

DRILLING LOG		DIVISION: South Atlantic	INSTALLATION: Jacksonville District	SHEET 1 of 1
1. PROJECT CAPTIVA ISLAND SAND STUDY		10. SIZE AND TYPE OF BIT 3 5/8"		
2. LOCATION (Coordinates or Station) X=560622.35 Y=835101.76		11. DATUM FOR ELEVATION SHOWN (TBM or MSL) NGVD		
3. DRILLING AGENCY: Alpine Ocean Seismic Survey Inc.		12. MANUFACTURER'S DESIGNATION OF DRILL ALPINE PNEUMATIC VIBRACORE		
4. HOLE NO. (As shown on drawing title and file number) CIVC-00-08		13. TOT NO. OF OVERBURDEN SAMPLES TAKEN Disturbed: 0 Undisturbed: 0		
5. NAME OF DRILLER MAURIZIO ROSSI		14. TOTAL NO. OF CORE BOXES		
6. DIRECTION OF HOLE VERTICAL		15. ELEVATION GROUND WATER		
7. THICKNESS OF BURDEN 0.0 FT		16. DATE HOLE Started 8/10/00 Completed 10:49		
8. DEPTH DRILLED INTO ROCK N/A		17. ELEVATION TOP OF HOLE -27.7 FT		
9. TOTAL DEPTH OF HOLE 19.3 FT		18. TOTAL CORE RECOVERY FOR BORING 98.9%		
		19. SIGNATURE OF GEOLOGIST ID		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-27.7	0					
	1		SAND, fine grained, some shell hash/shell fragments/whole shells, gray (5Y-6/1), (SP).		1	Sample #1, Depth = 1.0' Mean (mm): 0.47, Phi Sorting: 1.12 Silt: 2.15% (SW)
-30.6	2					
	3		SILTY CLAY, gray (5Y-5/1), (ML-CL).			
-31.6	4		SAND, fine grained, gray (5Y-6/1), (SP).		2	Sample #2, Depth = 3.5' Mean (mm): 0.19, Phi Sorting: 1.17 Silt: 6.87% (SW-SM)
-32.1	5		SAND, fine grained, some shell hash/shell fragments/whole shells, gray (5Y-6/1), (SP).		3	
-32.7	6		SAND, fine grained, gray (5Y-6/1), (SP).		2	
	7		SAND, fine grained, some shell hash/shell fragments/whole shells, gray (5Y-6/1), (SP).		3	Sample #3, Depth = 5.5' Mean (mm): 0.28, Phi Sorting: 2.03 Silt: 15.29% (SM)
-33.9	8		CARBONATE CLASTS, calcareous sand, trace shell hash/fragments, light gray (5Y-7/1), (GP).			
-35.8	9		SILTY SAND, calcareous, carbonate clasts, some shell hash/fragments, light gray (5Y-6/1), (SM).			
-36.4	10		little shell hash, light gray (5Y-7/1), (SM).		4	Sample #4, Depth = 9.0' Mean (mm): 0.32, Phi Sorting: 2.81 Silt: 30.67% (SM)
-38.4	11					
	12					
	13		SILTY CLAY, light gray (5Y-7/1), changes to pale yellow (2.5Y-8/3) at 13.3', (ML-CL).			
-43.7	14					
	15					
	16					
	17		CARBONATE CLASTS with calcareous sand & clay, light gray (5Y-7/1) changes to pale yellow (2.5Y-8/3) at 18.0', (GC).			
-46.8	18					
	19		No Recovery			
	20		End of Boring			
	21		Note:			
	22		1) Soils are field visually classified in accordance with the Unified Soil Classification System.			
	23					
	24					

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-8#1
 Date: 1/1/2001
 By: ID



2841 N. W. Boca Raton Blvd. Boca Raton FL 33428

Elevation:	-28.7	Feet	Easting:	560622.35	State Plane	1983
Reference:	NGVD 29		Northing:	835101.76	FLA West	Feet

