

Project No. 03-859-030

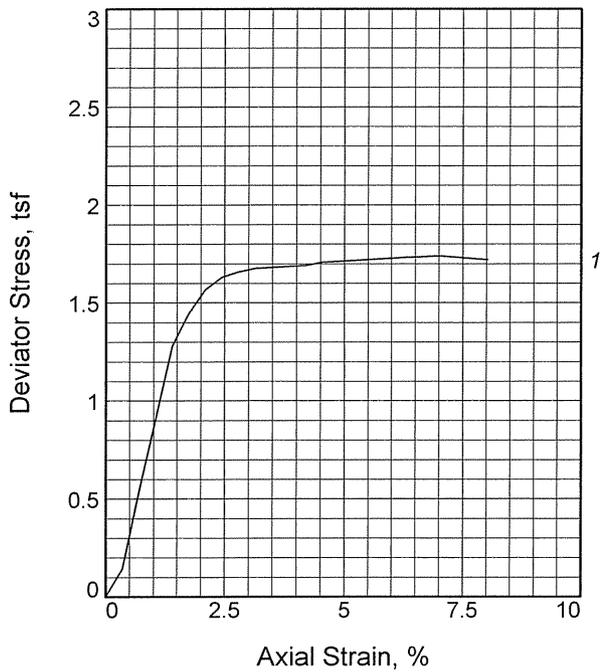
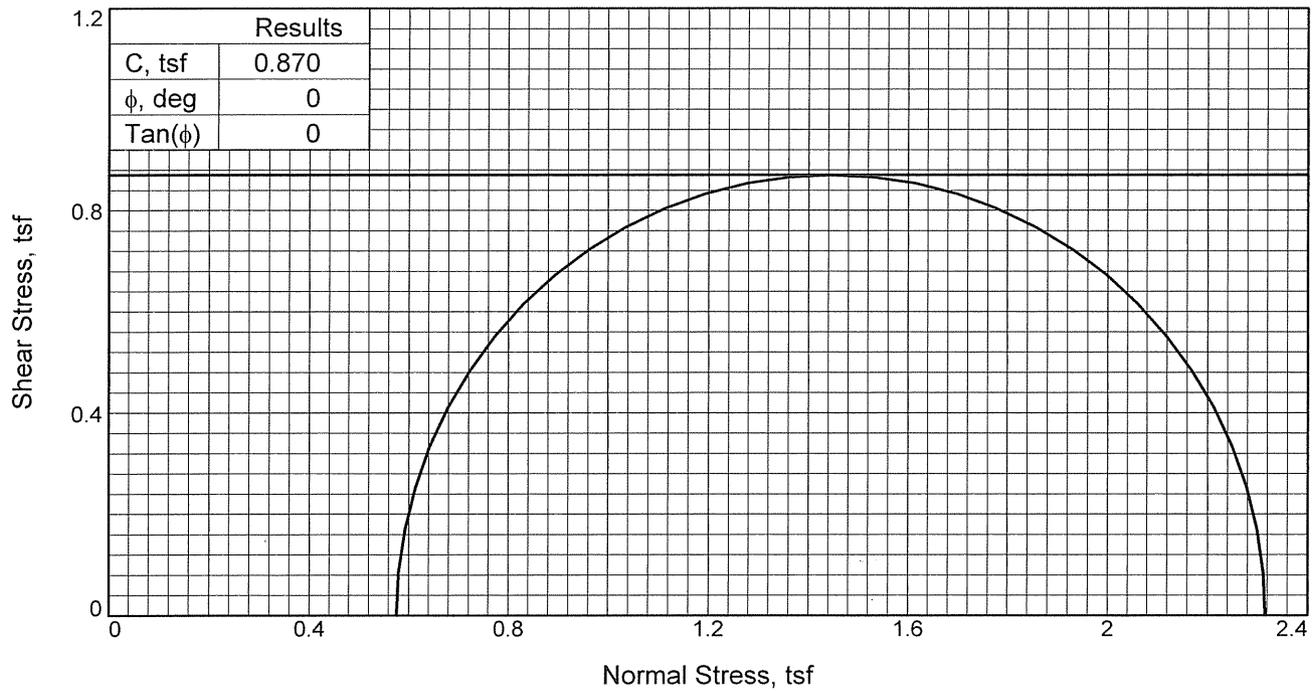
Client: United States Army Corps of Engineers

Project: Corpus Christi Ship Channel Improvements - LaQuinta Extension; Contract DACW64-03-D-0008; Delivery Order 0030

