Project No.: 03.14.859.054

Client: United States Army Corps of Engineers

Project: Beltway 8 PA Lab Testing
Contract No. DACW64-03-D-0008, Delivery Order No. 0054

Boring No.	Sample No.	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
	6	Gray and tan FAT CLAY; traces of ferrous and calcareous nodules	CH	22.5									
	8	Gray and tan FAT CLAY; traces of ferrous nodules	CH	32.2									
06-29													
	2	Gray and tan LEAN CLAY; roots and traces of ferrous nodules	CL	22.7									
	4	Gray and tan LEAN CLAY; few ferrous nodules	CL	16.0									
	6	Gray and tan LEAN CLAY; little calcareous nodules and traces of ferrous nodules	CL	17.7									
	8	Gray and tan FAT CLAY; few ferrous and calcareous nodules	CH	25.9									
06-30													
	2	Gray and tan FAT CLAY; traces of ferrous nodules	CH	27.3									
	4	Gray and tan LEAN CLAY; traces ferrous and calcareous nodules	CL	18.2									
	6	Gray and tan FAT CLAY; traces of ferrous and calcareous nodules	CH	26.9									
	8	Gray and tan FAT CLAY; traces of ferrous and calcareous nodules	CH	29.6									
06-96													
	2	Gray and tan FAT CLAY; traces of ferrous nodules	CH	19.5									
	4	Gray and tan LEAN CLAY; few ferrous and calcareous nodules	CL	15.2									
	6	Gray and tan FAT CLAY; traces of ferrous and calcareous nodules	CH	22.9									
	8	Gray and tan FAT CLAY; traces of ferrous nodules	CH	27.4									
06-97													
	1	Gray and brown SANDY LEAN CLAY; roots, traces of ferrous and calcareous nodules	CL	17.8									
	3	Gray and brown LEAN CLAY; traces of ferrous nodules	CL	18.9									
	5	Gray and tan FAT CLAY; few ferrous and calcareous nodules	CH	25.9									
	7	Gray and tan FAT CLAY; traces of ferrous nodules	CH	27.5									
06-98													
	3	Gray and tan LEAN CLAY; sand seams, traces of ferrous nodules	CL	16.4		48	19	29					
	6	Tan and light gray FAT CLAY, slickensided; traces of ferrous nodules	CH	25.8	97.7	72	27	45	98.6	0.83	9	0.6	Slickensided
06-99													
	2	Gray and tan LEAN CLAY with SAND; traces of ferrous nodules	CL	18.2									

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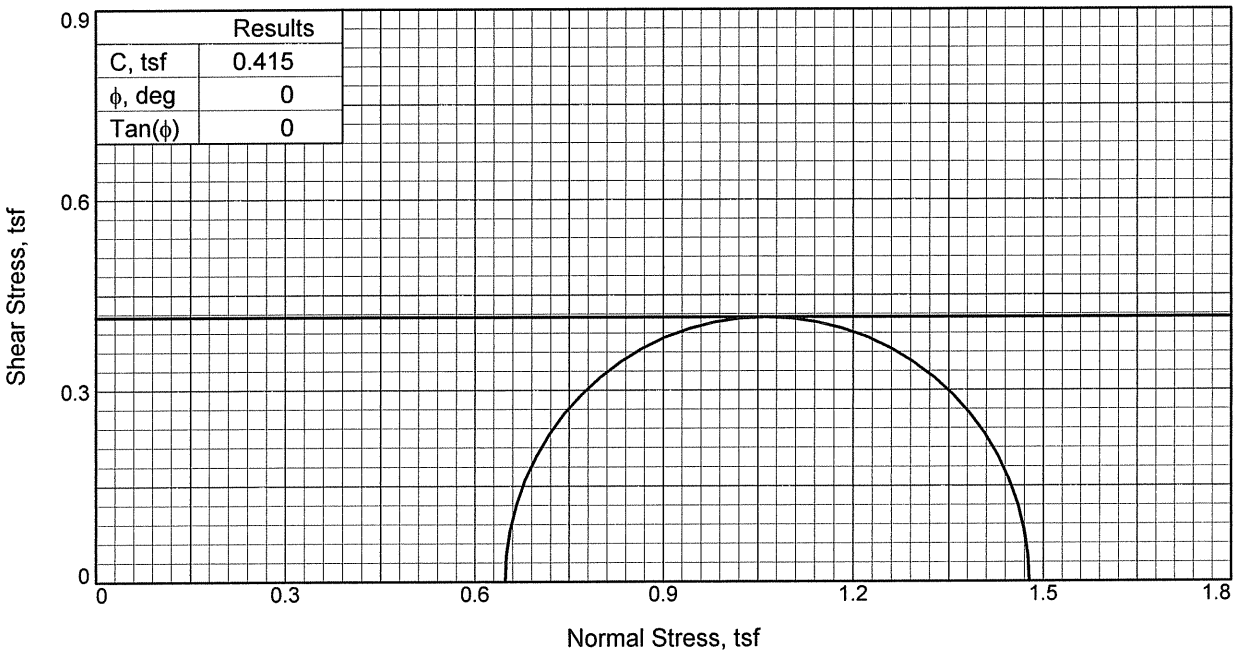

