

U.S. ARMY CORPS OF ENGINEERS
GEOTECHNICAL BORING DATA

BKM

PROJECT NAME Victoria Ship Channel

LOG OF BORING NO. 90-63

LOCATION / STATION 500+00

DATE / TIME STARTED 06/19/90 2 8:55 am

DATE / TIME COMPLETED " " 9:30 "

TIDE ELEVATION + 2.00 MLT DATUM

WATER DEPTH 10.50 - 8.5

DEPTH FROM WATER SURFACE
TO BOTTOM OF BORING 27.00

WEATHER Clear & Sunny

DRILL RIG MANUFACTURE
MODEL NO. CF-5

DRILLER Dempsey Gowan
LOGGER Iraj Mostafaei

DRILLER'S / LOGGER'S COMMENTS —

DEPTH, FEET SAMPLE SAMPLE NO. PEN./TORVANE SPT.-BLOW COUNT		BORING NO. <u>90-63</u>		DATE: BEGIN <u>06/19/90</u>		COMPLETE <u>06/19/90</u>	
		JOB NO. <u>146404</u>		LOGGER <u>Inuj</u>		PAGE <u>213</u>	
		PROJECT <u>Victoria Ship Channel</u>					
		LOCATION/STATION/ELEVATION: <u>Sta. 500+20 / Elev. +2.00 M.T.</u>					
		DEPTH: AUGERED _____		WASHED <u>16.5'</u>		CORED _____	
		GROUNDWATER READINGS					
		TIME	DEPTH	TIME	DEPTH	TIME	DEPTH
		FIRST					
		CONSIS- TENCY	COLOR	MINOR	MAJOR	MODIFICATION	
0		1 0.75 Firm	Gray & Yellowish		CLAY	—	
		2 2.50 v/stiff	"		"	- w/ limestone	
5		3 3.00 "	"		"	"	
		4 2.75 "	"		"	- w/ limestone & sand	
		5 2.00 stiff	"	Silty	"	—	
10		6 3.00 v/stiff	Gray & Brown		"	- w/ shells	
		7 3.00 "	"		"	—	
15		8 3.00 "	"		"	- 8" sample	
		Bottom of Boring					
20							

