

<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=545698.26 Y=773130.79		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-00-26		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 11:59		
8. DEPTH DRILLED INTO ROCK N/A		17. ELEVATION TOP OF HOLE -35.4 ft		
9. TOTAL DEPTH OF HOLE 9.8 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
-35.4	0					
	1		SAND, fine grained, some shell hash/fragments, gray (5Y-5/1), (SP).		1	Sample #1, Depth = 1.5' Mean (mm): 0.47, Phi Sorting: 1.09 Silt: 0.70% (SP)
-37.8	2					
	3		fine grained, trace shell hash/fragments, gray (5Y-5/1), (SP).			
-39.2	4					
	5		SAND, fine grained, little shell hash/fragments/whole shells, gray (5Y-5/1), (SP).		2	Sample #2, Depth = 5.0' Mean (mm): 0.49, Phi Sorting: 1.30 Silt: 0.43% (SW)
	6					
-42.8	7					
	8		SAND, calcareous, fine grained, trace shell hash, gray (5Y-6/1), (SP).		3	Sample #3, Depth = 7.5' Mean (mm): 0.34, Phi Sorting: 1.03 Silt: 1.47% (SP)
-45.2	9					
-45.6	10		Expansion			
	11		End of Boring			
	12					
	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-00-26#1  
 Date: 1/1/2001  
 By: ID



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

Elevation:	-36.9	Feet	Easting:	545698.26	State Plane	1983
Reference:	NGVD 29		Northing:	773130.79	FLA West	Feet

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

Dry Wt.	72.95	Percent Silt:	0.70
Wash Wt.	72.44		

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	0.180	0.247	0.180	0.247
7	-1.500	2.828	0.820	1.124	1.000	1.371
10	-1.000	2.000	1.170	1.604	2.170	2.975
14	-0.500	1.414	2.180	2.988	4.350	5.963
18	0.000	1.000	4.090	5.607	8.440	11.570
25	0.500	0.707	7.000	9.596	15.440	21.165
35	1.000	0.500	11.870	16.271	27.310	37.437
45	1.500	0.354	16.590	22.742	43.900	60.178
60	2.000	0.250	17.840	24.455	61.740	84.633
80	2.500	0.177	8.820	12.090	70.560	96.724
120	3.000	0.125	1.700	2.330	72.260	99.054
170	3.500	0.088	0.120	0.164	72.380	99.219
200	3.750	0.074	0.030	0.041	72.410	99.260
230	4.000	0.063	0.010	0.014	72.420	99.273
Pan	Pan	0.053	0.510	0.699	72.930	99.973

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.66	0.23	0.62	1.28	1.80	1.99	2.43

Median phi:	1.28	Median mm:	0.41
-------------	------	------------	------

	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.05	0.48	0.91	-0.37	1.07
Moment	1.10	0.47	1.09	-0.36	1.66

# Gradation Analysis Report

Proj Name: Captiva Island  
 Sample: CIVC-00-26#2  
 Date: 1/1/2001  
 By: ID



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

Elevation:	-40.4	Feet	Easting:	545698.26	State Plane	1983
Reference:	NGVD 29		Northing:	773130.79	FLA West	Feet

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

Dry Wt.	62.52	Percent Silt:	0.43
Wash Wt.	62.25		

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	0.280	0.448	0.280	0.448
5	-2.000	4.000	1.070	1.711	1.350	2.159
7	-1.500	2.828	1.270	2.031	2.620	4.191
10	-1.000	2.000	1.090	1.743	3.710	5.934
14	-0.500	1.414	1.630	2.607	5.340	8.541
18	0.000	1.000	2.750	4.399	8.090	12.940
25	0.500	0.707	5.430	8.685	13.520	21.625
35	1.000	0.500	9.740	15.579	23.260	37.204
45	1.500	0.354	13.450	21.513	36.710	58.717
60	2.000	0.250	14.270	22.825	50.980	81.542
80	2.500	0.177	8.730	13.964	59.710	95.505
120	3.000	0.125	2.250	3.599	61.960	99.104
170	3.500	0.088	0.220	0.352	62.180	99.456
200	3.750	0.074	0.030	0.048	62.210	99.504
230	4.000	0.063	0.010	0.016	62.220	99.520
Pan	Pan	0.053	0.270	0.432	62.490	99.952

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-1.27	0.18	0.61	1.30	1.86	2.09	2.48

Median phi:	1.30	Median mm:	0.41
-------------	------	------------	------

	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	0.95	0.52	1.05	-0.54	1.23
Moment	1.03	0.49	1.30	-0.62	2.02

