

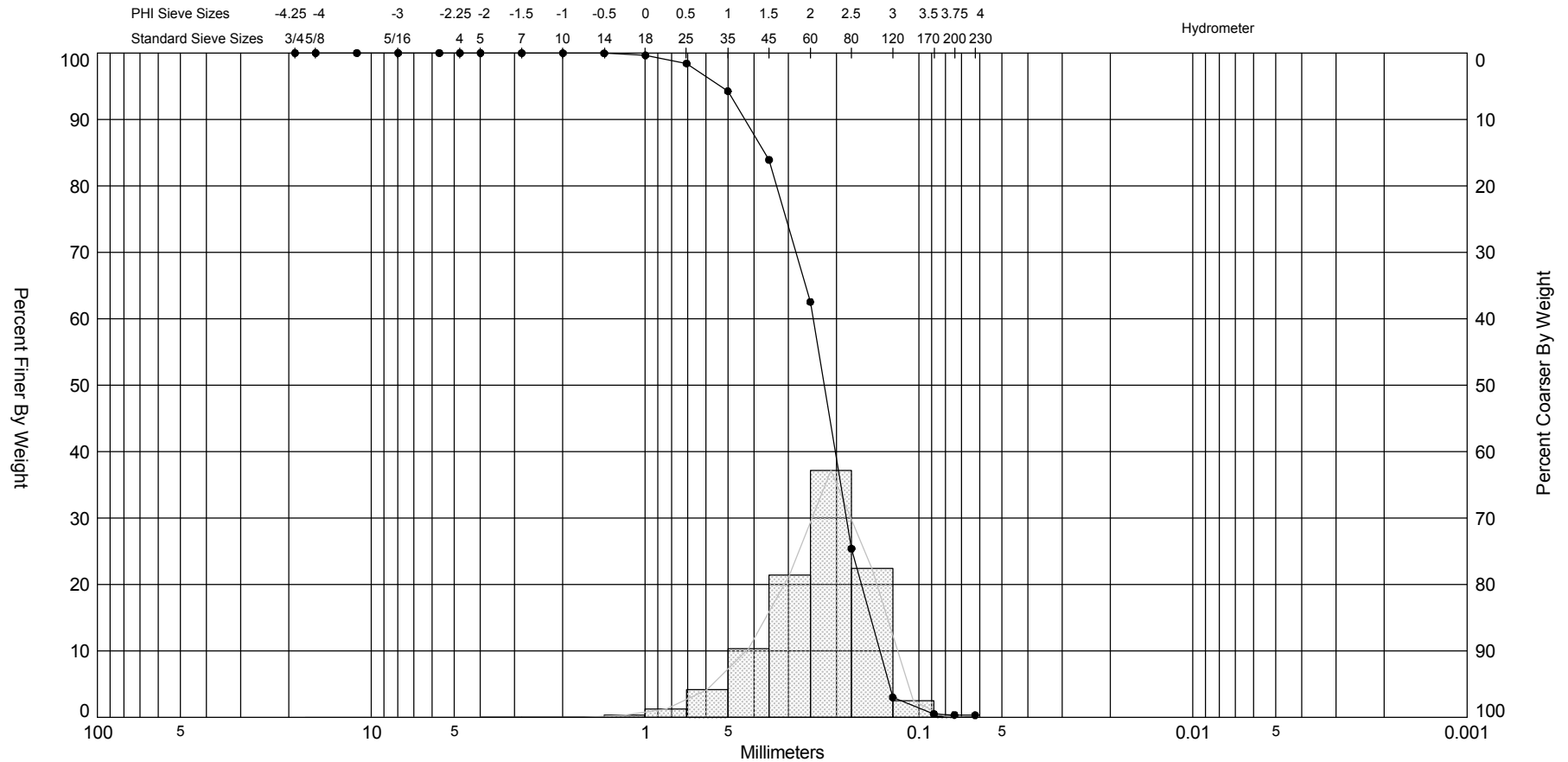



<b>Granularmetric Report</b> Depths and elevations based on measured values				 Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116			
Project Name: Flagler Beach Sample Analysis							
Sample Name: R-100 Berm Crest							
Analysis Date: 10-29-08							
Analyzed By: RC							
Easting (ft): <div style="text-align: center;">-81</div>		Northing (ft): <div style="text-align: center;">29</div>		Coordinate System: <div style="text-align: center;">Geographic (Latitude/Longitude)</div>		Elevation (ft):	
USCS: <div style="text-align: center;">SP</div>		Munsell: Wet - 10YR-7/2 Dry - 10YR-7/2 Washed - 10YR-7/2		Comments: <div style="text-align: center;">Collected on 8-12-08</div>			
Dry Weight (g): <div style="text-align: center;">100.12</div>	Wash Weight (g): <div style="text-align: center;">99.79</div>	Pan Retained (g): <div style="text-align: center;">0.00</div>	Sieve Loss (%): <div style="text-align: center;">0.00</div>	Fines (%): #200 - 0.36 #230 - 0.32	Organics (%):	Carbonates (%): <div style="text-align: center;">12</div>	Shell Hash (%): <div style="text-align: center;">0</div>
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	
7/16"	-3.50	11.31	0.00	0.00	0.00	0.00	
5/16"	-3.00	8.00	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	0.01	0.01	0.01	0.01	
10	-1.00	2.00	0.01	0.01	0.02	0.02	
14	-0.50	1.41	0.02	0.02	0.04	0.04	
18	0.00	1.00	0.31	0.31	0.35	0.35	
25	0.50	0.71	1.21	1.21	1.56	1.56	
35	1.00	0.50	4.17	4.17	5.73	5.73	
45	1.50	0.35	10.36	10.35	16.09	16.08	
60	2.00	0.25	21.41	21.38	37.50	37.46	
80	2.50	0.18	37.19	37.15	74.69	74.61	
120	3.00	0.13	22.43	22.40	97.12	97.01	
170	3.50	0.09	2.49	2.49	99.61	99.50	
200	3.75	0.07	0.14	0.14	99.75	99.64	
230	4.00	0.06	0.04	0.04	99.79	99.68	
Shell Hash calculated from visual estimate of shell <4.75mm and >2.8mm.							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.96	2.71	2.51	2.17	1.71	1.50	0.91	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.08	0.24	0.62	-0.76	3.88		

