

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=558487.86 Y=838473.37		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-00-05		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 8/8/00 Completed 8:44		
8. DEPTH DRILLED INTO ROCK N/A		17. ELEVATION TOP OF HOLE -29.0 FT		
9. TOTAL DEPTH OF HOLE 8.2 FT		18. TOTAL CORE RECOVERY FOR BORING 83.8%		
		19. SIGNATURE OF GEOLOGIST SK/ID		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-29	0					
	1				1	Sample #1, Depth = 2.0' Mean (mm): 0.46, Phi Sorting: 1.07 Silt: 2.87% (SP)
	2		SAND, medium grained, some shell hash/shell fragments/whole shells, layer of shell hash & shell fragments between 1.2' -1.4', gray (5Y-5/1), (SP).		2	Sample #2, Depth = 4.0' Mean (mm): 0.41, Phi Sorting: 1.08 Silt: 2.47% (SP)
-34.5	3					
	4					
	5					
-35.5	6		SAND, fine grained, little shell hash/shell fragments, gray (5Y-6/1), (SP).		3	Sample #3, Depth = 6.0' Mean (mm): 0.30, Phi Sorting: 1.91 Silt: 13.11% (SM)
	7		CARBONATE CLASTS, ranges from fine sand sized to 2.5", dark gray (5Y-4/1), (GP)			
	8		No Recovery			
-37.2	9		End of Boring			
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					

Note:

1) Soils are field visually
classified in accordance with the
Unified Soil Classification System.

Note:

This column contains laboratory data.

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-5#1
 Date: 1/1/2001
 By: ID



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

Elevation:	-31	Feet	Easting:	558487.86	State Plane	1983
Reference:	NGVD 29		Northing:	838473.37	FLA West	Feet

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

Dry Wt.	65.47	Percent Silt:	2.87
Wash Wt.	63.60		

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	0.490	0.748	0.490	0.748
7	-1.500	2.828	0.740	1.130	1.230	1.879
10	-1.000	2.000	0.920	1.405	2.150	3.284
14	-0.500	1.414	1.730	2.642	3.880	5.926
18	0.000	1.000	3.210	4.903	7.090	10.829
25	0.500	0.707	5.020	7.668	12.110	18.497
35	1.000	0.500	8.480	12.952	20.590	31.450
45	1.500	0.354	18.800	28.715	39.390	60.165
60	2.000	0.250	18.670	28.517	58.060	88.682
80	2.500	0.177	4.360	6.660	62.420	95.341
120	3.000	0.125	0.860	1.314	63.280	96.655
170	3.500	0.088	0.240	0.367	63.520	97.022
200	3.750	0.074	0.040	0.061	63.560	97.083
230	4.000	0.063	0.030	0.046	63.590	97.128
Pan	Pan	0.053	1.880	2.872	65.470	100.000

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.68	0.34	0.75	1.32	1.76	1.92	2.47

Median phi:	1.32	Median mm:	0.40
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.08	0.47	0.87	-0.47	1.28
Moment	1.13	0.46	1.07	-0.43	1.87

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-5#2
 Date: 1/1/2001
 By: ID



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

Elevation:	-33	Feet	Easting:	558487.86	State Plane	1983
Reference:	NGVD 29		Northing:	838473.37	FLA West	Feet

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

Dry Wt.	59.44	Percent Silt:	2.47
Wash Wt.	57.97		

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	0.600	1.009	0.600	1.009
5	-2.000	4.000	0.660	1.110	1.260	2.120
7	-1.500	2.828	0.440	0.740	1.700	2.860
10	-1.000	2.000	0.610	1.026	2.310	3.886
14	-0.500	1.414	1.060	1.783	3.370	5.670
18	0.000	1.000	1.870	3.146	5.240	8.816
25	0.500	0.707	3.590	6.040	8.830	14.855
35	1.000	0.500	5.310	8.933	14.140	23.789
45	1.500	0.354	10.280	17.295	24.420	41.083
60	2.000	0.250	25.410	42.749	49.830	83.832
80	2.500	0.177	6.560	11.036	56.390	94.869
120	3.000	0.125	1.140	1.918	57.530	96.787
170	3.500	0.088	0.310	0.522	57.840	97.308
200	3.750	0.074	0.110	0.185	57.950	97.493
230	4.000	0.063	0.010	0.017	57.960	97.510
Pan	Pan	0.053	1.470	2.473	59.430	99.983

