



DRILLING LOG		DIVISION	INSTALLATION	SHEET 1
1. PROJECT Texas Geotechnical Sand Search Galveston County Texas			9. SIZE AND TYPE OF BIT 3.0 In.	
2. BORING DESIGNATION GCVC-06-09			10. COORDINATE SYSTEM/DATUM Texas South Central	
3. DRILLING AGENCY Alpine Ocean Seismic Survey, Inc.			11. MANUFACTURER'S DESIGNATION OF DRILL <input type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER	
4. NAME OF DRILLER Charles Dill			12. TOTAL SAMPLES DISTURBED _____ UNDISTURBED (UD) _____	
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> 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 10-07-06 17:40 COMPLETED 10-07-06 17:43	
8. TOTAL DEPTH OF BORING 19.6 Ft.			16. ELEVATION TOP OF BORING -12.7 Ft.	
			17. TOTAL RECOVERY FOR BORING 19.1 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
-12.7	0.0					
			SAND, fine grained, quartz, trace shell hash, trace silt, 1.0" clay layers @ 6.3' and 7.0', gray (5Y-5/1), (SW).		1	Sample #1, Depth = 2.0' Mean (mm): 0.14, Phi Sorting: 0.94 Shell Hash: 2%, Fines (230): 2.61% (SW)
-20.7	8.0		SILT, some clay, little sand, trace shell hash, 4.0" clay layer @ 8.0', dark gray (5Y-4/1), (ML).		2	Sample #2, Depth = 8.5' Mean (mm): 0.11, Phi Sorting: 0.65 Shell Hash: 0%, Fines (230): 84.37% (ML)
-26.1	13.4		CLAY, little shell hash, trace silt, clay stiff to soft; 2.0" shell hash layers @ 10.0' and 13.3', dark gray (5Y-4/1), (CL).			
-31.8	19.1		SAND, fine grained, quartz, trace shell hash, trace silt, gray (5Y-5/1), (SP-SM).		3	Sample #3, Depth = 16.0' Mean (mm): 0.10, Phi Sorting: 0.28 Shell Hash: 0%, Fines (230): 7.40% (SP-SM)
-32.3	19.6		No Recovery.			
			End of Boring			

FLORIDA DEP ROSS GALVESTON VIBRACORES_2006.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: GVCV-06-09 #1

Analysis Date: 10-18-06

Analyzed By: MC

Easting (ft): 3,331,560	Northing (ft): 13,690,909	Coordinate System: Texas South Central	Elevation (ft): -14.7 MLLW
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USCS: SW	Munsell: Wet - 5Y-5/1 Dry - 5Y-6/1 Washed - 5Y-6/1	Comments:
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Dry Weight (g): 93.06	Wash Weight (g): 90.98	Pan Retained (g): 0.22	Sieve Loss (%): 0.13	Fines (%): #200 - 3.53 #230 - 2.61	Organics (%):	Carbonates (%):	Shell Hash (%): 2
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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	0.63	0.68	0.63	0.68
4	-2.25	4.76	0.22	0.24	0.85	0.92
5	-2.00	4.00	0.21	0.23	1.06	1.15
7	-1.50	2.83	0.71	0.76	1.77	1.91
10	-1.00	2.00	0.44	0.47	2.21	2.38
14	-0.50	1.41	0.54	0.58	2.75	2.96
18	0.00	1.00	0.33	0.35	3.08	3.31
25	0.50	0.71	0.33	0.35	3.41	3.66
35	1.00	0.50	0.30	0.32	3.71	3.98
45	1.50	0.35	0.21	0.23	3.92	4.21
60	2.00	0.25	0.27	0.29	4.19	4.50
80	2.50	0.18	5.01	5.38	9.20	9.88
120	3.00	0.13	32.64	35.07	41.84	44.95
170	3.50	0.09	43.65	46.91	85.49	91.86
200	3.75	0.07	4.29	4.61	89.78	96.47
230	4.00	0.06	0.86	0.92	90.64	97.39

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
3.67	3.42	3.32	3.05	2.72	2.59	2.05

Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis
	2.84	0.14	0.94	-4.03	20.89

GRANULARMETRIC REPORT GALVESTON_VIBRACORES_2006.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
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Project Name: Texas Geotechnical Sand Search

