



April 26, 2011

Gahagan & Bryant Associates, Inc
3802 West Bay to Bay Boulevard
Suite B-22
Tampa, FL 33629-6826

**Re: Jupiter Island '10 Sand Search
Beach Samples**

American Vibracore Services, Inc. is pleased to submit this report regarding the completion of native beach sample analysis phase of this project.

Overview

American Vibracore Services, Inc. (AVS) under contract from Gahagan & Bryant Associates, Inc. (GBA), conducted testing on Native Beach Samples from Jupiter Island, Florida.

Sample Processing and Laboratory Testing

All samples were collected by Gahagan & Bryant Associates and delivered to AVS's lab in Delray Beach, Florida for analysis. Laboratory testing was conducted in the form of grain size analyses, calcium carbonate content, Munsell color designation, and visual shell content.

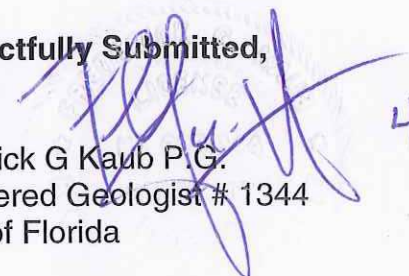
Reporting

Results were input into gINT format and hard copies and electronic copies were submitted as part of the final report.

Closing

We appreciate the opportunity to be of service to GBA on this project and look forward to a continued relationship.

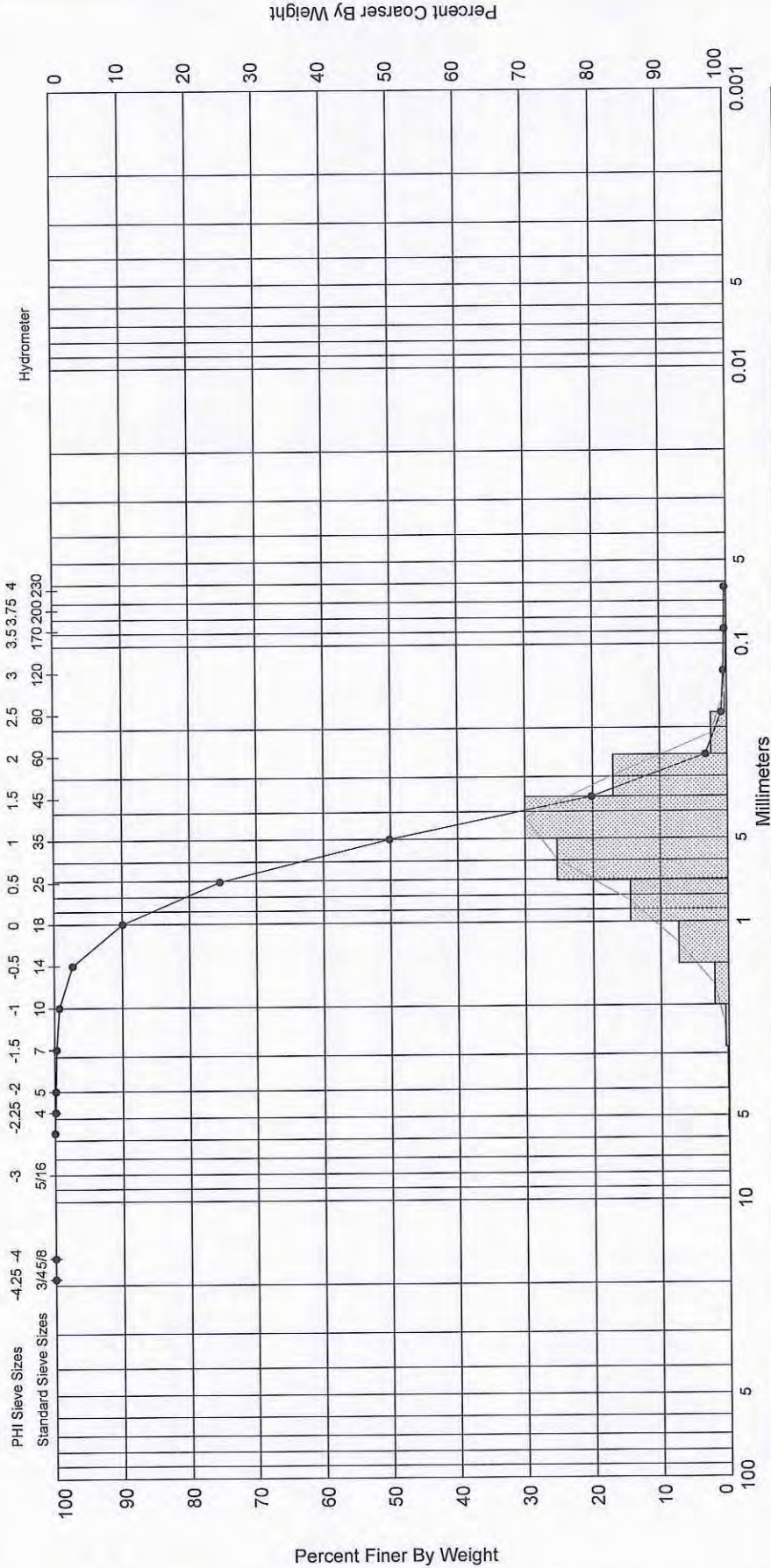
Respectfully Submitted,


Frederick G Kaub P.G.
Registered Geologist # 1344
State of Florida

4/26/2011

Sieve Graph

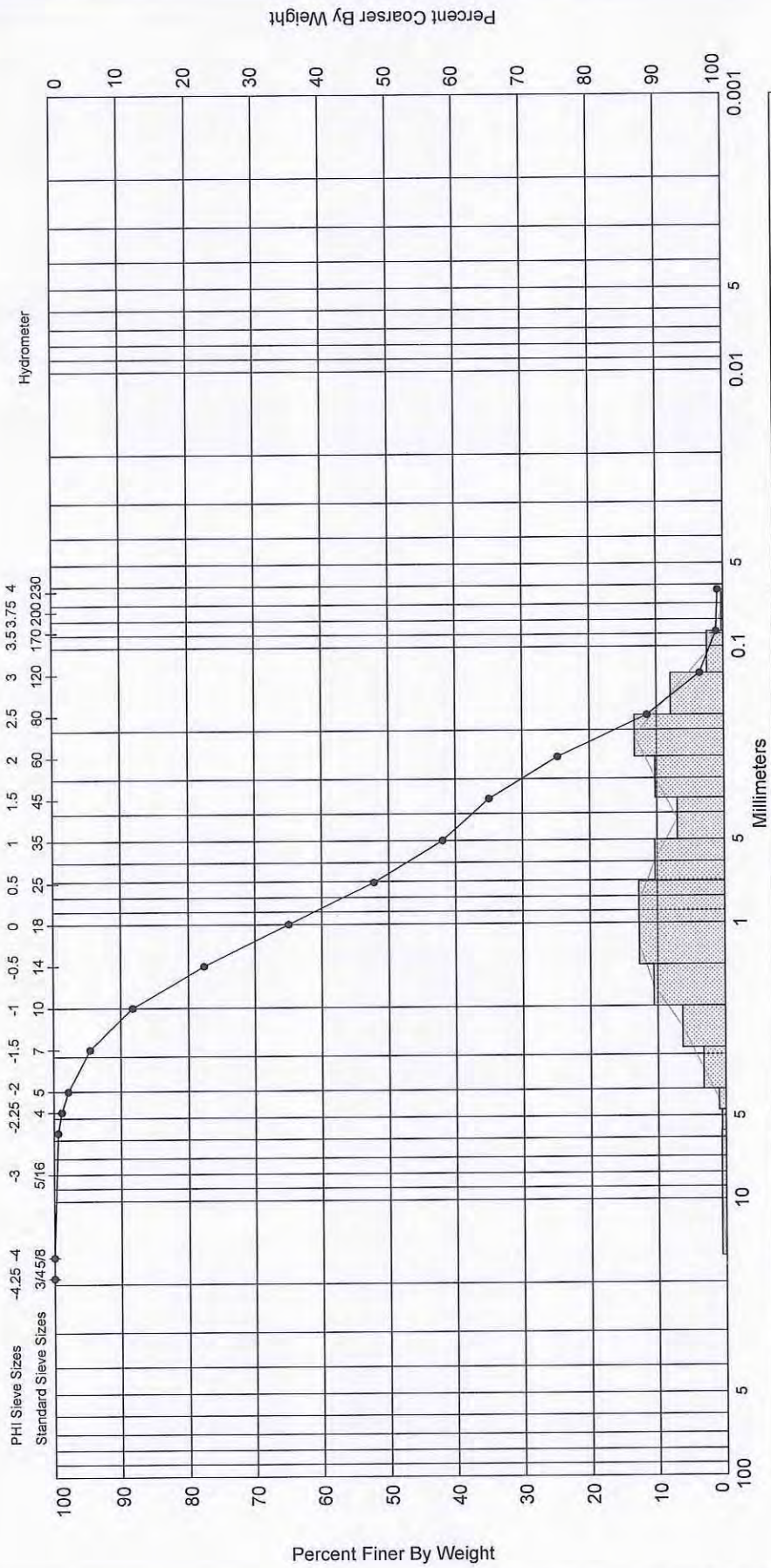




Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information				
1000258A	—●—	7.4	SP	#230 - 0.30		75.70	1	0.92	-0.51	3.88	0.7	Project Name:	Jupiter Island 10 - Beach Samples			
Comments:												Analysis Date:	01-24-11			
Depths and elevations based on measured values												Analyzed By:	JR			
												Easting (X, ft):	941554.			
												Northing (Y, ft):	1000417.			
												Horizontal System:	NAD 1983			
												Vertical System:	NAVD 88			

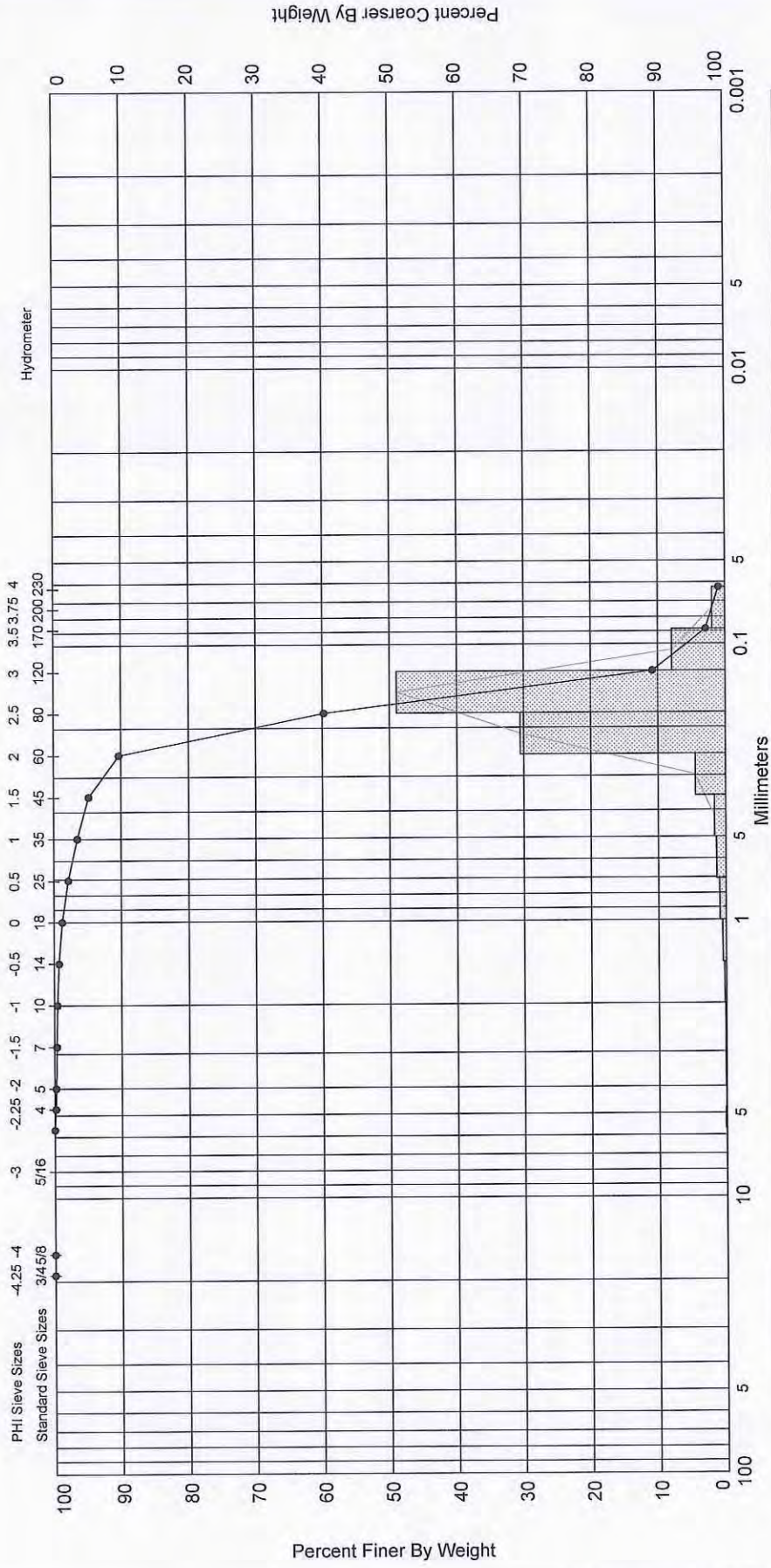
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1215 Wallace Drive
Delray Beach, FL 33444

AVS
AMERICAN VIBRACORE
SERVICES



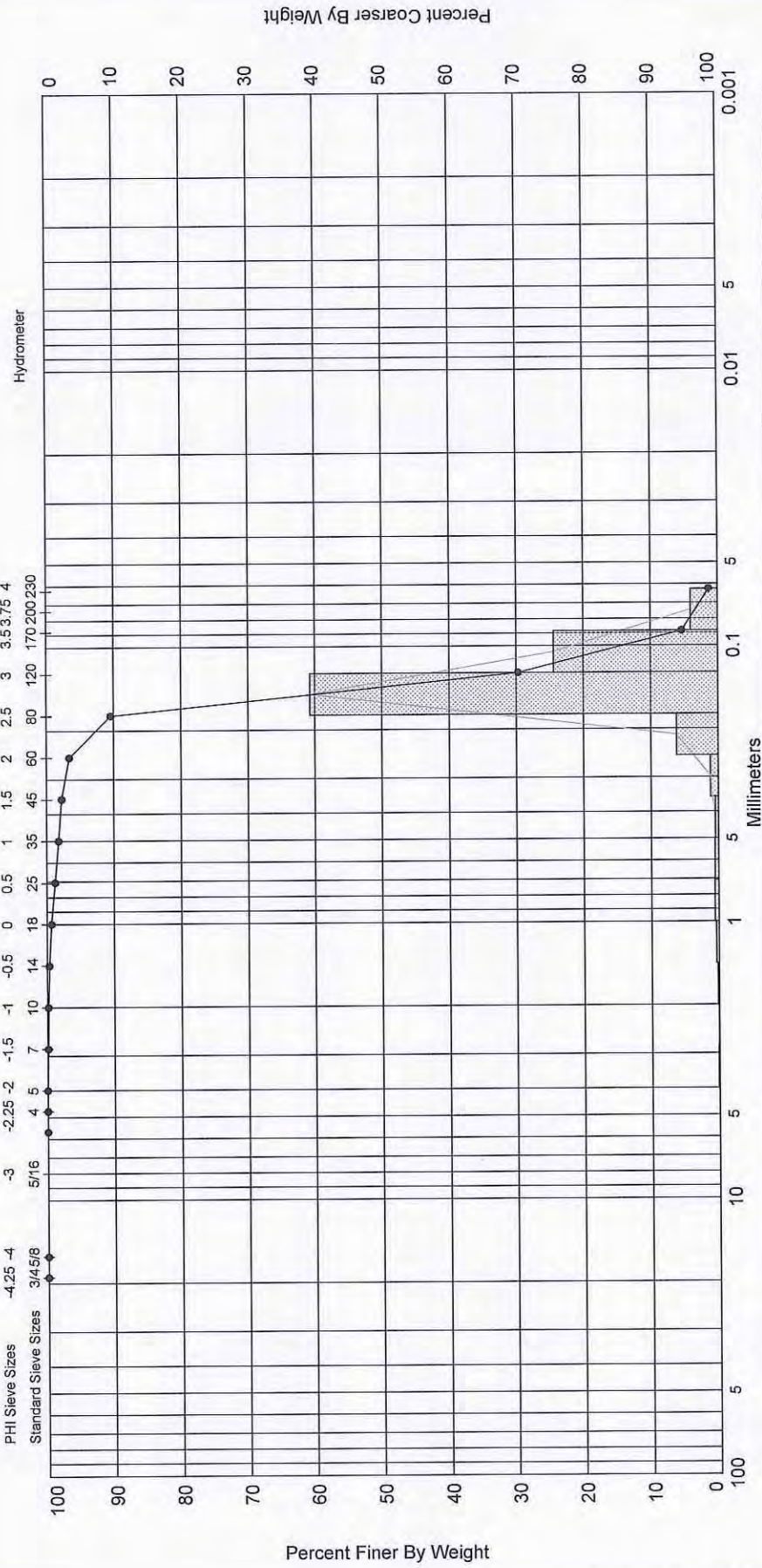
Gravel		Sand			Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine		

Sample	1000256C	Symbol	—●—	Elev. (ft)	-0.6	USCS	SW	% Fines	#230 - 0.83	% Organics	76.20	% Carbonates	0.61	Mean	0.68	Skew	-0.1	Kurt	2.19	Sort	1.42
Comments:																					
Depths and elevations based on measured values																					
										American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444											
										Sample Information Project Name: Jupiter Island 10 - Beach Samples Analysis Date: 01-24-11 Analyzed By: JR Easting (X, ft): 941611. Northing (Y, ft): 1000441. Horizontal System: NAD 1983 Vertical System: NAVD 88											



Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information				
1000258D	—●—	-4.6	SP	#230 - 0.94		29.10	2.6	2.49	-2.71	16.17	0.65	Project Name:	Jupiter Island 10 - Beach Samples			
Comments:												Analysis Date:	01-24-11			
Depths and elevations based on measured values												Analyzed By:	JR			
												Easting (X, ft):	941673.			
												Northing (Y, ft):	1000467.			
												Horizontal System:	NAD 1983			
												Vertical System:	NAVD 88			
												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444				

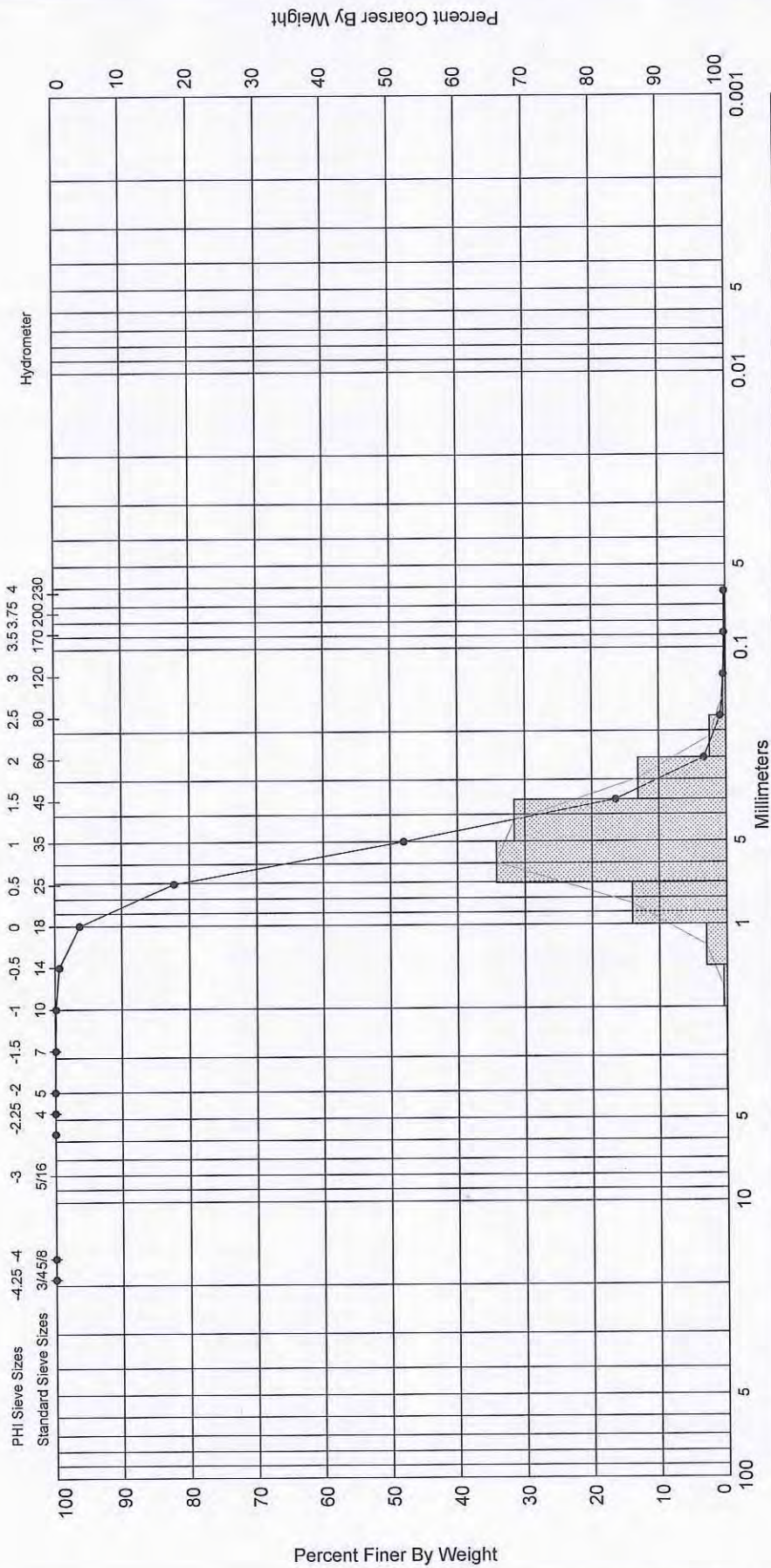


Gravel		Sand			Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine		

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
1000258E	—●—	-8.6	SP	#230 - 1.31		35.20	2.83	2.81	-3.1	21.27	0.53	Project Name:	Jupiter Island 10 - Beach Samples	Analysis Date:	01-24-11
Comments:												Analyzed By:	JR		
Depths and elevations based on measured values												Easting (X, ft):	941736.		
												Northing (Y, ft):	1000494.		
												Horizontal System:	NAD 1983		
												Vertical System:	NAVD 88		

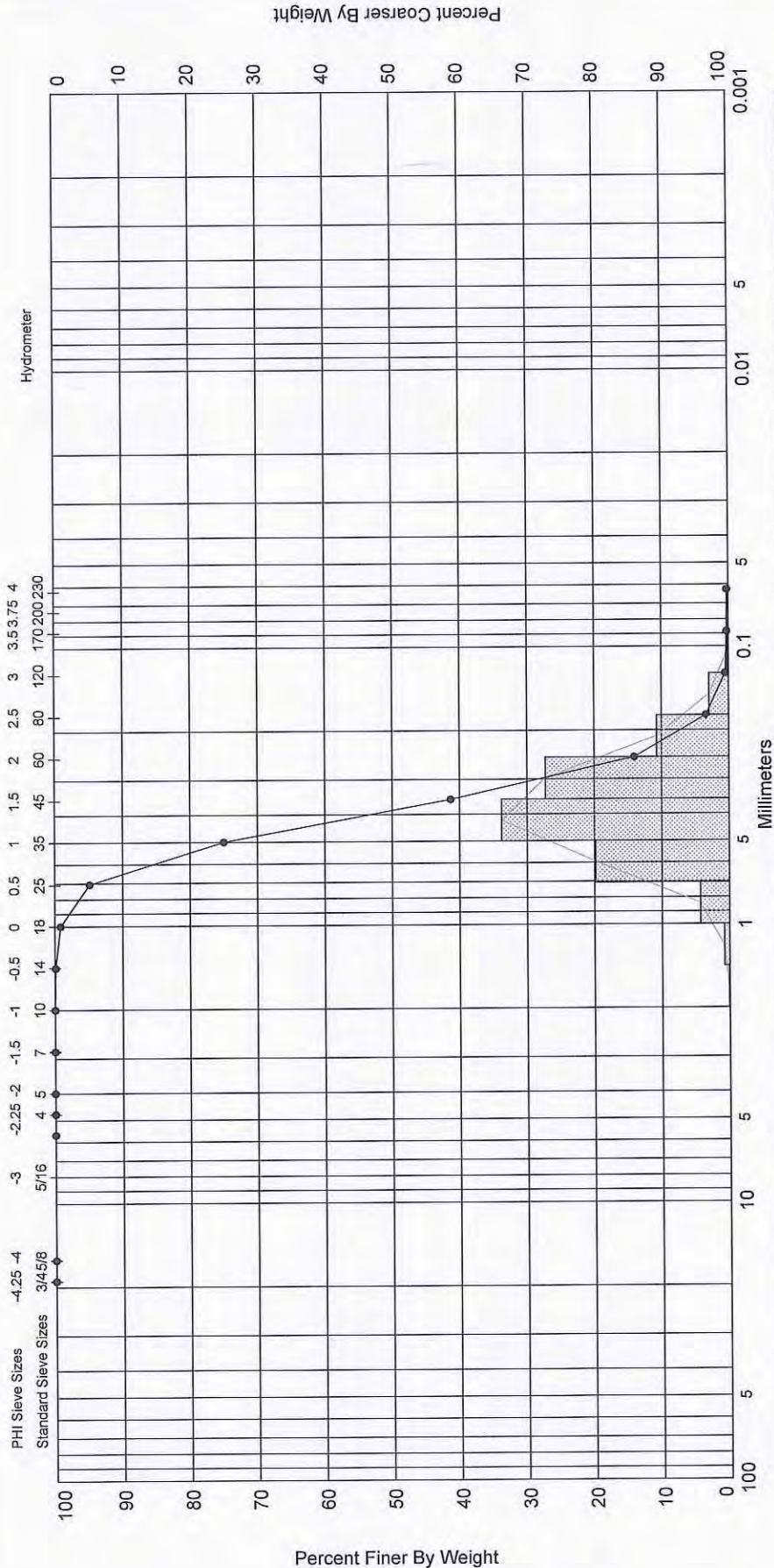


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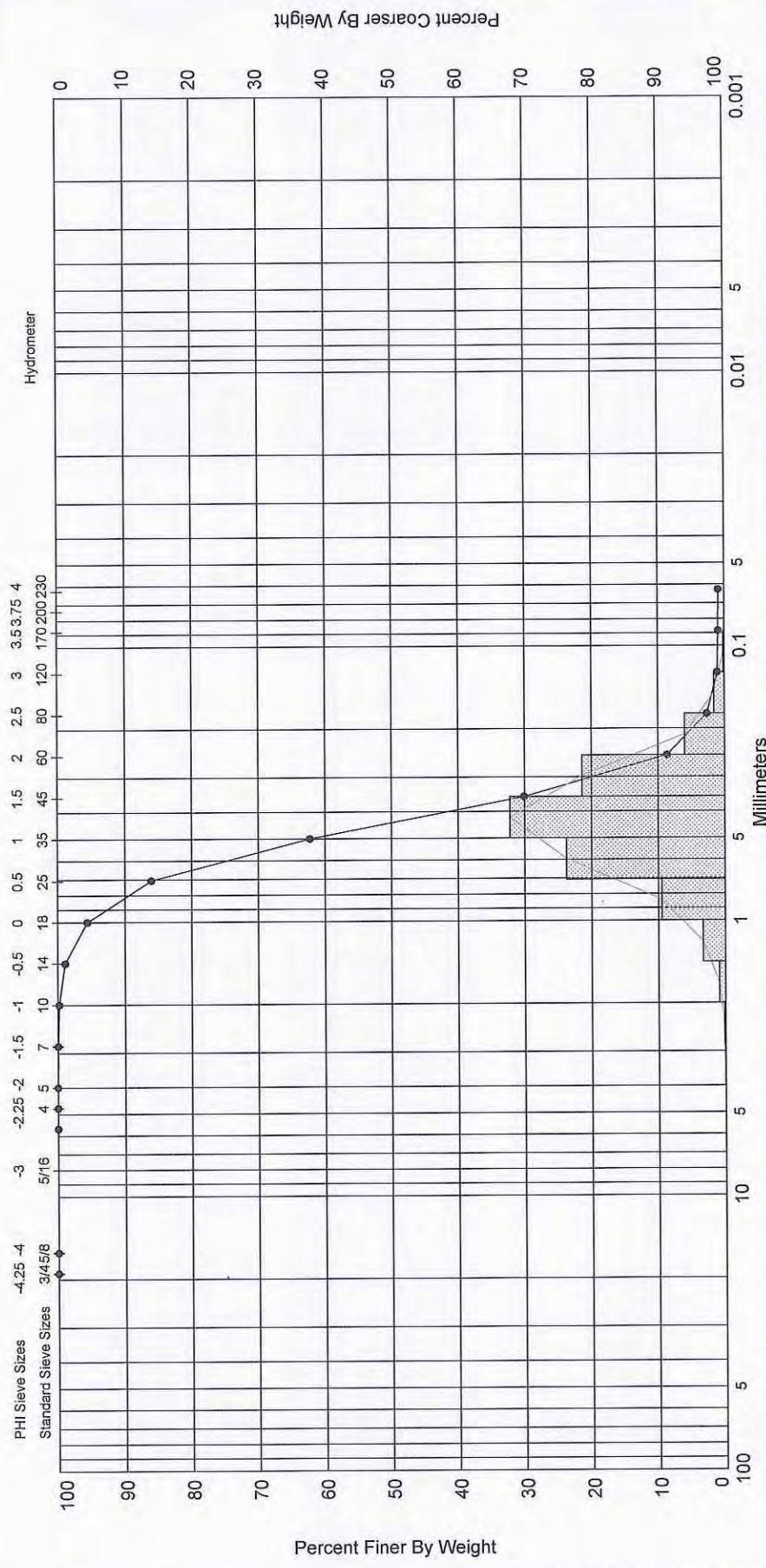
Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	965058A	Symbol	—●—	Elev. (ft)	7.4	USCS	SP	% Fines	#230 - 0.23	% Organics	70.80	% Carbonates	0.97	Median	0.98	Mean	0.01	Skew	3.95	Kurt	0.57	Sort	
Comments:																							
Depths and elevations based on measured values																							
												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444											
Sample Information												Project Name: Jupiter Island 10 - Beach Samples											
Analysis Date: 01-28-11												Analyzed By: JR											
Easting (X, ft): 953999												Northing (Y, ft): 965299											
Horizontal System: NAD 1983												Vertical System: NAVD 88											



Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine	Fine

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information				
965058B	—●—	3.4	SP	#230 -0.22		60.80	1.37	1.39	0.08	3.18	0.59	Project Name:	Jupiter Island 10 - Beach Samples			
Comments:												Analysis Date:	01-28-11			
Depths and elevations based on measured values												Analyzed By:	JR			
												Easting (X, ft):	954040.			
												Northing (Y, ft):	965316.			
												Horizontal System:	NAD 1983			
												Vertical System:	NAVD 88			
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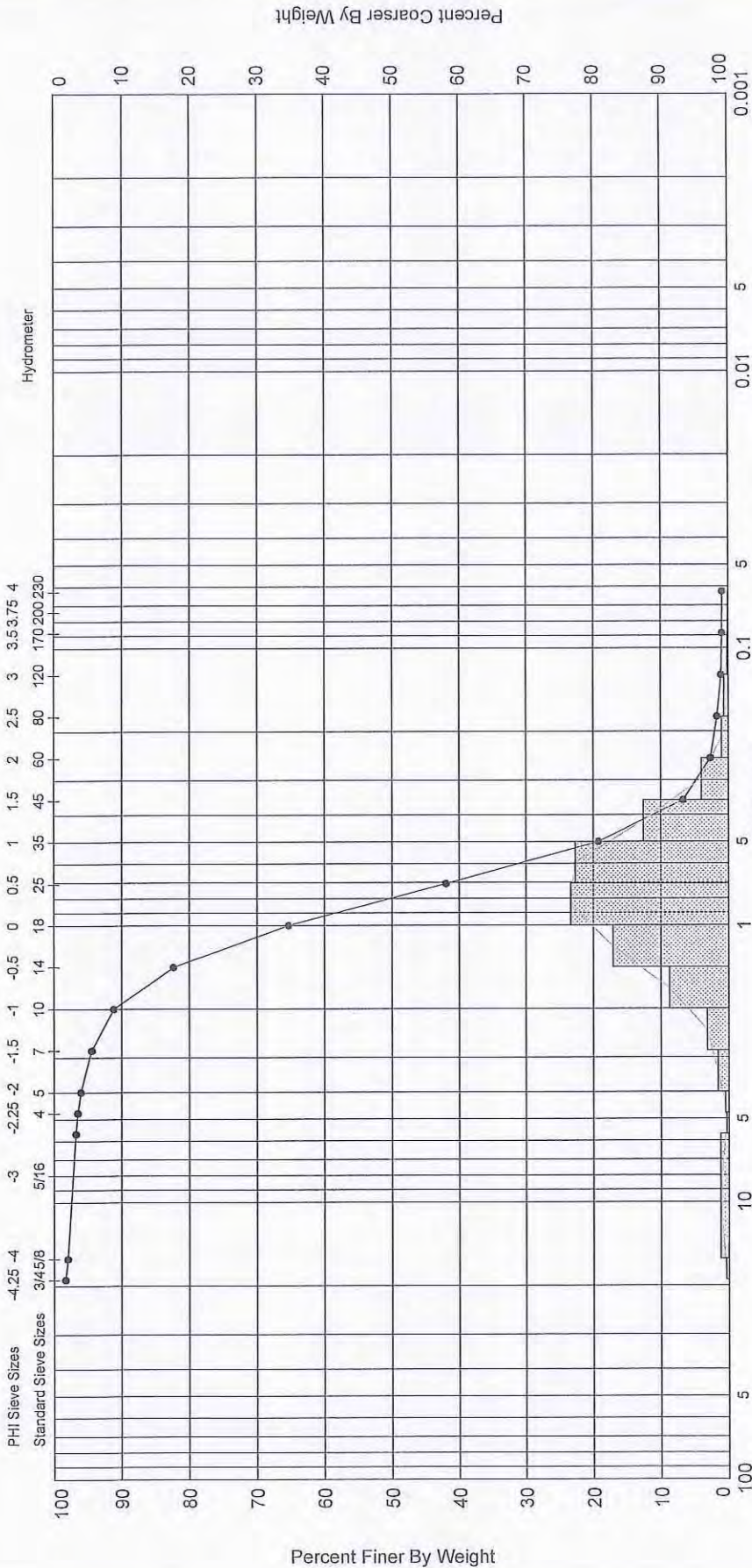
Gravel			Sand			Silt and Clay		
Coarse	Fine		Coarse	Medium	Fine	Coarse	Medium	Fine

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
965058C	—●—	-0.6	SP	#230 - 0.88		71.80	1.19	1.16	-0.25	3.59	0.66
Sample Information			Jupiter Island 10 - Beach Samples								
Project Name:			Analysis Date: 01-28-11								
Analyzed By:			JR								
Easting (X, ft):			954067.								
Northing (Y, ft):			965328.								
Horizontal System:			NAD 1983								
Vertical System:			NAVD 88								

Comments:
 Depths and elevations based on measured values



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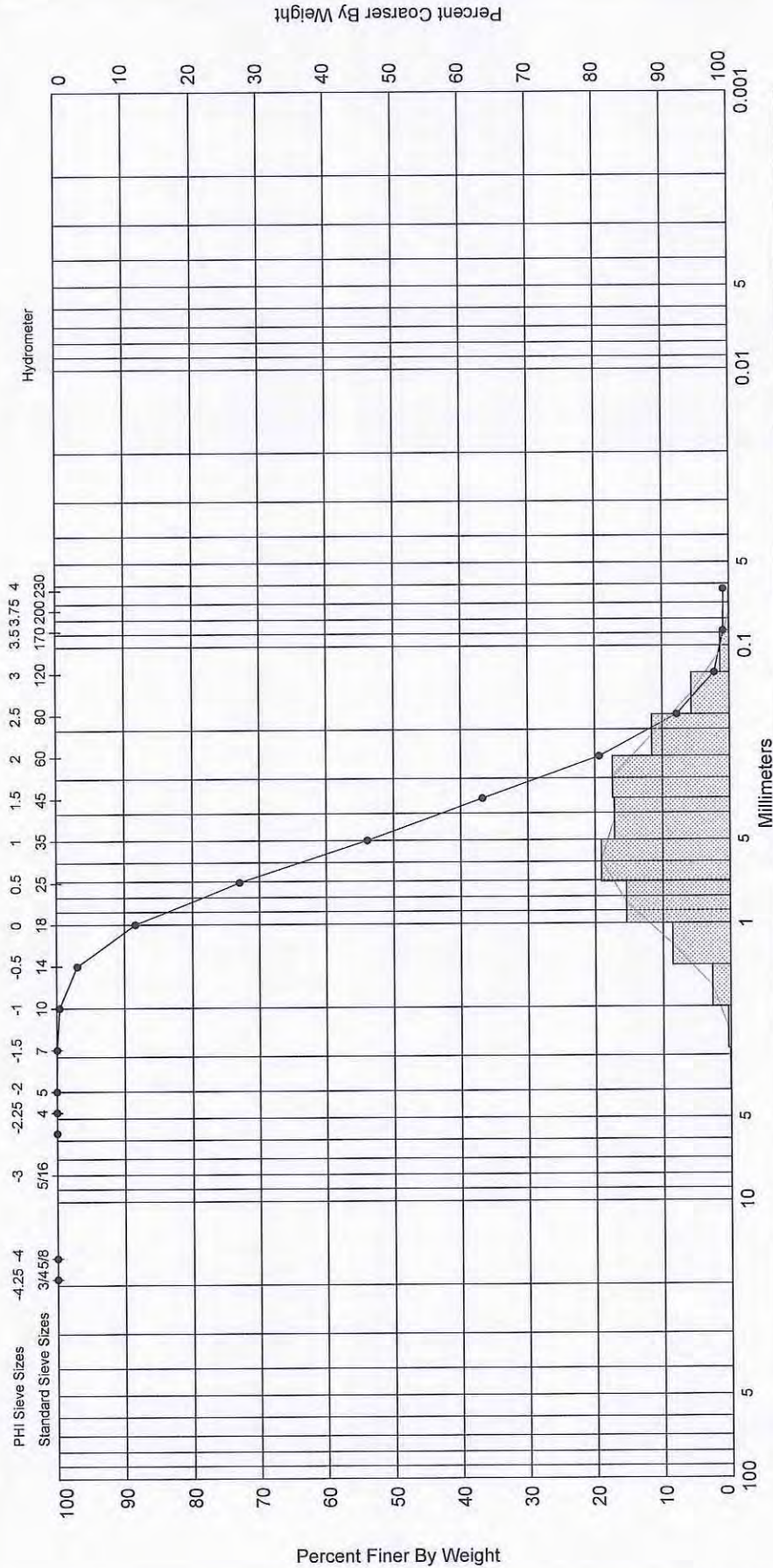


Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
965058D	—●—	-4.6	SW	#230 - 0.67		86.30	0.33	0.18	-0.67	5.65	0.95	Project Name:	Jupiter Island 10 - Beach Samples		
Comments:												Analysis Date:	01-28-11		
Depths and elevations based on measured values												Analyzed By:	JR		
												Easting (X, ft):	954088.		
												Northing (Y, ft):	965336.		
												Horizontal System:	NAD 1983		
												Vertical System:	NAVD 88		

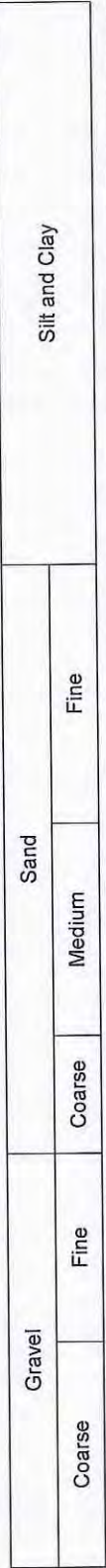
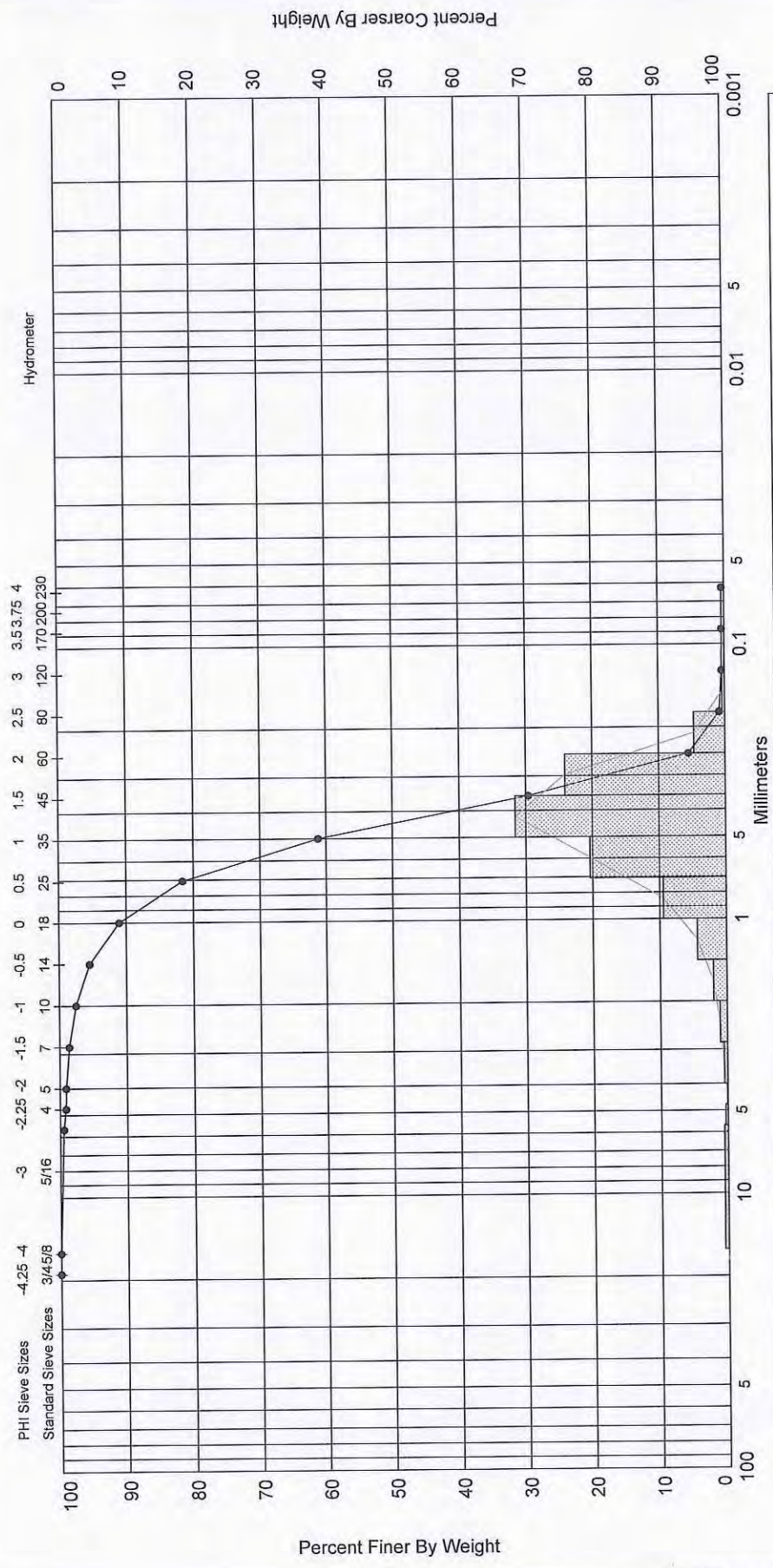


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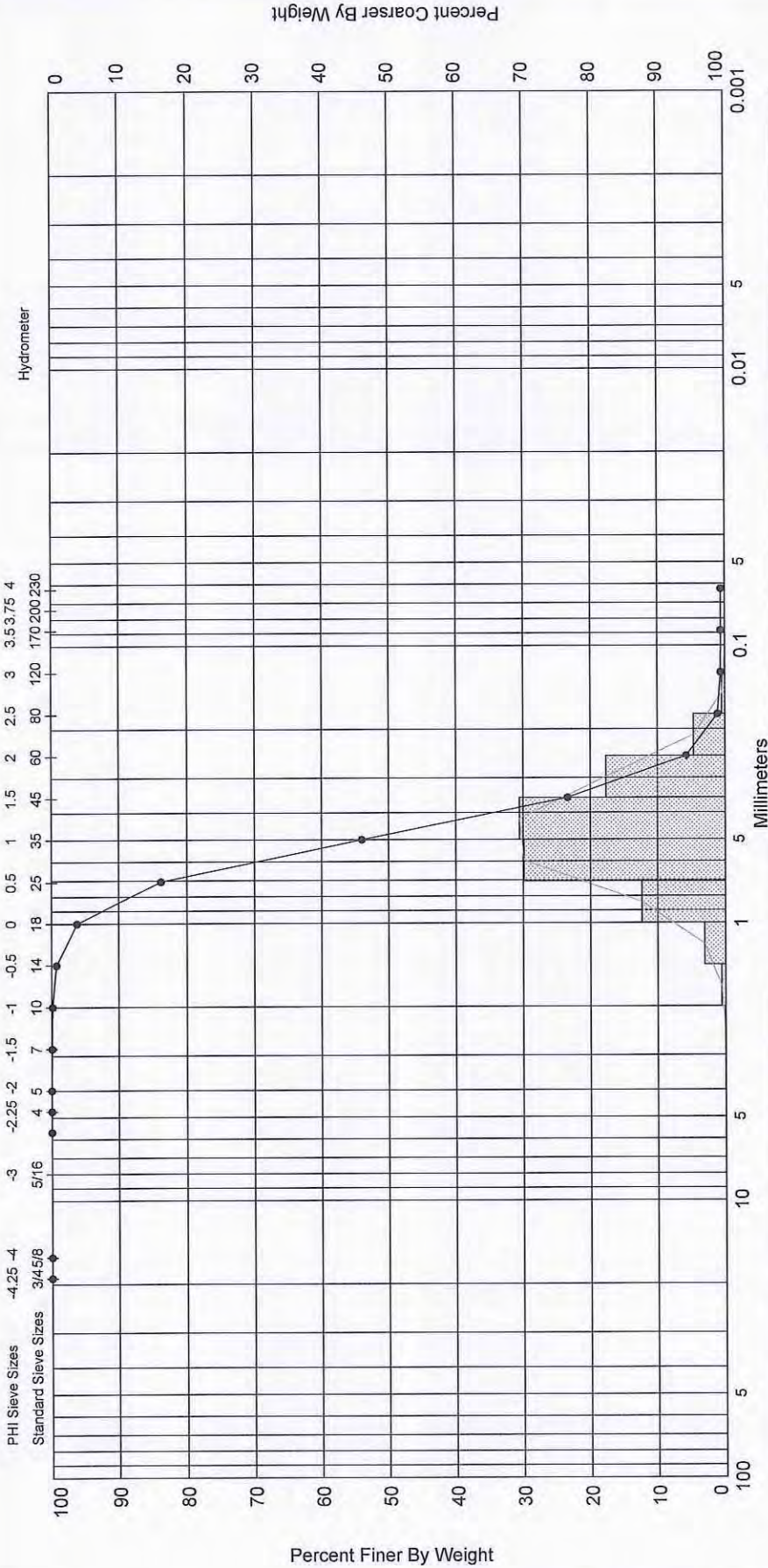
Gravel Coarse Fine
Sand Coarse Medium Fine
Silt and Clay

Sample	965058E	Symbol	—●—	Elev. (ft)	-8.6	USCS	SW	% Fines #230 - 0.85	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
											1.11	1.12	0.03	2.41	0.93
								72.20							
Sample Information		Project Name:	Jupiter Island 10 - Beach Samples												
		Analysis Date:	01-28-11												
		Analyzed By:	JR												
		Easting (X, ft):	954218.												
		Northing (Y, ft):	965391.												
		Horizontal System:	NAD 1983												
		Vertical System:	NAVD 88												
Comments:															
Depths and elevations based on measured values															
<p>AMERICAN VIBRACORE SERVICES</p>								<p>American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444</p>							



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information													
970641A	—●—	7.4	SP	#230 - 0.40			1.18	1.04	-1.6	7.81	0.82	Project Name:	Jupiter Island 10 - Beach Samples	Analysis Date:	01-14-11	Analyzed By:	JR	Easting (X, ft):	952745.	Northing (Y, ft):	970844.	Horizontal System:	NAD 1983	Vertical System:	NAVD 88
Comments:													American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444												
Depths and elevations based on measured values																									

