

U.S. ARMY CORPS OF ENGINEERS
GEOTECHNICAL BORING DATA

BKM

PROJECT NAME Victoria Ship Channel

LOG OF BORING NO. 90-33

LOCATION / STATION 55+00

DATE / TIME STARTED 06/15/90 11:00 am

DATE / TIME COMPLETED 1 12:00 noon

TIDE ELEVATION +2.3' MLT DATUM

WATER DEPTH 3.0'

DEPTH FROM WATER SURFACE
TO BOTTOM OF BORING 27.5'

WEATHER Clear & Sunny

DRILL RIG MANUFACTURE
MODEL NO. CF-5

DRILLER Dempsey Geaven
LOGGER Aris Lazaridis

DRILLER'S / LOGGER'S COMMENTS —

DEPTH, FEET		SAMPLE NO.	PEN. / TORVANE	SPT. - BLOW COUNT	BORING NO. <u>90-33</u> DATE: BEGIN <u>06/15/90</u> COMPLETE <u>06/15/90</u>				JOB NO. <u>14G-404</u> LOGGER <u>Aris</u> PAGE <u>2 / 3</u>		PROJECT <u>Victoria Ship Channel</u>		LOCATION/STATION/ELEVATION: <u>Sta. 55+00 / EL. +2.3' MLT</u>	
					DEPTH: AUGERED		WASHED <u>24.5'</u>		CORED					
					GROUNDWATER READINGS									
TIME		DEPTH		TIME		DEPTH		TIME		DEPTH				
FIRST														
CONSISTENCY		COLOR		MINOR		MAJOR		MODIFICATION						
0		1	0.0	V/soft	Gray	Silty	CLAY	- w/shells ; disturbed sample						
		2	0.0	"	"	"	"							
5		3	0.25	"	"	"	"	- w/shells						
		4	0.75	Firm	"	"	"	- w/calcareous nodules; 10" sample ^{CL, PL}						
		5	0.75	Firm	Gray	Clayey	SAND	- w/calcareous nodules MA						
10		6	1/1/1	V/Loose	Gray	Clayey	SILT	- w/shells						
15		7	3/6/6	M/Dense	Tan	"	"	—						
20		8	7/12/5	M/Dense	Gray & yellowish	"	SAND	- w/shells & little clay						
		9	10/12/4	"	"	"	"	- w/shells						
25		Bottom of Boring												

