

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=553977.43 Y=760140.23		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-00-39		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 8/11/00 Completed 9:55		
8. DEPTH DRILLED INTO ROCK N/A		17. ELEVATION TOP OF HOLE -35.4 FT		
9. TOTAL DEPTH OF HOLE 14.1 FT		18. TOTAL CORE RECOVERY FOR BORING 97.2%		
		19. SIGNATURE OF GEOLOGIST SK/ID		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-35.4	0					
-36.7	1		SAND, fine grained, some shell hash/shell fragments, gray (5Y-5/1), (SP).		1	Sample #1, Depth = 0.5' Mean (mm): 0.59, Phi Sorting: 1.39 Silt: 0.62% (SW)
	2					
	3		fine grained, little shell hash/shell fragments, gray (5Y-5/1), (SP).		2	Sample #2, Depth = 3.5' Mean (mm): 0.33, Phi Sorting: 1.10 Silt: 1.32% (SW)
	4					
-40.6	5					
	6		SAND, fine grained, little shell hash/shell fragments, gray (5Y-5/1), (SP).		3	Sample #3, Depth = 7.0' Mean (mm): 0.36, Phi Sorting: 1.05 Silt: 1.51% (SP)
	7					
-43.9	8					
	9		SAND, fine grained, trace shell hash/fragments, gray (5Y-5/1), (SP).		4	Sample #4, Depth = 9.5' Mean (mm): 0.27, Phi Sorting: 1.22 Silt: 4.35% (SW)
	10					
-45.9	11					
	12		CARBONATE CLASTS, from silt/clay size to 4" clasts, light gray (5Y-7/1) to white (5Y-8/1), (GM).			
	13					
-49.1	14		No Recovery			
-49.5	15		End of Boring			
	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-00-39#1
 Date: 1/1/2001
 By: ID



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

Elevation:	-35.9	Feet	Easting:	553977.43	State Plane	1983
Reference:	NGVD 29		Northing:	760140.23	FLA West	Feet

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

Dry Wt.	56.31	Percent Silt:	0.62
Wash Wt.	55.96		

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	0.290	0.515	0.290	0.515
5	-2.000	4.000	1.320	2.344	1.610	2.859
7	-1.500	2.828	1.270	2.255	2.880	5.115
10	-1.000	2.000	1.570	2.788	4.450	7.903
14	-0.500	1.414	2.770	4.919	7.220	12.822
18	0.000	1.000	4.060	7.210	11.280	20.032
25	0.500	0.707	7.350	13.053	18.630	33.085
35	1.000	0.500	9.780	17.368	28.410	50.453
45	1.500	0.354	9.300	16.516	37.710	66.969
60	2.000	0.250	11.500	20.423	49.210	87.391
80	2.500	0.177	5.260	9.341	54.470	96.732
120	3.000	0.125	1.340	2.380	55.810	99.112
170	3.500	0.088	0.110	0.195	55.920	99.307
200	3.750	0.074	0.020	0.036	55.940	99.343
230	4.000	0.063	0.010	0.018	55.950	99.361
Pan	Pan	0.053	0.350	0.622	56.300	99.982

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-1.53	-0.28	0.19	0.99	1.70	1.92	2.41

Median phi:	0.99	Median mm:	0.50
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	0.70	0.62	1.14	-0.37	1.07
Moment	0.77	0.59	1.39	-0.42	1.73

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-39#2
 Date: 1/1/2001
 By: ID



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

Elevation:	-38.9	Feet	Easting:	553977.43	State Plane	1983
Reference:	NGVD 29		Northing:	760140.23	FLA West	Feet