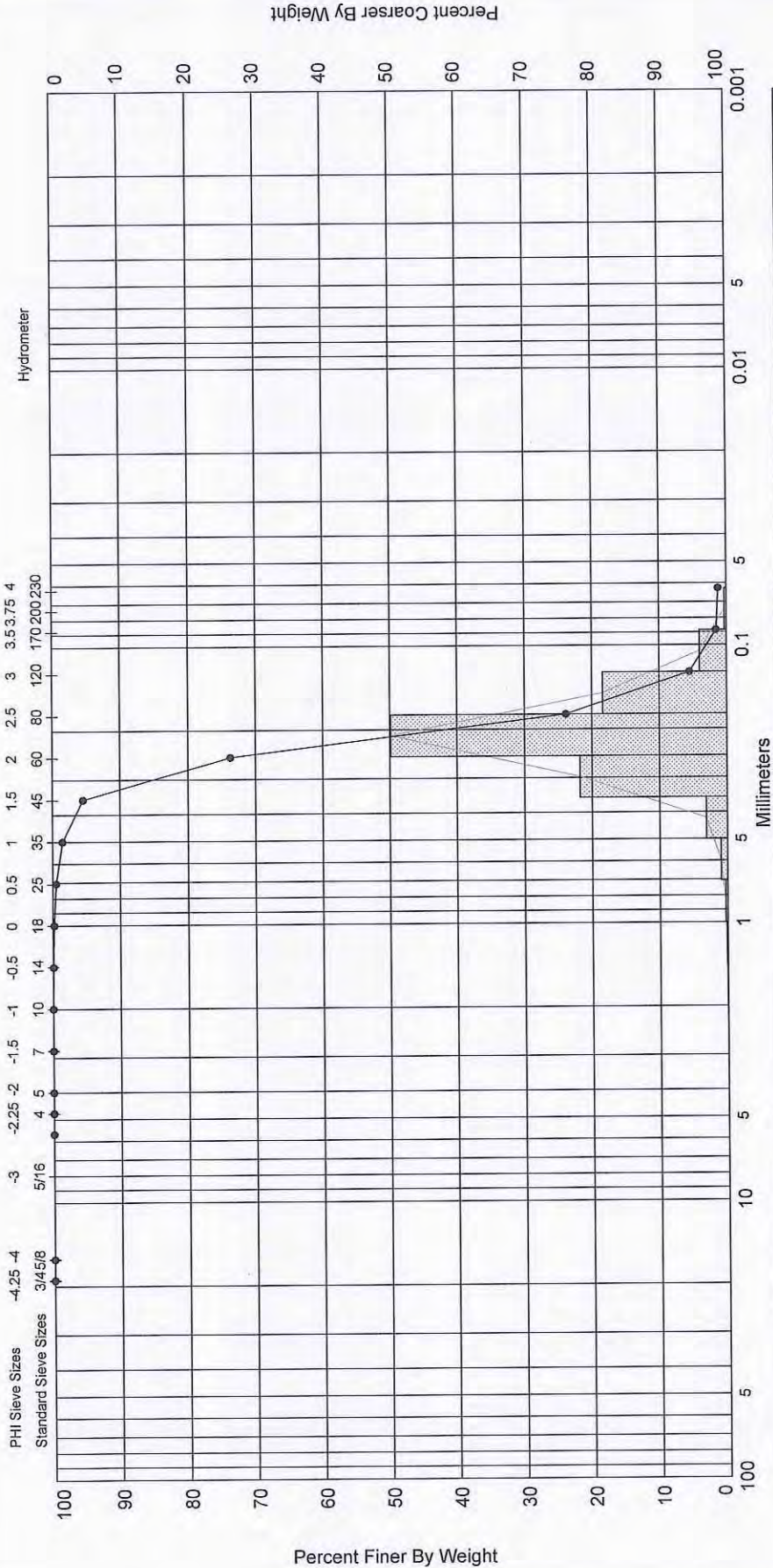




Sample Information											
Sample	970641B	Elev. (ft)	3.4	USCS	SP	% Fines	#230 - 0.58	% Organics		Sort	0.61
Mean	1.06	Skew	-0.14	Kurt	3.31						
Median	1.06										
Carbonates											
Project Name:	Jupiter Island 10 - Beach Samples										
Analysis Date:	01-14-11										
Analyzed By:	JR										
Easting (X, ft):	952884.										
Northing (Y, ft):	970902.										
Horizontal System:	NAD 1983										
Vertical System:	NAVD 88										

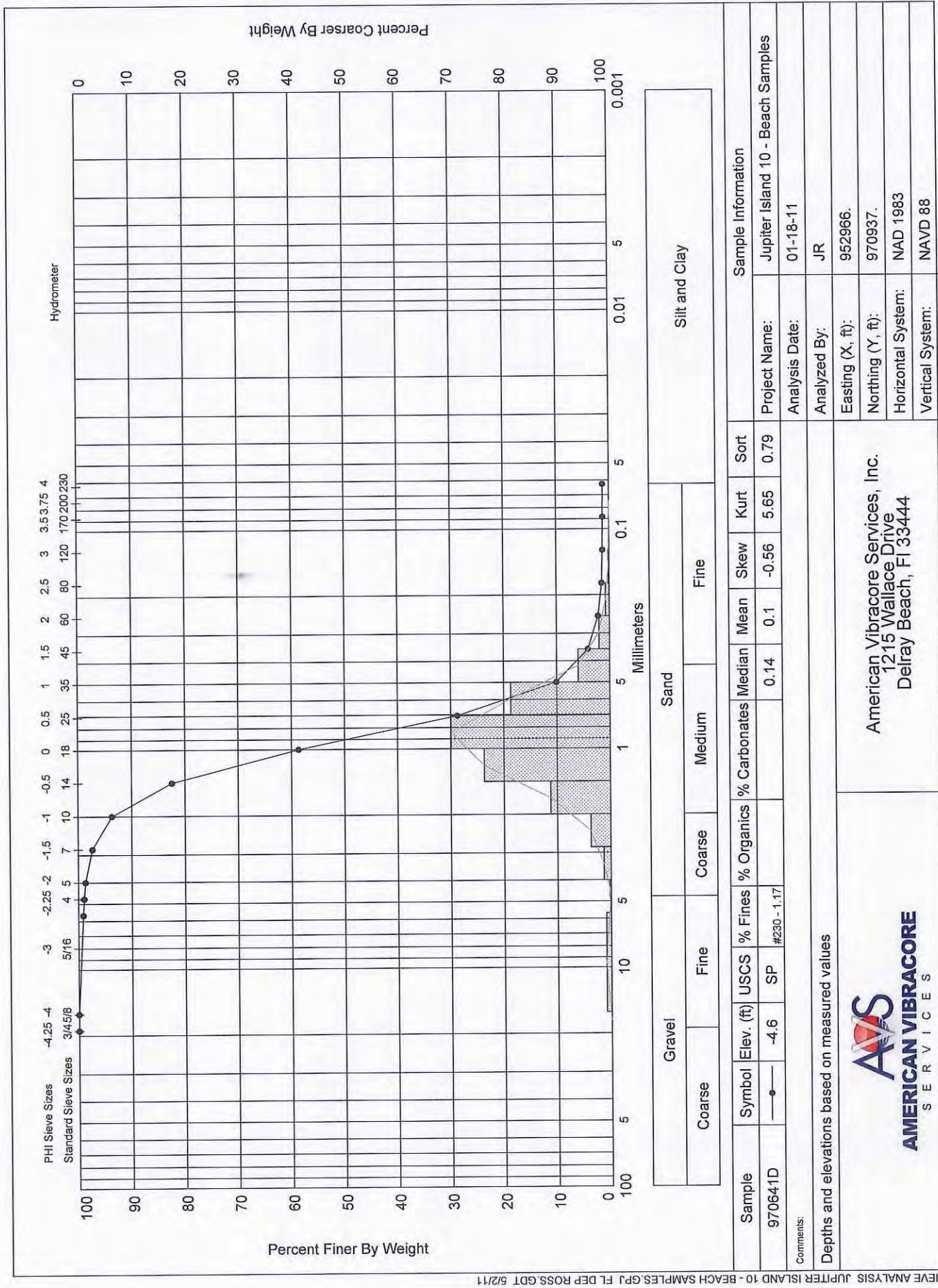
Gravel			Sand			Silt and Clay				
Coarse		Fine		Medium		Fine				

<p>Comments:</p> <p>Depths and elevations based on measured values</p>											
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Gravel	Sand			Silt and Clay			
	Coarse	Fine	Medium	Fine			

Sample	970641C	Symbol	—●—	Elev. (ft)	-0.6	USCS	SP	% Fines #230	1.20	% Organics		% Carbonates		Median	2.24	Mean	2.22	Skew	-0.54	Kurt	5.87	Sort	0.48
Comments:																							
Depths and elevations based on measured values																							
												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444											
Sample Information												Project Name: Jupiter Island 10 - Beach Samples Analysis Date: 01-14-11 Analyzed By: JR Easting (X, ft): 952908 Northing (Y, ft): 970912 Horizontal System: NAD 1983 Vertical System: NAVD 88											



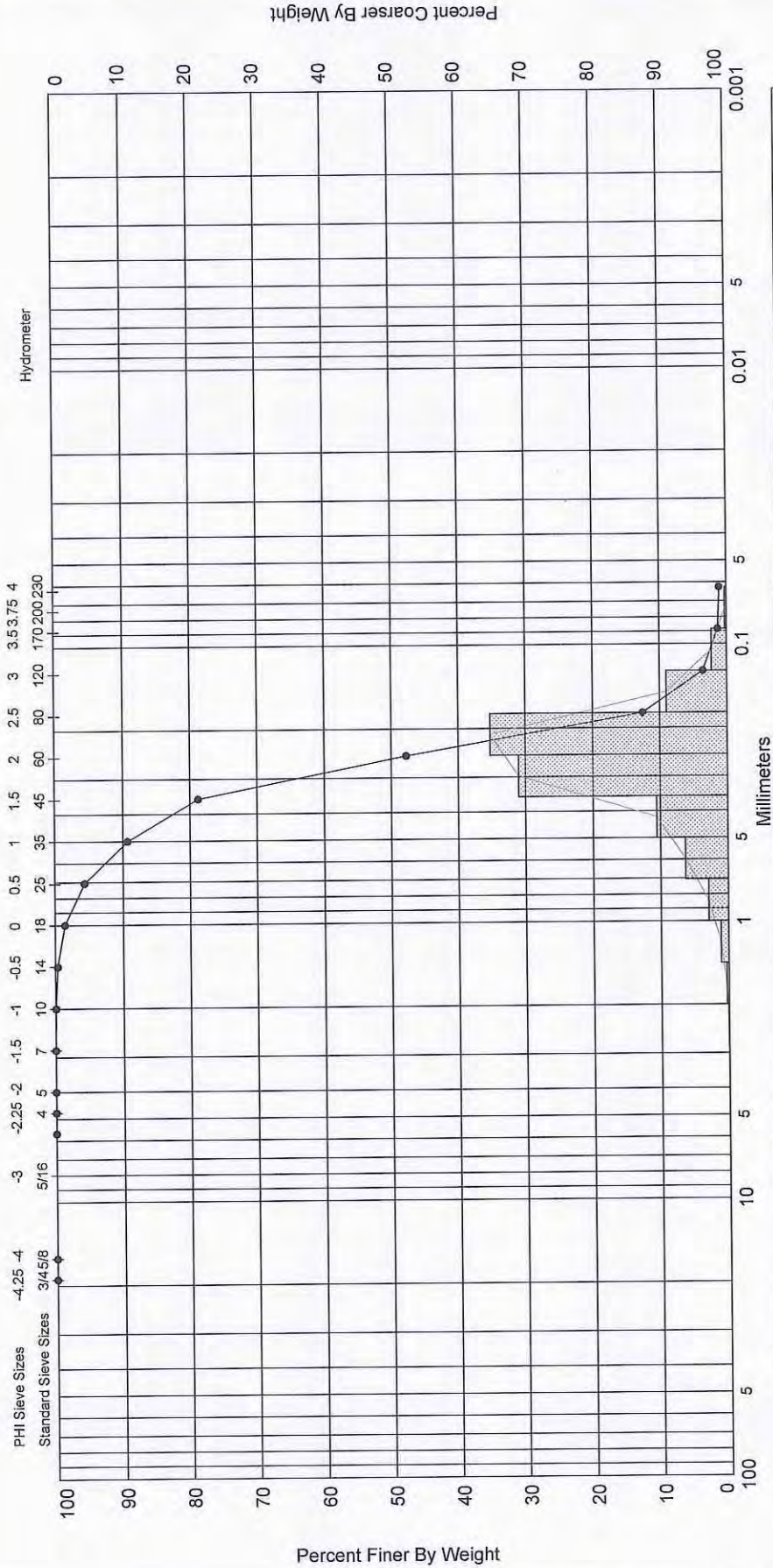
Sample Information	
Project Name:	Jupiter Island 10 - Beach Samples
Analysis Date:	01-18-11
Analyzed By:	JR
Easting (X, ft):	952966.
Northing (Y, ft):	970937.
Horizontal System:	NAD 1983
Vertical System:	NAVD 88

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
970641D	—●—	-4.6	SP	#230 - 1.17			0.14	0.1	-0.56	5.65	0.79


Comments: Depths and elevations based on measured values

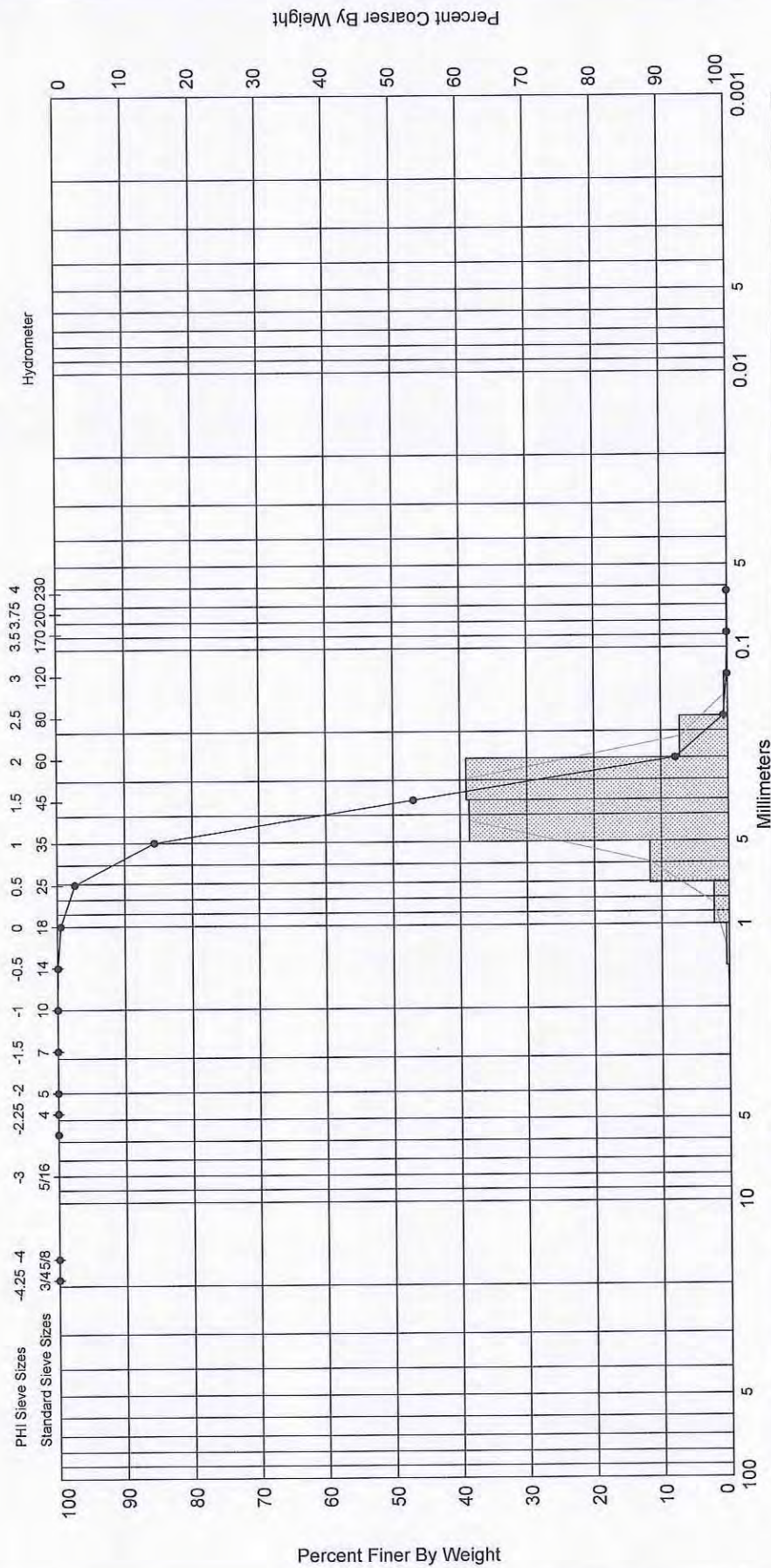


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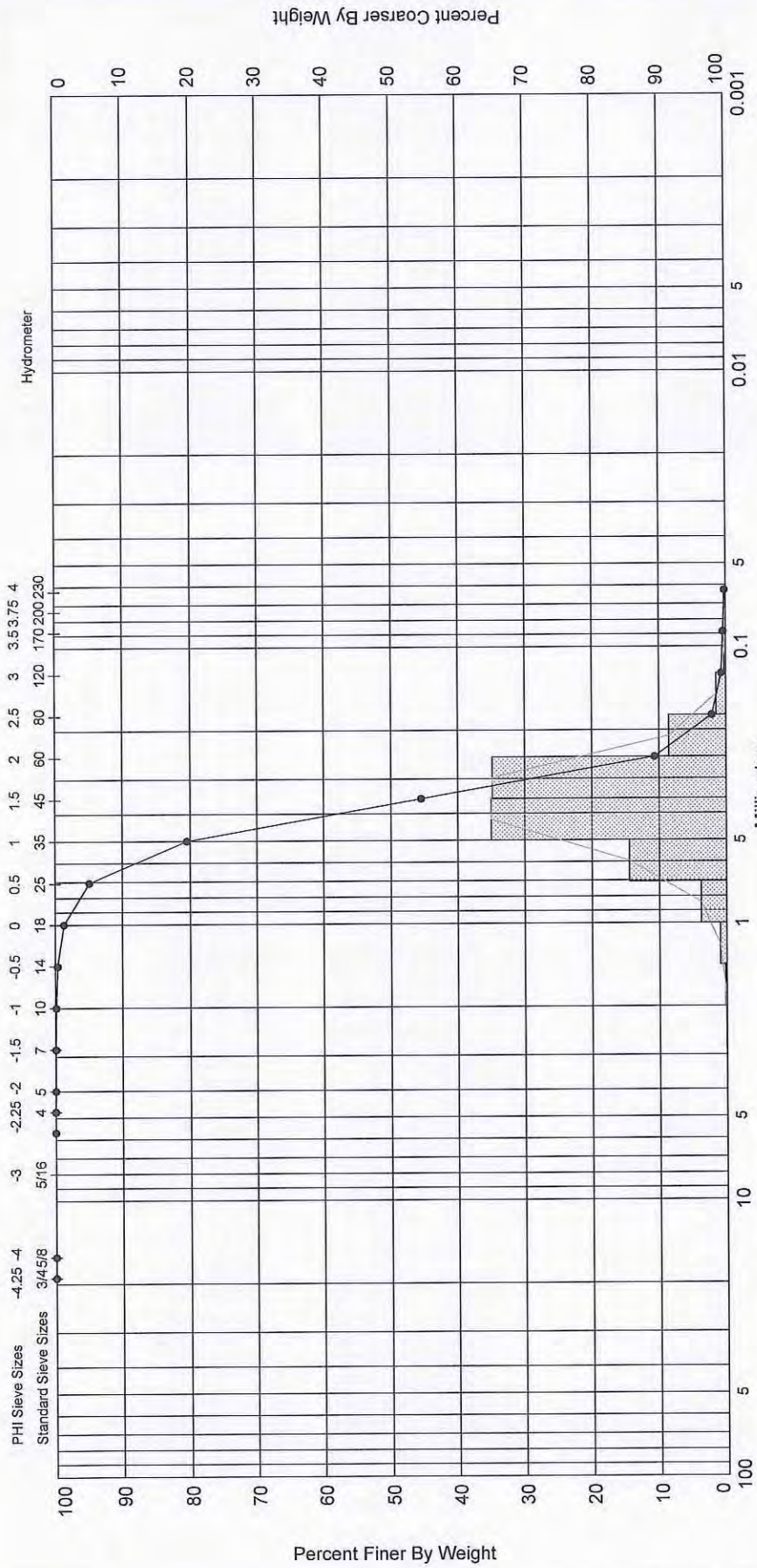
Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Medium	Fine

Sample	970641E	Symbol	—●—	Elev. (ft)	-8.6	USCS	SP	% Fines #230 - 1.05	% Organics	% Carbonates	Mean	1.86	Skew	-0.84	Kurt	4.44	Sort	0.67
Comments:																		
Depths and elevations based on measured values																		
<p style="text-align: center;">  AMERICAN VIBRACORE SERVICES </p>																		
<p style="text-align: center;"> American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444 </p>																		
Sample Information																		
Project Name: Jupiter Island 10 - Beach Samples																		
Analysis Date: 01-18-11																		
Analyzed By: JR																		
Easting (X, ft): 953115																		
Northing (Y, ft): 970999																		
Horizontal System: NAD 1983																		
Vertical System: NAVD 88																		



Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	976899A	Symbol	—●—	Elev. (ft)	7.4	USCS	SP	% Fines	#230 - 0.06	% Organics	63.40	% Carbonates	1.46	Median	1.44	Mean	1.44	Skew	-0.41	Kurt	4.02	Sort	0.46
Comments:																							
Depths and elevations based on measured values																							
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444												Sample Information											
												Project Name: Jupiter Island 10 - Beach Samples											
												Analysis Date: 01-27-11											
												Analyzed By: JR											
												Easting (X, ft): 951051.											
												Northing (Y, ft): 977074.											
												Horizontal System: NAD 1983											
												Vertical System: NAVD 88											



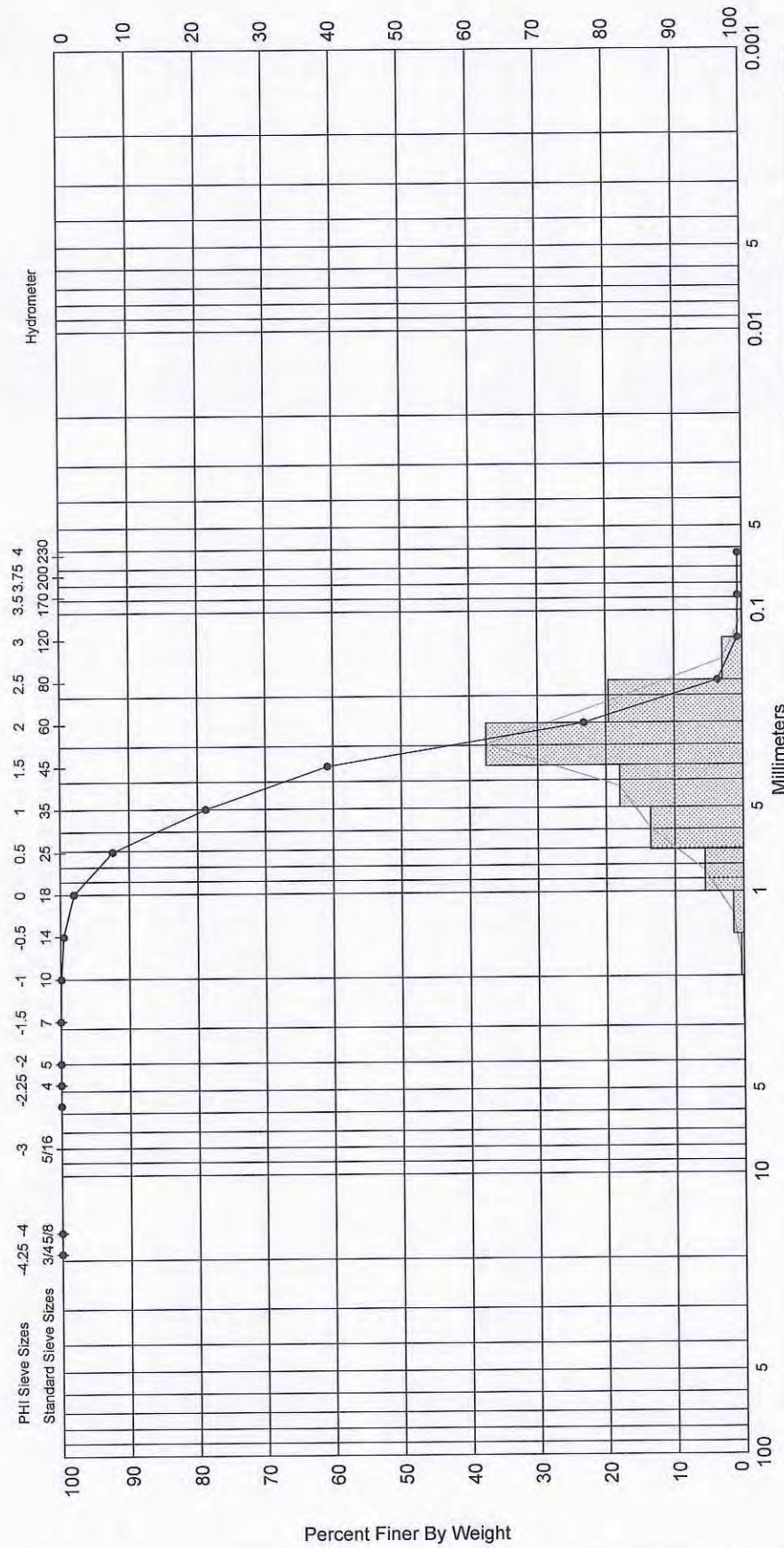
Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine	
Sample	Symbol Elev. (ft)	USCS	% Fines	% Organics	% Carbonates
976899B	3.4	SP	#230 - 0.18	66.80	1.44
					Median
					1.41
					Mean
					1.41
					Skew
					-0.33
					Kurt
					5.11
					Sort
					0.56

Sample Information	
Project Name:	Jupiter Island 10 - Beach Samples
Analysis Date:	01-27-11
Analyzed By:	JR
Easting (X, ft):	951070.
Northing (Y, ft):	977082.
Horizontal System:	NAD 1983
Vertical System:	NAVD 88



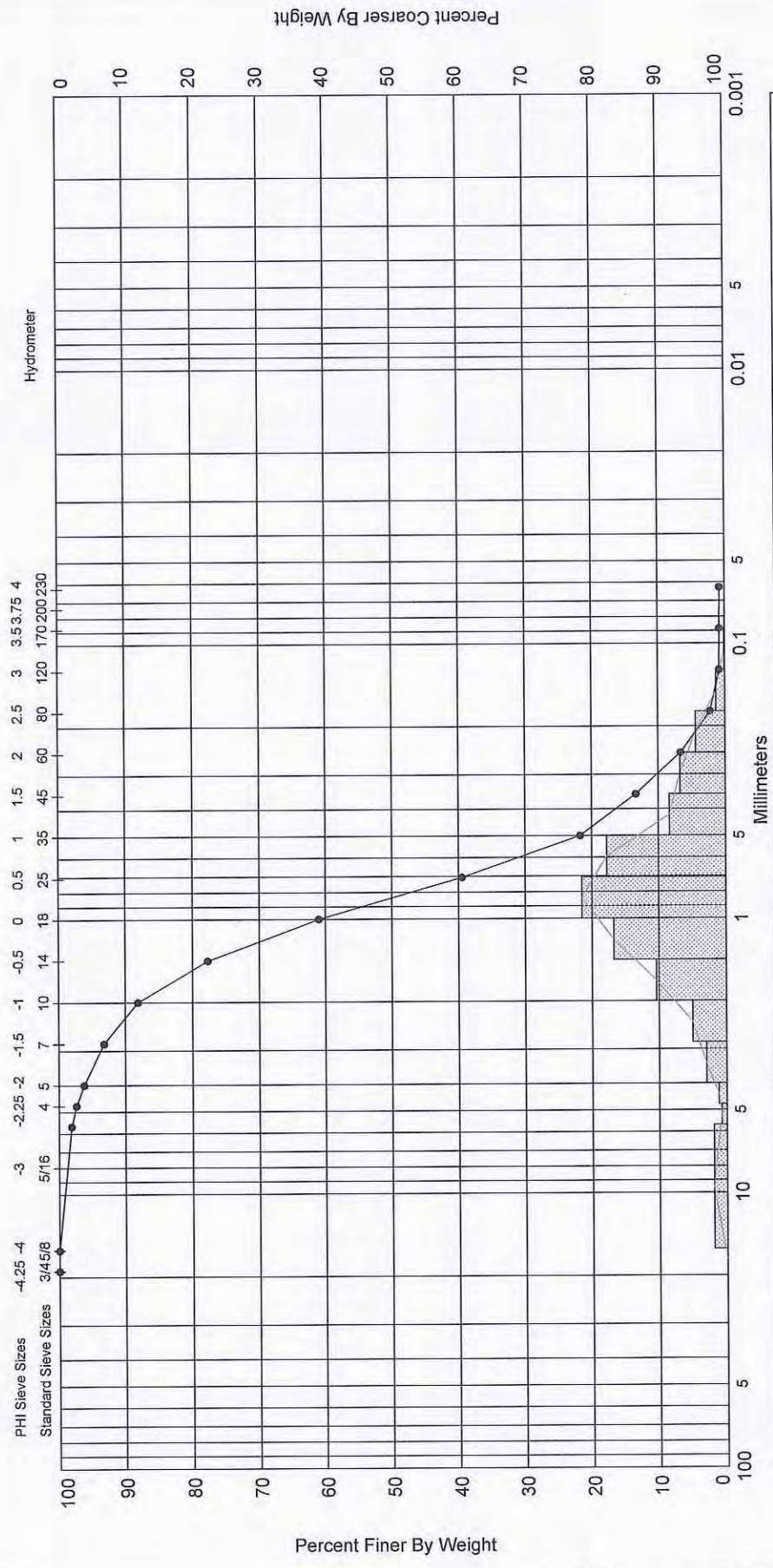
Depths and elevations based on measured values

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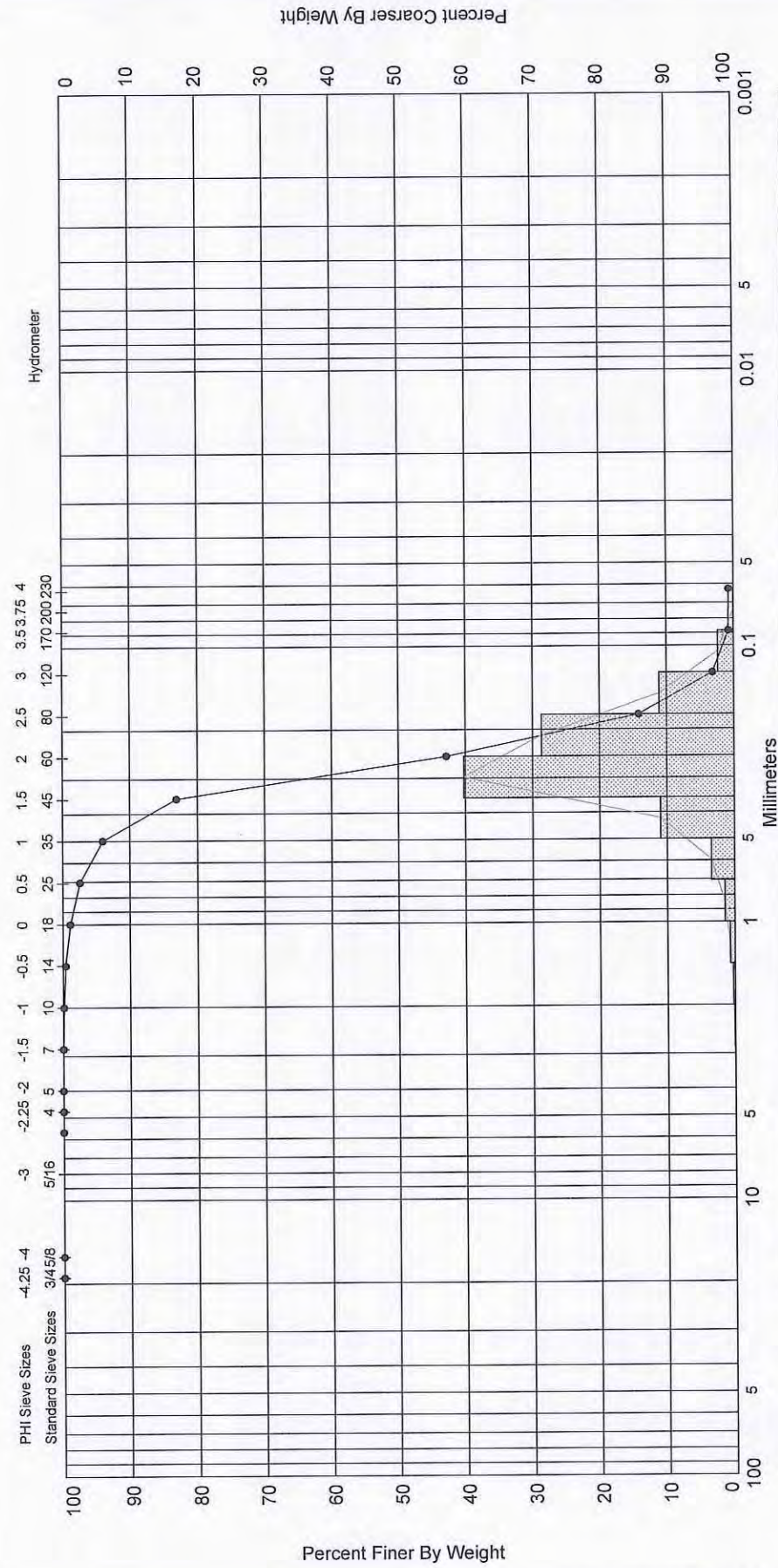
Gravel		Sand			Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine		

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information				
976899C	—●—	-0.6	SP	#230 - 0.62		62.60	1.64	1.52	-0.69	3.42	0.66	Project Name:	Jupiter Island 10 - Beach Samples			
Comments:												Analysis Date:	01-27-11			
Depths and elevations based on measured values												Analyzed By:	JR			
												Easting (X, ft):	951115.			
												Northing (Y, ft):	977101.			
												Horizontal System:	NAD 1983			
												Vertical System:	NAVD 88			
												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444				



Gravel		Sand			Silt and Clay						
Coarse	Fine	Coarse	Medium	Fine							
Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
976899D	—●—	-4.6	SW	#230 - 0.76		85.70	0.25	0.21	-0.39	3.69	1.14
Sample Information Project Name: Jupiter Island 10 - Beach Samples Analysis Date: 01-27-11 Analyzed By: JR Easting (X, ft): 951139. Northing (Y, ft): 977111. Horizontal System: NAD 1983 Vertical System: NAVD 88											
Comments: Depths and elevations based on measured values											
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444					

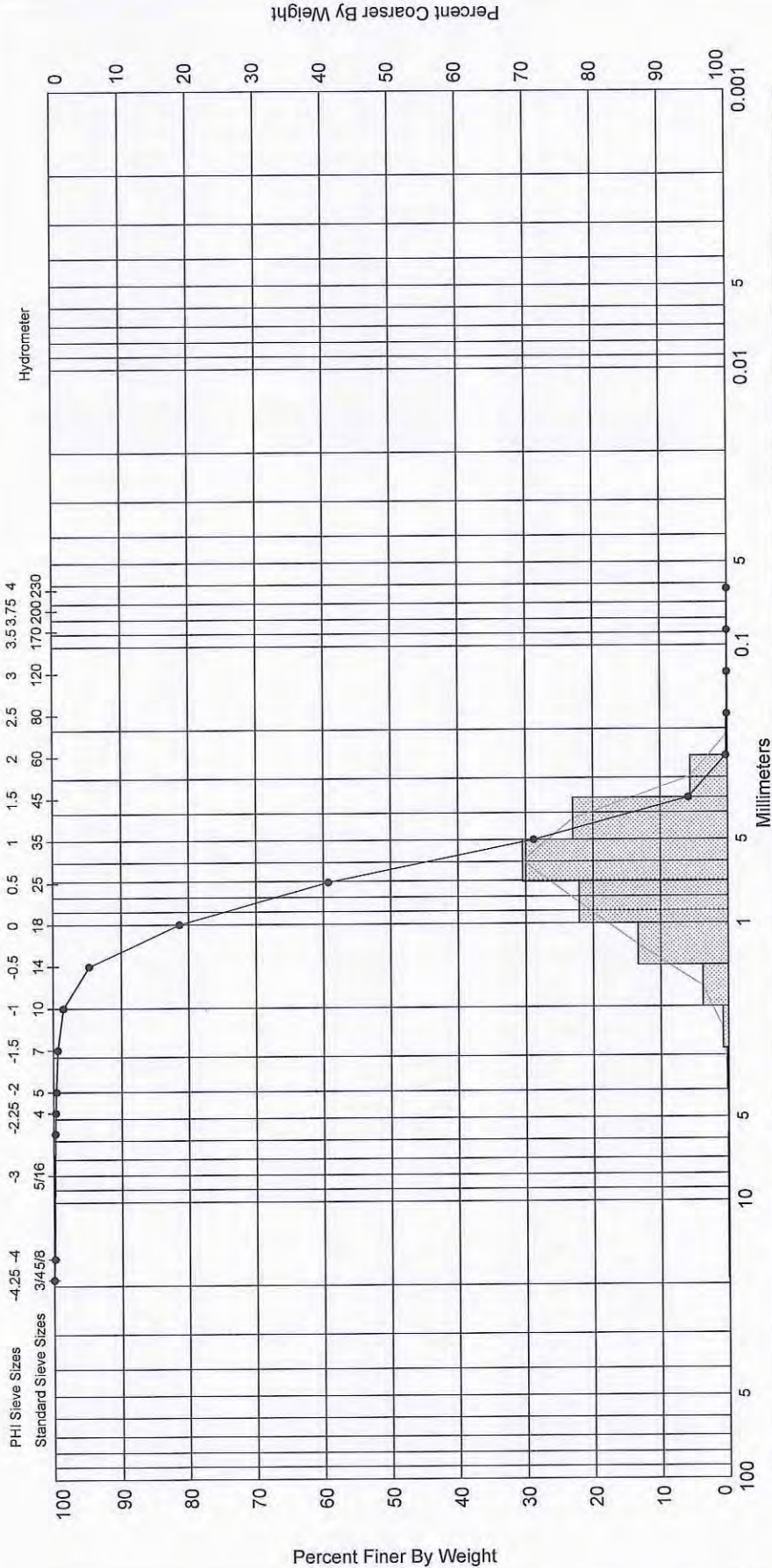
SIEVE ANALYSIS JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11



Gravel		Sand			Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine		

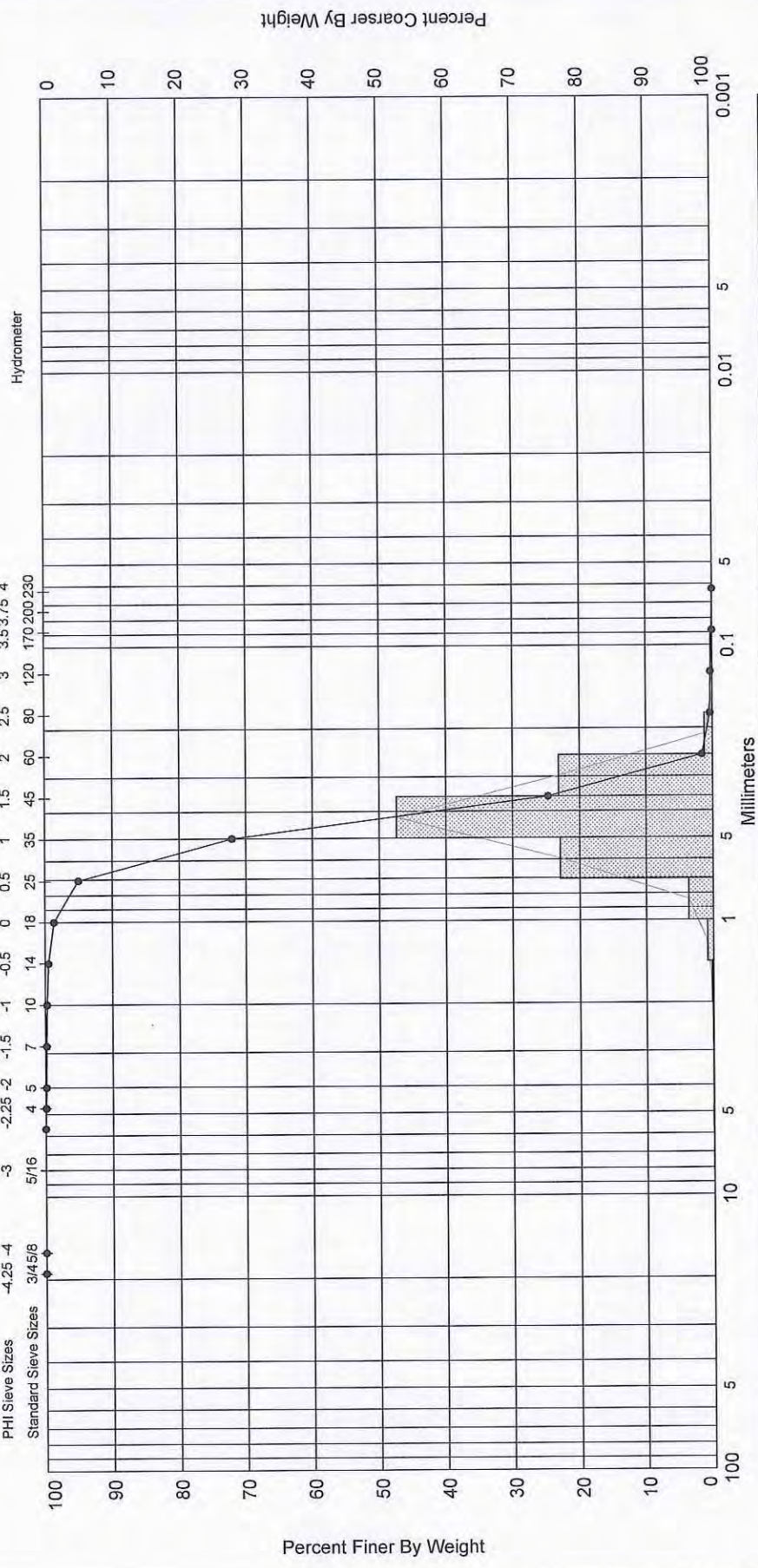
Sample	976899E	Symbol	●	Elev. (ft)	-8.6	USCS	SP	% Fines	#230 - 0.70	% Organics	50.60	% Carbonates	1.91	Median	1.91	Mean	1.91	Skew	-0.8	Kurt	5.66	Sort	0.61
Comments: Depths and elevations based on measured values																							
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444											Sample Information Project Name: Jupiter Island 10 - Beach Samples Analysis Date: 01-27-11 Analyzed By: JR Easting (X, ft): 951165. Northing (Y, ft): 977122. Horizontal System: NAD 1983 Vertical System: NAVD 88												





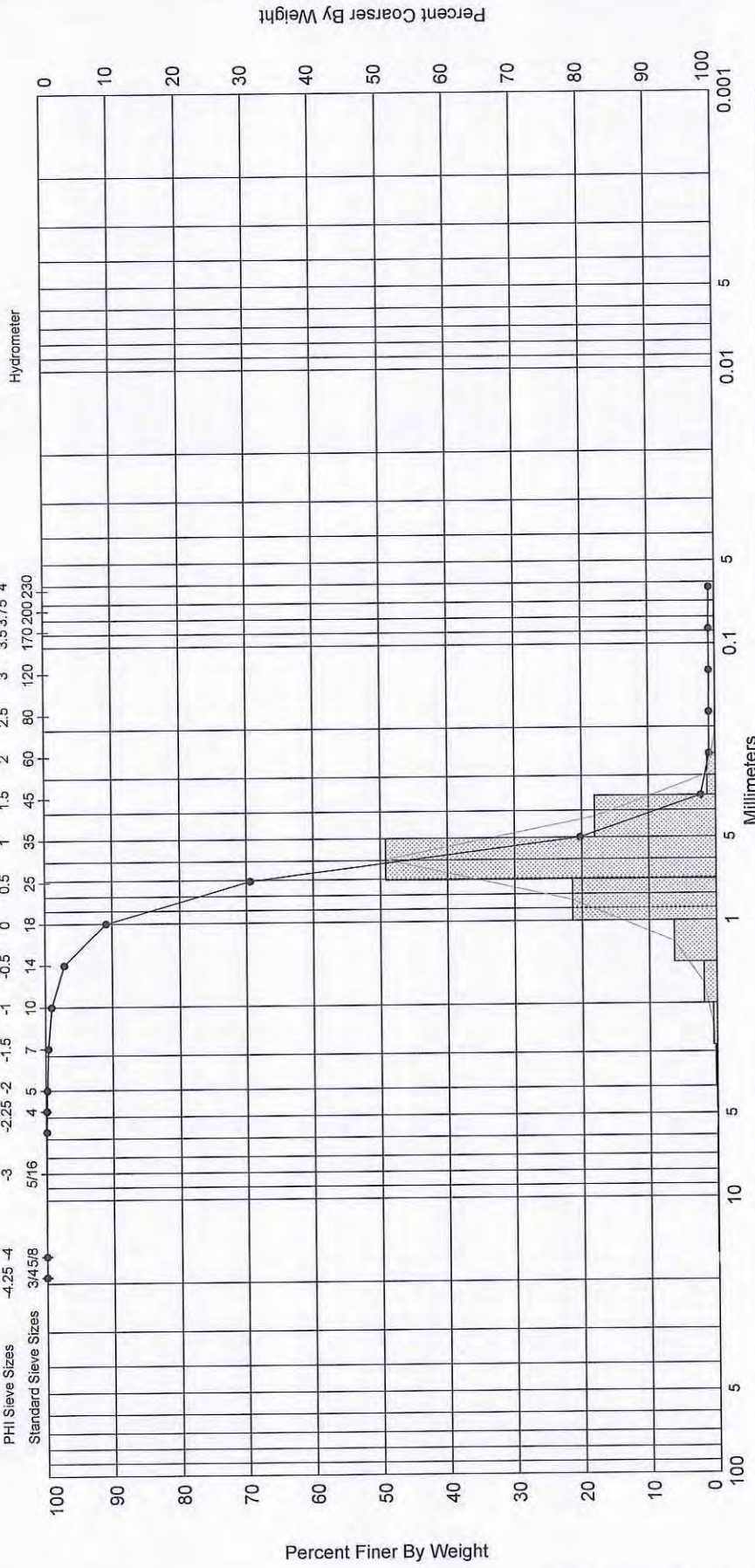
Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	983302A	Symbol	—●—	Elev. (ft)	7.4	USCS	SP	% Fines	#230 - 0.02	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information
Project Name: Jupiter Island 10 - Beach Samples Analysis Date: 01-12-11 Analyzed By: JR Easting (X, ft): 948679. Northing (Y, ft): 983453. Horizontal System: NAD 1983 Vertical System: NAVD 88																	
Comments: Depths and elevations based on measured values																	
 American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444																	



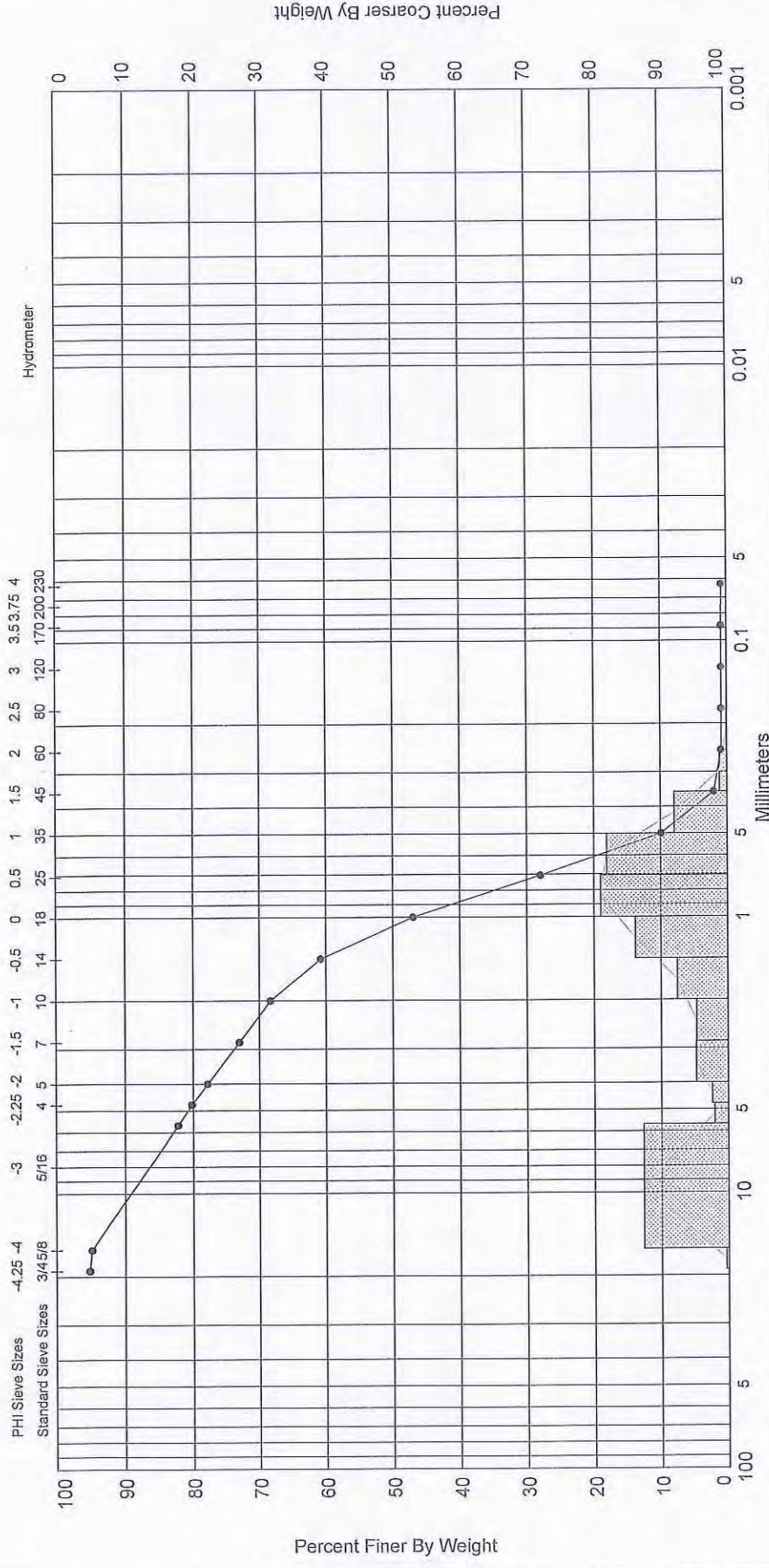
Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Medium	Fine

Sample	983302B	Symbol	—●—	Elev. (ft)	3.4	USCS	SP	% Fines #230	0.00	% Organics		% Carbonates		Mean	1.23	Skew	-0.89	Kurt	8.91	Sort	0.48
Comments:																					
Depths and elevations based on measured values																					
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444												Sample Information									
												Project Name:		Jupiter Island 10 - Beach Samples							
												Analysis Date:		01-12-11							
												Analyzed By:		JR							
												Easting (X, ft):		948722.							
												Northing (Y, ft):		983471.							
												Horizontal System:		NAD 1983							
												Vertical System:		NAVD 88							



Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine	

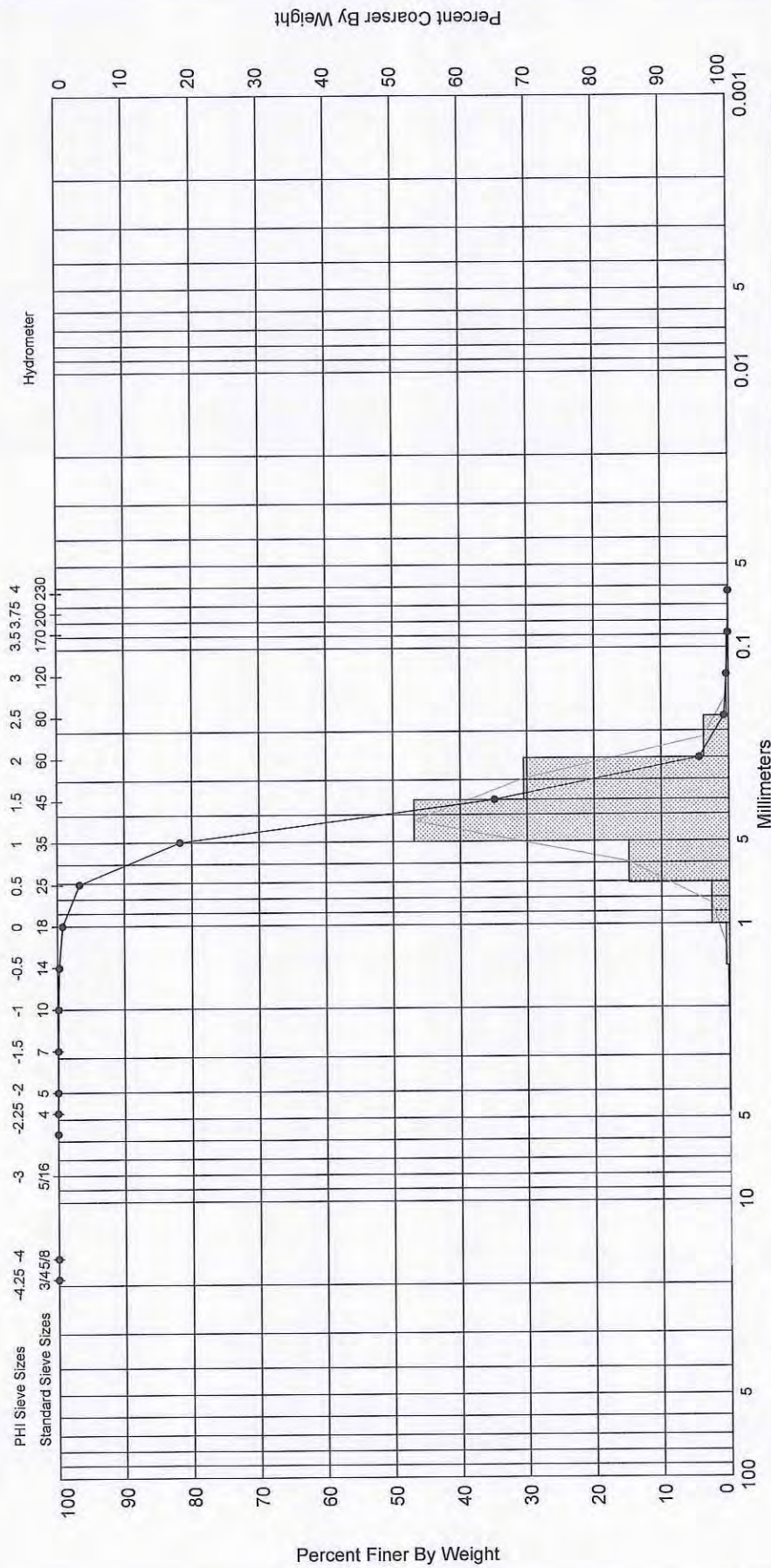
Sample	983302C	Symbol	—●—	Elev. (ft)	-0.6	USCS	SP	% Fines	#230 - 0.82	% Organics		% Carbonates		Mean	0.7	Skew	-1.18	Kurt	8.48	Sort	0.52
Comments:																					
Depths and elevations based on measured values																					
Sample Information											Project Name:										
											Jupiter Island 10 - Beach Samples										
											Analysis Date:										
											01-14-11										
											Analyzed By:										
											JR										
											Easting (X, ft):										
											948742.										
											Northing (Y, ft):										
											983479.										
											Horizontal System:										
											NAD 1983										
											Vertical System:										
											NAVD 88										
											American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444										



Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

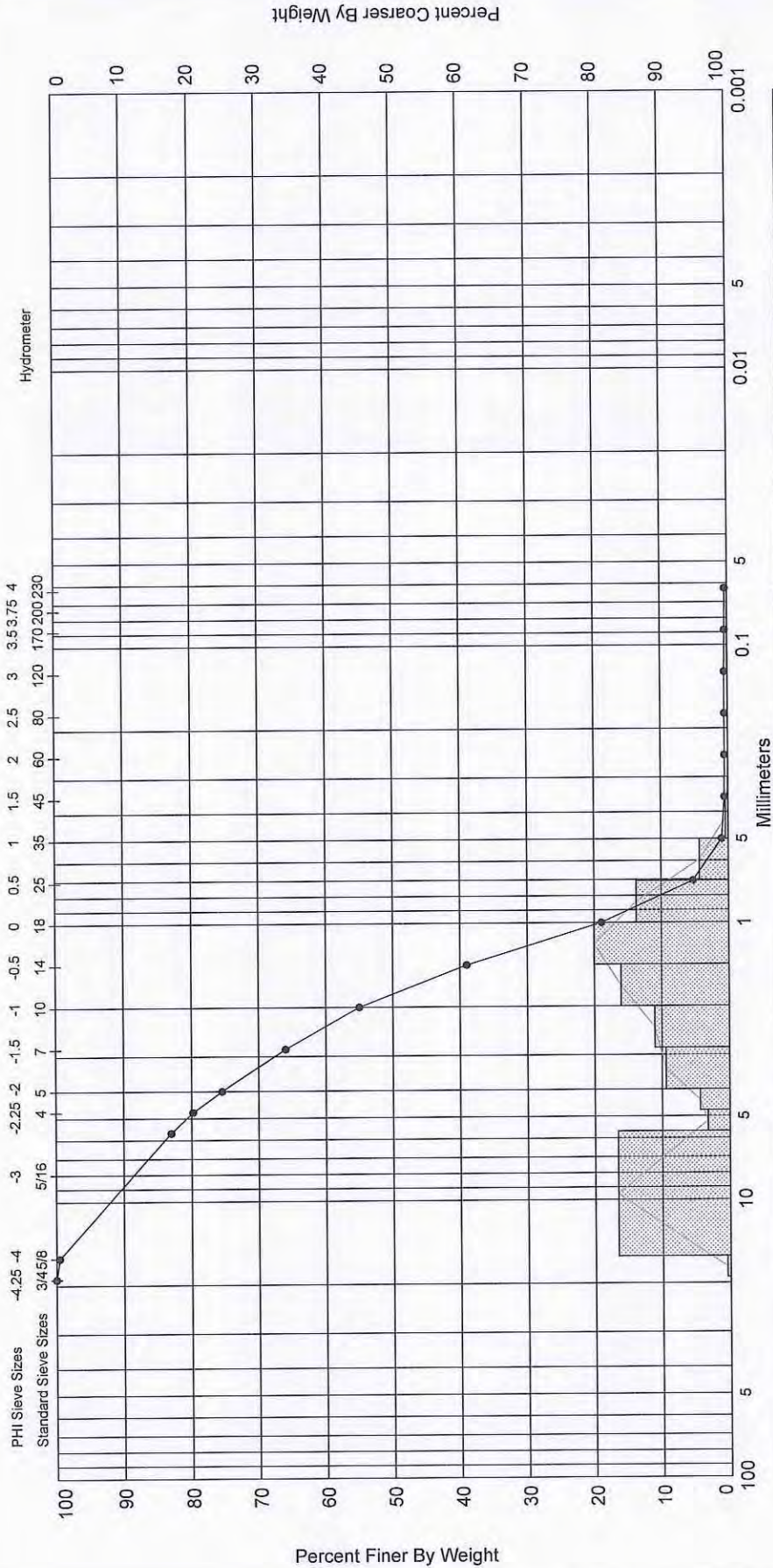
Sample	983302D	Symbol	—●—	Elev. (ft)	-4.6	USCS	SW	% Fines	#230 - 0.75	% Organics	% Carbonates	Mean	-0.67	Skew	-0.4	Kurt	2.25	Sort	1.41
Comments:																			
Depths and elevations based on measured values																			
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444										Sample Information									
										Project Name: Jupiter Island 10 - Beach Samples									
										Analysis Date: 01-14-11									
										Analyzed By: JR									
										Easting (X, ft): 948763.									
										Northing (Y, ft): 983488.									
										Horizontal System: NAD 1983									
										Vertical System: NAVD 88									





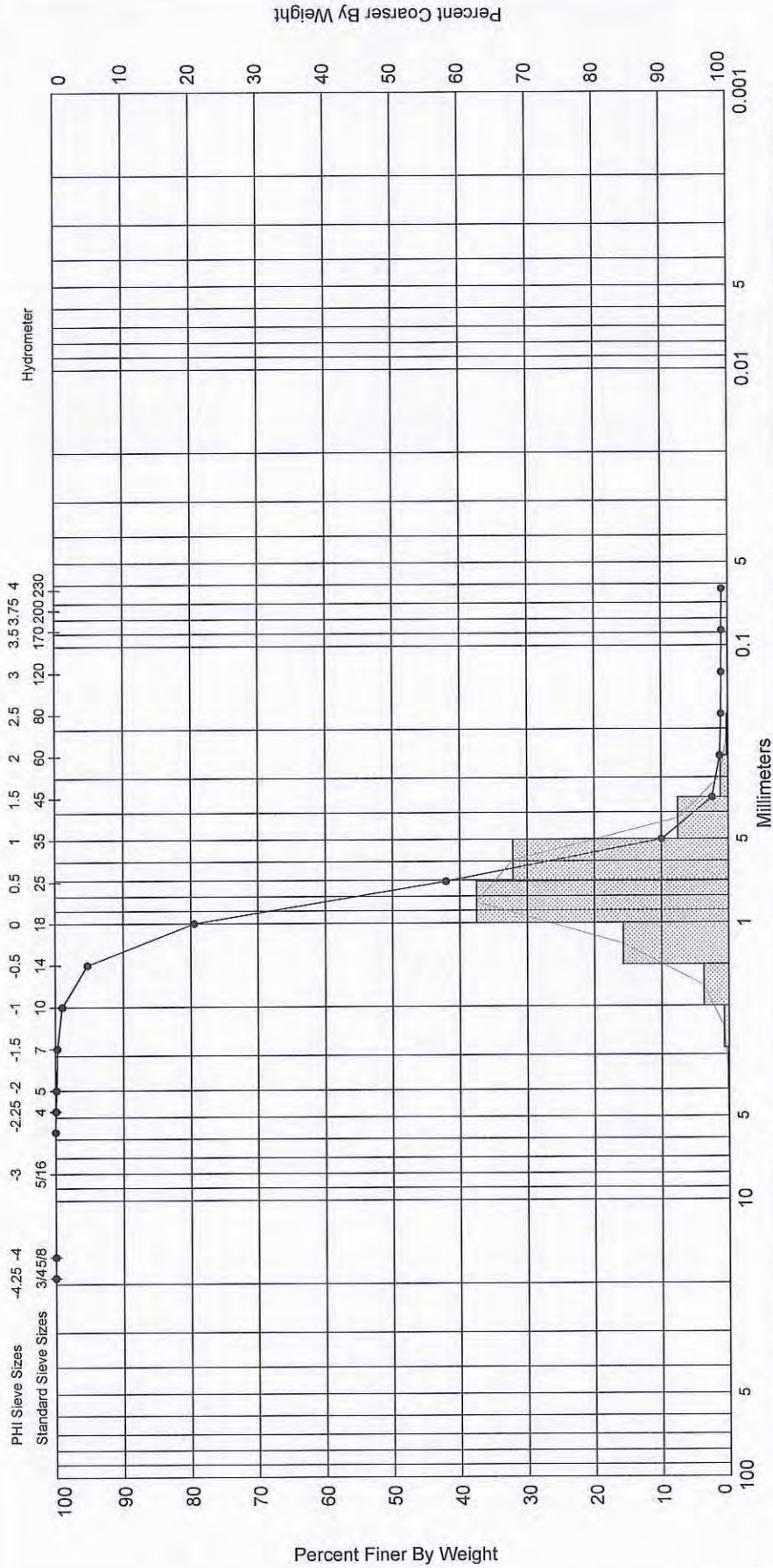
Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine	Coarse	Medium	Fine

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information				
988526A	—●—	7.4	SP	#230 - 0.03		67.20	1.34	1.34	-0.5	6.81	0.47	Project Name:	Jupiter Island 10 - Beach Samples			
Comments:												Analysis Date:	01-26-11			
Depths and elevations based on measured values												Analyzed By:	JR			
												Easting (X, ft):	946672.			
												Northing (Y, ft):	988683.			
												Horizontal System:	NAD 1983			
												Vertical System:	NAVD 88			
						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444										



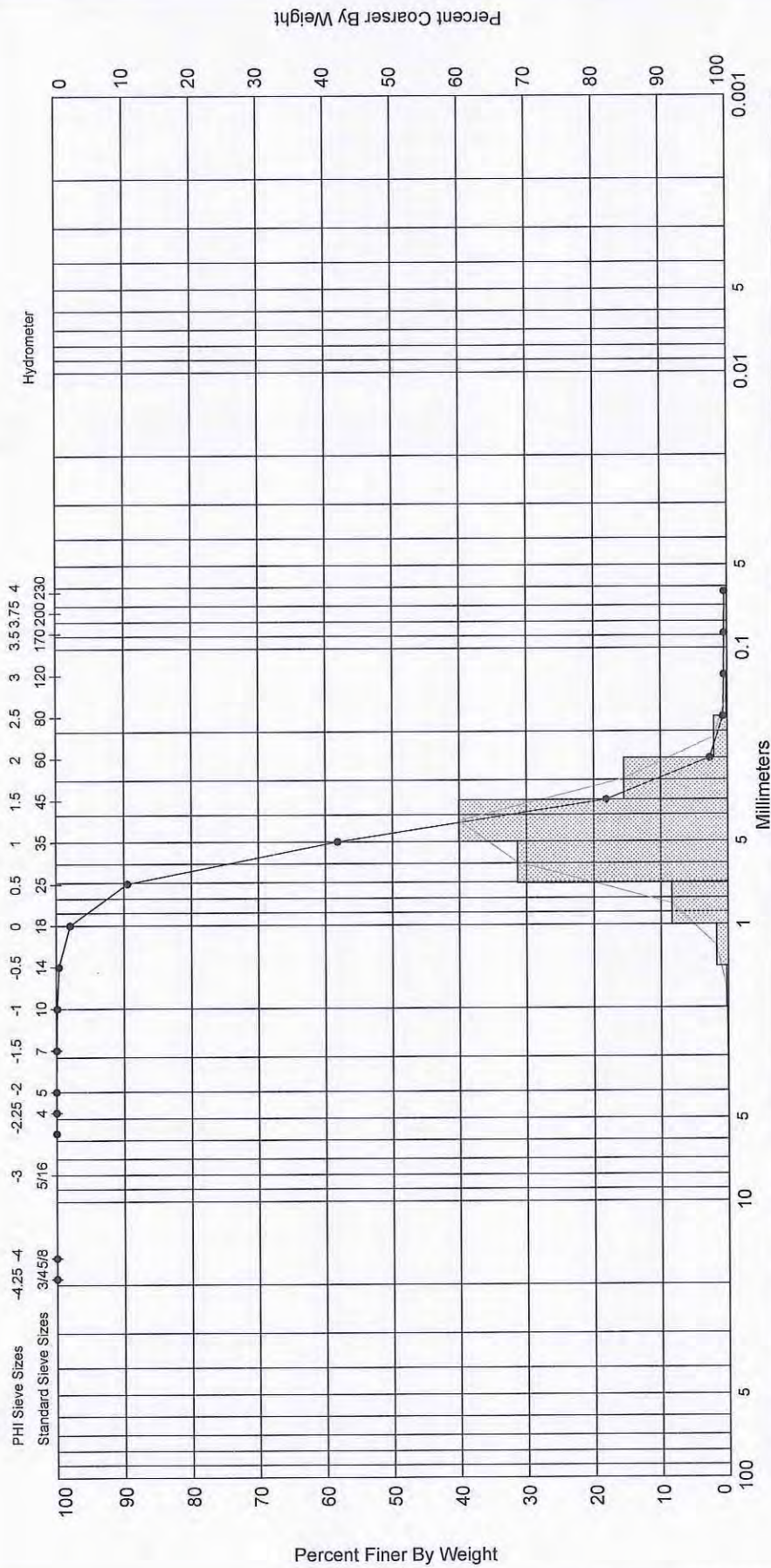
Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	988526B	Symbol	—●—	Elev. (ft)	3.4	USCS	SW	% Fines	#230 - 0.38	% Organics	69.80	% Carbonates	-1.13	Mean	-0.45	Skew	2.33	Kurt	1.25	Sort	1.25
Comments:																					
Depths and elevations based on measured values																					
											American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444										
Sample Information											Project Name: Jupiter Island 10 - Beach Samples										
Analysis Date: 01-26-11											Analyzed By: JR										
Easting (X, ft): 946714.											Northing (Y, ft): 988701.										
Horizontal System: NAD 1983											Vertical System: NAVD 88										



Gravel	Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Mean	Median	Skew	Kurt	Sort	Sample Information				
988526C	—●—	-0.6	SP	#230 - 0.92		88.30	0.39	0.38	-0.2	4.92	0.54	Project Name:	Jupiter Island 10 - Beach Samples			
Comments:												Analysis Date:	01-26-11			
Depths and elevations based on measured values												Analyzed By:	JR			
												Easting (X, ft):	946741.			
												Northing (Y, ft):	988712.			
												Horizontal System:	NAD 1983			
												Vertical System:	NAVD 88			
												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444				

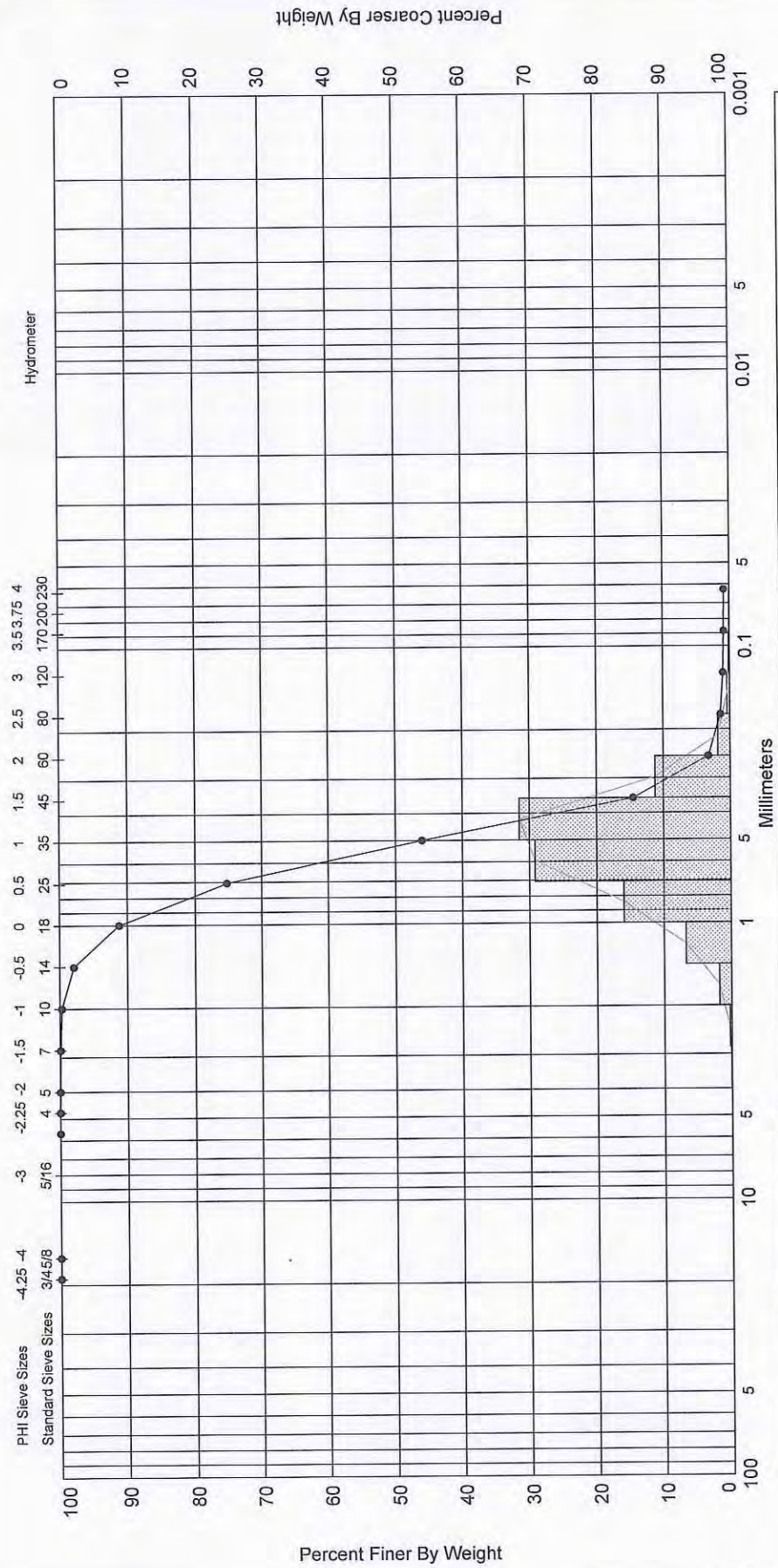


Gravel		Sand			Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine	Coarse	Fine

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
988526D	●	-4.6	SP	#230 - 0.43		96.90	1.1	1.07	-0.31	4.28	0.51	Project Name:	Jupiter Island 10 - Beach Samples		
Comments:												Analysis Date:	01-26-11		
Depths and elevations based on measured values												Analyzed By:	JR		
												Easting (X, ft):	946768.		
												Northing (Y, ft):	988724.		
												Horizontal System:	NAD 1983		
												Vertical System:	NAVD 88		

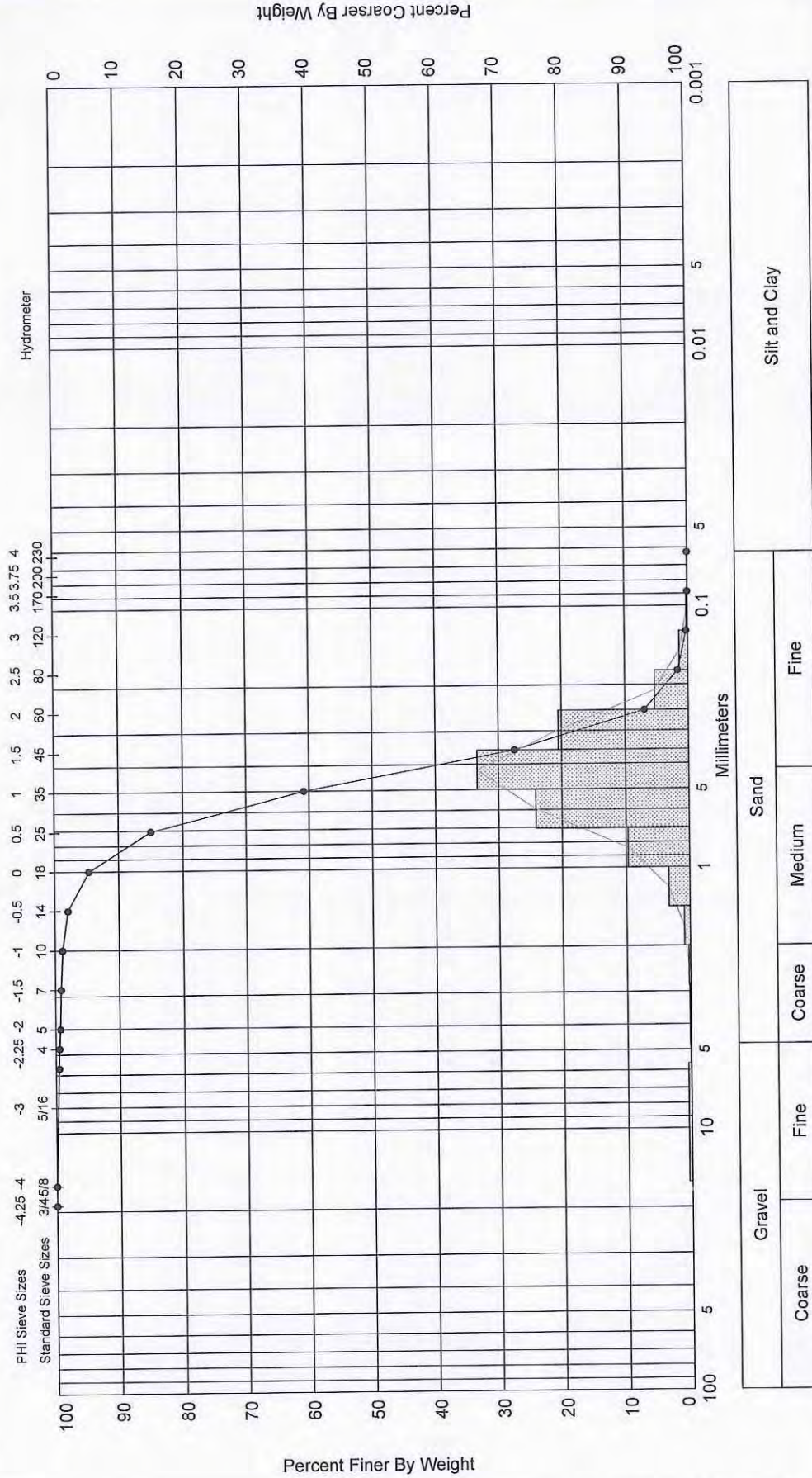


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Gravel		Sand			Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine		

Sample	988526E	Symbol	—●—	Elev. (ft)	-8.6	USCS	SP	% Fines #230	0.83	% Organics	77.70	% Carbonates	0.93	Mean	0.88	Skew	-0.26	Kurt	3.66	Sort	0.64
Comments:																					
Depths and elevations based on measured values																					
											American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444										
Sample Information											Project Name:										
											Jupiter Island 10 - Beach Samples										
											Analysis Date:										
											01-26-11										
											Analyzed By:										
											JR										
											Easting (X, ft):										
											947074.										
											Northing (Y, ft):										
											988851.										
											Horizontal System:										
											NAD 1983										
											Vertical System:										
											NAVD 88										



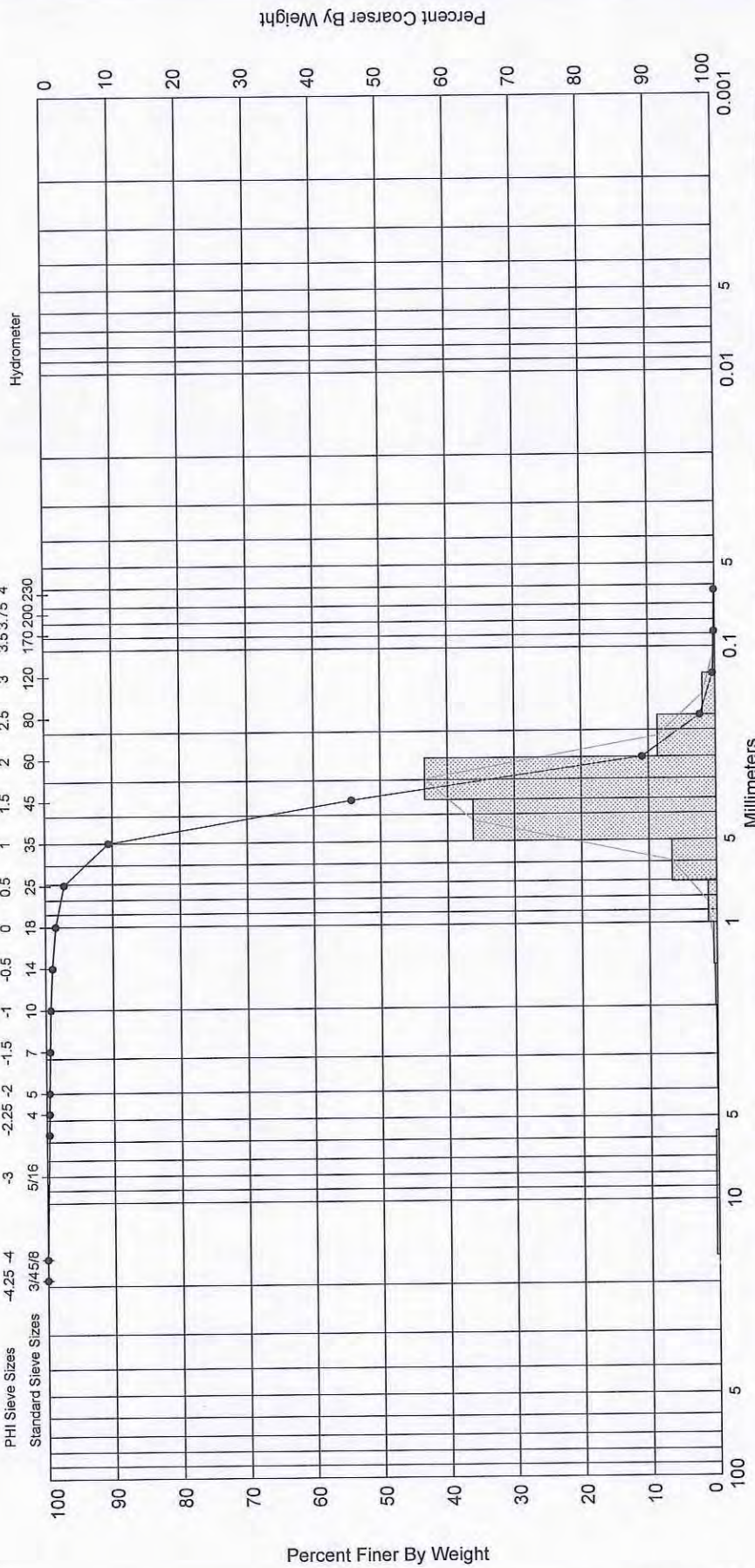
Sample Information		Sample Information		
Sample	993615A	Project Name:	Jupiter Island 10 - Beach Samples	
Symbol	—●—	Analysis Date:	01-10-11	
Elev. (ft)	7.4	Analyzed By:	JR	
USCS	SP	Easting (X, ft):	944437.	
% Fines	#230 - 0.04	Northing (Y, ft):	993818.	
% Organics		Horizontal System:	NAD 1983	
% Carbonates		Vertical System:	NAVD 88	
Mean	1.1	Skew	-1.32	
Median	1.16	Kurt	9.08	
Sort	0.74			



Depths and elevations based on measured values

American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Comments:



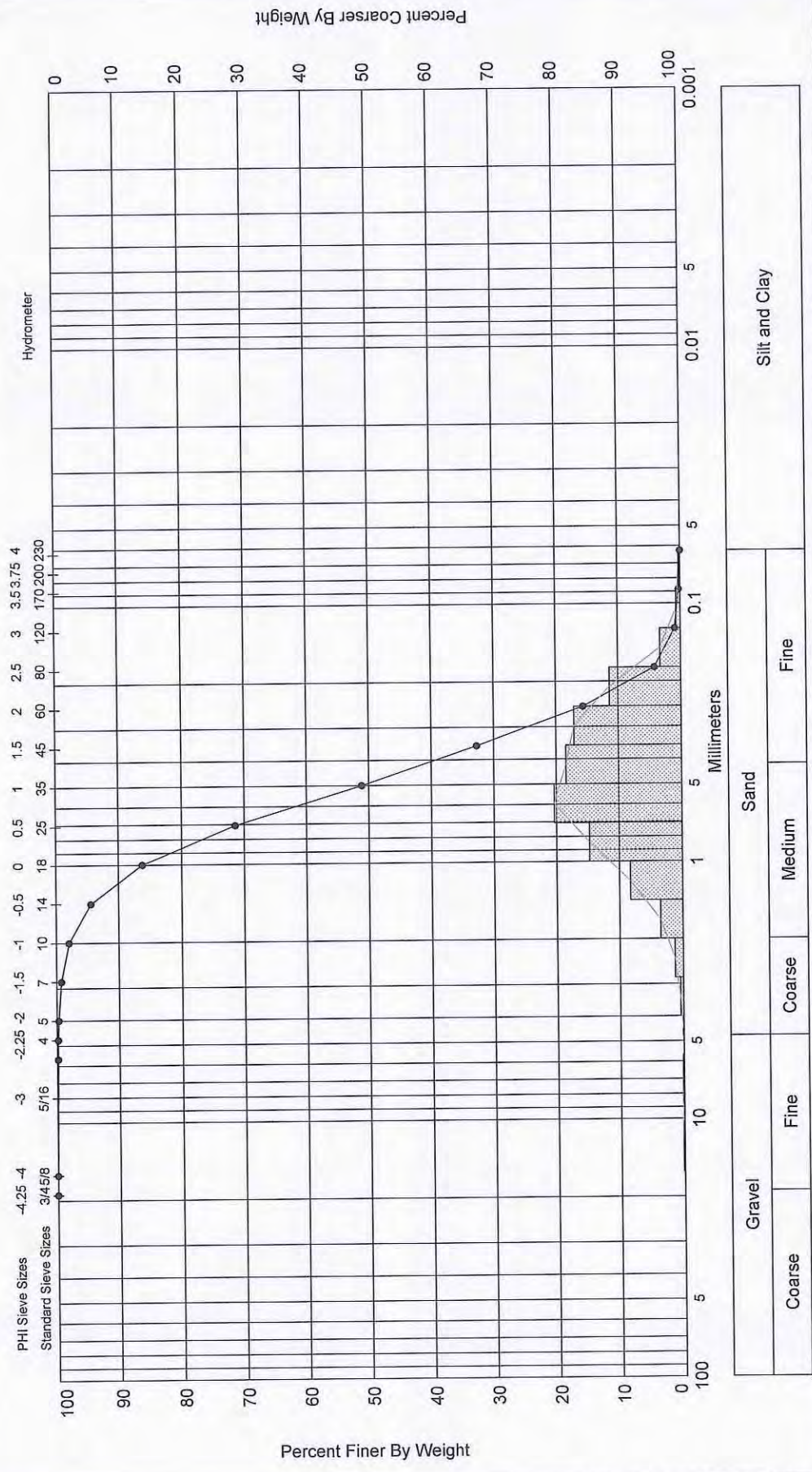
Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine	Fine

Sample Information		Sample Information	
Sample	993615B	Project Name:	Jupiter Island 10 - Beach Samples
Symbol	—●—	Analysis Date:	01-10-11
Elev. (ft)	3.4	Analyzed By:	JR
USCS	SP	Easting (X, ft):	944452.
% Fines	#230 - 0.12	Northing (Y, ft):	993824.
% Organics		Horizontal System:	NAD 1983
% Carbonates		Vertical System:	NAVD 88
Mean	1.55		
Median	1.5		
Skew	-2.64		
Kurt	21.38		
Sort	0.59		

Comments:
Depths and elevations based on measured values



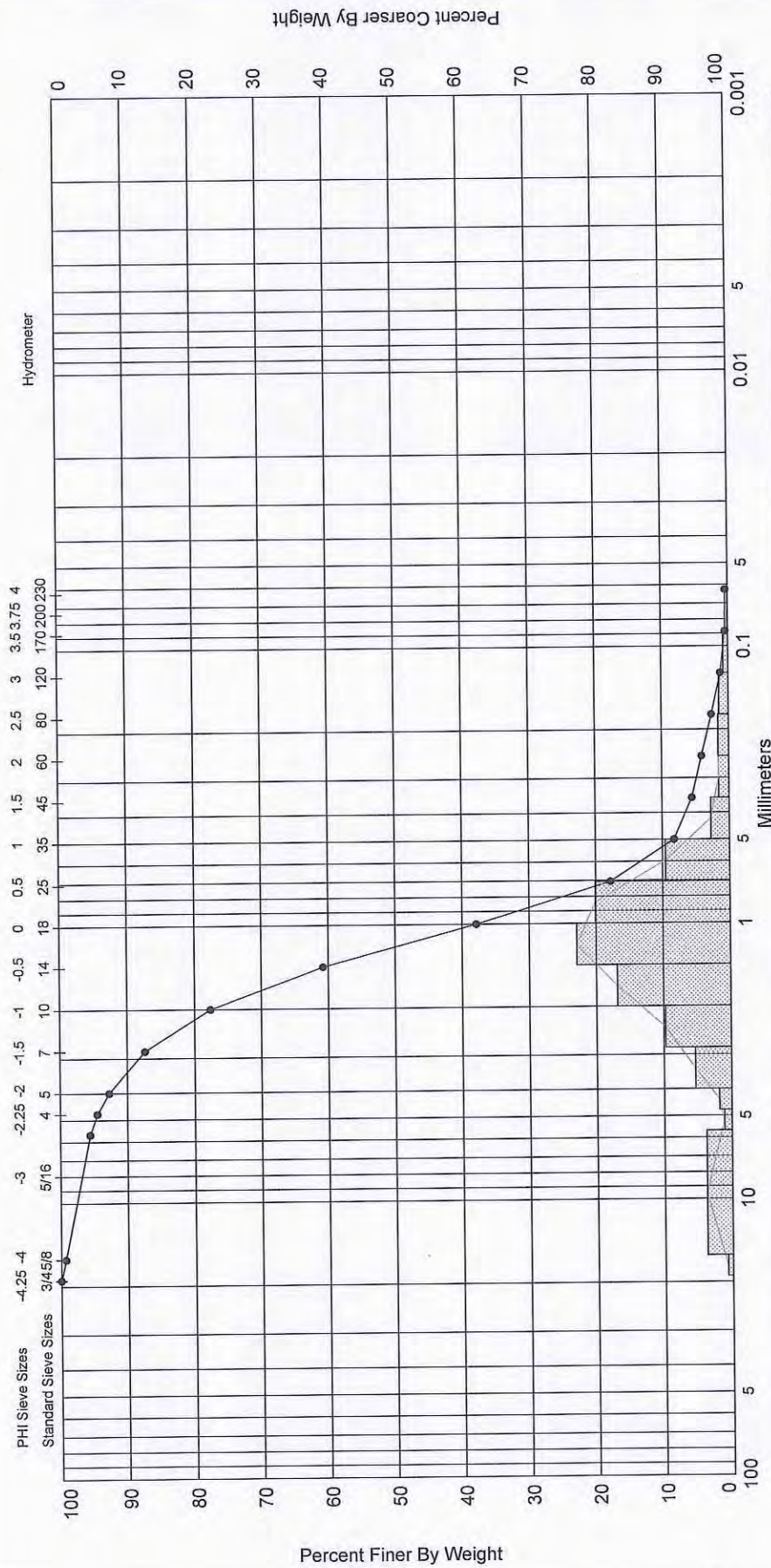
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1215 Wallace Drive
Delray Beach, FL 33444



Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Mean	Skew	Kurt	Sort	Sample Information			
993615C	●	-0.6	SW	#230 - 0.00			1.03	-0.3	3.32	0.95	Project Name:	Jupiter Island 10 - Beach Samples		
Comments:											Analysis Date:	01-10-11		
Depths and elevations based on measured values											Analyzed By:	JR		
											Easting (X, ft):	944507.		
											Northing (Y, ft):	993847.		
											Horizontal System:	NAD 1983		
											Vertical System:	NAVD 88		



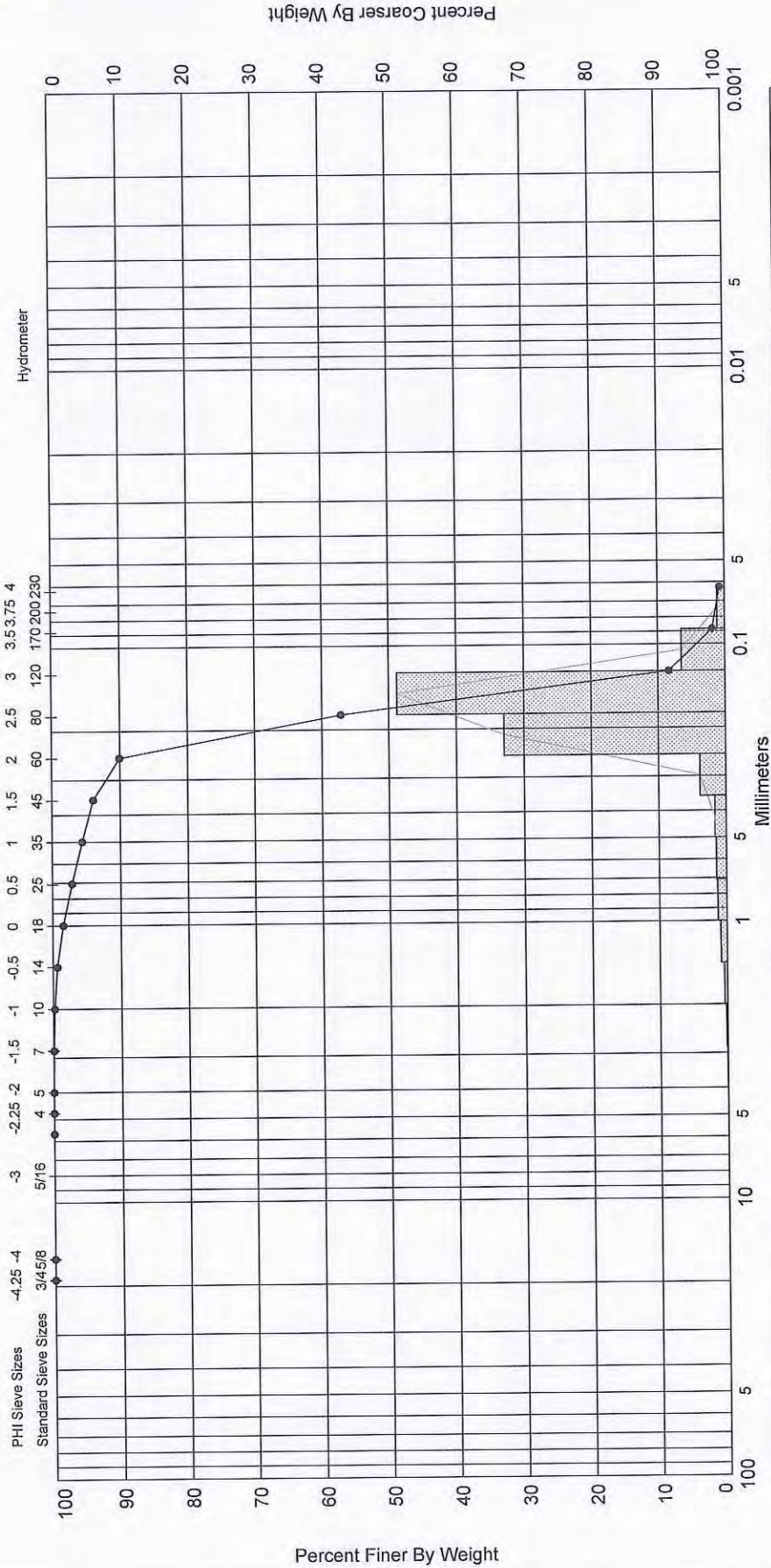
American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444




Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine	Fine

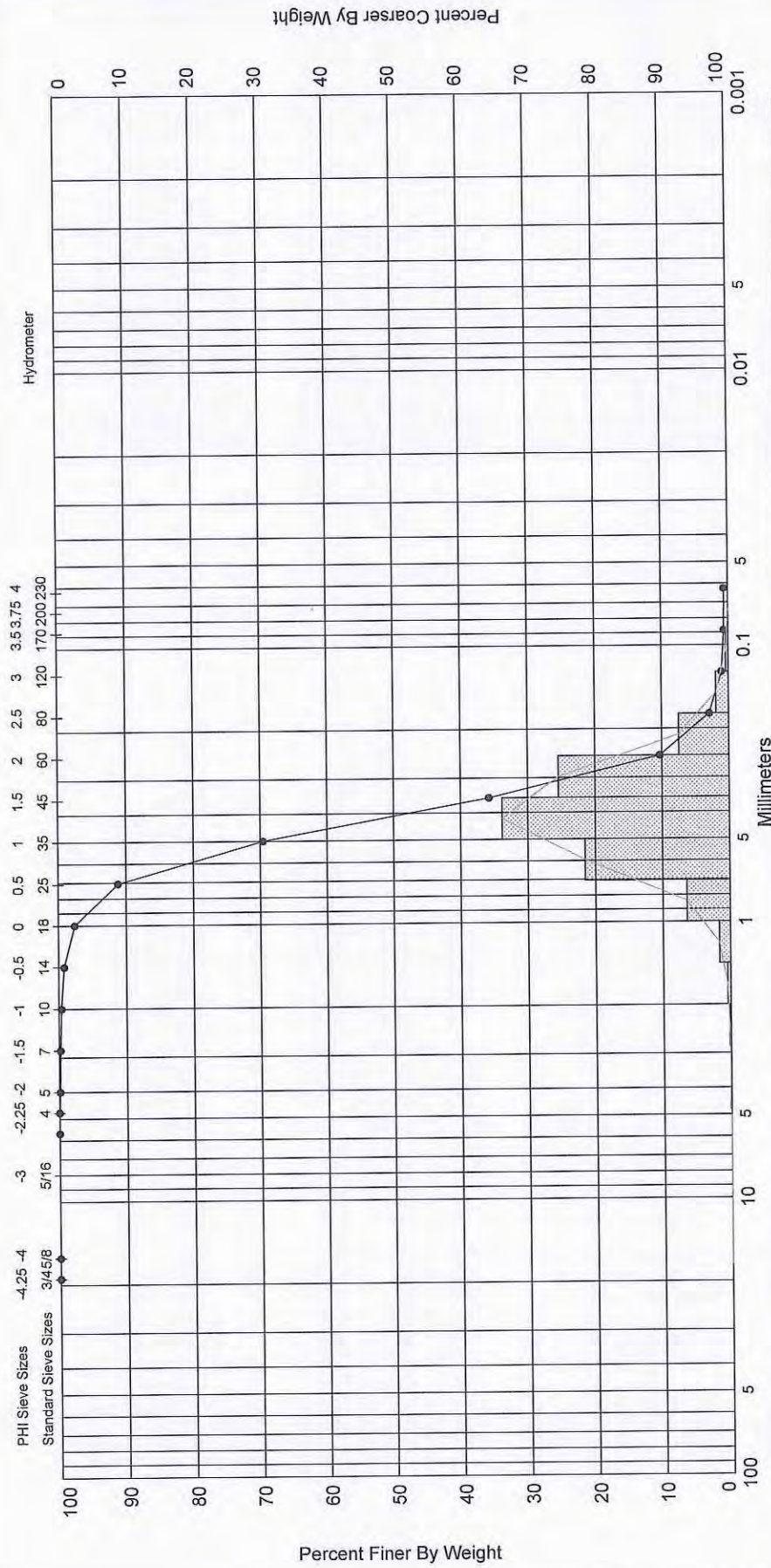
Sample	993615D	Symbol	—●—	Elev. (ft)	-4.6	USCS	SW	% Fines	#230 - 0.37	% Organics		% Carbonates		Mean	-0.33	Skew	-0.18	Kurt	4.49	Sort	1.18
Comments:																					
Depths and elevations based on measured values																					
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444												Sample Information Project Name: Jupiter Island 10 - Beach Samples Analysis Date: 01-10-11 Analyzed By: JR Easting (X, ft): 944530. Northing (Y, ft): 993857. Horizontal System: NAD 1983 Vertical System: NAVD 88									





Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

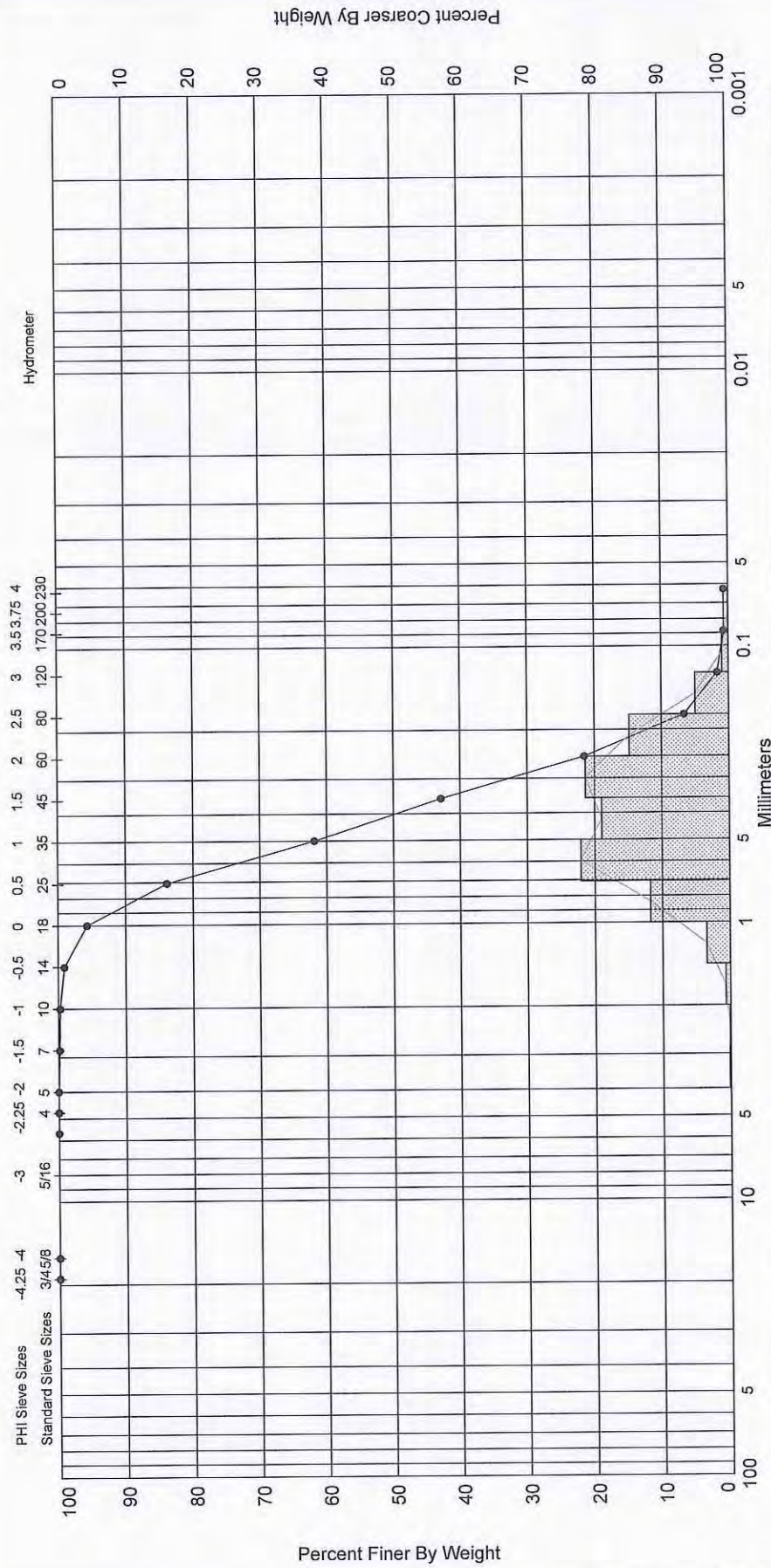
Sample Information		Sample Information	
Sample	993615E	Project Name:	Jupiter Island 10 - Beach Samples
Symbol	—●—	Analysis Date:	01-10-11
Elev. (ft)	-8.6	Analyzed By:	JR
USCS	SP	Easting (X, ft):	944637.
% Fines	#230 - 0.74	Northing (Y, ft):	993902.
% Organics		Horizontal System:	NAD 1983
% Carbonates		Vertical System:	NAVD 88
Mean	2.57	American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444	
Median	2.45	Depths and elevations based on measured values 	
Skew	-2.39		
Kurt	11.56		
Sort	0.64		
Comments:			



Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

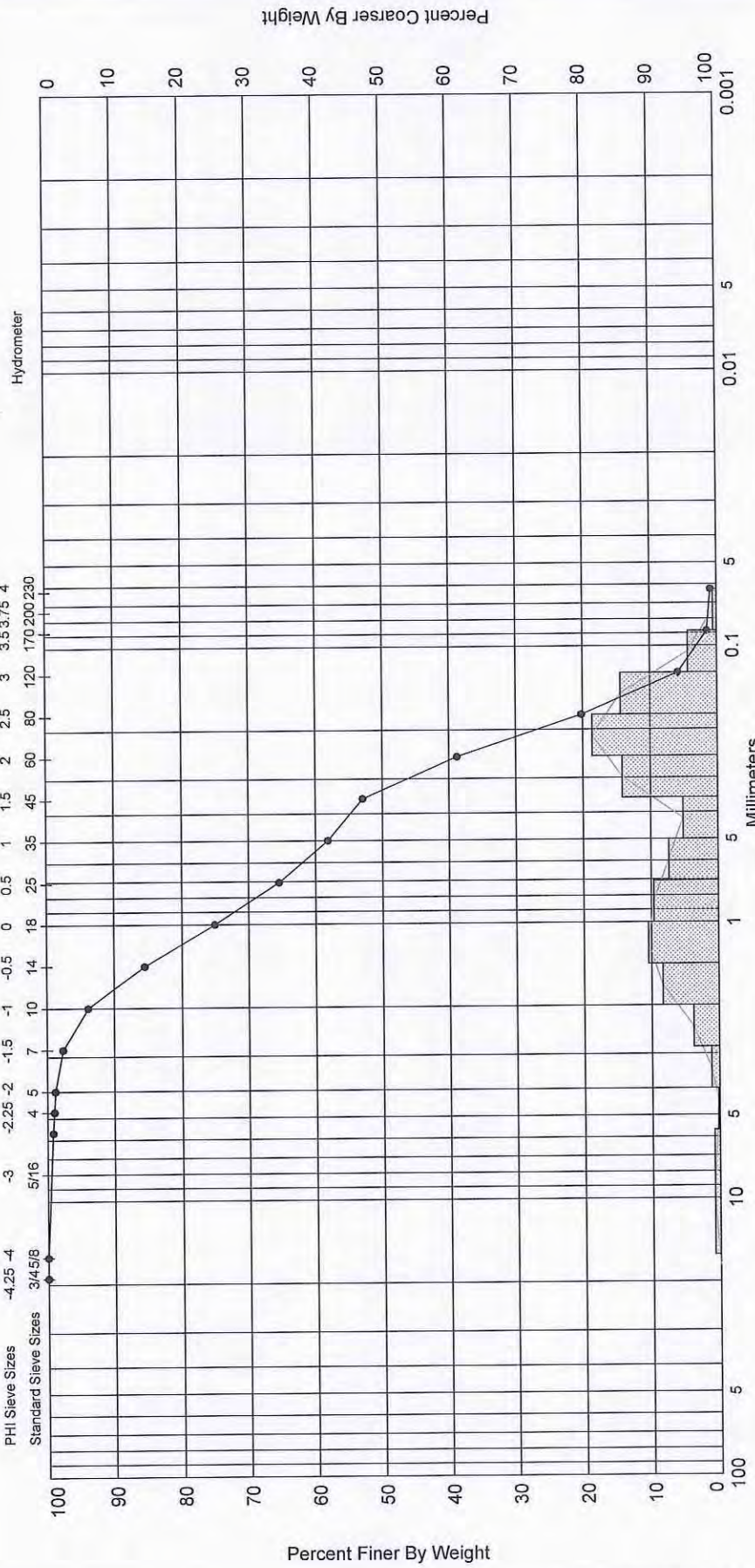
Sample	R-70A	Symbol	—●—	Elev. (ft)	7.4	USCS	SP	% Fines	#230 - 0.60	% Organics		% Carbonates	50.10	Median	1.29	Mean	1.27	Skew	-0.4	Kurt	4.85	Sort	0.64
Comments:																							
Depths and elevations based on measured values																							
Sample Information												Jupiter Island 10 - Beach Samples											
Project Name:												01-24-11											
Analysis Date:												JR											
Analyzed By:												937695.											
Easting (X, ft):												1007629.											
Northing (Y, ft):												NAD 1983											
Horizontal System:												NAVD 88											
Vertical System:																							
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444																							





Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine	Fine

Sample	R-70B	Symbol	—●—	USCS	SP	% Fines	#230 - 0.65	% Organics	64.20	% Carbonates	1.31	Mean	1.3	Skew	-0.09	Kurt	2.73	Sort	0.81
Comments:																			
Depths and elevations based on measured values																			
										American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444									
Sample Information										Project Name: Jupiter Island 10 - Beach Samples Analysis Date: 01-24-11 Analyzed By: JR Easting (X, ft): 937726. Northing (Y, ft): 1007642. Horizontal System: NAD 1983 Vertical System: NAVD 88									

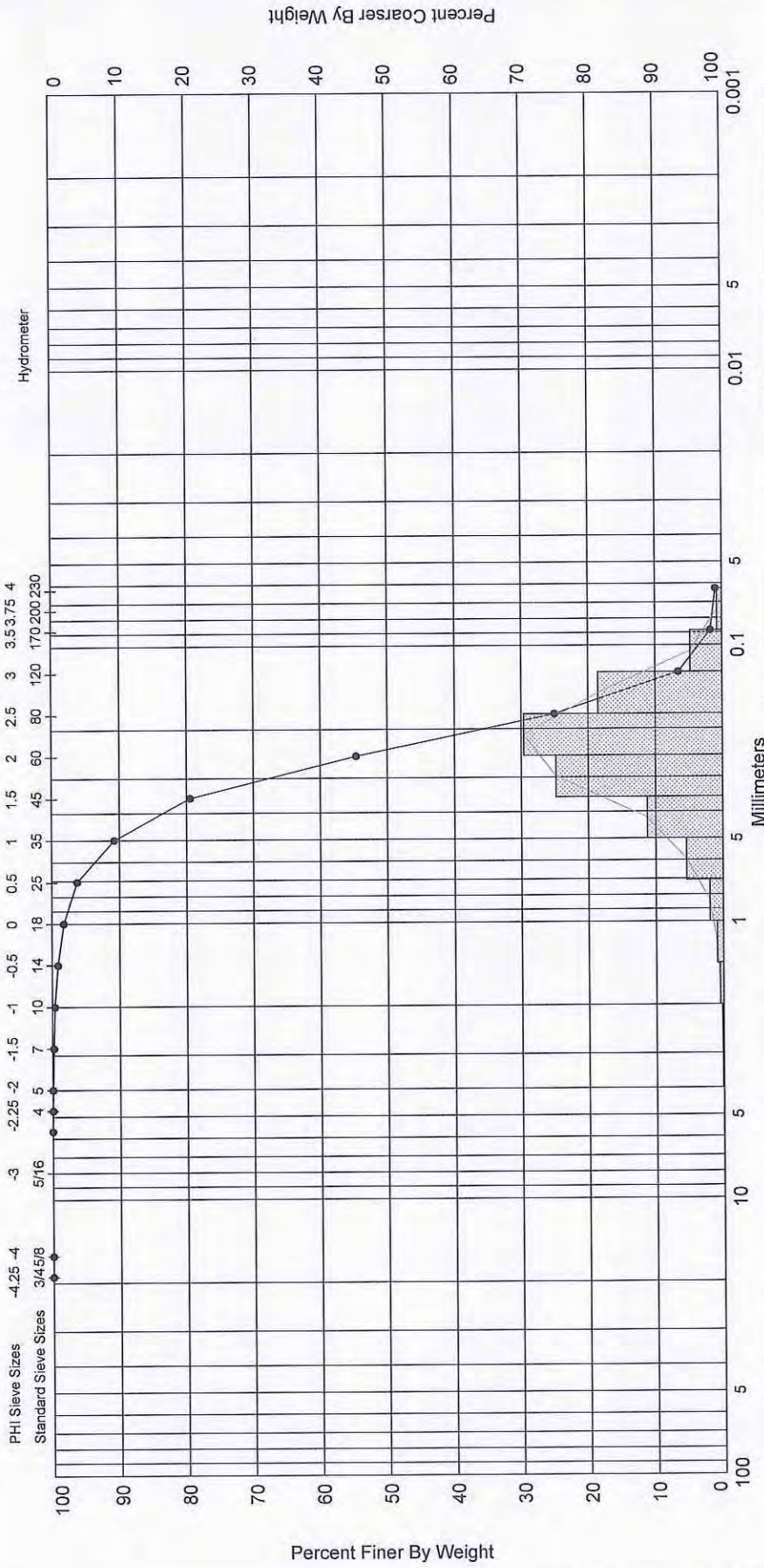


Sample Information	
Project Name:	Jupiter Island 10 - Beach Samples
Analysis Date:	01-24-11
Analyzed By:	JR
Easting (X, ft):	937758.
Northing (Y, ft):	1007655.
Horizontal System:	NAD 1983
Vertical System:	NAVD 88

Depths and elevations based on measured values



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 1215 Wallace Drive
 Delray Beach, FL 33444

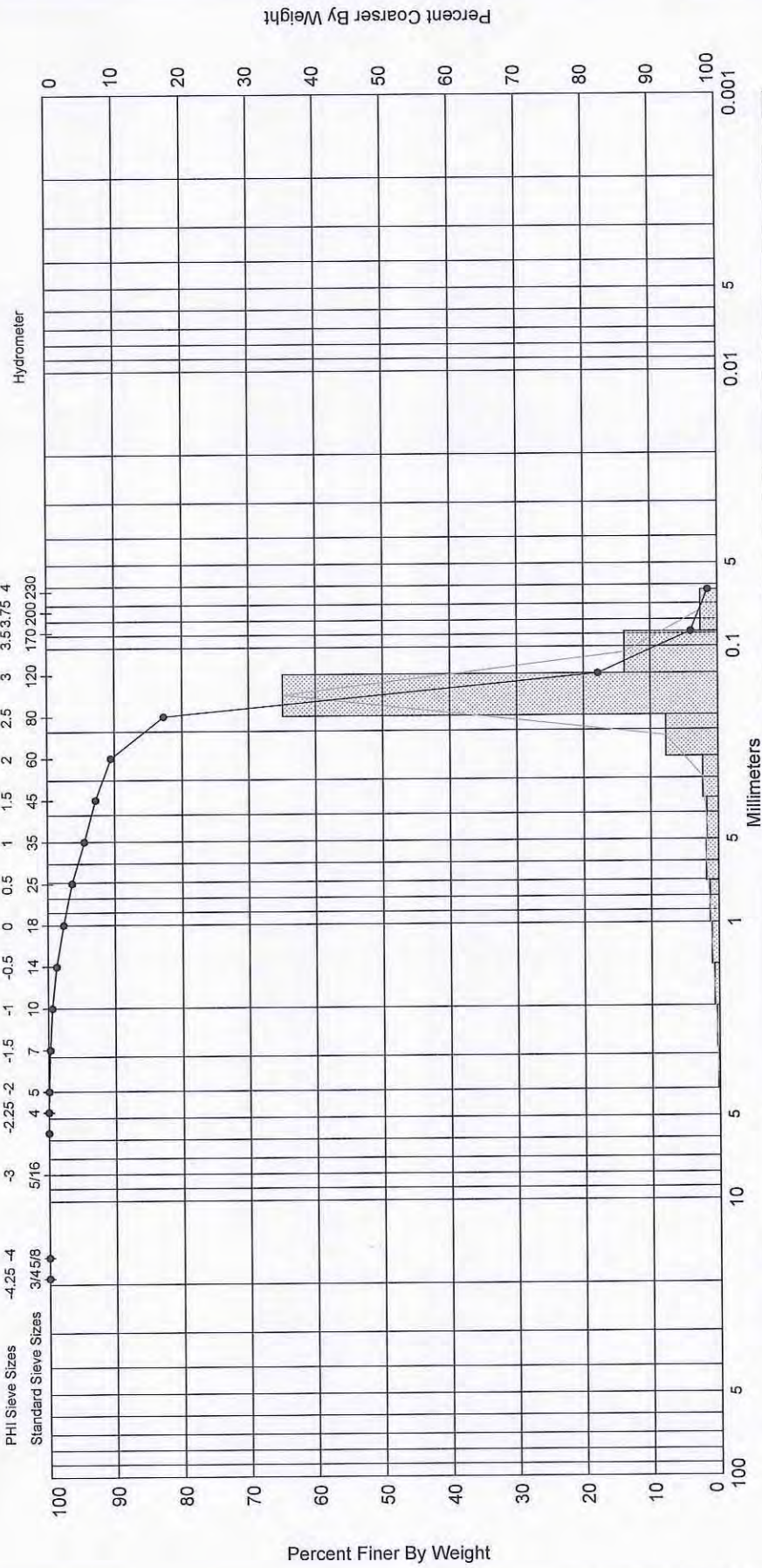


Gravel	Sand			Silt and Clay		
	Coarse	Fine		Coarse	Medium	Fine

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
R-70D	—●—	-4.6	SP	#230-0.97		39.40	2.08	1.99	-0.95	5.33	0.77	Project Name:	Jupiter Island 10 - Beach Samples		
Comments:												Analysis Date:	01-24-11		
Depths and elevations based on measured values												Analyzed By:	JR		
												Easting (X, ft):	937683.		
												Northing (Y, ft):	1007699.		
												Horizontal System:	NAD 1983		
												Vertical System:	NAVD 88		

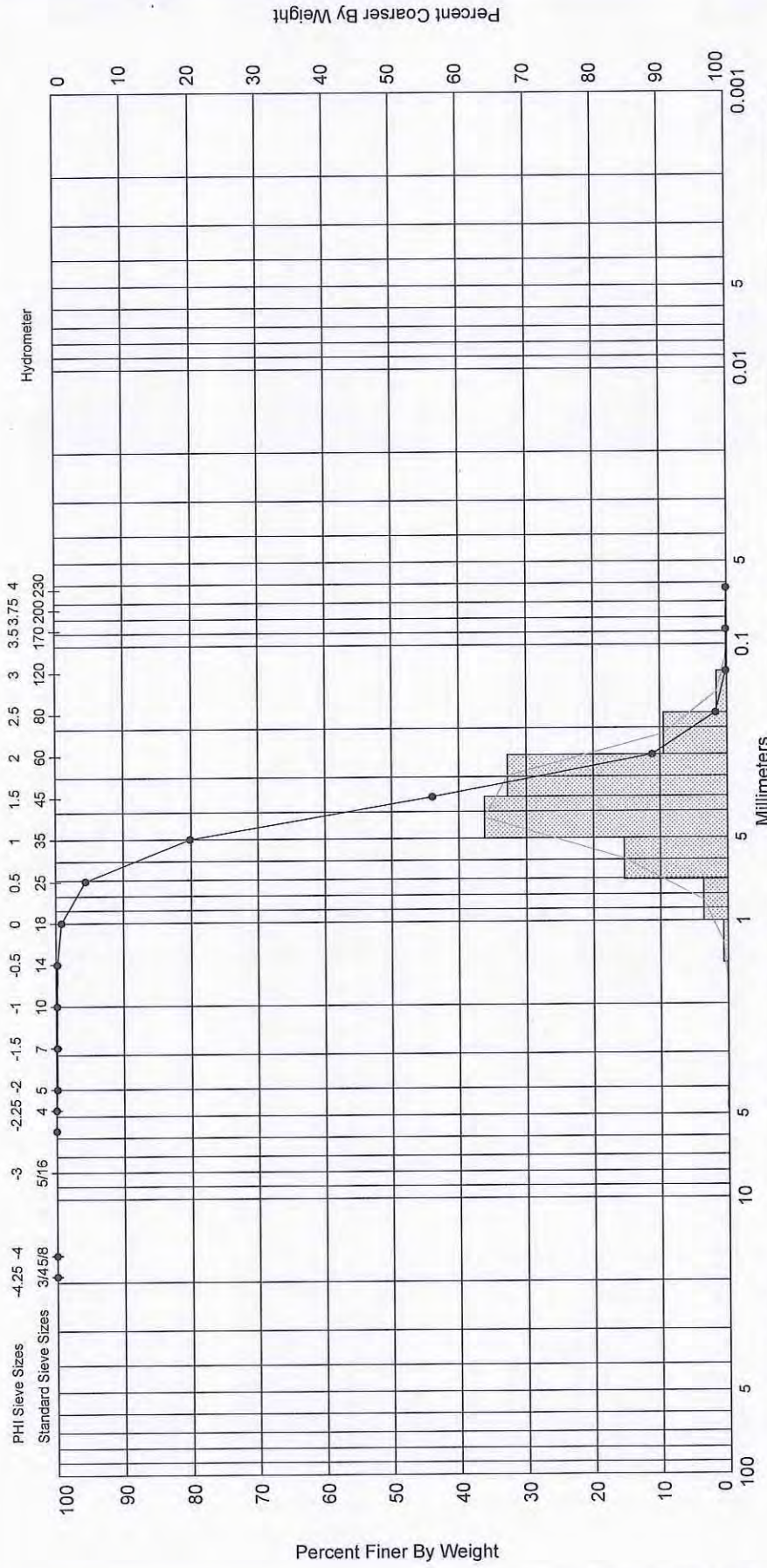


American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444



Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information				
R-70E	—●—	-8.6	SP	#230 - 1.44		20.90	2.75	2.61	-2.81	12.73	0.76	Project Name:	Jupiter Island 10 - Beach Samples			
Comments:												Analysis Date:	01-24-11			
Depths and elevations based on measured values												Analyzed By:	JR			
												Easting (X, ft):	937961.			
												Northing (Y, ft):	1007740.			
												Horizontal System:	NAD 1983			
												Vertical System:	NAVD 88			
												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444				

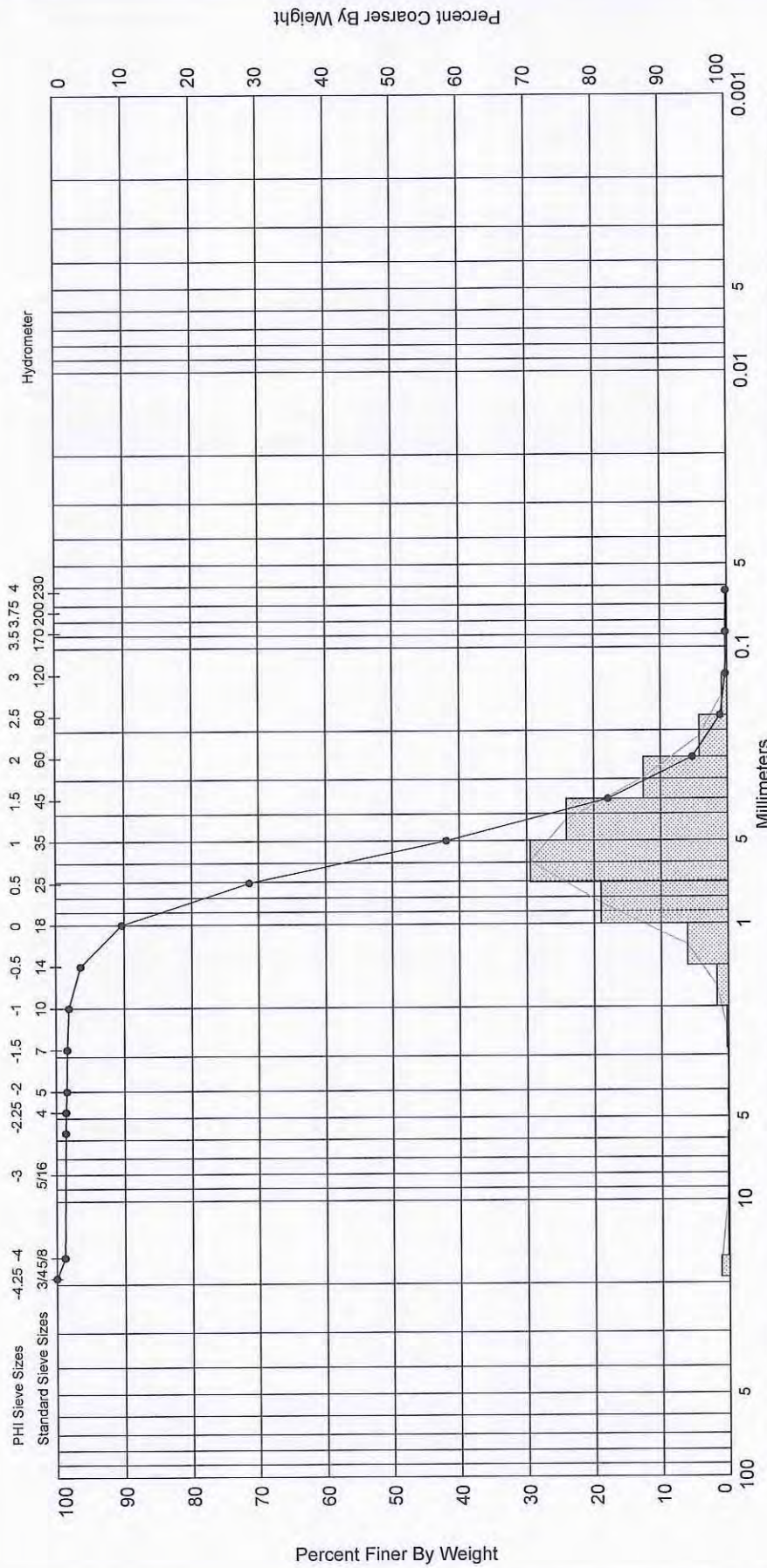


Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	Symbol	Elev. (ft)	USCS	% Fines	#230 - 0.09	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
R-75A	—●—	7.4	SP					1.42	1.4	-0.5	5.55	0.55	Project Name:	Jupiter Island 10 - Beach Samples		
Comments:													Analysis Date:	01-07-11		
Depths and elevations based on measured values													Analyzed By:	JR		
													Easting (X, ft):	939732.		
													Northing (Y, ft):	1003630.		
													Horizontal System:	NAD 1983		
													Vertical System:	NAVD 88		

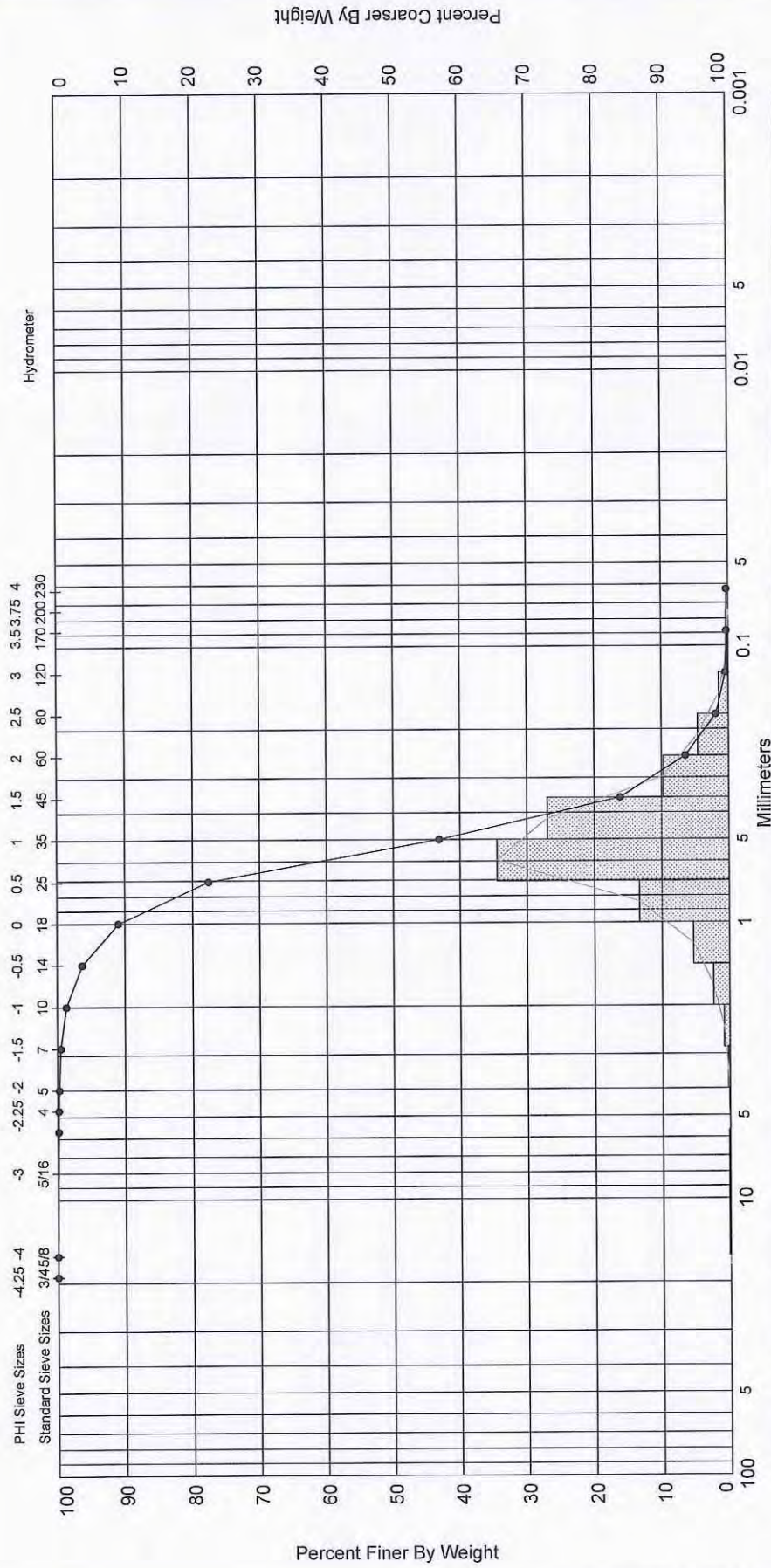


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 Delray Beach, FL 33444




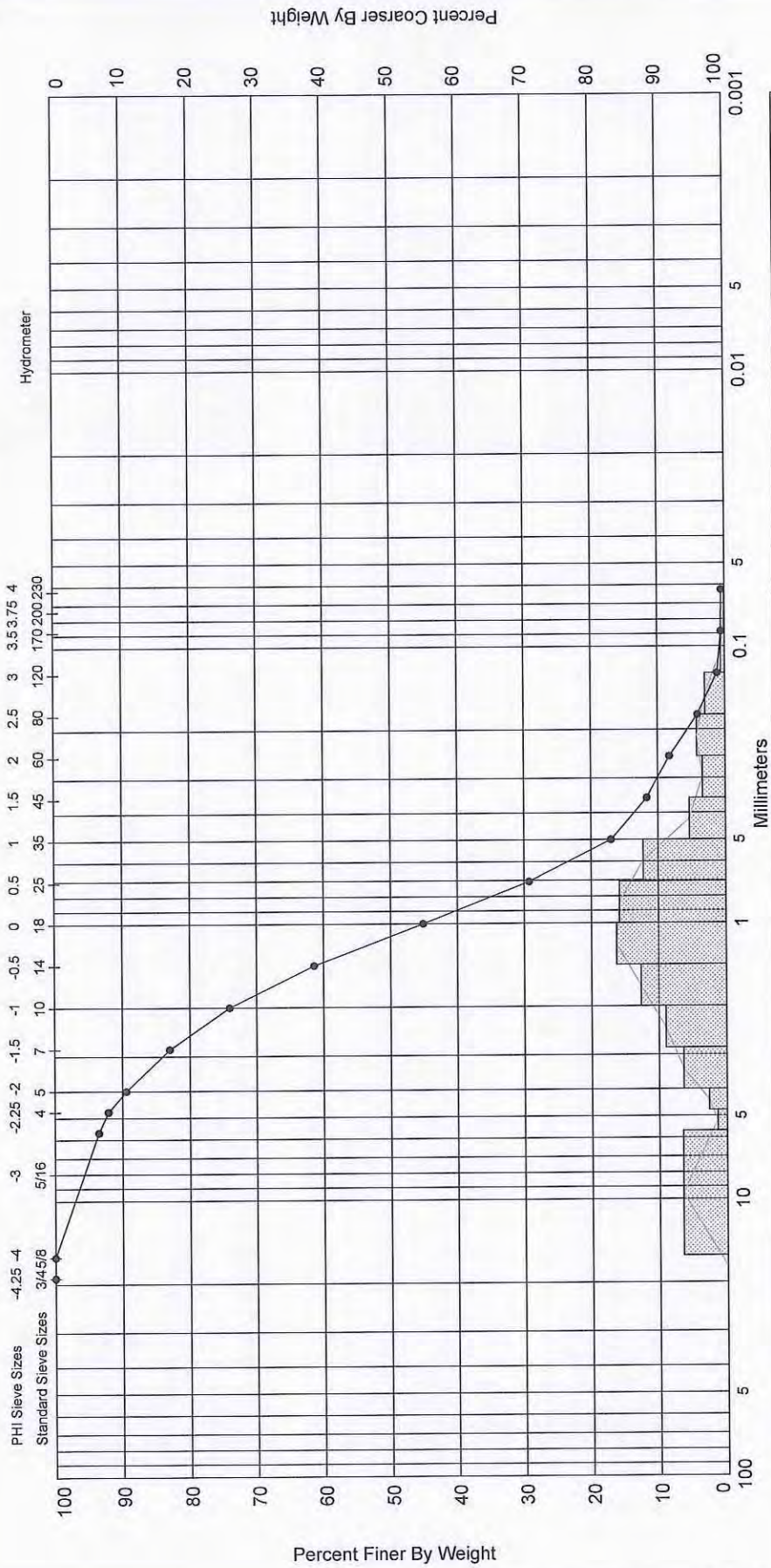
Gravel		Sand			Silt and Clay			
Coarse	Fine	Coarse	Medium	Fine				

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
R-75B	—●—	3.4	SW	#230 - 0.20			0.86	0.82	-2.1	13.16	0.9	Project Name:	Jupiter Island 10 - Beach Samples		
Comments:												Analysis Date:	01-07-11		
Depths and elevations based on measured values												Analyzed By:			
												Easting (X, ft):	939769.		
												Northing (Y, ft):	1003645.		
												Horizontal System:	NAD 1983		
												Vertical System:	NAVD 88		
												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444			



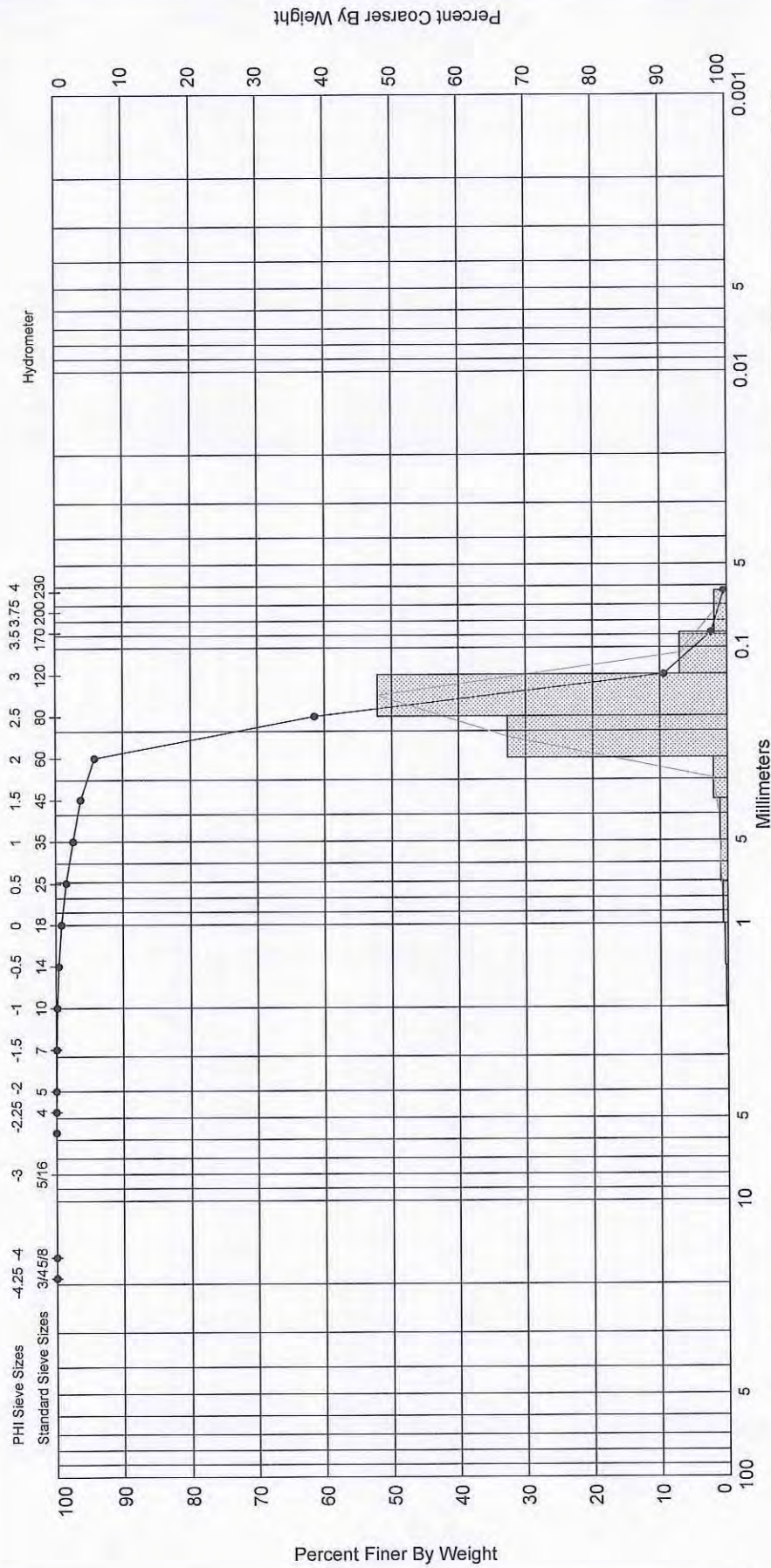
Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Mean	Skew	Kurt	Sort	Sample Information		
R-75C	—●—	-0.6	SP	#230 - 0.26			0.9	-0.49	5.45	0.73	Project Name:	Jupiter Island 10 - Beach Samples	
Comments:											Analysis Date:	01-07-11	
Depths and elevations based on measured values											Analyzed By:	JR	
											Easting (X, ft):	939793.	
											Northing (Y, ft):	1003655.	
											Horizontal System:	NAD 1983	
											Vertical System:	NAVD 88	
 AMERICAN VIBRACORE SERVICES											American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444		



Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	R-75D	Symbol	—●—	Elev. (ft)	-4.6	USCS	SW	% Fines	#230 - 0.49	% Organics		% Carbonates		Median	-0.21	Mean	-0.11	Skew	2.97	Kurt	1.43	Sort	
Comments:																							
Depths and elevations based on measured values																							
												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444											
Sample Information												Project Name: Jupiter Island 10 - Beach Samples											
Analysis Date: 01-07-11												Analyzed By: JR											
Easting (X, ft): 939819												Northing (Y, ft): 1003667											
Horizontal System: NAD 1983												Vertical System: NAVD 88											



Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Medium	Fine

Sample	R-75E	Symbol	—●—	Elev. (ft)	-8.6	USCS	SP	% Fines	#230 - 0.47	% Organics		% Carbonates		Mean	2.53	Skew	-2.49	Kurt	15.46	Sort	0.55
Comments:																					
Depths and elevations based on measured values																					
											American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444										
Sample Information											Jupiter Island 10 - Beach Samples										
Analysis Date:											01-07-11										
Analyzed By:											JR										
Easting (X, ft):											1003742.										
Northing (Y, ft):											940000.										
Horizontal System:											NAD 1983										
Vertical System:											NAVD 88										

Sieve Report



Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 1000258A

Analysis Date: 01-24-11

Analyzed By: JR

Easting (ft): 941554.	Northing (ft): 1000417.	Coordinate System: Florida State Plane East	Elevation (ft): 7.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments:
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Dry Weight (g): 758.10	Wash Weight (g): 755.90	Pan Retained (g): 0.10	Sieve Loss (%): 0.00	Fines (%): #230 - 0.30	Organics (%):	Carbonates (%): 75.70	Shells (%): 0.12
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.90	0.12	0.90	0.12
5	-2.00	4.00	0.30	0.04	1.20	0.16
7	-1.50	2.83	1.00	0.13	2.20	0.29
10	-1.00	2.00	3.30	0.44	5.50	0.73
14	-0.50	1.41	15.40	2.03	20.90	2.76
18	0.00	1.00	55.50	7.32	76.40	10.08
25	0.50	0.71	109.60	14.46	186.00	24.54
35	1.00	0.50	191.90	25.31	377.90	49.85
45	1.50	0.35	227.40	30.00	605.30	79.84
60	2.00	0.25	128.60	16.96	733.90	96.81
80	2.50	0.18	18.00	2.37	751.90	99.18
120	3.00	0.13	2.50	0.33	754.40	99.51
170	3.50	0.09	1.00	0.13	755.40	99.64
230	4.00	0.06	0.40	0.05	755.80	99.70

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.95	1.62	1.42	1.00	0.51	0.20	-0.35
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.92	0.53	0.7	-0.51	3.88	

GRANULARMETRIC REPORT JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 1000258B

Analysis Date: 01-24-11

Analyzed By: JR

Easting (ft): 941580.	Northing (ft): 1000428.	Coordinate System: Florida State Plane East	Elevation (ft): 3.4 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-5/2	Comments:
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Dry Weight (g): 475.20	Wash Weight (g): 472.70	Pan Retained (g): 0.10	Sieve Loss (%): 0.00	Fines (%): #230 - 0.55	Organics (%):	Carbonates (%): 79.50	Shells (%): 0.15
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.70	0.15	0.70	0.15
5	-2.00	4.00	0.70	0.15	1.40	0.29
7	-1.50	2.83	3.90	0.82	5.30	1.12
10	-1.00	2.00	6.90	1.45	12.20	2.57
14	-0.50	1.41	15.60	3.28	27.80	5.85
18	0.00	1.00	40.30	8.48	68.10	14.33
25	0.50	0.71	100.90	21.23	169.00	35.56
35	1.00	0.50	137.00	28.83	306.00	64.39
45	1.50	0.35	62.00	13.05	368.00	77.44
60	2.00	0.25	48.60	10.23	416.60	87.67
80	2.50	0.18	31.00	6.52	447.60	94.19
120	3.00	0.13	17.60	3.70	465.20	97.90
170	3.50	0.09	7.30	1.54	472.50	99.43
230	4.00	0.06	0.10	0.02	472.60	99.45

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.61	1.82	1.41	0.75	0.25	0.04	-0.63

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.83	0.56	0.93	0.15	3.47

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 1000258C

Analysis Date: 01-24-11

Analyzed By: JR

Easting (ft): 941611.	Northing (ft): 1000441.	Coordinate System: Florida State Plane East	Elevation (ft): -0.6 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-5/2	Comments:
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Dry Weight (g): 925.40	Wash Weight (g): 917.90	Pan Retained (g): 0.10	Sieve Loss (%): 0.01	Fines (%): #230 - 0.83	Organics (%):	Carbonates (%): 76.20	Shells (%): 1.17
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	5.60	0.61	5.60	0.61
4	-2.25	4.76	5.20	0.56	10.80	1.17
5	-2.00	4.00	9.20	0.99	20.00	2.16
7	-1.50	2.83	30.20	3.26	50.20	5.42
10	-1.00	2.00	58.60	6.33	108.80	11.76
14	-0.50	1.41	97.90	10.58	206.70	22.34
18	0.00	1.00	117.50	12.70	324.20	35.03
25	0.50	0.71	118.00	12.75	442.20	47.78
35	1.00	0.50	95.50	10.32	537.70	58.10
45	1.50	0.35	64.20	6.94	601.90	65.04
60	2.00	0.25	94.80	10.24	696.70	75.29
80	2.50	0.18	123.20	13.31	819.90	88.60
120	3.00	0.13	72.80	7.87	892.70	96.47
170	3.50	0.09	22.80	2.46	915.50	98.93
230	4.00	0.06	2.20	0.24	917.70	99.17

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.91	2.33	1.99	0.61	-0.40	-0.80	-1.56
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.68	0.62	1.42	-0.1	2.19	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 1000258D

Analysis Date: 01-24-11

Analyzed By: JR

Easting (ft): 941673.	Northing (ft): 1000467.	Coordinate System: Florida State Plane East	Elevation (ft): -4.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-6/1	Comments:
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Dry Weight (g): 648.20	Wash Weight (g): 642.10	Pan Retained (g): 0.00	Sieve Loss (%): 0.00	Fines (%): #230 - 0.94	Organics (%):	Carbonates (%): 29.10	Shells (%): 0.17
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	1.10	0.17	1.10	0.17
5	-2.00	4.00	0.40	0.06	1.50	0.23
7	-1.50	2.83	0.80	0.12	2.30	0.35
10	-1.00	2.00	0.70	0.11	3.00	0.46
14	-0.50	1.41	1.60	0.25	4.60	0.71
18	0.00	1.00	3.30	0.51	7.90	1.22
25	0.50	0.71	6.00	0.93	13.90	2.14
35	1.00	0.50	8.90	1.37	22.80	3.52
45	1.50	0.35	10.80	1.67	33.60	5.18
60	2.00	0.25	29.30	4.52	62.90	9.70
80	2.50	0.18	197.80	30.52	260.70	40.22
120	3.00	0.13	317.40	48.97	578.10	89.19
170	3.50	0.09	51.50	7.95	629.60	97.13
230	4.00	0.06	12.50	1.93	642.10	99.06

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.37	2.95	2.86	2.60	2.25	2.10	1.45

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.49	0.18	0.65	-2.71	16.17

GRANULARMETRIC REPORT JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 1000258E

Analysis Date: 01-24-11

Analyzed By: JR

Easting (ft): 941736.	Northing (ft): 1000494.	Coordinate System: Florida State Plane East	Elevation (ft): -8.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-6/1	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
190.20	187.80	0.00	0.05	#230 - 1.31		35.20	0.00
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.20	0.11	0.20	0.11	
10	-1.00	2.00	0.10	0.05	0.30	0.16	
14	-0.50	1.41	0.30	0.16	0.60	0.32	
18	0.00	1.00	0.70	0.37	1.30	0.68	
25	0.50	0.71	1.10	0.58	2.40	1.26	
35	1.00	0.50	1.00	0.53	3.40	1.79	
45	1.50	0.35	0.90	0.47	4.30	2.26	
60	2.00	0.25	2.20	1.16	6.50	3.42	
80	2.50	0.18	11.70	6.15	18.20	9.57	
120	3.00	0.13	115.50	60.73	133.70	70.29	
170	3.50	0.09	46.40	24.40	180.10	94.69	
230	4.00	0.06	7.60	4.00	187.70	98.69	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.54	3.28	3.10	2.83	2.63	2.55	2.13
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	2.81	0.14	0.53	-3.1	21.27	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 965058A

Analysis Date: 01-28-11

Analyzed By: JR

Easting (ft): 953999.	Northing (ft): 965299.	Coordinate System: Florida State Plane East	Elevation (ft): 7.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/1	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
791.90	790.10	0.00	0.00	#230 - 0.23		70.80	0.00
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.60	0.08	0.60	0.08	
10	-1.00	2.00	0.50	0.06	1.10	0.14	
14	-0.50	1.41	4.00	0.51	5.10	0.64	
18	0.00	1.00	24.10	3.04	29.20	3.69	
25	0.50	0.71	111.30	14.05	140.50	17.74	
35	1.00	0.50	271.10	34.23	411.60	51.98	
45	1.50	0.35	250.00	31.57	661.60	83.55	
60	2.00	0.25	104.10	13.15	765.70	96.69	
80	2.50	0.18	19.50	2.46	785.20	99.15	
120	3.00	0.13	3.70	0.47	788.90	99.62	
170	3.50	0.09	0.90	0.11	789.80	99.73	
230	4.00	0.06	0.30	0.04	790.10	99.77	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.94	1.52	1.36	0.97	0.61	0.44	0.05
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.98	0.51	0.57	0.01	3.95	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 965058B

Analysis Date: 01-28-11

Analyzed By: JR

Easting (ft): 954040.	Northing (ft): 965316.	Coordinate System: Florida State Plane East	Elevation (ft): 3.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/1	Comments:
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Dry Weight (g): 674.30	Wash Weight (g): 672.80	Pan Retained (g): 0.00	Sieve Loss (%): 0.00	Fines (%): #230 - 0.22	Organics (%):	Carbonates (%): 60.80	Shells (%): 0.00
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.10	0.01	0.10	0.01
14	-0.50	1.41	0.50	0.07	0.60	0.09
18	0.00	1.00	5.00	0.74	5.60	0.83
25	0.50	0.71	29.00	4.30	34.60	5.13
35	1.00	0.50	133.70	19.83	168.30	24.96
45	1.50	0.35	227.50	33.74	395.80	58.70
60	2.00	0.25	183.70	27.24	579.50	85.94
80	2.50	0.18	72.20	10.71	651.70	96.65
120	3.00	0.13	19.40	2.88	671.10	99.53
170	3.50	0.09	1.50	0.22	672.60	99.75
230	4.00	0.06	0.20	0.03	672.80	99.78

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
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2.42	1.96	1.80	1.37	1.00	0.77	0.48
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Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.39	0.38	0.59	0.08	3.18

GRANULARMETRIC REPORT JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 965058C

Analysis Date: 01-28-11

Analyzed By: JR

Easting (ft): 954067.	Northing (ft): 965328.	Coordinate System: Florida State Plane East	Elevation (ft): -0.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/1	Comments:
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Dry Weight (g): 453.10	Wash Weight (g): 449.10	Pan Retained (g): 0.00	Sieve Loss (%): 0.00	Fines (%): #230 - 0.88	Organics (%):	Carbonates (%): 71.80	Shells (%): 0.00
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.20	0.04	0.20	0.04
10	-1.00	2.00	0.80	0.18	1.00	0.22
14	-0.50	1.41	4.10	0.90	5.10	1.13
18	0.00	1.00	15.10	3.33	20.20	4.46
25	0.50	0.71	43.00	9.49	63.20	13.95
35	1.00	0.50	107.80	23.79	171.00	37.74
45	1.50	0.35	145.90	32.20	316.90	69.94
60	2.00	0.25	97.10	21.43	414.00	91.37
80	2.50	0.18	27.20	6.00	441.20	97.37
120	3.00	0.13	7.10	1.57	448.30	98.94
170	3.50	0.09	0.70	0.15	449.00	99.10
230	4.00	0.06	0.10	0.02	449.10	99.12

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.30	1.83	1.62	1.19	0.73	0.54	0.03
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.16	0.45	0.66	-0.25	3.59	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ - FL DEP ROSS.GDT - 5/2/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 965058D

Analysis Date: 01-28-11

Analyzed By: JR

Easting (ft): 954088.	Northing (ft): 965336.	Coordinate System: Florida State Plane East	Elevation (ft): -4.6 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-5/1	Comments:
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Dry Weight (g): 676.10	Wash Weight (g): 670.20	Pan Retained (g): 0.00	Sieve Loss (%): 0.00	Fines (%): #230 - 0.87	Organics (%):	Carbonates (%): 86.30	Shells (%): 3.62
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		1.76	11.90	1.76
5/8"	-4.00	16.00	2.40	0.35	14.30	2.12
3.5	-2.50	5.66	8.30	1.23	22.60	3.34
4	-2.25	4.76	1.90	0.28	24.50	3.62
5	-2.00	4.00	3.20	0.47	27.70	4.10
7	-1.50	2.83	10.70	1.58	38.40	5.68
10	-1.00	2.00	21.40	3.17	59.80	8.84
14	-0.50	1.41	59.00	8.73	118.80	17.57
18	0.00	1.00	115.90	17.14	234.70	34.71
25	0.50	0.71	157.90	23.35	392.60	58.07
35	1.00	0.50	153.60	22.72	546.20	80.79
45	1.50	0.35	84.90	12.56	631.10	93.34
60	2.00	0.25	27.10	4.01	658.20	97.35
80	2.50	0.18	6.70	0.99	664.90	98.34
120	3.00	0.13	4.20	0.62	669.10	98.96
170	3.50	0.09	0.90	0.13	670.00	99.10
230	4.00	0.06	0.20	0.03	670.20	99.13