USCS:	SW	Munsel Dry:	5Y-6/1	Munsel Wet:	5Y-6/1
Comments:	0				

Dry Wt.	78.64	Percent Silt:	2.15
Wash Wt.	76.95		

Sieve Size	PHI Size	mm Size	Grams Retained	% Weight Retained	Cum. Grams Retained	C % Weight Retained
5/8	-4.000	16.000	0.000	0.000	0.000	0.000
5/16	-3.000	8.000	0.280	0.356	0.280	0.356
5	-2.000	4.000	0.920	1.170	1.200	1.526
7	-1.500	2.828	0.800	1.017	2.000	2.543
10	-1.000	2.000	1.020	1.297	3.020	3.840
14	-0.500	1.414	2.340	2.976	5.360	6.816
18	0.000	1.000	4.190	5.328	9.550	12.144
25	0.500	0.707	6.250	7.948	15.800	20.092
35	1.000	0.500	10.410	13.238	26.210	33.329
45	1.500	0.354	23.250	29.565	49.460	62.894
60	2.000	0.250	18.890	24.021	68.350	86.915
80	2.500	0.177	6.680	8.494	75.030	95.409
120	3.000	0.125	1.470	1.869	76.500	97.279
170	3.500	0.088	0.370	0.470	76.870	97.749
200	3.750	0.074	0.060	0.076	76.930	97.826
230	4.000	0.063	0.010	0.013	76.940	97.838
Pan	Pan	0.053	1.690	2.149	78.630	99.987

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.81	0.24	0.69	1.28	1.75	1.94	2.48

Median phi:	1.28	Median mm:	0.41
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.03	0.49	0.92	-0.46	1.26
Moment	1.08	0.47	1.12	-0.44	1.85

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-8#2
 Date: 1/1/2001
 By: ID



2841 N. W. Boca Raton Blvd. Boca Raton FL 33428

Elevation:	-31.2	Feet	Easting:	560622.35	State Plane	1983
Reference:	NGVD 29		Northing:	835101.76	FLA West	Feet

USCS:	SW-SM	Munsel Dry:	5Y-6/1	Munsel Wet:	5Y-6/1
Comments:	0				

Dry Wt.	77.79	Percent Silt:	6.87
Wash Wt.	72.54		

Sieve Size	PHI Size	mm Size	Grams Retained	% Weight Retained	Cum. Grams Retained	C % Weight Retained
5/8	-4.000	16.000	0.000	0.000	0.000	0.000
5/16	-3.000	8.000	0.000	0.000	0.000	0.000
5	-2.000	4.000	0.000	0.000	0.000	0.000
7	-1.500	2.828	0.000	0.000	0.000	0.000
10	-1.000	2.000	0.480	0.617	0.480	0.617
14	-0.500	1.414	0.000	0.000	0.480	0.617
18	0.000	1.000	0.700	0.900	1.180	1.517
25	0.500	0.707	1.480	1.903	2.660	3.419
35	1.000	0.500	2.740	3.522	5.400	6.942
45	1.500	0.354	6.250	8.034	11.650	14.976
60	2.000	0.250	15.640	20.105	27.290	35.082
80	2.500	0.177	14.120	18.151	41.410	53.233
120	3.000	0.125	15.040	19.334	56.450	72.567
170	3.500	0.088	11.900	15.298	68.350	87.865
200	3.750	0.074	3.470	4.461	71.820	92.325
230	4.000	0.063	0.620	0.797	72.440	93.123
Pan	Pan	0.053	5.340	6.865	77.780	99.987

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
0.72	1.53	1.75	2.41	3.08	3.37	4.07

Median phi:	2.41	Median mm:	0.19
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	2.42	0.19	0.97	0.01	1.03
Moment	2.42	0.19	1.17	-0.02	1.57

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-8#3
 Date: 1/1/2001
 By: ID



