

Boring Designation VB-MCSP07-5

DRILLING LOG		DIVISION South Atlantic		INSTALLATION Jacksonville District		SHEET 1 OF 2 SHEETS			
1. PROJECT MARTIN COUNTY OFFSHORE INVESTIGATIONS Offshore Borrow Area				9. SIZE AND TYPE OF BIT See Remarks					
2. BORING DESIGNATION VB-MCSP07-5		LOCATION COORDINATES X = 946,139 Y = 1,072,524		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83 VERTICAL MLLW			
3. DRILLING AGENCY Challenge Engineering & Testing, Inc.		CONTRACTOR FILE NO. 2007D32		11. MANUFACTURER'S DESIGNATION OF DRILL Alpine Vibracore Unit		<input checked="" type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER			
4. NAME OF DRILLER Alpine Ocean Seismic, Inc.				12. TOTAL SAMPLES 4		DISTURBED 0 UNDISTURBED (UD)			
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED		DEG. FROM VERTICAL		13. TOTAL NUMBER CORE BOXES 1					
		BEARING		14. ELEVATION GROUND WATER Tidal					
6. THICKNESS OF OVERBURDEN N/A				15. DATE BORING 08-09-07		STARTED 08-09-07 COMPLETED 08-09-07			
7. DEPTH DRILLED INTO ROCK N/A				16. ELEVATION TOP OF BORING -53.0 Ft.					
8. TOTAL DEPTH OF BORING 20.0 Ft.				17. TOTAL RECOVERY FOR BORING 100 %					
				18. SIGNATURE AND TITLE OF INSPECTOR Eric Guarino, Geologist					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	ROD OR UD	REMARKS	BLOWS/1 FT.	N-VALUE
-53.0	0.0						-53.0		
		<div style="display: flex; align-items: center;"> <div style="width: 10px; height: 10px; border: 1px solid black; margin-right: 5px;"></div> <div style="font-size: 8px;">SHELL, mostly angular shell up to 1/4", some subangular fine to medium-grained sand-sized carbonate, trace angular fine to medium-grained sand-sized organic matter, strong reaction with HCl, moist, 10YR 7/2 light gray</div> </div>	1000				Vibracore		
				NR	1		-55.0		
							-55.5		
-56.3	3.3			NR					
		<div style="display: flex; align-items: center;"> <div style="width: 10px; height: 10px; border: 1px solid black; margin-right: 5px;"></div> <div style="font-size: 8px;">SAND, poorly-graded with silt, mostly subrounded fine-grained sand-sized carbonate, little angular shell up to 1/4", strong reaction with HCl, moist, 10YR 5/1 gray (SP-SM)</div> </div>		NR	2		-57.0		
							-57.5		
				NR					
				NR	3		-59.0		
							-59.5		
				NR					
-61.0	8.0			NR	4		-61.0		
		<div style="display: flex; align-items: center;"> <div style="width: 10px; height: 10px; border: 1px solid black; margin-right: 5px;"></div> <div style="font-size: 8px;">SAND, silty, mostly subrounded fine-grained sand-sized carbonate, little angular shell up to 1/4", strong reaction with HCl, moist, 10YR 5/1 gray (SM)</div> </div>					-61.5		
-63.4	10.4								
		<div style="display: flex; align-items: center;"> <div style="width: 10px; height: 10px; border: 1px solid black; margin-right: 5px;"></div> <div style="font-size: 8px;">SHELL, mostly angular shell up to 1/2", some rounded fine-grained sand-sized clay, weak reaction with HCl, moist, 10YR 5/1 gray</div> </div>	NR						
-65.3	12.3								
		<div style="display: flex; align-items: center;"> <div style="width: 10px; height: 10px; border: 1px solid black; margin-right: 5px;"></div> <div style="font-size: 8px;">SAND, silty, mostly subangular fine to medium-grained sand-sized quartz, some angular shell up to 1/4", weak reaction with HCl, moist, 10YR 5/1 gray (SM)</div> </div>							

DRILLING LOG (Cont. Sheet)			INSTALLATION			SHEET 2 OF 2 SHEETS																		
PROJECT			COORDINATE SYSTEM/DATUM		HORIZONTAL	VERTICAL																		
MARTIN COUNTY OFFSHORE INVESTIGATIONS			State Plane, FLE (U.S. Ft.)		NAD83	MLLW																		
LOCATION COORDINATES			ELEVATION TOP OF BORING																					
X = 946,139 Y = 1,072,524			-53.0 Ft.																					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	ROD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE															
-73.0	20.0		At El. -68.7 Ft., weak reaction with HCl, 10YR 6/4 light yellowish brown At El. -71.9 Ft., weak reaction with HCl, 10YR 4/1 dark gray At El. -72.8 Ft., few clay	NR			-73.0																	
			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>2.0/2.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>6.0/6.5</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>8.0/8.5</td> <td>SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	2.0/2.5	SP*	2	4.0/4.5	SP-SM*	3	6.0/6.5	SP-SM*	4	8.0/8.5	SM*				Abbreviations: NR = Not Recorded.		
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																						
1	2.0/2.5	SP*																						
2	4.0/4.5	SP-SM*																						
3	6.0/6.5	SP-SM*																						
4	8.0/8.5	SM*																						

Penetration Graph for Core No. VBMCSP07-5, Run 1

Date: 8/9/2007
Start Time: 11:41:26 AM
End Time: 11:44:47 AM

Penetration: 19.64 ft
Recovery: 20
W. D. Corrected: 53
W. D. Raw: 53

Easting: 946139
Northing: 1072524
Coord. System: FL East

Lat: 27d 16.8848' N
Long: 80d 6.4300' W
Datum: NAD-83

Comment:

