

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=561845.57 Y=833427.22		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-00-10		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 11:30		
8. DEPTH DRILLED INTO ROCK N/A		17. ELEVATION TOP OF HOLE -27.7 FT		
9. TOTAL DEPTH OF HOLE 20.0 FT		18. TOTAL CORE RECOVERY FOR BORING 78.5%		
		19. SIGNATURE OF GEOLOGIST SK/ID		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-27.7	0					
-30.4	1		SAND, fine grained, some shell hash/shell fragments/whole shells, between 0.8' & 1.3' a layer of shelly sand, gray (5Y-5/1), (SP).		1	Sample #1, Depth = 0.5' Mean (mm): 0.42, Phi Sorting: 1.17 Silt: 2.43% (SW)
-33.6	3		SAND, fine grained, trace calcareous silt/clay, some shell hash/ shell fragments/ whole shells, gray (5Y-5/1), (SP-SM).		2	Sample #2, Depth = 3.5' Mean (mm): 0.33, Phi Sorting: 1.76 Silt: 12.79% (SM)
-36.5	5				3	Sample #3, Depth = 5.2' Mean (mm): 0.46, Phi Sorting: 2.76 Silt: 16.40% (SM)
-39	7		SILTY SAND, some shell hash/shell fragments/whole shells, whole shells up to 3.5", mainly gray (5Y-5/1) with white (5Y-8/1) at places, (SM).			
-43.4	9		SAND, fine grained, trace calcareous silt/clay, trace shell hash/shell fragments, gray (5Y-6 /1), (SP-SM).		4	Sample #4, Depth = 9.4' Mean (mm): 0.21, Phi Sorting: 1.05 Silt: 10.61% (SW-SM)
-47.7	11		CARBONATE CLASTS embedded in calcareous fines, ranges from fine sand sized to 4.0", white (5Y-8/1) with patches of pale yellow (5Y-7/3), (GM).			
	12					
	13					
	14					
	15					
	16					
	17					
	18		No Recovery			
	19					
	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-00-10#1
 Date: 1/1/2001
 By: ID



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

Elevation:	-28.2	Feet	Easting:	561845.57	State Plane	1983
Reference:	NGVD 29		Northing:	833427.22	FLA West	Feet

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

Dry Wt.	78.22	Percent Silt:	2.43
Wash Wt.	76.32		

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	0.630	0.805	0.630	0.805
7	-1.500	2.828	0.680	0.869	1.310	1.675
10	-1.000	2.000	0.990	1.266	2.300	2.940
14	-0.500	1.414	2.390	3.055	4.690	5.996
18	0.000	1.000	3.630	4.641	8.320	10.637
25	0.500	0.707	4.890	6.252	13.210	16.888
35	1.000	0.500	8.730	11.161	21.940	28.049
45	1.500	0.354	21.790	27.857	43.730	55.906
60	2.000	0.250	20.130	25.735	63.860	81.642
80	2.500	0.177	8.000	10.228	71.860	91.869
120	3.000	0.125	3.320	4.244	75.180	96.114
170	3.500	0.088	0.960	1.227	76.140	97.341
200	3.750	0.074	0.160	0.205	76.300	97.545
230	4.000	0.063	0.010	0.013	76.310	97.558
Pan	Pan	0.053	1.900	2.429	78.210	99.987

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.66	0.43	0.86	1.39	1.87	2.11	2.87

Median phi:	1.39	Median mm:	0.38
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.23	0.43	0.96	-0.31	1.44
Moment	1.27	0.42	1.17	-0.30	1.91

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-10#2
 Date: 1/1/2001
 By: ID



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

Elevation:	-31.2	Feet	Easting:	561845.57	State Plane	1983
Reference:	NGVD 29		Northing:	833427.22	FLA West	Feet