# Gradation Analysis Report

Proj Name: Captiva Island  
 Sample: CIVC-00-26#3  
 Date: 1/1/2001  
 By: ID



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

Elevation:	-42.9	Feet	Easting:	545698.26	State Plane	1983
Reference:	NGVD 29		Northing:	773130.79	FLA West	Feet

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

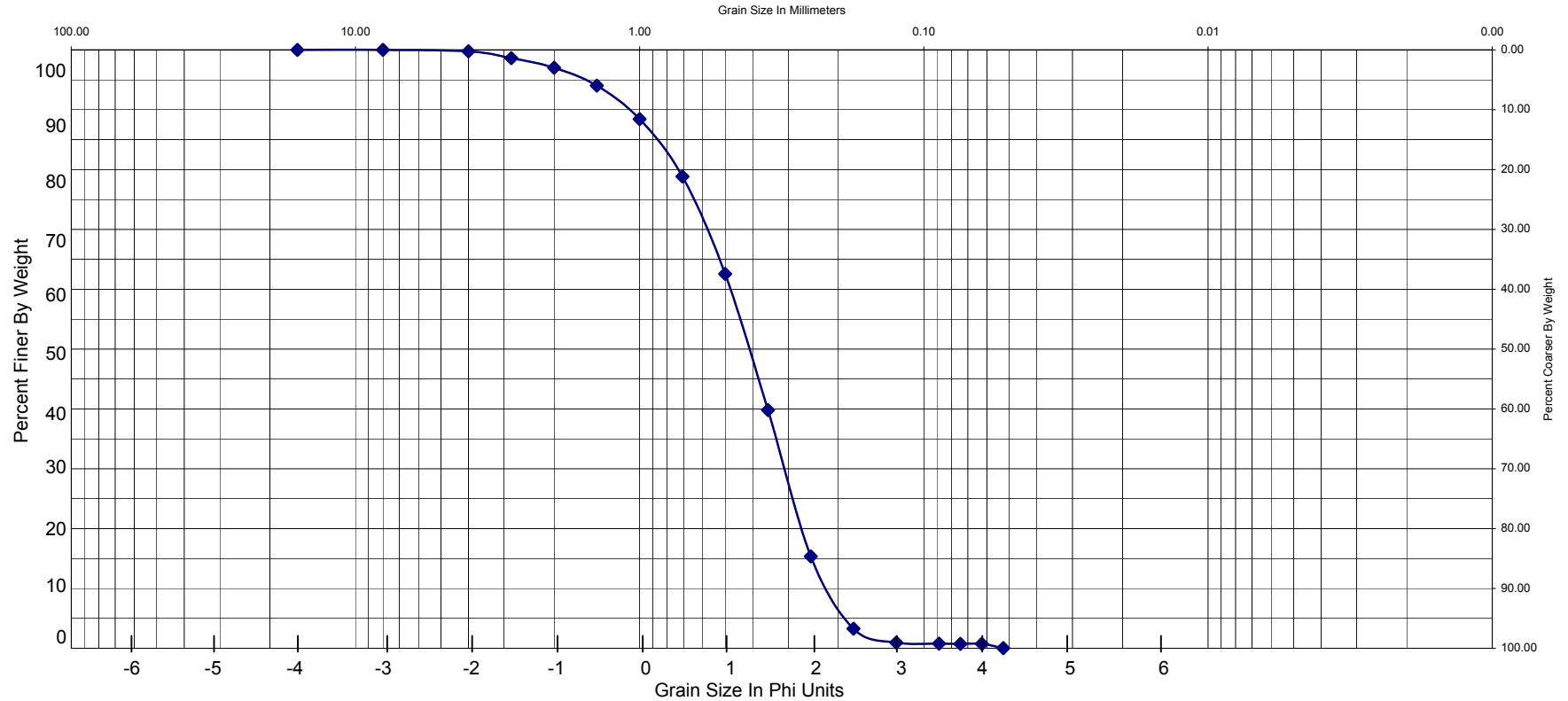
Dry Wt.	66.78	Percent Silt:	1.47
Wash Wt.	65.80		

