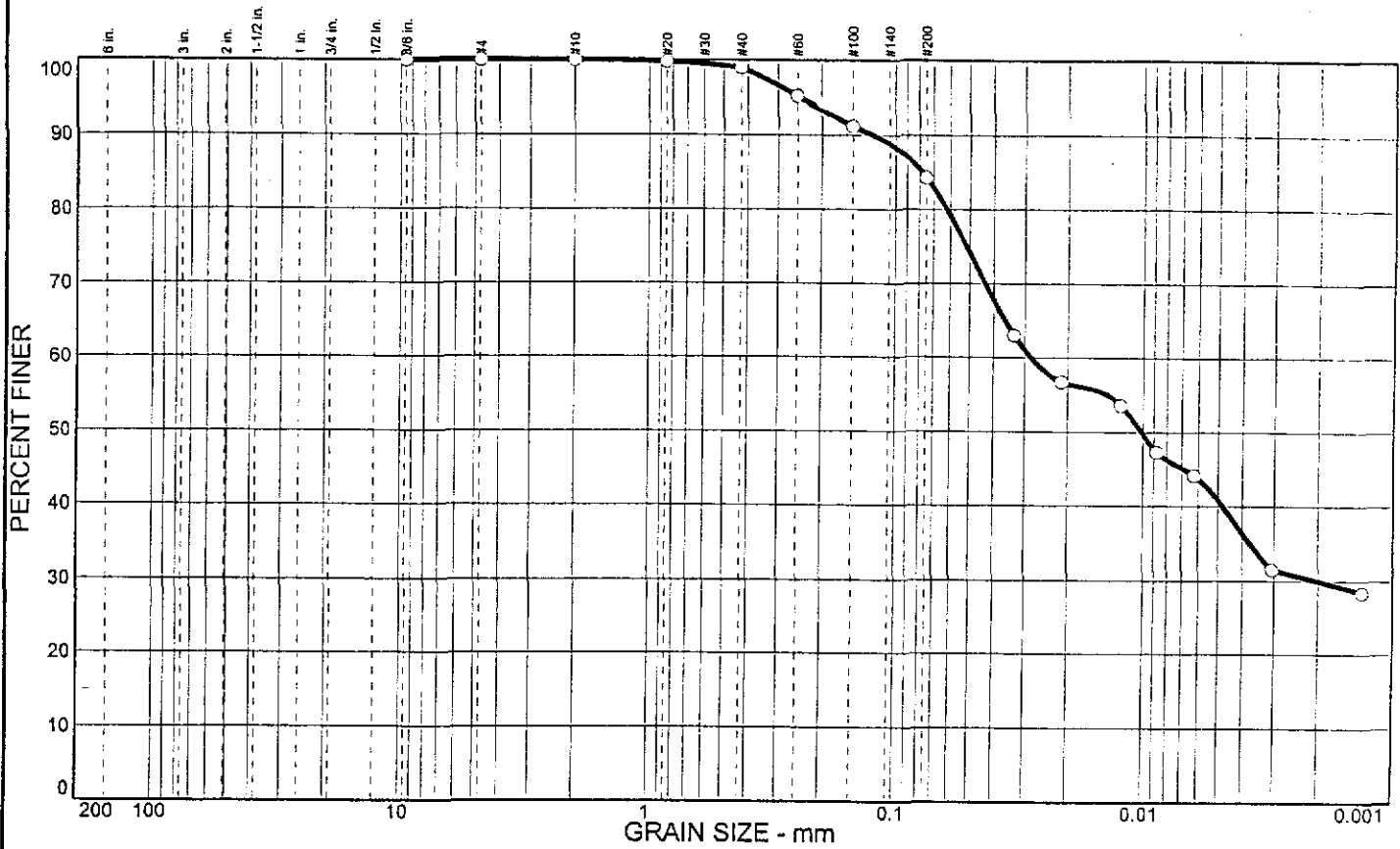
% SILT = 36.6 % CLAY = 17.1

D₈₅ = 0.28 D₆₀ = 0.12 D₅₀ = 0.06

D₃₀ = 0.01 D₁₅ = 0.00


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
		15.7	43.5	40.8	---	---	---	---

SIEVE inches size	PERCENT FINER		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.0283		
D ₃₀	0.0020		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
#4	100.0		
#10	100.0		
#20	99.8		
#40	99.0		
#60	95.2		
#100	91.2		
#200	84.3		

SOIL DESCRIPTION

○ SILT, WITH SAND

REMARKS:

○

○ Source:

Sample No.: C-166-SED-6

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-166-SED-6

Elev. or Depth: 0-2"

Location:

Description: SILT, WITH SAND

Liquid Limit: - - -

USCS Classification: - - -

Testing Remarks:

Sample Length (in./cm.):

Plastic Limit: - - -

AASHTO Classification: - - -

Mechanical Analysis Data

Initial

Dry sample and tare= 31.73

Tare = 0.00

Dry sample weight = 31.73

Sample split on number 10 sieve

Split sample data:

Sample and tare = 31.73 Tare = .00 Sample weight = 31.73

Cumulative weight retained tare= .00

Weight for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.00	100.0
# 20	0.05	99.8
# 40	0.33	99.0
# 60	1.54	95.2
# 100	2.78	91.2
# 200	4.97	84.3

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 100.0

Weight of hydrometer sample: 31.73

Calculated biased weight= 31.73

Table of composite correction values:

Temp, deg C: 23.0 19.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.9	28.0	20.0	0.0137	28.0	11.7	0.0330	63.0
5.00	20.0	26.0	18.0	0.0136	26.0	12.0	0.0212	56.7
15.00	20.1	25.0	17.0	0.0136	25.0	12.2	0.0123	53.6
30.00	20.4	23.0	15.0	0.0136	23.0	12.5	0.0088	47.3
60.00	20.6	22.0	14.0	0.0135	22.0	12.7	0.0062	44.1
250.00	22.8	18.0	10.0	0.0132	18.0	13.3	0.0030	31.5
1440.00	19.5	17.0	9.0	0.0137	17.0	13.5	0.0013	28.4

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

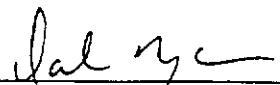
% COBBLES = % GRAVEL =

% SAND = 15.7 (% coarse = 0.0 % medium = 1.0 % fine = 14.7)

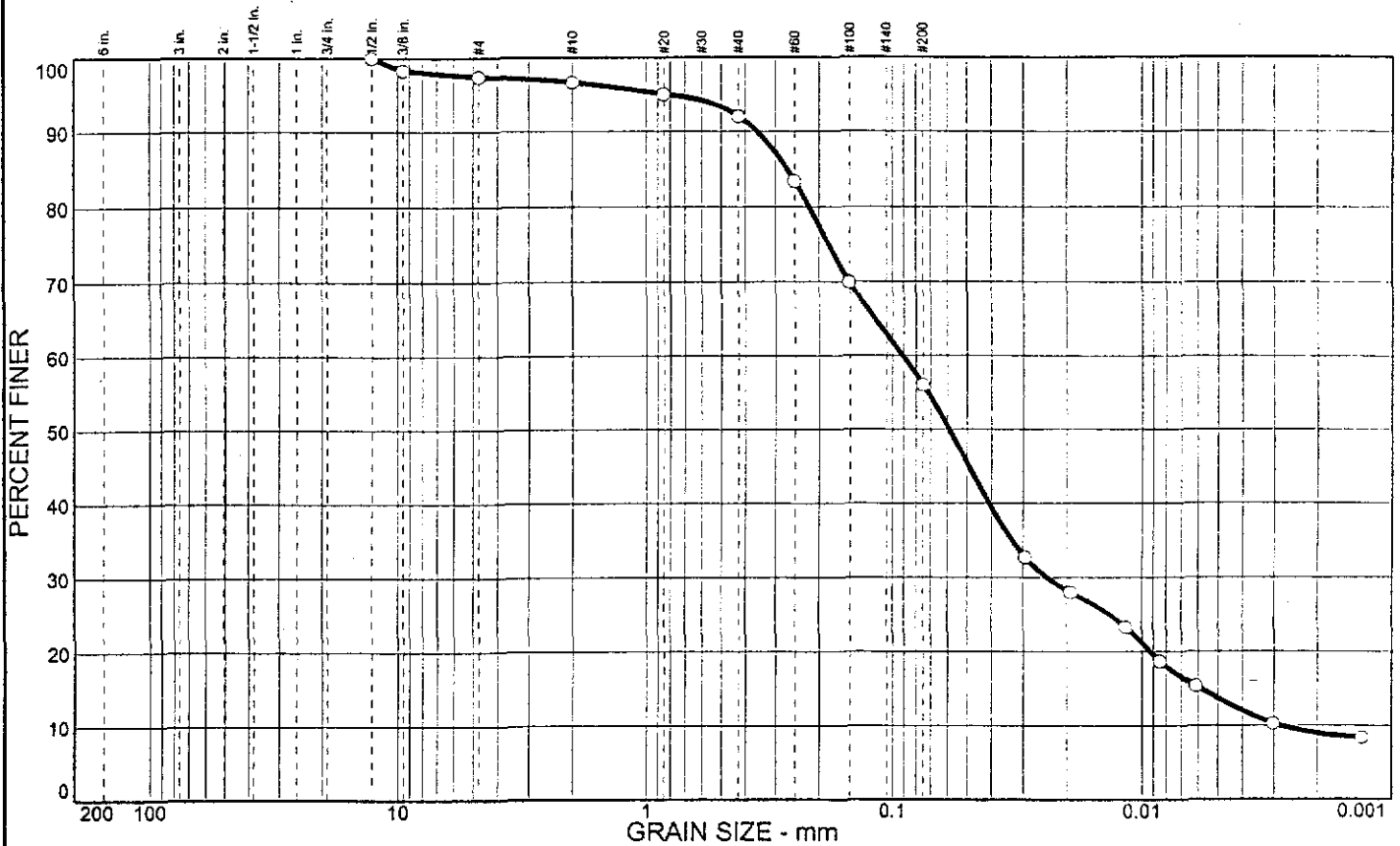
% SILT = 43.5 % CLAY = 40.8

D₈₅ = 0.08 D₆₀ = 0.03 D₅₀ = 0.01

D₃₀ = 0.00


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	2.6	41.4	42.3	13.7	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
5	100.0		
3/4	98.3		
X GRAIN SIZE			
D ₆₀	0.0911		
D ₃₀	0.0241		
D ₁₀	0.0028		
X COEFFICIENTS			
C _c	2.26		
C _u	32.27		

SIEVE number size	PERCENT FINER		
	○		
#4	97.4		
#10	96.6		
#20	95.0		
#40	92.0		
#60	83.4		
#100	69.9		
#200	56.0		

