

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=546879.24 Y=768731.84		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-00-30		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 15:34		
8. DEPTH DRILLED INTO ROCK N/A		17. ELEVATION TOP OF HOLE -30.4 FT		
9. TOTAL DEPTH OF HOLE 18.5 FT		18. TOTAL CORE RECOVERY FOR BORING 67.6%		
		19. SIGNATURE OF GEOLOGIST SK/ID		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-30.4	0					
	1		SAND, fine grained, some shell hash/fragments, gray (5Y-6/1), (SP). 1" shell @ 1.0'.		1	Sample #1, Depth = 0.5' Mean (mm): 0.46, Phi Sorting: 0.99 Silt: 0.77% (SP)
-32.9	2					
	3		SAND, fine grained, some shell hash/fragments, gray (5Y-6/1), (SP). 1" shell @ 5.3'.		2	Sample #2, Depth = 4.5' Mean (mm): 0.40, Phi Sorting: 1.17 Silt: 1.83% (SW)
-36.4	4					
	5					
	6					
	7					
	8		SAND, fine grained, some shell hash/fragments, gray (5Y-6/1), (SP).		3	Sample #3, Depth = 7.5' Mean (mm): 0.34, Phi Sorting: 1.09 Silt: 2.60% (SP)
-40.4	9					
	10					
	11		SAND, fine grained, trace silt/clay, little shell hash, gray (5Y-6/1) (SP-SM).		4	Sample #4, Depth = 11.0' Mean (mm): 0.25, Phi Sorting: 1.25 Silt: 4.93% (SW-SM)
-42.9	12					
	13					
	14					
	15					
	16		No Recovery			
	17					
-48.9	18					
	19		End of Boring			
	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-00-30#1
 Date: 1/1/2001
 By: ID



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

Elevation:	-30.9	Feet	Easting:	546879.24	State Plane	1983
Reference:	NGVD 29		Northing:	768731.84	FLA West	Feet

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

Dry Wt.	59.93	Percent Silt:	0.77
Wash Wt.	59.47		

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	0.320	0.534	0.320	0.534
7	-1.500	2.828	0.260	0.434	0.580	0.968
10	-1.000	2.000	0.780	1.302	1.360	2.269
14	-0.500	1.414	1.470	2.453	2.830	4.722
18	0.000	1.000	2.990	4.989	5.820	9.711
25	0.500	0.707	5.420	9.044	11.240	18.755
35	1.000	0.500	10.360	17.287	21.600	36.042
45	1.500	0.354	16.110	26.881	37.710	62.923
60	2.000	0.250	14.990	25.013	52.700	87.936
80	2.500	0.177	5.970	9.962	58.670	97.898
120	3.000	0.125	0.720	1.201	59.390	99.099
170	3.500	0.088	0.040	0.067	59.430	99.166
200	3.750	0.074	0.010	0.017	59.440	99.182
230	4.000	0.063	0.010	0.017	59.450	99.199
Pan	Pan	0.053	0.460	0.768	59.910	99.967

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.47	0.35	0.68	1.26	1.74	1.92	2.35

Median phi:	1.26	Median mm:	0.42
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.08	0.47	0.82	-0.33	1.09
Moment	1.12	0.46	0.99	-0.33	1.67

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-30#2
 Date: 1/1/2001
 By: ID



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

Elevation:	-34.9	Feet	Easting:	546879.24	State Plane	1983
Reference:	NGVD 29		Northing:	768731.84	FLA West	Feet