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

Dry Wt.	63.81	Percent Silt:	12.79
Wash Wt.	55.67		

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	0.470	0.737	0.470	0.737
5	-2.000	4.000	0.590	0.925	1.060	1.661
7	-1.500	2.828	0.670	1.050	1.730	2.711
10	-1.000	2.000	1.180	1.849	2.910	4.560
14	-0.500	1.414	2.040	3.197	4.950	7.757
18	0.000	1.000	3.140	4.921	8.090	12.678
25	0.500	0.707	5.140	8.055	13.230	20.733
35	1.000	0.500	6.510	10.202	19.740	30.936
45	1.500	0.354	9.360	14.669	29.100	45.604
60	2.000	0.250	13.310	20.859	42.410	66.463
80	2.500	0.177	6.680	10.469	49.090	76.932
120	3.000	0.125	3.940	6.175	53.030	83.106
170	3.500	0.088	2.010	3.150	55.040	86.256
200	3.750	0.074	0.520	0.815	55.560	87.071
230	4.000	0.063	0.060	0.094	55.620	87.165
Pan	Pan	0.053	8.160	12.788	63.780	99.953

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.93	0.21	0.71	1.60	2.41	3.14	4.15

Median phi:	1.60	Median mm:	0.33
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.63	0.32	1.50	0.03	1.23
Moment	1.61	0.33	1.76	0.01	1.62

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-10#3
 Date: 1/1/2001
 By: ID



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

Elevation:	-32.9	Feet	Easting:	561845.57	State Plane	1983
Reference:	NGVD 29		Northing:	833427.22	FLA West	Feet

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

Dry Wt.	69.24	Percent Silt:	16.40
Wash Wt.	57.94		

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	1.820	2.629	1.820	2.629
5	-2.000	4.000	4.600	6.644	6.420	9.272
7	-1.500	2.828	4.170	6.023	10.590	15.295
10	-1.000	2.000	3.970	5.734	14.560	21.028
14	-0.500	1.414	4.660	6.730	19.220	27.759
18	0.000	1.000	4.080	5.893	23.300	33.651
25	0.500	0.707	3.890	5.618	27.190	39.269
35	1.000	0.500	3.920	5.661	31.110	44.931
45	1.500	0.354	4.100	5.921	35.210	50.852
60	2.000	0.250	4.130	5.965	39.340	56.817
80	2.500	0.177	4.090	5.907	43.430	62.724
120	3.000	0.125	7.770	11.222	51.200	73.946
170	3.500	0.088	5.320	7.683	56.520	81.629
200	3.750	0.074	1.060	1.531	57.580	83.160
230	4.000	0.063	0.280	0.404	57.860	83.564
Pan	Pan	0.053	11.350	16.392	69.210	99.957

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-2.64	-1.44	-0.71	1.43	3.07	4.01	4.17

Median phi:	1.43	Median mm:	0.37
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.10	0.46	2.39	-0.17	0.74
Moment	1.13	0.46	2.76	-0.14	1.23

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-10#4
 Date: 1/1/2001
 By: ID



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

Elevation:	-37.1	Feet	Easting:	561845.57	State Plane	1983
Reference:	NGVD 29		Northing:	833427.22	FLA West	Feet