Sample Name: GCV-06-09 #2

Analysis Date: 10-18-06

Analyzed By: ST

Easting (ft): 3,331,560	Northing (ft): 13,690,909	Coordinate System: Texas South Central	Elevation (ft): -21.2 MLLW
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USCS: ML	Munsell: Wet - 5Y-4/1 Dry - 5Y-5/1 Washed - 5Y-5/1	Comments:
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Dry Weight (g): 71.33	Wash Weight (g): 12.18	Pan Retained (g): 1.04	Sieve Loss (%): 0.00	Fines (%): #200 - 87.08 #230 - 84.37	Organics (%):	Carbonates (%):	Shell Hash (%): 0
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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	0.06	0.08	0.06	0.08
14	-0.50	1.41	0.04	0.06	0.10	0.14
18	0.00	1.00	0.03	0.04	0.13	0.18
25	0.50	0.71	0.02	0.03	0.15	0.21
35	1.00	0.50	0.02	0.03	0.17	0.24
45	1.50	0.35	0.03	0.04	0.20	0.28
60	2.00	0.25	0.02	0.03	0.22	0.31
80	2.50	0.18	0.39	0.55	0.61	0.86
120	3.00	0.13	2.51	3.52	3.12	4.38
170	3.50	0.09	4.17	5.85	7.29	10.23
200	3.75	0.07	1.92	2.69	9.21	12.92
230	4.00	0.06	1.93	2.71	11.14	15.63

Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
						3.05
Moment Statistics	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
	3.21	0.11	0.65	-3.27	20.81	

GRANULARMETRIC REPORT GALVESTON_VIBRACORES_2006.GPJ FL DEP ROSS.GDT 12/14/06

Granularmetric Report

Depths and elevations based on measured values



Coastal Planning & Engineering
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Project Name: Texas Geotechnical Sand Search

