

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=543085.92 Y=789447.73		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-00-14		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 Completed 8/10/00 13:52		
8. DEPTH DRILLED INTO ROCK N/A		17. ELEVATION TOP OF HOLE -40.5 FT		
9. TOTAL DEPTH OF HOLE 19.3 FT		18. TOTAL CORE RECOVERY FOR BORING 91.6%		
		19. SIGNATURE OF GEOLOGIST SK/ID		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-40.5	0					
	1				1	Sample #1, Depth = 1.0' Mean (mm): 0.33, Phi Sorting: 1.24 Silt: 1.05% (SW)
	2					
	3		SAND, fine grained, some shell hash/shell fragments, gray (5Y-6/1), (SP).			
	4				2	Sample #2, Depth = 4.0' Mean (mm): 0.34, Phi Sorting: 1.22 Silt: 1.21% (SW)
-46	5					
	6		SAND, fine grained, little shell hash/shell fragments, light gray (5Y-7/1), (SP).		3	Sample #3, Depth = 6.5' Mean (mm): 0.26, Phi Sorting: 1.65 Silt: 5.83% (SW-SM)
-48.2	7					
	8		SAND, fine grained, trace calcareous silt/clay, trace shell hash/fragments, light gray (5Y-7/1), (SP-SM).		4	Sample #4, Depth = 8.5' Mean (mm): 0.20, Phi Sorting: 1.68 Silt: 13.50% (SM)
-49.9	9					
	10					
	11					
	12					
	13		CARBONATE CLASTS, ranges from fine sand sized to 2.5", hard & compact, light gray (5Y-7/1) and pale yellow (5Y-7/3), (GP).			
	14					
	15					
	16					
-58.2	17					
	18					
-59.8	19		No Recovery			
	20		End of Boring			
	21		Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.			Note: This column contains laboratory data.
	22					
	23					
	24					

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-14#1
 Date: 1/1/2001
 By: ID



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

Elevation:	-41.5	Feet	Easting:	543085.92	State Plane	1983
Reference:	NGVD 29		Northing:	789447.73	FLA West	Feet

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

Dry Wt.	63.15	Percent Silt:	1.05
Wash Wt.	62.50		

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	0.710	1.124	0.710	1.124
7	-1.500	2.828	0.590	0.934	1.300	2.059
10	-1.000	2.000	0.700	1.108	2.000	3.167
14	-0.500	1.414	1.410	2.233	3.410	5.400
18	0.000	1.000	2.030	3.215	5.440	8.614
25	0.500	0.707	3.340	5.289	8.780	13.903
35	1.000	0.500	4.280	6.778	13.060	20.681
45	1.500	0.354	5.990	9.485	19.050	30.166
60	2.000	0.250	16.540	26.192	35.590	56.358
80	2.500	0.177	15.480	24.513	51.070	80.871
120	3.000	0.125	10.530	16.675	61.600	97.546
170	3.500	0.088	0.790	1.251	62.390	98.797
200	3.750	0.074	0.070	0.111	62.460	98.907
230	4.000	0.063	0.010	0.016	62.470	98.923
Pan	Pan	0.053	0.660	1.045	63.130	99.968

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.59	0.65	1.23	1.88	2.38	2.59	2.92

Median phi:	1.88	Median mm:	0.27
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.49	0.36	1.02	-0.64	1.25
Moment	1.58	0.33	1.24	-0.62	1.94

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-14#2
 Date: 1/1/2001
 By: ID



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

Elevation:	-44.5	Feet	Easting:	543085.92	State Plane	1983
Reference:	NGVD 29		Northing:	789447.73	FLA West	Feet