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

Dry Wt.	62.66	Percent Silt:	1.32
Wash Wt.	61.83		

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	0.130	0.207	0.130	0.207
7	-1.500	2.828	0.540	0.862	0.670	1.069
10	-1.000	2.000	0.630	1.005	1.300	2.075
14	-0.500	1.414	1.120	1.787	2.420	3.862
18	0.000	1.000	1.820	2.905	4.240	6.767
25	0.500	0.707	2.820	4.500	7.060	11.267
35	1.000	0.500	4.780	7.628	11.840	18.896
45	1.500	0.354	7.780	12.416	19.620	31.312
60	2.000	0.250	15.950	25.455	35.570	56.767
80	2.500	0.177	18.740	29.907	54.310	86.674
120	3.000	0.125	7.060	11.267	61.370	97.941
170	3.500	0.088	0.420	0.670	61.790	98.612
200	3.750	0.074	0.030	0.048	61.820	98.659
230	4.000	0.063	0.010	0.016	61.830	98.675
Pan	Pan	0.053	0.830	1.325	62.660	100.000

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.30	0.81	1.25	1.87	2.30	2.46	2.87

Median phi:	1.87	Median mm:	0.27
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.54	0.34	0.89	-0.59	1.23
Moment	1.61	0.33	1.10	-0.57	1.93

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-39#3
 Date: 1/1/2001
 By: ID



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

Elevation:	-42.4	Feet	Easting:	553977.43	State Plane	1983
Reference:	NGVD 29		Northing:	760140.23	FLA West	Feet

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

Dry Wt.	64.79	Percent Silt:	1.51
Wash Wt.	63.81		

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	0.150	0.232	0.150	0.232
7	-1.500	2.828	0.290	0.448	0.440	0.679
10	-1.000	2.000	0.330	0.509	0.770	1.188
14	-0.500	1.414	1.110	1.713	1.880	2.902
18	0.000	1.000	2.110	3.257	3.990	6.158
25	0.500	0.707	4.640	7.162	8.630	13.320
35	1.000	0.500	7.770	11.993	16.400	25.313
45	1.500	0.354	9.830	15.172	26.230	40.485
60	2.000	0.250	19.810	30.576	46.040	71.060
80	2.500	0.177	12.870	19.864	58.910	90.925
120	3.000	0.125	4.370	6.745	63.280	97.669
170	3.500	0.088	0.410	0.633	63.690	98.302
200	3.750	0.074	0.090	0.139	63.780	98.441
230	4.000	0.063	0.020	0.031	63.800	98.472
Pan	Pan	0.053	0.980	1.513	64.780	99.985

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.18	0.61	0.99	1.66	2.10	2.33	2.80

Median phi:	1.66	Median mm:	0.32
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.44	0.37	0.88	-0.36	1.10
Moment	1.47	0.36	1.05	-0.29	1.62

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-39#4
 Date: 1/1/2001
 By: ID



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

Elevation:	-44.9	Feet	Easting:	553977.43	State Plane	1983
Reference:	NGVD 29		Northing:	760140.23	FLA West	Feet

