

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=548972.11 Y=767914.37		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-00-36		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 8/11/00 16:27		
8. DEPTH DRILLED INTO ROCK N/A		17. ELEVATION TOP OF HOLE -37.7 FT		
9. TOTAL DEPTH OF HOLE 11.4 FT		18. TOTAL CORE RECOVERY FOR BORING 92.1%		
		19. SIGNATURE OF GEOLOGIST SK/ID		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-37.7	0					
	1		SAND, medium grained, some shell hash/shell fragments/whole shells, gray (5Y-5/1), (SP).		1	Sample #1, Depth = 1.5' Mean (mm): 0.43, Phi Sorting: 1.34 Silt: 1.59% (SW)
-40.6	2					
	3		fine grained, little shell hash/shell fragments, gray (5Y-5/1), (SP).		2	Sample #2, Depth = 4.0' Mean (mm): 0.29, Phi Sorting: 1.16 Silt: 2.88% (SW)
-42.6	4					
	5		SAND, fine grained, trace shell hash/shell fragments, light gray (5Y-7/1), (SP).		3	Sample #3, Depth = 6.0' Mean (mm): 0.24, Phi Sorting: 0.65 Silt: 1.31% (SP)
-44.9	6					
	7		SAND, fine grained, trace shell hash/shell fragments, light gray (5Y-7/1), (SP).		4	Sample #4, Depth = 8.5' Mean (mm): 0.19, Phi Sorting: 1.55 Silt: 12.81% (SM)
-47.1	8					
	9		CARBONATE CLASTS, ranges from fine sand size to 4.0", gray (5Y-5/1), (GP).			
-48.2	10					
-49.1	11		No Recovery			
	12		End of Boring			
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	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-00-36#1
 Date: 1/1/2001
 By: ID



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

Elevation:	-39.2	Feet	Easting:	548972.11	State Plane	1983
Reference:	NGVD 29		Northing:	767914.37	FLA West	Feet

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

Dry Wt.	76.65	Percent Silt:	1.59
Wash Wt.	75.44		

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	0.480	0.626	0.480	0.626
7	-1.500	2.828	1.000	1.305	1.480	1.931
10	-1.000	2.000	1.840	2.401	3.320	4.331
14	-0.500	1.414	3.080	4.018	6.400	8.350
18	0.000	1.000	4.900	6.393	11.300	14.742
25	0.500	0.707	6.740	8.793	18.040	23.536
35	1.000	0.500	8.950	11.676	26.990	35.212
45	1.500	0.354	11.090	14.468	38.080	49.680
60	2.000	0.250	15.640	20.404	53.720	70.085
80	2.500	0.177	16.390	21.383	70.110	91.468
120	3.000	0.125	4.950	6.458	75.060	97.926
170	3.500	0.088	0.320	0.417	75.380	98.343
200	3.750	0.074	0.030	0.039	75.410	98.382
230	4.000	0.063	0.020	0.026	75.430	98.408
Pan	Pan	0.053	1.220	1.592	76.650	100.000

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.92	0.07	0.56	1.51	2.11	2.33	2.77

Median phi:	1.51	Median mm:	0.35
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.15	0.45	1.12	-0.44	0.97
Moment	1.21	0.43	1.34	-0.36	1.56

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-36#2
 Date: 1/1/2001
 By: ID



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

Elevation:	-41.7	Feet	Easting:	548972.11	State Plane	1983
Reference:	NGVD 29		Northing:	767914.37	FLA West	Feet

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

Dry Wt.	76.49	Percent Silt:	2.88
Wash Wt.	74.30		

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	0.530	0.693	0.530	0.693
10	-1.000	2.000	1.080	1.412	1.610	2.105
14	-0.500	1.414	1.760	2.301	3.370	4.406
18	0.000	1.000	1.910	2.497	5.280	6.903
25	0.500	0.707	3.000	3.922	8.280	10.825
35	1.000	0.500	3.840	5.020	12.120	15.845
45	1.500	0.354	5.720	7.478	17.840	23.323
60	2.000	0.250	16.080	21.022	33.920	44.346
80	2.500	0.177	26.440	34.567	60.360	78.912
120	3.000	0.125	12.710	16.617	73.070	95.529
170	3.500	0.088	1.040	1.360	74.110	96.888
200	3.750	0.074	0.150	0.196	74.260	97.085
230	4.000	0.063	0.020	0.026	74.280	97.111
Pan	Pan	0.053	2.200	2.876	76.480	99.987

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.38	1.01	1.54	2.08	2.44	2.65	2.98