2841 N. W. Boca Raton Blvd. Boca Raton FL 33428

Elevation:	-33.2	Feet	Easting:	560622.35	State Plane	1983
Reference:	NGVD 29		Northing:	835101.76	FLA West	Feet

USCS:	SM	Munsel Dry:	5Y-6/1	Munsel Wet:	5Y-6/1
Comments:	0				

Dry Wt.	79.55	Percent Silt:	15.29
Wash Wt.	67.47		

Sieve Size	PHI Size	mm Size	Grams Retained	% Weight Retained	Cum. Grams Retained	C % Weight Retained
5/8	-4.000	16.000	0.000	0.000	0.000	0.000
5/16	-3.000	8.000	0.000	0.000	0.000	0.000
5	-2.000	4.000	0.750	0.943	0.750	0.943
7	-1.500	2.828	1.780	2.238	2.530	3.180
10	-1.000	2.000	2.220	2.791	4.750	5.971
14	-0.500	1.414	3.900	4.903	8.650	10.874
18	0.000	1.000	4.480	5.632	13.130	16.505
25	0.500	0.707	4.780	6.009	17.910	22.514
35	1.000	0.500	4.570	5.745	22.480	28.259
45	1.500	0.354	4.480	5.632	26.960	33.891
60	2.000	0.250	6.630	8.334	33.590	42.225
80	2.500	0.177	9.890	12.432	43.480	54.657
120	3.000	0.125	14.030	17.637	57.510	72.294
170	3.500	0.088	8.070	10.145	65.580	82.439
200	3.750	0.074	1.430	1.798	67.010	84.236
230	4.000	0.063	0.360	0.453	67.370	84.689
Pan	Pan	0.053	12.160	15.286	79.530	99.975

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-1.17	-0.05	0.72	2.31	3.13	3.71	4.17

Median phi:	2.31	Median mm:	0.20
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.80	0.29	1.75	-0.40	0.91
Moment	1.83	0.28	2.03	-0.27	1.38

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-8#4
 Date: 1/1/2001
 By: ID



2841 N. W. Boca Raton Blvd. Boca Raton FL 33428

Elevation:	-36.7	Feet	Easting:	560622.35	State Plane	1983
Reference:	NGVD 29		Northing:	835101.76	FLA West	Feet

