

# LOG OF BORING C-14



Rock Engineering & Testing Lab., Inc.  
6817 Leopard St.  
Corpus Christi, TX 78409  
Telephone: (361) 883-4555  
Fax: (361) 883-4711

CLIENT: HDR, Inc.  
PROJECT: Prop. Large Scale Beach Nourishment Project  
LOCATION: S. Jetty Borrow Source Area; Galveston, TX  
NUMBER: G108558

DATE(S) DRILLED: 07/30/08 - 07/30/08

DRILLING METHOD(S):  
Hollow Stem Auger

GROUNDWATER INFORMATION:

SURFACE ELEVATION: -26.2' NAVD

DESCRIPTION OF STRATUM

SOIL SYMBOL	FIELD DATA				LABORATORY DATA							MINUS NO. 200 SIEVE (%)
	Elevation, Ft. [NAVD]	SAMPLE NUMBER	S-SAMPLES	N: BLOWS/FT P: TONS/SQ.FT T: TONS/SQ.FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	ATTERBERG LIMITS			MOISTURE CONTENT (%)	DRY DENSITY POUNDS/CU.FT	COMPRESSIVE STRENGTH (TONS/SQ.FT)		
					LL	PL	PI					
5												
10												
15												
20												
25												
27	SS S-1		N= 1									
28	SS S-2		N= 3	27						30		
29	SS S-3		N= 3									
30	SS S-4		N= 2									

**SILTY CLAYEY SAND**, with shell, gray, moist, very loose.

Same as above.

**SANDY CLAY**, with shell, gray, moist, soft.

**POORLY GRADED SAND**, with shell, gray, moist, very loose.

Boring was extended to an elevation of -34.2-feet NAVD during the drilling operations.

LOG OF BORING G108558B PROP. LARGE SCALE BEACH NOURISHMENT PROJECT.GPJ ROCK\_ETL.GDT 10/21/08

N - STANDARD PENETRATION TEST RESISTANCE  
P - POCKET PENETROMETER RESISTANCE  
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:  
Boring depth and location was determined by HDR, Inc. Boring operations were performed by RETL.  
GPS Coord. N. 29.33970 W. 94.71677



