


<b>Granularmetric Report</b> 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-06-32 #1							
Analysis Date: 06-16-06							
Analyzed By: JG							
Easting (ft): <b>914,444</b>		Northing (ft): <b>1,083,638</b>		Coordinate System: <b>Florida State Plane East</b>		Elevation (ft): <b>-34.2 NAVD 88</b>	
USCS: <b>SW</b>		Munsell: Wet - 2.5Y-4/1 Dry - 2.5Y-5/1 Washed - 2.5Y-6/1		Comments:			
Dry Weight (g): <b>82.03</b>	Wash Weight (g): <b>80.83</b>	Pan Retained (g): <b>0.01</b>	Sieve Loss (%): <b>0.01</b>	Fines (%): <b>#200 - 1.74</b> <b>#230 - 1.50</b>	Organics (%):	Carbonates (%):	Shell Hash (%): <b>2</b>
<b>Sieve Number</b>	<b>Sieve Size (Phi)</b>	<b>Sieve Size (Millimeters)</b>	<b>Grams Retained</b>	<b>% Weight Retained</b>	<b>Cum. Grams Retained</b>	<b>C. % Weight Retained</b>	
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	0.52	0.63	0.52	0.63	
3.5	-2.50	5.66	0.29	0.35	0.81	0.98	
4	-2.25	4.76	0.20	0.24	1.01	1.22	
5	-2.00	4.00	0.12	0.15	1.13	1.37	
7	-1.50	2.83	0.46	0.56	1.59	1.93	
10	-1.00	2.00	0.78	0.95	2.37	2.88	
14	-0.50	1.41	1.30	1.58	3.67	4.46	
18	0.00	1.00	2.53	3.08	6.20	7.54	
25	0.50	0.71	5.32	6.49	11.52	14.03	
35	1.00	0.50	11.00	13.41	22.52	27.44	
45	1.50	0.35	16.94	20.65	39.46	48.09	
60	2.00	0.25	27.79	33.88	67.25	81.97	
80	2.50	0.18	10.30	12.56	77.55	94.53	
120	3.00	0.13	1.67	2.04	79.22	96.57	
170	3.50	0.09	1.02	1.24	80.24	97.81	
200	3.75	0.07	0.37	0.45	80.61	98.26	
230	4.00	0.06	0.20	0.24	80.81	98.50	
<b>Phi 5</b>	<b>Phi 16</b>	<b>Phi 25</b>	<b>Phi 50</b>	<b>Phi 75</b>	<b>Phi 84</b>	<b>Phi 95</b>	
2.62	2.08	1.90	1.53	0.91	0.57	-0.41	
<b>Moment</b>	<b>Mean Phi</b>	<b>Mean mm</b>	<b>Sorting</b>	<b>Skewness</b>	<b>Kurtosis</b>		
<b>Statistics</b>	1.31	0.40	0.97	-1.48	7.51		

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ph (561) 391-8102  
fax (561) 391-9116

Project Name: St. Lucie Vibracores

Sample Name: SLVC-06-32 #2

Analysis Date: 06-16-06

Analyzed By: JG

Easting (ft):

914,444

Northing (ft):

1,083,638

Coordinate System:

Florida State Plane East

Elevation (ft):

-34.8 NAVD 88

USCS:

SW

Munsell:

Wet - 2.5Y-4/1

Dry - 2.5Y-5/1

Washed - 2.5Y-6/1

Comments:

Dry Weight (g):

93.51

Wash Weight (g):

91.88

Pan Retained (g):

0.06

Sieve Loss (%):

0.00

Fines (%):

#200 - 1.97

#230 - 1.81

Organics (%):

Carbonates (%):

Shell Hash (%):

18

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

3.25

3.48

3.25

3.48

5/16"

-3.00

8.00

4.00

4.28

7.25

7.76

3.5

-2.50

5.66

4.10

4.38

11.35

12.14

4

-2.25

4.76

1.26

1.35

12.61

13.49

5

-2.00

4.00

1.89

2.02

14.50

15.51

7

-1.50

2.83

2.79

2.98

17.29

18.49

10

-1.00

2.00

3.49

3.73

20.78

22.22

14

-0.50

1.41

4.95

5.29

25.73

27.51

18

0.00

1.00

5.87

6.28

31.60

33.79

25

0.50

0.71

8.12

8.68

39.72

42.47

35

1.00

0.50

10.75

11.50

50.47

53.97

45

1.50

0.35

13.16

14.07

63.63

68.04

60

2.00

0.25

17.89

19.13

81.52

87.17

80

2.50

0.18

7.88

8.43

89.40

95.60

120

3.00

0.13

1.13

1.21

90.53

96.81

170

3.50

0.09

0.55

0.59

91.08

97.40

200

3.75

0.07

0.59

0.63

91.67

98.03

230

4.00

0.06

0.15

0.16

91.82

98.19

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

2.46

1.92

1.68

0.83

-0.74

-1.92

-3.32

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

0.28

0.82

1.78

-0.77

2.62

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

# Granularmetric Report

Depths and elevations based on measured values



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FL 33431  
ph (561) 391-8102  
fax (561) 391-9116