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

Dry Wt.	71.34	Percent Silt:	1.21
Wash Wt.	70.48		

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	0.100	0.140	0.100	0.140
7	-1.500	2.828	0.440	0.617	0.540	0.757
10	-1.000	2.000	0.910	1.276	1.450	2.033
14	-0.500	1.414	1.960	2.747	3.410	4.780
18	0.000	1.000	2.840	3.981	6.250	8.761
25	0.500	0.707	4.640	6.504	10.890	15.265
35	1.000	0.500	5.530	7.752	16.420	23.017
45	1.500	0.354	6.850	9.602	23.270	32.618
60	2.000	0.250	18.650	26.142	41.920	58.761
80	2.500	0.177	16.560	23.213	58.480	81.974
120	3.000	0.125	11.000	15.419	69.480	97.393
170	3.500	0.088	0.820	1.149	70.300	98.542
200	3.750	0.074	0.120	0.168	70.420	98.710
230	4.000	0.063	0.010	0.014	70.430	98.724
Pan	Pan	0.053	0.860	1.205	71.290	99.930

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.47	0.55	1.10	1.83	2.35	2.56	2.92

Median phi:	1.83	Median mm:	0.28
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.48	0.36	1.02	-0.54	1.12
Moment	1.55	0.34	1.22	-0.48	1.72

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-14#3
 Date: 1/1/2001
 By: ID



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

Elevation:	-47	Feet	Easting:	543085.92	State Plane	1983
Reference:	NGVD 29		Northing:	789447.73	FLA West	Feet

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

Dry Wt.	49.32	Percent Silt:	5.83
Wash Wt.	46.48		

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	0.450	0.912	0.450	0.912
7	-1.500	2.828	0.600	1.217	1.050	2.129
10	-1.000	2.000	0.740	1.500	1.790	3.629
14	-0.500	1.414	1.430	2.899	3.220	6.529
18	0.000	1.000	2.040	4.136	5.260	10.665
25	0.500	0.707	2.310	4.684	7.570	15.349
35	1.000	0.500	2.500	5.069	10.070	20.418
45	1.500	0.354	2.910	5.900	12.980	26.318
60	2.000	0.250	5.050	10.239	18.030	36.557
80	2.500	0.177	8.780	17.802	26.810	54.359
120	3.000	0.125	13.820	28.021	40.630	82.380
170	3.500	0.088	4.980	10.097	45.610	92.478
200	3.750	0.074	0.560	1.135	46.170	93.613
230	4.000	0.063	0.160	0.324	46.330	93.938
Pan	Pan	0.053	2.870	5.819	49.200	99.757

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.77	0.56	1.38	2.37	2.87	3.07	4.04

Median phi:	2.37	Median mm:	0.19
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.85	0.28	1.35	-0.63	1.33
Moment	1.93	0.26	1.65	-0.40	1.79

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-14#4
 Date: 1/1/2001
 By: ID



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

Elevation:	-49	Feet	Easting:	543085.92	State Plane	1983
Reference:	NGVD 29		Northing:	789447.73	FLA West	Feet