SOIL DESCRIPTION
 ○ FINE SANDY SILT, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-168-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-168-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: FINE SANDY SILT, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 109.64
Tare = 0.00
Dry sample weight = 109.64
Sample split on number 10 sieve
Split sample data:
Sample and tare = 103.55 Tare = .00 Sample weight = 103.55
Cumulative weight retained tare= .00
Weight for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.5 inch 0.00 100.0
.375 inch 1.92 98.3
4 2.87 97.4
10 3.77 96.6
20 1.74 95.0
40 4.94 92.0
60 14.17 83.4
100 28.63 69.9
200 43.56 56.0

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 96.6
Weight of hydrometer sample: 103.55
Calculated biased weight= 107.19
Table of composite correction values:
Temp, deg C: 23.5 19.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.9	43.0	35.0	0.0137	43.0	9.2	0.0294	32.7
5.00	20.2	38.0	30.0	0.0136	38.0	10.1	0.0193	28.0
15.00	20.2	33.0	25.0	0.0136	33.0	10.9	0.0116	23.3
30.00	20.5	28.0	20.0	0.0136	28.0	11.7	0.0085	18.7
60.00	20.8	24.5	16.5	0.0135	24.5	12.3	0.0061	15.4
250.00	23.2	19.0	11.0	0.0131	19.0	13.2	0.0030	10.3
1440.00	19.9	17.0	9.0	0.0137	17.0	13.5	0.0013	8.4

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 2.6 (% coarse = % fine = 2.6)

% SAND = 41.4 (% coarse = 0.8 % medium = 4.6 % fine = 36.0)

% SILT = 42.3 % CLAY = 13.7

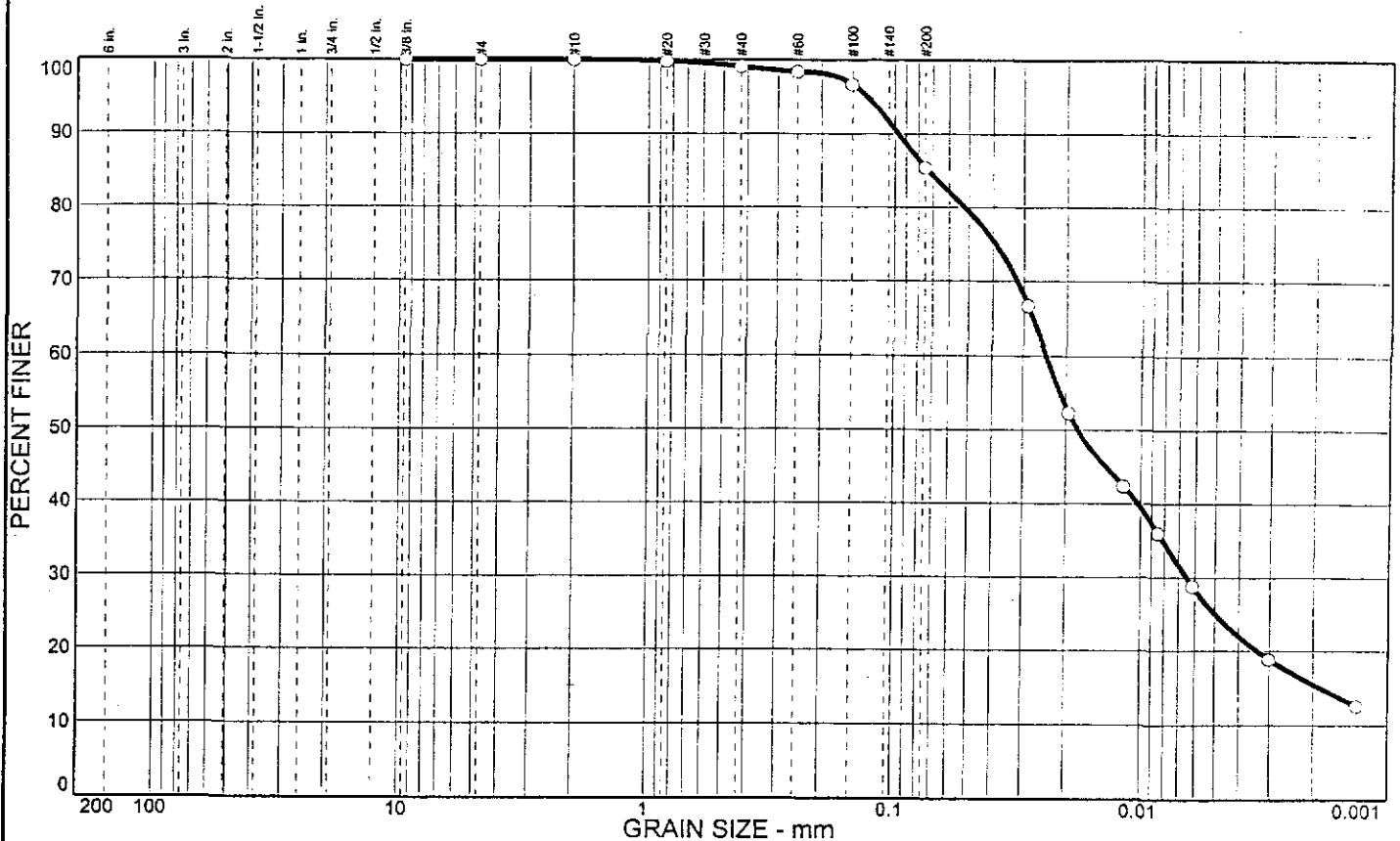
D₈₅ = 0.27 D₆₀ = 0.09 D₅₀ = 0.06

D₃₀ = 0.02 D₁₅ = 0.01 D₁₀ = 0.00

C_c = 2.2602 C_u = 32.2652

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MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		14.6	60.3	25.1	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D60	0.0241		
D30	0.0065		
D10			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	100.0		
#20	99.8		
#40	99.1		
#60	98.4		
#100	96.7		
#200	85.4		

SOIL DESCRIPTION
○ SILT, LITTLE SAND

REMARKS:
○

○ Source:

Sample No.: C-170-SED-1

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-170-SED-1

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, LITTLE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 55.71
Tare = 0.00
Dry sample weight = 55.71
Sample split on number 10 sieve
Split sample data:
Sample and tare = 55.49 Tare = .00 Sample weight = 55.49
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

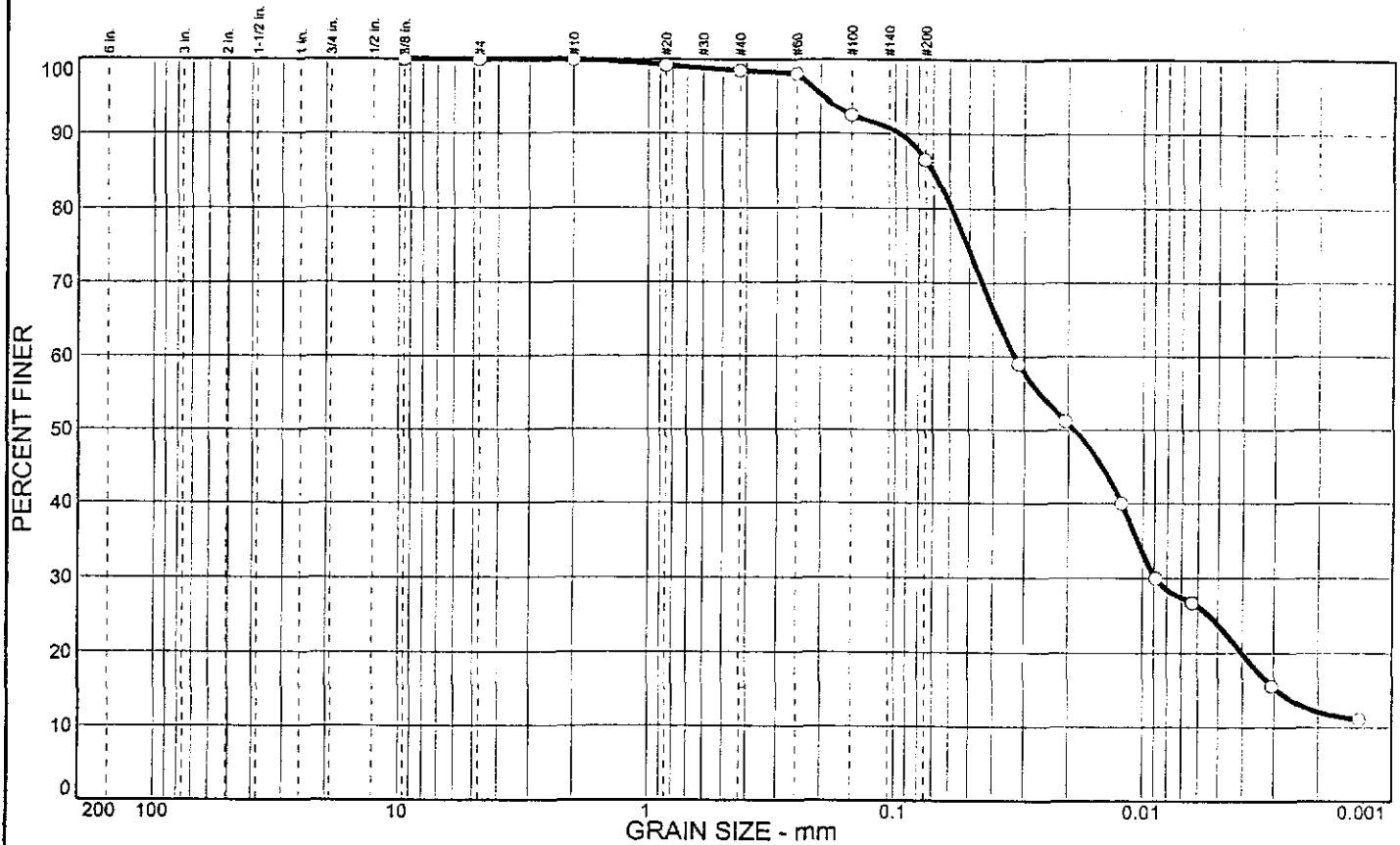
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.03	100.0
# 20	0.09	99.8
# 40	0.48	99.1
# 60	0.87	98.4
# 100	1.83	96.7
# 200	8.08	85.4

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100.0
Weight of hydrometer sample: 55.49
Calculated biased weight= 55.49
Table of composite correction values:
Temp, deg C: 23.5 19.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		13.5	62.7	23.8	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.0327		
D ₃₀	0.0089		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	99.9		
#20	99.2		
#40	98.5		
#60	98.1		
#100	92.5		
#200	86.5		

SOIL DESCRIPTION
○ SILT, LITTLE SAND

REMARKS:
○

○ Source:

Sample No.: C-170-SED-5

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-170-SED-5

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, LITTLE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	45.07	
Tare =	0.00	
Dry sample weight =	45.07	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 44.91 Tare = .00 Sample weight = 44.91		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.03	99.9
# 20	0.31	99.2
# 40	0.61	98.5
# 60	0.82	98.1
# 100	3.34	92.5
# 200	6.03	86.5

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 99.9

Weight of hydrometer sample: 44.91

Calculated biased weight= 44.95

Table of composite correction values:

