

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-4 #1

Analysis Date: 03-15-12

Analyzed By: MB

Easting (ft): 688,017.8
Northing (ft): 749,235.1

Coordinate System: Florida State Plane West
Elevation (ft): -11.2 NAVD 88

USCS: SW
Munsell: Wet - 5Y-6/2
Dry - 5Y-7/2
Comments:

Dry Weight (g): 147.04
Wash Weight (g): 142.29
Pan Retained (g): 0.38
Sieve Loss (%): 0.00
Fines (%): #200 - 4.00
 #230 - 3.48
Organics (%): 0.90
Carbonates (%): 10.40
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	0.00	0.00	0.00	0.00
3.5	-2.50	5.66	0.30	0.20	0.30	0.20
4	-2.25	4.76	0.06	0.04	0.36	0.24
5	-2.00	4.00	0.38	0.26	0.74	0.50
7	-1.50	2.83	0.56	0.38	1.30	0.88
10	-1.00	2.00	0.92	0.63	2.22	1.51
14	-0.50	1.41	2.09	1.42	4.31	2.93
18	0.00	1.00	2.25	1.53	6.56	4.46
25	0.50	0.71	2.32	1.58	8.88	6.04
35	1.00	0.50	2.29	1.56	11.17	7.60
45	1.50	0.35	2.01	1.37	13.18	8.97
60	2.00	0.25	2.76	1.88	15.94	10.85
80	2.50	0.18	7.84	5.33	23.78	16.18
120	3.00	0.13	72.73	49.46	96.51	65.64
170	3.50	0.09	39.97	27.18	136.48	92.82
200	3.75	0.07	4.67	3.18	141.15	96.00
230	4.00	0.06	0.76	0.52	141.91	96.52

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
	3.67	3.34	3.17	2.84	2.59	2.48	0.17
	2.61	0.16	0.98	-2.71	10.88		

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-4 #2

Analysis Date: 03-16-12

Analyzed By: MB

Easting (ft): 688,017.8	Northing (ft): 749,235.1	Coordinate System: Florida State Plane West	Elevation (ft): -11.9 NAVD 88
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USCS: SW	Munsell: Wet - 5Y-7/2 Dry - 5Y-7/1	Comments:
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Dry Weight (g): 149.98	Wash Weight (g): 149.98	Pan Retained (g): 0.77	Sieve Loss (%): 0.00	Fines (%): #200 - 0.64 #230 - 0.53	Organics (%): 1.40	Carbonates (%): 71.30	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	4.34	2.89	4.34	2.89
5/16"	-3.00	8.00	6.04	4.03	10.38	6.92
3.5	-2.50	5.66	4.58	3.05	14.96	9.97
4	-2.25	4.76	1.74	1.16	16.70	11.13
5	-2.00	4.00	3.69	2.46	20.39	13.59
7	-1.50	2.83	9.75	6.50	30.14	20.09
10	-1.00	2.00	11.37	7.58	41.51	27.67
14	-0.50	1.41	18.30	12.20	59.81	39.87
18	0.00	1.00	15.27	10.18	75.08	50.05
25	0.50	0.71	11.70	7.80	86.78	57.85
35	1.00	0.50	8.92	5.95	95.70	63.80
45	1.50	0.35	6.68	4.45	102.38	68.25
60	2.00	0.25	7.81	5.21	110.19	73.46
80	2.50	0.18	9.36	6.24	119.55	79.70
120	3.00	0.13	16.17	10.78	135.72	90.48
170	3.50	0.09	12.21	8.14	147.93	98.62
200	3.75	0.07	1.11	0.74	149.04	99.36
230	4.00	0.06	0.17	0.11	149.21	99.47

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.28	2.70	2.12	0.00	-1.18	-1.81	-3.24
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.22	0.86	1.99	-0.06	2.03	

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-4 #3

Analysis Date: 03-16-12

Analyzed By: MB

Easting (ft): 688,017.8	Northing (ft): 749,235.1	Coordinate System: Florida State Plane West	Elevation (ft): -13.2 NAVD 88
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USCS: SW-SM	Munsell: Wet - 5Y-6/1 Dry - 5Y-7/1	Comments:
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Dry Weight (g): 148.08	Wash Weight (g): 141.62	Pan Retained (g): 0.15	Sieve Loss (%): 0.00	Fines (%): #200 - 5.11 #230 - 4.45	Organics (%): 1.10	Carbonates (%): 49.60	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	0.00	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	0.21	0.14	0.21	0.14
4	-2.25	4.76	0.86	0.58	1.07	0.72
5	-2.00	4.00	0.39	0.26	1.46	0.98
7	-1.50	2.83	1.18	0.80	2.64	1.78
10	-1.00	2.00	1.95	1.32	4.59	3.10
14	-0.50	1.41	2.85	1.92	7.44	5.02
18	0.00	1.00	2.80	1.89	10.24	6.91
25	0.50	0.71	2.01	1.36	12.25	8.27
35	1.00	0.50	1.52	1.03	13.77	9.30
45	1.50	0.35	1.32	0.89	15.09	10.19
60	2.00	0.25	2.63	1.78	17.72	11.97
80	2.50	0.18	5.86	3.96	23.58	15.93
120	3.00	0.13	74.45	50.28	98.03	66.21
170	3.50	0.09	38.41	25.94	136.44	92.15
200	3.75	0.07	4.06	2.74	140.50	94.89
230	4.00	0.06	0.97	0.66	141.47	95.55

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.79	3.34	3.17	2.84	2.59	2.50	-0.51

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.53	0.17	1.15	-2.55	9.1

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

Sample Name: B-4 #4

Analysis Date: 03-16-12

Analyzed By: MB

Easting (ft):

688,017.8

Northing (ft):

