

Granularmetric Report

Depths and elevations based on measured values



Coastal Planning & Engineering
2481 NW Boca Raton Blvd, Boca Raton
FL 33431
ph (561) 391-8102
fax (561) 391-9116

Project Name: St. Lucie Vibracores

Sample Name: SLVC-06-02 #1

Analysis Date: 05-26-06

Analyzed By: JF

Easting (ft):

914,730

Northing (ft):

1,080,472

Coordinate System:

Florida State Plane East

Elevation (ft):

-32.6 NAVD 88

USCS:

SW

Munsell:

Wet - 2.5Y-5/1
Dry - 5Y-5/1
Washed - 5Y-5/1

Comments:

Dry Weight (g):

83.54

Wash Weight (g):

81.76

Pan Retained (g):

0.07

Sieve Loss (%):

0.08

Fines (%):

#200 - 2.72
#230 - 2.30

Organics (%):

Carbonates (%):

Shell Hash (%):

5

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

2.74

3.28

2.74

3.28

5/16"

-3.00

8.00

0.68

0.81

3.42

4.09

3.5

-2.50

5.66

0.19

0.23

3.61

4.32

4

-2.25

4.76

0.10

0.12

3.71

4.44

5

-2.00

4.00

0.12

0.14

3.83

4.58

7

-1.50

2.83

0.36

0.43

4.19

5.01

10

-1.00

2.00

0.65

0.78

4.84

5.79

14

-0.50

1.41

1.17

1.40

6.01

7.19

18

0.00

1.00

1.80

2.15

7.81

9.34

25

0.50

0.71

3.92

4.69

11.73

14.03

35

1.00

0.50

7.45

8.92

19.18

22.95

45

1.50

0.35

13.51

16.17

32.69

39.12

60

2.00

0.25

28.40

34.00

61.09

73.12

80

2.50

0.18

14.98

17.93

76.07

91.05

120

3.00

0.13

2.57

3.08

78.64

94.13

170

3.50

0.09

1.64

1.96

80.28

96.09

200

3.75

0.07

0.99

1.19

81.27

97.28

230

4.00

0.06

0.35

0.42

81.62

97.70

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.22

2.30

2.05

1.66

1.06

0.61

-1.51

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.32

0.40

1.36

-2.12

8.45

GRANULARMETRIC REPORT ST LUCIE VC.GPJ FL DEP ROSS.GDT 6/28/06

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Project Name: St. Lucie Vibracores

Sample Name: SLVC-06-02 #2

Analysis Date: 05-26-06

Analyzed By: JF

Easting (ft):

914,730

Northing (ft):

1,080,472

Coordinate System:

Florida State Plane East

Elevation (ft):

-35.1 NAVD 88

USCS:

SW

Munsell:

Wet - 2.5Y-5/2
Dry - 5Y-5/1
Washed - 5Y-5/1

Comments:

Dry Weight (g):

84.01

Wash Weight (g):

82.30

Pan Retained (g):

0.02

Sieve Loss (%):

0.08

Fines (%):

#200 - 2.31
#230 - 2.14

Organics (%):

Carbonates (%):

Shell Hash (%):

4

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

1.30

1.55

1.30

1.55

5/16"

