29 NV

BORING LOG
FIELD DATA

Project HARBOR ISLAND, PORT ARANSAS, TEXAS Location 2,496,292; 776,031 Date 2 JUNE 1974
Drill Rig FAILING 1500 Inspector LANGFORD Operator YOUNGEN Surface elev
Levee District GALVESTON Job No. Boring No. 74-130

SAMPLE NUMBER	DATE TAKEN 1974	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	CONTAINER	POCKET PENETROMETER VALUE	CLASSIFICATION AND REMARKS
	2 JUNE	0,0	60,5								WATER DEPTH 1515 HOURS
				0,0	3,0			3" BOSTERBURG	—		NO RECOVERY, GRAY SANDY CLAY, VERY SOFT.
1				3,0	6,5	3,0	4,5		TUBE	0,25	VANE SHEAR, 0,07,
			9,8			4,5	6,0		TUBE		
2		9,8		6,5	10,0	8,0	10,0	DRIVE SAMPLER	JAR		GRAY CLAYEY SAND, WEIGHT OF RODS PUSHED TO 10,0'
			13,0	10,0	13,0						WASHED.
3		13,0		13,0	13,5	13,6	15,0		JAR		GRAY SILTY FINE SAND, DENSE
				13,5	14,0						9 BLOWS
				14,0	14,5						13 BLOWS
				14,5	15,0						
				15,0	18,0						WASHED
4				18,0	18,5	18,6	20,0		JAR		WITH SHELL,
				18,5	19,0						9 BLOWS
				19,0	19,5						16 BLOWS
				19,5	20,0						

WES FORM NO. 819 REV NOV 1971 PREVIOUS EDITION IS OBSOLETE

Sheet 1 of 3 Sheets

Boring No. 74-130
Levee District GALVESTON
Job No.

LABORATORY DATA

Date Classified by

CLASSIFICATION	SYMBOL	NAT WC %

BORING LOG
FIELD DATA

Project HARBOR ISLAND, PORT ARANSAS, TEXAS Location _____ Date _____
Drill Rig _____ Inspector _____ Operator _____ Surface elev _____
Levee District _____ Job No. _____ Boring No. 74-130

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	CONTAINER	POCKET PENETROMETER VALUE	CLASSIFICATION AND REMARKS
			23.0	20.0	23.0						WASHED
5		23.0		23.0	23.5	23.3	25.0		JAR		GRAY SANDY CLAY, SOFT
				23.5	24.0						5 BLOWS
				24.0	24.5						6 BLOWS
				24.5	25.0						
				25.0	28.0			3" SHELBY TUBE			WASHED
				28.0	30.0	—	—		—		DID NOT RECOVER SAMPLE.
				28.0	29.5	-	—	DRIVE SAMPLER	-		WASHED ACCIDENTALLY,
6				29.5	30.0	30.0	31.5		JAR		WITH SHELL.
				30.0	30.5						21 BLOWS
			31.0	30.5	31.0						23 BLOWS
		31.0		31.0	31.5						GRAY FINE-MEDIUM QUARTZITIC SAND.
			34.0	31.5	34.0						WASHED

WES FORM NO. 819 REV NOV 1971 PREVIOUS EDITION IS OBSOLETE

Sheet 2 of 3 Sheets

Boring No. 74-130
Levee District GALVESTON
Job No. _____

LABORATORY DATA

Date _____ Classified by _____

CLASSIFICATION	SYMBOL	NAT WC %

BORING LOG
FIELD DATA

Project HARBOR ISLAND, PORT ARANSAS, TEXAS Location _____ Date _____
Drill Rig _____ Inspector _____ Operator _____ Surface elev _____
Levee District _____ Job No. _____ Boring No. 74-130

