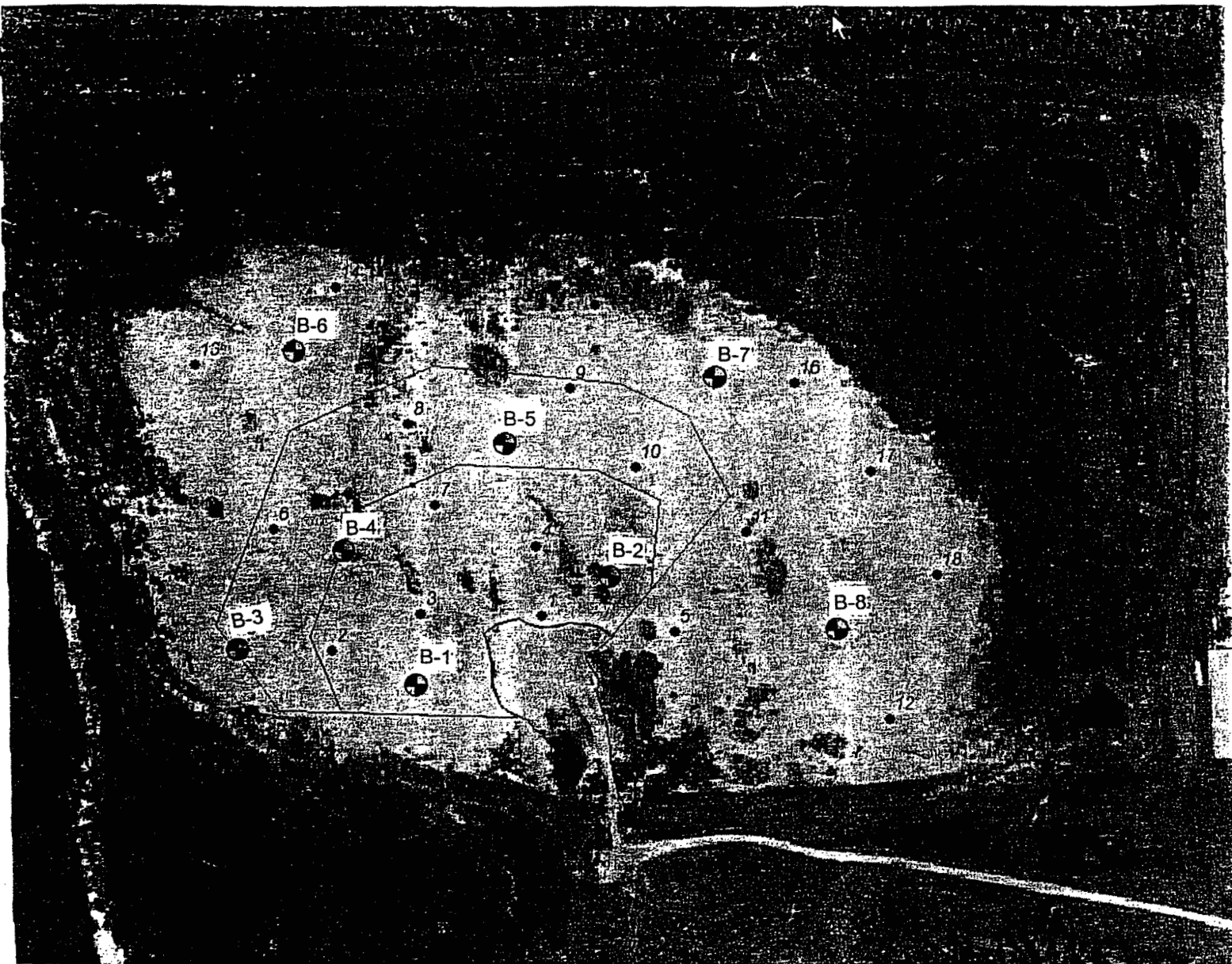




ENGINEERING AND TESTING
LABORATORY, INC.



