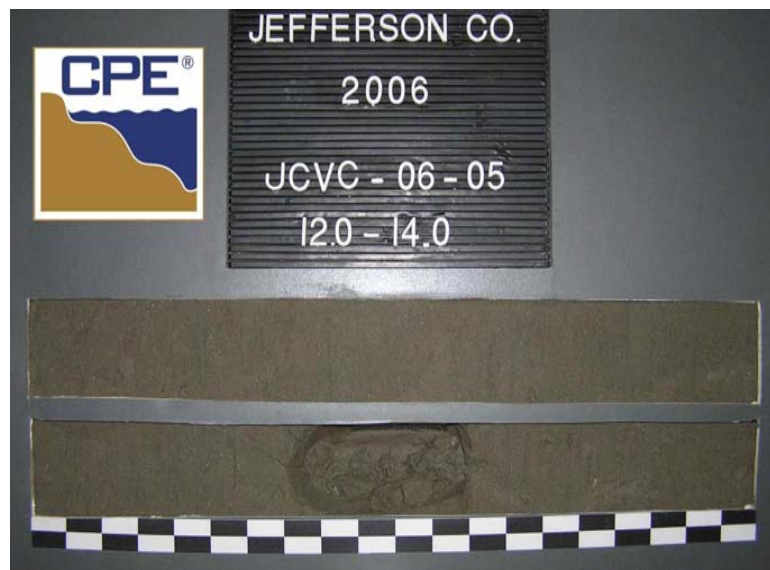








DRILLING LOG		DIVISION	INSTALLATION	SHEET 1 OF 1 SHEETS
1. PROJECT Texas Geotechnical Sand Search Jefferson County Texas			9. SIZE AND TYPE OF BIT 3.0 In.	
2. BORING DESIGNATION JCVC-06-05			10. COORDINATE SYSTEM/DATUM Texas South Central	
3. DRILLING AGENCY Alpine Ocean Seismic Survey, Inc.			11. MANUFACTURER'S DESIGNATION OF DRILL ☐ AUTO HAMMER ☐ MANUAL HAMMER	
4. NAME OF DRILLER Charles Dill			12. TOTAL SAMPLES DISTURBED UNDISTURBED (UD)	
5. DIRECTION OF BORING ☒ VERTICAL ☐ INCLINED			13. TOTAL NUMBER CORE BOXES	
6. THICKNESS OF OVERBURDEN 0.0 Ft.			14. ELEVATION GROUND WATER	
7. DEPTH DRILLED INTO ROCK 0.0 Ft.			15. DATE BORING STARTED COMPLETED 10-09-06 15:25 10-09-06 15:30	
8. TOTAL DEPTH OF BORING 18.4 Ft.			16. ELEVATION TOP OF BORING -24.8 Ft.	
			17. TOTAL RECOVERY FOR BORING 18.3 Ft.	
			18. SIGNATURE AND TITLE OF INSPECTOR ML	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-24.8	0.0					
-25.3	0.5		CLAY, some silt, soft, olive (5Y-4/3), (CL).			
-29.2	4.4		SAND, fine grained, little clay, little silt, 1.0" brown clay layers @ 2.0' and 3.3', olive (5Y-4/3), (SM).		1	Sample #1, Depth = 1.5' Mean (mm): 0.14, Phi Sorting: 0.46 Shell Hash: 0%, Fines (230): 16.64% (SM)
-35.4	10.6		SAND, fine grained, trace clayey silt, 2.0" silty clay layers @ 6.4' and 7.6'; 1.0" silty clay layers @ 5.8' and 7.2'; color changes from olive gray (5y 4/2) to olive (5Y 4/3), (SP-SM).		2	Sample #2, Depth = 4.5' Mean (mm): 0.21, Phi Sorting: 0.44 Shell Hash: 0%, Fines (230): 6.79% (SP-SM)
					3	Sample #3, Depth = 9.0' Mean (mm): 0.18, Phi Sorting: 0.49 Shell Hash: 0%, Fines (230): 3.95% (SP-SM)
-43.1	18.3		SAND, fine grained, trace silt, 2.0" clay layer @ 14.3'; 3.0" clay layer @ 15.4', gray (5Y-5/1), (SP-SM).		4	Sample #4, Depth = 13.0' Mean (mm): 0.13, Phi Sorting: 0.37 Shell Hash: 0%, Fines (230): 7.36% (SP-SM)
-43.2	18.4		No Recovery.			
			End of Boring			