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	0.040	0.060	0.040	0.060
7	-1.500	2.828	0.290	0.434	0.330	0.494
10	-1.000	2.000	0.540	0.809	0.870	1.303
14	-0.500	1.414	1.100	1.647	1.970	2.950
18	0.000	1.000	1.720	2.576	3.690	5.526
25	0.500	0.707	3.690	5.526	7.380	11.051
35	1.000	0.500	6.580	9.853	13.960	20.904
45	1.500	0.354	10.790	16.158	24.750	37.062
60	2.000	0.250	17.590	26.340	42.340	63.402
80	2.500	0.177	17.350	25.981	59.690	89.383
120	3.000	0.125	5.610	8.401	65.300	97.784
170	3.500	0.088	0.410	0.614	65.710	98.398
200	3.750	0.074	0.070	0.105	65.780	98.503
230	4.000	0.063	0.010	0.015	65.790	98.518
Pan	Pan	0.053	0.980	1.468	66.770	99.985

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.10	0.75	1.13	1.75	2.22	2.40	2.83

Median phi:	1.75	Median mm:	0.30
-------------	------	------------	------

	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.52	0.35	0.86	-0.39	1.10
Moment	1.57	0.34	1.03	-0.36	1.68

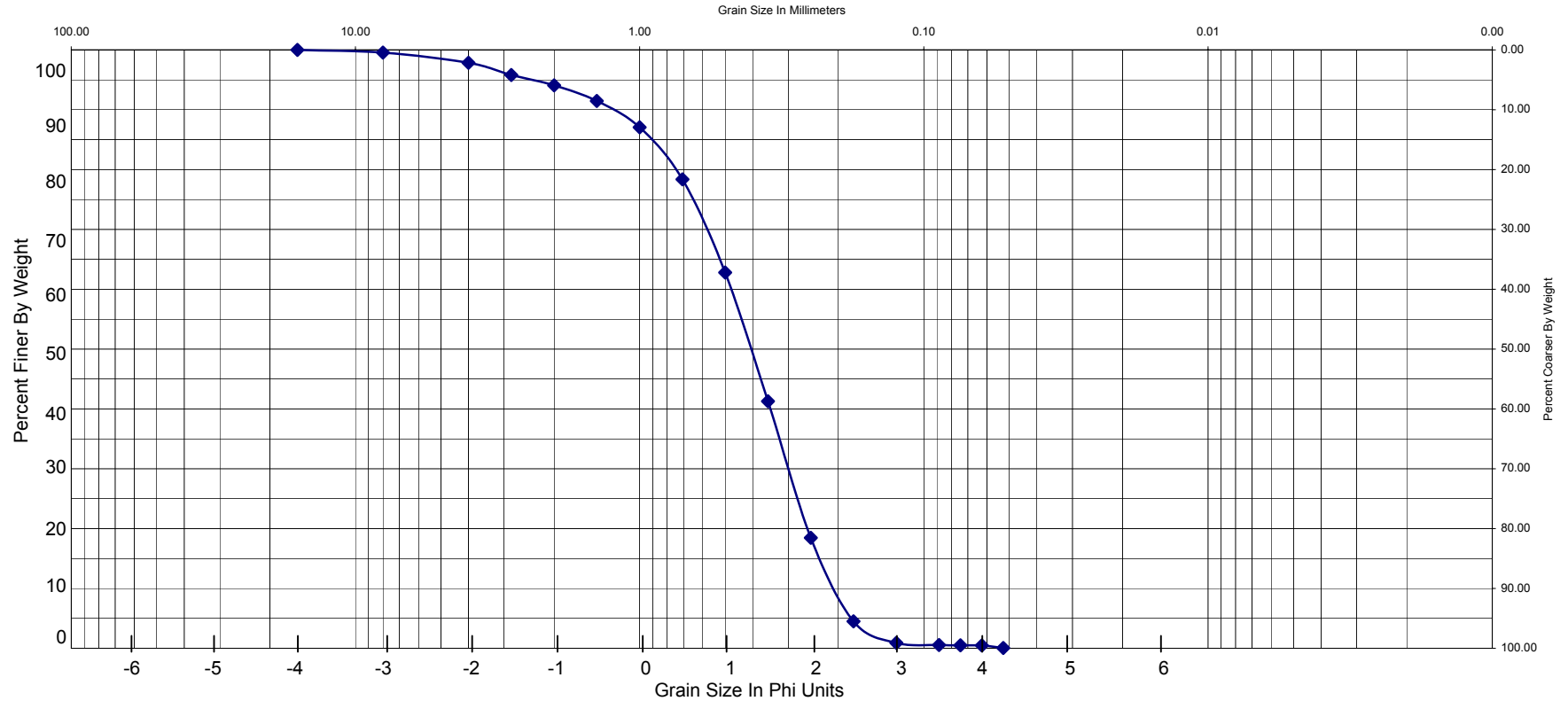


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-26#1	1.5		SP	0.70	0.41	0.47	-0.36	1.66	1.09	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 545698.26 Feet
													Northing (Y): 773130.79 Feet
													Sample Elevation: -36.9 NGVD 29
													Coord. System: State Plane 1983 FLA West



