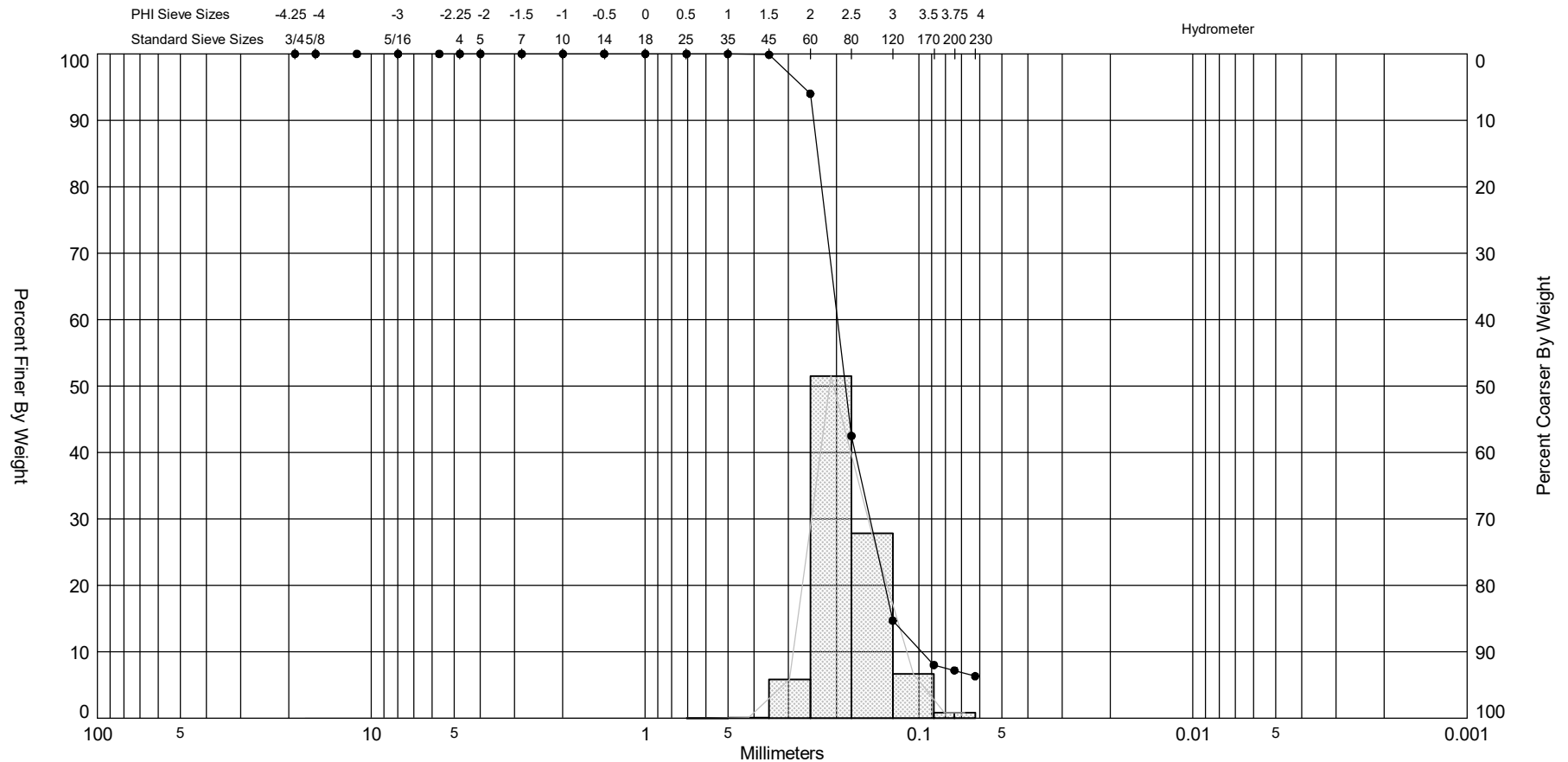


DRILLING LOG		DIVISION		INSTALLATION		SHEET 1 OF 1 SHEETS	
1. PROJECT McFaddin NWR Beach Ridge Restoration Jefferson County, Texas				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION JCVC-18-28				10. COORDINATE SYSTEM/DATUM Texas South Central		HORIZONTAL NAD 1983	
3. DRILLING AGENCY APTIM				11. MANUFACTURER'S DESIGNATION OF DRILL APTIM SEAS VC-700 Vibracore		VERTICAL NAVD88	
4. NAME OF DRILLER Francis Stankiewicz				12. TOTAL SAMPLES			
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 05-24-18 12:35			
8. TOTAL DEPTH OF BORING 15.7 Ft.				16. ELEVATION TOP OF BORING -28.3 Ft.			
				17. TOTAL RECOVERY FOR BORING 15.6 Ft.			
				18. SIGNATURE AND TITLE OF INSPECTOR KM			
ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS	
-28.3	0.0						
-29.1	0.8		CLAY, trace organics, trace rock, rocks up to 0.5", (3.0" x 1.5") sandy pocket @ top of core, light olive brown (2.5Y-5/4), (CL).		T1	Sample #T1, Depth = 0.6' Ave. Field Vane (tsf): 0.82	
			CLAY, trace organics, yellowish brown (10YR-5/4), (CL).		T2	Sample #T2, Depth = 4.0' Ave. Field Vane (tsf): 0.84	
-35.5	7.2						