USCS:	SM	Munsel Dry:	5Y-6/1	Munsel Wet:	5Y-6/1
Comments:	0				

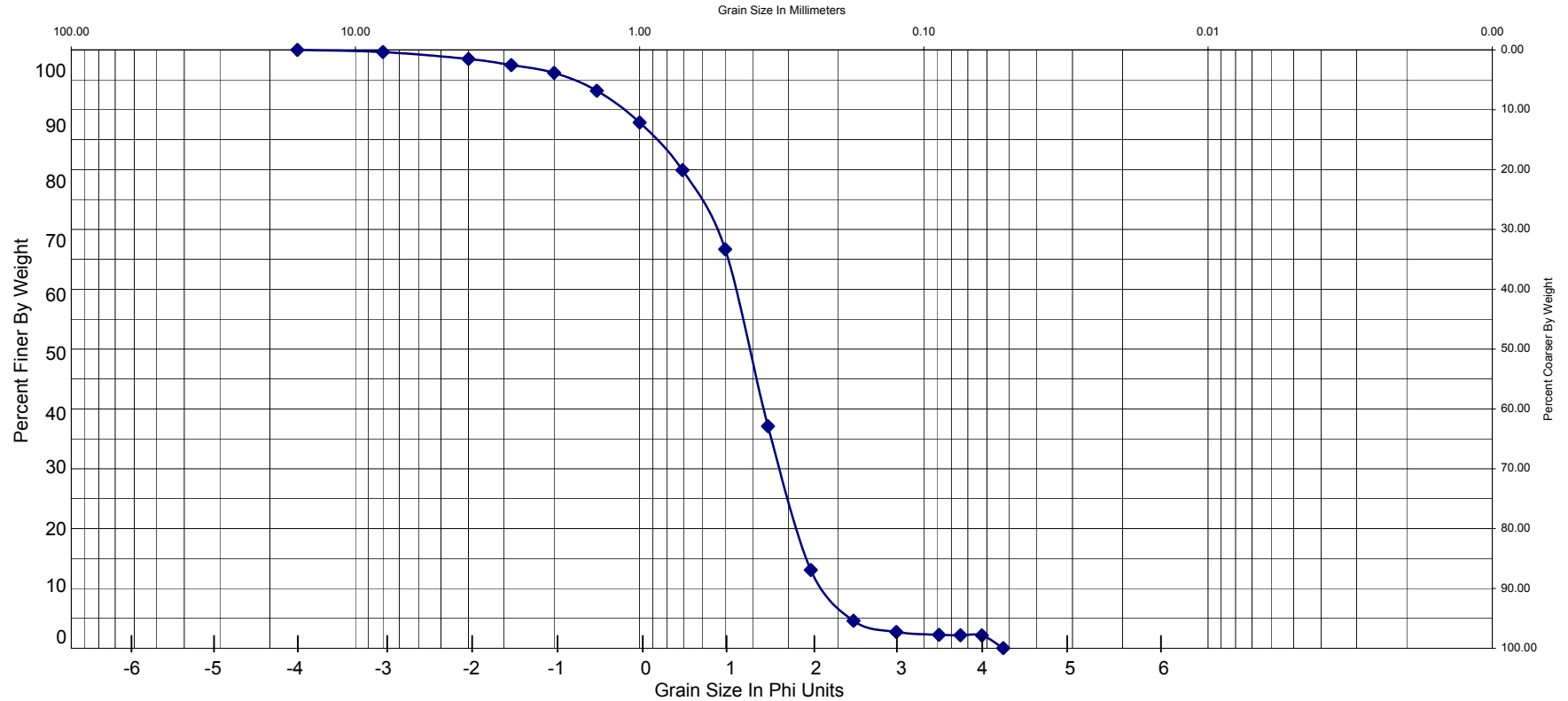
Dry Wt.	106.41	Percent Silt:	30.67
Wash Wt.	73.79		

Sieve Size	PHI Size	mm Size	Grams Retained	% Weight Retained	Cum. Grams Retained	C % Weight Retained
5/8	-4.000	16.000	0.000	0.000	0.000	0.000
5/16	-3.000	8.000	3.850	3.618	3.850	3.618
5	-2.000	4.000	6.470	6.080	10.320	9.698
7	-1.500	2.828	3.140	2.951	13.460	12.649
10	-1.000	2.000	3.520	3.308	16.980	15.957
14	-0.500	1.414	4.240	3.985	21.220	19.942
18	0.000	1.000	3.230	3.035	24.450	22.977
25	0.500	0.707	2.790	2.622	27.240	25.599
35	1.000	0.500	1.920	1.804	29.160	27.403
45	1.500	0.354	3.670	3.449	32.830	30.852
60	2.000	0.250	12.100	11.371	44.930	42.223
80	2.500	0.177	8.610	8.091	53.540	50.315
120	3.000	0.125	16.350	15.365	69.890	65.680
170	3.500	0.088	3.360	3.158	73.250	68.838
200	3.750	0.074	0.460	0.432	73.710	69.270
230	4.000	0.063	0.050	0.047	73.760	69.317
Pan	Pan	0.053	32.630	30.664	106.390	99.981

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-2.77	-0.99	0.38	2.48	4.05	4.12	4.21

Median phi:	2.48	Median mm:	0.18
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.41	0.38	2.34	-0.57	0.78
Moment	1.64	0.32	2.81	-0.45	1.47

