

# 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-06-30 #1

Analysis Date: 06-15-06

Analyzed By: RS

Easting (ft):

913,977

Northing (ft):

1,085,616

Coordinate System:

Florida State Plane East

Elevation (ft):

-36.3 NAVD 88

USCS:

SW

Munsell:

Wet - 2.5Y-4/2  
Dry - 5Y-6/1  
Washed - 5Y-6/1

Comments:

Dry Weight (g):

85.60

Wash Weight (g):

84.29

Pan Retained (g):

0.03

Sieve Loss (%):

0.06

Fines (%):

#200 - 1.78  
#230 - 1.62

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

0.60

0.70

0.60

0.70

5/16"

-3.00

8.00

1.39

1.62

1.99

2.32

3.5

-2.50

5.66

0.73

0.85

2.72

3.17

4

-2.25

4.76

0.09

0.11

2.81

3.28

5

-2.00

4.00

0.42

0.49

3.23

3.77

7

-1.50

2.83

1.17

1.37

4.40

5.14

10

-1.00

2.00

2.01

2.35

6.41

7.49

14

-0.50

1.41

3.70

4.32

10.11

11.81

18

0.00

1.00

5.01

5.85

15.12

17.66

25

0.50

0.71

9.31

10.88

24.43

28.54

35

1.00

0.50

14.86

17.36

39.29

45.90

45

1.50

0.35

19.43

22.70

58.72

68.60

60

2.00

0.25

18.02

21.05

76.74

89.65

80

2.50

0.18

5.34

6.24

82.08

95.89

120

3.00

0.13

0.95

1.11

83.03

97.00

170

3.50

0.09

0.52

0.61

83.55

97.61

200

3.75

0.07

0.52

0.61

84.07

98.22

230

4.00

0.06

0.14

0.16

84.21

98.38

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

2.43

1.87

1.65

1.09

0.34

-0.14

-1.55

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

0.83

0.56

1.22

-1.29

5.52

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-06-30 #2

Analysis Date: 06-15-06

Analyzed By: RS

Easting (ft):

913,977

Northing (ft):

1,085,616

Coordinate System:

Florida State Plane East

Elevation (ft):

-39.8 NAVD 88

USCS:

SW

Munsell:

Wet - 2.5Y-4/2  
Dry - 5Y-5/2  
Washed - 5Y-6/2

Comments:

Dry Weight (g):

93.71

Wash Weight (g):

92.05

Pan Retained (g):

0.02

Sieve Loss (%):

0.10

Fines (%):

#200 - 1.99  
#230 - 1.89

Organics (%):

Carbonates (%):

Shell Hash (%):

3

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

0.35

0.37

0.35

0.37

5/16"

-3.00

8.00

0.56

0.60

0.91

0.97

3.5

-2.50

5.66

0.44

0.47

1.35

1.44

4

-2.25

4.76

0.26

0.28

1.61

1.72

5

-2.00

4.00

0.42

0.45

2.03

2.17

7

-1.50

2.83

0.74

0.79

2.77

2.96

10

-1.00

2.00

1.68

1.79

4.45

4.75

14

-0.50

1.41

3.91

4.17

8.36

8.92

18

0.00

1.00

5.39

5.75

13.75

14.67

25

0.50

0.71

10.68

11.40

24.43

26.07

35

1.00

0.50

15.60

16.65

40.03

42.72

45

1.50

0.35

18.80

20.06

58.83

62.78

60

2.00

0.25

22.86

24.39

81.69

87.17

80

2.50

0.18

8.31

8.87

90.00

96.04

120

3.00

0.13

1.04

1.11

91.04

97.15

170

3.50

0.09

0.44

0.47

91.48

97.62

200

3.75

0.07

0.37

0.39

91.85

98.01

230

4.00

0.06

0.09

0.10

91.94

98.11

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

2.44

1.94

1.75

1.18

0.45

0.06

-0.97

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

0.97

0.51

1.09

-1.2

5.59

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fax (561) 391-9116

Project Name: St. Lucie Vibracores

Sample Name: SLVC-06-30 #3

Analysis Date: 06-15-06

Analyzed By: JG

Easting (ft):

913,977

Northing (ft):

1,085,616

Coordinate System:

Florida State Plane East

Elevation (ft):

-41.3 NAVD 88

USCS:

SW-SM

Munsell:

Wet - 10Y-4/1  
Dry - 5Y-5/1  
Washed - 5Y-6/1

Comments:

Dry Weight (g):

89.81

Wash Weight (g):

86.87

Pan Retained (g):

0.47

Sieve Loss (%):

0.00

Fines (%):

#200 - 5.39  
#230 - 3.81

Organics (%):

Carbonates (%):

Shell Hash (%):