Median phi:	2.08	Median mm:	0.24
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.67	0.31	0.92	-0.86	1.53
Moment	1.76	0.29	1.16	-0.79	2.26

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-36#3
 Date: 1/1/2001
 By: ID



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

Elevation:	-43.7	Feet	Easting:	548972.11	State Plane	1983
Reference:	NGVD 29		Northing:	767914.37	FLA West	Feet

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

Dry Wt.	69.62	Percent Silt:	1.31
Wash Wt.	68.71		

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	0.144	0.100	0.144
7	-1.500	2.828	0.290	0.417	0.390	0.560
10	-1.000	2.000	0.250	0.359	0.640	0.919
14	-0.500	1.414	0.280	0.402	0.920	1.321
18	0.000	1.000	0.430	0.618	1.350	1.939
25	0.500	0.707	0.700	1.005	2.050	2.945
35	1.000	0.500	1.550	2.226	3.600	5.171
45	1.500	0.354	4.180	6.004	7.780	11.175
60	2.000	0.250	16.670	23.944	24.450	35.119
80	2.500	0.177	34.100	48.980	58.550	84.099
120	3.000	0.125	9.600	13.789	68.150	97.889
170	3.500	0.088	0.460	0.661	68.610	98.549
200	3.750	0.074	0.080	0.115	68.690	98.664
230	4.000	0.063	0.010	0.014	68.700	98.679
Pan	Pan	0.053	0.910	1.307	69.610	99.986

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
0.96	1.60	1.79	2.15	2.41	2.50	2.89

Median phi:	2.15	Median mm:	0.23
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	2.02	0.25	0.52	-0.41	1.28
Moment	2.04	0.24	0.65	-0.38	1.91

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-36#4
 Date: 1/1/2001
 By: ID



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

Elevation:	-46.2	Feet	Easting:	548972.11	State Plane	1983
Reference:	NGVD 29		Northing:	767914.37	FLA West	Feet

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

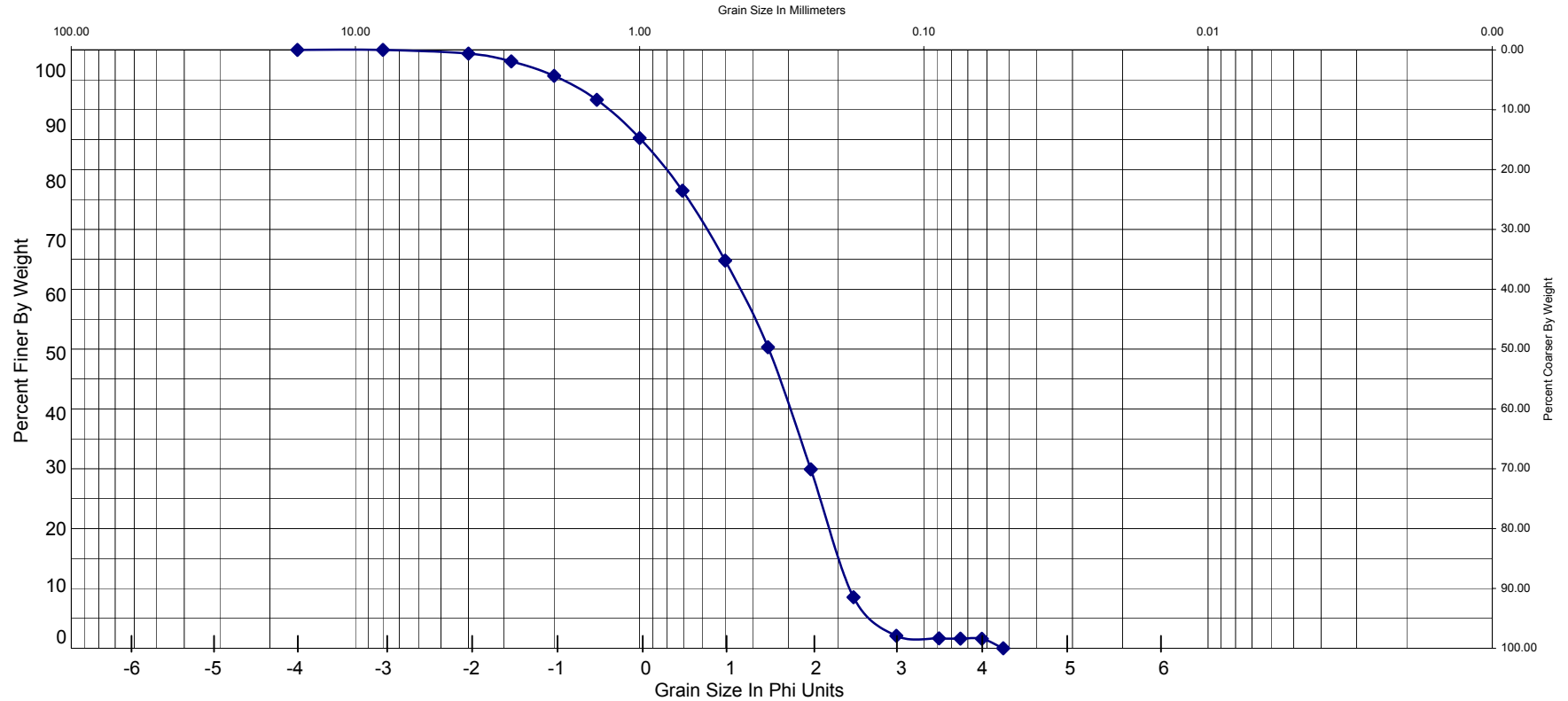
Dry Wt.	65.65	Percent Silt:	12.81
Wash Wt.	57.26		