Temp, deg C:	24.0	19.0
Comp. corr:	-8.0	-8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.9	34.5	26.5	0.0137	34.5	10.6	0.0315	59.0
5.00	19.9	31.0	23.0	0.0137	31.0	11.2	0.0205	51.2
15.00	19.9	26.0	18.0	0.0137	26.0	12.0	0.0122	40.0
30.00	20.3	21.5	13.5	0.0136	21.5	12.8	0.0089	30.0
60.00	20.5	20.0	12.0	0.0136	20.0	13.0	0.0063	26.7
250.00	23.8	15.0	7.0	0.0130	15.0	13.8	0.0031	15.6
1440.00	19.6	13.0	5.0	0.0137	13.0	14.2	0.0014	11.1

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 13.5 (% coarse = 0.1 % medium = 1.4 % fine = 12.0)

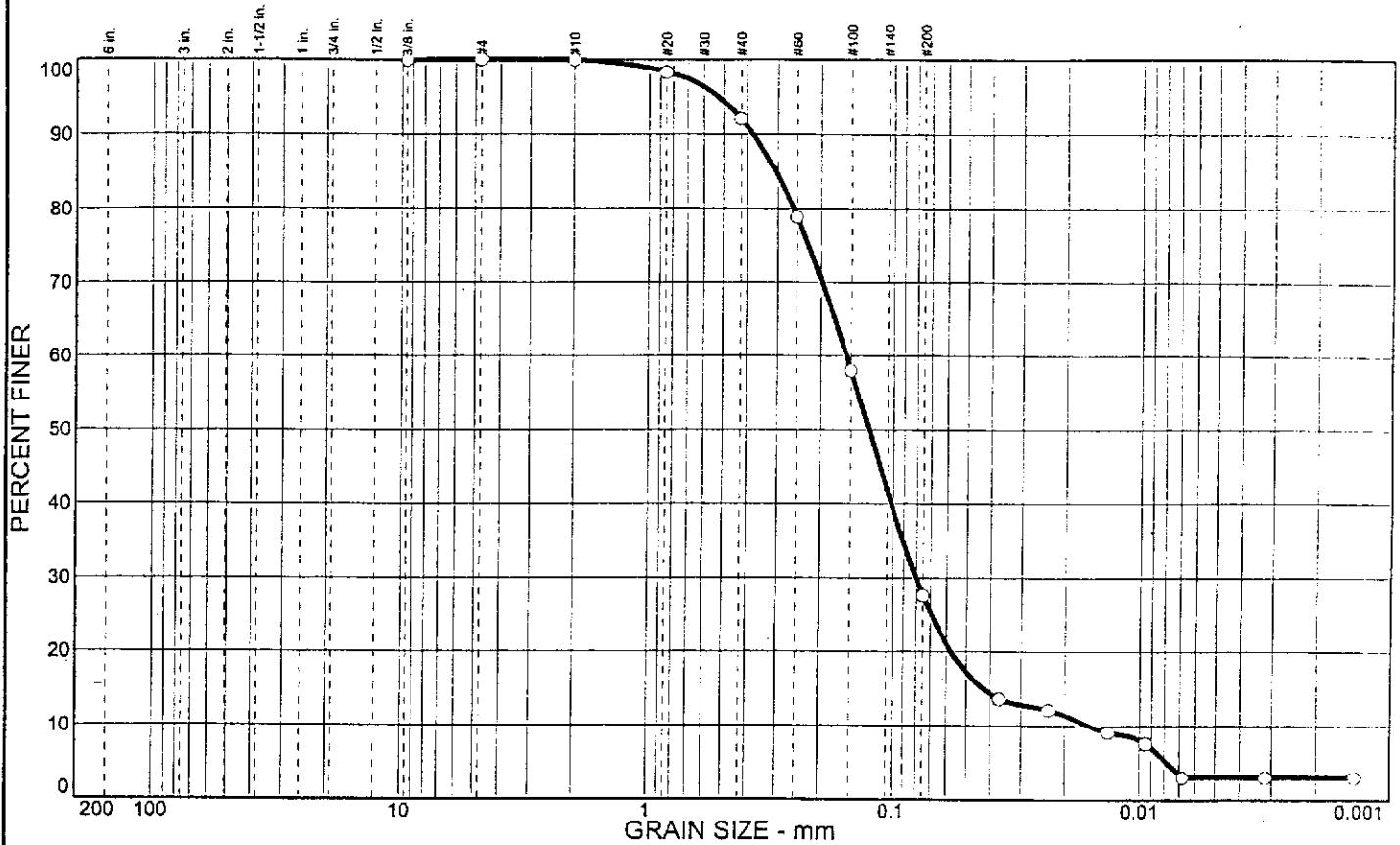
% SILT = 62.7 % CLAY = 23.8

D₈₅= 0.07 D₆₀= 0.03 D₅₀= 0.02

D₃₀= 0.01 D₁₅= 0.00


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
		72.4	24.6	3.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.157		
D ₃₀	0.0802		
D ₁₀	0.0161		
COEFFICIENTS			
C _c	2.55		
C _u	9.74		

SIEVE number size	PERCENT FINER		
#4	100.0		
#10	100.0		
#20	98.3		
#40	92.1		
#60	78.8		
#100	58.0		
#200	27.6		

SOIL DESCRIPTION

○ SILTY FINE SAND

REMARKS:

○

○ Source:

Sample No.: C-177-SED-2

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-177-SED-2

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY FINE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 33.02
Tare = 0.00
Dry sample weight = 33.02
Sample split on number 10 sieve
Split sample data:

Sample and tare = 33.00 Tare = .00 Sample weight = 33.00

Cumulative weight retained tare= .00

Weight for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.01	100.0
# 20	0.55	98.3
# 40	2.62	92.1
# 60	6.99	78.8
# 100	13.86	58.0
# 200	23.88	27.6

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 100.0

Weight of hydrometer sample: 33.00

Calculated biased weight= 33.00

Table of composite correction values:

Temp, deg C: 24.0 19.0

Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.8	12.5	4.5	0.0137	12.5	14.2	0.0365	13.6
5.00	19.8	12.0	4.0	0.0137	12.0	14.3	0.0232	12.1
15.00	20.0	11.0	3.0	0.0136	11.0	14.5	0.0134	9.1
30.00	20.1	10.5	2.5	0.0136	10.5	14.6	0.0095	7.6
60.00	20.4	9.0	1.0	0.0136	9.0	14.8	0.0067	3.0
250.00	23.9	9.0	1.0	0.0130	9.0	14.8	0.0032	3.0
1440.00	19.4	9.0	1.0	0.0137	9.0	14.8	0.0014	3.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES =

% GRAVEL =

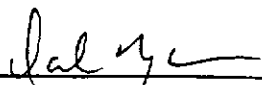
% SAND = 72.4 (% coarse = 0.0 % medium = 7.9 % fine = 64.5)

% SILT = 24.6 % CLAY = 3.0

D₈₅ = 0.31 D₆₀ = 0.16 D₅₀ = 0.13

D₃₀ = 0.08 D₁₅ = 0.04 D₁₀ = 0.02

C_c = 2.5483 C_u = 9.7376


MATERIALS ENGINEERING LABORATORY

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-173-SED-4

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, WITH SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 33.09
Tare = 0.00
Dry sample weight = 33.09
Sample split on number 10 sieve
Split sample data:
Sample and tare = 33.09 Tare = .00 Sample weight = 33.09
Cumulative weight retained tare= .00
Time for cumulative weight retained= .00
Sieve Cumul. Wt. Percent
retained finer
.375 inch 0.00 100.0
4 0.00 100.0
10 0.00 100.0
20 0.02 99.9
40 0.10 99.7
60 0.49 98.5
100 2.18 93.4
200 6.48 80.4

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100.0
Weight of hydrometer sample: 33.09
Calculated biased weight= 33.09
Table of composite correction values:
Temp, deg C: 24.0 19.0
Comp. corr: -8.0 -8.0
Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.6	24.5	16.5	0.0137	24.5	12.3	0.0340	49.9
5.00	19.6	22.0	14.0	0.0137	22.0	12.7	0.0218	42.3
15.00	19.8	17.5	9.5	0.0137	17.5	13.4	0.0129	28.7
30.00	19.9	16.0	8.0	0.0137	16.0	13.7	0.0092	24.2
60.00	20.1	13.5	5.5	0.0136	13.5	14.1	0.0066	16.6
250.00	23.7	11.0	3.0	0.0130	11.0	14.5	0.0031	9.1
1440.00	19.2	10.0	2.0	0.0138	10.0	14.7	0.0014	6.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

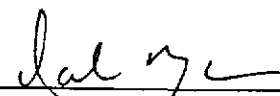
% SAND = 19.6 (% coarse = 0.0 % medium = 0.3 % fine = 19.3)