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.71	1.13	0.87	0.33	-0.28	-0.59	-1.72

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	0.18	0.88	0.95	-0.67	5.65

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 965058E

Analysis Date: 01-28-11

Analyzed By: JR

Easting (ft): <p style="text-align: center;">954218.</p>	Northing (ft): <p style="text-align: center;">965391.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">-8.6 NAVD 88</p>
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USCS: <p style="text-align: center;">SW</p>	Munsell: <p style="text-align: center;">Wet - 10 YR-5/1</p>	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
680.50	674.70	0.00	0.00	#230 - 0.85		72.20	0.00
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.30	0.04	0.30	0.04	
10	-1.00	2.00	2.40	0.35	2.70	0.40	
14	-0.50	1.41	18.10	2.66	20.80	3.06	
18	0.00	1.00	58.40	8.58	79.20	11.64	
25	0.50	0.71	104.90	15.42	184.10	27.05	
35	1.00	0.50	129.80	19.07	313.90	46.13	
45	1.50	0.35	116.50	17.12	430.40	63.25	
60	2.00	0.25	118.40	17.40	548.80	80.65	
80	2.50	0.18	78.50	11.54	627.30	92.18	
120	3.00	0.13	38.20	5.61	665.50	97.80	
170	3.50	0.09	9.00	1.32	674.50	99.12	
230	4.00	0.06	0.20	0.03	674.70	99.15	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.75	2.15	1.84	1.11	0.43	0.14	-0.39
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.12	0.46	0.93	0.03	2.41	

GRANULOMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 970641A

Analysis Date: 01-14-11

Analyzed By: JR

Easting (ft): 952745.	Northing (ft): 970844.	Coordinate System: Florida State Plane East	Elevation (ft): 7.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
550.70	548.60	0.00	0.02	#230 - 0.40			0.89
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	3.10	0.56	3.10	0.56	
4	-2.25	4.76	1.80	0.33	4.90	0.89	
5	-2.00	4.00	0.30	0.05	5.20	0.94	
7	-1.50	2.83	2.80	0.51	8.00	1.45	
10	-1.00	2.00	5.90	1.07	13.90	2.52	
14	-0.50	1.41	11.20	2.03	25.10	4.56	
18	0.00	1.00	24.30	4.41	49.40	8.97	
25	0.50	0.71	52.10	9.46	101.50	18.43	
35	1.00	0.50	112.20	20.37	213.70	38.81	
45	1.50	0.35	173.90	31.58	387.60	70.38	
60	2.00	0.25	132.60	24.08	520.20	94.46	
80	2.50	0.18	25.80	4.68	546.00	99.15	
120	3.00	0.13	2.20	0.40	548.20	99.55	
170	3.50	0.09	0.20	0.04	548.40	99.58	
230	4.00	0.06	0.10	0.02	548.50	99.60	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.06	1.78	1.60	1.18	0.66	0.37	-0.45
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.04	0.49	0.82	-1.6	7.81	

GRANULARMETRIC REPORT JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 970641B

Analysis Date: 01-14-11

Analyzed By: JR

Easting (ft): <p style="text-align: center;">952884.</p>	Northing (ft): <p style="text-align: center;">970902.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">3.4 NAVD 88</p>
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USCS: <p style="text-align: center;">SP</p>	Munsell: <p style="text-align: center;">Wet - 10 YR-5/1</p>	Comments:
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Dry Weight (g): <p style="text-align: center;">704.10</p>	Wash Weight (g): <p style="text-align: center;">700.00</p>	Pan Retained (g): <p style="text-align: center;">0.00</p>	Sieve Loss (%): <p style="text-align: center;">0.00</p>	Fines (%): <p style="text-align: center;">#230 - 0.58</p>	Organics (%):	Carbonates (%):	Shells (%): <p style="text-align: center;">0.00</p>
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.40	0.06	0.40	0.06
10	-1.00	2.00	0.50	0.07	0.90	0.13
14	-0.50	1.41	4.10	0.58	5.00	0.71
18	0.00	1.00	21.60	3.07	26.60	3.78
25	0.50	0.71	87.20	12.38	113.80	16.16
35	1.00	0.50	210.40	29.88	324.20	46.04
45	1.50	0.35	215.10	30.55	539.30	76.59
60	2.00	0.25	124.30	17.65	663.60	94.25
80	2.50	0.18	33.00	4.69	696.60	98.93
120	3.00	0.13	3.20	0.45	699.80	99.39
170	3.50	0.09	0.10	0.01	699.90	99.40
230	4.00	0.06	0.10	0.01	700.00	99.42

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.08	1.71	1.47	1.06	0.65	0.49	0.05

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.06	0.48	0.61	-0.14	3.31

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 970641C

Analysis Date: 01-14-11

Analyzed By: JR

Easting (ft): <p style="text-align: center;">952908.</p>	Northing (ft): <p style="text-align: center;">970912.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">-0.6 NAVD 88</p>
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USCS: <p style="text-align: center;">SP</p>	Munsell: <p style="text-align: center;">Wet - 10 YR-5/1</p>	Comments:
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Dry Weight (g): <p style="text-align: center;">493.20</p>	Wash Weight (g): <p style="text-align: center;">487.30</p>	Pan Retained (g): <p style="text-align: center;">0.00</p>	Sieve Loss (%): <p style="text-align: center;">0.00</p>	Fines (%): <p style="text-align: center;">#230 - 1.20</p>	Organics (%):	Carbonates (%):	Shells (%): <p style="text-align: center;">0.00</p>
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.30	0.06	0.30	0.06
18	0.00	1.00	0.60	0.12	0.90	0.18
25	0.50	0.71	1.50	0.30	2.40	0.49
35	1.00	0.50	4.70	0.95	7.10	1.44
45	1.50	0.35	15.20	3.08	22.30	4.52
60	2.00	0.25	107.40	21.78	129.70	26.30
80	2.50	0.18	245.90	49.86	375.60	76.16
120	3.00	0.13	90.60	18.37	466.20	94.53
170	3.50	0.09	19.60	3.97	485.80	98.50
230	4.00	0.06	1.50	0.30	487.30	98.80

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.06	2.71	2.49	2.24	1.97	1.76	1.51
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	2.22	0.21	0.48	-0.54	5.87	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 970641D

Analysis Date: 01-18-11

Analyzed By: JR

Easting (ft): 952966.	Northing (ft): 970937.	Coordinate System: Florida State Plane East	Elevation (ft): -4.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/2	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
707.40	699.20	0.00	0.01	#230 - 1.17			1.03
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	6.10	0.86	6.10	0.86	
4	-2.25	4.76	1.20	0.17	7.30	1.03	
5	-2.00	4.00	1.90	0.27	9.20	1.30	
7	-1.50	2.83	9.20	1.30	18.40	2.60	
10	-1.00	2.00	26.10	3.69	44.50	6.29	
14	-0.50	1.41	79.70	11.27	124.20	17.56	
18	0.00	1.00	168.20	23.78	292.40	41.33	
25	0.50	0.71	211.70	29.93	504.10	71.26	
35	1.00	0.50	132.10	18.67	636.20	89.93	
45	1.50	0.35	42.20	5.97	678.40	95.90	
60	2.00	0.25	13.90	1.96	692.30	97.87	
80	2.50	0.18	5.10	0.72	697.40	98.59	
120	3.00	0.13	1.20	0.17	698.60	98.76	
170	3.50	0.09	0.40	0.06	699.00	98.81	
230	4.00	0.06	0.10	0.01	699.10	98.83	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.42	0.84	0.60	0.14	-0.34	-0.57	-1.17
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.1	0.93	0.79	-0.56	5.65	

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 970641E

Analysis Date: 01-18-11

Analyzed By: JR

Easting (ft): <p style="text-align: center;">953115.</p>	Northing (ft): <p style="text-align: center;">970999.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">-8.6 NAVD 88</p>
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USCS: <p style="text-align: center;">SP</p>	Munsell: <p style="text-align: center;">Wet - 10 YR-5/1</p>	Comments:
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Dry Weight (g): <p style="text-align: center;">635.90</p>	Wash Weight (g): <p style="text-align: center;">629.30</p>	Pan Retained (g): <p style="text-align: center;">0.10</p>	Sieve Loss (%): <p style="text-align: center;">0.00</p>	Fines (%): <p style="text-align: center;">#230 - 1.05</p>	Organics (%):	Carbonates (%):	Shells (%): <p style="text-align: center;">0.00</p>
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.40	0.06	0.40	0.06
14	-0.50	1.41	1.80	0.28	2.20	0.35
18	0.00	1.00	7.10	1.12	9.30	1.46
25	0.50	0.71	18.40	2.89	27.70	4.36
35	1.00	0.50	40.30	6.34	68.00	10.69
45	1.50	0.35	67.10	10.55	135.10	21.25
60	2.00	0.25	197.00	30.98	332.10	52.23
80	2.50	0.18	224.10	35.24	556.20	87.47
120	3.00	0.13	57.20	9.00	613.40	96.46
170	3.50	0.09	14.30	2.25	627.70	98.71
230	4.00	0.06	1.50	0.24	629.20	98.95

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.92	2.45	2.32	1.96	1.56	1.25	0.55

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.86	0.28	0.67	-0.84	4.44

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 976899A

Analysis Date: 01-27-11

Analyzed By: JR

Easting (ft): <p style="text-align: center;">951051.</p>	Northing (ft): <p style="text-align: center;">977074.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">7.4 NAVD 88</p>
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USCS: <p style="text-align: center;">SP</p>	Munsell: <p style="text-align: center;">Wet - 10 YR-4/1</p>	Comments:
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Dry Weight (g): <p style="text-align: center;">666.00</p>	Wash Weight (g): <p style="text-align: center;">665.50</p>	Pan Retained (g): <p style="text-align: center;">0.00</p>	Sieve Loss (%): <p style="text-align: center;">0.00</p>	Fines (%): <p style="text-align: center;">#230 - 0.08</p>	Organics (%):	Carbonates (%): <p style="text-align: center;">63.40</p>	Shells (%): <p style="text-align: center;">0.00</p>
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.10	0.02	0.10	0.02
14	-0.50	1.41	0.30	0.05	0.40	0.06
18	0.00	1.00	2.80	0.42	3.20	0.48
25	0.50	0.71	14.60	2.19	17.80	2.67
35	1.00	0.50	78.00	11.71	95.80	14.38
45	1.50	0.35	257.30	38.63	353.10	53.02
60	2.00	0.25	260.40	39.10	613.50	92.12
80	2.50	0.18	48.10	7.22	661.60	99.34
120	3.00	0.13	3.70	0.56	665.30	99.89
170	3.50	0.09	0.10	0.02	665.40	99.91
230	4.00	0.06	0.10	0.02	665.50	99.92

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.20	1.90	1.78	1.46	1.14	1.02	0.60
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.44	0.37	0.46	-0.41	4.02	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 976899B

Analysis Date: 01-27-11

Analyzed By: JR

Easting (ft): <p style="text-align: center;">951070.</p>	Northing (ft): <p style="text-align: center;">977082.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">3.4 NAVD 88</p>
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USCS: <p style="text-align: center;">SP</p>	Munsell: <p style="text-align: center;">Wet - 10 YR-4/1</p>	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
542.90	542.10	0.10	0.02	#230 - 0.18		66.80	0.00
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.20	0.04	0.20	0.04	
7	-1.50	2.83	0.10	0.02	0.30	0.06	
10	-1.00	2.00	0.40	0.07	0.70	0.13	
14	-0.50	1.41	1.20	0.22	1.90	0.35	
18	0.00	1.00	5.10	0.94	7.00	1.29	
25	0.50	0.71	20.60	3.79	27.60	5.08	
35	1.00	0.50	78.40	14.44	106.00	19.52	
45	1.50	0.35	190.00	35.00	296.00	54.52	
60	2.00	0.25	189.10	34.83	485.10	89.35	
80	2.50	0.18	46.40	8.55	531.50	97.90	
120	3.00	0.13	7.80	1.44	539.30	99.34	
170	3.50	0.09	1.40	0.26	540.70	99.59	
230	4.00	0.06	1.20	0.22	541.90	99.82	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.33	1.92	1.79	1.44	1.08	0.88	0.49
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.41	0.38	0.56	-0.33	5.11	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 976899C

Analysis Date: 01-27-11

Analyzed By: JR

Easting (ft): 951115.	Northing (ft): 977101.	Coordinate System: Florida State Plane East	Elevation (ft): -0.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
534.40	531.10	0.00	0.00	#230 - 0.62		62.60	0.00
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.50	0.09	0.50	0.09	0.09
14	-0.50	1.41	2.00	0.37	2.50	0.47	0.47
18	0.00	1.00	8.10	1.52	10.60	1.98	1.98
25	0.50	0.71	30.30	5.67	40.90	7.65	7.65
35	1.00	0.50	72.40	13.55	113.30	21.20	21.20
45	1.50	0.35	96.20	18.00	209.50	39.20	39.20
60	2.00	0.25	200.80	37.57	410.30	76.78	76.78
80	2.50	0.18	104.60	19.57	514.90	96.35	96.35
120	3.00	0.13	15.80	2.96	530.70	99.31	99.31
170	3.50	0.09	0.30	0.06	531.00	99.36	99.36
230	4.00	0.06	0.10	0.02	531.10	99.38	99.38

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.47	2.18	1.98	1.64	1.11	0.81	0.27
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.52	0.35	0.66	-0.69	3.42	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 976899D

Analysis Date: 01-27-11

Analyzed By: JR

Easting (ft):

951139.

Northing (ft):

977111.

Coordinate System:

Florida State Plane East

Elevation (ft):

-4.6 NAVD 88

USCS:

SW

Munsell:

Wet - 10 YR-4/1

Comments:

Dry Weight (g):

669.60

Wash Weight (g):

664.50

Pan Retained (g):

0.00

Sieve Loss (%):

0.00

Fines (%):

#230 - 0.76

Organics (%):

Carbonates (%):

85.70

Shells (%):

2.66

Sieve Number

Sieve Size (Phi)

Sieve Size (Millimeters)

Grams Retained

% Weight Retained

Cum. Grams Retained

C. % Weight Retained

3/4"

-4.25

19.03

0.00

0.00

0.00

0.00

5/8"

-4.00

16.00

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

12.70

1.90

12.70

1.90

4

-2.25

4.76

5.10

0.76

17.80

2.66

5

-2.00

4.00

7.90

1.18

25.70

3.84

7

-1.50

2.83

20.20

3.02

45.90

6.85

10

-1.00

2.00

33.70

5.03

79.60

11.89

14

-0.50

1.41

69.60

10.39

149.20

22.28

18

0.00

1.00

112.20

16.76

261.40

39.04

25

0.50

0.71

144.00

21.51

405.40

60.54

35

1.00

0.50

118.80

17.74

524.20

78.29

45

1.50

0.35

55.90

8.35

580.10

86.63

60

2.00

0.25

45.10

6.74

625.20

93.37

80

2.50

0.18

29.70

4.44

654.90

97.80

120

3.00

0.13

9.00

1.34

663.90

99.15

170

3.50

0.09

0.50

0.07

664.40

99.22

230

4.00

0.06

0.10

0.01

664.50

99.24

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

2.18

1.34

0.91

0.25

-0.42

-0.80

-1.81

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

0.21

0.86

1.14

-0.39

3.69

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 976899E

Analysis Date: 01-27-11

Analyzed By: JR

Easting (ft): <p style="text-align: center;">951165.</p>	Northing (ft): <p style="text-align: center;">977122.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">-8.6 NAVD 88</p>
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USCS: <p style="text-align: center;">SP</p>	Munsell: <p style="text-align: center;">Wet - 10 YR-5/1</p>	Comments:
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Dry Weight (g): <p style="text-align: center;">585.00</p>	Wash Weight (g): <p style="text-align: center;">580.90</p>	Pan Retained (g): <p style="text-align: center;">0.00</p>	Sieve Loss (%): <p style="text-align: center;">0.00</p>	Fines (%): <p style="text-align: center;">#230 - 0.70</p>	Organics (%):	Carbonates (%): <p style="text-align: center;">50.60</p>	Shells (%): <p style="text-align: center;">0.00</p>
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.10	0.02	0.10	0.02
10	-1.00	2.00	0.60	0.10	0.70	0.12
14	-0.50	1.41	1.60	0.27	2.30	0.39
18	0.00	1.00	4.20	0.72	6.50	1.11
25	0.50	0.71	8.40	1.44	14.90	2.55
35	1.00	0.50	19.90	3.40	34.80	5.95
45	1.50	0.35	64.10	10.96	98.90	16.91
60	2.00	0.25	235.50	40.26	334.40	57.16
80	2.50	0.18	167.70	28.67	502.10	85.83
120	3.00	0.13	64.80	11.08	566.90	96.91
170	3.50	0.09	13.80	2.36	580.70	99.26
230	4.00	0.06	0.20	0.03	580.90	99.30

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.91	2.47	2.31	1.91	1.60	1.46	0.86

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.91	0.27	0.61	-0.8	5.66

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 983302A

Analysis Date: 01-12-11

Analyzed By: JR

Easting (ft): 948679.	Northing (ft): 983453.	Coordinate System: Florida State Plane East	Elevation (ft): 7.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
598.20	598.10	0.00	0.00	#230 - 0.02			0.33
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.80	0.13	0.80	0.13	
3.5	-2.50	5.66	0.70	0.12	1.50	0.25	
4	-2.25	4.76	0.50	0.08	2.00	0.33	
5	-2.00	4.00	0.60	0.10	2.60	0.43	
7	-1.50	2.83	1.30	0.22	3.90	0.65	
10	-1.00	2.00	5.00	0.84	8.90	1.49	
14	-0.50	1.41	22.70	3.79	31.60	5.28	
18	0.00	1.00	80.00	13.37	111.60	18.66	
25	0.50	0.71	132.10	22.08	243.70	40.74	
35	1.00	0.50	182.20	30.46	425.90	71.20	
45	1.50	0.35	137.50	22.99	563.40	94.18	
60	2.00	0.25	33.20	5.55	596.60	99.73	
80	2.50	0.18	1.10	0.18	597.70	99.92	
120	3.00	0.13	0.10	0.02	597.80	99.93	
170	3.50	0.09	0.10	0.02	597.90	99.95	
230	4.00	0.06	0.20	0.03	598.10	99.98	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.57	1.28	1.08	0.65	0.14	-0.10	-0.54
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.58	0.67	0.69	-0.96	6.79	

GRANULOMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 983302B

Analysis Date: 01-12-11

Analyzed By: JR

Easting (ft): 948722.	Northing (ft): 983471.	Coordinate System: Florida State Plane East	Elevation (ft): 3.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
665.60	665.60	0.00	0.00	#230 - 0.00			0.09
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.60	0.09	0.60	0.09	
5	-2.00	4.00	0.30	0.05	0.90	0.14	
7	-1.50	2.83	0.20	0.03	1.10	0.17	
10	-1.00	2.00	0.70	0.11	1.80	0.27	
14	-0.50	1.41	1.40	0.21	3.20	0.48	
18	0.00	1.00	5.70	0.86	8.90	1.34	
25	0.50	0.71	24.50	3.68	33.40	5.02	
35	1.00	0.50	152.50	22.91	185.90	27.93	
45	1.50	0.35	315.20	47.36	501.10	75.29	
60	2.00	0.25	154.00	23.14	655.10	98.42	
80	2.50	0.18	8.10	1.22	663.20	99.64	
120	3.00	0.13	0.50	0.08	663.70	99.71	
170	3.50	0.09	1.70	0.26	665.40	99.97	
230	4.00	0.06	0.20	0.03	665.60	100.00	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.93	1.69	1.50	1.23	0.94	0.74	0.50
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.21	0.43	0.48	-0.89	8.91	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 983302C

Analysis Date: 01-14-11

Analyzed By: JR

Easting (ft): 948742.	Northing (ft): 983479.	Coordinate System: Florida State Plane East	Elevation (ft): -0.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
820.10	813.40	0.00	0.00	#230 - 0.82			0.11
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.70	0.09	0.70	0.09	
4	-2.25	4.76	0.20	0.02	0.90	0.11	
5	-2.00	4.00	0.70	0.09	1.60	0.20	
7	-1.50	2.83	1.70	0.21	3.30	0.40	
10	-1.00	2.00	4.50	0.55	7.80	0.95	
14	-0.50	1.41	15.80	1.93	23.60	2.88	
18	0.00	1.00	51.60	6.29	75.20	9.17	
25	0.50	0.71	175.60	21.41	250.80	30.58	
35	1.00	0.50	403.40	49.19	654.20	79.77	
45	1.50	0.35	147.90	18.03	802.10	97.81	
60	2.00	0.25	10.40	1.27	812.50	99.07	
80	2.50	0.18	0.20	0.02	812.70	99.10	
120	3.00	0.13	0.20	0.02	812.90	99.12	
170	3.50	0.09	0.10	0.01	813.00	99.13	
230	4.00	0.06	0.40	0.05	813.40	99.18	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.42	1.12	0.95	0.70	0.37	0.16	-0.33
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.63	0.65	0.52	-1.18	8.48	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 983302D

Analysis Date: 01-14-11

Analyzed By: JR

Easting (ft): 948763.	Northing (ft): 983488.	Coordinate System: Florida State Plane East	Elevation (ft): -4.6 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/2	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
693.50	688.20	0.00	0.00	#230 - 0.76			19.78
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		4.77	33.10	4.77	
5/8"	-4.00	16.00	2.20	0.32	35.30	5.09	
3.5	-2.50	5.66	87.70	12.65	123.00	17.74	
4	-2.25	4.76	14.20	2.05	137.20	19.78	
5	-2.00	4.00	16.70	2.41	153.90	22.19	
7	-1.50	2.83	33.20	4.79	187.10	26.98	
10	-1.00	2.00	32.70	4.72	219.80	31.69	
14	-0.50	1.41	52.30	7.54	272.10	39.24	
18	0.00	1.00	95.70	13.80	367.80	53.04	
25	0.50	0.71	131.80	19.01	499.60	72.04	
35	1.00	0.50	125.40	18.08	625.00	90.12	
45	1.50	0.35	54.80	7.90	679.80	98.02	
60	2.00	0.25	7.80	1.12	687.60	99.15	
80	2.50	0.18	0.30	0.04	687.90	99.19	
120	3.00	0.13	0.10	0.01	688.00	99.21	
170	3.50	0.09	0.10	0.01	688.10	99.22	
230	4.00	0.06	0.10	0.01	688.20	99.24	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.31	0.83	0.58	-0.11	-1.71	-2.71	-4.07
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	-0.67	1.59	1.41	-0.4	2.25	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 983302E

Analysis Date: 01-14-11

Analyzed By: JR

Easting (ft): 948869.	Northing (ft): 983532.	Coordinate System: Florida State Plane East	Elevation (ft): -8.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments:
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Dry Weight (g): 770.80	Wash Weight (g): 763.90	Pan Retained (g): 0.10	Sieve Loss (%): 0.00	Fines (%): #230 - 0.91	Organics (%):	Carbonates (%):	Shells (%): 0.00
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.10	0.01	0.10	0.01
10	-1.00	2.00	0.20	0.03	0.30	0.04
14	-0.50	1.41	3.70	0.48	4.00	0.52
18	0.00	1.00	26.30	3.41	30.30	3.93
25	0.50	0.71	86.10	11.17	116.40	15.10
35	1.00	0.50	201.40	26.13	317.80	41.23
45	1.50	0.35	295.30	38.31	613.10	79.54
60	2.00	0.25	135.20	17.54	748.30	97.08
80	2.50	0.18	12.10	1.57	760.40	98.65
120	3.00	0.13	1.50	0.19	761.90	98.85
170	3.50	0.09	1.60	0.21	763.50	99.05
230	4.00	0.06	0.30	0.04	763.80	99.09

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.94	1.63	1.44	1.11	0.69	0.52	0.05
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.06	0.48	0.56	-0.28	3.77	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 988526A

Analysis Date: 01-26-11

Analyzed By: JR

Easting (ft): 946672.	Northing (ft): 988683.	Coordinate System: Florida State Plane East	Elevation (ft): 7.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
597.20	597.10	0.00	0.02	#230 - 0.03		67.20	0.00
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.20	0.03	0.20	0.03	
7	-1.50	2.83	0.29	0.05	0.49	0.08	
10	-1.00	2.00	0.33	0.06	0.82	0.14	
14	-0.50	1.41	0.79	0.13	1.61	0.27	
18	0.00	1.00	3.04	0.51	4.65	0.78	
25	0.50	0.71	15.45	2.59	20.10	3.37	
35	1.00	0.50	88.89	14.88	108.99	18.25	
45	1.50	0.35	279.95	46.88	388.94	65.13	
60	2.00	0.25	182.08	30.49	571.02	95.62	
80	2.50	0.18	22.11	3.70	593.13	99.32	
120	3.00	0.13	2.11	0.35	595.24	99.67	
170	3.50	0.09	1.58	0.26	596.82	99.94	
230	4.00	0.06	0.19	0.03	597.01	99.97	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.99	1.81	1.66	1.34	1.07	0.92	0.55
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.34	0.40	0.47	-0.5	6.81	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 988526B

Analysis Date: 01-26-11

Analyzed By: JR

Easting (ft): 946714.	Northing (ft): 988701.	Coordinate System: Florida State Plane East	Elevation (ft): 3.4 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-5/1	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
630.50	628.10	0.00	0.00	#230 - 0.38		69.80	20.21
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	2.80	0.44	2.80	0.44	
3.5	-2.50	5.66	104.50	16.57	107.30	17.02	
4	-2.25	4.76	20.10	3.19	127.40	20.21	
5	-2.00	4.00	27.40	4.35	154.80	24.55	
7	-1.50	2.83	59.40	9.42	214.20	33.97	
10	-1.00	2.00	69.50	11.02	283.70	45.00	
14	-0.50	1.41	101.10	16.03	384.80	61.03	
18	0.00	1.00	126.40	20.05	511.20	81.08	
25	0.50	0.71	86.40	13.70	597.60	94.78	
35	1.00	0.50	26.80	4.25	624.40	99.03	
45	1.50	0.35	2.70	0.43	627.10	99.46	
60	2.00	0.25	0.20	0.03	627.30	99.49	
80	2.50	0.18	0.10	0.02	627.40	99.51	
120	3.00	0.13	0.10	0.02	627.50	99.52	
170	3.50	0.09	0.30	0.05	627.80	99.57	
230	4.00	0.06	0.30	0.05	628.10	99.62	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
0.53	0.11	-0.15	-0.84	-1.98	-2.59	-3.59
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	-1.13	2.19	1.25	-0.45	2.33	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 988526C

Analysis Date: 01-26-11

Analyzed By: JR

Easting (ft): 946741.	Northing (ft): 988712.	Coordinate System: Florida State Plane East	Elevation (ft): -0.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/1	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
616.40	610.80	0.00	0.02	#230 - 0.92		88.30	0.06
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.40	0.06	0.40	0.06	
5	-2.00	4.00	0.50	0.08	0.90	0.15	
7	-1.50	2.83	0.90	0.15	1.80	0.29	
10	-1.00	2.00	4.40	0.71	6.20	1.01	
14	-0.50	1.41	23.20	3.76	29.40	4.77	
18	0.00	1.00	96.90	15.72	126.30	20.49	
25	0.50	0.71	231.10	37.49	357.40	57.98	
35	1.00	0.50	197.80	32.09	555.20	90.07	
45	1.50	0.35	46.40	7.53	601.60	97.60	
60	2.00	0.25	7.10	1.15	608.70	98.75	
80	2.50	0.18	1.30	0.21	610.00	98.96	
120	3.00	0.13	0.30	0.05	610.30	99.01	
170	3.50	0.09	0.30	0.05	610.60	99.06	
230	4.00	0.06	0.10	0.02	610.70	99.08	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.33	0.91	0.77	0.39	0.06	-0.14	-0.49
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.38	0.77	0.54	-0.2	4.92	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 988526D

Analysis Date: 01-26-11

Analyzed By: JR

Easting (ft): 946768.	Northing (ft): 988724.	Coordinate System: Florida State Plane East	Elevation (ft): -4.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/2	Comments:
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Dry Weight (g): 437.40	Wash Weight (g): 435.50	Pan Retained (g): 0.00	Sieve Loss (%): 0.00	Fines (%): #230 - 0.43	Organics (%):	Carbonates (%): 96.90	Shells (%): 0.00
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.20	0.05	0.20	0.05
10	-1.00	2.00	0.40	0.09	0.60	0.14
14	-0.50	1.41	1.20	0.27	1.80	0.41
18	0.00	1.00	7.40	1.69	9.20	2.10
25	0.50	0.71	36.70	8.39	45.90	10.49
35	1.00	0.50	137.10	31.34	183.00	41.84
45	1.50	0.35	175.10	40.03	358.10	81.87
60	2.00	0.25	67.90	15.52	426.00	97.39
80	2.50	0.18	8.70	1.99	434.70	99.38
120	3.00	0.13	0.60	0.14	435.30	99.52
170	3.50	0.09	0.10	0.02	435.40	99.54
230	4.00	0.06	0.10	0.02	435.50	99.57

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.92	1.57	1.41	1.10	0.73	0.59	0.17
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.07	0.48	0.51	-0.31	4.28	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 988526E

Analysis Date: 01-26-11

Analyzed By: JR

Easting (ft): <p style="text-align: center;">947074.</p>	Northing (ft): <p style="text-align: center;">988851.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">-8.6 NAVD 88</p>
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USCS: <p style="text-align: center;">SP</p>	Munsell: <p style="text-align: center;">Wet - 10 YR-4/1</p>	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
766.70	760.30	0.00	0.00	#230 - 0.83		77.70	0.01
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.10	0.01	0.10	0.01	
5	-2.00	4.00	0.10	0.01	0.20	0.03	
7	-1.50	2.83	0.40	0.05	0.60	0.08	
10	-1.00	2.00	1.80	0.23	2.40	0.31	
14	-0.50	1.41	13.60	1.77	16.00	2.09	
18	0.00	1.00	51.80	6.76	67.80	8.84	
25	0.50	0.71	122.30	15.95	190.10	24.79	
35	1.00	0.50	223.70	29.18	413.80	53.97	
45	1.50	0.35	241.60	31.51	655.40	85.48	
60	2.00	0.25	86.30	11.26	741.70	96.74	
80	2.50	0.18	14.20	1.85	755.90	98.59	
120	3.00	0.13	3.10	0.40	759.00	99.00	
170	3.50	0.09	1.10	0.14	760.10	99.14	
230	4.00	0.06	0.20	0.03	760.30	99.17	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.92	1.48	1.33	0.93	0.50	0.22	-0.28
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.88	0.54	0.64	-0.26	3.66	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 993615A

Analysis Date: 01-10-11

Analyzed By: JR

Easting (ft): 944437.	Northing (ft): 993818.	Coordinate System: Florida State Plane East	Elevation (ft): 7.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
1092.10	1091.80	0.10	0.00	#230 - 0.04			0.54
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	5.10	0.47	5.10	0.47	
4	-2.25	4.76	0.80	0.07	5.90	0.54	
5	-2.00	4.00	1.80	0.16	7.70	0.71	
7	-1.50	2.83	1.90	0.17	9.60	0.88	
10	-1.00	2.00	3.00	0.27	12.60	1.15	
14	-0.50	1.41	9.80	0.90	22.40	2.05	
18	0.00	1.00	36.10	3.31	58.50	5.36	
25	0.50	0.71	106.10	9.72	164.60	15.07	
35	1.00	0.50	263.50	24.13	428.10	39.20	
45	1.50	0.35	364.30	33.36	792.40	72.56	
60	2.00	0.25	223.70	20.48	1016.10	93.04	
80	2.50	0.18	58.10	5.32	1074.20	98.36	
120	3.00	0.13	14.90	1.36	1089.10	99.73	
170	3.50	0.09	2.30	0.21	1091.40	99.94	
230	4.00	0.06	0.30	0.03	1091.70	99.96	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.18	1.78	1.56	1.16	0.71	0.52	-0.05
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.1	0.47	0.74	-1.32	9.08	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT - 5/2/11

Granularmetric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 993615B

Analysis Date: 01-10-11

Analyzed By: JR

Easting (ft): 944452.	Northing (ft): 993824.	Coordinate System: Florida State Plane East	Elevation (ft): 3.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments:
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Dry Weight (g): 942.50	Wash Weight (g): 941.50	Pan Retained (g): 0.00	Sieve Loss (%): 0.01	Fines (%): #230 - 0.12	Organics (%):	Carbonates (%):	Shells (%): 0.41
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	3.40	0.36	3.40	0.36
4	-2.25	4.76	0.50	0.05	3.90	0.41
5	-2.00	4.00	0.30	0.03	4.20	0.45
7	-1.50	2.83	1.20	0.13	5.40	0.57
10	-1.00	2.00	1.30	0.14	6.70	0.71
14	-0.50	1.41	2.90	0.31	9.60	1.02
18	0.00	1.00	4.80	0.51	14.40	1.53
25	0.50	0.71	12.30	1.31	26.70	2.83
35	1.00	0.50	62.10	6.59	88.80	9.42
45	1.50	0.35	341.40	36.22	430.20	45.64
60	2.00	0.25	409.20	43.42	839.40	89.06
80	2.50	0.18	81.40	8.64	920.80	97.70
120	3.00	0.13	18.00	1.91	938.80	99.61
170	3.50	0.09	2.30	0.24	941.10	99.85
230	4.00	0.06	0.30	0.03	941.40	99.88

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.34	1.94	1.84	1.55	1.22	1.09	0.66

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.5	0.35	0.59	-2.64	21.38

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 993615C

Analysis Date: 01-10-11

Analyzed By: JR

Easting (ft): 944507.	Northing (ft): 993847.	Coordinate System: Florida State Plane East	Elevation (ft): -0.6 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/2	Comments:
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Dry Weight (g): 755.01	Wash Weight (g): 755.00	Pan Retained (g): 0.00	Sieve Loss (%): 0.00	Fines (%): #230 - 0.00	Organics (%):	Carbonates (%):	Shells (%): 0.17
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.10	0.15	1.10	0.15
4	-2.25	4.76	0.20	0.03	1.30	0.17
5	-2.00	4.00	0.90	0.12	2.20	0.29
7	-1.50	2.83	3.40	0.45	5.60	0.74
10	-1.00	2.00	9.70	1.28	15.30	2.03
14	-0.50	1.41	26.80	3.55	42.10	5.58
18	0.00	1.00	62.20	8.24	104.30	13.81
25	0.50	0.71	111.50	14.77	215.80	28.58
35	1.00	0.50	153.40	20.32	369.20	48.90
45	1.50	0.35	138.90	18.40	508.10	67.30
60	2.00	0.25	129.10	17.10	637.20	84.40
80	2.50	0.18	86.00	11.39	723.20	95.79
120	3.00	0.13	25.00	3.31	748.20	99.10
170	3.50	0.09	4.90	0.65	753.10	99.75
230	4.00	0.06	1.90	0.25	755.00	100.00

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.47	1.99	1.73	1.03	0.38	0.07	-0.58

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.02	0.49	0.95	-0.3	3.32

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 993615D

Analysis Date: 01-10-11

Analyzed By: JR

Easting (ft): 944530.	Northing (ft): 993857.	Coordinate System: Florida State Plane East	Elevation (ft): -4.6 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-4/2	Comments:
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Dry Weight (g): 668.20	Wash Weight (g): 666.20	Pan Retained (g): 0.00	Sieve Loss (%): 0.07	Fines (%): #230 - 0.37	Organics (%):	Carbonates (%):	Shells (%): 5.48
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	4.60	0.69	4.60	0.69
3.5	-2.50	5.66	24.80	3.71	29.40	4.40
4	-2.25	4.76	7.20	1.08	36.60	5.48
5	-2.00	4.00	12.00	1.80	48.60	7.27
7	-1.50	2.83	35.70	5.34	84.30	12.62
10	-1.00	2.00	65.10	9.74	149.40	22.36
14	-0.50	1.41	112.80	16.88	262.20	39.24
18	0.00	1.00	153.10	22.91	415.30	62.15
25	0.50	0.71	134.10	20.07	549.40	82.22
35	1.00	0.50	63.80	9.55	613.20	91.77
45	1.50	0.35	18.00	2.69	631.20	94.46
60	2.00	0.25	10.00	1.50	641.20	95.96
80	2.50	0.18	10.30	1.54	651.50	97.50
120	3.00	0.13	9.10	1.36	660.60	98.86
170	3.50	0.09	4.80	0.72	665.40	99.58
230	4.00	0.06	0.30	0.04	665.70	99.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
1.68	0.59	0.32	-0.27	-0.92	-1.33	-2.36
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	-0.33	1.26	1.18	-0.18	4.49	

GRANULOMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 993615E

Analysis Date: 01-10-11

Analyzed By: JR

Easting (ft): 944637.	Northing (ft): 993902.	Coordinate System: Florida State Plane East	Elevation (ft): -8.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-6/1	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
813.20	808.40	0.90	0.04	#230 - 0.74			0.00
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.10	0.01	0.10	0.01	
7	-1.50	2.83	0.40	0.05	0.50	0.06	
10	-1.00	2.00	1.20	0.15	1.70	0.21	
14	-0.50	1.41	3.50	0.43	5.20	0.64	
18	0.00	1.00	7.50	0.92	12.70	1.56	
25	0.50	0.71	10.70	1.32	23.40	2.88	
35	1.00	0.50	12.20	1.50	35.60	4.38	
45	1.50	0.35	13.60	1.67	49.20	6.05	
60	2.00	0.25	31.60	3.89	80.80	9.94	
80	2.50	0.18	267.70	32.92	348.50	42.86	
120	3.00	0.13	396.70	48.78	745.20	91.64	
170	3.50	0.09	52.90	6.51	798.10	98.14	
230	4.00	0.06	9.10	1.12	807.20	99.26	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.26	2.92	2.83	2.57	2.23	2.09	1.19
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	2.45	0.18	0.64	-2.39	11.56	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-70A

Analysis Date: 01-24-11

Analyzed By: JR

Easting (ft): <p style="text-align: center;">937695.</p>	Northing (ft): <p style="text-align: center;">1007629.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">7.4 NAVD 88</p>
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USCS: <p style="text-align: center;">SP</p>	Munsell: <p style="text-align: center;">Wet - 10 YR-6/2</p>	Comments:
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Dry Weight (g): <p style="text-align: center;">596.40</p>	Wash Weight (g): <p style="text-align: center;">592.80</p>	Pan Retained (g): <p style="text-align: center;">0.00</p>	Sieve Loss (%): <p style="text-align: center;">0.00</p>	Fines (%): <p style="text-align: center;">#230 - 0.60</p>	Organics (%):	Carbonates (%): <p style="text-align: center;">50.10</p>	Shells (%): <p style="text-align: center;">0.00</p>
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.70	0.12	0.70	0.12
7	-1.50	2.83	0.50	0.08	1.20	0.20
10	-1.00	2.00	1.10	0.18	2.30	0.39
14	-0.50	1.41	2.70	0.45	5.00	0.84
18	0.00	1.00	9.60	1.61	14.60	2.45
25	0.50	0.71	38.30	6.42	52.90	8.87
35	1.00	0.50	128.50	21.55	181.40	30.42
45	1.50	0.35	201.70	33.82	383.10	64.24
60	2.00	0.25	151.80	25.45	534.90	89.69
80	2.50	0.18	44.40	7.44	579.30	97.13
120	3.00	0.13	11.10	1.86	590.40	98.99
170	3.50	0.09	2.30	0.39	592.70	99.38
230	4.00	0.06	0.10	0.02	592.80	99.40

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.36	1.89	1.71	1.29	0.87	0.67	0.20
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.27	0.41	0.64	-0.4	4.85	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-70B

Analysis Date: 01-24-11

Analyzed By: JR

Easting (ft): <p style="text-align: center;">937726.</p>	Northing (ft): <p style="text-align: center;">1007642.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">3.4 NAVD 88</p>
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USCS: <p style="text-align: center;">SP</p>	Munsell: <p style="text-align: center;">Wet - 10 YR-5/2</p>	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
382.30	380.00	0.10	0.03	#230 - 0.65		64.20	0.00
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.60	0.16	0.60	0.16	
10	-1.00	2.00	0.40	0.10	1.00	0.26	
14	-0.50	1.41	2.50	0.65	3.50	0.92	
18	0.00	1.00	13.20	3.45	16.70	4.37	
25	0.50	0.71	44.90	11.74	61.60	16.11	
35	1.00	0.50	84.40	22.08	146.00	38.19	
45	1.50	0.35	72.40	18.94	218.40	57.13	
60	2.00	0.25	81.70	21.37	300.10	78.50	
80	2.50	0.18	56.70	14.83	356.80	93.33	
120	3.00	0.13	19.20	5.02	376.00	98.35	
170	3.50	0.09	3.70	0.97	379.70	99.32	
230	4.00	0.06	0.10	0.03	379.80	99.35	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.67	2.19	1.92	1.31	0.70	0.50	0.03

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.3	0.41	0.81	-0.09	2.73

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
 Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-70C

Analysis Date: 01-24-11

Analyzed By: JR

Easting (ft): 937758.	Northing (ft): 1007655.	Coordinate System: Florida State Plane East	Elevation (ft): -0.6 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-6/2	Comments:
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Dry Weight (g): 499.10	Wash Weight (g): 494.70	Pan Retained (g): 0.00	Sieve Loss (%): 0.02	Fines (%): #230 - 0.90	Organics (%):	Carbonates (%): 58.00	Shells (%): 1.00
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	4.00	0.80	4.00	0.80
4	-2.25	4.76	1.00	0.20	5.00	1.00
5	-2.00	4.00	0.80	0.16	5.80	1.16
7	-1.50	2.83	5.80	1.16	11.60	2.32
10	-1.00	2.00	18.90	3.79	30.50	6.11
14	-0.50	1.41	41.60	8.34	72.10	14.45
18	0.00	1.00	52.30	10.48	124.40	24.92
25	0.50	0.71	48.00	9.62	172.40	34.54
35	1.00	0.50	36.50	7.31	208.90	41.86
45	1.50	0.35	25.90	5.19	234.80	47.04
60	2.00	0.25	70.70	14.17	305.50	61.21
80	2.50	0.18	92.90	18.61	398.40	79.82
120	3.00	0.13	71.70	14.37	470.10	94.19
170	3.50	0.09	21.70	4.35	491.80	98.54
230	4.00	0.06	2.80	0.56	494.60	99.10

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.09	2.65	2.37	1.60	0.00	-0.43	-1.15

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.19	0.44	1.41	-0.51	2.44

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-70D

Analysis Date: 01-24-11

Analyzed By: JR

Easting (ft): <p style="text-align: center;">937683.</p>	Northing (ft): <p style="text-align: center;">1007699.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">-4.6 NAVD 88</p>
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USCS: <p style="text-align: center;">SP</p>	Munsell: <p style="text-align: center;">Wet - 10 YR-6/1</p>	Comments:
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Dry Weight (g): <p style="text-align: center;">723.20</p>	Wash Weight (g): <p style="text-align: center;">716.40</p>	Pan Retained (g): <p style="text-align: center;">0.10</p>	Sieve Loss (%): <p style="text-align: center;">0.01</p>	Fines (%): <p style="text-align: center;">#230 - 0.97</p>	Organics (%):	Carbonates (%): <p style="text-align: center;">39.40</p>	Shells (%): <p style="text-align: center;">0.06</p>
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.40	0.06	0.40	0.06
5	-2.00	4.00	0.10	0.01	0.50	0.07
7	-1.50	2.83	1.00	0.14	1.50	0.21
10	-1.00	2.00	1.30	0.18	2.80	0.39
14	-0.50	1.41	3.60	0.50	6.40	0.88
18	0.00	1.00	6.50	0.90	12.90	1.78
25	0.50	0.71	14.60	2.02	27.50	3.80
35	1.00	0.50	39.40	5.45	66.90	9.25
45	1.50	0.35	81.50	11.27	148.40	20.52
60	2.00	0.25	179.60	24.83	328.00	45.35
80	2.50	0.18	214.10	29.60	542.10	74.96
120	3.00	0.13	133.70	18.49	675.80	93.45
170	3.50	0.09	34.80	4.81	710.60	98.26
230	4.00	0.06	5.60	0.77	716.20	99.03

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.16	2.74	2.50	2.08	1.59	1.30	0.61
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.99	0.25	0.77	-0.95	5.33	

GRANULOMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT - 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-70E

Analysis Date: 01-24-11

Analyzed By: JR

Easting (ft): 937961.	Northing (ft): 1007740.	Coordinate System: Florida State Plane East	Elevation (ft): -8.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-6/1	Comments:
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Dry Weight (g): 494.50	Wash Weight (g): 488.00	Pan Retained (g): 0.60	Sieve Loss (%): 0.00	Fines (%): #230 - 1.44	Organics (%):	Carbonates (%): 20.90	Shells (%): 0.00
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.30	0.06	0.30	0.06
7	-1.50	2.83	1.00	0.20	1.30	0.26
10	-1.00	2.00	1.60	0.32	2.90	0.59
14	-0.50	1.41	3.40	0.69	6.30	1.27
18	0.00	1.00	5.20	1.05	11.50	2.33
25	0.50	0.71	6.50	1.31	18.00	3.64
35	1.00	0.50	9.10	1.84	27.10	5.48
45	1.50	0.35	8.40	1.70	35.50	7.18
60	2.00	0.25	11.40	2.31	46.90	9.48
80	2.50	0.18	38.40	7.77	85.30	17.25
120	3.00	0.13	321.00	64.91	406.30	82.16
170	3.50	0.09	68.50	13.85	474.80	96.02
230	4.00	0.06	12.60	2.55	487.40	98.56

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.46	3.07	2.94	2.75	2.56	2.42	0.87

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.61	0.16	0.76	-2.81	12.73

GRANULOMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-75A

Analysis Date: 01-07-11

Analyzed By: JR

Easting (ft): <p style="text-align: center;">939732.</p>	Northing (ft): <p style="text-align: center;">1003630.</p>	Coordinate System: <p style="text-align: center;">Florida State Plane East</p>	Elevation (ft): <p style="text-align: center;">7.4 NAVD 88</p>
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USCS: <p style="text-align: center;">SP</p>	Munsell: <p style="text-align: center;">Wet - 10 YR-5/1</p>	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
573.10	572.80	0.10	0.02	#230 - 0.09			0.00
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.80	0.14	0.80	0.14	
7	-1.50	2.83	0.00	0.00	0.80	0.14	
10	-1.00	2.00	0.10	0.02	0.90	0.16	
14	-0.50	1.41	0.20	0.03	1.10	0.19	
18	0.00	1.00	3.70	0.65	4.80	0.84	
25	0.50	0.71	20.60	3.59	25.40	4.43	
35	1.00	0.50	88.30	15.41	113.70	19.84	
45	1.50	0.35	207.60	36.22	321.30	56.06	
60	2.00	0.25	187.90	32.79	509.20	88.85	
80	2.50	0.18	54.20	9.46	563.40	98.31	
120	3.00	0.13	8.80	1.54	572.20	99.84	
170	3.50	0.09	0.10	0.02	572.30	99.86	
230	4.00	0.06	0.30	0.05	572.60	99.91	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.33	1.93	1.79	1.42	1.07	0.88	0.52
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.4	0.38	0.55	-0.5	5.55	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-75B

Analysis Date: 01-07-11

Analyzed By:

Easting (ft): 939769.	Northing (ft): 1003645.	Coordinate System: Florida State Plane East	Elevation (ft): 3.4 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-5/2	Comments:
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Dry Weight (g): 594.50	Wash Weight (g): 593.40	Pan Retained (g): 0.10	Sieve Loss (%): 0.00	Fines (%): #230 - 0.20	Organics (%):	Carbonates (%):	Shells (%): 1.41
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	7.10	1.19	7.10	1.19
3.5	-2.50	5.66	1.00	0.17	8.10	1.36
4	-2.25	4.76	0.30	0.05	8.40	1.41
5	-2.00	4.00	0.80	0.13	9.20	1.55
7	-1.50	2.83	0.40	0.07	9.60	1.61
10	-1.00	2.00	1.60	0.27	11.20	1.88
14	-0.50	1.41	10.20	1.72	21.40	3.60
18	0.00	1.00	36.10	6.07	57.50	9.67
25	0.50	0.71	112.60	18.94	170.10	28.61
35	1.00	0.50	175.10	29.45	345.20	58.07
45	1.50	0.35	143.20	24.09	488.40	82.15
60	2.00	0.25	74.90	12.60	563.30	94.75
80	2.50	0.18	24.90	4.19	588.20	98.94
120	3.00	0.13	4.80	0.81	593.00	99.75
170	3.50	0.09	0.10	0.02	593.10	99.76
230	4.00	0.06	0.20	0.03	593.30	99.80

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.03	1.57	1.35	0.86	0.40	0.17	-0.38
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	0.82	0.57	0.9	-2.1	13.16	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-75C

Analysis Date: 01-07-11

Analyzed By: JR

Easting (ft): 939793.	Northing (ft): 1003655.	Coordinate System: Florida State Plane East	Elevation (ft): -0.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/2	Comments:
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Dry Weight (g): 649.10	Wash Weight (g): 647.40	Pan Retained (g): 0.00	Sieve Loss (%): 0.00	Fines (%): #230 - 0.26	Organics (%):	Carbonates (%):	Shells (%): 0.17
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	1.00	0.15	1.00	0.15
4	-2.25	4.76	0.10	0.02	1.10	0.17
5	-2.00	4.00	0.60	0.09	1.70	0.26
7	-1.50	2.83	1.70	0.26	3.40	0.52
10	-1.00	2.00	5.50	0.85	8.90	1.37
14	-0.50	1.41	15.40	2.37	24.30	3.74
18	0.00	1.00	34.50	5.32	58.80	9.06
25	0.50	0.71	86.50	13.33	145.30	22.38
35	1.00	0.50	223.90	34.49	369.20	56.88
45	1.50	0.35	175.00	26.96	544.20	83.84
60	2.00	0.25	63.20	9.74	607.40	93.58
80	2.50	0.18	29.70	4.58	637.10	98.15
120	3.00	0.13	9.20	1.42	646.30	99.57
170	3.50	0.09	1.00	0.15	647.30	99.72
230	4.00	0.06	0.10	0.02	647.40	99.74

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.16	1.51	1.34	0.90	0.54	0.26	-0.38