SAMPLE NUMBER	DATE TAKEN	STRATUM FROM	STRATUM TO	DRIVE FROM	DRIVE TO	SAMPLE FROM	SAMPLE TO	TYPE OF SAMPLER	CONTAINER	POCKET PENETROMETER VALUE	CLASSIFICATION AND REMARKS
7		34.0	34.8	34.0	34.5	34.0	34.8		JAR	3.50	GREEN SANDY CLAY, VERY STIFF.
				34.5	35.0						26 BLOWS
				35.0	35.5						31 BLOWS.
		34.8		35.5	36.0						GREEN, GRAY FINE SAND.
				36.0	40.0						
8				40.0	40.5				JAR		
				40.5	41.0						26 BLOWS
				41.0	41.5						34 BLOWS.
			42.0	41.5	42.0						
											TOTAL DEPTH 42.0
											TOTAL DEPTH 102.5

WES FORM NO. 819 REV NOV 1971 PREVIOUS EDITION IS OBSOLETE

Sheet 3 of 3 Sheets

Boring No. 74-130
Levee District GALVESTON
Job No. _____

LABORATORY DATA

Date _____ Classified by _____

CLASSIFICATION	SYMBOL	NAT WC %

12 July 1971

GDLR NO 1475

PROJECT: HARBOR ISLAND, PORT ARANSAS, TEXAS

BORING NO. 74-130

TEST DATA SUMMARY

LOCATION: 2,496,292; 776,031

DATE COMPLETED 2 June 1974

FIELD NO.	Sample Depth, Feet From	To	CLASSIFICATION ELEVATION TOP BORING _____	SYMBOL	CONSISTENCY	POCKET (1) PENETROMETER	STAN. PENET. BLOWS/FT (2)	MOISTURE CONTENT %	DRY DENSITY p. c. f.	L.L.	P.L.	Lab 74 Sample No.	BAR L.S.	SIEVE ANALYSIS PERCENT GRVL	SAND	FINES	INIT. WT.	ACC. WT. RTND. SIEVE NO. (3) NO. 4	NO. 10	NO. 40	NO. 200
	0.0	60.5	WATER									X									
1C	3.0	4.5	Brown to Gray Clay 0'-13'	CL	S	0.25		55	70	39	17	1769		0	12	88	50	0	0	0	6
+ 2J	8.0	10.0	sand pockets 3'-4.5' & sandy 8'-10'		VS	0.0		41		48	18	1770		0	28	72	50	0	0	0	14
3J	13.6	15.0	Gray Sandy Silt w/shell fragments 13'-18'	ML	M		22	50				1771	0	0	14	86	50	0	0	0	7
4J	18.6	20.0	Gray Clayey Sand 18'-30'	SC	M		25	25				1772	8	0	56	44	50	0	0	0	28
5J	23.3	25.0	shell fragments & clay seams 18.6'-20' & sand layers 23.3-25'		M		11	32		51	25	1773		0	76	24	50	0	1	4	38
6J	30.0	31.5	Gray Clay 30'-34'	CL	D		41	39				1774	5	0	4	96	50	0	0	0	2
7J	34.0	34.8	Gray Clayey Sand 34'-34.8'	SC	VD		56	23		18	17	1775		0	68	32	50	0	1	2	34
8J	40.5	41.5	Gray Sandy Silt 34.8'-42'	ML	VD		60	25				1776	0	0	42	58	50	0	0	0	21
+ 1A	4.5	6.0	Brown Gray Clay w/sand pockets 4.5'-6.0'	SC	S	0.25		23	*	41	16	1769A		0	86	14	50	0	0	0	43

* Disturbed

KEY: CONSISTENCY — COHESIVE SOILS: VS Very Soft, S Soft, M Medium, ST Stiff, VST Very Stiff, H Hard; CONSISTENCY — COHESIONLESS SOILS: VL Very Loose, L Loose, M Medium, D Dense, VD Very Dense

(1) Tons/Sq.Ft. Unconfined Compressive Strength
(2) Split Barrel Sampler
(3) Acc. Wt. Rtnd ÷ Init. Wt. x 100 = % Rtnd.