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

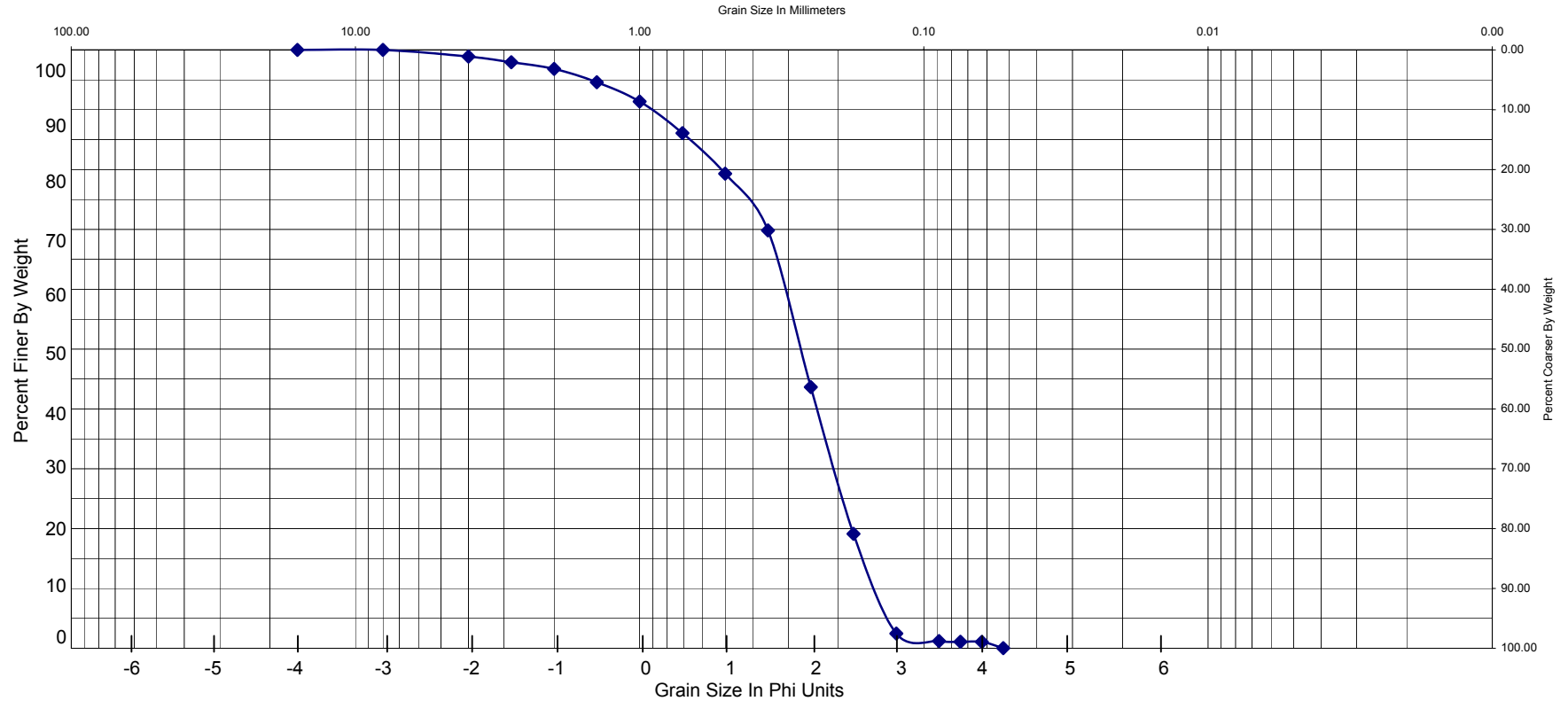
Dry Wt.	60.10	Percent Silt:	13.50
Wash Wt.	52.10		

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	0.740	1.231	0.740	1.231
7	-1.500	2.828	0.780	1.298	1.520	2.529
10	-1.000	2.000	0.740	1.231	2.260	3.760
14	-0.500	1.414	1.280	2.130	3.540	5.890
18	0.000	1.000	1.490	2.479	5.030	8.369
25	0.500	0.707	1.930	3.211	6.960	11.581
35	1.000	0.500	1.950	3.245	8.910	14.825
45	1.500	0.354	2.140	3.561	11.050	18.386
60	2.000	0.250	4.060	6.755	15.110	25.141
80	2.500	0.177	7.620	12.679	22.730	37.820
120	3.000	0.125	18.030	30.000	40.760	67.820
170	3.500	0.088	7.990	13.295	48.750	81.115
200	3.750	0.074	2.520	4.193	51.270	85.308
230	4.000	0.063	0.700	1.165	51.970	86.473
Pan	Pan	0.053	8.110	13.494	60.080	99.967

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.71	1.16	1.99	2.70	3.27	3.67	4.16

Median phi:	2.70	Median mm:	0.15
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	2.20	0.22	1.36	-0.74	1.56
Moment	2.32	0.20	1.68	-0.70	2.14



