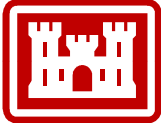
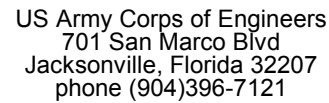


USAGE GRANULARMETRIC REPORT FDEP_GINT_IMPORT_FLAGLER.GPJ FL DEP ROSS.GDT 11/14/12

Granularmetric Report Depths and elevations based on measured values				 <p>US Army Corps of Engineers 701 San Marco Blvd Jacksonville, Florida 32207 phone (904)396-7121</p>			
Project Name: Flagler County							
Sample Name: R-97 #Dune							
Analysis Date: 09-05-12							
Analyzed By:							
Easting (ft): 622,027		Northing (ft): 1,855,172		Coordinate System:		Elevation (ft): 0.0 MLLW	
USCS SP		Munsell: Moist - 7.5YR 7/2		Comments:			
				Fines (%): #230 - 0.06	Organics (%):	Carbonates (%):	Shells (%): 49.50
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
#7	-1.50	2.82	0.00		0.00		
#10	-1.00	2.00	0.02		0.02		
#14	-0.50	1.41	0.38		0.40		
#18	0.00	1.00	3.05		3.45		
#25	0.50	0.71	9.54		12.99		
#35	1.00	0.50	16.61		29.60		
#45	1.50	0.35	23.78		53.38		
#60	2.00	0.25	28.04		81.42		
#80	2.50	0.18	14.73		96.15		
#120	3.00	0.13	3.32		99.47		
#170	3.50	0.09	0.43		99.90		
#200	3.75	0.07	0.02		99.92		
#230	4.00	0.06	0.02		99.94		
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.46	2.08	1.88	1.42	0.86	0.59	0.08	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.36	0.39	0.72	-0.26	2.77		

Depths and elevations based on measured values



Analyzed By:

0.0 MLLW

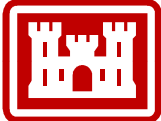
Comments:

Shells (%):

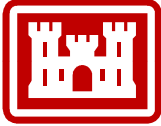
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.08	1.53	1.20	0.44	-0.15	-0.37	-0.83
Moment statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	0.53	0.69	0.89	0.14	2.74	

USACE GRANULARMETRIC REPORT FDEP_GINT_IMPORT_FLAGLER.GPJ FL DEP ROSS.GDT 11/14/12

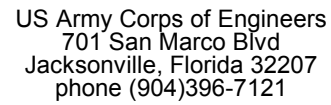
USAGE GRANULARMETRIC REPORT FDEP_GINT_IMPORT_FLAGLER.GPJ FL DEP ROSS.GDT 11/14/12

Granularmetric Report Depths and elevations based on measured values				 <p>US Army Corps of Engineers 701 San Marco Blvd Jacksonville, Florida 32207 phone (904)396-7121</p>			
Project Name: Flagler County							
Sample Name: R-97 #Berm Post							
Analysis Date: 09-05-12							
Analyzed By:							
Easting (ft): 622,027		Northing (ft): 1,855,172		Coordinate System:		Elevation (ft): 0.0 MLLW	
USCS SP		Munsell: Moist - 7.5YR 7/3		Comments:			
				Fines (%): #230 - 0.00	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
#14	-0.50	1.41	0.00		0.00		
#18	0.00	1.00	3.19		3.19		
#25	0.50	0.71	8.32		11.51		
#35	1.00	0.50	25.91		37.42		
#45	1.50	0.35	18.31		55.73		
#60	2.00	0.25	29.12		84.85		
#80	2.50	0.18	13.23		98.08		
#120	3.00	0.13	1.87		99.95		
#170	3.50	0.09	0.02		99.97		
#200	3.75	0.07	0.03		100.00		
#230	4.00	0.06	0.00		100.00		
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.38	1.98	1.83	1.34	0.76	0.59	0.11	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.29	0.41	0.68	-0.16	2.4		