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

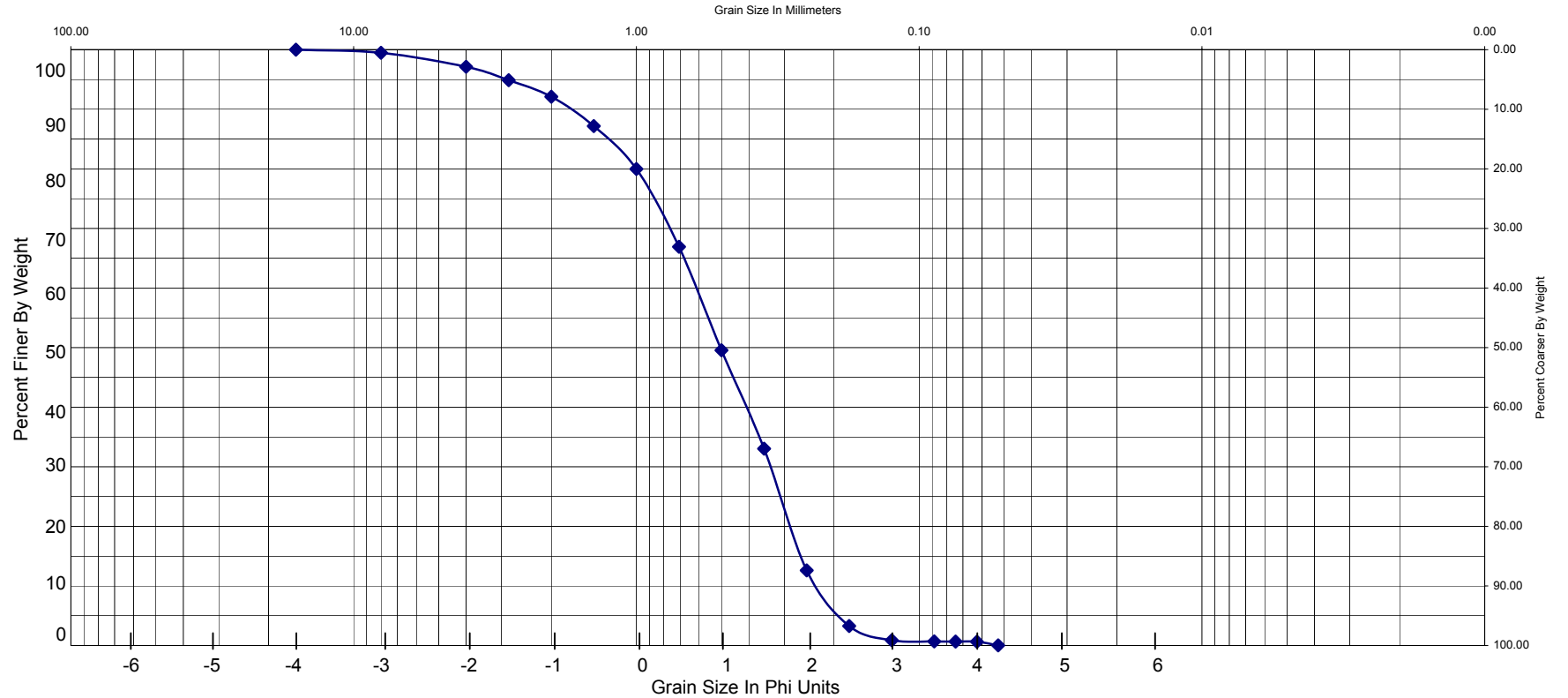
Dry Wt.	65.25	Percent Silt:	4.35
Wash Wt.	62.42		

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	0.521	0.340	0.521
7	-1.500	2.828	0.220	0.337	0.560	0.858
10	-1.000	2.000	0.540	0.828	1.100	1.686
14	-0.500	1.414	0.940	1.441	2.040	3.126
18	0.000	1.000	1.720	2.636	3.760	5.762
25	0.500	0.707	2.680	4.107	6.440	9.870
35	1.000	0.500	4.300	6.590	10.740	16.460
45	1.500	0.354	6.200	9.502	16.940	25.962
60	2.000	0.250	12.090	18.529	29.030	44.490
80	2.500	0.177	18.640	28.567	47.670	73.057
120	3.000	0.125	12.840	19.678	60.510	92.736
170	3.500	0.088	1.590	2.437	62.100	95.172
200	3.750	0.074	0.240	0.368	62.340	95.540
230	4.000	0.063	0.060	0.092	62.400	95.632
Pan	Pan	0.053	2.840	4.352	65.240	99.985

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.14	0.96	1.45	2.10	2.55	2.78	3.46

Median phi:	2.10	Median mm:	0.23
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.83	0.28	1.00	-0.45	1.34
Moment	1.88	0.27	1.22	-0.38	1.86

