

# Granularmetric Report

Depths and elevations based on measured values



1333 Gateway Dr., Suite 1004  
Melbourne, FL 32901  
Phone (321) 751-1135  
Fax (321) 751-2343

Project Name: Bonita Beach

Sample Name: B-2 #1

Analysis Date: 03-01-12

Analyzed By: LA

Easting (ft): 688,097.9  
Northing (ft): 750,798.1

Coordinate System: Florida State Plane West  
Elevation (ft): -10.2 NAVD 88

USCS: SW  
Munsell: Wet - 5Y-7/2  
Dry - 5Y-8/1  
Comments:

Dry Weight (g): 158.39  
Wash Weight (g): 158.39  
Pan Retained (g): 0.23  
Sieve Loss (%): 0.03  
Fines (%): #200 - 0.25, #230 - 0.17  
Organics (%): 0.60  
Carbonates (%): 20.10  
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
7/16"	-3.50	11.31	0.00	0.00	0.00	0.00
5/16"	-3.00	8.00	0.76	0.48	0.76	0.48
3.5	-2.50	5.66	0.63	0.40	1.39	0.88
4	-2.25	4.76	0.57	0.36	1.96	1.24
5	-2.00	4.00	0.27	0.17	2.23	1.41
7	-1.50	2.83	1.05	0.66	3.28	2.07
10	-1.00	2.00	1.79	1.13	5.07	3.20
14	-0.50	1.41	2.87	1.81	7.94	5.01
18	0.00	1.00	3.19	2.01	11.13	7.02
25	0.50	0.71	3.46	2.18	14.59	9.20
35	1.00	0.50	4.43	2.80	19.02	12.00
45	1.50	0.35	5.41	3.42	24.43	15.42
60	2.00	0.25	10.97	6.93	35.40	22.35
80	2.50	0.18	33.96	21.44	69.36	43.79
120	3.00	0.13	72.29	45.64	141.65	89.43
170	3.50	0.09	15.50	9.79	157.15	99.22
200	3.75	0.07	0.84	0.53	157.99	99.75
230	4.00	0.06	0.12	0.08	158.11	99.83

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
	3.28	2.94	2.84	2.57	2.06	1.54	-0.50
	2.19	0.22	1.15	-2.27	8.5		

GRANULARMETRIC REPORT 2012-3-1 BONITA BEACH.GPJ FL DEP ROSS.GDT 3/28/12

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Project Name: Bonita Beach

Sample Name: B-2 #2

Analysis Date: 03-01-12

Analyzed By: LA

Easting (ft): 688,097.9	Northing (ft): 750,798.1	Coordinate System: Florida State Plane West	Elevation (ft): -11.2 NAVD 88
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USCS: SW	Munsell: Wet - 5Y-6/2 Dry - 5Y-7/1	Comments:
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Dry Weight (g): 139.38	Wash Weight (g): 136.34	Pan Retained (g): 0.11	Sieve Loss (%): 0.03	Fines (%): #200 - 2.40 #230 - 2.29	Organics (%): 1.10	Carbonates (%): 35.10	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	0.00
5/8"	-4.00	16.00	7.15	5.13	7.15	5.13
7/16"	-3.50	11.31	0.51	0.37	7.66	5.50
5/16"	-3.00	8.00	1.21	0.87	8.87	6.37
3.5	-2.50	5.66	4.38	3.14	13.25	9.51
4	-2.25	4.76	1.65	1.18	14.90	10.69
5	-2.00	4.00	2.21	1.59	17.11	12.28
7	-1.50	2.83	5.16	3.70	22.27	15.98
10	-1.00	2.00	5.30	3.80	27.57	19.78
14	-0.50	1.41	5.97	4.28	33.54	24.06
18	0.00	1.00	5.23	3.75	38.77	27.81
25	0.50	0.71	4.37	3.14	43.14	30.95
35	1.00	0.50	3.81	2.73	46.95	33.68
45	1.50	0.35	4.07	2.92	51.02	36.60
60	2.00	0.25	9.04	6.49	60.06	43.09
80	2.50	0.18	29.45	21.13	89.51	64.22
120	3.00	0.13	39.00	27.98	128.51	92.20
170	3.50	0.09	6.98	5.01	135.49	97.21
200	3.75	0.07	0.55	0.39	136.04	97.60
230	4.00	0.06	0.15	0.11	136.19	97.71

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.28	2.85	2.69	2.16	-0.37	-1.50	-4.01
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.07	0.48	2.15	-1.08	2.91	

GRANULARMETRIC REPORT 2012-3-1 BONITA BEACH.GPJ FL DEP ROSS.GDT 3/28/12

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1333 Gateway Dr., Suite 1004  
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Project Name: Bonita Beach