BORING LOCATION PLAN

NO SCALE

October 7, 2004

Attn.: Mr. Hugo E. Bermudez, P.E.

RETL Job No.: C0400619

TOWN OF QUINTANA BEACH NOURISHMENT PROJECT

Port of Bay City

Bay City, Texas

ROCK ENGINEERING AND TESTING LABORATORY, INC.

4910 NEPTUNE STREET

CORPUS CHRISTI, TX 78405

(361) 883-4555

LOG OF BORING B-4

SHEET 1 of 1



Rock Engineering and Testing Laboratory, Inc.
4910 Neptune Street
Corpus Christi, Texas 78405
Telephone: (361) 883-4555
Fax: (361) 883-4711

CLIENT: Coast and Harbor Engineering, Inc.
PROJECT: Prop. Quintana Beach Nourishment
LOCATION: Port of Bay City, Texas
NUMBER: C0400619

DATE(S) DRILLED: 9/8/04 - 9/8/04

DRILLING METHOD(S):

Hollow Stem Auger

GROUNDWATER INFORMATION:

Groundwater (GW) at 18' during drilling operations.

SURFACE ELEVATION: N/A

DESCRIPTION OF STRATUM

	FIELD DATA					LABORATORY DATA						
SOIL SYMBOL	DEPTH (FT)	SAMPLE NUMBER	SAMPLES	N: BLOWS/FT P: TONS/SQ FT T: TONS/SQ FT PERCENT RECOVERY/ ROCK QUALITY DESIGNATION	MOISTURE CONTENT (%)	ATTERBERG LIMITS			DRY DENSITY POUNDS/CU.FT	COMPRESSIVE STRENGTH (TONS/SQ FT)	MINUS NO. 200 SIEVE (%)	
						LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI				
	5	SS S-1	N= 10		2							
		SS S-2	N= 16		4							
		SS S-3	N= 19		5							
	10	SS S-4	N= 16		5						6	
		SS S-5	N= 25		4							
	15	SS S-6	N= 20		6							
		SS S-7	N= 4		18							
		SS S-8	N= 5	▽	20							
	20	SS S-9	N= 61		16						3	
		SS S-10	N= 20		18							
	25											
		SS S-11	N= 4		17						6	
	30											

POORLY GRADED SAND, pink (7.5YR 7/4), dry, medium.

Same as above, pink (7.5YR 7/4).

Same as above, light brown (7.5YR 6/4).

POORLY GRADED SAND, with clay and silt, light brown (7.5YR 6/4), dry, medium. (SP-SM/SC)

Same as above, reddish yellow (7.5YR 6/6).

Same as above, reddish yellow (7.5YR 6/6).

POORLY GRADED SAND, brown (7.5YR 5/3), moist, loose.

Same as above, brown (7.5YR 4/3).

Same as above, brown (7.5YR 4/3), very dense. (SP)

POORLY GRADED SAND, brown (7.5YR 5/4), moist, medium.

Same as above, with clay and silt, brown (7.5YR 5/4), loose. (SP-SM/SC)

