

<b>DRILLING LOG</b>		<b>DIVISION</b> South Atlantic		<b>INSTALLATION</b> Jacksonville District		<b>SHEET 1</b> OF 2 SHEETS	
<b>1. PROJECT</b> Duval County FL BEC Borrow Area A				<b>9. SIZE AND TYPE OF BIT</b> See Remarks			
<b>2. BORING DESIGNATION</b> CB-DUC04-01		<b>LOCATION COORDINATES</b> X = 415,747 Y = 2,189,394		<b>10. COORDINATE SYSTEM/DATUM</b> State Plane, FLE (U.S. Ft.)		<b>HORIZONTAL</b> NAD27	<b>VERTICAL</b> MLLW
<b>3. DRILLING AGENCY</b> Alpine Ocean Seismic Survey, Inc.		<b>CONTRACTOR FILE NO.</b>		<b>11. MANUFACTURER'S DESIGNATION OF DRILL</b> Vibrocure		<input type="checkbox"/> <b>AUTO HAMMER</b> <input type="checkbox"/> <b>MANUAL HAMMER</b>	
<b>4. NAME OF DRILLER</b> James F. Cole				<b>12. TOTAL SAMPLES</b>		<b>DISTURBED</b> 4	<b>UNDISTURBED (UD)</b> 0
<b>5. DIRECTION OF BORING</b> <input checked="" type="checkbox"/> <b>VERTICAL</b> <input type="checkbox"/> <b>INCLINED</b>		<b>DEG. FROM VERTICAL</b>	<b>BEARING</b>	<b>13. TOTAL NUMBER CORE BOXES</b> 1		<b>14. ELEVATION GROUND WATER</b> Tidal	
<b>6. THICKNESS OF OVERBURDEN</b> N/A		<b>7. DEPTH DRILLED INTO ROCK</b> N/A		<b>15. DATE BORING</b>		<b>STARTED</b> 04-15-04	<b>COMPLETED</b> 04-15-04
<b>8. TOTAL DEPTH OF BORING</b> 19.6 Ft.		<b>16. ELEVATION TOP OF BORING</b> -50.9 Ft.		<b>17. TOTAL RECOVERY FOR BORING</b> 97 %		<b>18. SIGNATURE AND TITLE OF INSPECTOR</b> William H. Brenner, Geologist <i>William H. Brenner</i>	

ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-50.9	0.0						-50.9		
			SAND, poorly-graded, mostly subrounded to rounded fine-grained sand-sized quartz, few fine-grained sand-sized carbonate, trace silt, trace angular sand to gravel-sized shell up to 1/2", strong reaction with HCl, wet, 10BG 5/1 greenish gray (SP)	100			Vibrocure		
				100	1		-52.9 Vibrocure		
							-53.9		
-55.4	4.5								
-55.9	5.0		SHELL, mostly angular coarse-grained sand-sized shell up to 1-1/2", few subrounded medium to coarse-grained sand-sized quartz, strong reaction with HCl, wet, 10BG 5/1 greenish gray	100			Vibrocure		
			SAND, poorly-graded with silt, mostly subrounded to rounded fine-grained sand-sized quartz, few subrounded to rounded fine-grained sand-sized carbonate, few silt, trace angular sand to gravel-sized shell up to 1/2", strong reaction with HCl, wet, 5BG 5/1 greenish gray (SP-SM)	100	2		-57.9 Vibrocure		
							-58.9		
				100			Vibrocure		
			At El. -60.9 Ft., weak reaction with HCl						
-62.4	11.5								
			SAND, silty, mostly subrounded to rounded fine to medium-grained sand-sized quartz, little silt, few rounded fine-grained sand-sized carbonate, weak reaction with HCl, moderate cementation, 2.5Y 6/6 olive yellow (SM)	100	3		-62.9 Vibrocure		
							-63.9		
				100			Vibrocure		
							-65.9		

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																		
PROJECT Duval County FL BEC			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD27	VERTICAL MLLW																		
LOCATION COORDINATES X = 415,747 Y = 2,189,394			ELEVATION TOP OF BORING -50.9 Ft.																					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE															
-69.9	19.0	NR		100	4		Vibracore																	
-70.5	19.6			83			Vibracore																	
			NOTES:																					
			1. Soils are field visually classified in accordance with the Unified Soils Classification System.																					
			2. Laboratory Testing Results																					
			<table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/3.0</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>7.0/8.0</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>12.0/13.0</td> <td>SM*</td> </tr> <tr> <td>4</td> <td>15.0/16.0</td> <td>SM*</td> </tr> </tbody> </table>	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/3.0	SP*	2	7.0/8.0	SP-SM*	3	12.0/13.0	SM*	4	15.0/16.0	SM*						
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4	15.0/16.0	SM*																						
			*Lab visual classification based on gradation curve. No Atterberg limits.																					
			3. Additional Laboratory Testing																					
			2 Specific Gravity																					