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.9	0.54	0.73	-0.49	5.45

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-75D

Analysis Date: 01-07-11

Analyzed By: JR

Easting (ft): 939819.	Northing (ft): 1003667.	Coordinate System: Florida State Plane East	Elevation (ft): -4.6 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-5/2	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
654.50	651.40	0.10	0.00	#230 - 0.49			7.94
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	42.90	6.55	42.90	6.55	
4	-2.25	4.76	9.10	1.39	52.00	7.94	
5	-2.00	4.00	17.20	2.63	69.20	10.57	
7	-1.50	2.83	42.00	6.42	111.20	16.99	
10	-1.00	2.00	58.80	8.98	170.00	25.97	
14	-0.50	1.41	82.80	12.65	252.80	38.62	
18	0.00	1.00	106.50	16.27	359.30	54.90	
25	0.50	0.71	103.70	15.84	463.00	70.74	
35	1.00	0.50	80.10	12.24	543.10	82.98	
45	1.50	0.35	35.10	5.36	578.20	88.34	
60	2.00	0.25	22.00	3.36	600.20	91.70	
80	2.50	0.18	27.60	4.22	627.80	95.92	
120	3.00	0.13	19.40	2.96	647.20	98.88	
170	3.50	0.09	3.80	0.58	651.00	99.47	
230	4.00	0.06	0.30	0.05	651.30	99.51	

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.39	1.10	0.67	-0.15	-1.05	-1.58	-2.91
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	-0.21	1.16	1.43	-0.11	2.97	

GRANULARMETRIC REPORT JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-75E

Analysis Date: 01-07-11

Analyzed By: JR

Easting (ft): 1003742.	Northing (ft): 940000.	Coordinate System: Florida State Plane East	Elevation (ft): -8.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-6/1	Comments:
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Dry Weight (g): 770.50	Wash Weight (g): 767.10	Pan Retained (g):	Sieve Loss (%):	Fines (%): #230 - 0.47	Organics (%):	Carbonates (%):	Shells (%): 0.00
----------------------------------	-----------------------------------	-------------------	-----------------	----------------------------------	---------------	-----------------	----------------------------

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.20	0.03	0.20	0.03
7	-1.50	2.83	0.40	0.05	0.60	0.08
10	-1.00	2.00	0.80	0.10	1.40	0.18
14	-0.50	1.41	1.80	0.23	3.20	0.42
18	0.00	1.00	3.30	0.43	6.50	0.84
25	0.50	0.71	5.50	0.71	12.00	1.56
35	1.00	0.50	8.00	1.04	20.00	2.60
45	1.50	0.35	8.60	1.12	28.60	3.71
60	2.00	0.25	16.20	2.10	44.80	5.81
80	2.50	0.18	251.90	32.69	296.70	38.51
120	3.00	0.13	401.50	52.11	698.20	90.62
170	3.50	0.09	54.30	7.05	752.50	97.66
230	4.00	0.06	14.40	1.87	766.90	99.53

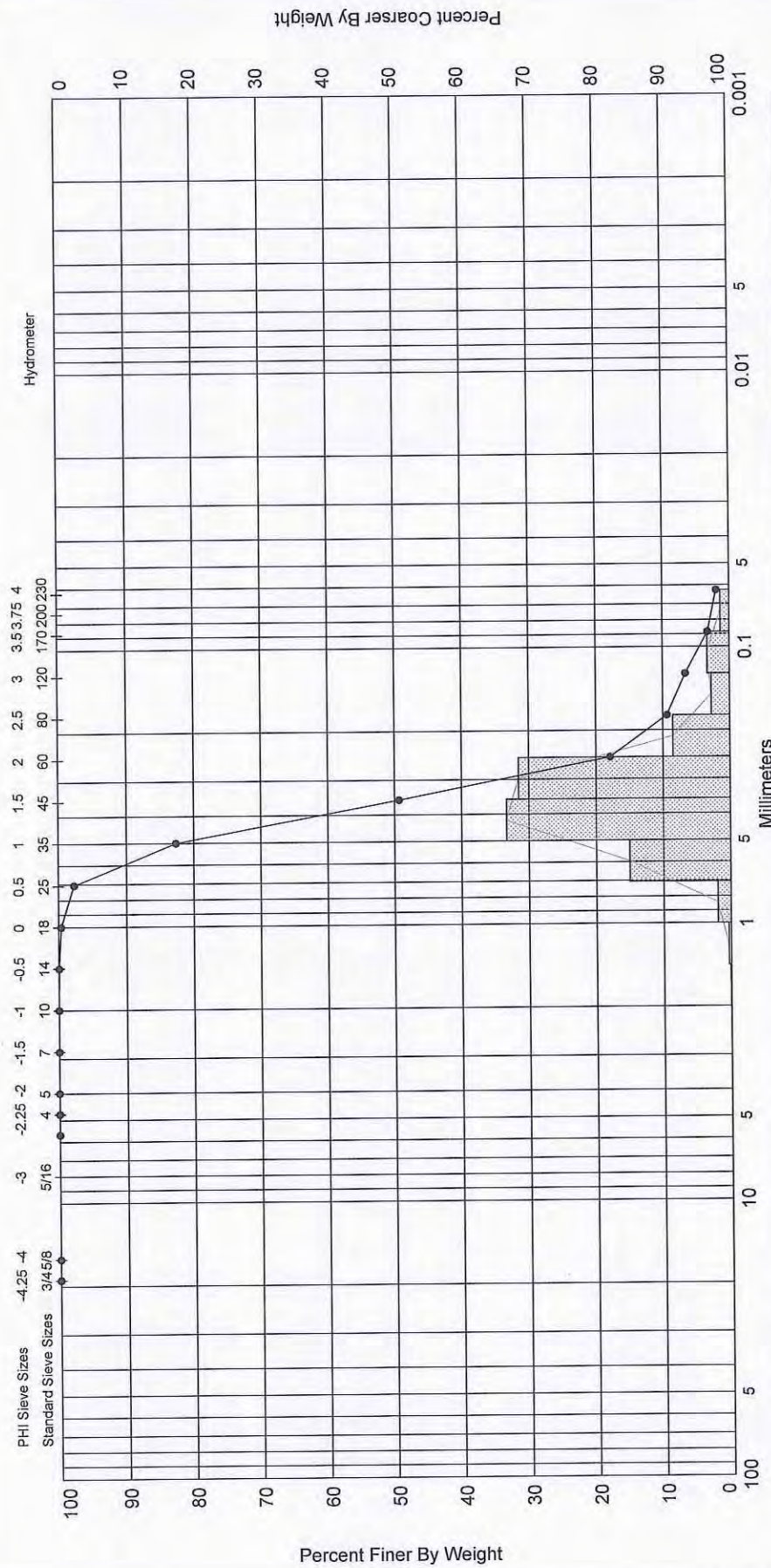
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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.31	2.94	2.85	2.61	2.29	2.16	1.81
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	2.53	0.17	0.55	-2.49	15.46	

GRANULOMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

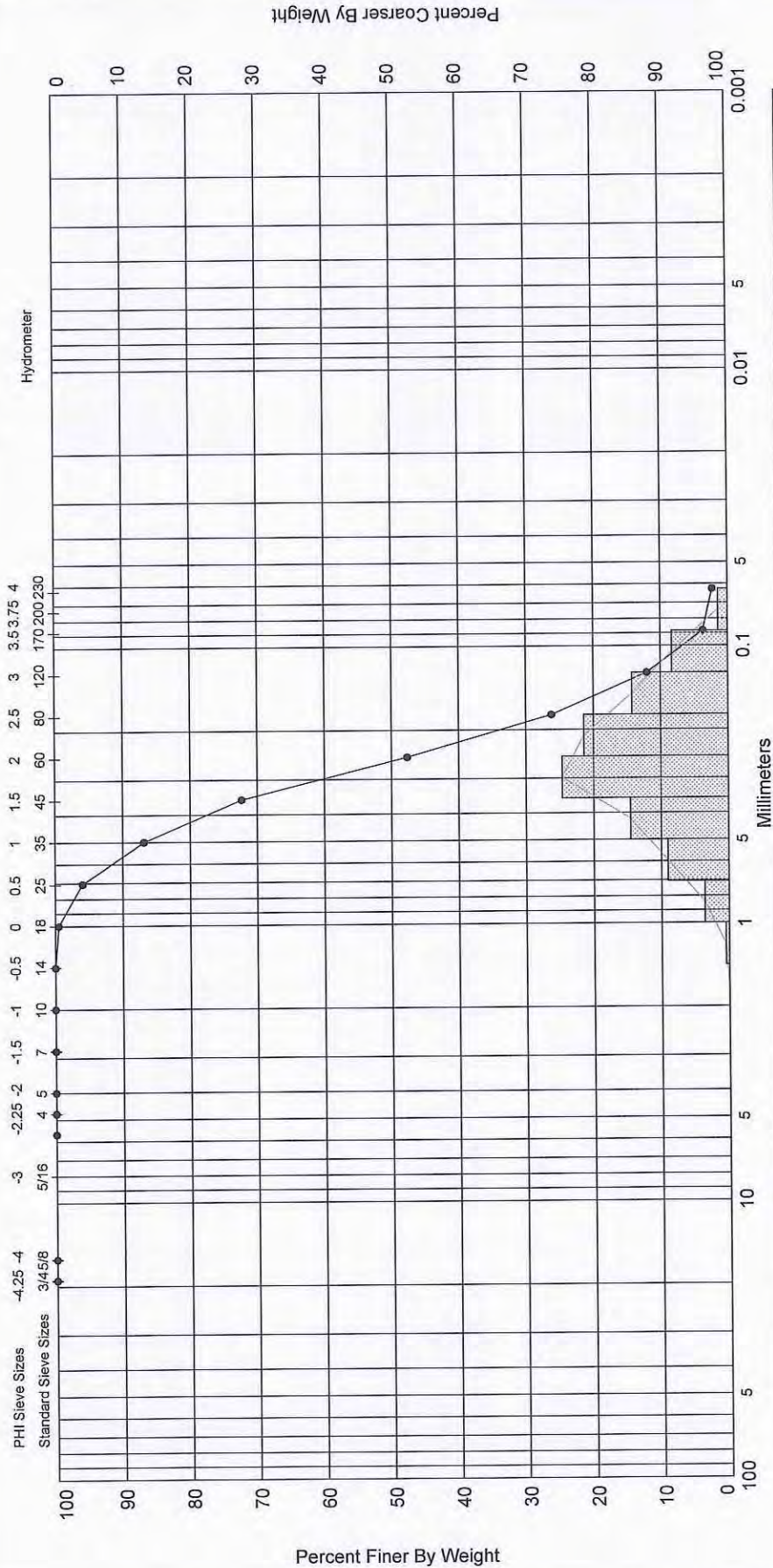
Post CC Sieve Graph






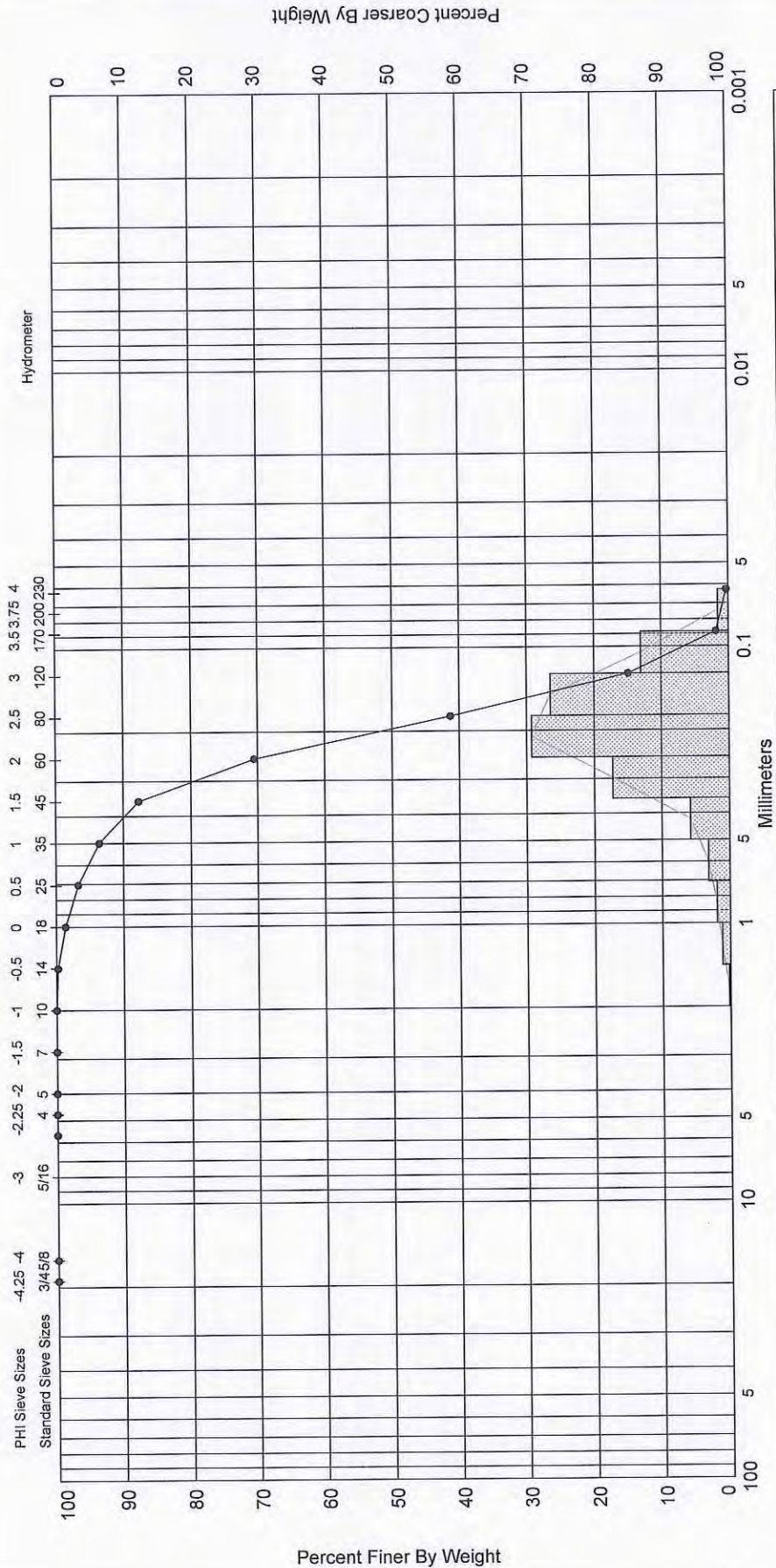
Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	1000258A	Symbol	—●—	Elev. (ft)	7.4	USCS	SP	% Fines	#230 - 1.94	% Organics	% Carbonates	Mean	1.54	Skew	0.87	Kurt	4.55	Sort	0.66
Comments:																			
Depths and elevations based on measured values																			
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444										Sample Information									
										Project Name: Jupiter Island 10 - Beach Samples									
										Analysis Date: 01-17-11									
										Analyzed By: ML									
										Easting (X, ft): 941554.									
										Northing (Y, ft): 1000417.									
										Horizontal System: NAD 1983									
										Vertical System: NAVD 88									



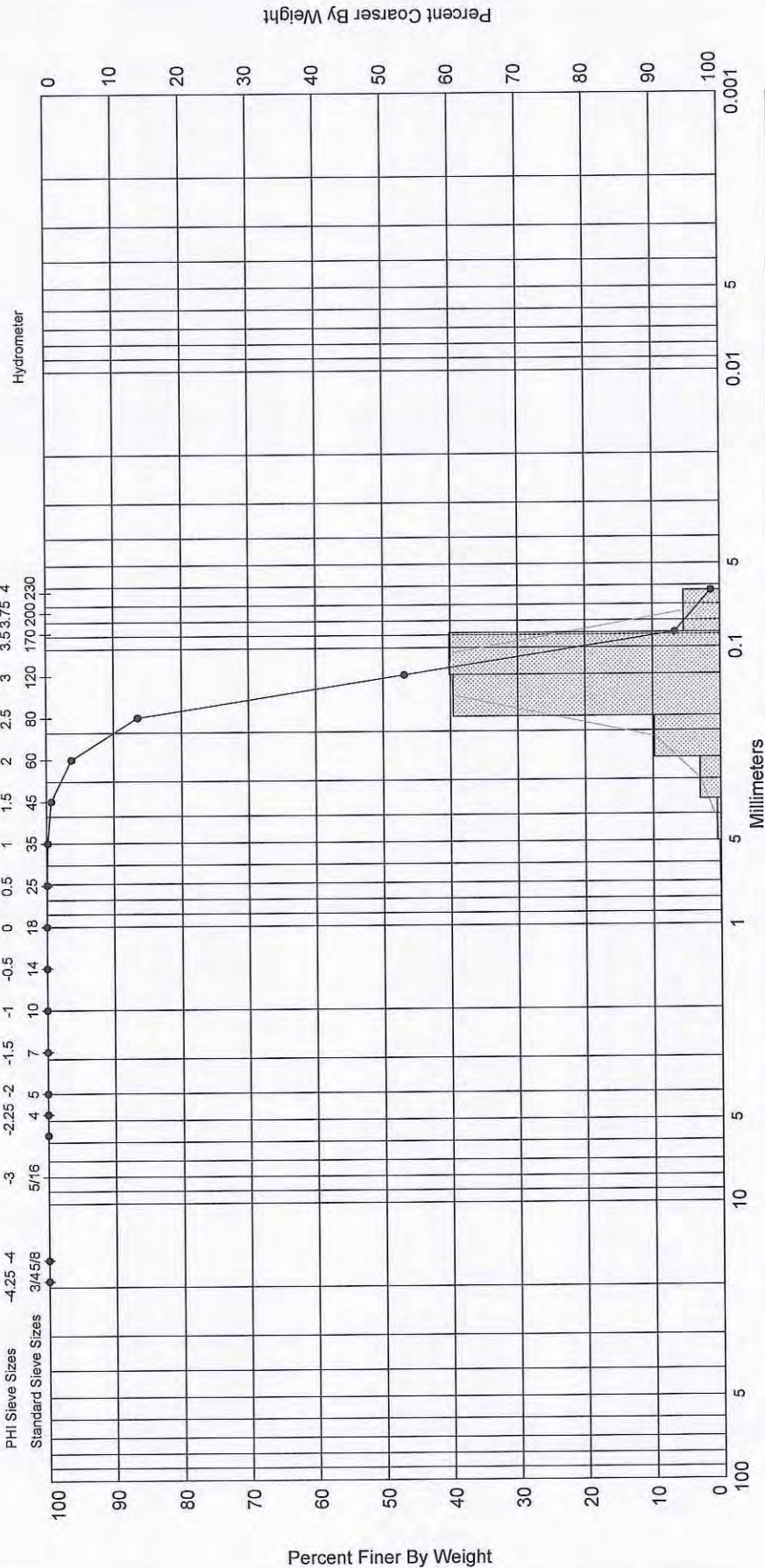
Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Medium	Fine

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information				
1000258B	PCC	3.4	SP	#230 - 2.23			1.95	1.93	-0.11	2.61	0.81	Project Name:	Jupiter Island 10 - Beach Samples			
Comments:												Analysis Date:	01-17-11			
Depths and elevations based on measured values												Analyzed By:	ML			
												Easting (X, ft):	941580.			
												Northing (Y, ft):	1000428.			
												Horizontal System:	NAD 1983			
												Vertical System:	NAVD 88			
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444				



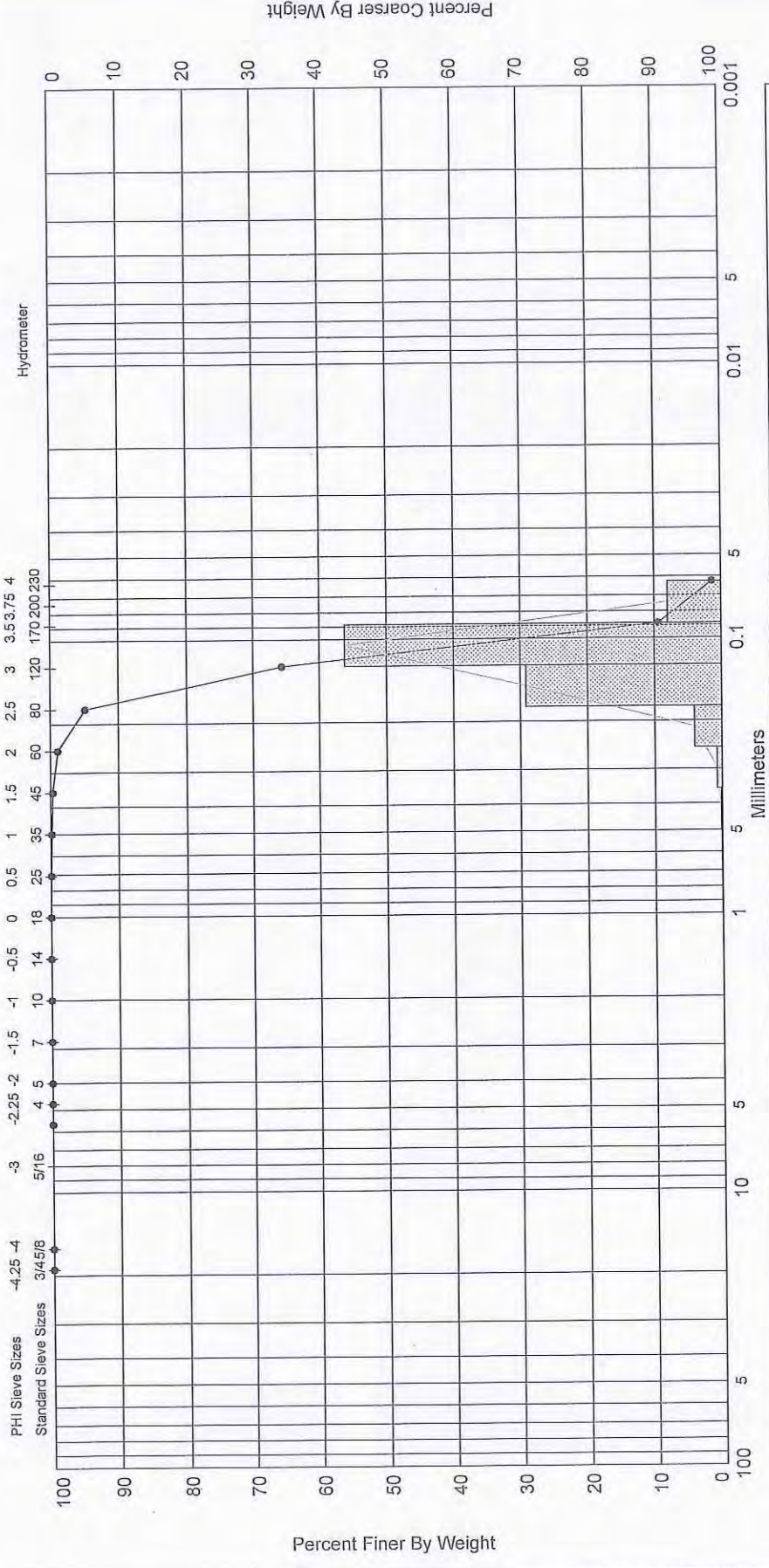
Gravel		Sand			Silt and Clay						
Coarse	Fine	Coarse	Medium	Fine							
Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
1000258C PCC	—●—	-0.6	SP	#230 - 0.30			2.35	2.27	-0.92	4.33	0.76
Comments: Depths and elevations based on measured values											
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444						Sample Information Project Name: Jupiter Island 10 - Beach Samples Analysis Date: 01-17-11 Analyzed By: ML Easting (X, ft): 941611. Northing (Y, ft): 1000441. Horizontal System: NAD 1983 Vertical System: NAVD 88					





Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

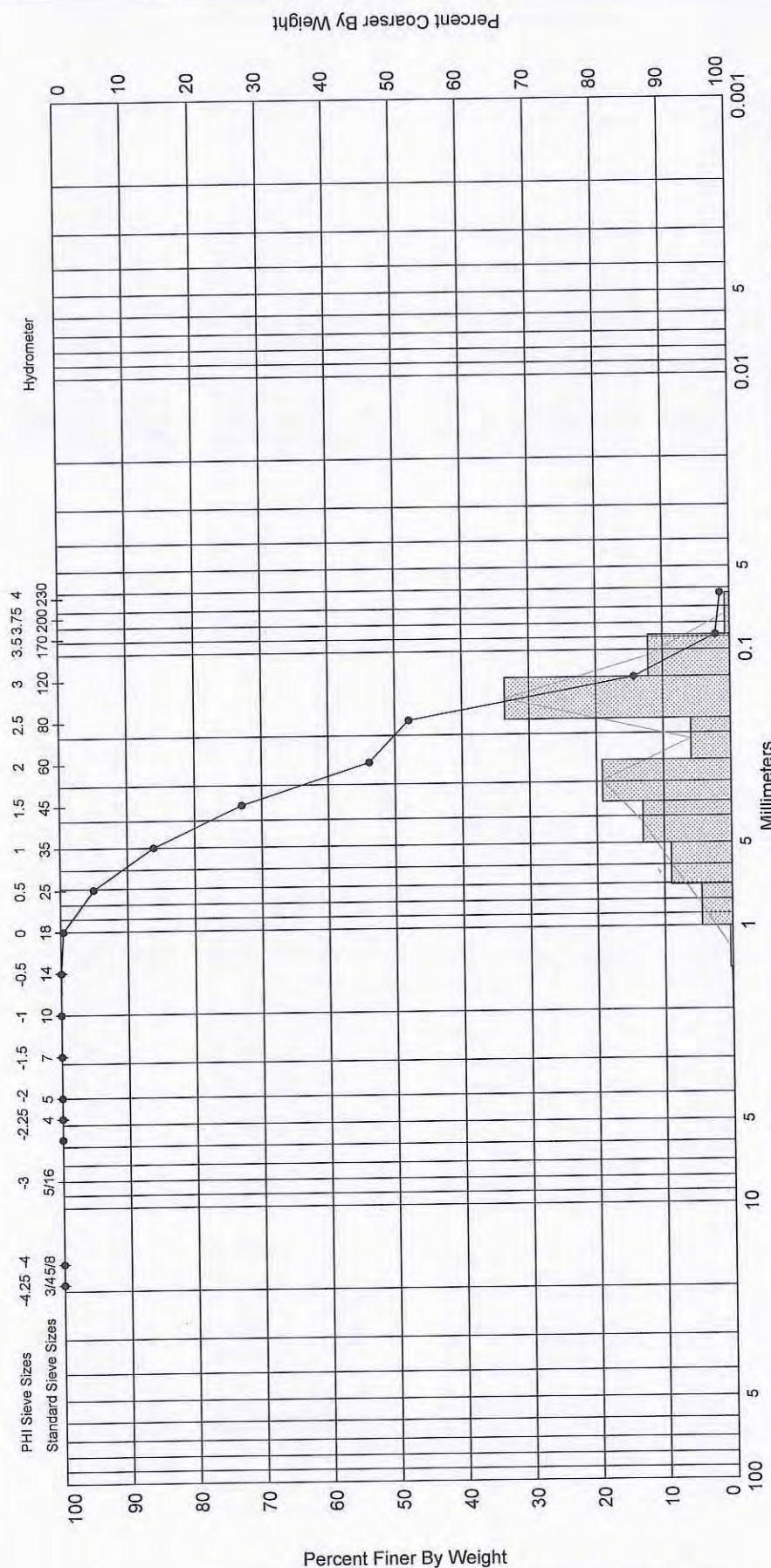
Sample	Symbol	Elev. (ft)	USCS	% Fines #230 - 1.31	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information					
1000258D	PCC	◆	SP	-1.31			2.96	2.92	-0.88	4.91	0.45	Project Name:	Jupiter Island 10 - Beach Samples				
Comments:												Analysis Date:	01-10-11				
Depths and elevations based on measured values												Analyzed By:	ML				
												Easting (X, ft):	941673.				
												Northing (Y, ft):	1000467.				
												Horizontal System:	NAD 1983				
												Vertical System:	NAVD 88				
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444					




Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Medium	Fine

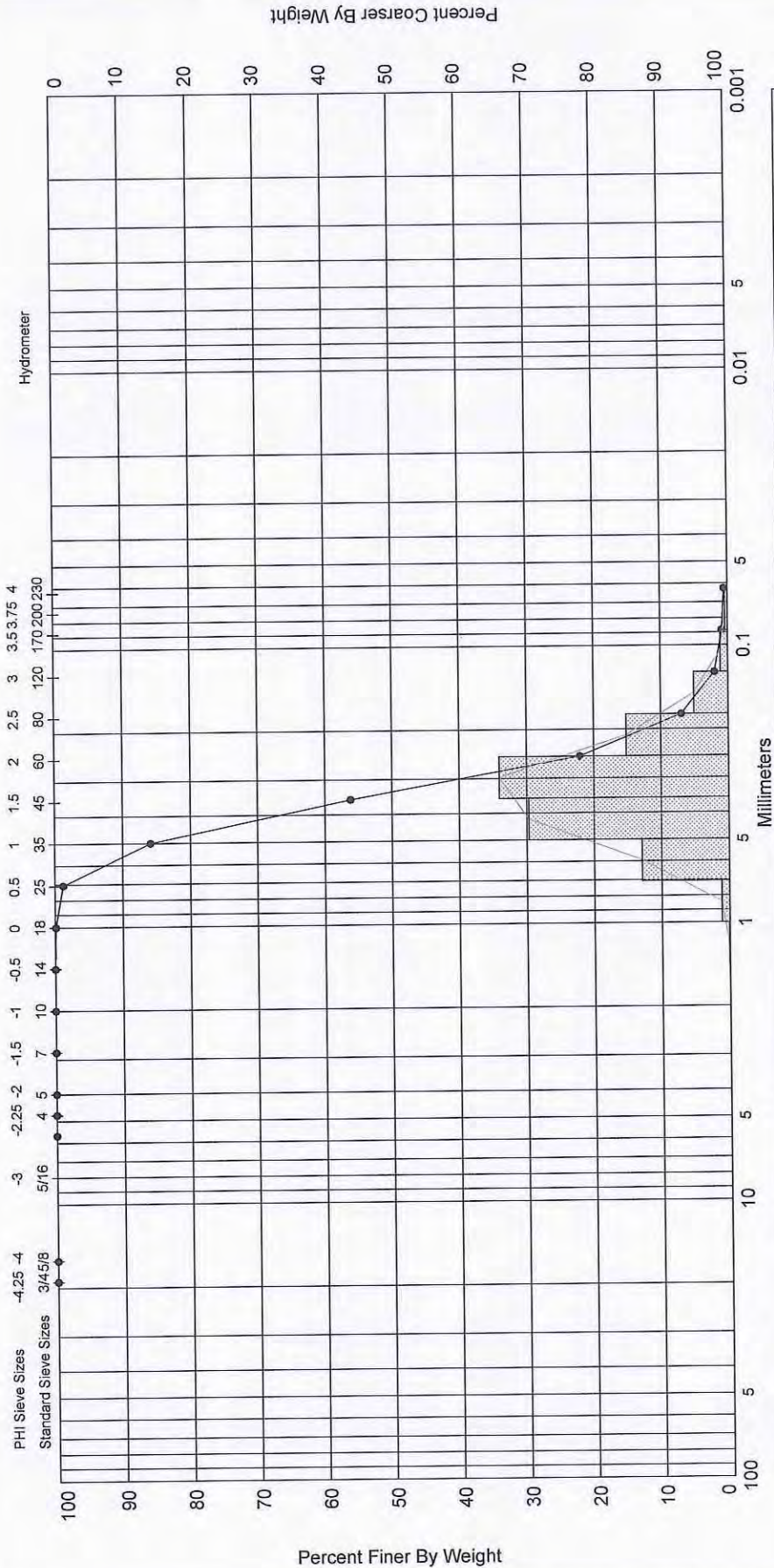
Sample	1000258E PCC	Symbol	—●—	Elev. (ft)	-8.6	USCS	SW	% Fines	#230 - 1.38	% Organics		% Carbonates		Median	3.14	Mean	3.08	Skew	-1.18	Kurt	7.76	Sort	0.38
Comments:																							
Depths and elevations based on measured values																							
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444												Sample Information											
												Project Name: Jupiter Island 10 - Beach Samples											
												Analysis Date: 01-10-11											
												Analyzed By: ML											
												Easting (X, ft): 941736.											
												Northing (Y, ft): 1000494.											
												Horizontal System: NAD 1983											
												Vertical System: NAVD 88											






Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
965058A	PCC	7.4	SW	#230 - 1.43			2.33	2.09	-0.44	2.15	0.89	Project Name:	Jupiter Island 10 - Beach Samples		
Comments:												Analysis Date:	01-28-11		
Depths and elevations based on measured values												Analyzed By:	ML		
												Easting (X, ft):	953999.		
												Northing (Y, ft):	965299.		
												Horizontal System:	NAD 1983		
												Vertical System:	NAVD 88		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444			



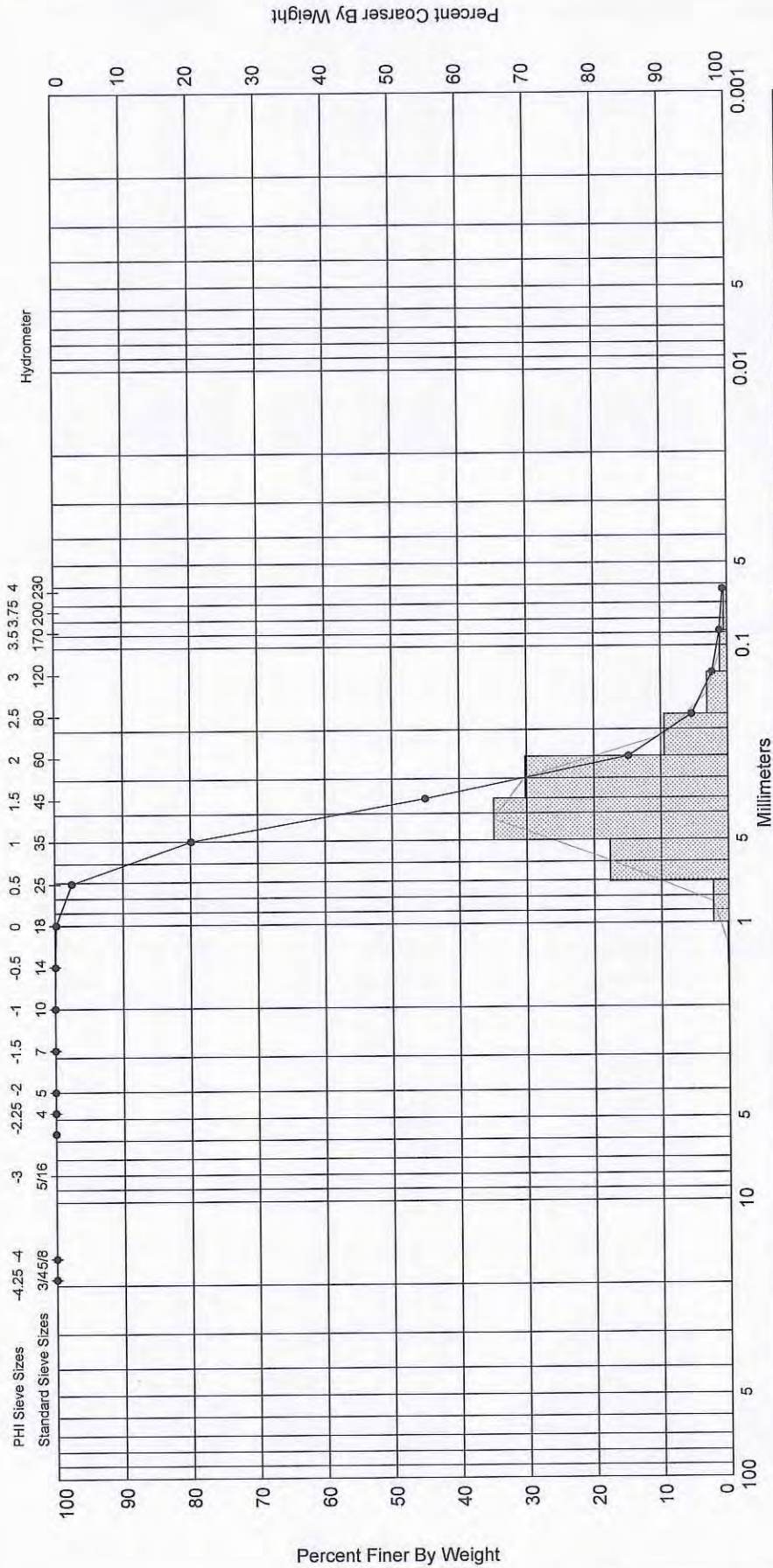
Sample Information		Sample Information	
Sample	965058B PCC	Project Name:	Jupiter Island 10 - Beach Samples
Symbol	●	Analysis Date:	01-28-11
Elev. (ft)	3.4	Analyzed By:	ML
USCS	SP	Easting (X, ft):	954040.
% Fines	#230 - 0.48	Northing (Y, ft):	965316.
% Organics		Horizontal System:	NAD 1983
% Carbonates		Vertical System:	NAVD 88
Mean	1.59		
Median	1.6		
Skew	0.38		
Kurt	3.42		
Sort	0.58		

Comments: Depths and elevations based on measured values



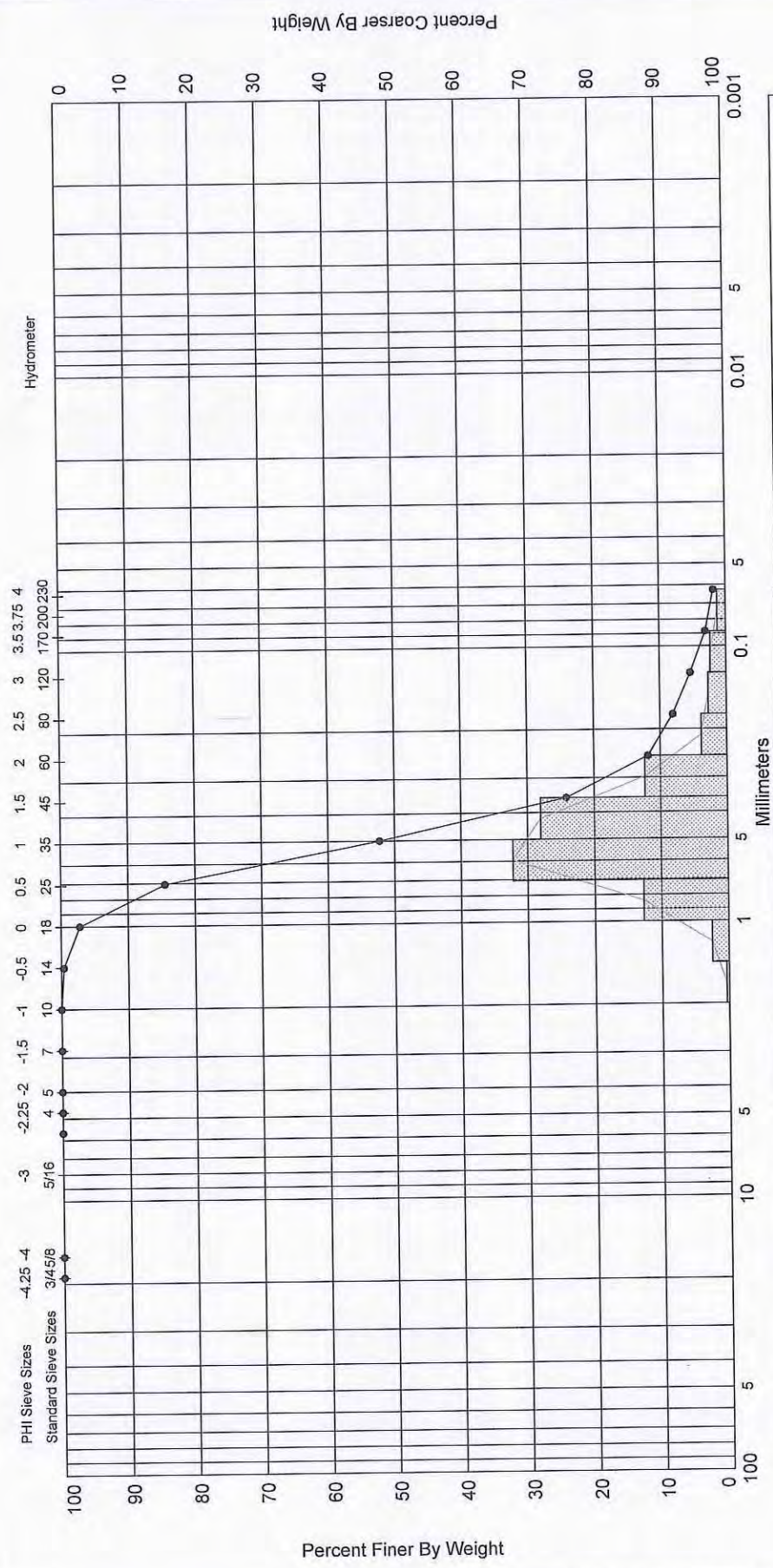
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1215 Wallace Drive
Delray Beach, FL 33444




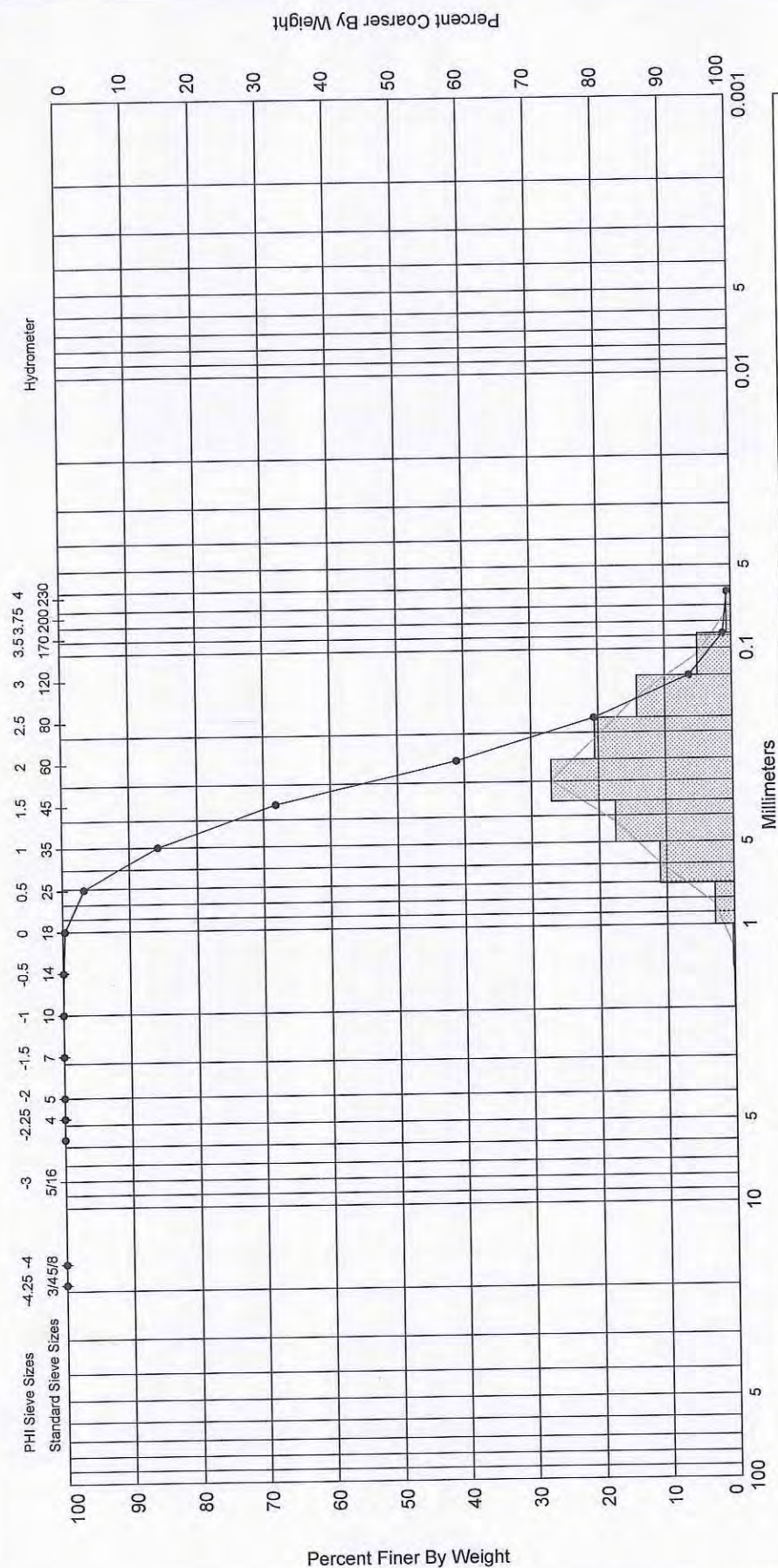
Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine	Fine

Sample	965058C	PCC	Symbol	—●—	Elev. (ft)	-0.6	USCS	SP	% Fines	#230 - 0.67	% Organics	% Carbonates	Median	1.43	Mean	1.46	Skew	0.61	Kurt	4.17	Sort	0.59	
Comments:																							
Depths and elevations based on measured values																							
												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444											
Sample Information						Project Name:			Jupiter Island 10 - Beach Samples			Analysis Date:			01-28-11			Analyzed By:			ML		
						Easting (X, ft):			954067.			Northing (Y, ft):			965328.			Horizontal System:			NAD 1983		
						Vertical System:			NAVD 88														



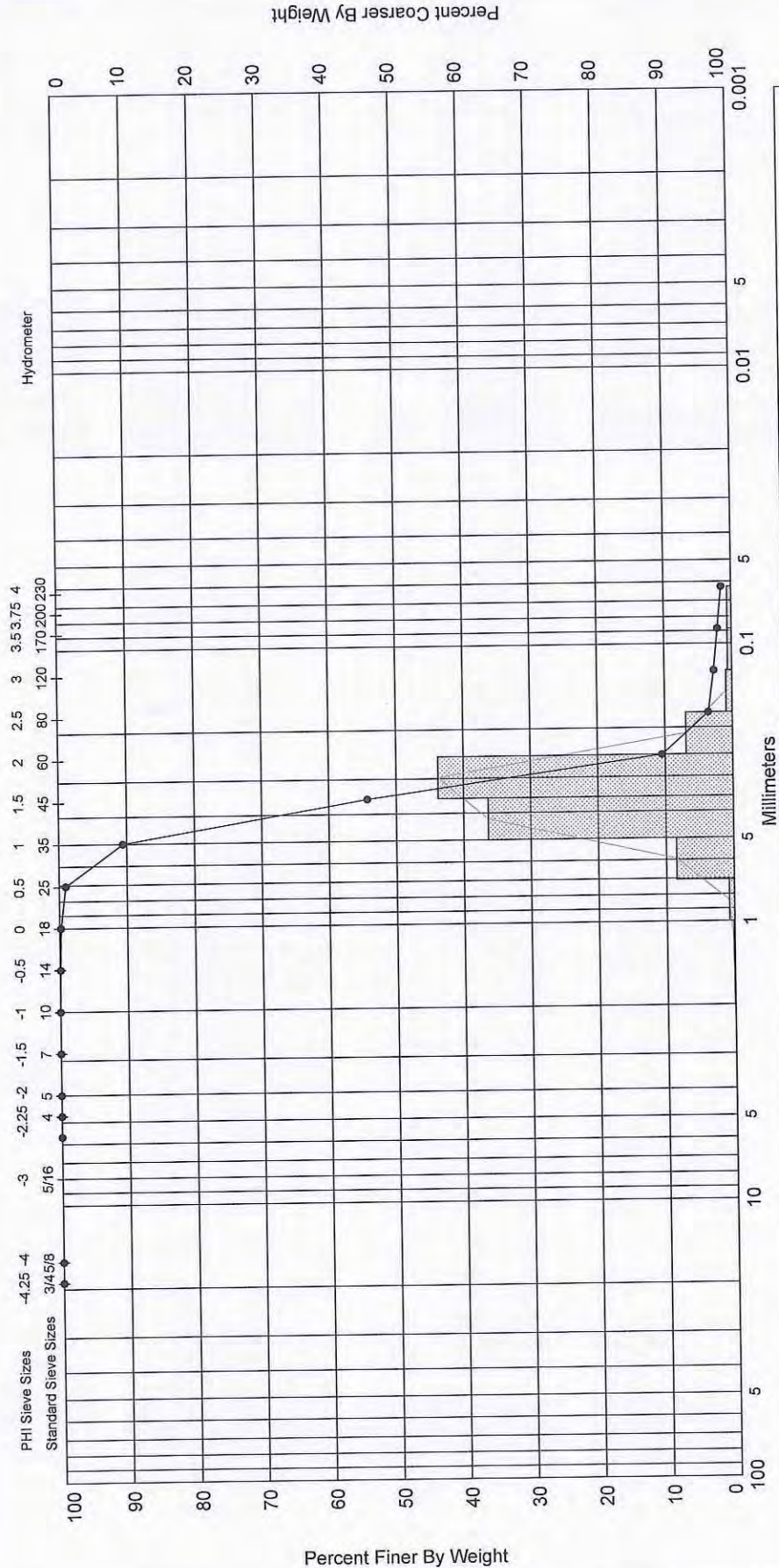
Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
965058D	PCC	—	SP	#230 - 1.82			1.04	1.13	1.04	4.73	0.76	Project Name:	Jupiter Island 10 - Beach Samples		
Comments:												Analysis Date:	01-28-11		
Depths and elevations based on measured values												Analyzed By:	ML		
												Easting (X, ft):	954088.		
												Northing (Y, ft):	965336.		
												Horizontal System:	NAD 1983		
												Vertical System:	NAVD 88		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444			