-3.00

8.00

0.07

0.08

1.37

1.63

3.5

-2.50

5.66

0.80

0.95

2.17

2.58

4

-2.25

4.76

0.13

0.15

2.30

2.73

5

-2.00

4.00

0.23

0.27

2.53

3.00

7

-1.50

2.83

0.71

0.85

3.24

3.85

10

-1.00

2.00

1.28

1.52

4.52

5.37

14

-0.50

1.41

2.83

3.37

7.35

8.74

18

0.00

1.00

4.50

5.36

11.85

14.10

25

0.50

0.71

8.98

10.69

20.83

24.79

35

1.00

0.50

14.69

17.49

35.52

42.28

45

1.50

0.35

18.99

22.60

54.51

64.88

60

2.00

0.25

20.01

23.82

74.52

88.70

80

2.50

0.18

5.84

6.95

80.36

95.65

120

3.00

0.13

1.04

1.24

81.40

96.89

170

3.50

0.09

0.43

0.51

81.83

97.40

200

3.75

0.07

0.24

0.29

82.07

97.69

230

4.00

0.06

0.14

0.17

82.21

97.86

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

2.45

1.90

1.71

1.17

0.51

0.09

-1.12

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

0.93

0.52

1.15

-1.57

7

GRANULARMETRIC REPORT ST LUCIE VC.GPJ FL DEP ROSS.GDT 6/28/06

Granularmetric Report

Depths and elevations based on measured values



Coastal Planning & Engineering
2481 NW Boca Raton Blvd, Boca Raton
FL 33431
ph (561) 391-8102
fax (561) 391-9116

Project Name: St. Lucie Vibracores

Sample Name: SLVC-06-02 #3

Analysis Date: 05-26-06

Analyzed By: JF

Easting (ft):

914,730

Northing (ft):

1,080,472

Coordinate System:

Florida State Plane East

Elevation (ft):

-37.6 NAVD 88

USCS:

SW

Munsell:

Wet - 2.5Y-5/1
Dry - 5Y-5/1
Washed - 5Y-5/1

Comments:

Dry Weight (g):

82.20

Wash Weight (g):

80.35

Pan Retained (g):

0.05

Sieve Loss (%):

0.12

Fines (%):

#200 - 2.80
#230 - 2.44

Organics (%):

Carbonates (%):

Shell Hash (%):

1

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	0.06	0.07	0.06	0.07
3.5	-2.50	5.66	0.12	0.15	0.18	0.22
4	-2.25	4.76	0.12	0.15	0.30	0.37
5	-2.00	4.00	0.47	0.57	0.77	0.94
7	-1.50	2.83	0.43	0.52	1.20	1.46
10	-1.00	2.00	0.95	1.16	2.15	2.62
14	-0.50	1.41	1.89	2.30	4.04	4.92
18	0.00	1.00	3.55	4.32	7.59	9.24
25	0.50	0.71	7.63	9.28	15.22	18.52
35	1.00	0.50	11.80	14.36	27.02	32.88
45	1.50	0.35	13.87	16.87	40.89	49.75
60	2.00	0.25	18.76	22.82	59.65	72.57
80	2.50	0.18	12.67	15.41	72.32	87.98
120	3.00	0.13	4.34	5.28	76.66	93.26
170	3.50	0.09	2.30	2.80	78.96	96.06
200	3.75	0.07	0.94	1.14	79.90	97.20
230	4.00	0.06	0.30	0.36	80.20	97.56

