

# Granularmetric Report

Depths and elevations based on measured values



715-E North Dr.  
Melbourne, Fl. 32934  
Phone (321) 751-1135  
Fax (321) 751-2343

Project Name: Gulf County Supplemental

Sample Name: RC-18 #1

Analysis Date: 08-04-06

Analyzed By: jv

Easting (ft): 1,678,612.45	Northing (ft): 256,903.75	Coordinate System: Florida State Plane North	Elevation (ft): -33.0 NAVD 88
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USCS: SP	Munsell: Wet - 10YR-8/1	Comments:
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Dry Weight (g): 100.12	Wash Weight (g):	Pan Retained (g): 0.01	Sieve Loss (%):	Fines (%): #200 - 0.00 #230 - 0.00	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
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	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.23	0.23	0.23	0.23
10	-1.00	2.00	0.17	0.17	0.40	0.40
14	-0.50	1.41	0.35	0.35	0.75	0.75
18	0.00	1.00	0.48	0.48	1.23	1.23
25	0.50	0.71	0.83	0.83	2.06	2.06
35	1.00	0.50	2.75	2.75	4.81	4.81
45	1.50	0.35	11.93	11.92	16.74	16.73
60	2.00	0.25	29.73	29.69	46.47	46.42
80	2.50	0.18	40.89	40.84	87.36	87.26
120	3.00	0.13	12.15	12.14	99.51	99.40
170	3.50	0.09	0.56	0.56	100.07	99.96
200	3.75	0.07	0.04	0.04	100.11	100.00
230	4.00	0.06	0.00	0.00	100.11	100.00

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.82	2.46	2.35	2.04	1.64	1.47	1.01

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	1.95	0.26	0.6	-1.6	8.97

GRANULARMETRIC REPORT GULF COUNTY SUPPLEMENTAL.GPJ FL DEP ROSS.GDT 12/5/07

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715-E North Dr.  
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Phone (321) 751-1135  
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Project Name: Gulf County Supplemental

Sample Name: RC-18 #2

Analysis Date: 08-04-06

Analyzed By: jv

Easting (ft): 1,678,612.45	Northing (ft): 256,903.75	Coordinate System: Florida State Plane North	Elevation (ft): -36.5 NAVD 88
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USCS: SP	Munsell: Wet - 10YR-8/1	Comments:
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Dry Weight (g): 88.48	Wash Weight (g):	Pan Retained (g): 0.14	Sieve Loss (%):	Fines (%): #200 - 0.19 #230 - 0.14	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
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	0.15	0.17	0.15	0.17
3.5	-2.50	5.66	0.20	0.23	0.35	0.40
4	-2.25	4.76	0.04	0.05	0.39	0.45
5	-2.00	4.00	0.04	0.05	0.43	0.50
7	-1.50	2.83	0.25	0.28	0.68	0.78
10	-1.00	2.00	0.37	0.42	1.05	1.20
14	-0.50	1.41	0.64	0.72	1.69	1.92
18	0.00	1.00	0.82	0.93	2.51	2.85
25	0.50	0.71	1.29	1.46	3.80	4.31
35	1.00	0.50	3.05	3.45	6.85	7.76
45	1.50	0.35	6.27	7.09	13.12	14.85
60	2.00	0.25	15.53	17.55	28.65	32.40
80	2.50	0.18	27.57	31.16	56.22	63.56
120	3.00	0.13	28.66	32.39	84.88	95.95
170	3.50	0.09	3.31	3.74	88.19	99.69
200	3.75	0.07	0.11	0.12	88.30	99.81
230	4.00	0.06	0.04	0.05	88.34	99.86

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.99	2.82	2.68	2.28	1.79	1.53	0.60

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.12	0.23	0.84	-2.23	11.03

GRANULARMETRIC REPORT GULF COUNTY SUPPLEMENTAL.GPJ FL DEP ROSS.GDT 12/5/07

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Melbourne, Fl. 32934  
Phone (321) 751-1135  
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Project Name: Gulf County Supplemental

