

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=544958.84 Y=772419.33		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-00-25		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 12:43		
8. DEPTH DRILLED INTO ROCK N/A		17. ELEVATION TOP OF HOLE -34.2 FT		
9. TOTAL DEPTH OF HOLE 15.8 FT		18. TOTAL CORE RECOVERY FOR BORING 99.4%		
		19. SIGNATURE OF GEOLOGIST ID		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-34.2	0					
	1		SHELLY SAND, fine grained (sand component), gray (5Y-6/1), (SP).		1	Sample #1, Depth = 1.0' Mean (mm): 0.38, Phi Sorting: 0.87 Silt: 0.70% (SP)
-36.9	2					
	3		SHELLY SAND, fine grained (sand component), gray (5Y-6/1), (SP).		2	Sample #2, Depth = 4.5' Mean (mm): 0.39, Phi Sorting: 1.16 Silt: 1.06% (SW)
	4					
	5					
	6					
-41.8	7				3	Sample #3, Depth = 7.0' Mean (mm): 0.35, Phi Sorting: 1.11 Silt: 1.11% (SW)
	8					
	9		SAND, fine grained, some shell hash/fragments, gray (5Y-6/1), (SP).		4	Sample #4, Depth = 11.0' Mean (mm): 0.34, Phi Sorting: 1.14 Silt: 2.44% (SW)
-46.2	10					
	11					
	12					
-48.2	13		SAND, calcareous, fine grained, trace shell hash, gray (5Y-5/1), (SP).			
	14					
-50.1	15		CARBONATE CLASTS, ranges from silt/clay size to 2.5", calcareous, fine grained sand predominant, gray (5Y-6/1), (GM).			
	16		No Recovery			
	17		End of Boring			
	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-00-25#1
 Date: 1/1/2001
 By: ID



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

Elevation:	-35.2	Feet	Easting:	544958.84	State Plane	1983
Reference:	NGVD 29		Northing:	772419.33	FLA West	Feet

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

Dry Wt.	77.11	Percent Silt:	0.70
Wash Wt.	76.57		

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	0.120	0.156	0.120	0.156
7	-1.500	2.828	0.180	0.233	0.300	0.389
10	-1.000	2.000	0.280	0.363	0.580	0.752
14	-0.500	1.414	0.990	1.284	1.570	2.036
18	0.000	1.000	1.930	2.503	3.500	4.539
25	0.500	0.707	4.620	5.991	8.120	10.530
35	1.000	0.500	10.260	13.306	18.380	23.836
45	1.500	0.354	18.200	23.603	36.580	47.439
60	2.000	0.250	23.360	30.294	59.940	77.733
80	2.500	0.177	14.310	18.558	74.250	96.291
120	3.000	0.125	2.200	2.853	76.450	99.144
170	3.500	0.088	0.070	0.091	76.520	99.235
200	3.750	0.074	0.030	0.039	76.550	99.274
230	4.000	0.063	0.010	0.013	76.560	99.287
Pan	Pan	0.053	0.540	0.700	77.100	99.987

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
0.04	0.71	1.02	1.54	1.95	2.17	2.46

Median phi:	1.54	Median mm:	0.34
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.38	0.38	0.73	-0.33	1.07
Moment	1.41	0.38	0.87	-0.32	1.61

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-25#2
 Date: 1/1/2001
 By: ID



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

Elevation:	-38.7	Feet	Easting:	544958.84	State Plane	1983
Reference:	NGVD 29		Northing:	772419.33	FLA West	Feet