Project Name: St. Lucie Vibracores

Sample Name: SLVC-06-32 #3

Analysis Date: 06-16-06

Analyzed By: JG

Easting (ft):

914,444

Northing (ft):

1,083,638

Coordinate System:

Florida State Plane East

Elevation (ft):

-36.3 NAVD 88

USCS:

SW

Munsell:

Wet - N-4/0

Dry - 10Y-5/1

Washed - 10Y-5/1

Comments:

Dry Weight (g):

89.10

Wash Weight (g):

87.38

Pan Retained (g):

0.00

Sieve Loss (%):

0.00

Fines (%):

#200 - 2.07  
#230 - 1.92

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

0.00

0.00

0.00

0.00

5/16"

-3.00

8.00

0.74

0.83

0.74

0.83

3.5

-2.50

5.66

0.37

0.42

1.11

1.25

4

-2.25

4.76

0.56

0.63

1.67

1.88

5

-2.00

4.00

0.56

0.63

2.23

2.51

7

-1.50

2.83

0.89

1.00

3.12

3.51

10

-1.00

2.00

1.58

1.77

4.70

5.28

14

-0.50

1.41

2.70

3.03

7.40

8.31

18

0.00

1.00

3.58

4.02

10.98

12.33

25

0.50

0.71

5.93

6.66

16.91

18.99

35

1.00

0.50

8.85

9.93

25.76

28.92

45

1.50

0.35

13.08

14.68

38.84

43.60

60

2.00

0.25

22.91

25.71

61.75

69.31

80

2.50

0.18

17.42

19.55

79.17

88.86

120

3.00

0.13

4.33

4.86

83.50

93.72

170

3.50

0.09

2.42

2.72

85.92

96.44

200

3.75

0.07

1.33

1.49

87.25

97.93

230

4.00

0.06

0.13

0.15

87.38

98.08

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.24

2.38

2.15

1.62

0.80

0.28

-1.08

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

1.33

0.40

1.22

-1.18

4.94

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

# Granularmetric Report

Depths and elevations based on measured values



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FL 33431  
ph (561) 391-8102  
fax (561) 391-9116

Project Name: St. Lucie Vibracores

Sample Name: SLVC-06-32 #4

Analysis Date: 06-15-06

Analyzed By: RS

Easting (ft):

914,444

Northing (ft):

1,083,638

Coordinate System:

Florida State Plane East

Elevation (ft):

-40.8 NAVD 88

USCS:

SW

Munsell:

Wet - N-4/0

Dry - 2.5Y-5/1

Washed - 2.5Y-6/1

Comments:

Dry Weight (g):

87.32

Wash Weight (g):

84.71

Pan Retained (g):

0.02

Sieve Loss (%):

0.19

Fines (%):

#200 - 3.84

#230 - 3.21

Organics (%):

Carbonates (%):