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

Dry Wt.	57.88	Percent Silt:	1.83
Wash Wt.	56.85		

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	0.350	0.605	0.350	0.605
7	-1.500	2.828	0.630	1.088	0.980	1.693
10	-1.000	2.000	0.870	1.503	1.850	3.196
14	-0.500	1.414	1.480	2.557	3.330	5.753
18	0.000	1.000	2.090	3.611	5.420	9.364
25	0.500	0.707	4.240	7.326	9.660	16.690
35	1.000	0.500	6.860	11.852	16.520	28.542
45	1.500	0.354	10.180	17.588	26.700	46.130
60	2.000	0.250	16.920	29.233	43.620	75.363
80	2.500	0.177	9.850	17.018	53.470	92.381
120	3.000	0.125	2.990	5.166	56.460	97.547
170	3.500	0.088	0.260	0.449	56.720	97.996
200	3.750	0.074	0.050	0.086	56.770	98.082
230	4.000	0.063	0.020	0.035	56.790	98.117
Pan	Pan	0.053	1.060	1.831	57.850	99.948

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.65	0.45	0.85	1.57	1.99	2.25	2.75

Median phi:	1.57	Median mm:	0.34
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.27	0.41	0.96	-0.49	1.22
Moment	1.32	0.40	1.17	-0.44	1.81

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-30#3
 Date: 1/1/2001
 By: ID



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

Elevation:	-37.9	Feet	Easting:	546879.24	State Plane	1983
Reference:	NGVD 29		Northing:	768731.84	FLA West	Feet

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

Dry Wt.	66.64	Percent Silt:	2.60
Wash Wt.	64.91		

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	0.250	0.375	0.250	0.375
7	-1.500	2.828	0.750	1.125	1.000	1.501
10	-1.000	2.000	0.540	0.810	1.540	2.311
14	-0.500	1.414	1.030	1.546	2.570	3.857
18	0.000	1.000	1.720	2.581	4.290	6.438
25	0.500	0.707	2.960	4.442	7.250	10.879
35	1.000	0.500	5.700	8.553	12.950	19.433
45	1.500	0.354	11.120	16.687	24.070	36.119
60	2.000	0.250	17.550	26.336	41.620	62.455
80	2.500	0.177	17.380	26.080	59.000	88.535
120	3.000	0.125	5.140	7.713	64.140	96.248
170	3.500	0.088	0.590	0.885	64.730	97.134
200	3.750	0.074	0.120	0.180	64.850	97.314
230	4.000	0.063	0.040	0.060	64.890	97.374
Pan	Pan	0.053	1.730	2.596	66.620	99.970

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
-0.28	0.80	1.17	1.76	2.24	2.41	2.92

Median phi:	1.76	Median mm:	0.29
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.52	0.35	0.89	-0.44	1.22
Moment	1.57	0.34	1.09	-0.46	1.87

Gradation Analysis Report

Proj Name: Captiva Island
 Sample: CIVC-00-30#4
 Date: 1/1/2001
 By: ID



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

Elevation:	-41.4	Feet	Easting:	546879.24	State Plane	1983
Reference:	NGVD 29		Northing:	768731.84	FLA West	Feet