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.69	0.56	1.03	1.60	1.90	2.01	2.53

Median phi:	1.60	Median mm:	0.33
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.20	0.43	0.85	-0.87	1.53
Moment	1.28	0.41	1.08	-0.71	2.20

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-5#3
 Date: 1/1/2001
 By: ID



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

Elevation:	-35	Feet	Easting:	558487.86	State Plane	1983
Reference:	NGVD 29		Northing:	838473.37	FLA West	Feet

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

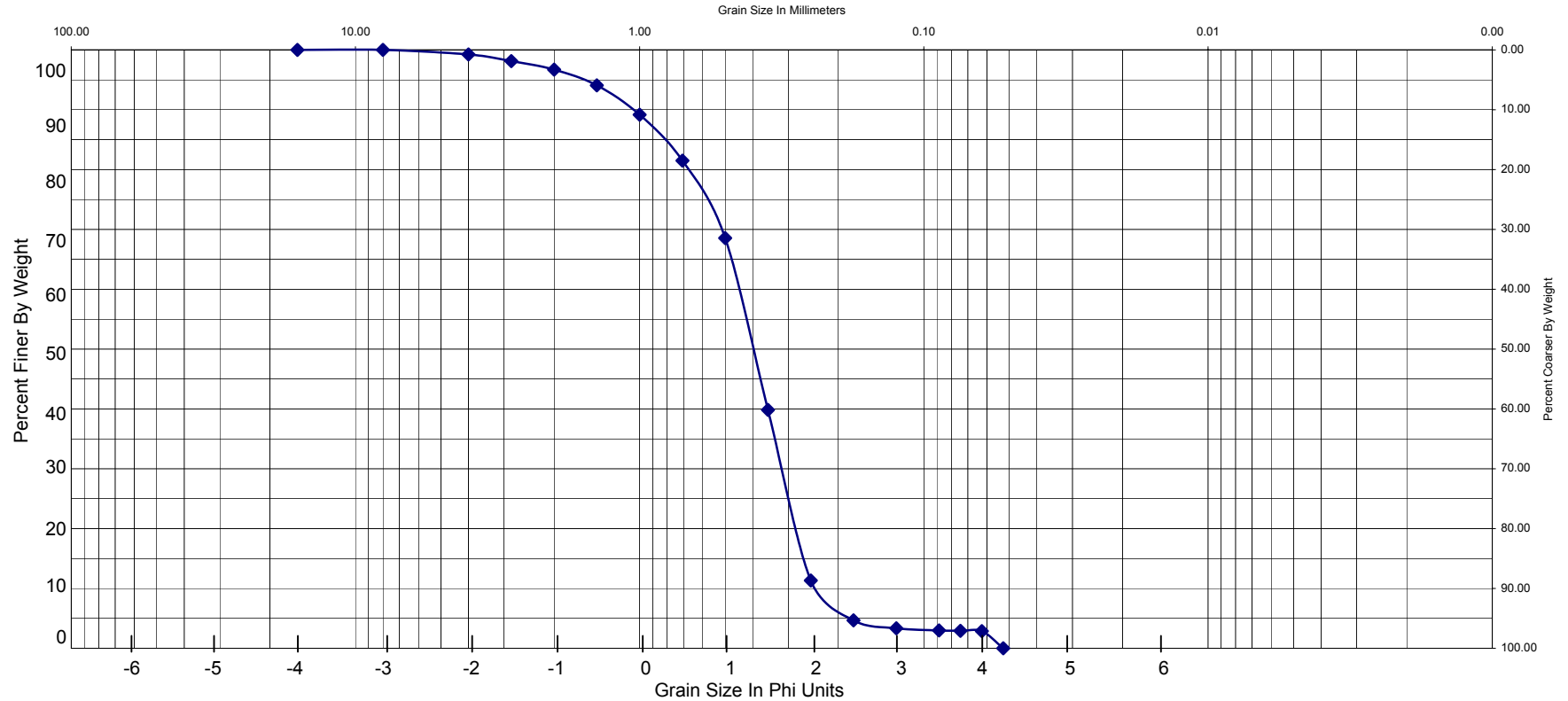
Dry Wt.	59.65	Percent Silt:	13.11
Wash Wt.	51.84		

