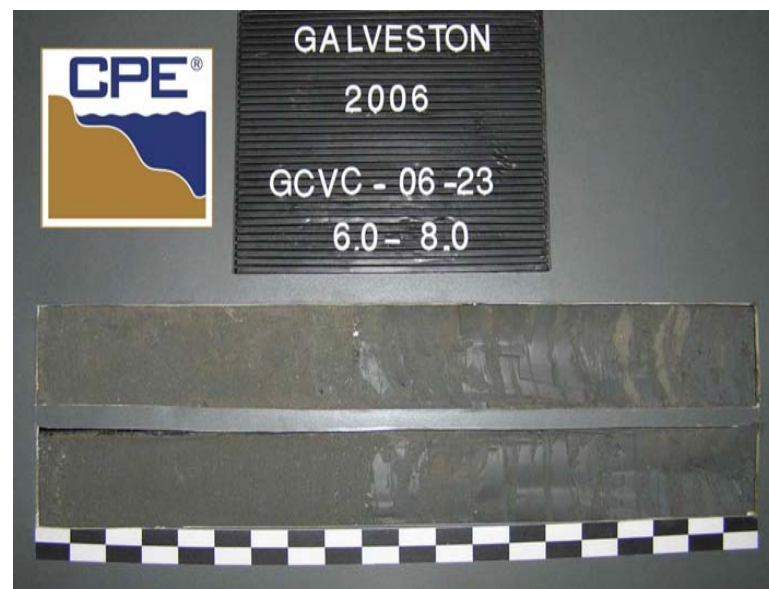
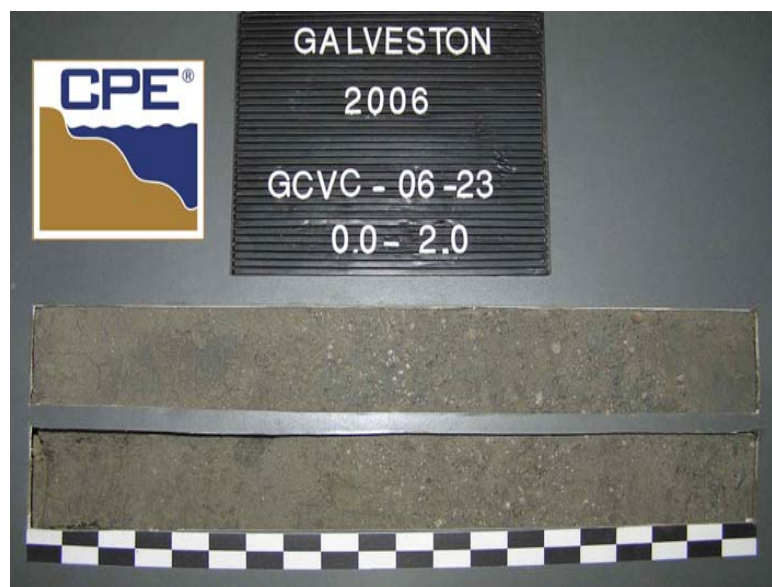
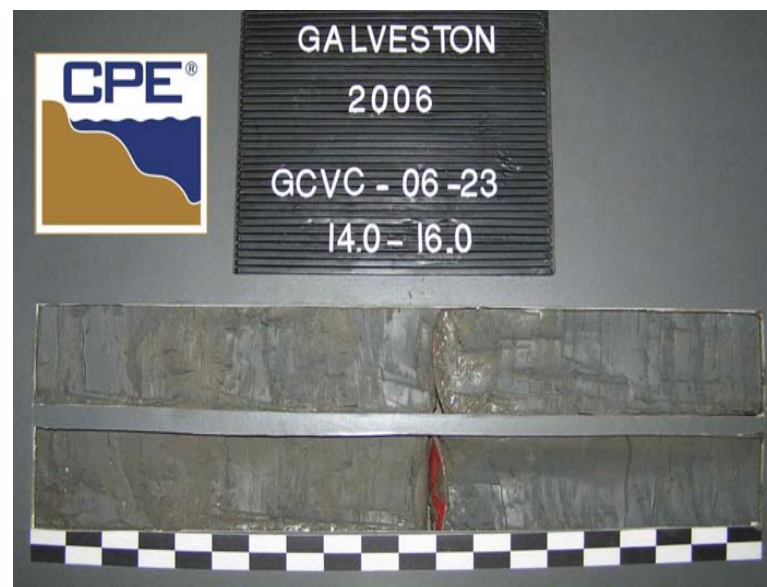
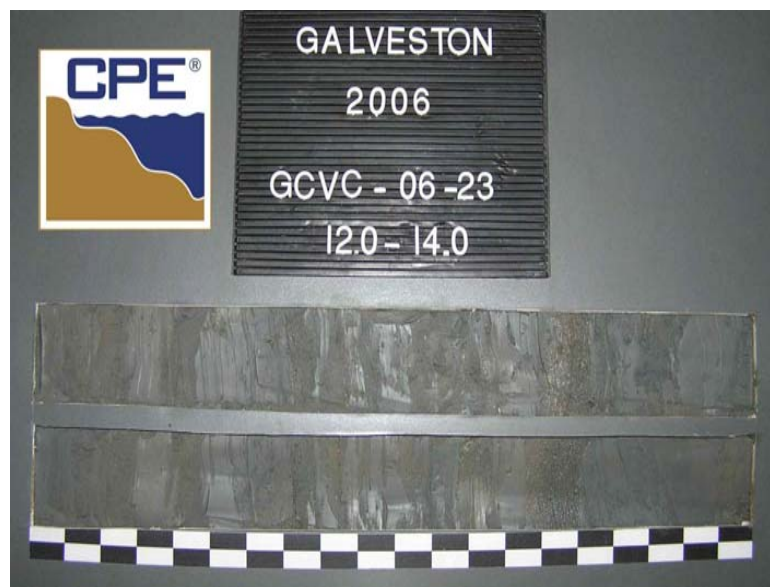