% SILT = 68.3 % CLAY = 12.1

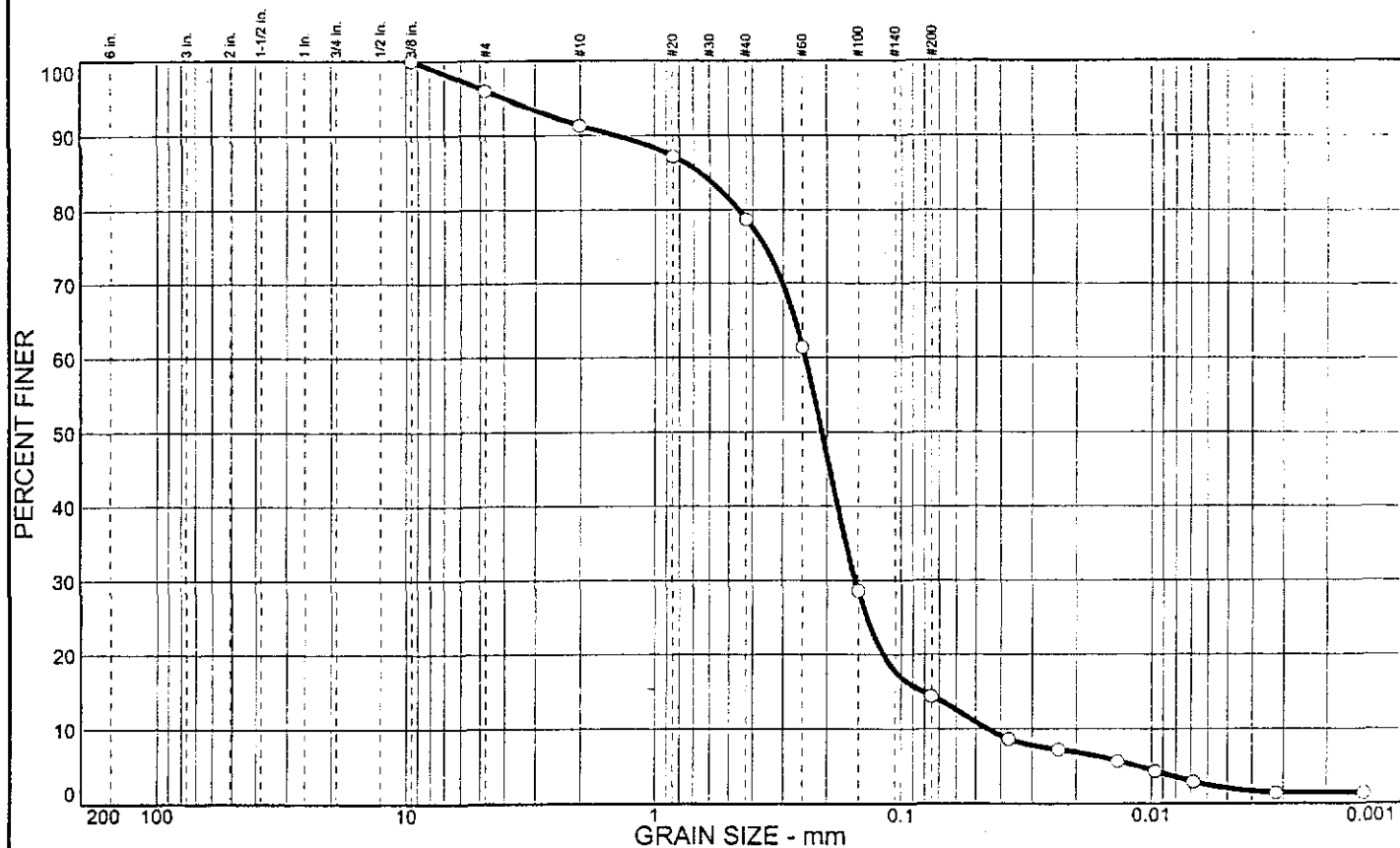
D₈₅ = 0.09 D₆₀ = 0.05 D₅₀ = 0.03

D₃₀ = 0.01 D₁₅ = 0.01 D₁₀ = 0.00

C_c = 1.0917 C_u = 11.9411


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	4.0	81.6	12.4	2.0	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.244		
D ₃₀	0.154		
D ₁₀	0.0453		
COEFFICIENTS			
C _c	2.15		
C _u	5.39		

SIEVE number size	PERCENT FINER		
	○		
#4	96.0		
#10	91.3		
#20	87.2		
#40	78.7		
#60	61.4		
#100	28.6		
#200	14.4		

SOIL DESCRIPTION
○ SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
○

○ Source:

Sample No.: C-175-SED-1

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-175-SED-1

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial

Dry sample and tare= 35.55
Tare = 0.00
Dry sample weight = 35.55
Sample split on number 10 sieve
Split sample data:
Sample and tare = 31.84 Tare = .00 Sample weight = 31.84
Cumulative weight retained tare= .00
Weight for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	1.44	96.0
# 10	3.08	91.3
# 20	1.44	87.2
# 40	4.39	78.7
# 60	10.43	61.4
# 100	21.87	28.6
# 200	26.81	14.4

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 91.3
Weight of hydrometer sample: 31.84
Calculated biased weight= 34.87
Table of composite correction values:
Temp, deg C: 24.0 18.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.2	11.0	3.0	0.0138	11.0	14.5	0.0371	8.6
5.00	19.2	10.5	2.5	0.0138	10.5	14.6	0.0235	7.2
15.00	19.3	10.0	2.0	0.0138	10.0	14.7	0.0136	5.7
30.00	19.3	9.5	1.5	0.0138	9.5	14.7	0.0096	4.3
60.00	19.5	9.0	1.0	0.0137	9.0	14.8	0.0068	2.9
250.00	23.4	8.5	0.5	0.0131	8.5	14.9	0.0032	1.4
1440.00	18.5	8.5	0.5	0.0139	8.5	14.9	0.0014	1.4

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 4.0 (% coarse = % fine = 4.0)

% SAND = 81.6 (% coarse = 4.7 % medium = 12.6 % fine = 64.3)

% SILT = 12.4 % CLAY = 2.0

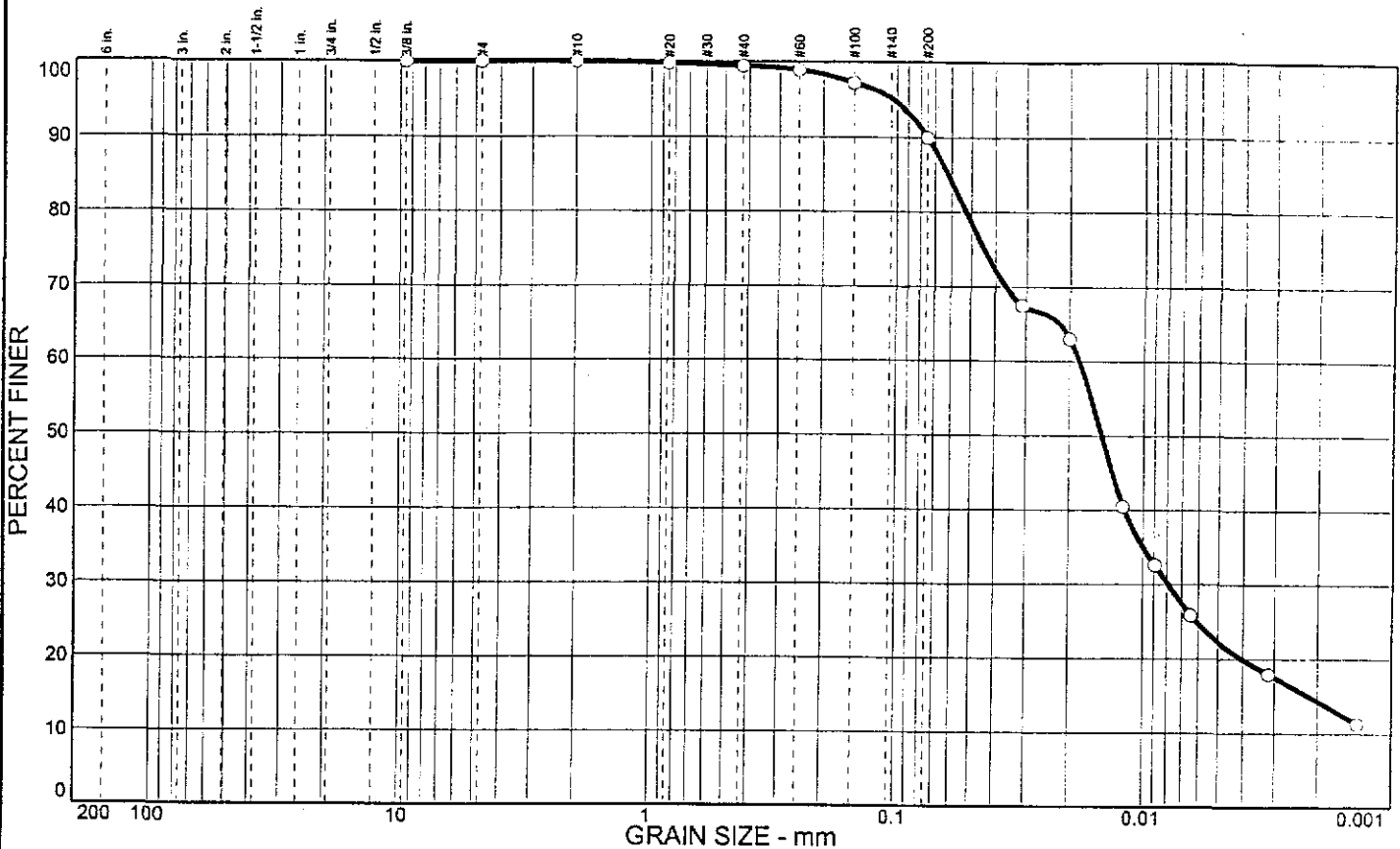
D₈₅ = 0.66 D₆₀ = 0.24 D₅₀ = 0.21

D₃₀ = 0.15 D₁₅ = 0.08 D₁₀ = 0.05

C_c = 2.1492 C_u = 5.3897


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
		10.0	67.8	22.2	---	---	---	---

SIEVE Inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.0182		
D ₃₀	0.0079		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	100.0		
#20	99.8		
#40	99.4		
#60	98.9		
#100	97.2		
#200	90.0		

SOIL DESCRIPTION
○ SILT, TRACE SAND

REMARKS:
○

○ Source:

Sample No.: C-176-SED-5

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-176-SED-5

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, TRACE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	44.46	
Tare =	0.00	
Dry sample weight =	44.46	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 44.46 Tare = .00 Sample weight = 44.46		
Cumulative weight retained tare= .00		
Weight for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.00	100.0
# 20	0.10	99.8
# 40	0.25	99.4
# 60	0.50	98.9
# 100	1.25	97.2
# 200	4.43	90.0

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 100.0

Weight of hydrometer sample: 44.46

Calculated biased weight= 44.46

Table of composite correction values:

Temp, deg C:	21.0	18.0
Comp. corr:	-8.0	-8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.1	38.0	30.0	0.0138	38.0	10.1	0.0310	67.5
5.00	19.1	36.0	28.0	0.0138	36.0	10.4	0.0199	63.0
15.00	21.0	26.0	18.0	0.0135	26.0	12.0	0.0121	40.5
30.00	19.1	22.5	14.5	0.0138	22.5	12.6	0.0089	32.6
60.00	19.3	19.5	11.5	0.0138	19.5	13.1	0.0064	25.9
250.00	20.5	16.0	8.0	0.0136	16.0	13.7	0.0032	18.0
1440.00	18.3	13.0	5.0	0.0139	13.0	14.2	0.0014	11.3

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 10.0 (% coarse = 0.0 % medium = 0.6 % fine = 9.4)