USAGE GRANULARMETRIC REPORT FDEP_GINT_IMPORT_FLAGLER.GPJ FL DEP ROSS.GDT 11/14/12

Granularmetric Report Depths and elevations based on measured values				 <p>US Army Corps of Engineers 701 San Marco Blvd Jacksonville, Florida 32207 phone (904)396-7121</p>			
Project Name: Flagler County							
Sample Name: R-97 #Mid-Tide							
Analysis Date: 09-05-12							
Analyzed By:							
Easting (ft):		Northing (ft):		Coordinate System:		Elevation (ft):	
622,027		1,855,172				0.0 MLLW	
USCS		Munsell:		Comments:			
SP		Moist - 7.5YR 7/3					
				Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
				#230 - 0.31			28.50
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
#7	-1.50	2.82	0.00		0.00		
#10	-1.00	2.00	0.08		0.08		
#14	-0.50	1.41	0.53		0.61		
#18	0.00	1.00	2.78		3.39		
#25	0.50	0.71	5.32		8.71		
#35	1.00	0.50	6.82		15.53		
#45	1.50	0.35	9.55		25.08		
#60	2.00	0.25	17.80		42.88		
#80	2.50	0.18	36.38		79.26		
#120	3.00	0.13	18.84		98.10		
#170	3.50	0.09	1.54		99.64		
#200	3.75	0.07	0.04		99.68		
#230	4.00	0.06	0.01		99.69		
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.92	2.63	2.44	2.09	1.49	1.02	0.15	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.88	0.27	0.82	-1.02	3.56		

Depths and elevations based on measured values



Analyzed By:

0.0 MLLW

Comments:

4.90

C. % Weight Retained

0.00

0.10

0.10

0.10

0.10

0.14

0.41

0.77

1.21

1.72

2.67

4.79

18.52

79.71

98 02

98.53

98.60

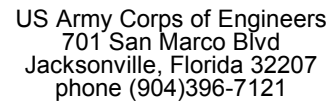
Phi 95

2.00

Kurtosis

26.14

Depths and elevations based on measured values



Analyzed By:

-0.1 MLLW

Comments:

14.40

C. % Weight Retained

0.00

0.01

0.13

1.01

3.37

6.43

9.66

13.40

19.57

43.02

90.41

98.83

98.95

98.96

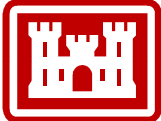
Phi 95

0.27

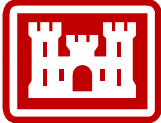
Kurtosis

5.9

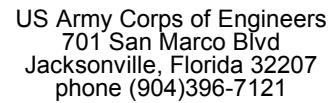
USAGE GRANULARMETRIC REPORT FDEP_GINT_IMPORT_FLAGLER.GPJ FL DEP ROSS.GDT 11/14/12

Granularmetric Report Depths and elevations based on measured values				 US Army Corps of Engineers 701 San Marco Blvd Jacksonville, Florida 32207 phone (904)396-7121			
Project Name: Flagler County							
Sample Name: R-97 #-10							
Analysis Date: 09-05-12							
Analyzed By:							
Easting (ft): 622,027		Northing (ft): 1,855,172		Coordinate System:		Elevation (ft): -0.1 MLLW	
USCS SP		Munsell: Moist - 10YR 7/2		Comments:			
				Fines (%): #230 - 1.27	Organics (%):	Carbonates (%): 9.00	Shells (%): 9.80
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
3/8"	-3.25	9.48	0.00		0.00		
#3.5	-2.50	5.66	0.05		0.05		
#4	-2.25	4.75	0.00		0.05		
#5	-2.00	3.99	0.05		0.10		
#7	-1.50	2.82	0.02		0.12		
#10	-1.00	2.00	0.13		0.25		
#14	-0.50	1.41	0.75		1.00		
#18	0.00	1.00	1.54		2.54		
#25	0.50	0.71	1.65		4.19		
#35	1.00	0.50	1.36		5.55		
#45	1.50	0.35	3.43		8.98		
#60	2.00	0.25	11.29		20.27		
#80	2.50	0.18	16.85		37.12		
#120	3.00	0.13	59.64		96.76		
#170	3.50	0.09	1.54		98.30		
#200	3.75	0.07	0.43		98.73		
#230	4.00	0.06	0.00		98.73		
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.99	2.89	2.82	2.61	2.14	1.81	0.80	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.35	0.20	0.73	-2.37	9.85		