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.31

2.37

2.08

1.51

0.73

0.36

-0.49

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.34


0.40

1.05

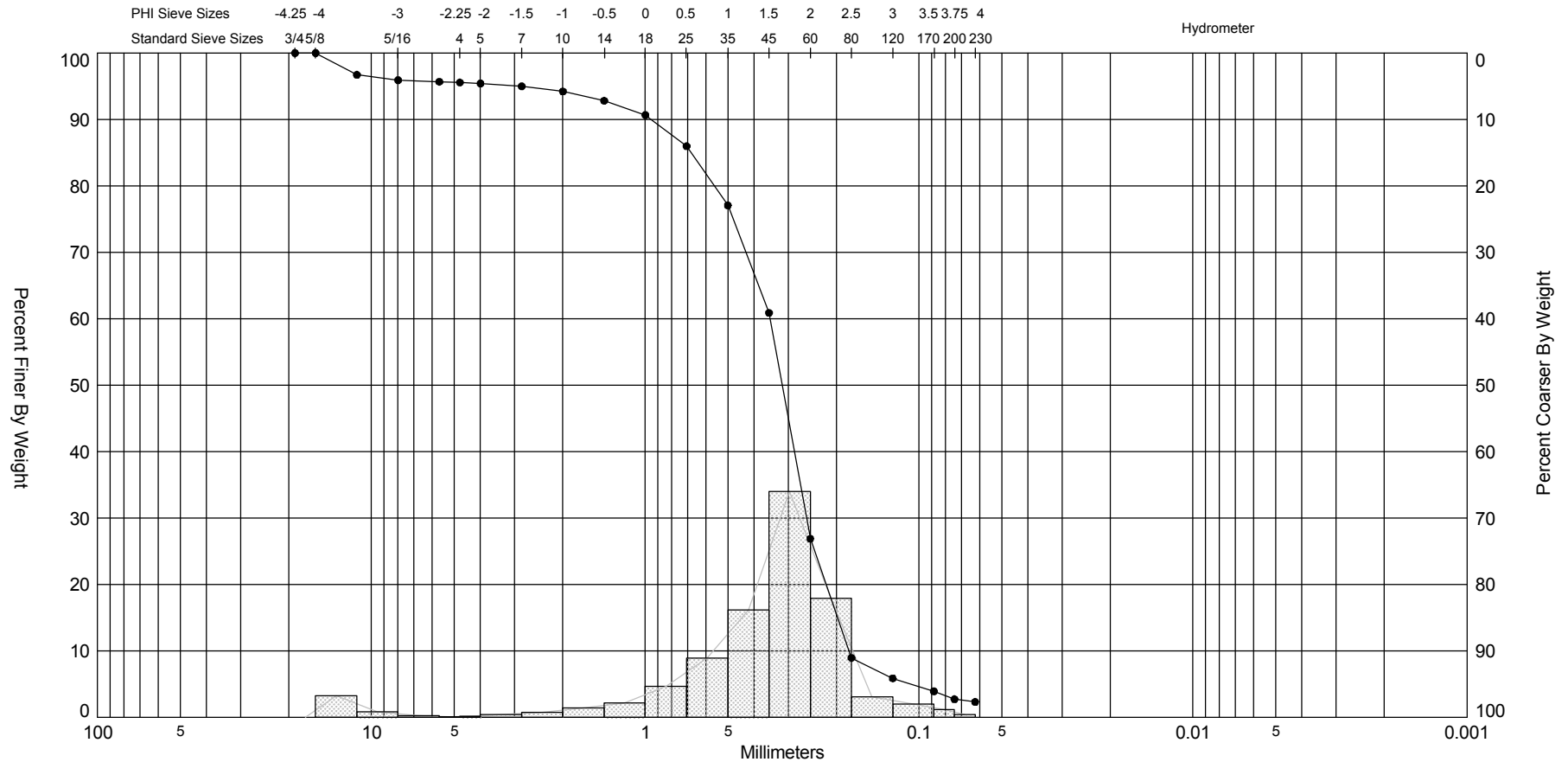
-0.61

4.03


GRANULARMETRIC REPORT ST LUCIE VC.GPJ FL DEP ROSS.GDT 6/28/06

Granularmetric Report Depths and elevations based on measured values				 Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116			
Project Name: St. Lucie Vibracores							
Sample Name: SLVC-06-02 #4							
Analysis Date: 05-26-06							
Analyzed By: AU							
Easting (ft): 914,730		Northing (ft): 1,080,472		Coordinate System: Florida State Plane East		Elevation (ft): -38.6 NAVD 88	
