

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=559987.59 Y=837106.00		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-00-07		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 10:30		
8. DEPTH DRILLED INTO ROCK N/A		17. ELEVATION TOP OF HOLE -29.5 ft		
9. TOTAL DEPTH OF HOLE 19.3 FT		18. TOTAL CORE RECOVERY FOR BORING 100%		
		19. SIGNATURE OF GEOLOGIST ID		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-29.5	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): 0.49, Phi Sorting: 1.72 Silt: 3.93% (SW)
-32	2					
	3		SAND, fine grained, some shell hash/shell fragments/whole shells, gray (5Y-6/1), (SP).		2	Sample #2, Depth = 3.2' Mean (mm): 0.37, Phi Sorting: 1.67 Silt: 7.97% (SW-SM)
-33.3	4					
	5		CARBONATE CLASTS, ranges from fine sand sized to 3.5", little shell hash/fragments, gray (5Y-6/1), (GP). Large fragment between 5.0-5.3'.		3	Sample #3, Depth = 6.5' Mean (mm): 0.60, Phi Sorting: 2.73 Silt: 14.95% (SM)
-36.5	6					
	7		CARBONATE CLASTS, calcareous gravel/sand, little calcareous silt/clay, little shell hash/shell fragments, light gray (5Y-7/1), (GM).		4	Sample #4, Depth = 8.0' Mean (mm): 0.33, Phi Sorting: 3.24 Silt: 54.30% (CL)
-39.3	8					
	9					
	10		CLAYEY SILTY GRAVEL, calcareous, with little gravel size calcareous fragments, gray (5Y-6/1) with patches of pale yellow (5Y-7/3), (GM-GC).			
-42.5	11					
	12					
	13					
	14					
	15					
	16		SILTY CLAY, calcareous, pale yellow (5Y-7/3) to white (5Y-8/1), (ML-CL).			
-48.8	17					
-49.4	18					
	19					
	20		Expansion			
	21		End of Boring			
	22		Note: 1) Soils are field visually classified in accordance with the Unified Soil Classification System.			Notes: This column contains laboratory data.
	23					
	24					

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-7#1
 Date: 1/1/2001
 By: ID



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

Elevation:	-30.5	Feet	Easting:	559987.59	State Plane	1983
Reference:	NGVD 29		Northing:	837106.00	FLA West	Feet

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

Dry Wt.	65.43	Percent Silt:	3.93
Wash Wt.	62.86		

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	2.100	3.210	2.100	3.210
7	-1.500	2.828	1.720	2.629	3.820	5.838
10	-1.000	2.000	2.240	3.424	6.060	9.262
14	-0.500	1.414	3.710	5.670	9.770	14.932
18	0.000	1.000	4.540	6.939	14.310	21.871
25	0.500	0.707	5.280	8.070	19.590	29.940
35	1.000	0.500	5.680	8.681	25.270	38.621
45	1.500	0.354	7.910	12.089	33.180	50.711
60	2.000	0.250	14.830	22.665	48.010	73.376
80	2.500	0.177	11.040	16.873	59.050	90.249
120	3.000	0.125	2.680	4.096	61.730	94.345
170	3.500	0.088	0.850	1.299	62.580	95.644
200	3.750	0.074	0.210	0.321	62.790	95.965
230	4.000	0.063	0.050	0.076	62.840	96.042
Pan	Pan	0.053	2.570	3.928	65.410	99.969

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-1.66	-0.42	0.19	1.47	2.05	2.31	3.24

Median phi:	1.47	Median mm:	0.36
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	0.99	0.50	1.43	-0.49	1.08
Moment	1.03	0.49	1.72	-0.29	1.61

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-7#2
 Date: 1/1/2001
 By: ID



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

Elevation:	-32.7	Feet	Easting:	559987.59	State Plane	1983
Reference:	NGVD 29		Northing:	837106.00	FLA West	Feet

