

## Boring Designation VB-MCSP07-12

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-MCSP07-12		LOCATION COORDINATES X = 949,851 Y = 1,076,487		10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83			
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			
5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED				13. TOTAL NUMBER CORE BOXES 1		14. ELEVATION GROUND WATER Tidal			
6. THICKNESS OF OVERBURDEN N/A				15. DATE BORING 08-10-07		STARTED 08-10-07			
7. DEPTH DRILLED INTO ROCK N/A				16. ELEVATION TOP OF BORING -52.3 Ft.		COMPLETED 08-10-07			
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	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE
-52.3	0.0						-52.3		
			SHELL, mostly angular shell up to 1/4", some subangular fine to medium-grained sand-sized quartz, trace angular fine to medium-grained sand-sized organic matter, weak reaction with HCl, moist, 10YR 7/2 light gray	667			Vibracore		
				NR	1		-55.3		
							-55.8		
				NR					
							-58.3		
				NR	2		-58.8		
				NR					
-61.2	8.9								
-62.0	9.7		SAND, poorly-graded, mostly subangular fine to medium-grained sand-sized carbonate, some angular shell up to 1/4", strong reaction with HCl, moist, 10YR 4/1 dark gray (SP)	NR	3		-62.3		
			SAND, poorly-graded with silt, mostly subangular fine-grained sand-sized silt, some angular shell up to 1/4", strong reaction with HCl, moist, Occasional Clay Lense, 10YR 5/1 gray (SP-SM)	NR			-62.8		
				NR			-65.3		
				NR	4		-65.8		
-66.3	14.0			NR					
			SAND, silty, mostly subangular fine to medium-grained sand-sized carbonate, some angular shell up to 2", strong reaction	NR					

DRILLING LOG (Cont. Sheet)			INSTALLATION Jacksonville District			SHEET 2 OF 2 SHEETS																		
PROJECT MARTIN COUNTY OFFSHORE INVESTIGATIONS			COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.)		HORIZONTAL NAD83	VERTICAL MLLW																		
LOCATION COORDINATES X = 949,851 Y = 1,076,487			ELEVATION TOP OF BORING -52.3 Ft.																					
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% REC.	BOX OR SAMPLE	RQD OR UD	REMARKS	BLOWS/ 1 FT.	N-VALUE															
-72.3	20.0		with HCl, moist, 10YR 5/1 gray (SM)  At El. -68.8 Ft., mostly subangular fine to medium-grained sand-sized carbonate, little angular shell up to 1/4", strong reaction with HCl, moist, 10YR 5/1 gray  At El. -70.8 Ft., weak reaction with HCl, moist, 10YR 6/2 light brownish gray At El. -71.4 Ft., strong reaction with HCl, moist, 10YR 6/4 light yellowish brown	NR																				
			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>3.0/3.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>10.0/10.5</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>13.0/13.5</td> <td>SM*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits.	SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION	1	3.0/3.5	SP*	2	6.0/6.5	SP*	3	10.0/10.5	SP-SM*	4	13.0/13.5	SM*				Abbreviations: NR = Not Recorded.		
SAMPLE ID	SAMPLE DEPTH	LABORATORY CLASSIFICATION																						
1	3.0/3.5	SP*																						
2	6.0/6.5	SP*																						
3	10.0/10.5	SP-SM*																						
4	13.0/13.5	SM*																						

## Penetration Graph for Core No. VB-MCSP07-12, Run 1

Date: 8/9/2007  
Start Time: 1:53:45 PM  
End Time: 1:56:53 PM

Penetration: 19.84 ft  
Recovery: 20  
W. D. Corrected: 52.3  
W. D. Raw: 52.4

Easting: 949851  
Northing: 1076487  
Coord. System: FL East

Lat: 27d 17.5373' N  
Long: 80d 5.7408' W  
Datum: NAD-83

Comment:

