

Granularmetric Report

Depths and elevations based on measured values



Athena Technologies, Inc.
P.O. Box 68
McClellanville, SC 29458
ph 843-887-3800
fax 843-887-3801

Project Name: New Pass, Sarasota County, FL

Sample Name: NPVC-14-3 #C

Analysis Date: 08-20-14

Analyzed By:

Easting (ft): 464,591	Northing (ft): 1,088,040	Coordinate System: Florida State Plane West	Elevation (ft): -4.5 NAVD 88
---------------------------------	------------------------------------	-------------------------------------------------------	----------------------------------------

USCS: SP	Munsell: Dry - N-7/0	Comments: Composite sample collected from 0-9.0'
--------------------	--------------------------------	------------------------------------------------------------

Dry Weight (g): 237.60	Wash Weight (g): 235.27	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.97 #230 - 0.96	Organics (%):	Carbonates (%): 53.50	Shells (%): 57.00
----------------------------------	-----------------------------------	-------------------	-----------------	------------------------------------------	---------------	---------------------------------	-----------------------------

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve
3/4"	-4.25	19.03	0.00	0.00	0.00	100.00
5/8"	-4.00	16.00	5.28	2.22	5.28	97.78
#3.5	-2.50	5.66	12.57	5.29	17.85	92.49
#4	-2.25	4.76	3.11	1.31	20.96	91.18
#5	-2.00	4.00	3.08	1.30	24.04	89.88
#7	-1.50	2.83	7.22	3.04	31.26	86.84
#10	-1.00	2.00	8.21	3.46	39.47	83.38
#14	-0.50	1.41	12.37	5.21	51.84	78.17
#18	0.00	1.00	15.53	6.54	67.37	71.63
#25	0.50	0.71	17.12	7.21	84.49	64.42
#35	1.00	0.50	18.82	7.92	103.31	56.50
#45	1.50	0.35	13.69	5.76	117.00	50.74
#60	2.00	0.25	16.58	6.98	133.58	43.76
#80	2.50	0.18	27.55	11.60	161.13	32.16
#120	3.00	0.13	63.59	26.76	224.72	5.40
#170	3.50	0.09	10.29	4.33	235.01	1.07
#200	3.75	0.07	0.23	0.10	235.24	0.97
#230	4.00	0.06	0.03	0.01	235.27	0.96

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.05	2.80	2.63	1.55	-0.26	-1.09	-3.21

Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
Statistics	0.95	0.52	1.96	-0.89	2.85

GRANULARMETRIC REPORT NEW PASS, FL, JULY '14.GPJ FL DEP ROSS.GDT 9/30/14

Granularmetric Report

Depths and elevations based on measured values



Athena Technologies, Inc.
P.O. Box 68
McClellanville, SC 29458
ph 843-887-3800
fax 843-887-3801

Project Name: New Pass, Sarasota County, FL

Sample Name: NPVC-14-3 #PC

Analysis Date: 08-23-14

Analyzed By:

Easting (ft): 464,591	Northing (ft): 1,088,040	Coordinate System: Florida State Plane West	Elevation (ft): -4.5 NAVD 88
---------------------------------	------------------------------------	-------------------------------------------------------	----------------------------------------

USCS: SP	Munsell:	Comments:
--------------------	----------	-----------

Dry Weight (g): 110.40	Wash Weight (g): 110.27	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.17 #230 - 0.13	Organics (%):	Carbonates (%):	Shells (%):
----------------------------------	-----------------------------------	-------------------	-----------------	--------------------------------------------------------	---------------	-----------------	-------------

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve
3/4"	-4.25	19.03	0.00	0.00	0.00	100.00
5/8"	-4.00	16.00	0.00	0.00	0.00	100.00
#3.5	-2.50	5.66	0.00	0.00	0.00	100.00
#4	-2.25	4.76	0.00	0.00	0.00	100.00
#5	-2.00	4.00	0.00	0.00	0.00	100.00
#7	-1.50	2.83	0.00	0.00	0.00	100.00
#10	-1.00	2.00	0.00	0.00	0.00	100.00
#14	-0.50	1.41	0.00	0.00	0.00	100.00
#18	0.00	1.00	0.07	0.06	0.07	99.94
#25	0.50	0.71	0.18	0.16	0.25	99.78
#35	1.00	0.50	0.75	0.68	1.00	99.10
#45	1.50	0.35	2.55	2.31	3.55	96.79
#60	2.00	0.25	7.93	7.18	11.48	89.61
#80	2.50	0.18	26.10	23.64	37.58	65.97
#120	3.00	0.13	63.01	57.07	100.59	8.90
#170	3.50	0.09	9.41	8.52	110.00	0.38
#200	3.75	0.07	0.23	0.21	110.23	0.17
#230	4.00	0.06	0.04	0.04	110.27	0.13

