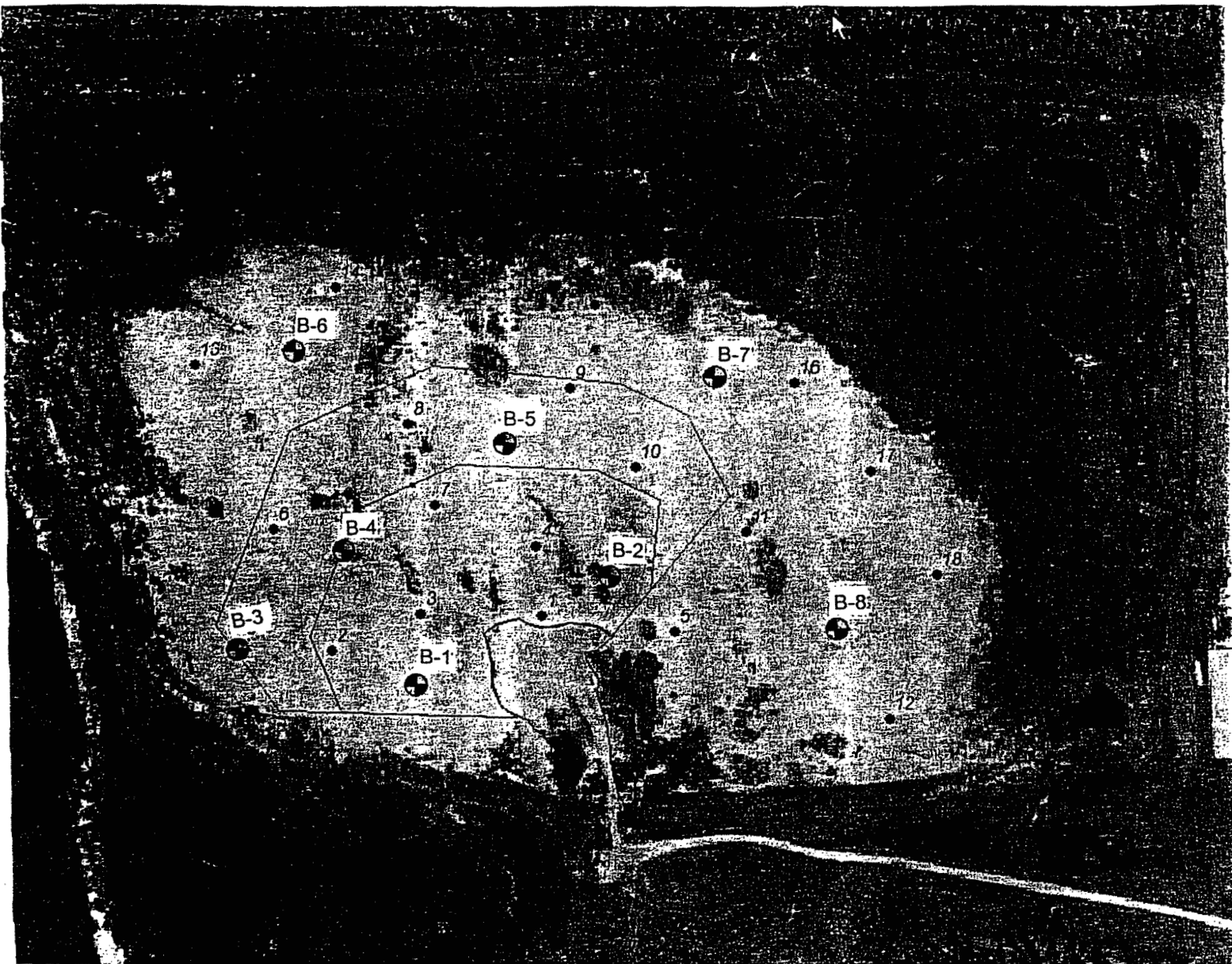




ENGINEERING AND TESTING
LABORATORY, INC.