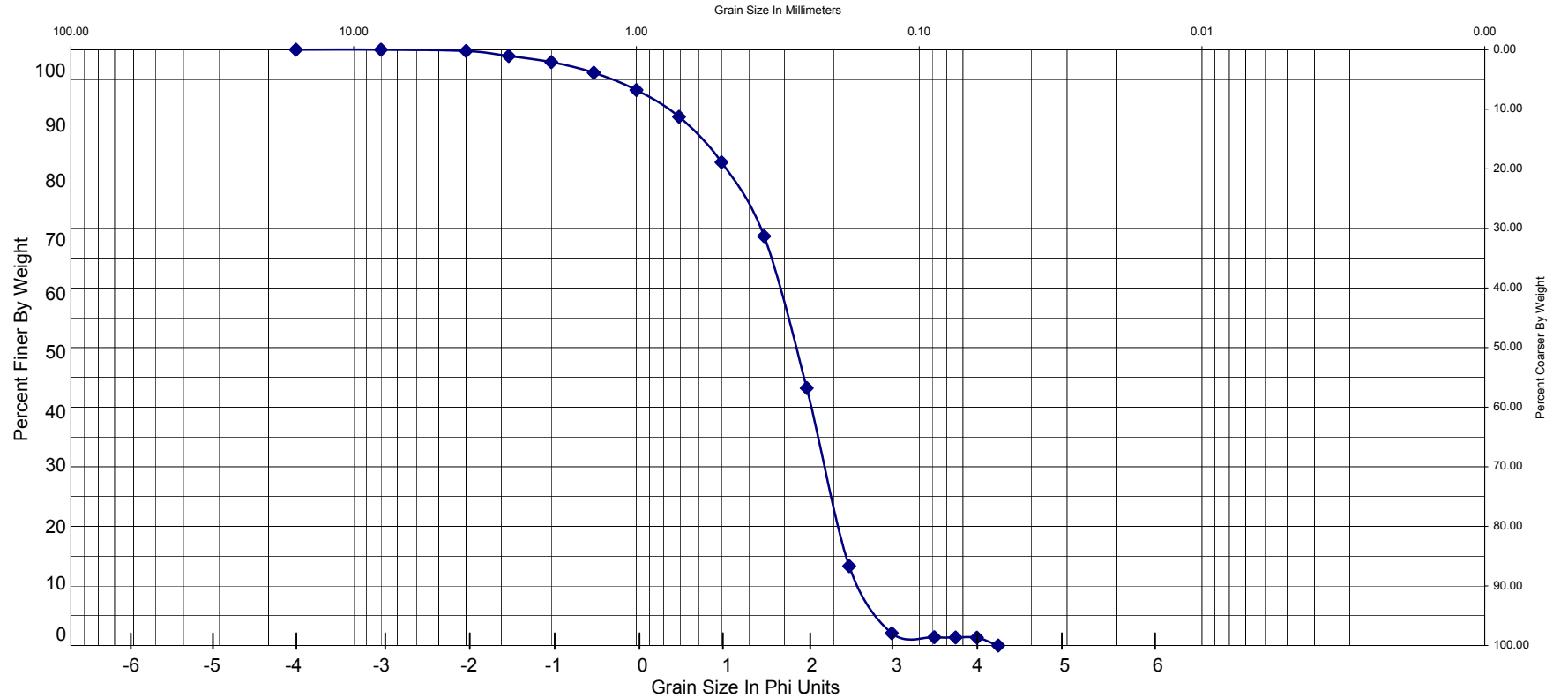


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-39#1	0.5		SW	62	0.5	0.59	-0.42	1.73	1.39	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 553977.43 Feet
													Northing (Y): 760140.23 Feet
													Sample Elevation: -35.9 NGVD 29
													Coord. System: State Plane 1983 FLA West



