

<b>DRILLING LOG</b>		<b>DIVISION:</b> South Atlantic	<b>INSTALLATION:</b> Jacksonville District	<b>SHEET</b> 1 of 1
1. PROJECT CAPTIVA ISLAND SAND STUDY		10. SIZE AND TYPE OF BIT 3 5/8"		
2. LOCATION (Coordinates or Station) X=562313.76 Y=833853.75		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-00-09		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 11:08		
8. DEPTH DRILLED INTO ROCK N/A		17. ELEVATION TOP OF HOLE -28.5 FT		
9. TOTAL DEPTH OF HOLE 18.5 FT		18. TOTAL CORE RECOVERY FOR BORING 100%		
		19. SIGNATURE OF GEOLOGIST SK/ID		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-28.5	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): 0.41, Phi Sorting: 1.57 Silt: 3.86% (SW)
-31	2					
	3		SAND, calcareous sand with little calcareous silt/clay, little shell hash/shell fragments/whole shells, gray (5Y-5/1), (SM).		2	Sample #2, Depth = 3.2' Mean (mm): 0.30, Phi Sorting: 2.30 Silt: 19.99% (SM)
-33.5	4					
	5					
	6					
	7		CARBONATE CLASTS, ranges from fine sand sized to 3.5", gray (5Y-5/1) to white (5Y-8/1), (GP).			
-37.7	8					
	9					
	10					
	11					
	12					
	13					
	14		SILTY CLAY, calcareous, pale yellow (5Y-7/3) to gray (5Y-5/1), (ML-CL).			
	15					
	16					
	17					
-47	18					
-47.6	19		Expansion			
	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-00-9#1  
 Date: 1/1/2001  
 By: ID



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

Elevation:	-30	Feet	Easting:	562313.76	State Plane	1983
Reference:	NGVD 29		Northing:	833853.75	FLA West	Feet

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

Dry Wt.	87.68	Percent Silt:	3.86
Wash Wt.	84.31		

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	1.230	1.403	1.230	1.403
7	-1.500	2.828	1.560	1.779	2.790	3.182
10	-1.000	2.000	2.320	2.646	5.110	5.828
14	-0.500	1.414	3.710	4.231	8.820	10.059
18	0.000	1.000	4.990	5.691	13.810	15.750
25	0.500	0.707	6.320	7.208	20.130	22.958
35	1.000	0.500	8.570	9.774	28.700	32.733
45	1.500	0.354	13.100	14.941	41.800	47.673
60	2.000	0.250	18.050	20.586	59.850	68.260
80	2.500	0.177	13.440	15.328	73.290	83.588
120	3.000	0.125	8.230	9.386	81.520	92.974
170	3.500	0.088	2.490	2.840	84.010	95.814
200	3.750	0.074	0.240	0.274	84.250	96.088
230	4.000	0.063	0.030	0.034	84.280	96.122
Pan	Pan	0.053	3.380	3.855	87.660	99.977

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-1.16	0.02	0.60	1.56	2.22	2.52	3.35

Median phi:	1.56	Median mm:	0.34
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.26	0.42	1.31	-0.35	1.14
Moment	1.30	0.41	1.57	-0.26	1.65

# Gradation Analysis Report

Proj Name: Captiva Island  
 Sample: CIVC-00-9#2  
 Date: 1/1/2001  
 By: ID



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

Elevation:	-31.7	Feet	Easting:	562313.76	State Plane	1983
Reference:	NGVD 29		Northing:	833853.75	FLA West	Feet