- Geotechnical Engineering
- Construction Materials Testing

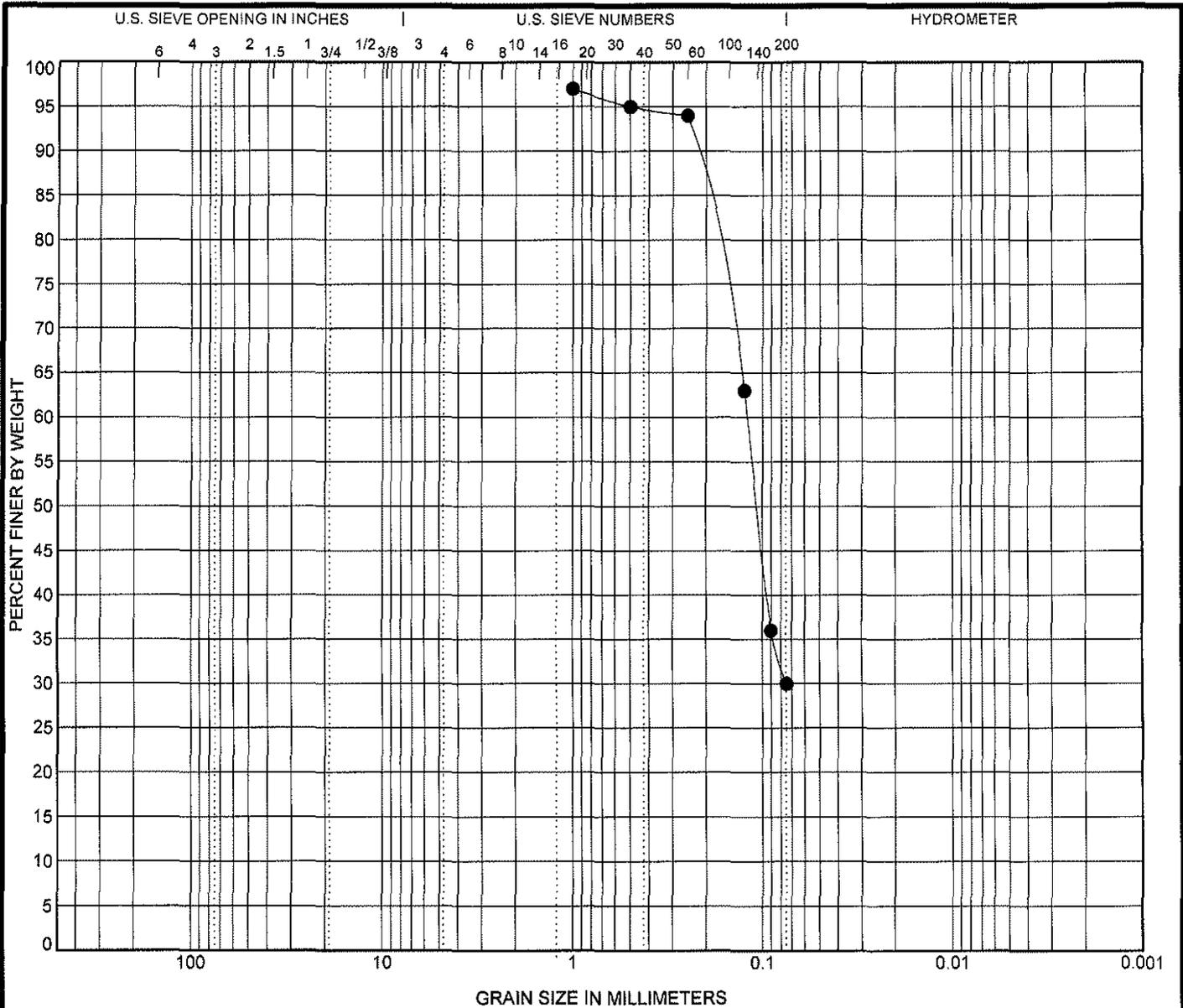
**PROJECT NAME:** West Galveston Island Large Scale Beach Nourishment Project  
**CLIENT:** HDR, Inc.  
**BORING ID.:** C-14  
**DESCRIPTION:** South Jetty Borrow Source Area

<b>PERCENT SHELL BY WEIGHT (BASED ON #10 SIEVE)</b>
<b>-28.2' TO -30.2' NAVD</b>
<b>3.65</b>

ASTM MESH	% FINER BY WEIGHT AFTER REMOVING SHELL	
	-28.2' TO -30.2' NAVD	
#10	100.00	
#18	97.10	
#35	95.20	
#60	94.20	
#120	62.60	
#170	36.40	
#200	29.50	
<b>STATISTICS (EXCLUDING SHELL)</b>		
<b>MEDIAN GRAIN SIZE (mm)</b>	0.11	
<b>MEAN GRAIN SIZE (mm)</b>	N/A	
<b>SORTING (<math>\sigma</math>)</b>	N/A	

\*The #10 material was utilized as the total sample for Grain Size Distribution Curve calculations.

US GRAIN SIZE G108558B PROP. LARGE SCALE BEACH NOURISHMENT PROJECT.GPJ US LAB.GDT 10/20/08



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen ID	Depth	Classification	LL	PL	PI	Cc	Cu
● C-14 (-28.2' to -30.2' NAVD)		<b>Borrow Area (-28.2' to -30.2' NAVD)</b>					

Specimen ID	Depth	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● C-14 (-28.2' to -30.2' NAVD)		1	0.121	0.075		0.0	67.0	30.0	



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**GRAIN SIZE DISTRIBUTION**

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