

DRILLING LOG		DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 6 SHEETS
1. PROJECT C&SF US DOI Modified Waters to ENP 8.5 Square Mile Area			9. SIZE AND TYPE OF BIT See Remarks	
2. BORING DESIGNATION CP02-85SMA-CB-0091		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83
3. DRILLING AGENCY Law Engineering, Inc.		11. MANUFACTURER'S DESIGNATION OF DRILL CME-55		<input checked="" type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER
4. NAME OF DRILLER David Johns, Jr.		12. TOTAL SAMPLES		DISTURBED 27
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		13. TOTAL NUMBER CORE BOXES		UNDISTURBED (UD) 0
6. THICKNESS OF OVERBURDEN N/A		14. ELEVATION GROUND WATER		6.2 Ft.
7. DEPTH DRILLED INTO ROCK N/A		15. DATE BORING		STARTED 11-12-02
8. TOTAL DEPTH OF BORING 100.5 Ft.		16. ELEVATION TOP OF BORING		COMPLETED 11-14-02
		17. TOTAL RECOVERY FOR BORING		7.2 Ft.
		18. SIGNATURE AND TITLE OF INSPECTOR		57 %
				Jeremy Bernauer, Geotechnical Engineer

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/0.5 FT.	N-VALUE		
7.2	0.0						7.2				
7.0	0.3	Moderately Weathered	SAND, poorly-graded, mostly subrounded fine-grained quartz, little silt, trace organic matter, brown (SP) LIMESTONE, 0, moderately hard, moderately weathered, fine-grained, tan	100	1		SPT Sampler	20	31		
										16	
						80	2		SPT Sampler	9	22
										9	
						90	3		SPT Sampler	11	29
								14			
				100	4		SPT Sampler	15	5		
								12			
1.2	6.0	Slightly Weathered	LIMESTONE, 0, hard, slightly weathered, vuggy, gray						27		
			From El. -2.3 to -3.8 Ft., 0, from calcite replacement	100		RQD 70	4 x 5-1/2" Diamond Set Bit DT = 5 mins HP = 300 psi		10		
			At El. -3.8 Ft., 0, porous		BOX 2						
				10		RQD 0	4 x 5-1/2" Diamond Set Bit DT = 37 mins HP = 300 psi		15		

DRILLING LOG (Cont. Sheet)	INSTALLATION Jacksonville District		SHEET 2 OF 6 SHEETS	
	PROJECT C&SF US DOI Modified Waters to ENP	COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)	HORIZONTAL NAD83	VERTICAL NAVD88
LOCATION COORDINATES X = 810,347 Y = 475,130		ELEVATION TOP OF BORING 7.2 Ft.		

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/0.5 FT.	N-VALUE	
		<p>Slightly Weathered</p> <p>Unweathered</p>		10	BOX 2	RQD 0	4 x 5-1/2" Diamond Set Bit DT = 37 mins HP = 300 psi		15	
			At El. -8.8 Ft., 0, vuggy					-8.8		
					60		RQD 50	4 x 5-1/2" Diamond Set Bit DT = 15 mins HP = 300 psi		20
						BOX 3			-13.8	
					40		RQD 0	4 x 5-1/2" Diamond Set Bit DT = 24 mins HP = 300 psi		25
								-18.8		
			At El. -18.8 Ft., 0, unweathered							
				20		RQD 10	4 x 5-1/2" Diamond Set Bit DT = 8 mins HP = 300 psi		30	
			At El. -23.8 Ft., 0, porous, mineral deposits, tan		BOX 4			-23.8		
			At El. -24.8 Ft., 0, with calcite replacement							
				80		RQD 15	4 x 5-1/2" Diamond Set Bit DT = 18 mins HP = 300 psi		35	

DRILLING LOG (Cont. Sheet)		INSTALLATION			SHEET 3 OF 6 SHEETS					
PROJECT C&SF US DOI Modified Waters to ENP		COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88					
LOCATION COORDINATES X = 810,347 Y = 475,130		ELEVATION TOP OF BORING 7.2 Ft.								
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 0.5 FT.	N-VALUE	
		Unweathered		80	BOX 4	RQD 15	4 x 5-1/2" Diamond Set Bit DT = 18 mins HP = 300 psi			
			At El. -28.8 Ft., 0, vuggy, fossiliferous							35
					30		RQD 10	4 x 5-1/2" Diamond Set Bit DT = 2 mins HP = 300 psi		
			At El. -33.8 Ft., 0, pitted			BOX 3				40
					30		RQD 30	4 x 5-1/2" Diamond Set Bit DT = 4 mins HP = 300 psi		
			At El. -38.8 Ft., 0, porous						45	
				40		RQD 30	4 x 5-1/2" Diamond Set Bit DT = 10 mins HP = 300 psi			
					BOX 4				50	
				60		RQD 50	4 x 5-1/2" Diamond Set Bit DT = 9 mins HP = 300 psi			
									55	

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 4 OF 6 SHEETS			
PROJECT C&SF US DOI Modified Waters to ENP			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88			
LOCATION COORDINATES X = 810,347 Y = 475,130			ELEVATION TOP OF BORING 7.2 Ft.						
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/0.5 FT.	N-VALUE
-54.8	62.0	<p>Unweathered</p> <p>Slightly Weathered</p>	<p>At El. -49.8 Ft., 0, slightly weathered, with calcite replacement</p> <p>From El. -50.3 to -51.3 Ft., 0, sand seams</p>	60	BOX 4	RQD 50	<p>4 x 5-1/2" Diamond Set Bit DT = 9 mins HP = 300 psi</p> <p>-48.8</p>		55
				50		RQD 20	<p>4 x 5-1/2" Diamond Set Bit DT = 4 mins HP = 300 psi</p>		60
					BOX 2		-53.8		
			SAND, silty, mostly subrounded fine-grained quartz, little shell, little silt, weak reaction with HCl, wet, with thin limestone seams, tan (SM)	0		RQD 0	<p>4 x 5-1/2" Diamond Set Bit DT = 1 min HP = 300 psi</p>		65
				85	5			7	
							SPT Sampler	8	27
								19	
				75	6			9	
							SPT Sampler	10	23
								13	
			At El. -61.8 Ft., some silt, gray	80	7			2	
							SPT Sampler	4	12
								8	70
				50	8			6	
			At El. -63.8 Ft., little shell				SPT Sampler	9	25
								16	
				100	9			5	
							SPT Sampler	8	22
								14	
				100	10			7	
							SPT Sampler	10	26
								16	
									75

DRILLING LOG (Cont. Sheet)		INSTALLATION Jacksonville District			SHEET 5 OF 6 SHEETS				
PROJECT C&SF US DOI Modified Waters to ENP		COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88				
LOCATION COORDINATES X = 810,347 Y = 475,130		ELEVATION TOP OF BORING 7.2 Ft.							
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/0.5 FT.	N-VALUE
				50	11		SPT Sampler	10	75
			At El. -68.8 Ft., trace shell					12	27
							-69.3	15	
				100	12		SPT Sampler	3	7
							-70.8	3	
								4	
				80	13		SPT Sampler	3	7
							-72.3	3	
								4	
			At El. -72.8 Ft., some shell	100	14		SPT Sampler	6	80
							-73.8	5	11
								6	
			At El. -74.3 Ft., few shell	100	15		SPT Sampler	10	23
							-75.3	13	
								8	
				100	16		SPT Sampler	7	16
							-76.8	9	
								6	
				100	17		SPT Sampler	5	9
							-78.3	4	85
								5	
				100	18		SPT Sampler	4	9
			At El. -79.8 Ft., some silt, trace shell, brown				-79.8	5	
								6	
				100	19		SPT Sampler	19	36
							-81.3	17	
								6	
				0	20		SPT Sampler	13	28
			At El. -82.8 Ft., some shell, gray				-82.8	15	
								12	90
				20	21		SPT Sampler	14	26
							-84.3	12	
								6	
				75	22		SPT Sampler	10	22
							-85.8	12	
								10	
				50	23		SPT Sampler	12	26
							-87.3	14	
								10	
				60	24		SPT Sampler	10	95

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 6 OF 6 SHEETS				
PROJECT C&SF US DOI Modified Waters to ENP			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL NAVD88				
LOCATION COORDINATES X = 810,347 Y = 475,130			ELEVATION TOP OF BORING 7.2 Ft.							
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 0.5 FT.	N-VALUE	
				60	24		SPT Sampler	11	24	
							-88.8	13		
					30	25		SPT Sampler	6	18
							-90.3	8	10	
				80	26		SPT Sampler	6	22	
						-91.8	9	13		
				50	27		SPT Sampler	5	17	
						-93.3	8	9		
-93.3	100.5								100	
			NOTES: 1. USACE Jacksonville is the custodian for these original files. 2. Soils are field visually classified in accordance with the Unified Soils Classification System.				140# hammer w/30" drop used with 2.0' split spoon (1-3/8" I.D. x 2" O.D.). Abbreviations: DT = Drill Time. HP = Hydraulic Pressure.			

95

100

105

110

115