BORING NO. 74-130

Bottomed at 42.0' Water at _____ Tide Reading _____

Sheet 1 of sheets 1

1975

UNCONFINED COMPRESSION TEST

DATE: 12/12/72

PROJECT: AC. Ext. Ch. Harbor Is.

EXCAVATION NUMBER: 74-130

SAMPLE NUMBER: C-1 (3.0-4.5)

PROVING RING DIAL NUMBER:

PROVING RING NUMBER:

CALIBRATION CURVE NUMBER:

PROVING RING CONSTANT, K_r:

Cyl #3

RATE OF LOAD APPLICATION: 0°040

FORMULAS

Area $= \frac{\pi D^2}{4} = \frac{C^2 D}{4}$ Corrected Area, $A = \frac{A_o \text{ (sq. ft.)}}{1 - E}$ Unit Strain, $E = \frac{\Delta L}{L_o}$ Unit Stress $= \frac{\text{P (lb.)}}{\text{A (sq. ft.)}}$

INITIAL MEASUREMENTS ON SAMPLE

	DIAMETER, D (in.)	CIRCUMFERENCE, C (in.)	AREA (sq. in.)
TOP			
CENTER			
BOTTOM			

AVERAGE AREA, A_o: SQ. IN. | SQ. FT.

HEIGHT, L_o (in.)

ELAPSED TIME (min.)	PROVING RING DIAL READING (0.0001 in.)	LOAD, P (lb.) (Ring Dial x K_r, or from calibration curve)	VERTICAL DIAL READING (in.)	VERTICAL DIAL DIFFERENCE, ΔL (in.)	UNIT STRAIN, E (in./in.)	CORRECTED AREA, A (sq. ft.)	UNIT STRESS (lb./sq. ft.)
	2		025		.625	301	28
	3		050		1.25	3.03	41
	5		075		1.87	3.05	68
	6		100		2.50	3.06	82
	7		125		3.13	3.09	95
	8		150		3.75	3.11	107
	9		175		4.38	3.13	120
	9		200		5.00	3.15	119
	10		225		5.63	3.17	132
	10		250		6.25	3.19	131
	11		275		6.88	3.21	143
	11		300		7.50	3.23	142
	12		325		8.13	3.25	154
	12		350		8.75	3.28	153
	13		375		9.38	3.30	165
	13		400		10.00	3.32	164
	13		425		10.63	3.34	163
	14		450		11.25	3.37	173
	14		475		11.88	3.39	172
	14		500		12.50	3.42	171
	14				13.13	3.44	170

WATER CONTENT (%)

W.W. in Cyl #3 420 53%

UNCONFINED COMPRESSIVE STRENGTH, q_u (lb./sq. ft.)

REMARKS AND CALCULATIONS (Use reverse side, if more space is needed)

Pen - 0.0
Color - Dk Gray
Dish - 291
W.W. - 321
D.W. - 210

large silt pocket (1" x diam) few yards

TECHNICIAN (Signature)

COMPUTED BY (Signature)

CHECKED BY (Signature)

DD FORM 1 AUG 57 1213

Mat #8 - Loose

GPO 931154

1975

UNCONFINED COMPRESSION TEST

DATE: 12/12/74

PROJECT: C.C. Ent. Ch. Hayden Is.

EXCAVATION NUMBER: 74-130

SAMPLE NUMBER: C-1 (3.0-4.5)

PROVING RING DIAL NUMBER:

PROVING RING NUMBER:

CALIBRATION CURVE NUMBER:

PROVING RING CONSTANT, K_r:

Cyl #3

RATE OF LOAD APPLICATION: 0.040

FORMULAS

$$\text{Area} = \frac{\pi D^2}{4} = \frac{C^2 D}{4} \qquad \text{Corrected Area, } A = \frac{A_o \text{ (sq. ft.)}}{1 - E} \qquad \text{Unit Strain, } E = \frac{\Delta L}{L_o} \qquad \text{Unit Stress} = \frac{P \text{ (lb.)}}{A \text{ (sq. ft.)}}$$

INITIAL MEASUREMENTS ON SAMPLE

	DIAMETER, D (in.)	CIRCUMFERENCE, C (in.)	AREA (sq. in.)
TOP			
CENTER			
BOTTOM			

AVERAGE AREA, A_o: SQ. IN. | SQ. FT.