Boring No.	Depth (feet)	Soil Description	USCS	Water Content (%)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plast. Index	Finer than #200 Sieve (%)	Uc/UU. Compr. (tsf)	Cell Press. (psi)	Failure Strain (%)	Failure Type
	16-18	Tan and light gray FAT CLAY	CH	29.5		91	25	66	99.7				
	18.5-20	Light gray and tan SILTY SAND	SM	13.8					34.6				
04-181													
	3.5-5	Gray SILTY SAND	SM	27.5									
	8.5-10	Gray and tan SILTY SAND	SM	31.3					46.7				
	13.5-15	Gray and tan SILTY SAND	SM	29.6		23	23	NP					
	18.5-20	Gray and tan SILTY SAND	SM	29.1									
04-182													
	0-1.5	Gray CLAYEY SAND; few shells	SC	24.4					24.7				
	8-10	FAT CLAY with SAND	CH	22.8	105.3	61	20	41	80.3				
	10-12	Tan FAT CLAY; traces of calcareous nodules	CH	21.9									
	12-14	Tan and light gray FAT CLAY with SAND	CH	21.7		74	24	50	81.9				
	14-16	Tan and light gray FAT CLAY	CH	22.7									
	16-18	Tan FAT CLAY	CH	19.6		62	21	41					
04-183													
	0-1.5	Gray and tan FAT CLAY	CH	33.6									
	2-4	Tan and gray FAT CLAY	CH	36.6	86.5	66	20	46	99.1	1.48	10	6.0	bulge/vertical
	4-6	Tan and light gray FAT CLAY, slickenside	CH	32.4									
	6-8	Tan and light gray FAT CLAY; few calcareous nodules	CH	17.1									
	8-10	Tan and light gray SANDY LEAN CLAY	CL	18.0		42	17	25	59.9				
	10-12	Tan and light gray SANDY LEAN CLAY	CL	21.5									
	14-16	Light gray and tan FAT CLAY with SAND; and traces of calcareous and ferrous nodules	CH	19.4									
	16-18	Light gray and tan SANDY LEAN CLAY	CL	16.6									
04-184													
	0-2	Dark gray FAT CLAY with SAND	CH	26.1	93.5	59	21	38	73.6	1.74	8	7.0	multi shear
	2-4	Dark gray FAT CLAY	CH	22.7									
	4-6	Dark gray and tan FAT CLAY	CH	22.2									
	6-8	Tan and light gray LEAN CLAY	CL	20.4		46	17	29	97.0				
	8-10	Light gray and tan LEAN CLAY; few calcareous nodules	CL	18.5									
04-185													
	0-2	Dark gray LEAN CLAY with SAND; some roots	CL	15.6									
	2-4	Gray LEAN CLAY with SAND; traces of calcareous nodules	CL	14.0									
	4-6	Light gray and tan LEAN CLAY with SAND; traces of calcareous nodules	CL	15.4									
	6-8	Light gray and tan LEAN CLAY with SAND; traces of calcareous nodules	CL	15.4									
	8-10	Tan and light gray LEAN CLAY with SAND	CL	13.8									
	10-12	Light gray and tan LEAN CLAY with SAND; traces of ferrous nodules	CL	13.7									
04-186													
	0-2	Dark gray FAT CLAY with SAND	CH	30.6	92.2	65	21	44	71.2				
	2-4	Dark gray FAT CLAY	CH	30.5		57	22	35					

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Sample No.		1
Initial	Water Content,	26.1
	Dry Density, pcf	93.5
	Saturation,	85.9
	Void Ratio	0.8364
	Diameter, in.	2.80
At Test	Height, in.	5.72
	Water Content,	26.1
	Dry Density, pcf	93.5
	Saturation,	85.9
	Void Ratio	0.8364
Diameter, in.		2.80
Height, in.		5.72
Strain at peak, %		7.0
Back Pressure, tsf		0.00
Cell Pressure, tsf		0.58
Fail. Stress, tsf		1.74
Ult. Stress, tsf		1.74
σ_1 Failure, tsf		2.32
σ_3 Failure, tsf		0.58

Type of Test:

Unconsolidated Undrained

Sample Type: Undisturbed

Description: Dark gray FAT CLAY with SAND

LL= 59

PL= 21

PI= 38

Specific Gravity= 2.75

Remarks:

Pocket Pen, tsf: 4.00

Failure Type: Multiple shear

Test Method: ASTM D 2850

Figure C-6

Client: United States Army Corps of Engineers

Project: Corpus Christi Ship Channel Improvements - LaQuinta Extension

Source of Sample: 04-184

Depth: 0-2

Proj. No.: 03-859-030

Date: 3/10/05

TRIAXIAL SHEAR TEST REPORT

Tolunay-Wong Engineers, Inc.