FLORIDA DEP ROSS - JEFFERSON VIBRACORES 2006 1-8.GPJ FL DEP ROSS.GDT 12/14/06

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: Texas Geotechnical Sand Search

Sample Name: JCVC-06-05 #1

Analysis Date: 10-17-06

Analyzed By: JG

Easting (ft):

3,478,435

Northing (ft):

13,788,487

Coordinate System:

Texas South Central

Elevation (ft):

-26.3 MLLW

USCS:

SM

Munsell:

Wet - 5Y-4/3

Dry - 2.5Y-6/4

Washed - 2.5Y-6/3

Comments:

Dry Weight (g):

95.89

Wash Weight (g):

80.82

Pan Retained (g):

0.89

Sieve Loss (%):

0.00

Fines (%):

#200 - 19.69

#230 - 16.64

Organics (%):

Carbonates (%):

Shell Hash (%):

0

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

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

0.00

0.00

0.00

0.00

4

-2.25

4.76

0.00

0.00

0.00

0.00

5

-2.00

4.00

0.00

0.00

0.00

0.00

7

-1.50

2.83

0.00

0.00

0.00

0.00

10

-1.00

2.00

0.10

0.10

0.10

0.10

14

-0.50

1.41

0.01

0.01

0.11

0.11

18

0.00

1.00

0.05

0.05

0.16

0.16

25

0.50

0.71

0.02

0.02

0.18

0.18

35

1.00

0.50

0.01

0.01

0.19

0.19

45

1.50

0.35

0.03

0.03

0.22

0.22

60

2.00

0.25

0.93

0.97

1.15

1.19

80

2.50

0.18

15.13

15.78

16.28

16.97

120

3.00

0.13

44.29

46.19

60.57

63.16

170

3.50

0.09

12.04

12.56

72.61

75.72

200

3.75

0.07

4.40

4.59

77.01

80.31

230

4.00

0.06

2.92

3.05

79.93

83.36

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.47

2.86

2.59

2.47

2.12

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

2.8

0.14

0.46

-0.69

11.89

GRANULARMETRIC REPORT - JEFFERSON_VIBRACORES_2006_1-8.GPJ FL DEP ROSS GDT 12/14/06

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: Texas Geotechnical Sand Search							
Sample Name: JCVC-06-05 #2							
Analysis Date: 10-17-06							
Analyzed By: AU							
Easting (ft):		Northing (ft):		Coordinate System:		Elevation (ft):	
3,478,435		13,788,487		Texas South Central		-29.3 MLLW	
USCS:		Munsell:		Comments:			
SP-SM		Wet - 5Y-4/2 Dry - 2.5Y-6/4 Washed - 2.5Y-6/2					
Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shell Hash (%):
101.98	95.36	0.14	0.16	#200 - 7.50 #230 - 6.79			0
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	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.00	0.00	0.00	0.00	
25	0.50	0.71	0.01	0.01	0.01	0.01	
35	1.00	0.50	0.01	0.01	0.02	0.02	
45	1.50	0.35	0.13	0.13	0.15	0.15	
60	2.00	0.25	30.14	29.55	30.29	29.70	
80	2.50	0.18	48.47	47.53	78.76	77.23	
120	3.00	0.13	10.21	10.01	88.97	87.24	
170	3.50	0.09	4.06	3.98	93.03	91.22	
200	3.75	0.07	1.31	1.28	94.34	92.50	
230	4.00	0.06	0.72	0.71	95.06	93.21	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
	2.84	2.48	2.21	1.92	1.77	1.58	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.22	0.21	0.44	1.17	4.87		