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

Dry Wt.	97.42	Percent Silt:	1.06
Wash Wt.	96.39		

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	0.290	0.298	0.290	0.298
7	-1.500	2.828	0.460	0.472	0.750	0.770
10	-1.000	2.000	1.410	1.447	2.160	2.217
14	-0.500	1.414	2.780	2.854	4.940	5.071
18	0.000	1.000	4.330	4.445	9.270	9.515
25	0.500	0.707	8.410	8.633	17.680	18.148
35	1.000	0.500	11.050	11.343	28.730	29.491
45	1.500	0.354	13.130	13.478	41.860	42.969
60	2.000	0.250	25.630	26.309	67.490	69.277
80	2.500	0.177	22.770	23.373	90.260	92.650
120	3.000	0.125	5.920	6.077	96.180	98.727
170	3.500	0.088	0.170	0.175	96.350	98.902
200	3.750	0.074	0.030	0.031	96.380	98.932
230	4.000	0.063	0.010	0.010	96.390	98.943
Pan	Pan	0.053	1.030	1.057	97.420	100.000

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.51	0.38	0.80	1.63	2.12	2.31	2.69

Median phi:	1.63	Median mm:	0.32
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.30	0.41	0.97	-0.49	1.00
Moment	1.35	0.39	1.16	-0.39	1.59

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-25#3
 Date: 1/1/2001
 By: ID



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

Elevation:	-41.2	Feet	Easting:	544958.84	State Plane	1983
Reference:	NGVD 29		Northing:	772419.33	FLA West	Feet

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

Dry Wt.	83.87	Percent Silt:	1.11
Wash Wt.	82.95		

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	0.000	0.000	0.000	0.000
5	-2.000	4.000	0.520	0.620	0.520	0.620
7	-1.500	2.828	0.440	0.525	0.960	1.145
10	-1.000	2.000	1.020	1.216	1.980	2.361
14	-0.500	1.414	1.580	1.884	3.560	4.245
18	0.000	1.000	2.390	2.850	5.950	7.094
25	0.500	0.707	4.570	5.449	10.520	12.543
35	1.000	0.500	7.790	9.288	18.310	21.831
45	1.500	0.354	12.310	14.677	30.620	36.509
60	2.000	0.250	22.080	26.326	52.700	62.835
80	2.500	0.177	23.040	27.471	75.740	90.306
120	3.000	0.125	6.710	8.000	82.450	98.307
170	3.500	0.088	0.390	0.465	82.840	98.772
200	3.750	0.074	0.050	0.060	82.890	98.832
230	4.000	0.063	0.040	0.048	82.930	98.879
Pan	Pan	0.053	0.930	1.109	83.860	99.988

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.37	0.69	1.11	1.76	2.22	2.39	2.79

Median phi:	1.76	Median mm:	0.30
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.45	0.37	0.90	-0.53	1.16
Moment	1.51	0.35	1.11	-0.51	1.84

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-25#4
 Date: 1/1/2001
 By: ID



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

Elevation:	-45.2	Feet	Easting:	544958.84	State Plane	1983
Reference:	NGVD 29		Northing:	772419.33	FLA West	Feet