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

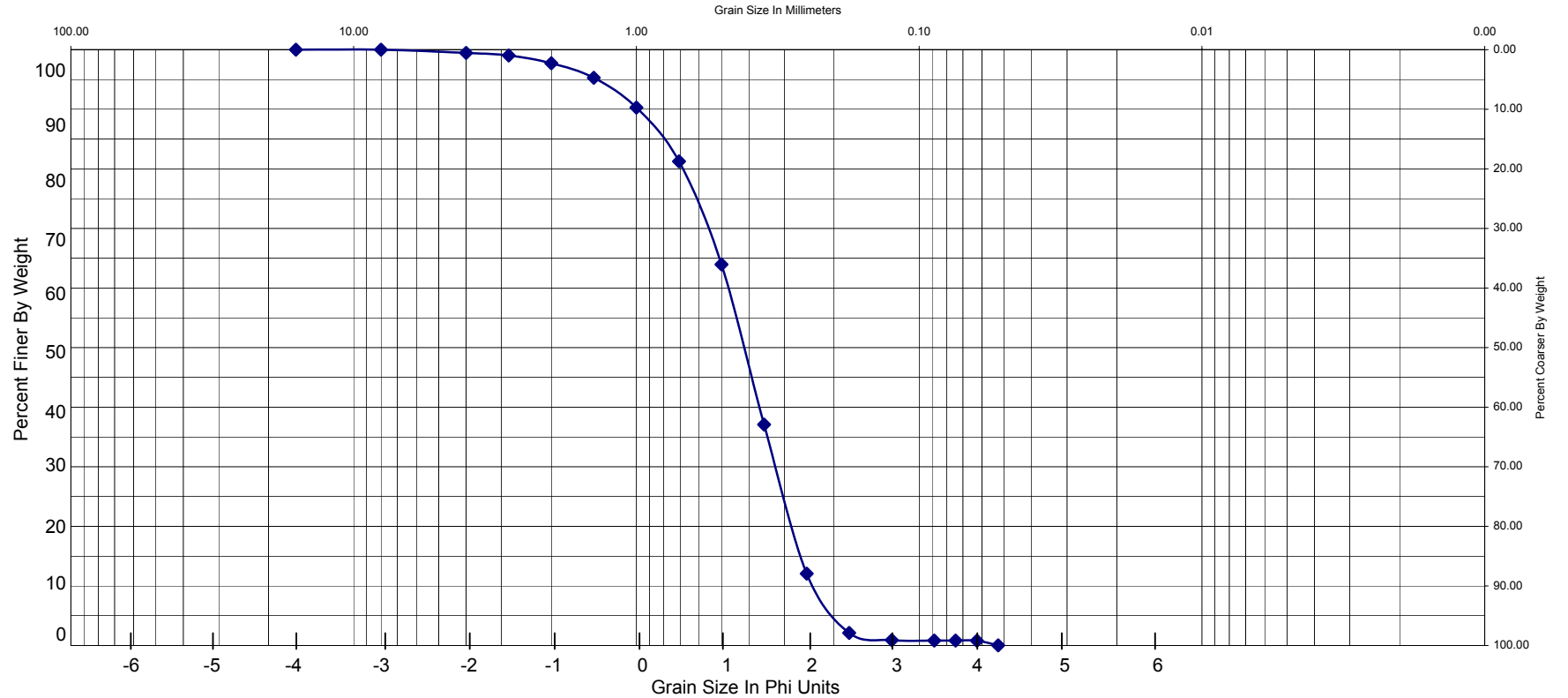
Dry Wt.	51.59	Percent Silt:	4.93
Wash Wt.	49.06		

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	0.110	0.213	0.110	0.213
7	-1.500	2.828	0.230	0.446	0.340	0.659
10	-1.000	2.000	0.480	0.930	0.820	1.589
14	-0.500	1.414	0.780	1.512	1.600	3.101
18	0.000	1.000	0.970	1.880	2.570	4.982
25	0.500	0.707	1.920	3.722	4.490	8.703
35	1.000	0.500	2.950	5.718	7.440	14.421
45	1.500	0.354	3.610	6.997	11.050	21.419
60	2.000	0.250	8.940	17.329	19.990	38.748
80	2.500	0.177	17.230	33.398	37.220	72.146
120	3.000	0.125	10.230	19.829	47.450	91.975
170	3.500	0.088	1.240	2.404	48.690	94.379
200	3.750	0.074	0.270	0.523	48.960	94.902
230	4.000	0.063	0.070	0.136	49.030	95.038
Pan	Pan	0.053	2.540	4.923	51.570	99.961

PHI 5	PHI 16	PHI 25	PHI 50	PHI 75	PHI 84	PHI 95
0.00	1.11	1.60	2.17	2.57	2.80	3.86

Median phi:	2.17	Median mm:	0.22
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	Mean phi	Mean mm	Sorting	Skewness	Kurtosis
Graphic	1.99	0.25	1.01	-0.33	1.63
Moment	2.02	0.25	1.25	-0.17	1.99