-37.5	9.2		CLAY, (1.25" x 0.5") shell fragment @ 9.0', (3.0" x 1.5") silty pocket @ 9.1', light olive brown (2.5Y-5/3), (CL).		T3	Sample #T3, Depth = 8.2' Ave. Field Vane (tsf): 0.75	
-38.0	9.7		Shelly CLAY, some silt, trace shell hash, shell composed of shell fragments and whole shells up to (2.5" x 2.0"), gray (2.5Y-5/1), (GC).				
			CLAY, trace rock, trace shell fragments, trace shell hash, trace silt, shell fragments up to (0.75" x 0.25"), rocks up to 0.25", silt distributed in silty pockets up to 1.0", 1.25" whole shell @ 10.0', 3.0" sandy pocket @ 12.5', dark greenish gray (10Y-4/1), (CL).		T4	Sample #T4, Depth = 11.2' Ave. Field Vane (tsf): 0.70	
-41.0	12.7						
-42.9	14.6		SAND, fine grained, quartz, trace clay, 1.5" clayey pocket @ 13.0', gray (2.5Y-5/1), (SP-SC).		1	Sample #1, Depth = 13.7' Mean (mm): 0.18, Phi Sorting: 0.40 Fines (230): 6.32% (SP-SC)	
-43.7	15.4		SAND, fine grained, quartz, some silt, trace clay, dark grayish brown (2.5Y-4/2), (SM).		2	Sample #2, Depth = 15.0' Mean (mm): 0.10, Phi Sorting: 0.36 Fines (230): 30.78% (SM)	
-43.9	15.6		Sandy CLAY, Bit Sample, dark gray (2.5Y-4/1), (CL).				
-44.0	15.7		No Recovery.				
			End of Boring				