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

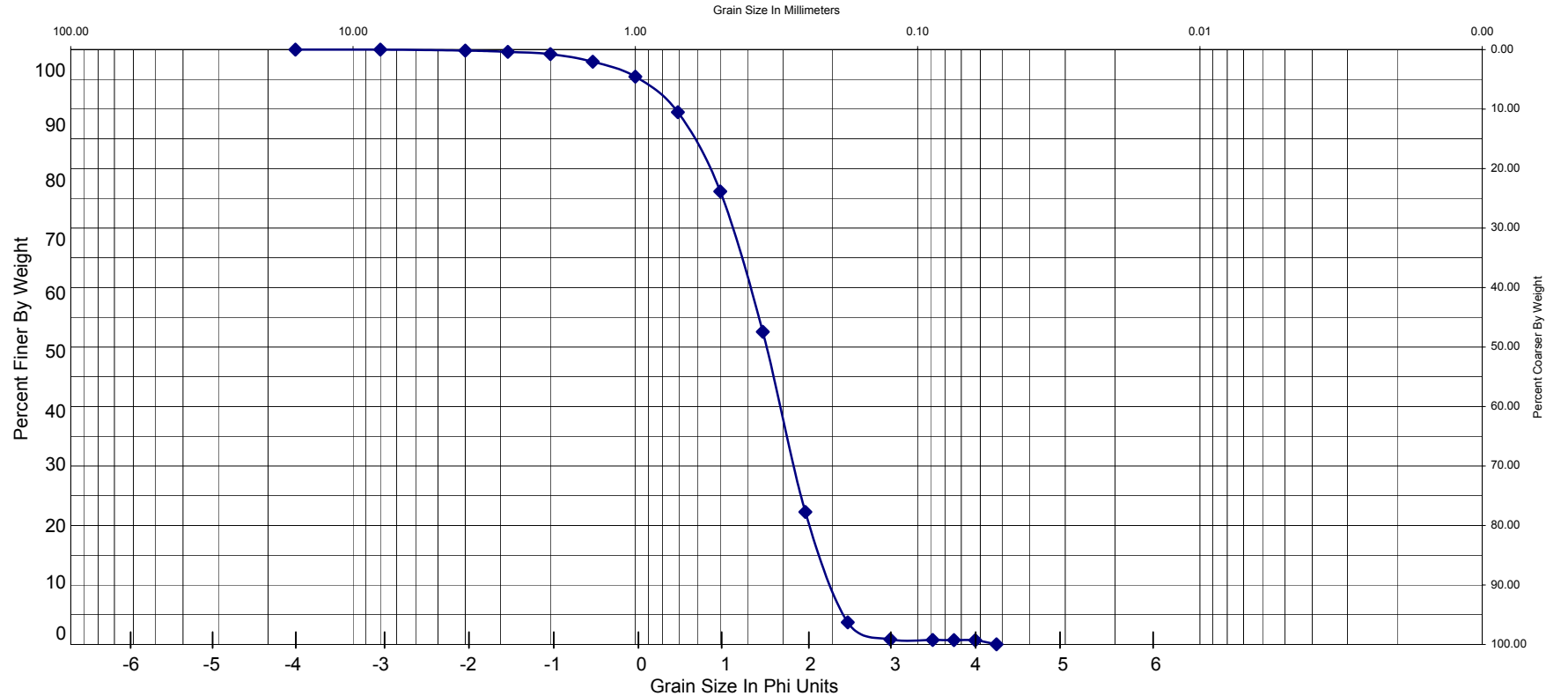
Dry Wt.	88.79	Percent Silt:	2.44
Wash Wt.	86.63		

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	0.390	0.439	0.390	0.439
7	-1.500	2.828	0.560	0.631	0.950	1.070
10	-1.000	2.000	0.940	1.059	1.890	2.129
14	-0.500	1.414	1.670	1.881	3.560	4.009
18	0.000	1.000	2.470	2.782	6.030	6.791
25	0.500	0.707	5.160	5.811	11.190	12.603
35	1.000	0.500	8.640	9.731	19.830	22.334
45	1.500	0.354	11.640	13.110	31.470	35.443
60	2.000	0.250	20.630	23.235	52.100	58.678
80	2.500	0.177	23.930	26.951	76.030	85.629
120	3.000	0.125	9.700	10.925	85.730	96.554
170	3.500	0.088	0.720	0.811	86.450	97.365
200	3.750	0.074	0.120	0.135	86.570	97.500
230	4.000	0.063	0.040	0.045	86.610	97.545
Pan	Pan	0.053	2.170	2.444	88.780	99.989

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.32	0.67	1.10	1.81	2.30	2.47	2.93