Sample Name: B-2 #3

Analysis Date: 03-01-12

Analyzed By: LA

Easting (ft): 688,097.9	Northing (ft): 750,798.1	Coordinate System: Florida State Plane West	Elevation (ft): -12.2 NAVD 88
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USCS: SW	Munsell: Wet - 5Y-6/2 Dry - 5Y-7/1	Comments:
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Dry Weight (g): 156.24	Wash Weight (g): 152.05	Pan Retained (g): 0.30	Sieve Loss (%): 0.04	Fines (%): #200 - 3.09 #230 - 2.92	Organics (%): 1.30	Carbonates (%): 56.90	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	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
7/16"	-3.50	11.31	1.40	0.90	1.40	0.90
5/16"	-3.00	8.00	0.35	0.22	1.75	1.12
3.5	-2.50	5.66	5.12	3.28	6.87	4.40
4	-2.25	4.76	2.12	1.36	8.99	5.76
5	-2.00	4.00	2.77	1.77	11.76	7.53
7	-1.50	2.83	7.16	4.58	18.92	12.11
10	-1.00	2.00	8.79	5.63	27.71	17.74
14	-0.50	1.41	13.25	8.48	40.96	26.22
18	0.00	1.00	10.85	6.94	51.81	33.16
25	0.50	0.71	9.13	5.84	60.94	39.00
35	1.00	0.50	7.59	4.86	68.53	43.86
45	1.50	0.35	6.60	4.22	75.13	48.08
60	2.00	0.25	8.11	5.19	83.24	53.27
80	2.50	0.18	17.82	11.41	101.06	64.68
120	3.00	0.13	40.48	25.91	141.54	90.59
170	3.50	0.09	9.08	5.81	150.62	96.40
200	3.75	0.07	0.80	0.51	151.42	96.91
230	4.00	0.06	0.26	0.17	151.68	97.08

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.38	2.87	2.70	1.68	-0.57	-1.15	-2.39
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.97	0.51	1.87	-0.54	2.04	

GRANULARMETRIC REPORT 2012-3-1 BONITA BEACH.GPJ FL DEP ROSS.GDT 3/28/12

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Phone (321) 751-1135  
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Project Name: Bonita Beach

Sample Name: B-2 #4

Analysis Date: 03-01-12

Analyzed By: LA

Easting (ft): 688,097.9	Northing (ft): 750,798.1	Coordinate System: Florida State Plane West	Elevation (ft): -14.7 NAVD 88
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USCS: SW-SM	Munsell: Wet - 5Y-5/2 Dry - 5Y-6/1	Comments:
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Dry Weight (g): 137.36	Wash Weight (g): 129.10	Pan Retained (g): 0.82	Sieve Loss (%): 0.00	Fines (%): #200 - 8.94 #230 - 6.61	Organics (%): 1.40	Carbonates (%): 7.60	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	0.00
5/8"	-4.00	16.00	0.00	0.00	0.00	0.00
7/16"	-3.50	11.31	0.98	0.71	0.98	0.71
5/16"	-3.00	8.00	1.28	0.93	2.26	1.64
3.5	-2.50	5.66	0.00	0.00	2.26	1.64
4	-2.25	4.76	0.37	0.27	2.63	1.91
5	-2.00	4.00	0.12	0.09	2.75	2.00
7	-1.50	2.83	0.41	0.30	3.16	2.30
10	-1.00	2.00	0.65	0.47	3.81	2.77
14	-0.50	1.41	0.78	0.57	4.59	3.34
18	0.00	1.00	0.68	0.50	5.27	3.84
25	0.50	0.71	0.59	0.43	5.86	4.27
35	1.00	0.50	0.50	0.36	6.36	4.63
45	1.50	0.35	0.70	0.51	7.06	5.14
60	2.00	0.25	1.24	0.90	8.30	6.04
80	2.50	0.18	2.71	1.97	11.01	8.01
120	3.00	0.13	46.19	33.63	57.20	41.64
170	3.50	0.09	58.68	42.72	115.88	84.36
200	3.75	0.07	9.20	6.70	125.08	91.06
230	4.00	0.06	3.20	2.33	128.28	93.39

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.50	3.39	3.10	2.75	2.62	1.36
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	2.82	0.14	1.15	-4.01	20.29	

GRANULARMETRIC REPORT 2012-3-1 BONITA BEACH.GPJ FL DEP ROSS.GDT 3/28/12

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Project Name: Bonita Beach

Sample Name: B-2 #5

Analysis Date: 03-01-12

Analyzed By: LA

Easting (ft): 688,097.9	Northing (ft): 750,798.1	Coordinate System: Florida State Plane West	Elevation (ft): -16.7 NAVD 88
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USCS: SM	Munsell: Wet - 5Y-5/2 Dry - 5Y-6/1	Comments:
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Dry Weight (g): 131.50	Wash Weight (g): 117.48	Pan Retained (g): 1.61	Sieve Loss (%): 0.05	Fines (%): #200 - 14.57 #230 - 11.93	Organics (%): 2.20	Carbonates (%): 14.90	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	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	0.82	0.62	0.82	0.62
4	-2.25	4.76	0.37	0.28	1.19	0.90
5	-2.00	4.00	0.35	0.27	1.54	1.17
7	-1.50	2.83	0.95	0.72	2.49	1.89
10	-1.00	2.00	1.13	0.86	3.62	2.75
14	-0.50	1.41	2.24	1.70	5.86	4.45
18	0.00	1.00	1.55	1.18	7.41	5.63
25	0.50	0.71	1.02	0.78	8.43	6.41
35	1.00	0.50	0.98	0.75	9.41	7.16
45	1.50	0.35	1.17	0.89	10.58	8.05
60	2.00	0.25	1.89	1.44	12.47	9.49
80	2.50	0.18	4.05	3.08	16.52	12.57
120	3.00	0.13	35.04	26.65	51.56	39.22
170	3.50	0.09	49.20	37.41	100.76	76.63
200	3.75	0.07	11.57	8.80	112.33	85.43
230	4.00	0.06	3.47	2.64	115.80	88.07

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.71	3.48	3.14	2.73	2.56	-0.27
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	2.74	0.15	1.19	-2.75	10.49	

GRANULARMETRIC REPORT 2012-3-1 BONITA BEACH.GPJ FL DEP ROSS.GDT 3/28/12