Sample Name: GCV-06-09 #3

Analysis Date: 10-18-06

Analyzed By: MC

Easting (ft): 3,331,560	Northing (ft): 13,690,909	Coordinate System: Texas South Central	Elevation (ft): -28.7 MLLW
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USCS: SP-SM	Munsell: Wet - 5Y-5/1 Dry - 5Y-6/1 Washed - 5Y-6/1	Comments:
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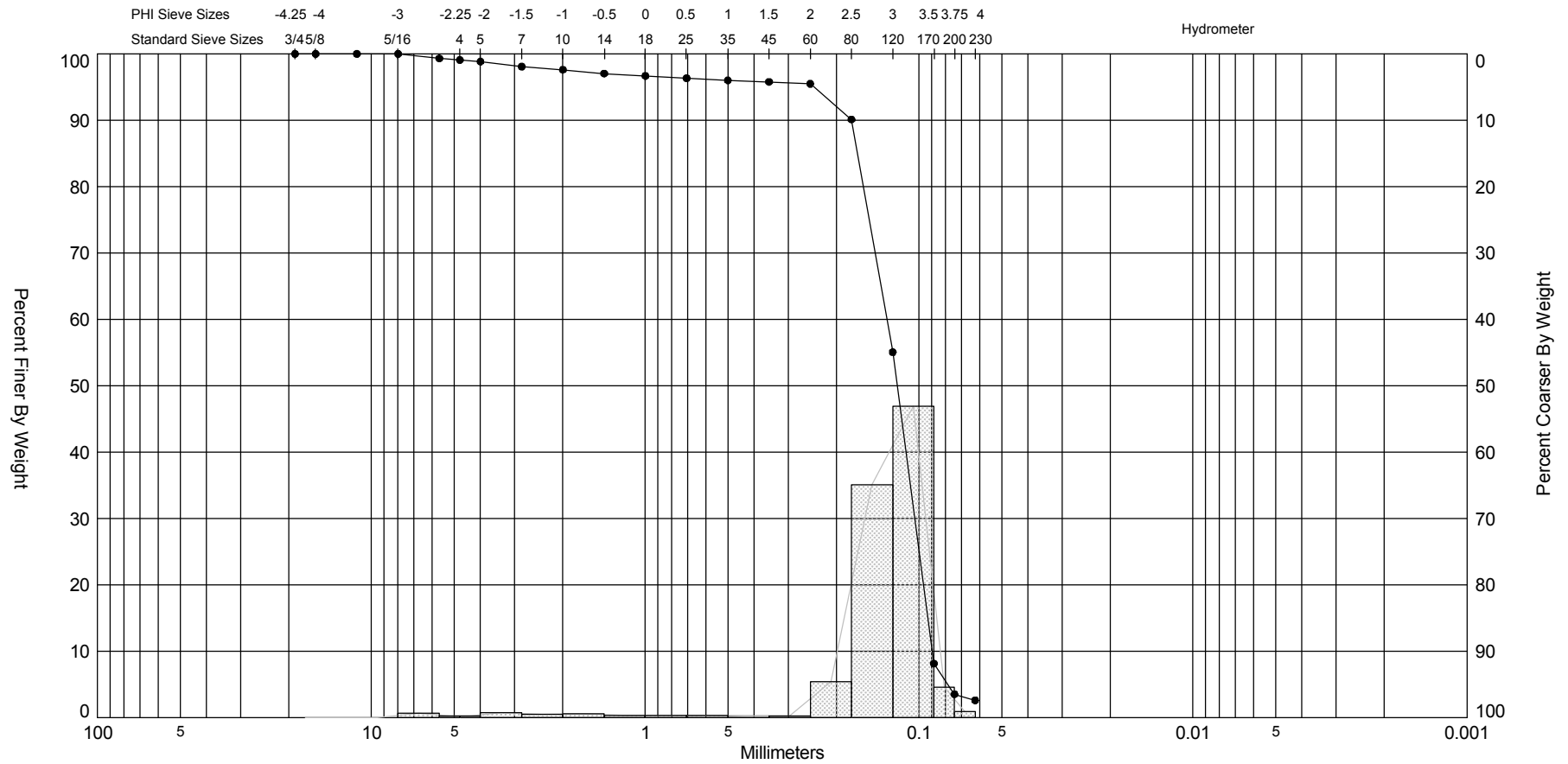
Dry Weight (g): 94.88	Wash Weight (g): 89.36	Pan Retained (g): 1.29	Sieve Loss (%): 0.21	Fines (%): #200 - 10.26 #230 - 7.40	Organics (%):	Carbonates (%):	Shell Hash (%): 0
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Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight 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	0.05	0.05	0.05	0.05
10	-1.00	2.00	0.03	0.03	0.08	0.08
14	-0.50	1.41	0.02	0.02	0.10	0.10
18	0.00	1.00	0.02	0.02	0.12	0.12
25	0.50	0.71	0.01	0.01	0.13	0.13
35	1.00	0.50	0.01	0.01	0.14	0.14
45	1.50	0.35	0.02	0.02	0.16	0.16
60	2.00	0.25	0.00	0.00	0.16	0.16
80	2.50	0.18	0.20	0.21	0.36	0.37
120	3.00	0.13	3.54	3.73	3.90	4.10
170	3.50	0.09	64.87	68.37	68.77	72.47
200	3.75	0.07	16.39	17.27	85.16	89.74
230	4.00	0.06	2.71	2.86	87.87	92.60


Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95
	3.67	3.54	3.34	3.15	3.09	3.01
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis	
Statistics	3.31	0.10	0.28	-6.39	108.76	