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

Dry Wt.	77.69	Percent Silt:	7.97
Wash Wt.	71.51		

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	0.340	0.438	0.340	0.438
7	-1.500	2.828	0.780	1.004	1.120	1.442
10	-1.000	2.000	1.540	1.982	2.660	3.424
14	-0.500	1.414	3.820	4.917	6.480	8.341
18	0.000	1.000	5.220	6.719	11.700	15.060
25	0.500	0.707	8.010	10.310	19.710	25.370
35	1.000	0.500	8.670	11.160	28.380	36.530
45	1.500	0.354	10.670	13.734	39.050	50.264
60	2.000	0.250	15.900	20.466	54.950	70.730
80	2.500	0.177	10.330	13.296	65.280	84.026
120	3.000	0.125	4.550	5.857	69.830	89.883
170	3.500	0.088	1.370	1.763	71.200	91.646
200	3.750	0.074	0.260	0.335	71.460	91.981
230	4.000	0.063	0.040	0.051	71.500	92.032
Pan	Pan	0.053	6.190	7.968	77.690	100.000

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.84	0.05	0.48	1.49	2.16	2.50	4.09

Median phi:	1.49	Median mm:	0.36
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.46	0.36	1.36	-0.02	1.20
Moment	1.42	0.37	1.67	0.21	1.78

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-7#3
 Date: 1/1/2001
 By: ID



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

Elevation:	-36	Feet	Easting:	559987.59	State Plane	1983
Reference:	NGVD 29		Northing:	837106.00	FLA West	Feet

USCS:	SM	Munsel Dry:	5Y-7/1	Munsel Wet:	5Y-6/1
Comments:	0				

Dry Wt.	90.90	Percent Silt:	14.95
Wash Wt.	77.33		

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	1.950	2.145	1.950	2.145
5	-2.000	4.000	8.020	8.823	9.970	10.968
7	-1.500	2.828	8.070	8.878	18.040	19.846
10	-1.000	2.000	7.600	8.361	25.640	28.207
14	-0.500	1.414	9.010	9.912	34.650	38.119
18	0.000	1.000	6.680	7.349	41.330	45.468
25	0.500	0.707	5.340	5.875	46.670	51.342
35	1.000	0.500	3.540	3.894	50.210	55.237
45	1.500	0.354	4.010	4.411	54.220	59.648
60	2.000	0.250	7.420	8.163	61.640	67.811
80	2.500	0.177	4.430	4.873	66.070	72.684
120	3.000	0.125	5.430	5.974	71.500	78.658
170	3.500	0.088	4.850	5.336	76.350	83.993
200	3.750	0.074	0.840	0.924	77.190	84.917
230	4.000	0.063	0.100	0.110	77.290	85.028
Pan	Pan	0.053	13.590	14.950	90.880	99.978

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-2.68	-1.72	-1.19	0.38	2.69	3.50	4.17

Median phi:	0.38	Median mm:	0.77
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	0.73	0.60	2.34	0.17	0.72
Moment	0.74	0.60	2.73	0.06	1.19

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-7#4
 Date: 1/1/2001
 By: ID



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

Elevation:	-37.5	Feet	Easting:	559987.59	State Plane	1983
Reference:	NGVD 29		Northing:	837106.00	FLA West	Feet