Median phi:	1.81	Median mm:	0.28
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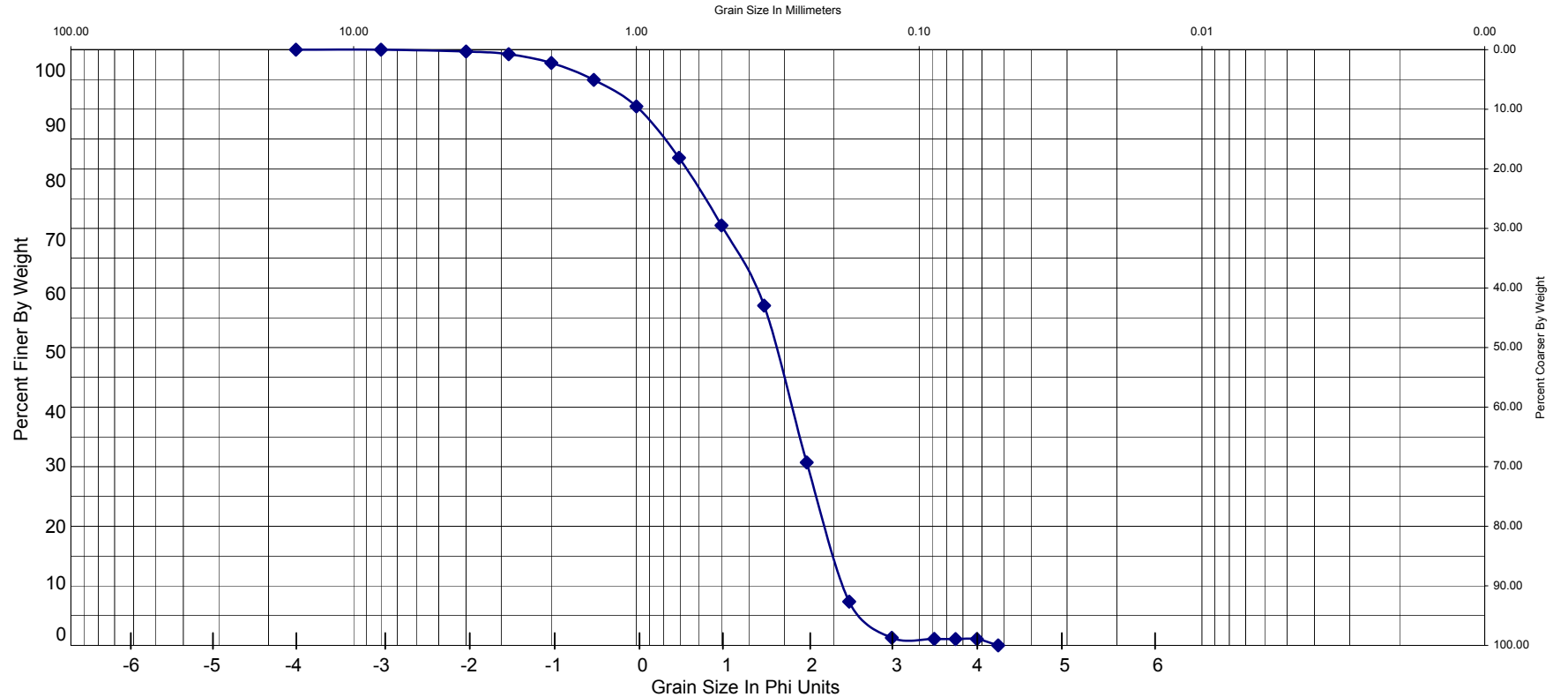
	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.51	0.35	0.94	-0.48	1.11
Moment	1.57	0.34	1.14	-0.43	1.73




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-00-25#1	1.0		SP	0.70	0.34	0.38	-0.32	1.61	0.87	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID

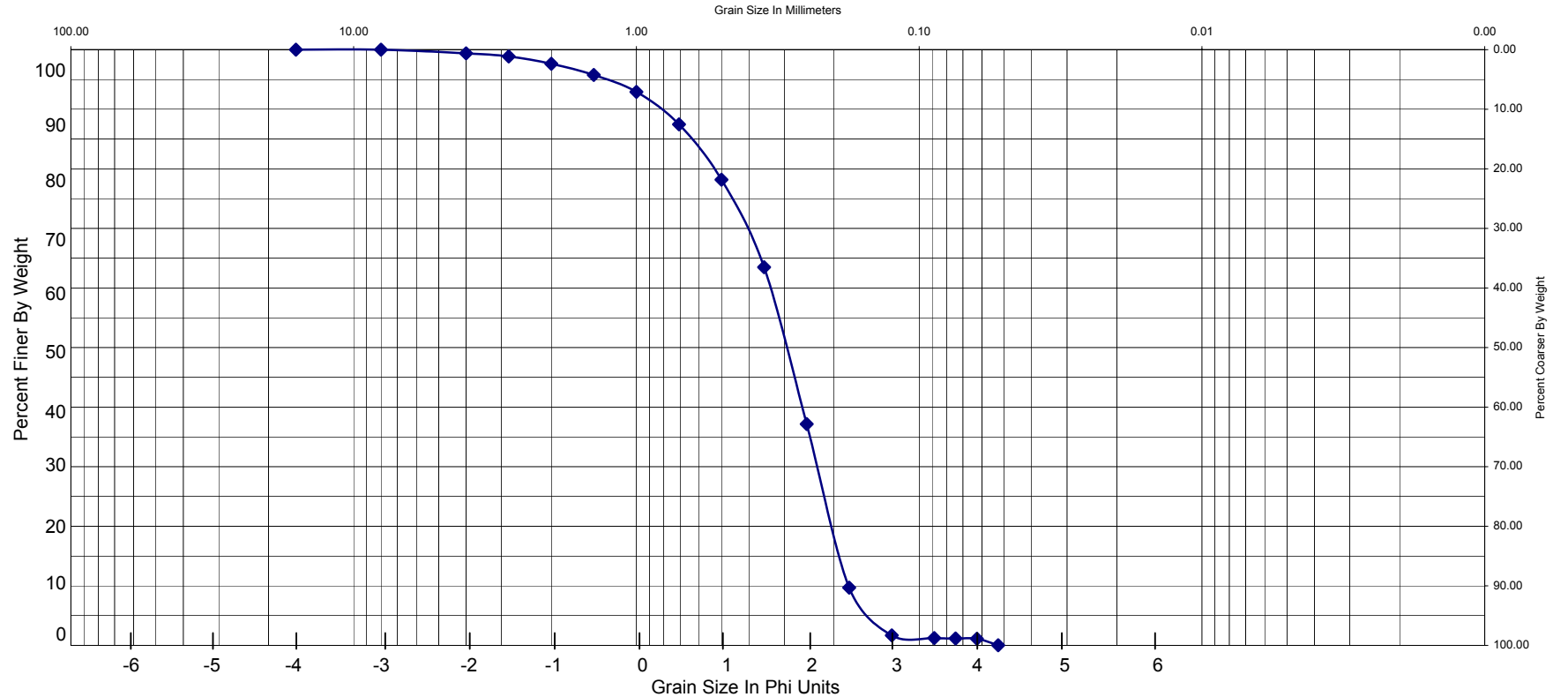
	COASTAL PLANNING & ENGINEERING, INC. 2481 N. W. BOCA RATON BLVD. BOCA RATON, FLORIDA 33431		Easting (X): 544958.84 Feet
			Northing (Y): 772419.33 Feet
			Sample Elevation: -35.2 NGVD 29
			Coord. System: State Plane 1983 FLA West



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-00-25#2	4.5		SW	1.06	0.32	0.39	-0.39	1.59	1.16	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 544958.84 Feet
													Northing (Y): 772419.33 Feet
													Sample Elevation: -38.7 NGVD 29
													Coord. System: State Plane 1983 FLA West