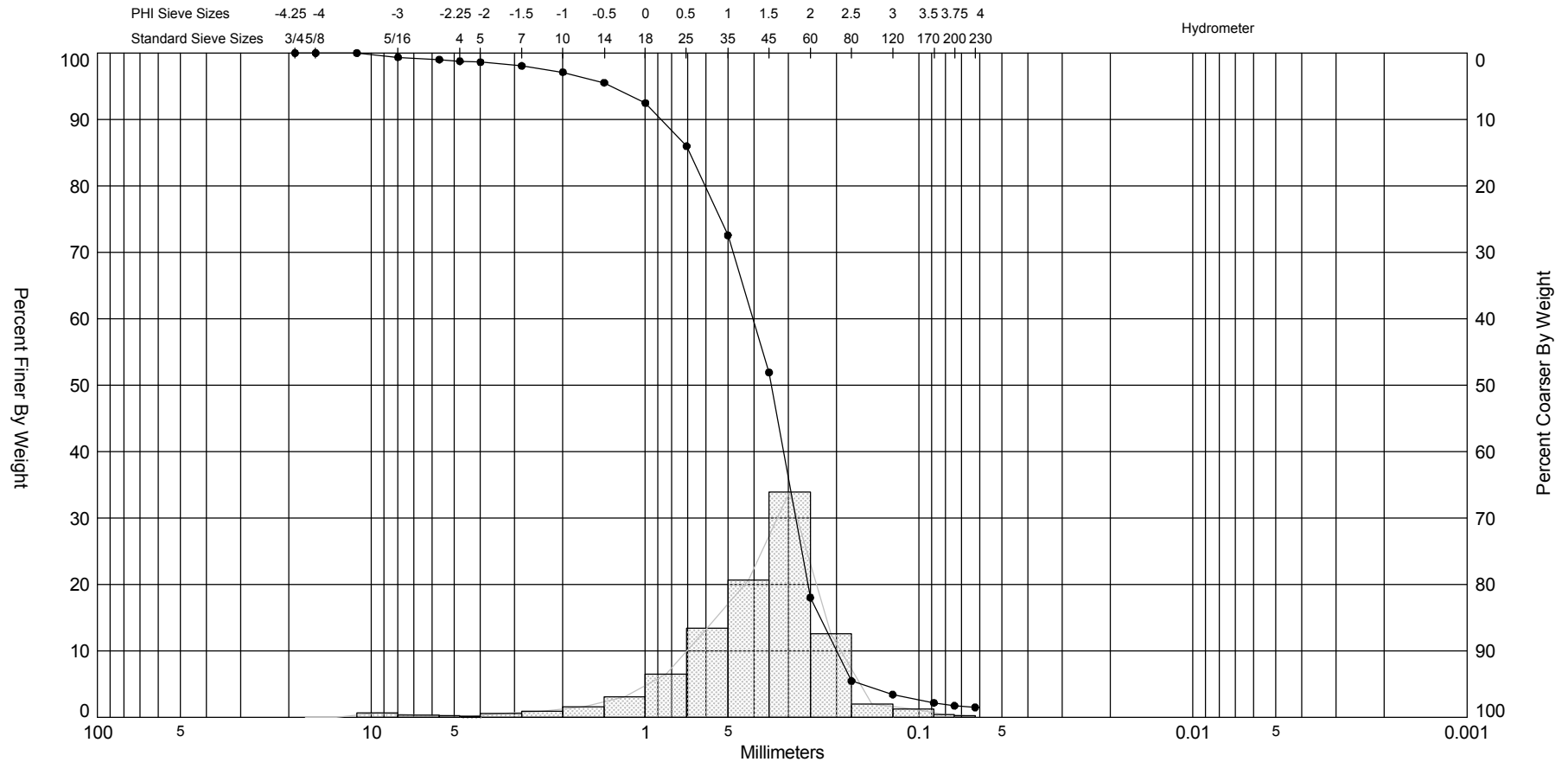
Shell Hash (%):

8


Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	C. % Weight Retained
1"	-4.75	26.91	0.00	0.00	0.00	0.00
3/4"	-4.25	19.03	0.01	0.01	0.01	0.01
5/8"	-4.00	16.00	0.00	0.00	0.01	0.01
7/16"	-3.50	11.31	0.69	0.79	0.70	0.80
5/16"	-3.00	8.00	1.95	2.23	2.65	3.03
3.5	-2.50	5.66	1.17	1.34	3.82	4.37
4	-2.25	4.76	0.42	0.48	4.24	4.85
5	-2.00	4.00	0.82	0.94	5.06	5.79
7	-1.50	2.83	1.81	2.07	6.87	7.86
10	-1.00	2.00	2.18	2.50	9.05	10.36
14	-0.50	1.41	3.90	4.47	12.95	14.83
18	0.00	1.00	4.83	5.53	17.78	20.36
25	0.50	0.71	8.53	9.77	26.31	30.13
35	1.00	0.50	11.01	12.61	37.32	42.74
45	1.50	0.35	12.58	14.41	49.90	57.15
60	2.00	0.25	15.51	17.76	65.41	74.91
80	2.50	0.18	8.67	9.93	74.08	84.84
120	3.00	0.13	3.88	4.44	77.96	89.28
170	3.50	0.09	4.00	4.58	81.96	93.86
200	3.75	0.07	2.01	2.30	83.97	96.16
230	4.00	0.06	0.55	0.63	84.52	96.79
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.62	2.46	2.00	1.25	0.24	-0.39	-2.21
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	0.96	0.51	1.55	-0.82	3.72	