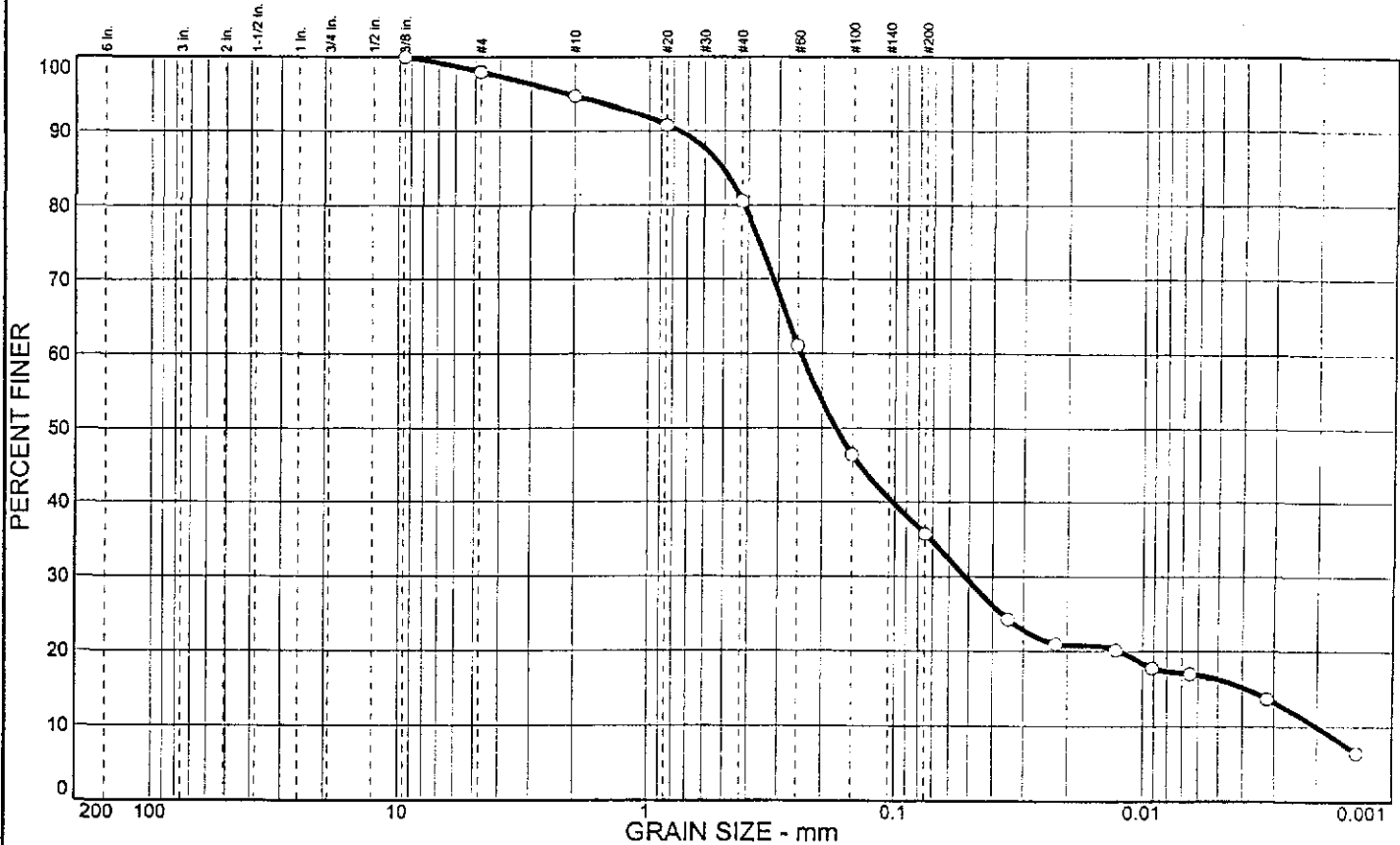
% SILT = 67.8 % CLAY = 22.2

D₈₅ = 0.06 D₆₀ = 0.02 D₅₀ = 0.01

D₃₀ = 0.01 D₁₅ = 0.00


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0	2.0	62.3	19.4	16.3	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.242		
D ₃₀	0.0518		
D ₁₀	0.0020		
COEFFICIENTS			
C _c	5.45		
C _u	119.62		

SIEVE number size	PERCENT FINER		
	○		
#4	98.0		
#10	94.7		
#20	90.8		
#40	80.6		
#60	61.1		
#100	46.4		
#200	35.7		

SOIL DESCRIPTION
 ○ SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

REMARKS:
 ○

○ Source:

Sample No.: C-177-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-177-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY MEDIUM TO FINE SAND, TRACE GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	75.09	
Tare =	0.00	
Dry sample weight =	75.09	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 58.84 Tare = .00 Sample weight = 58.84		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	1.50	98.0
# 10	3.96	94.7
# 20	2.42	90.8
# 40	8.78	80.6
# 60	20.89	61.1
# 100	30.00	46.4
# 200	36.69	35.7

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 94.7

Weight of hydrometer sample: 58.57

Calculated biased weight= 61.85

Table of composite correction values:

Temp, deg C:	20.0	18.0
Comp. corr:	-8.0	-8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.0	23.0	15.0	0.0138	23.0	12.5	0.0346	24.3
5.00	19.0	21.0	13.0	0.0138	21.0	12.9	0.0222	21.0
15.00	19.1	20.5	12.5	0.0138	20.5	12.9	0.0128	20.2
30.00	19.1	19.0	11.0	0.0138	19.0	13.2	0.0091	17.8
60.00	19.2	18.5	10.5	0.0138	18.5	13.3	0.0065	17.0
250.00	19.9	16.5	8.5	0.0137	16.5	13.6	0.0032	13.7
1440.00	18.2	12.0	4.0	0.0140	12.0	14.3	0.0014	6.5

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 2.0 (% coarse = % fine = 2.0)

% SAND = 62.3 (% coarse = 3.3 % medium = 14.1 % fine = 44.9)

% SILT = 19.4 % CLAY = 16.3

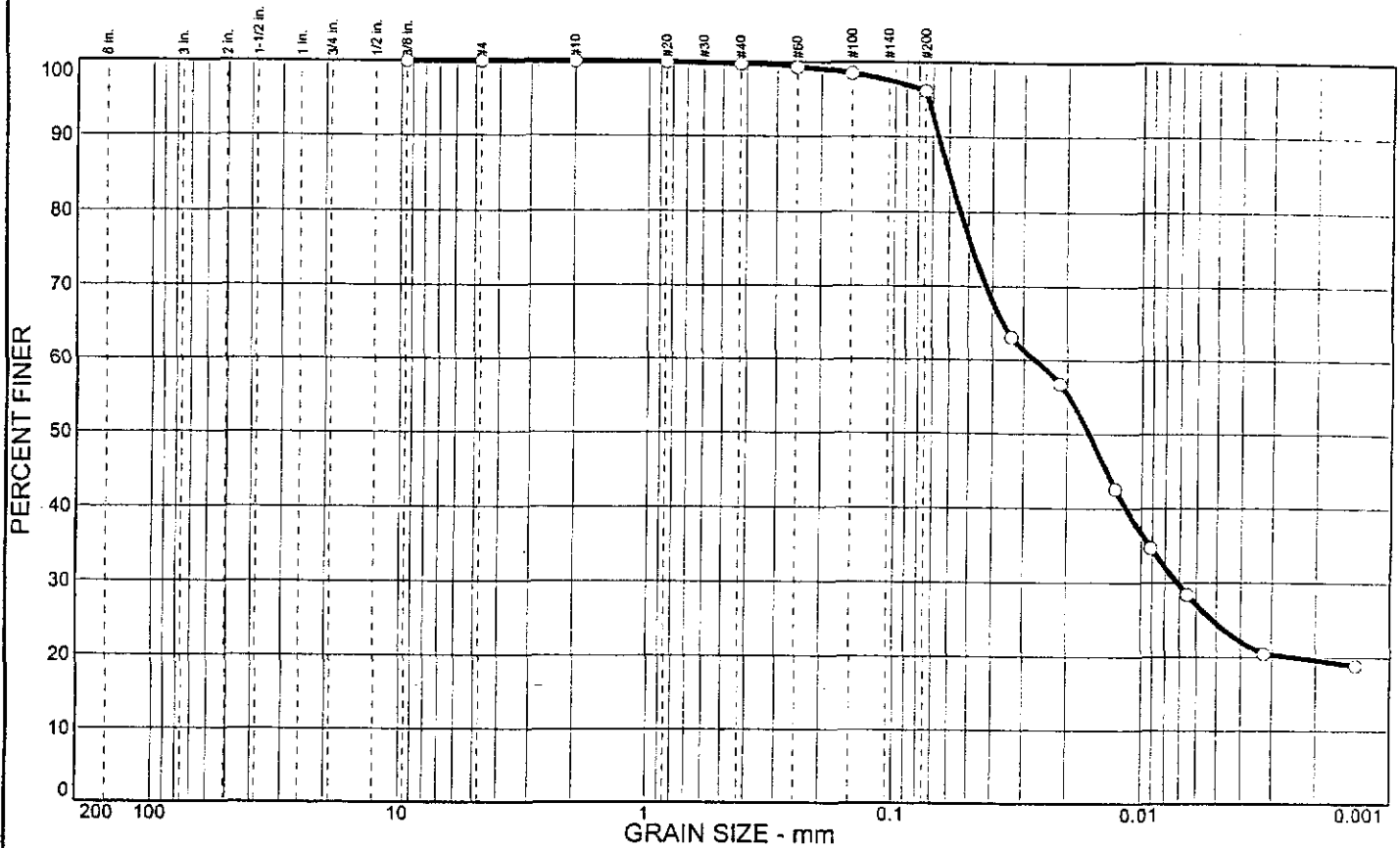
D₈₅ = 0.51 D₆₀ = 0.24 D₅₀ = 0.17

D₃₀ = 0.05 D₁₅ = 0.00 D₁₀ = 0.00

C_c = 5.4538 C_u = 119.6183


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		3.8	71.7	24.5	---	---	---	---

SIEVE Inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.0272		
D ₃₀	0.0072		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	100.0		
#20	99.9		
#40	99.7		
#60	99.3		
#100	98.5		
#200	96.2		

SOIL DESCRIPTION
 ○ SILT, TRACE SAND

REMARKS:
 ○

○ Source:

Sample No.: C-178-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-178-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, TRACE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 31.72
Tare = 0.00
Dry sample weight = 31.72
Sample split on number 10 sieve
Split sample data:
Sample and tare = 31.72 Tare = .00 Sample weight = 31.72
Cumulative weight retained tare= .00
Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.00	100.0
# 20	0.04	99.9
# 40	0.11	99.7
# 60	0.23	99.3
# 100	0.49	98.5
# 200	1.22	96.2

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100.0
Weight of hydrometer sample: 31.72
Calculated biased weight= 31.72
Table of composite correction values:
Temp, deg C: 20.0 18.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0
Specific gravity of solids= 2.65
Specific gravity correction factor= 1.000
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.0	28.0	20.0	0.0138	28.0	11.7	0.0334	63.1
5.00	19.0	26.0	18.0	0.0138	26.0	12.0	0.0214	56.8
15.00	19.1	21.5	13.5	0.0138	21.5	12.8	0.0127	42.6
30.00	19.1	19.0	11.0	0.0138	19.0	13.2	0.0091	34.7
60.00	19.3	17.0	9.0	0.0138	17.0	13.5	0.0065	28.4
250.00	19.7	14.5	6.5	0.0137	14.5	13.9	0.0032	20.5
1440.00	18.2	14.0	6.0	0.0140	14.0	14.0	0.0014	18.9

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 3.8 (% coarse = 0.0 % medium = 0.3 % fine = 3.5)