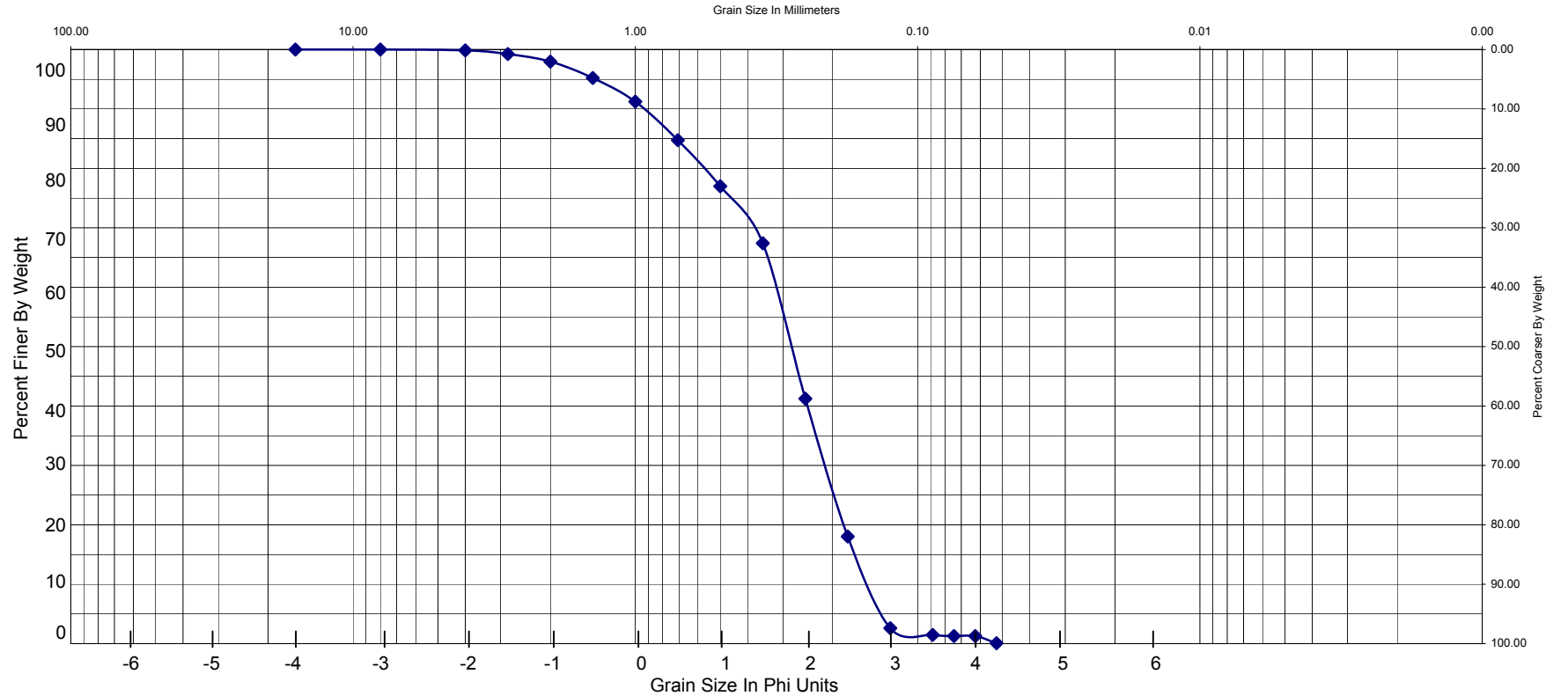
Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-14#1	1.0		SW	1.05	0.27	0.33	-0.62	1.94	1.24	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID



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BOCA RATON, FLORIDA 33431

Easting (X):	543085.92 Feet
Northing (Y):	789447.73 Feet
Sample Elevation:	-41.5 NGVD 29
Coord. System:	State Plane 1983 FLA West