USCS:	0	Munsel Dry:	5Y-7/1	Munsel Wet:	5Y-6/1
Comments:	0				

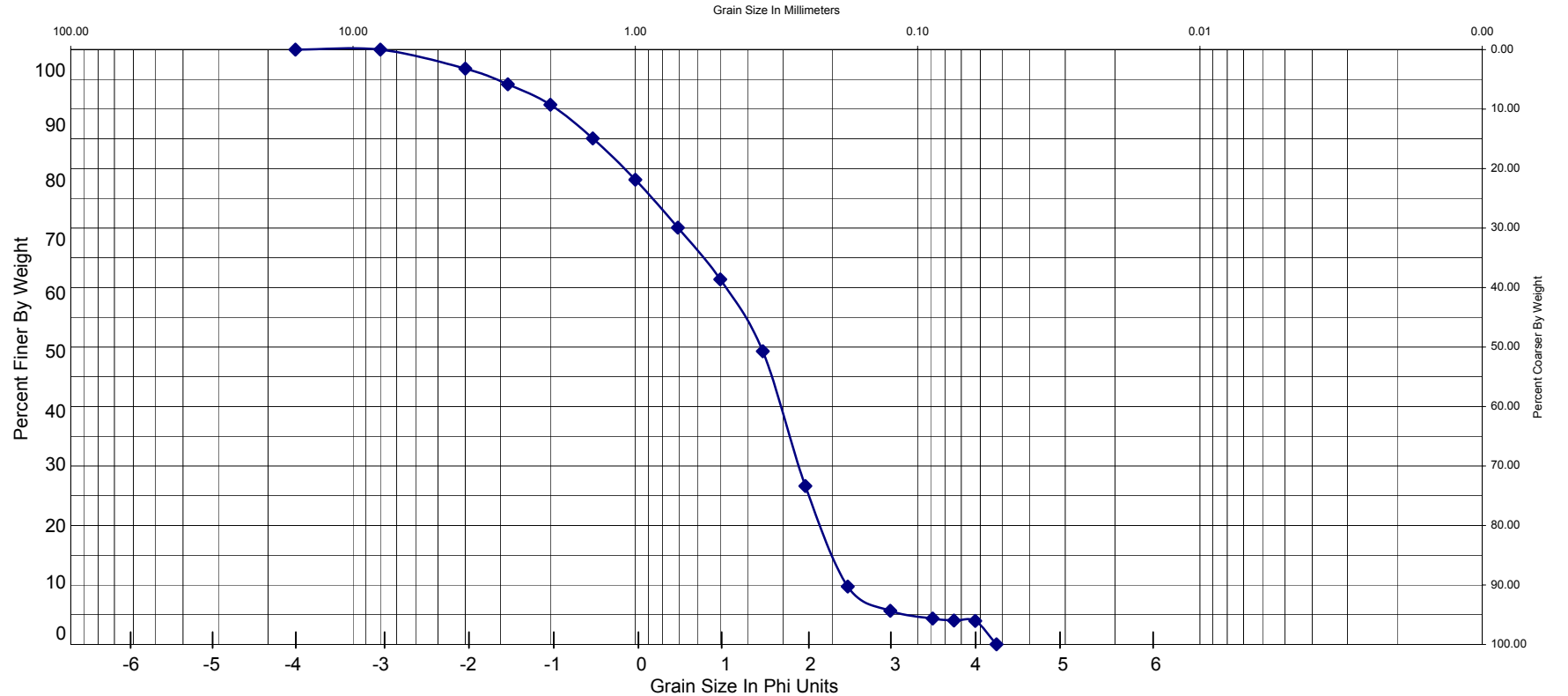
Dry Wt.	90.62	Percent Silt:	54.30
Wash Wt.	41.45		

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	3.160	3.487	3.160	3.487
5	-2.000	4.000	11.440	12.624	14.600	16.111
7	-1.500	2.828	3.380	3.730	17.980	19.841
10	-1.000	2.000	2.210	2.439	20.190	22.280
14	-0.500	1.414	2.160	2.384	22.350	24.663
18	0.000	1.000	1.460	1.611	23.810	26.275
25	0.500	0.707	1.170	1.291	24.980	27.566
35	1.000	0.500	1.040	1.148	26.020	28.713
45	1.500	0.354	2.170	2.395	28.190	31.108
60	2.000	0.250	5.370	5.926	33.560	37.034
80	2.500	0.177	3.240	3.575	36.800	40.609
120	3.000	0.125	3.100	3.421	39.900	44.030
170	3.500	0.088	1.210	1.335	41.110	45.365
200	3.750	0.074	0.240	0.265	41.350	45.630
230	4.000	0.063	0.050	0.055	41.400	45.685
Pan	Pan	0.053	49.200	54.293	90.600	99.978

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-2.88	-2.01	-0.40	4.02	4.13	4.18	4.23