USAGE GRANULARMETRIC REPORT FDEP_GINT_IMPORT_FLAGLER.GPJ FL DEP ROSS.GDT 11/14/12

Granularmetric Report Depths and elevations based on measured values				 US Army Corps of Engineers 701 San Marco Blvd Jacksonville, Florida 32207 phone (904)396-7121			
Project Name: Flagler County							
Sample Name: R-97 #-10 post							
Analysis Date: 09-05-12							
Analyzed By:							
Easting (ft):		Northing (ft):		Coordinate System:		Elevation (ft):	
622,027		1,855,172				-0.1 MLLW	
USCS		Munsell:		Comments:			
SP		Moist - 10YR 7/2					
				Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
				#230 - 0.00			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
#14	-0.50	1.41	0.00		0.00		
#18	0.00	1.00	0.03		0.03		
#25	0.50	0.71	0.13		0.16		
#35	1.00	0.50	1.45		1.61		
#45	1.50	0.35	0.34		1.95		
#60	2.00	0.25	3.57		5.52		
#80	2.50	0.18	29.70		35.22		
#120	3.00	0.13	21.13		56.35		
#170	3.50	0.09	42.17		98.52		
#200	3.75	0.07	1.46		99.98		
#230	4.00	0.06	0.02		100.00		
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.46	3.33	3.22	2.85	2.33	2.17	1.92	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.75	0.15	0.55	-1	4.49		

Depths and elevations based on measured values



Analyzed By:

-0.1 MLLW

Comments:

8.50

C. % Weight Retained

0.00

0.04

0.12

0.35

1.44

3.35

5.16

6.64

8.09

10.19

20.93

73.28

96.97

98.59

98.95

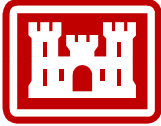
Phi 95

0.46

Kurtosis

9.73

USAGE GRANULARMETRIC REPORT FDEP_GINT_IMPORT_FLAGLER.GPJ FL DEP ROSS.GDT 11/14/12

Granularmetric Report Depths and elevations based on measured values				 <p>US Army Corps of Engineers 701 San Marco Blvd Jacksonville, Florida 32207 phone (904)396-7121</p>			
Project Name: Flagler County							
Sample Name: R-97 #-20							
Analysis Date: 09-05-12							
Analyzed By:							
Easting (ft): 622,027		Northing (ft): 1,855,172		Coordinate System:		Elevation (ft): -0.1 MLLW	
USCS SW		Munsell: Moist - 10YR 7/2		Comments:			
				Fines (%): #230 - 1.02	Organics (%):	Carbonates (%):	Shells (%): 12.40
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	% Weight Retained		C. % Weight Retained		
3/8"	-3.25	9.48	0.00		0.00		
#3.5	-2.50	5.66	0.62		0.62		
#4	-2.25	4.75	0.06		0.68		
#5	-2.00	3.99	0.25		0.93		
#7	-1.50	2.82	0.45		1.38		
#10	-1.00	2.00	0.79		2.17		
#14	-0.50	1.41	1.68		3.85		
#18	0.00	1.00	1.81		5.66		
#25	0.50	0.71	1.23		6.89		
#35	1.00	0.50	0.49		7.38		
#45	1.50	0.35	0.23		7.61		
#60	2.00	0.25	3.40		11.01		
#80	2.50	0.18	4.16		15.17		
#120	3.00	0.13	47.72		62.89		
#170	3.50	0.09	32.32		95.21		
#200	3.75	0.07	2.81		98.02		
#230	4.00	0.06	0.96		98.98		
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.50	3.33	3.19	2.86	2.60	2.51	-0.18	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.63	0.16	1.06	-2.92	12.03		