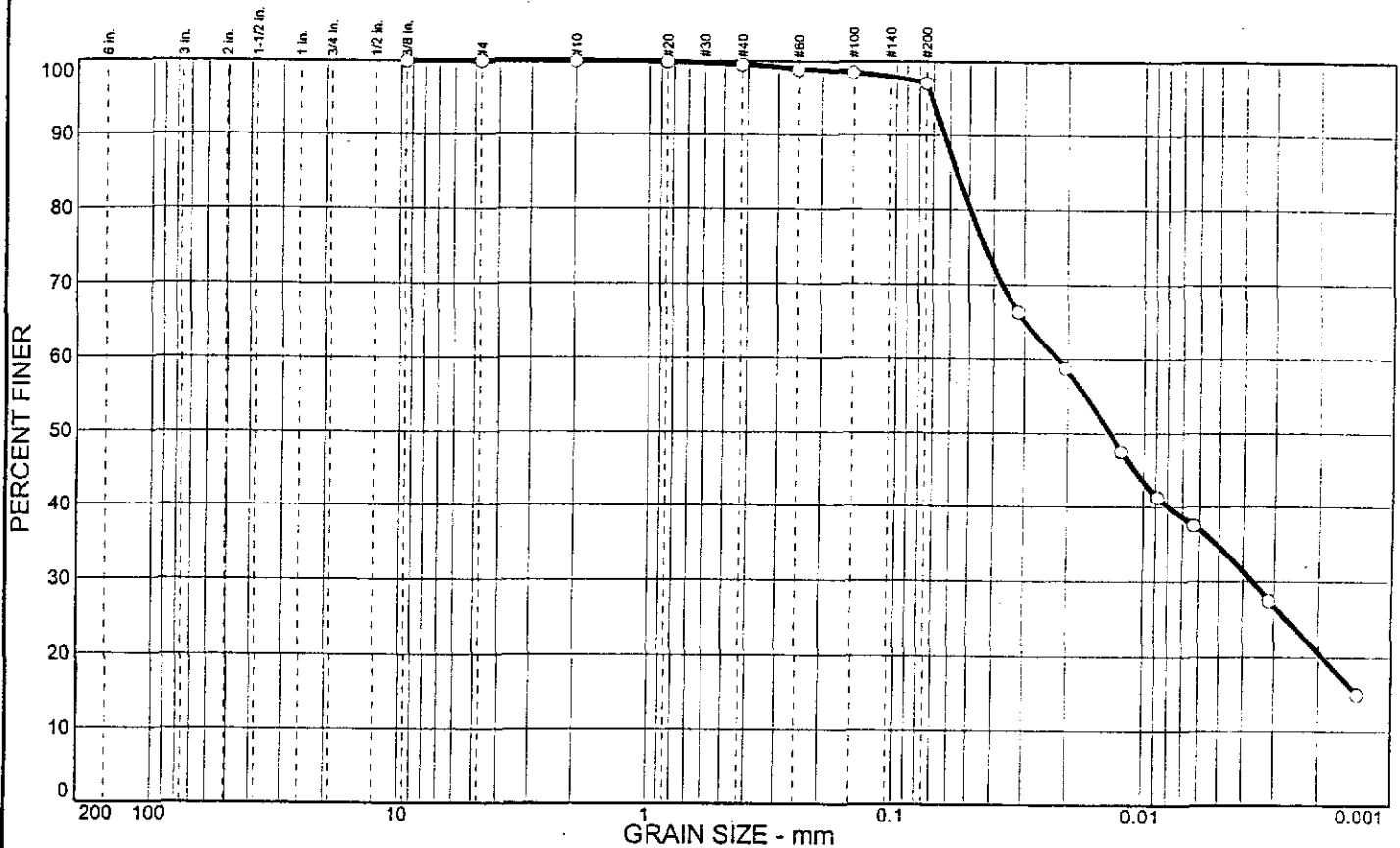
% SILT = 71.7 % CLAY = 24.5

D₈₅ = 0.06 D₆₀ = 0.03 D₅₀ = 0.02

D₃₀ = 0.01


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		2.9	62.5	34.6	---	---	---	---

SIEVE Inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.0221		
D ₃₀	0.0037		
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	100.0		
#20	99.9		
#40	99.5		
#60	98.9		
#100	98.5		
#200	97.1		

SOIL DESCRIPTION
○ SILT, TRACE SAND

REMARKS:
○

○ Source:

Sample No.: C-181-SED-3

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-181-SED-3

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, TRACE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 40.00
Tare = 0.00
Dry sample weight = 40.00
Sample split on number 10 sieve
Split sample data:
Sample and tare = 40.00 Tare = .00 Sample weight = 40.00
Cumulative weight retained tare= .00
Time for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.00	100.0
# 20	0.06	99.9
# 40	0.22	99.5
# 60	0.43	98.9
# 100	0.62	98.5
# 200	1.15	97.1

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 100.0
Weight of hydrometer sample: 40.00
Calculated biased weight= 40.00
Table of composite correction values:
Temp, deg C: 20.0 18.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.9	34.5	26.5	0.0138	34.5	10.6	0.0319	66.3
5.00	19.0	31.5	23.5	0.0138	31.5	11.1	0.0206	58.8
15.00	19.0	27.0	19.0	0.0138	27.0	11.9	0.0123	47.5
30.00	19.0	24.5	16.5	0.0138	24.5	12.3	0.0088	41.3
60.00	19.2	23.0	15.0	0.0138	23.0	12.5	0.0063	37.5
250.00	19.6	19.0	11.0	0.0137	19.0	13.2	0.0031	27.5
1440.00	18.3	14.0	6.0	0.0139	14.0	14.0	0.0014	15.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

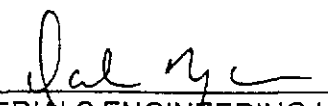
% COBBLES = % GRAVEL =

% SAND = 2.9 (% coarse = 0.0 % medium = 0.5 % fine = 2.4)

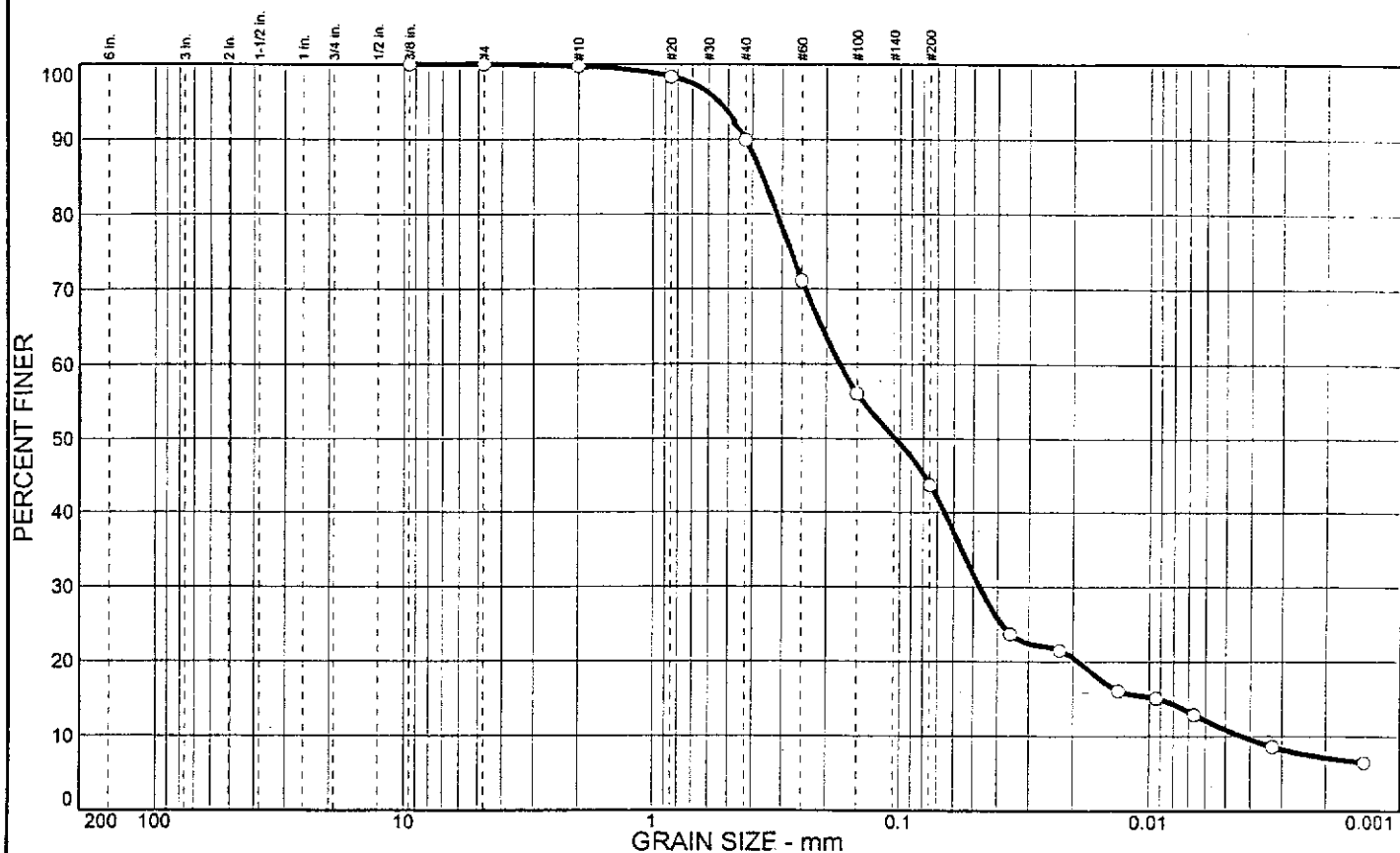
% SILT = 62.5 % CLAY = 34.6

D₈₅ = 0.06 D₆₀ = 0.02 D₅₀ = 0.01

D₃₀ = 0.00 D₁₅ = 0.00


 MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
0		56.3	32.8	10.9	---	---	---	---

SIEVE inches size	PERCENT FINER		
	○		
.375	100.0		
GRAIN SIZE			
D ₆₀	0.177		
D ₃₀	0.0472		
D ₁₀	0.0043		
COEFFICIENTS			
C _c	2.92		
C _u	40.82		

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	99.7		
#20	98.3		
#40	89.9		
#60	71.1		
#100	56.1		
#200	43.7		

SOIL DESCRIPTION
○ SILTY FINE SAND

REMARKS:
○

○ Source:

Sample No.: C-181-SED-5

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-181-SED-5

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILTY FINE SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

Initial
Dry sample and tare= 46.63
Tare = 0.00
Dry sample weight = 46.63
Sample split on number 10 sieve
Split sample data:
Sample and tare = 46.33 Tare = .00 Sample weight = 46.33
Cumulative weight retained tare= .00
Time for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.14	99.7
# 20	0.67	98.3
# 40	4.55	89.9
# 60	13.30	71.1
# 100	20.25	56.1
# 200	26.04	43.7

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 99.7
Weight of hydrometer sample: 46.33
Calculated biased weight= 46.47
Table of composite correction values:
Temp, deg C: 20.0 18.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	19.0	19.0	11.0	0.0138	19.0	13.2	0.0355	23.7
5.00	19.0	18.0	10.0	0.0138	18.0	13.3	0.0226	21.5
15.00	19.0	15.5	7.5	0.0138	15.5	13.8	0.0132	16.1
30.00	19.1	15.0	7.0	0.0138	15.0	13.8	0.0094	15.1
60.00	19.3	14.0	6.0	0.0138	14.0	14.0	0.0066	12.9
250.00	19.8	12.0	4.0	0.0137	12.0	14.3	0.0033	8.6
1440.00	18.2	11.0	3.0	0.0140	11.0	14.5	0.0014	6.5

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL =

% SAND = 56.3 (% coarse = 0.3 % medium = 9.8 % fine = 46.2)

% SILT = 32.8 % CLAY = 10.9

D₈₅ = 0.36 D₆₀ = 0.18 D₅₀ = 0.10

D₃₀ = 0.05 D₁₅ = 0.01 D₁₀ = 0.00

C_c = 2.9176 C_u = 40.8165


MATERIALS ENGINEERING LABORATORY

The graph displays the grain size distribution of a soil sample. The y-axis represents the percentage of soil finer than a given grain size, ranging from 0 to 100. The x-axis represents the grain size in millimeters on a logarithmic scale, ranging from 200 mm to 0.001 mm. The curve shows that 100% of the soil is finer than 0.075 mm (No. 20 sieve). The distribution is well-graded, with a significant portion of the soil falling between 0.075 mm and 0.0075 mm.

