APPENDIX A. BORING LOGS AND PROFILES

This Appendix contains the following:

- Figure A-1 – Boring Location Plan
- Description of Terms & Symbols Used on Soil Boring Logs
- Soil Boring Logs
- Soil Boring Profiles

VICINITY MAP
NOT TO SCALE

REFERENCE:
SITE IMAGE BY GOOGLE.

SCALE
1" = 2500'

REFERENCE:
PLAN BY GOOGLE.

NOTE:
BORING LOCATIONS ARE APPROXIMATE.

Confidential Information:
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Work Product

COLE'S BAYOU MARSH CREATION AND HYDROLOGIC RESTORATION
VERMILION PARISH, LOUISIANA

for

COASTAL PROTECTION & RESTORATION AUTHORITY
BATON ROUGE, LOUISIANA

AAI
Ardaman & Associates, Inc.
Baton Rouge, LA Jefferson, LA

Project Engineer:	Drawn by:	Checked by:
R. ROUSSET	RJB	RER
File No.: 13-80-3705	Date: 12-17-13	Figure No.: A-1

Title:
BORING PLAN

Dec 19, 2013 - 3:53pm

P:\2013\13-80-3705 Cole's Bayou\AutoCAD\13-80-3705 Boring Plan.dwg

DESCRIPTION OF TERMS AND SYMBOLS USED ON SOIL BORING LOG

FIELD DATA				LABORATORY DATA								
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	PL	PI	Other	Soil Type	DESCRIPTION

5

10

15

20

25

30

35

40

Ground Water Levels

Long-Term Depth
Depth to water after boring is completed (time noted).

Short-Term Depth
Depth to water after initial water encountered prior to proceeding with boring (time noted).

Initially Encountered
Depth where free water was initially encountered during augering.

Sampling/Field Data

3.5 (P) — **Undisturbed**
3" dia. Tube sample

Pocket Penetrometer (P)
Penetration resistance (tons/sq. ft.).

Torvane (T)
Shearing resistance (tons/sq. ft.)

13 b/f (3-7-6) — **Split Spoon**
Std. penetration test

Std. Penetration
No. of blows per foot (blows per each six inch increments).

Auger
Disturbed (auger) collected in accordance with ASTM D-1452.

No Recovery
Sampling attempted but no sample retrieved.

DESCRIPTION

Description
Classifications are based on visual observations by field & lab representatives as well as results of laboratory data (when available).

Laboratory Data

Compressive Strength
Value based on peak compressive strength. Determined by unconfined compression test unless otherwise noted.

Dry Unit Weight
As determined by method similar to ASTM D-2937.

Water Content
As determined by pertinent portions of ASTM D-2216.

Atterberg Limits
LL : Liquid Limit
PL : Plastic Limit
PI : Plasticity Index
(= Liquid Limit - Plastic Limit)

Other
Results of other tests such as consolidation, permeability, grain size or notes associated with testing program.

Soil Type
Graphical representation of soil type. In accordance with USCS Symbols.

Ground Water Level Data	Boring Advancement Method	Notes
	Boring Abandonment Method	

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Strata Boundaries May Not Be Exact

Form LOGTERMS

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-01

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/14/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 44' 20.4"
Long. 92° 13' 37.2"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	PL	PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)	0.12 t=1.0	77 73	56 38	87	22	65	98	ORG_1		Very soft gray CLAY (CH) w/ organics
			0.0 (P)	0.09 t=2.0	596 333	10 15	465	134	331		ORG_2		Very soft dark brown ORGANIC CLAY (OH)
	5		0.0 (P)		72	50							Very soft gray CLAY (CH) w/ trace organics
			0.0 (P)	0.18 t=3.0	84 120	53 37	90	23	67	98	ORG_3		
			1.0 (P)	0.25 t=4.0	37 34	87 65	47	17	30		ORG_4		Soft gray SILTY CLAY (CL) w/ organics
	10		1.5 (P)										
			2.5 (P)	1.37 t=6.0	33 28 25	79 97 86	57	17	40				Stiff gray and tan CLAY (CH)
	15		2.5 (P)		26	96							
			2.0 (P)	1.17 t=7.0	28	97	54	17	37				
			2.5 (P)		23	98							
	20												Stiff gray and tan SILTY CLAY (CL)
			2.5 (P)	1.74 t=10.0	24 28	101 100	47	13	34	97	GSH		
	25												
			3.0 (P)	2.03 t=12.0	22 23	103 107	55	15	40				Very stiff gray and tan CLAY (CH)
	30												Boring completed at 30 ft.
	35												
	40												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
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Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 30 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
GSH: Hydrometer Particle Size Analysis
ORG_1= 66.9%
ORG_2=47.2%
ORG_3=14.5%
ORG_4=22.6%
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-02

Ardaman & Associates, Inc.

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/15/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 44' 18.3"
Long. 92° 13' 31.4"
Surface Elevation: 0 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P) 0.0 (P)	0.12 t=1.0	525 597 678	11 9 9	695	322	373		ORG_1		Brown ORGANIC CLAY (OH)
	5		0.0 (P) 1.0 (P)	0.10 t=2.0	76 132	57 37	86	25	61	94			Very soft gray CLAY (CH) w/ organics
	10		1.5 (P)	0.32 t=4.0	37 35	85 87	47	16	31				Soft gray SILTY CLAY (CL)
			2.0 (P) 2.0 (P)	1.02 t=5.0 1.33 t=5.0	30 27 27 26	95 92 99 90	61 56	17 18	44 38				Medium to stiff gray and tan CLAY (CH)
	15		3.5 (P) 3.0 (P) 2.0 (P)	0.80 t=6.0	22 27 24	84 98 100	56	17	39				
	20				29	95							
	25		3.0 (P)	0.57 t=10.0	32 26	92 93	55	17	38				
	30		3.0 (P)		22	103							Very stiff gray and tan SILTY CLAY (CL) w/ sand
	35		3.0 (P)	2.50 t=14.0	22 25	99 92	37	19	18	83	GSH		
	40		2.0 (P)		33	91				100	GSH		Stiff gray and tan CLAY (CH)

Continued Next Page

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
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Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 80 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
ORG_1=75.7%
*Boring Elevations are approximate
GSH: Hydrometer Particle Size Analysis

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-02

Ardaman & Associates, Inc.

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/15/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 44' 18.3"
Long. 92° 13' 31.4"
Surface Elevation: 0 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
													Stiff gray and tan CLAY (CH)
	45		3.0 (P)	1.07 t=18.0	42 48	78 77	83	26	57				Stiff gray and tan CLAY (CH)
	50		0.5 (P)		38	81				65	GSH		Soft gray and tan SANDY CLAY (CL)
	55		2.5 (P)										Stiff gray and tan CLAY (CH)
	60		2.0 (P)	0.60 t=24.0	32 29	93 92	46	17	29				Medium to stiff brown and gray SILTY CLAY (CL)
	65		2.0 (P)										
	70		1.0 (P)										
	75		0.5 (P)	1.20 t=29.0	27 30	99 92	31	20	11	94	GSH		--w/ trace sand, 73 to 80 ft.
	80		0.5 (P)	1.04 t=32.0	27 26	99 100	31	18	13	89	GSH		
													Boring completed at 80 ft.

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
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Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 80 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
GSH: Hydrometer Particle Size Analysis

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-03

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/17/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 44' 22.1"
Long. 92° 13' 23.1"

Surface Elevation: 2 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)		547	9							Very soft dark brown ORGANIC CLAY (OH)
			0.0 (P)		528	11	381	94	287	100	ORG_1		
	5		0.0 (P)	0.10 t=2.0	97	47	104	24	80		ORG_2		Very soft gray CLAY (CH) w/ organics
					109	41							
			0.5 (P)		328	19							
			1.0 (P)	0.15 t=4.0	55	69	71	18	53				
	10				40	74							
			1.5 (P)	0.75 t=5.0	31	93							Medium to stiff gray and tan CLAY (CH)
					31	87							
			2.0 (P)	1.39 t=6.0	26	101	55	13	42				
					26	96							
	15		1.5 (P)		28	87							
			2.0 (P)		26	94							
			2.5 (P)	1.32 t=8.0	26	99	53	13	40				
	20				26	99							
			1.5 (P)										
	25				29	94							
			2.5 (P)	1.79 t=12.0	27	96	67	15	52				
	30				27	94							Boring completed at 30 ft.
	35												
	40												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 30 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
ORG_1=64.4%
ORG_2=36.6%
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

ARD LOG01 01R 13-80-3705.GPJ LOG01R.GDT 12/19/13

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-04

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/21/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 44' 5.4"
Long. 92° 13' 54.3"

Surface Elevation: 2 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)	0.11	808	7	645	199	446		ORG_1		Very soft brown ORGANIC CLAY (OH)
			0.0 (P)		553		375	120	255	99			
					237	18				99			
	5		0.0 (P)										
			0.5 (P)	0.47 t=2.0	75	51							Soft to medium gray and tan CLAY (CH) w/ organics
					32	92	50	15	35				
					32	82							
			1.5 (P)										
	10				36	79							
			2.5 (P)	0.75 t=4.0	31	93	61	13	48				
					31	86							
			3.0 (P)										Stiff to very stiff gray and tan CLAY (CH)
	15		3.0 (P)	1.03 t=6.0	28	97	58	17	41				
					31	85							
			2.5 (P)										
			2.5 (P)	1.12 t=7.0	28	96	66	20	46				
	20				30	97							
			2.0 (P)	2.04 t=9.0	26	97				79	GSH		--w/ sand, 23 to 25 ft.
	25				27	97							
			2.5 (P)	1.54 t=11.0	28	96	65	15	50				
	30				31	88							Boring completed at 30 ft.
	35												
	40												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
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Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 30 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
ORG_1=74.3%
GSH: Hydrometer Particle Size Analysis
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-05

Ardaman & Associates, Inc.

Sheet 1 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/10/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 59.5"
Long. 92° 13' 44.1"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)		319	18	173	35	138				Very soft gray ORGANIC CLAY (OH)
			0.0 (P)										
	5		0.0 (P)	0.12 t=2.0	95 81 90	39 53 48	95	25	70				Very soft dark gray CLAY (CH) w/ organics
			1.0 (P)	0.14 t=3.0	247 134	21 34	266	99	167		ORG_1		Very soft dark gray ORGANIC CLAY (OH) w/ roots
			0.5 (P)	0.14 t=4.0	170	29	175	58	117		ORG_2		
	10		1.5 (P)										
			1.5 (P)										
	15		2.0 (P)	0.93 t=6.0	30 29 26	89 95 95	58	15	43				Medium to stiff gray CLAY (CH)
			2.5 (P)	1.12 t=7.0	26 25	100 98	53	14	39				
			4.0 (P)		32 32	88							
	20												
			3.0 (P)		25	101	46	16	30	79	GSH		Medium gray and tan SILTY CLAY (CL) w/ sand
	25												
			1.0 (P)	0.41 t=12.0	42 41	79 78	67	19	48				Soft gray and tan CLAY (CH)
	30												
			1.5 (P)	1.69 t=14.0	26 28	99 95	46	15	31	95	GSH		Stiff gray and tan SILTY CLAY (CL) w/ trace sand
	35												
			2.0 (P)										
	40												

Continued Next Page

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
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Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 60 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
GSH: Hydrometer Particle Size Analysis
ORG_1=30.2%
ORG_2=45.2%
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-05

Ardaman & Associates, Inc.

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/10/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 59.5"
Long. 92° 13' 44.1"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
					33	91							Stiff gray and tan SILTY CLAY (CL) w/ trace sand
			2.5 (P)		44								Soft gray CLAY (CH)
	45												
			2.0 (P)				59	16	43	99	GSH		
	50				44	78							
			2.0 (P)	0.43 t=22.0	62	64	88	21	67				
	55				58	66							
			1.5 (P)										
	60												Boring completed at 60 ft.
	65												
	70												
	75												
	80												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 60 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
GSH: Hydrometer Particle Size Analysis

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-06

Ardaman & Associates, Inc.

Sheet 1 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/8/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 58"
Long. 92° 13' 34.9"

Surface Elevation: 0 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)				135	29	106		ORG$_1$		Very soft gray ORGANIC CLAY (OH)
			0.0 (P)	0.04 t=2.0	193 163 142	32 35	126	27	99	97	GSH		
	5		0.0 (P)		115	41							
			0.0 (P)	0.25 t=3.0	70 72	60 53	83	19	64	99	GSH		Soft gray CLAY (CH) w/ organics
			0.0 (P)		169	30							Very soft gray ORGANIC CLAY (OH)
	10		1.0 (P)	0.40 t=5.0	34	89	44	15	29				Soft gray SILTY CLAY (CL) w/ organics
			1.5 (P)		36	83							
	15		2.0 (P)	0.73 t=6.0	33 28	91 93	61	15	46				Medium to stiff gray and tan CLAY (CH)
			2.0 (P)		25	97							
			1.5 (P)	1.08 t=8.0	25 27	100 91	51	12	39				
	20												
			1.0 (P)	2.60 t=10.0	26 32	97 91	58	19	39	97	GSH		Very stiff gray and tan CLAY (CH)
	25												
			3.5 (P)	0.82 t=12.0	43 46	78 78	87	25	62	100	GSH		Soft to medium gray and tan CLAY (CH)
	30												
			2.0 (P)		31	81							
	35												
			3.5 (P)	0.44 t=16.0	43	80	62	18	44				
	40												

Continued Next Page

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 60 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
GSH: Hydrometer Particle Size Analysis
ORG$_1$=11.4%
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-06

Ardaman & Associates, Inc.

Sheet 2 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/8/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 58"
Long. 92° 13' 34.9"
Surface Elevation: 0 (ft., NAVD)

FIELD DATA				LABORATORY DATA										
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
					31	84							Soft to medium gray and tan CLAY (CH)
	45		2.0 (P)	0.85 t=18.0	57 36	66 79	76	20	56				
	50		0.0 (P)	2.10 t=20.0 1.28 t=20.0	31 34 65	92 88 70	32 48	21 17	11 31	97	GSH		Stiff to very stiff gray SILTY CLAY (CL)
	55		0.0 (P)		31	89							Medium brown and gray SILTY CLAY (CL)
	60		0.0 (P)	0.66 t=24.0	31	95	34	15	19	99	GSH		
													Boring completed at 60 ft.
	65												
	70												
	75												
	80												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 60 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
GSH: Hydrometer Particle Size Analysis

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-07

Ardaman & Associates, Inc.

Sheet 1 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/11/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 57.1"
Long. 92° 13' 35.5"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA										
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)										Very soft to soft gray CLAY (CH) w/ organics
			0.0 (P)	0.10 t=2.0	94 77 100	43 56 47	76	20	56				
	5		0.0 (P)		87	46							
			0.0 (P)										
			1.0 (P)	0.21 t=4.0	68	61	81	19	62		ORG_1		
	10		1.0 (P)	0.46 t=5.0	43 36 35	65 87 77							
			1.5 (P)		31	88							
	15		2.0 (P)	0.39 t=6.0	37 33	87 83	63	15	48				
			2.0 (P)		23	109							Stiff gray and tan CLAY (CH)
			3.0 (P)	1.30 t=8.0	24 25	103 106	55	15	40				
	20												
			3.5 (P)		26 34	97 88							
	25												
			2.5 (P)	1.39 t=12.0	27 33	97 89	52	16	36				
	30												
			3.5 (P)		31	88							
	35												Medium gray and tan SANDY CLAY (CL)
			2.5 (P)	0.80 t=16.0	29	96	46	15	31	66			
	40												

Continued Next Page

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 60 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
ORG_1=28.6%
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-07

Ardaman & Associates, Inc.

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/11/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 57.1"
Long. 92° 13' 35.5"
Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
					28	94							Medium gray and tan SANDY CLAY (CL)
	45		1.0 (P)		59	65							Medium gray and tan SILTY CLAY (CL)
	50		1.5 (P)	0.83 t=20.0	31 29	94 86	32	23	9	95	GSH		
	55		1.5 (P)		32	95							Medium gray and tan CLAY (CH) w/ organics
	60		1.5 (P)	0.86 t=24.0	32 28	93 88	59	15	44	99	ORG_2 GSH		
	65												Boring completed at 60 ft.
	70												
	75												
	80												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 60 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

ORG_2=31.7%

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-08

Ardaman & Associates, Inc.

Sheet 1 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/22/13
Logged by: R. Brunet
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 54.7"
Long. 92° 14' 0"
Surface Elevation: 2 (ft., NAVD)

Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)		177	22	347	99	248		ORG_1		Very soft dark brown ORGANIC CLAY (OH)
			0.0 (P)	0.20 t=2.0	61	64	65	16	49				Very soft gray CLAY (CH)
					54	62							
	5		0.0 (P)										
					80	57							
			0.0 (P)	0.14 t=3.0	98	48	104	24	80	98	ORG_2		
					117	40							
			1.0 (P)										Medium to stiff gray and tan CLAY (CH)
					34	78							
	10		0.5 (P)	0.77 t=5.0	29	96	52	14	38				
					27	93							
			2.0 (P)										
					28	97							
	15		2.0 (P)	1.76 t=6.0	25	102							
					26	93							
			1.5 (P)										
					26	90							
			2.0 (P)	1.31 t=8.0	26	99	52	15	37	97			
	20				27	97							
			0.75 (P)										
	25				27	95							
			3.0 (P)	0.87 t=12.0	43	79							
	30				39	80							
			1.25 (P)										
	35				23	96							
													Stiff to very stiff gray and tan CLAY (CH)
			4.25 (P)	2.01 t=16.0	28	94	51	16	35				
	40												

Continued Next Page

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 80 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
ORG_1=73.4%
ORG_2=6.7%
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-08

Ardaman & Associates, Inc.

Sheet 2 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/22/13
Logged by: R. Brunet
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 54.7"
Long. 92° 14' 0"

Surface Elevation: 2 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	PL	PI	Percent Passing #200 Sieve	Other	Soil Type	Description
					34	90							Stiff to very stiff gray and tan CLAY (CH)
	45		1.5 (P)	1.54 t=18.0	34	87	61	17	44				
	50		1.0 (P)										
	55		0.75 (P)		39	74							
													Stiff brown and gray SILTY CLAY (CL)
	60		1.0 (P)	1.30 t=24.0	28 30	96 91	31	17	14	97	GSH		
	65		0.0 (P)										
	70		1.0 (P)	1.35 t=28.0	30 30	92 94	45	16	29				
	75		1.0 (P)		29	91							
	80		0.25 (P)										

Boring completed at 80 ft

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 80 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
GSH: Hydrometer Particle Size Analysis

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-09

Ardaman & Associates, Inc.

Sheet 1 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/13/13
Logged by: D. Wyble
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 55.1"
Long. 92° 12' 39.4"
Surface Elevation: 1 (ft., NAVD)

Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)	0.19 t=2.0	127 118	38 42	120	34	86		ORG_1		Very soft brown ORGANIC CLAY (OH)
	5		0.0 (P) 0.0 (P) 0.0 (P)	0.15 t=2.0	64 86	62 35	73	18	55				Very soft gray and tan CLAY (CH)
	10		0.0 (P)	0.15 t=4.0	186 318	29 18	403	118	285				Very soft gray ORGANIC CLAY (OH)
	15		0.75 (P) 1.0 (P) 2.0 (P) 2.25 (P) 3.0 (P)	1.38 t=6.0 1.53 t=7.0	27 25 24 22 21 21 19	96 100 88 98 106 109 110	49 42	12 12	37 30				Stiff gray and tan SILTY CLAY (CL)
	25		0.75 (P)	1.06 t=10.0	24 24	101 93	52	13	39				Stiff gray and tan CLAY (CH)
	30		1.25 (P)		37	86							
	35		1.75 (P)	2.22 t=14.0	22 22	103 99	36	16	20	86	GSH		Very stiff gray and tan SILTY CLAY (CL) w/ trace sand
	40		1.0 (P)	2.22 t=16.0	26	95	50	17	33				Stiff to very stiff gray CLAY (CH)

Continued Next Page

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 30 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
GSH: Hydrometer Particle Size Analysis
ORG_1=15.4%
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-09

Ardaman & Associates, Inc.

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/13/13
Logged by: D. Wyble
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 55.1"
Long. 92° 12' 39.4"
Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
					27	92							Stiff to very stiff gray CLAY (CH)
			2.25 (P)										
	45				27	93							
			0.5 (P)	1.93 t=20.0	38	84	65	19	46				
	50				35	81							
			1.5 (P)										
	55												
			2.0 (P)	2.01 t=24.0	28	97	69	25	44				
	60				24	84							Boring completed at 30 ft.
	65												
	70												
	75												
	80												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 30 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-10

Ardaman & Associates, Inc.

Sheet 1 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/14/13
Logged by: D. Wyble
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 46.4"
Long. 92° 13' 0.5"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA										
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)	0.15 t=1.0	91	49	95	24	71		ORG_1		Very soft gray CLAY (CH) w/ trace organics
					86	48							
			0.0 (P)										
					78	47							
	5		0.0 (P)	0.20 t=2.0	70	59	84	21	63				
					84	45							
			0.0 (P)										
					99	48							
			0.0 (P)	0.14 t=4.0	80	54	77	20	57		ORG_2		
	10				74	55							
			0.0 (P)		170						ORG_3		
					155	34							
			0.5 (P)	0.87 t=6.0	29	95	51	15	36				Medium to stiff gray and tan CLAY (CH)
					31	89							
	15		1.25 (P)										
			2.0 (P)										
					25	94							
			2.0 (P)	1.40 t=8.0	24	102	53	16	37				
	20				25	92							
			0.25 (P)										
	25												
			2.25 (P)	1.49 t=12.0	41	81	93	27	66				
	30				46	75							
			2.25 (P)	2.29 t=14.0	24	101	48	15	33	85	GSH		Very stiff gray and tan SILTY CLAY (CL) w/ sand
	35				23	103							
			2.0 (P)		24		51	14	37	30			Loose tan CLAYEY SAND (SC)
	40												

Continued Next Page

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 60 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
ORG_1=4.9%
ORG_2=4.6%
ORG_3=24.6%
GSH: Hydrometer Particle Size Analysis
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-10

Ardaman & Associates, Inc.

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/14/13
Logged by: D. Wyble
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 46.4"
Long. 92° 13' 0.5"
Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
					27	97							Loose tan CLAYEY SAND (SC)
	45		3.5 (P)		35 36	80	68	19	49	100	GSH		Soft gray and tan CLAY (CH)
	50		1.0 (P)										
	55		3.0 (P)										
	60		1.5 (P)	0.49 t=24.0	48 42	75 79	71	21	50	97			Boring completed at 60 ft.
	65												
	70												
	75												
	80												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 60 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
GSH: Hydrometer Particle Size Analysis

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-11

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/21/13
Logged by: D. Thibodaux
Driller: D. Anthony
Rig: Airboat

Location: Lat. 29° 43' 41.75"
Long. 92° 13' 51.92"

Surface Elevation: 2 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)	0.12 t=1.0	424 481	13 11	421	119	302				Very soft dark brown ORGANIC CLAY (OH)
			0.0 (P)										
	5		0.0 (P)	0.21 t=2.0	87 85 94	38 52 48	98	23	75	100			Very soft gray CLAY (CH) w/ organics
			0.5 (P)										
			1.5 (P)	0.14 t=4.0	98 87 59	48 51 53	80	19	61				
	10		2.25 (P)										
			3.0 (P)		40	81							Stiff gray and tan CLAY (CH)
			3.0 (P)	1.01 t=6.0	35 30 27	81 95 92							
	15		2.75 (P)	1.21 t=7.0	27 25	98 94	53	14	39				
			2.5 (P)										
	20				27	95							
			2.25 (P)		28 35	91	63	17	46				
	25												
			2.5 (P)		34 36	80	73	21	52				
	30												Boring completed at 30 ft.
	35												
	40												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 30 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-12

Ardaman & Associates, Inc.

Sheet 1 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/12/13
Logged by: D. Wyble
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 28.6"
Long. 92° 13' 14"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	PL	PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			No (P)										Very soft dark gray ORGANIC CLAY (OH)
			0.0 (P)	0.15 t=2.0	114 95	41 39	130	37	93				
	5		0.0 (P)	0.13 t=2.0	72 64	59 61	78	21	57				Very soft gray CLAY (CH) w/ organics
			0.0 (P)										
			0.0 (P)	0.13 t=4.0	97 75	49 53	99	27	72				
	10		1.5 (P)										Medium gray and tan CLAY (CH)
			1.5 (P)	0.59 t=6.0	44 33 31	78 73 84	55	16	39				
	15		1.5 (P)	0.87 t=6.0	27	101	48	16	32				Medium to stiff gray and tan SILTY CLAY (CL)
			1.5 (P)	1.37 t=7.0	22 25	106 100	46	13	33				
			2.5 (P)										
	20												
			2.5 (P)										
	25												Soft to medium gray and tan CLAY (CH)
			1.5 (P)		27	108	52	16	36				
	30												
			1.5 (P)										
	35												
			0.75 (P)	0.45 t=16.0	36	85	69	17	52				
	40												

Continued Next Page

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 60 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-12

Ardaman & Associates, Inc.

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/12/13
Logged by: D. Wyble
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 28.6"
Long. 92° 13' 14"
Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA										
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
					35	75							Soft to medium gray and tan CLAY (CH)
			1.0 (P)	0.85 t=18.0	31	90	54	19	35	100	GSH		
	45				34	88							
			0.5 (P)		32		52	17	35				
	50				30	91							
			0.5 (P)										
	55				49	68							
			0.5 (P)										
	60												Boring completed at 60 ft.
	65												
	70												
	75												
	80												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 60 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
GSH: Hydrometer Particle Size Analysis

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-13

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/23/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 0.9"
Long. 92° 13' 4.1"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)		93	49	91	24	67				Very soft dark gray CLAY (CH) w/ organics
			0.0 (P)	0.10 t=2.0	425 105	13 34	299	81	218	99			Very soft gray ORGANIC CLAY (OH)
	5		0.0 (P)										
			0.5 (P)	0.17 t=3.0	51 89	74 48	57	16	41				Very soft gray CLAY (CH) w/ silt pockets and organics
			0.5 (P)										
	10		1.0 (P)	0.21 t=5.0	41 32	80 59							
			2.0 (P)		32	86							Stiff gray and tan CLAY (CH) w/ trace organics
	15		2.0 (P)	1.09 t=6.0	28 27	97 90	53	14	39				
			3.0 (P)		25	99							
			3.0 (P)	1.02 t=8.0	27 24	99 99	54	16	38	98			
	20												
			3.5 (P)	1.63 t=10.0	30 29	95 96	65	19	46				
	25												
			3.5 (P)										
	30												Boring completed at 30 ft.
	35												
	40												

Ground Water Level Data	Boring Advancement Method	Notes
GW @ Ground Surface	4" Nom. Dia. Short Flight Auger: 0 to 20 ft. 4" Dia. Rotary Wash: 20 to 30 ft.	t: Unconsolidated, Undrained Triaxial Compression Test Lateral Pressure = psi *Boring Elevations are approximate
Confidential Information: Privileged & Confidential Work Product	**Boring Abandonment Method** Borehole grouted upon completion	Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-14

Ardaman & Associates, Inc.

Sheet 1 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/23/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 42' 55.76"
Long. 92° 12' 52.06"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)		626	9	594	179	415				Very soft dark brown and gray ORGANICS (PT) w/ trace clay and roots
			0.0 (P)										
	5		0.0 (P)	0.17 t=2.0	71	58	57	17	40				Very soft dark gray CLAY (CH) w/ trace organics
			0.0 (P)	0.10 t=3.0	99	46							
			0.0 (P)										
	10		0.0 (P)	0.15 t=5.0	217	24	312	89	223				Very soft dark brown and gray ORGANICS (PT) w/ trace clay
			0.0 (P)										
	15		1.0 (P)	0.05 t=6.0	31	91	44	14	30				Very soft gray SILTY CLAY (CL) w/ trace organics and fenods
			1.0 (P)	0.11 t=7.0	27	96	61	14	47				Very soft gray, tan, and brown CLAY (CH) w/ trace organics and fenods
			1.75 (P)										
	20												
			2.25 (P)										
	25												
			2.25 (P)	0.15 t=12.0	30	92	62	19	43				
	30												
	35												
	40												

Continued Next Page

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 40 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-14

Ardaman & Associates, Inc.

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/23/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 42' 55.76"
Long. 92° 12' 52.06"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
													Very soft gray, tan, and brown CLAY (CH) w/ trace organics and fenods
			3.0 (P)										
	45												Boring completed at 40 ft.
	50												
	55												
	60												
	65												
	70												
	75												
	80												

Ground Water Level Data	Boring Advancement Method	Notes
GW @ Ground Surface	4" Nom. Dia. Short Flight Auger: 0 to 20 ft. 4" Dia. Rotary Wash: 20 to 40 ft.	
Confidential Information: Privileged & Confidential Work Product	**Boring Abandonment Method**	
	Borehole grouted upon completion	Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-15

Ardaman & Associates, Inc.

Sheet 1 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/23/13
Logged by: J. Hamilton
Driller: D. Anthony
Rig: Airboat

Location: Lat. 29° 42' 55.7"
Long. 92° 14' 6.9"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)										Very soft brown ORGANIC CLAY (OH)
			0.0 (P)										Very soft to soft gray CLAY (CH)
	5		0.0 (P)	0.13 t=2.0	68	61	78	19	59				
					68	58							
			0.0 (P)	0.13 t=3.0	70	59							
					81	49							
			0.0 (P)				103	24	79	100			
	10				100	45							
			0.0 (P)	0.15 t=5.0	105	45	99	23	76				
					81	45							
			1.0 (P)										
					40	76							
	15		1.25 (P)	0.26 t=6.0	42	81	62	16	46				
					42	75							
			1.5 (P)	0.74 t=7.0	32	92							Medium to stiff bluish gray and tan CLAY (CH)
					29	86							
			1.75 (P)										
	20												
			2.0 (P)	1.86 t=10.0	23	102	57	15	42				
	25				24	98							
			2.75 (P)										Very stiff light gray and tan CLAY (CH)
	30				30	96							
			4.5 (P)	2.33 t=14.0	22	104	55	14	41				
	35				25	92							
			1.25 (P)										
	40				28	97							

Continued Next Page

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 80 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-15

Ardaman & Associates, Inc.

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/23/13
Logged by: J. Hamilton
Driller: D. Anthony
Rig: Airboat

Location: Lat. 29° 42' 55.7"
Long. 92° 14' 6.9"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
													Very stiff light gray and tan CLAY (CH)
			3.25 (P)	1.58 t=18.0	30	93	46	17	29				Medium to stiff tan, gray, and brown SILTY CLAY (CL)
	45				31	88							
			1.5 (P)										
	50				28	93							
			1.5 (P)	1.66 t=22.0	44	79							
	55				39	82							
			1.0 (P)										
	60				33	88							
			1.75 (P)	1.37 t=26.0	29	95	34	18	16				
	65												
			0.0 (P)										
	70												
			0.0 (P)										
	75												
			0.0 (P)		27		31	18	13				
	80				26	93							

Boring completed at 80 ft

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 80 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-16

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/24/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 5.6"
Long. 92° 14' 17.5"
Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)				86	22	64	99			Very soft gray CLAY (CH) w/ organics and shells
			0.5 (P)	0.09 t=2.0	116 91 72	33 50 51	96	21	75				
	5		0.0 (P)	0.13 t=2.0	72 86	58 51	77	19	58				
			0.0 (P)										
			0.0 (P)	0.08 t=4.0	103 104 100	41 45 46	99	21	78	98			
	10		0.5 (P)										
			1.5 (P)										Medium to stiff gray and tan CLAY (CH)
	15		0.5 (P)	0.59 t=6.0	39 37 33	82 85 86	57	15	42				
			2.5 (P)										
	20		2.5 (P)	1.39 t=8.0	29 24 24	84 102 98	64	14	50				
	25		2.5 (P)										
	30		2.5 (P)		30	83	57	17	40				
													Boring completed at 30 ft.
	35												
	40												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 30 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-17

Ardaman & Associates, Inc.

Sheet 1 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/26/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 42' 40.3"
Long. 92° 12' 4.5"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)		105	33							Very soft dark gray ORGANIC CLAY (OH)
			0.0 (P)	0.11 t=2.0	135	36	136	34	102				
					122	31							
	5		0.0 (P)		173	22							
			0.5 (P)	0.11 t=3.0	149	34	149	36	113				
					149	26							
			0.5 (P)										
	10		0.5 (P)		447	11							
			0.5 (P)	0.21 t=6.0	42	79	48	15	33				Very soft gray SILTY CLAY (CL) w/ organics
					37	65							
	15		1.0 (P)	0.53 t=6.0	34	88	61	16	45				Medium to stiff dark gray CLAY (CH)
					32	80							
			2.5 (P)	0.81 t=7.0	30	94							
					27	89							
			2.5 (P)	1.19 t=8.0	29	95	60	15	45				
	20				26	84							
			2.5 (P)										
	25												
			3.0 (P)										
	30												
			1.5 (P)		21					30			Medium dense gray and tan SILTY SAND (SM)
	35												
			1.5 (P)	0.73 t=16.0	34	89	66	17	49				Medium gray CLAY (CH) w/ trace organics
	40												

Continued Next Page

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 60 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-17

Ardaman & Associates, Inc.

Sheet 2 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/26/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 42' 40.3"
Long. 92° 12' 4.5"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
					31	84							Medium gray CLAY (CH) w/ trace organics
	45		2.0 (P)										Very stiff tan and gray SILTY CLAY (CL) w/ silt pockets
	50		2.0 (P)	2.00 t=20.0	40 41	89 74							
	55		2.0 (P)	2.05 t=22.0	28 33	95 83	39	15	24				
	60		2.0 (P)										Boring completed at 60 ft.
	65												
	70												
	75												
	80												

Ground Water Level Data	Boring Advancement Method	Notes
GW @ Ground Surface	4" Nom. Dia. Short Flight Auger: 0 to 20 ft. 4" Dia. Rotary Wash: 20 to 60 ft.	
Confidential Information: Privileged & Confidential Work Product	**Boring Abandonment Method** Borehole grouted upon completion	Strata Boundaries May Not Be Exact

ARD LOG01 01R 13-80-3705.GPJ LOG01R.GDT 12/19/13

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-18

Ardaman & Associates, Inc.

Sheet 1 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/24/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 42' 2.5"
Long. 92° 13' 23.1"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	PL	PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.5 (P)		70	38							Very soft gray and dark gray CLAY (CH) w/ organics
			0.5 (P)	0.21 t=2.0	51	70	72	16	56				
					165	27							
	5		0.5 (P)		59	53							
			0.5 (P)	0.21 t=3.0	57	68	74	17	57				
					61	48							
			0.5 (P)	0.17 t=4.0	63	64	80	18	62				
	10				53	60							
			0.0 (P)		117	37							
			0.5 (P)		89	44							
	15		0.5 (P)	0.18 t=6.0	84	52	82	20	62				
					193	28							
			0.5 (P)		84	45							
			1.0 (P)	0.22 t=8.0	79	55	72	19	53				
	20				45	64							
			2.5 (P)										Medium to stiff tan, brown, and gray CLAY (CH)
	25				27	92							
			2.0 (P)	0.98 t=12.0	39	83	80	20	60				
	30				37	79							
			2.5 (P)										
	35				32	88							
			3.0 (P)	1.16 t=16.0	32	89	68	16	52				
	40												

Continued Next Page

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 60 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-18

Ardaman & Associates, Inc.

Sheet 2 of 2

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/24/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 42' 2.5"
Long. 92° 13' 23.1"

Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	PL	PI	Percent Passing #200 Sieve	Other	Soil Type	Description
					32	86							Medium to stiff tan, brown, and gray CLAY (CH)
			2.5 (P)	1.48 t=18.0	33	90							
	45				38	80							
			3.0 (P)										
	50												
			1.0 (P)										
	55												
			1.5 (P)										
	60												Boring completed at 60 ft.
	65												
	70												
	75												
	80												

Ground Water Level Data	Boring Advancement Method	Notes
GW @ Ground Surface	4" Nom. Dia. Short Flight Auger: 0 to 20 ft. 4" Dia. Rotary Wash: 20 to 60 ft.	
Confidential Information: Privileged & Confidential Work Product	**Boring Abandonment Method** Borehole grouted upon completion	Strata Boundaries May Not Be Exact

ARD LOG01 01R 13-80-3705 GPJ LOG01R GDT 12/19/13

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

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Baton Rouge, LA

LOG OF SOIL BORING B-19

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/21/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 6.2"
Long. 92° 10' 25"

Surface Elevation: -3 (ft., NAVD)

Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			1.5 (P)	0.14 t=1.0	45	78	48	13	35	99			Very soft gray SILTY CLAY (CL)
					39	72							
			1.5 (P)										
					28	92							
	5		3.0 (P)	1.22 t=2.0	29	94	46	14	32				Stiff to very stiff gray, tan, and brown SILTY CLAY (CL) w/ trace organics
					30	90							
			2.5 (P)	2.40 t=3.0	22	105	48	13	35				
					22	103							
			1.5 (P)										
	10				23	102							
			2.0 (P)										
					24	101							
			2.0 (P)	1.46 t=6.0	26	101	41	14	27				
					26	89							
	15		1.5 (P)										
					25	97							
			1.0 (P)	0.85 t=7.0	27	98	38	12	26				Medium tan SILTY CLAY (CL) w/ trace sand
					26	90							
			1.0 (P)		26					90			
	20				25	92							Boring completed at 20 ft.
	25												
	30												
	35												
	40												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.

Boring Abandonment Method

Borehole backfilled with soil upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-20

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/22/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 6.4"
Long. 92° 10' 14.7"

Surface Elevation: -3 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.5 (P)		36	66							Very soft gray CLAY (CH) w/ trace organics
			0.5 (P)	0.14 t=2.0	105	46	87	18	69				
					84	82							
	5		2.5 (P)	1.36 t=2.0	24	104	46	15	31				Stiff bluish gray and tan SILTY CLAY (CL)
					24	95							
			3.5 (P)		22	102							Stiff bluish gray and tan CLAY (CH) w/ trace organics
			3.5 (P)	1.46 t=4.0	23	104	50	15	35				
	10				24	102							
			4.5 (P)	1.85 t=5.0	26	99	58	14	44				
					27	96							
			4.0 (P)										
					26	89							
	15		2.0 (P)		27	96							Stiff tan and gray SILTY CLAY (CL) w/ trace organics
			1.0 (P)	1.42 t=7.0	27	95	38	15	23	98	GSH		
					26	93							
			1.5 (P)										
	20				27	91							Boring completed at 20 ft.
	25												
	30												
	35												
	40												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.

Boring Abandonment Method

Borehole backfilled with soil upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
GSH: Hydrometer Particle Size Analysis
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-21

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/22/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 6.6"
Long. 92° 10' 4.5"

Surface Elevation: -3 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	PL	PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)	0.14 t=1.0	175	30	175	36	139				Very soft gray and brown CLAY (CH) w/ organics
					158	32							
			0.0 (P)	0.08 t=2.0	105	45	94	20	74				
					99	43							
	5		0.0 (P)										
					100	39							
			0.5 (P)	0.12 t=3.0	133	38	143	32	111				
					103	40							
			0.5 (P)										
					87	48							
	10		0.5 (P)	0.16 t=5.0	87	51	97	23	74				
					84	47							
			2.0 (P)										Medium bluish gray SILTY CLAY (CL) w/ trace fine sand and trace organics
					26	85							
	15		3.0 (P)	0.82 t=6.0	26	102	28	20	8	86			
					24	100							
			1.0 (P)										Hard gray SANDY CLAY (SC)
					23	98							
			0.5 (P)	4.91 t=8.0	22	107				52			
	20				28	82							
													Boring completed at 20 ft.
	25												
	30												
	35												
	40												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.

Boring Abandonment Method

Borehole backfilled with soil upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-22

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/23/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 0.7"
Long. 92° 10' 24.7"

Surface Elevation: -4 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	PL	PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)		184	28							Very soft dark gray and brown ORGANIC CLAY (OH)
			2.0 (P)										Stiff gray and tan SILTY CLAY (CL) w/ trace organics
	5		4.0 (P)	1.70 t=2.0	24 23	103 100	42	16	26				
			4.0 (P)	3.11 t=3.0	20 20	109 103	54	14	40				Very stiff brown, gray, and tan CLAY (CH)
			3.0 (P)										
	10		2.0 (P)	2.17 t=5.0	27 27	98 97	56	17	39				
			4.0 (P)		28	98							Stiff gray and tan SILTY CLAY (CL)
	15		3.5 (P)	1.05 t=6.0	28 26	99 99	42	15	27				
			2.0 (P)		42	91							
			2.0 (P)	1.53 t=8.0	27 28	99 83	47	16	31				
	20												Boring completed at 20 ft.
	25												
	30												
	35												
	40												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.

Boring Abandonment Method

Borehole backfilled with soil upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-23

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/23/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 43' 1.3"
Long. 92° 10' 14.7"

Surface Elevation: -4 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	PL	PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)				106	20	86				Very soft gray CLAY (CH) w/ organics
					112	41							
			0.0 (P)	0.13 t=2.0	78	55	81	16	65				
					40	64							
	5		2.0 (P)	0.55 t=2.0	32	92	45	14	31				Medium to stiff gray SILTY CLAY (CL) w/ trace organics
					34	84							
			3.0 (P)	1.41 t=3.0	25	103	45	16	29				
					25	93							
			1.5 (P)										
					25	94							
	10		2.5 (P)	1.42 t=5.0	25	102	50	15	35				Medium to stiff gray and tan CLAY (CH) w/ trace organics
					26	97							
			3.0 (P)										
					28	83							
	15		2.0 (P)										
			1.5 (P)	0.81 t=7.0	28	95	50	16	34				
					29	93							
			2.0 (P)	0.96 t=8.0	28	96	37	16	21	97	GSH		Medium light gray and tan SILTY CLAY (CL)
	20				29	87							
													Boring completed at 20 ft.
	25												
	30												
	35												
	40												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
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Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.

Boring Abandonment Method

Borehole backfilled with soil upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
GSH: Hydrometer Particle Size Analysis
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

LOG OF SOIL BORING B-24

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/23/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

CPRA
Baton Rouge, LA

Location: Lat. 29° 43' 1.2"
Long. 92° 10' 4.3"

Surface Elevation: -4 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)		182	29							Very soft gray and brown CLAY (CH) w/ organics
			0.0 (P)	0.08 t=2.0	114	43	90	19	71				
					102	43							
	5		0.0 (P)	0.07 t=2.0	106	44	93	21	72				
					98	51							
			0.0 (P)										
					276	20							
			0.0 (P)	0.13 t=4.0	98	47	140	29	111				
	10				180	31							
			0.5 (P)										
					138	32							
			2.0 (P)										Medium to stiff bluish gray SILTY CLAY (CL) w/ trace organics
					171	28							
	15		2.5 (P)	0.97 t=6.0	27	98	45	13	32				
					27	98							
			4.5+ (P)										
					25	92							
			3.5 (P)	1.38 t=8.0	22	106	44	13	31				
	20				22	96							Boring completed at 20 ft.
	25												
	30												
	35												
	40												

Ground Water Level Data	Boring Advancement Method	Notes
GW @ Ground Surface	4" Nom. Dia. Short Flight Auger: 0 to 20 ft.	t: Unconsolidated, Undrained Triaxial Compression Test Lateral Pressure = psi *Boring Elevations are approximate
Confidential Information: Privileged & Confidential Work Product	**Boring Abandonment Method** Borehole backfilled with soil upon completion	Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

CPRA
Baton Rouge, LA

LOG OF SOIL BORING B-25

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File: 13-80-3705
Date: 10/16/13
Logged by: J. Garner
Driller: D. Anthony
Rig: Ardco K-1000

Location: Lat. 29° 44' 27.2"
Long. 92° 13' 45.7"
Surface Elevation: 1 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P)		352	12							Very soft dark brown and gray CLAY (CH) w/ organics
			0.0 (P)	0.08 t=2.0	155	33	128	29	99				
					63	45							
	5		0.0 (P)	0.13 t=2.0	111	43	107	23	84				
					113	44							
			0.5 (P)		118	45							
			1.5 (P)	0.51 t=4.0	34	88	59	16	43				Medium to stiff gray and tan CLAY (CH) w/ trace organics
					36	83							
	10		2.5 (P)	1.15 t=5.0	28	96	59	12	47				
					28	91							
			2.5 (P)		29	90							
	15		3.5 (P)										
			2.0 (P)										
			1.5 (P)	0.98 t=8.0	27	97	59	14	45				
	20												
			2.5 (P)	2.16 t=10.0	27	96	63	16	47	89	GSH		Very stiff tan and gray CLAY (CH) w/ trace sand and organics
	25				41	90							
			2.0 (P)										
	30												Boring completed at 30 ft.
	35												
	40												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
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Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 30 ft.

Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
GSH: Hydrometer Particle Size Analysis
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact

Cole's Bayou Marsh Restoration
(TV-63)
Vermillion Parish, LA

LOG OF SOIL BORING B-26

Ardaman & Associates, Inc.

Sheet 1 of 1

Baton Rouge Geotechnical Laboratory
AASHTO Accredited Laboratory , LELAP Certificate No. 02052,
USACE Validated

File:	13-80-3705
Date:	10/16/13
Logged by:	J. Garner
Driller:	D. Anthony
Rig:	Ardco K-1000

CPRA
Baton Rouge, LA

Location: Lat. 29° 44' 24.7"
Long. 92° 13' 26.9"

Surface Elevation: 2 (ft., NAVD)

FIELD DATA				LABORATORY DATA									
Ground Water Level	Depth (feet)	Samples	Field Test Results	Compressive Strength (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL	Atterberg Limits PL	Atterberg Limits PI	Percent Passing #200 Sieve	Other	Soil Type	Description
			0.0 (P) 0.0 (P)	0.08 t=2.0	119 159 71	32 31 47	145	34	111		ORG$_1$		Very soft dark brown ORGANIC CLAY (OH)
	5		0.0 (P) 0.0 (P) 0.5 (P)	0.14 t=5.0	91 96 100	53 48 38	104	24	80				Very soft gray CLAY (CH) w/ organics
	10		0.5 (P)	0.73 t=5.0	37 30 26	79 94 94	55	16	39				Medium gray and tan CLAY (CH)
	15 20		2.0 (P) 2.5 (P) 3.5 (P) 4.5 (P)	2.26 t=7.0	20 24 21 24 24	94 96 107 108 100	50	15	35				Very stiff gray and tan CLAY (CH)
	25		2.0 (P)	0.65 t=10.0	31 29	93 92	54	16	38	91	GSH		Medium to stiff gray and tan CLAY (CH)
	30		2.5 (P)	1.33 t=12.0	32 28	90 95	72	22	50				Boring completed at 30 ft.
	35												
	40												

Ground Water Level Data

GW @ Ground Surface

Confidential Information:
Privileged & Confidential
Work Product

Boring Advancement Method

4" Nom. Dia. Short Flight Auger:
0 to 20 ft.
4" Dia. Rotary Wash:
20 to 30 ft.

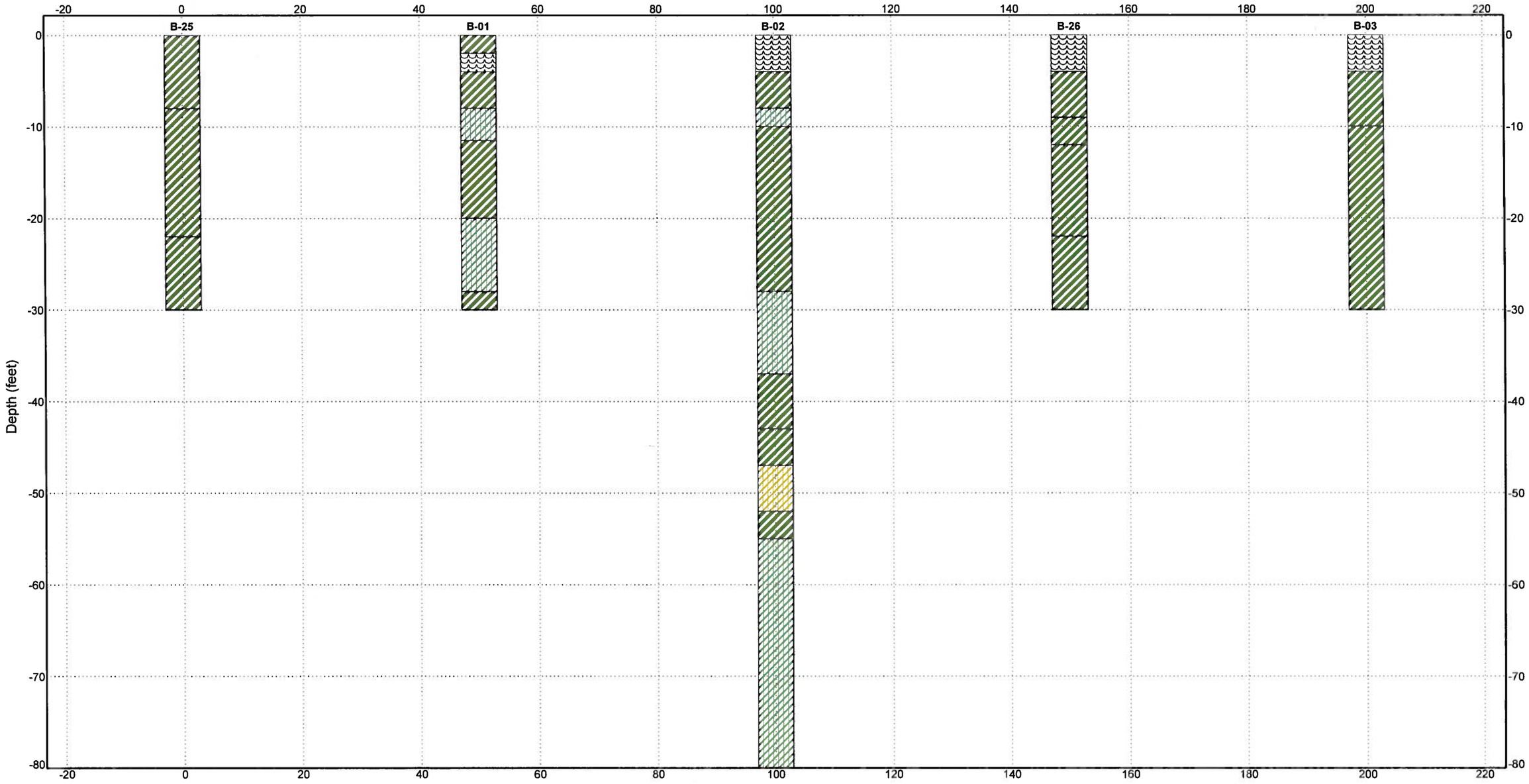
Boring Abandonment Method

Borehole grouted upon completion

Notes

t: Unconsolidated, Undrained Triaxial Compression Test
Lateral Pressure = psi
ORG$_1$=67.7%
GSH: Hydrometer Particle Size Analysis
*Boring Elevations are approximate

Strata Boundaries May Not Be Exact



Ardaman & Associates, Inc.

LITHOLOGY GRAPHICS

- USCS High Plasticity Clay
- USCS Low Plasticity Clay
- USCS Low Plasticity Sandy Clay
- USCS High Plasticity Organic silt or clay
- USCS Clayey Sand
- USCS Silty Sand

Confidential Information: Privileged & Confidential Work Product

Title: Cross Section Diagram

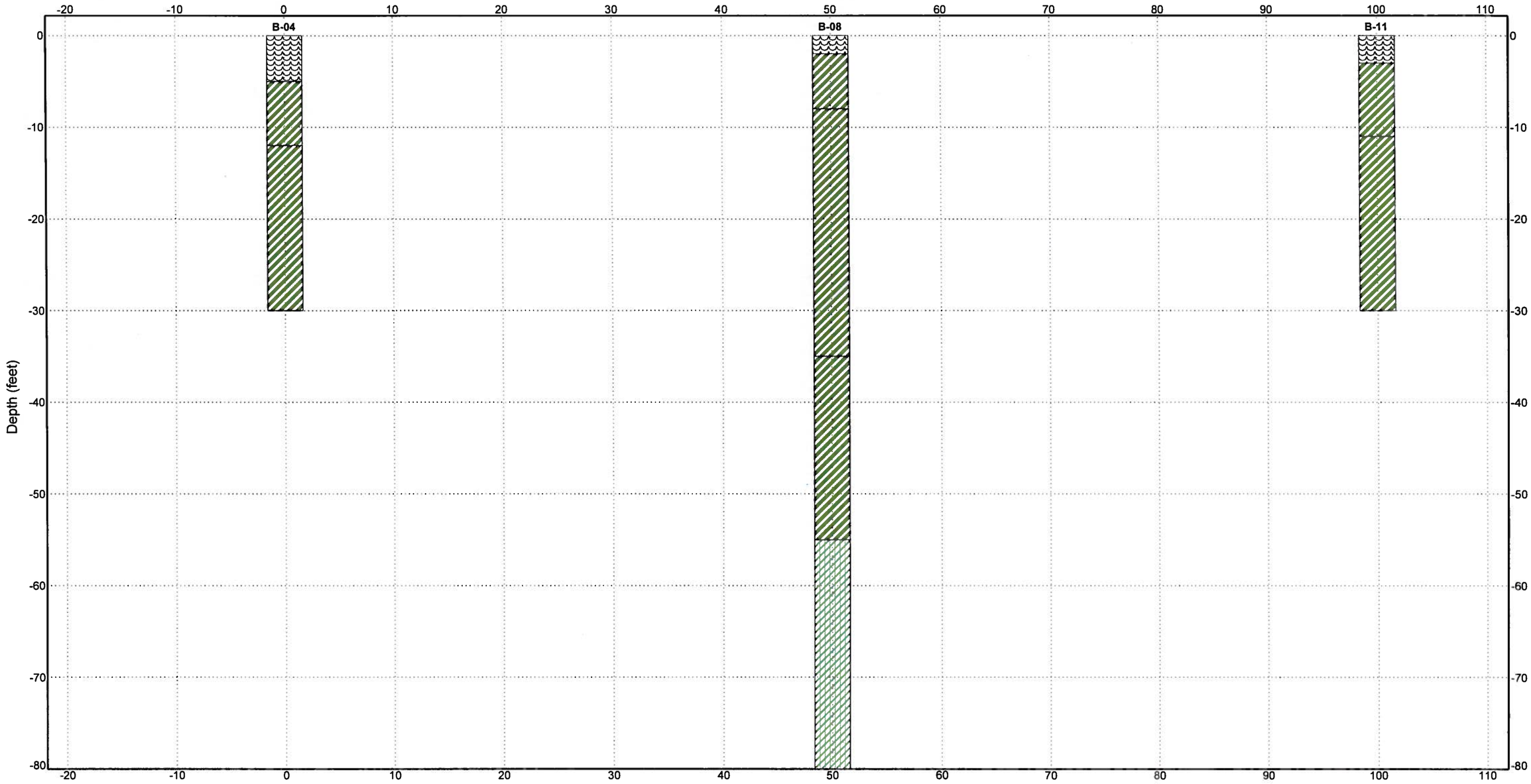
Geotechnical Investigation:
Cole's Bayou Marsh Restoration (TV-63)
Vermillion Parish, LA
for:
CPRA
Baton Rouge, LA

Ardaman & Associates, Inc.
Baton Rouge, LA

File No.: 13-80-3705

Figure No.: A-2

ARD CROSS SECTION 13-80-3705.GPJ LOG01.GDT 12/19/13



Ardaman & Associates, Inc.

LITHOLOGY GRAPHICS

- USCS High Plasticity Clay
- USCS Low Plasticity Clay
- USCS Low Plasticity Sandy Clay
- USCS High Plasticity Organic silt or clay
- USCS Peat
- USCS Clayey Sand
- USCS Silty Sand

Confidential Information: Privileged & Confidential Work Product

Title: Cross Section Diagram

Geotechnical Investigation:

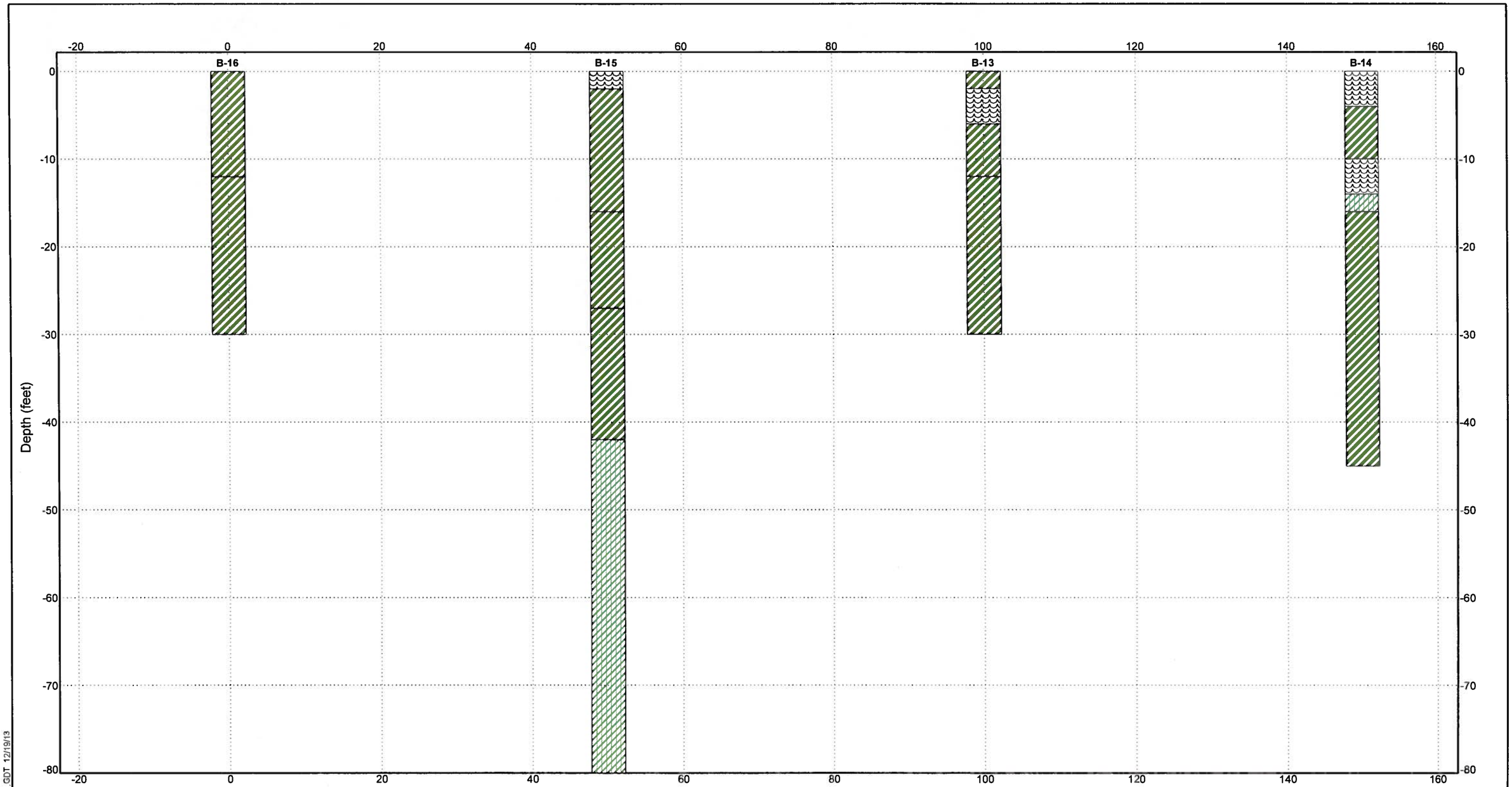
Cole's Bayou Marsh Restoration (TV-63)
Vermillion Parish, LA
for:
CPRA
Baton Rouge, LA

Ardaman & Associates, Inc.
Baton Rouge, LA

File No.: 13-80-3705

Figure No.: A-3

ARD CROSS SECTION 13-80-3705.GPJ LOG01.GDT 12/19/13



ARD CROSS SECTION 13-80-3705.GPJ LOG01.GDT 12/19/13

Ardaman & Associates, Inc.

LITHOLOGY GRAPHICS

- USCS High Plasticity Clay
- USCS Low Plasticity Clay
- USCS Low Plasticity Sandy Clay
- USCS High Plasticity Organic silt or clay
- USCS Clayey Sand
- USCS Silty Sand

Confidential Information: Privileged & Confidential Work Product

Title: Cross Section Diagram

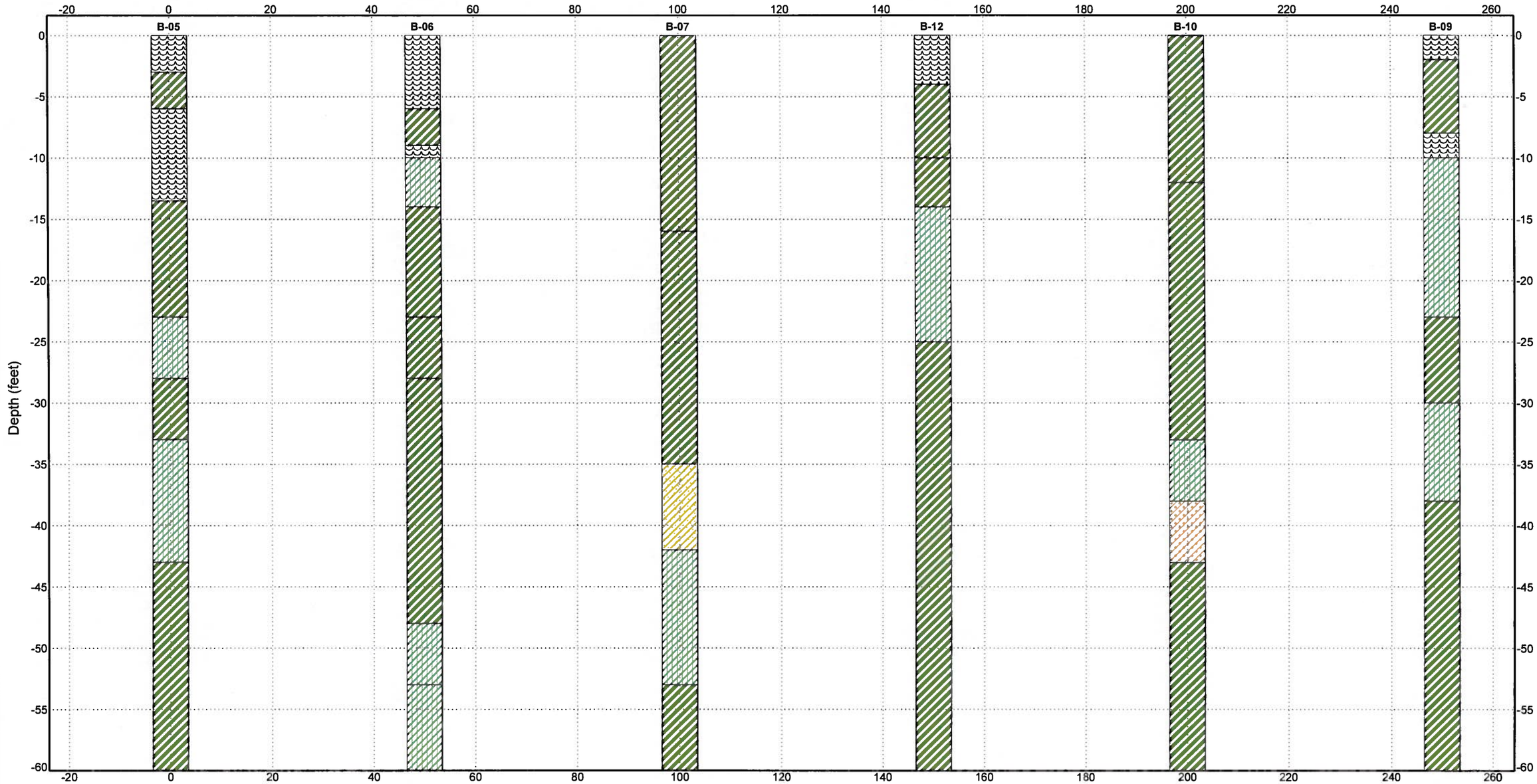
Geotechnical Investigation:

Cole's Bayou Marsh Restoration (TV-63)
Vermillion Parish, LA
for:
CPRA
Baton Rouge, LA

Ardaman & Associates, Inc.
Baton Rouge, LA

File No.: 13-80-3705

Figure No.: A-4



ARD CROSS SECTION 13-80-3705.GPJ LOG01.GDT 12/19/13

Ardaman & Associates, Inc.