GRANULARMETRIC REPORT GALVESTON_VIBRACORES_2006.GPJ FL DEP ROSS.GDT 12/14/06

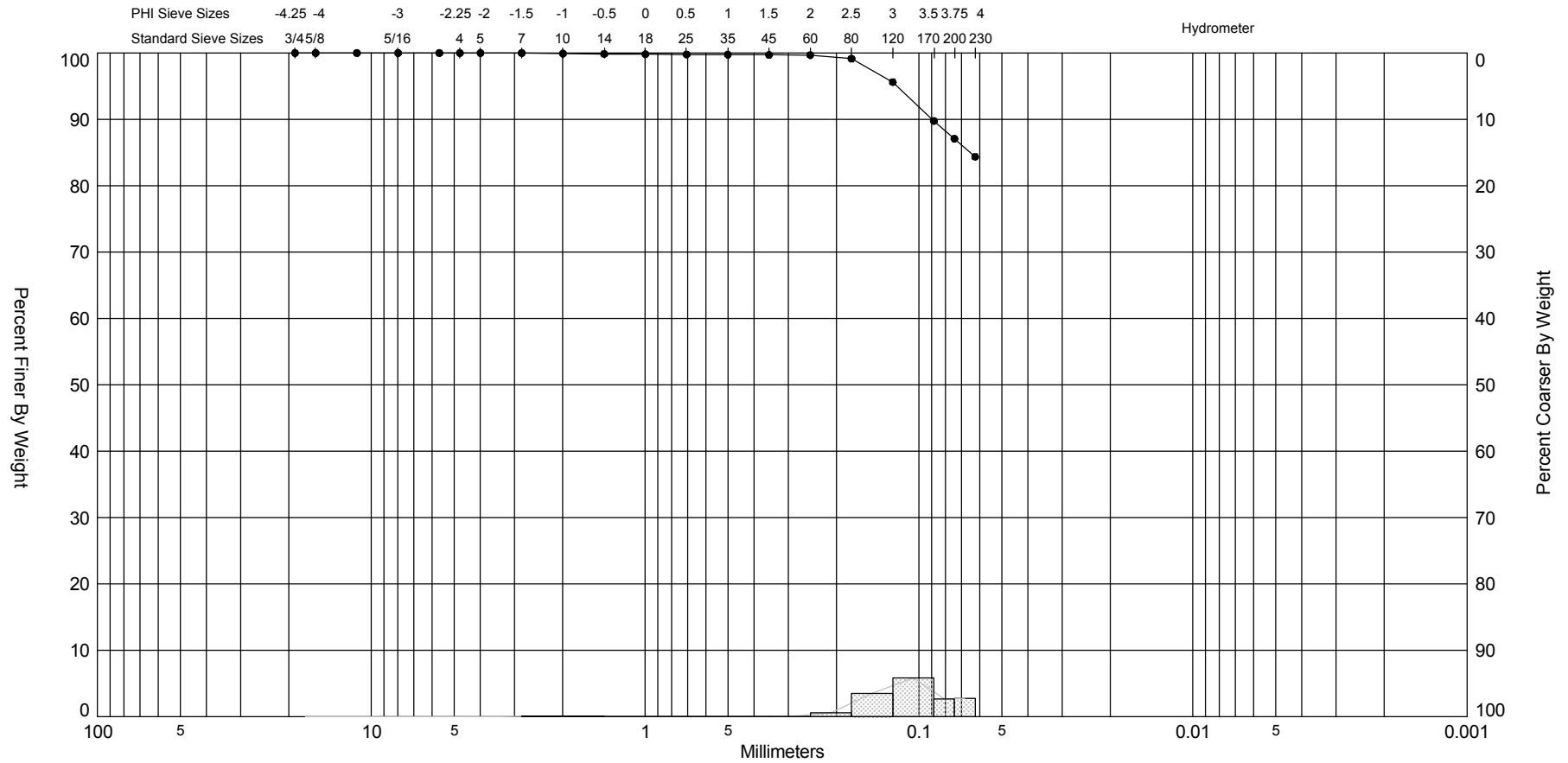
SIEVE ANALYSIS GALVESTON_VIBRACORES_2006.GPJ FL DEP ROSS.GDT 12/14/06




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	
GCVC-06-09 #1	—●—	-14.7	SW	#200 - 3.53 #230 - 2.61			3.05	2.84	-4.03	20.89	0.94	Project Name:	Texas Geotechnical Sand Search
Comments:												Analysis Date:	10-18-06
Depths and elevations based on measured values												Analyzed By:	MC
							Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116					Easting (X, ft):	3,331,560
												Northing (Y, ft):	13,690,909
												Horizontal System:	NAD 1983
												Vertical System:	MLLW

