






Granularmetric Report Depths and elevations based on measured values				 COASTAL TECH Coastal Geology & Sediments Laboratory 1333 Gateway Dr., Suite 1004 Melbourne, FL 32901 Phone (321) 751-1135 Fax (321) 751-2343			
Project Name: Charlotte Co							
Sample Name: CH-12-VC-1 #1							
Analysis Date: 02-10-13							
Analyzed By: MB							
Easting (ft): <div style="text-align: center;">526,968.7</div>		Northing (ft): <div style="text-align: center;">923,608.4</div>		Coordinate System: <div style="text-align: center;">Florida State Plane West</div>		Elevation (ft): <div style="text-align: center;">-27.7 NAVD 88</div>	
USCS: <div style="text-align: center;">SW</div>		Munsell: Wet - 2.5Y-6/1 Dry - 2.5Y-7/1		Comments:			
Dry Weight (g): <div style="text-align: center;">148.97</div>	Wash Weight (g): <div style="text-align: center;">148.97</div>	Pan Retained (g): <div style="text-align: center;">0.04</div>	Sieve Loss (%): <div style="text-align: center;">0.00</div>	Fines (%): #200 - 0.05 #230 - 0.02	Organics (%): <div style="text-align: center;">0.73</div>	Carbonates (%): <div style="text-align: center;">21.70</div>	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	
11/16"	-3.50	11.31	0.97	0.65	0.97	0.65	
5/16"	-3.00	8.00	0.00	0.00	0.97	0.65	
3.5	-2.50	5.66	0.32	0.21	1.29	0.86	
4	-2.25	4.76	0.29	0.19	1.58	1.05	
5	-2.00	4.00	0.31	0.21	1.89	1.26	
7	-1.50	2.83	1.17	0.79	3.06	2.05	
10	-1.00	2.00	1.87	1.26	4.93	3.31	
14	-0.50	1.41	3.49	2.34	8.42	5.65	
18	0.00	1.00	4.62	3.10	13.04	8.75	
25	0.50	0.71	6.79	4.56	19.83	13.31	
35	1.00	0.50	14.94	10.03	34.77	23.34	
45	1.50	0.35	36.11	24.24	70.88	47.58	
60	2.00	0.25	49.83	33.45	120.71	81.03	
80	2.50	0.18	22.96	15.41	143.67	96.44	
120	3.00	0.13	4.79	3.22	148.46	99.66	
170	3.50	0.09	0.37	0.25	148.83	99.91	
200	3.75	0.07	0.06	0.04	148.89	99.95	
230	4.00	0.06	0.04	0.03	148.93	99.98	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.45	2.10	1.91	1.54	1.03	0.63	-0.64	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.33	0.40	0.97	-1.91	8.73		

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Project Name: Charlotte Co							
Sample Name: CH-12-VC-1 #2							
Analysis Date: 02-10-13							
Analyzed By: MB							
Easting (ft):		Northing (ft):		Coordinate System:		Elevation (ft):	
526,968.7		923,608.4		Florida State Plane West		-30.7 NAVD 88	
USCS:		Munsell:		Comments:			
SW		Wet - 2.5Y-6/1 Dry - 2.5Y-7/1					
Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
156.83	156.83	0.21	0.01	#200 - 0.19 #230 - 0.14	0.63	21.06	
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	0.00	
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00	
11/16"	-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	0.03	0.02	0.03	0.02	
4	-2.25	4.76	0.02	0.01	0.05	0.03	
5	-2.00	4.00	0.66	0.42	0.71	0.45	
7	-1.50	2.83	1.35	0.86	2.06	1.31	
10	-1.00	2.00	1.68	1.07	3.74	2.38	
14	-0.50	1.41	3.00	1.91	6.74	4.29	
18	0.00	1.00	3.86	2.46	10.60	6.75	
25	0.50	0.71	4.98	3.18	15.58	9.93	
35	1.00	0.50	10.82	6.90	26.40	16.83	
45	1.50	0.35	28.13	17.94	54.53	34.77	
60	2.00	0.25	51.45	32.81	105.98	67.58	
80	2.50	0.18	42.23	26.93	148.21	94.51	
120	3.00	0.13	7.23	4.61	155.44	99.12	
170	3.50	0.09	0.91	0.58	156.35	99.70	
200	3.75	0.07	0.18	0.11	156.53	99.81	
230	4.00	0.06	0.08	0.05	156.61	99.86	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.55	2.30	2.14	1.73	1.23	0.94	-0.36	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.56	0.34	0.88	-1.57	6.29		

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Project Name: Charlotte Co							
Sample Name: CH-12-VC-1 #3							
Analysis Date: 02-10-13							
Analyzed By: MB							
Easting (ft):		Northing (ft):		Coordinate System:		Elevation (ft):	
526,968.7		923,608.4		Florida State Plane West		-33.7 NAVD 88	
USCS:		Munsell:		Comments:			
SW		Wet - 5Y-6/1 Dry - 2.5Y-7/1					
Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
156.02	156.02	0.12	0.00	#200 - 0.10 #230 - 0.04	0.67	18.02	
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	
11/16"	-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	0.22	0.14	0.22	0.14	
4	-2.25	4.76	0.15	0.10	0.37	0.24	
5	-2.00	4.00	0.20	0.13	0.57	0.37	
7	-1.50	2.83	1.08	0.69	1.65	1.06	
10	-1.00	2.00	1.85	1.19	3.50	2.25	
14	-0.50	1.41	2.90	1.86	6.40	4.11	
18	0.00	1.00	3.49	2.24	9.89	6.35	
25	0.50	0.71	4.58	2.94	14.47	9.29	
35	1.00	0.50	8.59	5.51	23.06	14.80	
45	1.50	0.35	27.11	17.38	50.17	32.18	
60	2.00	0.25	53.65	34.39	103.82	66.57	
80	2.50	0.18	39.30	25.19	143.12	91.76	
120	3.00	0.13	11.15	7.15	154.27	98.91	
170	3.50	0.09	1.35	0.87	155.62	99.78	
200	3.75	0.07	0.19	0.12	155.81	99.90	
230	4.00	0.06	0.09	0.06	155.90	99.96	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.73	2.35	2.17	1.76	1.29	1.03	-0.30	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.61	0.33	0.88	-1.58	6.65		