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

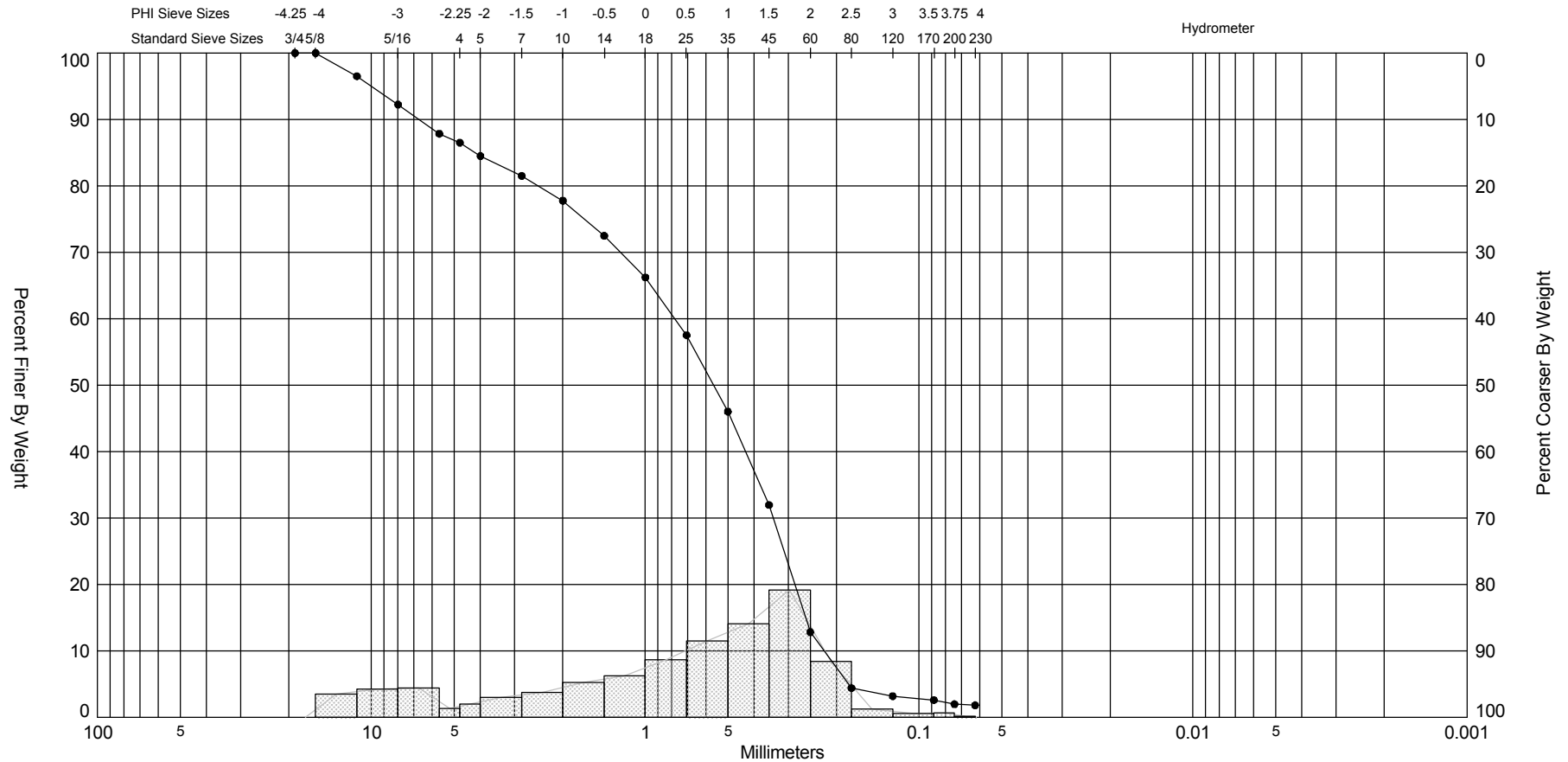
SIEVE ANALYSIS ST LUCIE VC.GPJ FL DEP ROSS.GDT 6/28/06




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-06-32 #1	—●—	-34.2	SW	#200 - 1.74 #230 - 1.50			1.53	1.31	-1.48	7.51	0.97	Project Name:	St. Lucie Vibracores
Comments:												Analysis Date:	06-16-06
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):	914,444
												Northing (Y, ft):	1,083,638
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88