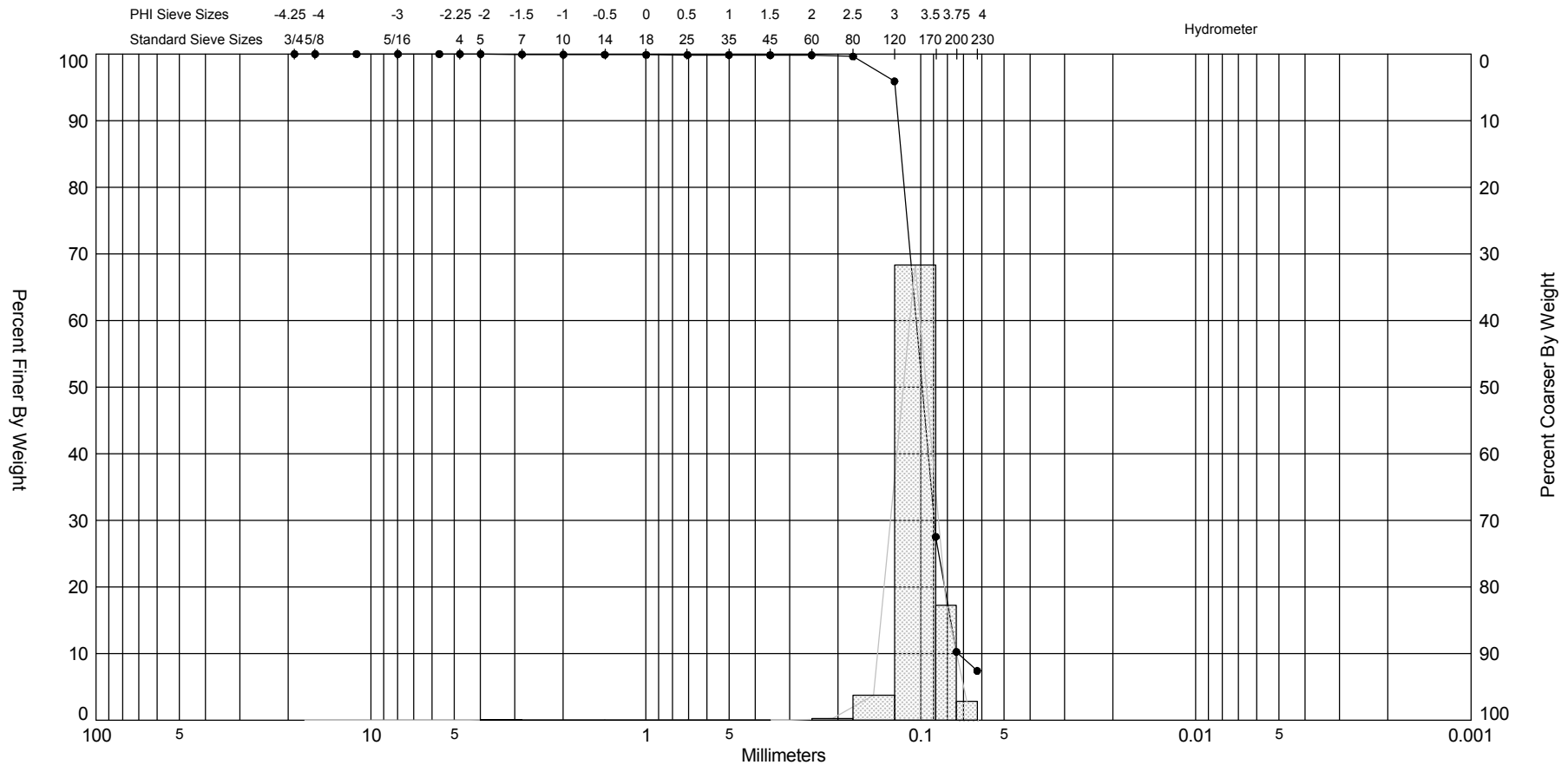
SIEVE ANALYSIS GALVESTON_VIBRACORES_2006.GPJ FL DEP ROSS.GDT 12/14/06




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	
GCVC-06-09 #2	—●—	-21.2	ML	#200 - 87.08 #230 - 84.37				3.21	-3.27	20.81	0.65	Project Name:	Texas Geotechnical Sand Search
Comments:												Analysis Date:	10-18-06
Depths and elevations based on measured values												Analyzed By:	ST
 Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116							Easting (X, ft):	3,331,560					
							Northing (Y, ft):	13,690,909					
							Horizontal System:	NAD 1983					
							Vertical System:	MLLW					

SIEVE ANALYSIS GALVESTON_VIBRACORES_2006.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	
GCVC-06-09 #3	—●—	-28.7	SP-SM	#200 - 10.26 #230 - 7.40			3.34	3.31	-6.39	108.76	0.28	Project Name:	Texas Geotechnical Sand Search
Comments:												Analysis Date:	10-18-06
Depths and elevations based on measured values												Analyzed By:	MC
							Coastal Planning & Engineering 2481 NW Boca Raton Blvd, Boca Raton FL 33431 ph (561) 391-8102 fax (561) 391-9116					Easting (X, ft):	3,331,560
												Northing (Y, ft):	13,690,909
												Horizontal System:	NAD 1983
												Vertical System:	MLLW