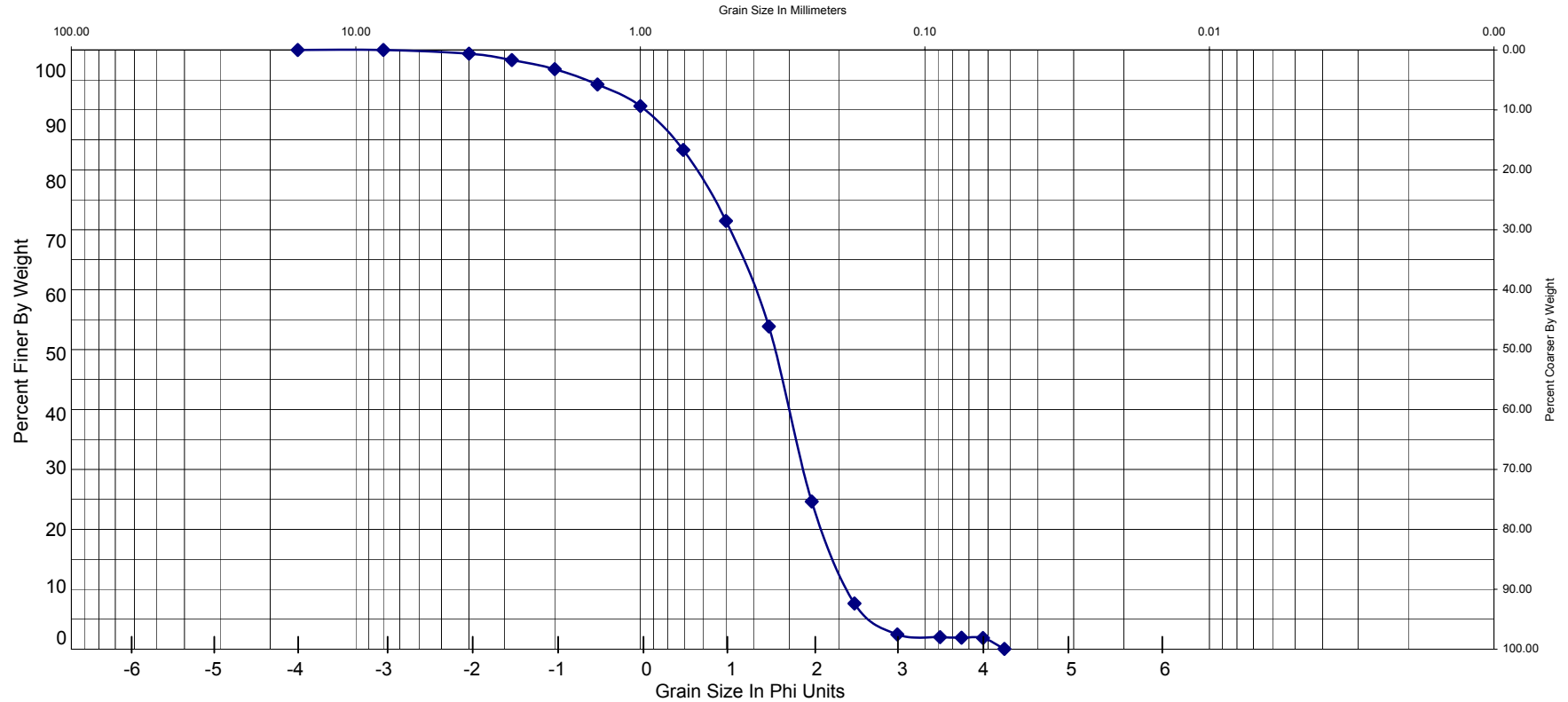


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-30#1	0.5		SP	0.77	0.42	0.46	-0.33	1.67	0.99	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 546879.24 Feet
													Northing (Y): 768731.84 Feet
													Sample Elevation: -30.9 NGVD 29
													Coord. System: State Plane 1983 FLA West



