U.S. ARMY CORPS OF ENGINEERS

BORING NO. 98-80 DATE: BEGIN 7-14-98 PAGE 2 of 3
JOB NO. 1140086157 COMPLETE 7-14-98 Thin Walled Tube
PROJECT Greens Bayou ■ 3" □ 6"
LOCATION along Green's Bayou
ELEVATION OF HOLE
MANUFACTURER'S DESIGNATION OF DRILL RIG FAILING-36
GROUNDWATER: DEPTH * ft., ELEV. ____ ft., at end of Drilling
WEATHER PARTLY CLOUDY SUNNY & VERY HOT
DRILLER DEMPSEY GEARREN LOGGER JOHN A GENTRY

DEPTH, FEET	SAMPLE	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
35								
		18	4.5+	RED	CLAY	HARD		
		19	4.5+	RED	CLAY	HARD		
40		20	4.25	RED	CLAY	HARD		-W/ GRAY SILT LAYER 41'-42'
		21	3.75	BROWN + GRAY	CLAY	VERY STIFF		-W/ SAND SEAMS 42'-44'
45		22	3.0	BROWN + GRAY	CLAY	VERY STIFF	SANDY	
		23	3.75	BROWN + GRAY	CLAY	VERY STIFF	SANDY	
	J	24		BROWN	SAND	DENSE	SILTY	
50	X	25	5 13	BROWN	SAND	DENSE	SILTY	-W/ SAND STONE 50'-52'
55	X	26	15 38 50	BROWN + GRAY	SAND	VERY DENSE	SILTY	
	X	27	12 44 27	BROWN	SAND	VERY DENSE	SILTY	
60								* Drilling Fluid level after drilling @ 2'
65								
70								*J = JAR SAMPLE

Seive Analy

GEOTEST ENGINEERING, INC.

U.S. ARMY CORPS OF ENGINEERS

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PROJECT Greens Bayou ■ 3" □ 6"
LOCATION along Greens Bayou
ELEVATION OF HOLE
MANUFACTURER'S DESIGNATION OF DRILL RIG FAILING-36
GROUNDWATER: DEPTH ✗ ft., ELEV. ____ ft., at end of Drilling
WEATHER PARTLY CLOUDY & SUNNY + VERY HOT
DRILLER DEMPSEY GEARER LOGGER JOHN A. GENTRY

DEPTH, FEET	SAMPLE	SAMPLE NO.	PEN./TORVANE / SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0	J	1	4.25	BROWN	CLAY	HARD	SANDY	-w/ROOTS 0'-4 VERY DRY 0'-4
		2	4.5+	GRAY	CLAY	HARD	SANDY	-w/SAND ON BOTTOM OF SAMPLE 4ft
5 (Seive analysis)	X	3	3.6s	GRAY	SAND	MEDIUM DENSE	CLAY	
		4	3.0	GRAY	CLAY	VERY STIFF	SANDY	
10 (Direct shear)		5	3.0	GRAY	CLAY	VERY STIFF	SANDY	
		6	2.5	GRAY	CLAY	VERY STIFF	SANDY	-w/FERROUS NODULES 12-16'
15		7	1.5	GRAY	CLAY	STIFF	SANDY	
		8	3.0	GRAY + BROWN	CLAY	VERY STIFF	SANDY	-w/CLAY SEAMS 17-18'
		9	3.25	RED + GRAY	CLAY	VERY STIFF		-w/SAND SEAMS 18-22 -w/SLICKEN SIDES 18-30
20 (Qtest slickensided)		10	4.25	RED + GRAY	CLAY	HARD		SET UP WET ROTARY @ 22'
		11	4.5+	RED + GRAY	CLAY	HARD		-w/SILT SEAMS 22-26' -w/Calcareous Nodules 21-32
25		12	4.5+	RED + GRAY	CLAY	HARD		
		13	4.5+	RED + GRAY	CLAY	HARD		
		14	4.5+	RED + GRAY	CLAY	HARD		
30		15	4.5+	Red & Gray	Clay	Hard		
		16	2.00	Red & Gray	Clay	V. Stiff	SILTY	
		16A	4.25	RED	CLAY	HARD		
35		17	4.5+	RED	CLAY	HARD		

GEOTEST ENGINEERING, INC.