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: Texas Geotechnical Sand Search							
Sample Name: JCVC-06-05 #3							
Analysis Date: 10-17-06							
Analyzed By: AU							
Easting (ft):		Northing (ft):		Coordinate System:		Elevation (ft):	
3,478,435		13,788,487		Texas South Central		-33.8 MLLW	
USCS:		Munsell:		Comments:			
SP-SM		Wet - 5Y-4/2 Dry - 5Y-5/2 Washed - 5Y-5/1					
Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shell Hash (%):
97.67	94.29	0.36	0.11	#200 - 5.13 #230 - 3.95			0
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	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.00	0.00	0.00	0.00	
4	-2.25	4.76	0.00	0.00	0.00	0.00	
5	-2.00	4.00	0.00	0.00	0.00	0.00	
7	-1.50	2.83	0.00	0.00	0.00	0.00	
10	-1.00	2.00	0.00	0.00	0.00	0.00	
14	-0.50	1.41	0.00	0.00	0.00	0.00	
18	0.00	1.00	0.00	0.00	0.00	0.00	
25	0.50	0.71	0.00	0.00	0.00	0.00	
35	1.00	0.50	0.03	0.03	0.03	0.03	
45	1.50	0.35	0.19	0.19	0.22	0.22	
60	2.00	0.25	11.87	12.15	12.09	12.37	
80	2.50	0.18	44.44	45.50	56.53	57.87	
120	3.00	0.13	23.18	23.73	79.71	81.60	
170	3.50	0.09	10.48	10.73	90.19	92.33	
200	3.75	0.07	2.48	2.54	92.67	94.87	
230	4.00	0.06	1.15	1.18	93.82	96.05	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.78	3.11	2.86	2.41	2.14	2.04	1.70	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.48	0.18	0.49	0.61	3.12		

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: Texas Geotechnical Sand Search

Sample Name: JCVC-06-05 #4

Analysis Date: 10-17-06

Analyzed By: AU

Easting (ft):

3,478,435

Northing (ft):

13,788,487

Coordinate System:

Texas South Central

Elevation (ft):

-37.8 MLLW

USCS:

SP-SM

Munsell:

Wet - 5Y-5/1

Dry - 5Y-5/1

Washed - 2.5Y-6/2

Comments:

Dry Weight (g):

94.82

Wash Weight (g):

88.85

Pan Retained (g):

0.92

Sieve Loss (%):

0.09

Fines (%):

#200 - 10.15
#230 - 7.36

Organics (%):

Carbonates (%):

Shell Hash (%):