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

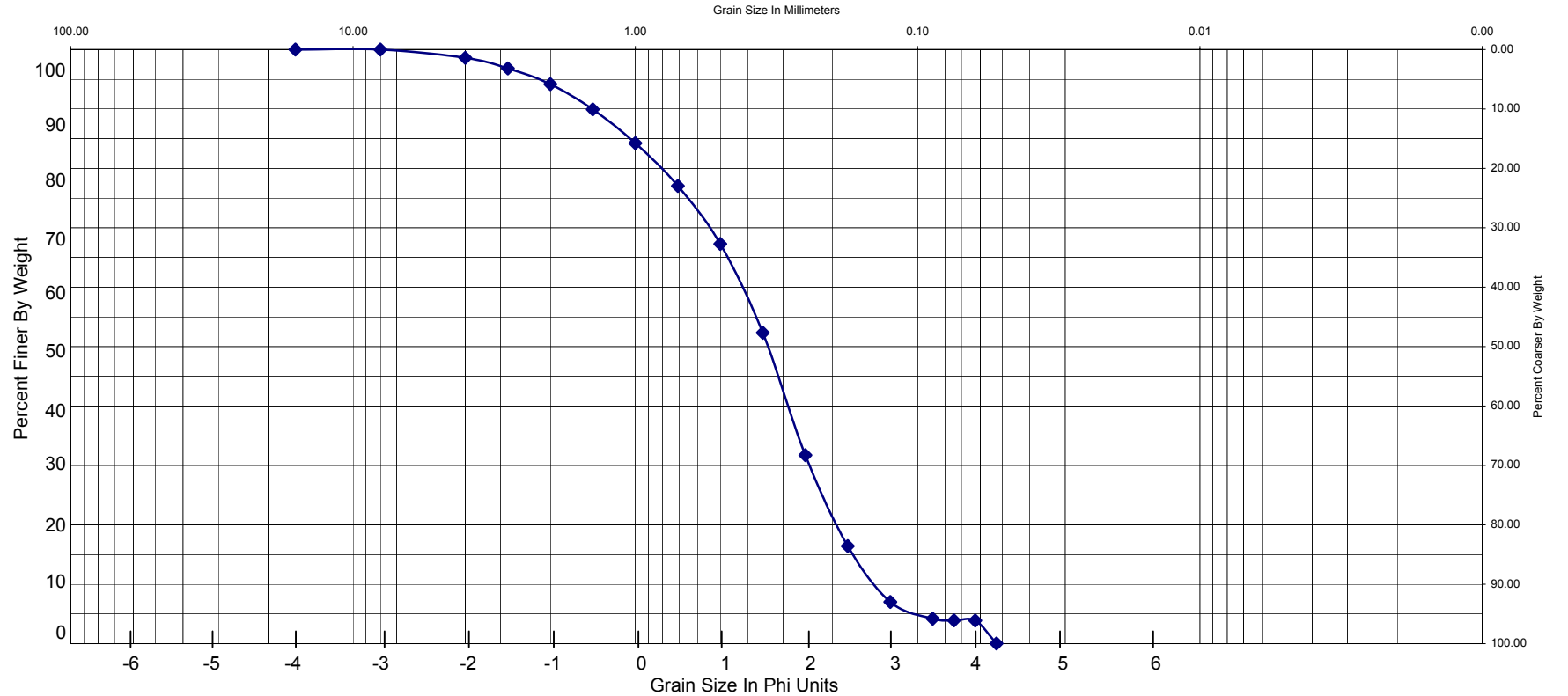
Dry Wt.	69.05	Percent Silt:	19.99
Wash Wt.	55.29		

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	0.420	0.608	0.420	0.608
5	-2.000	4.000	1.790	2.592	2.210	3.201
7	-1.500	2.828	2.050	2.969	4.260	6.169
10	-1.000	2.000	2.330	3.374	6.590	9.544
14	-0.500	1.414	3.300	4.779	9.890	14.323
18	0.000	1.000	3.470	5.025	13.360	19.348
25	0.500	0.707	4.150	6.010	17.510	25.358
35	1.000	0.500	4.840	7.009	22.350	32.368
45	1.500	0.354	5.780	8.371	28.130	40.739
60	2.000	0.250	7.070	10.239	35.200	50.978
80	2.500	0.177	4.120	5.967	39.320	56.944
120	3.000	0.125	7.540	10.920	46.860	67.864
170	3.500	0.088	6.340	9.182	53.200	77.046
200	3.750	0.074	1.860	2.694	55.060	79.739
230	4.000	0.063	0.170	0.246	55.230	79.986
Pan	Pan	0.053	13.800	19.986	69.030	99.971

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-1.70	-0.33	0.47	1.95	3.39	4.05	4.19

Median phi:	1.95	Median mm:	0.26
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.63	0.32	1.99	-0.22	0.83
Moment	1.72	0.30	2.30	-0.24	1.37