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

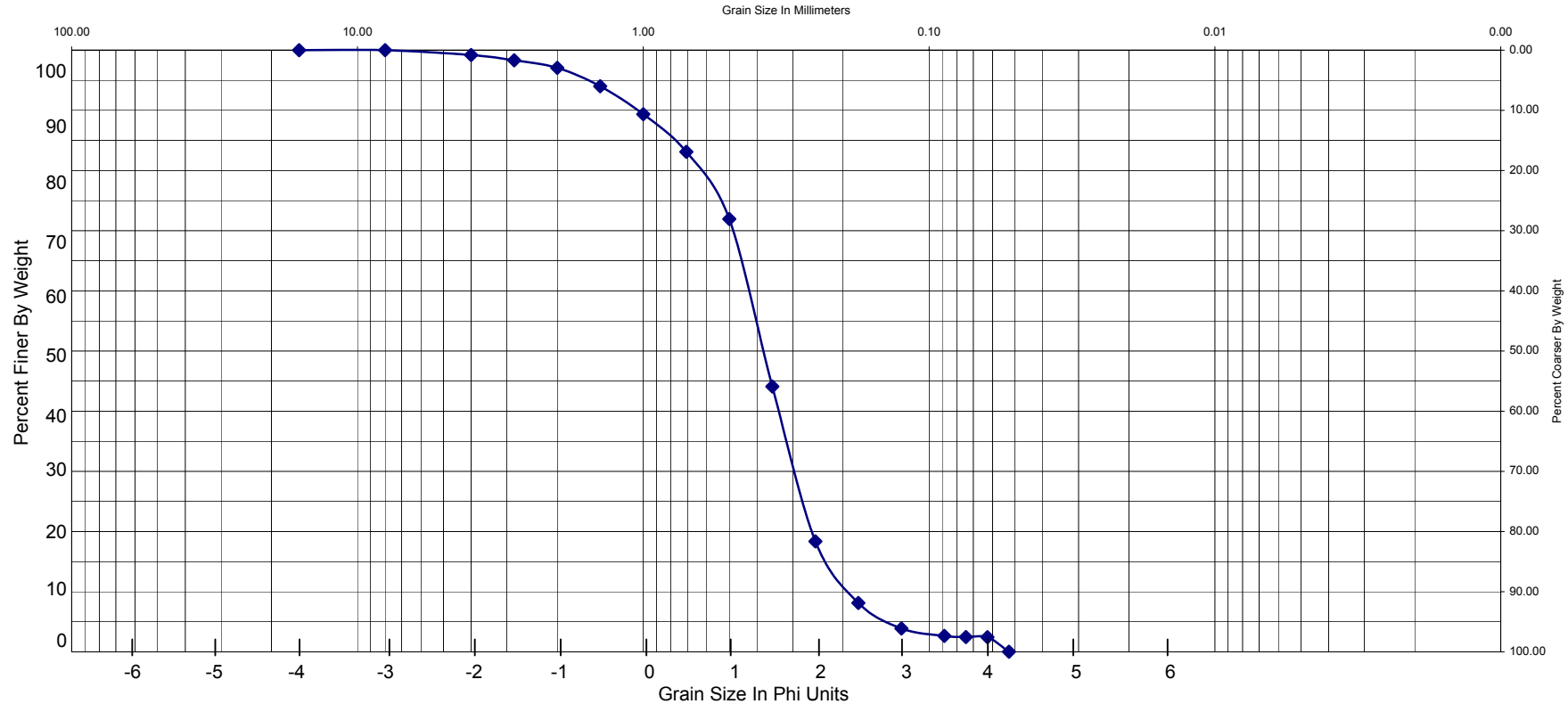
Dry Wt.	72.76	Percent Silt:	10.61
Wash Wt.	65.07		

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	1.270	1.745	1.270	1.745
5	-2.000	4.000	0.460	0.632	1.730	2.378
7	-1.500	2.828	0.450	0.618	2.180	2.996
10	-1.000	2.000	0.340	0.467	2.520	3.463
14	-0.500	1.414	0.280	0.385	2.800	3.848
18	0.000	1.000	0.250	0.344	3.050	4.192
25	0.500	0.707	0.300	0.412	3.350	4.604
35	1.000	0.500	0.480	0.660	3.830	5.264
45	1.500	0.354	2.550	3.505	6.380	8.769
60	2.000	0.250	18.250	25.082	24.630	33.851
80	2.500	0.177	30.690	42.180	55.320	76.031
120	3.000	0.125	8.440	11.600	63.760	87.631
170	3.500	0.088	1.020	1.402	64.780	89.032
200	3.750	0.074	0.200	0.275	64.980	89.307
230	4.000	0.063	0.060	0.082	65.040	89.390
Pan	Pan	0.053	7.720	10.610	72.760	100.000

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
0.80	1.64	1.82	2.19	2.49	2.84	4.13