LITHOLOGY GRAPHICS

- USCS High Plasticity Clay
- USCS Low Plasticity Clay
- USCS Low Plasticity Sandy Clay
- USCS High Plasticity Organic silt or clay
- USCS Peat
- USCS Clayey Sand
- USCS Silty Sand

Confidential Information: Privileged & Confidential Work Product

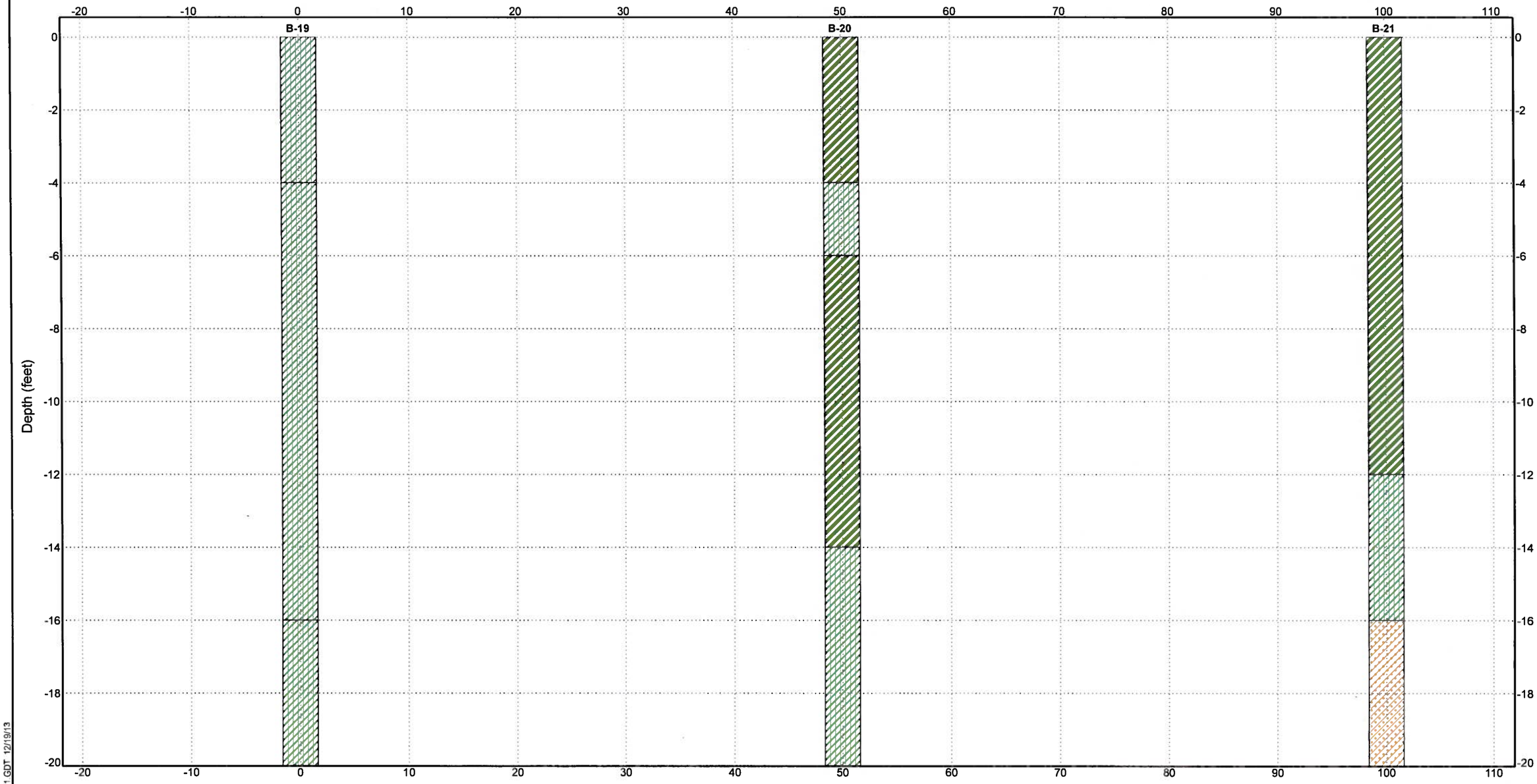
Title: Cross Section Diagram

Geotechnical Investigation:
Cole's Bayou Marsh Restoration (TV-63)
Vermillion Parish, LA
for:
CPRA
Baton Rouge, LA

Ardaman & Associates, Inc.
Baton Rouge, LA

File No.: 13-80-3705

Figure No.: A-5



Ardaman & Associates, Inc.

LITHOLOGY GRAPHICS

- USCS High Plasticity Clay
- USCS Low Plasticity Clay
- USCS Low Plasticity Sandy Clay
- USCS High Plasticity Organic silt or clay
- USCS Peat
- USCS Clayey Sand
- USCS Silty Sand

Confidential Information: Privileged & Confidential Work Product

Title: Cross Section Diagram

Geotechnical Investigation:

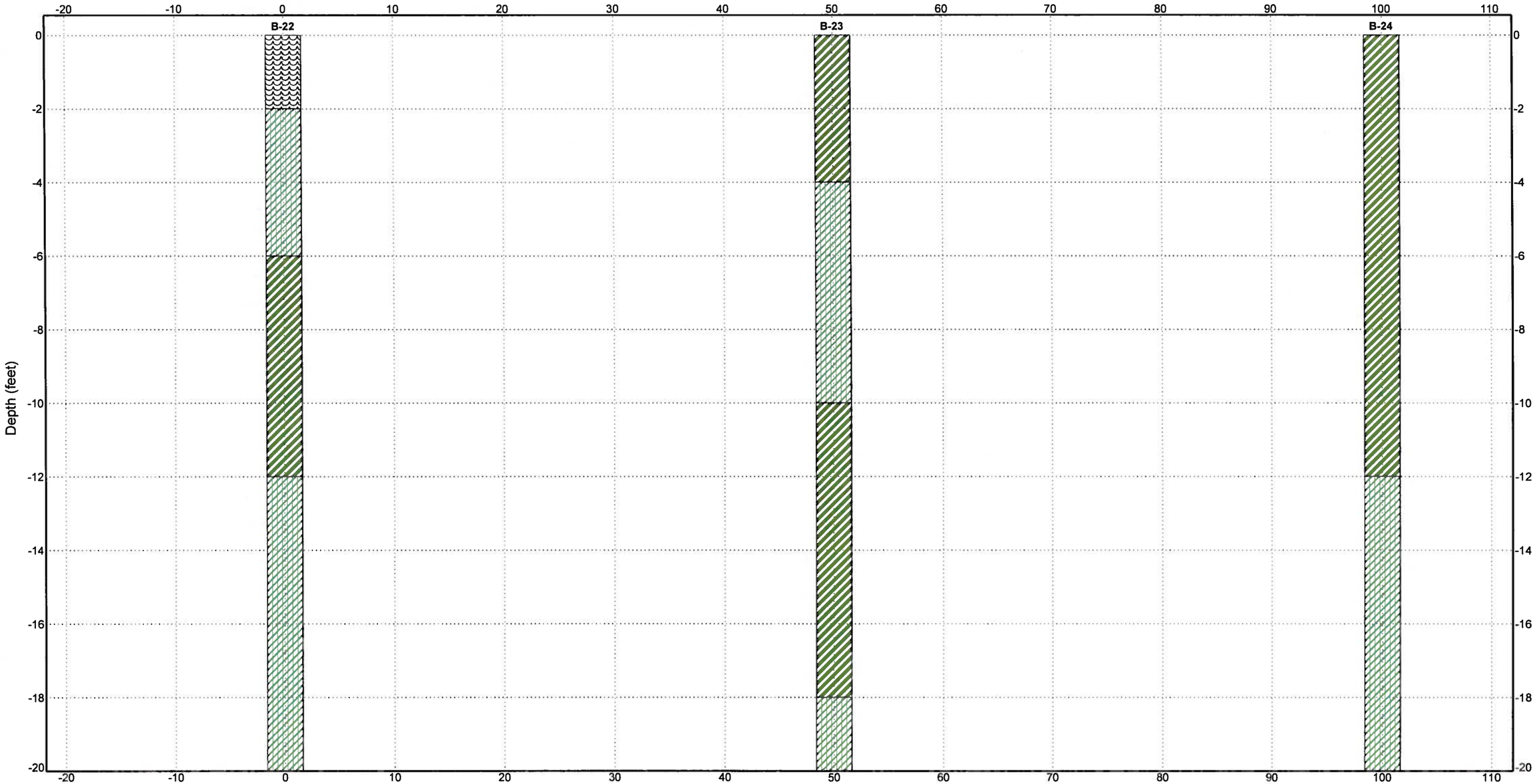
Cole's Bayou Marsh Restoration (TV-63)
Vermillion Parish, LA
for:
CPRA
Baton Rouge, LA

Ardaman & Associates, Inc.
Baton Rouge, LA

File No.: 13-80-3705

Figure No.: A-6

ARD CROSS SECTION 13-80-3705.GPJ LOG01.GDT 12/19/13



ARD CROSS SECTION 13-80-3705.GPJ LOG01.GDT 12/19/13

Ardaman & Associates, Inc.

LITHOLOGY GRAPHICS

- USCS High Plasticity Clay
- USCS Low Plasticity Clay
- USCS Low Plasticity Sandy Clay
- USCS High Plasticity Organic silt or clay
- USCS Peat
- USCS Clayey Sand
- USCS Silty Sand

Confidential Information: Privileged & Confidential Work Product

Title: Cross Section Diagram

Geotechnical Investigation:
Cole's Bayou Marsh Restoration (TV-63)
Vermillion Parish, LA
for:
CPRA
Baton Rouge, LA

Ardaman & Associates, Inc.
Baton Rouge, LA

File No.: 13-80-3705

Figure No.: A-7

APPENDIX B. LABORATORY DATA PLOTS

This Appendix contains the following:

- Figure B-1A – Moisture Content vs. Depth (Marsh Creation Areas 1 & 2)
- Figure B-1B – Moisture Content vs. Depth (Marsh Creation Area 3)
- Figure B-1C – Moisture Content vs. Depth (Hydraulic Structures)
- Figure B-2A – Wet Density vs. Depth (Marsh Creation Areas 1 & 2)
- Figure B-2B – Wet Density vs. Depth (Marsh Creation Area 3)
- Figure B-2C – Wet Density vs. Depth (Hydraulic Structures)
- Figure B-3A – Dry Density vs. Depth (Marsh Creation Areas 1 & 2)
- Figure B-3B – Dry Density vs. Depth (Marsh Creation Area 3)
- Figure B-3C – Dry Density vs. Depth (Hydraulic Structures)
- Figure B-4A – Organic Content vs. Depth (Marsh Creation Areas 1 & 2)
- Figure B-4B – Organic Content vs. Depth (Marsh Creation Area 3)
- Figure B-4C – Organic Content vs. Depth (Hydraulic Structures)
- Figure B-5A – Plasticity Chart (Marsh Creation Areas 1 & 2)
- Figure B-5B – Plasticity Chart (Marsh Creation Area 3)
- Figure B-5C – Plasticity Chart (Hydraulic Structures)
- Figure B-6A – Liquid Limit vs. Depth (Marsh Creation Areas 1 & 2)
- Figure B-6B – Liquid Limit vs. Depth (Marsh Creation Area 3)
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- Figure B-24 – UUC Shear Strength vs. Depth (Borrow Area)
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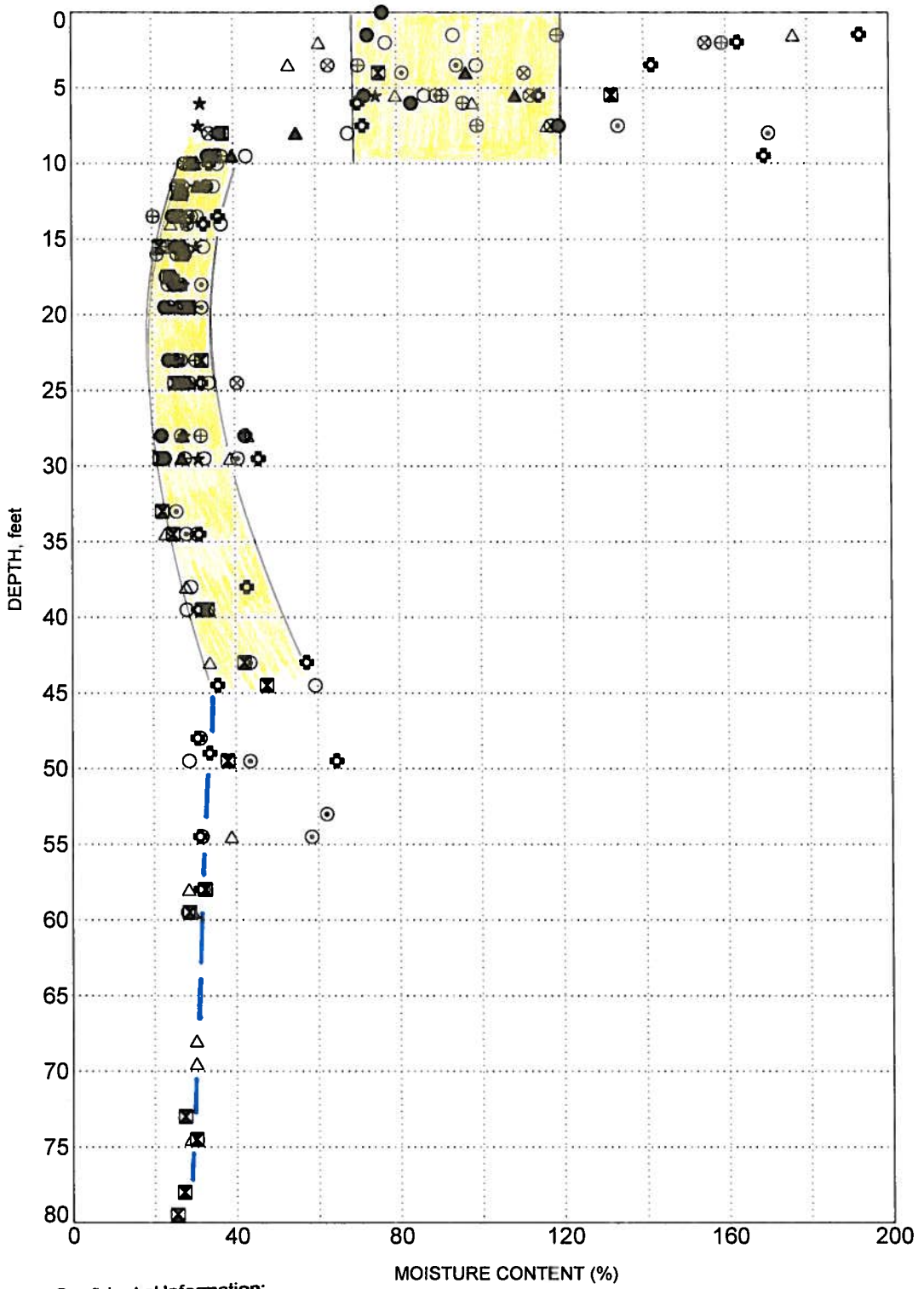

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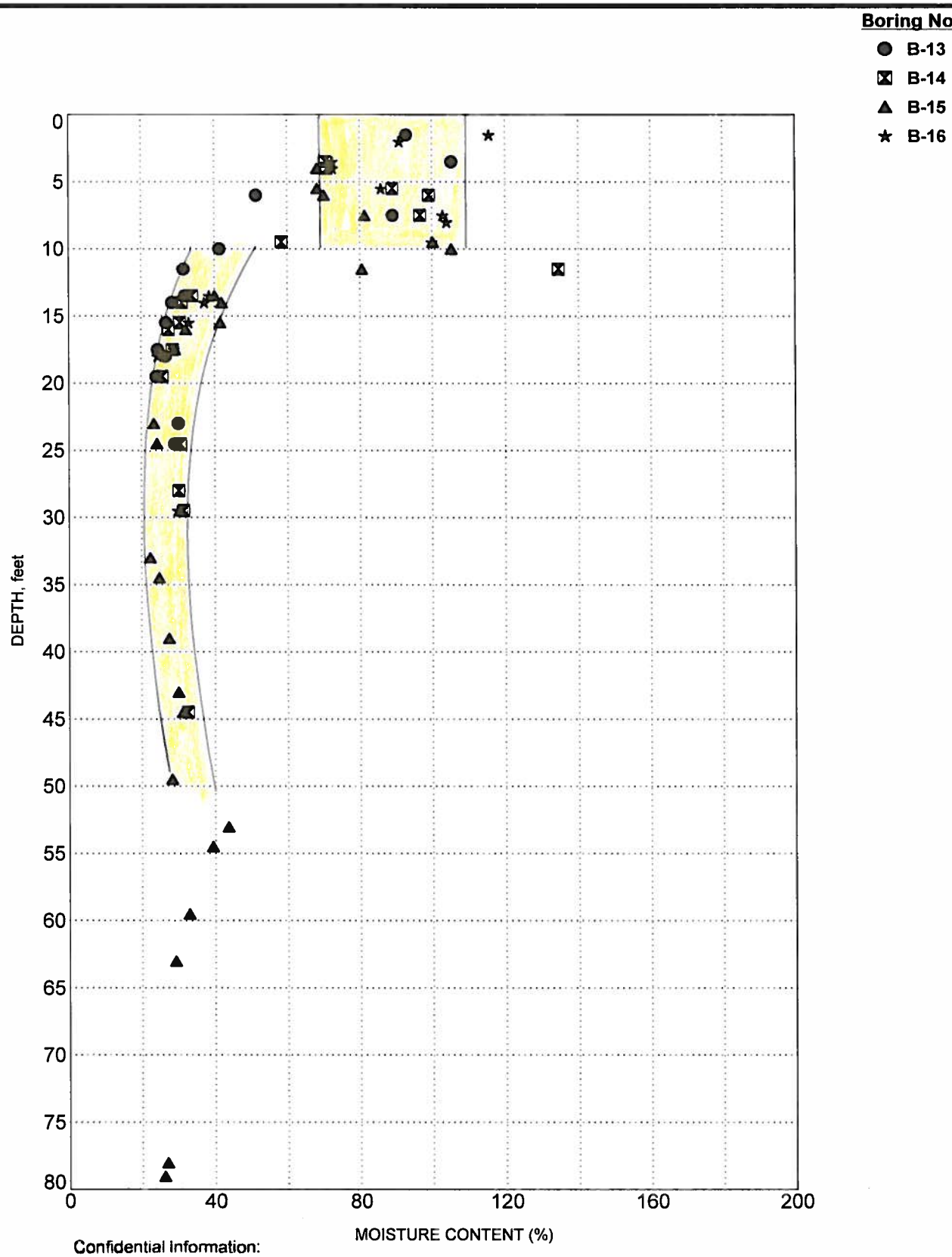
MOISTURE CONTENT vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-1A

ARD DEPTH VS MOISTURE CONTENT 13-80-3705.GPJ US_LAB.GDT 12/19/13



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MOISTURE CONTENT vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-1B

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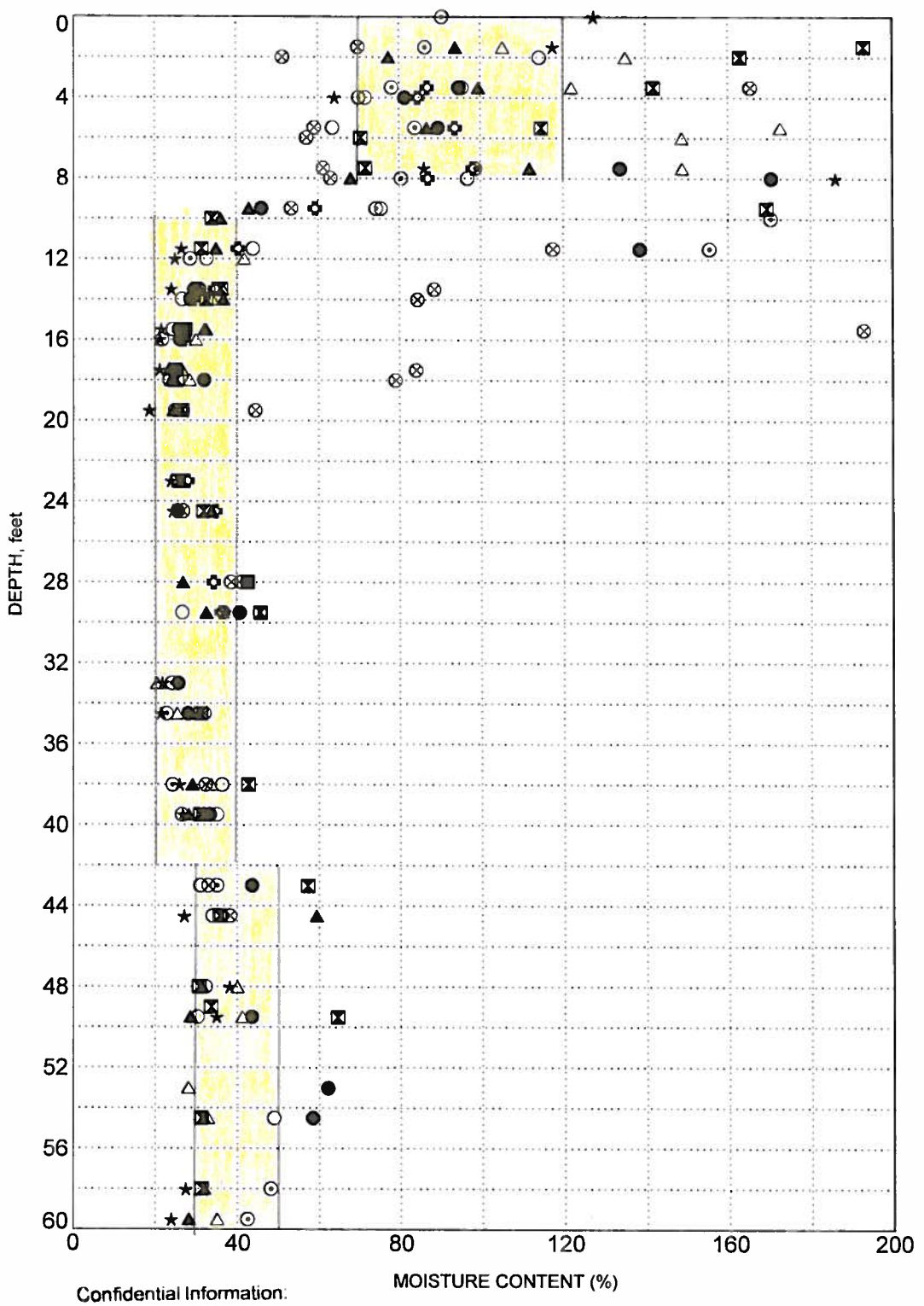

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MOISTURE CONTENT vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-1C

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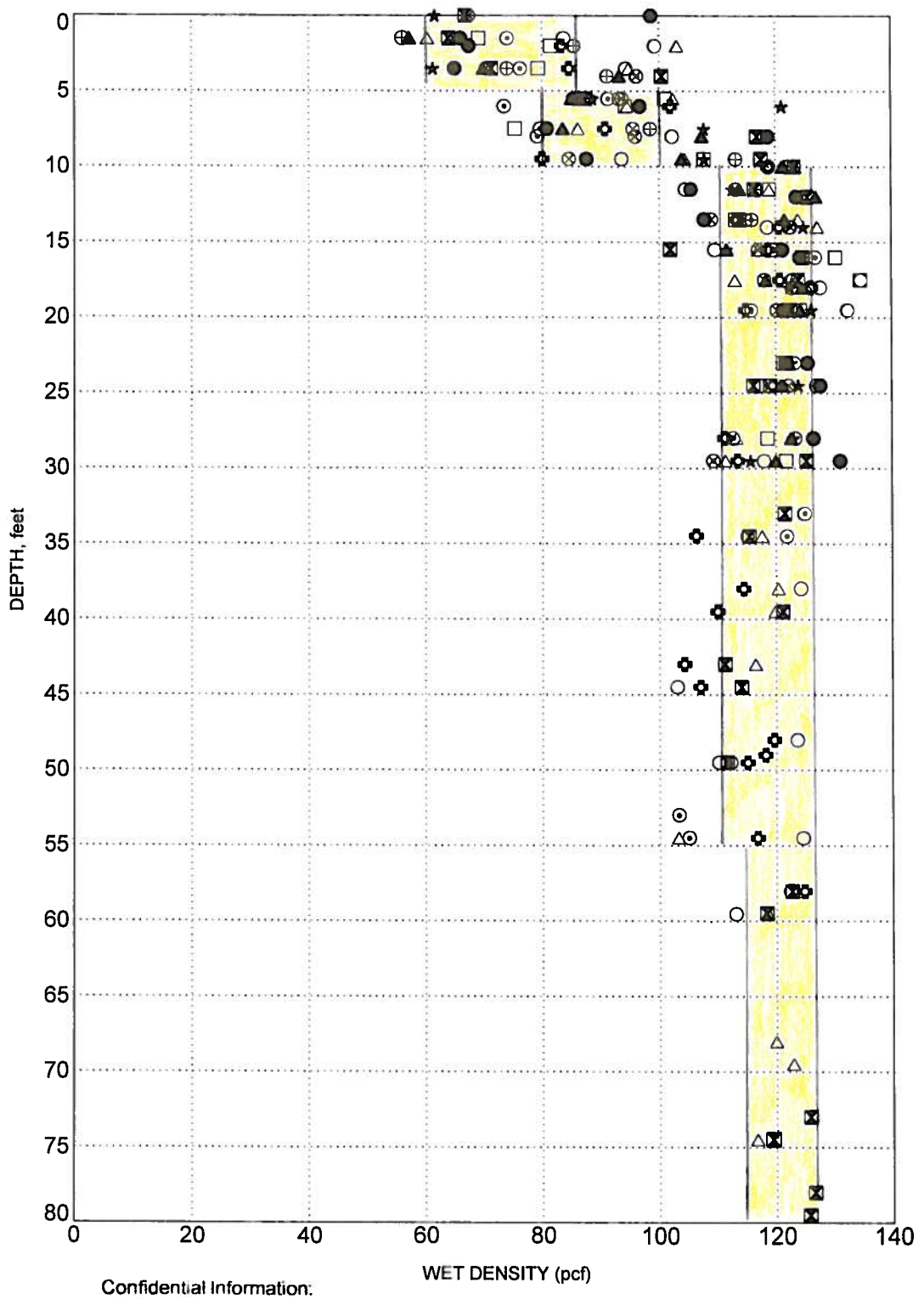

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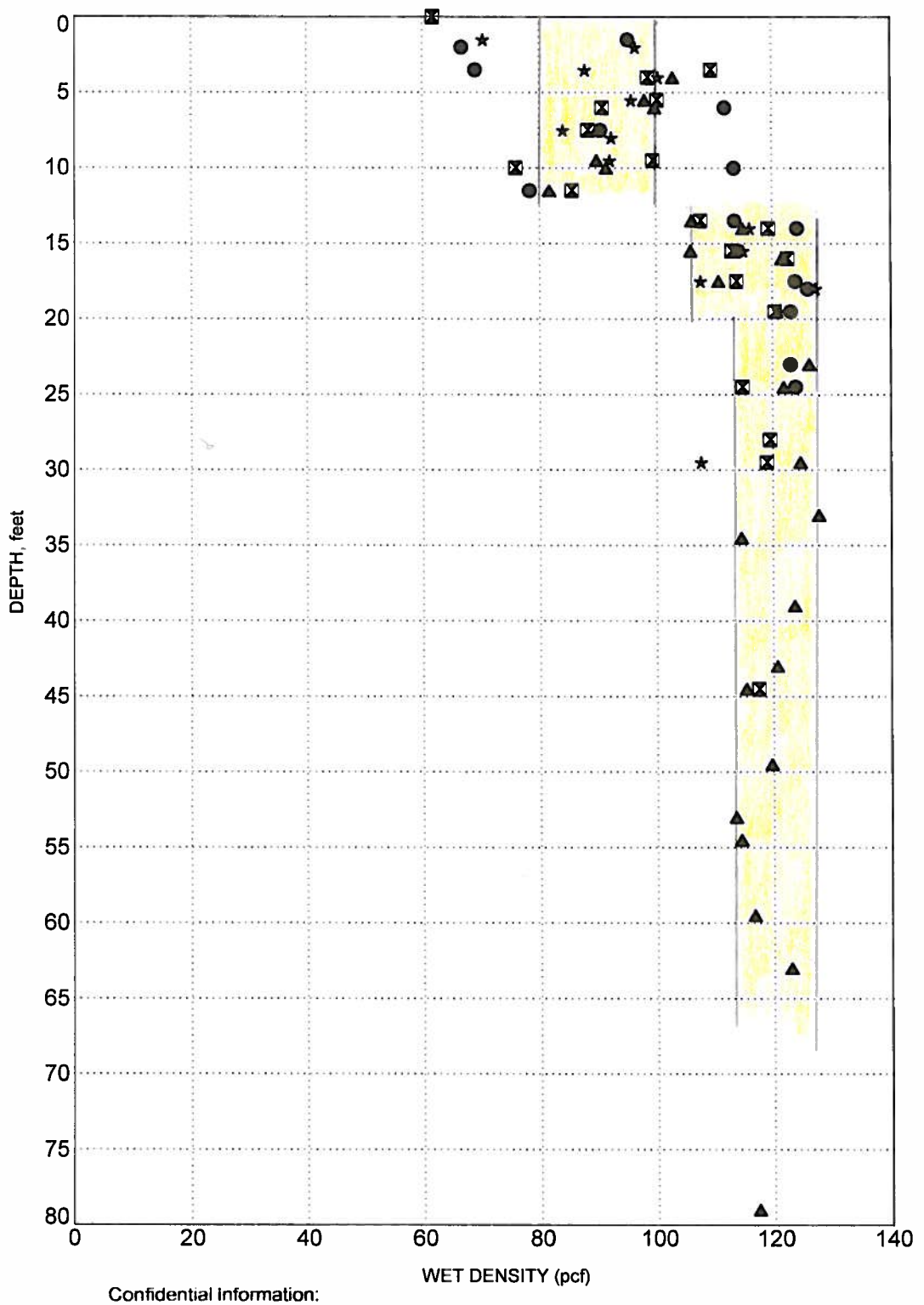
WET DENSITY vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-2A

ARD DEPTH VS WET DENSITY 13-80-3705.GPJ US LAB.GDT 12/19/13



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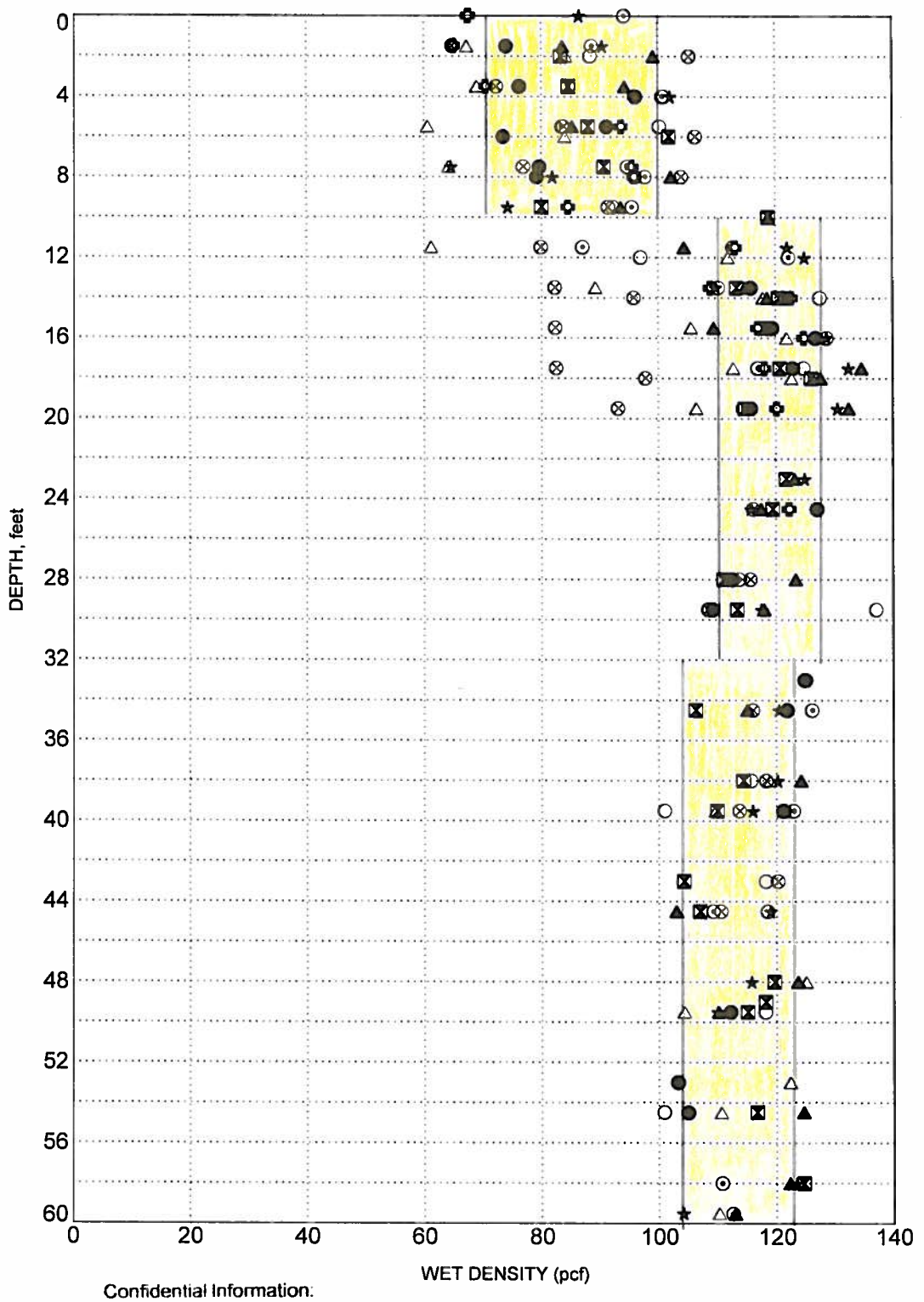
WET DENSITY vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-2B

ARD DEPTH VS WET DENSITY 13-80-3705.GPJ US_LAB.GDT 12/19/13



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WET DENSITY vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-2C

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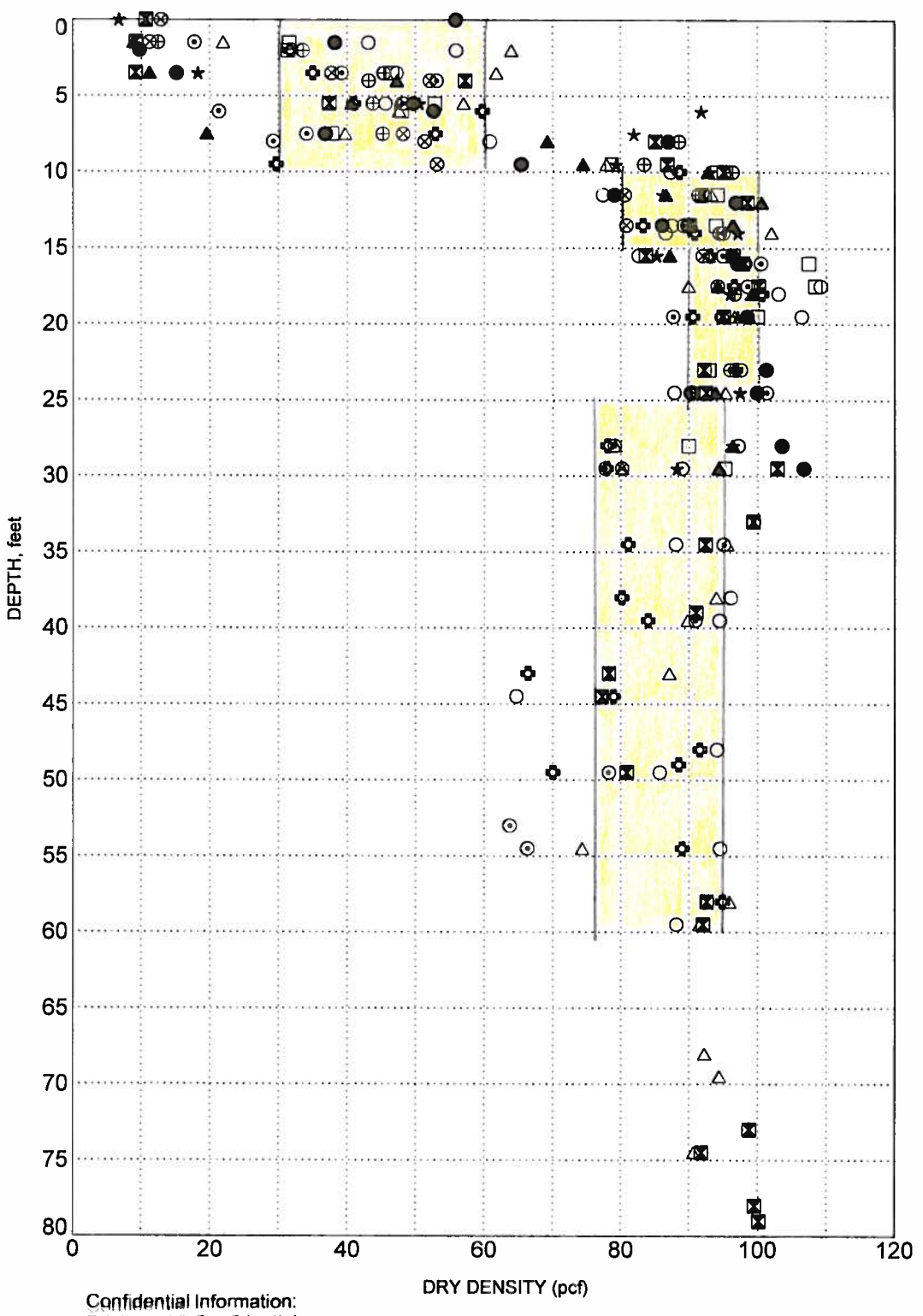

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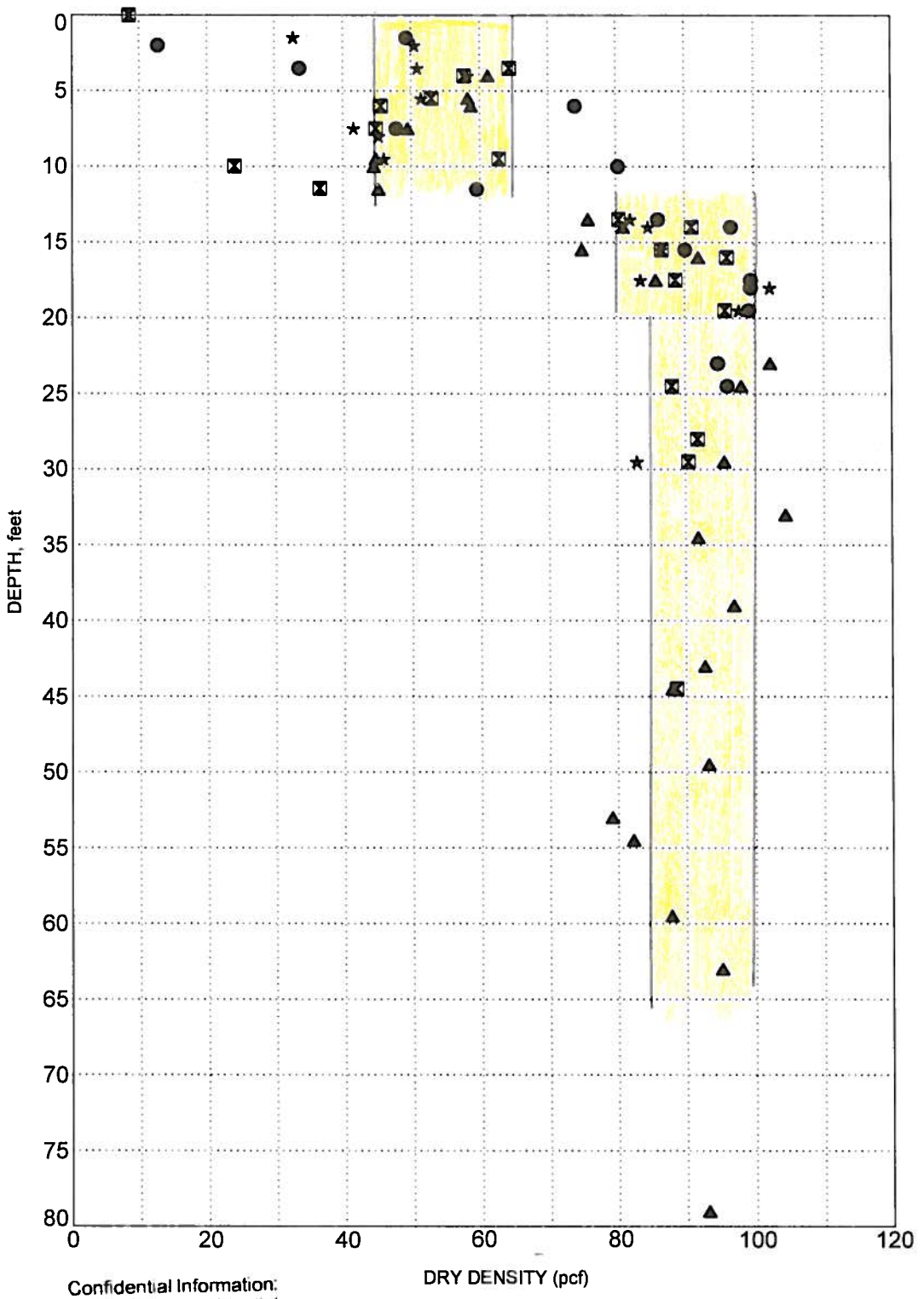
DRY DENSITY vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-3A

ARD DEPTH VS DRY DENSITY 13-80-3705.GPJ US_LAB.GDT 12/19/13



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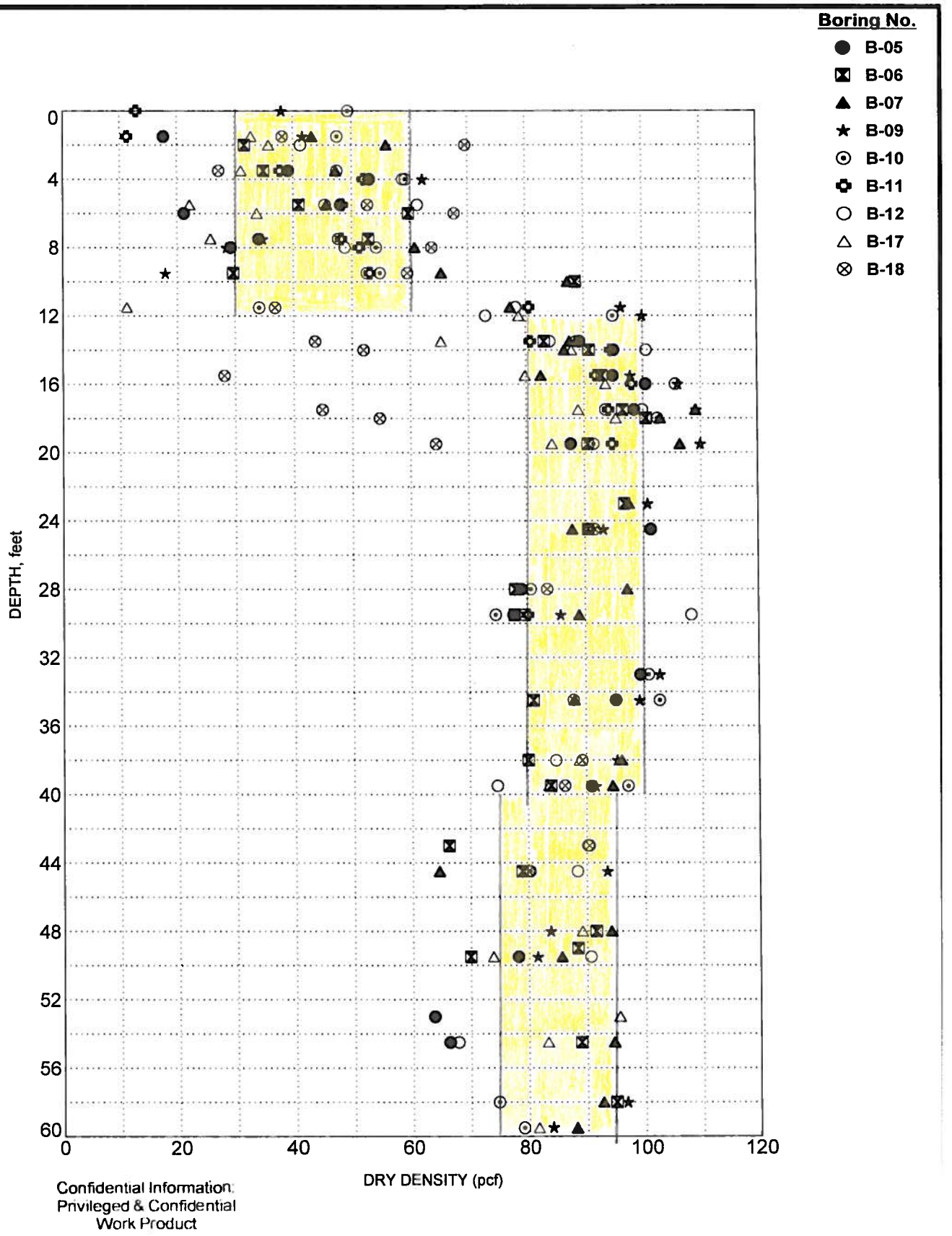
DRY DENSITY vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-3B

ARD DEPTH VS DRY DENSITY 13-80-3705.GPJ US_LAB.GDT 12/19/13



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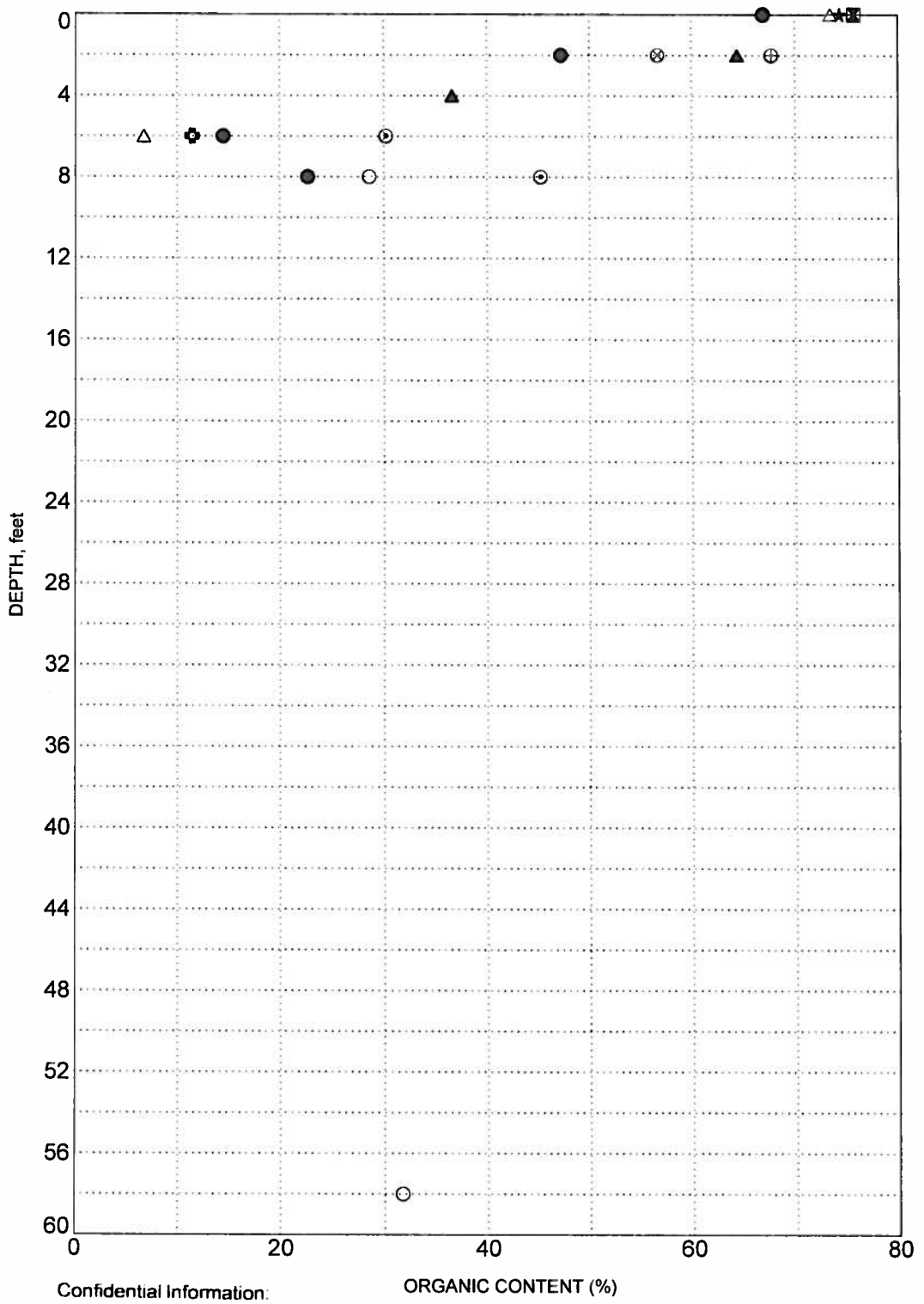
DRY DENSITY vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-3C



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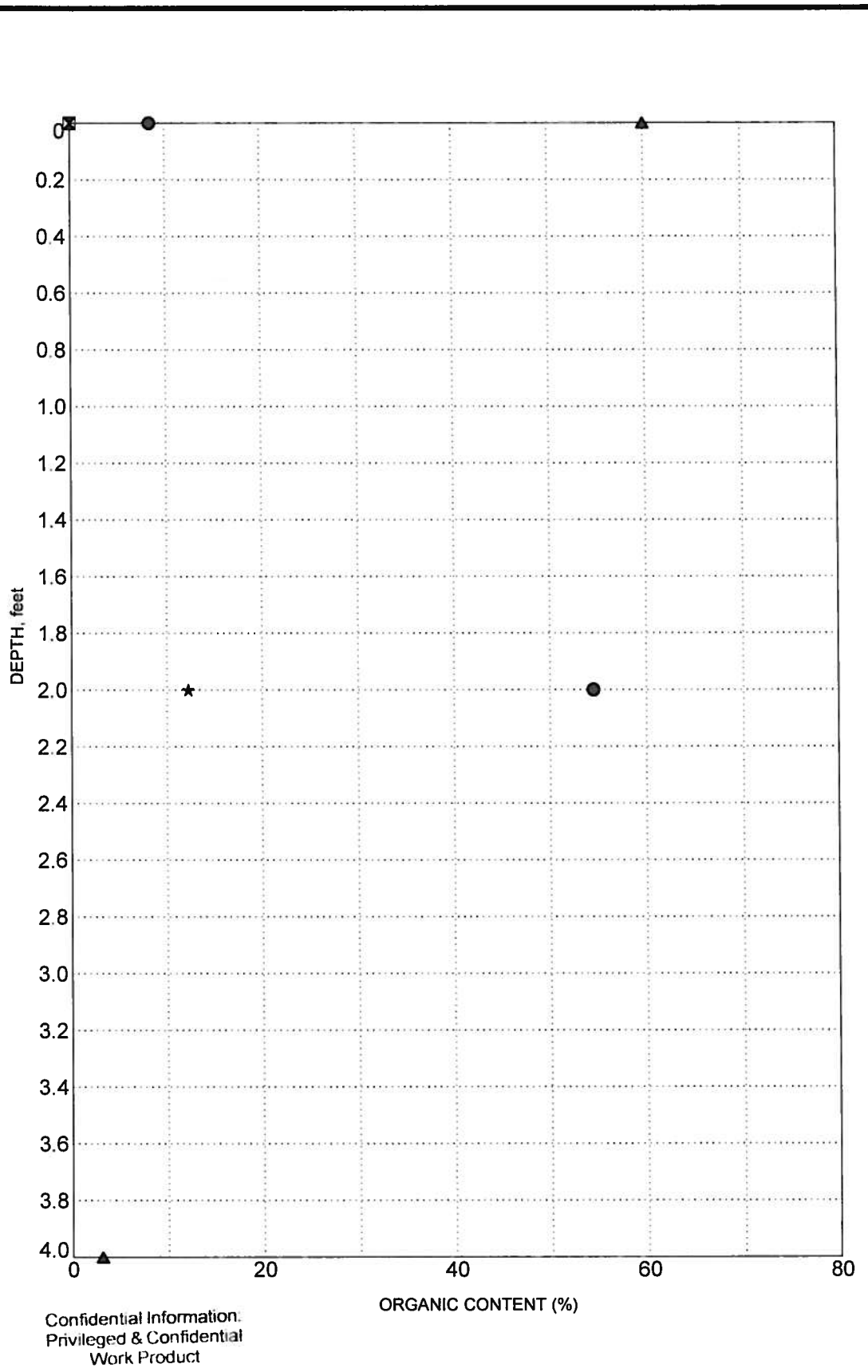
ORGANIC CONTENT vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-4A

ARD DEPTH VS ORGANIC CONTENT 13-80-3705.GPJ US LAB.GDT 12/19/13



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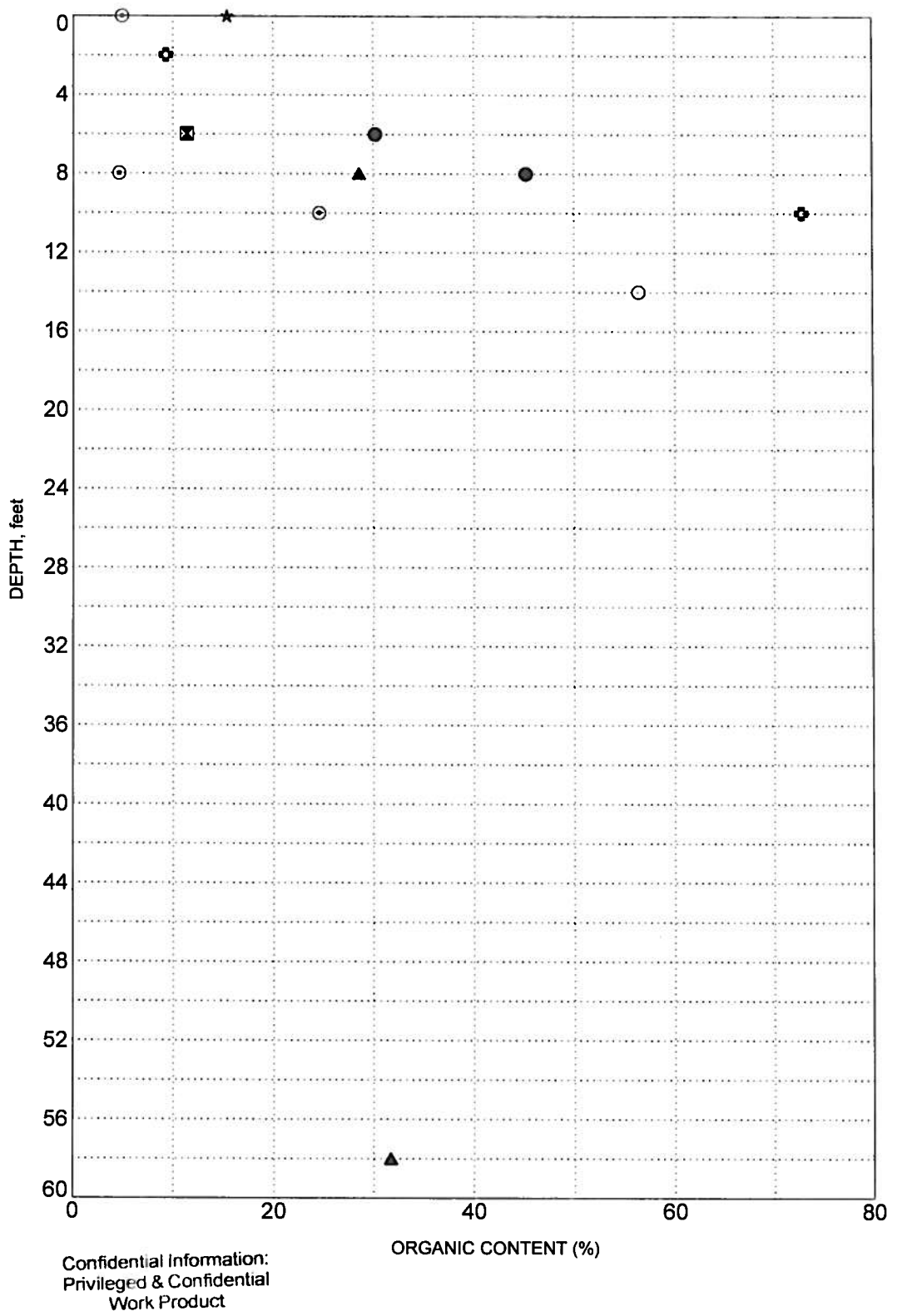
ORGANIC CONTENT vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-4B

ARD DEPTH VS ORGANIC CONTENT 13-80-3705.GPJ US_LAB.GDT 12/19/13



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ORGANIC CONTENT vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-4C

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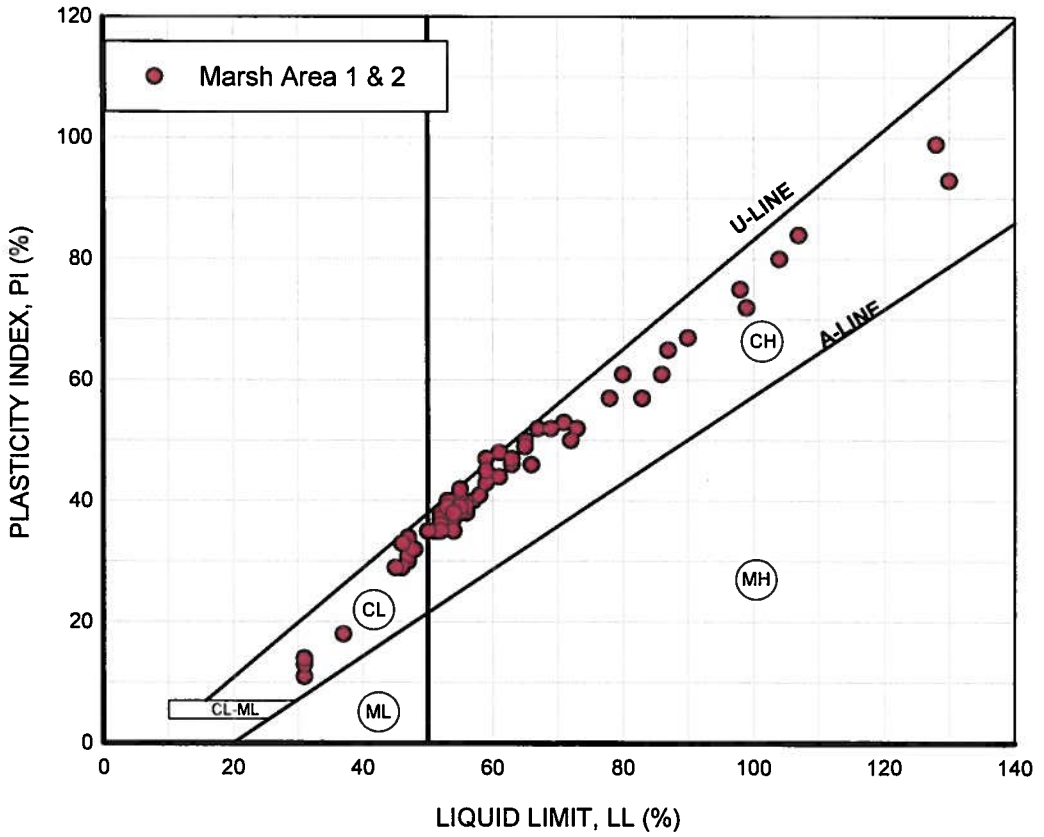

PLASTICITY CHART

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COLE'S BAYOU MARSH CREATION

CPRA

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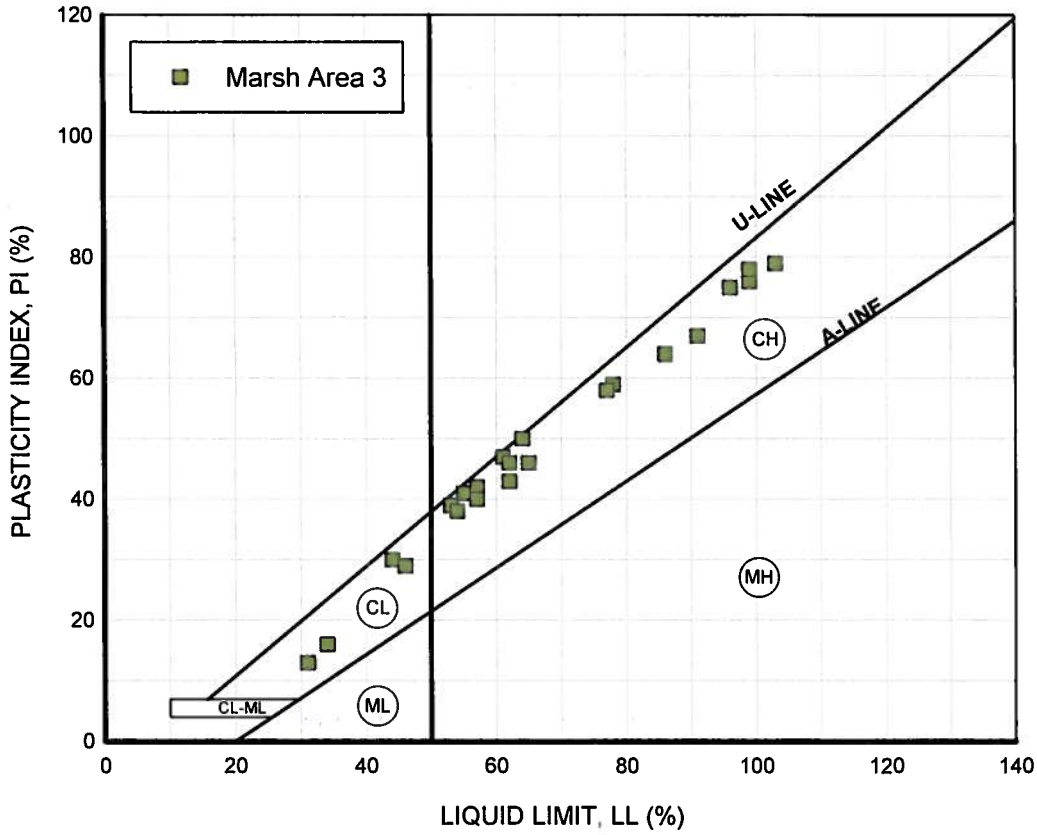
FILE NO. 13-80-3705	APPROVED BY MB	FIGURE. B-5A



PLASTICITY CHART

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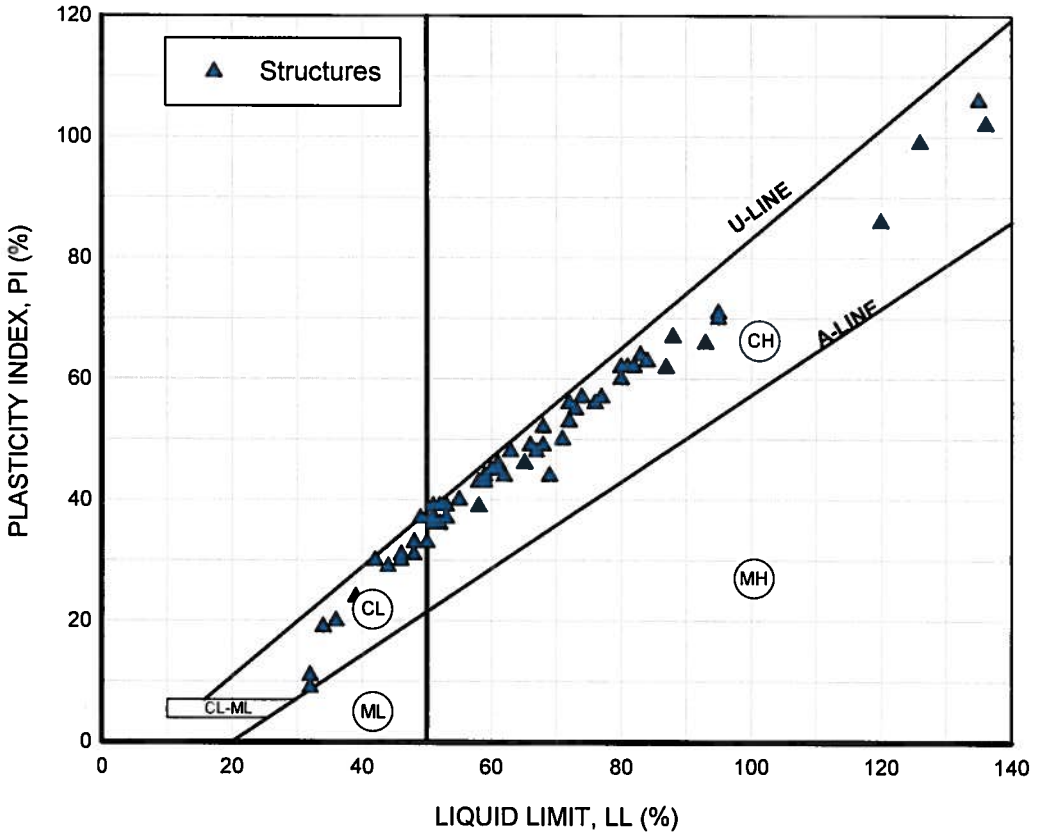

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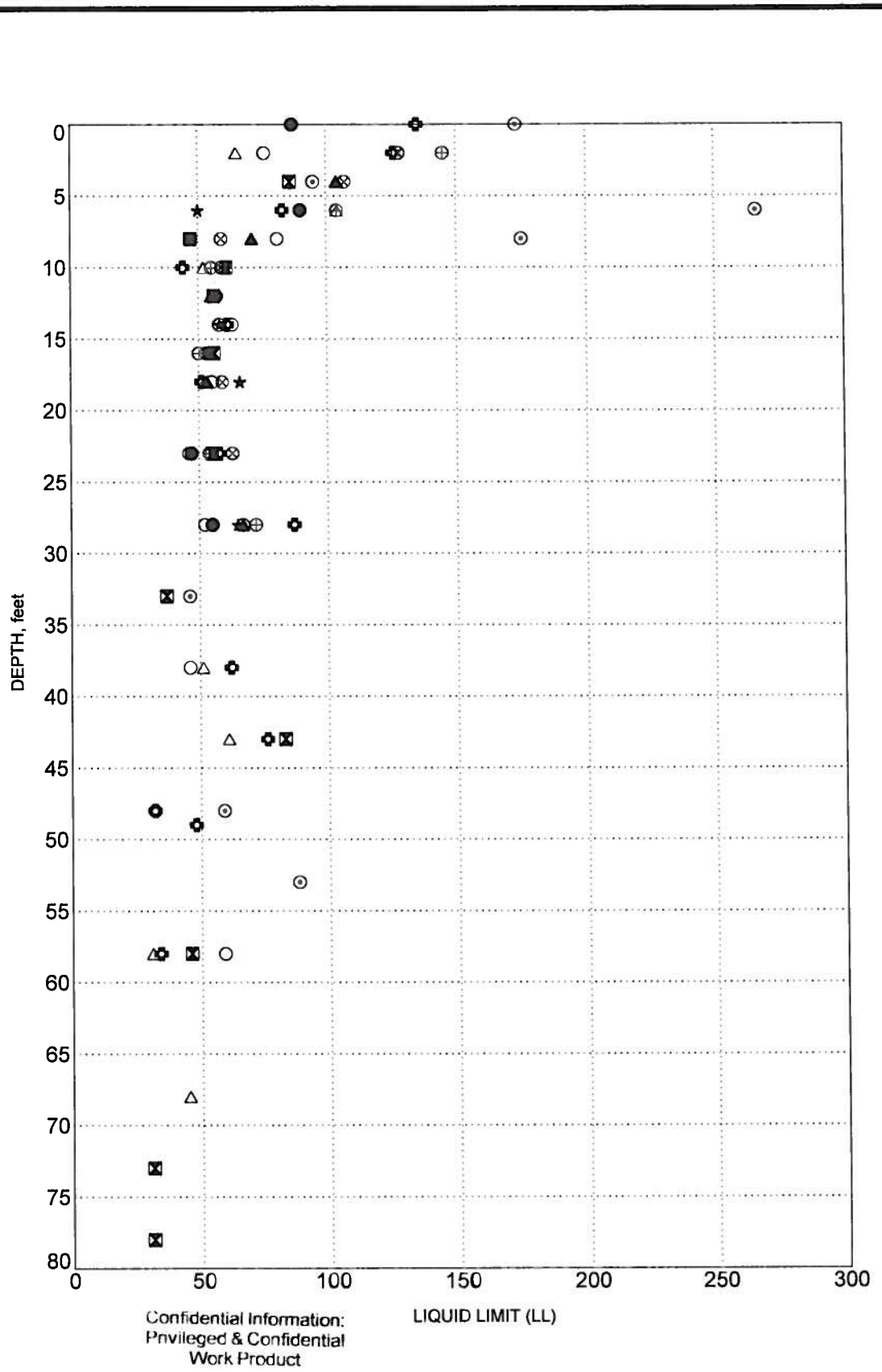
FILE NO: 13-80-3705	APPROVED BY: MB	FIGURE: B-5C