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Project Name: Charlotte Co							
Sample Name: CH-12-VC-1 #4							
Analysis Date: 02-10-13							
Analyzed By: MB							
Easting (ft): <div style="text-align: center;">526,968.7</div>		Northing (ft): <div style="text-align: center;">923,608.4</div>		Coordinate System: <div style="text-align: center;">Florida State Plane West</div>		Elevation (ft): <div style="text-align: center;">-35.9 NAVD 88</div>	
USCS: <div style="text-align: center;">SW</div>		Munsell: <div style="text-align: center;">Wet - 5Y-7/1 Dry - 2.5Y-7/1</div>		Comments:			
Dry Weight (g): <div style="text-align: center;">157.31</div>	Wash Weight (g): <div style="text-align: center;">157.31</div>	Pan Retained (g): <div style="text-align: center;">1.46</div>	Sieve Loss (%): <div style="text-align: center;">0.15</div>	Fines (%): #200 - 1.37 #230 - 1.08	Organics (%): <div style="text-align: center;">1.16</div>	Carbonates (%): <div style="text-align: center;">47.95</div>	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	
11/16"	-3.50	11.31	9.14	5.81	9.14	5.81	
5/16"	-3.00	8.00	9.01	5.73	18.15	11.54	
3.5	-2.50	5.66	5.95	3.78	24.10	15.32	
4	-2.25	4.76	1.84	1.17	25.94	16.49	
5	-2.00	4.00	2.24	1.42	28.18	17.91	
7	-1.50	2.83	2.97	1.89	31.15	19.80	
10	-1.00	2.00	3.70	2.35	34.85	22.15	
14	-0.50	1.41	6.24	3.97	41.09	26.12	
18	0.00	1.00	7.09	4.51	48.18	30.63	
25	0.50	0.71	8.32	5.29	56.50	35.92	
35	1.00	0.50	10.86	6.90	67.36	42.82	
45	1.50	0.35	17.91	11.39	85.27	54.21	
60	2.00	0.25	28.93	18.39	114.20	72.60	
80	2.50	0.18	28.40	18.05	142.60	90.65	
120	3.00	0.13	9.07	5.77	151.67	96.42	
170	3.50	0.09	2.65	1.68	154.32	98.10	
200	3.75	0.07	0.84	0.53	155.16	98.63	
230	4.00	0.06	0.45	0.29	155.61	98.92	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.88	2.32	2.07	1.32	-0.64	-2.35	-3.60	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	0.52	0.70	2.04	-0.87	2.49		

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Project Name: Charlotte Co							
Sample Name: CH-12-VC-1 #5							
Analysis Date: 02-10-13							
Analyzed By: MB							
Easting (ft): <div style="text-align: center;">526,968.7</div>		Northing (ft): <div style="text-align: center;">923,608.4</div>		Coordinate System: <div style="text-align: center;">Florida State Plane West</div>		Elevation (ft): <div style="text-align: center;">-36.7 NAVD 88</div>	
USCS: <div style="text-align: center;">SP-SM</div>		Munsell: <div style="text-align: center;">Wet - 5Y-6/1 Dry - 2.5Y-7/1</div>		Comments:			
Dry Weight (g): <div style="text-align: center;">146.05</div>	Wash Weight (g): <div style="text-align: center;">136.08</div>	Pan Retained (g): <div style="text-align: center;">0.82</div>	Sieve Loss (%): <div style="text-align: center;">0.00</div>	Fines (%): #200 - 8.66 #230 - 7.41	Organics (%): <div style="text-align: center;">1.05</div>	Carbonates (%): <div style="text-align: center;">13.80</div>	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	
11/16"	-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	0.03	0.02	0.03	0.02	
7	-1.50	2.83	0.05	0.03	0.08	0.05	
10	-1.00	2.00	0.43	0.29	0.51	0.34	
14	-0.50	1.41	0.85	0.58	1.36	0.92	
18	0.00	1.00	1.29	0.88	2.65	1.80	
25	0.50	0.71	1.49	1.02	4.14	2.82	
35	1.00	0.50	2.07	1.42	6.21	4.24	
45	1.50	0.35	3.95	2.70	10.16	6.94	
60	2.00	0.25	12.00	8.22	22.16	15.16	
80	2.50	0.18	47.61	32.60	69.77	47.76	
120	3.00	0.13	46.69	31.97	116.46	79.73	
170	3.50	0.09	14.29	9.78	130.75	89.51	
200	3.75	0.07	2.68	1.83	133.43	91.34	
230	4.00	0.06	1.83	1.25	135.26	92.59	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
	3.22	2.93	2.54	2.15	2.01	1.14	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.4	0.19	0.73	-1.7	8.49		