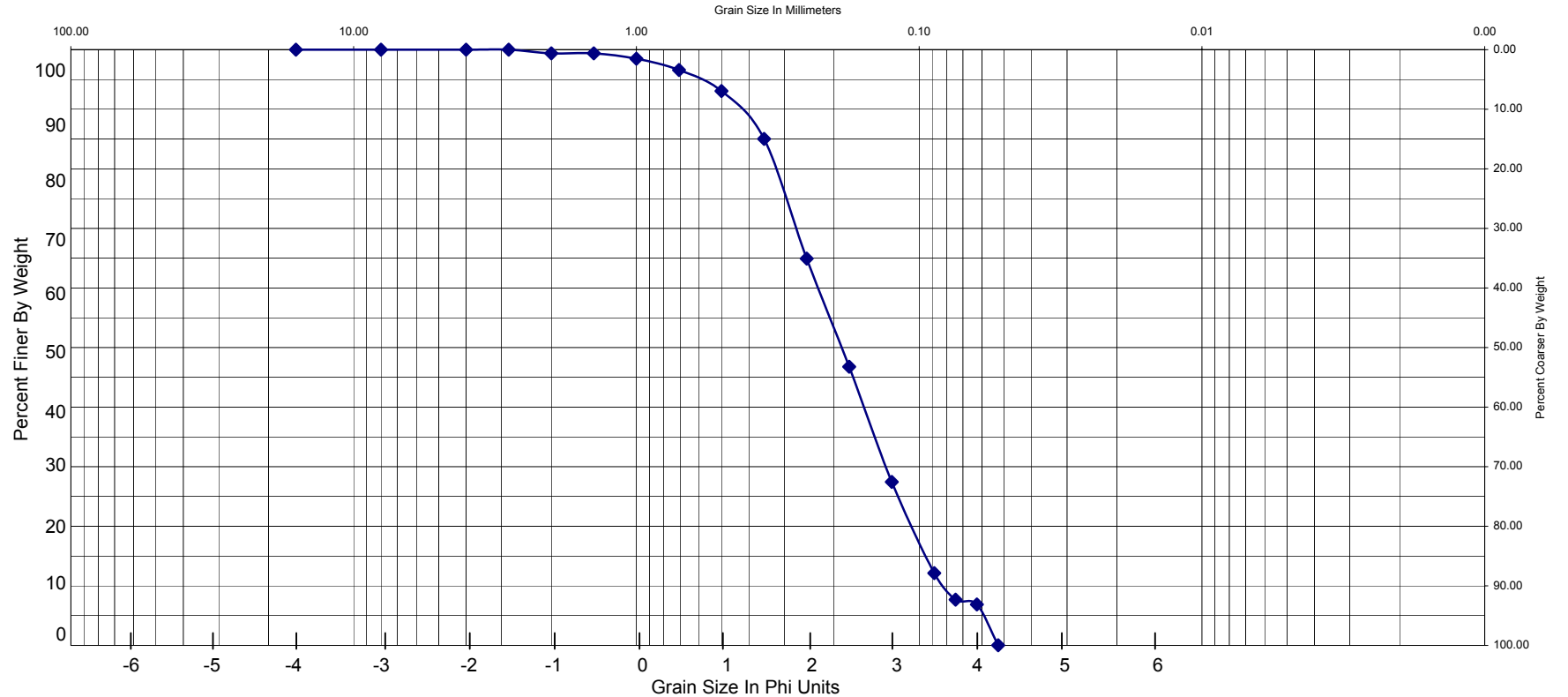


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-8#1	1.0		SW	2.15	0.41	0.47	-0.44	1.85	1.12	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 560622.35 Feet
													Northing (Y): 835101.76 Feet
													Sample Elevation:-28.7 NGVD 29
													Coord. System: State Plane 1983 FLA West




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Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