0

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

0.00

0.00

0.00

0.00

3.5

-2.50

5.66

0.00

0.00

0.00

0.00

4

-2.25

4.76

0.00

0.00

0.00

0.00

5

-2.00

4.00

0.00

0.00

0.00

0.00

7

-1.50

2.83

0.00

0.00

0.00

0.00

10

-1.00

2.00

0.00

0.00

0.00

0.00

14

-0.50

1.41

0.00

0.00

0.00

0.00

18

0.00

1.00

0.00

0.00

0.00

0.00

25

0.50

0.71

0.02

0.02

0.02

0.02

35

1.00

0.50

0.01

0.01

0.03

0.03

45

1.50

0.35

0.02

0.02

0.05

0.05

60

2.00

0.25

0.15

0.16

0.20

0.21

80

2.50

0.18

5.04

5.32

5.24

5.53

120

3.00

0.13

44.58

47.02

49.82

52.55

170

3.50

0.09

29.19

30.78

79.01

83.33

200

3.75

0.07

6.18

6.52

85.19

89.85

230

4.00

0.06

2.65

2.79

87.84

92.64

Phi 5

Phi 16

Phi 25

Phi 50

Phi 75

Phi 84

Phi 95

3.53

3.36

2.97

2.71

2.61

2.45

Moment

Mean Phi

Mean mm

Sorting

Skewness

Kurtosis

Statistics

2.98

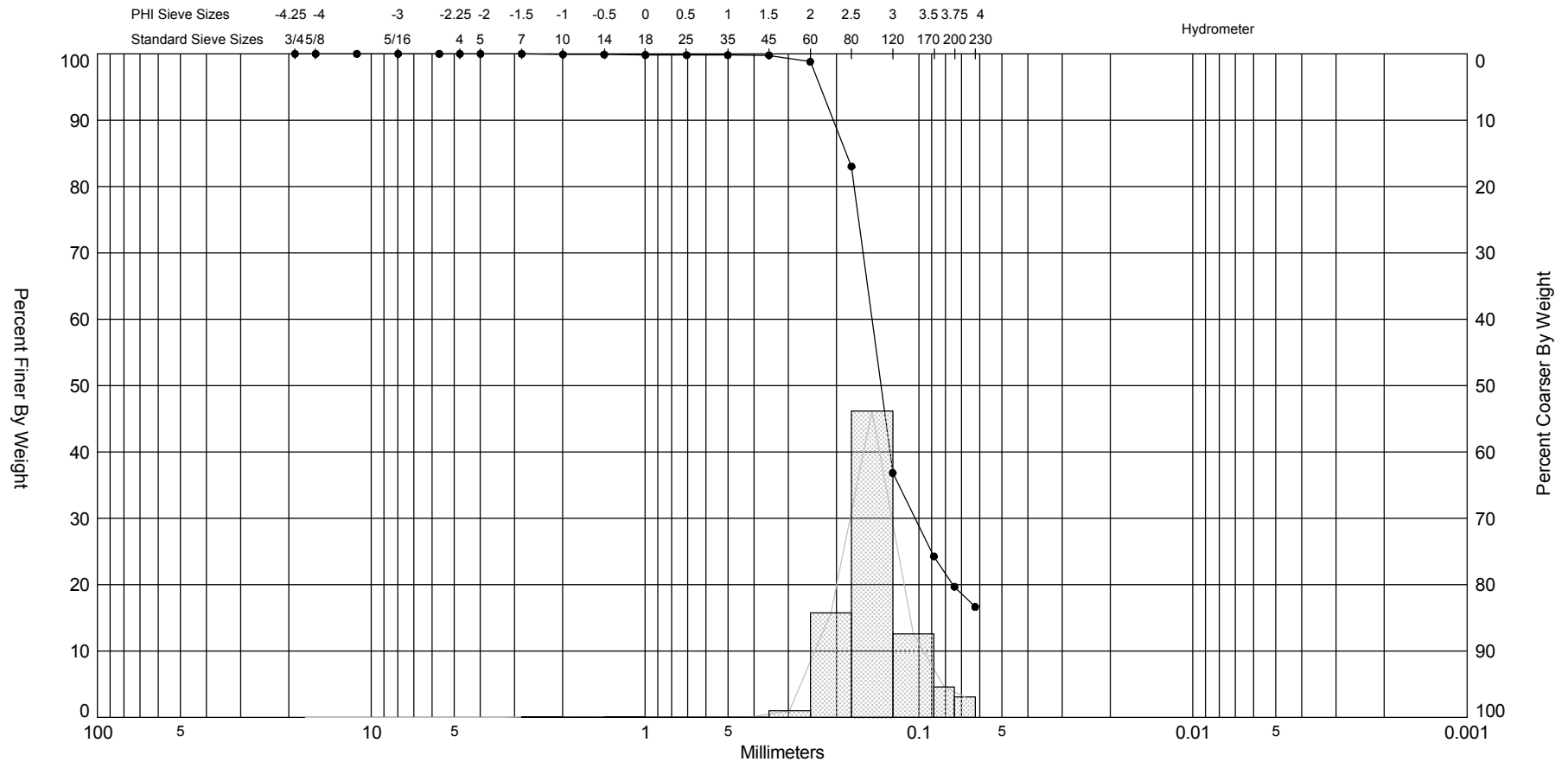
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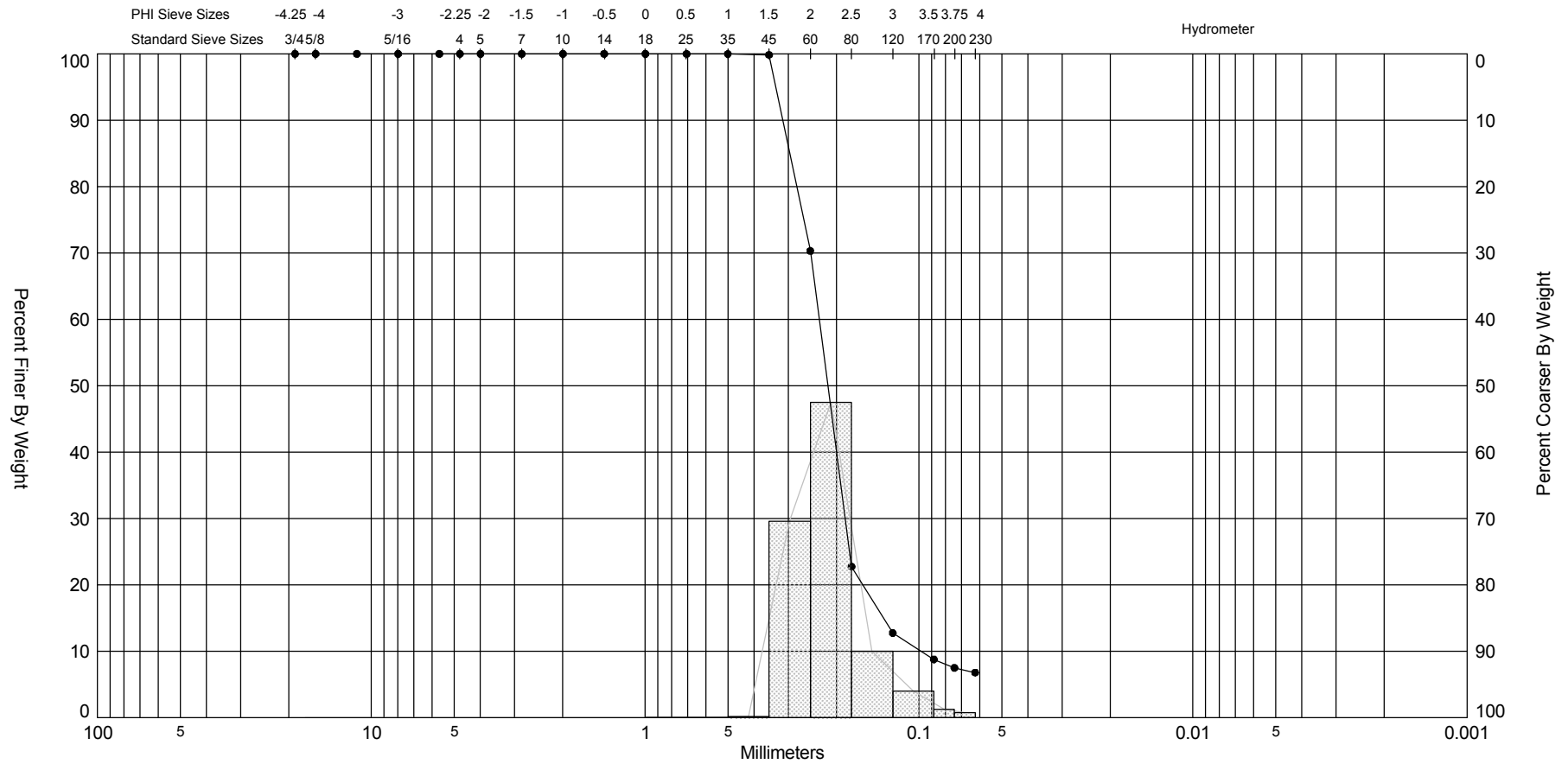
3.66