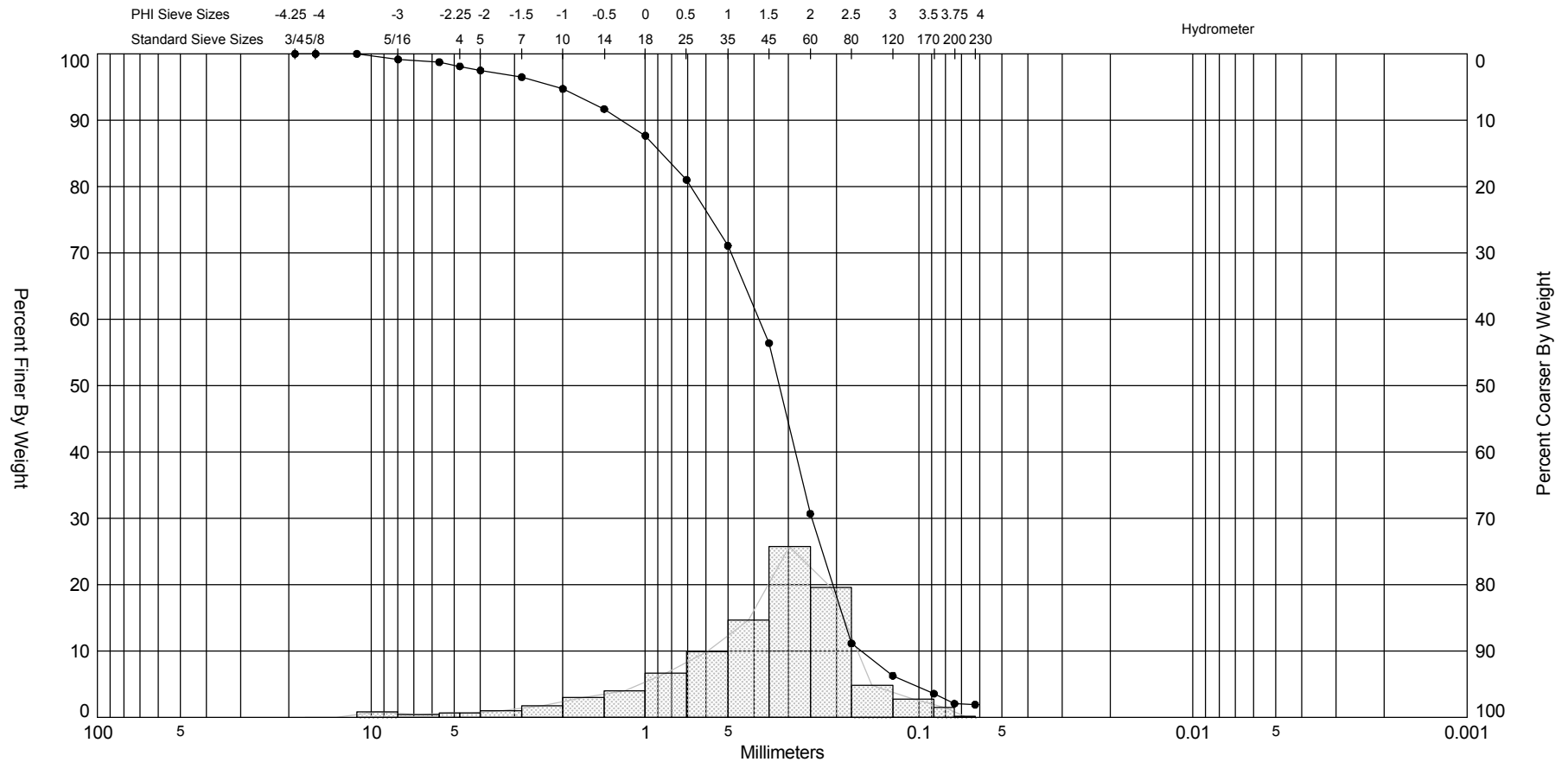
SIEVE ANALYSIS ST LUCIE VC.GPJ FL DEP ROSS.GDT 6/28/06