Median phi:	2.19	Median mm:	0.22
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	2.32	0.20	0.80	0.38	2.06
Moment	2.27	0.21	1.05	0.44	2.33



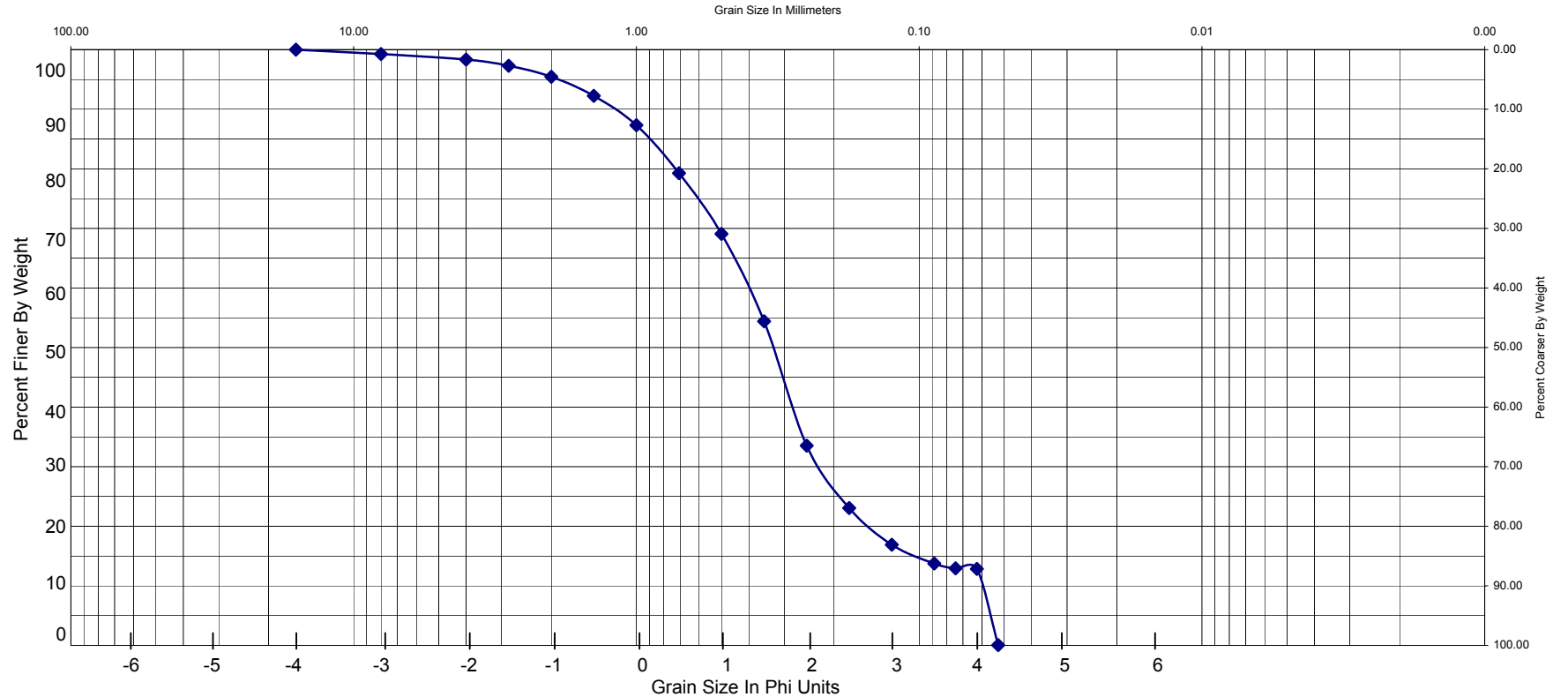
Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-10#1	0.5		SW	2.43	0.38	0.41	-0.3	1.91	1.17	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID



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Easting (X):	561845.57 Feet
Northing (Y):	833427.22 Feet
Sample Elevation:	-28.2 NGVD 29
Coord. System:	State Plane 1983 FLA West