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	1.320	2.011	1.320	2.011
7	-1.500	2.828	0.740	1.127	2.060	3.138
10	-1.000	2.000	0.680	1.036	2.740	4.174
14	-0.500	1.414	0.640	0.975	3.380	5.149
18	0.000	1.000	0.730	1.112	4.110	6.260
25	0.500	0.707	1.250	1.904	5.360	8.165
35	1.000	0.500	1.910	2.909	7.270	11.074
45	1.500	0.354	2.400	3.656	9.670	14.730
60	2.000	0.250	4.130	6.291	13.800	21.021
80	2.500	0.177	11.810	17.989	25.610	39.010
120	3.000	0.125	21.820	33.237	47.430	72.247
170	3.500	0.088	7.820	11.912	55.250	84.158
200	3.750	0.074	1.800	2.742	57.050	86.900
230	4.000	0.063	0.170	0.259	57.220	87.159
Pan	Pan	0.053	8.410	12.810	65.630	99.970

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.58	1.60	2.11	2.67	3.11	3.49	4.15

Median phi:	2.67	Median mm:	0.16
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	2.27	0.21	1.19	-0.78	1.93
Moment	2.37	0.19	1.55	-0.82	2.52

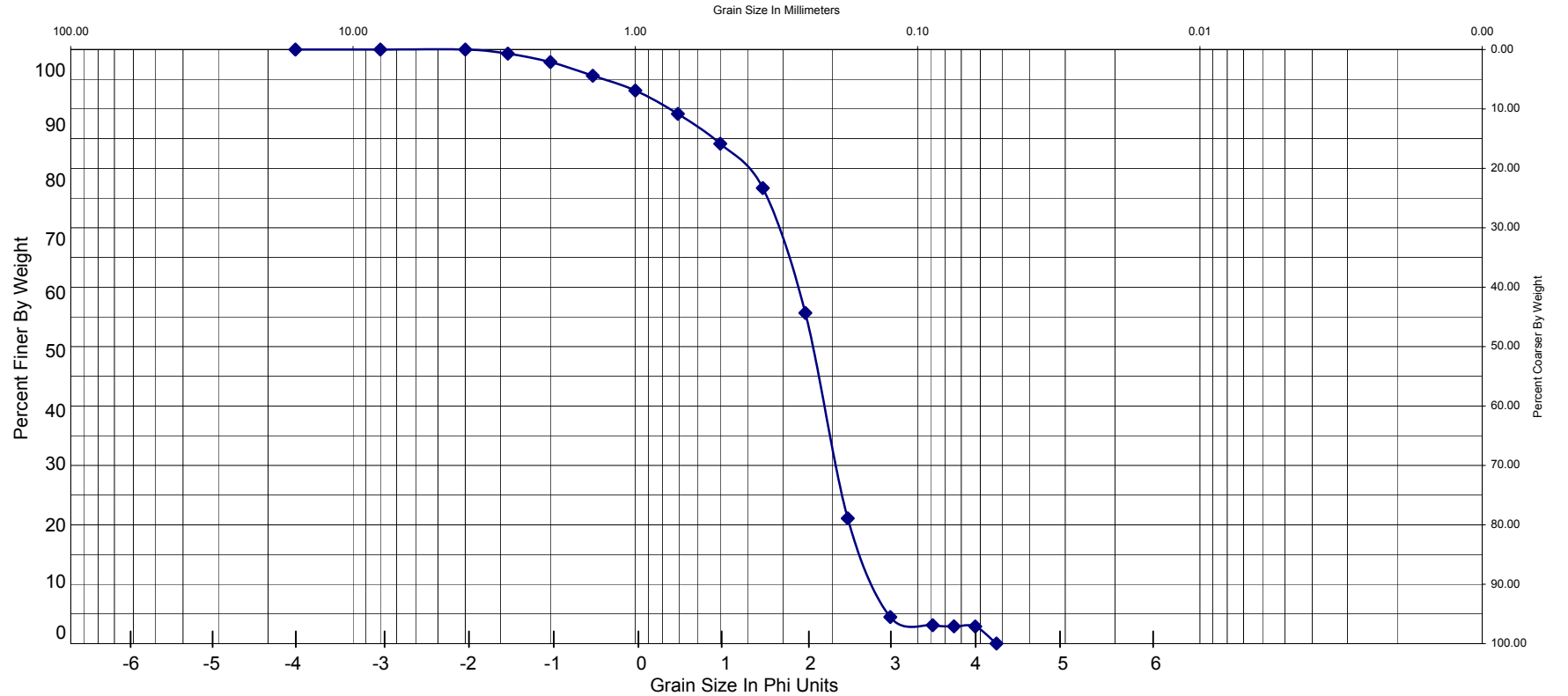


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-36#1	1.5		SW	1.59	0.35	0.43	-0.36	1.56	1.34	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 548972.11 Feet
													Northing (Y): 767914.37 Feet
													Sample Elevation: -39.2 NGVD 29
													Coord. System: State Plane 1983 FLA West



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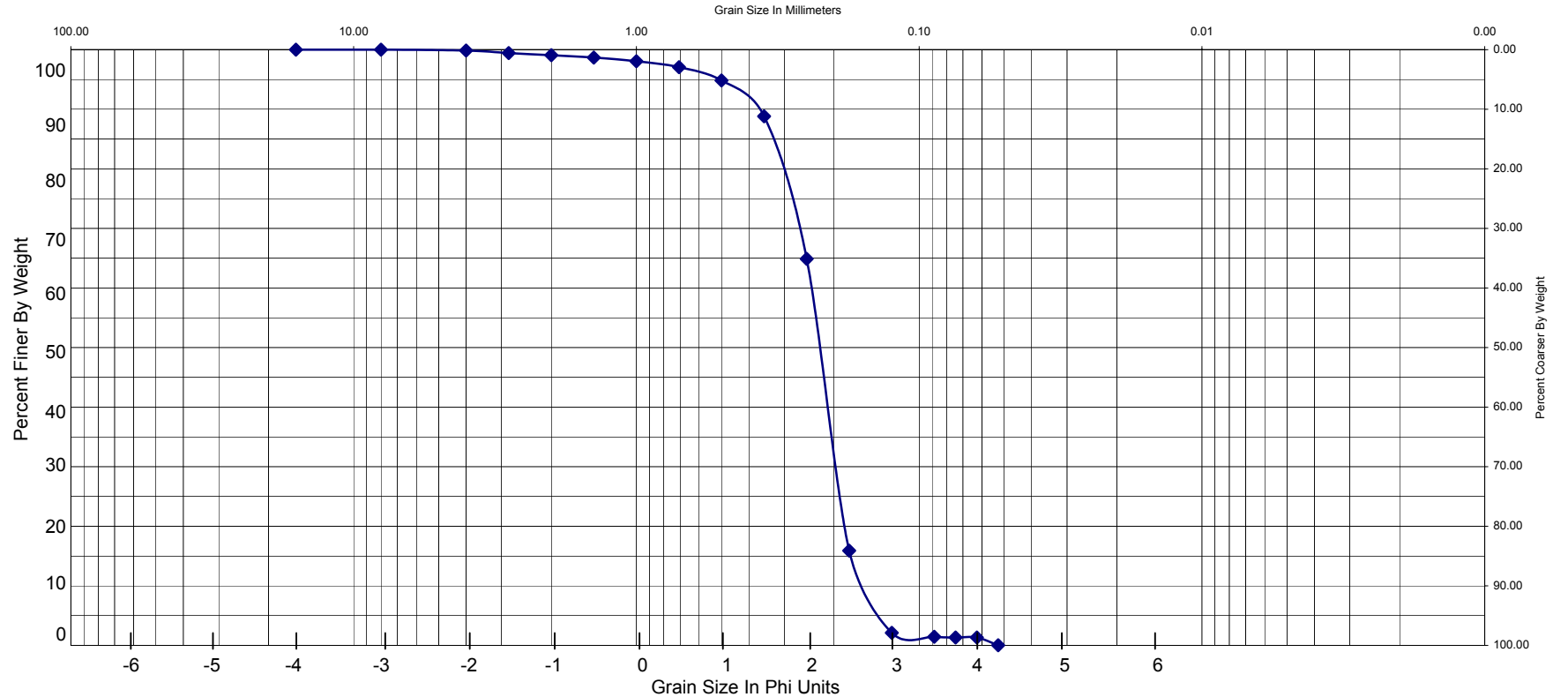