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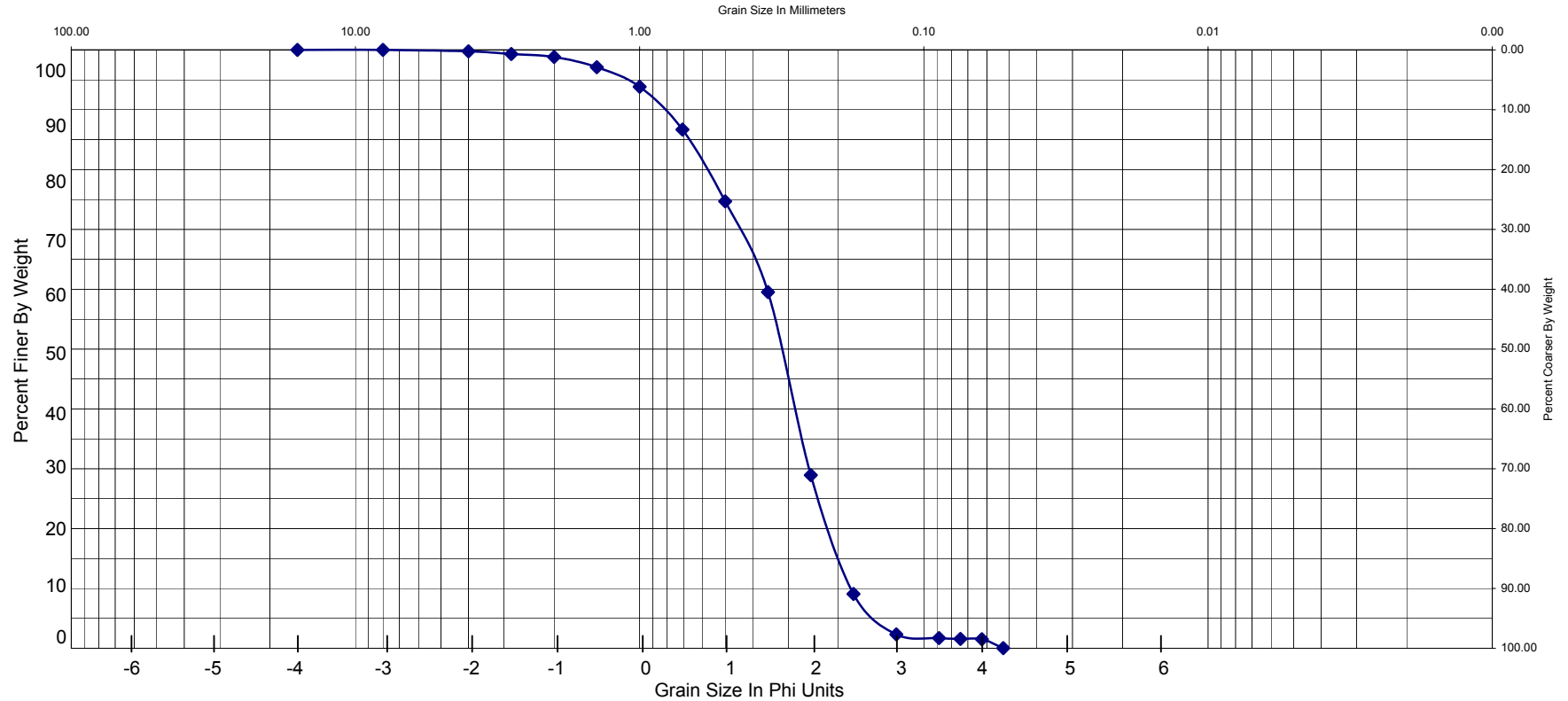
Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-39#2	3.5		SW	1.32	0.27	0.33	-0.57	1.93	1.1	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID



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Easting (X):	553977.43 Feet
Northing (Y):	760140.23 Feet
Sample Elevation:	-38.9 NGVD 29
Coord. System:	State Plane 1983 FLA West