USCS: SW		Munsell: Wet - 2.5Y-5/1 Dry - N-4/0 Washed - N-5/0		Comments:			
Dry Weight (g): 81.68	Wash Weight (g): 79.91	Pan Retained (g): 0.05	Sieve Loss (%): 0.13	Fines (%): #200 - 2.57 #230 - 2.34	Organics (%):	Carbonates (%):	Shell Hash (%): 10
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	0.83	1.02	0.83	1.02	
7/16"	-3.50	11.31	0.58	0.71	1.41	1.73	
5/16"	-3.00	8.00	0.71	0.87	2.12	2.60	
3.5	-2.50	5.66	1.19	1.46	3.31	4.06	
4	-2.25	4.76	0.86	1.05	4.17	5.11	
5	-2.00	4.00	0.98	1.20	5.15	6.31	
7	-1.50	2.83	2.76	3.38	7.91	9.69	
10	-1.00	2.00	5.12	6.27	13.03	15.96	
14	-0.50	1.41	10.24	12.54	23.27	28.50	
18	0.00	1.00	12.69	15.54	35.96	44.04	
25	0.50	0.71	13.77	16.86	49.73	60.90	
35	1.00	0.50	12.20	14.94	61.93	75.84	
45	1.50	0.35	7.28	8.91	69.21	84.75	
60	2.00	0.25	4.49	5.50	73.70	90.25	
80	2.50	0.18	1.85	2.26	75.55	92.51	
120	3.00	0.13	1.59	1.95	77.14	94.46	
170	3.50	0.09	1.81	2.22	78.95	96.68	
200	3.75	0.07	0.61	0.75	79.56	97.43	
230	4.00	0.06	0.19	0.23	79.75	97.66	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.12	1.46	0.97	0.18	-0.64	-1.00	-2.28	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	0.12	0.92	1.39	-0.2	3.86		

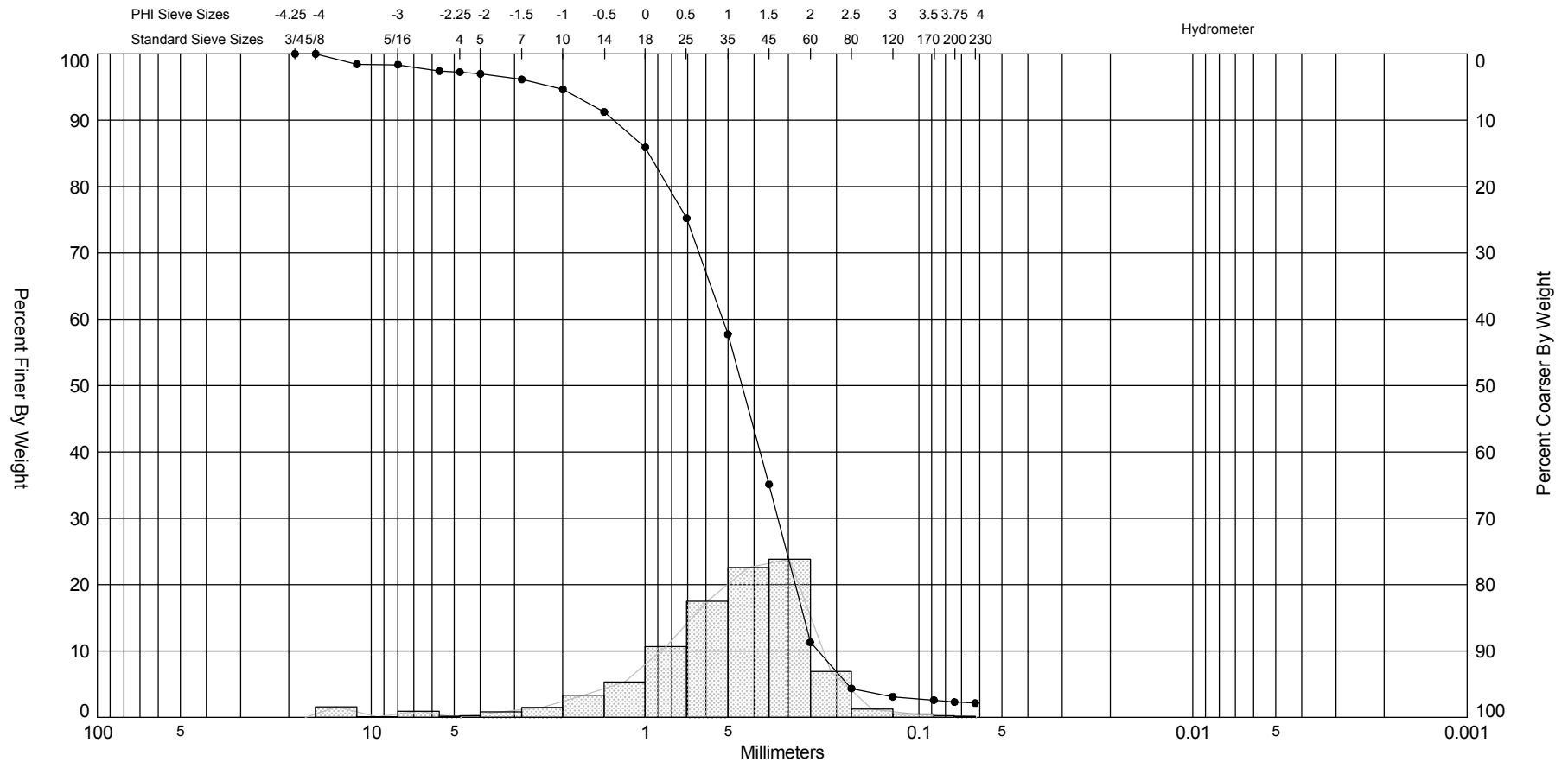
SIEVE ANALYSIS ST LUCIE VC.GPJ FL DEP ROSS.GDT 6/28/06




Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
SLVC-06-02 #1	—●—	-32.6	SW	#200 - 2.72 #230 - 2.30			1.66	1.32	-2.12	8.45	1.36	Project Name:	St. Lucie Vibracores
Comments:												Analysis Date:	05-26-06
Depths and elevations based on measured values												Analyzed By:	JF
						Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116						Easting (X, ft):	914,730
												Northing (Y, ft):	1,080,472
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

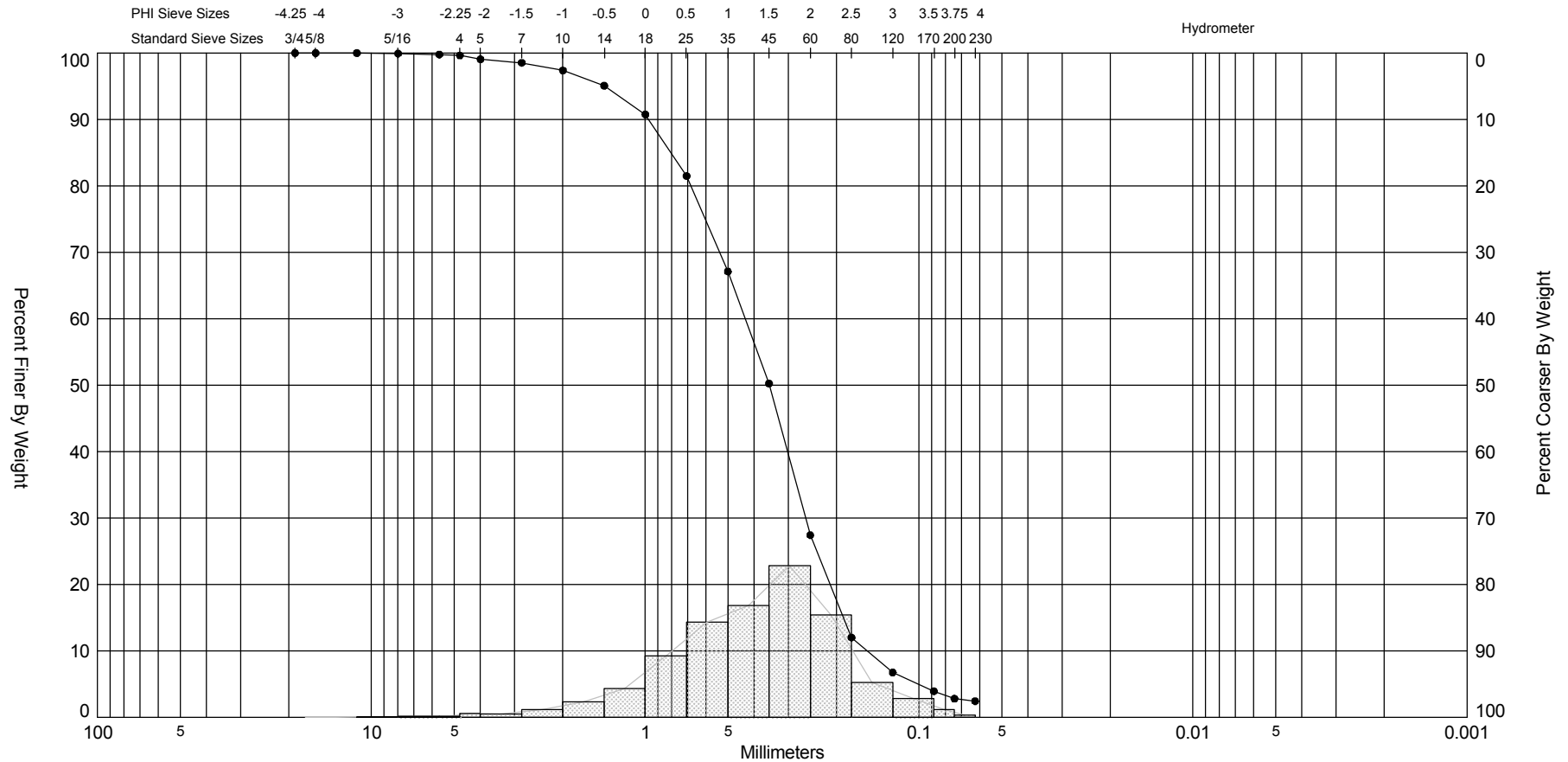
SIEVE ANALYSIS ST LUCIE VC.GPJ FL DEP ROSS.GDT 6/28/06




Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
SLVC-06-02 #2	—●—	-35.1	SW	#200 - 2.31 #230 - 2.14			1.17	0.93	-1.57	7	1.15	Project Name:	St. Lucie Vibracores
Comments:												Analysis Date:	05-26-06
Depths and elevations based on measured values												Analyzed By:	JF
						Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116						Easting (X, ft):	914,730
												Northing (Y, ft):	1,080,472
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