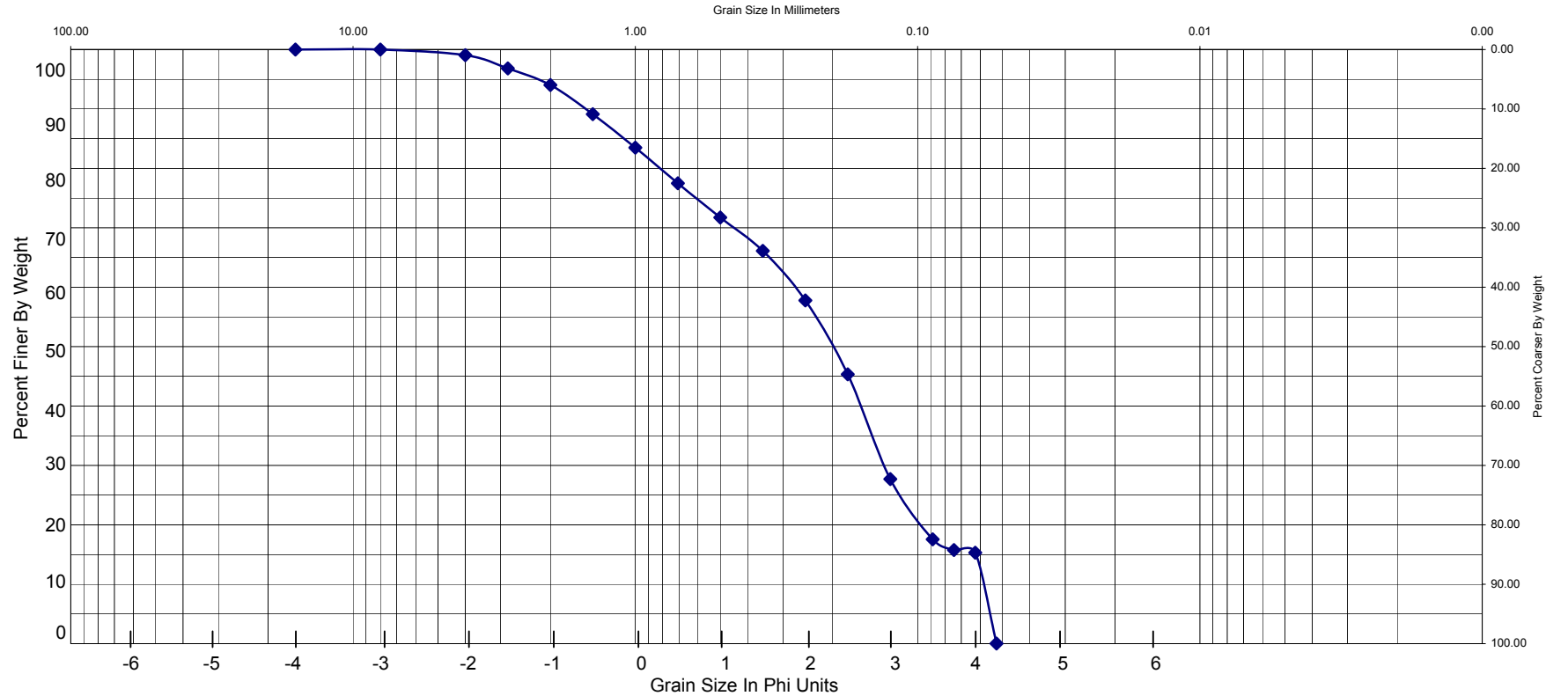
Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-8#2	3.5		SW-SM	6.87	0.19	0.19	-0.02	1.57	1.17	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID



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Easting (X):	560622.35 Feet
Northing (Y):	835101.76 Feet
Sample Elevation:	-31.2 NGVD 29
Coord. System:	State Plane 1983 FLA West