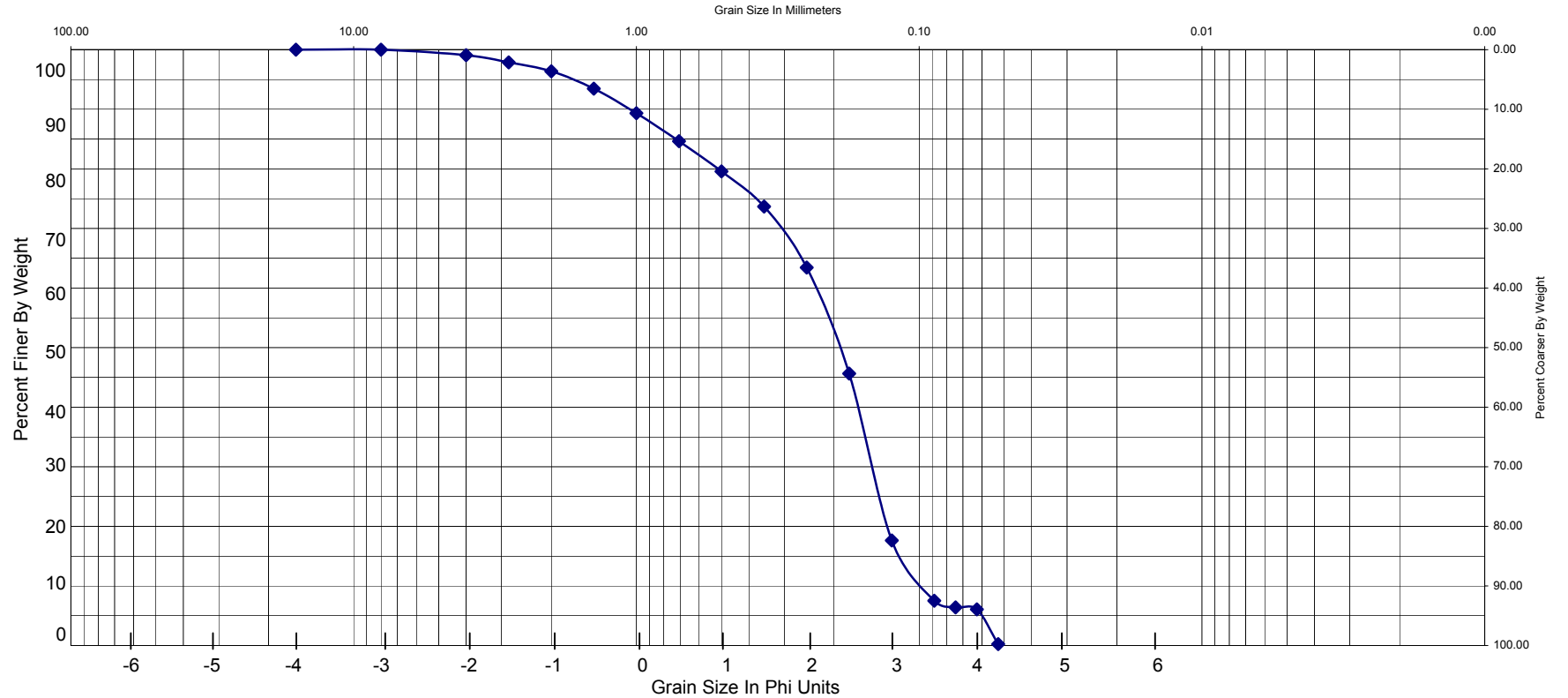
Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-14#2	4.0		SW	1.21	0.28	0.34	-0.48	1.72	1.22	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID



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Easting (X):	543085.92 Feet
Northing (Y):	789447.73 Feet
Sample Elevation:	-44.5 NGVD 29
Coord. System:	State Plane 1983 FLA West