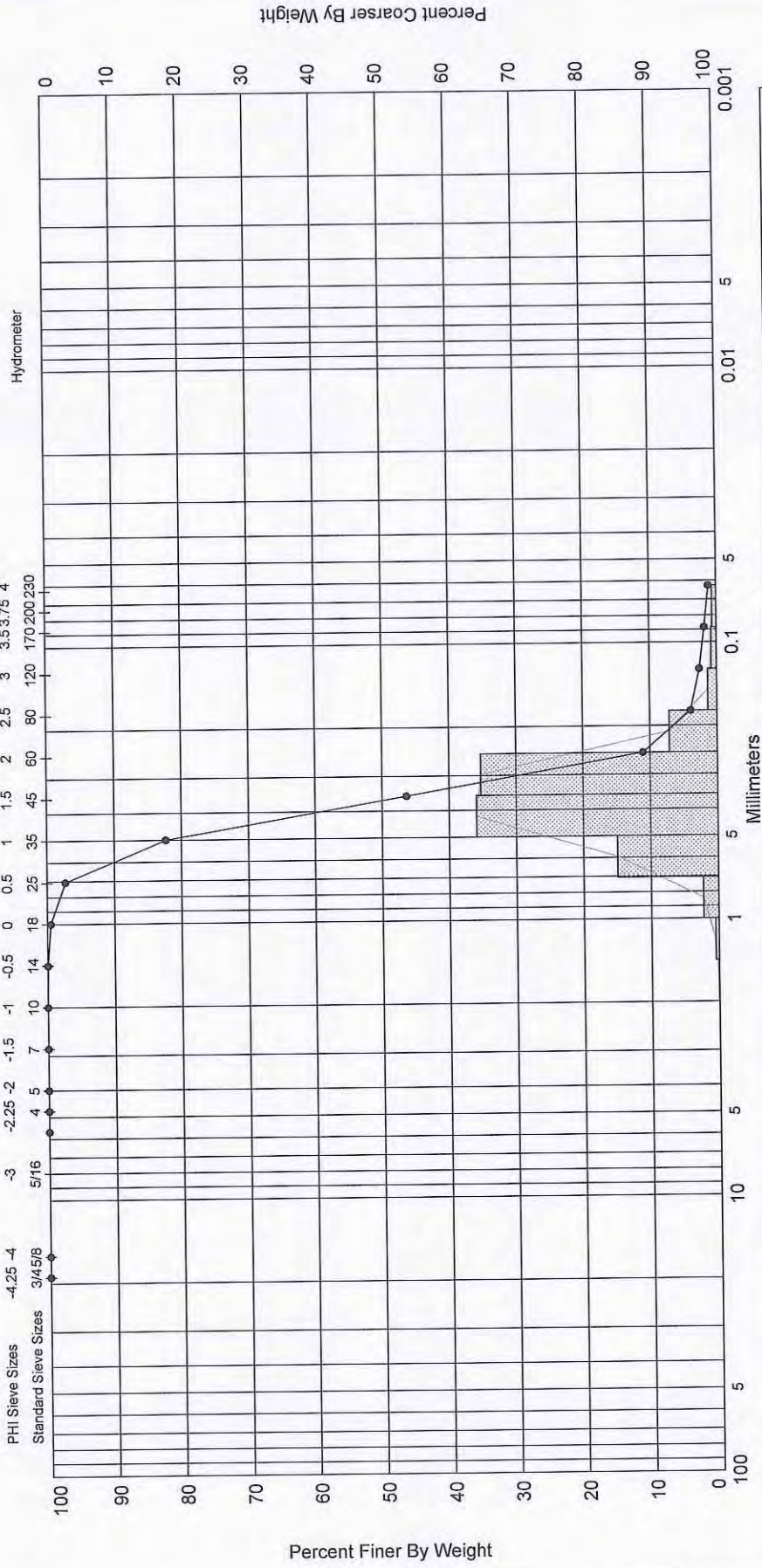
Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Coarse	Fine

Sample	965058E PCC	Symbol	—●—	Elev. (ft)	-8.6	USCS	SP	% Fines	#230 - 0.57	% Organics		% Carbonates		Mean	1.84	Median	1.84	Skew	-0.03	Kurt	2.64	Sort	0.75
Comments:																							
Depths and elevations based on measured values																							
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444												Sample Information											
												Project Name: Jupiter Island 10 - Beach Samples											
												Analysis Date: 01-28-11											
												Analyzed By: ML											
												Easting (X, ft): 954218.											
												Northing (Y, ft): 965391.											
												Horizontal System: NAD 1983											
												Vertical System: NAVD 88											



Gravel		Sand				Silt and Clay				
Coarse	Fine	Coarse	Medium	Fine	Coarse	Medium	Fine	Coarse	Medium	Fine

Sample	976899A	PCC	USCS	SP	#230 - 1.45	% Fines	% Organics	% Carbonates	Mean	Median	Skew	Kurt	Sort
	Symbol	Elev. (ft)	7.4						1.55	1.53	0.62	6.75	0.47
Sample Information													
Project Name: Jupiter Island 10 - Beach Samples													
Analysis Date: 01-28-11													
Analyzed By: ML													
Easting (X, ft): 951051.													
Northing (Y, ft): 977074.													
Horizontal System: NAD 1983													
Vertical System: NAVD 88													
AMERICAN VIBRACORE SERVICES						American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444							
Comments: Depths and elevations based on measured values													



Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Medium	Fine

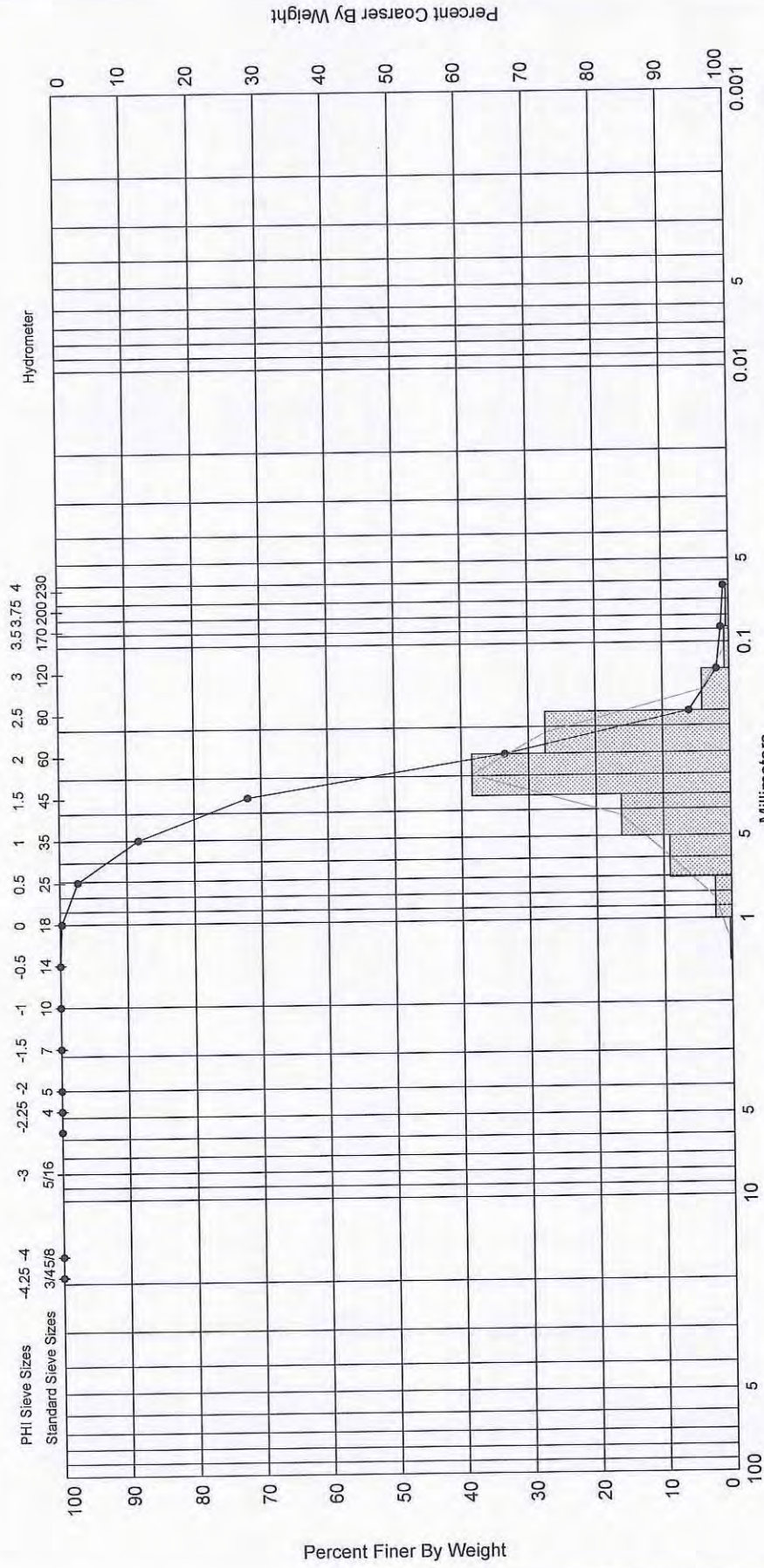
Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
976899B PCC	—●—	3.4	SP	#230 - 1.14			1.45	1.45	0.51	5.26	0.55

Sample Information	
Project Name:	Jupiter Island 10 - Beach Samples
Analysis Date:	01-28-11
Analyzed By:	ML
Easting (X, ft):	951070.
Northing (Y, ft):	977082.
Horizontal System:	NAD 1983
Vertical System:	NAVD 88

Comments:
Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444




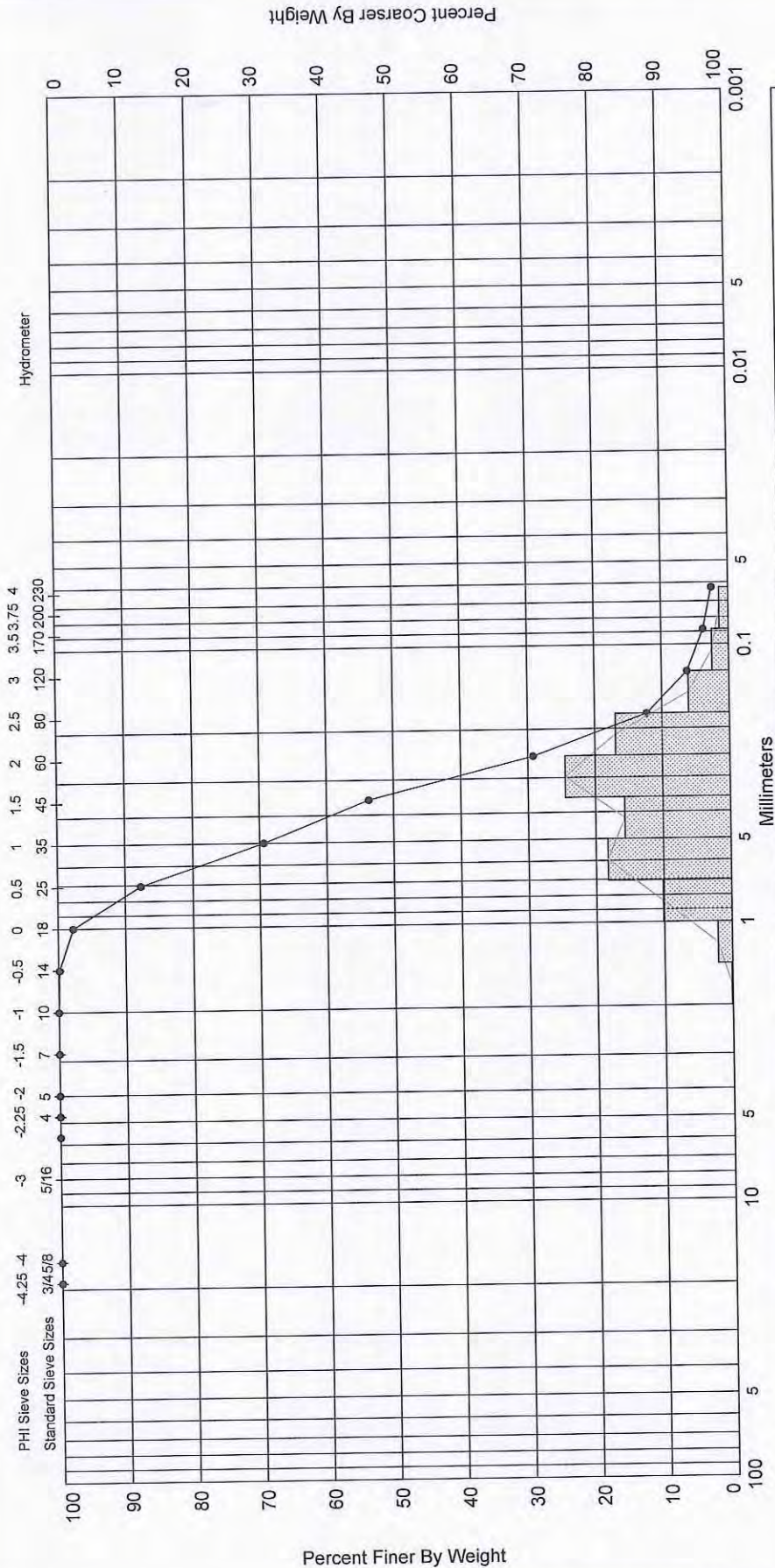
Gravel		Sand			Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine		

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
976899C PCC	●	-0.6	SP	#230 - 0.80			1.79	1.73	-0.33	3.65	0.58

Sample Information	
Project Name:	Jupiter Island 10 - Beach Samples
Analysis Date:	01-28-11
Analyzed By:	ML
Easting (X, ft):	951115.
Northing (Y, ft):	977101.
Horizontal System:	NAD 1983
Vertical System:	NAVD 88

Comments:	
Depths and elevations based on measured values	

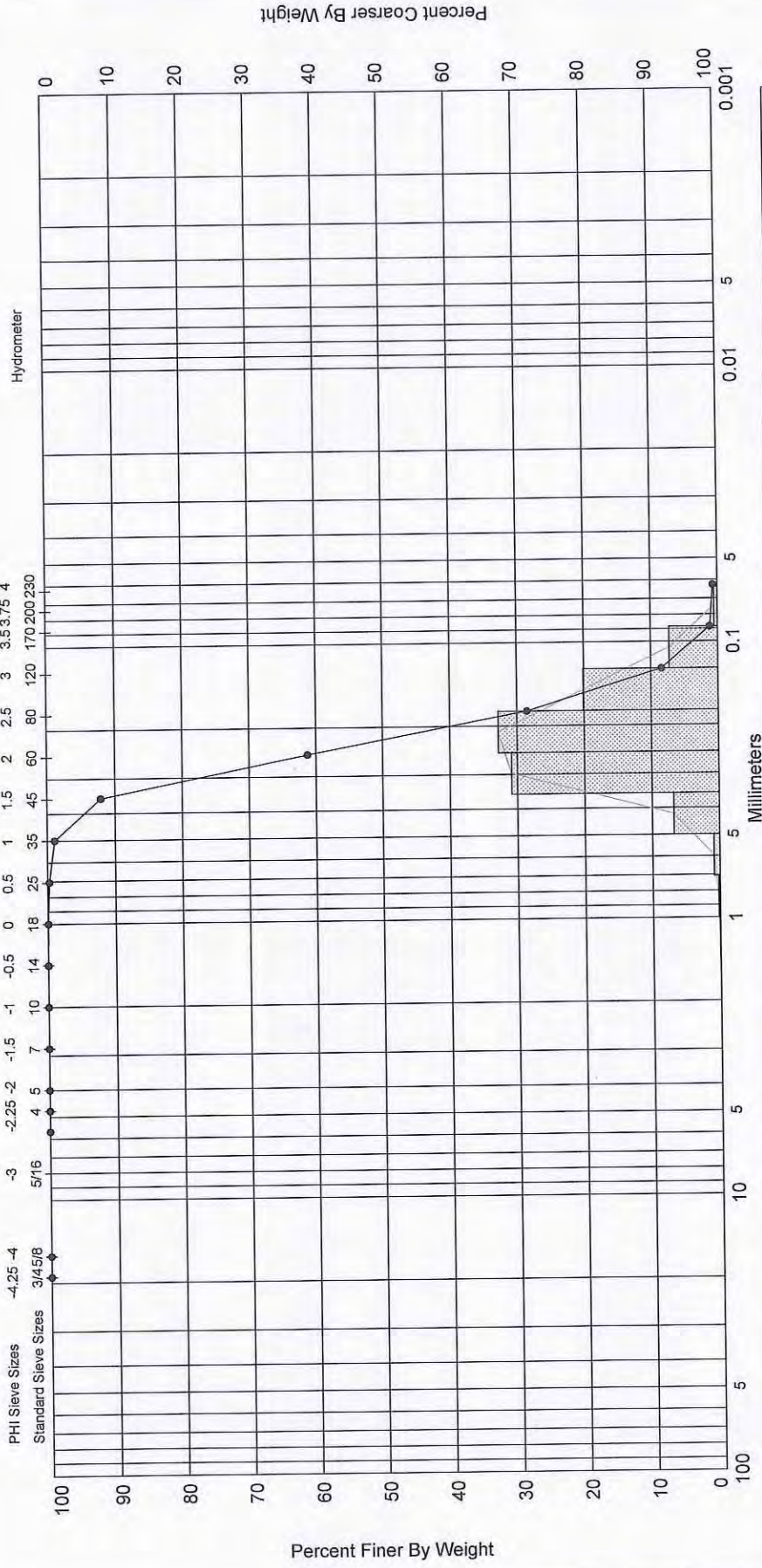
 AMERICAN VIBRACORE SERVICES	
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444	



Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	976899D	PCC	Symbol	—●—	Elev. (ft)	-4.6	USCS	SP	% Fines	#230 - 2.44	% Organics	% Carbonates	Median	1.58	Mean	1.49	Skew	0.14	Kurt	2.69	Sort	0.84
Comments:																						
Depths and elevations based on measured values																						
											American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444											
											Sample Information Project Name: Jupiter Island 10 - Beach Samples Analysis Date: 01-28-11 Analyzed By: ML Easting (X, ft): 951139. Northing (Y, ft): 977111. Horizontal System: NAD 1983 Vertical System: NAVD 88											

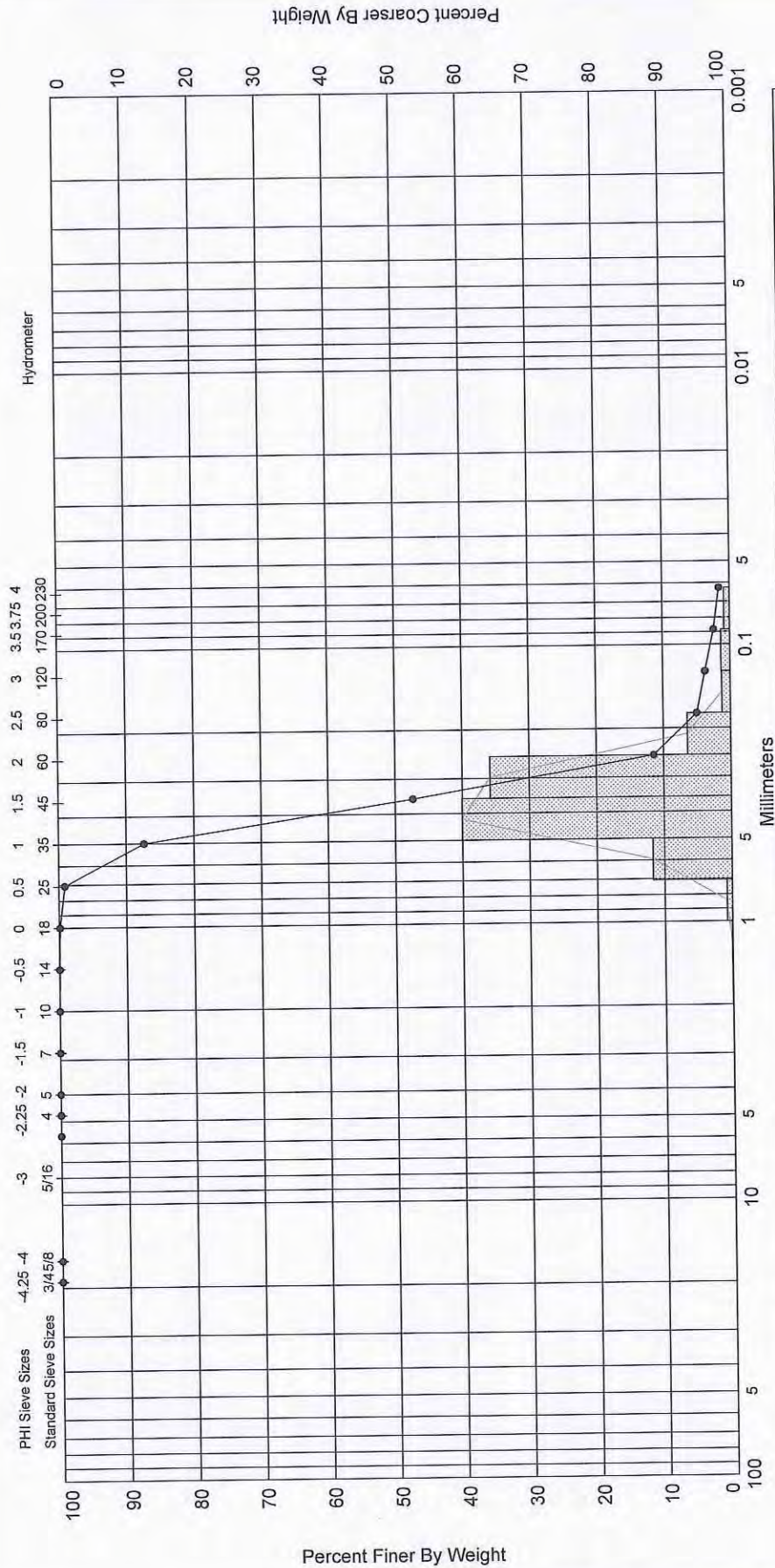





Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Medium	Fine

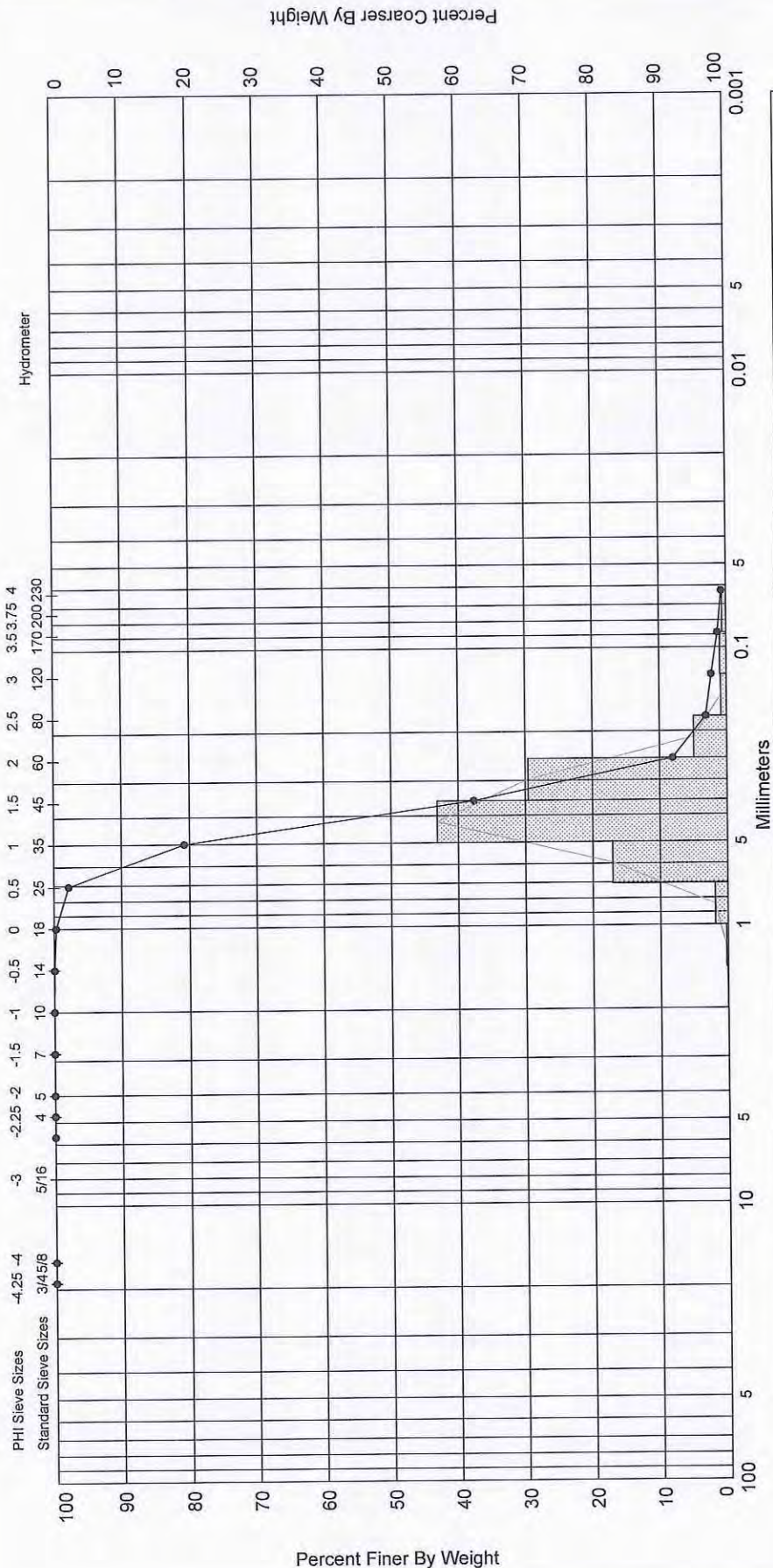
Sample	976899E PCC	Symbol	●	Elev. (ft)	-8.6	USCS	SP	% Fines	#230 - 0.85	% Organics		% Carbonates		Median	2.17	Mean	2.19	Skew	0.04	Kurt	3.17	Sort	0.56
Comments:																							
Depths and elevations based on measured values																							
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444												Sample Information Project Name: Jupiter Island 10 - Beach Samples Analysis Date: 01-28-11 Analyzed By: ML Easting (X, ft): 951165. Northing (Y, ft): 977122. Horizontal System: NAD 1983 Vertical System: NAVD 88											





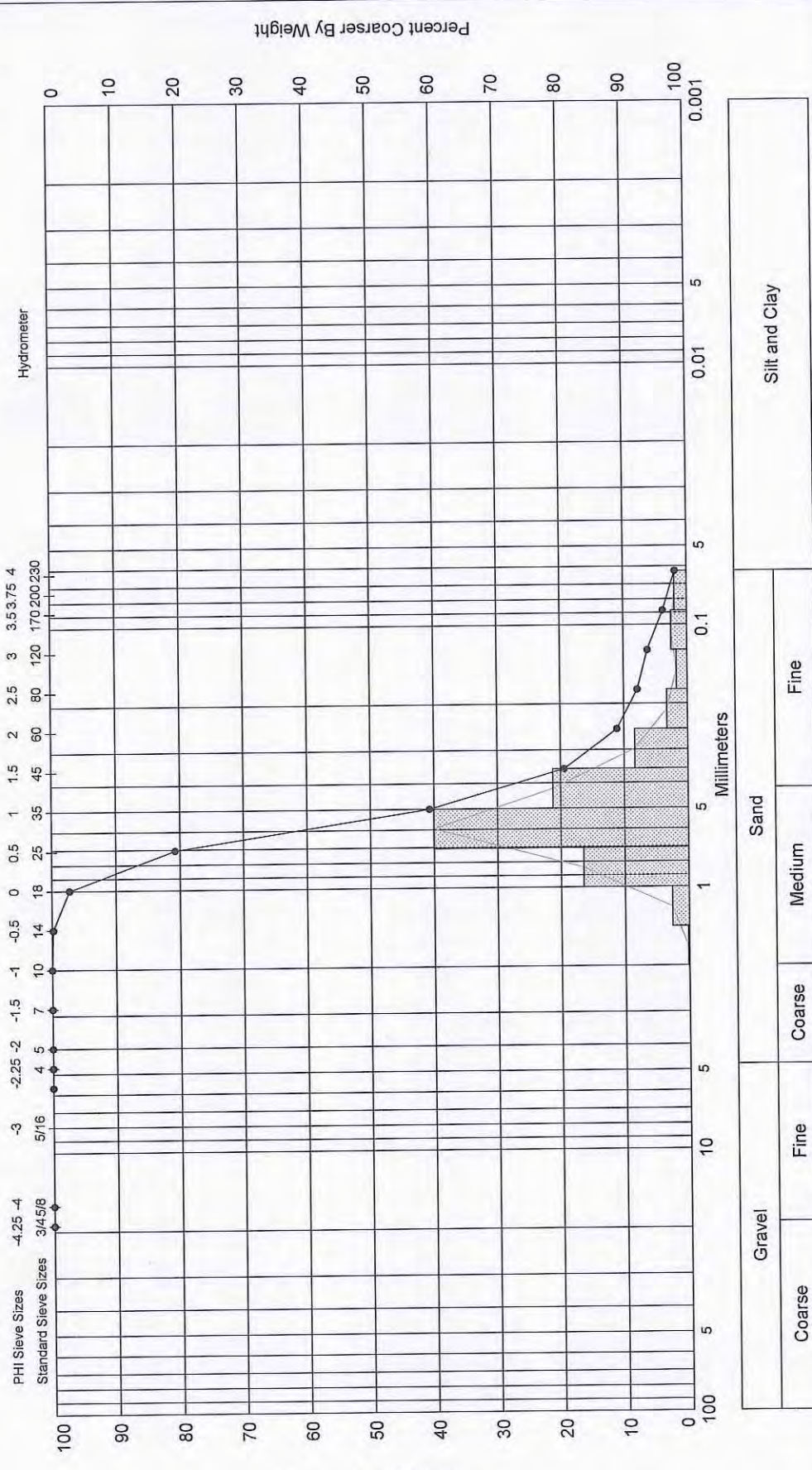
Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Medium	Fine

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information					
988526A	PCC	7.4	SP	#230 - 1.57			1.47	1.5	1.06	6.38	0.52	Project Name:	Jupiter Island 10 - Beach Samples				
Comments:												Analysis Date:	01-17-11				
Depths and elevations based on measured values												Analyzed By:	ML				
												Easting (X, ft):	946672.				
												Northing (Y, ft):	988683.				
												Horizontal System:	NAD 1983				
												Vertical System:	NAVD 88				
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444					

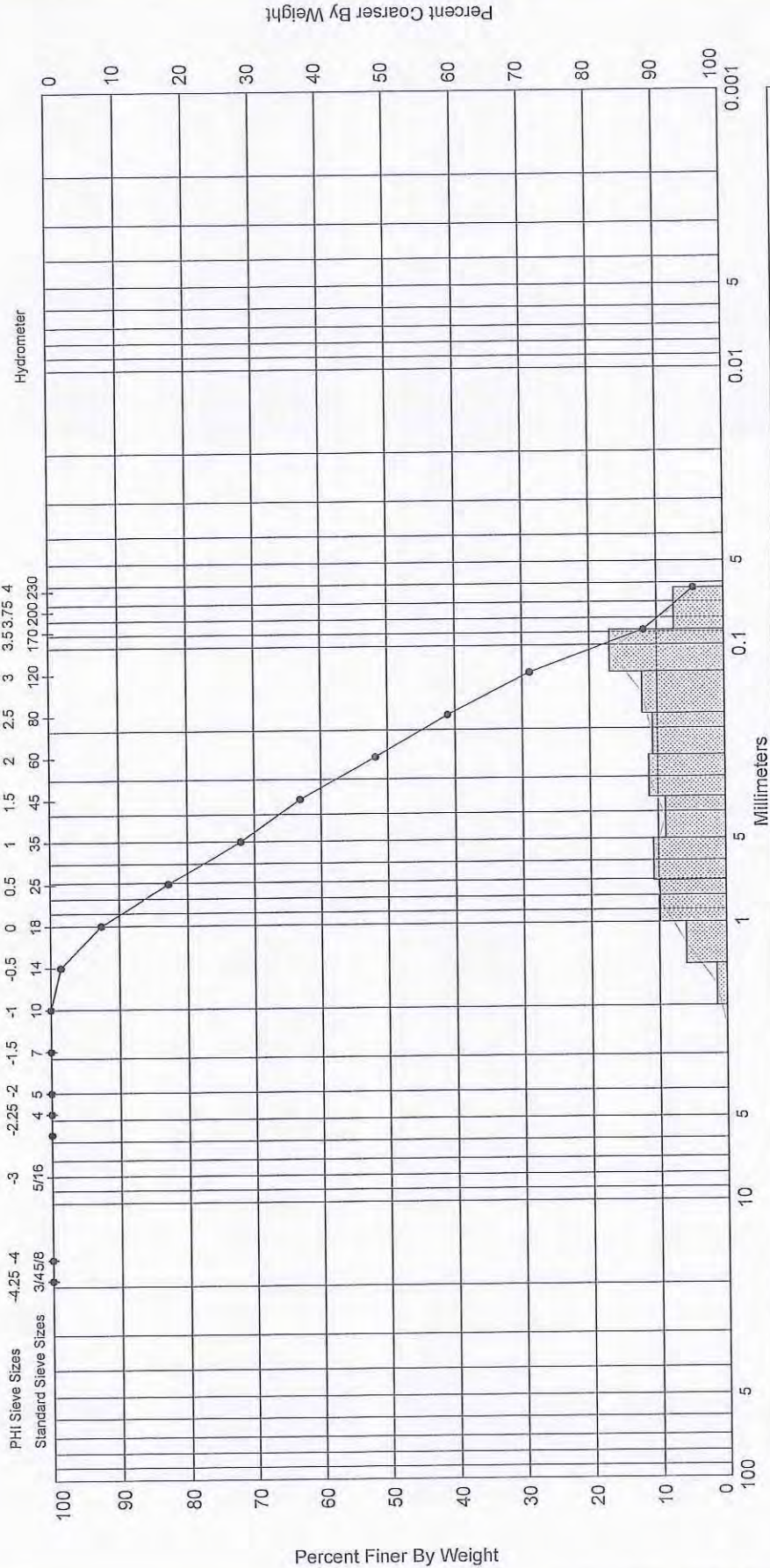


Gravel		Sand			Silt and Clay		
Coarse	Fine	Coarse	Medium	Fine			

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
988526B	PCC	3.4	SP	#230 - 0.71			1.36	1.39	0.87	6.18	0.52	Project Name:	Jupiter Island 10 - Beach Samples		
Comments:												Analysis Date:	01-25-11		
Depths and elevations based on measured values												Analyzed By:	ML		
												Easting (X, ft):	946714.		
												Northing (Y, ft):	988701.		
												Horizontal System:	NAD 1983		
												Vertical System:	NAVD 88		
												 American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444			

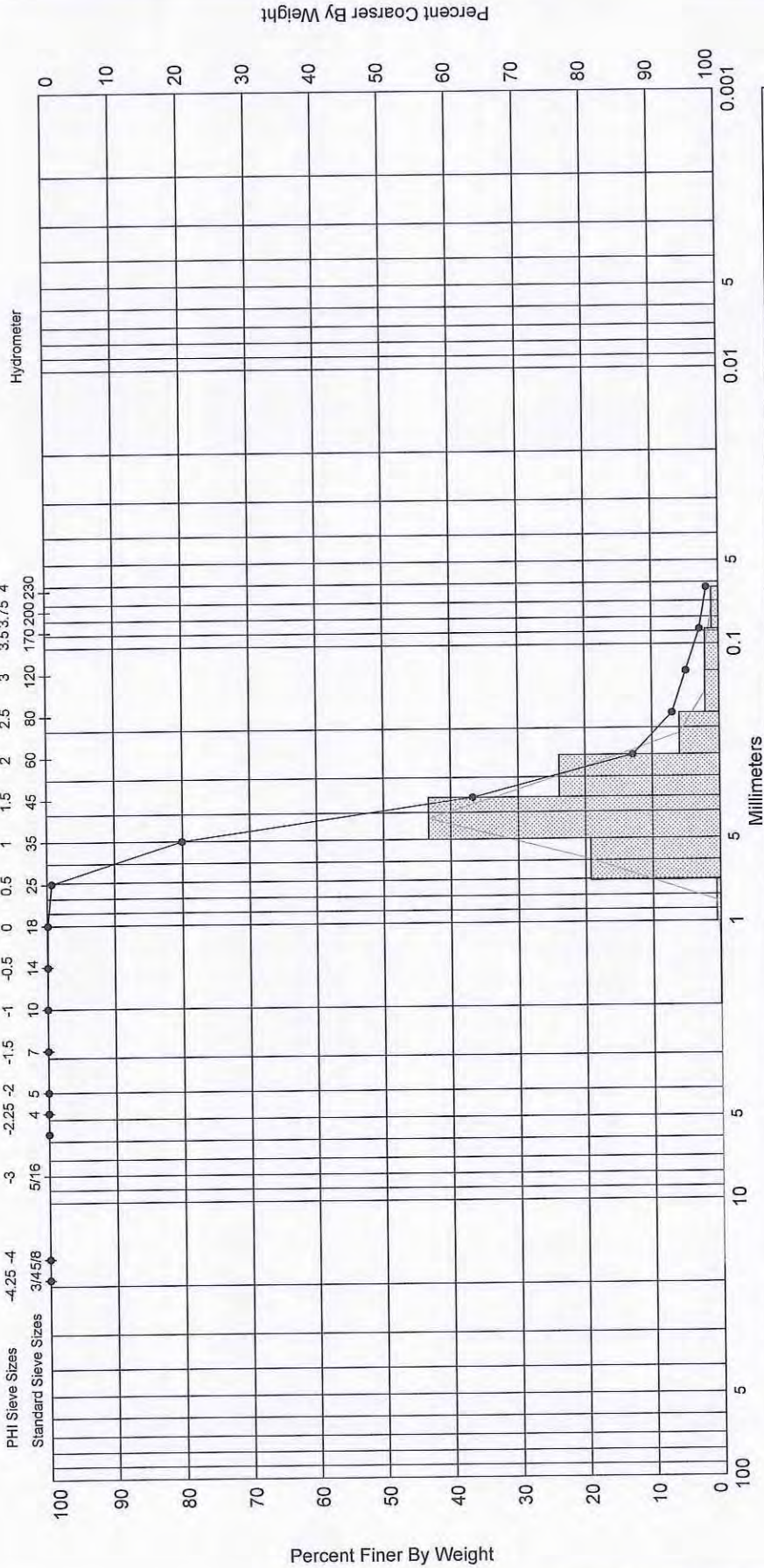


Sample Information		Sample Information	
Sample	988526C PCC	Project Name:	Jupiter Island 10 - Beach Samples
Symbol	—●—	Analysis Date:	01-25-11
Elev. (ft)	-0.6	Analyzed By:	ML
USCS	SP	Easting (X, ft):	946741.
% Fines	#230 - 1.93	Northing (Y, ft):	988712.
% Organics		Horizontal System:	NAD 1983
% Carbonates		Vertical System:	NAVD 88
Median	0.88	AMERICAN VIBRACORE SERVICES American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444	
Mean	1.03		
Skew	1.46		
Kurt	5.65		
Sort	0.78		
Comments: Depths and elevations based on measured values			



Gravel		Sand			Silt and Clay				
Coarse	Fine	Coarse	Medium	Fine					

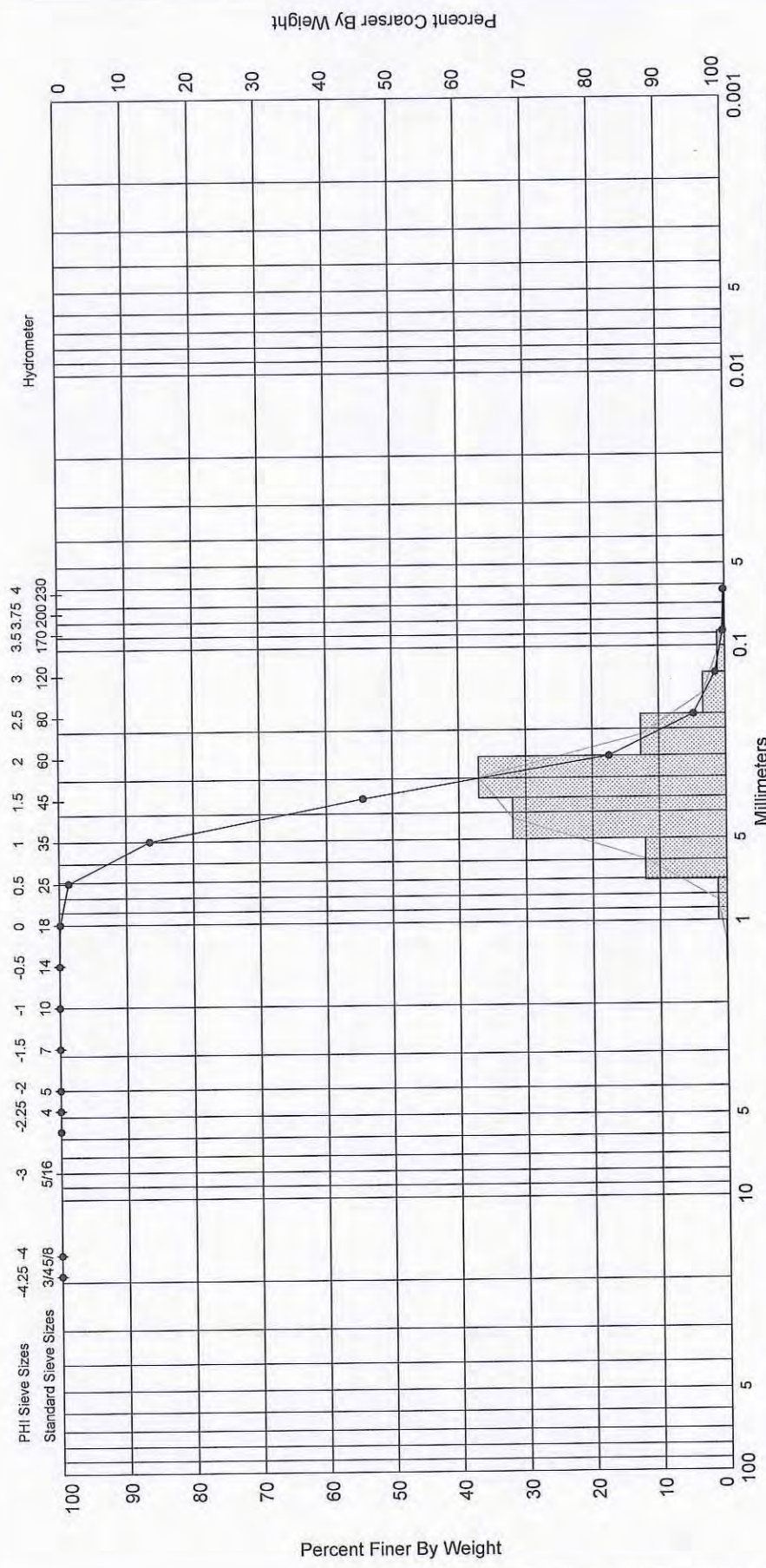
Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information													
988526D PCC	—●—	-4.6	SW	#230 - 4.46			2.08	1.88	-0.23	1.88	1.25	Project Name:	Jupiter Island 10 - Beach Samples	Analysis Date:	01-25-11	Analyzed By:	ML	Easting (X, ft):	946768.	Northing (Y, ft):	988724.	Horizontal System:	NAD 1983	Vertical System:	NAVD 88
Comments:													Depths and elevations based on measured values												
													American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444												



Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Medium	Fine

Sample	988526E PCC	Symbol	—●—	Elev. (ft)	-8.6	USCS	SP	% Fines	#230 - 1.80	% Organics	% Carbonates	Median	1.35	Mean	1.43	Skew	1.34	Kurt	5.91	Sort	0.59
Comments:																					
Depths and elevations based on measured values																					
American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444											Sample Information										
											Project Name: Jupiter Island 10 - Beach Samples										
											Analysis Date: 01-25-11										
											Analyzed By: ML										
											Easting (X, ft): 947074.										
											Northing (Y, ft): 988851.										
											Horizontal System: NAD 1983										
											Vertical System: NAVD 88										





Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine	Fine

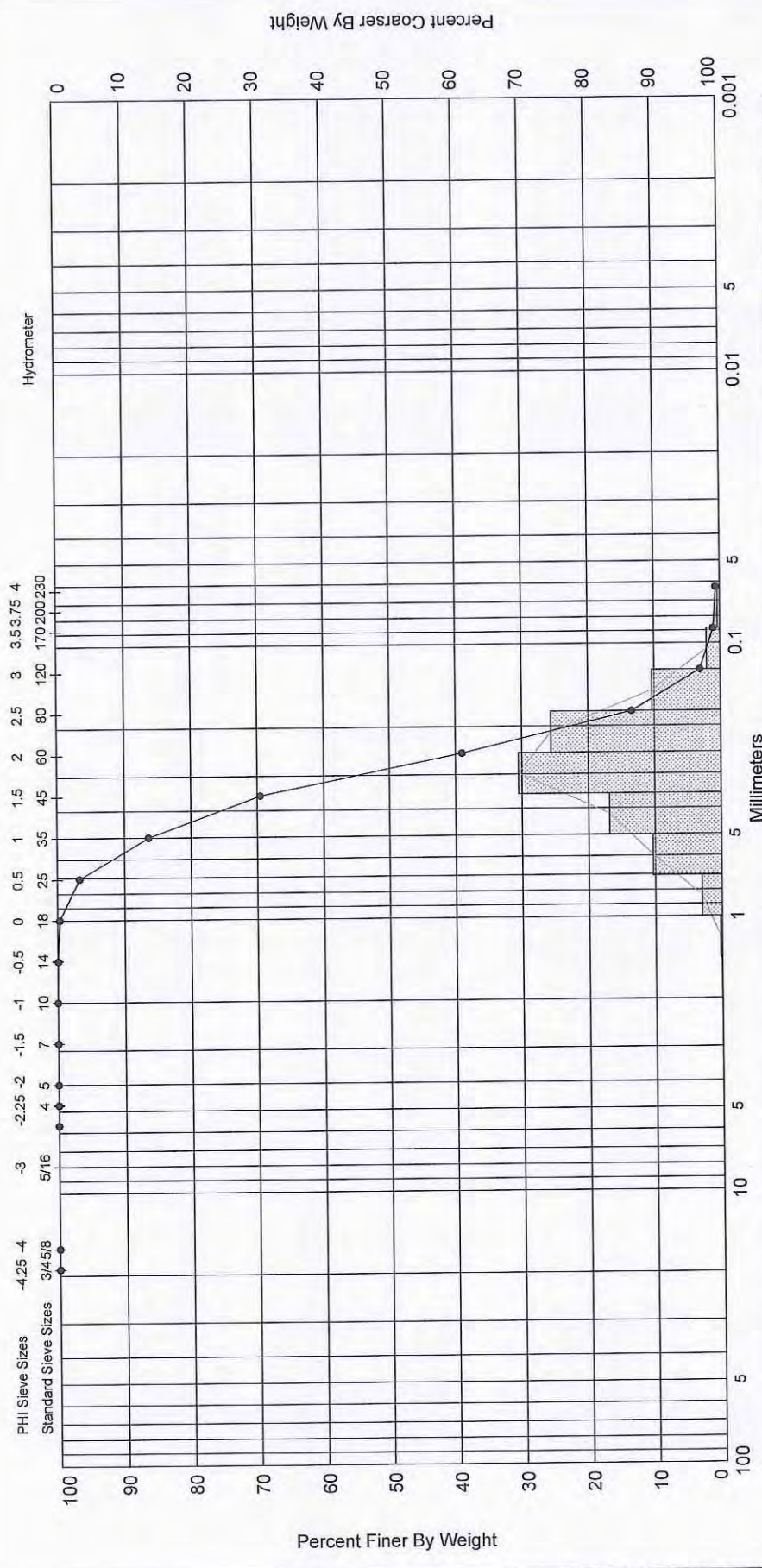
Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information													
R-70A PCC	—●—	7.4	SP	#230 - 0.20			1.56	1.56	0.33	3.7	0.54	Project Name:	Jupiter Island 10 - Beach Samples	Analysis Date:	01-11-11	Analyzed By:	ML	Easting (X, ft):	937695.	Northing (Y, ft):	1007629.	Horizontal System:	NAD 1983	Vertical System:	NAVD 88

Comments:


Depths and elevations based on measured values

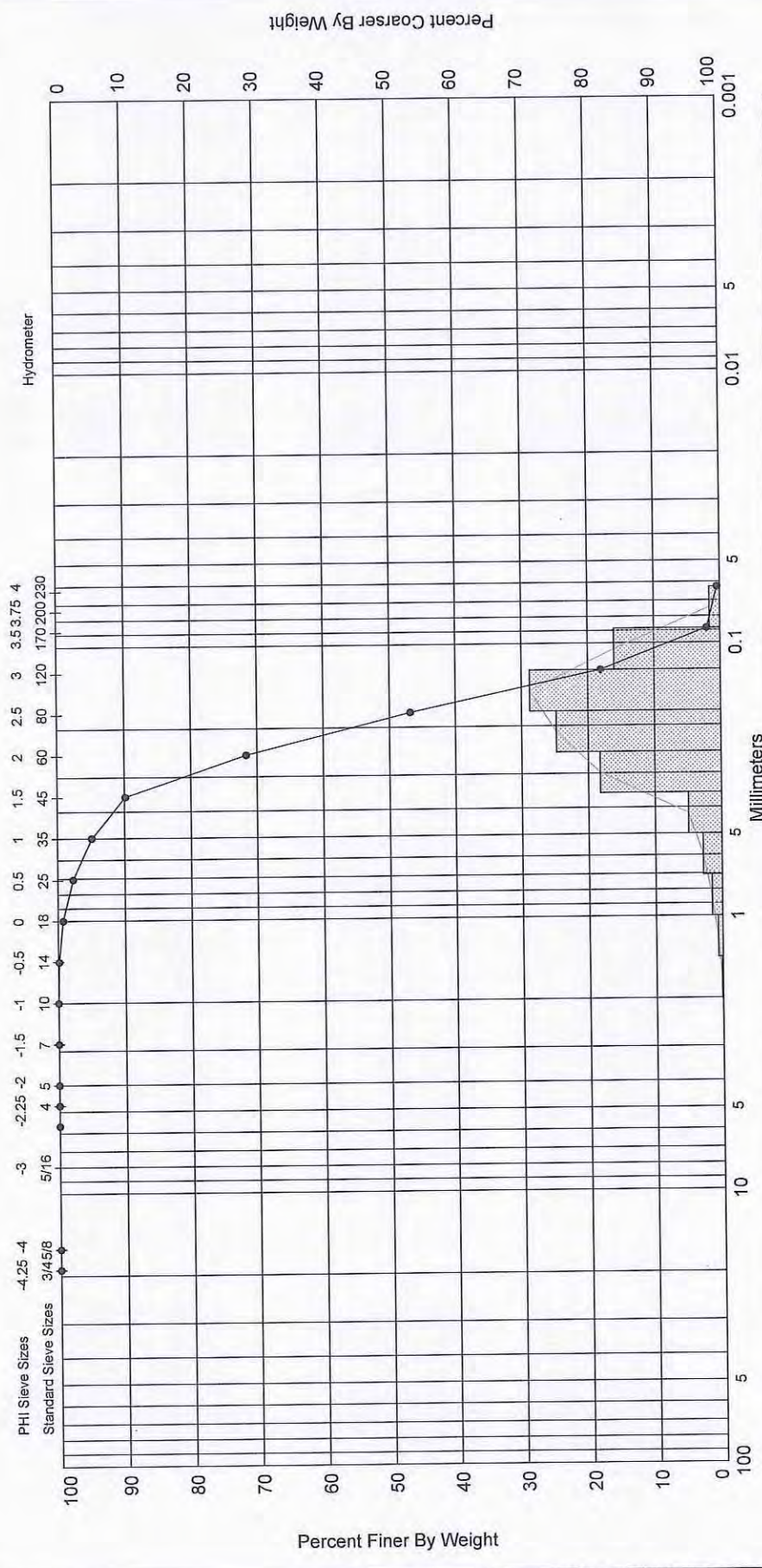


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Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine	Fine