749,235.1

Coordinate System:

Florida State Plane West

Elevation (ft):

-13.9 NAVD 88

USCS:

SW-SM W/ GRAVEL

Munsell:

Wet - 5Y-6/2
Dry - 5Y-6/1

Comments:

Dry Weight (g):

129.38

Wash Weight (g):

122.52

Pan Retained (g):

0.48

Sieve Loss (%):

0.11

Fines (%):

#200 - 6.21
#230 - 5.80

Organics (%):

2.00

Carbonates (%):

48.20

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

6.25

4.83

6.25

4.83

5/16"

-3.00

8.00

6.33

4.89

12.58

9.72

3.5

-2.50

5.66

6.92

5.35

19.50

15.07

4

-2.25

4.76

2.33

1.80

21.83

16.87

5

-2.00

4.00

4.47

3.45

26.30

20.32

7

-1.50

2.83

7.67

5.93

33.97

26.25

10

-1.00

2.00

6.59

5.09

40.56

31.34

14

-0.50

1.41

8.43

6.52

48.99

37.86

18

0.00

1.00

5.76

4.45

54.75

42.31

25

0.50

0.71

3.55

2.74

58.30

45.05

35

1.00

0.50

2.46

1.90

60.76

46.95

45

1.50

0.35

1.82

1.41

62.58

48.36

60

2.00

0.25

2.33

1.80

64.91

50.16

80

2.50

0.18

6.51

5.03

71.42

55.19

120

3.00

0.13

27.88

21.55

99.30

76.74

170

3.50

0.09

19.05

14.72

118.35

91.46

200

3.75

0.07

3.02

2.33

121.37

93.79

230

4.00

0.06

0.53

0.41

121.90

94.20

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.25

2.96

1.96

-1.61

-2.37

-3.48

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

0.56

0.68

2.47

-0.32

1.55

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1333 Gateway Dr., Suite 1004
Melbourne, FL 32901
Phone (321) 751-1135
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Project Name: Bonita Beach

Sample Name: B-4 #5

Analysis Date: 03-16-12

Analyzed By: MB

Easting (ft): 688,017.8
Northing (ft): 749,235.1

Coordinate System: Florida State Plane West
Elevation (ft): -14.9 NAVD 88

USCS: SM
Munsell: Wet - 5Y-5/1
Dry - 5Y-6/1
Comments:

Dry Weight (g): 135.16
Wash Weight (g): 114.80
Pan Retained (g): 1.83
Sieve Loss (%): 0.10
Fines (%): #200 - 19.59
#230 - 16.53
Organics (%): 2.30
Carbonates (%): 21.70
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	1.28	0.95	1.28	0.95
5/16"	-3.00	8.00	1.15	0.85	2.43	1.80
3.5	-2.50	5.66	1.03	0.76	3.46	2.56
4	-2.25	4.76	0.85	0.63	4.31	3.19
5	-2.00	4.00	0.70	0.52	5.01	3.71
7	-1.50	2.83	0.54	0.40	5.55	4.11
10	-1.00	2.00	1.24	0.92	6.79	5.03
14	-0.50	1.41	1.53	1.13	8.32	6.16
18	0.00	1.00	1.48	1.09	9.80	7.25
25	0.50	0.71	1.23	0.91	11.03	8.16
35	1.00	0.50	1.03	0.76	12.06	8.92
45	1.50	0.35	1.15	0.85	13.21	9.77
60	2.00	0.25	1.50	1.11	14.71	10.88
80	2.50	0.18	2.52	1.86	17.23	12.74
120	3.00	0.13	25.25	18.68	42.48	31.42
170	3.50	0.09	57.30	42.39	99.78	73.81
200	3.75	0.07	8.92	6.60	108.70	80.41
230	4.00	0.06	4.13	3.06	112.83	83.47

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.62	0.16	1.55	-2.67	9.45

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Melbourne, FL 32901
Phone (321) 751-1135
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Project Name: Bonita Beach

Sample Name: B-4 #6

Analysis Date: 03-16-12

Analyzed By: MB

Easting (ft): 688,017.8
Northing (ft): 749,235.1

Coordinate System: Florida State Plane West
Elevation (ft): -17.9 NAVD 88

USCS: SM
Munsell: Wet - 5Y-5/1
Dry - 5Y-6/1
Comments:

Dry Weight (g): 151.77
Wash Weight (g): 136.01
Pan Retained (g): 1.52
Sieve Loss (%): 0.09
Fines (%): #200 - 13.92
#230 - 11.47
Organics (%): 1.80
Carbonates (%): 14.60
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	0.61	0.40	0.61	0.40
3.5	-2.50	5.66	2.09	1.38	2.70	1.78
4	-2.25	4.76	1.12	0.74	3.82	2.52
5	-2.00	4.00	0.77	0.51	4.59	3.03
7	-1.50	2.83	1.67	1.10	6.26	4.13
10	-1.00	2.00	2.59	1.71	8.85	5.84
14	-0.50	1.41	3.77	2.48	12.62	8.32
18	0.00	1.00	2.43	1.60	15.05	9.92
25	0.50	0.71	1.46	0.96	16.51	10.88
35	1.00	0.50	1.23	0.81	17.74	11.69
45	1.50	0.35	1.22	0.80	18.96	12.49
60	2.00	0.25	1.79	1.18	20.75	13.67
80	2.50	0.18	4.16	2.74	24.91	16.41
120	3.00	0.13	40.75	26.85	65.66	43.26
170	3.50	0.09	51.28	33.79	116.94	77.05
200	3.75	0.07	13.70	9.03	130.64	86.08
230	4.00	0.06	3.72	2.45	134.36	88.53

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.5	0.18	1.53	-2.17	6.71

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