BKM

U.S. ARMY CORPS OF ENGINEERS
GEOTECHNICAL BORING DATA

PROJECT NAME Victoria Ship Channel

LOG OF BORING NO. 90-43

LOCATION / STATION 205+00

DATE / TIME STARTED [illegible] @ 4:40 pm
DATE / TIME COMPLETED " " 5:40 "

TIDE ELEVATION +2.50' MLT DATUM -1.5

WATER DEPTH 4.00'

DEPTH FROM WATER SURFACE TO BOTTOM OF BORING 27.50'

WEATHER [illegible]

DRILL RIG MANUFACTURE MODEL NO. CF-5

DRILLER Dempsey Geaver
LOGGER Aris Lazaridis

DRILLER'S / LOGGER'S COMMENTS —

BORING NO. 90-43 DATE: BEGIN 06/16/90 COMPLETE 06/16/90
JOB NO. 146404 LOGGER Aris PAGE 2 / 3
PROJECT Victoria Ship Channel
LOCATION/STATION/ELEVATION: Sta. 205+00 / El. +2.50' MLT

DEPTH: AUGERED _____ WASHED 23.5' CORED _____

GROUNDWATER READINGS

TIME	DEPTH	TIME	DEPTH	TIME	DEPTH
FIRST					

DEPTH, FEET	SAMPLE	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	CONSISTENCY	COLOR	MINOR	MAJOR	MODIFICATION
0		—	—	—	—	—	—	- No Recovery
		1	WOH	V/Loose	Gray	[illegible]	SILT	- w/ sand
5		2	WOH	"	"	"	"	- w/ sand
		3	1.50	Stiff	Gray & Tan		CLAY	- w/ calcareous nodules & Gray silty clay layer
		4	1.75	"	"		"	- w/ calcareous nodules
10		5	1.75	"	L/Gray & Tan		"	"
		6	1.75	"	"		"	- w/ calcareous nodules : 2.5' sample
15		7	3/4/3	Loose	L/Gray & [illegible]		SAND	—
20		8	5/5/5	"	L/Gray		"	- w/ little clay
		9	4/5/6	M/Dense	"		"	- w/ tan clay layer below 23'
25								Bottom of Boring

CONTNUED: ☐ YES ☒ NO

Project : VICTORIA SHIP CHANNEL, TEXAS

SUMMARY OF LABORATORY TEST RESULTS

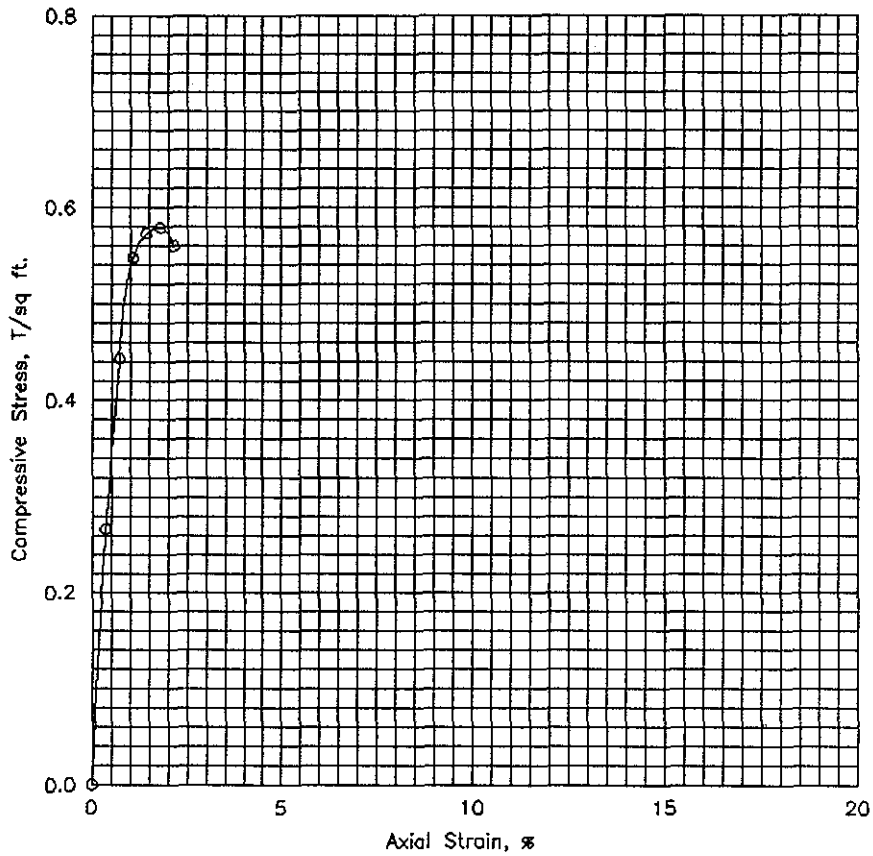
Boring No. 90-43

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 #4	#10	#40	#100	#200	Torvane Shear Strength (tsf)	q u (tsf)
1	2 - 3.5		WOH	Dark gray, SANDY CLAY, very soft, with shell fragments	CL	26.4											
2	4 - 5.5		WOH	Dark gray, CLAYEY SAND, very soft, with shell fragments	SC	32.8					99.8	99.3	98.3	66.9	44.0		
3	6 - 8	0.75		Gray and green (olive), SANDY CLAY, firm, with large calcareous nodules, blocky structure	CL	29.3											
4	8 - 10	1.50		Gray, CLAY, stiff, with sand, slickensided, blocky structure	CH	30.9	91.3	119.4	80		97.6	95.8	94.5	82.1	71.2		0.58
5	10 - 12	1.25		Light green & light brown, CLAY, stiff, with sand pockets & blocky structure, slickensided	CH	25.8											
6	12 - 14	2.50		Gray and yellowish brown, CLAY, very stiff, with calcareous nodules, blocky structure	CH	27.4											
7	14 - 15.5		7	Light green and light brown, CLAYEY SILTY SAND, loose	S M						100.0	99.8	98.8	55.5	32.3		
8	19 - 20.5		10	Dark gray and brown, SAND, loose, with shell fragments	S P												
9	22 - 23.5		11	Brown, SAND, medium 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

Job No. 14G404

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_0	30.9 %	%	%	%
	Void ratio	e_0				
	Saturation	S_0	%	%	%	%
	Dry density, lb/cu ft	γ_d	91.3			
Time to failure, min		t_f	1.73			
Unconfined compressive strength, T/sq ft		q_u	.58			
Undrained shear strength, T/sq ft		S_u	.29			
Sensitivity ratio		S_t				
Initial specimen diameter, in.		D_0	2.810			
Initial specimen height, in.		H_0	5.590			

Classification Gray, CLAY, stiff, slickensided, blocky structures

LL 80	PL	PI	G_s

Remarks

Project CHANNEL TO VICTORIA, TEXAS

Area Channel to Victoria in San Antonio Bay, Texas

Boring No. 90-43 | Sample No. 4

Depth El 8-10 ft | Date 7/30/90

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 3659

PLATE XI-2

Geotest Engineering, Inc.

PLATE