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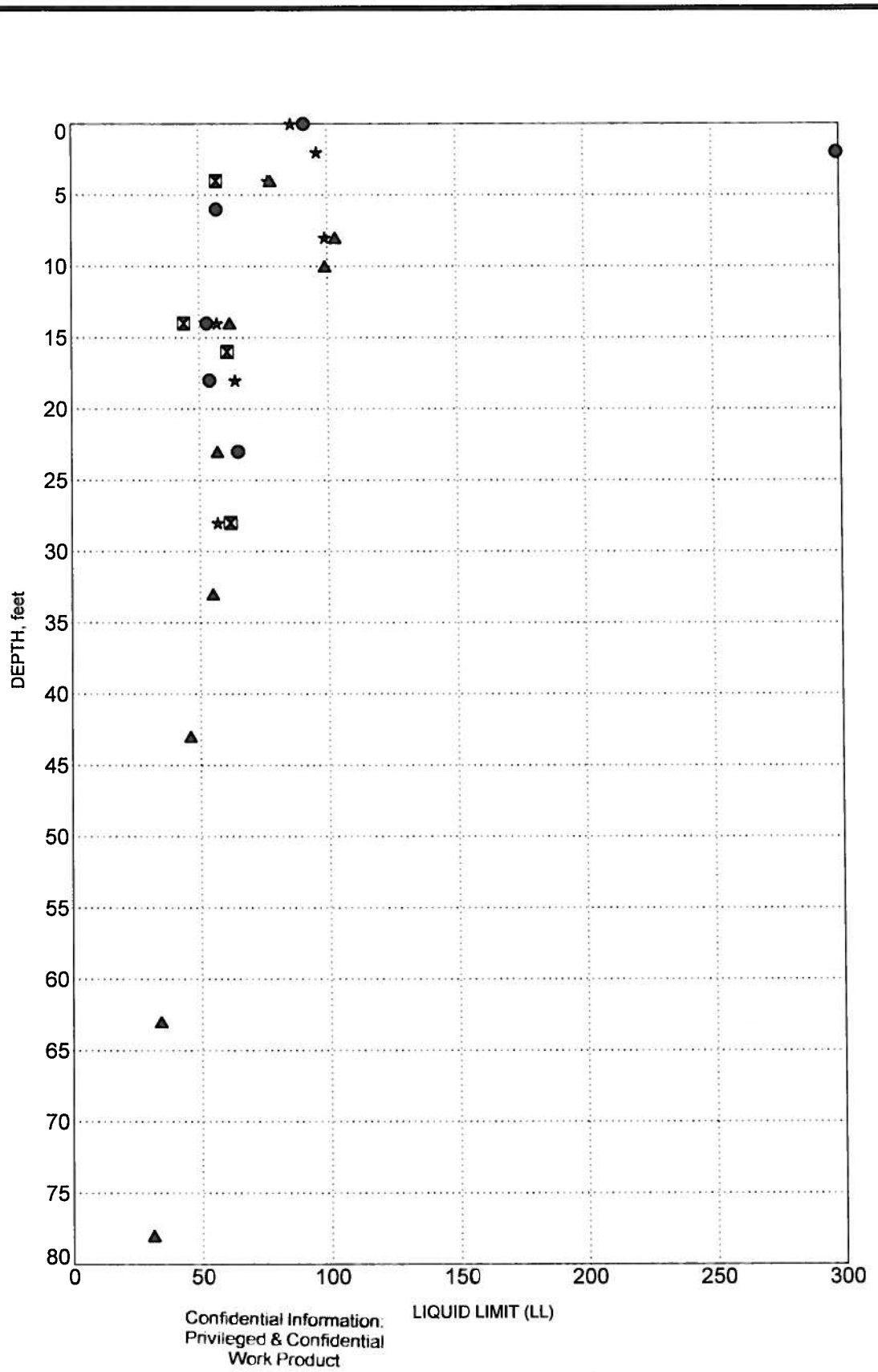
LIQUID LIMIT vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-6A

ARD DEPTH VS LL 13-80-3705.GPJ US_LAB.GDT 12/19/13



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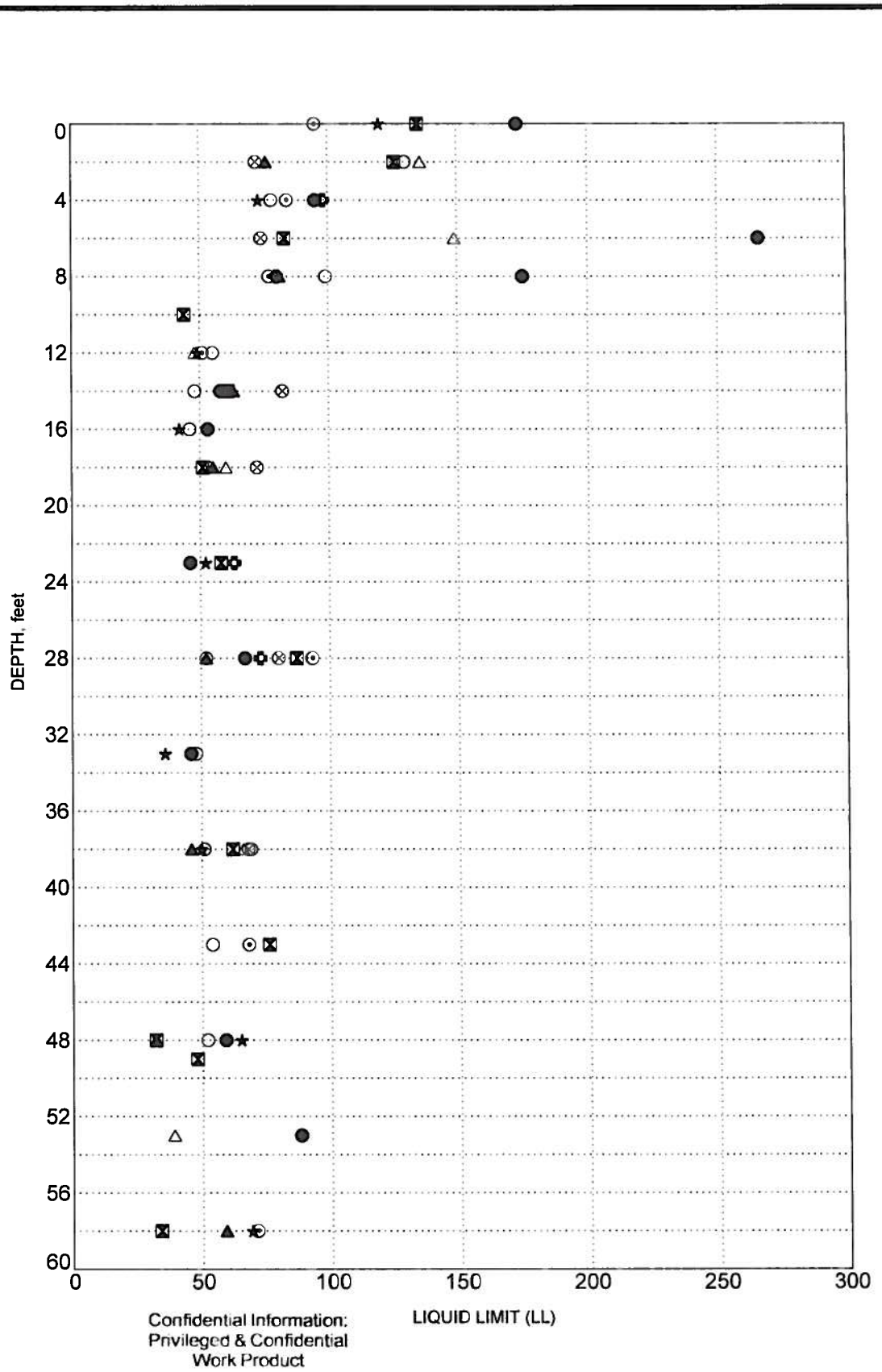
LIQUID LIMIT vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-6B

ARD DEPTH VS LL 13-80-3705.GPJ US LAB.GDT 12/19/13



ARD DEPTH VS LL 13-80-3705.GPJ US_LAB.GDT 12/19/13

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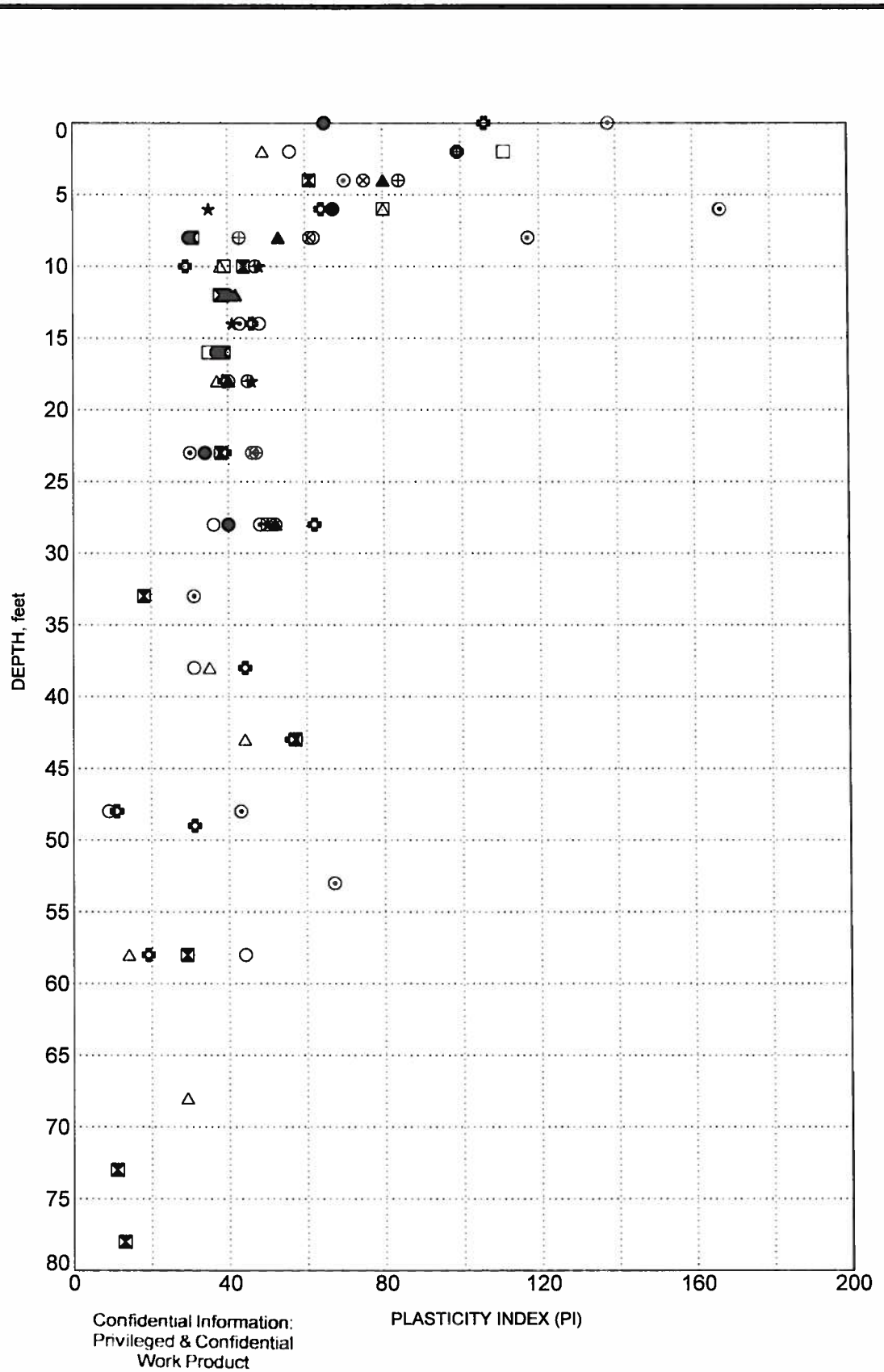
LIQUID LIMIT vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-6C



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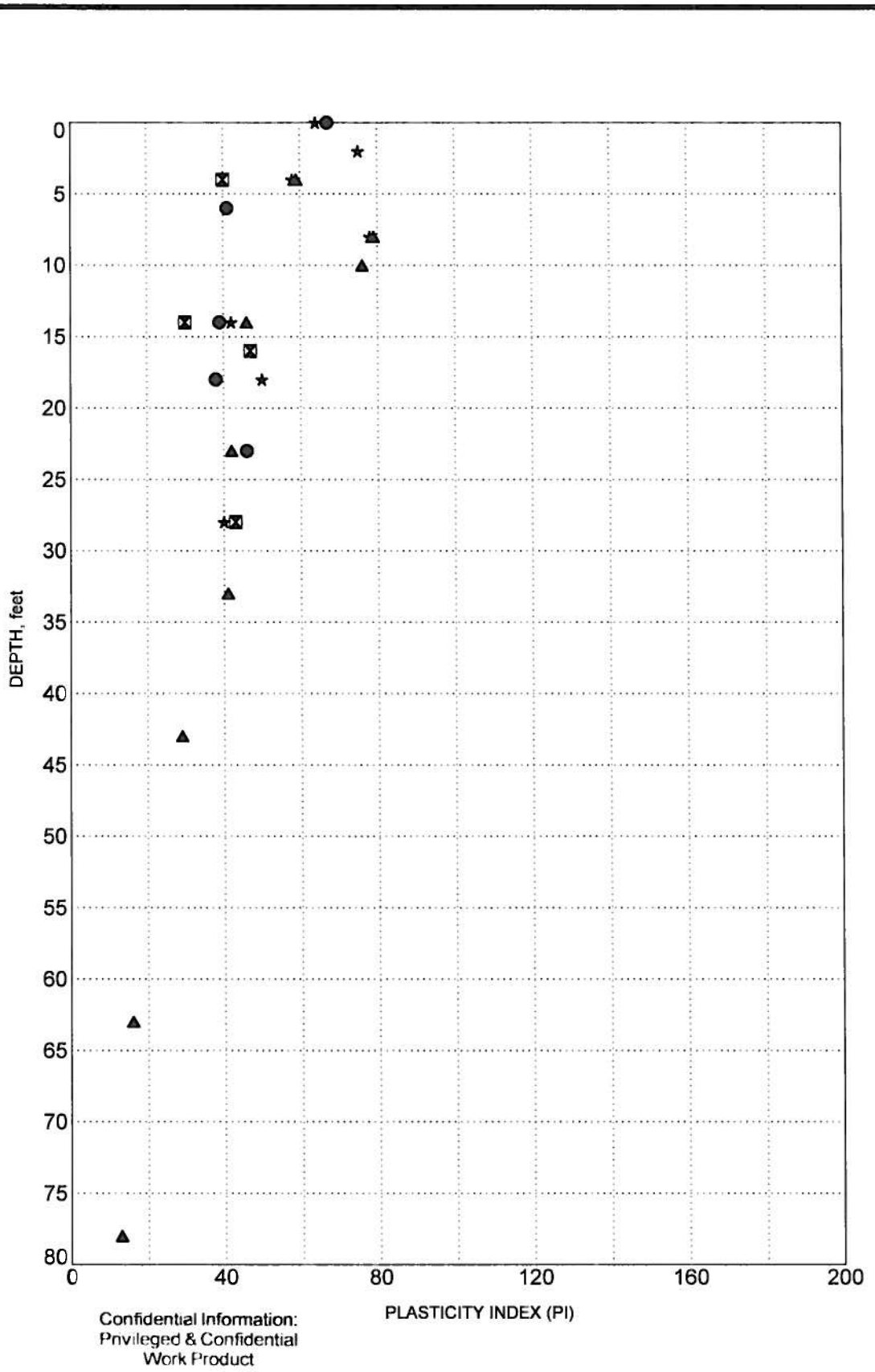
PLASTICITY INDEX vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-7A

ARD DEPTH VS PI 13-80-3705.GPJ US LAB.GDT 12/19/13



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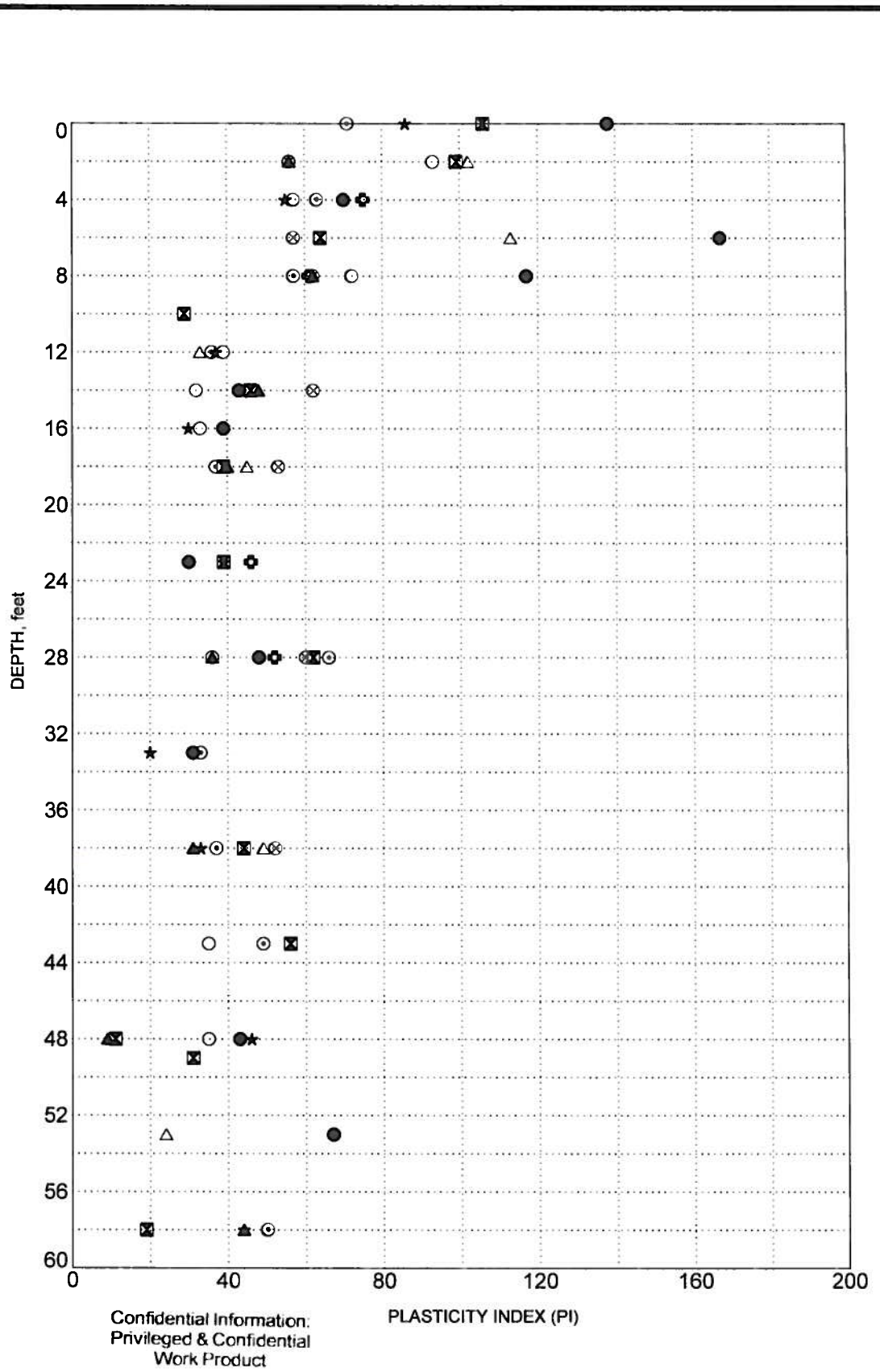
Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-7B



ARD DEPTH VS PI 13-80-3705.GPJ US_LAB.GDT 12/19/13

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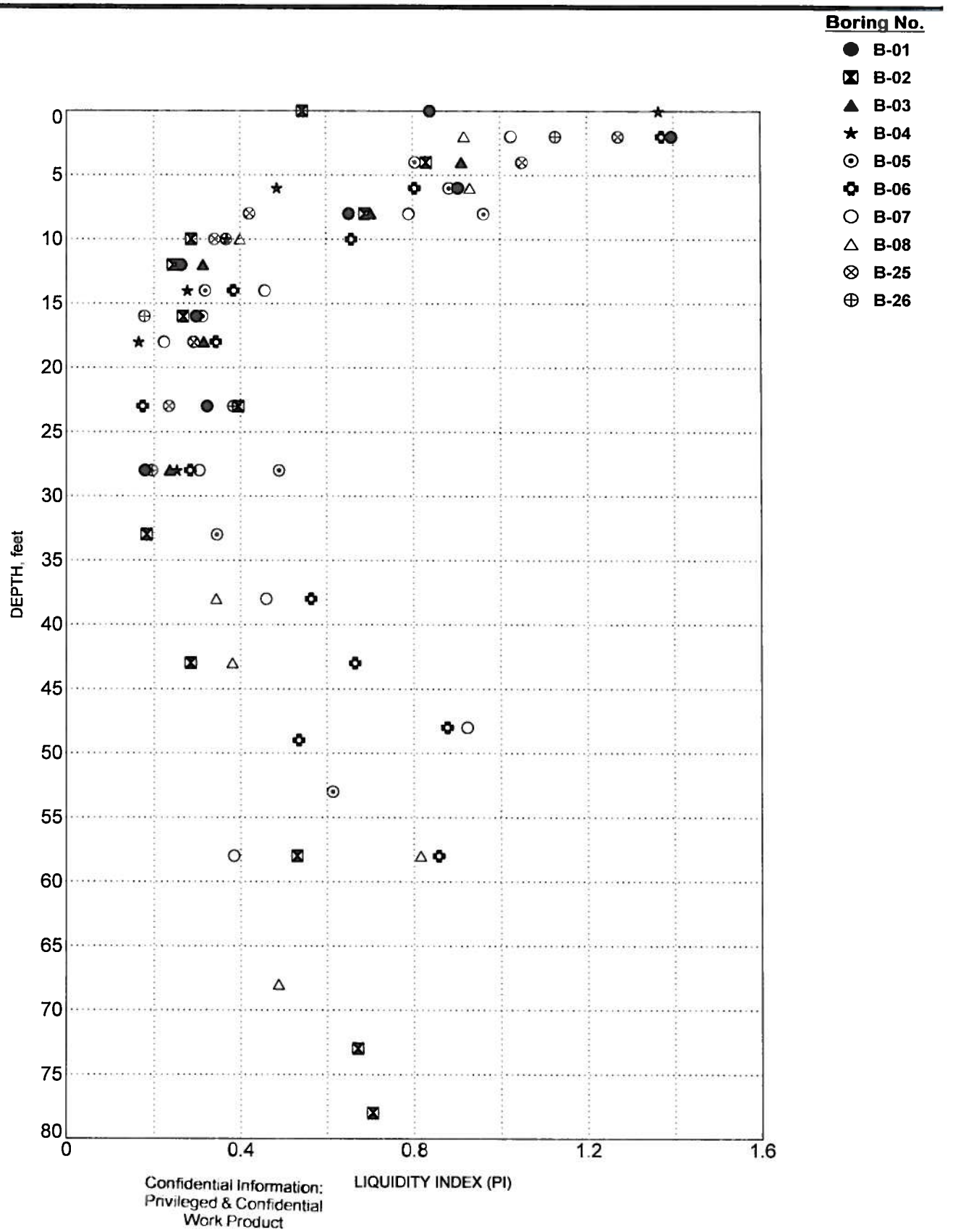
PLASTICITY INDEX vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-7C



ARD DEPTH VS LI 13-80-3705.GPJ US_LAB.GDT 12/19/13

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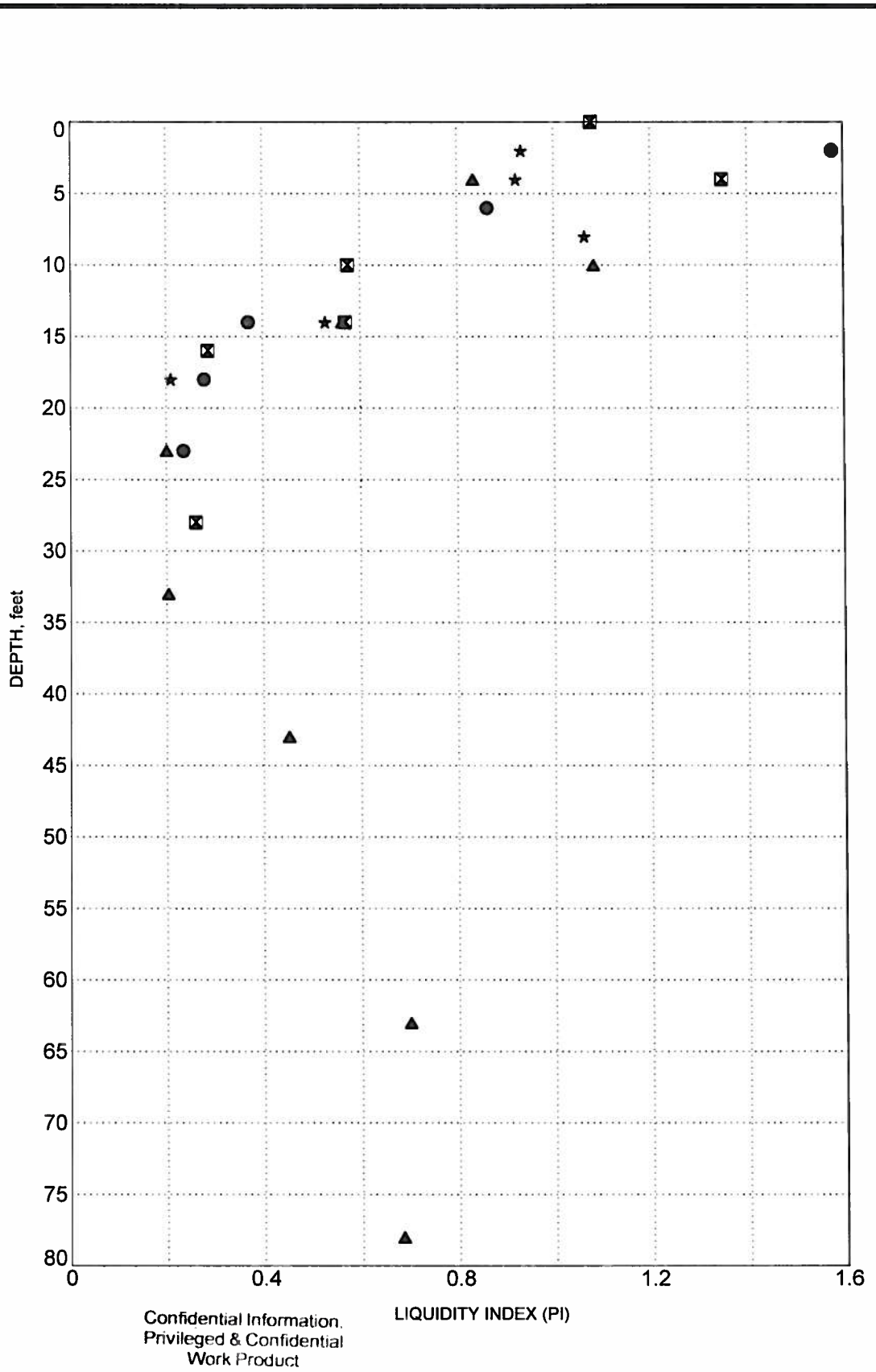
LIQUIDITY INDEX vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-8A



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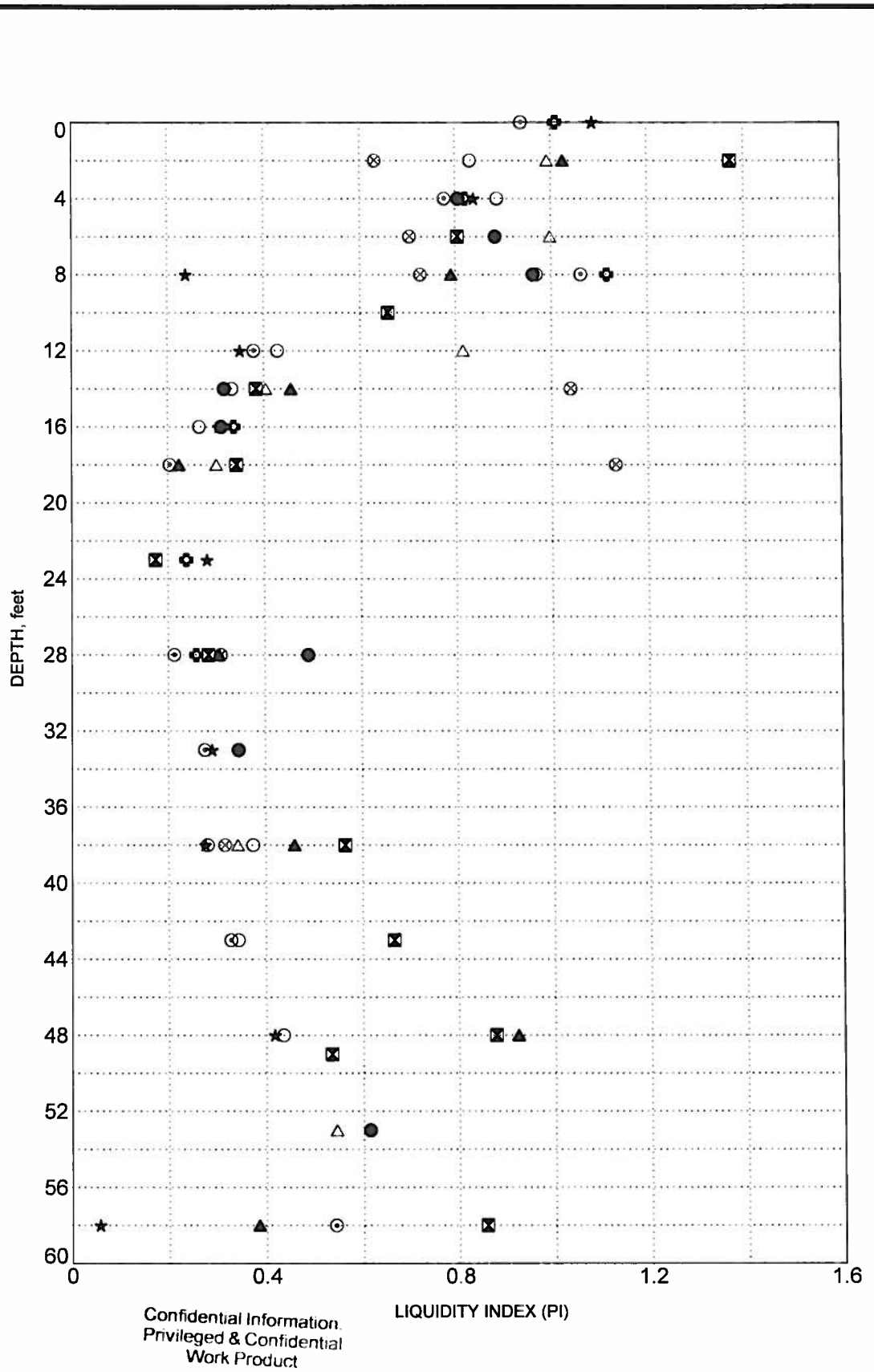
LIQUIDITY INDEX vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-8B

ARD DEPTH VS LI 13-80-3705.GPJ US LAB.GDT 12/19/13



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LIQUIDITY INDEX vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-8C

ARD DEPTH VS LI 13-80-3705.GPJ US_LAB.GDT 12/19/13

Figure B-9

Hydrometer Particle Size Analyses Results

Boring ID	Sample Depth	% Gravel	% Sand	% Silt	% Clay
B-01	23-25	0	3	72	25
B-02	33-35	0.4	17	63	19
B-02	38-40	0	0	39	61
B-02	48-50	0	35	54	11
B-02	73-75	0	6	76	18
B-02	78-80	0	11	57	32
B-04	23-25	0	21	61	18
B-05	23-25	0	21	44	35
B-05	33-35	0	5	62	33
B-05	48-50	0	1	48	51
B-06	2-4	0	3	25	72
B-06	6-8 BL 2	0	1	39	60
B-06	23.5-25	0	3	60	37
B-06	28-30	0	0	5	95
B-06	48-50	0	3	76	21
B-06	58-60	0	1	74	25
B-07	48-50	0	5	63	32
B-07	58-60	0	1	77	22
B-08	58-60	0	3	74	23
B-09	33-35	0	14	51	35
B-10	33-35	0	15	44	41
B-10	43-45	0	0	31	69
B-12	43-45	0	0	46	53
B-20	16-18	0	2	67	32
B-23	18-20	0	3	65	32
B-25	23-25	0	11	60	29
B-26	23-25	0	9	76	15

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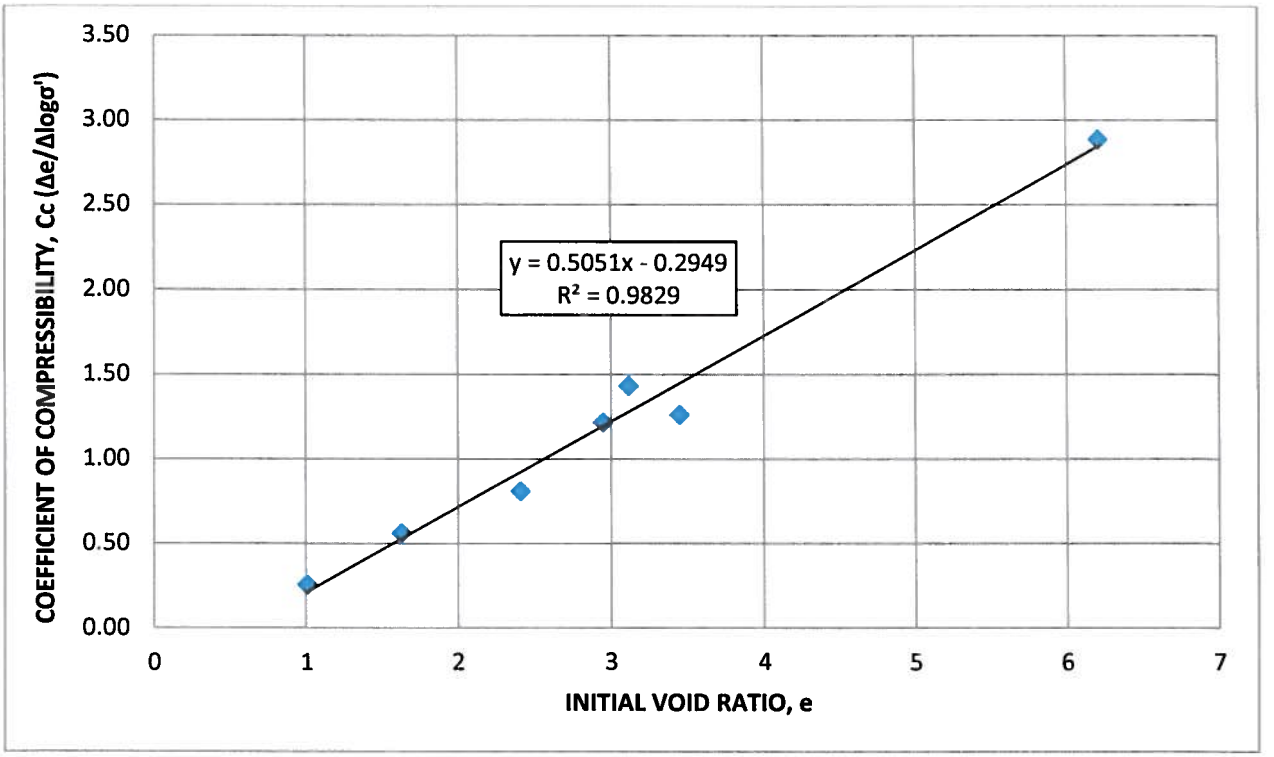
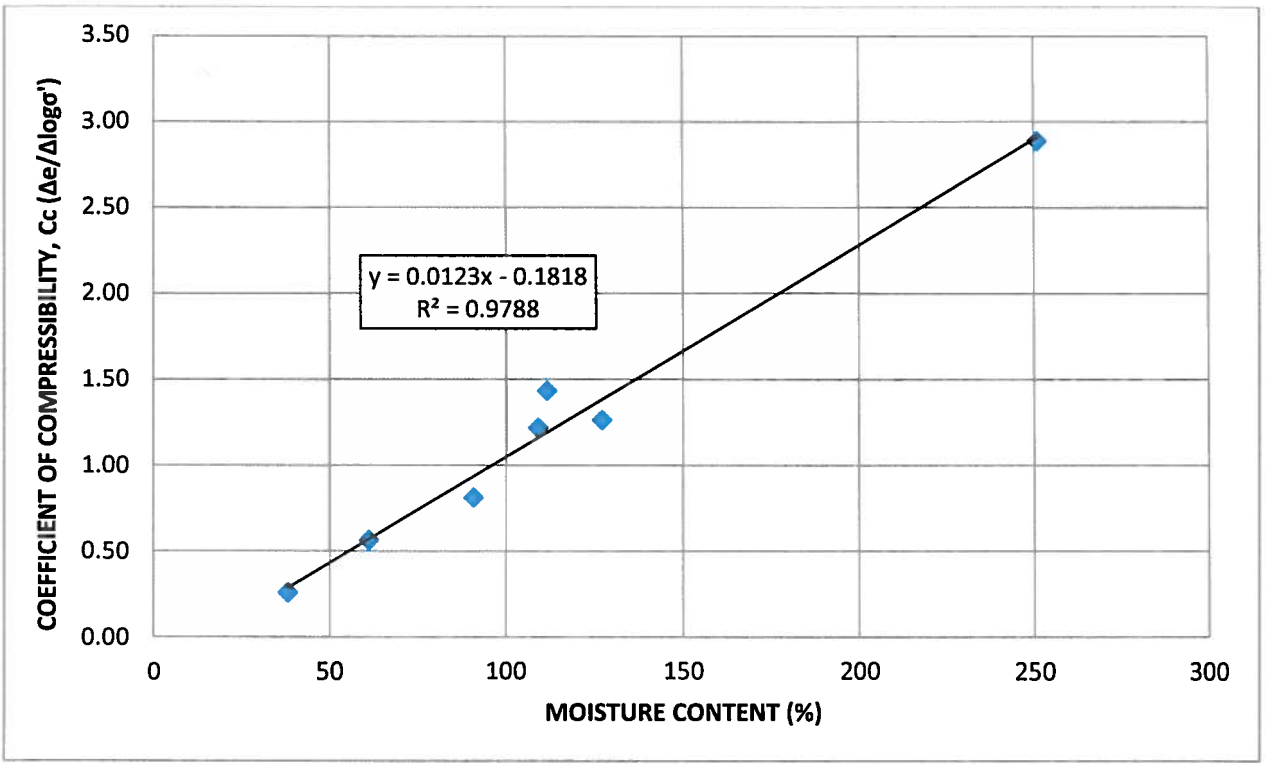
Client: CPRA
Project: Cole's Bayou
AAI Project No. 13-80-3705





Correlations between Compressibility and Index Properties Figure B-10

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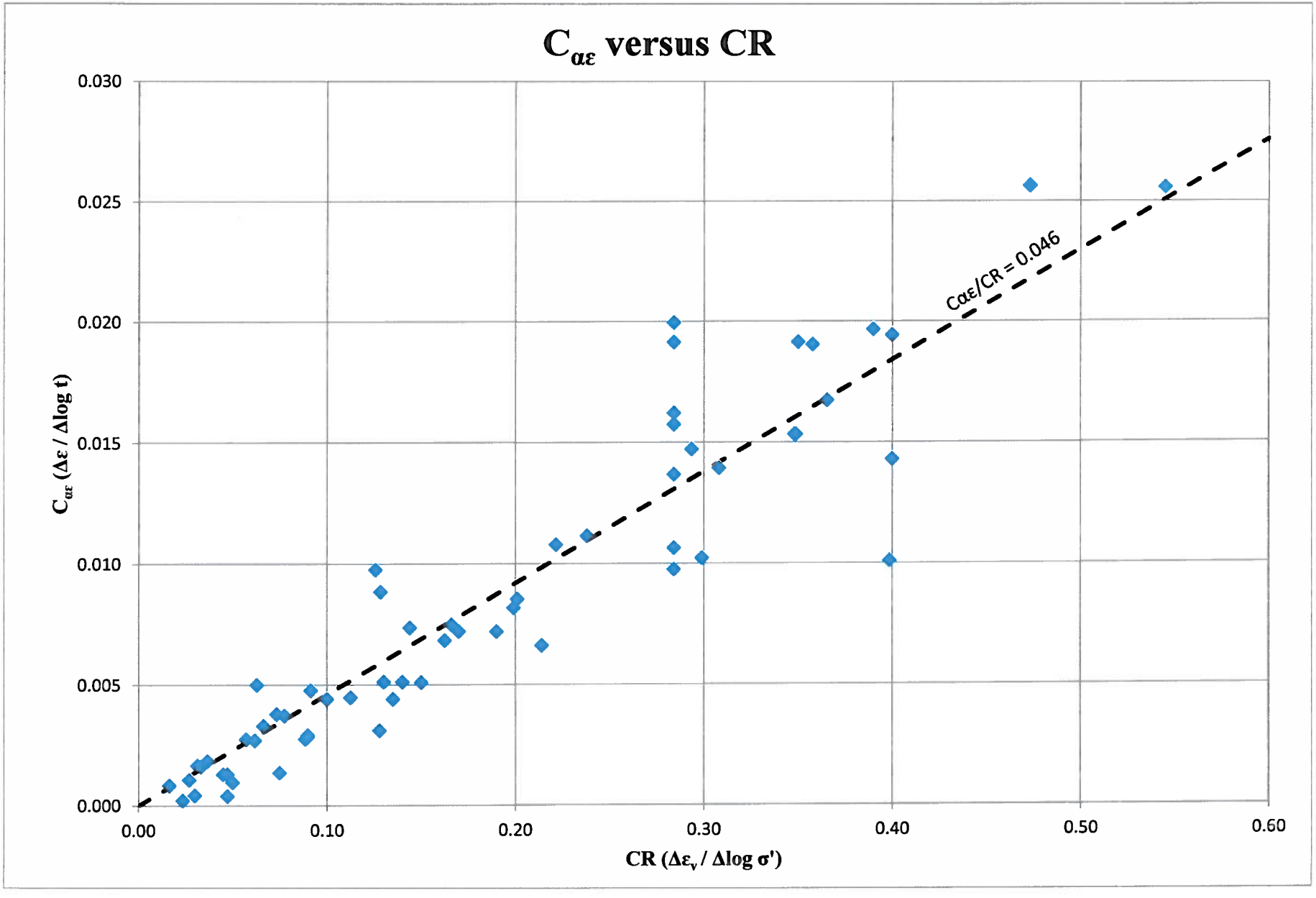

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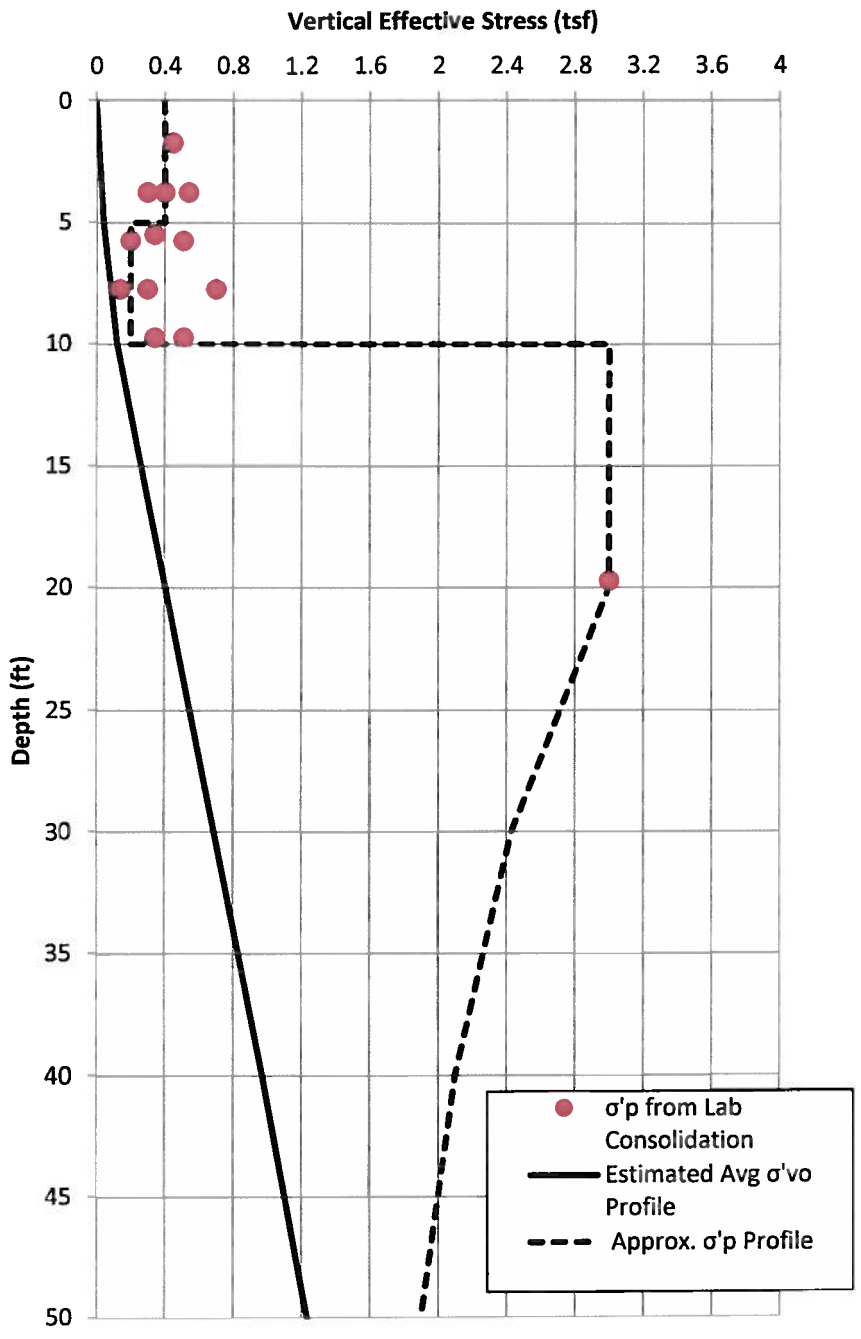
Baton Rouge, LA 70810

Figure B-11



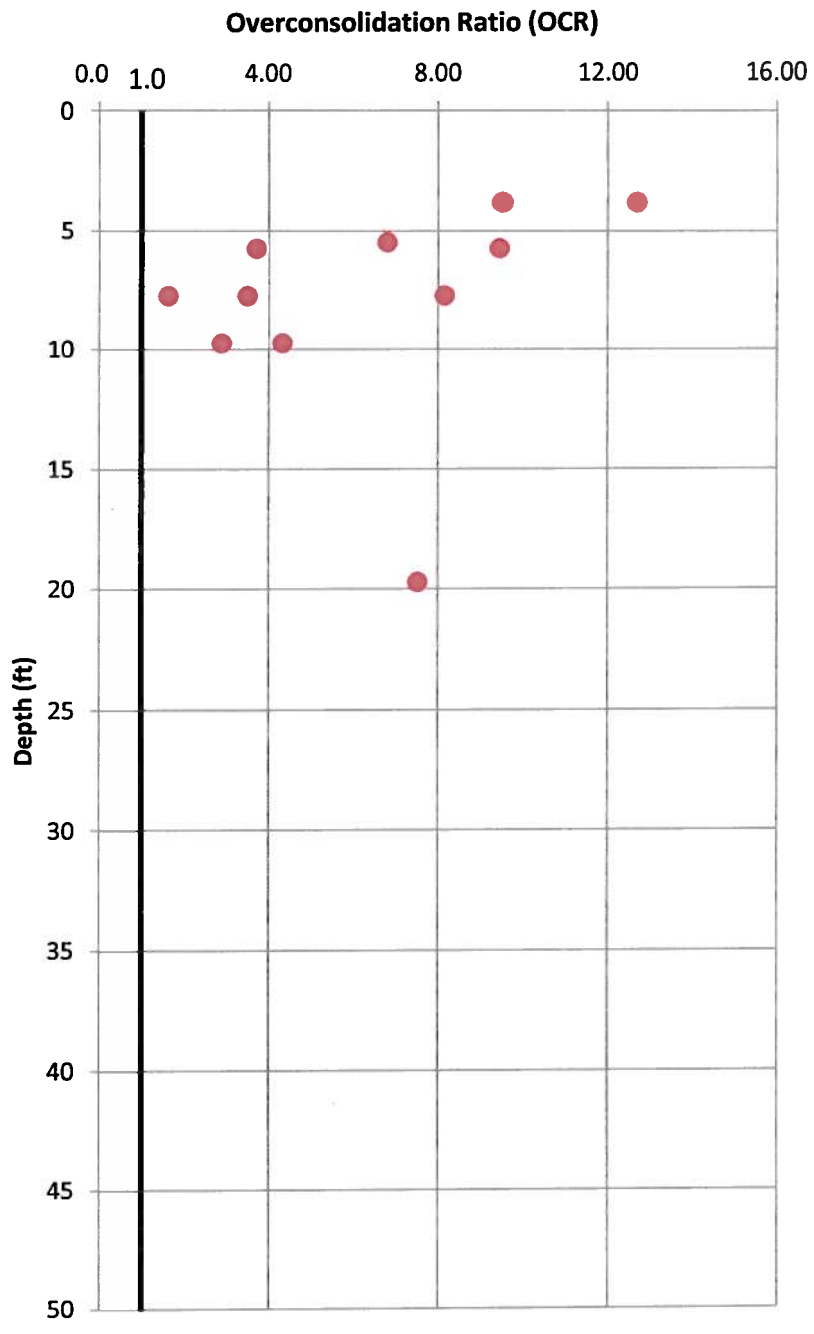


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Figure: B-12

Client: CPRA
Project: Cole's Bayou
AAI Project No. 13-80-3705

STRESS HISTORY PROFILES

Client: CPRA
Project: Cole's Bayou
AAI Project No.: 13-80-3705

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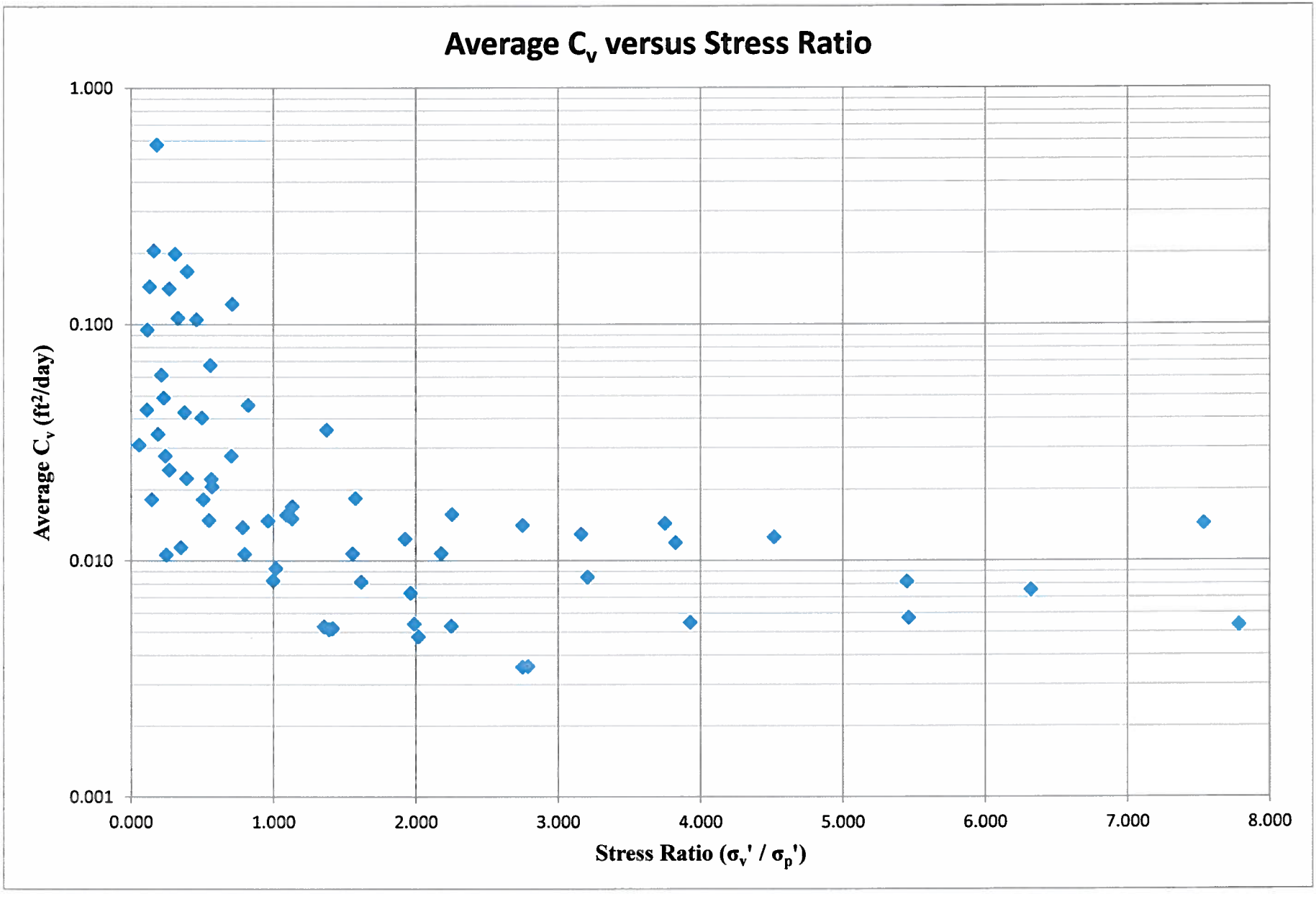

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Figure B-13

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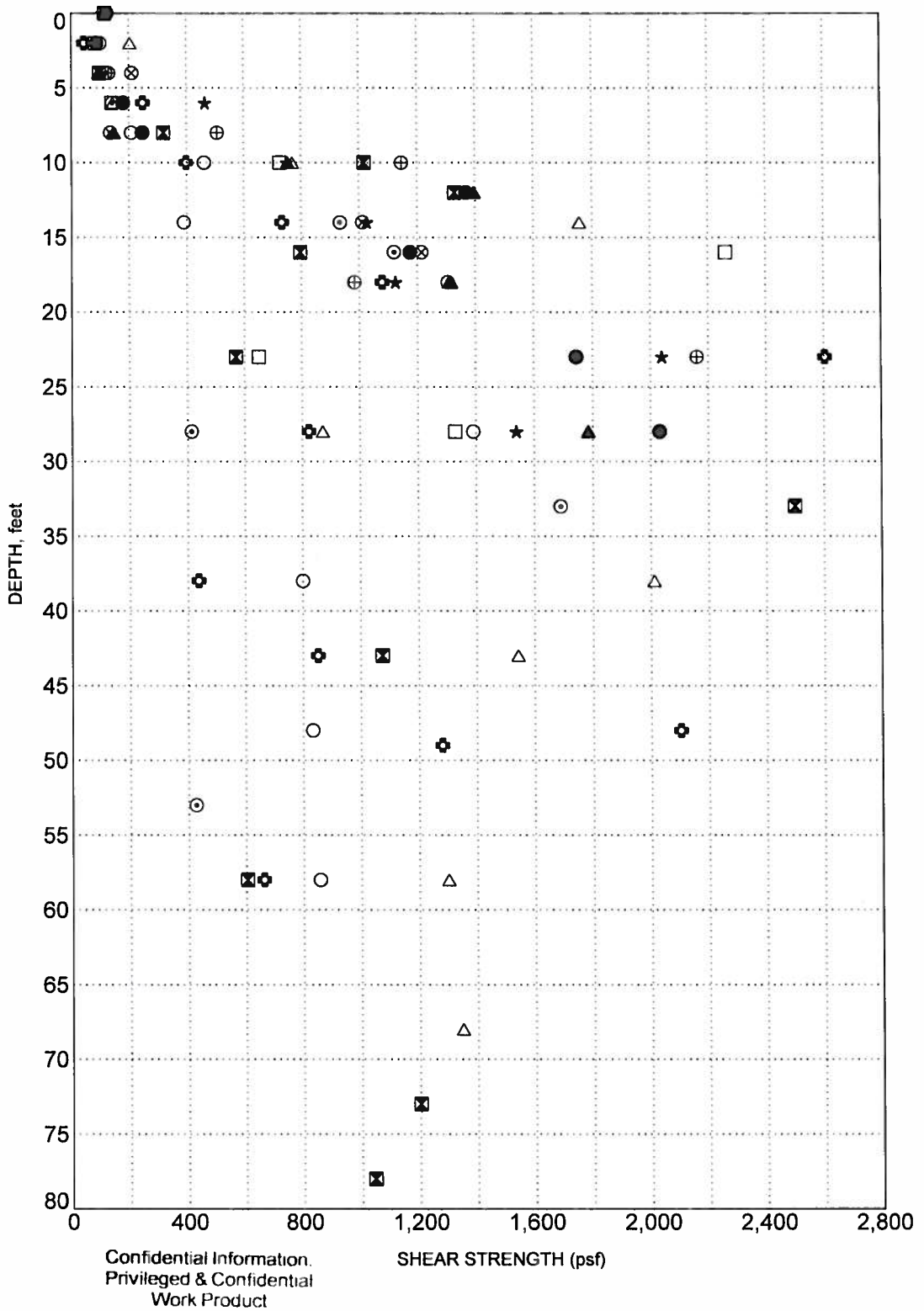

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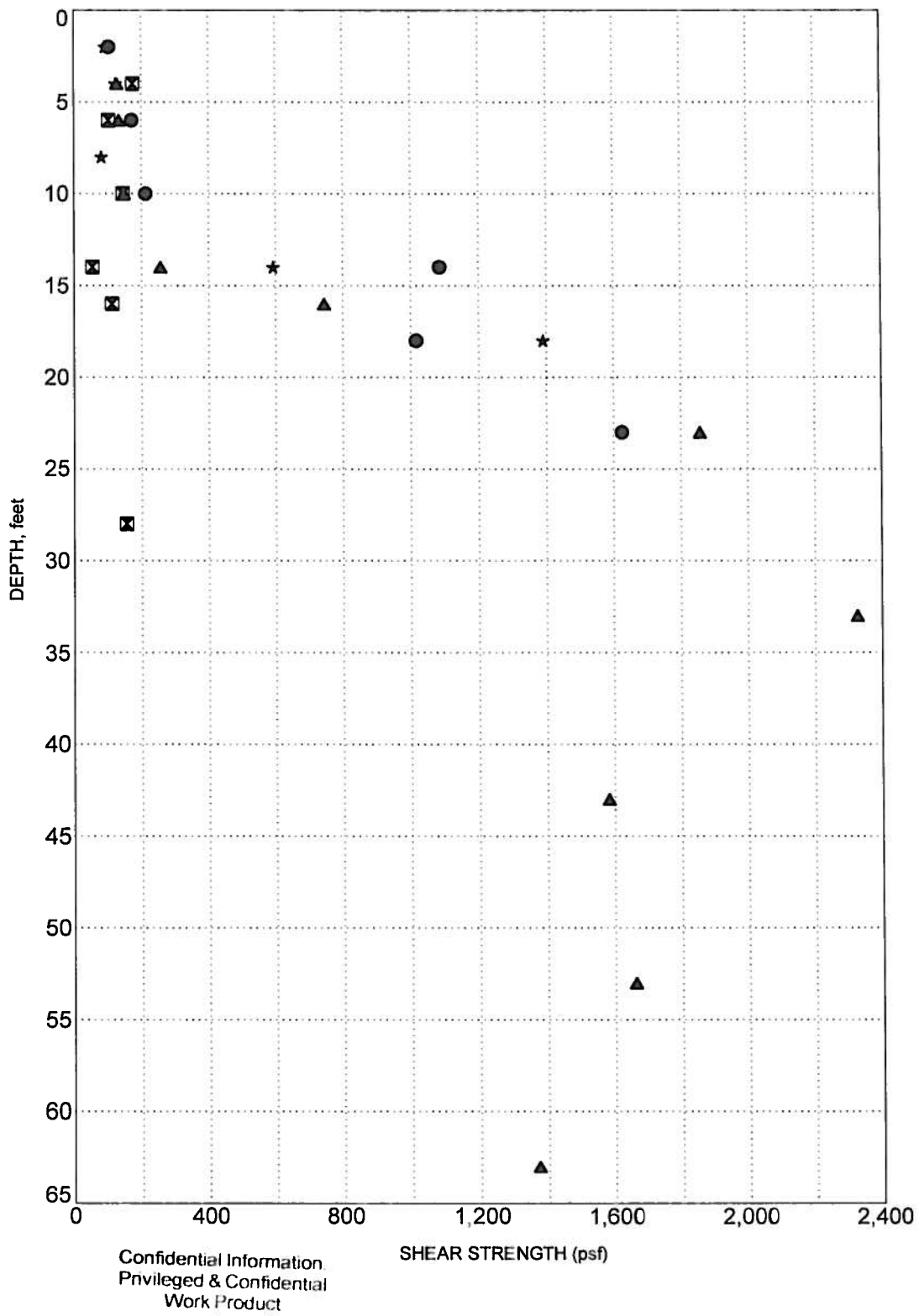
UUC SHEAR STRENGTH vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-14A

ARD DEPTH VS SHEAR STRENGTH 13-80-3705.GPJ US_LAB.GDT 12/20/13



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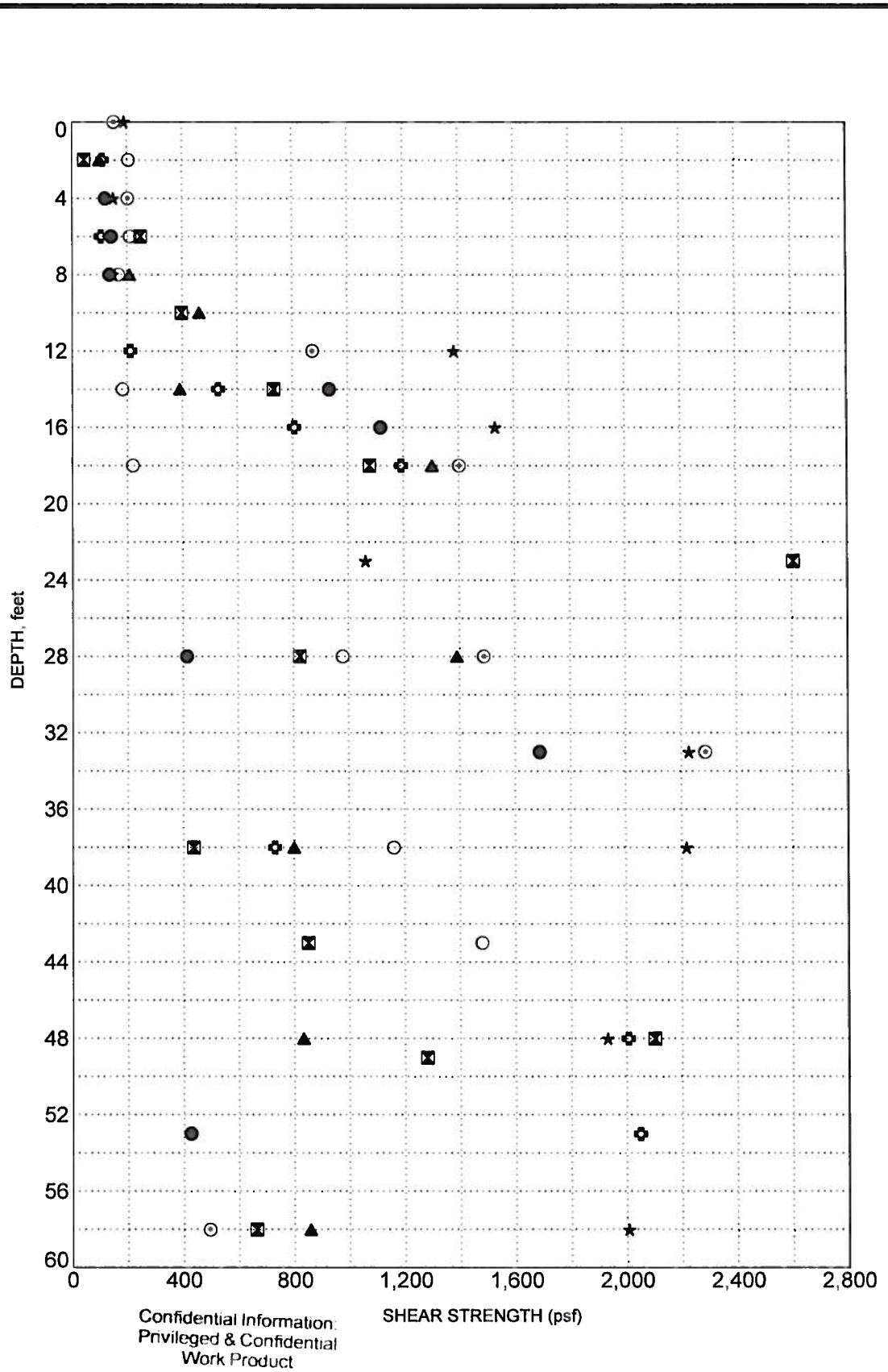
UUC SHEAR STRENGTH vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-14B

ARD DEPTH VS SHEAR STRENGTH 13-80-3705.GPJ US LAB.GDT 12/20/13



Confidential Information:
Privileged & Confidential
Work Product

Ardaman & Associates, Inc.