CONTINUED: ☐ YES ☒ NO

Project : VICTORIA SHIP CHANNEL, TEXAS

SUMMARY OF LABORATORY TEST RESULTS

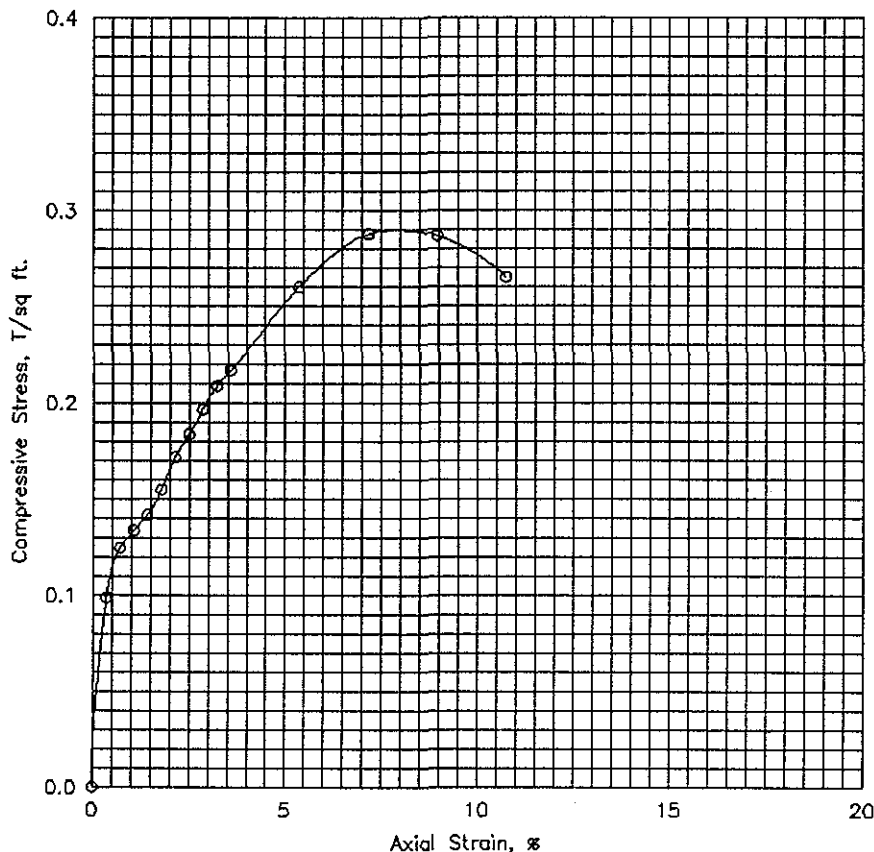
Boring No. 90-33

S #	Depth (ft)	P P (tsf)	SPT Blows per Foot	Visual Classification	U S C	M c (%)	Dry Unit Wt (pcf)	Wet Unit Wt (pcf)	LL (%)	P L (%)	Mechanical Analysis % Passing					Torvane Shear Strength (tsf)	q u (tsf)
											#4	#10	#40	#100	#200		
1	0 - 2			Dark gray, SILTY CLAY, very soft, slightly sandy, with shell fragments	CL	31.0											
2	2 - 4			Dark gray, SANDY CLAY, very soft, silty, with shell fragments	CL	29.8			21		98.6	97.3	94.6	91.3	62.0		
3	4 - 6	0.00		Dark gray, SILTY CLAY, very soft, with shell fragments	CL	47.2	74.2	105.4									
4	6 - 8	0.25		Gray and green (olive), SILTY CLAY, soft, with shell fragments	CL	29.5	90.7	117.5	47	21	98.9	98.1	96.8	96.3	89.7	0.25	0.29
5	8 - 10	0.00		Gray and green (olive), SILTY CLAY, very soft, with sand	CL						99.5	99.4	99.3	98.9	70.5		
6	10 - 11.5		2	Gray, SANDY CLAY, very soft, with shell fragments	CL	29.1	92.8	116.9	27	16	97.9	95.1	93.7	92.7	51.8		
7	15 - 16.5		12	Gray, CLAYEY SAND, medium dense	SC	25.2											
8	20 - 21.5		27	Gray, SILTY SAND, medium dense, with shell fragments and sand stone	S M						93.7	92.6	91.4	89.9	25.7		
9	23 - 24.5		26	Gray, SILTY SAND, medium dense, with shell fragments and sand stone	S M												

S # : Sample Number, P P : Pocket Penetrometer Reading, U S C : Unified Soil Classification, M c : Moisture Content

q u : Unconfined Compressive Strength, W O H : Weight of hammer, W O P : Weight of pipe

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.		1			
Type of Specimen		Undisturbed			
Initial	Water content	w_0	29.5 %	%	%
	Void ratio	e_0			
	Saturation	S_0	%	%	%
	Dry density, lb/cu ft	γ_d	90.7		
Time to failure, min		t_f	6.52		
Unconfined compressive strength, T/sq ft		q_u	.29		
Undrained shear strength, T/sq ft		S_u	.14		
Sensitivity ratio		S_t			
Initial specimen diameter, in.		D_0	2.800		
Initial specimen height, in.		H_0	5.590		
Classification Gray & green (olive), Silty CLAY, soft w/shell fragments					
LL	47	PL	21	PI	26
		G.			
Remarks		Project CHANNEL TO VICTORIA, TEXAS			
		Area Channel to Victoria in San Antonio Bay, Texas			
		Boring No. 90-33		Sample No. 4	
		Depth 6-8 ft		Date 7/23/90	
		UNCONFINED COMPRESSION TEST REPORT			