GRANULARMETRIC REPORT - JEFFERSON_VIBRACORES_2006_1-8.GPJ FL DEP ROSS GDT 12/14/06



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

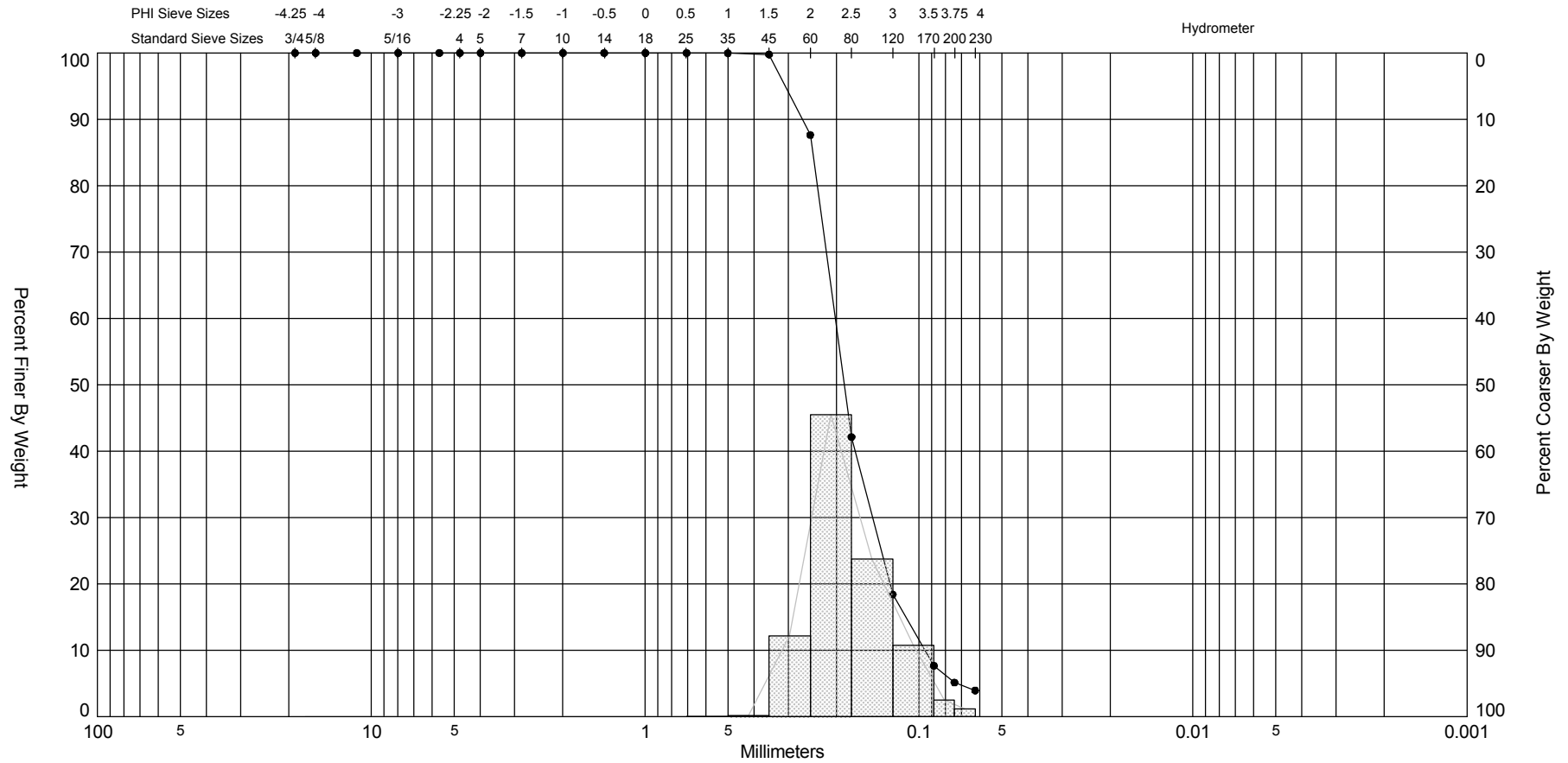
Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JCVC-06-05 #1	—●—	-26.3	SM	#200 - 19.69 #230 - 16.64			2.86	2.8	-0.69	11.89	0.46	Project Name:	Texas Geotechnical Sand Search
Comments:												Analysis Date:	10-17-06
Depths and elevations 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):	3,478,435
												Northing (Y, ft):	13,788,487
												Horizontal System:	NAD 1983
												Vertical System:	MLLW