<b>Granularmetric Report</b> Depths and elevations based on measured values				 Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116			
Project Name: Flagler Beach Sample Analysis							
Sample Name: R-100 Berm Crest AD							
Analysis Date: 11-04-08							
Analyzed By: RC							
Easting (ft):  -81		Northing (ft):  29		Coordinate System:  Geographic (Latitude/Longitude)		Elevation (ft):	
USCS:  SP		Munsell: Dry - 2.5Y-8/2 Washed - 2.5Y-8/2		Comments:  Collected on 8-12-08 AD=After Digestion			
Dry Weight (g):  138.69	Wash Weight (g):  138.49	Pan Retained (g):  0.01	Sieve Loss (%):  0.02	Fines (%): #200 - 0.23 #230 - 0.17	Organics (%):	Carbonates (%):	Shell Hash (%):  0
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	
7/16"	-3.50	11.31	0.00	0.00	0.00	0.00	
5/16"	-3.00	8.00	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	0.01	0.01	0.01	
25	0.50	0.71	0.08	0.06	0.09	0.07	
35	1.00	0.50	1.00	0.72	1.09	0.79	
45	1.50	0.35	7.74	5.58	8.83	6.37	
60	2.00	0.25	25.80	18.60	34.63	24.97	
80	2.50	0.18	54.43	39.25	89.06	64.22	
120	3.00	0.13	44.56	32.13	133.62	96.35	
170	3.50	0.09	4.37	3.15	137.99	99.50	
200	3.75	0.07	0.37	0.27	138.36	99.77	
230	4.00	0.06	0.09	0.06	138.45	99.83	
Shell Hash calculated from visual estimate of shell <4.75mm and >2.8mm.							
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.98	2.81	2.67	2.32	2.00	1.76	1.38	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.29	0.20	0.49	-0.46	3.29		



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-100 Berm Crest	—●—		SP	#200 - 0.36 #230 - 0.32		12	2.17	2.08	-0.76	3.88	0.62	Project Name:	Flagler Beach Sample Analysis
Comments: Collected on 8-12-08												Analysis Date:	10-29-08
Depths and elevations based on measured values												Analyzed By:	RC
						Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116						Easting (X, ft):	-81
												Northing (Y, ft):	29
												Horizontal System:	
												Vertical System:	