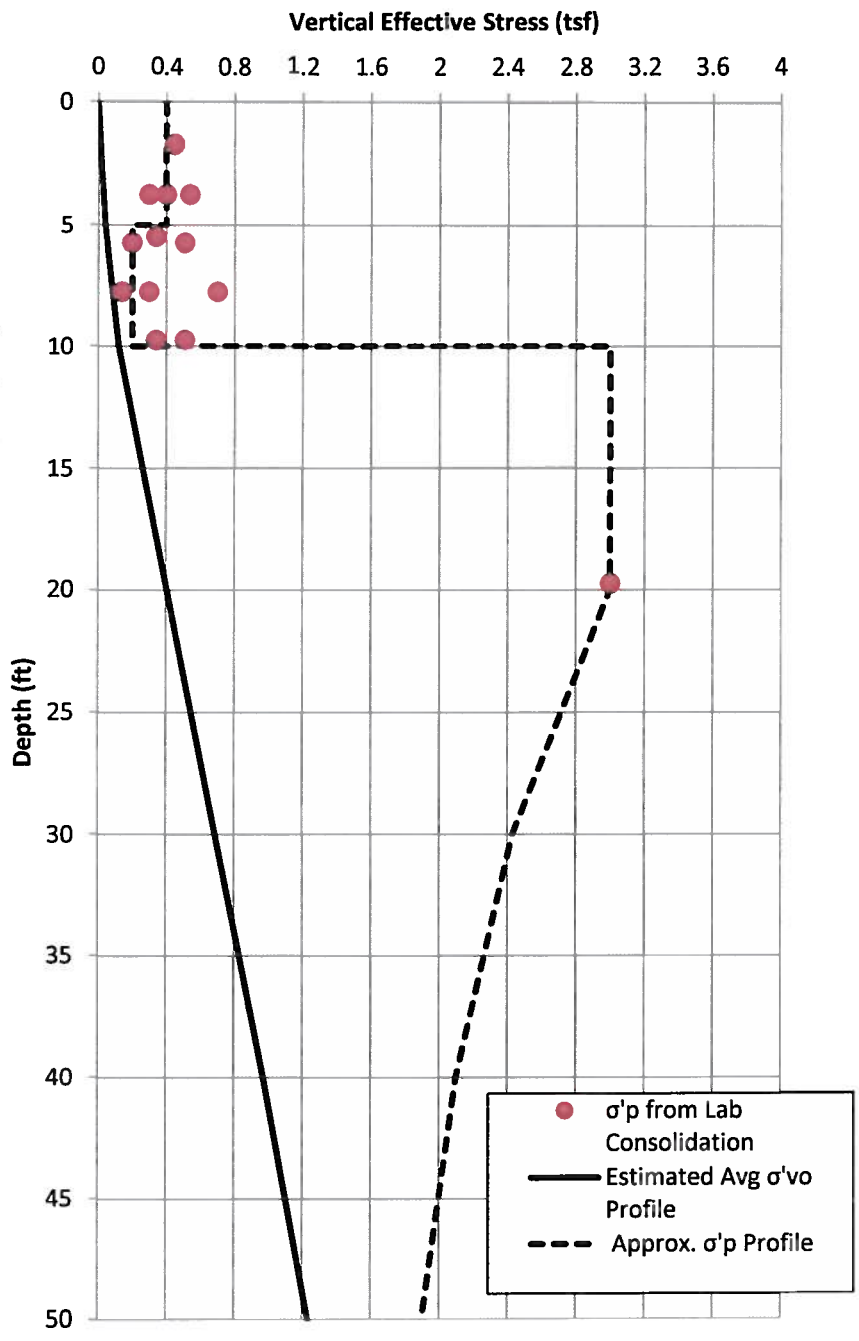
UUC SHEAR STRENGTH vs DEPTH

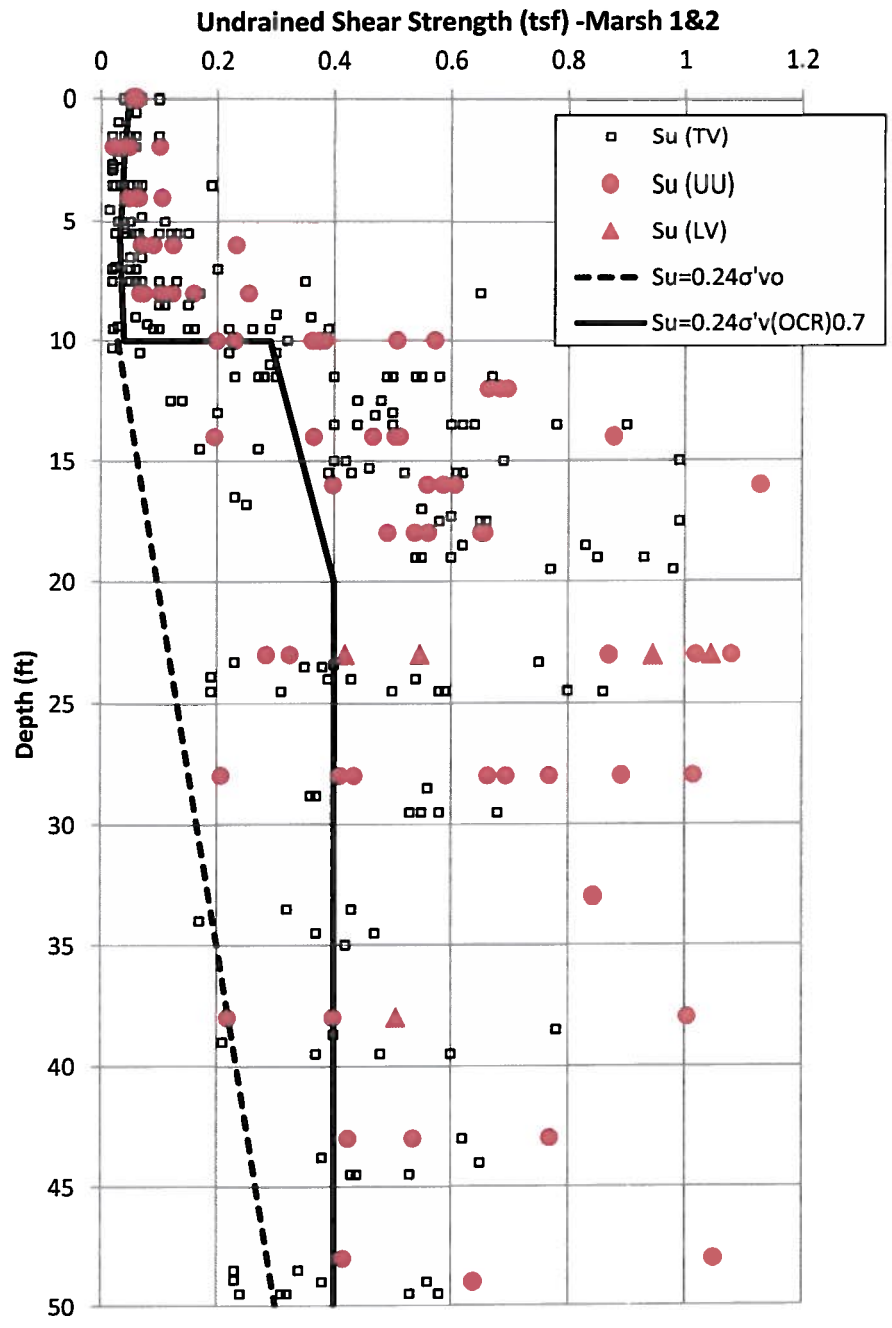
Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-14C

ARD DEPTH VS SHEAR STRENGTH 13-80-3705.GPJ US_LAB.GDT 12/20/13



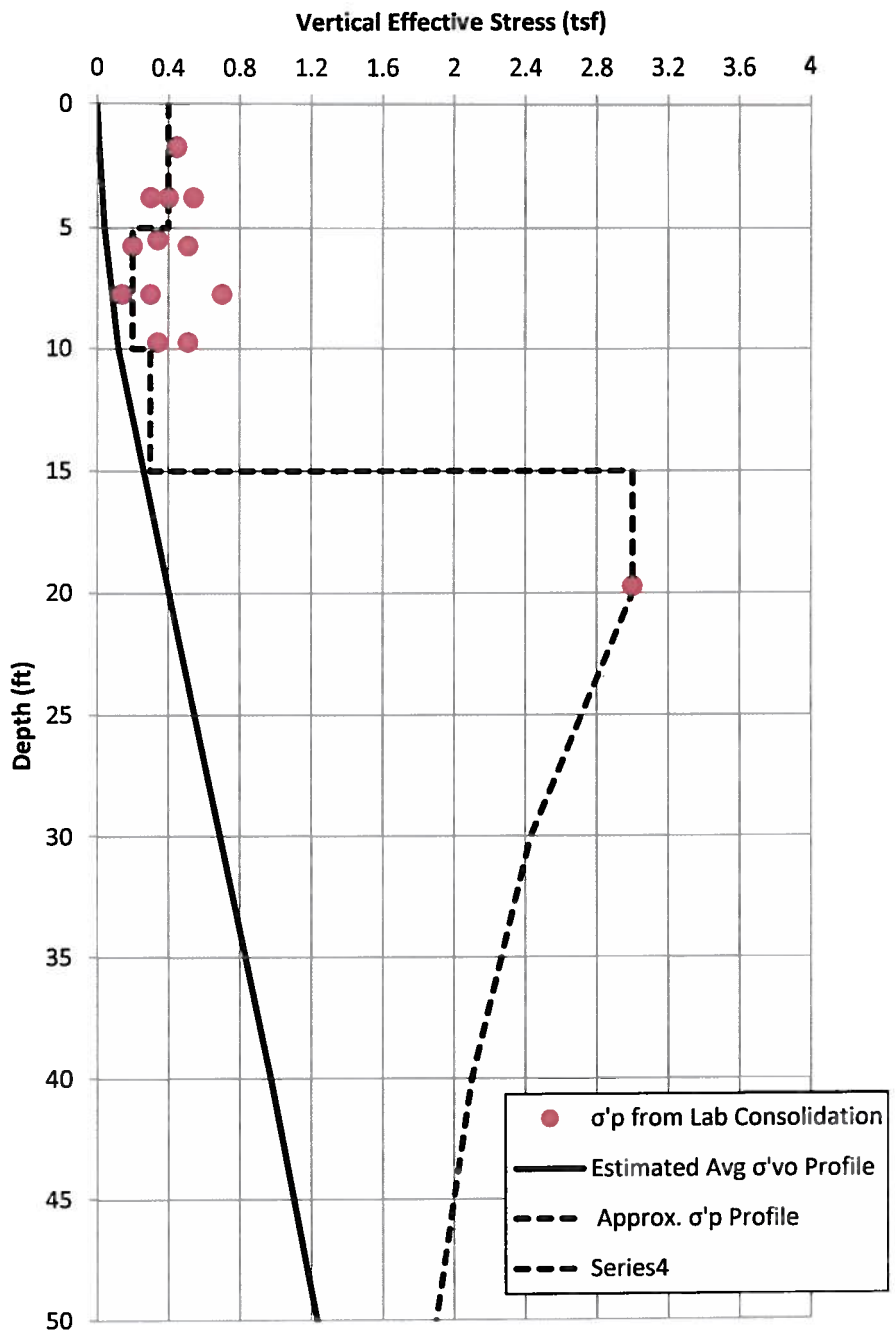


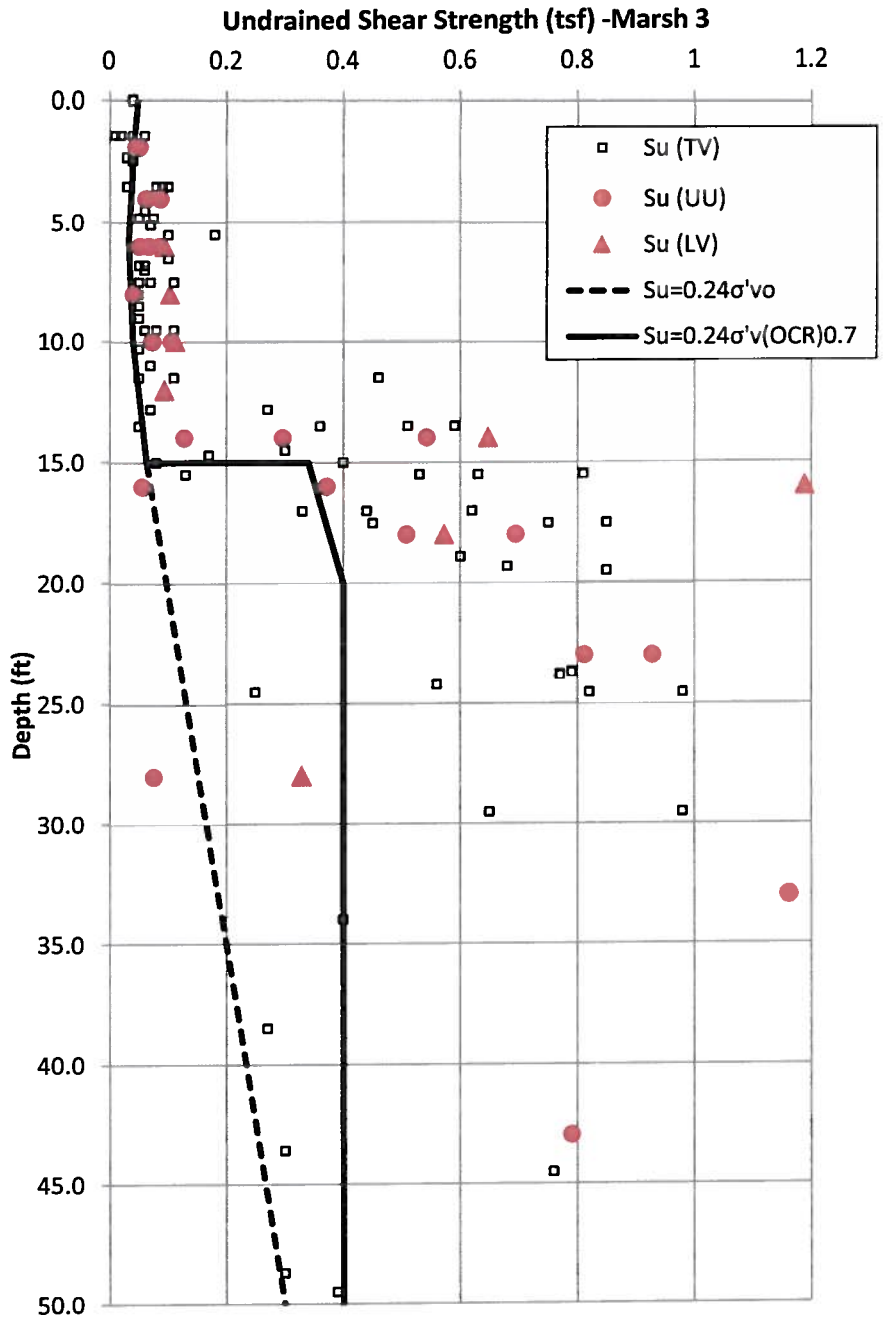
Confidential Information.
Privileged & Confidential
Work Product

Figure: B-15A

Client: CPRA
Project: Cole's Bayou
AAI Project No. 13-80-3705

VERTICAL EFFECTIVE STRESS AND UNDRAINED SHEAR STRENGTH VS. DEPTH



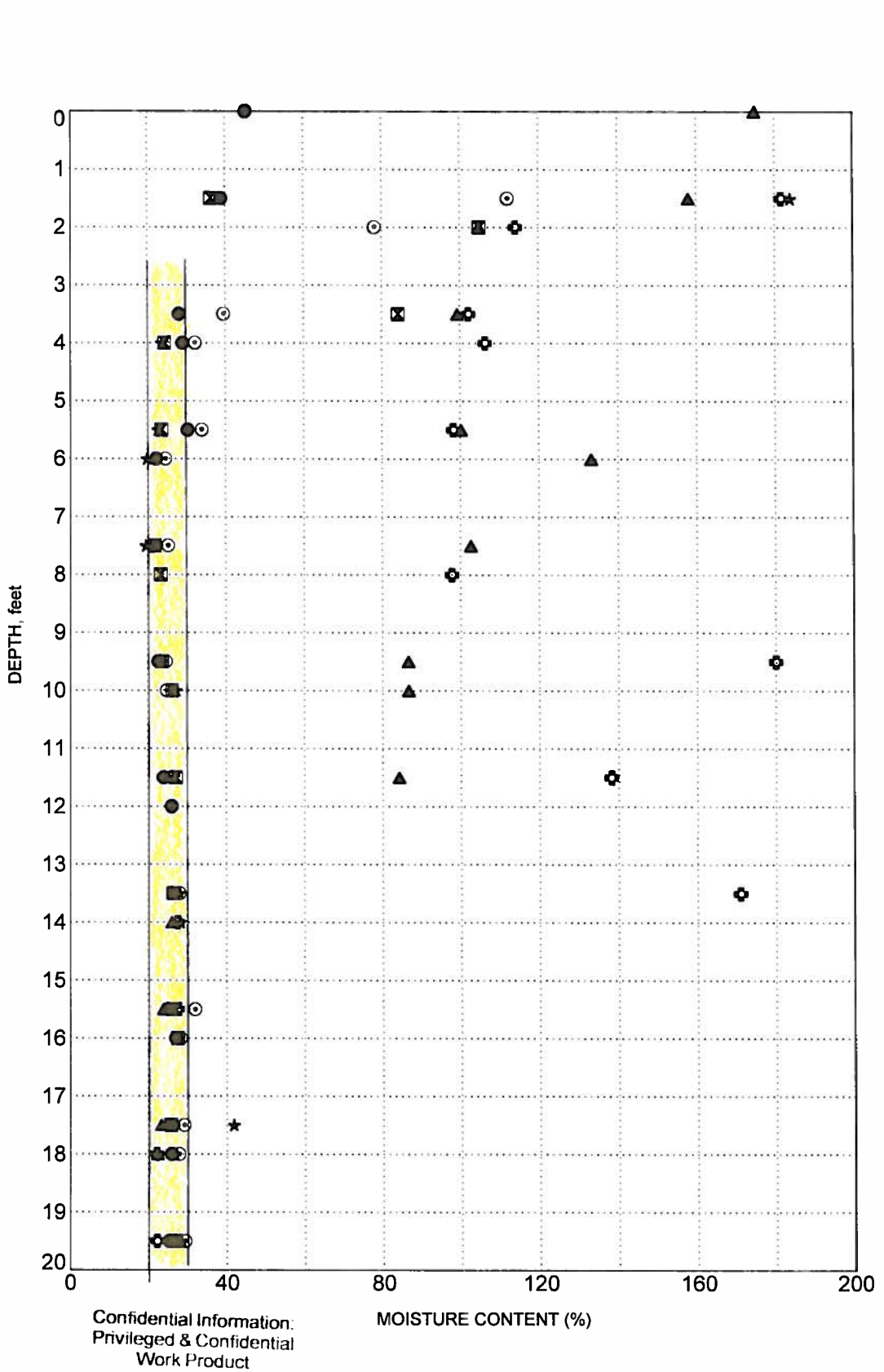


Confidential Information.
Privileged & Confidential
Work Product

Figure: B-15B

Client: CPRA
Project: Cole's Bayou
AAI Project No. 13-80-3705

VERTICAL EFFECTIVE STRESS AND UNDRAINED SHEAR STRENGTH VS. DEPTH



ARD DEPTH VS MOISTURE CONTENT 13-80-3705.GPJ US LAB.GDT 12/19/13

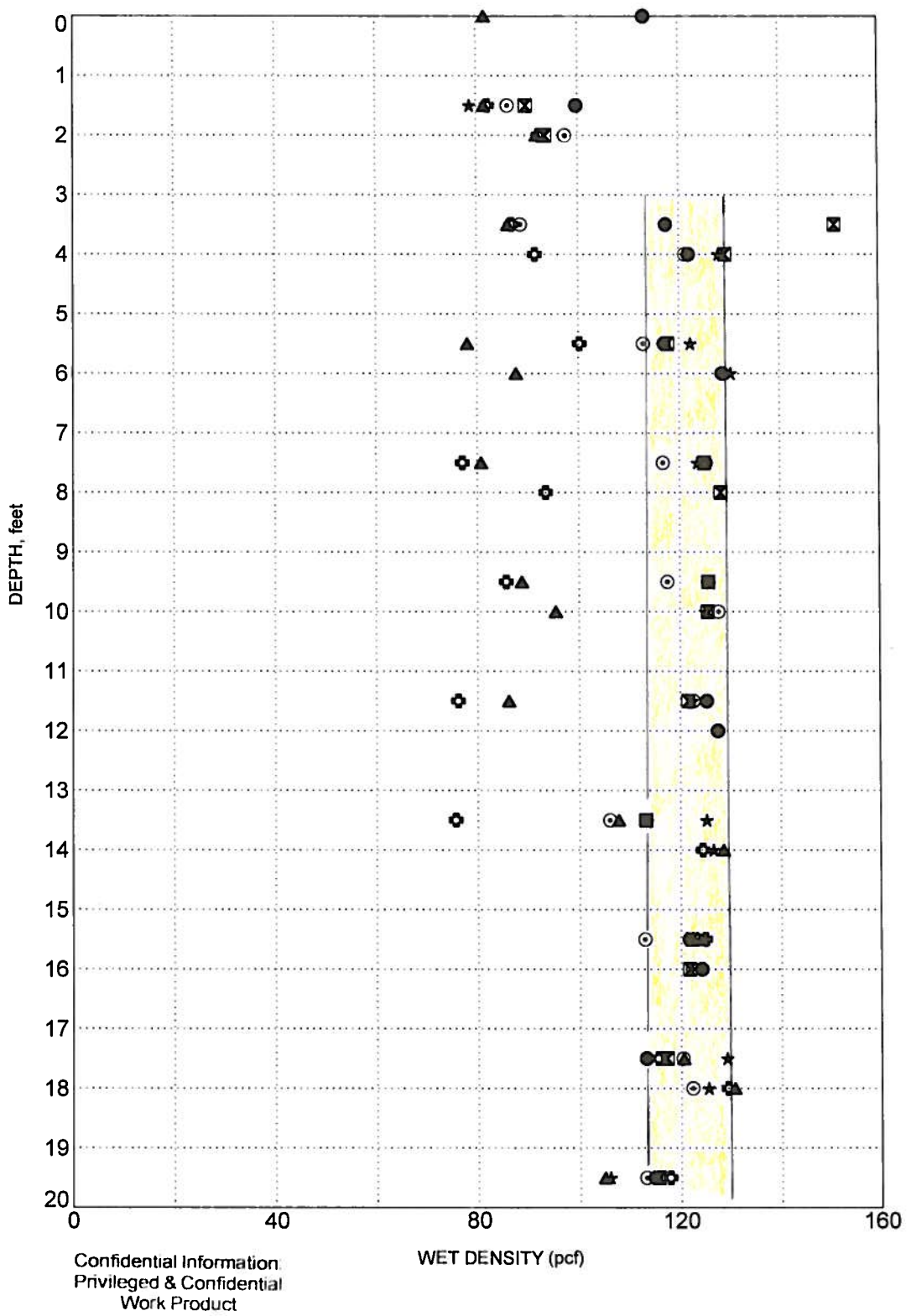
Ardaman & Associates, Inc.

MOISTURE CONTENT vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-16



Confidential Information
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Ardaman & Associates, Inc.

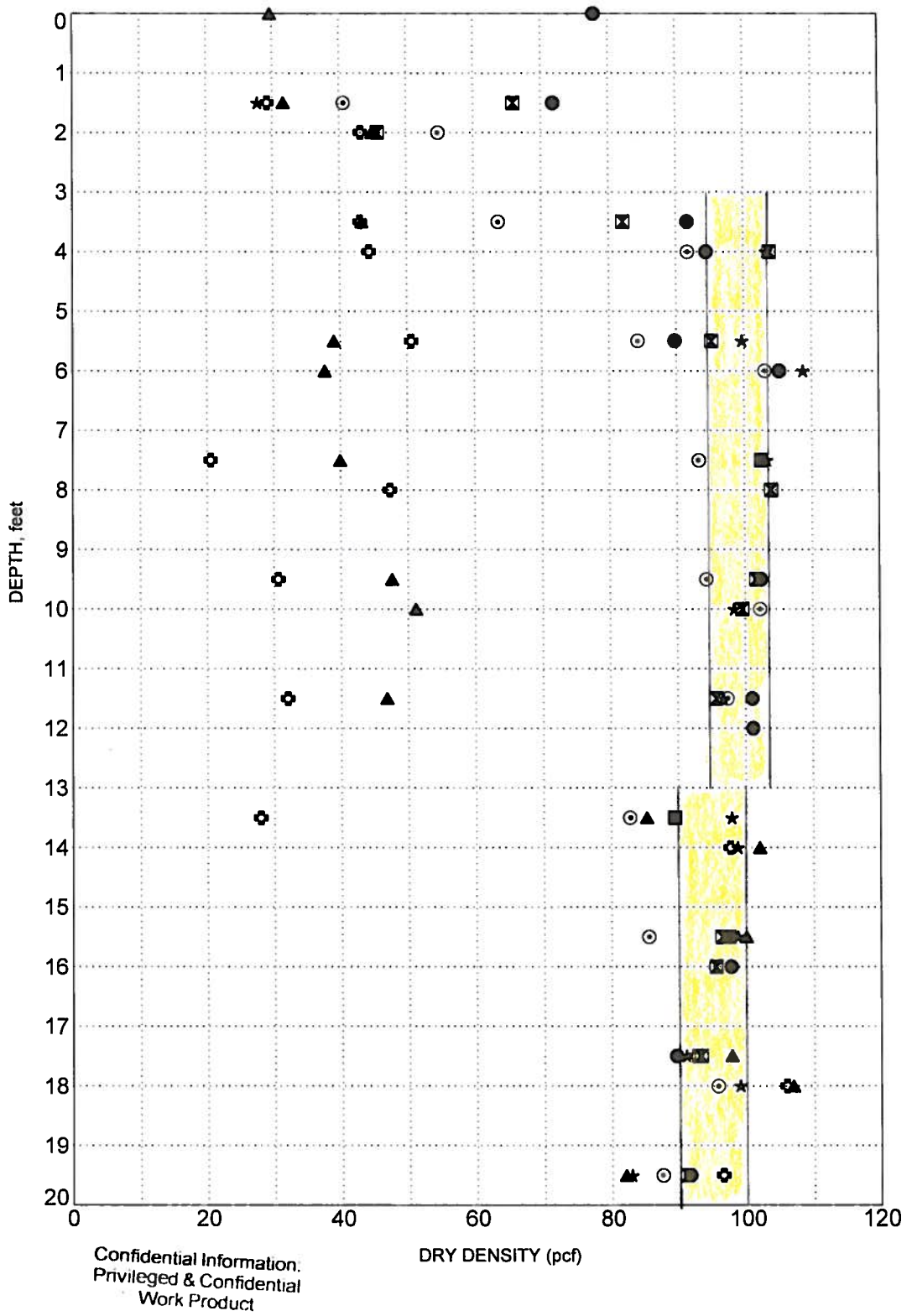
WET DENSITY vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-17

ARD DEPTH VS WET DENSITY 13-80-3705.GPJ US_LAB.GDT 12/19/13



Confidential Information:
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Work Product

Ardaman & Associates, Inc.

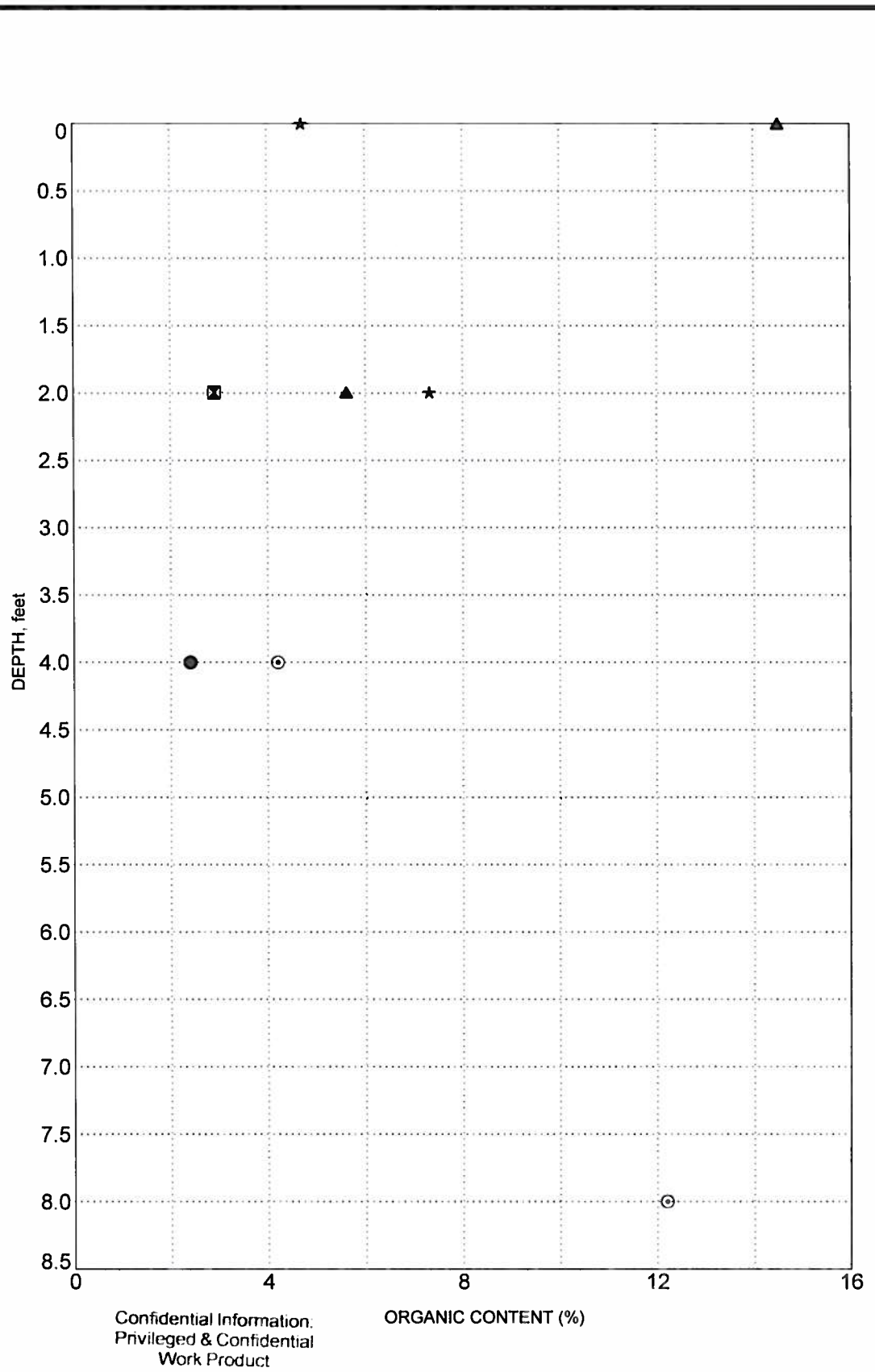
DRY DENSITY vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-18

ARD DEPTH VS DRY DENSITY 13-80-3705.GPJ US_LAB.GDT 12/19/13



Ardaman & Associates, Inc.

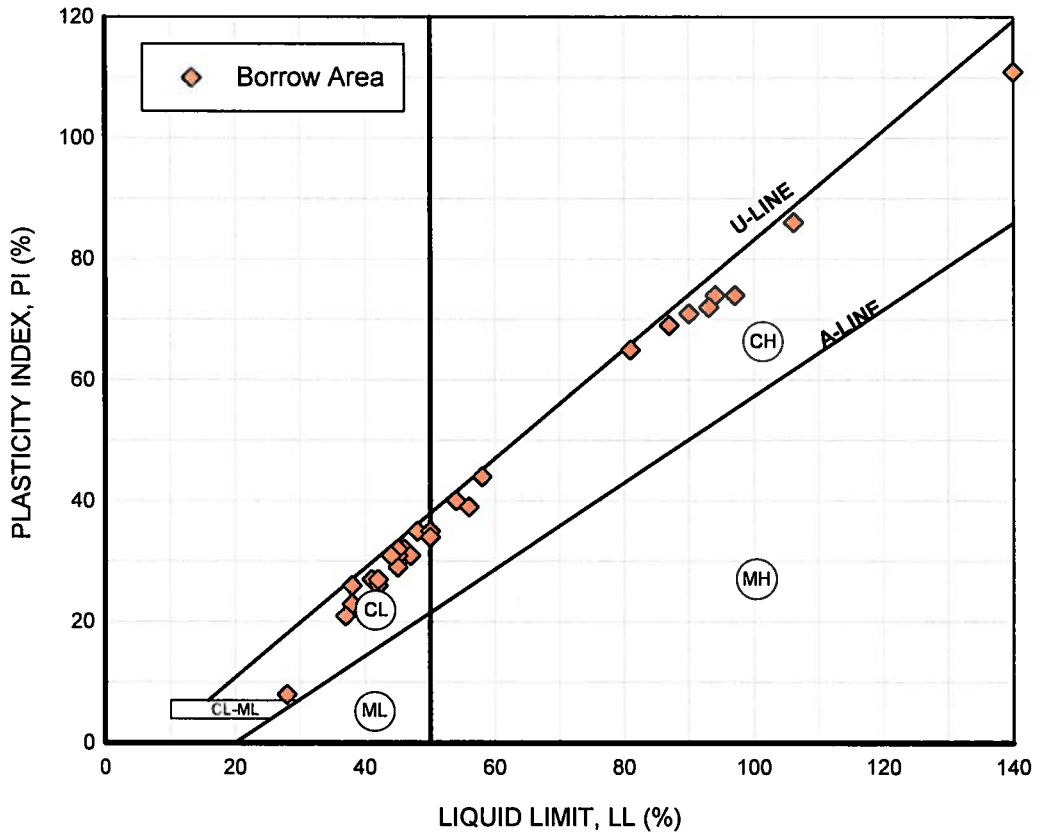
ORGANIC CONTENT vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-19

ARD DEPTH VS ORGANIC CONTENT 13-80-3705.GPJ US_LAB.GDT 12/20/13



PLASTICITY CHART

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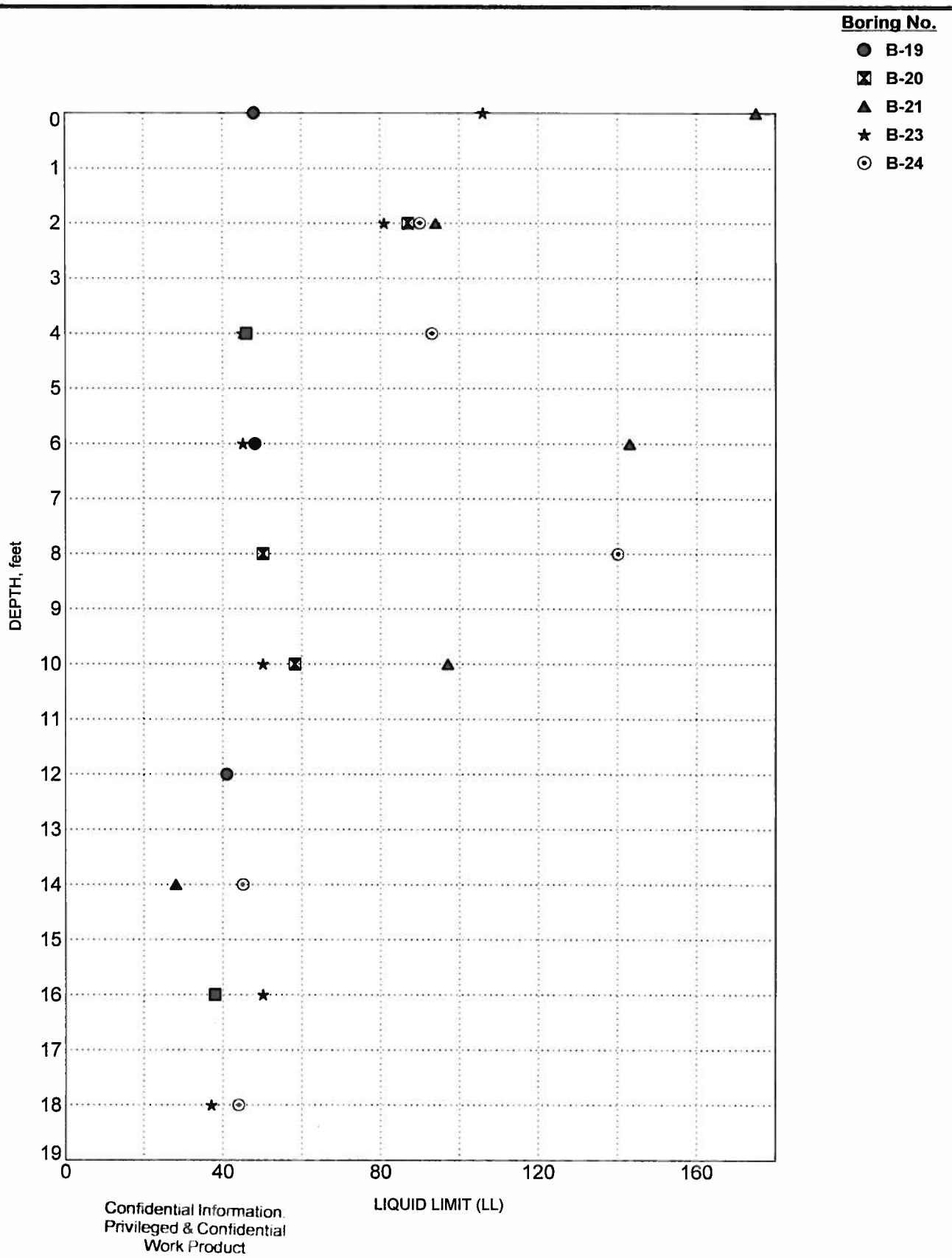
Geotechnical, Environmental and Materials Consultants

COLE'S BAYOU MARSH CREATION

CPRA

DRAWN BY: RJB	CHECKED BY: RER	DATE: 12/19/13
FILE NO: 13-80-3705	APPROVED BY: MB	FIGURE: B-20



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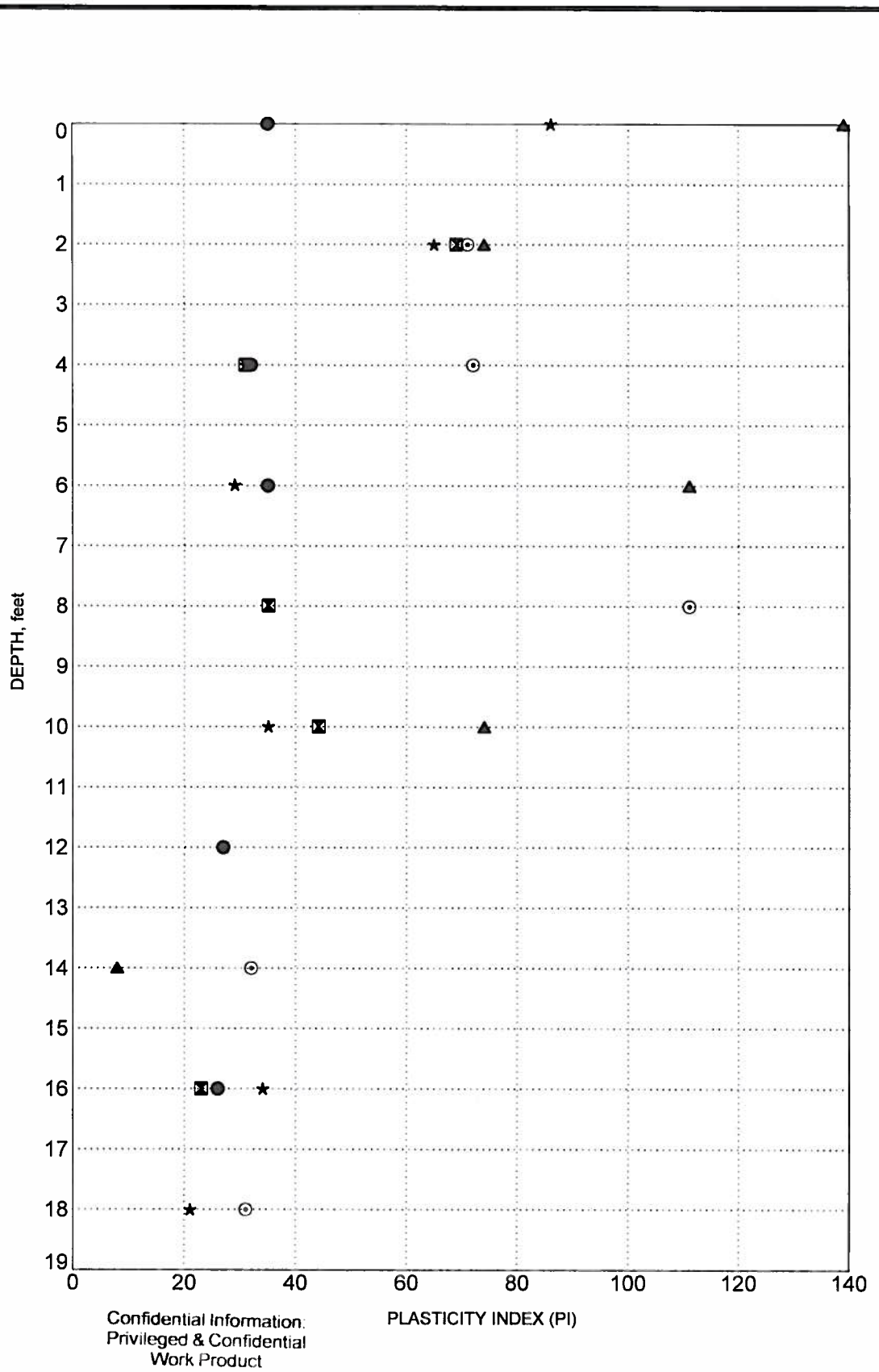
LIQUID LIMIT vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-21

ARD DEPTH VS LL 13-80-3705.GPJ US_LAB.GDT 12/20/13



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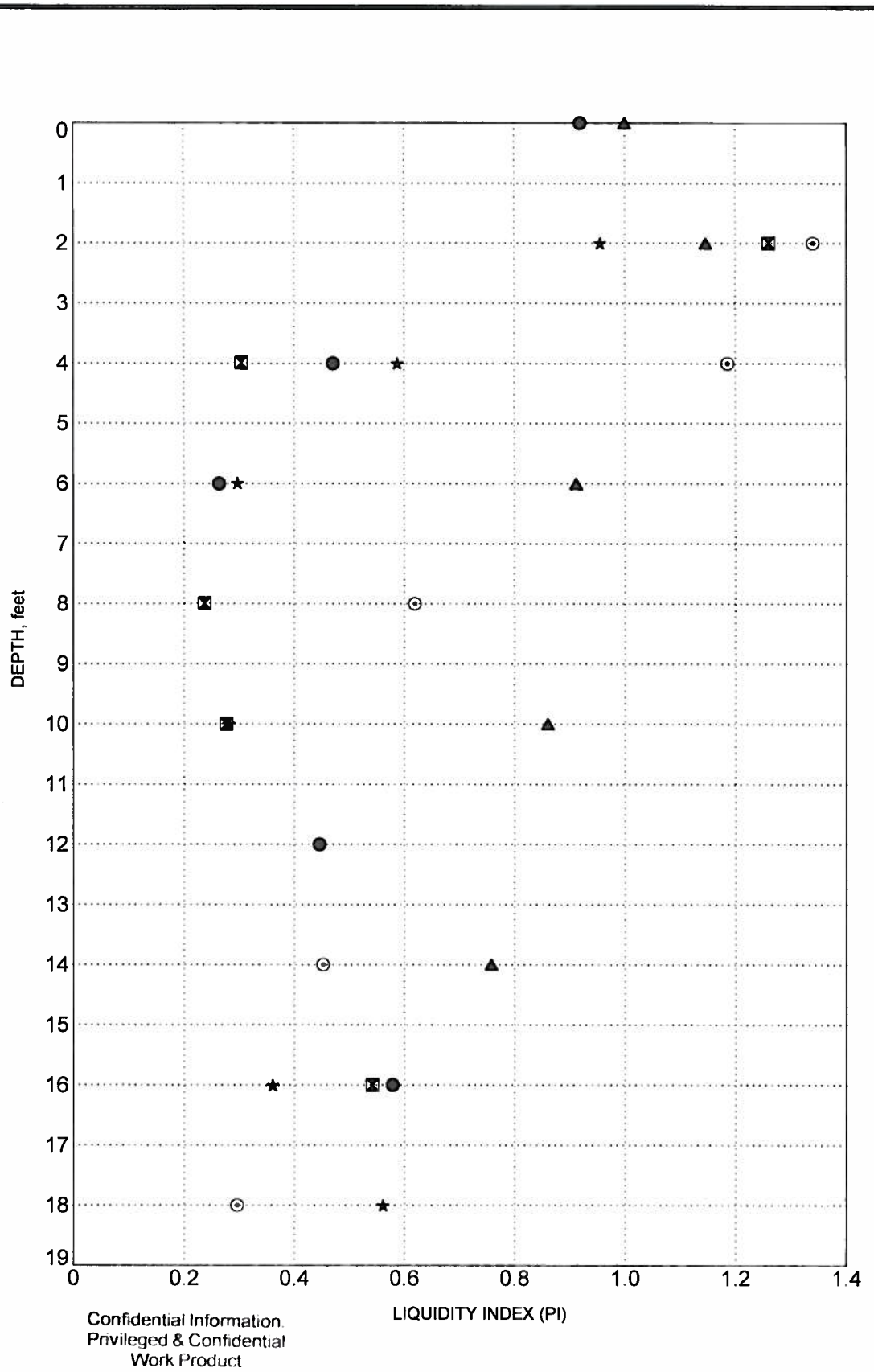
PLASTICITY INDEX vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-22

ARD DEPTH VS PI 13-80-3705.GPJ US_LAB.GDT 12/20/13



Ardaman & Associates, Inc.

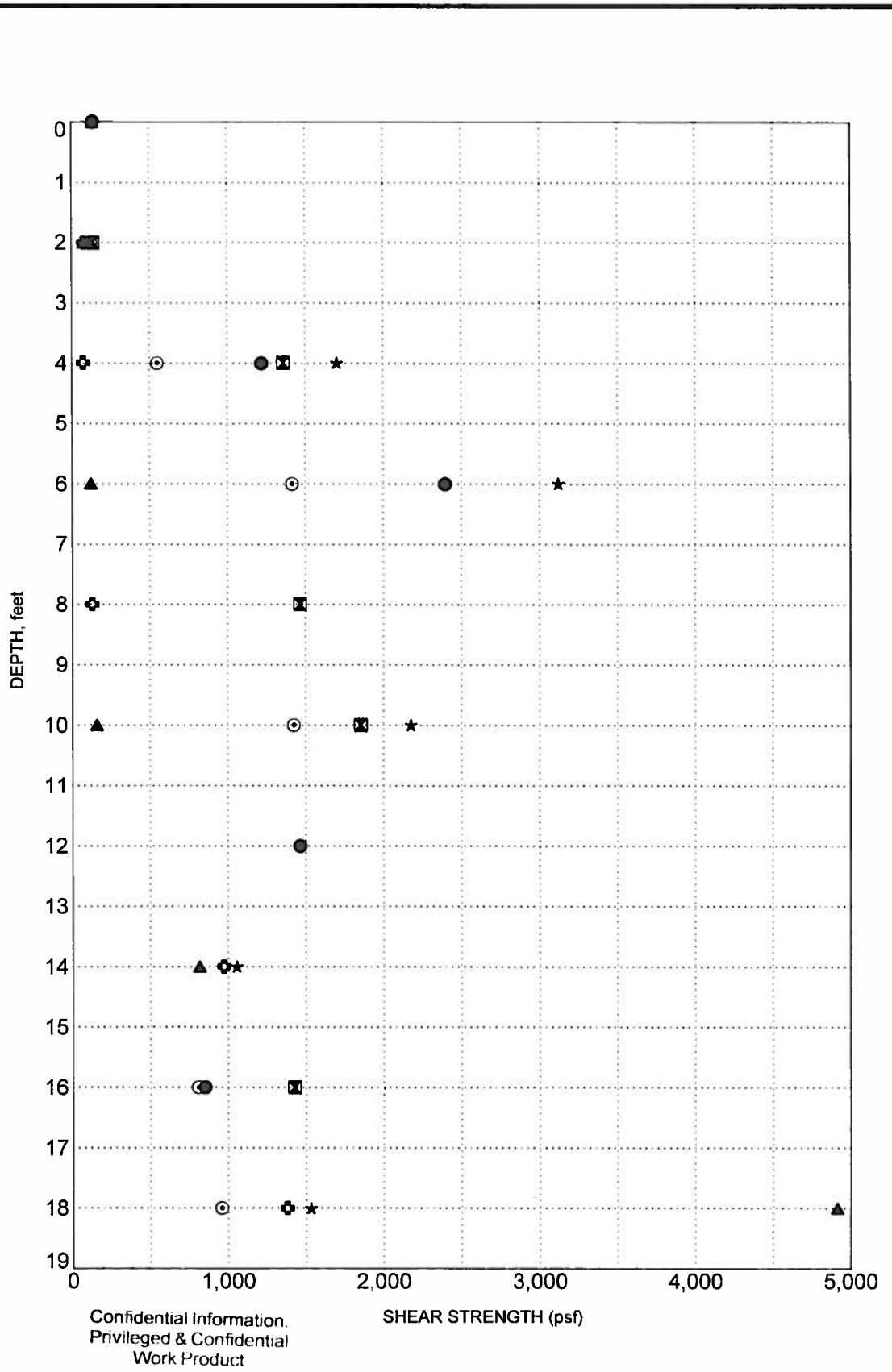
LIQUIDITY INDEX vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-23

ARD DEPTH VS LI 13-80-3705.GPJ US_LAB.GDT 12/20/13



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UUC SHEAR STRENGTH vs DEPTH

Project: Cole's Bayou Marsh Restoration (TV-63)

Client: CPRA

AAI Project Number: 13-80-3705 Figure No.: B-24

ARD DEPTH VS SHEAR STRENGTH 13-80-3705.GPJ US LAB.GDT 12/19/13

Dec 19, 2013 – 4:27pm

P:\2013\13-80-3705 Cole's Bayou\AutoCAD\13-80-3705 Aerial of Borrow Area.dwg

SCALE
1" = 2000'

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Work Product

REFERENCE
AERIAL BY GOOGLE EARTH 2006

NOTE:
BORING LOCATIONS ARE APPROXIMATE.

COLE'S BAYOU MARSH CREATION AND HYDROLOGIC RESTORATION
VERMILION PARISH, LOUISIANA

for

COASTAL PROTECTION & RESTORATION AUTHORITY
BATON ROUGE, LOUISIANA

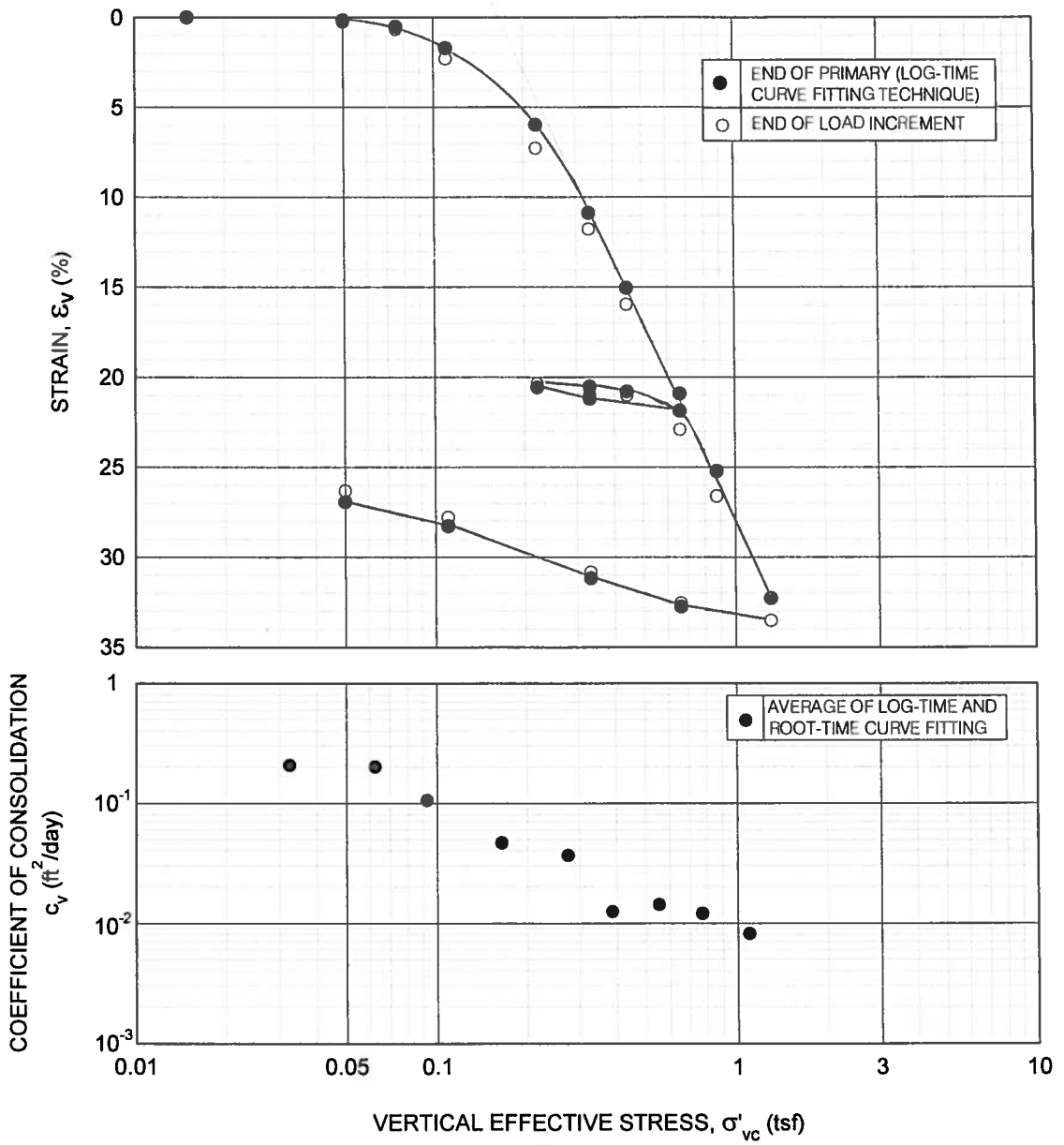
AAI
Ardaman & Associates, Inc.
Baton Rouge, LA Jefferson, LA

Project Engineer:	Drawn by:	Checked by:
R. ROUSSET	RJB	RER
File No.: 13-80-3705	Date: 12-17-13	Figure No.: B-25

Title:
2006 AERIAL OF BORROW AREA BORINGS

APPENDIX C. CONSOLIDATION TEST RESULTS

- Incremental Consolidation Test Results



SAMPLE DATA

BORING NO.:	B-02
SAMPLE NO.:	
DEPTH (FEET):	5.75
DESCRIPTION:	Gray CLAY (CH) w/organics

SPECIMEN CONDITIONS

	INITIAL	FINAL
MOISTURE CONTENT (%):	251.1	176.6
DRY DENSITY (lb/ft^3):	21.2	28.4
VOID RATIO:	6.22	4.39

INDEX PROPERTIES

LIQUID LIMIT (%):	86
PLASTIC LIMIT (%):	25
PLASTICITY INDEX (%):	61
SPECIFIC GRAVITY:	2.45
-200(%):	95
ORGANIC CONTENT (%):	---

CONSOLIDATION PARAMETERS

EFFECTIVE OVERBURDEN STRESS, σ'_{vo} (tsf):	0.055
PRECONSOLIDATION PRESSURE, σ'_p (tsf):	0.20
VIRGIN COMPRESSION RATIO, CR:	0.40
RECOMPRESSION RATIO, RR:	0.045

INCREMENTAL CONSOLIDATION TEST RESULTS

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Ardaman & Associates, Inc.
Geotechnical, Environmental and Materials Consultants

COLE'S BAYOU MARSH CREATION

CPRA

DRAWN BY: RJB	CHECKED BY: RER	DATE: 12/19/13
FILE NO: 13-80-3705	APPROVED BY: MB	FIGURE: C1

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ARDAMAN & ASSOCIATES, INC
GEOTECHNICAL TESTING LABORATORY
ONE-DIMENSIONAL INCREMENTAL LOADING CONSOLIDATION TEST SUMMARY SHEET

Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{50} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	$C_{\alpha\varepsilon}$
0	0.1655	0.1655	0.1655	-	-	-	-	0.7500	0.7500	6.2182	6.2182	0.00	0.00	----
0.015	0.1655	0.1655	0.1653				0.008	0.7500	0.7502	6.2182	6.2201	0.00	-0.03	----
0.050	0.1653	0.1667	0.1674				0.033	0.7488	0.7481	6.2067	6.1999	0.16	0.25	----
0.075	0.1674	0.1694	0.1704	78	L	2.12E-01	0.063	0.7462	0.7451	6.1812	6.1711	0.51	0.65	0.00043
0.110	0.1706	0.1786	0.1830	156	L	1.04E-01	0.093	0.7371	0.7327	6.0941	6.0517	1.72	2.31	0.00280
0.220	0.1830	0.2105	0.2203	348	L	4.40E-02	0.165	0.7052	0.6954	5.7870	5.6927	5.97	7.28	0.01082
0.330	0.2203	0.2473	0.2540	606	L	2.27E-02	0.275	0.6684	0.6617	5.4329	5.3684	10.88	11.77	0.01476
0.440	0.2540	0.2785	0.2854	1500	L	8.34E-03	0.385	0.6372	0.6303	5.1326	5.0662	15.04	15.96	0.01537
0.660	0.2854	0.3225	0.3294	1200	L	9.25E-03	0.550	0.5932	0.5863	4.7091	4.6427	20.91	21.83	0.01908
0.330	0.3292	0.3244	0.3229	102	L	1.01E-01	0.495	0.5911	0.5926	4.6889	4.7034	21.19	20.99	----
0.220	0.3227	0.3195	0.3179	180	L	5.82E-02	0.275	0.5958	0.5974	4.7341	4.7495	20.56	20.35	----
0.330	0.3180	0.3193	0.3199	60	L	1.76E-01	0.275	0.5961	0.5955	4.7373	4.7313	20.52	20.60	----
0.440	0.3201	0.3215	0.3231	470	L	2.23E-02	0.385	0.5941	0.5925	4.7178	4.7024	20.79	21.00	----
0.660	0.3234	0.3300	0.3378	174	L	5.92E-02	0.550	0.5859	0.5781	4.6389	4.5638	21.88	22.92	----
0.870	0.3378	0.3550	0.3654	648	L	1.48E-02	0.765	0.5609	0.5505	4.3983	4.2982	25.21	26.60	0.01677
1.310	0.3654	0.4080	0.4172	1206	L	6.88E-03	1.090	0.5079	0.4987	3.8882	3.7996	32.28	33.51	0.01947
0.660	0.4167	0.4109	0.4095	186	L	4.01E-02	0.985	0.5045	0.5059	3.8555	3.8689	32.73	32.55	----
0.330	0.4094	0.3990	0.3965	600	L	1.29E-02	0.495	0.5163	0.5188	3.9690	3.9931	31.16	30.83	----
0.110	0.3965	0.3773	0.3736	1800	L	4.60E-03	0.220	0.5380	0.5417	4.1779	4.2135	28.27	27.77	----
0.050	0.3736	0.3672	0.3627				0.080	0.5481	0.5526	4.2751	4.3184	26.92	26.32	----
														----

					Initial Conditions	Final Conditions
Project Name:		Cole's Bayou				
File Number:		13-80-3705		Height (in)	0.7500	0.5600
Boring Number:		B-02		w_c (%)	251.1	176.6
Depth:		4-6		γt (pcf)	74.4	78.5
				γd (pcf)	21.2	28.4
LL =	86	-200 =	94	Saturation (%)	98.9	98.5
PI =	61	OC =	--	Void ratio, e	6.2182	4.3896

EOP= End of Primary Consolidation
EOI= End of load increment (typically 12 hrs +/-)

Specific Gravity	2.449
Ring Diameter (in)	2.0000
Ring weight (g)	62.51
Height of Solids (in)	0.1039
Weight of Dry Soil (g)	13.10

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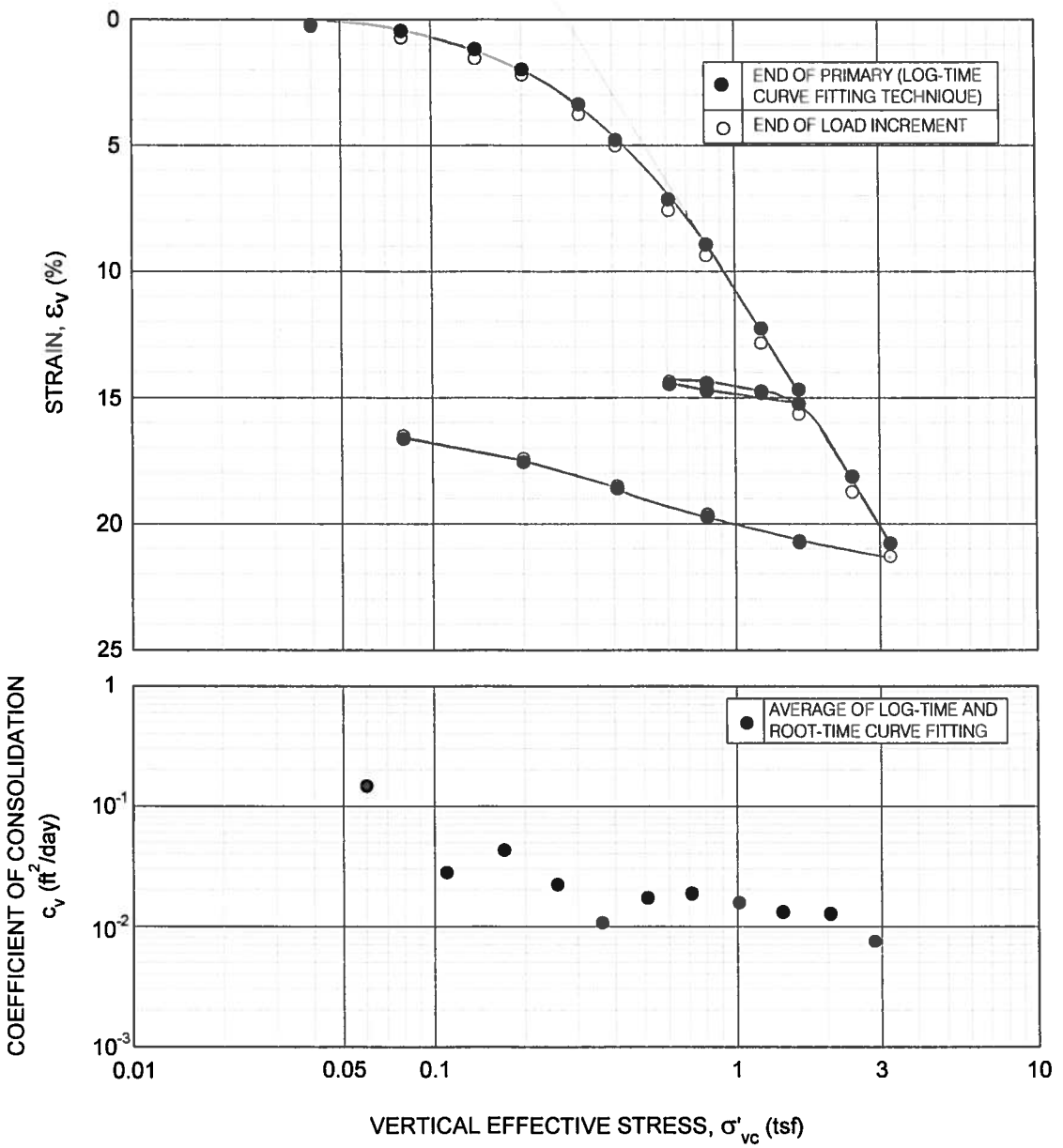
ARDAMAN & ASSOCIATES, INC
GEOTECHNICAL TESTING LABORATORY
ONE-DIMENSIONAL INCREMENTAL LOADING CONSOLIDATION TEST SUMMARY SHEET

Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{100} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	$C_{\alpha\varepsilon}$
0.000	0.1655	0.1655	0.1655		-	-	-	0.7500	0.7500	6.2182	6.2182	0.00	0.00	----
0.015	0.1655	0.1655	0.1653				0.008	0.7500	0.7502	6.2182	6.2201	0.00	-0.03	----
0.050	0.1656	0.1666	0.1674	346	S	2.07E-01	0.033	0.7492	0.7484	6.2105	6.2028	0.11	0.21	----
0.075	0.1677	0.1694	0.1704	375	S	1.90E-01	0.063	0.7467	0.7457	6.1865	6.1768	0.44	0.57	0.00043
0.110	0.1708	0.1781	0.1830	653	S	1.08E-01	0.093	0.7384	0.7335	6.1066	6.0594	1.55	2.20	0.00280
0.220	0.1830	0.2080	0.2203	1382	S	4.80E-02	0.165	0.7085	0.6962	5.8188	5.7004	5.53	7.17	0.01082
0.330	0.2203	0.2383	0.2540	1215	S	4.96E-02	0.275	0.6782	0.6625	5.5272	5.3761	9.57	11.67	0.01476
0.440	0.2540	0.2723	0.2854	3286	S	1.66E-02	0.385	0.6442	0.6311	5.2000	5.0739	14.11	15.85	0.01537
0.660	0.2854	0.3127	0.3294	2535	S	1.92E-02	0.550	0.6038	0.5871	4.8111	4.6504	19.49	21.72	0.01908
0.330	0.3292	0.3249	0.3229	240	S	1.85E-01	0.495	0.5914	0.5934	4.6918	4.7111	21.15	20.88	----
0.220	0.3227	0.3198	0.3179	614	S	7.36E-02	0.275	0.5963	0.5982	4.7390	4.7572	20.49	20.24	----
0.330	0.3180	0.3194	0.3199	540	S	8.44E-02	0.275	0.5968	0.5963	4.7438	4.7390	20.43	20.49	----
0.440	0.3201	0.3220	0.3231	470	S	9.62E-02	0.385	0.5944	0.5933	4.7207	4.7101	20.75	20.89	----
0.660	0.3234	0.3304	0.3378	866	S	5.13E-02	0.550	0.5863	0.5789	4.6427	4.5715	21.83	22.81	----
0.870	0.3378	0.3550	0.3654	4541	S	9.14E-03	0.765	0.5617	0.5513	4.4060	4.3059	25.11	26.49	0.01677
1.310	0.3654	0.4000	0.4172	3840	S	9.48E-03	1.090	0.5167	0.4995	3.9729	3.8073	31.11	33.40	0.01947
0.660	0.4167	0.4117	0.4095	540	S	5.96E-02	0.985	0.5045	0.5067	3.8555	3.8766	32.73	32.44	----
0.330	0.4094	0.4012	0.3965	1561	S	2.13E-02	0.495	0.5149	0.5196	3.9555	4.0008	31.35	30.72	----
0.110	0.3965	0.3821	0.3736	4034	S	8.78E-03	0.220	0.5340	0.5425	4.1394	4.2212	28.80	27.67	----
0.050	0.3736	0.3672	0.3627	4646	S	8.18E-03	0.080	0.5489	0.5534	4.2828	4.3261	26.81	26.21	----
0.000														----
0.000														----
0.000														----

					Initial Conditions	Final Conditions
Project Name:	Cole's Bayou					
File Number:	13-80-3705			Height (in)	0.7500	0.5600
Boring Number:	B-02			w_c (%)	251.1	176.6
Depth:	4-6			γt (pcf)	74.4	78.5
				γd (pcf)	21.2	28.4
LL =	86	-200 =	94	Saturation (%)	98.9	98.5
PI =	61	OC =	--	Void ratio, e	6.2182	4.3896

EOP= End of Primary Consolidation
EOI= End of load increment (typically 12 hrs +/-)

Specific Gravity	2.449
Ring Diameter (in)	2.0000
Ring weight (g)	62.51
Height of Solids (in)	0.1039
Weight of Dry Soil (g)	13.10



SAMPLE DATA

BORING NO.:	B-16
SAMPLE NO.:	
DEPTH (FEET):	1.75
DESCRIPTION:	Gray CLAY (CH) w/organics and shells

INDEX PROPERTIES

LIQUID LIMIT (%):	86
PLASTIC LIMIT (%):	22
PLASTICITY INDEX (%):	64
SPECIFIC GRAVITY:	2.71
-200(%):	99
ORGANIC CONTENT (%):	---

SPECIMEN CONDITIONS	INITIAL	FINAL
MOISTURE CONTENT (%):	61.0	45.4
DRY DENSITY (lb/ft^3):	64.4	77.4
VOID RATIO:	1.63	1.19

CONSOLIDATION PARAMETERS

EFFECTIVE OVERBURDEN STRESS, σ'_{vo} (tsf):	0.003
PRECONSOLIDATION PRESSURE, σ'_p (tsf):	0.45
VIRGIN COMPRESSION RATIO, CR:	0.214
RECOMPRESSION RATIO, RR:	0.028

INCREMENTAL CONSOLIDATION TEST RESULTS

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Work Product

Ardaman & Associates, Inc.
Geotechnical, Environmental and Materials Consultants

COLE'S BAYOU MARSH CREATION

CPRA

DRAWN BY: RJB	CHECKED BY: RER	DATE: 12/19/13
FILE NO: 13-80-3705	APPROVED BY: MB	FIGURE: C2

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GEOTECHNICAL TESTING LABORATORY
ONE-DIMENSIONAL INCREMENTAL LOADING CONSOLIDATION TEST SUMMARY SHEET

Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{50} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	C α ε
0	0.0685	0.0685	0.0685		-	-	-	0.7480	0.7480	1.6289	1.6289	0.00	0.00	----
0.040	0.0685	0.0701	0.0706				0.020	0.7464	0.7460	1.6234	1.6217	0.21	0.27	----
0.080	0.0706	0.0720	0.0740	102	L	1.61E-01	0.060	0.7446	0.7426	1.6168	1.6097	0.46	0.73	----
0.140	0.0738	0.0772	0.0799	720	L	2.26E-02	0.110	0.7391	0.7364	1.5976	1.5881	1.19	1.55	0.00333
0.200	0.0800	0.0832	0.0848	780	L	2.05E-02	0.170	0.7332	0.7316	1.5767	1.5713	1.99	2.19	0.00279
0.310	0.0848	0.0936	0.0966	960	L	1.63E-02	0.255	0.7228	0.7198	1.5403	1.5298	3.37	3.77	0.00443
0.410	0.0966	0.1041	0.1059	1620	L	9.38E-03	0.360	0.7123	0.7105	1.5033	1.4971	4.78	5.01	0.00514
0.610	0.1058	0.1217	0.1250	1020	L	1.43E-02	0.510	0.6946	0.6914	1.4412	1.4298	7.14	7.57	0.00514
0.810	0.1249	0.1350	0.1383	1200	L	1.16E-02	0.710	0.6813	0.6780	1.3943	1.3829	8.92	9.36	0.00723
1.220	0.1384	0.1600	0.1643	1080	L	1.22E-02	1.015	0.6564	0.6521	1.3068	1.2917	12.25	12.83	0.00722
1.625	0.1643	0.1780	0.1821	1200	L	1.03E-02	1.423	0.6383	0.6343	1.2434	1.2291	14.67	15.21	0.00820
0.810	0.1820	0.1783	0.1777	156	L	7.69E-02	1.218	0.6380	0.6385	1.2421	1.2441	14.71	14.64	----
0.610	0.1776	0.1762	0.1754	276	L	4.39E-02	0.710	0.6399	0.6407	1.2490	1.2518	14.45	14.34	----
0.810	0.1755	0.1760	0.1761	240	L	5.07E-02	0.710	0.6402	0.6401	1.2501	1.2497	14.41	14.43	----
1.220	0.1762	0.1786	0.1792	156	L	7.76E-02	1.015	0.6377	0.6372	1.2412	1.2393	14.75	14.82	----
1.625	0.1794	0.1825	0.1856	360	L	3.33E-02	1.423	0.6341	0.6310	1.2284	1.2175	15.23	15.65	----
2.440	0.1857	0.2041	0.2087	900	L	1.27E-02	2.033	0.6125	0.6080	1.1527	1.1367	18.11	18.72	0.00857
3.250	0.2087	0.2240	0.2278	1440	L	7.42E-03	2.845	0.5927	0.5889	1.0829	1.0696	20.77	21.28	0.00664
1.625	0.2274	0.2232	0.2228	270	L	3.83E-02	2.438	0.5931	0.5935	1.0843	1.0857	20.72	20.66	----
0.810	0.2206	0.2135	0.2128	900	L	1.17E-02	1.218	0.6006	0.6013	1.1107	1.1133	19.71	19.61	----
0.410	0.2127	0.2050	0.2043	1740	L	6.24E-03	0.610	0.6090	0.6097	1.1402	1.1428	18.59	18.49	----
0.200	0.2042	0.1971	0.1962	3360	L	3.32E-03	0.305	0.6168	0.6178	1.1678	1.1711	17.54	17.41	----
0.080	0.1961	0.1902	0.1893	4500	L	2.54E-03	0.140	0.6237	0.6246	1.1919	1.1950	16.62	16.50	----
														----

					Initial Conditions	Final Conditions
Project Name:		Cole's Bayou				
File Number:		13-80-3705		Height (in)	0.7480	0.6230
Boring Number:		B-16		w_c (%)	61.0	45.4
Depth:		0-2		γt (pcf)	103.7	112.5
				γd (pcf)	64.4	77.4
LL =	86	-200 =	99	Saturation (%)	101.6	103.6
PI =	64	OC =	–	Void ratio, e	1.6289	1.1896

EOP= End of Primary Consolidation
EOI= End of load increment (typically 12 hrs +/-)

Specific Gravity	2.713
Ring Diameter (in)	2.0000
Ring weight (g)	62.60
Height of Solids (in)	0.2845
Weight of Dry Soil (g)	39.74

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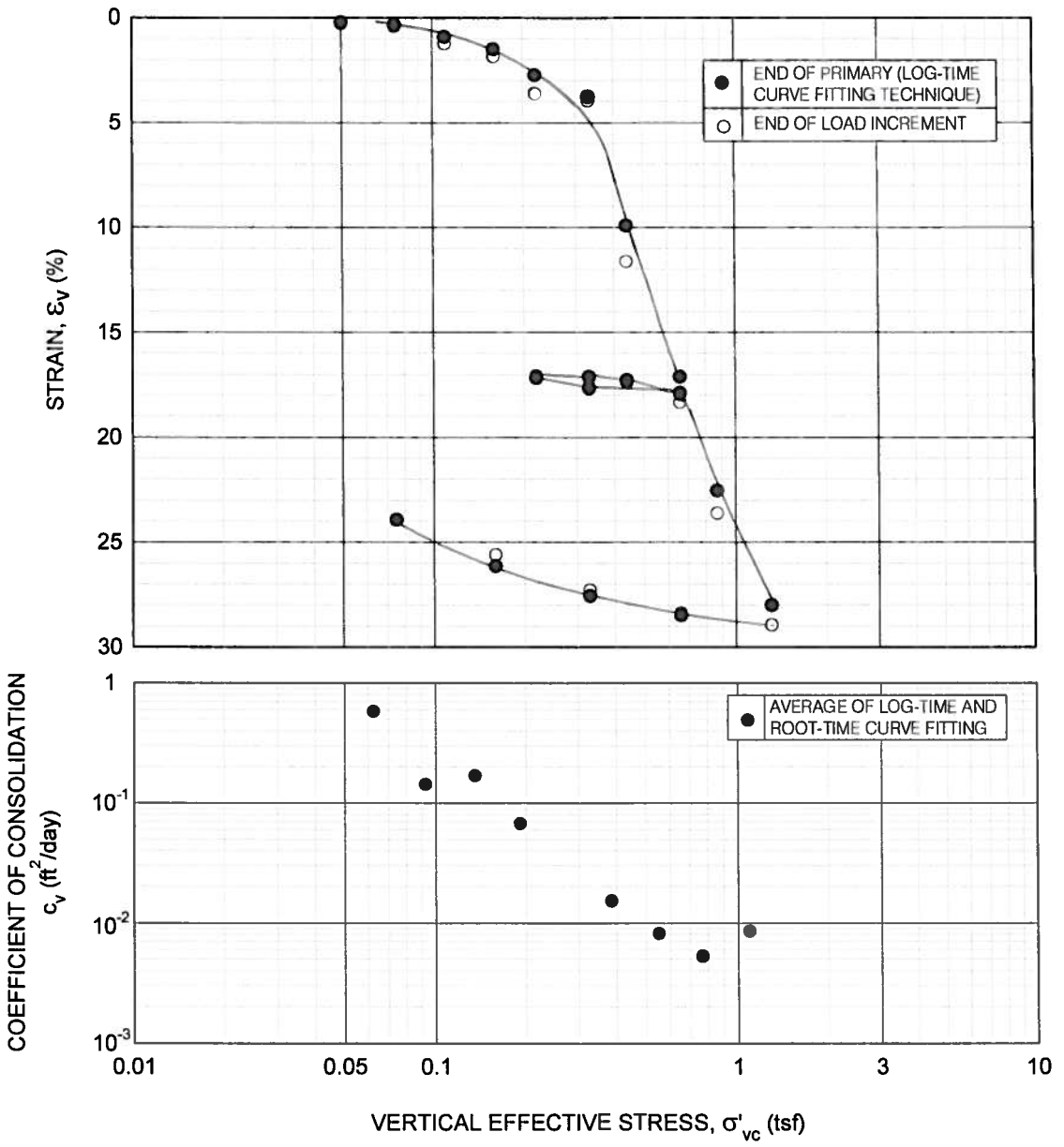
GEOTECHNICAL TESTING LABORATORY
ONE-DIMENSIONAL INCREMENTAL LOADING CONSOLIDATION TEST SUMMARY SHEET

Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{90} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	C $\alpha\varepsilon$
0.000	0.0685	0.0685	0.0685		-	-	-	0.7480	0.7480	1.6289	1.6289	0.00	0.00	----
0.040	0.0685	0.0685	0.0706				0.020	0.7480	0.7460	1.6289	1.6217	0.00	0.27	----
0.080	0.0706	0.0720	0.0740	540	S	1.31E-01	0.060	0.7446	0.7426	1.6168	1.6097	0.46	0.73	----
0.140	0.0740	0.0770	0.0799	2089	S	3.36E-02	0.110	0.7396	0.7367	1.5992	1.5890	1.13	1.52	0.00333
0.200	0.0799	0.0818	0.0848	1058	S	6.53E-02	0.170	0.7348	0.7318	1.5824	1.5720	1.77	2.17	0.00279
0.310	0.0848	0.0919	0.0966	2381	S	2.84E-02	0.255	0.7247	0.7200	1.5470	1.5305	3.11	3.74	0.00443
0.410	0.0966	0.1032	0.1059	5415	S	1.21E-02	0.360	0.7134	0.7108	1.5073	1.4980	4.63	4.98	0.00514
0.610	0.1060	0.1196	0.1250	3197	S	1.98E-02	0.510	0.6972	0.6918	1.4502	1.4314	6.80	7.51	0.00514
0.810	0.1250	0.1324	0.1383	2381	S	2.54E-02	0.710	0.6844	0.6786	1.4054	1.3848	8.50	9.28	0.00723
1.220	0.1385	0.1563	0.1643	2940	S	1.95E-02	1.015	0.6608	0.6528	1.3223	1.2941	11.66	12.73	0.00722
1.625	0.1643	0.1755	0.1821	3375	S	1.58E-02	1.423	0.6416	0.6350	1.2548	1.2318	14.23	15.11	0.00820
0.810	0.1816	0.1791	0.1777	470	S	1.10E-01	1.218	0.6375	0.6389	1.2404	1.2453	14.78	14.59	----
0.610	0.1776	0.1762	0.1754	1215	S	4.30E-02	0.710	0.6403	0.6411	1.2503	1.2532	14.40	14.29	----
0.810	0.1755	0.1760	0.1761	1325	S	3.96E-02	0.710	0.6406	0.6405	1.2513	1.2509	14.36	14.38	----
1.220	0.1764	0.1784	0.1792	653	S	7.99E-02	1.015	0.6385	0.6377	1.2439	1.2413	14.64	14.74	----
1.625	0.1793	0.1829	0.1856	1815	S	2.84E-02	1.423	0.6341	0.6314	1.2286	1.2191	15.23	15.59	----
2.440	0.1857	0.2034	0.2087	3937	S	1.26E-02	2.033	0.6137	0.6085	1.1569	1.1385	17.95	18.66	0.00857
3.250	0.2087	0.2237	0.2278	6000	S	7.68E-03	2.845	0.5935	0.5894	1.0858	1.0714	20.66	21.21	0.00664
1.625	0.2275	0.2243	0.2228	614	S	7.26E-02	2.438	0.5926	0.5941	1.0826	1.0879	20.78	20.58	----
0.810	0.2207	0.2141	0.2128	3286	S	1.39E-02	1.218	0.6007	0.6020	1.1111	1.1158	19.70	19.52	----
0.410	0.2127	0.2058	0.2043	5415	S	8.64E-03	0.610	0.6089	0.6105	1.1401	1.1455	18.59	18.39	----
0.200	0.2042	0.1972	0.1962	15169	S	3.17E-03	0.305	0.6175	0.6185	1.1701	1.1738	17.45	17.31	----
0.080	0.1961	0.1893	0.1893				0.140	0.6253	0.6253	1.1977	1.1977	16.40	16.40	----

				Initial Conditions	Final Conditions
Project Name:	Cole's Bayou				
File Number:	13-80-3705		Height (in)	0.7480	0.6230
Boring Number:	B-16		w_c (%)	61.0	45.4
Depth:	0-2		γt (pcf)	103.7	112.5
			γd (pcf)	64.4	77.4
LL = 86	-200 = 99		Saturation (%)	101.6	103.6
PI = 64	OC = --		Void ratio, e	1.6289	1.1896

EOP= End of Primary Consolidation
EOI= End of load increment (typically 12 hrs +/-)

Specific Gravity	2.713
Ring Diameter (in)	2.0000
Ring weight (g)	62.60
Height of Solids (in)	0.2845
Weight of Dry Soil (g)	39.74



SAMPLE DATA	
BORING NO.:	B-15
SAMPLE NO.:	
DEPTH (FEET):	9.75
DESCRIPTION:	Gray CLAY (CH)

INDEX PROPERTIES	
LIQUID LIMIT (%):	103
PLASTIC LIMIT (%):	24
PLASTICITY INDEX (%):	79
SPECIFIC GRAVITY:	2.75
-200(%):	100
ORGANIC CONTENT (%):	---

SPECIMEN CONDITIONS	INITIAL	FINAL
MOISTURE CONTENT (%):	108.6	75.3
DRY DENSITY (lb/ft^3):	43.4	57.9
VOID RATIO:	2.95	1.96

CONSOLIDATION PARAMETERS	
EFFECTIVE OVERBURDEN STRESS, σ'_{vo} (tsf):	0.166
PRECONSOLIDATION PRESSURE, σ'_p (tsf):	0.34
VIRGIN COMPRESSION RATIO, CR:	0.308
RECOMPRESSION RATIO, RR:	0.022

INCREMENTAL CONSOLIDATION TEST RESULTS

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Geotechnical, Environmental and Materials Consultants

COLE'S BAYOU MARSH CREATION

CPRA

DRAWN BY: RJB	CHECKED BY: RER	DATE: 12/19/13
FILE NO: 13-80-3705	APPROVED BY: MB	FIGURE: C4

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Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{100} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	$C_{\alpha\varepsilon}$
0	0.0945	0.0945	0.0945		-	-	-	0.7480	0.7480	2.9501	2.9501	0.00	0.00	---
0.050	0.0945	0.0960	0.0965				0.025	0.7465	0.7460	2.9422	2.9395	0.20	0.27	---
0.075	0.0965	0.0969	0.0975	22	L	7.50E-01	0.063	0.7456	0.7450	2.9372	2.9340	0.33	0.41	0.00025
0.110	0.0978	0.1015	0.1040	120	L	1.36E-01	0.093	0.7413	0.7388	2.9145	2.9015	0.90	1.23	0.00166
0.160	0.1040	0.1059	0.1085	96	L	1.68E-01	0.135	0.7369	0.7343	2.8912	2.8775	1.49	1.84	0.00133
0.220	0.1085	0.1152	0.1218	300	L	5.28E-02	0.190	0.7276	0.7210	2.8421	2.8073	2.73	3.62	0.00503
0.330	0.1220	0.1232	0.1244				0.275	0.7197	0.7186	2.8007	2.7946	3.78	3.94	---
0.440	0.1244	0.1690	0.1818	1080	L	1.33E-02	0.385	0.6739	0.6611	2.5588	2.4912	9.91	11.62	0.02562
0.660	0.1815	0.2225	0.2289	1440	L	8.45E-03	0.550	0.6201	0.6137	2.2744	2.2409	17.11	17.95	0.01012
0.330	0.2285	0.2263	0.2257	114	L	9.83E-02	0.495	0.6159	0.6165	2.2525	2.2557	17.66	17.58	---
0.220	0.2254	0.2223	0.2216	384	L	2.95E-02	0.275	0.6196	0.6204	2.2720	2.2760	17.17	17.07	---
0.330	0.2216	0.2220	0.2223	60	L	1.90E-01	0.275	0.6200	0.6197	2.2741	2.2726	17.11	17.15	---
0.440	0.2225	0.2233	0.2242	72	L	1.58E-01	0.385	0.6188	0.6180	2.2679	2.2636	17.27	17.38	---
0.660	0.2245	0.2282	0.2316	108	L	1.04E-01	0.550	0.6143	0.6109	2.2441	2.2261	17.87	18.33	---
0.870	0.2316	0.2630	0.2711	2280	L	4.61E-03	0.765	0.5795	0.5714	2.0600	2.0175	22.53	23.61	0.01919
1.310	0.2712	0.3040	0.3110	1080	L	8.46E-03	1.090	0.5386	0.5316	1.8440	1.8071	28.00	28.94	0.01397
0.660	0.3104	0.3070	0.3063	120	L	7.03E-02	0.985	0.5350	0.5357	1.8250	1.8290	28.48	28.38	---
0.330	0.3060	0.2998	0.2978	360	L	2.39E-02	0.495	0.5419	0.5440	1.8617	1.8725	27.55	27.28	---
0.160	0.2976	0.2890	0.2850	618	L	1.44E-02	0.245	0.5526	0.5566	1.9180	1.9391	26.13	25.59	---
0.075	0.2849	0.2723	0.2723	3300	L	2.85E-03	0.118	0.5691	0.5692	2.0054	2.0056	23.92	23.91	---
														---

				Initial Conditions	Final Conditions
Project Name:	Cole's Bayou				
File Number:	13-80-3705		Height (in)	0.7480	0.5600
Boring Number:	B-15		w_c (%)	108.6	75.3
Depth:	8-10		γt (pcf)	90.5	101.6
			γd (pcf)	43.4	57.9
LL = 103	-200 = 100		Saturation (%)	101.1	105.6
PI = 79	OC = --		Void ratio, e	2.9501	1.9573

EOP= End of Primary Consolidation
EOI= End of load increment (typically 24 hrs +/-)

Specific Gravity	2.745
Ring Diameter (in)	2.0000
Ring weight (g)	62.39
Height of Solids (in)	0.1894
Weight of Dry Soil (g)	26.76

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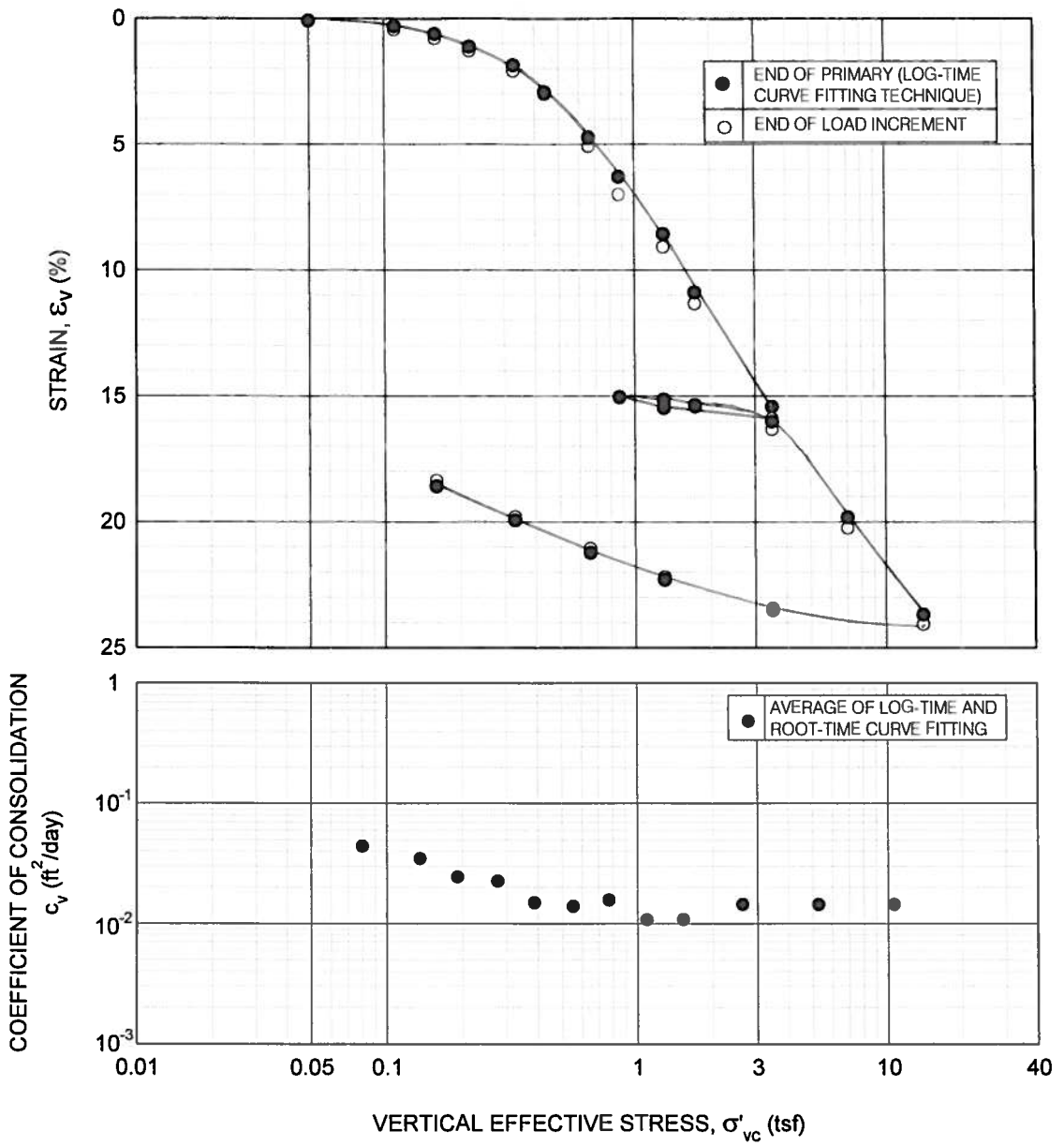
ONE-DIMENSIONAL INCREMENTAL LOADING CONSOLIDATION TEST SUMMARY SHEET

Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{100} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	C α ε
0.000	0.0945	0.0945	0.0945		-	-	-	0.7480	0.7480	2.9501	2.9501	0.00	0.00	—
0.050	0.0945	0.0960	0.0965				0.025	0.7465	0.7460	2.9422	2.9395	0.20	0.27	—
0.075	0.0966	0.0970	0.0975	173	S	4.10E-01	0.063	0.7456	0.7451	2.9372	2.9346	0.33	0.39	0.00025
0.110	0.0978	0.1014	0.1040	470	S	1.50E-01	0.093	0.7415	0.7389	2.9156	2.9021	0.87	1.22	0.00166
0.160	0.1040	0.1059	0.1085	406	S	1.71E-01	0.135	0.7370	0.7344	2.8921	2.8783	1.47	1.82	0.00133
0.220	0.1086	0.1139	0.1218	821	S	8.32E-02	0.190	0.7291	0.7212	2.8504	2.8086	2.53	3.58	0.00503
0.330	0.1220	0.1232	0.1244				0.275	0.7200	0.7188	2.8020	2.7960	3.75	3.90	—
0.440	0.1244	0.1651	0.1818	3650	S	1.71E-02	0.385	0.6781	0.6614	2.5810	2.4928	9.34	11.58	0.02562
0.660	0.1818	0.2222	0.2289	6615	S	7.93E-03	0.550	0.6210	0.6144	2.2795	2.2444	16.98	17.87	0.01012
0.330	0.2285	0.2265	0.2257	375	S	1.29E-01	0.495	0.6163	0.6172	2.2547	2.2592	17.61	17.49	—
0.220	0.2254	0.2234	0.2216	735	S	6.64E-02	0.275	0.6192	0.6210	2.2697	2.2795	17.22	16.98	—
0.330	0.2216	0.2219	0.2223	194	S	2.54E-01	0.275	0.6207	0.6203	2.2777	2.2758	17.02	17.07	—
0.440	0.2225	0.2232	0.2242	240	S	2.04E-01	0.385	0.6196	0.6186	2.2719	2.2669	17.17	17.30	—
0.660	0.2245	0.2286	0.2316	540	S	8.98E-02	0.550	0.6145	0.6115	2.2452	2.2294	17.84	18.25	—
0.870	0.2316	0.2600	0.2711	7526	S	6.05E-03	0.765	0.5831	0.5721	2.0794	2.0210	22.04	23.52	0.01919
1.310	0.2711	0.3032	0.3110	4541	S	8.69E-03	1.090	0.5400	0.5322	1.8515	1.8103	27.81	28.85	0.01397
0.660	0.3104	0.3075	0.3063	406	S	8.95E-02	0.985	0.5351	0.5363	1.8256	1.8322	28.47	28.30	—
0.330	0.3060	0.3007	0.2978	1270	S	2.92E-02	0.495	0.5416	0.5446	1.8602	1.8758	27.59	27.20	—
0.160	0.2975	0.2892	0.2850	3286	S	1.17E-02	0.245	0.5529	0.5571	1.9196	1.9418	26.09	25.53	—
0.075	0.2850	0.2748	0.2723	8497	S	4.75E-03	0.118	0.5673	0.5698	1.9957	2.0092	24.16	23.82	—

EOP= End of Primary Consolidation
EOI= End of load increment (typically 24 hrs +/-)

			Initial Conditions	Final Conditions
Project Name:	Cole's Bayou			
File Number:	13-80-3705	Height (in)	0.7480	0.5600
Boring Number:	B-15	w_c (%)	108.6	75.3
Depth:	8-10	γt (pcf)	90.5	101.6
		γd (pcf)	43.4	57.9
LL = 103	-200 = 100	Saturation (%)	101.1	105.6
PI = 79	OC = --	Void ratio, e	2.9501	1.9573

Specific Gravity	2.745
Ring Diameter (in)	2.0000
Ring weight (g)	62.39
Height of Solids (in)	0.1894
Weight of Dry Soil (g)	26.76



SAMPLE DATA	
BORING NO.:	B-01
SAMPLE NO.:	
DEPTH (FEET):	7.75
DESCRIPTION:	Gray CLAY (CH) w/trace organics

SPECIMEN CONDITIONS	INITIAL	FINAL
MOISTURE CONTENT (%):	37.9	25.1
DRY DENSITY (lb/ft^3):	84.0	102.3
VOID RATIO:	1.01	0.65

INDEX PROPERTIES	
LIQUID LIMIT (%):	90
PLASTIC LIMIT (%):	23
PLASTICITY INDEX (%):	67
SPECIFIC GRAVITY:	2.70
-200(%):	98
ORGANIC CONTENT (%):	14.5

CONSOLIDATION PARAMETERS	
EFFECTIVE OVERBURDEN STRESS, σ'_{vo} (tsf):	0.094
PRECONSOLIDATION PRESSURE, σ'_p (tsf):	0.70
VIRGIN COMPRESSION RATIO, CR:	0.128
RECOMPRESSION RATIO, RR:	0.016

INCREMENTAL CONSOLIDATION TEST RESULTS

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Work Product

Ardaman & Associates, Inc.
Geotechnical, Environmental and Materials Consultants

COLE'S BAYOU MARSH CREATION

CPRA

DRAWN BY: RJB	CHECKED BY: RER	DATE: 12/19/13
FILE NO: 13-80-3705	APPROVED BY: MB	FIGURE: C5

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Work Product

ARDAMAN & ASSOCIATES, INC
GEOTECHNICAL TESTING LABORATORY
ONE-DIMENSIONAL INCREMENTAL LOADING CONSOLIDATION TEST SUMMARY SHEET

Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{50} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	$C_{\alpha\varepsilon}$
0	0.0097	0.0097	0.0097		-	-	-	0.7490	0.7490	1.0075	1.0075	0.00	0.00	-----
0.050	0.0097	0.0103	0.0105				0.025	0.7484	0.7482	1.0059	1.0054	0.08	0.11	-----
0.110	0.0109	0.0124	0.0134	390	L	4.25E-02	0.080	0.7467	0.7457	1.0013	0.9987	0.31	0.44	0.00087
0.160	0.0136	0.0149	0.0162	450	L	3.66E-02	0.135	0.7444	0.7431	0.9952	0.9917	0.61	0.79	0.00110
0.220	0.0165	0.0190	0.0202	840	L	1.94E-02	0.190	0.7406	0.7394	0.9850	0.9818	1.12	1.28	0.00171
0.330	0.0202	0.0245	0.0262	960	L	1.68E-02	0.275	0.7351	0.7334	0.9703	0.9657	1.86	2.08	0.00274
0.440	0.0264	0.0327	0.0333	2160	L	7.32E-03	0.385	0.7271	0.7265	0.9488	0.9472	2.92	3.00	0.00289
0.660	0.0333	0.0462	0.0488	1260	L	1.22E-02	0.550	0.7136	0.7110	0.9126	0.9057	4.73	5.07	0.00450
0.870	0.0489	0.0580	0.0633	900	L	1.64E-02	0.765	0.7019	0.6966	0.8813	0.8671	6.29	7.00	0.00886
1.310	0.0637	0.0754	0.0793	1260	L	1.12E-02	1.090	0.6849	0.6810	0.8357	0.8253	8.56	9.08	0.00685
1.740	0.0796	0.0931	0.0965	1260	L	1.07E-02	1.525	0.6675	0.6641	0.7891	0.7800	10.88	11.34	0.00750
3.510	0.0980	0.1286	0.1322	960	L	1.30E-02	2.625	0.6335	0.6299	0.6979	0.6883	15.42	15.90	0.00512
1.310	0.1312	0.1280	0.1275	210	L	5.63E-02	2.410	0.6331	0.6336	0.6969	0.6982	15.47	15.41	-----
0.870	0.1274	0.1247	0.1245	960	L	1.25E-02	1.090	0.6363	0.6365	0.7054	0.7060	15.05	15.02	-----
1.310	0.1247	0.1256	0.1263	300	L	4.00E-02	1.090	0.6356	0.6349	0.7036	0.7017	15.14	15.23	-----
1.740	0.1264	0.1273	0.1279	90	L	1.33E-01	1.525	0.6340	0.6334	0.6993	0.6977	15.35	15.43	-----
3.510	0.1291	0.1335	0.1358	240	L	4.92E-02	2.625	0.6290	0.6267	0.6859	0.6797	16.02	16.33	-----
7.040	0.1374	0.1635	0.1667	840	L	1.33E-02	5.275	0.6006	0.5974	0.6098	0.6012	19.81	20.24	0.00443
14.100	0.1687	0.1945	0.1973	840	L	1.21E-02	10.570	0.5716	0.5688	0.5320	0.5245	23.68	24.06	0.00314
3.510	0.1947	0.1905	0.1899	300	L	3.22E-02	8.805	0.5730	0.5736	0.5358	0.5374	23.50	23.42	-----
1.310	0.1885	0.1801	0.1793	1500	L	6.60E-03	2.410	0.5820	0.5828	0.5599	0.5621	22.30	22.19	-----
0.660	0.1787	0.1715	0.1702	3300	L	3.09E-03	0.985	0.5900	0.5913	0.5813	0.5848	21.23	21.05	-----
0.330	0.1700	0.1616	0.1606	6000	L	1.75E-03	0.495	0.5997	0.6007	0.6073	0.6100	19.93	19.80	-----
0.160	0.1603	0.1512	0.1494	10200	L	1.06E-03	0.245	0.6098	0.6116	0.6344	0.6392	18.58	18.34	-----
														-----

					Initial Conditions	Final Conditions
Project Name:		Cole's Bayou				
File Number:		13-80-3705		Height (in)	0.7490	0.6150
Boring Number:		B-01		w_c (%)	37.9	25.1
Depth:		6-8		γt (pcf)	115.8	128.0
				γd (pcf)	84.0	102.3
LL =	90	-200 =	98	Saturation (%)	101.5	104.7
PI =	67	OC =	14.5	Void ratio, e	1.0075	0.6484

EOP= End of Primary Consolidation
EOI= End of load increment (typically 12 hrs +/-)

Specific Gravity	2.701
Ring Diameter (in)	2.0000
Ring weight (g)	62.53
Height of Solids (in)	0.3731
Weight of Dry Soil (g)	51.88

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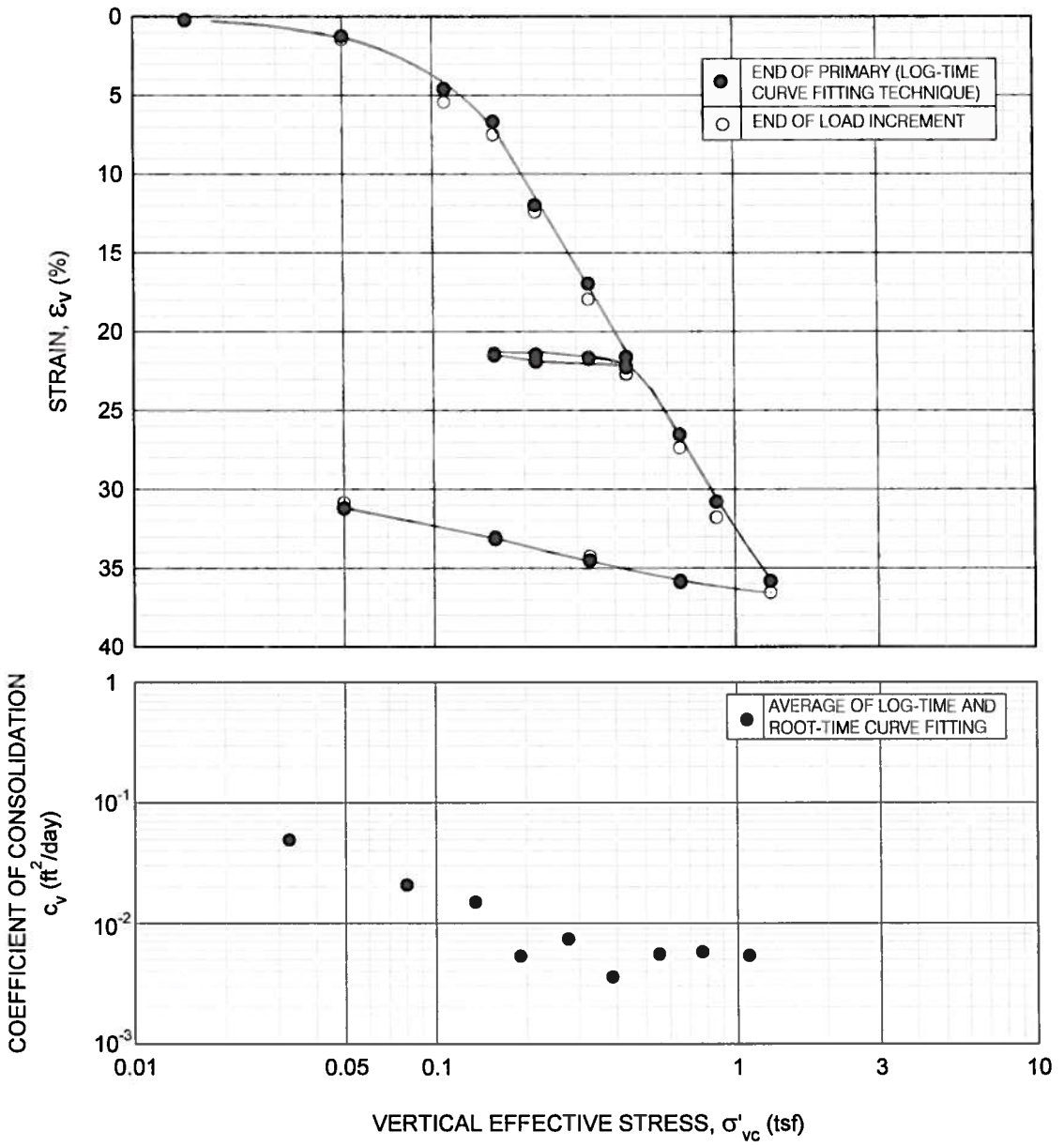
ARDAMAN & ASSOCIATES, INC
GEOTECHNICAL TESTING LABORATORY
ONE-DIMENSIONAL INCREMENTAL LOADING CONSOLIDATION TEST SUMMARY SHEET

Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{90} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	C α e
0.000	0.0097	0.0097	0.0097		-	-	-	0.7490	0.7490	1.0075	1.0075	0.00	0.00	----
0.050	0.0097	0.0097	0.0105				0.025	0.7490	0.7482	1.0075	1.0054	0.00	0.11	----
0.110	0.0108	0.0125	0.0134	1561	S	4.57E-02	0.080	0.7465	0.7456	1.0008	0.9984	0.33	0.45	0.00087
0.160	0.0136	0.0151	0.0162	2160	S	3.28E-02	0.135	0.7441	0.7430	0.9942	0.9913	0.66	0.81	0.00110
0.220	0.0162	0.0187	0.0202	2381	S	2.95E-02	0.190	0.7405	0.7390	0.9846	0.9806	1.14	1.34	0.00171
0.330	0.0202	0.0236	0.0262	2458	S	2.82E-02	0.275	0.7356	0.7330	0.9715	0.9645	1.80	2.14	0.00274
0.440	0.0262	0.0304	0.0333	3025	S	2.25E-02	0.385	0.7288	0.7259	0.9532	0.9455	2.70	3.09	0.00289
0.660	0.0333	0.0450	0.0488	4234	S	1.56E-02	0.550	0.7142	0.7104	0.9141	0.9039	4.65	5.16	0.00450
0.870	0.0489	0.0590	0.0633	4234	S	1.50E-02	0.765	0.7003	0.6960	0.8768	0.8653	6.51	7.08	0.00886
1.310	0.0639	0.0755	0.0793	5881	S	1.03E-02	1.090	0.6844	0.6806	0.8342	0.8240	8.63	9.14	0.00685
1.740	0.0793	0.0926	0.0965	5302	S	1.09E-02	1.525	0.6673	0.6634	0.7884	0.7779	10.91	11.44	0.00750
3.510	0.0980	0.1260	0.1322	3375	S	1.59E-02	2.625	0.6354	0.6292	0.7029	0.6863	15.17	16.00	0.00512
1.310	0.1313	0.1285	0.1275	614	S	8.26E-02	2.410	0.6320	0.6330	0.6938	0.6965	15.63	15.49	----
0.870	0.1274	0.1255	0.1245	2018	S	2.54E-02	1.090	0.6348	0.6358	0.7015	0.7042	15.24	15.11	----
1.310	0.1248	0.1257	0.1263	1750	S	2.94E-02	1.090	0.6349	0.6343	0.7016	0.7000	15.24	15.32	----
1.740	0.1265	0.1274	0.1279	821	S	6.25E-02	1.525	0.6334	0.6329	0.6976	0.6963	15.44	15.50	----
3.510	0.1292	0.1338	0.1358	1215	S	4.18E-02	2.625	0.6283	0.6263	0.6839	0.6786	16.12	16.39	----
7.040	0.1376	0.1614	0.1667	3110	S	1.55E-02	5.275	0.6025	0.5972	0.6148	0.6006	19.56	20.27	0.00443
14.100	0.1686	0.1917	0.1973	2614	S	1.67E-02	10.570	0.5741	0.5685	0.5387	0.5236	23.36	24.10	0.00314
3.510	0.1947	0.1916	0.1899	653	S	6.35E-02	8.805	0.5716	0.5733	0.5320	0.5365	23.69	23.46	----
1.310	0.1884	0.1813	0.1793	4646	S	9.14E-03	2.410	0.5804	0.5824	0.5555	0.5609	22.51	22.25	----
0.660	0.1790	0.1708	0.1702	16138	S	2.72E-03	0.985	0.5906	0.5912	0.5829	0.5845	21.15	21.07	----
0.330	0.1700	0.1606	0.1606			2.72E-03	0.495	0.6006	0.6006	0.6097	0.6097	19.82	19.82	----
0.160	0.1603	0.1496	0.1494			2.72E-03	0.245	0.6113	0.6115	0.6384	0.6389	18.39	18.36	----
														----

					Initial Conditions	Final Conditions
Project Name:	Cole's Bayou			Height (in)	0.7490	0.6150
File Number:	13-80-3705			w_c (%)	37.9	25.1
Boring Number:	B-01			γt (pcf)	115.8	128.0
Depth:	6-8			γd (pcf)	84.0	102.3
LL =	90	-200 =	98	Saturation (%)	101.5	104.7
PI =	67	OC =	14.5	Void ratio, e	1.0075	0.6484

EOP= End of Primary Consolidation
EOI= End of load increment (typically 12 hrs +/-)

Specific Gravity	2.701
Ring Diameter (in)	2.0000
Ring weight (g)	62.53
Height of Solids (in)	0.3731
Weight of Dry Soil (g)	51.88



SAMPLE DATA	
BORING NO.:	B-08
SAMPLE NO.:	
DEPTH (FEET):	7.75
DESCRIPTION:	Gray CLAY (CH)

SPECIMEN CONDITIONS	INITIAL	FINAL
MOISTURE CONTENT (%):	126.9	78.0
DRY DENSITY (lb/ft^3):	38.5	57.8
VOID RATIO:	3.45	1.96

INDEX PROPERTIES	
LIQUID LIMIT (%):	104
PLASTIC LIMIT (%):	24
PLASTICITY INDEX (%):	80
SPECIFIC GRAVITY:	2.74
-200(%):	98
ORGANIC CONTENT (%):	6.7

CONSOLIDATION PARAMETERS	
EFFECTIVE OVERBURDEN STRESS, σ'_{vo} (tsf):	0.094
PRECONSOLIDATION PRESSURE, σ'_p (tsf):	0.14
VIRGIN COMPRESSION RATIO, CR:	0.284
RECOMPRESSION RATIO, RR:	0.016

INCREMENTAL CONSOLIDATION TEST RESULTS

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Ardaman & Associates, Inc.
Geotechnical, Environmental and Materials Consultants

COLE'S BAYOU MARSH CREATION

CPRA

DRAWN BY: RJB	CHECKED BY: RER	DATE: 12/19/13
FILE NO: 13-80-3705	APPROVED BY: MB	FIGURE: C6

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ARDAMAN & ASSOCIATES, INC
GEOTECHNICAL TESTING LABORATORY
ONE-DIMENSIONAL INCREMENTAL LOADING CONSOLIDATION TEST SUMMARY SHEET

Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{100} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	C_α
0	0.1054	0.1054	0.1054		-	-	-	0.7500	0.7500	3.4470	3.4470	0.00	0.00	----
0.015	0.1054	0.1069	0.1074				0.008	0.7485	0.7480	3.4381	3.4352	0.20	0.27	----
0.050	0.1075	0.1148	0.1164	516	L	3.18E-02	0.033	0.7407	0.7391	3.3919	3.3824	1.24	1.45	0.00133
0.110	0.1164	0.1400	0.1463	960	L	1.63E-02	0.080	0.7155	0.7092	3.2425	3.2051	4.60	5.44	0.00978
0.160	0.1463	0.1555	0.1618	1080	L	1.36E-02	0.135	0.7000	0.6937	3.1505	3.1132	6.67	7.51	0.00978
0.220	0.1619	0.1955	0.1987	3060	L	4.44E-03	0.190	0.6601	0.6569	2.9140	2.8950	11.99	12.41	0.01371
0.330	0.1982	0.2323	0.2397	1680	L	7.23E-03	0.275	0.6228	0.6154	2.6928	2.6489	16.96	17.95	0.01919
0.440	0.2398	0.2673	0.2726	3300	L	3.25E-03	0.385	0.5879	0.5826	2.4859	2.4544	21.61	22.32	0.02000
0.220	0.2723	0.2693	0.2688	180	L	5.62E-02	0.330	0.5856	0.5861	2.4722	2.4752	21.92	21.85	----
0.160	0.2687	0.2662	0.2652	240	L	4.26E-02	0.190	0.5886	0.5896	2.4900	2.4959	21.52	21.39	----
0.220	0.2654	0.2659	0.2661	360	L	2.86E-02	0.190	0.5891	0.5889	2.4930	2.4918	21.45	21.48	----
0.330	0.2662	0.2674	0.2683	120	L	8.55E-02	0.275	0.5877	0.5868	2.4847	2.4793	21.64	21.76	----
0.440	0.2684	0.2720	0.2754	240	L	4.23E-02	0.385	0.5832	0.5798	2.4580	2.4378	22.24	22.69	----
0.660	0.2754	0.3042	0.3105	1920	L	4.94E-03	0.550	0.5510	0.5447	2.2671	2.2297	26.53	27.37	0.01578
0.870	0.3104	0.3360	0.3435	1500	L	5.59E-03	0.765	0.5191	0.5116	2.0779	2.0335	30.79	31.79	0.01625
1.310	0.3437	0.3740	0.3795	1500	L	4.87E-03	1.090	0.4813	0.4758	1.8538	1.8212	35.83	36.56	0.01067
0.660	0.3793	0.3743	0.3734	318	L	2.13E-02	0.985	0.4808	0.4817	1.8508	1.8562	35.89	35.77	----
0.330	0.3733	0.3639	0.3619	720	L	9.74E-03	0.495	0.4911	0.4931	1.9119	1.9238	34.52	34.25	----
0.160	0.3617	0.3536	0.3526	1740	L	4.21E-03	0.245	0.5012	0.5022	1.9718	1.9777	33.17	33.04	----
0.050	0.3523	0.3386	0.3359	2820	L	2.72E-03	0.105	0.5159	0.5186	2.0590	2.0750	31.21	30.85	----
														----

				Initial Conditions	Final Conditions
Project Name:	Cole's Bayou		Height (in)	0.7500	0.4990
File Number:	13-80-3705		w_c (%)	126.9	78.0
Boring Number:	B-08		γt (pcf)	87.3	102.9
Depth:	6-8		γd (pcf)	38.5	57.8
LL = 104	-200 = 98		Saturation (%)	100.9	109.1
PI = 80	OC = 6.7		Void ratio, e	3.4470	1.9587

EOP= End of Primary Consolidation
EOI= End of load increment (typically 24 hrs +/-)

Specific Gravity	2.74
Ring Diameter (in)	2.0000
Ring weight (g)	62.52
Height of Solids (in)	0.1687
Weight of Dry Soil (g)	23.79

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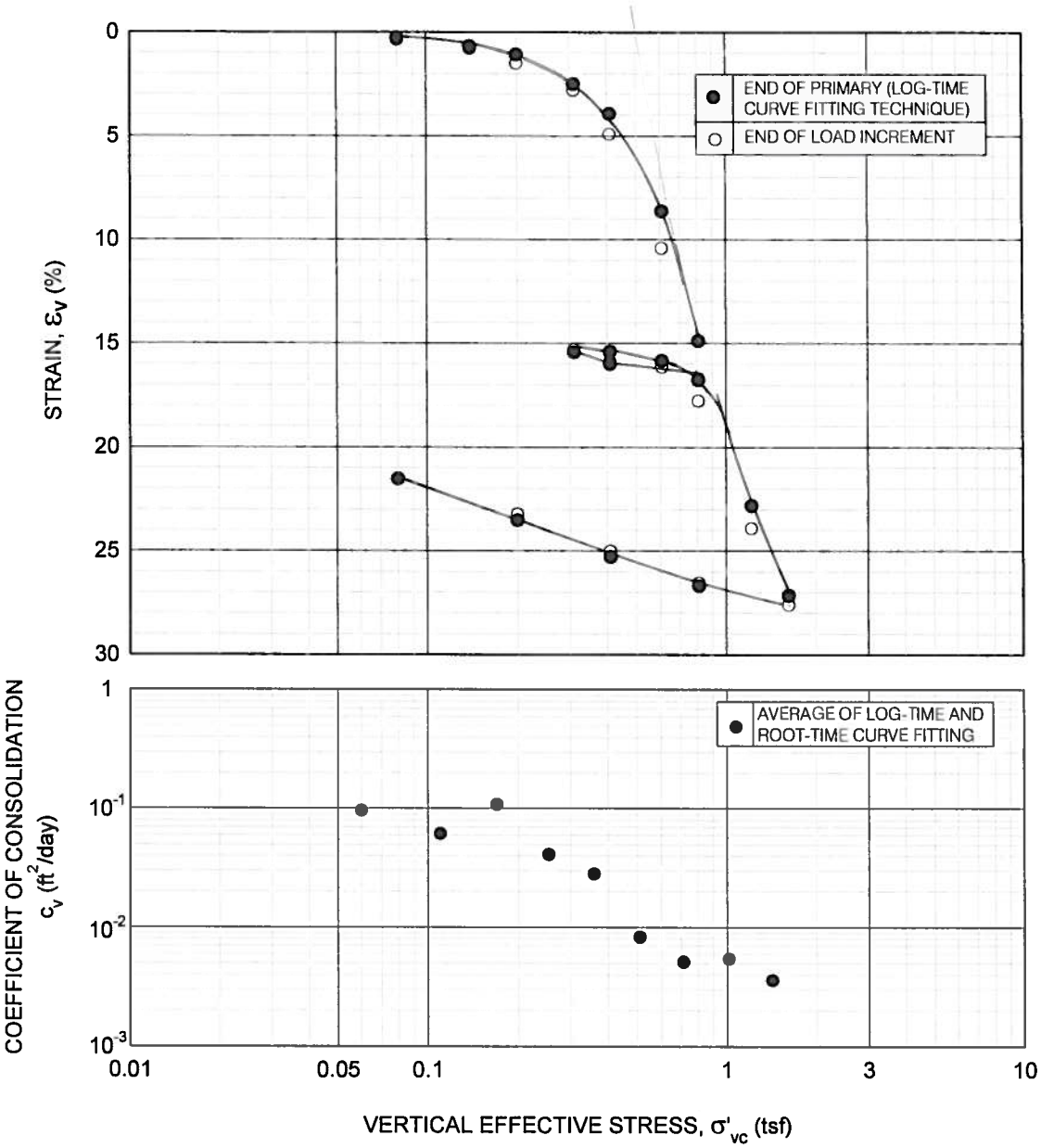
ARDAMAN & ASSOCIATES, INC
GEOTECHNICAL TESTING LABORATORY
ONE-DIMENSIONAL INCREMENTAL LOADING CONSOLIDATION TEST SUMMARY SHEET

Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{100} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	$C_{\alpha\varepsilon}$
0.000	0.1054	0.1054	0.1054		-	-	-	0.7500	0.7500	3.4470	3.4470	0.00	0.00	----
0.015	0.1054	0.1069	0.1074				0.008	0.7485	0.7480	3.4381	3.4352	0.20	0.27	----
0.050	0.1077	0.1126	0.1164	1058	S	6.71E-02	0.033	0.7431	0.7393	3.4061	3.3836	0.92	1.43	0.00133
0.110	0.1164	0.1366	0.1463	2693	S	2.52E-02	0.080	0.7191	0.7094	3.2638	3.2063	4.12	5.41	0.00133
0.160	0.1463	0.1549	0.1618	3937	S	1.61E-02	0.135	0.7008	0.6939	3.1553	3.1144	6.56	7.48	0.00133
0.220	0.1618	0.1907	0.1987	9526	S	6.19E-03	0.190	0.6650	0.6570	2.9430	2.8956	11.33	12.40	0.00133
0.330	0.1987	0.2315	0.2397	6998	S	7.48E-03	0.275	0.6242	0.6160	2.7011	2.6525	16.77	17.87	0.00133
0.440	0.2397	0.2645	0.2726	11929	S	3.90E-03	0.385	0.5912	0.5831	2.5054	2.4574	21.17	22.25	0.00133
0.220	0.2724	0.2698	0.2688	540	S	8.07E-02	0.330	0.5857	0.5867	2.4728	2.4788	21.91	21.77	0.00133
0.160	0.2687	0.2664	0.2652	960	S	4.59E-02	0.190	0.5890	0.5902	2.4924	2.4995	21.47	21.31	----
0.220	0.2654	0.2661	0.2661				0.190	0.5895	0.5895	2.4954	2.4954	21.40	21.40	----
0.330	0.2662	0.2674	0.2683	577	S	7.67E-02	0.275	0.5883	0.5874	2.4882	2.4829	21.56	21.68	----
0.440	0.2683	0.2720	0.2754	1058	S	4.14E-02	0.385	0.5837	0.5803	2.4610	2.4408	22.17	22.63	----
0.660	0.2754	0.3011	0.3105	6742	S	6.10E-03	0.550	0.5546	0.5452	2.2884	2.2327	26.05	27.31	0.01578
0.870	0.3105	0.3355	0.3435	6121	S	5.92E-03	0.765	0.5202	0.5122	2.0844	2.0370	30.64	31.71	0.01625
1.310	0.3435	0.3718	0.3795	5415	S	5.85E-03	1.090	0.4839	0.4762	1.8692	1.8236	35.48	36.51	0.01067
0.660	0.3791	0.3744	0.3734	1500	S	1.95E-02	0.985	0.4809	0.4819	1.8514	1.8574	35.88	35.75	----
0.330	0.3732	0.3648	0.3619	2614	S	1.15E-02	0.495	0.4903	0.4932	1.9072	1.9244	34.63	34.24	----
0.160	0.3619	0.3552	0.3526	4335	S	7.26E-03	0.245	0.4999	0.5025	1.9641	1.9795	33.35	33.00	----
0.050	0.3526	0.3388	0.3359	11261	S	2.94E-03	0.105	0.5163	0.5192	2.0613	2.0785	31.16	30.77	----

				Initial Conditions	Final Conditions
Project Name:	Cole's Bayou		Height (in)	0.7500	0.4990
File Number:	13-80-3705		w_c (%)	126.9	78.0
Boring Number:	B-08		γt (pcf)	87.3	102.9
Depth:	6-8		γd (pcf)	38.5	57.8
LL = 104	-200 = 98		Saturation (%)	100.9	109.1
PI = 80	OC = 6.7		Void ratio, e	3.4470	1.9587

EOP= End of Primary Consolidation
EOI= End of load increment (typically 24 hrs +/-)

Specific Gravity	2.74
Ring Diameter (in)	2.0000
Ring weight (g)	62.52
Height of Solids (in)	0.1687
Weight of Dry Soil (g)	23.79



SAMPLE DATA

BORING NO.:	B-16
SAMPLE NO.:	
DEPTH (FEET):	9.75
DESCRIPTION:	Gray CLAY (CH) w/organics and shells

INDEX PROPERTIES

LIQUID LIMIT (%):	99
PLASTIC LIMIT (%):	21
PLASTICITY INDEX (%):	78
SPECIFIC GRAVITY:	2.78
-200(%):	98
ORGANIC CONTENT (%):	---

SPECIMEN CONDITIONS

	INITIAL	FINAL
MOISTURE CONTENT (%):	111.5	80.0
DRY DENSITY (lb/ft^3):	42.1	54.5
VOID RATIO:	3.12	2.18

CONSOLIDATION PARAMETERS

EFFECTIVE OVERBURDEN STRESS, σ'_{vo} (tsf):	0.166
PRECONSOLIDATION PRESSURE, σ'_p (tsf):	0.51
VIRGIN COMPRESSION RATIO, CR:	0.348
RECOMPRESSION RATIO, RR:	0.032

INCREMENTAL CONSOLIDATION TEST RESULTS

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Geotechnical, Environmental and Materials Consultants

COLE'S BAYOU MARSH CREATION

CPRA

DRAWN BY RJB	CHECKED BY RER	DATE 12/19/13
FILE NO 13-80-3705	APPROVED BY MB	FIGURE C7

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Work Product

ARDAMAN & ASSOCIATES, INC
GEOTECHNICAL TESTING LABORATORY
ONE-DIMENSIONAL INCREMENTAL LOADING CONSOLIDATION TEST SUMMARY SHEET

Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{50} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	$C_{\alpha\varepsilon}$
0	0.1281	0.1281	0.1281		-	-	-	0.7500	0.7500	3.1160	3.1160	0.00	0.00	----
0.040	0.1281	0.1280	0.1279				0.020	0.7501	0.7502	3.1165	3.1170	-0.01	-0.03	----
0.080	0.1280	0.1302	0.1309	420	L	3.96E-02	0.060	0.7480	0.7474	3.1050	3.1014	0.27	0.35	----
0.140	0.1309	0.1333	0.1341	276	L	5.98E-02	0.110	0.7450	0.7442	3.0882	3.0838	0.67	0.78	0.00046
0.200	0.1341	0.1364	0.1395	126	L	1.30E-01	0.170	0.7419	0.7388	3.0715	3.0542	1.08	1.50	0.00100
0.310	0.1395	0.1470	0.1493	594	L	2.70E-02	0.255	0.7313	0.7290	3.0131	3.0007	2.50	2.80	0.00375
0.410	0.1493	0.1577	0.1651	720	L	2.16E-02	0.360	0.7206	0.7132	2.9543	2.9137	3.93	4.91	0.00738
0.610	0.1649	0.1928	0.2061				0.510	0.6853	0.6720	2.7606	2.6876	8.63	10.41	----
0.810	0.2060	0.2395	0.2531	2220	L	5.73E-03	0.710	0.6384	0.6248	2.5035	2.4289	14.88	16.69	0.02570
0.410	0.2531	0.2477	0.2468	222	L	5.26E-02	0.610	0.6302	0.6311	2.4582	2.4632	15.98	15.86	----
0.310	0.2468	0.2435	0.2427	660	L	1.80E-02	0.360	0.6344	0.6352	2.4813	2.4859	15.42	15.31	----
0.410	0.2427	0.2433	0.2437	120	L	9.96E-02	0.360	0.6346	0.6342	2.4826	2.4804	15.39	15.44	----
0.610	0.2438	0.2467	0.2489	150	L	7.91E-02	0.510	0.6313	0.6291	2.4643	2.4522	15.83	16.13	----
0.810	0.2489	0.2536	0.2612	240	L	4.85E-02	0.710	0.6244	0.6168	2.4264	2.3847	16.75	17.77	----
1.220	0.2612	0.2990	0.3072	1680	L	6.31E-03	1.015	0.5789	0.5708	2.1770	2.1322	22.81	23.90	0.01970
1.625	0.3072	0.3315	0.3349	2700	L	3.43E-03	1.423	0.5465	0.5431	1.9989	1.9802	27.14	27.59	0.01537
0.810	0.3347	0.3278	0.3268	300	L	2.95E-02	1.218	0.5499	0.5510	2.0178	2.0236	26.68	26.54	----
0.410	0.3267	0.3172	0.3152	840	L	1.09E-02	0.610	0.5604	0.5625	2.0754	2.0867	25.28	25.01	----
0.200	0.3152	0.3040	0.3017	1920	L	4.98E-03	0.305	0.5736	0.5759	2.1479	2.1605	23.52	23.21	----
0.080	0.3017	0.2890	0.2890	6000	L	1.68E-03	0.140	0.5886	0.5886	2.2299	2.2302	21.53	21.52	----
														----

					Initial Conditions	Final Conditions
Project Name:		Cole's Bayou		Height (in)	0.7500	0.5800
File Number:		13-80-3705		w_c (%)	111.5	80.0
Boring Number:		B-16		γt (pcf)	89.1	98.1
Depth:		8-10		γd (pcf)	42.1	54.5
LL =	99	-200 =	98	Saturation (%)	99.4	101.9
PI =	78	OC =	--	Void ratio, e	3.1160	2.1830

EOP= End of Primary Consolidation
EOI= End of load increment (typically 12 hrs +/-)

Specific Gravity	2.778
Ring Diameter (in)	2.0000
Ring weight (g)	62.56
Height of Solids (in)	0.1822
Weight of Dry Soil (g)	26.06

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Work Product

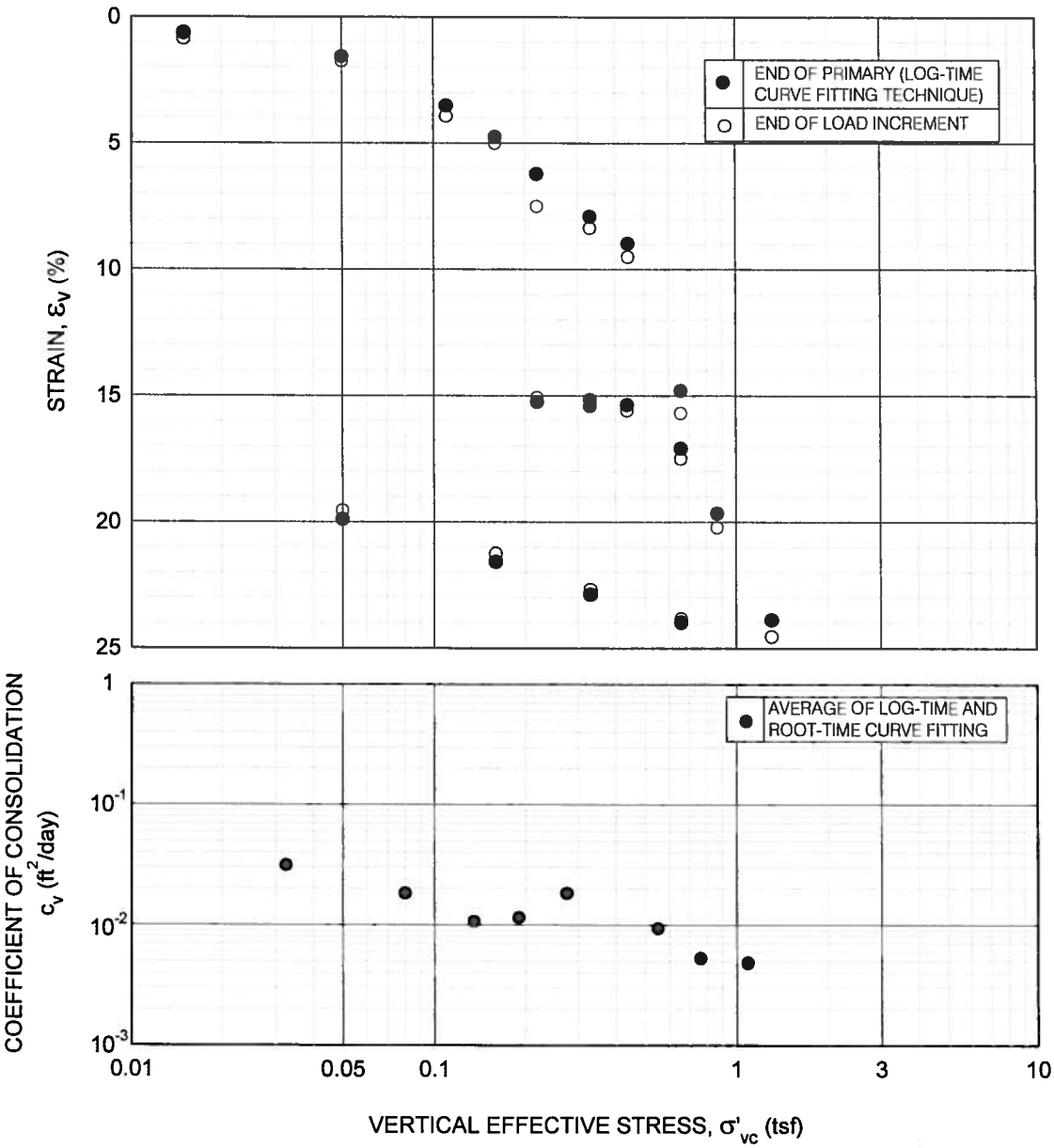
ARDAMAN & ASSOCIATES, INC
GEOTECHNICAL TESTING LABORATORY
ONE-DIMENSIONAL INCREMENTAL LOADING CONSOLIDATION TEST SUMMARY SHEET

Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{90} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	$C_{\alpha\varepsilon}$
0.000	0.1281	0.1281	0.1281		-	-	-	0.7500	0.7500	3.1160	3.1160	0.00	0.00	----
0.040	0.1281	0.1280	0.1279				0.020	0.7501	0.7502	3.1165	3.1170	-0.01	-0.03	----
0.080	0.1281	0.1293	0.1309	470	S	1.53E-01	0.060	0.7490	0.7474	3.1102	3.1017	0.14	0.35	----
0.140	0.1309	0.1332	0.1341	1109	S	6.41E-02	0.110	0.7451	0.7442	3.0891	3.0841	0.65	0.77	0.00046
0.200	0.1343	0.1365	0.1395	821	S	8.58E-02	0.170	0.7420	0.7390	3.0720	3.0556	1.07	1.47	0.00100
0.310	0.1395	0.1449	0.1493	1270	S	5.45E-02	0.255	0.7336	0.7293	3.0259	3.0021	2.19	2.77	0.00375
0.410	0.1493	0.1564	0.1651	1949	S	3.45E-02	0.360	0.7222	0.7135	2.9631	2.9154	3.71	4.87	0.00738
0.610	0.1651	0.1928	0.2061	7526	S	8.30E-03	0.510	0.6858	0.6725	2.7634	2.6904	8.57	10.34	----
0.810	0.2061	0.2442	0.2531	11929	S	4.57E-03	0.710	0.6344	0.6255	2.4813	2.4324	15.42	16.61	0.02570
0.410	0.2530	0.2487	0.2468	653	S	7.70E-02	0.610	0.6298	0.6317	2.4560	2.4665	16.03	15.78	----
0.310	0.2467	0.2447	0.2427	1215	S	4.20E-02	0.360	0.6337	0.6357	2.4774	2.4887	15.51	15.24	----
0.410	0.2427	0.2433	0.2437	470	S	1.10E-01	0.360	0.6351	0.6347	2.4854	2.4832	15.32	15.37	----
0.610	0.2438	0.2470	0.2489	960	S	5.33E-02	0.510	0.6315	0.6296	2.4656	2.4552	15.80	16.05	----
0.810	0.2489	0.2546	0.2612	1561	S	3.21E-02	0.710	0.6239	0.6173	2.4239	2.3877	16.81	17.69	----
1.220	0.2612	0.2988	0.3072	9985	S	4.58E-03	1.015	0.5797	0.5714	2.1814	2.1355	22.71	23.82	0.01970
1.625	0.3073	0.3309	0.3349	10613	S	3.77E-03	1.423	0.5478	0.5438	2.0060	1.9841	26.97	27.50	0.01537
0.810	0.3345	0.3291	0.3268	866	S	4.40E-02	1.218	0.5492	0.5515	2.0137	2.0266	26.78	26.47	----
0.410	0.3267	0.3179	0.3152	2693	S	1.46E-02	0.610	0.5603	0.5631	2.0749	2.0900	25.29	24.93	----
0.200	0.3152	0.3050	0.3017	6869	S	6.00E-03	0.305	0.5733	0.5766	2.1460	2.1641	23.57	23.13	----
0.080	0.3017	0.2890	0.2890	32294	S	1.34E-03	0.140	0.5892	0.5893	2.2335	2.2338	21.44	21.43	----

					Initial Conditions	Final Conditions
Project Name:	Cole's Bayou			Height (in)	0.7500	0.5800
File Number:	13-80-3705			w_c (%)	111.5	80.0
Boring Number:	B-16			γt (pcf)	89.1	98.1
Depth:	8-10			γd (pcf)	42.1	54.5
LL =	99	-200 =	98	Saturation (%)	99.4	101.9
PI =	78	OC =	--	Void ratio, e	3.1160	2.1830

EOP= End of Primary Consolidation
EOI= End of load increment (typically 12 hrs +/-)

Specific Gravity	2.778
Ring Diameter (in)	2.0000
Ring weight (g)	62.56
Height of Solids (in)	0.1822
Weight of Dry Soil (g)	26.06



SAMPLE DATA

BORING NO.:	B-13
SAMPLE NO.:	
DEPTH (FEET):	3.75
DESCRIPTION:	Gray ORGANIC CLAY (OH)

SPECIMEN CONDITIONS

	INITIAL	FINAL
MOISTURE CONTENT (%):	90.7	65.6
DRY DENSITY (lb/ft^3):	49.1	62.5
VOID RATIO:	2.41	1.68

INDEX PROPERTIES

LIQUID LIMIT (%):	299
PLASTIC LIMIT (%):	81
PLASTICITY INDEX (%):	218
SPECIFIC GRAVITY:	2.68
-200(%):	99
ORGANIC CONTENT (%):	54.5

CONSOLIDATION PARAMETERS

EFFECTIVE OVERBURDEN STRESS, σ'_{vo} (tsf):	0.01
PRECONSOLIDATION PRESSURE, σ'_p (tsf):	0.54
VIRGIN COMPRESSION RATIO, CR:	0.238
RECOMPRESSION RATIO, RR:	0.032

INCREMENTAL CONSOLIDATION TEST RESULTS

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Ardaman & Associates, Inc.
Geotechnical, Environmental and Materials Consultants

COLE'S BAYOU MARSH CREATION

CPRA

DRAWN BY: RJB	CHECKED BY: RER	DATE: 12/19/13
FILE NO: 13-80-3705	APPROVED BY: MB	FIGURE: C3

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Work Product

ARDAMAN & ASSOCIATES, INC
GEOTECHNICAL TESTING LABORATORY
ONE-DIMENSIONAL INCREMENTAL LOADING CONSOLIDATION TEST SUMMARY SHEET

Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{100} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	$C_{\alpha\varepsilon}$
0	0.0199	0.0199	0.0199		-	-	-	0.7480	0.7480	2.4100	2.4100	0.00	0.00	----
0.015	0.0199	0.0247	0.0263				0.008	0.7432	0.7416	2.3881	2.3808	0.64	0.86	----
0.050	0.0263	0.0315	0.0329	1020	L	1.59E-02	0.033	0.7364	0.7350	2.3568	2.3507	1.56	1.74	0.00189
0.110	0.0334	0.0466	0.0497	1020	L	1.54E-02	0.080	0.7218	0.7187	2.2905	2.2764	3.50	3.92	0.00382
0.160	0.0499	0.0560	0.0580	1800	L	8.44E-03	0.135	0.7126	0.7106	2.2484	2.2395	4.74	5.00	0.00480
0.220	0.0580	0.0670	0.0767	1860	L	7.95E-03	0.190	0.7016	0.6919	2.1982	2.1542	6.21	7.50	0.01028
0.330	0.0767	0.0795	0.0830	600	L	2.36E-02	0.275	0.6891	0.6856	2.1412	2.1255	7.88	8.34	0.00295
0.440	0.0829	0.0874	0.0914	132	L	1.05E-01	0.385	0.6811	0.6772	2.1050	2.0870	8.94	9.47	0.00140
0.660	0.0913	0.1310	0.1378	1260	L	1.02E-02	0.550	0.6374	0.6307	1.9058	1.8750	14.79	15.69	0.01433
0.330	0.1368	0.1346	0.1339	450	L	2.63E-02	0.495	0.6329	0.6336	1.8850	1.8884	15.39	15.29	----
0.220	0.1336	0.1332	0.1318	180	L	6.62E-02	0.275	0.6340	0.6354	1.8903	1.8964	15.24	15.06	----
0.330	0.1320	0.1327	0.1332	186	L	6.43E-02	0.275	0.6347	0.6342	1.8932	1.8909	15.15	15.22	----
0.440	0.1334	0.1344	0.1361	228	L	5.22E-02	0.385	0.6331	0.6314	1.8862	1.8784	15.36	15.59	----
0.660	0.1360	0.1470	0.1501	1740	L	6.68E-03	0.550	0.6204	0.6174	1.8283	1.8144	17.06	17.47	----
0.870	0.1502	0.1665	0.1707	1920	L	5.73E-03	0.765	0.6010	0.5969	1.7398	1.7209	19.65	20.21	0.01025
1.310	0.1710	0.1985	0.2034	2220	L	4.54E-03	1.090	0.5694	0.5645	1.5955	1.5734	23.88	24.53	0.01118
0.660	0.2031	0.1988	0.1978	360	L	2.64E-02	0.985	0.5688	0.5698	1.5930	1.5976	23.96	23.82	----
0.330	0.1974	0.1902	0.1889	1380	L	7.06E-03	0.495	0.5770	0.5783	1.6304	1.6363	22.86	22.69	----
0.160	0.1888	0.1805	0.1781	1620	L	6.21E-03	0.245	0.5866	0.5890	1.6742	1.6851	21.58	21.26	----
0.050	0.1773	0.1670	0.1645	3600	L	2.91E-03	0.105	0.5993	0.6018	1.7318	1.7435	19.89	19.55	----
														----

			Initial Conditions	Final Conditions
Project Name:	Cole's Bayou			
File Number:	13-80-3705	Height (in)	0.7480	0.5880
Boring Number:	B-13	w_c (%)	90.7	65.6
Depth:	2-4	γt (pcf)	93.7	103.5
		γd (pcf)	49.1	62.5
LL = 299	-200 = 99	Saturation (%)	101.0	104.8
PI = 218	OC = 54.5	Void ratio, e	2.4100	1.6806

EOP= End of Primary Consolidation
EOI= End of load increment (typically 12 hrs +/-)

Specific Gravity	2.684
Ring Diameter (in)	2.0000
Ring weight (g)	62.49
Height of Solids (in)	0.2194
Weight of Dry Soil (g)	30.31

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GEOTECHNICAL TESTING LABORATORY
ONE-DIMENSIONAL INCREMENTAL LOADING CONSOLIDATION TEST SUMMARY SHEET

Effective Stress (tsf)	Dial Readings (inch) Initial	EOP	EOI	Time, t_{100} (sec)	Method (L=log, S=sq rt)	Cv (ft^2/day)	Average Effective Stress (tsf)	Height at EOP (inch)	Height at EOI (inch)	Void Ratio at EOP	Void Ratio at EOI	Strain at EOP (%)	Strain at EOI (%)	$C_{\alpha\varepsilon}$
0.000	0.0199	0.0199	0.0199		-	-	-	0.7480	0.7480	2.4100	2.4100	0.00	0.00	---
0.015	0.0199	0.0247	0.0263				0.008	0.7432	0.7416	2.3881	2.3808	0.64	0.86	---
0.050	0.0263	0.0296	0.0329	1500	S	4.66E-02	0.033	0.7383	0.7351	2.3657	2.3509	1.30	1.73	0.00189
0.110	0.0330	0.0454	0.0497	3197	S	2.12E-02	0.080	0.7227	0.7184	2.2944	2.2748	3.39	3.96	0.00382
0.160	0.0498	0.0549	0.0580	5078	S	1.29E-02	0.135	0.7133	0.7102	2.2515	2.2376	4.65	5.05	0.00480
0.220	0.0580	0.0691	0.0767	4234	S	1.50E-02	0.190	0.6991	0.6916	2.1870	2.1526	6.54	7.55	0.01028
0.330	0.0767	0.0805	0.0830	4646	S	1.31E-02	0.275	0.6878	0.6853	2.1353	2.1241	8.05	8.38	0.00295
0.440	0.0830	0.0867	0.0914	420	S	1.42E-01	0.385	0.6816	0.6770	2.1073	2.0861	8.88	9.50	0.00140
0.660	0.0932	0.1321	0.1378	6490	S	8.50E-03	0.550	0.6381	0.6324	1.9087	1.8830	14.70	15.45	0.01433
0.330	0.1376	0.1348	0.1339	1009	S	5.08E-02	0.495	0.6352	0.6362	1.8957	1.9001	15.08	14.95	---
0.220	0.1338	0.1332	0.1318	154	S	3.36E-01	0.275	0.6367	0.6381	1.9026	1.9090	14.88	14.69	---
0.330	0.1320	0.1323	0.1332		S		0.275	0.6378	0.6369	1.9076	1.9035	14.73	14.85	---
0.440	0.1332	0.1344	0.1361	821	S	6.29E-02	0.385	0.6357	0.6340	1.8980	1.8903	15.01	15.24	---
0.660	0.1361	0.1443	0.1501	3937	S	1.29E-02	0.550	0.6258	0.6201	1.8529	1.8267	16.34	17.11	---
0.870	0.1501	0.1678	0.1707	10140	S	4.70E-03	0.765	0.6024	0.5995	1.7460	1.7330	19.47	19.85	0.01025
1.310	0.1707	0.1977	0.2034	8640	S	5.07E-03	1.090	0.5725	0.5669	1.6099	1.5841	23.46	24.22	0.01118
0.660	0.2032	0.1991	0.1978	1382	S	2.99E-02	0.985	0.5710	0.5723	1.6028	1.6088	23.67	23.50	---
0.330	0.1977	0.1909	0.1889	4034	S	1.05E-02	0.495	0.5791	0.5811	1.6398	1.6489	22.59	22.32	---
0.160	0.1888	0.1798	0.1781	8354	S	5.24E-03	0.245	0.5901	0.5918	1.6899	1.6977	21.12	20.89	---
0.050	0.1781	0.1662	0.1645	14978	S	3.04E-03	0.105	0.6037	0.6054	1.7519	1.7599	19.30	19.06	---

				Initial Conditions	Final Conditions
Project Name:	Cole's Bayou		Height (in)	0.7480	0.5880
File Number:	13-80-3705		w_c (%)	90.7	65.6
Boring Number:	B-13		γt (pcf)	93.7	103.5
Depth:	2-4		γd (pcf)	49.1	62.5
LL = 299	-200 = 99		Saturation (%)	101.0	104.8
PI = 218	OC = 54.5		Void ratio, e	2.4100	1.6806

EOP= End of Primary Consolidation
EOI= End of load increment (typically 12 hrs +/-)

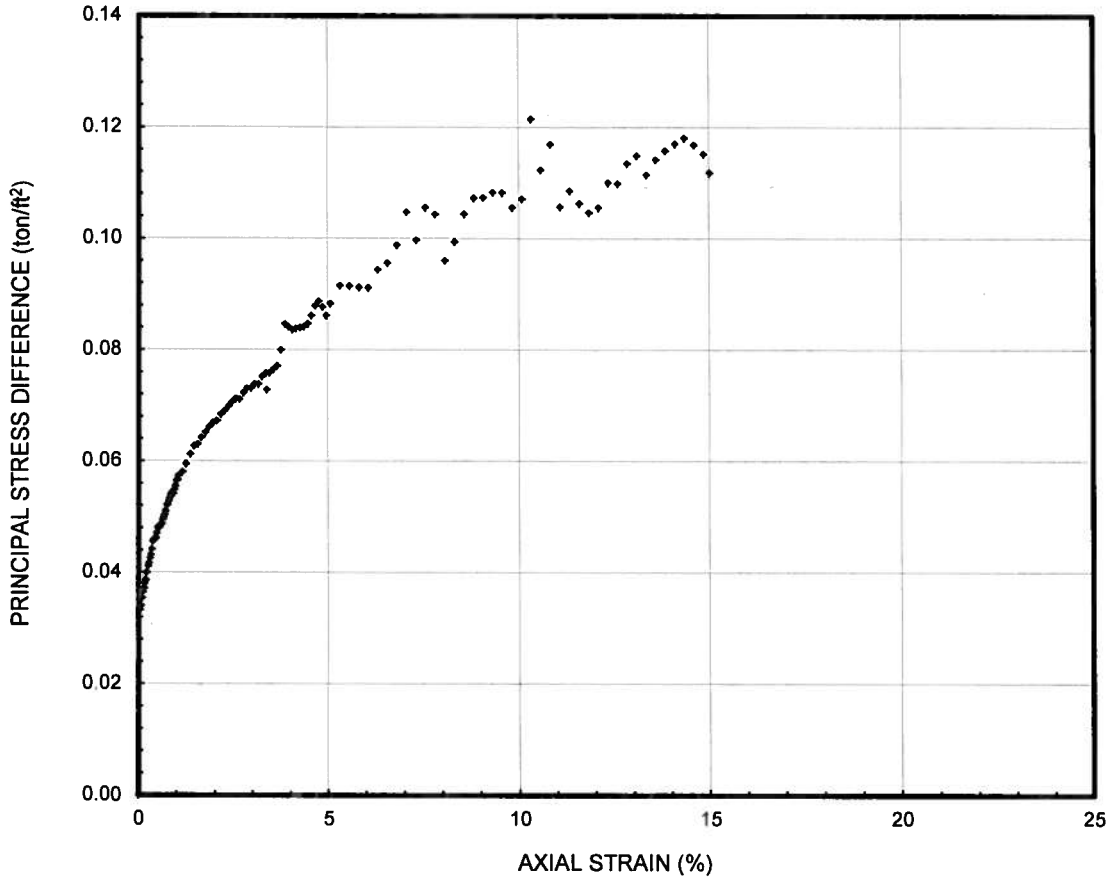
Specific Gravity	2.684
Ring Diameter (in)	2.0000
Ring weight (g)	62.49
Height of Solids (in)	0.2194
Weight of Dry Soil (g)	30.31

APPENDIX D. UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

- Unconsolidated Undrained Compressive Strength – Stress Strain Curves

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-01
Depth	0-2 ft
Description	Gray clay w/ organics



Initial Height	2.783	in	**Cell Pressure**	1.0	lb/in^2
Initial Diameter	1.401	in	**Strain Rate**	1.0	%/min
Dry Density	53.0	lb/ft^3	**Peak Stress**	0.12	ton/ft^2
Moisture Content	86.4	%	**Strain at Peak Stress**	10.33	%
Saturation	106.9	%	**Failure Type**	Bulging	

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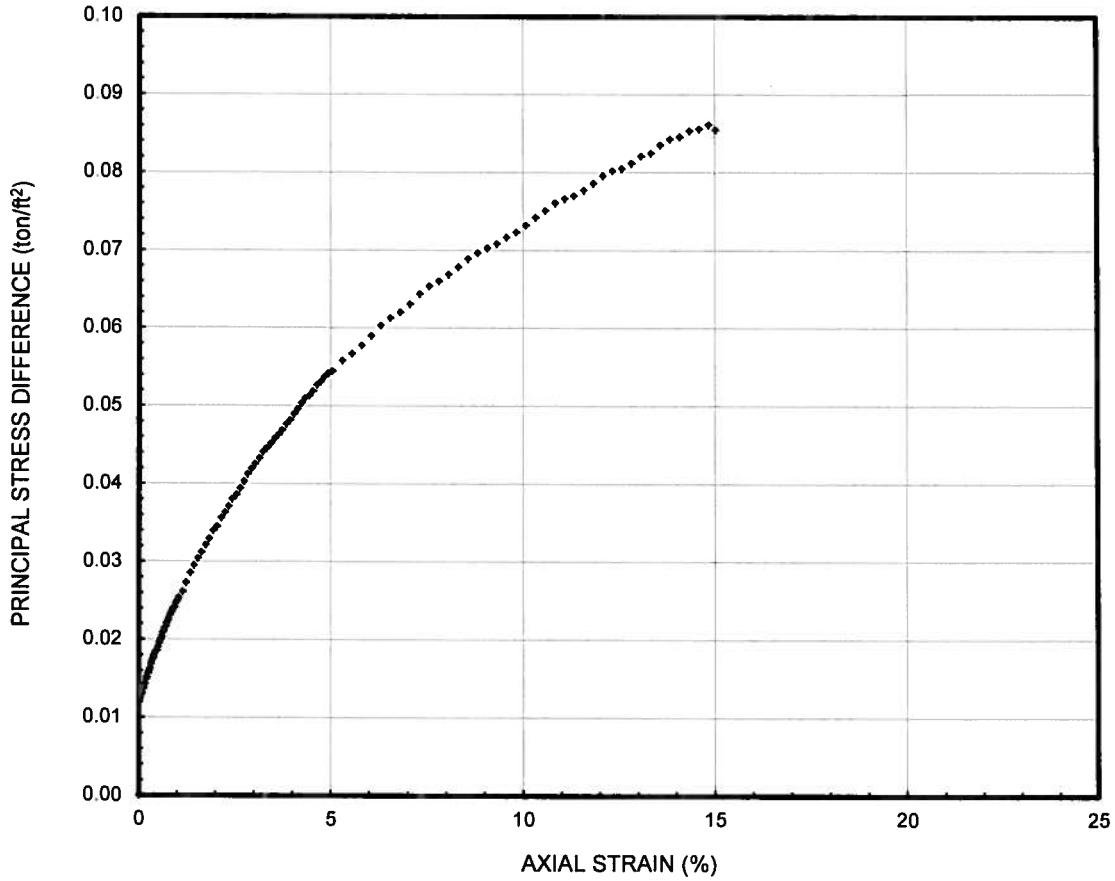
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-01
Depth	2-4 ft
Description	Dark organics w/ clay



Initial Height	5.662	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	2.815	in	**Strain Rate**	1.0	%/min
Dry Density	9.4	lb/ft^3	**Peak Stress**	0.09	ton/ft^2
Moisture Content	620.2	%	**Strain at Peak Stress**	14.84	%
Saturation	98.6	%	**Failure Type**	Bulging	

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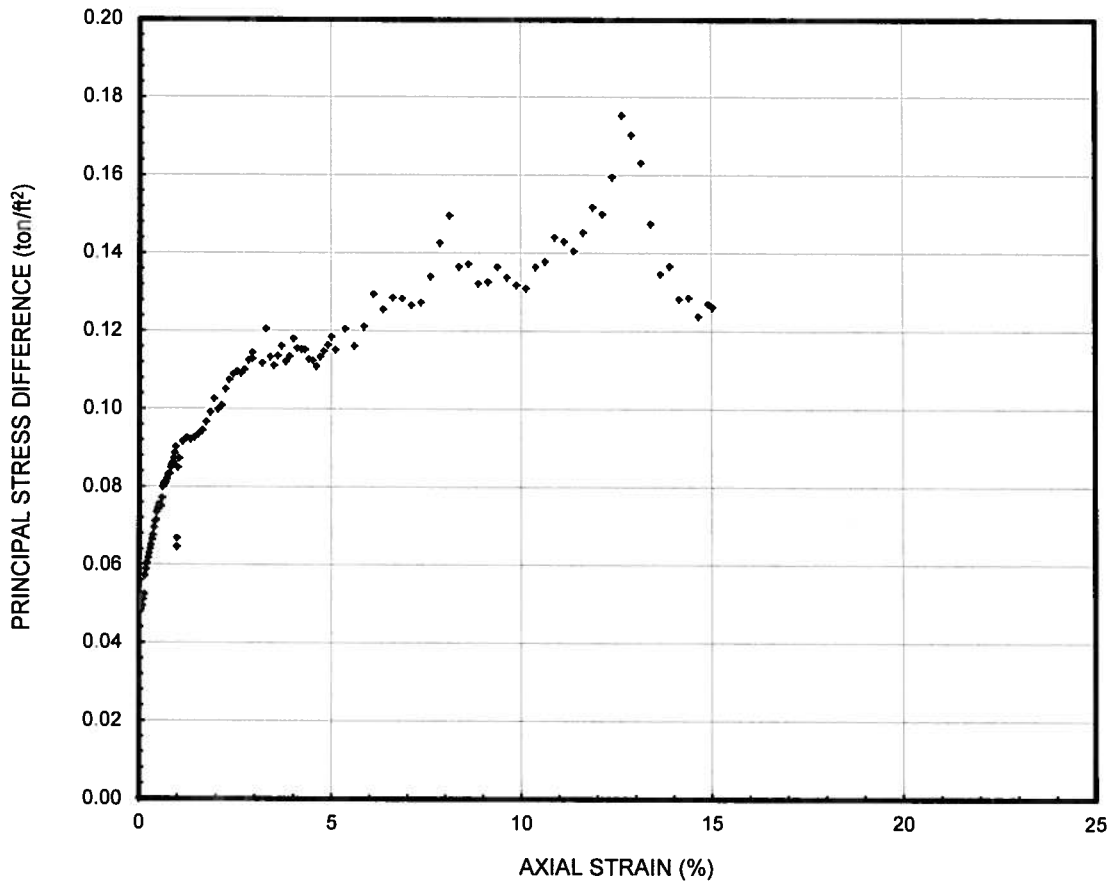
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-01
Depth	6-8 ft
Description	Gray clay w/ organics



Initial Height	2.780	in	**Cell Pressure**	3.0	lb/in^2
Initial Diameter	1.405	in	**Strain Rate**	1.0	%/min
Dry Density	50.1	lb/ft^3	**Peak Stress**	0.18	ton/ft^2
Moisture Content	93.2	%	**Strain at Peak Stress**	12.64	%
Saturation	106.3	%	**Failure Type**	Bulging	

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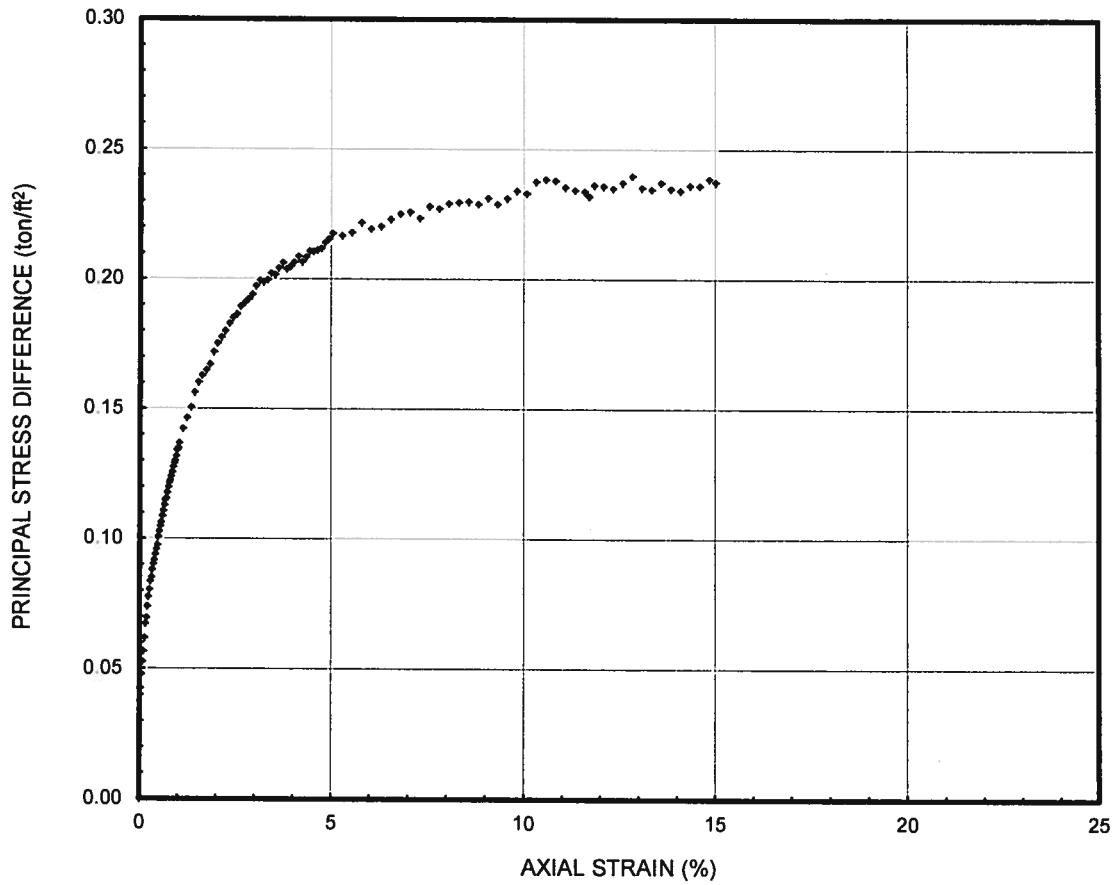
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-01
Depth	8-10 ft
Description	Gray clay w/ organics



Initial Height	2.784	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	1.398	in	**Strain Rate**	1.0	%/min
Dry Density	76.3	lb/ft^3	**Peak Stress**	0.25	ton/ft^2
Moisture Content	55.5	%	**Strain at Peak Stress**	12.84	%
Saturation	123.9	%	**Failure Type**	Bulging	

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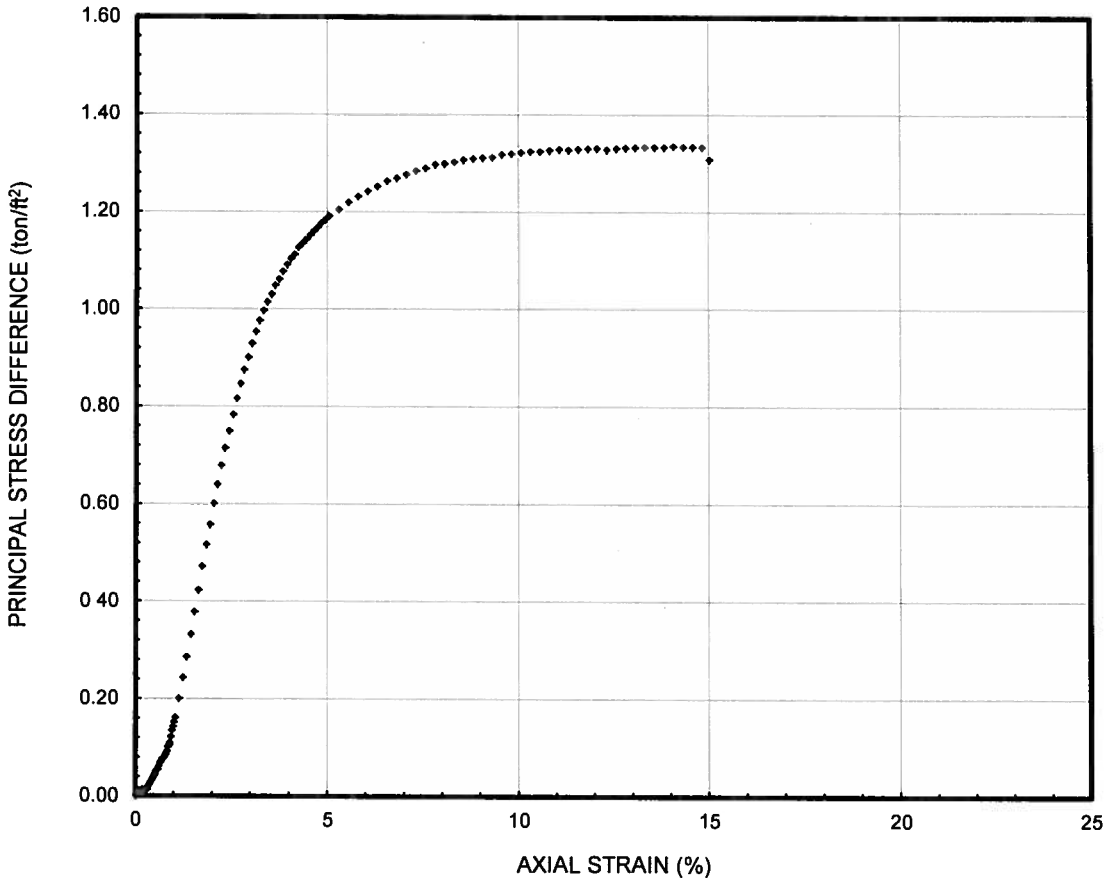
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13 80-3705
Boring Number	B-01
Depth	12-14 ft
Description	Gr/T clay w/ tr orgs



Initial Height	5.751	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	2.853	in	**Strain Rate**	1.0	%/min
Dry Density	98.5	lb/ft^3	**Peak Stress**	1.37	ton/ft^2
Moisture Content	25.6	%	**Strain at Peak Stress**	14.07	%
Saturation	97.3	%	**Failure Type**	Diagonal	

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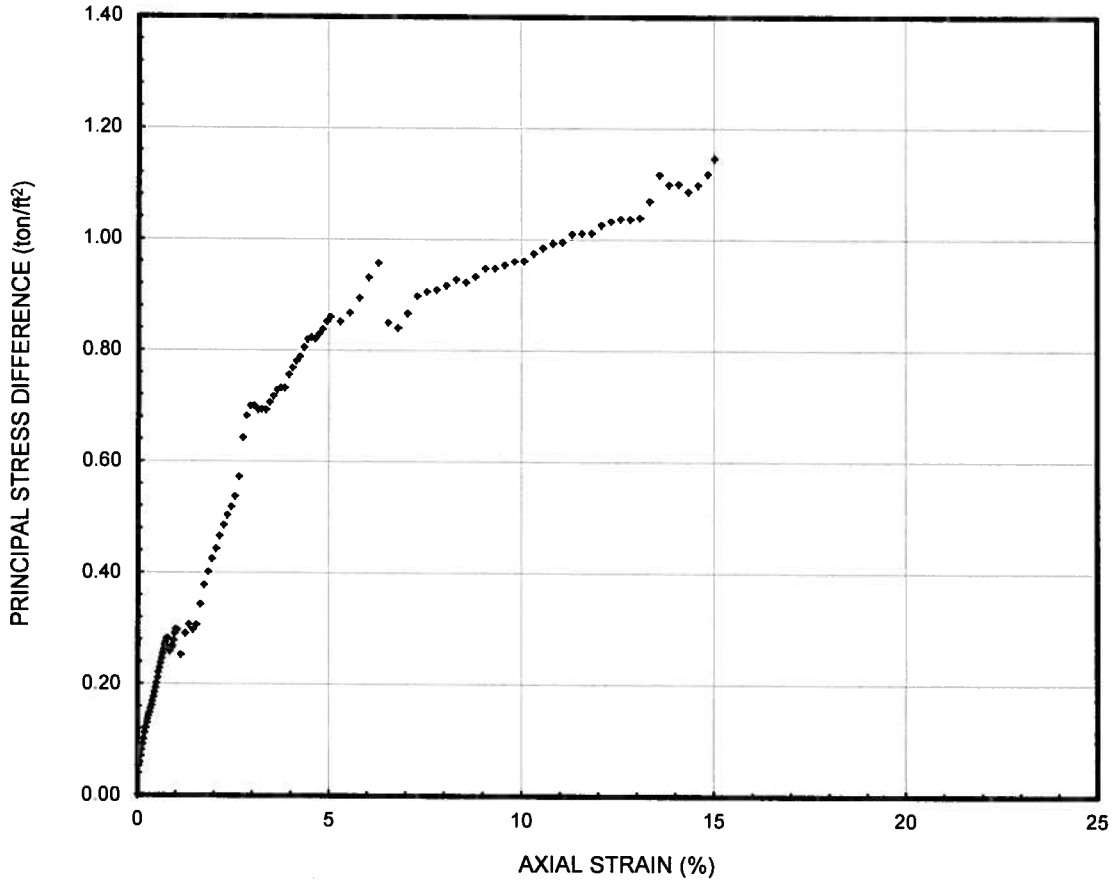
FILE NO. **13-80-3705**	APPROVED BY:	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-01
Depth	16-18 ft
Description	Bluish gray, tan and gray clay w/ fenods



Initial Height	2.794	in	**Cell Pressure**	7.0	lb/in^2
Initial Diameter	1.411	in	**Strain Rate**	1.0	%/min
Dry Density	97.1	lb/ft^3	**Peak Stress**	1.17	ton/ft^2
Moisture Content	27.7	%	**Strain at Peak Stress**	15.00	%
Saturation	101.6	%	**Failure Type**	Combination	

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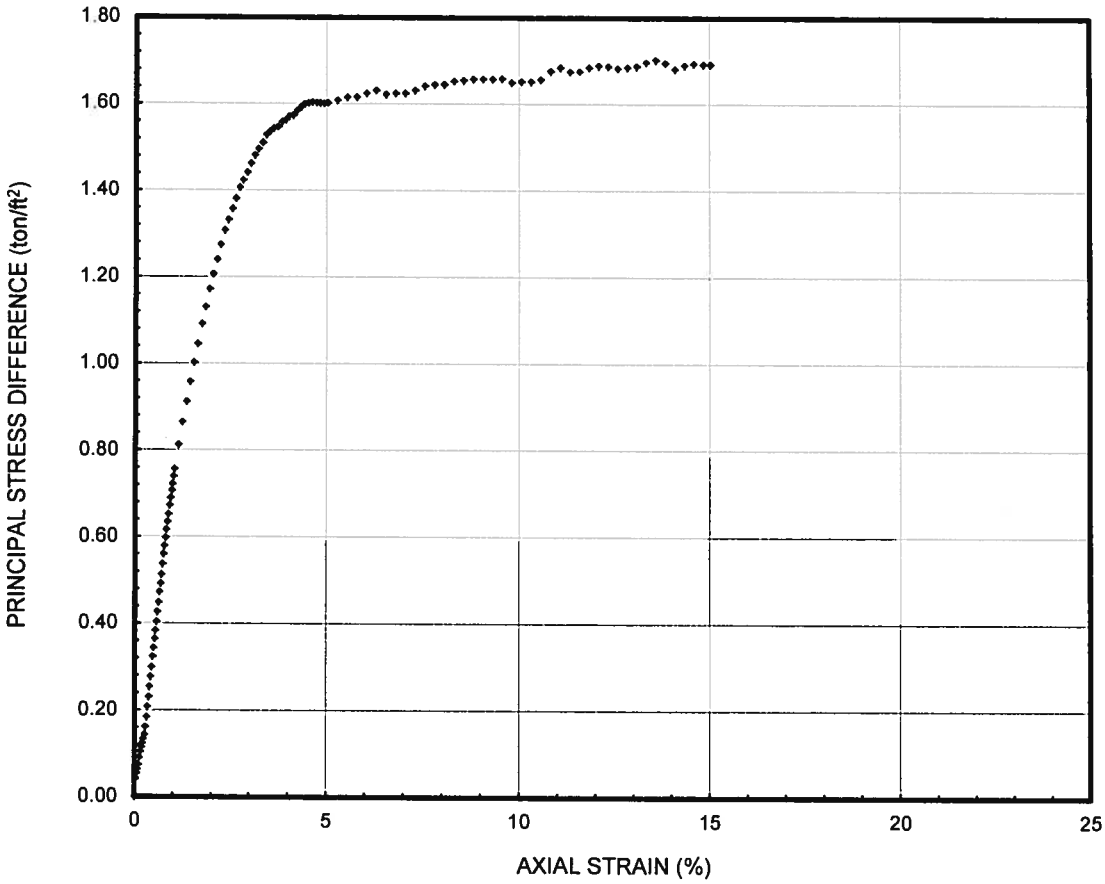
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-01
Depth	23-25 ft
Description	Light gray and tan clay w/ silt, fenods, trace orgs and fenods



Initial Height	2.802	in	**Cell Pressure**	10.0	lb/in^2
Initial Diameter	1.403	in	**Strain Rate**	1.0	%/min
Dry Density	100.6	lb/ft^3	**Peak Stress**	1.74	ton/ft^2
Moisture Content	24.4	%	**Strain at Peak Stress**	13.59	%
Saturation	97.8	%	**Failure Type**	Diagonal	

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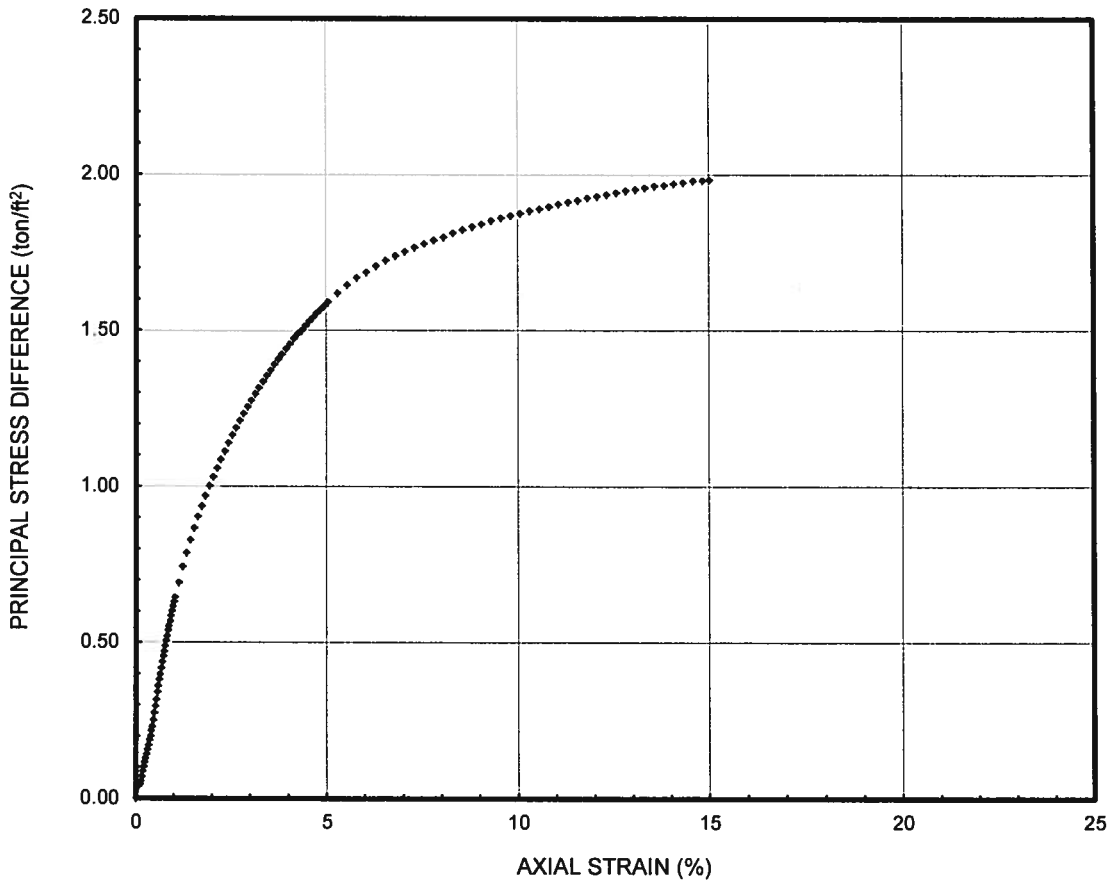
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-01
Depth	28-30 ft
Description	Light gray and tan clay w/ calnods



Initial Height	5.745	in	**Cell Pressure**	12.0	lb/in^2
Initial Diameter	2.863	in	**Strain Rate**	1.0	%/min
Dry Density	102.5	lb/ft^3	**Peak Stress**	2.03	ton/ft^2
Moisture Content	23.3	%	**Strain at Peak Stress**	15.01	%
Saturation	97.4	%	**Failure Type**	Bulging	

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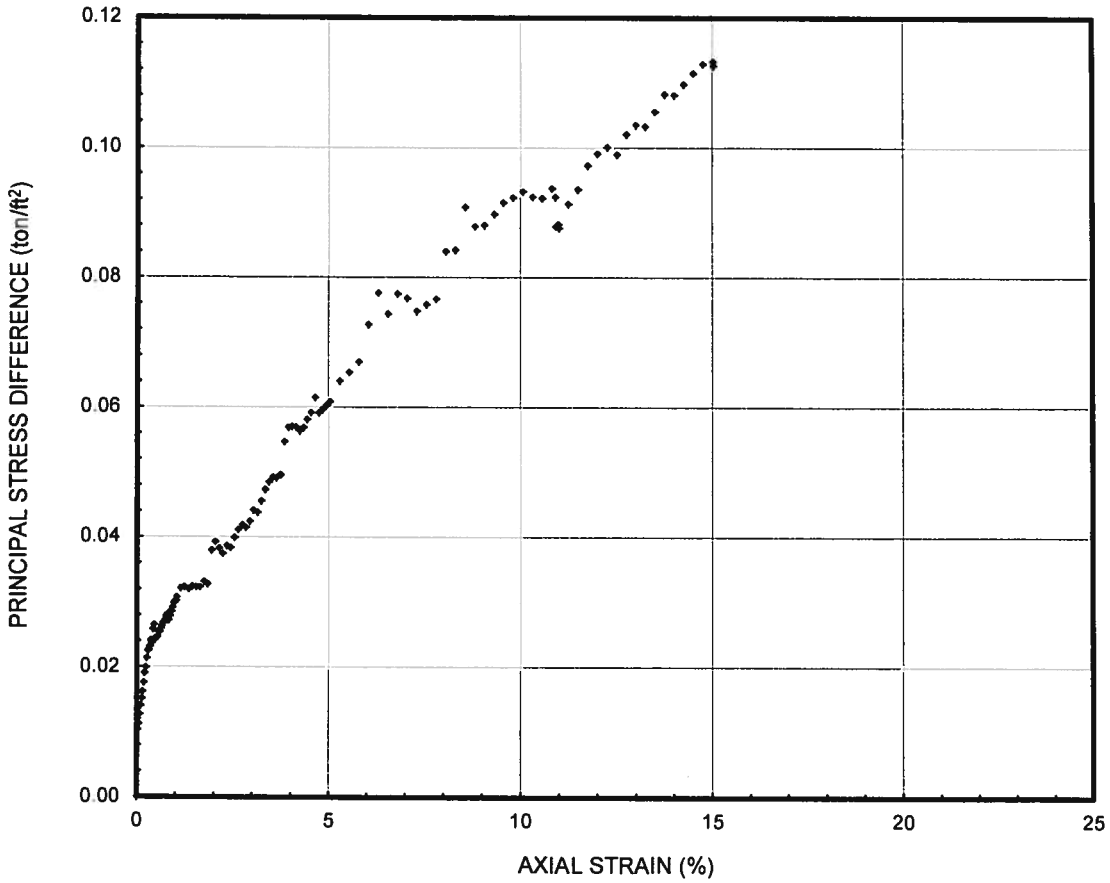
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-02
Depth	0-2 ft
Description	Dark brown organics w/trace clay



Initial Height	5.663	in	**Cell Pressure**	1.0	lb/in^2
Initial Diameter	2.734	in	**Strain Rate**	1.0	%/min
Dry Density	7.6	lb/ft^3	**Peak Stress**	0.12	ton/ft^2
Moisture Content	777.0	%	**Strain at Peak Stress**	15.01	%
Saturation	99.7	%	**Failure Type**	Bulging	

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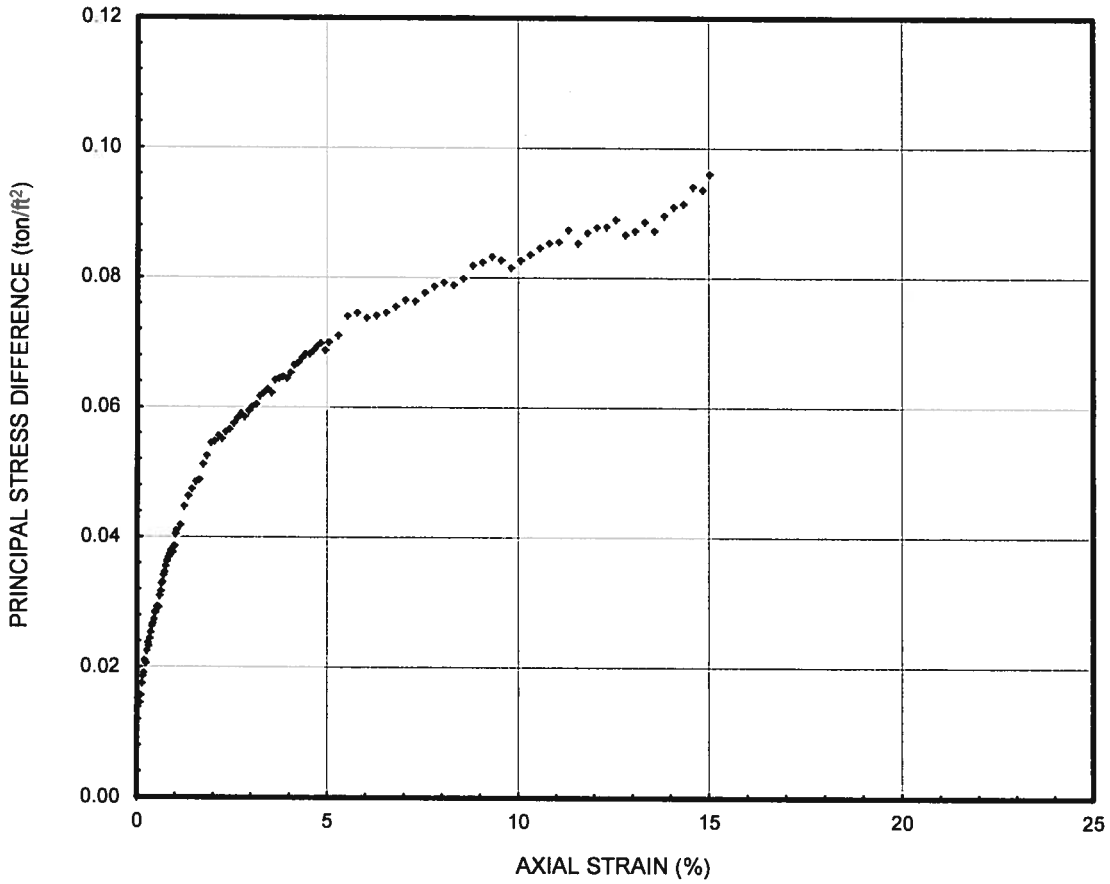
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-02
Depth	4-6 ft
Description	Gray clay w/silt pocket and organics



Initial Height	2.776	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.387	in	**Strain Rate**	1.0	%/min
Dry Density	54.1	lb/ft^3	**Peak Stress**	0.10	ton/ft^2
Moisture Content	85.5	%	**Strain at Peak Stress**	15.01	%
Saturation	108.9	%	**Failure Type**	Bulging	

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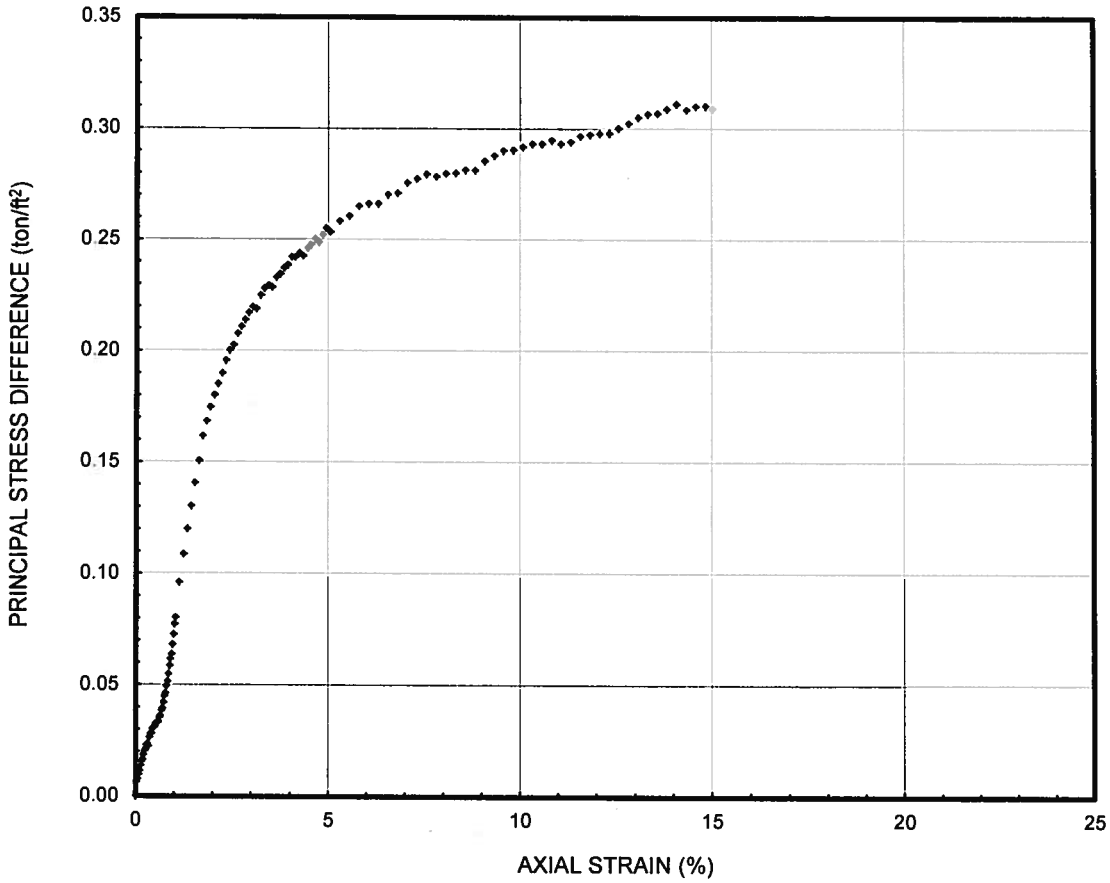
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-02
Depth	8-10 ft
Description	Gray clay w/trace organics



Initial Height	5.739	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	2.832	in	**Strain Rate**	1.0	%/min
Dry Density	85.6	lb/ft^3	**Peak Stress**	0.32	ton/ft^2
Moisture Content	36.3	%	**Strain at Peak Stress**	14.07	%
Saturation	101.3	%	**Failure Type**	Bulging	

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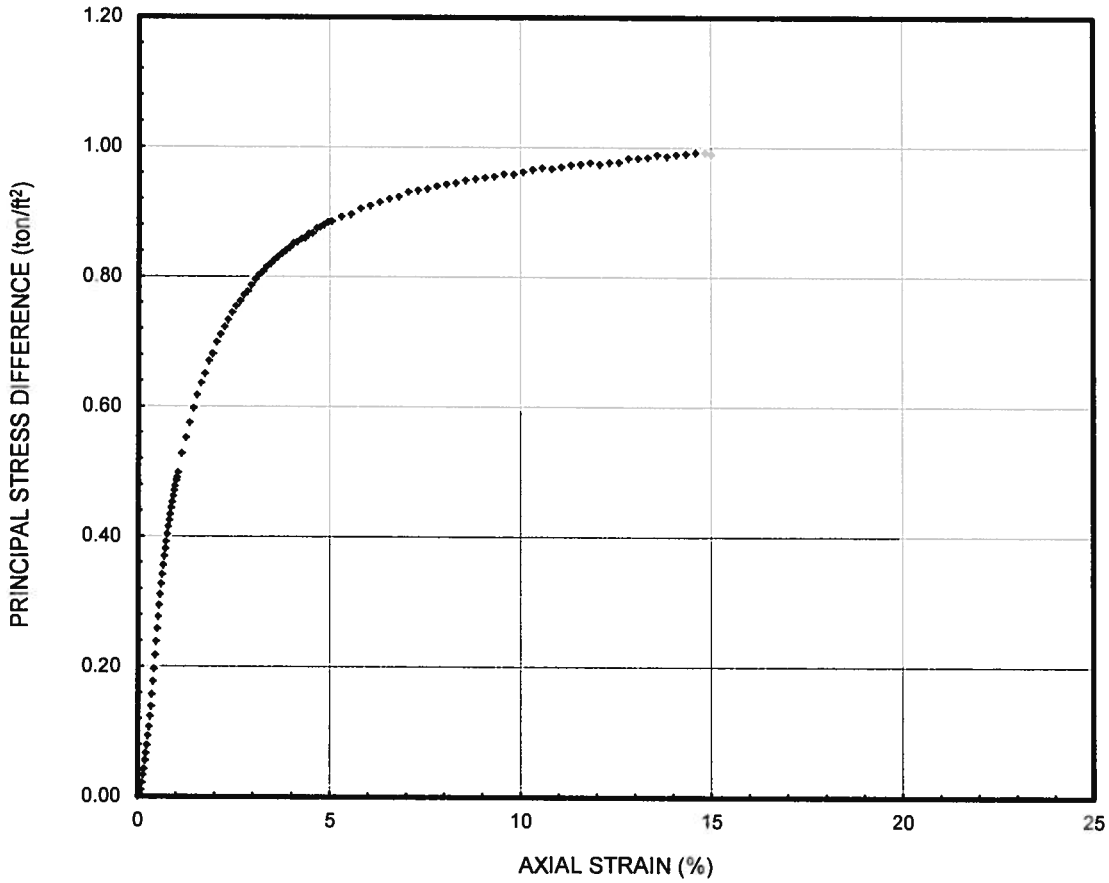
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-02
Depth	10-12 ft
Description	Bluish gray and tan clay w/trace organics and fenods



Initial Height	5.746	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	2.840	in	**Strain Rate**	1.0	%/min
Dry Density	96.3	lb/ft^3	**Peak Stress**	1.02	ton/ft^2
Moisture Content	27.8	%	**Strain at Peak Stress**	14.59	%
Saturation	100.0	%	**Failure Type**	Bulging	

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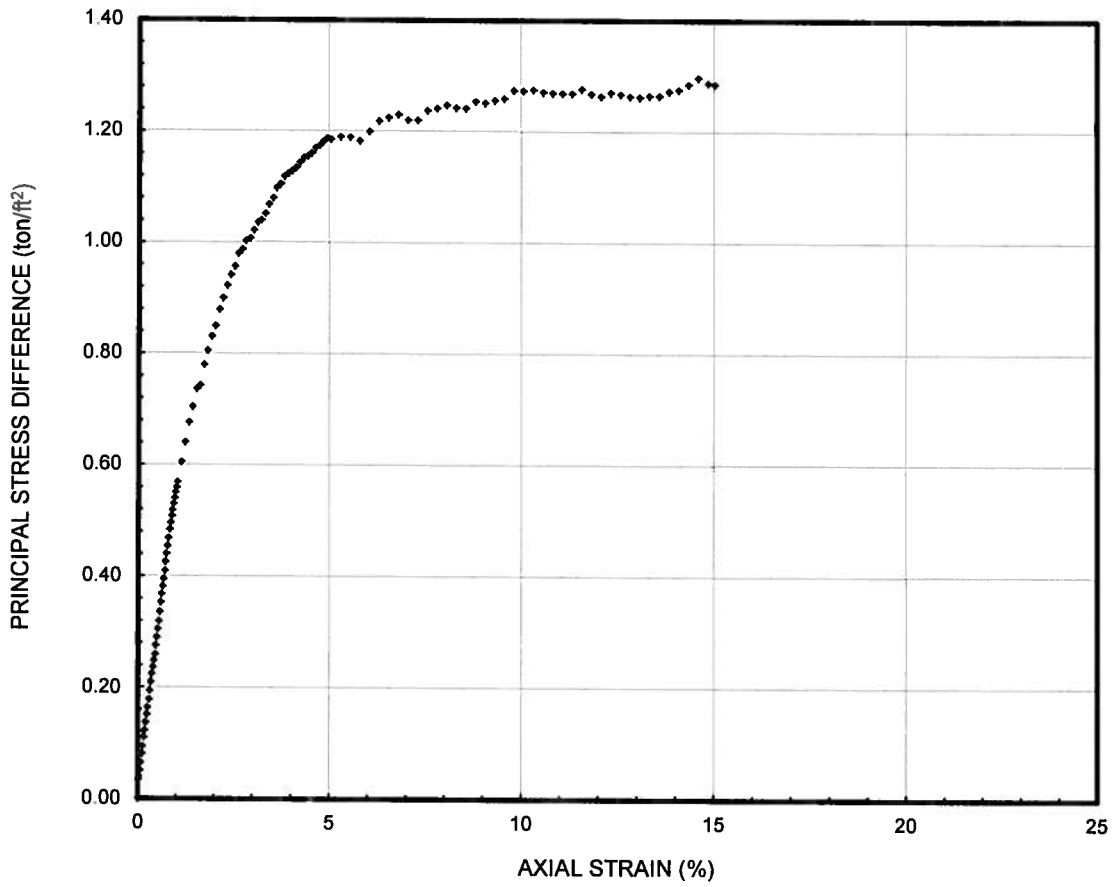
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-02
Depth	12-14 ft
Description	Tan and gray clay w/ fenods



Initial Height	2.789	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	1.407	in	**Strain Rate**	1.0	%/min
Dry Density	99.3	lb/ft^3	**Peak Stress**	1.33	ton/ft^2
Moisture Content	26.7	%	**Strain at Peak Stress**	14.59	%
Saturation	103.3	%	**Failure Type**	Bulging	

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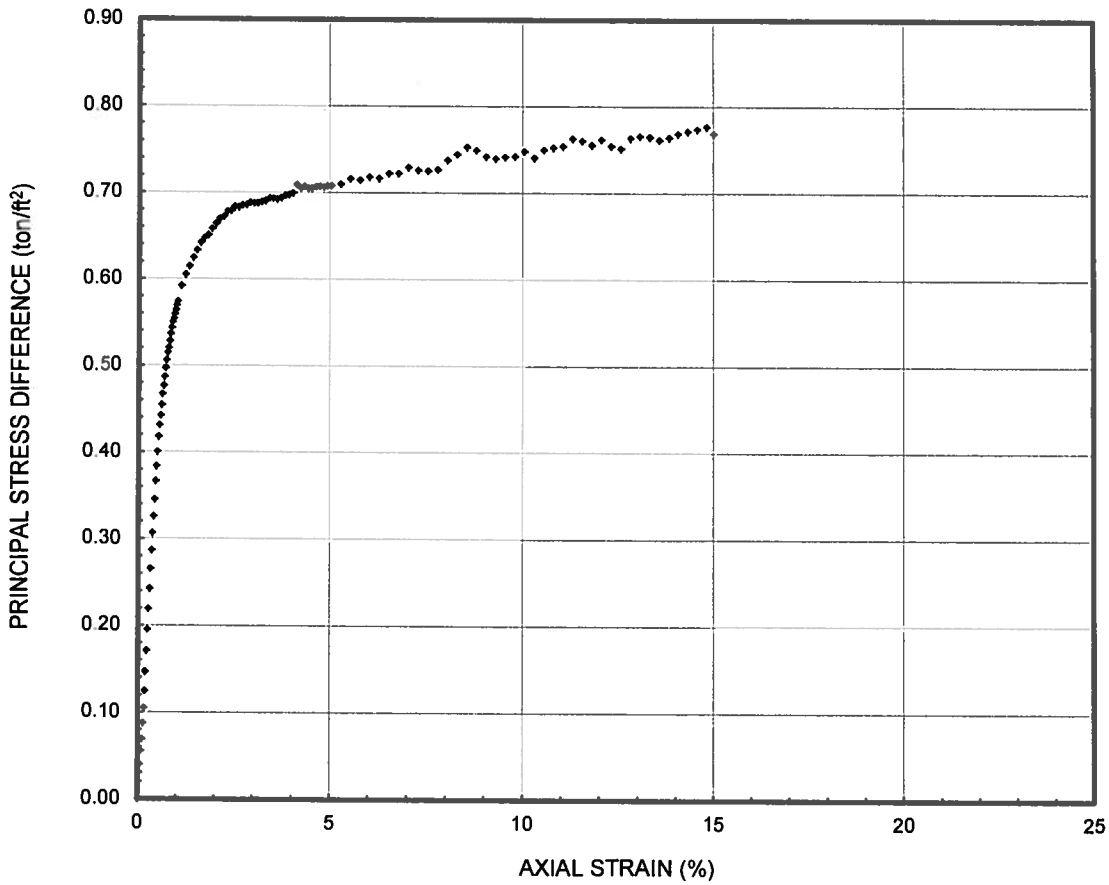
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-02
Depth	16-18 ft
Description	Tan and gray clay w/ trace organics and calnods



Initial Height	2.797	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	1.389	in	**Strain Rate**	1.0	%/min
Dry Density	99.9	lb/ft^3	**Peak Stress**	0.80	ton/ft^2
Moisture Content	24.9	%	**Strain at Peak Stress**	14.83	%
Saturation	97.8	%	**Failure Type**	Bulging	

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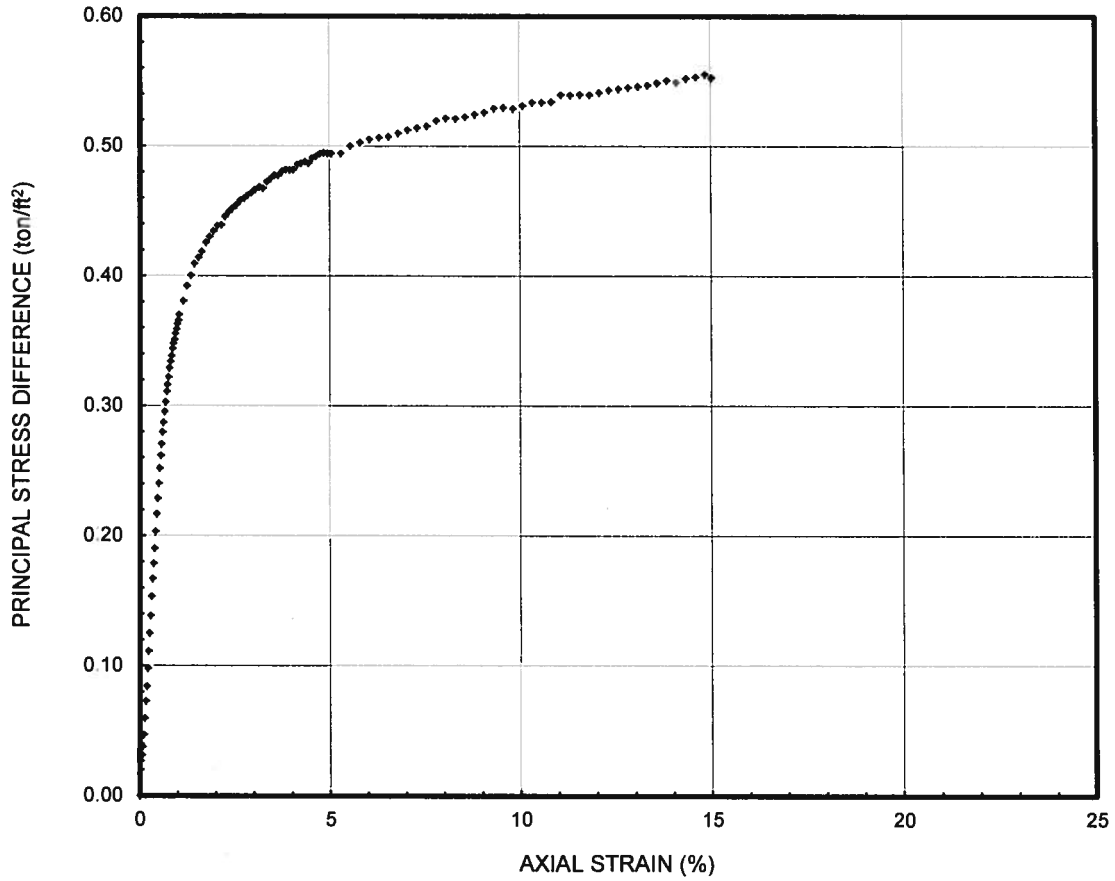
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-02
Depth	23-25 ft
Description	Tan and gray clay w/silt pockets, fenods and trace organics