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

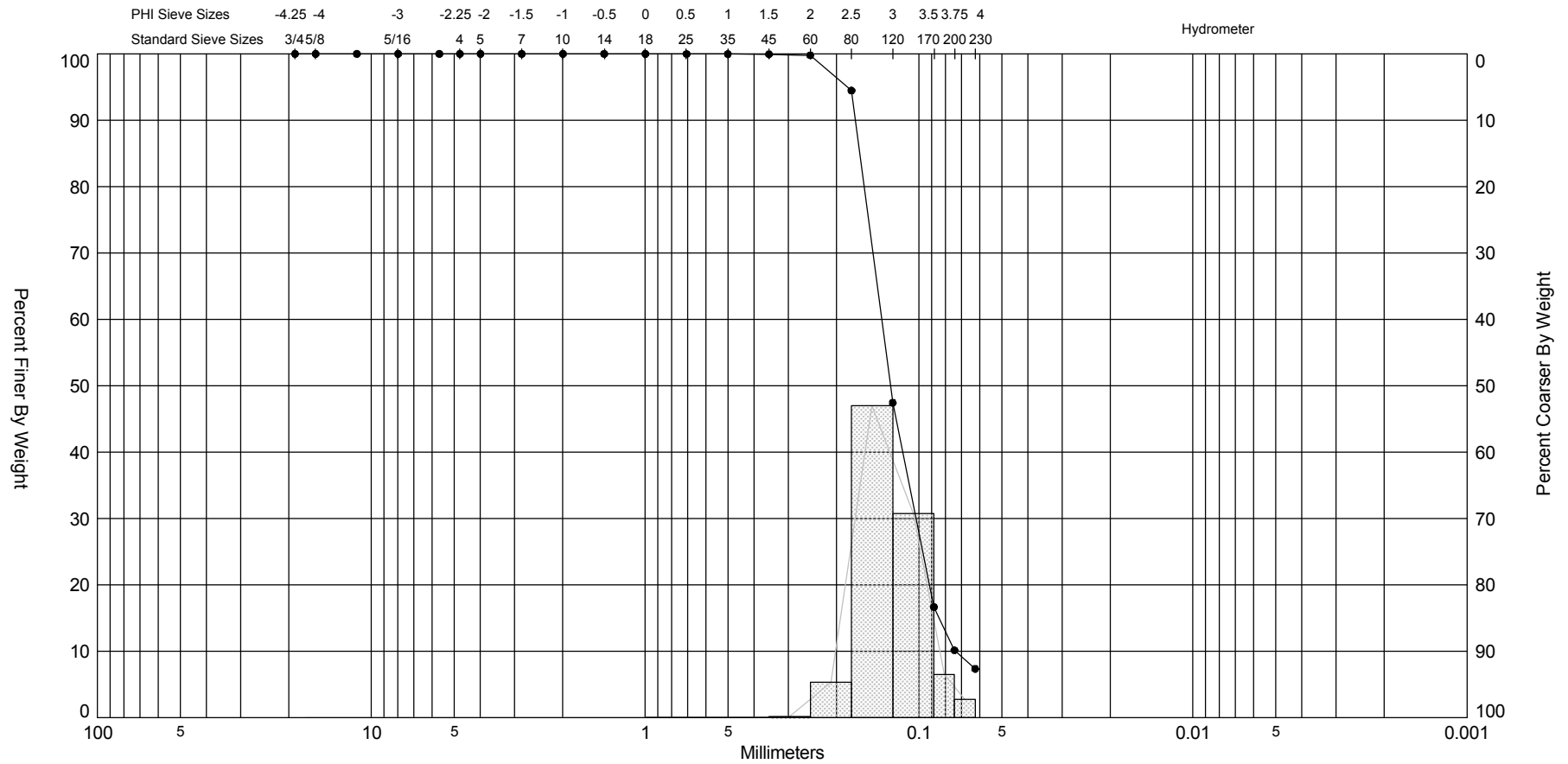
Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
JCVC-06-05 #2	—●—	-29.3	SP-SM	#200 - 7.50 #230 - 6.79			2.21	2.22	1.17	4.87	0.44	Project Name:	Texas Geotechnical Sand Search
Comments:												Analysis Date:	10-17-06
Depths and elevations 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):	3,478,435
												Northing (Y, ft):	13,788,487
												Horizontal System:	NAD 1983
												Vertical System:	MLLW

SIEVE ANALYSIS - JEFFERSON_VIBRACORES_2006_1-8.GPJ FL DEP ROSS.GDT 12/14/06



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	
JCVC-06-05 #3	—●—	-33.8	SP-SM	#200 - 5.13 #230 - 3.95			2.41	2.48	0.61	3.12	0.49	Project Name:	Texas Geotechnical Sand Search
Comments:												Analysis Date:	10-17-06
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):	3,478,435
												Northing (Y, ft):	13,788,487
												Horizontal System:	NAD 1983
												Vertical System:	MLLW



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	
JCVC-06-05 #4	—●—	-37.8	SP-SM	#200 - 10.15 #230 - 7.36			2.97	2.98	0.16	3.66	0.37	Project Name:	Texas Geotechnical Sand Search
Comments:												Analysis Date:	10-17-06
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):	3,478,435
												Northing (Y, ft):	13,788,487
												Horizontal System:	NAD 1983
												Vertical System:	MLLW