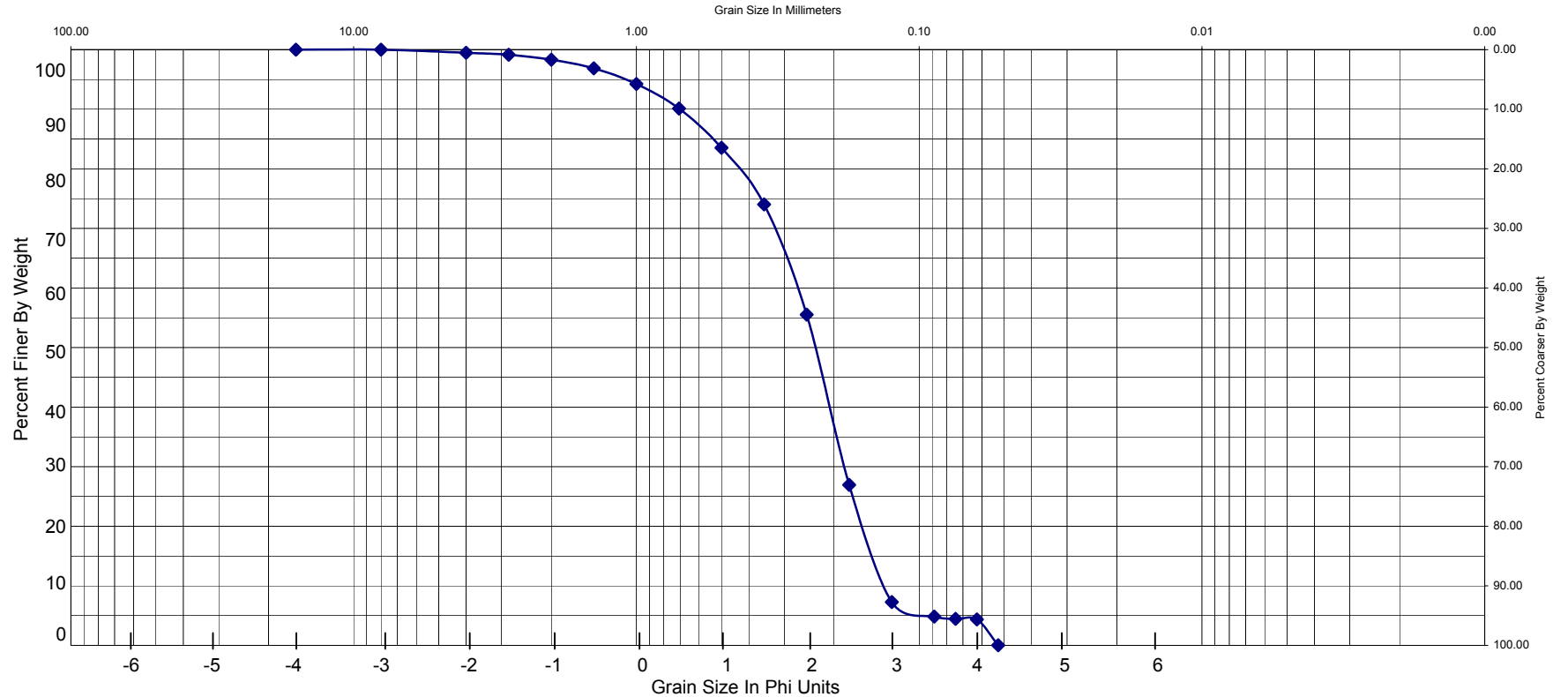


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-39#3	7.0		SP	1.51	0.32	0.36	-0.29	1.62	1.05	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 553977.43 Feet
													Northing (Y): 760140.23 Feet
													Sample Elevation: -42.4 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-00-39#4	9.5		SW	4.35	0.23	0.27	-0.38	1.86	1.22	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 553977.43 Feet
													Northing (Y): 760140.23 Feet
													Sample Elevation: -44.9 NGVD 29
													Coord. System: State Plane 1983 FLA West



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