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.23	2.94	2.86	2.64	2.31	2.12	1.62

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.55	0.17	0.46	-1.36	6.34

GRANULARMETRIC REPORT POST CARB.GPJ FL DEP ROSS.GDT 9/30/14

Granularmetric Report

Depths and elevations based on measured values



Athena Technologies, Inc.
P.O. Box 68
McClellanville, SC 29458
ph 843-887-3800
fax 843-887-3801

Project Name: New Pass, Sarasota County, FL

Sample Name: NPVC-14-3 #1

Analysis Date: 08-20-14

Analyzed By:

Easting (ft): 464,591	Northing (ft): 1,088,040	Coordinate System: Florida State Plane West	Elevation (ft): -5.3 NAVD 88
---------------------------------	------------------------------------	-------------------------------------------------------	----------------------------------------

USCS: SP	Munsell: Dry - N-6/0	Comments:
--------------------	--------------------------------	-----------

Dry Weight (g): 166.21	Wash Weight (g): 165.08	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.71 #230 - 0.70	Organics (%):	Carbonates (%):	Shells (%): 55.00
----------------------------------	-----------------------------------	-------------------	-----------------	------------------------------------------	---------------	-----------------	-----------------------------

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve
3/4"	-4.25	19.03	0.00	0.00	0.00	100.00
5/8"	-4.00	16.00	0.00	0.00	0.00	100.00
#3.5	-2.50	5.66	1.37	0.82	1.37	99.18
#4	-2.25	4.76	0.59	0.35	1.96	98.83
#5	-2.00	4.00	0.63	0.38	2.59	98.45
#7	-1.50	2.83	2.61	1.57	5.20	96.88
#10	-1.00	2.00	4.49	2.70	9.69	94.18
#14	-0.50	1.41	8.49	5.11	18.18	89.07
#18	0.00	1.00	11.97	7.20	30.15	81.87
#25	0.50	0.71	16.39	9.86	46.54	72.01
#35	1.00	0.50	16.48	9.92	63.02	62.09
#45	1.50	0.35	13.87	8.34	76.89	53.75
#60	2.00	0.25	14.88	8.95	91.77	44.80
#80	2.50	0.18	24.31	14.63	116.08	30.17
#120	3.00	0.13	42.47	25.55	158.55	4.62
#170	3.50	0.09	6.42	3.86	164.97	0.76
#200	3.75	0.07	0.09	0.05	165.06	0.71
#230	4.00	0.06	0.02	0.01	165.08	0.70

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.99	2.78	2.60	1.71	0.35	-0.15	-1.15
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.37	0.39	1.4	-0.75	2.88	

GRANULARMETRIC REPORT NEW PASS, FL, JULY '14.GPJ FL DEP ROSS.GDT 9/30/14

Granularmetric Report

Depths and elevations based on measured values



Athena Technologies, Inc.
P.O. Box 68
McClellanville, SC 29458
ph 843-887-3800
fax 843-887-3801

Project Name: New Pass, Sarasota County, FL

Sample Name: NPVC-14-3 #2

Analysis Date: 08-20-14

Analyzed By:

Easting (ft): 464,591	Northing (ft): 1,088,040	Coordinate System: Florida State Plane West	Elevation (ft): -9.3 NAVD 88
---------------------------------	------------------------------------	-------------------------------------------------------	----------------------------------------

USCS: SP	Munsell: Dry - N-7/0	Comments:
--------------------	--------------------------------	-----------

Dry Weight (g): 158.73	Wash Weight (g): 157.05	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 1.05 #230 - 1.04	Organics (%):	Carbonates (%):	Shells (%): 36.00
----------------------------------	-----------------------------------	-------------------	-----------------	------------------------------------------	---------------	-----------------	-----------------------------