 CONTINUED: ☐ YES ☒ NO

Project : CHANNEL TO VICTORIA
VICTORIA, TEXAS

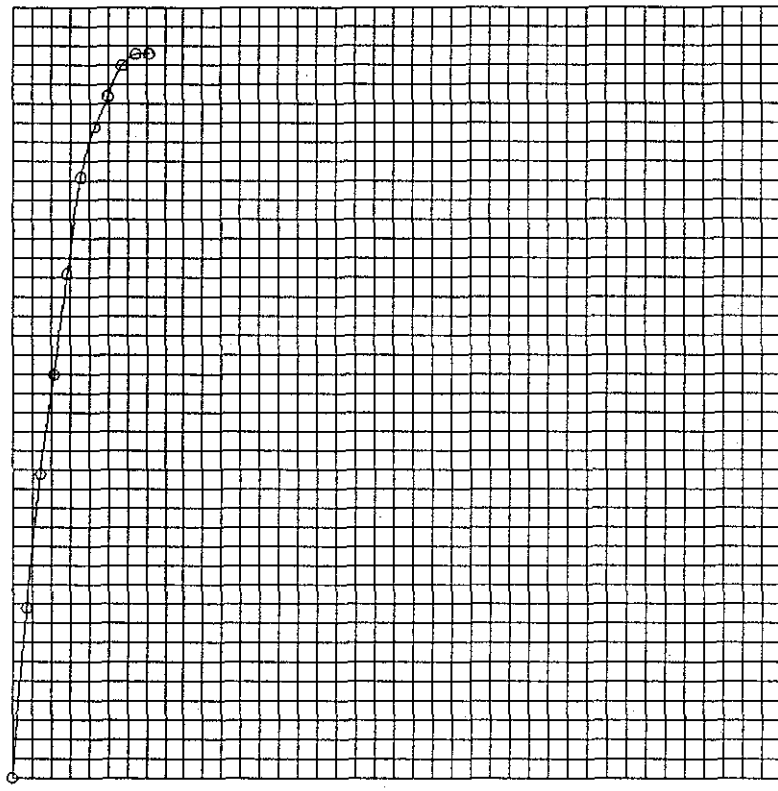
SUMMARY OF LABORATORY TEST RESULTS

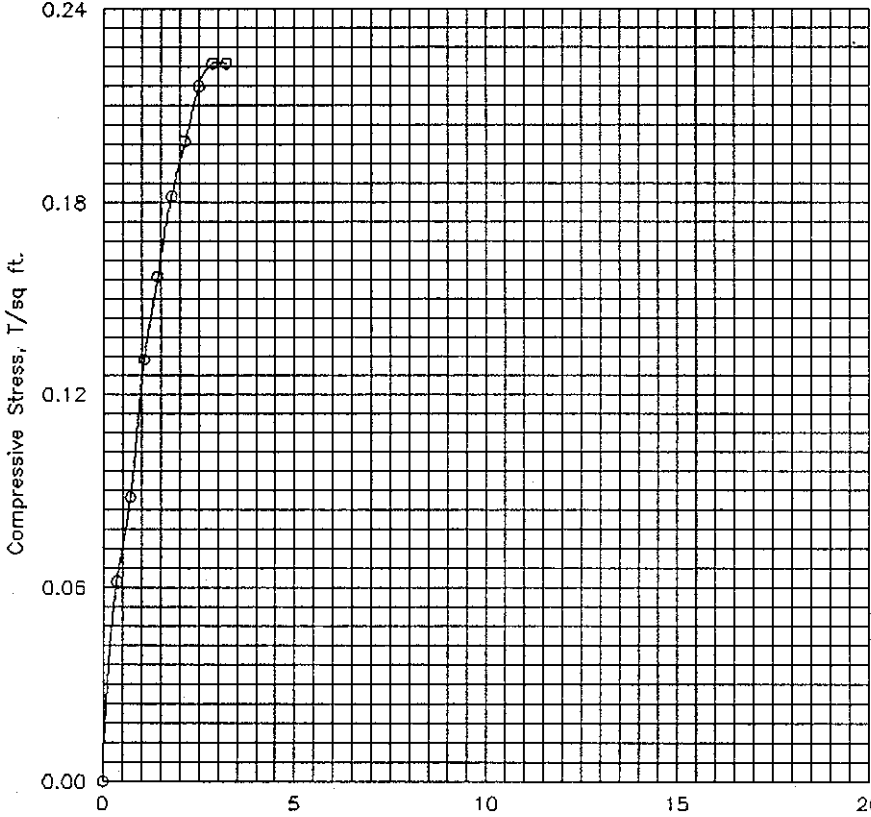
Boring No. 90-63

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	0.50		Gray and yellowish blue, SANDY CLAY, firm, with calcareous nodules	CL	21.5											
2	2 - 4	1.50		Gray and yellowish blue, SANDY CLAY, stiff, with large calcareous nodules	CL	20.6	106.6	128.6	27	14	98.2	96.2	95.4	93.1	63.8	0.45	0.19
3	4 - 6	0.75		Gray and yellowish blue, SANDY CLAY, firm, with large calcareous nodules	CL	21.9											
4	6 - 8	2.50		Gray and yellowish blue, SANDY CLAY, very stiff, with large calcareous nodules	CL	23.4											
5	8 - 10	1.25		Gray and green, SANDY CLAY, stiff, with silty clay pockets, blocky structure	CL	23.2	102.8	162.4	31	16	100.0	99.9	99.9	98.5	64.5		0.22
6	10 - 12	1.75		Gray and brown, SANDY CLAY, stiff, with silt pockets	CL	23.4											
7	12 - 14	3.00		Gray and brown, SANDY CLAY, very stiff, with silt pockets, slickensided	CL												
8	14.5-16.5	3.00		Gray and brown, SANDY CLAY, very stiff, with silt pockets	CL	24.0											

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		Compressive Stress, T/sq ft.		Axial Strain, %	
					
☐ Controlled stress ☒ Controlled strain					
Test No.		1			
Type of Specimen		Undisturbed			
Initial	Water content	w_0	20.6 %	%	%
	Void ratio	e_0			
	Saturation	S_0	%	%	%
	Dry density, lb/cu ft	γ_d	106.6		
Time to failure, min		t_f	2.92		
Unconfined compressive strength, T/sq ft		q_u	.19		
Undrained shear strength, T/sq ft		S_u	.09		
Sensitivity ratio		S_t			
Initial specimen diameter, in.		D_0	2.825		
Initial specimen height, in.		H_0	5.590		
Classification Gray and bluish yellow, SANDY CLAY, stiff, with large calcareous nodules					
LL	27	PL	14	PI	13
Remarks		G.			
		Project CHANNEL TO VICTORIA, TEXAS			
		Area Channel to Victoria in San Antonio Bay, Texas			
		Boring No. 90-63		Sample No. 2	
		Depth 2-4 ft		Date 8/1/90	
UNCONFINED COMPRESSION TEST REPORT					

Failure Sketches		Compressive Stress, T/sq ft.		Axial Strain, %	
					
		☐ Controlled stress ☒ Controlled strain			
Test No.		1			
Type of Specimen		Undisturbed			
Initial	Water content	w_0	23.2 %	%	%
	Void ratio	e_0			
	Saturation	S_0	%	%	%
	Dry density, lb/cu ft	γ_d	102.8		
Time to failure, min		t_f	2.63		
Unconfined compressive strength, T/sq ft		q_u	.22		
Undrained shear strength, T/sq ft		S_u	.11		
Sensitivity ratio		S_t			
Initial specimen diameter, in.		D_0	2.825		
Initial specimen height, in.		H_0	5.590		
Classification Gray and green, Sandy CLAY, stiff, with sand pockets					
LL	31	PL	16	PI	15
Remarks		Project CHANNEL TO VICTORIA, TEXAS Area Channel to Victoria in San Antonio Bay, Texas Boring No. 90-63 Sample No. 5 Depth 8-10 ft Date 8/1/90 El.			
UNCONFINED COMPRESSION TEST REPORT					