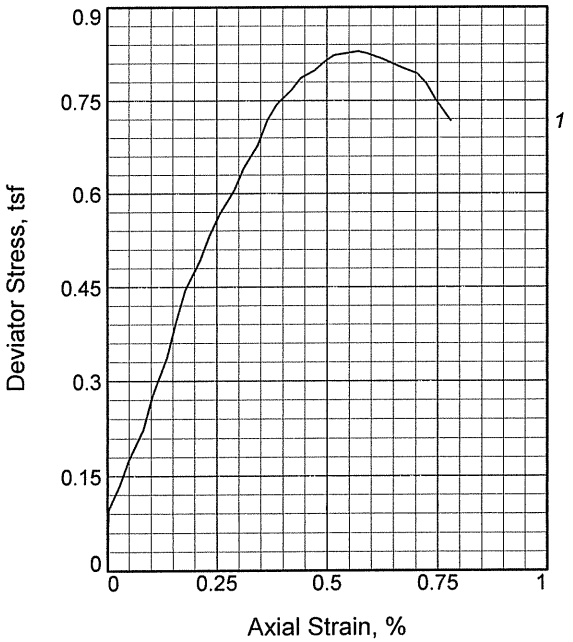

Sample No.		1
Initial	Water Content, %	25.8
	Dry Density, pcf	97.7
	Saturation, %	93.8
	Void Ratio	0.7567
	Diameter, in.	2.85
	Height, in.	5.91
At Test	Water Content, %	25.8
	Dry Density, pcf	97.7
	Saturation, %	93.8
	Void Ratio	0.7567
	Diameter, in.	2.85
	Height, in.	5.91
Strain rate, %/min.		1.00
Back Pressure, psi		0.00
Cell Pressure, psi		9.00
Fail. Stress, tsf		0.83
Strain, %		0.6
Ult. Stress, tsf		0.72
Strain, %		
σ_1 Failure, tsf		1.48
σ_3 Failure, tsf		0.65

Type of Test:
Unconsolidated Undrained

Sample Type: Undisturbed

Description: Tan and light gray FAT CLAY, slickensided; traces of ferrous nodules

LL= 72 **PL=** 27 **PI=** 45

Assumed Specific Gravity= 2.75

Remarks:
Failure Type: Slickensided
Test Method: ASTM D 2850

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Source of Sample: 06-98

Sample Number: 6

Proj. No.: 03.14.859.054 **Date Sampled:** 10/5/06

TRIAXIAL SHEAR TEST REPORT

Tolunay-Wong Engineers, Inc.