Initial Height	5.745	in	**Cell Pressure**	10.0	lb/in^2
Initial Diameter	2.848	in	**Strain Rate**	1.0	%/min
Dry Density	92.1	lb/ft^3	**Peak Stress**	0.57	ton/ft^2
Moisture Content	32.0	%	**Strain at Peak Stress**	14.85	%
Saturation	104.1	%	**Failure Type**	Bulging	

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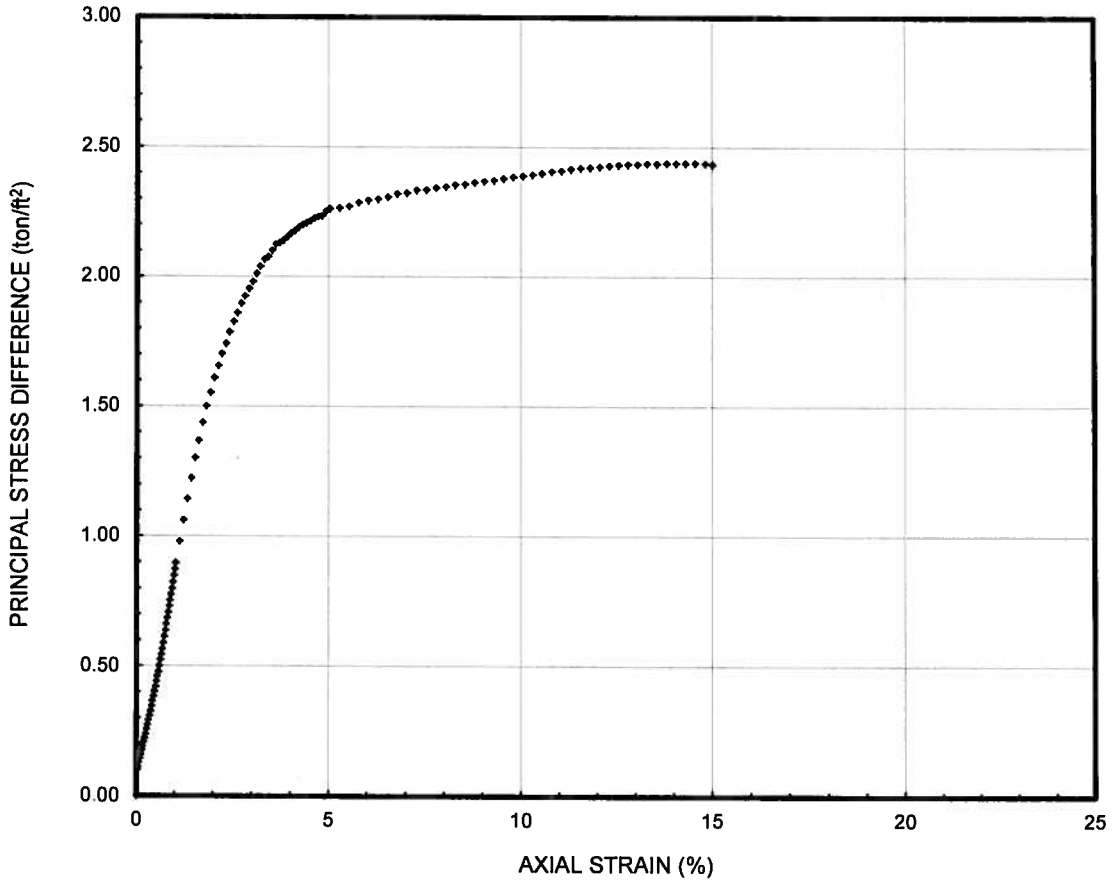
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-02
Depth	33-35 ft
Description	Light gray and tan silty sandy clay w/ fenods



Initial Height	2.797	in	**Cell Pressure**	14.0	lb/in^2
Initial Diameter	1.408	in	**Strain Rate**	1.0	%/min
Dry Density	99.6	lb/ft^3	**Peak Stress**	2.50	ton/ft^2
Moisture Content	22.3	%	**Strain at Peak Stress**	14.57	%
Saturation	87.0	%	**Failure Type**	Combination	

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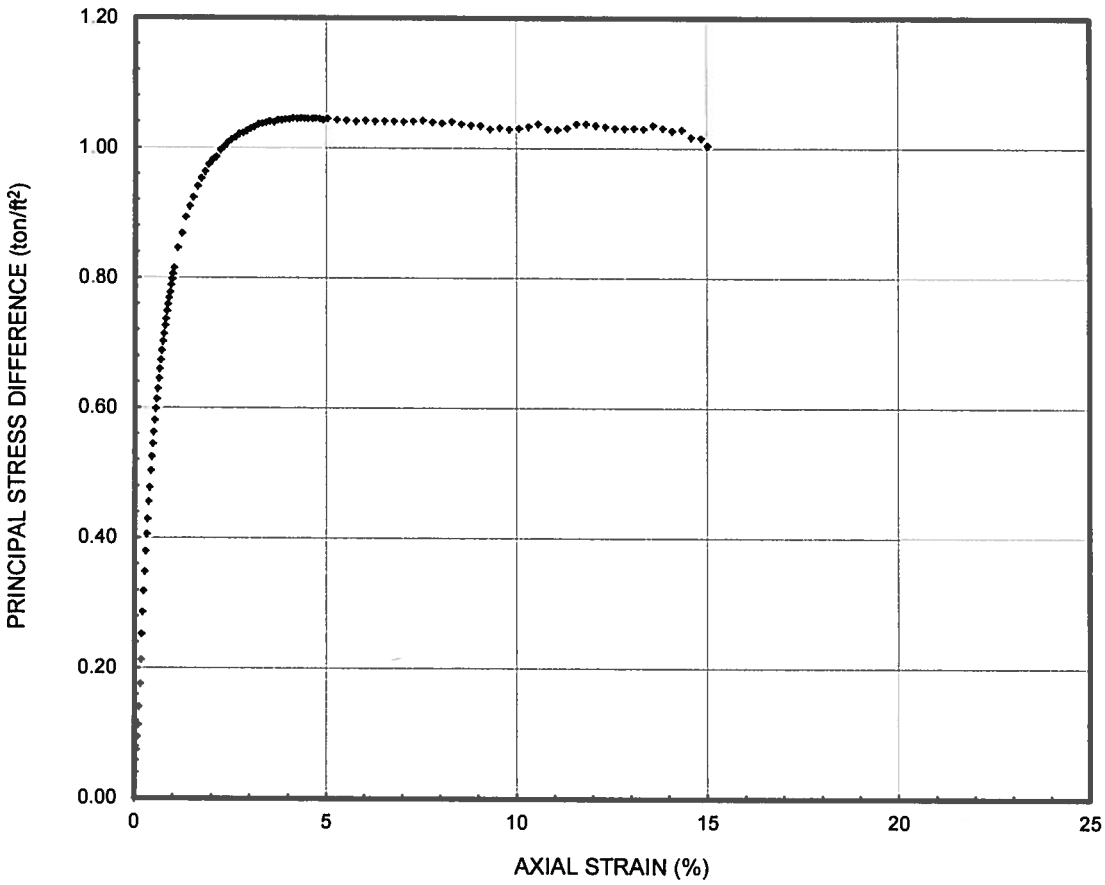
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-02
Depth	43-45 ft
Description	Gray, dark gray and tan clay w/ trace organics



Initial Height	5.760	in	**Cell Pressure**	18.0	lb/in^2
Initial Diameter	2.829	in	**Strain Rate**	1.0	%/min
Dry Density	78.3	lb/ft^3	**Peak Stress**	1.07	ton/ft^2
Moisture Content	42.2	%	**Strain at Peak Stress**	4.34	%
Saturation	98.8	%	**Failure Type**	Combination	

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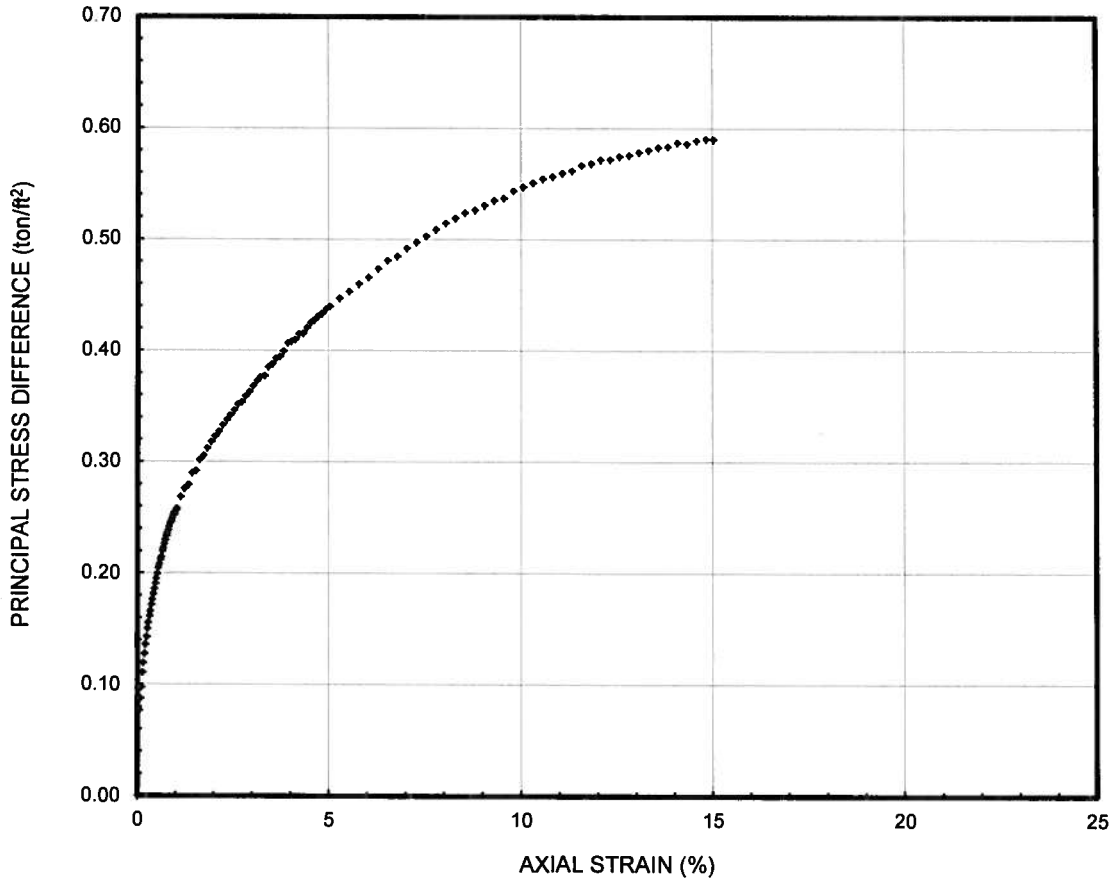
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-02
Depth	58-60 ft
Description	Tan and gray clay w/shells and cemented clay



Initial Height	5.743	in	**Cell Pressure**	24.0	lb/in^2
Initial Diameter	2.846	in	**Strain Rate**	1.0	%/min
Dry Density	92.6	lb/ft^3	**Peak Stress**	0.60	ton/ft^2
Moisture Content	32.4	%	**Strain at Peak Stress**	14.83	%
Saturation	106.6	%	**Failure Type**	Bulging	

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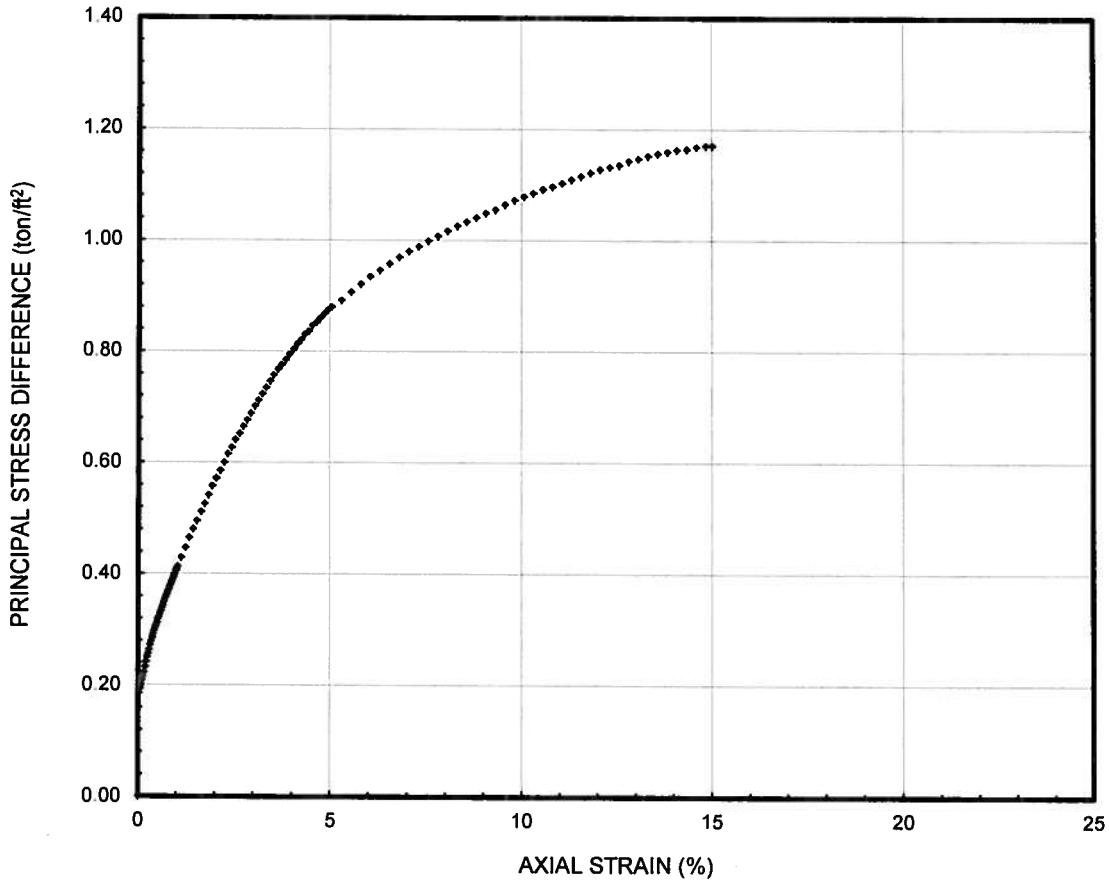
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-02
Depth	73-75 ft
Description	Gray and brown silty clay w/ fine sand



Initial Height	2.784	in	**Cell Pressure**	29.0	lb/in^2
Initial Diameter	1.397	in	**Strain Rate**	1.0	%/min
Dry Density	98.8	lb/ft^3	**Peak Stress**	1.20	ton/ft^2
Moisture Content	27.4	%	**Strain at Peak Stress**	15.00	%
Saturation	104.7	%	**Failure Type**	Bulging	

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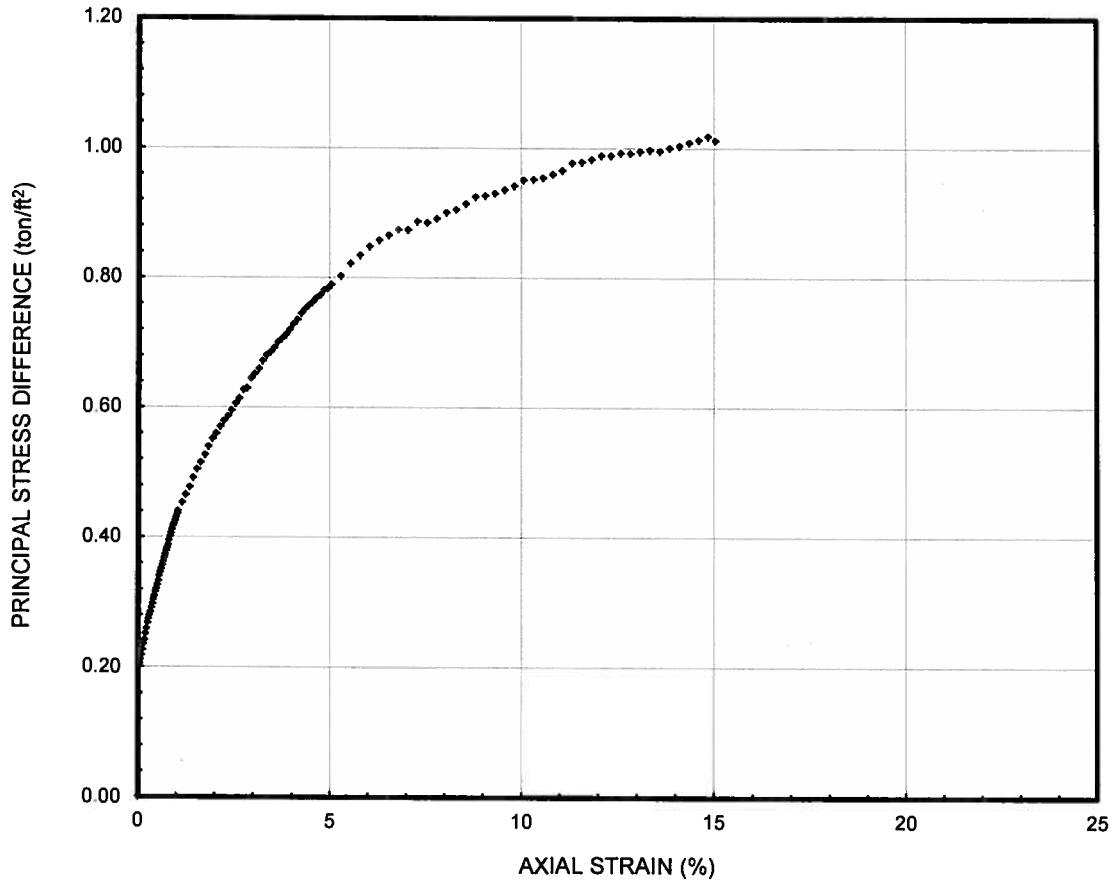
DRAWN BY: **CMW**	CHECKED BY: **RER**	DATE: **12-18-13**
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-02
Depth	78-80 ft
Description	Gray silty clay alternating with brown silty sandy clay



Initial Height	2.777	in	**Cell Pressure**	32.0	lb/in^2
Initial Diameter	1.388	in	**Strain Rate**	1.0	%/min
Dry Density	99.7	lb/ft^3	**Peak Stress**	1.04	ton/ft^2
Moisture Content	27.2	%	**Strain at Peak Stress**	14.83	%
Saturation	106.2	%	**Failure Type**	Bulging	

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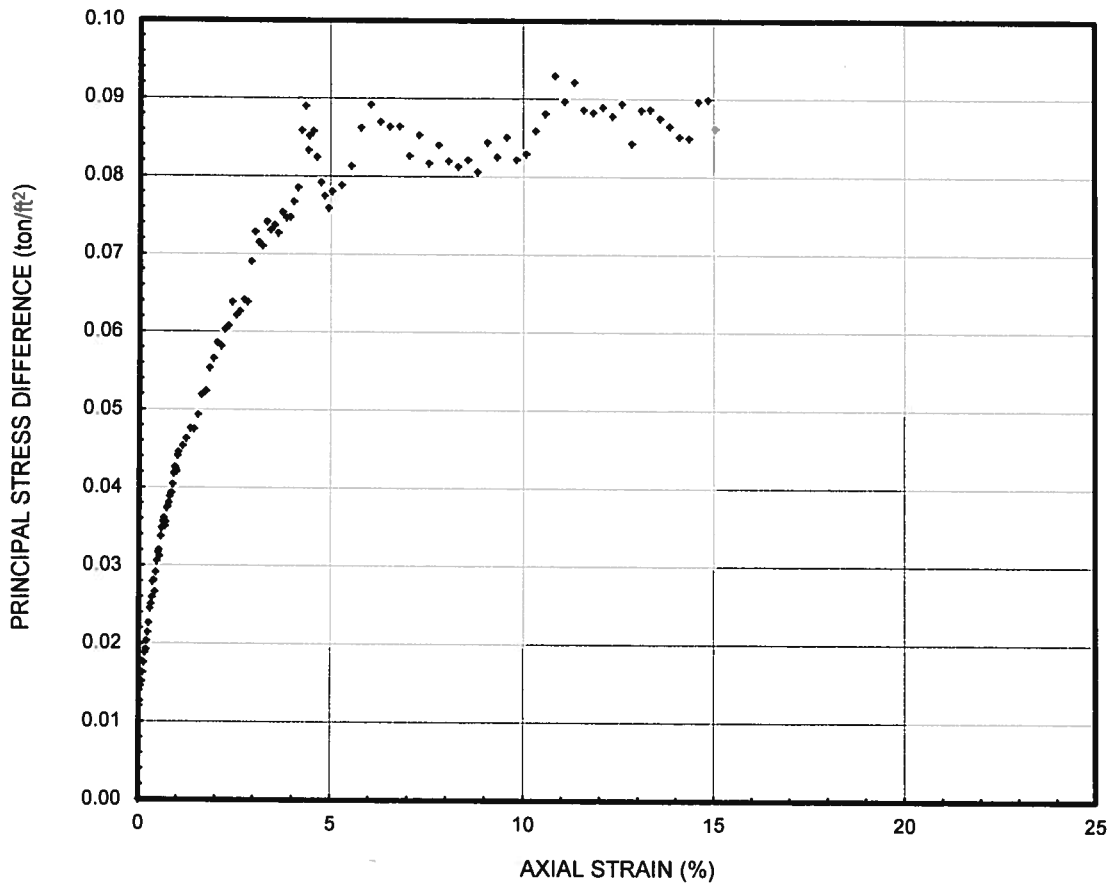
FILE NO **13-80-3705**	APPROVED BY	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-03
Depth	4-6 ft
Description	Gray clay w/organics at top and roots



Initial Height	2.787	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.394	in	**Strain Rate**	1.0	%/min
Dry Density	47.3	lb/ft^3	**Peak Stress**	0.10	ton/ft^2
Moisture Content	96.9	%	**Strain at Peak Stress**	10.82	%
Saturation	102.1	%	**Failure Type**	Combination	

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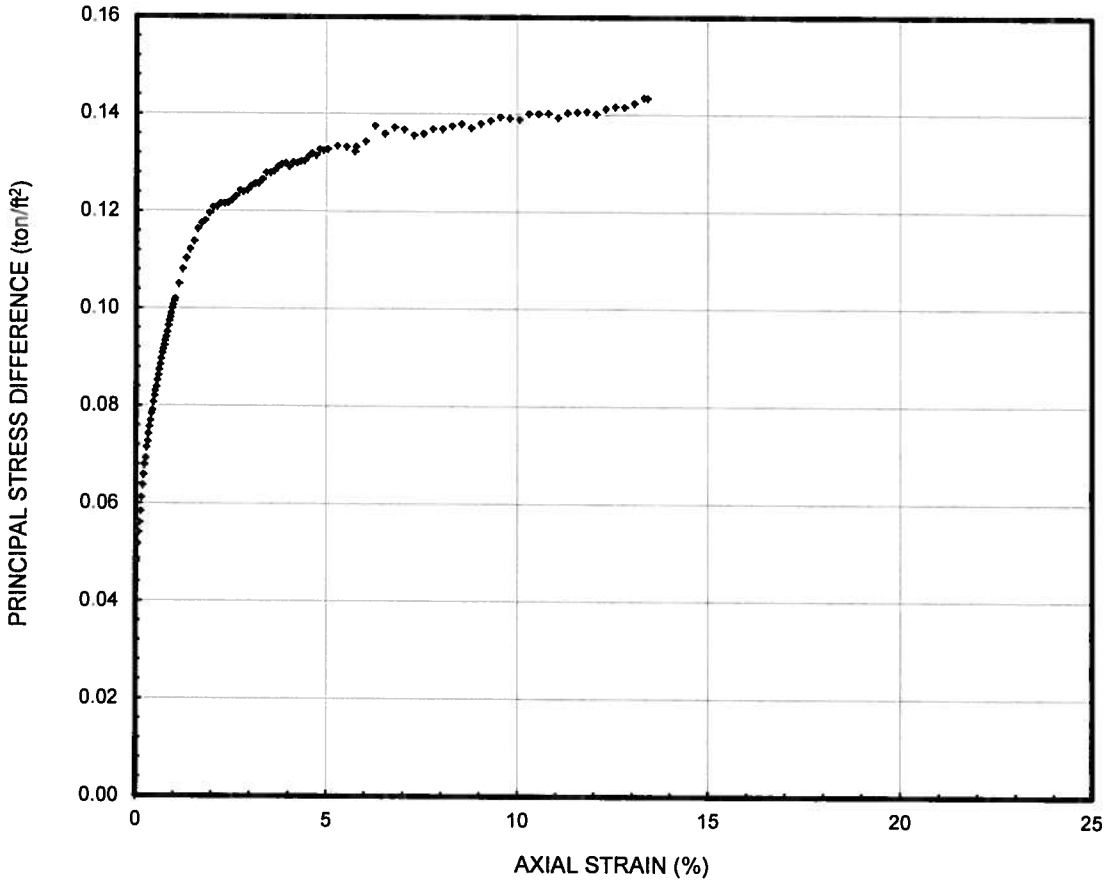
FILE NO: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-03
Depth	8-10 ft
Description	Dark gray and gray clay w/organics



Initial Height	2.785	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	1.394	in	**Strain Rate**	1.0	%/min
Dry Density	69.1	lb/ft^3	**Peak Stress**	0.15	ton/ft^2
Moisture Content	55.3	%	**Strain at Peak Stress**	13.33	%
Saturation	103.6	%	**Failure Type**	Bulging	

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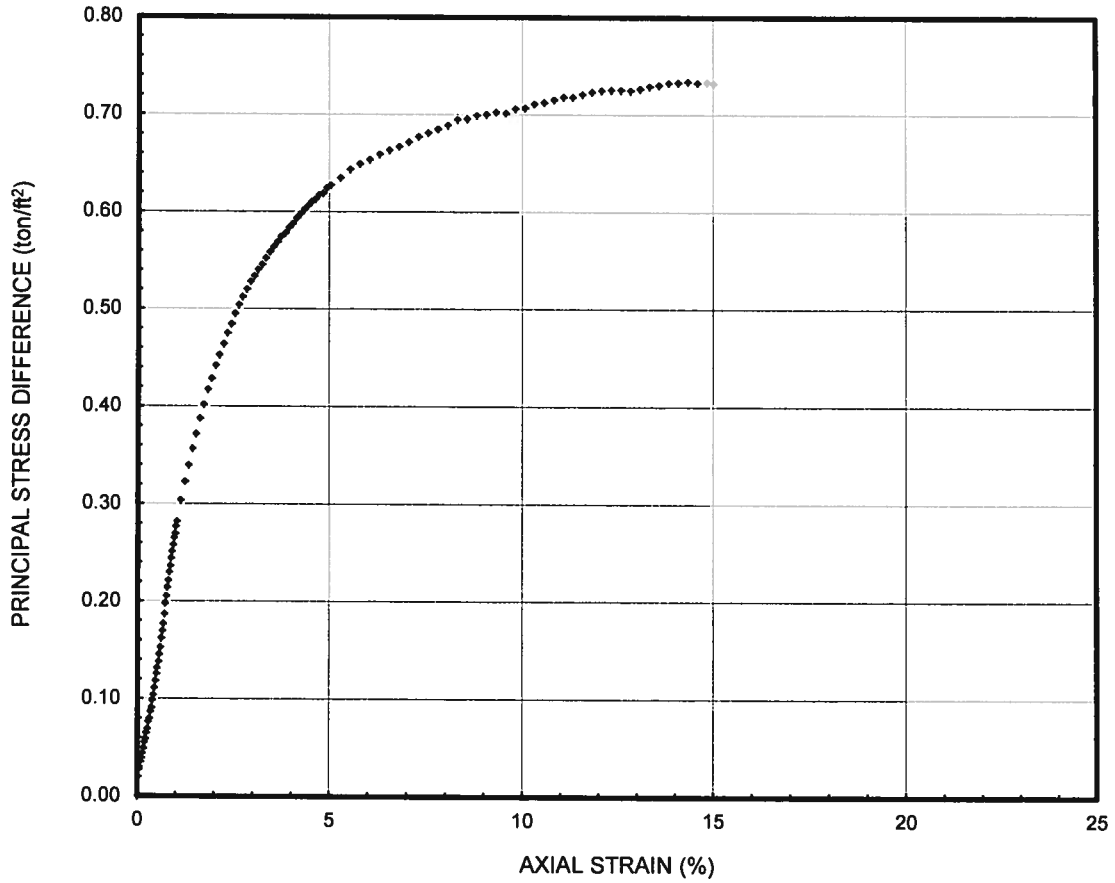
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-03
Depth	10-12 ft
Description	Gray clay w/organics



Initial Height	5.753	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	2.841	in	**Strain Rate**	1.0	%/min
Dry Density	92.6	lb/ft^3	**Peak Stress**	0.75	ton/ft^2
Moisture Content	30.9	%	**Strain at Peak Stress**	14.33	%
Saturation	101.9	%	**Failure Type**	Bulging	

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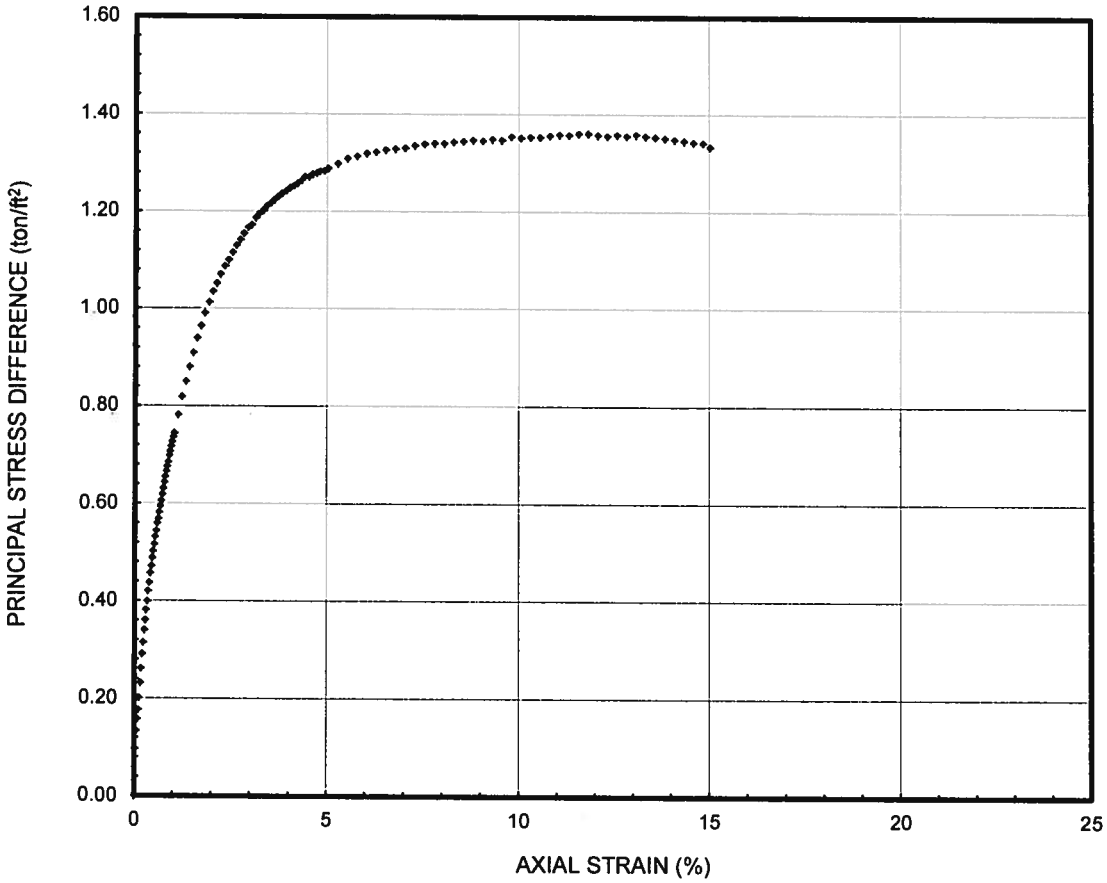
FILE NO: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-03
Depth	12-14 ft
Description	Gray and tan clay w/trace organics



Initial Height	2.795	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	1.409	in	**Strain Rate**	1.0	%/min
Dry Density	100.7	lb/ft^3	**Peak Stress**	1.39	ton/ft^2
Moisture Content	26.1	%	**Strain at Peak Stress**	11.82	%
Saturation	104.7	%	**Failure Type**	Combination	

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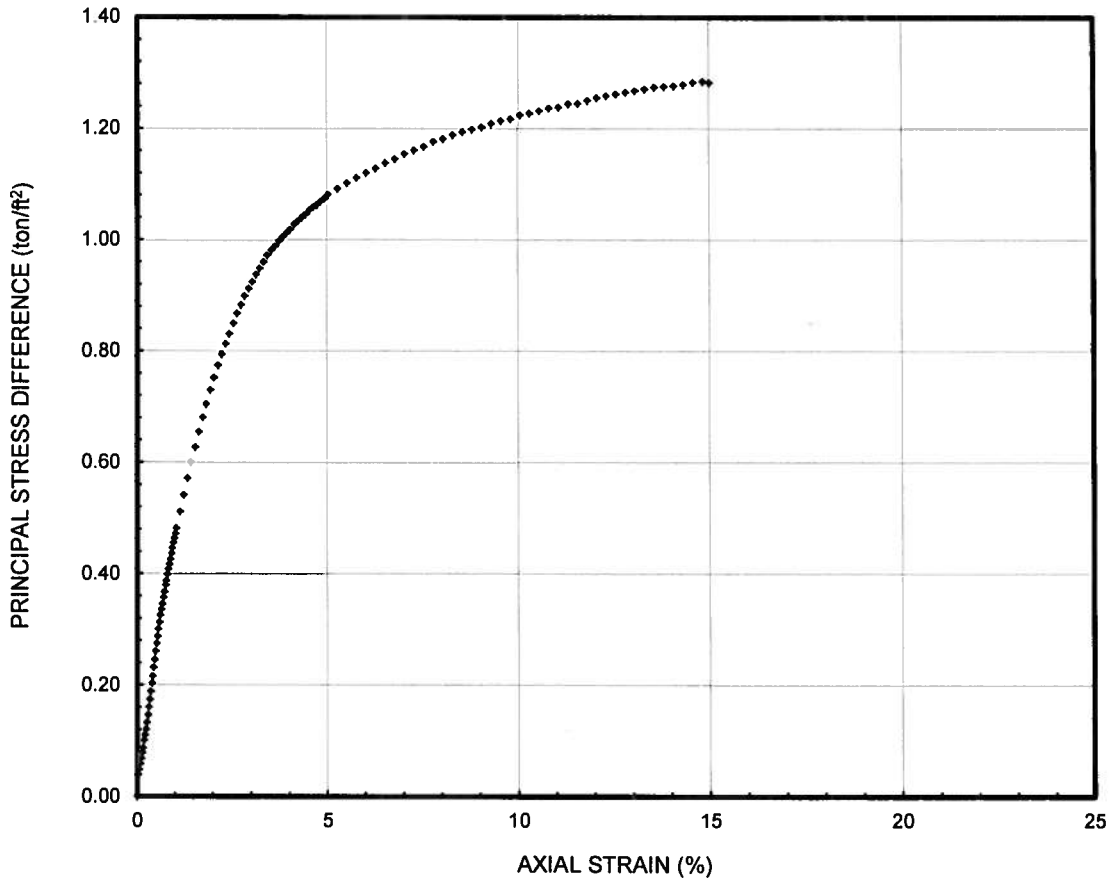
FILE NO: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-03
Depth	18-20 ft
Description	Tan and gray glay w/fenods, calcnods, and trace organics



Initial Height	5.750	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	2.847	in	**Strain Rate**	1.0	%/min
Dry Density	100.0	lb/ft^3	**Peak Stress**	1.32	ton/ft^2
Moisture Content	24.5	%	**Strain at Peak Stress**	14.83	%
Saturation	96.4	%	**Failure Type**	Bulging	

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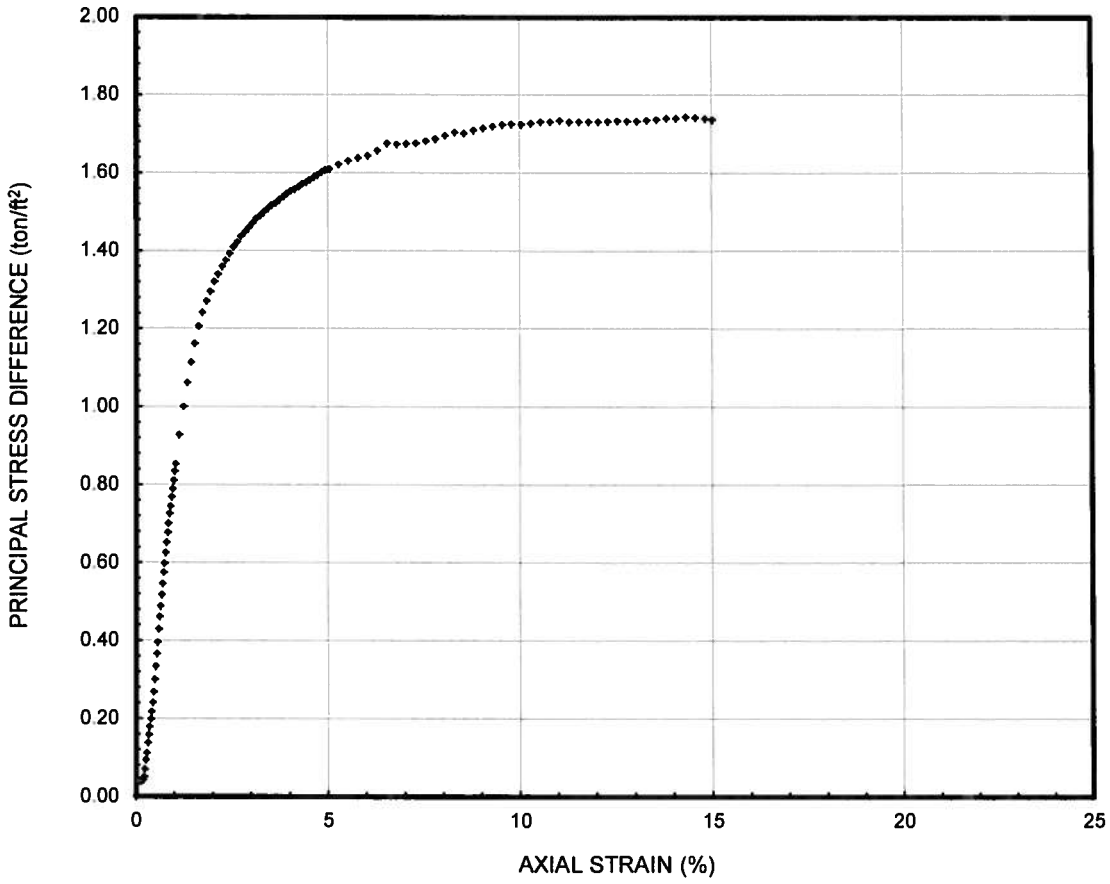
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-03
Depth	28-30 ft
Description	Light gray and tan clay w/fenods



Initial Height	5.754	in	**Cell Pressure**	12.0	lb/in^2
Initial Diameter	2.840	in	**Strain Rate**	1.0	%/min
Dry Density	96.3	lb/ft^3	**Peak Stress**	1.79	ton/ft^2
Moisture Content	27.3	%	**Strain at Peak Stress**	14.33	%
Saturation	98.1	%	**Failure Type**	Bulging	

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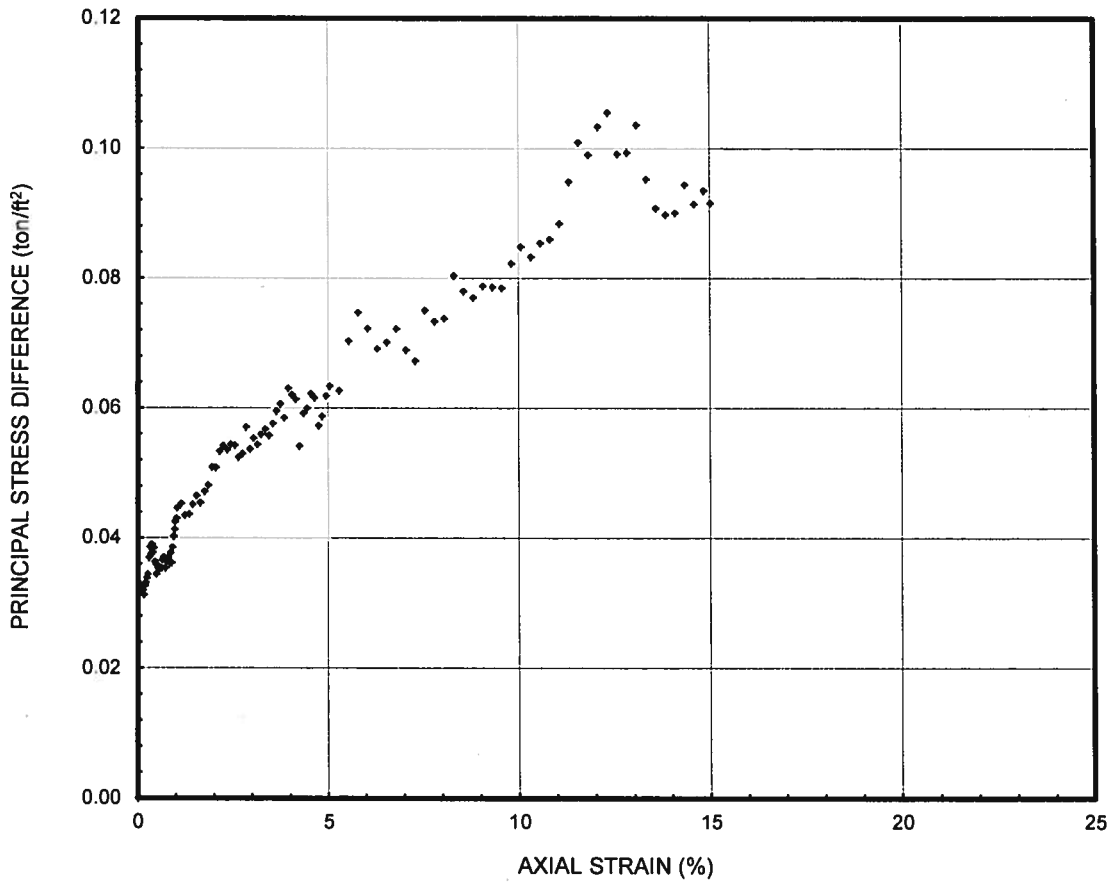
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-04
Depth	0-2 ft
Description	Dark gray organics w/roots



Initial Height	2.741	in	**Cell Pressure**	0.0	lb/in^2
Initial Diameter	1.406	in	**Strain Rate**	1.0	%/min
Dry Density	6.8	lb/ft^3	**Peak Stress**	0.11	ton/ft^2
Moisture Content	808.3	%	**Strain at Peak Stress**	12.33	%
Saturation	91.5	%	**Failure Type**	Bulging	

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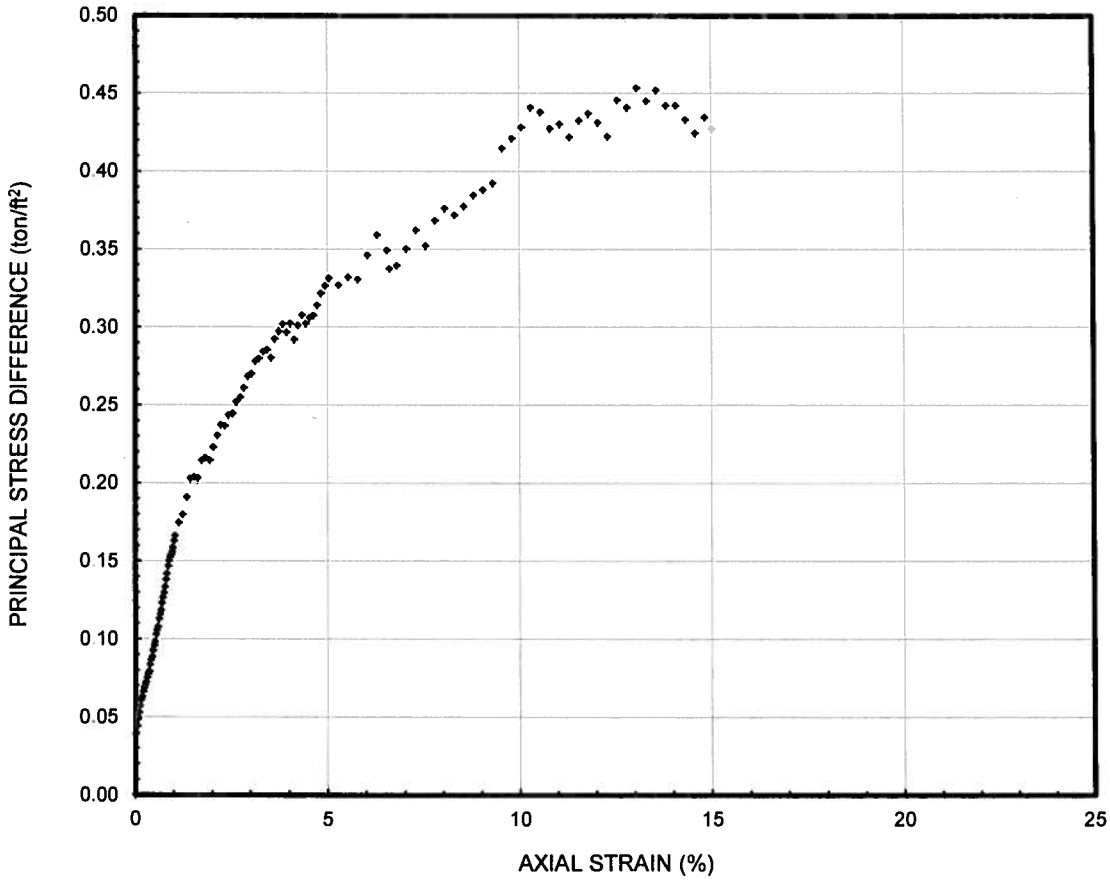
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-04
Depth	6-8 ft
Description	Gray and dark gray clay w/ organics and cemented clay



Initial Height	2.791	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.398	in	**Strain Rate**	1.0	%/min
Dry Density	91.7	lb/ft^3	**Peak Stress**	0.46	ton/ft^2
Moisture Content	32.0	%	**Strain at Peak Stress**	13.08	%
Saturation	103.1	%	**Failure Type**	Bulging	

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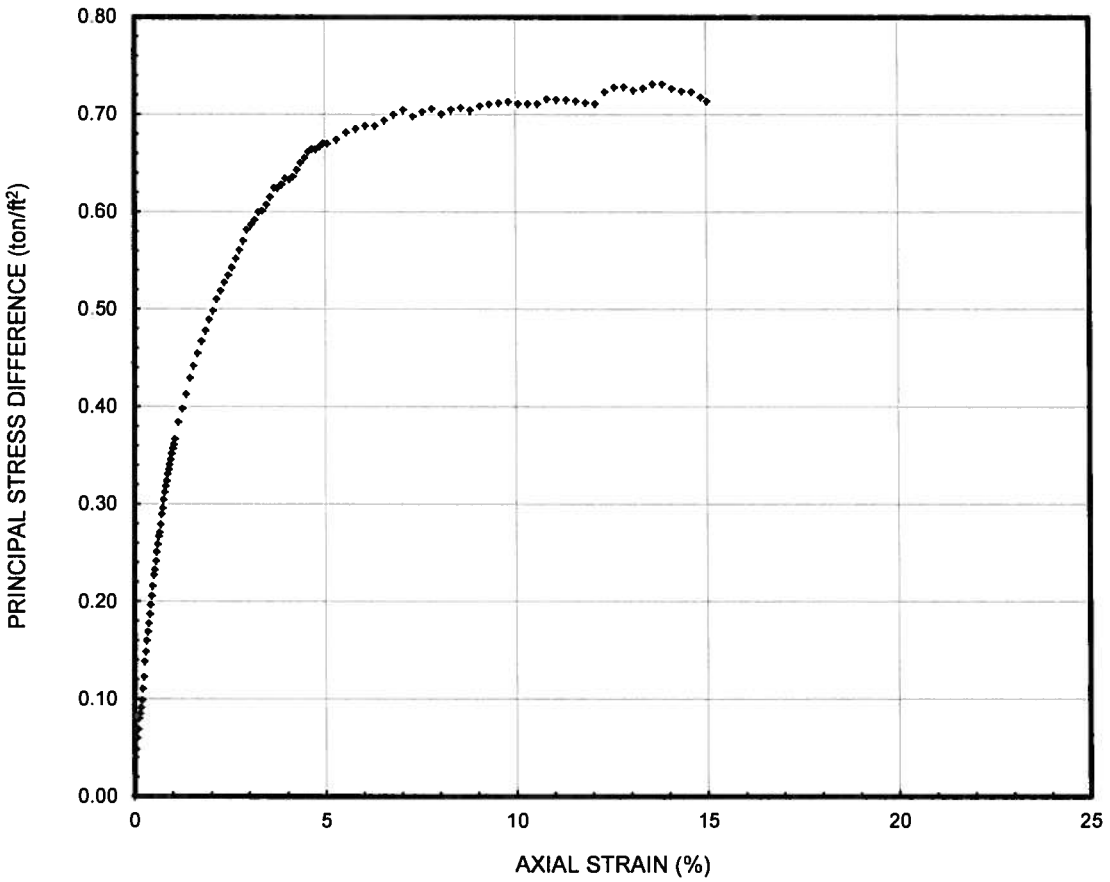
FILE NO **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-04
Depth	10-12 ft
Description	Gray, tan and dark gray clay w/ trace organics and shells



Initial Height	2.791	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	1.417	in	**Strain Rate**	1.0	%/min
Dry Density	93.1	lb/ft^3	**Peak Stress**	0.75	ton/ft^2
Moisture Content	30.6	%	**Strain at Peak Stress**	13.86	%
Saturation	102.0	%	**Failure Type**	Bulging	

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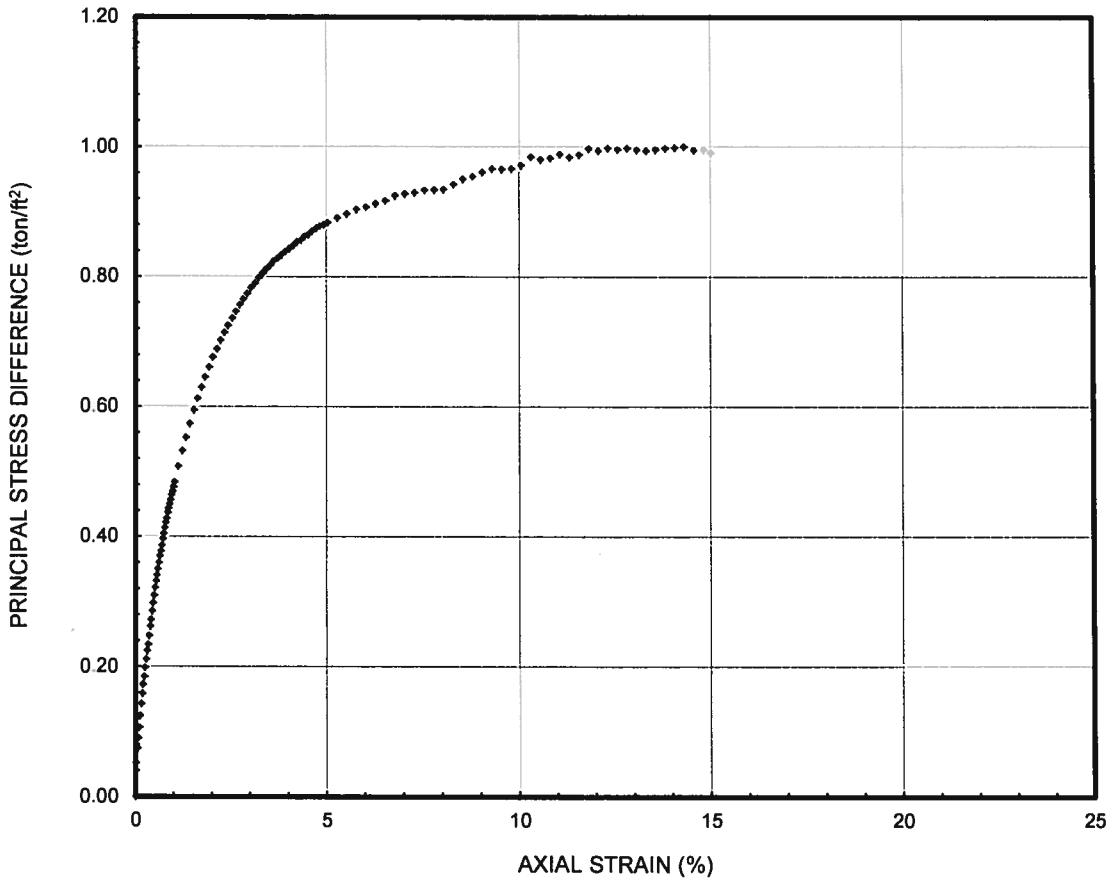
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-04
Depth	14-16 ft
Description	Bluish gray and tan clay w/ trace organics, shells, and fenods



Initial Height	2.793	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	1.402	in	**Strain Rate**	1.0	%/min
Dry Density	97.1	lb/ft^3	**Peak Stress**	1.02	ton/ft^2
Moisture Content	28.4	%	**Strain at Peak Stress**	14.32	%
Saturation	104.1	%	**Failure Type**	Combination	

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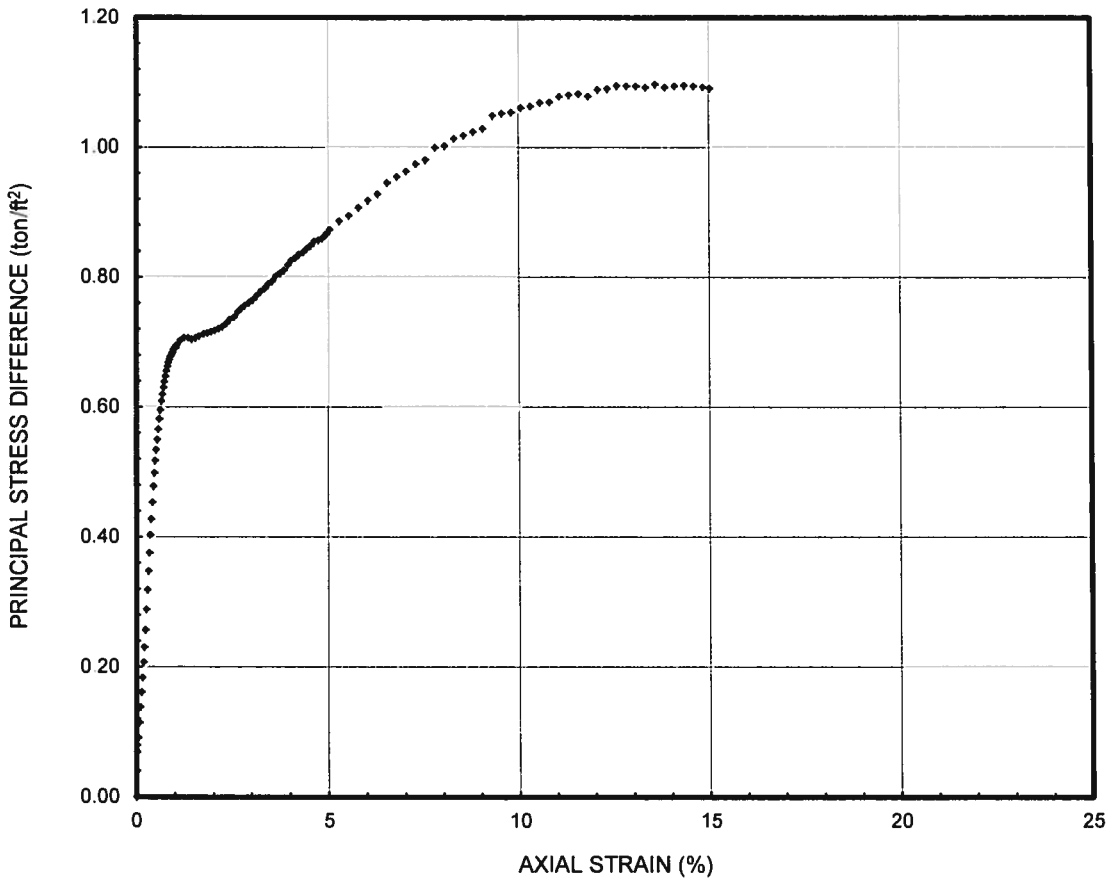
FILE NO: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-04
Depth	18-20 ft
Description	Tan and gray clay w/ calnods and cemented clay



Initial Height	2.792	in	**Cell Pressure**	7.0	lb/in^2
Initial Diameter	1.385	in	**Strain Rate**	1.0	%/min
Dry Density	96.1	lb/ft^3	**Peak Stress**	1.12	ton/ft^2
Moisture Content	27.6	%	**Strain at Peak Stress**	13.59	%
Saturation	98.7	%	**Failure Type**	Shear Plane	

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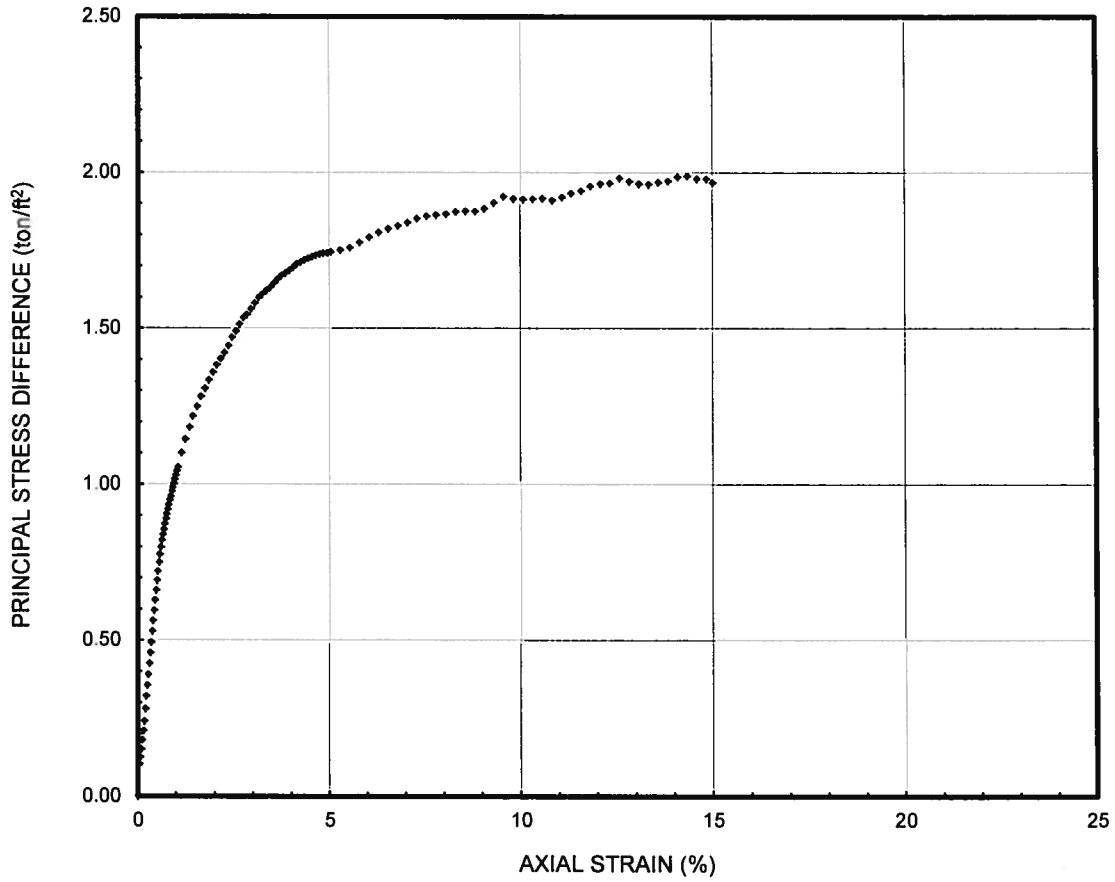
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-04
Depth	23-25 ft
Description	Tan and light gray silty clay w/ fine sand and fenods



Initial Height	2.790	in	**Cell Pressure**	9.0	lb/in^2
Initial Diameter	1.413	in	**Strain Rate**	1.0	%/min
Dry Density	97.0	lb/ft^3	**Peak Stress**	2.04	ton/ft^2
Moisture Content	26.5	%	**Strain at Peak Stress**	14.34	%
Saturation	96.9	%	**Failure Type**	Combination	

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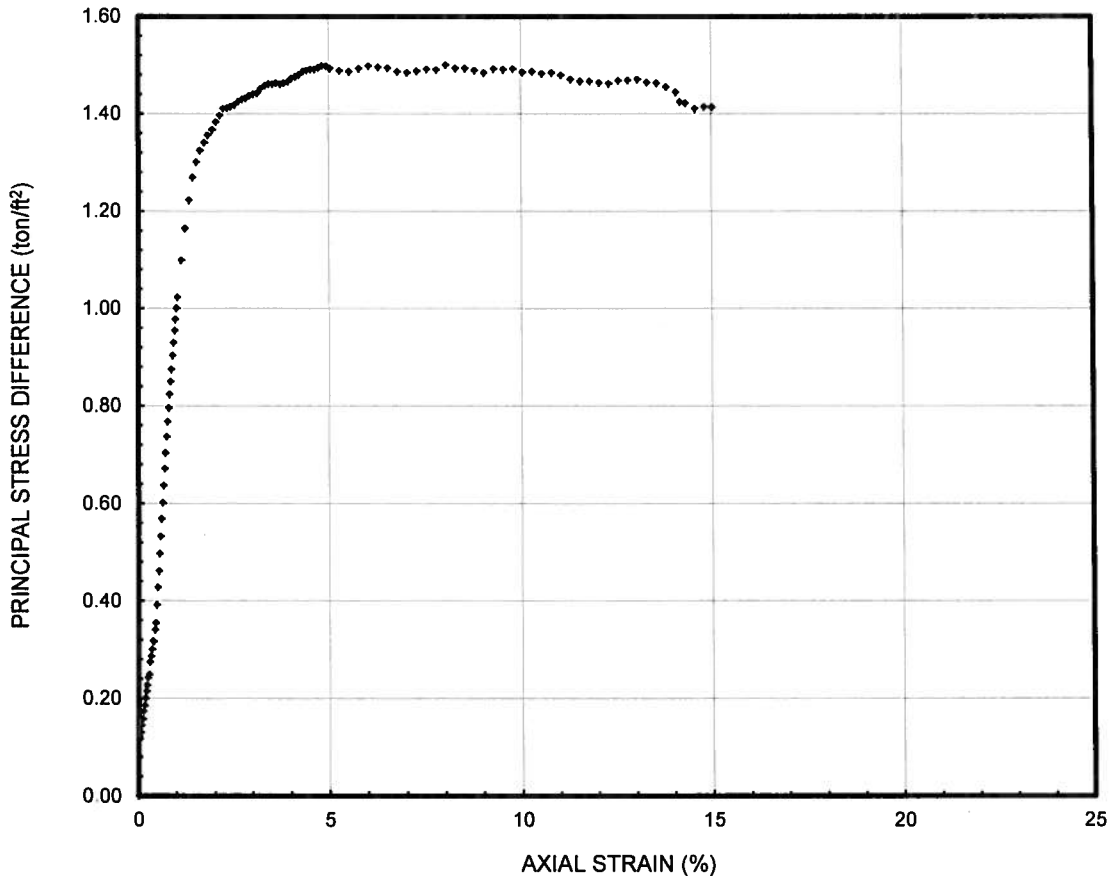
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-04
Depth	28-30 ft
Description	Light gray and tan jointed clay w/ fenods and trace orgs



Initial Height	2.794	in	**Cell Pressure**	11.0	lb/in^2
Initial Diameter	1.415	in	**Strain Rate**	1.0	%/min
Dry Density	96.2	lb/ft^3	**Peak Stress**	1.54	ton/ft^2
Moisture Content	27.6	%	**Strain at Peak Stress**	8.05	%
Saturation	99.2	%	**Failure Type**	Combination	