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-36#2	4.0		SW	2.88	0.24	0.3	-0.79	2.26	1.16	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 548972.11 Feet
													Northing (Y): 767914.37 Feet
													Sample Elevation: -41.7 NGVD 29
													Coord. System: State Plane 1983 FLA West



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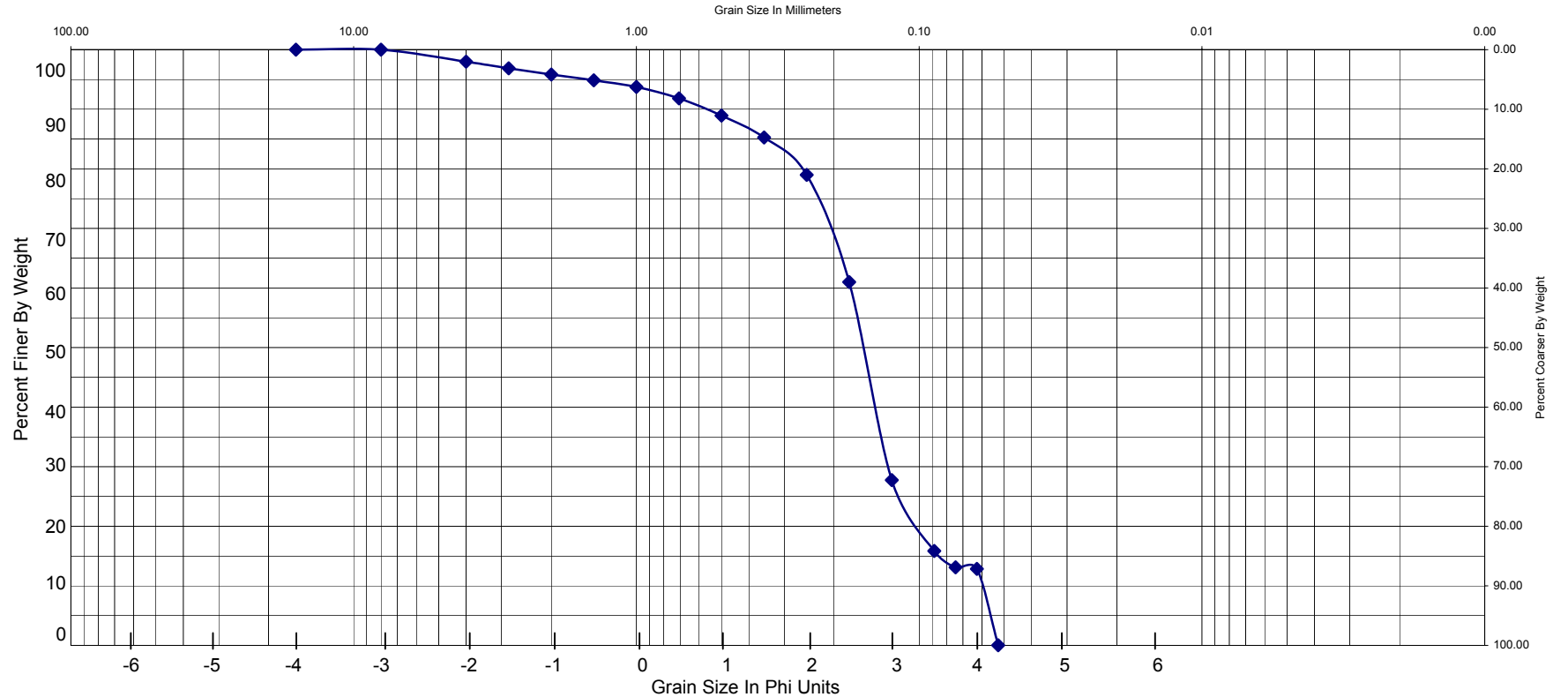


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-36#3	6.0		SP	1.31	0.23	0.24	-0.38	1.91	0.65	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 548972.11 Feet
													Northing (Y): 767914.37 Feet
													Sample Elevation: -43.7 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-00-36#4	8.5		SM	12.81	0.16	0.19	-0.82	2.52	1.55	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 548972.11 Feet
													Northing (Y): 767914.37 Feet
													Sample Elevation: -46.2 NGVD 29
													Coord. System: State Plane 1983 FLA West



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