3

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	0.64	0.71	0.64	0.71
3.5	-2.50	5.66	0.46	0.51	1.10	1.22
4	-2.25	4.76	0.46	0.51	1.56	1.73
5	-2.00	4.00	0.38	0.42	1.94	2.15
7	-1.50	2.83	0.84	0.94	2.78	3.09
10	-1.00	2.00	1.20	1.34	3.98	4.43
14	-0.50	1.41	2.22	2.47	6.20	6.90
18	0.00	1.00	2.85	3.17	9.05	10.07
25	0.50	0.71	4.66	5.19	13.71	15.26
35	1.00	0.50	7.87	8.76	21.58	24.02
45	1.50	0.35	11.59	12.91	33.17	36.93
60	2.00	0.25	22.66	25.23	55.83	62.16
80	2.50	0.18	15.67	17.45	71.50	79.61
120	3.00	0.13	6.19	6.89	77.69	86.50
170	3.50	0.09	4.62	5.14	82.31	91.64
200	3.75	0.07	2.67	2.97	84.98	94.61
230	4.00	0.06	1.42	1.58	86.40	96.19

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.81

2.82

2.37

1.76

1.04

0.54

-0.88

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.54

0.34

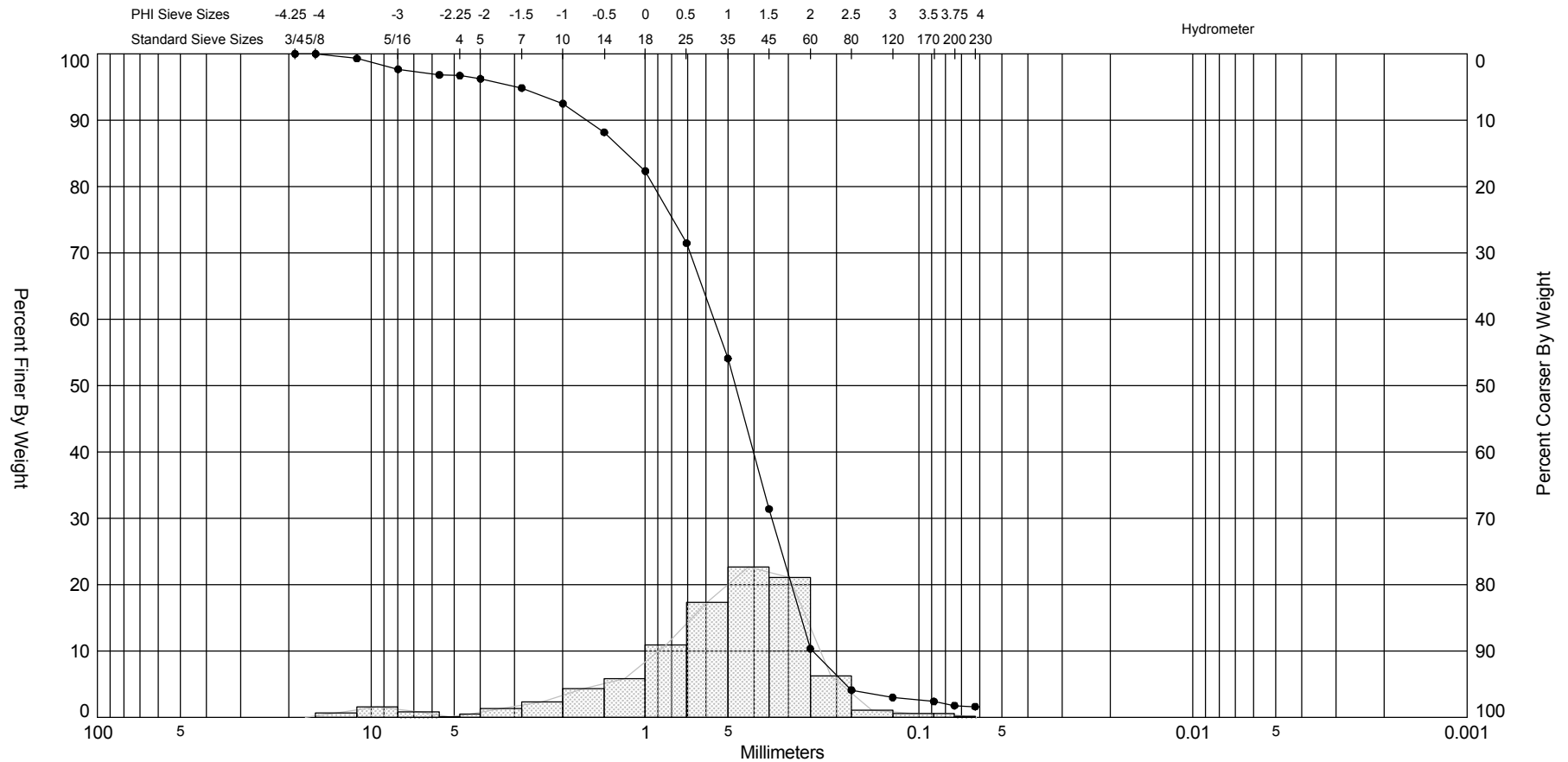
1.27

-1.04


4.91

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

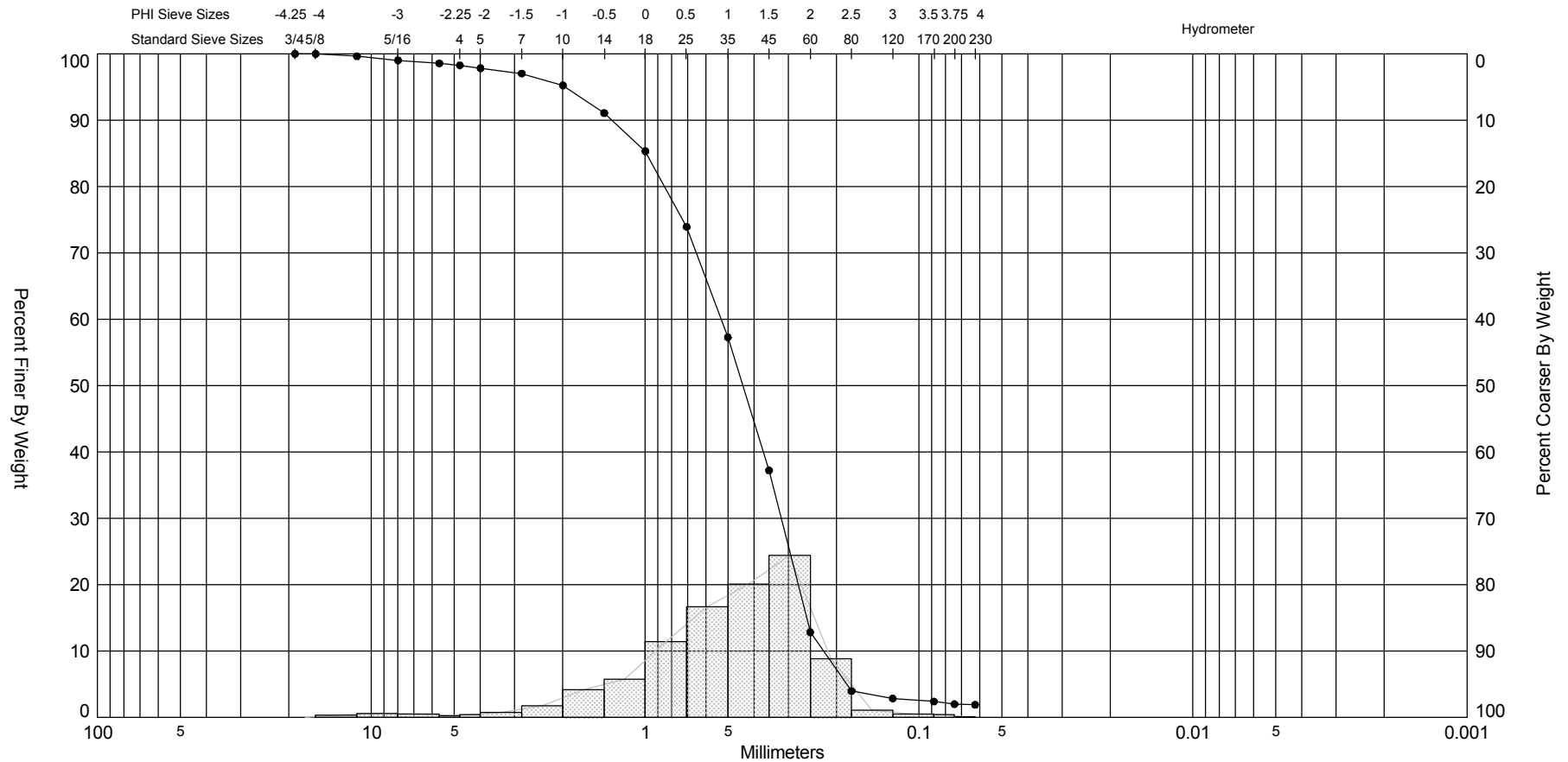
SIEVE ANALYSIS ST LUCIE VC.GPJ FL DEP ROSS.GDT 6/28/06




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-06-30 #1	—●—	-36.3	SW	#200 - 1.78 #230 - 1.62			1.09	0.83	-1.29	5.52	1.22	Project Name:	St. Lucie Vibracores
Comments:												Analysis Date:	06-15-06
Depths and elevations based on measured values												Analyzed By:	RS
						Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116						Easting (X, ft):	913,977
												Northing (Y, ft):	1,085,616
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