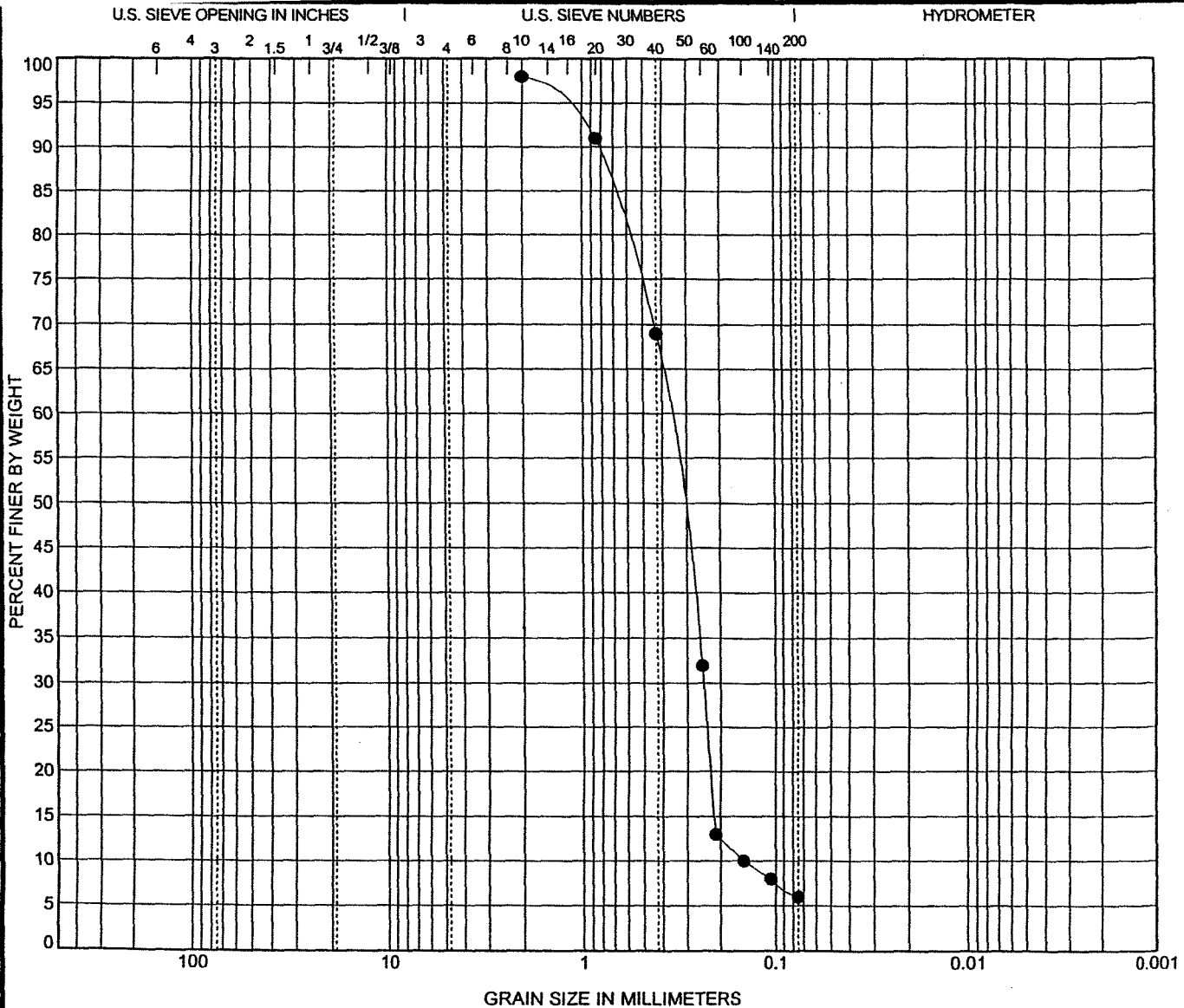
Boring was terminated at a depth of 30-feet.