Median phi:	4.02	Median mm:	0.06
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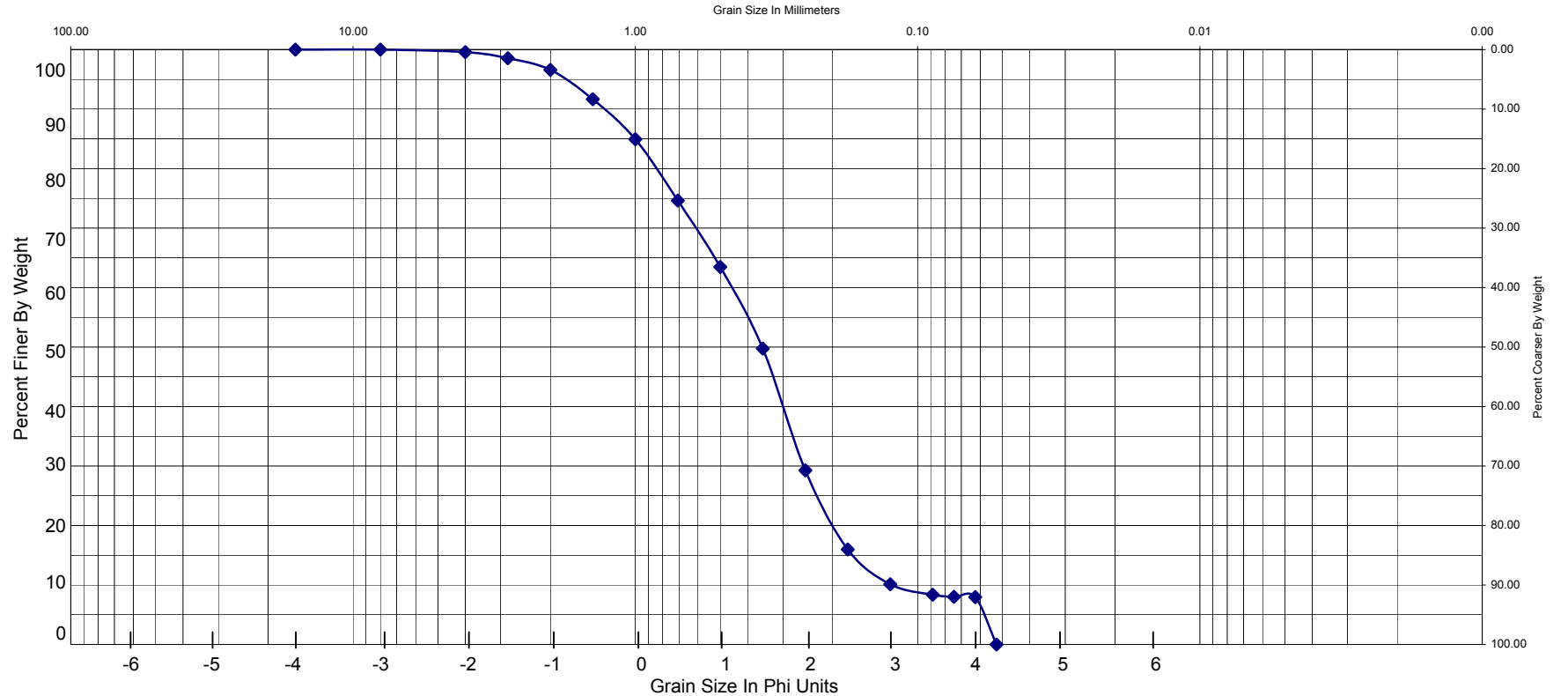
	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.51	0.35	2.62	-1.08	0.64
Moment	1.61	0.33	3.24	-0.40	1.15