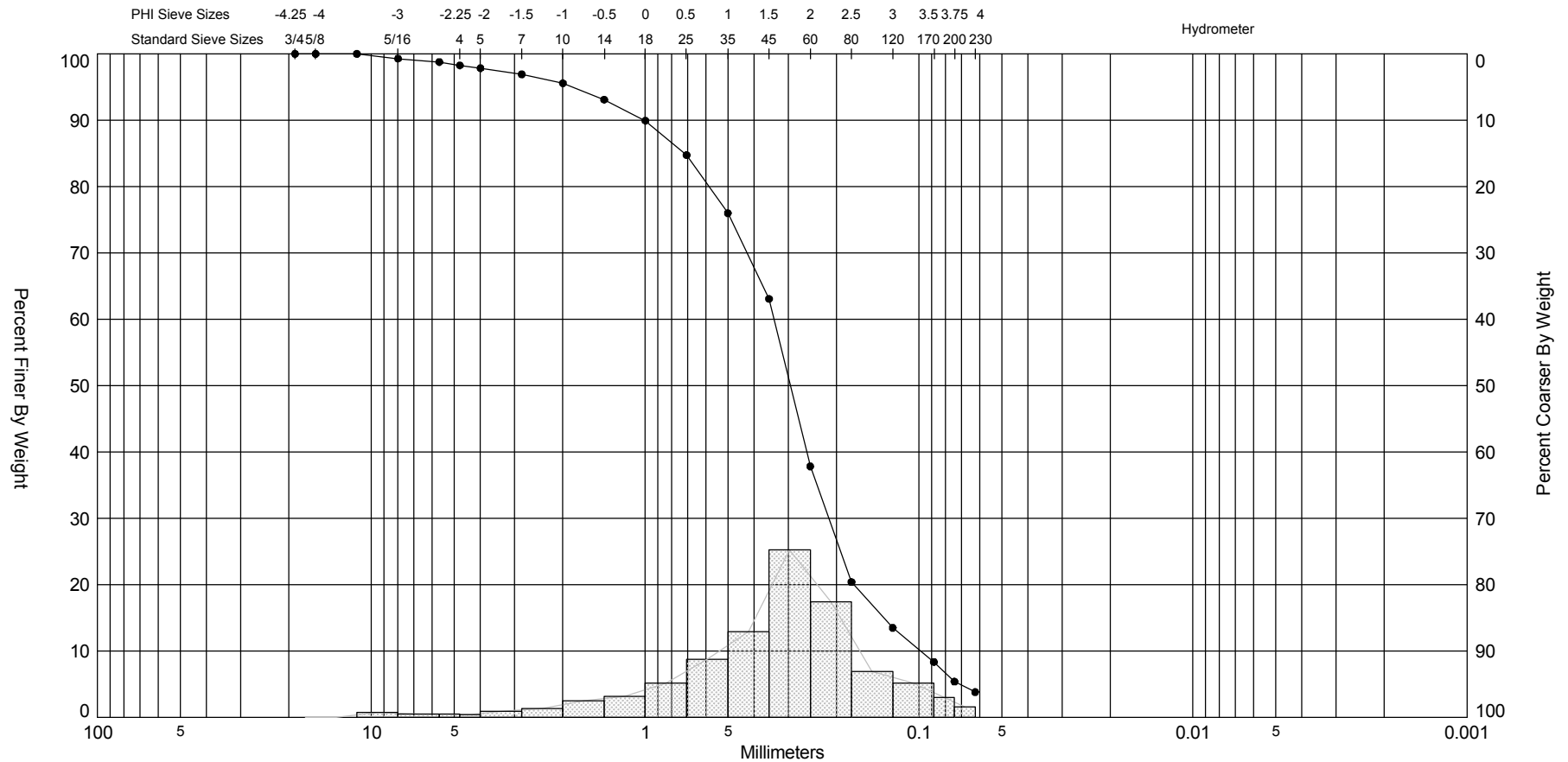
SIEVE ANALYSIS ST LUCIE VC.GPJ FL DEP ROSS.GDT 6/28/06




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-06-30 #2	—●—	-39.8	SW	#200 - 1.99 #230 - 1.89			1.18	0.97	-1.2	5.59	1.09	Project Name:	St. Lucie Vibracores
Comments:												Analysis Date:	06-15-06
Depths and elevations based on measured values												Analyzed By:	RS
						Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116						Easting (X, ft):	913,977
												Northing (Y, ft):	1,085,616
												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-06-30 #3	—●—	-41.3	SW-SM	#200 - 5.39 #230 - 3.81			1.76	1.54	-1.04	4.91	1.27	Project Name:	St. Lucie Vibracores
Comments:												Analysis Date:	06-15-06
Depths and elevations based on measured values												Analyzed By:	JG
						Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116						Easting (X, ft):	913,977
												Northing (Y, ft):	1,085,616
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88