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information			
R-70B PCC	—●—	3.4	SP	#230 - 0.64			1.82	1.78	-0.2	2.98	0.68	Project Name:	Jupiter Island 10 - Beach Samples		
Comments:												Analysis Date:	01-17-11		
Depths and elevations based on measured values												Analyzed By:	ML		
												Easting (X, ft):	937726.		
												Northing (Y, ft):	1007642.		
												Horizontal System:	NAD 1983		
												Vertical System:	NAVD 88		
 AMERICAN VIBRACORE SERVICES												American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444			



Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Fine	

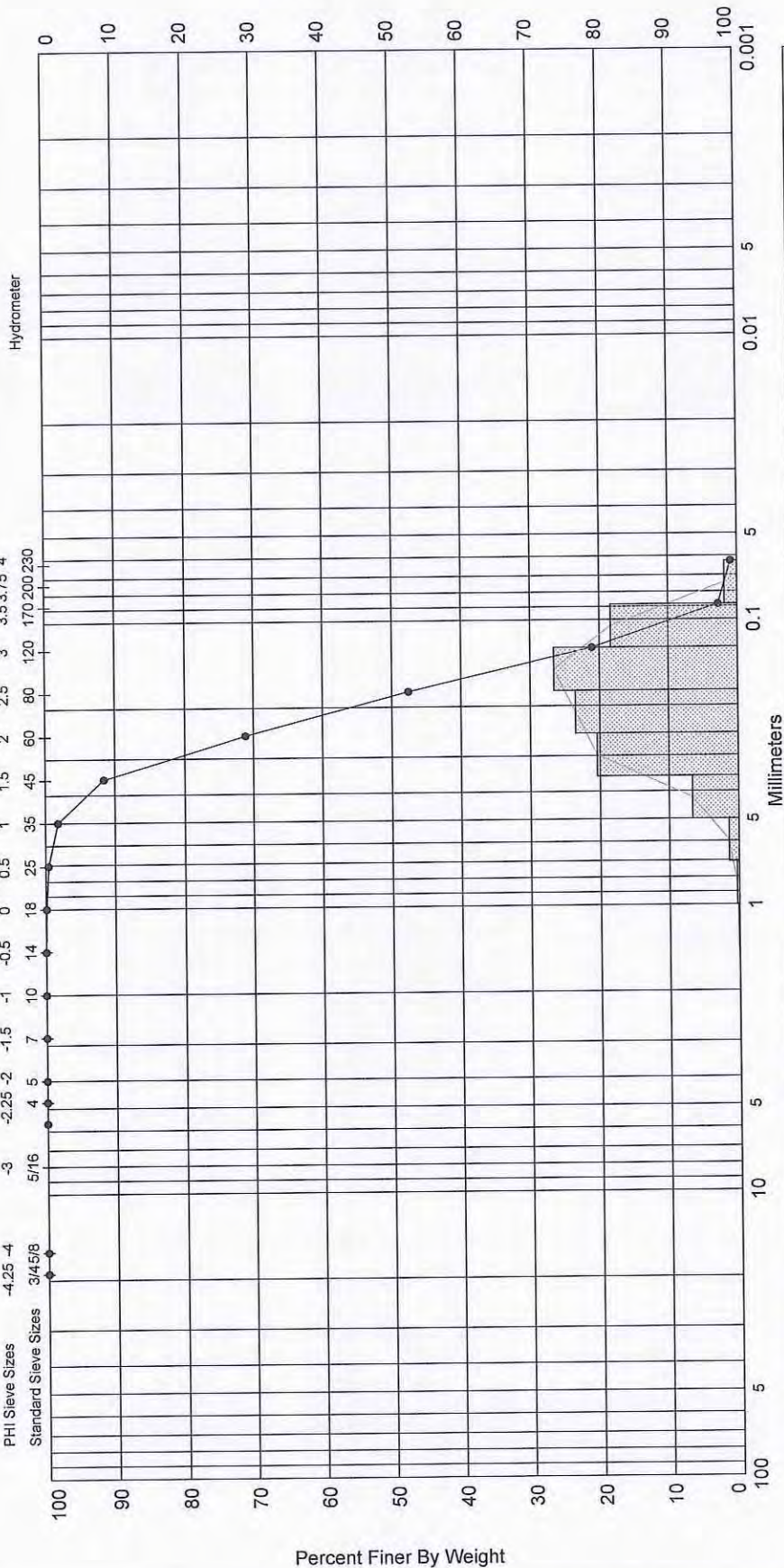
Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information													
R-70C PCC	—●—	-0.6	SP	#230 - 0.42			2.44	2.34	-0.84	4.08	0.73	Project Name:	Jupiter Island 10 - Beach Samples	Analysis Date:	01-11-11	Analyzed By:	ML	Easting (X, ft):	937758.	Northing (Y, ft):	1007655.	Horizontal System:	NAD 1983	Vertical System:	NAVD 88

Comments:

Depths and elevations based on measured values



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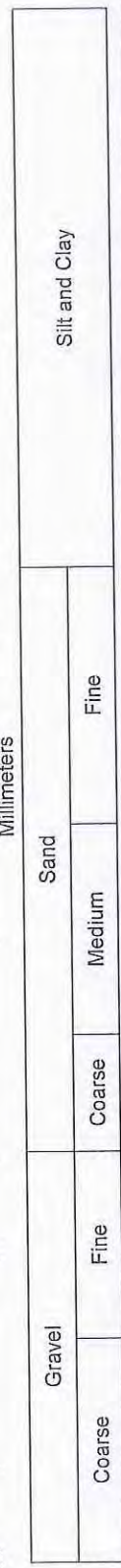
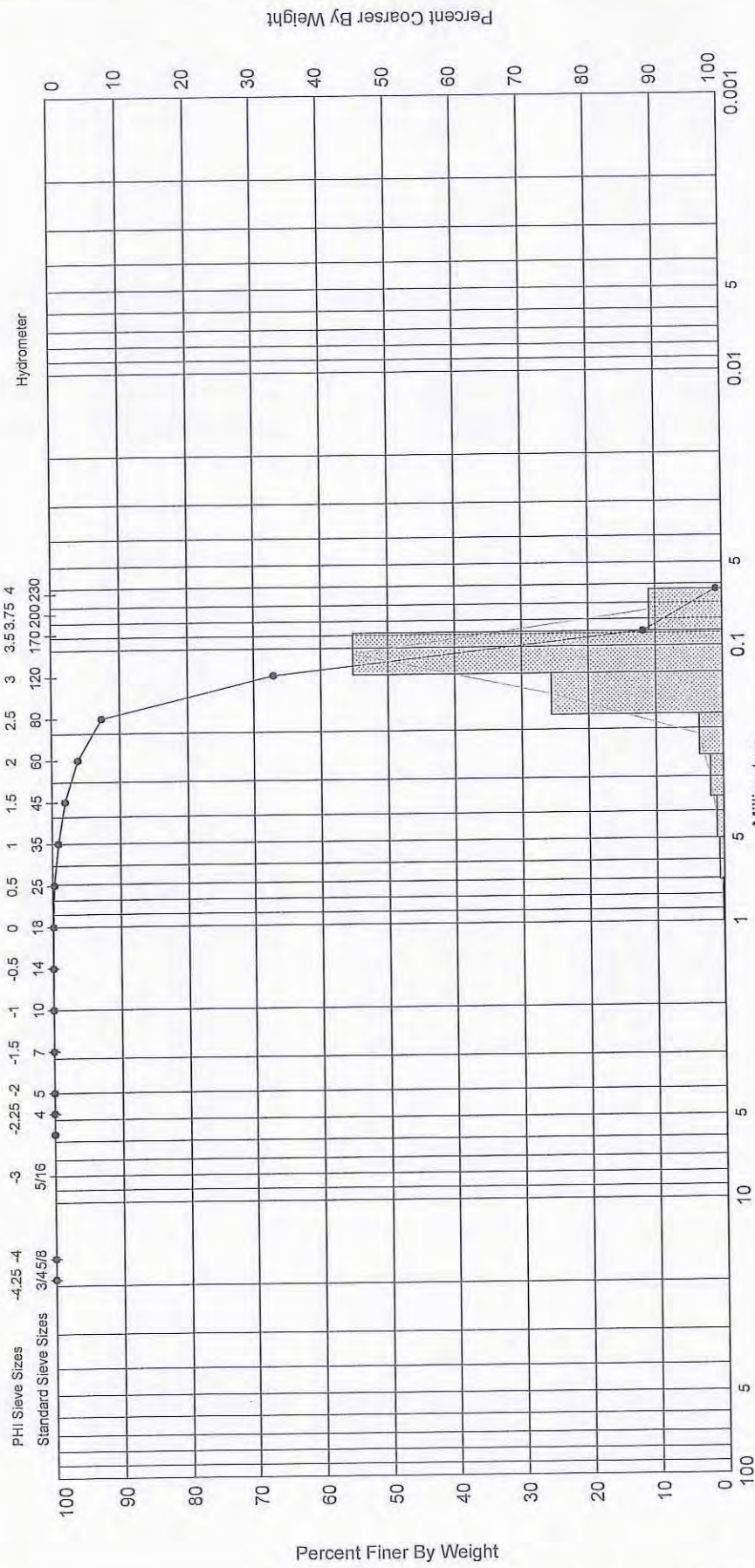


Gravel		Sand		Silt and Clay	
Coarse	Fine	Coarse	Medium	Medium	Fine

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
R-70D PCC	—●—	-4.6	SP	#230 - 0.91			2.45	2.4	-0.33	2.74	0.66

Sample Information	
Project Name:	Jupiter Island 10 - Beach Samples
Analysis Date:	01-11-11
Analyzed By:	ML
Easting (X, ft):	937683.
Northing (Y, ft):	1007699.
Horizontal System:	NAD 1983
Vertical System:	NAVD 88

 AMERICAN VIBRACORE SERVICES	American Vibracore Services, Inc. 1215 Wallace Drive Delray Beach, FL 33444
	Comments: Depths and elevations based on measured values



Sample Information	
Project Name:	Jupiter Island 10 - Beach Samples
Analysis Date:	01-10-11
Analyzed By:	ML
Easting (X, ft):	937961.
Northing (Y, ft):	1007740.
Horizontal System:	NAD 1983
Vertical System:	NAVD 88

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort
R-70E PCC	—●—	-8.6	SW	#230 - 0.87			3.15	3.07	-2.09	10.99	0.5

Comments:
 Depths and elevations based on measured values



American Vibracore Services, Inc.
 1215 Wallace Drive
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Post CC Sieve Report



Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 1000258A PCC

Analysis Date: 01-17-11

Analyzed By: ML

Easting (ft):

941554.

Northing (ft):

1000417.

Coordinate System:

Florida State Plane East

Elevation (ft):

7.4 NAVD 88

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments:

Dry Weight (g):

24.24

Wash Weight (g):

23.82

Pan Retained (g):

0.05

Sieve Loss (%):

0.00

Fines (%):

#230 - 1.94

Organics (%):

Carbonates (%):

Shells (%):

Sieve Number

Sieve Size (Phi)

Sieve Size (Millimeters)

Grams Retained

% Weight Retained

Cum. Grams Retained

C. % Weight Retained

3/4"

-4.25

19.03

0.00

0.00

0.00

0.00

5/8"

-4.00

16.00

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

0.00

0.00

0.00

0.00

4

-2.25

4.76

0.00

0.00

0.00

0.00

5

-2.00

4.00

0.00

0.00

0.00

0.00

7

-1.50

2.83

0.00

0.00

0.00

0.00

10

-1.00

2.00

0.00

0.00

0.00

0.00

14

-0.50

1.41

0.01

0.04

0.01

0.04

18

0.00

1.00

0.08

0.33

0.09

0.37

25

0.50

0.71

0.47

1.94

0.56

2.31

35

1.00

0.50

3.65

15.06

4.21

17.37

45

1.50

0.35

8.07

33.29

12.28

50.66

60

2.00

0.25

7.63

31.48

19.91

82.14

80

2.50

0.18

2.06

8.50

21.97

90.64

120

3.00

0.13

0.67

2.76

22.64

93.40

170

3.50

0.09

0.81

3.34

23.45

96.74

230

4.00

0.06

0.32

1.32

23.77

98.06

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.24

2.11

1.89

1.49

1.11

0.95

0.59

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.54

0.34

0.66

0.87

4.55

GRANULARMETRIC REPORT. JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 1000258B PCC

Analysis Date: 01-17-11

Analyzed By: ML

Easting (ft): 941580.	Northing (ft): 1000428.	Coordinate System: Florida State Plane East	Elevation (ft): 3.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/2	Comments:
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Dry Weight (g): 21.93	Wash Weight (g): 21.50	Pan Retained (g): 0.04	Sieve Loss (%): 0.09	Fines (%): #230 - 2.23	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.00	0.00	0.00	0.00
18	0.00	1.00	0.11	0.50	0.11	0.50
25	0.50	0.71	0.79	3.60	0.90	4.10
35	1.00	0.50	1.98	9.03	2.88	13.13
45	1.50	0.35	3.19	14.55	6.07	27.68
60	2.00	0.25	5.41	24.67	11.48	52.35
80	2.50	0.18	4.70	21.43	16.18	73.78
120	3.00	0.13	3.12	14.23	19.30	88.01
170	3.50	0.09	1.83	8.34	21.13	96.35
230	4.00	0.06	0.31	1.41	21.44	97.77

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.42	2.86	2.54	1.95	1.41	1.10	0.55

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.93	0.26	0.81	-0.11	2.61

GRANULARMETRIC REPORT: JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 1000258C PCC

Analysis Date: 01-17-11

Analyzed By: ML

Easting (ft): 941611.	Northing (ft): 1000441.	Coordinate System: Florida State Plane East	Elevation (ft): -0.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/2	Comments:
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Dry Weight (g): 23.37	Wash Weight (g): 23.33	Pan Retained (g): 0.02	Sieve Loss (%): 0.04	Fines (%): #230 - 0.30	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.05	0.21	0.05	0.21
18	0.00	1.00	0.27	1.16	0.32	1.37
25	0.50	0.71	0.45	1.93	0.77	3.29
35	1.00	0.50	0.74	3.17	1.51	6.46
45	1.50	0.35	1.35	5.78	2.86	12.24
60	2.00	0.25	4.03	17.24	6.89	29.48
80	2.50	0.18	6.83	29.23	13.72	58.71
120	3.00	0.13	6.17	26.40	19.89	85.11
170	3.50	0.09	3.05	13.05	22.94	98.16
230	4.00	0.06	0.36	1.54	23.30	99.70

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.38	2.98	2.81	2.35	1.87	1.61	0.77
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	2.27	0.21	0.76	-0.92	4.33	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 1000258D PCC

Analysis Date: 01-10-11

Analyzed By: ML

Easting (ft): 941673.	Northing (ft): 1000467.	Coordinate System: Florida State Plane East	Elevation (ft): -4.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-6/1	Comments:
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Dry Weight (g): 70.78	Wash Weight (g): 70.29	Pan Retained (g): 0.43	Sieve Loss (%): 0.01	Fines (%): #230 - 1.31	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.00	0.00	0.00	0.00
18	0.00	1.00	0.00	0.00	0.00	0.00
25	0.50	0.71	0.04	0.06	0.04	0.06
35	1.00	0.50	0.09	0.13	0.13	0.18
45	1.50	0.35	0.38	0.54	0.51	0.72
60	2.00	0.25	2.15	3.04	2.66	3.76
80	2.50	0.18	6.94	9.81	9.60	13.56
120	3.00	0.13	28.01	39.57	37.61	53.14
170	3.50	0.09	28.43	40.17	66.04	93.30
230	4.00	0.06	3.81	5.38	69.85	98.69

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.66	3.38	3.27	2.96	2.64	2.53	2.06

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.92	0.13	0.45	-0.88	4.91

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 1000258E PCC

Analysis Date: 01-10-11

Analyzed By: ML

Easting (ft):

941736.

Northing (ft):

1000494.

Coordinate System:

Florida State Plane East

Elevation (ft):

-8.6 NAVD 88

USCS:

SW

Munsell:

Wet - 10 YR-6/1

Comments:

Dry Weight (g):

52.06

Wash Weight (g):

51.75

Pan Retained (g):

0.39

Sieve Loss (%):

0.04

Fines (%):

#230 - 1.38

Organics (%):

Carbonates (%):

Shells (%):

Sieve Number

Sieve Size (Phi)

Sieve Size (Millimeters)

Grams Retained

% Weight Retained

Cum. Grams Retained

C. % Weight Retained

3/4"

-4.25

19.03

0.00

0.00

0.00

0.00

5/8"

-4.00

16.00

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

0.00

0.00

0.00

0.00

4

-2.25

4.76

0.00

0.00

0.00

0.00

5

-2.00

4.00

0.00

0.00

0.00

0.00

7

-1.50

2.83

0.00

0.00

0.00

0.00

10

-1.00

2.00

0.00

0.00

0.00

0.00

14

-0.50

1.41

0.00

0.00

0.00

0.00

18

0.00

1.00

0.01

0.02

0.01

0.02

25

0.50

0.71

0.02

0.04

0.03

0.06

35

1.00

0.50

0.05

0.10

0.08

0.15

45

1.50

0.35

0.08

0.15

0.16

0.31

60

2.00

0.25

0.40

0.77

0.56

1.08

80

2.50

0.18

2.15

4.13

2.71

5.21

120

3.00

0.13

15.17

29.14

17.88

34.34

170

3.50

0.09

29.27

56.22

47.15

90.57

230

4.00

0.06

4.19

8.05

51.34

98.62

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.78

3.44

3.36

3.14

2.84

2.69

2.47

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

3.08

0.12

0.38

-1.18

7.76

GRANULARMETRIC REPORT JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 965058A PCC

Analysis Date: 01-28-11

Analyzed By: ML

Easting (ft): 953999.	Northing (ft): 965299.	Coordinate System: Florida State Plane East	Elevation (ft): 7.4 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-5/1	Comments:
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Dry Weight (g): 29.33	Wash Weight (g): 28.95	Pan Retained (g): 0.03	Sieve Loss (%): 0.03	Fines (%): #230 - 1.43	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.01	0.03	0.01	0.03
18	0.00	1.00	0.10	0.34	0.11	0.38
25	0.50	0.71	1.34	4.57	1.45	4.94
35	1.00	0.50	2.62	8.93	4.07	13.88
45	1.50	0.35	3.86	13.16	7.93	27.04
60	2.00	0.25	5.61	19.13	13.54	46.16
80	2.50	0.18	1.73	5.90	15.27	52.06
120	3.00	0.13	9.86	33.62	25.13	85.68
170	3.50	0.09	3.57	12.17	28.70	97.85
230	4.00	0.06	0.21	0.72	28.91	98.57

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.38	2.98	2.84	2.33	1.42	1.08	0.50
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	2.09	0.23	0.89	-0.44	2.15	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 965058B PCC

Analysis Date: 01-28-11

Analyzed By: ML

Easting (ft): 954040.	Northing (ft): 965316.	Coordinate System: Florida State Plane East	Elevation (ft): 3.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/1	Comments:
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Dry Weight (g): 39.49	Wash Weight (g): 39.33	Pan Retained (g): 0.02	Sieve Loss (%): 0.03	Fines (%): #230 - 0.48	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.00	0.00	0.00	0.00
18	0.00	1.00	0.04	0.10	0.04	0.10
25	0.50	0.71	0.44	1.11	0.48	1.22
35	1.00	0.50	5.10	12.91	5.58	14.13
45	1.50	0.35	11.73	29.70	17.31	43.83
60	2.00	0.25	13.46	34.08	30.77	77.92
80	2.50	0.18	5.99	15.17	36.76	93.09
120	3.00	0.13	1.97	4.99	38.73	98.08
170	3.50	0.09	0.43	1.09	39.16	99.16
230	4.00	0.06	0.14	0.35	39.30	99.52

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.69	2.20	1.96	1.59	1.18	1.03	0.65
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.6	0.33	0.58	0.38	3.42	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 965058C PCC

Analysis Date: 01-28-11

Analyzed By: ML

Easting (ft): 954067.	Northing (ft): 965328.	Coordinate System: Florida State Plane East	Elevation (ft): -0.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/1	Comments:
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Dry Weight (g): 28.25	Wash Weight (g): 28.11	Pan Retained (g): 0.04	Sieve Loss (%): 0.04	Fines (%): #230 - 0.67	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.01	0.04	0.01	0.04
18	0.00	1.00	0.04	0.14	0.05	0.18
25	0.50	0.71	0.65	2.30	0.70	2.48
35	1.00	0.50	4.98	17.63	5.68	20.11
45	1.50	0.35	9.85	34.87	15.53	54.97
60	2.00	0.25	8.53	30.19	24.06	85.17
80	2.50	0.18	2.67	9.45	26.73	94.62
120	3.00	0.13	0.87	3.08	27.60	97.70
170	3.50	0.09	0.32	1.13	27.92	98.83
230	4.00	0.06	0.14	0.50	28.06	99.33

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.56	1.98	1.83	1.43	1.07	0.88	0.57
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.46	0.36	0.59	0.61	4.17	

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 965058D PCC

Analysis Date: 01-28-11

Analyzed By: ML

Easting (ft):

954088.

Northing (ft):

965336.

Coordinate System:

Florida State Plane East

Elevation (ft):

-4.6 NAVD 88

USCS:

SP

Munsell:

Wet - 10 YR-5/1

Comments:

Dry Weight (g):

13.76

Wash Weight (g):

13.54

Pan Retained (g):

0.03

Sieve Loss (%):

0.00

Fines (%):

#230 - 1.82

Organics (%):

Carbonates (%):

Shells (%):

Sieve Number

Sieve Size (Phi)

Sieve Size (Millimeters)

Grams Retained

% Weight Retained

Cum. Grams Retained

C. % Weight Retained

3/4"

-4.25

19.03

0.00

0.00

0.00

0.00

5/8"

-4.00

16.00

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

0.00

0.00

0.00

0.00

4

-2.25

4.76

0.00

0.00

0.00

0.00

5

-2.00

4.00

0.00

0.00

0.00

0.00

7

-1.50

2.83

0.00

0.00

0.00

0.00

10

-1.00

2.00

0.00

0.00

0.00

0.00

14

-0.50

1.41

0.05

0.36

0.05

0.36

18

0.00

1.00

0.34

2.47

0.39

2.83

25

0.50

0.71

1.74

12.65

2.13

15.48

35

1.00

0.50

4.44

32.27

6.57

47.75

45

1.50

0.35

3.86

28.05

10.43

75.80

60

2.00

0.25

1.70

12.35

12.13

88.15

80

2.50

0.18

0.52

3.78

12.65

91.93

120

3.00

0.13

0.37

2.69

13.02

94.62

170

3.50

0.09

0.32

2.33

13.34

96.95

230

4.00

0.06

0.17

1.24

13.51

98.18

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.08

1.83

1.49

1.04

0.65

0.51

0.09

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.13

0.46

0.76

1.04

4.73

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 965058E PCC

Analysis Date: 01-28-11

Analyzed By: ML

Easting (ft): 954218.	Northing (ft): 965391.	Coordinate System: Florida State Plane East	Elevation (ft): -8.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/1	Comments:
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Dry Weight (g): 28.07	Wash Weight (g): 27.95	Pan Retained (g): 0.03	Sieve Loss (%): 0.04	Fines (%): #230 - 0.57	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.02	0.07	0.02	0.07
18	0.00	1.00	0.07	0.25	0.09	0.32
25	0.50	0.71	0.81	2.89	0.90	3.21
35	1.00	0.50	3.09	11.01	3.99	14.21
45	1.50	0.35	4.94	17.60	8.93	31.81
60	2.00	0.25	7.59	27.04	16.52	58.85
80	2.50	0.18	5.77	20.56	22.29	79.41
120	3.00	0.13	3.99	14.21	26.28	93.62
170	3.50	0.09	1.44	5.13	27.72	98.75
230	4.00	0.06	0.19	0.68	27.91	99.43

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.13	2.66	2.39	1.84	1.31	1.05	0.58

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.84	0.28	0.75	-0.03	2.64

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 976899A PCC

Analysis Date: 01-28-11

Analyzed By: ML

Easting (ft): 951051.	Northing (ft): 977074.	Coordinate System: Florida State Plane East	Elevation (ft): 7.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments:
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Dry Weight (g): 36.64	Wash Weight (g): 36.17	Pan Retained (g): 0.03	Sieve Loss (%): 0.08	Fines (%): #230 - 1.45	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.03	0.08	0.03	0.08
18	0.00	1.00	0.04	0.11	0.07	0.19
25	0.50	0.71	0.28	0.76	0.35	0.96
35	1.00	0.50	3.11	8.49	3.46	9.44
45	1.50	0.35	13.31	36.33	16.77	45.77
60	2.00	0.25	16.05	43.80	32.82	89.57
80	2.50	0.18	2.53	6.91	35.35	96.48
120	3.00	0.13	0.32	0.87	35.67	97.35
170	3.50	0.09	0.22	0.60	35.89	97.95
230	4.00	0.06	0.22	0.60	36.11	98.55

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.39	1.94	1.83	1.55	1.21	1.09	0.74
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.53	0.35	0.47	0.62	6.75	

GRANULARMETRIC REPORT JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 976899B PCC

Analysis Date: 01-28-11

Analyzed By: ML

Easting (ft): 951070. Northing (ft): 977082.

Coordinate System: Florida State Plane East

Elevation (ft): 3.4 NAVD 88

USCS: SP Munsell: Wet - 10 YR-4/1 Comments:

Dry Weight (g): 33.23	Wash Weight (g): 32.88	Pan Retained (g): 0.02	Sieve Loss (%): 0.03	Fines (%): #230 - 1.14	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.01	0.03	0.01	0.03
18	0.00	1.00	0.16	0.48	0.17	0.51
25	0.50	0.71	0.74	2.23	0.91	2.74
35	1.00	0.50	4.97	14.96	5.88	17.69
45	1.50	0.35	11.95	35.96	17.83	53.66
60	2.00	0.25	11.73	35.30	29.56	88.96
80	2.50	0.18	2.37	7.13	31.93	96.09
120	3.00	0.13	0.45	1.35	32.38	97.44
170	3.50	0.09	0.26	0.78	32.64	98.22
230	4.00	0.06	0.21	0.63	32.85	98.86

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.42	1.93	1.80	1.45	1.10	0.94	0.58

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.45	0.37	0.55	0.51	5.26

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 976899C PCC

Analysis Date: 01-28-11

Analyzed By: ML

Easting (ft): 951115.	Northing (ft): 977101.	Coordinate System: Florida State Plane East	Elevation (ft): -0.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments:
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Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
37.66	37.40	0.01	0.08	#230 - 0.80			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained	
3/4"	-4.25	19.03		0.00	0.00	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.10	0.27	0.10	0.27	
25	0.50	0.71	0.91	2.42	1.01	2.68	
35	1.00	0.50	3.42	9.08	4.43	11.76	
45	1.50	0.35	6.12	16.25	10.55	28.01	
60	2.00	0.25	14.48	38.45	25.03	66.46	
80	2.50	0.18	10.35	27.48	35.38	93.95	
120	3.00	0.13	1.56	4.14	36.94	98.09	
170	3.50	0.09	0.26	0.69	37.20	98.78	
230	4.00	0.06	0.16	0.42	37.36	99.20	

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.63	2.32	2.16	1.79	1.41	1.13	0.63
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.73	0.30	0.58	-0.33	3.65	

GRANULARMETRIC REPORT JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 976899D PCC

Analysis Date: 01-28-11

Analyzed By: ML

Easting (ft): 951139.	Northing (ft): 977111.	Coordinate System: Florida State Plane East	Elevation (ft): -4.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-4/1	Comments:
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Dry Weight (g): 14.34	Wash Weight (g): 14.00	Pan Retained (g): 0.01	Sieve Loss (%): 0.00	Fines (%): #230 - 2.44	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.02	0.14	0.02	0.14
18	0.00	1.00	0.30	2.09	0.32	2.23
25	0.50	0.71	1.45	10.11	1.77	12.34
35	1.00	0.50	2.62	18.27	4.39	30.61
45	1.50	0.35	2.25	15.69	6.64	46.30
60	2.00	0.25	3.51	24.48	10.15	70.78
80	2.50	0.18	2.43	16.95	12.58	87.73
120	3.00	0.13	0.87	6.07	13.45	93.79
170	3.50	0.09	0.35	2.44	13.80	96.23
230	4.00	0.06	0.19	1.32	13.99	97.56

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
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3.25	2.39	2.12	1.58	0.85	0.60	0.14
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Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.49	0.36	0.84	0.14	2.69

GRANULOMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 976899E PCC

Analysis Date: 01-28-11

Analyzed By: ML

Easting (ft): 951165.	Northing (ft): 977122.	Coordinate System: Florida State Plane East	Elevation (ft): -8.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/1	Comments:
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Dry Weight (g): 49.09	Wash Weight (g): 48.83	Pan Retained (g): 0.04	Sieve Loss (%): 0.04	Fines (%): #230 - 0.65	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.01	0.02	0.01	0.02
18	0.00	1.00	0.02	0.04	0.03	0.06
25	0.50	0.71	0.10	0.20	0.13	0.26
35	1.00	0.50	0.42	0.86	0.55	1.12
45	1.50	0.35	3.33	6.78	3.88	7.90
60	2.00	0.25	15.14	30.84	19.02	38.75
80	2.50	0.18	16.08	32.76	35.10	71.50
120	3.00	0.13	9.86	20.09	44.96	91.59
170	3.50	0.09	3.57	7.27	48.53	98.86
230	4.00	0.06	0.24	0.49	48.77	99.35

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.23	2.81	2.59	2.17	1.78	1.63	1.29
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	2.19	0.22	0.56	0.04	3.17	

GRANULARMETRIC REPORT JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 988526A PCC

Analysis Date: 01-17-11

Analyzed By: ML

Easting (ft):

946672.

Northing (ft):

988683.

Coordinate System:

Florida State Plane East

Elevation (ft):

7.4 NAVD 88

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments:

Dry Weight (g):

33.16

Wash Weight (g):

32.68

Pan Retained (g):

0.03

Sieve Loss (%):

0.03

Fines (%):

#230 - 1.57

Organics (%):

Carbonates (%):

Shells (%):

Sieve Number

Sieve Size (Phi)

Sieve Size (Millimeters)

Grams Retained

% Weight Retained

Cum. Grams Retained

C. % Weight Retained

3/4"

-4.25

19.03

0.00

0.00

0.00

0.00

5/8"

-4.00

16.00

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

0.00

0.00

0.00

0.00

4

-2.25

4.76

0.00

0.00

0.00

0.00

5

-2.00

4.00

0.00

0.00

0.00

0.00

7

-1.50

2.83

0.00

0.00

0.00

0.00

10

-1.00

2.00

0.00

0.00

0.00

0.00

14

-0.50

1.41

0.01

0.03

0.01

0.03

18

0.00

1.00

0.03

0.09

0.04

0.12

25

0.50

0.71

0.26

0.78

0.30

0.90

35

1.00

0.50

3.88

11.70

4.18

12.61

45

1.50

0.35

13.28

40.05

17.46

52.65

60

2.00

0.25

11.90

35.89

29.36

88.54

80

2.50

0.18

2.14

6.45

31.50

94.99

120

3.00

0.13

0.42

1.27

31.92

96.26

170

3.50

0.09

0.44

1.33

32.36

97.59

230

4.00

0.06

0.28

0.84

32.64

98.43

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

2.50

1.94

1.81

1.47

1.15

1.04

0.68

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.5

0.35

0.52

1.06

6.38

GRANULARMETRIC REPORT JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 988526B PCC

Analysis Date: 01-25-11

Analyzed By: ML

Easting (ft): 946714.	Northing (ft): 988701.	Coordinate System: Florida State Plane East	Elevation (ft): 3.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/1	Comments:
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Dry Weight (g): 32.20	Wash Weight (g): 32.00	Pan Retained (g): 0.03	Sieve Loss (%): 0.00	Fines (%): #230 - 0.71	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.01	0.03	0.01	0.03
18	0.00	1.00	0.08	0.25	0.09	0.28
25	0.50	0.71	0.61	1.89	0.70	2.17
35	1.00	0.50	5.49	17.05	6.19	19.22
45	1.50	0.35	13.89	43.14	20.08	62.36
60	2.00	0.25	9.53	29.60	29.61	91.96
80	2.50	0.18	1.59	4.94	31.20	96.89
120	3.00	0.13	0.27	0.84	31.47	97.73
170	3.50	0.09	0.31	0.96	31.78	98.70
230	4.00	0.06	0.19	0.59	31.97	99.29

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.31	1.87	1.71	1.36	1.07	0.91	0.58

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.39	0.38	0.52	0.87	6.18

GRANULARMETRIC REPORT JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 988526C PCC

Analysis Date: 01-25-11

Analyzed By: ML

Easting (ft):

946741.

Northing (ft):

988712.

Coordinate System:

Florida State Plane East

Elevation (ft):

-0.6 NAVD 88

USCS:

SP

Munsell:

Wet - 10 YR-5/1

Comments:

Dry Weight (g):

10.91

Wash Weight (g):

10.76

Pan Retained (g):

0.05

Sieve Loss (%):

0.00

Fines (%):

#230 - 1.83

Organics (%):

Carbonates (%):

Shells (%):

Sieve Number

Sieve Size (Phi)

Sieve Size (Millimeters)

Grams Retained

% Weight Retained

Cum. Grams Retained

C. % Weight Retained

3/4"

-4.25

19.03

0.00

0.00

0.00

0.00

5/8"

-4.00

16.00

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

0.00

0.00

0.00

0.00

4

-2.25

4.76

0.00

0.00

0.00

0.00

5

-2.00

4.00

0.00

0.00

0.00

0.00

7

-1.50

2.83

0.00

0.00

0.00

0.00

10

-1.00

2.00

0.00

0.00

0.00

0.00

14

-0.50

1.41

0.02

0.18

0.02

0.18

18

0.00

1.00

0.28

2.57

0.30

2.75

25

0.50

0.71

1.80

16.50

2.10

19.25

35

1.00

0.50

4.37

40.05

6.47

59.30

45

1.50

0.35

2.32

21.26

8.79

80.57

60

2.00

0.25

0.91

8.34

9.70

88.91

80

2.50

0.18

0.35

3.21

10.05

92.12

120

3.00

0.13

0.18

1.65

10.23

93.77

170

3.50

0.09

0.27

2.47

10.50

96.24

230

4.00

0.06

0.21

1.92

10.71

98.17

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.25

1.71

1.37

0.88

0.57

0.40

0.07

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.03

0.49

0.78

1.46

5.65

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granulometric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 988526D PCC

Analysis Date: 01-25-11

Analyzed By: ML

Easting (ft): 946768.	Northing (ft): 988724.	Coordinate System: Florida State Plane East	Elevation (ft): -4.6 NAVD 88
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USCS: SW	Munsell: Wet - 10 YR-5/2	Comments:
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Dry Weight (g): 3.36	Wash Weight (g): 3.25	Pan Retained (g): 0.04	Sieve Loss (%): 0.00	Fines (%): #230 - 4.46	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.05	1.49	0.05	1.49
18	0.00	1.00	0.20	5.95	0.25	7.44
25	0.50	0.71	0.33	9.82	0.58	17.26
35	1.00	0.50	0.36	10.71	0.94	27.98
45	1.50	0.35	0.30	8.93	1.24	36.90
60	2.00	0.25	0.38	11.31	1.62	48.21
80	2.50	0.18	0.36	10.71	1.98	58.93
120	3.00	0.13	0.41	12.20	2.39	71.13
170	3.50	0.09	0.57	16.96	2.96	88.10
230	4.00	0.06	0.25	7.44	3.21	95.54

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.96	3.38	3.11	2.08	0.86	0.44	-0.21

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.88	0.27	1.25	-0.23	1.88

GRANULARMETRIC REPORT JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP POSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: 988526E PCC

Analysis Date: 01-25-11

Analyzed By: ML

Easting (ft):

947074.

Northing (ft):

988851.

Coordinate System:

Florida State Plane East

Elevation (ft):

-8.6 NAVD 88

USCS:

SP

Munsell:

Wet - 10 YR-4/1

Comments:

Dry Weight (g):

21.65

Wash Weight (g):

21.31

Pan Retained (g):

0.04

Sieve Loss (%):

0.05

Fines (%):

#230 - 1.80

Organics (%):

Carbonates (%):

Shells (%):

Sieve Number

Sieve Size
(Phi)

Sieve Size
(Millimeters)

Grams
Retained

% Weight
Retained

Cum. Grams
Retained

C. % Weight
Retained

3/4"

-4.25

19.03

0.00

0.00

0.00

0.00

5/8"

-4.00

16.00

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

0.00

0.00

0.00

0.00

4

-2.25

4.76

0.00

0.00

0.00

0.00

5

-2.00

4.00

0.00

0.00

0.00

0.00

7

-1.50

2.83

0.00

0.00

0.00

0.00

10

-1.00

2.00

0.01

0.05

0.01

0.05

14

-0.50

1.41

0.01

0.05

0.02

0.09

18

0.00

1.00

0.13

0.60

0.15

0.69

25

0.50

0.71

4.17

19.26

4.32

19.95

35

1.50

0.35

9.37

43.28

13.69

63.23

45

2.00

0.25

5.17

23.88

18.86

87.11

60

2.50

0.18

1.28

5.91

20.14

93.03

80

3.00

0.13

0.45

2.08

20.59

95.10

120

3.50

0.09

0.44

2.03

21.03

97.14

170

4.00

0.06

0.23

1.06

21.26

98.20

230

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

2.98

1.93

1.75

1.35

1.06

0.90

0.61

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.43

0.37

0.59

1.34

5.91

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-70A PCC

Analysis Date: 01-11-11

Analyzed By: ML

Easting (ft): 937695.	Northing (ft): 1007629.	Coordinate System: Florida State Plane East	Elevation (ft): 7.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-6/2	Comments:
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Dry Weight (g): 49.79	Wash Weight (g): 49.71	Pan Retained (g): 0.01	Sieve Loss (%): 0.02	Fines (%): #230 - 0.20	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.01	0.02	0.01	0.02
18	0.00	1.00	0.05	0.10	0.06	0.12
25	0.50	0.71	0.65	1.31	0.71	1.43
35	1.00	0.50	6.03	12.11	6.74	13.54
45	1.50	0.35	15.93	31.99	22.67	45.53
60	2.00	0.25	18.41	36.98	41.08	82.51
80	2.50	0.18	6.33	12.71	47.41	95.22
120	3.00	0.13	1.66	3.33	49.07	98.55
170	3.50	0.09	0.56	1.12	49.63	99.68
230	4.00	0.06	0.06	0.12	49.69	99.80

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
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2.49	2.06	1.90	1.56	1.18	1.04	0.65
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Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.56	0.34	0.54	0.33	3.7

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES GP.J FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-70B PCC

Analysis Date: 01-17-11

Analyzed By: ML

Easting (ft): 937726.	Northing (ft): 1007642.	Coordinate System: Florida State Plane East	Elevation (ft): 3.4 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-5/2	Comments:
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Dry Weight (g): 34.57	Wash Weight (g): 34.36	Pan Retained (g): 0.01	Sieve Loss (%): 0.00	Fines (%): #230 - 0.64	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.02	0.06	0.02	0.06
18	0.00	1.00	0.09	0.26	0.11	0.32
25	0.50	0.71	1.03	2.98	1.14	3.30
35	1.00	0.50	3.57	10.33	4.71	13.62
45	1.50	0.35	5.82	16.84	10.53	30.46
60	2.00	0.25	10.55	30.52	21.08	60.98
80	2.50	0.18	8.86	25.63	29.94	86.61
120	3.00	0.13	3.57	10.33	33.51	96.93
170	3.50	0.09	0.71	2.05	34.22	98.99
230	4.00	0.06	0.13	0.38	34.35	99.36

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
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2.91	2.45	2.27	1.82	1.34	1.07	0.58
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Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	1.78	0.29	0.68	-0.2	2.98

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-70C PCC

Analysis Date: 01-11-11

Analyzed By: ML

Easting (ft):

937758.

Northing (ft):

1007655.

Coordinate System:

Florida State Plane East

Elevation (ft):

-0.6 NAVD 88

USCS:

SP

Munsell:

Wet - 10 YR-6/2

Comments:

Dry Weight (g):

40.35

Wash Weight (g):

40.25

Pan Retained (g):

0.05

Sieve Loss (%):

0.05

Fines (%):

#230 - 0.42

Organics (%):

Carbonates (%):

Shells (%):

Sieve Number

Sieve Size
(Phi)

Sieve Size
(Millimeters)

Grams
Retained

% Weight
Retained

Cum. Grams
Retained

C. % Weight
Retained

3/4"

-4.25

19.03

0.00

0.00

0.00

0.00

5/8"

-4.00

16.00

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

0.00

0.00

0.00

0.00

4

-2.25

4.76

0.00

0.00

0.00

0.00

5

-2.00

4.00

0.00

0.00

0.00

0.00

7

-1.50

2.83

0.00

0.00

0.00

0.00

10

-1.00

2.00

0.00

0.00

0.00

0.00

14

-0.50

1.41

0.05

0.12

0.05

0.12

18

0.00

1.00

0.26

0.64

0.31

0.77

25

0.50

0.71

0.63

1.56

0.94

2.33

35

1.00

0.50

1.14

2.83

2.08

5.15

45

1.50

0.35

2.01

4.98

4.09

10.14

60

2.00

0.25

7.36

18.24

11.45

28.38

80

2.50

0.18

10.01

24.81

21.46

53.18

120

3.00

0.13

11.60

28.75

33.06

81.93

170

3.50

0.09

6.48

16.06

39.54

97.99

230

4.00

0.06

0.64

1.59

40.18

99.58

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.41

3.06

2.88

2.44

1.91

1.66

0.97

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

2.34

0.20

0.73

-0.84

4.08

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-70D PCC

Analysis Date: 01-11-11

Analyzed By: ML

Easting (ft): 937683.	Northing (ft): 1007699.	Coordinate System: Florida State Plane East	Elevation (ft): -4.6 NAVD 88
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USCS: SP	Munsell: Wet - 10 YR-6/1	Comments:
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Dry Weight (g): 52.71	Wash Weight (g): 52.68	Pan Retained (g): 0.37	Sieve Loss (%): 0.15	Fines (%): #230 - 0.91	Organics (%):	Carbonates (%):	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
3/4"	-4.25	19.03		0.00	0.00	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.00	0.00	0.00	0.00
4	-2.25	4.76	0.00	0.00	0.00	0.00
5	-2.00	4.00	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.00	0.00	0.00	0.00
10	-1.00	2.00	0.00	0.00	0.00	0.00
14	-0.50	1.41	0.00	0.00	0.00	0.00
18	0.00	1.00	0.05	0.09	0.05	0.09
25	0.50	0.71	0.16	0.30	0.21	0.40
35	1.00	0.50	0.74	1.40	0.95	1.80
45	1.50	0.35	3.51	6.66	4.46	8.46
60	2.00	0.25	10.75	20.39	15.21	28.86
80	2.50	0.18	12.40	23.52	27.61	52.38
120	3.00	0.13	14.00	26.56	41.61	78.94
170	3.50	0.09	9.66	18.33	51.27	97.27
230	4.00	0.06	0.96	1.82	52.23	99.09

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.44	3.14	2.93	2.45	1.91	1.68	1.24

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.4	0.19	0.66	-0.33	2.74

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES.GPJ FL DEP ROSS.GDT 5/2/11

Granularmetric Report

Depths and elevations based on measured values



American Vibracore Services, Inc.
1215 Wallace Drive
Delray Beach, FL 33444

Project Name: Jupiter Island 10 - Beach Samples

Sample Name: R-70E PCC

Analysis Date: 01-10-11

Analyzed By: ML

Easting (ft):

937961.

Northing (ft):

1007740.

Coordinate System:

Florida State Plane East

Elevation (ft):

-8.6 NAVD 88

USCS:

SW

Munsell:

Wet - 10 YR-6/1

Comments:

Dry Weight (g):

69.09

Wash Weight (g):

68.64

Pan Retained (g):

0.14

Sieve Loss (%):

0.01

Fines (%):

#230 - 0.87

Organics (%):

Carbonates (%):

Shells (%):

Sieve Number

Sieve Size (Phi)

Sieve Size (Millimeters)

Grams Retained

% Weight Retained

Cum. Grams Retained

C. % Weight Retained

3/4"

-4.25

19.03

0.00

0.00

0.00

0.00

5/8"

-4.00

16.00

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

0.00

0.00

0.00

0.00

4

-2.25

4.76

0.00

0.00

0.00

0.00

5

-2.00

4.00

0.00

0.00

0.00

0.00

7

-1.50

2.83

0.00

0.00

0.00

0.00

10

-1.00

2.00

0.01

0.01

0.01

0.01

14

-0.50

1.41

0.02

0.03

0.03

0.04

18

0.00

1.00

0.03

0.04

0.06

0.09

25

0.50

0.71

0.12

0.17

0.18

0.26

35

1.00

0.50

0.44

0.64

0.62

0.90

45

1.50

0.35

0.70

1.01

1.32

1.91

60

2.00

0.25

1.33

1.93

2.65

3.84

80

2.50

0.18

2.44

3.53

5.09

7.37

120

3.00

0.13

17.64

25.53

22.73

32.90

170

3.50

0.09

38.18

55.26

60.91

88.16

230

4.00

0.06

7.58

10.97

68.49

99.13

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.81

3.46

3.38

3.15

2.85

2.67

2.16

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

3.07

0.12

0.5

-2.09

10.99

GRANULARMETRIC REPORT - JUPITER ISLAND 10 - BEACH SAMPLES GPJ FL DEP ROSS.GDT 5/2/11

Calcium Carbonate Testing



**REPORT OF CARBONATES CONTENT
By Acid Leaching Vesterberg Method**

DATE: 1/27/2011

Project No. : 10-0100

CLIENT: Gahagan & Bryant

Lab ID:

PROJECT: Jupiter Island 10 Beach Samples

SAMPLED BY: AVS

DATE: 12-29-10

TESTED BY: Michael Lenz

DATE: 1/27/2011

MATERIAL

DESCRIPTION: (Refer to individual description on grain size distribution)

INTENDED USE: N/A

RESULTS

Location	Mass of Sample (g)	Insoluble residue (g)	Carbonates Content (%)
988,526E	96.96	21.65	77.7
976,899A	100.15	36.64	63.4
976,899B	100.01	33.23	66.8
976,899C	100.64	37.66	62.6
976,899D	100.38	14.34	85.7
976,899E	99.29	49.09	50.6

Respectfully Submitted.

FBPE CA # 4930

Paul Danforth, P.E.

Professional Engineer # 44653

State of Florida

**REPORT OF CARBONATES CONTENT
By Acid Leaching Vesterberg Method**

DATE: 1/28/2011

Project No. : 10-0100

CLIENT: Gahagan & Bryant

Lab ID:

PROJECT: Jupiter Island 10 Beach Samples

SAMPLED BY: AVS

DATE: 12-29-10

TESTED BY: Michael Lenz

DATE: 1/28/2011

MATERIAL

DESCRIPTION: (Refer to individual description on grain size distribution)

INTENDED USE: N/A

RESULTS

Location	Mass of Sample (g)	Insoluble residue (g)	Carbonates Content (%)
965,058A	100.47	29.33	70.8
965,058B	100.83	39.49	60.8
965,058C	100.03	28.25	71.8
965,058D	100.76	13.76	86.3
965,058E	100.89	28.07	72.2

Respectfully Submitted.

FBPE CA # 4930

Paul Danforth, P.E.

Professional Engineer # 44653

State of Florida

**REPORT OF CARBONATES CONTENT
By Acid Leaching Vesterberg Method**

DATE: 1/3/2011

Project No. : 10-0100

CLIENT: Gahagan & Bryant

Lab ID :

PROJECT: Jupiter Island 10 Beach Samples

SAMPLED BY: AVS

DATE: 12-29-10

TESTED BY: Michael Lenz

DATE: 1/3/2011

MATERIAL

DESCRIPTION: (Refer to individual description on grain size distribution)

INTENDED USE: N/A

RESULTS

Location	Mass of Sample (g)	Insoluble residue (g)	Carbonates Content (%)
R-70A	99.73	49.79	50.1
R-70B	96.49	34.57	64.2
R-70C	96.16	40.35	58.0
R-70D	87.03	52.71	39.4
R-70E	87.31	69.09	20.9

Respectfully Submitted.

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**REPORT OF CARBONATES CONTENT
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DATE: 1/3/2011

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DATE: 12-29-10

TESTED BY: Michael Lenz

DATE: 1/3/2011

MATERIAL

DESCRIPTION: (Refer to individual description on grain size distribution)

INTENDED USE: N/A

RESULTS

Location	Mass of Sample (g)	Insoluble residue (g)	Carbonates Content (%)
1,000,258A	99.73	24.24	75.7
1,000,258B	106.96	21.93	79.5
1,000,258C	98.13	23.37	76.2
1,000,258D	99.89	70.78	29.1
1,000,258E	80.37	52.06	35.2
988,526A	101.15	33.16	67.2
988,526B	106.53	32.20	69.8
988,526C	93.58	10.91	88.3
988,526D	108.29	3.36	96.9

Respectfully Submitted.
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Paul Danforth, P.E.
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