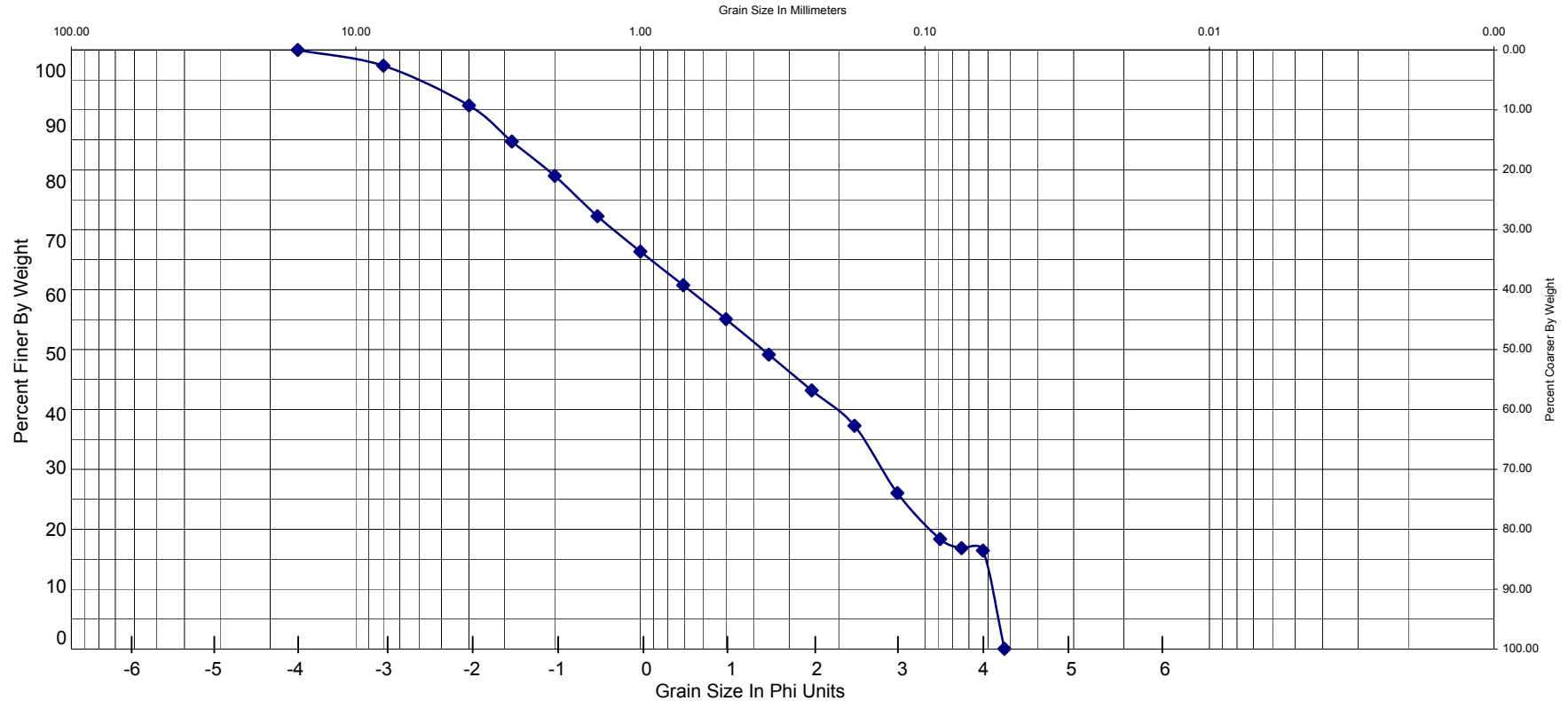


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-10#2	3.5		SM	12.79	0.33	0.33	0.01	1.62	1.76	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 561845.57 Feet
													Northing (Y): 833427.22 Feet
													Sample Elevation: -31.2 NGVD 29
													Coord. System: State Plane 1983 FLA West




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Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