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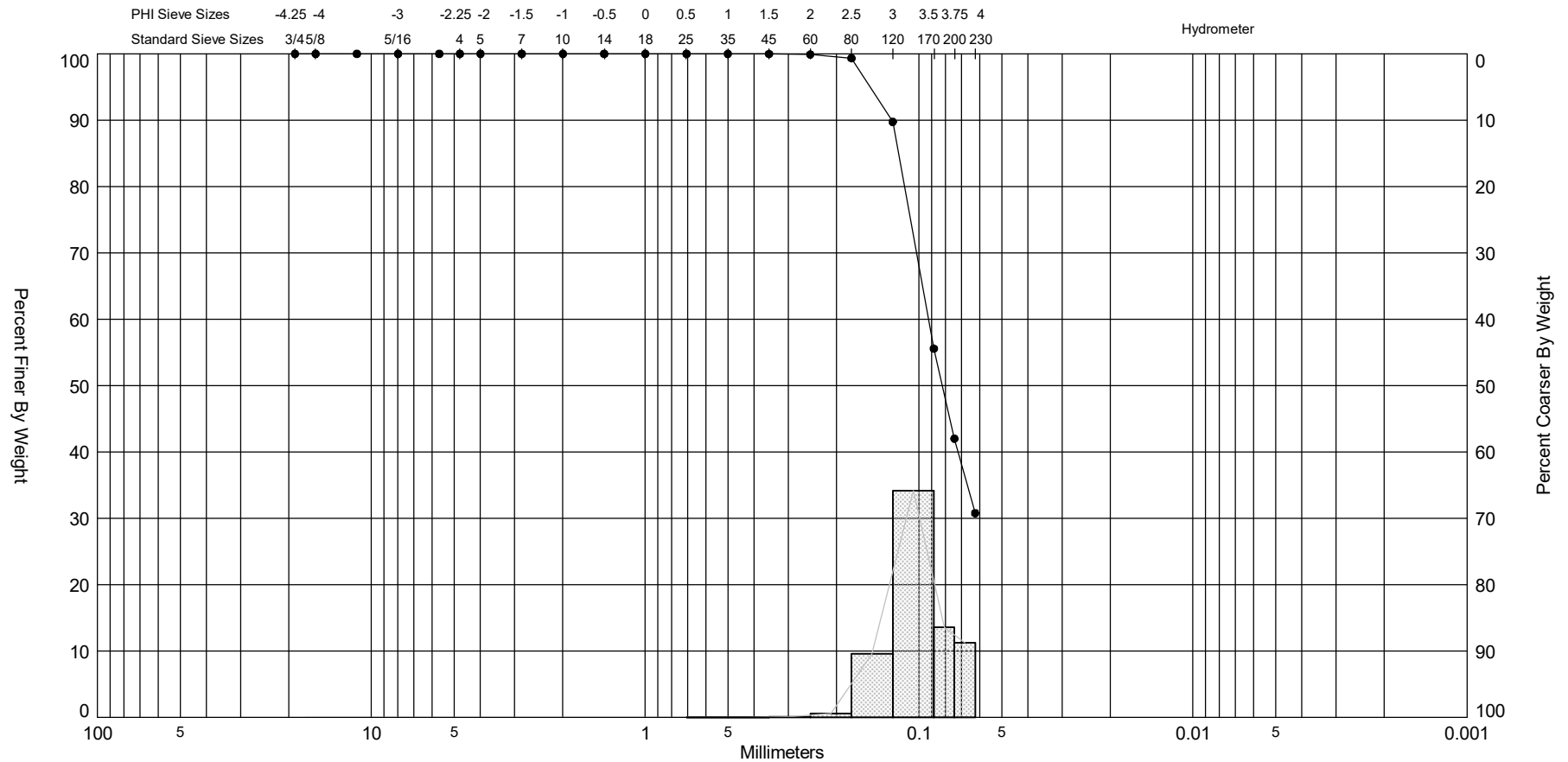
MCFADDIN_2018_VC.GPJ 8/14/18



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-18-28 #1	—●—	-42.0	SP-SC	#200 - 7.19 #230 - 6.32			2.43	2.46	0.8	4.15	0.4	Project Name:	McFaddin NWR Beach Ridge Restoration
Comments:												Analysis Date:	06-25-18
Depths and elevations based on measured values												Analyzed By:	SP
							APTIM 2481 NW Boca Raton Blvd. Boca Raton, FL 33431 ph (561) 391-8102					Easting (X, ft):	3,483,824
												Northing (Y, ft):	13,787,653
												Horizontal Datum:	NAD 1983
												Vertical Datum:	NAVD88