JOB NO. 114008614 DATE 2/26/98

PROJECT Greens Bayou

EA Houston, Texas

BORING NO. 97-80 SAMPLE NO. 3 DEPTH 4-6 ft

SPECIMEN NO. 1

CLASSIFICATION
Sandy Clay,w/fer nod & sand seams,Stiff,Gray

Tare No.	W16	Height	5.595 in.
Tare plus Wet Specimen	459.70 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	388.10 gm	Initial Area	6.290 sq in.
Water Weight	71.60 gm	Volume	35.194 cu in.
Tare Weight	42.54 gm	Volume of Solids	cu in.
Wet Specimen	1146.88 gm	Void Ratio	
Dry Specimen	950.03 gm	Saturation	%
Water Content	20.72 %	Dry Density	102.8 lb/cu ft

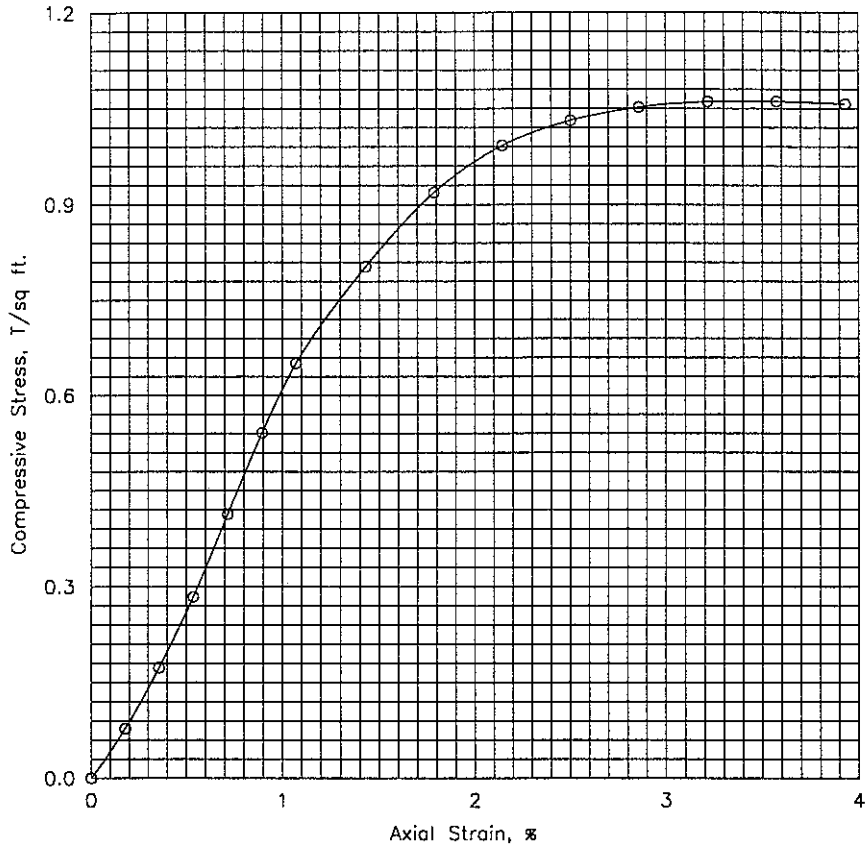
Specific Gravity of Solids
LL = 24 PL = 15 PI = 9

Proving Ring No. 10170
Proving Ring Constant, K = .757 lbs/div.

apsed ſime min.	Dial Reading 0.001"	Cumulative Change in.	Proving Ring Dial Reading	Axial Load lb	Axial Strain	Area Corr. sq in.	Compr. Stress tsf
.0	0.	.000	.0	.0	.000	6.29	.000
.2	10.	.010	9.0	6.8	.002	6.30	.078
.3	20.	.020	20.0	15.1	.004	6.31	.173
.5	30.	.030	33.0	25.0	.005	6.32	.284
.7	40.	.040	48.0	36.3	.007	6.34	.413
.9	50.	.050	63.0	47.7	.009	6.35	.541
1.0	60.	.060	76.0	57.5	.011	6.36	.651
1.4	80.	.080	94.0	71.2	.014	6.38	.803
1.7	100.	.100	108.0	81.8	.018	6.40	.919
2.0	120.	.120	117.0	88.6	.021	6.43	.992
2.3	140.	.140	122.0	92.4	.025	6.45	1.031
2.6	160.	.160	125.0	94.6	.029	6.48	1.052
3.0	180.	.180	126.5	95.8	.032	6.50	1.061
3.3	200.	.200	127.0	96.1	.036	6.52	1.061
3.6	220.	.220	127.0	96.1	.039	6.55	1.057

Job No. 114008614

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_0	20.7 %	%	%	%
	Void ratio	e_0				
	Saturation	S_0	%	%	%	%
	Dry density, lb/cu ft	γ_d	102.8			
Time to failure, min		t_f	3.28			
Unconfined compressive strength, T/sq ft		q_u	1.06			
Undrained shear strength, T/sq ft		S_u	.53			
Sensitivity ratio		S_t				
Initial specimen diameter, in.		D_0	2.830			
Initial specimen height, in.		H_0	5.595			

Classification Sandy Clay,w/fer nod & sand seams,Stiff,Gray

LL	24	PL	15	PI	9	G_s	

Remarks

Project Greens Bayou

Area Houston, Texas

Boring No. 97-80 | Sample No. 3

Depth El 4-6 ft | Date 2/26/98

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 3659

PLATE XI-2

Geotest Engineering, Inc.