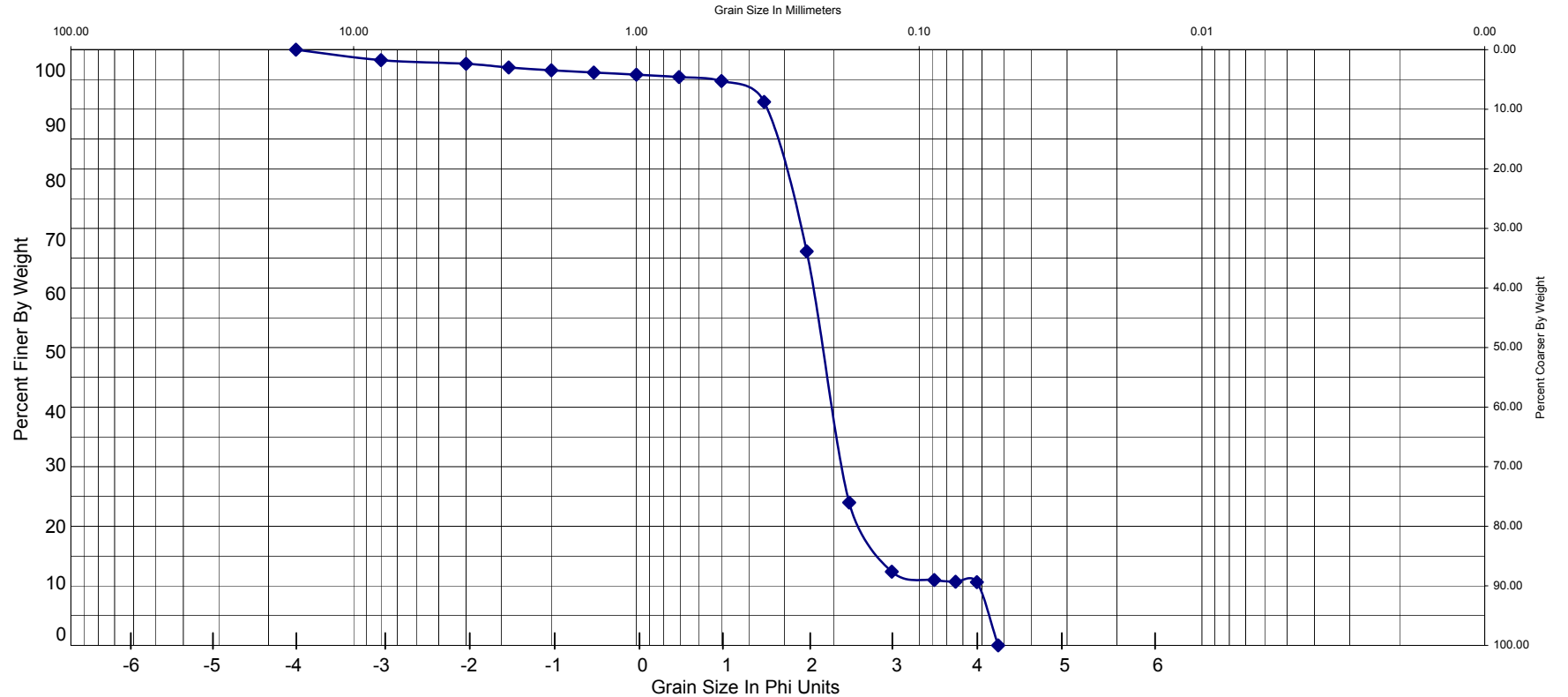
Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-10#3	5.2		SM	16.40	0.37	0.46	-0.14	1.23	2.76	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID



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Easting (X):	561845.57 Feet
Northing (Y):	833427.22 Feet
Sample Elevation:	-32.9 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-00-10#4	9.4		SW-SM	10.61	0.22	0.21	0.44	2.33	1.05	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 561845.57 Feet
													Northing (Y): 833427.22 Feet
													Sample Elevation: -37.1 NGVD 29
													Coord. System: State Plane 1983 FLA West



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