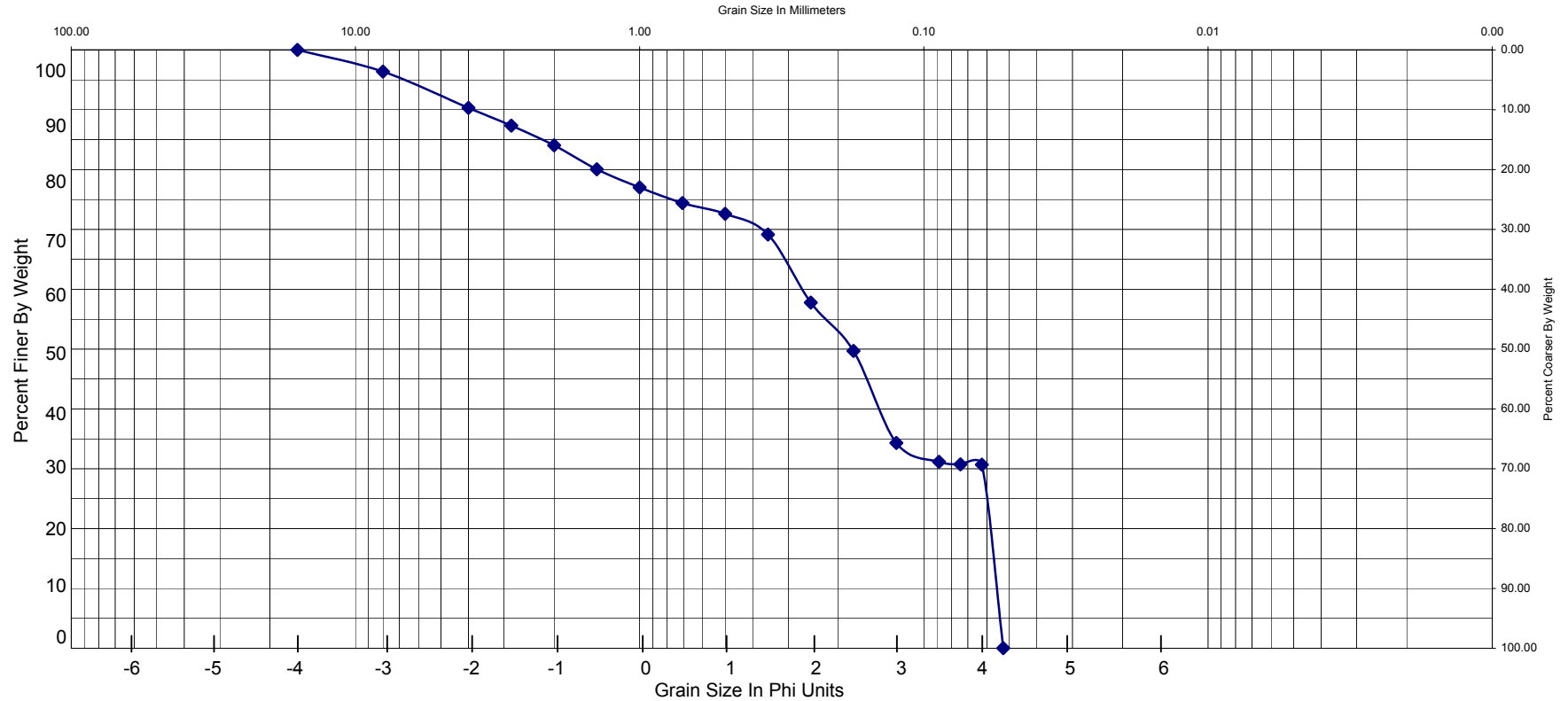
Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-8#3	5.5		SM	15.29	0.2	0.28	-0.27	1.38	2.03	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID



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Easting (X):	560622.35 Feet
Northing (Y):	835101.76 Feet
Sample Elevation:	-33.2 NGVD 29
Coord. System:	State Plane 1983 FLA West



Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-8#4	9.0		SM	30.67	0.18	0.32	-0.45	1.47	2.81	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 560622.35 Feet
													Northing (Y): 835101.76 Feet
													Sample Elevation:-36.7 NGVD 29
													Coord. System: State Plane 1983 FLA West



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