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-5

SHEET 1 of 1

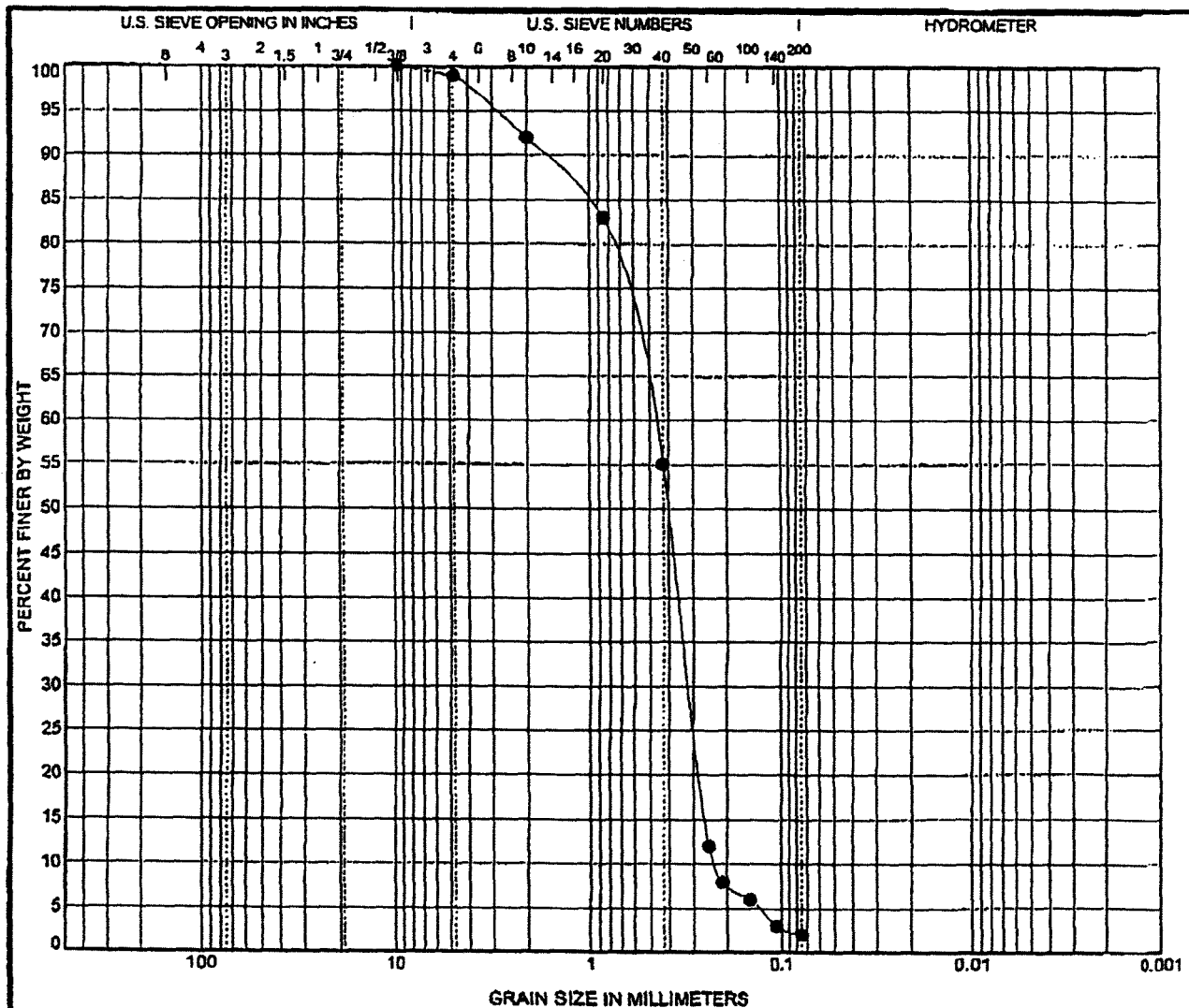


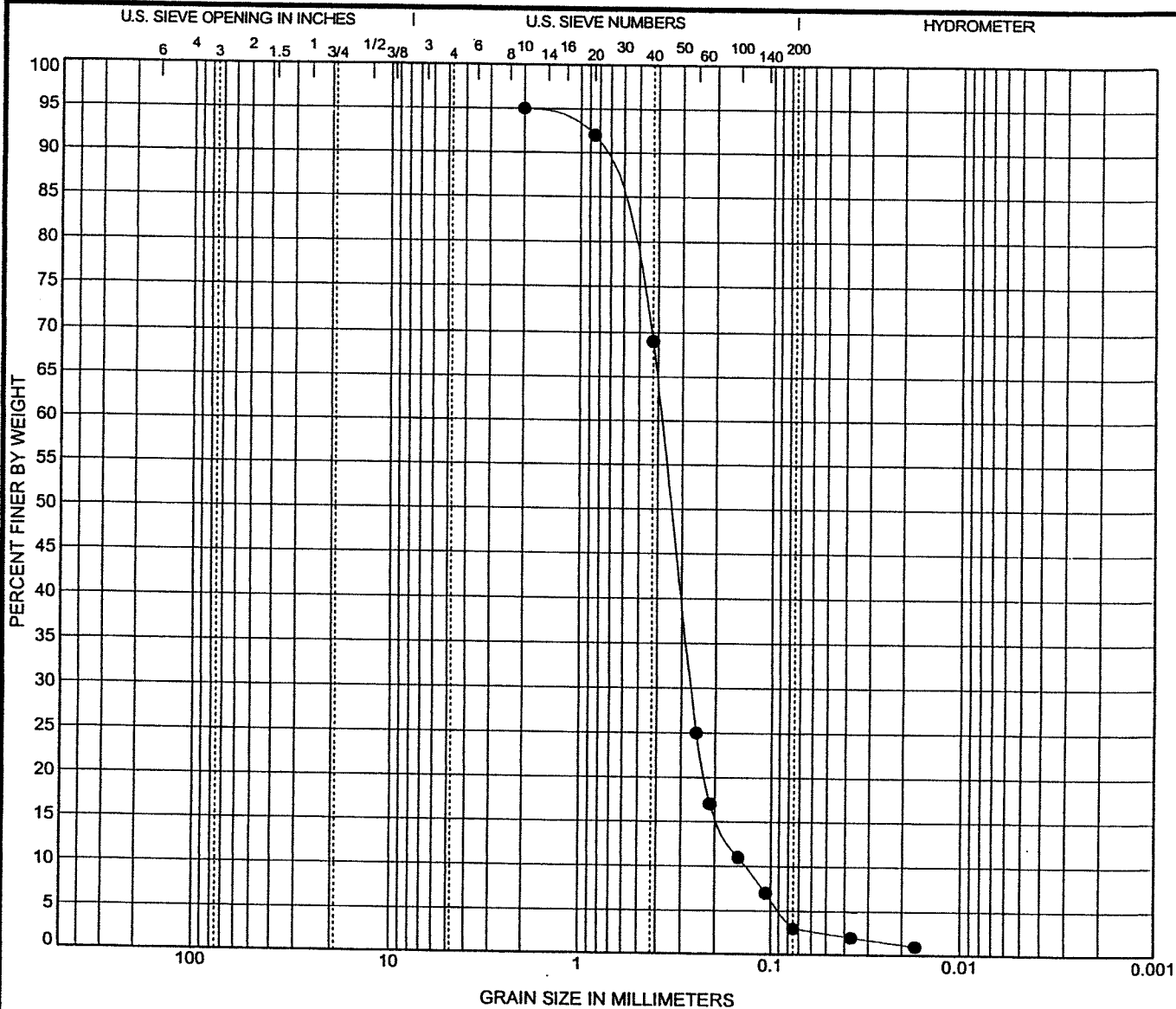
Rock Engineering and Testing Laboratory, Inc.
4910 Neptune Street
Corpus Christi, Texas 78405
Telephone: (361) 883-4555
Fax: (361) 883-4711