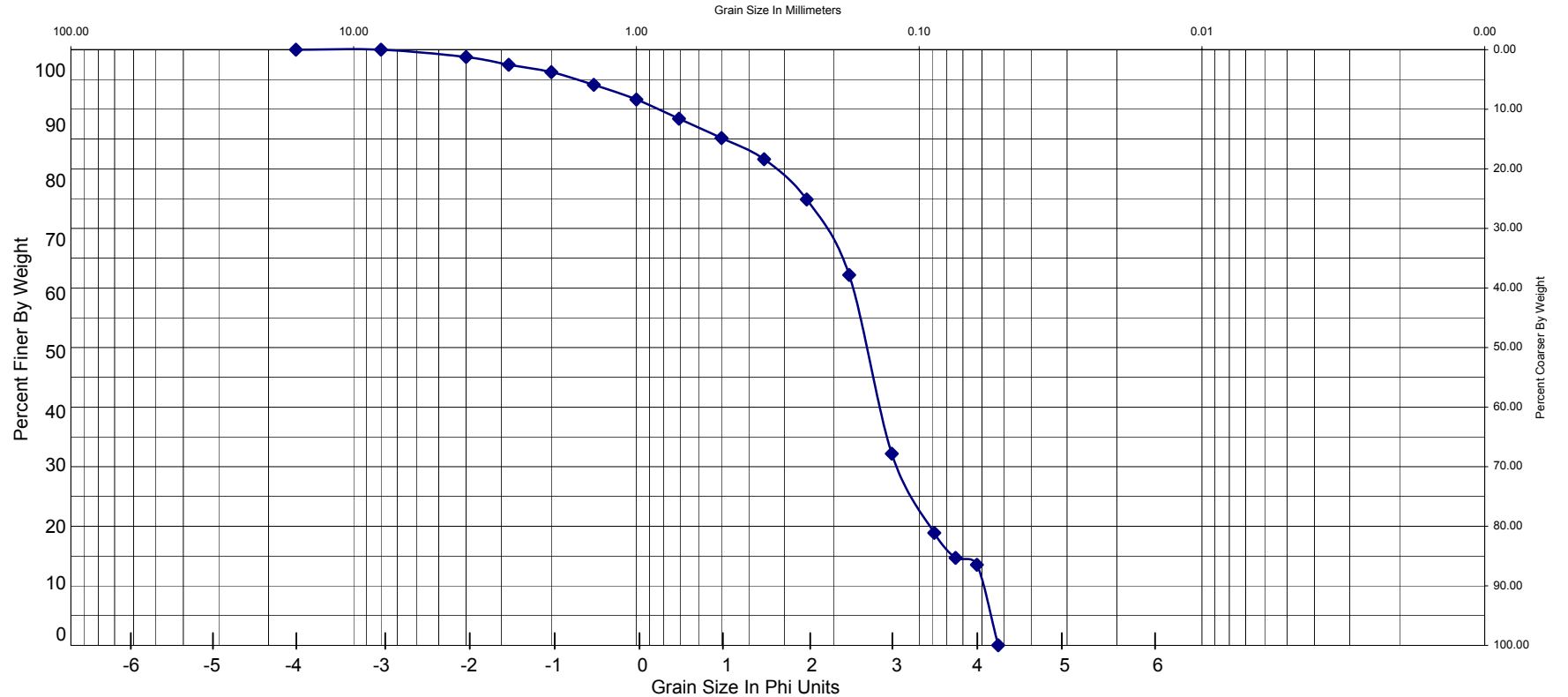


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-14#3	6.5		SW-SM	5.83	0.19	0.26	-0.4	1.79	1.65	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 543085.92 Feet
													Northing (Y): 789447.73 Feet
													Sample Elevation: -47 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-00-14#4	8.5		SM	13.50	0.15	0.2	-0.7	2.14	1.68	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 543085.92 Feet
													Northing (Y): 789447.73 Feet
													Sample Elevation: -49 NGVD 29
													Coord. System: State Plane 1983 FLA West



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