Grain Size (mm)	Percent Finer (%)
200	100
100	100
60	100
40	100
30	100
20	100
15	100
10	100
7.5	100
6	100
4.75	100
3.75	100
3.0	100
2.5	100
2.0	100
1.5	100
1.18	100
0.85	100
0.75	100
0.60	100
0.425	100
0.30	100
0.25	100
0.20	100
0.15	100
0.10	100
0.075	100
0.060	97
0.0425	83
0.030	57
0.025	46
0.020	38
0.015	31
0.010	25
0.0075	16
0.0060	12

[illegible]

SIEVE inches size	PERCENT FINER		
	0		
.375	100.0		
	GRAIN SIZE		
D ₆₀	0.0369		
D ₃₀	0.0089		
D ₁₀			
	COEFFICIENTS		
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	○		
#4	100.0		
#10	100.0		
#20	99.8		
#40	99.5		
#60	98.9		
#100	95.4		
#200	82.2		

○ SILT, WITH SAND

REMARKS:

○ Source:

Sample No.: C-183-SED-5

Elev./Depth: 0-2"

Thompson Engineering

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project No.: 2000-00-0235

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-183-SED-5

Elev. or Depth: 0-2"

Sample Length (in./cm.):

Location:

Description: SILT, WITH SAND

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	42.61	
Tare =	0.00	
Dry sample weight =	42.61	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 42.61 Tare = .00 Sample weight = 42.61		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.00	100.0
# 10	0.00	100.0
# 20	0.08	99.8
# 40	0.22	99.5
# 60	0.45	98.9
# 100	1.95	95.4
# 200	7.60	82.2

Hydrometer Analysis Data

Separation sieve is #10

Percent -#10 based upon complete sample= 100.0

Weight of hydrometer sample: 42.61

Calculated biased weight= 42.61

Table of composite correction values:

Temp, deg C:	20.0	18.0
Comp. corr:	-8.0	-8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.5	32.0	24.0	0.0139	32.0	11.0	0.0327	56.3
5.00	18.5	27.5	19.5	0.0139	27.5	11.8	0.0213	45.8
15.00	18.6	24.0	16.0	0.0139	24.0	12.4	0.0126	37.6
30.00	18.7	21.0	13.0	0.0139	21.0	12.9	0.0091	30.5
60.00	18.9	18.5	10.5	0.0138	18.5	13.3	0.0065	24.6
250.00	19.6	15.0	7.0	0.0137	15.0	13.8	0.0032	16.4
1440.00	18.3	13.0	5.0	0.0139	13.0	14.2	0.0014	11.7

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

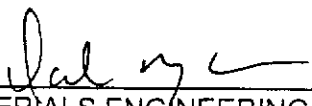
% COBBLES = % GRAVEL =

% SAND = 17.8 (% coarse = 0.0 % medium = 0.5 % fine = 17.3)

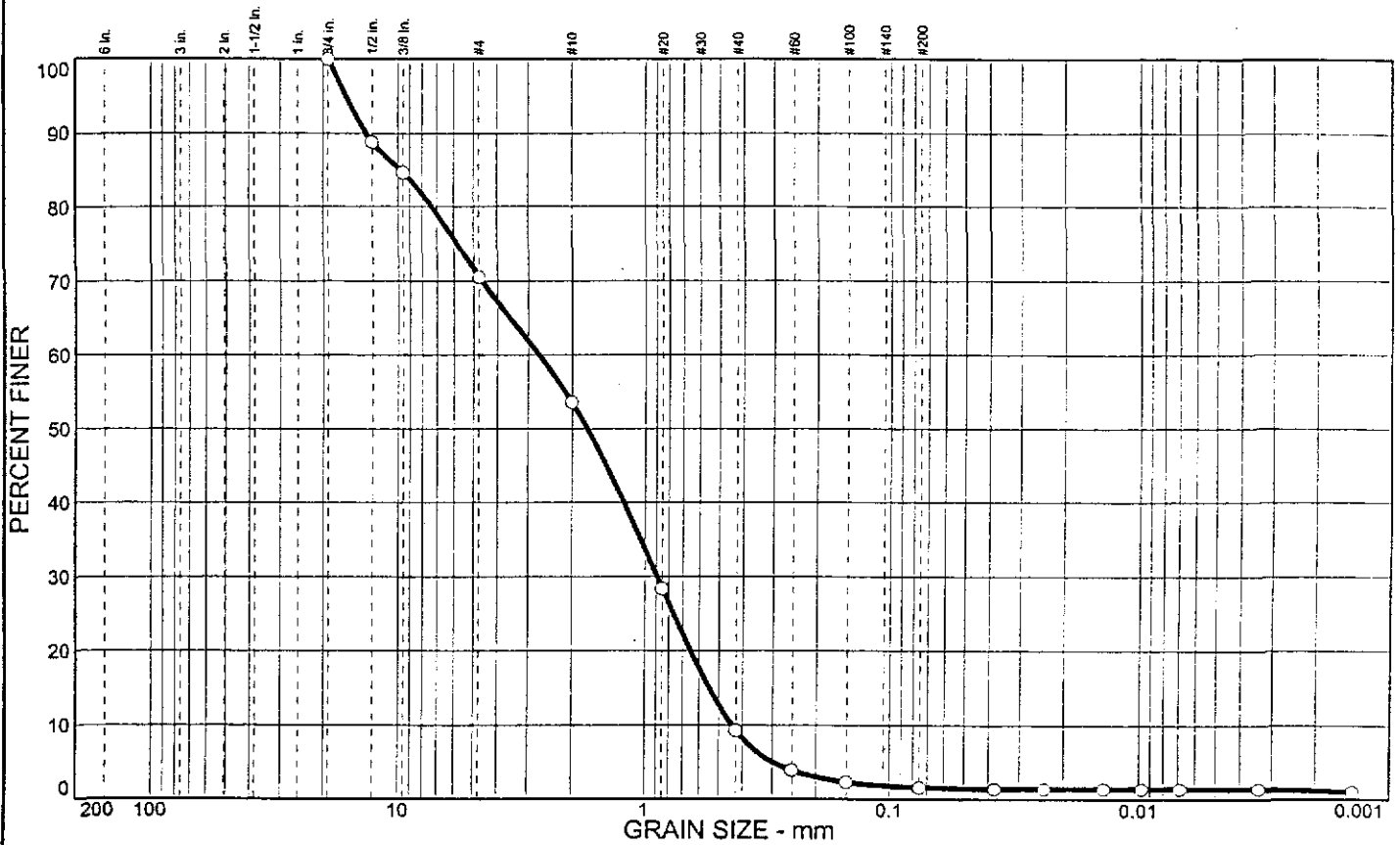
% SILT = 61.3 % CLAY = 20.9

D₈₅= 0.08 D₆₀= 0.04 D₅₀= 0.03

D₃₀= 0.01 D₁₅= 0.00


MATERIALS ENGINEERING LABORATORY

Particle Size Distribution Report

[illegible]

SIEVE	PERCENT FINER		
inches size	○		
.75	100.0		
.5	88.8		
.375	84.6		
X	GRAIN SIZE		
D ₆₀	2.71		
D ₃₀	0.893		
D ₁₀	0.441		
X	COEFFICIENTS		
C _c	0.67		
C _u	6.15		

SIEVE number size	PERCENT FINER		
	○		
#4	70.5		
#10	53.6		
#20	28.4		
#40	9.3		
#60	3.9		
#100	2.3		
#200	1.6		

○ COARSE TO MEDIUM SAND, WITH GRAVEL

○

Elev./Depth: 0-2.5"

Plate

GRAIN SIZE DISTRIBUTION TEST DATA

Client: SAVANNAH LABORATORIES, INC.

Project: SAVANNAH #:S9-17912

Project Number: 2000-00-0235

Sample Data

Source:

Sample No.: C-150-SED-1

Elev. or Depth: 0-2.5"

Sample Length (in./cm.):

Location:

Description: COARSE TO MEDIUM SAND, WITH GRAVEL

Liquid Limit: - - -

Plastic Limit: - - -

USCS Classification: - - -

AASHTO Classification: - - -

Testing Remarks:

Mechanical Analysis Data

	Initial	
Dry sample and tare=	149.64	
Tare =	0.00	
Dry sample weight =	149.64	
Sample split on number 10 sieve		
Split sample data:		
Sample and tare = 78.68 Tare = .00 Sample weight = 78.68		
Cumulative weight retained tare= .00		
Tare for cumulative weight retained= .00		
Sieve	Cumul. Wt. retained	Percent finer
.75 inch	0.00	100.0
.5 inch	16.73	88.8
.375 inch	23.10	84.6
# 4	44.16	70.5
# 10	69.42	53.6
# 20	36.95	28.4
# 40	65.01	9.3
# 60	72.97	3.9
# 100	75.36	2.3
# 200	76.40	1.6

Hydrometer Analysis Data

Separation sieve is #10
Percent -#10 based upon complete sample= 53.6
Weight of hydrometer sample: 78.68
Calculated biased weight= 146.79
Table of composite correction values:
Temp, deg C: 20.0 18.0
Comp. corr: -8.0 -8.0

Meniscus correction only= 0

Specific gravity of solids= 2.65

Specific gravity correction factor= 1.000

Hydrometer type: 152H

Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0376	1.4
5.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0238	1.4
15.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0137	1.4
30.00	18.5	10.0	2.0	0.0139	10.0	14.7	0.0097	1.4
60.00	18.6	10.0	2.0	0.0139	10.0	14.7	0.0069	1.4
250.00	18.8	10.0	2.0	0.0139	10.0	14.7	0.0034	1.4
1440.00	18.0	9.5	1.5	0.0140	9.5	14.7	0.0014	1.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

% COBBLES = % GRAVEL = 29.5 (% coarse = % fine = 29.5)

% SAND = 68.9 (% coarse = 16.9 % medium = 44.3 % fine = 7.7)

% SILT = 0.2 % CLAY = 1.4

D₈₅= 9.80 D₆₀= 2.71 D₅₀= 1.73

D₃₀= 0.89 D₁₅= 0.55 D₁₀= 0.44

C_c= 0.6664 C_u= 6.1538


MATERIALS ENGINEERING LABORATORY

BLASLAND, BOUCK & LEE, INC.

engineers & scientists

Appendix D

Supplemental RCRA Facility Investigation Solutia Inc., Anniston, Alabama Choccolocco and Snow Creeks Floodplain Modeling Overview

1 Modeling Scope

Floodplain modeling of Choccolocco and Snow Creeks was conducted as part of the Off-Site Portion of the RCRA Facility Investigation (RFI)/Confirmatory Sampling (CS) Program in accordance with the Supplemental Work Plan. The 2-, 10-, 25-, 50-, and 100-year floodplains were identified using U.S. Army Corp of Engineers Hydrologic Engineering Center's River Analysis System (HEC-RAS) software.

