

U.S. ARMY CORPS OF ENGINEERS
GEOTECHNICAL BORING DATA

BEM

PROJECT NAME Victoria Ship Channel

LOG OF BORING NO. 90-34

LOCATION / STATION 70+00

DATE / TIME STARTED 06/15/90 9:30 am

DATE / TIME COMPLETED " " 10:30 "

TIDE ELEVATION +2.3' MLT DATUM

WATER DEPTH 2.75' 1.45'

DEPTH FROM WATER SURFACE
TO BOTTOM OF BORING 27.25'

WEATHER Clear & Sunny

DRILL RIG MANUFACTURE
MODEL NO. CF-5

DRILLER Dempsey Gearen
LOGGER Arisc Lazaridis

DRILLERS / LOGGERS COMMENTS —

DEPTH, FEET		SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	BORING NO. <u>90-34</u> DATE: BEGIN <u>06/15/90</u> COMPLETE <u>06/15/90</u>				JOB NO. <u>146404</u> LOGGER <u>Aris</u> PAGE <u>2 / 3</u>		PROJECT <u>Victoria Inlet Channel</u>	LOCATION/STATION/ELEVATION: <u>Sta. 70+00 / E.P. +2.3' M.L.T.</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	1/5 off	Gray	Silty	CLAY	- Disturbed sample; w/shells					
		2	0.0	"	"		"	"					
5		3	3.25	1/5 still	Gray & Tan		"	- 9" sample					
		4	1.50	5 off	"		"	-					
		5	1.75	"	"		"	- w/calcareous nodules of Gray and tan silty clay layer					
10		6	1.75	"	"		"	- w/calcareous nodules of tan sand layer; 9" sample					
		7	3/5/5	M/Dense	Gray & Yellowish	Clayey	SAND	-					
15		8	3/6/7	"	Yellowish		"	-					
20		9	12/20/21	Dense	Gray & Yellowish		"	- w/silty clay with shells layer					
25								Bottom of Boring					

CONTINUED: ☐ YES ☒ NO

Project : VICTORIA SHIP CHANNEL, TEXAS

SUMMARY OF LABORATORY TEST RESULTS

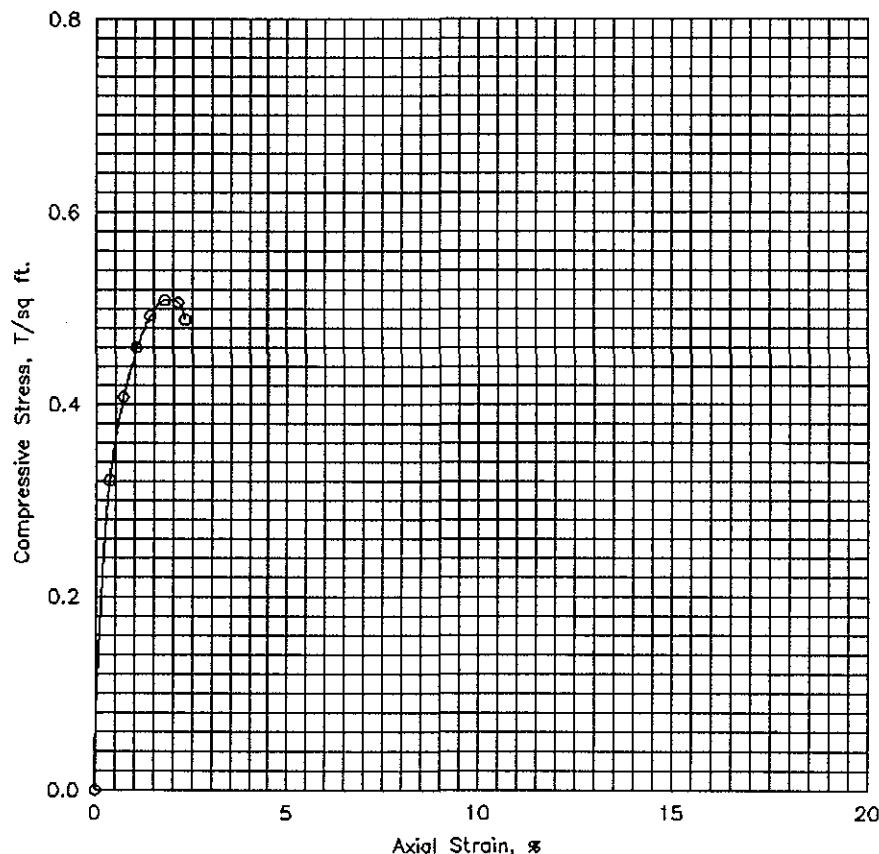
Boring No. 90-34

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)	L L (%)	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, with shell fragments	CL	36.6											
2	2 - 4			Dark Gray, CLAY, soft, with shell fragments, and calcareous nodules	CH	49.6			62		98.3	97.4	96.7	95.3	90.7		
3	4 - 6	1.50		Gray and brownish yellow, CLAY, stiff, with calcareous nodules	CH	34.5											
4	6 - 8	1.50		Gray and brownish yellow, CLAY, stiff, slickensided	CH	26.1	96.6	121.8	52		100.0	100.0	99.9	99.8	97.9	0.50	0.51
5	8 - 10	1.50		Gray and brownish yellow, CLAY, stiff, with calcareous nodules	CH	29.0											
6	10 - 12	1.75		Gray and brownish yellow, CLAY, stiff, with calcareous nodules, slickensided	CH	30.7	94.1	123.0	58		99.7	99.2	99.0	98.1	94.0		
7	12 - 13.5		10	Gray and yellowish, SAND, medium dense, with traces of clay	S P												
8	17 - 18.5		13	Yellow, SAND, medium dense	S P / S M						100.0	99.7	95.4	26.6	7.7		
9	23 - 24.5		41	Yellow, SAND, dense	S P												

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	26.1 %	%	%
	Void ratio	e_0			
	Saturation	S_0	%	%	%
	Dry density, lb/cu ft	γ_d	96.6		
Time to failure, min		t_f	1.70		
Unconfined compressive strength, T/sq ft		q_u	.51		
Undrained shear strength, T/sq ft		S_u	.25		
Sensitivity ratio		S_t			
Initial specimen diameter, in.		D_0	2.810		
Initial specimen height, in.		H_0	5.590		
Classification Gray and brownish yellow, CLAY, stiff, slickensided					
LL	52	PL		PI	G_s
Remarks		Project CHANNEL TO VICTORIA, TEXAS			
		Area Channel to Victoria in San Antonio Bay, Texas			
		Boring No. 90-34		Sample No. 4	
		Depth 6-8 ft		Date 7/23/90	
		UNCONFINED COMPRESSION TEST REPORT			