GALVESTON

2006

GCVC - 06 -23

16.0 - 17.6



DRILLING LOG		DIVISION	INSTALLATION	SHEET 1 OF 1 SHEETS
1. PROJECT Texas Geotechnical Sand Search Galveston County Texas			9. SIZE AND TYPE OF BIT 3.0 In.	
2. BORING DESIGNATION GCVC-06-23			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 10-10-06 10:52	
8. TOTAL DEPTH OF BORING 19.9 Ft.			16. ELEVATION TOP OF BORING -19.0 Ft.	
			17. TOTAL RECOVERY FOR BORING 17.6 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
-19.0	0.0					
-19.7	0.7		SAND, fine grained, quartz, little silt, gray (5Y-5/1), (SP).		2	Sample #2, Depth = 0.4' Mean (mm): 0.13, Phi Sorting: 0.59 Shell Hash: 1%, Fines (230): 2.13% (SP)
-21.0	2.0		SAND, fine to medium grained, quartz, little shell hash, little silt, gray (5Y-5/1), (SW).		3	Sample #3, Depth = 1.4' Mean (mm): 0.17, Phi Sorting: 1.53 Shell Hash: 7%, Fines (230): 3.10% (SW)
-26.0	7.0		SAND, fine grained, quartz, little silt, trace shell hash, 1.0" clay layer @ 7.0', gray (5Y-5/1), (SM).		1	Sample #1, Depth = 3.0' Mean (mm): 0.11, Phi Sorting: 0.38 Shell Hash: 0%, Fines (230): 11.87% (SM)
-29.8	10.8		CLAY, some sand, trace shell hash, trace whole shell, soft to stiff; whole shell up to 0.5"; 1.0" sand layers interbedded with clay; 2.5" sand layers @ 9.1' and 9.7', gray (5Y-5/1), (CL).			
-31.0	12.0		SAND, fine grained, quartz, little silt, trace shell hash, 1.0" shell hash layer @ 12.0', gray (5Y-5/1), (SM).			
-36.6	17.6		CLAY, little sand, trace shell hash, soft to stiff; 1.0" sand layer @ 16.2'; 2.0" sand layers @ 13.5' and 17.6'; 1.0" shell hash layer @ 16.9', gray (5Y-5/1), (CL).			
-38.9	19.9		No Recovery.			
			End of Boring			