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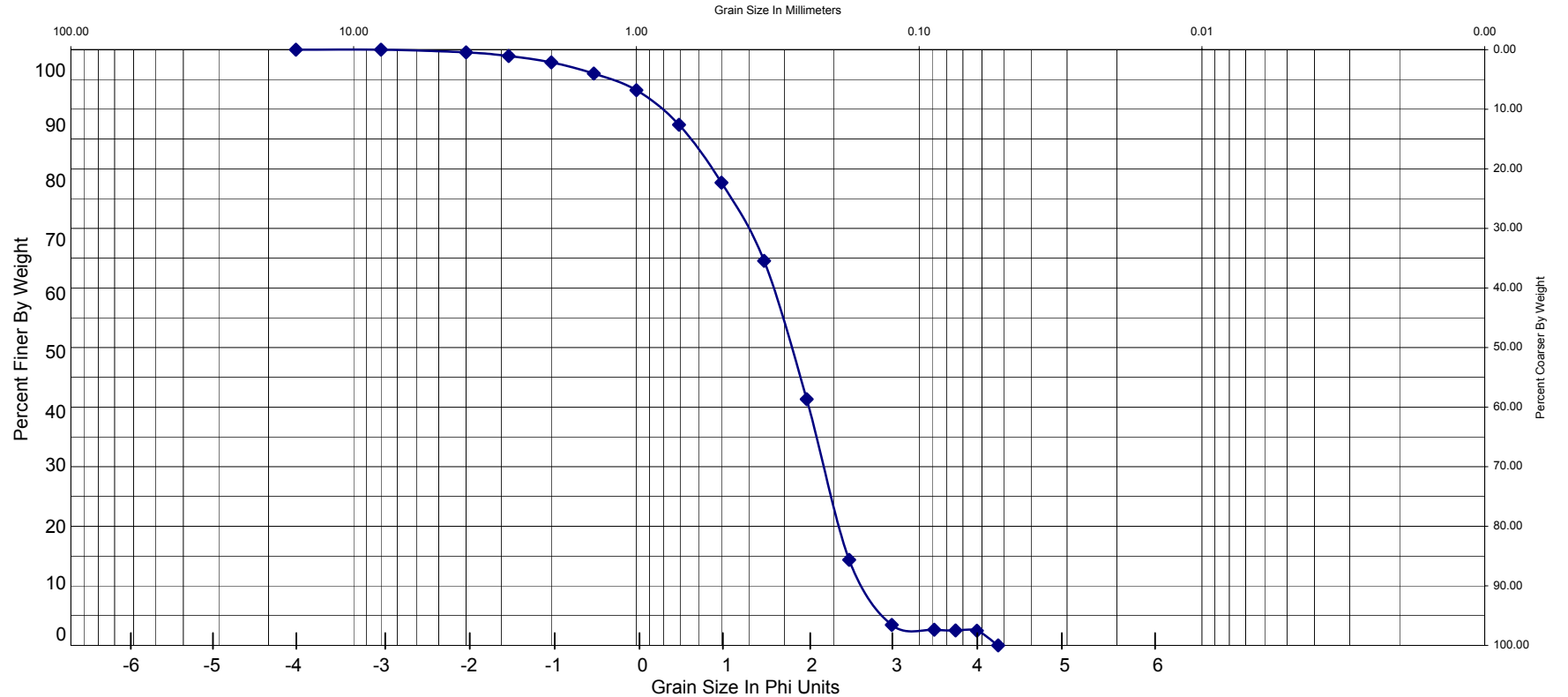


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-25#3	7.0		SW	1.11	0.3	0.35	-0.51	1.84	1.11	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 544958.84 Feet
													Northing (Y): 772419.33 Feet
													Sample Elevation: -41.2 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-00-25#4	11.0		SW	2.44	0.29	0.34	-0.43	1.73	1.14	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 544958.84 Feet
													Northing (Y): 772419.33 Feet
													Sample Elevation: -45.2 NGVD 29
													Coord. System: State Plane 1983 FLA West



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