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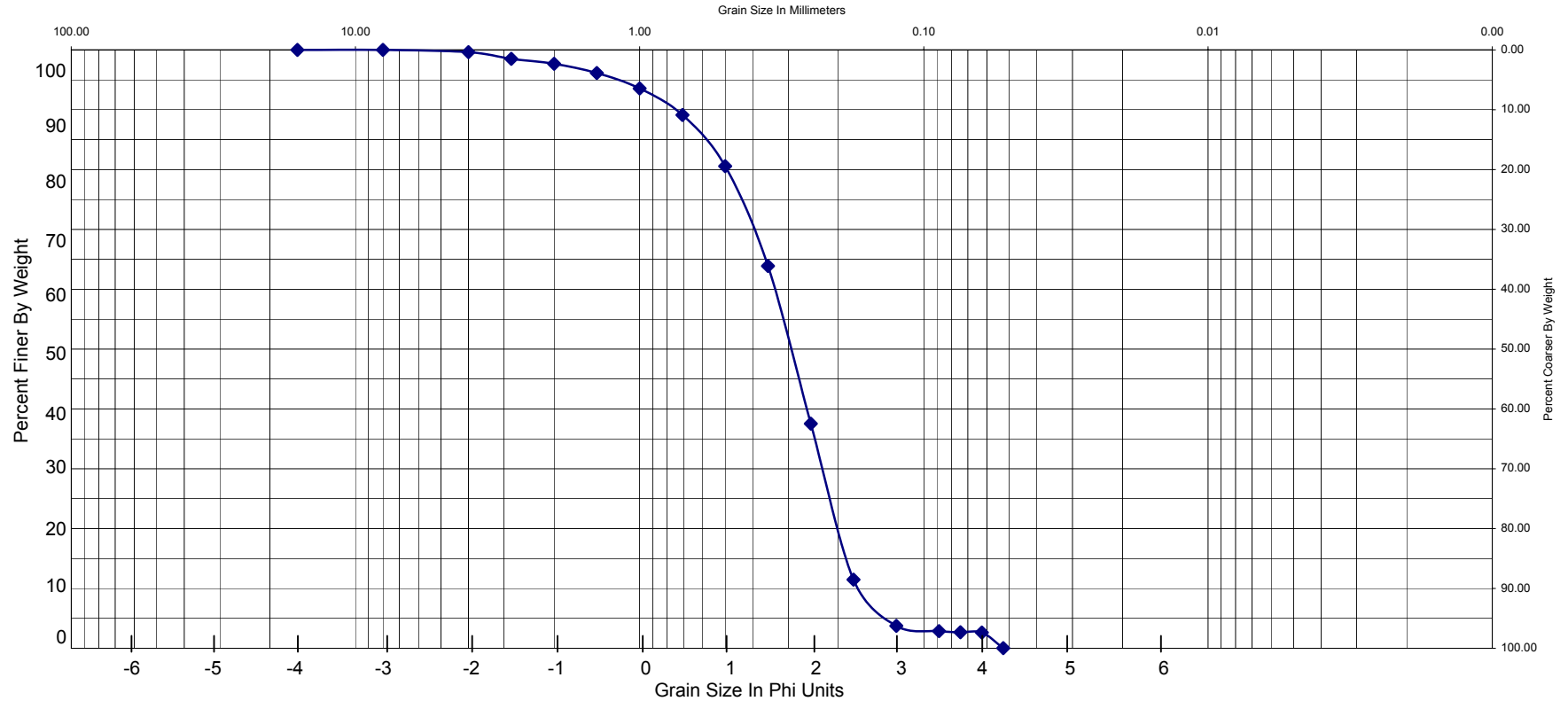


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-30#2	4.5		SW	1.83	0.34	0.4	-0.44	1.81	1.17	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 546879.24 Feet
													Northing (Y): 768731.84 Feet
													Sample Elevation: -34.9 NGVD 29
													Coord. System: State Plane 1983 FLA West