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	0.730	1.224	0.730	1.224
7	-1.500	2.828	1.200	2.012	1.930	3.236
10	-1.000	2.000	1.710	2.867	3.640	6.102
14	-0.500	1.414	2.380	3.990	6.020	10.092
18	0.000	1.000	2.890	4.845	8.910	14.937
25	0.500	0.707	3.380	5.666	12.290	20.604
35	1.000	0.500	4.230	7.091	16.520	27.695
45	1.500	0.354	4.260	7.142	20.780	34.837
60	2.000	0.250	7.790	13.060	28.570	47.896
80	2.500	0.177	8.490	14.233	37.060	62.129
120	3.000	0.125	11.020	18.474	48.080	80.604
170	3.500	0.088	3.130	5.247	51.210	85.851
200	3.750	0.074	0.500	0.838	51.710	86.689
230	4.000	0.063	0.100	0.168	51.810	86.857
Pan	Pan	0.053	7.820	13.110	59.630	99.966

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-1.19	0.09	0.81	2.07	2.85	3.32	4.15

Median phi:	2.07	Median mm:	0.24
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.69	0.31	1.62	-0.35	1.08
Moment	1.73	0.30	1.91	-0.25	1.55

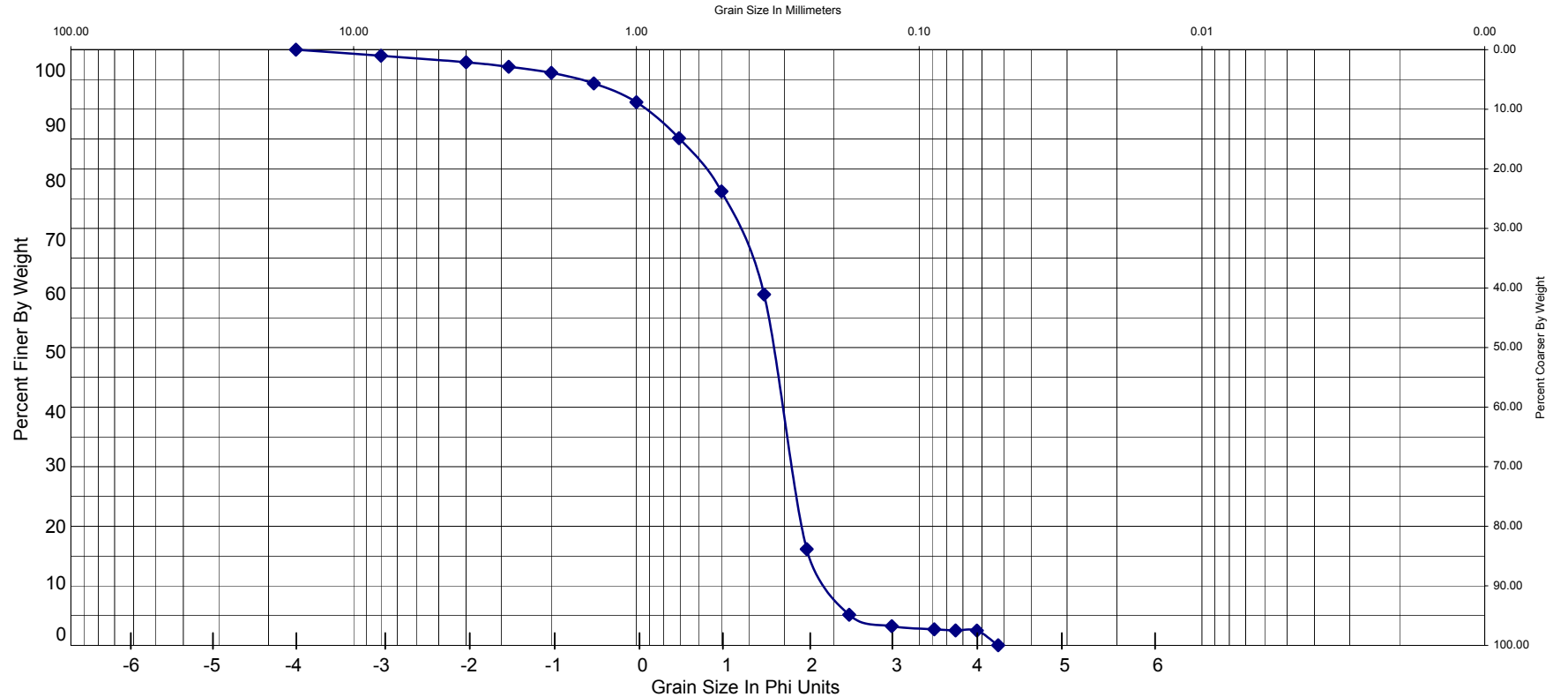


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-5#1	2.0		SP	2.87	0.4	0.46	-0.43	1.87	1.07	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 558487.86 Feet
													Northing (Y): 838473.37 Feet
													Sample Elevation: -31 NGVD 29
													Coord. System: State Plane 1983 FLA West