Sample Name: RC-18 #3

Analysis Date: 08-04-06

Analyzed By: jv

Easting (ft): <b>1,678,612.45</b>	Northing (ft): <b>256,903.75</b>	Coordinate System: <b>Florida State Plane North</b>	Elevation (ft): <b>-38.0 NAVD 88</b>
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USCS: <b>SP</b>	Munsell: <b>Wet - 10YR-7/1</b>	Comments:
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Dry Weight (g): <b>87.40</b>	Wash Weight (g):	Pan Retained (g): <b>0.52</b>	Sieve Loss (%):	Fines (%): #200 - 0.69 #230 - 0.60	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
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	0.00	0.00	0.00	0.00
7	-1.50	2.83	0.17	0.19	0.17	0.19
10	-1.00	2.00	0.48	0.55	0.65	0.74
14	-0.50	1.41	0.64	0.73	1.29	1.47
18	0.00	1.00	0.62	0.71	1.91	2.18
25	0.50	0.71	0.90	1.03	2.81	3.21
35	1.00	0.50	2.10	2.40	4.91	5.61
45	1.50	0.35	4.23	4.84	9.14	10.45
60	2.00	0.25	9.66	11.05	18.80	21.50
80	2.50	0.18	29.04	33.23	47.84	54.73
120	3.00	0.13	34.11	39.03	81.95	93.76
170	3.50	0.09	4.59	5.25	86.54	99.01
200	3.75	0.07	0.26	0.30	86.80	99.31
230	4.00	0.06	0.08	0.09	86.88	99.40

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.12	2.87	2.76	2.43	2.05	1.75	0.87

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.28	0.21	0.74	-2.09	9.34

GRANULARMETRIC REPORT GULF COUNTY SUPPLEMENTAL.GPJ FL DEP ROSS.GDT 12/5/07

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Depths and elevations based on measured values



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Melbourne, Fl. 32934  
Phone (321) 751-1135  
Fax (321) 751-2343

Project Name: Gulf County Supplemental

Sample Name: RC-18 #4

Analysis Date: 08-22-06

Analyzed By: jv

Easting (ft): <b>1,678,612.45</b>	Northing (ft): <b>256,903.75</b>	Coordinate System: <b>Florida State Plane North</b>	Elevation (ft): <b>-39.0 NAVD 88</b>
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USCS: <b>SW</b>	Munsell: <b>Wet - 10YR-7/1</b>	Comments:
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Dry Weight (g): <b>85.40</b>	Wash Weight (g):	Pan Retained (g): <b>2.15</b>	Sieve Loss (%):	Fines (%): <b>#200 - 3.62</b> <b>#230 - 2.51</b>	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
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	1.32	1.55	1.32	1.55
4	-2.25	4.76	0.04	0.05	1.36	1.60
5	-2.00	4.00	0.24	0.28	1.60	1.88
7	-1.50	2.83	0.48	0.56	2.08	2.44
10	-1.00	2.00	1.02	1.19	3.10	3.63
14	-0.50	1.41	0.99	1.16	4.09	4.79
18	0.00	1.00	1.20	1.41	5.29	6.20
25	0.50	0.71	1.23	1.44	6.52	7.64
35	1.00	0.50	2.80	3.28	9.32	10.92
45	1.50	0.35	6.39	7.48	15.71	18.40
60	2.00	0.25	10.77	12.61	26.48	31.01
80	2.50	0.18	19.27	22.56	45.75	53.57
120	3.00	0.13	30.68	35.93	76.43	89.50
170	3.50	0.09	5.02	5.88	81.45	95.38
200	3.75	0.07	0.85	1.00	82.30	96.38
230	4.00	0.06	0.95	1.11	83.25	97.49

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.47	2.92	2.80	2.42	1.76	1.34	-0.43

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	2.07	0.24	1.15	-2.09	8.23

GRANULARMETRIC REPORT GULF COUNTY SUPPLEMENTAL.GPJ FL DEP ROSS.GDT 12/5/07

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Melbourne, Fl. 32934  
Phone (321) 751-1135  
Fax (321) 751-2343

Project Name: Gulf County Supplemental

Sample Name: RC-18 #5

Analysis Date: 11-18-06

Analyzed By: LA

Easting (ft): 1,678,612.45	Northing (ft): 256,903.75	Coordinate System: Florida State Plane North	Elevation (ft): -39.9 NAVD 88
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USCS: SW-SM	Munsell: Wet - 10YR-5/1	Comments:
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Dry Weight (g): 125.14	Wash Weight (g): 117.64	Pan Retained (g): 0.16	Sieve Loss (%): 0.58	Fines (%): #200 - 6.84 #230 - 6.71	Organics (%): 2.60	Carbonates (%): 28.20	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
5/8"	-4.00	16.00	12.28	9.81	12.28	9.81
11/16"	-3.50	11.31	6.66	5.32	18.94	15.13
5/16"	-3.00	8.00	3.61	2.88	22.55	18.01
3.5	-2.50	5.66	6.93	5.54	29.48	23.55
4	-2.25	4.76	2.88	2.30	32.36	25.85
5	-2.00	4.00	3.43	2.74	35.79	28.59
7	-1.50	2.83	5.84	4.67	41.63	33.26
10	-1.00	2.00	4.82	3.85	46.45	37.11
14	-0.50	1.41	4.75	3.80	51.20	40.91
18	0.00	1.00	4.11	3.28	55.31	44.19
25	0.50	0.71	6.18	4.94	61.49	49.13
35	1.00	0.50	8.97	7.17	70.46	56.30
45	1.50	0.35	8.14	6.50	78.60	62.80
60	2.00	0.25	6.98	5.58	85.58	68.38
80	2.50	0.18	10.28	8.21	95.86	76.59
120	3.00	0.13	17.07	13.64	112.93	90.23
170	3.50	0.09	3.44	2.75	116.37	92.98
200	3.75	0.07	0.22	0.18	116.59	93.16
230	4.00	0.06	0.16	0.13	116.75	93.29