Snow Creek drains an area of approximately 19 square miles, with Solutia's Anniston facility located in the upper portion of the watershed. Snow Creek discharges to Choccolocco Creek approximately 37 miles upstream of Choccolocco Creek's confluence with the Coosa River. The lower four to five miles of Choccolocco Creek are currently part of Lake Logan Martin, which is formed by impoundment of the Coosa River.

Two scenarios were modeled for each creek: a current condition scenario and a historical condition scenario. The current condition scenario represents the mid 1990s while the historical condition scenario represents the early 1950s.

For Choccolocco Creek, the current condition scenario incorporates man-made oxbow cutoffs, overflow cutoffs, the low flow dam structure at Jackson Shoals, bridges as located and configured in 1999, and Lake Logan Martin. The historical condition scenario includes the channel in its natural alignment (i.e., no man-made cutoffs), low flow dam structures at both Jackson Shoals and the former Smith's Mill site, and bridges as likely to have been located and configured in the mid 1950s. The historical condition scenario does not include Lake Logan Martin. Land use and development are considered similar for the two scenarios.

For Snow Creek, the current condition scenario incorporates bridge, culvert, and development conditions (land use and buildings) of the mid 1990s. The historical condition scenario includes the estimated bridge, culvert, and development status from the mid 1950s.

2 Input Development

2.1 FEMA Data

The basic data requirements for floodplain modeling include ground elevation data in the channel bed and overbanks, bridge geometry data, roughness coefficients, and stream flow (discharge) data. Input from models used in Federal Emergency Management Agency (FEMA) Flood Insurance Studies (FIS) published from 1980 to 1993 was used as a starting point for the input data development. FEMA data were enhanced and/or updated using various sources as described below.

2.2 *Snow Creek*

Elevation data for Snow Creek were taken from the Snow Creek FEMA model. The FEMA elevations were verified at several locations in the creek with field survey data. Bridge data from the FEMA model were refined using photographs and field survey data. Both historical and recent aerial photographs were used to assess Manning's roughness coefficients and development conditions. Roughness values were adjusted for estimated differences between current and historical conditions. Development in the immediate vicinity of the creek that has a potentially significant impact on flooding conditions was represented using options in HEC-RAS for blocked (due to buildings) and ineffective (due to flow divergence and convergence) flow areas. The locations of blocked and ineffective areas were developed from aerial photographs.

Flow data for the Snow Creek current condition model were obtained from the FEMA data. The FEMA data included discharges for the 10-, 50-, and 100-year events. Discharges for the 2- and 25-year events were interpolated from the 10-, 50-, and 100-year events. The historical condition discharges were obtained by reducing the current condition discharges to reflect the estimated change in land development between the two time periods. The water surface elevations at the downstream end of Snow Creek, which are necessary as a starting point for the model computations, were taken from the modeling results for Choccolocco Creek at the confluence of Choccolocco and Snow Creeks.

2.3 *Choccolocco Creek*

Elevation data for the Choccolocco Creek model were obtained from several sources. FEMA model data were used for areas in the immediate vicinity of bridges. Away from the bridges, the FEMA data were not used because the FEMA model river stationing could not be verified. The FEMA model elevation data were replaced with data from 1:24,000 scale USGS digital elevation models (DEMs). These DEMs were supplemented with field survey data for the stream bed collected during the Supplemental Study at over 100 transect locations. Engineering drawings from U.S. Soil Conservation Service (now the National Resource Conservation Service) channel modification projects and aerial photographs were used to ascertain the location and character of oxbow cutoffs constructed during those projects.

Choccolocco Creek bridge data were generally adopted directly from the FEMA model. Field photographs were used to make minor modifications to the FEMA data. The locations and geometries of structures currently not present or inundated by Lake Logan Martin were estimated from historical aerial photographs and maps. Aerial photographs were also used to assess Manning's roughness coefficient and development conditions. For Choccolocco Creek, development and roughness conditions were judged to not have changed appreciably between the time periods represented by the historical and current cases.

Flow data for Choccolocco Creek were taken from published FEMA FIS reports. As with the Snow Creek discharges, the 2- and 25-year events were interpolated from the given 10-, 50-, and 100-year events. Flows at intermediate points between FEMA stations were modified to reflect contributing watershed areas when judged necessary for data consistency. The estimated reductions in flow due to presently existing upland retention structures were also used to adjust historical condition flows to current condition flows.

The current condition water surface elevations at the downstream end of the creek for all storm events were taken to be the normal pool elevation of Lake Logan Martin. For the historical

condition, a stage-discharge curve for the Coosa River representative of conditions prior to the impoundment of Lake Logan Martin was developed from historical rating curve data at points upstream and downstream of Lake Logan Martin. Water surface elevations for the downstream end of Choccolocco Creek were then taken from this stage-discharge curve.

2.4 Calibration

Initially computed water surface profiles for Choccolocco Creek were compared to rating curves for the Lincoln, Jackson Shoals, and Jennifer gauge stations to identify adjustments to channel roughness and calibrate the Choccolocco Creek model. Similar comparison was not possible for Snow Creek since stage-discharge measurement stations for the creek do not exist. However, computed water levels were inspected for physical reasonableness. Minor modifications were made to insure physical reasonableness of the results.

3 Modeling Results

Modeling determined features of flow behavior, including water surface elevation, flood flow widths, and channel and floodplain velocities. Modeling results were used to generate floodplain maps (Figures D1 - D2).

For Choccolocco Creek, the floodplain maps were produced from the DEMs using water surface elevations generated by HEC-RAS. Geographic information system (GIS) software was used to identify the intersection of the ground surface and the computed water surface elevation.

Inconsistencies between the DEMs and the FEMA-based ground elevation data used in the HEC-RAS model required that a different approach be taken for the Snow Creek floodplain maps. These maps were developed using the floodplain width computed by HEC-RAS. CAD and GIS software were used to generate plots of the floodplains based on the computed floodplain width.

4 Closure

The Snow and Choccolocco Creek floodplain maps produced for the Off-Site Portion of the RFI/CS are based on a variety of data, including both field and previous studies. Data used as input to the analysis were verified wherever possible. Map production techniques were chosen so as to minimize the inconsistencies that the different data sources sometimes produced. However, the maps are based on various data sources and the modeling includes estimates of both current and historical conditions. Furthermore, data for calibration of flow conditions in Snow Creek were not available. Thus, the floodplain maps should be used for guidance in defining flood plain limits and not taken to show the precise extent of flooding.

Figure D-1 - Current Choccolocco and Snow Creek Floodplains

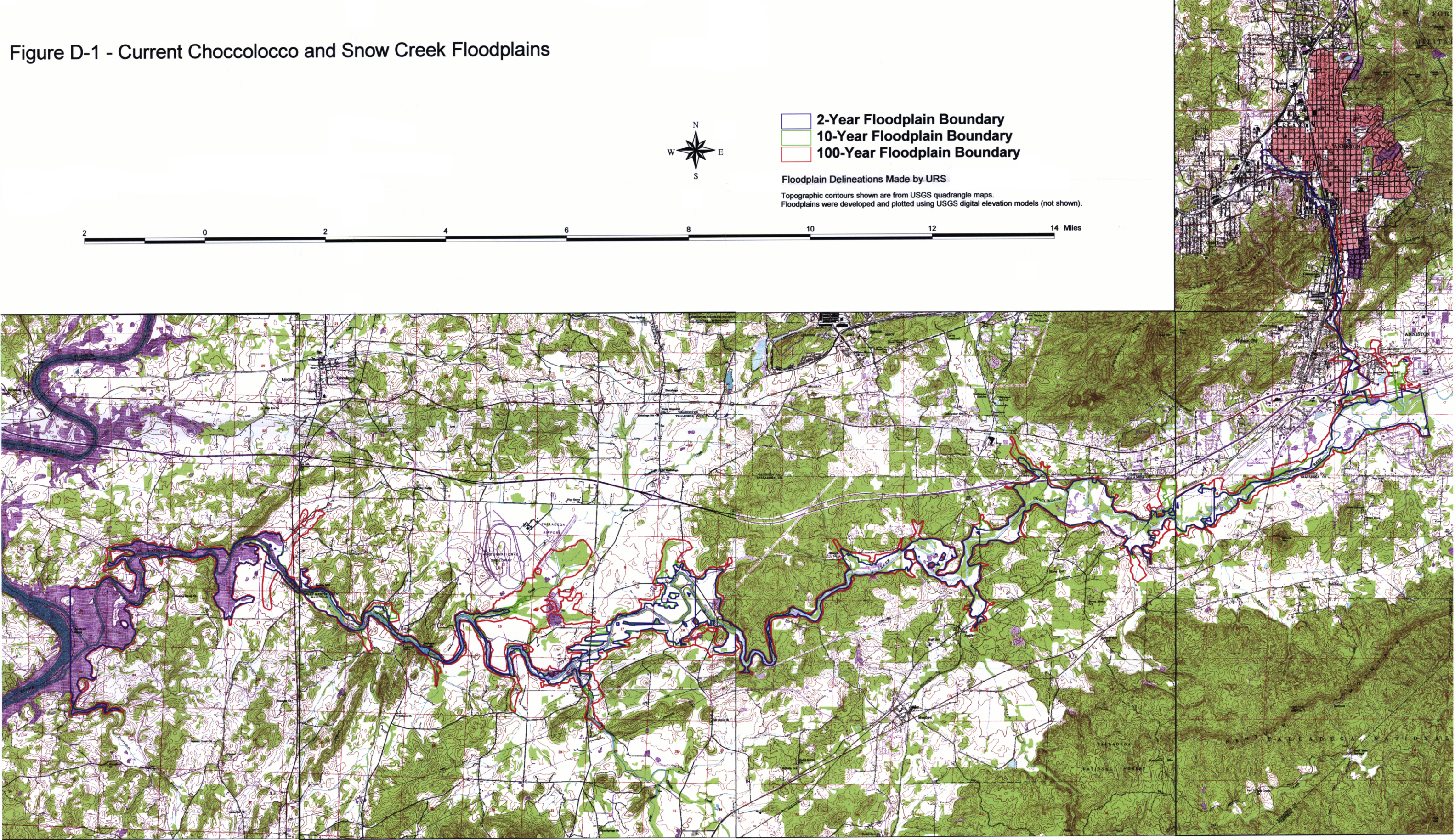


Figure D-2 - Historical Choccolocco and Snow Creek Floodplains