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

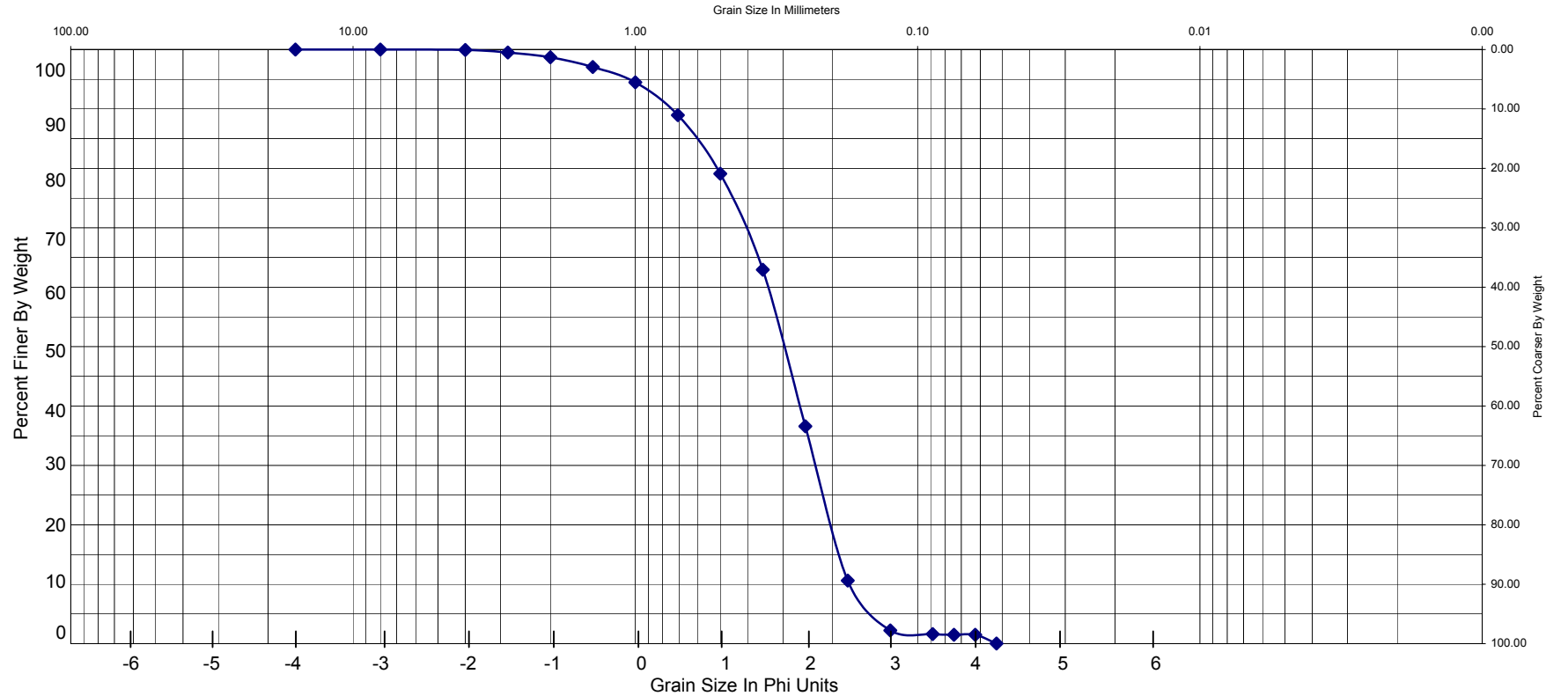


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-26#2	5.0		SW	0.43	0.41	0.49	-0.62	2.02	1.3	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 545698.26 Feet
													Northing (Y): 773130.79 Feet
													Sample Elevation: -40.4 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-00-26#3	7.5		SP	1.47	0.3	0.34	-0.36	1.68	1.03	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):	545698.26 Feet
Northing (Y):	773130.79 Feet
Sample Elevation:	-42.9 NGVD 29
Coord. System:	State Plane 1983 FLA West





CAPTIVA  
VC-00-26