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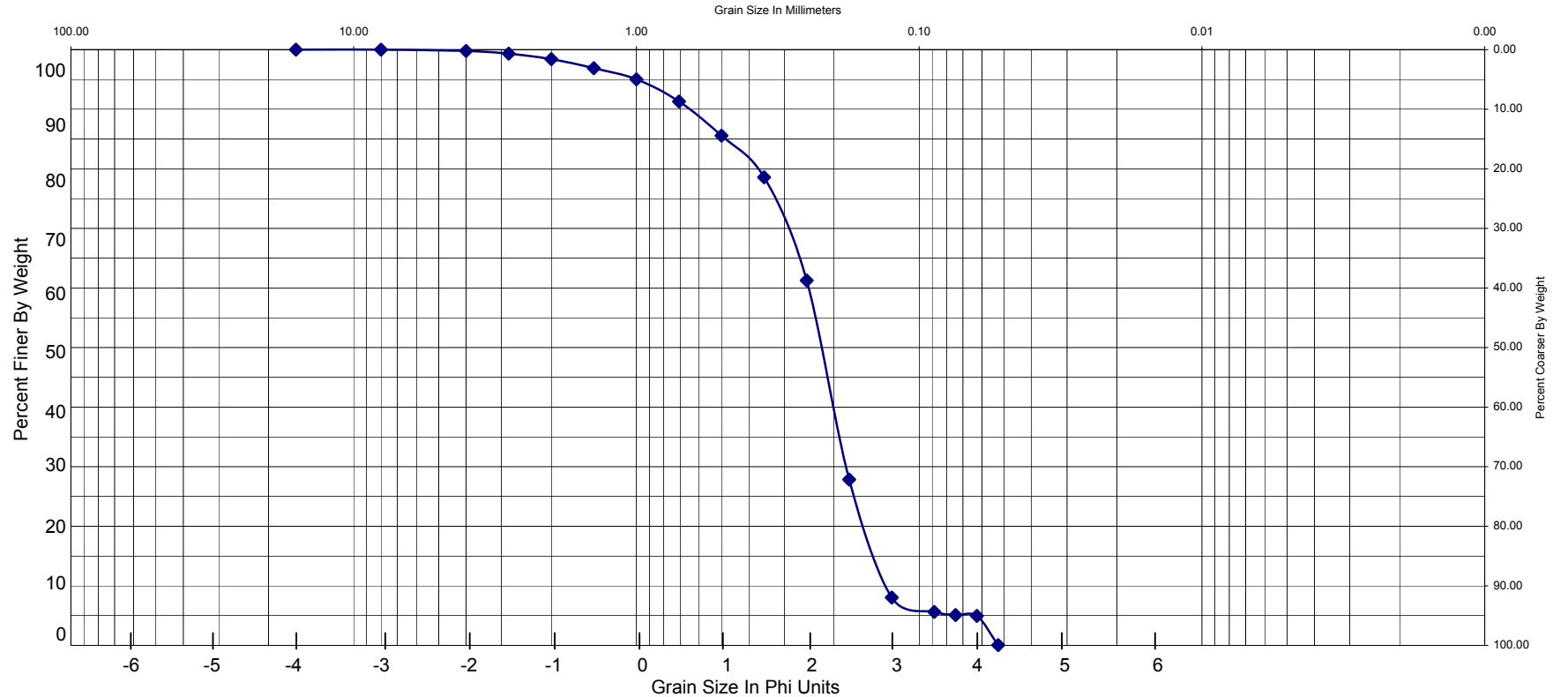


Gravel		Sand			Silt or Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample No.	Depth	Description	USCS	% Silt	Median	Mean	Skew	Kurt	Sort	PL	LL	PI	Sample Information
◆ CIVC-00-30#3	7.5		SP	2.60	0.3	0.34	-0.46	1.87	1.09	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 546879.24 Feet
													Northing (Y): 768731.84 Feet
													Sample Elevation: -37.9 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-00-30#4	11.0		SW-SM	4.93	0.22	0.25	-0.17	1.99	1.25	NA	NA	NA	Project Name: Captiva Island
													Sample Type: Vibracores
													Collection Date: 1/1/2001
													Analysis By: ID
													Easting (X): 546879.24 Feet
													Northing (Y): 768731.84 Feet
													Sample Elevation: -41.4 NGVD 29
													Coord. System: State Plane 1983 FLA West



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