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-00-7#1	1.0		SW	3.93	0.36	0.49	-0.29	1.61	1.72	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): 559987.59 Feet Northing (Y): 837106.00 Feet Sample Elevation: -30.5 NGVD 29 Coord. System: State Plane 1983 FLA West
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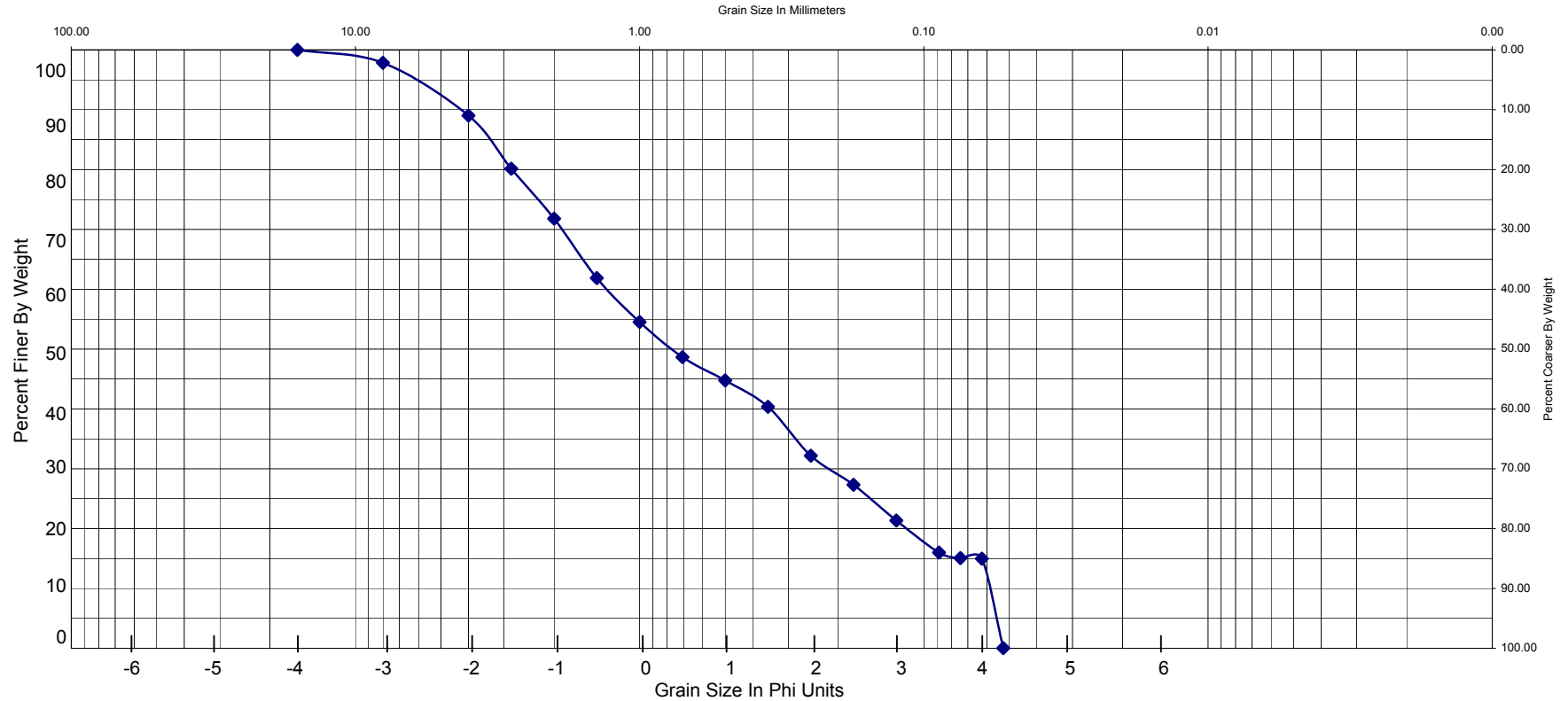
Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-7#2	3.2		SW-SM	7.97	0.36	0.37	0.21	1.78	1.67	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):	559987.59 Feet
Northing (Y):	837106.00 Feet
Sample Elevation:	-32.7 NGVD 29
Coord. System:	State Plane 1983 FLA West