MCFADDIN_2018_VC.GPJ 8/14/18



Granularmetric Report Depths and elevations based on measured values				 APTIM 2481 NW Boca Raton Blvd. Boca Raton, FL 33431 ph (561) 391-8102			
Project Name: McFaddin NWR Beach Ridge Restoration							
Sample Name: JCVC-18-28 #1							
Analysis Date: 06-25-18							
Analyzed By: SP							
Easting (ft): 3,483,824		Northing (ft): 13,787,653		Coordinate System: Texas South Central		Elevation (ft): -42.0 NAVD88	
USCS: SP-SC		Munsell: Wet - 2.5Y-5/1 Dry - 2.5Y-6/1 Washed - 2.5Y-6/1		Comments:			
Dry Weight (g): 92.35	Wash Weight (g): 86.89	Pan Retained (g): 0.33	Sieve Loss (%): 0.05	Fines (%): #200 - 7.19 #230 - 6.32	Organics (%):	Carbonates (%):	Shell Hash (%):
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	0.02	0.02	0.02	0.02	
45	1.50	0.35	0.09	0.10	0.11	0.12	
60	2.00	0.25	5.42	5.87	5.53	5.99	
80	2.50	0.18	47.58	51.52	53.11	57.51	
120	3.00	0.13	25.67	27.80	78.78	85.31	
170	3.50	0.09	6.17	6.68	84.95	91.99	
200	3.75	0.07	0.76	0.82	85.71	92.81	
230	4.00	0.06	0.80	0.87	86.51	93.68	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
	2.98	2.81	2.43	2.18	2.10	1.92	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.46	0.18	0.4	0.8	4.15		

Granularmetric Report Depths and elevations based on measured values				 APTIM 2481 NW Boca Raton Blvd. Boca Raton, FL 33431 ph (561) 391-8102				
Project Name: McFaddin NWR Beach Ridge Restoration								
Sample Name: JCVC-18-28 #2								
Analysis Date: 06-25-18								
Analyzed By: SP								
Easting (ft): 3,483,824		Northing (ft): 13,787,653		Coordinate System: Texas South Central		Elevation (ft): -43.3 NAVD88		
USCS: SM		Munsell: Wet - 2.5Y-4/2 Dry - 2.5Y-5/2 Washed - 2.5Y-6/1		Comments:				
Dry Weight (g): 86.72	Wash Weight (g): 68.52	Pan Retained (g): 8.44	Sieve Loss (%): 0.06	Fines (%): #200 - 42.01 #230 - 30.78	Organics (%):	Carbonates (%):	Shell Hash (%):	
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	0.01	0.01	0.01	0.01		
45	1.50	0.35	0.01	0.01	0.02	0.02		
60	2.00	0.25	0.07	0.08	0.09	0.10		
80	2.50	0.18	0.48	0.55	0.57	0.65		
120	3.00	0.13	8.33	9.61	8.90	10.26		
170	3.50	0.09	29.63	34.17	38.53	44.43		
200	3.75	0.07	11.76	13.56	50.29	57.99		
230	4.00	0.06	9.74	11.23	60.03	69.22		
Phi 5		Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
				3.60	3.22	3.08	2.73	
Moment	Mean Phi		Mean mm		Sorting		Skewness	Kurtosis
Statistics	3.34		0.10		0.36		-0.45	3.68



MCFADDIN NWR BEACH
RIDGE RESTORATION
PHASE II
JCVC-18-28
0.0' - 2.0'



MCFADDIN NWR BEACH
RIDGE RESTORATION
PHASE II
JCVC-18-28
2.0' - 4.0'



MCFADDIN NWR BEACH
RIDGE RESTORATION
PHASE II
JCVC-18-28
4.0' - 6.0'



MCFADDIN NWR BEACH
RIDGE RESTORATION
PHASE II
JCVC-18-28
6.0' - 8.0'





MCFADDIN NWR BEACH
RIDGE RESTORATION
PHASE II
JCVC-18-28
8.0'-10.0'



MCFADDIN NWR BEACH
RIDGE RESTORATION
PHASE II
JCVC-18-28
10.0'-12.0'



MCFADDIN NWR BEACH
RIDGE RESTORATION
PHASE II
JCVC-18-28
12.0'-14.0'



MCFADDIN NWR BEACH
RIDGE RESTORATION
PHASE II
JCVC-18-28
14.0'-15.6'