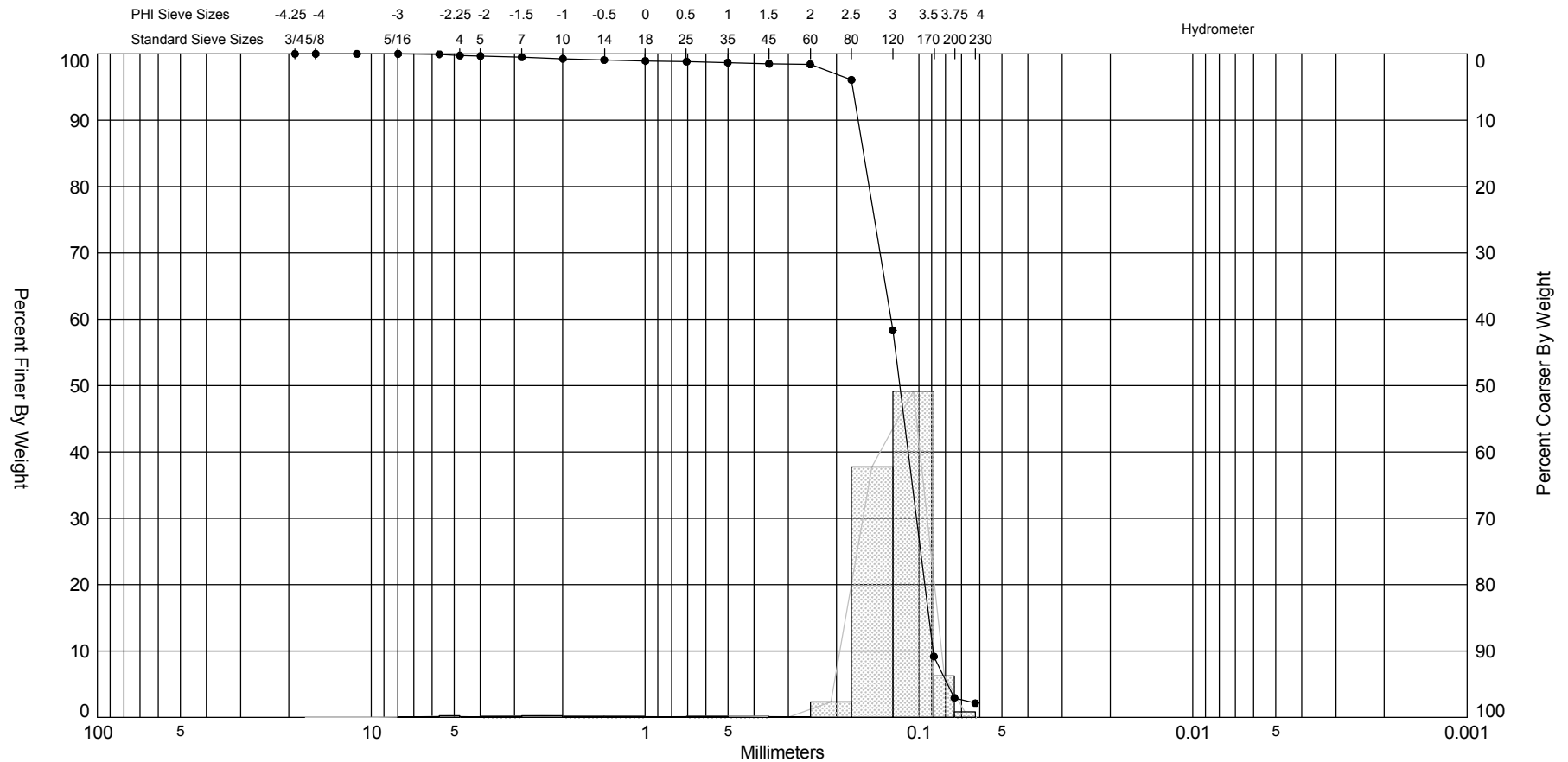
FLORIDA DEP ROSS GALVESTON VIBRACORES 2006.GPJ FL DEP ROSS.GDT 12/14/06

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: GCVC-06-23 #2							
Analysis Date: 10-30-06							
Analyzed By: JG							
Easting (ft):		Northing (ft):		Coordinate System:		Elevation (ft):	
3,324,045		13,683,495		Texas South Central		-19.4 MLLW	
USCS:		Munsell:		Comments:			
SP		Wet - 5Y-5/1 Dry - 5Y-5/1 Washed - 2.5Y-6/2					
Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shell Hash (%):
85.72	84.05	0.14	0.02	#200 - 2.95 #230 - 2.13			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	0.00	0.00	0.00	0.00	
3.5	-2.50	5.66	0.04	0.05	0.04	0.05	
4	-2.25	4.76	0.18	0.21	0.22	0.26	
5	-2.00	4.00	0.06	0.07	0.28	0.33	
7	-1.50	2.83	0.16	0.19	0.44	0.52	
10	-1.00	2.00	0.19	0.22	0.63	0.74	
14	-0.50	1.41	0.16	0.19	0.79	0.93	
18	0.00	1.00	0.11	0.13	0.90	1.06	
25	0.50	0.71	0.09	0.10	0.99	1.16	
35	1.00	0.50	0.12	0.14	1.11	1.30	
45	1.50	0.35	0.16	0.19	1.27	1.49	
60	2.00	0.25	0.09	0.10	1.36	1.59	
80	2.50	0.18	2.00	2.33	3.36	3.92	
120	3.00	0.13	32.38	37.77	35.74	41.69	
170	3.50	0.09	42.11	49.13	77.85	90.82	
200	3.75	0.07	5.34	6.23	83.19	97.05	
230	4.00	0.06	0.70	0.82	83.89	97.87	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.67	3.43	3.34	3.08	2.78	2.66	2.51	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	3	0.13	0.59	-5.36	43.73		