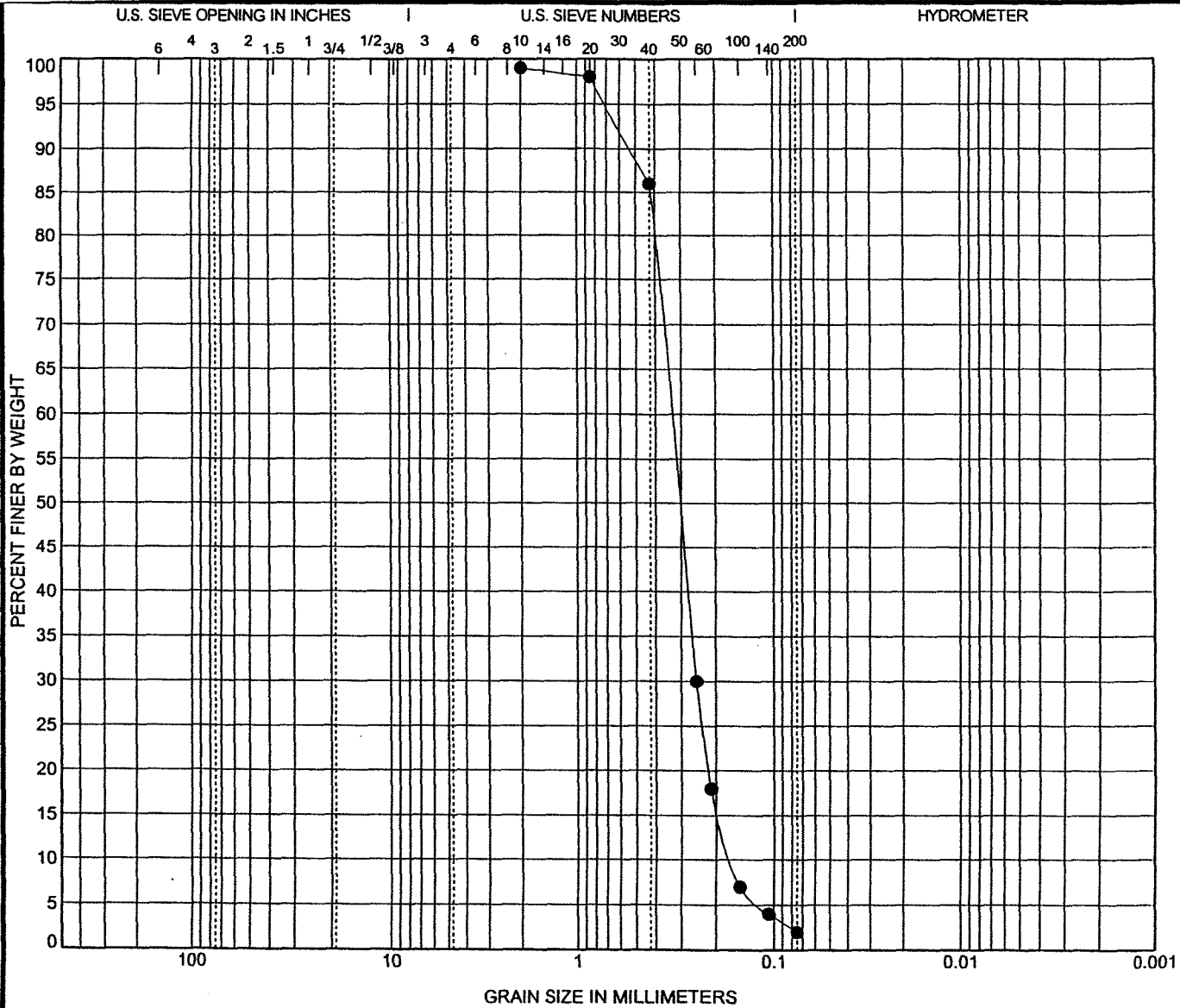
CLIENT: Coast and Harbor Engineering, Inc.
PROJECT: Prop. Quintana Beach Nourishment
LOCATION: Port of Bay City, Texas
NUMBER: C0400619

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

FIELD DATA										LABORATORY DATA					DATE(S) DRILLED: 9/8/04 - 9/8/04
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 (%)	DRILLING METHOD(S): Hollow Stem Auger			
						LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX							
						LL	PL	PI							
		SS S-1	N= 10		3							GROUNDWATER INFORMATION: Groundwater (GW) at 15' during drilling operations. SURFACE ELEVATION: N/A DESCRIPTION OF STRATUM POORLY GRADED SAND , trace gravel, reddish yellow (7.5YR 6/6), dry, medium. (SP) Same as above, trace clay, reddish yellow (7.5YR 7/6). Same as above, light brown (7.5YR 6/4). POORLY GRADED SAND , light brown (7.5YR 6/4), dry, medium. (SP) Same as above, light brown (7.5YR 6/3), moist, loose. Same as above, brown (7.5YR 5/4). (SP) FAT CLAY , trace sand, dark brown (7.5YR 3/3), moist, soft. Boring was terminated at a depth of 20-feet.			
	5	SS S-2	N= 12		7						2				
		SS S-3	N= 16		5										
	10	SS S-4	N= 15		5						2				
		SS S-5	N= 8		19										
	15	SS S-6	N= 6		22						2				
	20	SS S-8	N= 2		24										
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.			







COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification	Classification	LL	PL	PI	Cc	Cu
● B-5 8.5	POORLY GRADED SAND(SP)				1.14	2.02

Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● B-5 8.5	2	0.332	0.25	0.165	0.0	97.0	2.0	

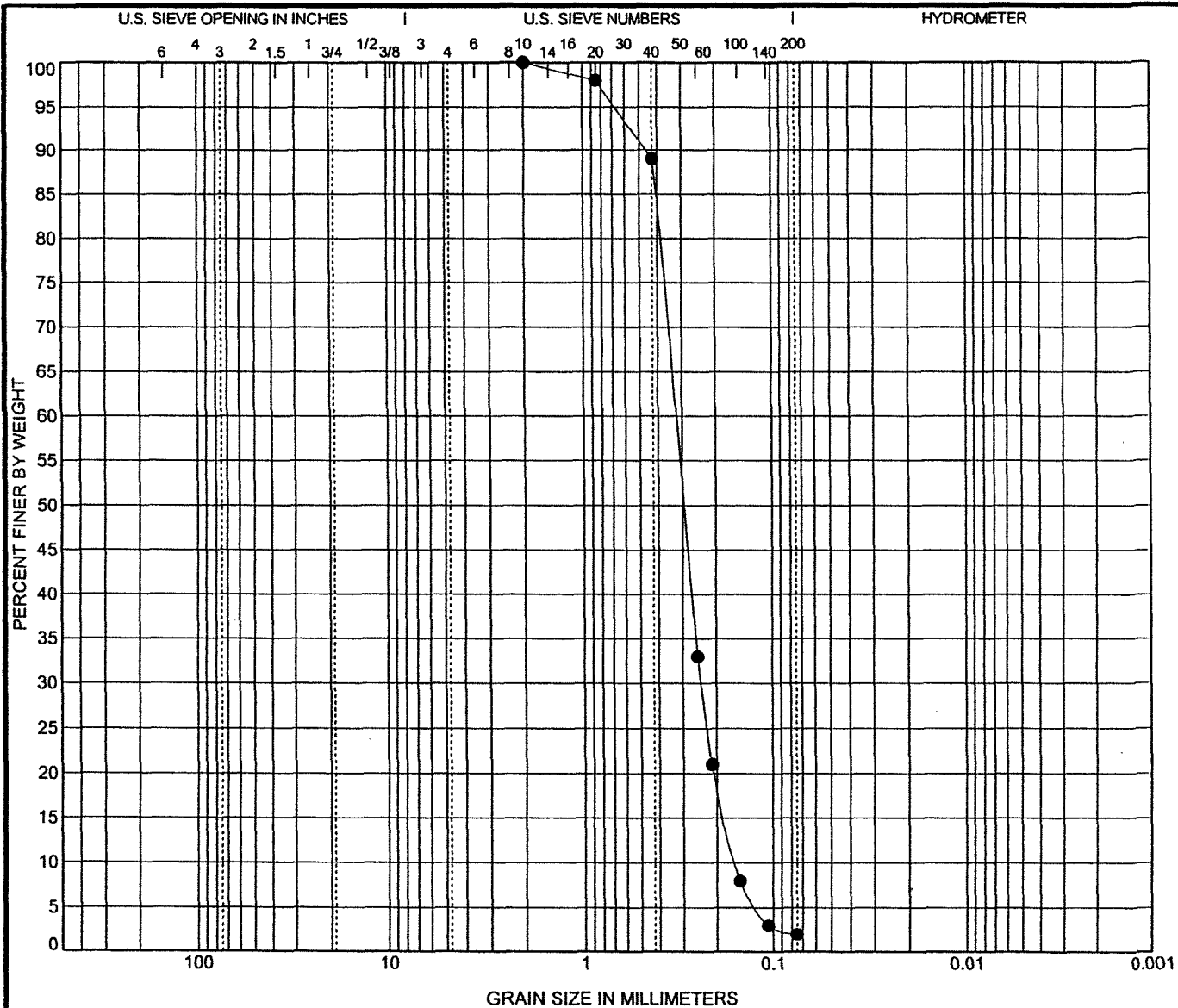


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GRAIN SIZE DISTRIBUTION

Project: Prop. Town of Quintana Beach Nourishment
Location: Port of Bay City, Texas
Number: C0400619

US GRAIN SIZE C0400619.GPJ US LAB.GDT 9/23/04



COBBLES	GRAVEL		SAND			*SILT-OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification	LL	PL	PI	Cc	Cu
●	B-5 13.5	POORLY GRADED SAND(SP)				1.13	2.04

[illegible]

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