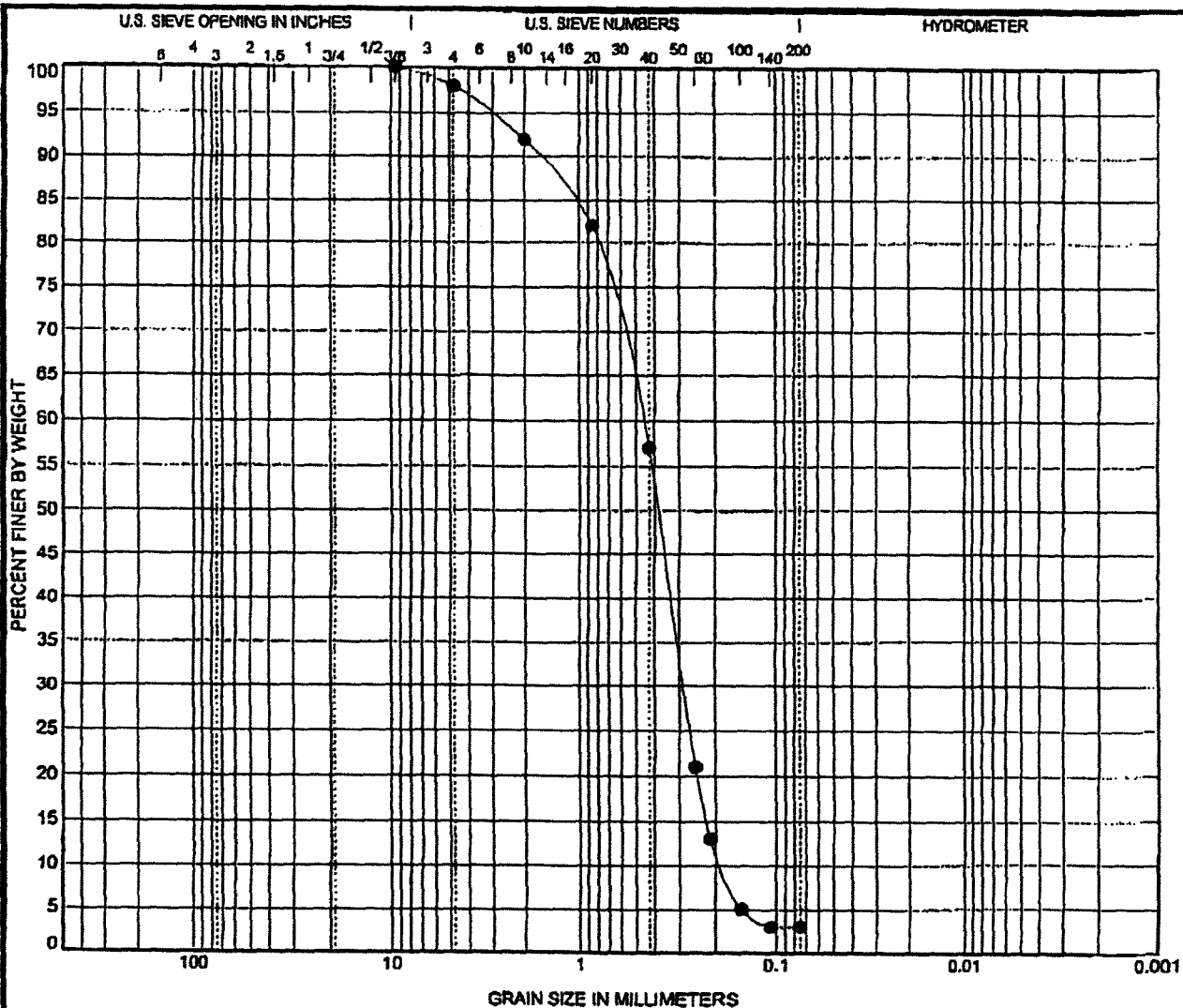
N - STANDARD PENETRATION TEST RESISTANCE
P - POCKET PENETROMETER RESISTANCE
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:

Boring location and depth was determined by Coast and Harbor Engineering, Inc. and boring was performed by Envirocore, a drilling sub-contractor to RETL.

LOG OF BORING C04619.GPJ ROCK ETL.GDT 10/7/04





COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification	Classification	LL	PL	PI	Cc	Cu
● B-4 20.0	POORLY GRADED SAND(SF)				0.95	2.48

Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● B-4 20.0	9.5	0.462	0.285	0.186	2.0	95.0	3.0	



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GRAIN SIZE DISTRIBUTION

Project: Prop. Quintana Beach Nourishment

Location: Port of Bay City, Texas

Number: C0400619