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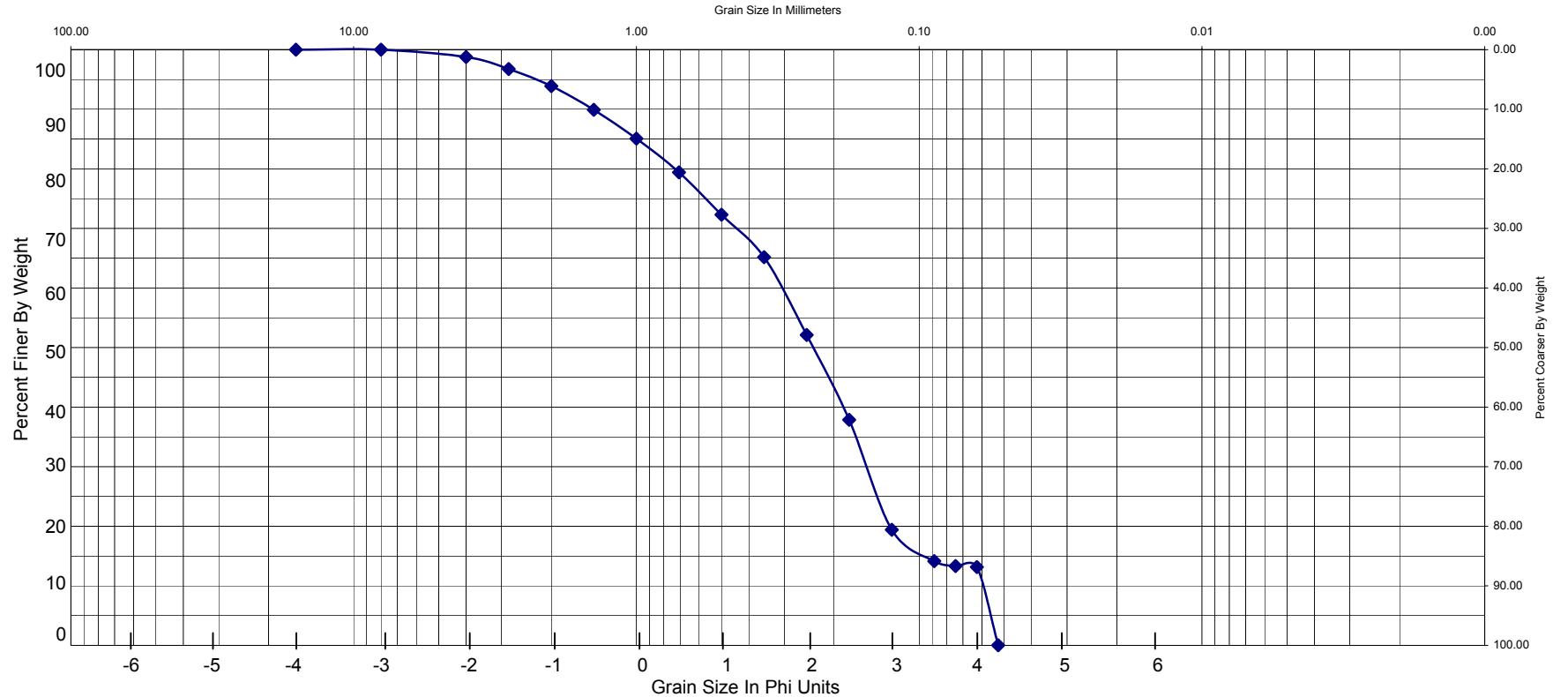


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-5#2	4.0		SP	2.47	0.33	0.41	-0.71	2.2	1.08	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 558487.86 Feet
													Northing (Y): 838473.37 Feet
													Sample Elevation:-33 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-00-5#3	6.0		SM	13.11	0.24	0.3	-0.25	1.55	1.91	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 558487.86 Feet
													Northing (Y): 838473.37 Feet
													Sample Elevation: -35 NGVD 29
													Coord. System: State Plane 1983 FLA West



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