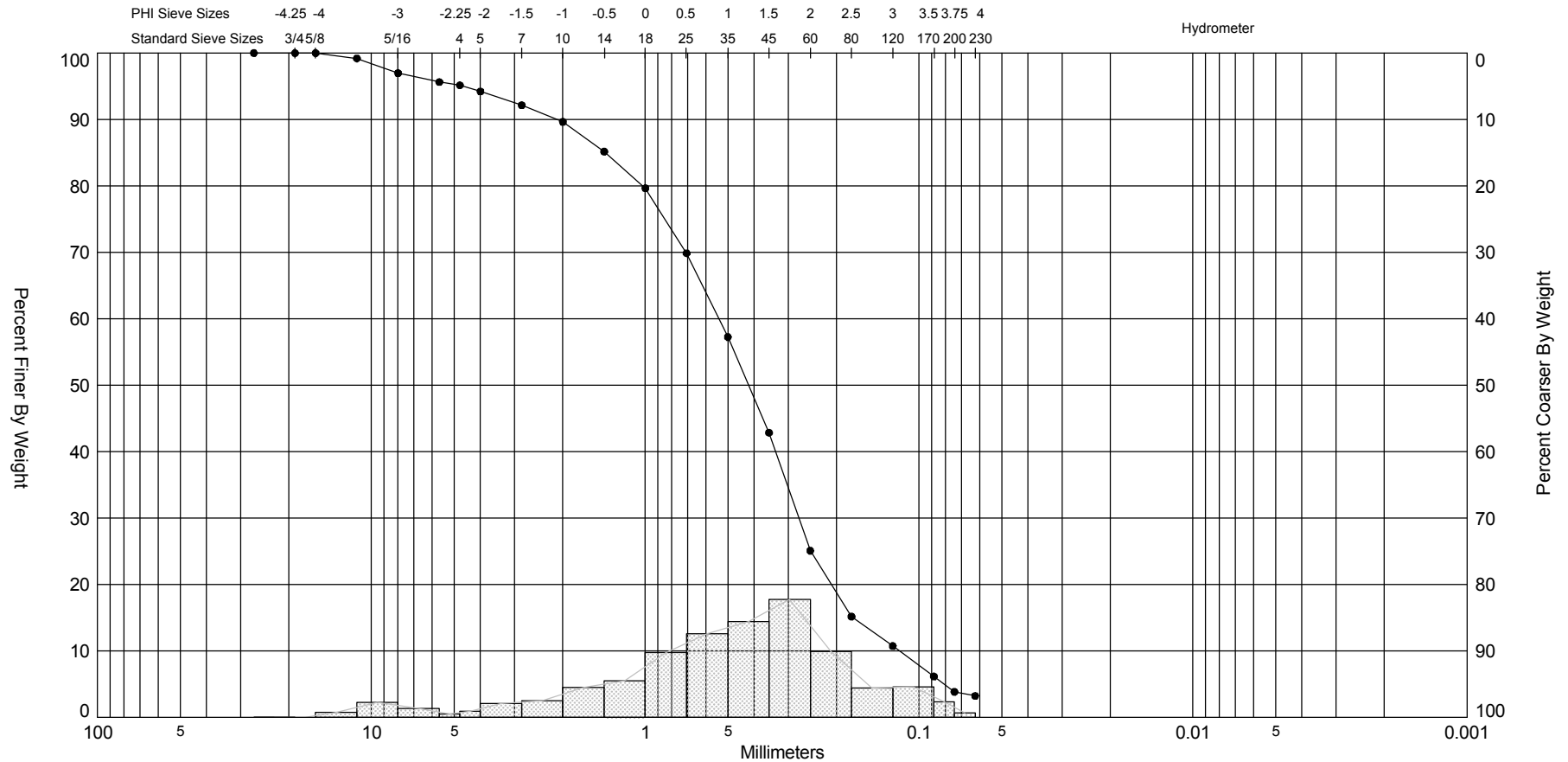
Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
SLVC-06-32 #2	—●—	-34.8	SW	#200 - 1.97 #230 - 1.81			0.83	0.28	-0.77	2.62	1.78	Project Name:	St. Lucie Vibracores
Comments:												Analysis Date:	06-16-06
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):	914,444
												Northing (Y, ft):	1,083,638
												Horizontal System:	NAD 1983
												Vertical System:	NAVD 88


SIEVE ANALYSIS 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-06-32 #4	—●—	-40.8	SW	#200 - 3.84 #230 - 3.21			1.25	0.96	-0.82	3.72	1.55	Project Name:	St. Lucie Vibracores
Comments:												Analysis Date:	06-15-06
Depths and elevations based on measured values												Analyzed By:	RS
							Coastal Planning & Engineering					Easting (X, ft):	914,444
							2481 NW Boca Raton Blvd, Boca Raton					Northing (Y, ft):	1,083,638
							FL 33431					Horizontal System:	NAD 1983
							ph (561) 391-8102 fax (561) 391-9116					Vertical System:	NAVD 88