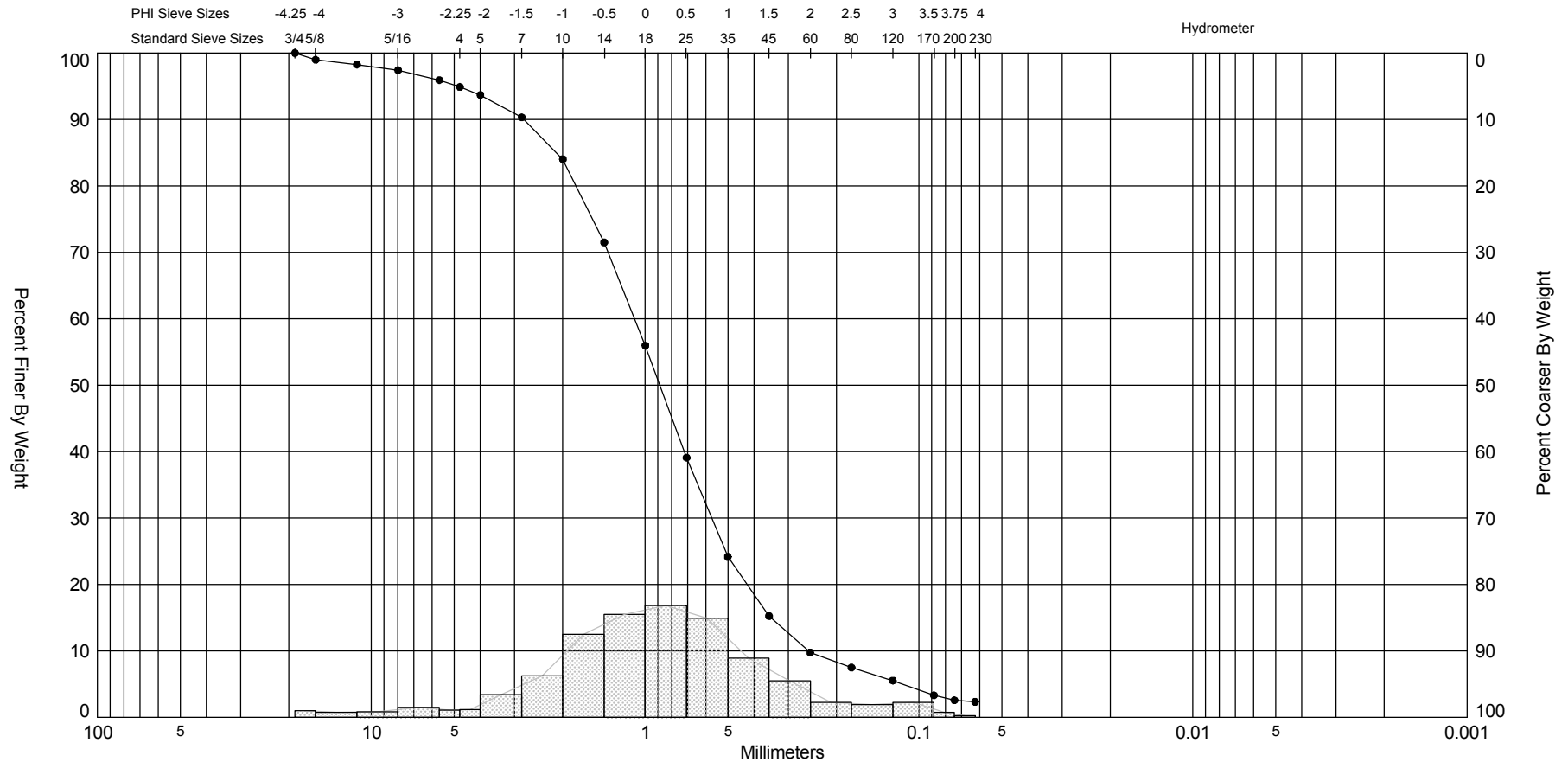
SIEVE ANALYSIS ST LUCIE VC.GPJ FL DEP ROSS.GDT 6/28/06




Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
SLVC-06-02 #3	—●—	-37.6	SW	#200 - 2.80 #230 - 2.44			1.51	1.34	-0.61	4.03	1.05	Project Name:	St. Lucie Vibracores
Comments:												Analysis Date:	05-26-06
Depths and elevations based on measured values												Analyzed By:	JF
						Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116						Easting (X, ft):	914,730
												Northing (Y, ft):	1,080,472
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

SIEVE ANALYSIS ST LUCIE VC.GPJ FL DEP ROSS.GDT 6/28/06



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
SLVC-06-02 #4	—●—	-38.6	SW	#200 - 2.57 #230 - 2.34			0.18	0.12	-0.2	3.86	1.39	Project Name:	St. Lucie Vibracores
Comments:												Analysis Date:	05-26-06
Depths and elevations based on measured values												Analyzed By:	AU
						Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116						Easting (X, ft):	914,730
												Northing (Y, ft):	1,080,472
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88