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	2.77	2.40	0.56	-2.34	-3.35	

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	-0.25	1.19	2.12	0.29	1.81

GRANULARMETRIC REPORT GULF COUNTY SUPPLEMENTAL.GPJ FL DEP ROSS.GDT 12/5/07

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Melbourne, Fl. 32934  
Phone (321) 751-1135  
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Project Name: Gulf County Supplemental

Sample Name: RC-18 #6

Analysis Date: 11-18-06

Analyzed By: LA

Easting (ft): 1,678,612.45	Northing (ft): 256,903.75	Coordinate System: Florida State Plane North	Elevation (ft): -41.0 NAVD 88
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USCS: SP	Munsell: Wet - 10YR-8/1	Comments:
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Dry Weight (g): 121.83	Wash Weight (g):	Pan Retained (g): 0.15	Sieve Loss (%):	Fines (%): #200 - 0.34 #230 - 0.31	Organics (%): 0.30	Carbonates (%): 2.30	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
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	0.07	0.06	0.07	0.06
7	-1.50	2.83	0.06	0.05	0.13	0.11
10	-1.00	2.00	0.23	0.19	0.36	0.30
14	-0.50	1.41	0.26	0.21	0.62	0.51
18	0.00	1.00	0.38	0.31	1.00	0.82
25	0.50	0.71	0.66	0.54	1.66	1.36
35	1.00	0.50	1.60	1.31	3.26	2.67
45	1.50	0.35	6.00	4.92	9.26	7.59
60	2.00	0.25	34.71	28.49	43.97	36.08
80	2.50	0.18	60.93	50.01	104.90	86.09
120	3.00	0.13	15.55	12.76	120.45	98.85
170	3.50	0.09	0.90	0.74	121.35	99.59
200	3.75	0.07	0.08	0.07	121.43	99.66
230	4.00	0.06	0.04	0.03	121.47	99.69

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Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.85	2.48	2.39	2.14	1.81	1.65	1.24

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.07	0.24	0.51	-1.99	13.2

GRANULARMETRIC REPORT GULF COUNTY SUPPLEMENTAL.GPJ FL DEP ROSS.GDT 12/5/07

# Granularmetric Report

Depths and elevations based on measured values



715-E North Dr.  
Melbourne, Fl. 32934  
Phone (321) 751-1135  
Fax (321) 751-2343

Project Name: Gulf County Supplemental

Sample Name: RC-18 #7

Analysis Date: 11-18-06

Analyzed By: LA

Easting (ft): 1,678,612.45	Northing (ft): 256,903.75	Coordinate System: Florida State Plane North	Elevation (ft): -42.8 NAVD 88
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USCS: SP	Munsell: Wet - 10YR-2/1	Comments:
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Dry Weight (g): 97.59	Wash Weight (g): 93.31	Pan Retained (g): 0.05	Sieve Loss (%): 0.03	Fines (%): #200 - 4.58 #230 - 4.47	Organics (%): 2.30	Carbonates (%): 2.40	Shells (%):
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
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	0.00	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	0.03	0.03	0.03
18	0.00	1.00	0.36	0.37	0.39	0.40
25	0.50	0.71	1.89	1.94	2.28	2.34
35	1.00	0.50	6.25	6.40	8.53	8.74
45	1.50	0.35	10.58	10.84	19.11	19.58
60	2.00	0.25	22.99	23.56	42.10	43.14
80	2.50	0.18	33.01	33.83	75.11	76.97
120	3.00	0.13	16.22	16.62	91.33	93.59
170	3.50	0.09	1.68	1.72	93.01	95.31
200	3.75	0.07	0.11	0.11	93.12	95.42
230	4.00	0.06	0.11	0.11	93.23	95.53

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.41	2.71	2.47	2.10	1.62	1.33	0.71
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	1.97	0.26	0.65	-0.64	3.4	

GRANULARMETRIC REPORT GULF COUNTY SUPPLEMENTAL.GPJ FL DEP ROSS.GDT 12/5/07