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve
3/4"	-4.25	19.03	0.00	0.00	0.00	100.00
5/8"	-4.00	16.00	0.00	0.00	0.00	100.00
#3.5	-2.50	5.66	1.51	0.95	1.51	99.05
#4	-2.25	4.76	0.36	0.23	1.87	98.82
#5	-2.00	4.00	0.35	0.22	2.22	98.60
#7	-1.50	2.83	1.06	0.67	3.28	97.93
#10	-1.00	2.00	1.84	1.16	5.12	96.77
#14	-0.50	1.41	3.75	2.36	8.87	94.41
#18	0.00	1.00	5.25	3.31	14.12	91.10
#25	0.50	0.71	6.74	4.25	20.86	86.85
#35	1.00	0.50	8.85	5.58	29.71	81.27
#45	1.50	0.35	8.51	5.36	38.22	75.91
#60	2.00	0.25	13.25	8.35	51.47	67.56
#80	2.50	0.18	29.21	18.40	80.68	49.16
#120	3.00	0.13	68.31	43.04	148.99	6.12
#170	3.50	0.09	7.94	5.00	156.93	1.12
#200	3.75	0.07	0.11	0.07	157.04	1.05
#230	4.00	0.06	0.01	0.01	157.05	1.04

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.11	2.89	2.78	2.48	1.55	0.76	-0.62
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	1.96	0.26	1.23	-1.76	6.12	

GRANULARMETRIC REPORT NEW PASS, FL, JULY '14.GPJ FL DEP ROSS.GDT 9/30/14

Granularmetric Report

Depths and elevations based on measured values



Athena Technologies, Inc.
P.O. Box 68
McClellanville, SC 29458
ph 843-887-3800
fax 843-887-3801

Project Name: New Pass, Sarasota County, FL

Sample Name: NPVC-14-3 #3

Analysis Date: 08-20-14

Analyzed By:

Easting (ft): 464,591	Northing (ft): 1,088,040	Coordinate System: Florida State Plane West	Elevation (ft): -12.3 NAVD 88
---------------------------------	------------------------------------	-------------------------------------------------------	-----------------------------------------

USCS: SW	Munsell: Dry - N-5/0	Comments:
--------------------	--------------------------------	-----------

Dry Weight (g): 168.34	Wash Weight (g): 167.01	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.82 #230 - 0.80	Organics (%):	Carbonates (%):	Shells (%): 78.00
----------------------------------	-----------------------------------	-------------------	-----------------	--------------------------------------------------------	---------------	-----------------	-----------------------------

Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve
3/4"	-4.25	19.03	0.00	0.00	0.00	100.00
5/8"	-4.00	16.00	0.00	0.00	0.00	100.00
#3.5	-2.50	5.66	8.19	4.87	8.19	95.13
#4	-2.25	4.76	2.44	1.45	10.63	93.68
#5	-2.00	4.00	3.77	2.24	14.40	91.44
#7	-1.50	2.83	9.78	5.81	24.18	85.63
#10	-1.00	2.00	12.00	7.13	36.18	78.50
#14	-0.50	1.41	16.01	9.51	52.19	68.99
#18	0.00	1.00	17.27	10.26	69.46	58.73
#25	0.50	0.71	20.27	12.04	89.73	46.69
#35	1.00	0.50	19.56	11.62	109.29	35.07
#45	1.50	0.35	15.39	9.14	124.68	25.93
#60	2.00	0.25	12.38	7.35	137.06	18.58
#80	2.50	0.18	11.67	6.93	148.73	11.65
#120	3.00	0.13	14.70	8.73	163.43	2.92
#170	3.50	0.09	3.39	2.01	166.82	0.91
#200	3.75	0.07	0.15	0.09	166.97	0.82
#230	4.00	0.06	0.04	0.02	167.01	0.80

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
2.88	2.19	1.56	0.36	-0.82	-1.39	-2.48
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	0.3	0.81	1.63	-0.23	2.43	

GRANULARMETRIC REPORT NEW PASS, FL, JULY '14.GPJ FL DEP ROSS.GDT 9/30/14