HEIGHT, L_o (in.)

ELAPSED TIME (min.)	PROVING RING DIAL READING (0.0001 in.)	LOAD, P (lb.) (Ring Dial x K_r, or from calibration curve)	VERTICAL DIAL READING (in.)	VERTICAL DIAL DIFFERENCE, ΔL (in.)	UNIT STRAIN, E (in./in.)	CORRECTED AREA, A (sq. ft.)	UNIT STRESS (lb./sq. ft.)
	2		025		.625	3.01	28
	3		050		1.25	3.03	41
	5		075		1.87	3.05	68
	6		100		2.50	3.06	82
	7		125		3.13	3.09	95
	8		150		3.75	3.11	107
	9		175		4.38	3.13	120
	9		200		5.00	3.15	119
	10		225		5.63	3.17	132
	10		250		6.25	3.19	131
	11		275		6.88	3.21	143
	11		300		7.50	3.23	142
	12		325		8.13	3.25	154
	12		350		8.75	3.28	153
	13		375		9.38	3.30	165
	13		400		10.00	3.32	164
	13		425		10.63	3.34	163
	14		450		11.25	3.37	173
	14		475		11.88	3.39	172
	14		500		12.50	3.42	171
	14				13.13	3.44	170

WATER CONTENT (%)

W.W. in Cyl #3 420 53%

UNCONFINED COMPRESSIVE STRENGTH, q_u (lb./sq. ft.)

REMARKS AND CALCULATIONS (Use reverse side, if more space is needed)

Pen - 0.0
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W.W. - 321
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large silt pocket (1" x diam) few yards

TECHNICIAN (Signature)

COMPUTED BY (Signature)

CHECKED BY (Signature)

DD FORM 1 AUG 57 1213

No. #8 - Loose

GPO 931154

331

SIEVE ANALYSIS

Date 1.22.75

Project Corpus Christi 74-124

Boring No. 74-130 Sample No. 3 (13.6-15.0)

ML

Test No Good

Total wt in grams of sample, W_s = 217 | Wt in grams of material > No. 4 sieve =

Sieve Openings		U. S. Standard Sieve Size or Number	Weight Retained in grams	Percent Retained		Percent Finer by Weight
Inches	Millimeters			Partial	Total	
3.00		3-in.				
2.00		2-in.				
1.50		1-1/2-in.				
1.00	25.4	1-in.				
0.750	19.1	3/4-in.				
0.500	12.7	1/2-in.				
0.375	9.52	3/8-in.				
0.250	6.35	[illegible]				
0.187	4.76	No. 4	0		0	100
		Pan				
0.132	3.36	[illegible]				
0.094	2.38	[illegible]				
0.079	2.00	No. 10	5 4		2	98
0.047	1.19	[illegible]				
0.033	0.84	No. 20	11		5	95
0.023	0.59	[illegible]				
0.0165	0.42	No. 40	14		7	93
0.0117	0.297	No. 50	15		7	93
0.0083	0.210	No. 70	17		7	93
0.0059	0.149	No. 100	23		11	89
0.0041	0.105	No. 140	123		56	44
0.0029	0.074	No. 200	157		77	23
		Pan			100	0
Total weight in grams						

Partial percent retained = $\frac{\text{wt in grams retained on a sieve}}{\text{wt in grams of sample used for a given series of sieves}} \times 100$

Total percent retained = $\frac{\text{wt in grams retained on a sieve}}{\text{total wt in grams of oven-dry sample}} \times 100$

For an individual sieve, the percent finer by weight = percent finer than next larger sieve - percent retained on individual sieve

Remarks

Technician W Computed by W Checked by

ENG FORM 1 JUN 65 3841

PLATE V-1