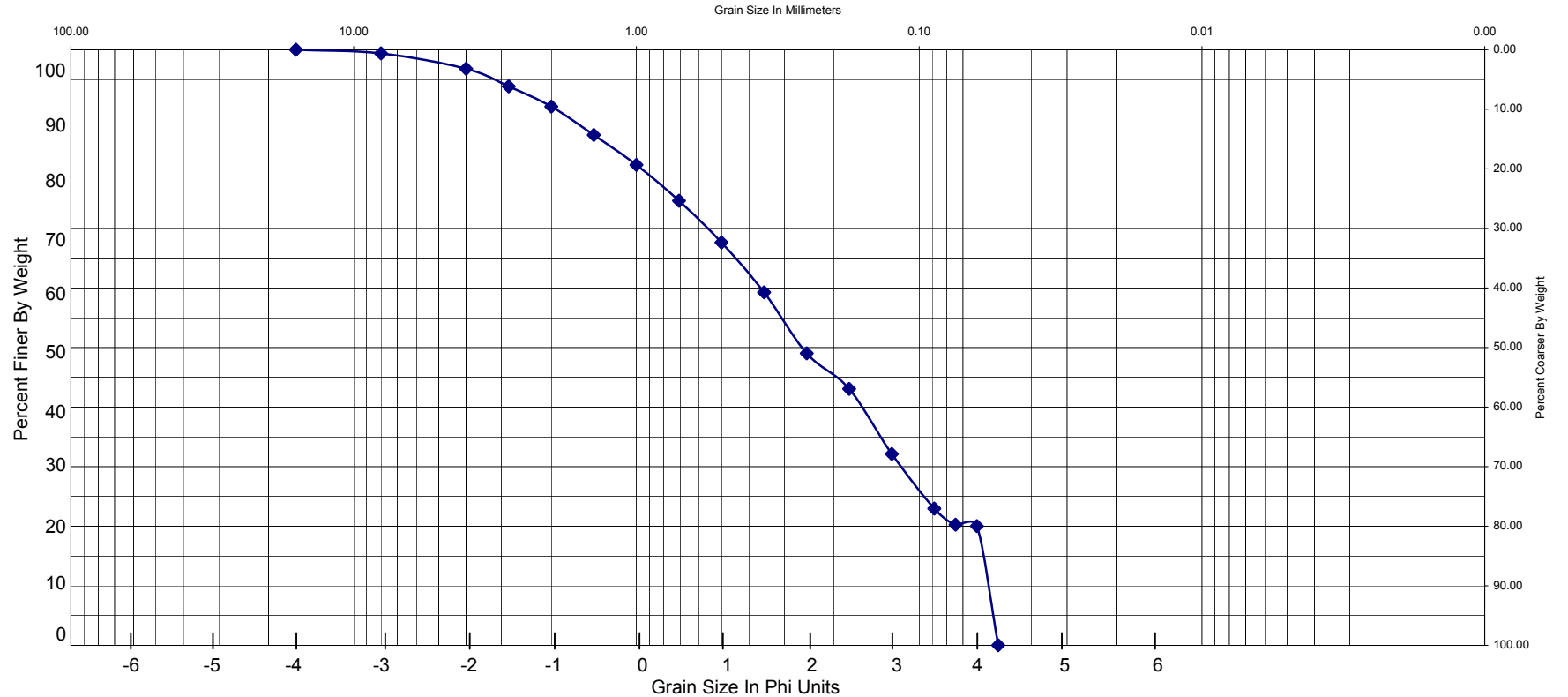


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-9#1	1.5		SW	3.86	0.34	0.41	-0.26	1.65	1.57	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 562313.76 Feet
													Northing (Y): 833853.75 Feet
													Sample Elevation: -30 NGVD 29
													Coord. System: State Plane 1983 FLA West



**COASTAL PLANNING & ENGINEERING, INC.**  
**2481 N. W. BOCA RATON BLVD.**  
**BOCA RATON, FLORIDA 33431**



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-00-9#2	3.2		SM	19.99	0.26	0.3	-0.24	1.37	2.3	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 562313.76 Feet
													Northing (Y): 833853.75 Feet
													Sample Elevation:-31.7 NGVD 29
													Coord. System: State Plane 1983 FLA West



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