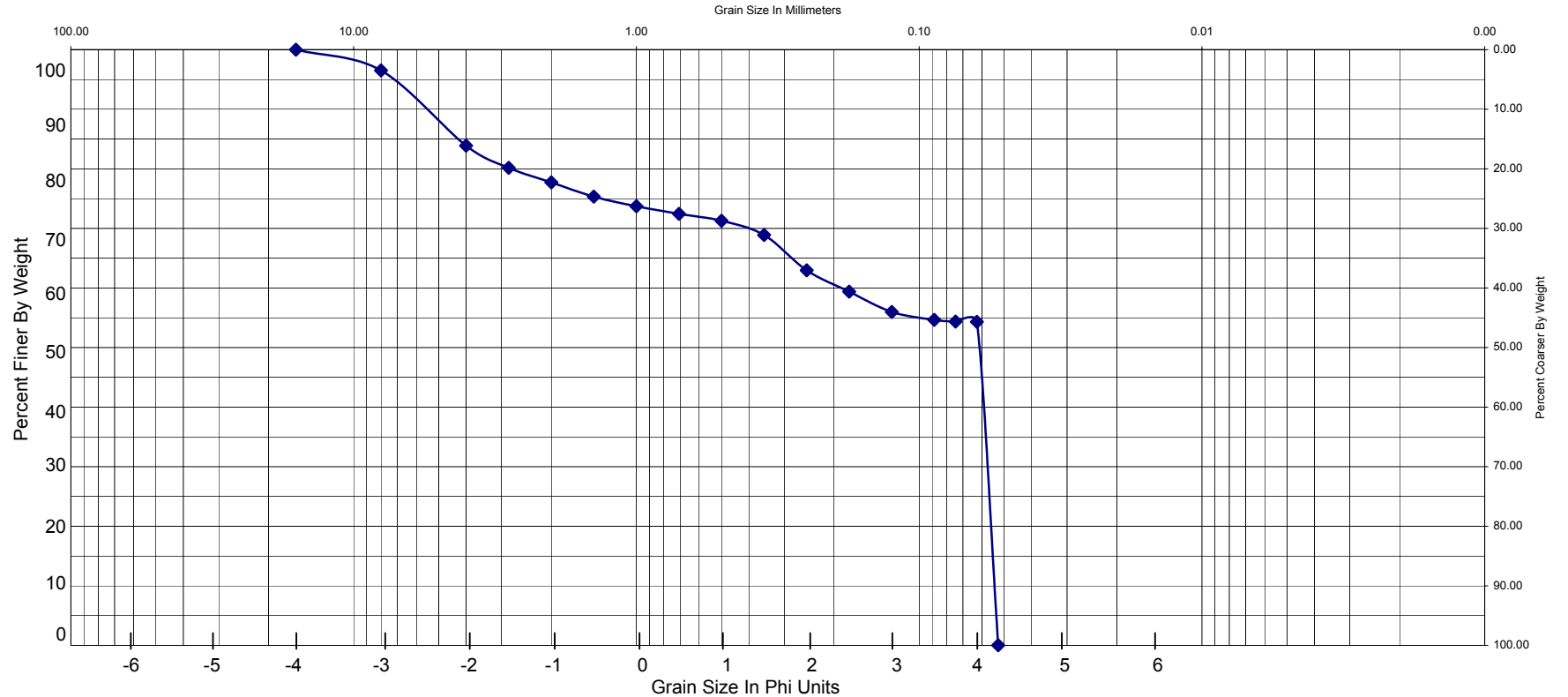


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-7#3	6.5		SM	14.95	0.77	0.6	0.06	1.19	2.73	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 559987.59 Feet
													Northing (Y): 837106.00 Feet
													Sample Elevation: -36 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-00-7#4	8.0			54.30	0.06	0.33	-0.4	1.15	3.24	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID



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2481 N. W. BOCA RATON BLVD.
BOCA RATON, FLORIDA 33431

Easting (X):	559987.59 Feet
Northing (Y):	837106.00 Feet
Sample Elevation:	-37.5 NGVD 29
Coord. System:	State Plane 1983 FLA West