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: GCVC-06-23 #3							
Analysis Date: 10-30-06							
Analyzed By: JG							
Easting (ft):		Northing (ft):		Coordinate System:		Elevation (ft):	
3,324,045		13,683,495		Texas South Central		-20.4 MLLW	
USCS:		Munsell:		Comments:			
SW		Wet - 5Y-5/1 Dry - 5Y-5/1 Washed - 2.5Y-6/2					
Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shell Hash (%):
86.03	83.55	0.16	0.02	#200 - 3.79 #230 - 3.10			7
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	1.67	1.94	1.67	1.94	
4	-2.25	4.76	0.94	1.09	2.61	3.03	
5	-2.00	4.00	0.89	1.03	3.50	4.06	
7	-1.50	2.83	2.10	2.44	5.60	6.50	
10	-1.00	2.00	1.39	1.62	6.99	8.12	
14	-0.50	1.41	0.94	1.09	7.93	9.21	
18	0.00	1.00	0.64	0.74	8.57	9.95	
25	0.50	0.71	0.51	0.59	9.08	10.54	
35	1.00	0.50	0.39	0.45	9.47	10.99	
45	1.50	0.35	0.29	0.34	9.76	11.33	
60	2.00	0.25	0.34	0.40	10.10	11.73	
80	2.50	0.18	1.63	1.89	11.73	13.62	
120	3.00	0.13	24.87	28.91	36.60	42.53	
170	3.50	0.09	43.21	50.23	79.81	92.76	
200	3.75	0.07	2.97	3.45	82.78	96.21	
230	4.00	0.06	0.59	0.69	83.37	96.90	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.66	3.41	3.32	3.07	2.70	2.54	-1.81	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.54	0.17	1.53	-2.44	7.62		

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: GCVC-06-23 #1							
Analysis Date: 10-20-06							
Analyzed By: MC							
Easting (ft): 3,324,045		Northing (ft): 13,683,495		Coordinate System: Texas South Central		Elevation (ft): -22.0 MLLW	
USCS: SM		Munsell: Wet - 5Y-5/1 Dry - 5Y-5/1 Washed - 5Y-6/1		Comments:			
Dry Weight (g): 93.79	Wash Weight (g): 84.44	Pan Retained (g): 1.61	Sieve Loss (%): 0.17	Fines (%): #200 - 14.77 #230 - 11.87	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	0.07	0.07	0.07	0.07	
4	-2.25	4.76	0.00	0.00	0.07	0.07	
5	-2.00	4.00	0.04	0.04	0.11	0.11	
7	-1.50	2.83	0.03	0.03	0.14	0.14	
10	-1.00	2.00	0.02	0.02	0.16	0.16	
14	-0.50	1.41	0.00	0.00	0.16	0.16	
18	0.00	1.00	0.02	0.02	0.18	0.18	
25	0.50	0.71	0.01	0.01	0.19	0.19	
35	1.00	0.50	0.05	0.05	0.24	0.24	
45	1.50	0.35	0.12	0.13	0.36	0.37	
60	2.00	0.25	0.16	0.17	0.52	0.54	
80	2.50	0.18	0.67	0.71	1.19	1.25	
120	3.00	0.13	11.61	12.38	12.80	13.63	
170	3.50	0.09	58.14	61.99	70.94	75.62	
200	3.75	0.07	9.01	9.61	79.95	85.23	
230	4.00	0.06	2.72	2.90	82.67	88.13	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
	3.72	3.49	3.29	3.09	3.02	2.65	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	3.21	0.11	0.38	-6.47	88.53		

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	
GVCV-06-23 #2	—●—	-19.4	SP	#200 - 2.95 #230 - 2.13			3.08	3	-5.36	43.73	0.59	Project Name:	Texas Geotechnical Sand Search
Comments:												Analysis Date:	10-30-06
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):	3,324,045
												Northing (Y, ft):	13,683,495
												Horizontal System:	NAD 1983
												Vertical System:	MLLW

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