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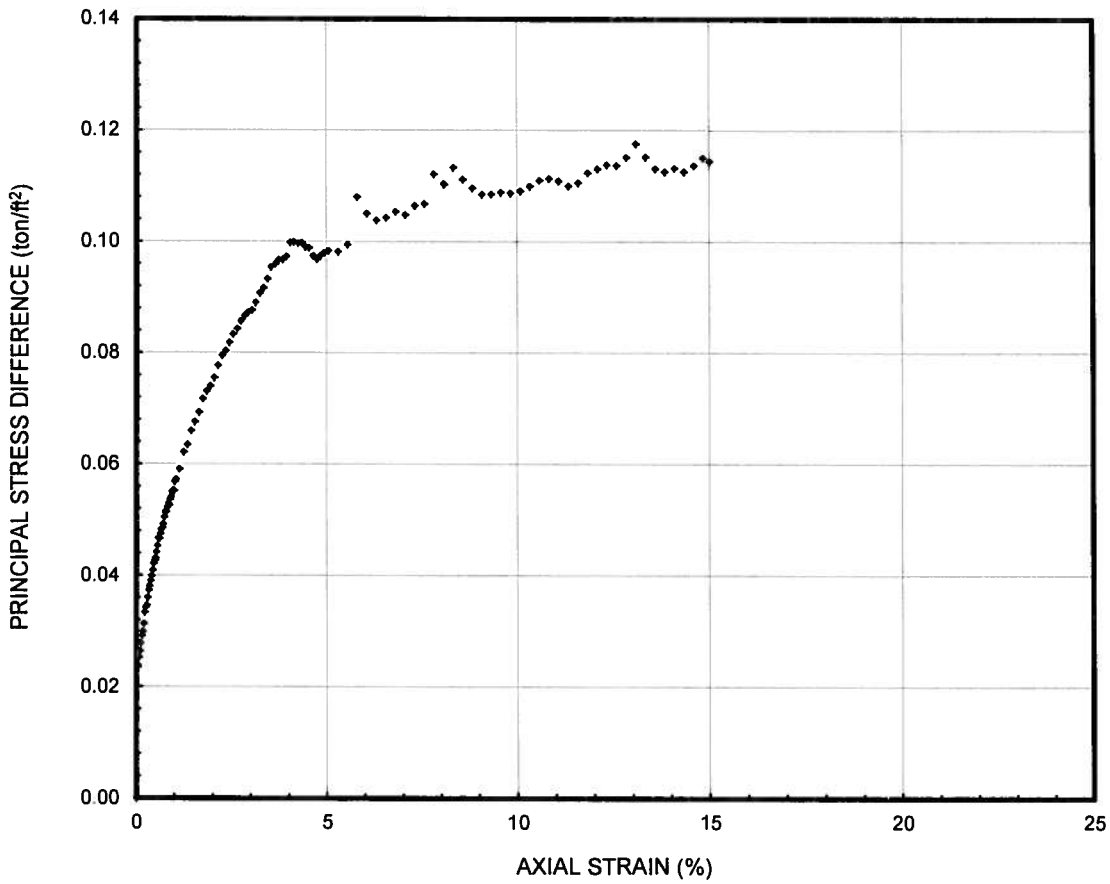
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3735
Boring Number	B-05
Depth	4-6 ft
Description	Dark gray clay w/ organics



Initial Height	2.793	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.406	in	**Strain Rate**	1.0	%/min
Dry Density	50.9	lb/ft^3	**Peak Stress**	0.12	ton/ft^2
Moisture Content	89.7	%	**Strain at Peak Stress**	13.09	%
Saturation	104.8	%	**Failure Type**	Bulging	

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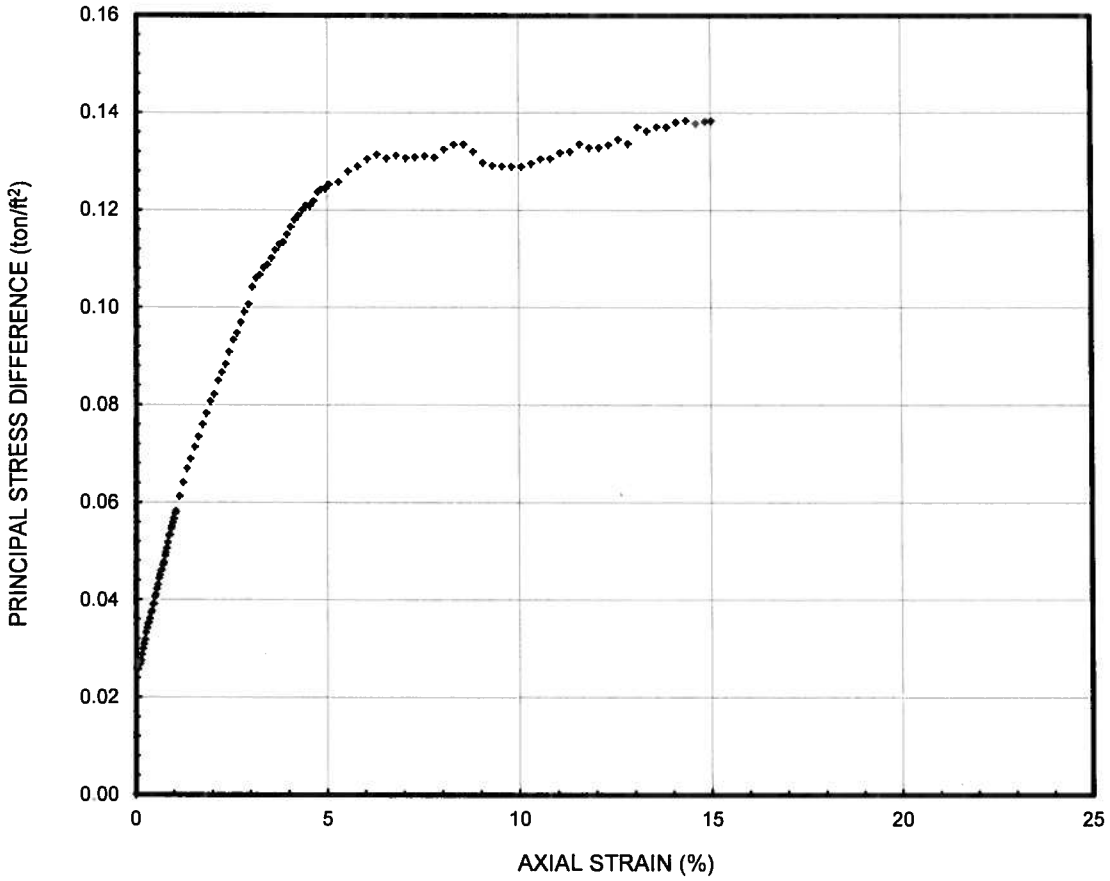
FILE NO: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3735
Boring Number	B-05
Depth	6-8 ft
Description	Dark brown organics w/clay and roots



Initial Height	2.793	in	**Cell Pressure**	3.0	lb/in^2
Initial Diameter	1.395	in	**Strain Rate**	1.0	%/min
Dry Density	21.2	lb/ft^3	**Peak Stress**	0.14	ton/ft^2
Moisture Content	246.5	%	**Strain at Peak Stress**	14.35	%
Saturation	95.6	%	**Failure Type**	Combination	

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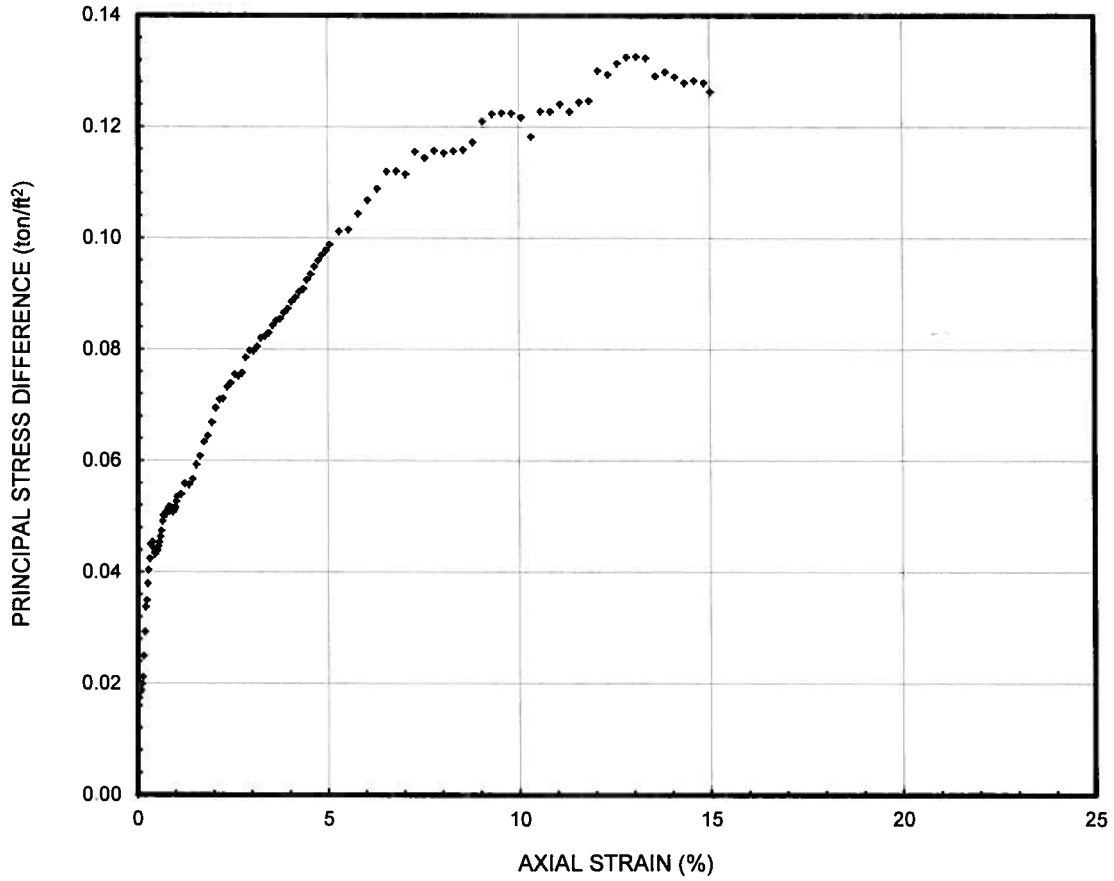
FILE NO: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-05
Depth	8-10 ft
Description	Dark brown organics w/clay bottom and roots



Initial Height	5.743	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	2.812	in	**Strain Rate**	1.0	%/min
Dry Density	29.3	lb/ft^3	**Peak Stress**	0.14	ton/ft^2
Moisture Content	170.5	%	**Strain at Peak Stress**	13.08	%
Saturation	96.7	%	**Failure Type**	Bulging	

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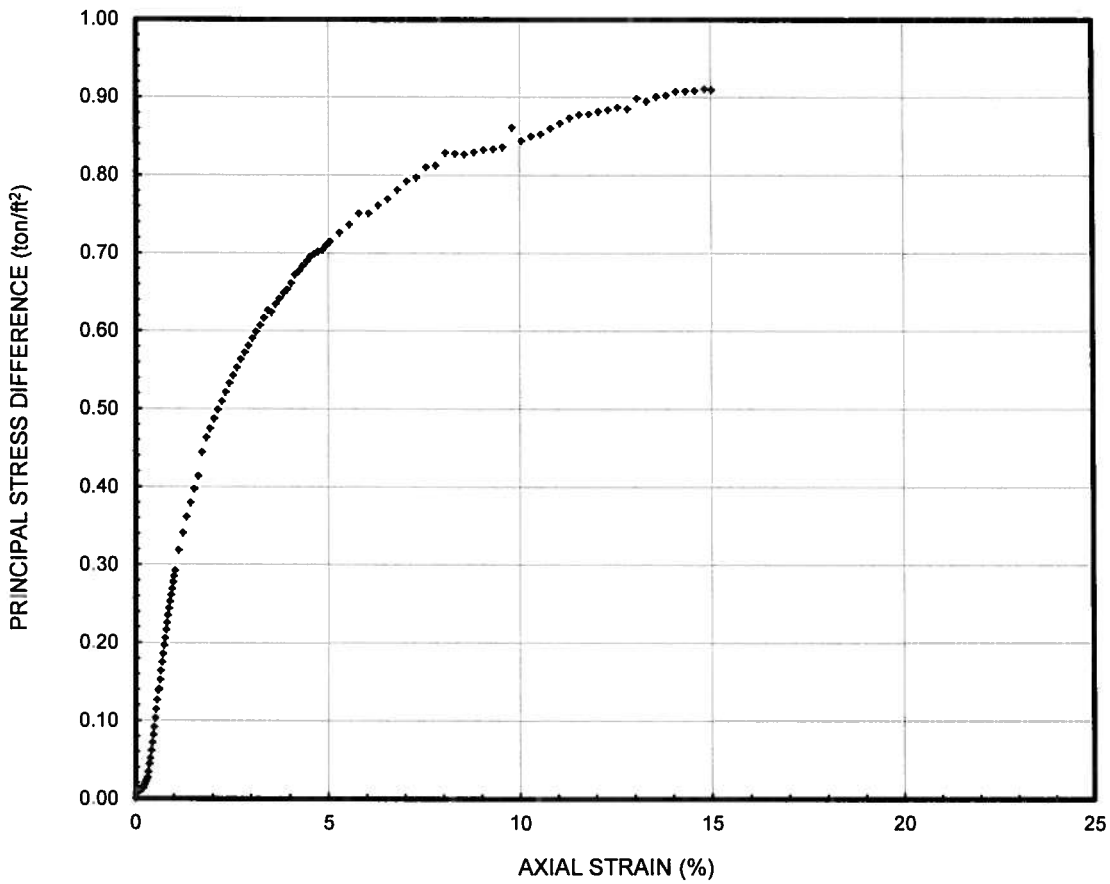
FILE NO. 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-05
Depth	14-16 ft
Description	Light gray clay w/ silt and trace organics



Initial Height	5.766	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	2.861	in	**Strain Rate**	1.0	%/min
Dry Density	95.4	lb/ft^3	**Peak Stress**	0.93	ton/ft^2
Moisture Content	28.3	%	**Strain at Peak Stress**	14.84	%
Saturation	99.5	%	**Failure Type**	Bulging	

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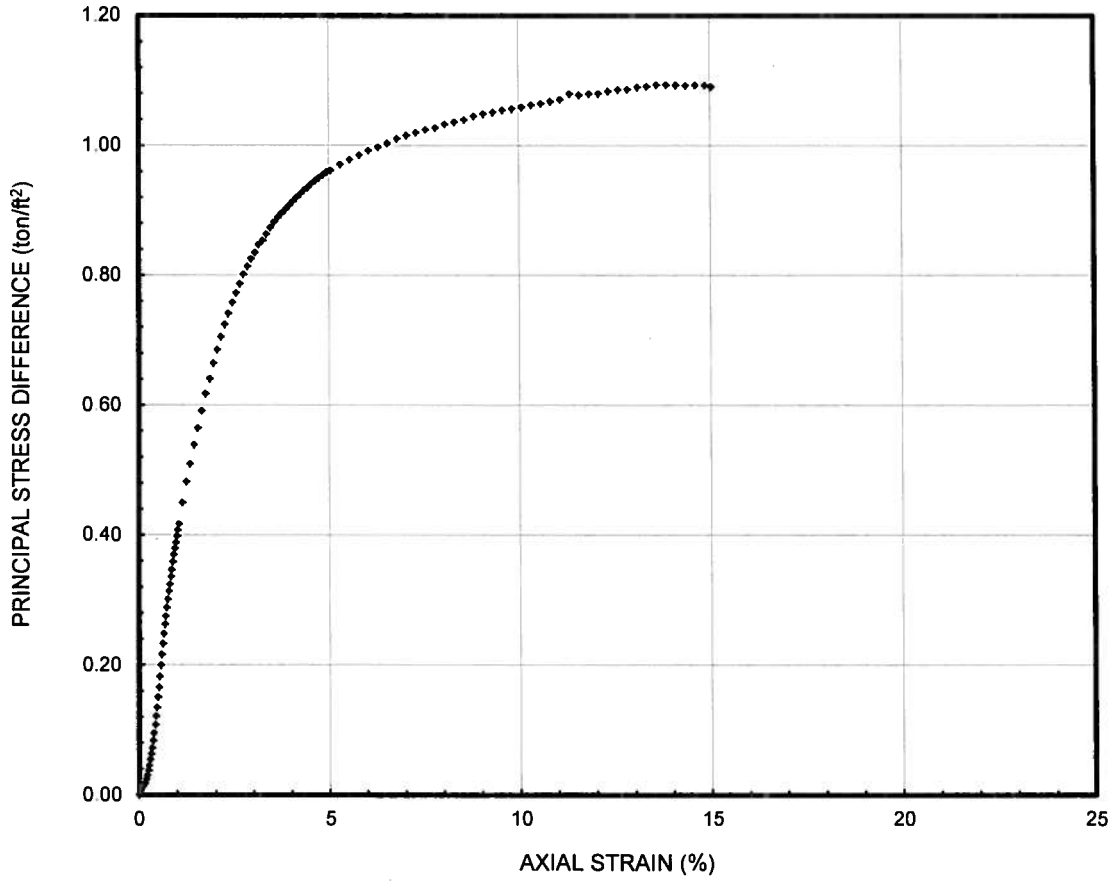
FILE NO: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3735
Boring Number	B-05
Depth	16-18 ft
Description	Bluish gray clay w/silt and trace organics



Initial Height	2.795	in	**Cell Pressure**	7.0	lb/in^2
Initial Diameter	1.401	in	**Strain Rate**	1.0	%/min
Dry Density	97.8	lb/ft^3	**Peak Stress**	1.12	ton/ft^2
Moisture Content	29.7	%	**Strain at Peak Stress**	13.85	%
Saturation	110.9	%	**Failure Type**	Bulging	

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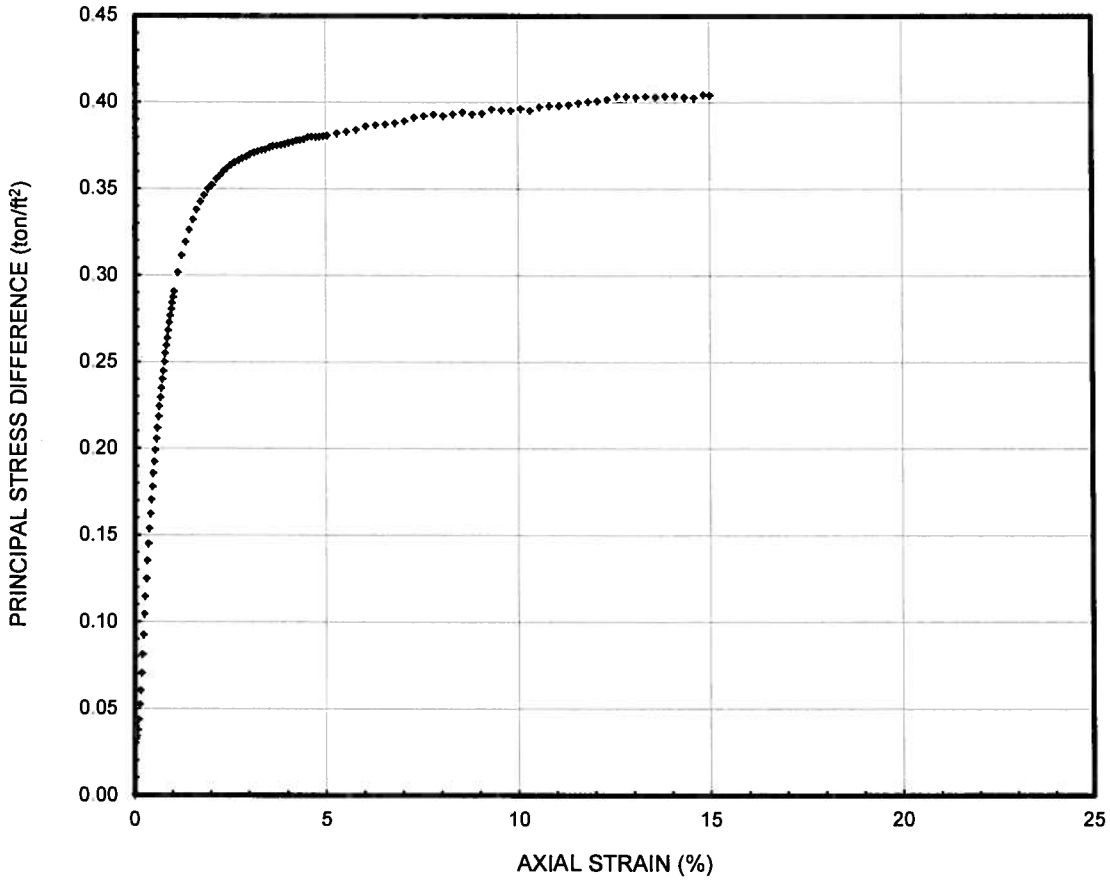
DRAWN BY: **CMW**	CHECKED BY: **RER**	DATE: **12-18-13**
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-05
Depth	28-30 ft
Description	Tan and light gray clay w/ fenods and trace organics



Initial Height	5.765	in	**Cell Pressure**	12.0	lb/in^2
Initial Diameter	2.850	in	**Strain Rate**	1.0	%/min
Dry Density	77.6	lb/ft^3	**Peak Stress**	0.41	ton/ft^2
Moisture Content	45.1	%	**Strain at Peak Stress**	14.84	%
Saturation	103.9	%	**Failure Type**	Combination	

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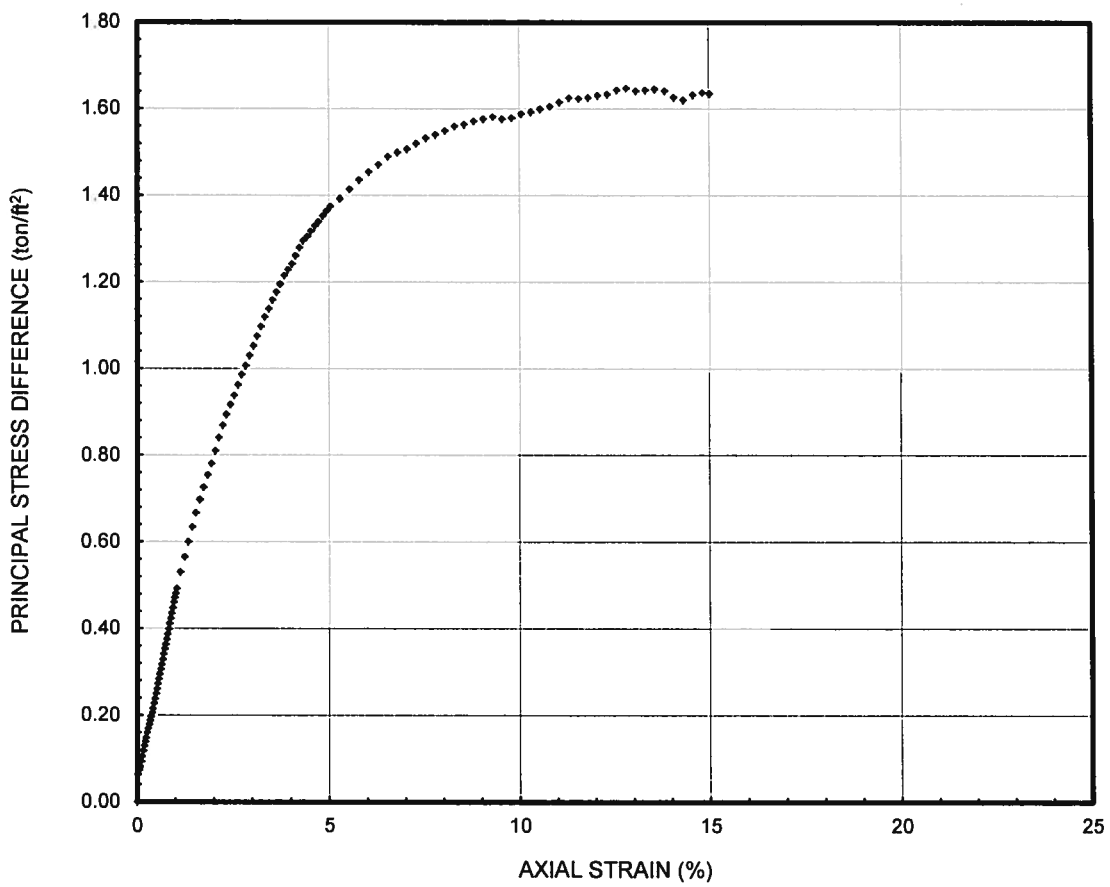
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-05
Depth	33-35 ft
Description	Tan and gray clay @ top. Silty sandy clay @ bottom w/trace organics and fenods



Initial Height	2.796	in	**Cell Pressure**	14.0	lb/in^2
Initial Diameter	1.418	in	**Strain Rate**	1.0	%/min
Dry Density	97.9	lb/ft^3	**Peak Stress**	1.69	ton/ft^2
Moisture Content	27.4	%	**Strain at Peak Stress**	12.83	%
Saturation	102.5	%	**Failure Type**	Combination	

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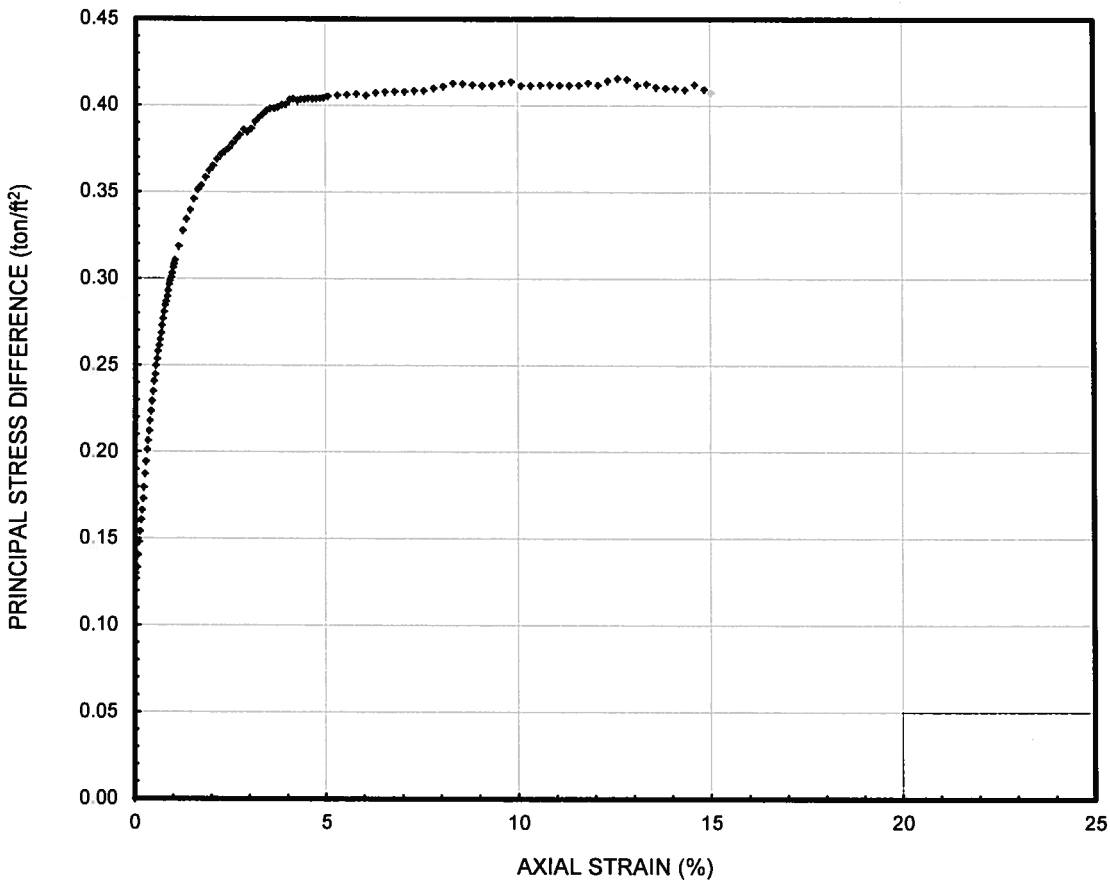
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3735
Boring Number	B-05
Depth	53-55 ft
Description	Gray clay w/silt layers, shells and sand pockets



Initial Height	2.790	in	**Cell Pressure**	22.0	lb/in^2
Initial Diameter	1.413	in	**Strain Rate**	1.0	%/min
Dry Density	65.6	lb/ft^3	**Peak Stress**	0.43	ton/ft^2
Moisture Content	57.5	%	**Strain at Peak Stress**	12.59	%
Saturation	99.1	%	**Failure Type**	Combination	

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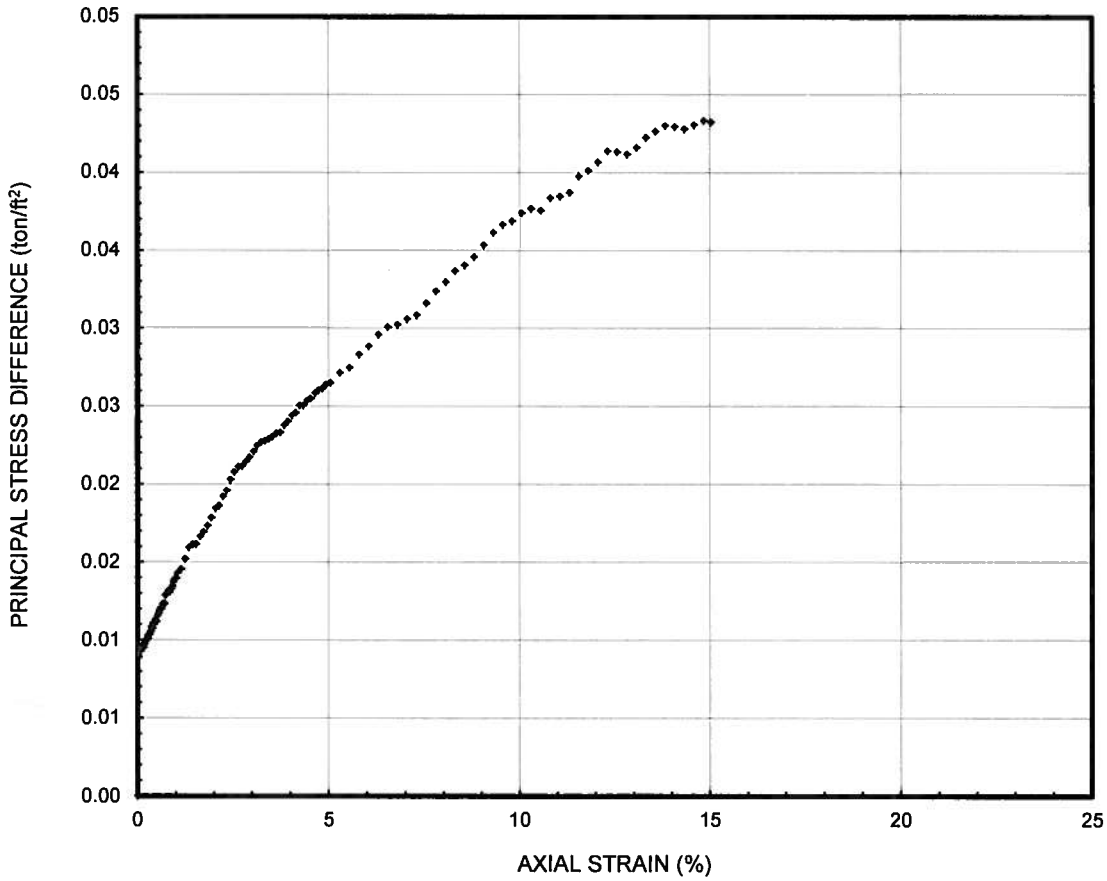
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-06
Depth	2-4 ft
Description	Gray silty clay w/ organics



Initial Height	5.250	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	2.835	in	**Strain Rate**	1.0	%/min
Dry Density	33.8	lb/ft^3	**Peak Stress**	0.04	ton/ft^2
Moisture Content	146.2	%	**Strain at Peak Stress**	14.84	%
Saturation	99.1	%	**Failure Type**	Bulging	

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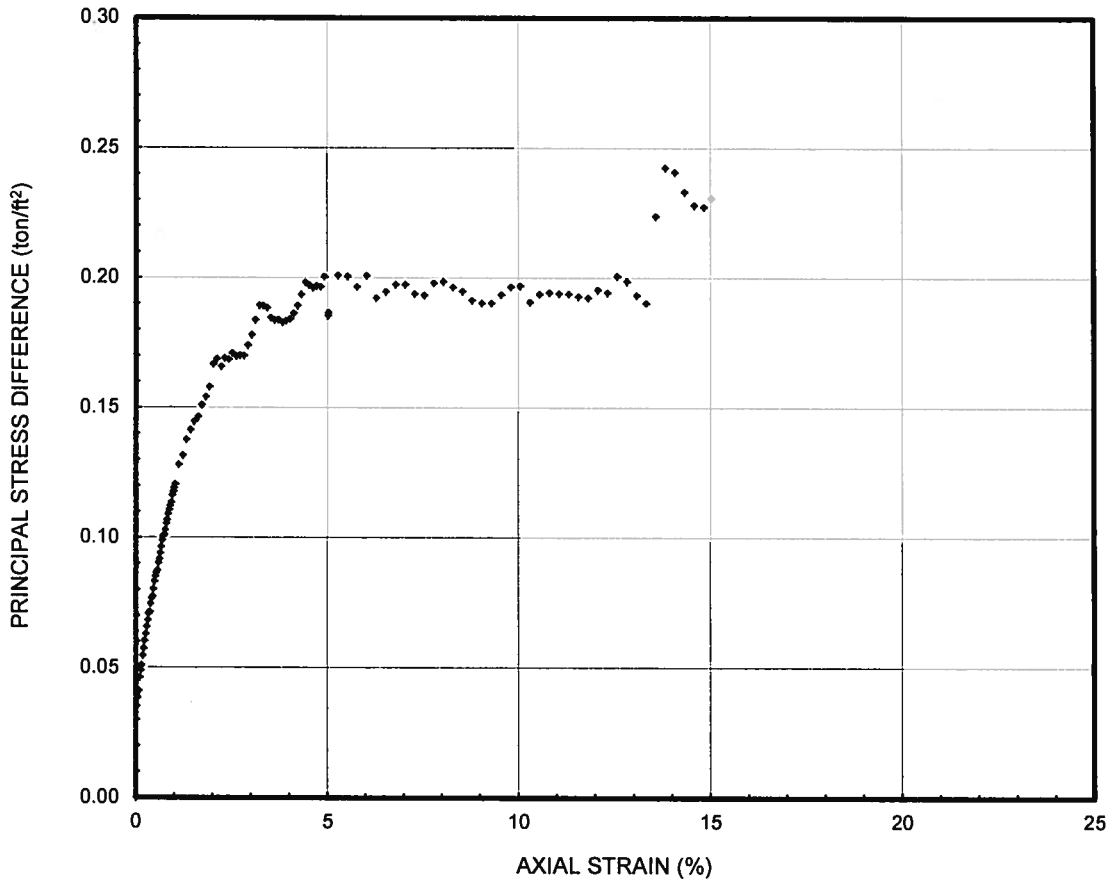
FILE NO: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-06
Depth	6-8 ft
Description	Gray clay w/ organics



Initial Height	2.789	in	**Cell Pressure**	3.0	lb/in^2
Initial Diameter	1.407	in	**Strain Rate**	1.0	%/min
Dry Density	59.6	lb/ft^3	**Peak Stress**	0.25	ton/ft^2
Moisture Content	70.5	%	**Strain at Peak Stress**	13.83	%
Saturation	104.1	%	**Failure Type**	Bulging	

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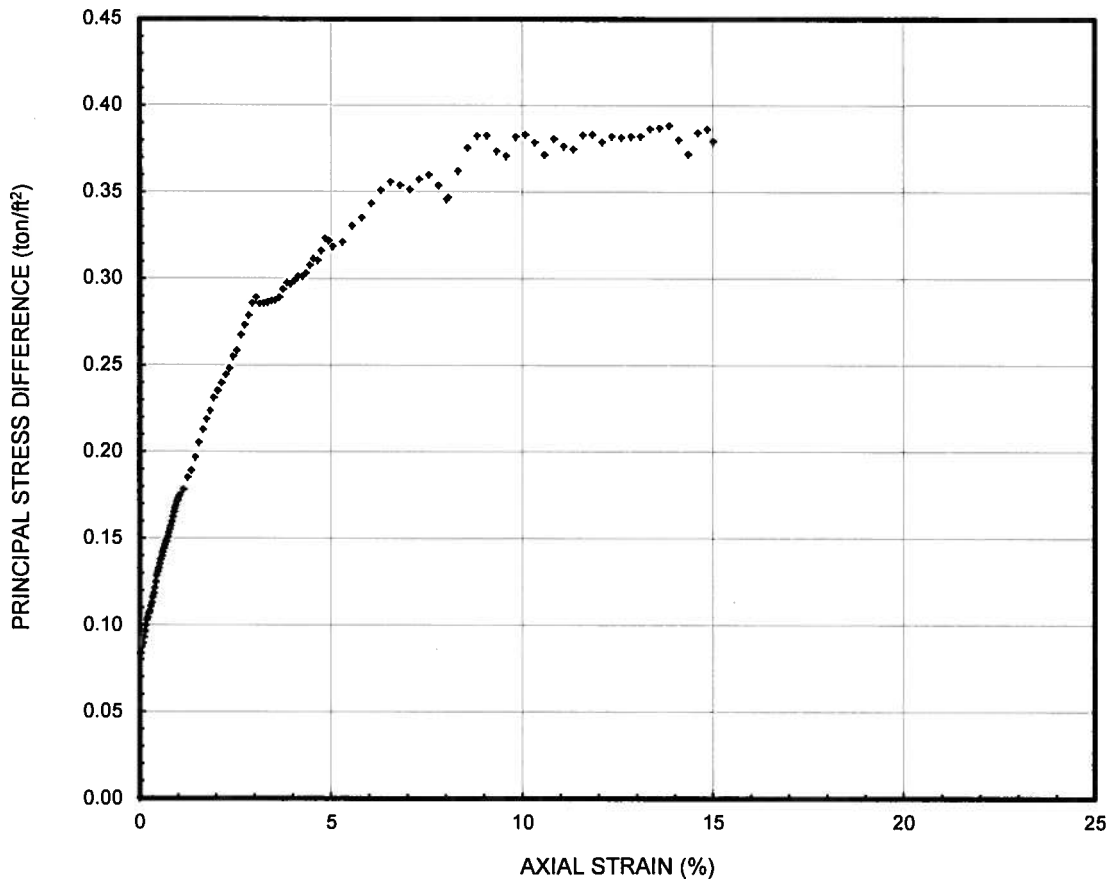
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-06
Depth	10-12 ft
Description	Gray clay w/ organics



Initial Height	2.787	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	1.408	in	**Strain Rate**	1.0	%/min
Dry Density	89.4	lb/ft^3	**Peak Stress**	0.40	ton/ft^2
Moisture Content	33.1	%	**Strain at Peak Stress**	13.84	%
Saturation	101.0	%	**Failure Type**	Bulging	

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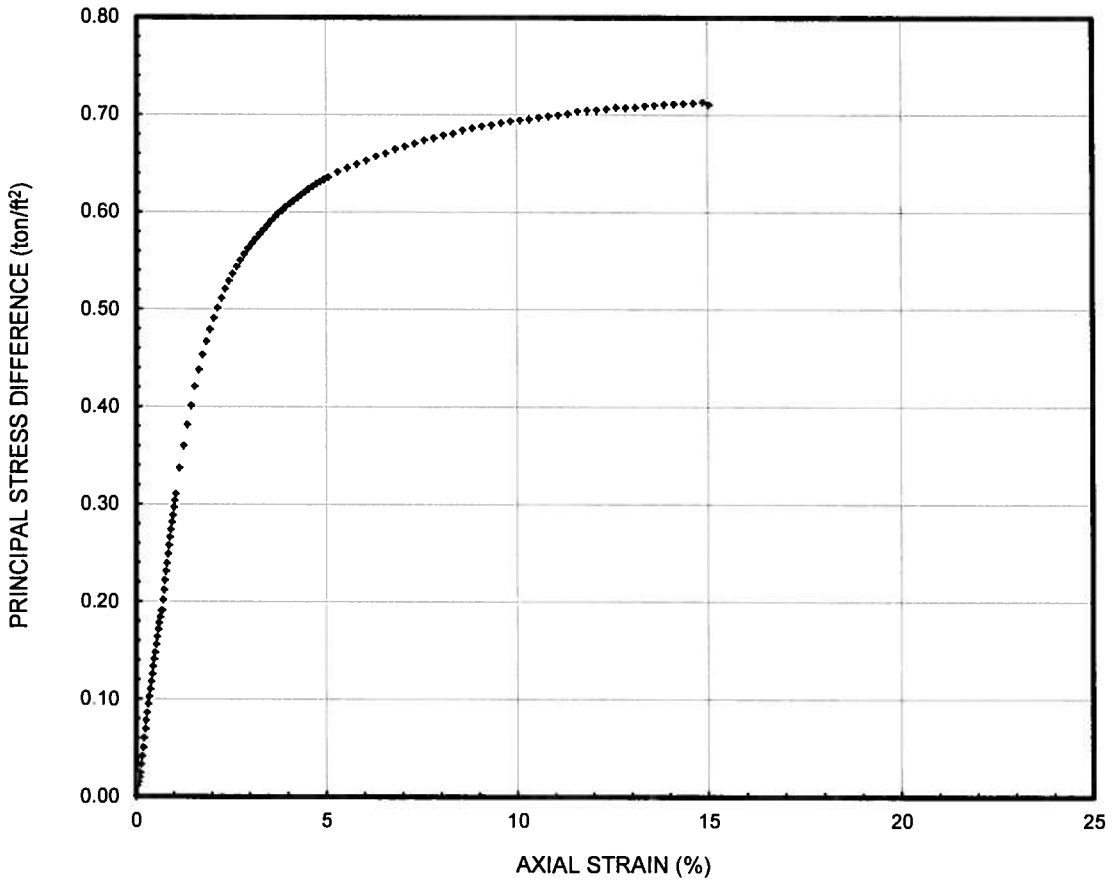
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-06
Depth	14-16 ft
Description	Gray clay w/ silt and trace organics



Initial Height	5.750	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	2.840	in	**Strain Rate**	1.0	%/min
Dry Density	93.7	lb/ft^3	**Peak Stress**	0.73	ton/ft^2
Moisture Content	28.5	%	**Strain at Peak Stress**	14.87	%
Saturation	96.5	%	**Failure Type**	Bulging	

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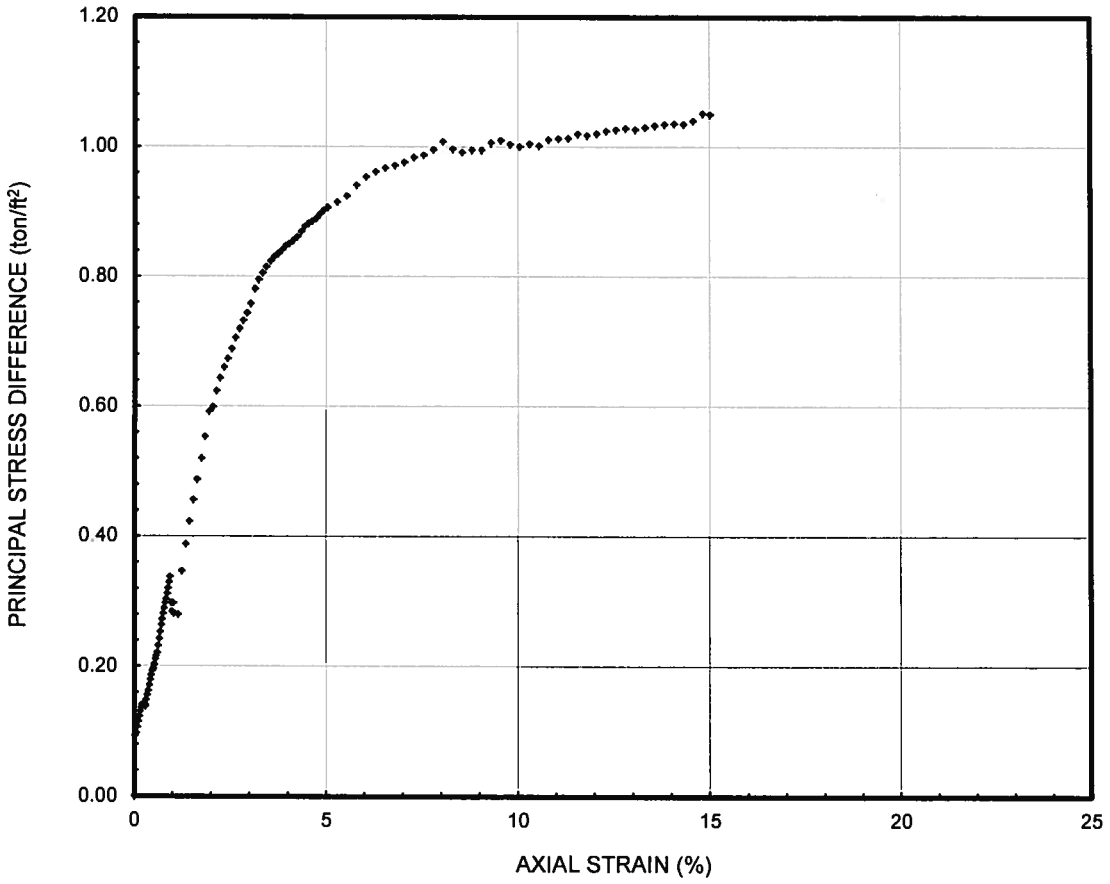
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-06
Depth	18-20 ft
Description	gray and tan sicl w/fenods



Initial Height	2.797	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	1.424	in	**Strain Rate**	1.0	%/min
Dry Density	98.4	lb/ft^3	**Peak Stress**	1.08	ton/ft^2
Moisture Content	28.2	%	**Strain at Peak Stress**	14.83	%
Saturation	106.8	%	**Failure Type**	Combination	

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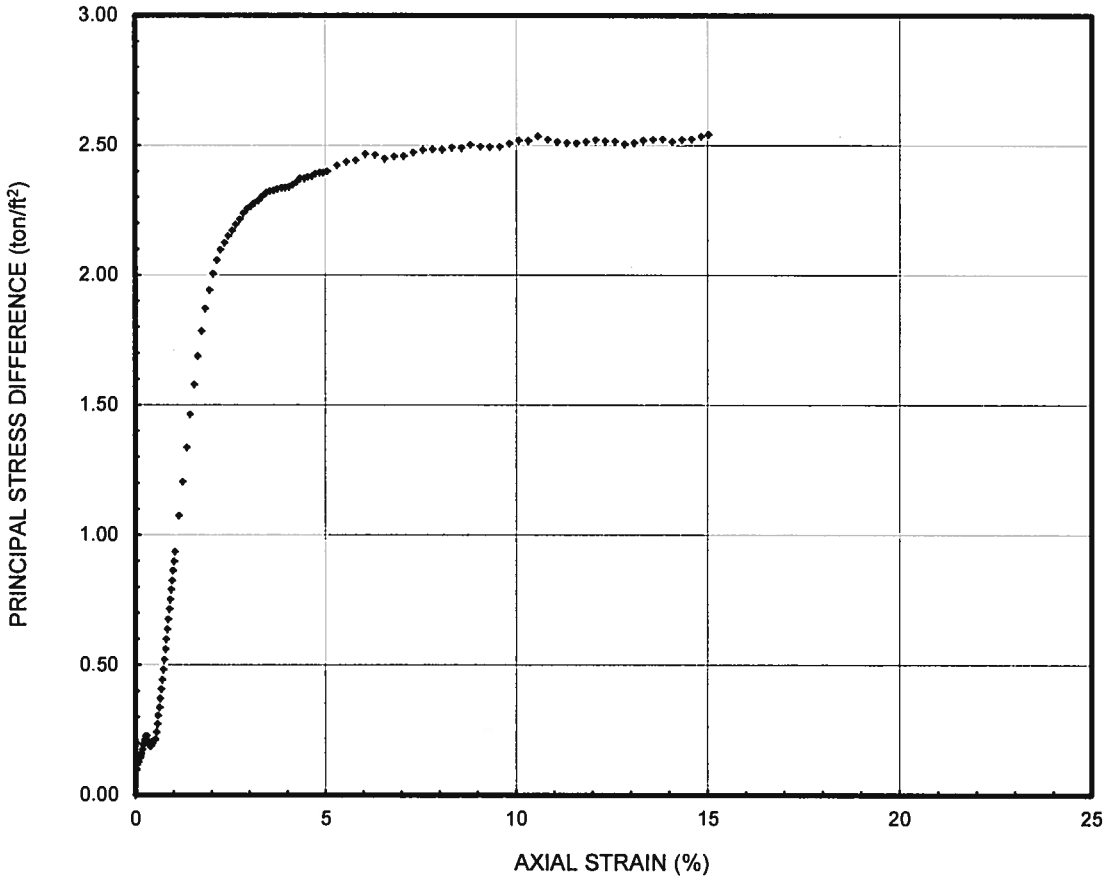
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-06
Depth	23-25 ft
Description	Tan and light gray clay w/ silt, organics and fenods



Initial Height	2.804	in	**Cell Pressure**	10.0	lb/in^2
Initial Diameter	1.414	in	**Strain Rate**	1.0	%/min
Dry Density	96.1	lb/ft^3	**Peak Stress**	2.60	ton/ft^2
Moisture Content	26.5	%	**Strain at Peak Stress**	15.02	%
Saturation	94.9	%	**Failure Type**	Diagonal	

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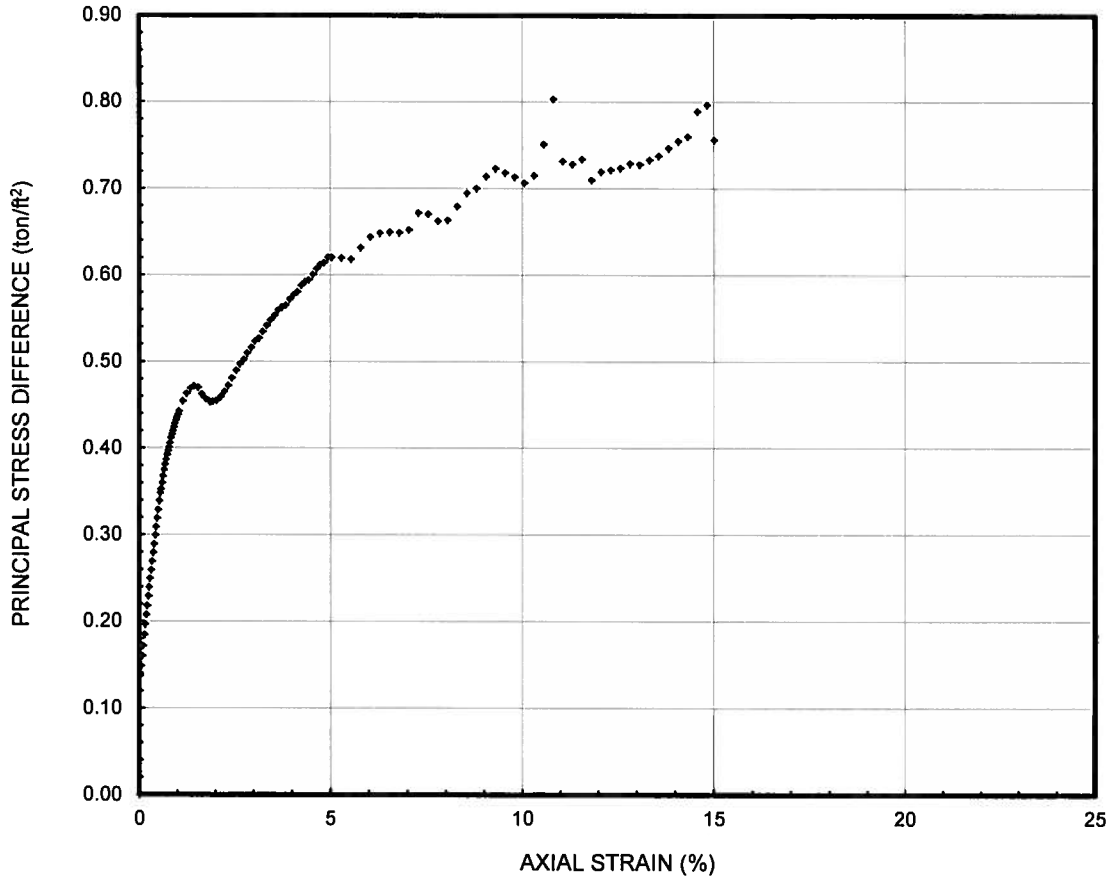
FILE NO: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-06
Depth	28-30 ft
Description	Gray and tan jointed clay w/ fenods



Initial Height	2.801	in	**Cell Pressure**	12.0	lb/in^2
Initial Diameter	1.407	in	**Strain Rate**	1.0	%/min
Dry Density	77.4	lb/ft^3	**Peak Stress**	0.82	ton/ft^2
Moisture Content	43.2	%	**Strain at Peak Stress**	10.81	%
Saturation	99.1	%	**Failure Type**	Diagonal	

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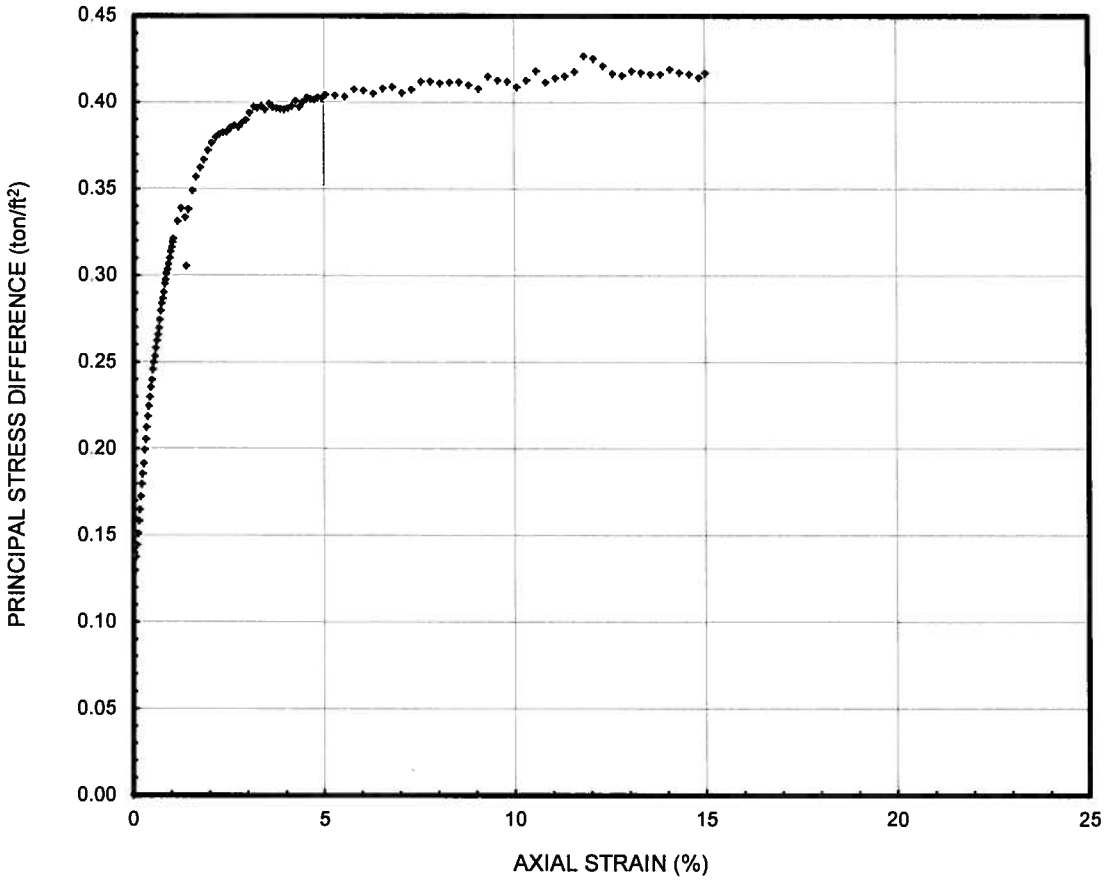
FILE NO. **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-06
Depth	38-40 ft
Description	Light gray and tan clay



Initial Height	2.795	in	**Cell Pressure**	16.0	lb/in^2
Initial Diameter	1.401	in	**Strain Rate**	1.0	%/min
Dry Density	81.6	lb/ft^3	**Peak Stress**	0.44	ton/ft^2
Moisture Content	40.3	%	**Strain at Peak Stress**	11.83	%
Saturation	102.1	%	**Failure Type**	Combination	

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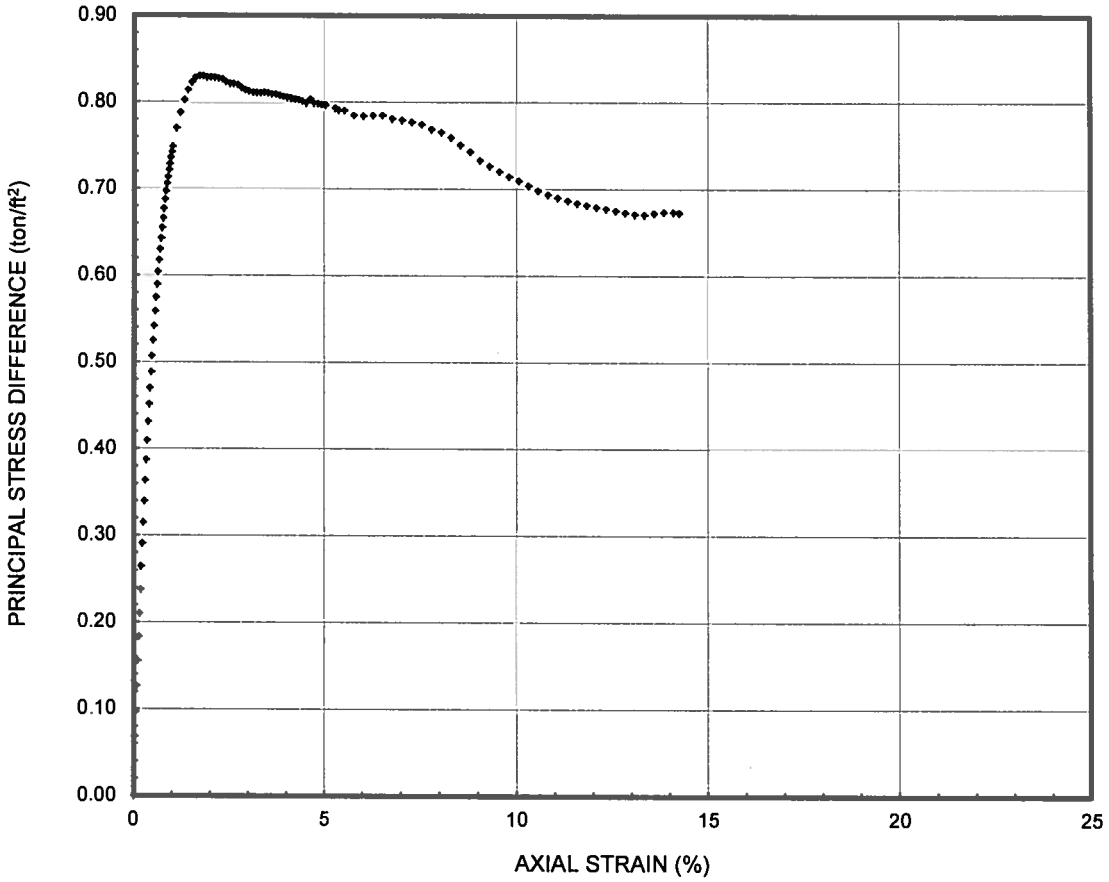
FILE NO: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-06
Depth	43-45 ft
Description	Gray clay w/ silt pockets and trace organics



Initial Height	5.761	in	**Cell Pressure**	18.0	lb/in^2
Initial Diameter	2.836	in	**Strain Rate**	1.0	%/min
Dry Density	64.8	lb/ft^3	**Peak Stress**	0.85	ton/ft^2
Moisture Content	60.6	%	**Strain at Peak Stress**	1.74	%
Saturation	102.4	%	**Failure Type**	Diagonal	

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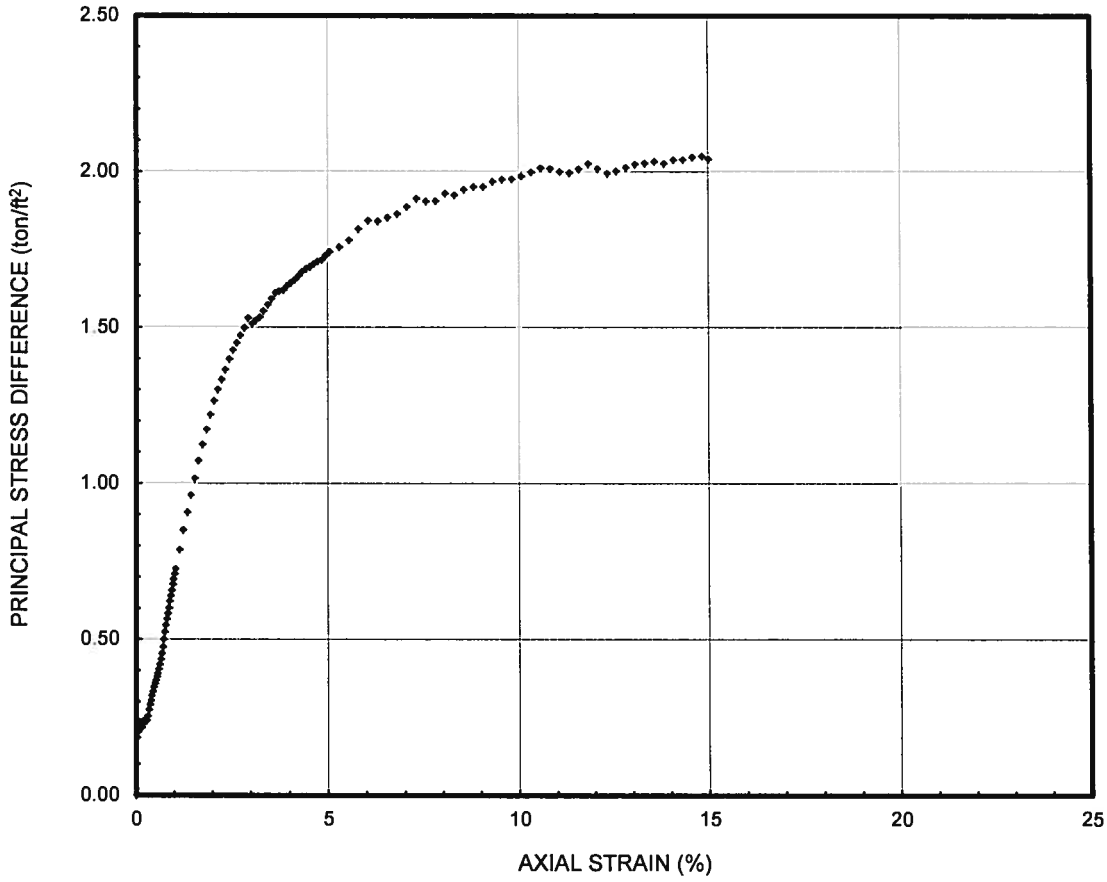
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-06
Depth	48-50 ft
Description	Gray silty clay w/ silt and trace organics



Initial Height	2.802	in	**Cell Pressure**	20.0	lb/in^2
Initial Diameter	1.412	in	**Strain Rate**	1.0	%/min
Dry Density	91.6	lb/ft^3	**Peak Stress**	2.10	ton/ft^2
Moisture Content	30.9	%	**Strain at Peak Stress**	14.83	%
Saturation	99.2	%	**Failure Type**	Combination	

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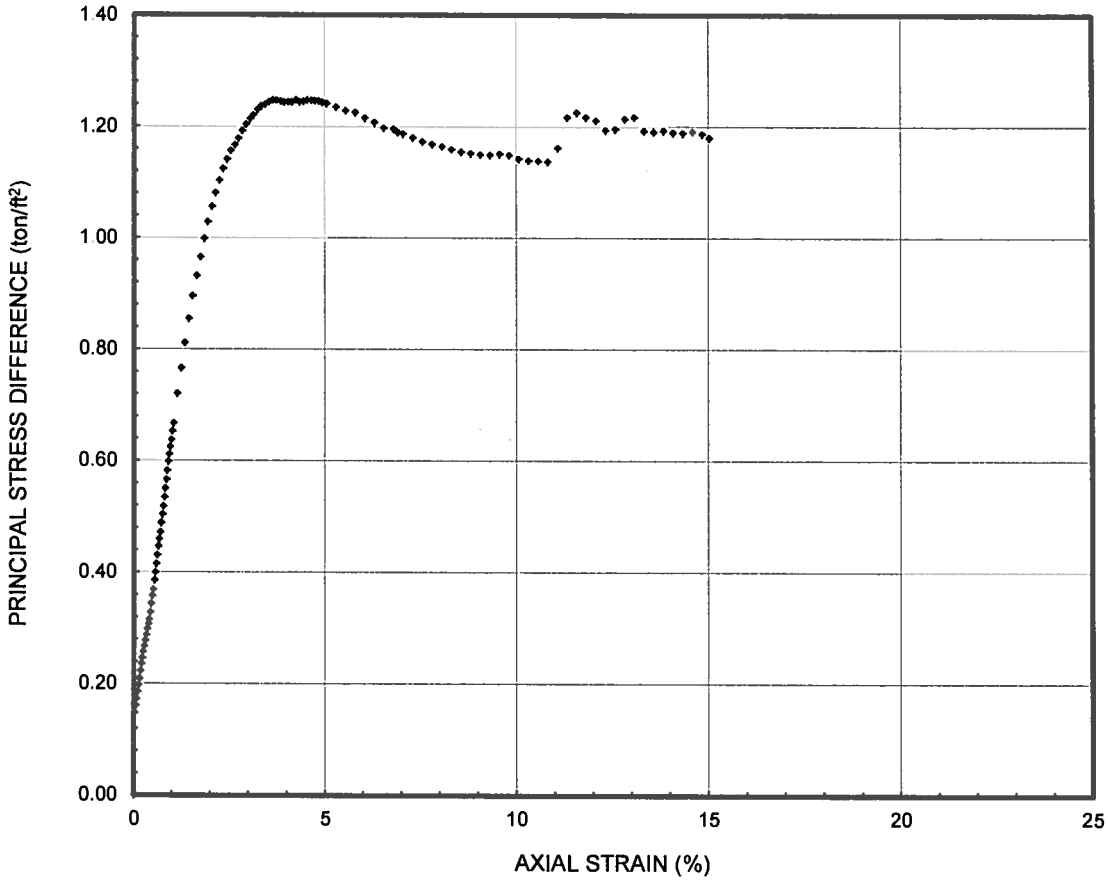
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-06
Depth	48-50 ft
Description	Gray and brown clay w/ silt



Initial Height	2.801	in	**Cell Pressure**	20.0	lb/in^2
Initial Diameter	1.430	in	**Strain Rate**	1.0	%/min
Dry Density	88.8	lb/ft^3	**Peak Stress**	1.28	ton/ft^2
Moisture Content	32.8	%	**Strain at Peak Stress**	4.24	%
Saturation	98.6	%	**Failure Type**	Diagonal	

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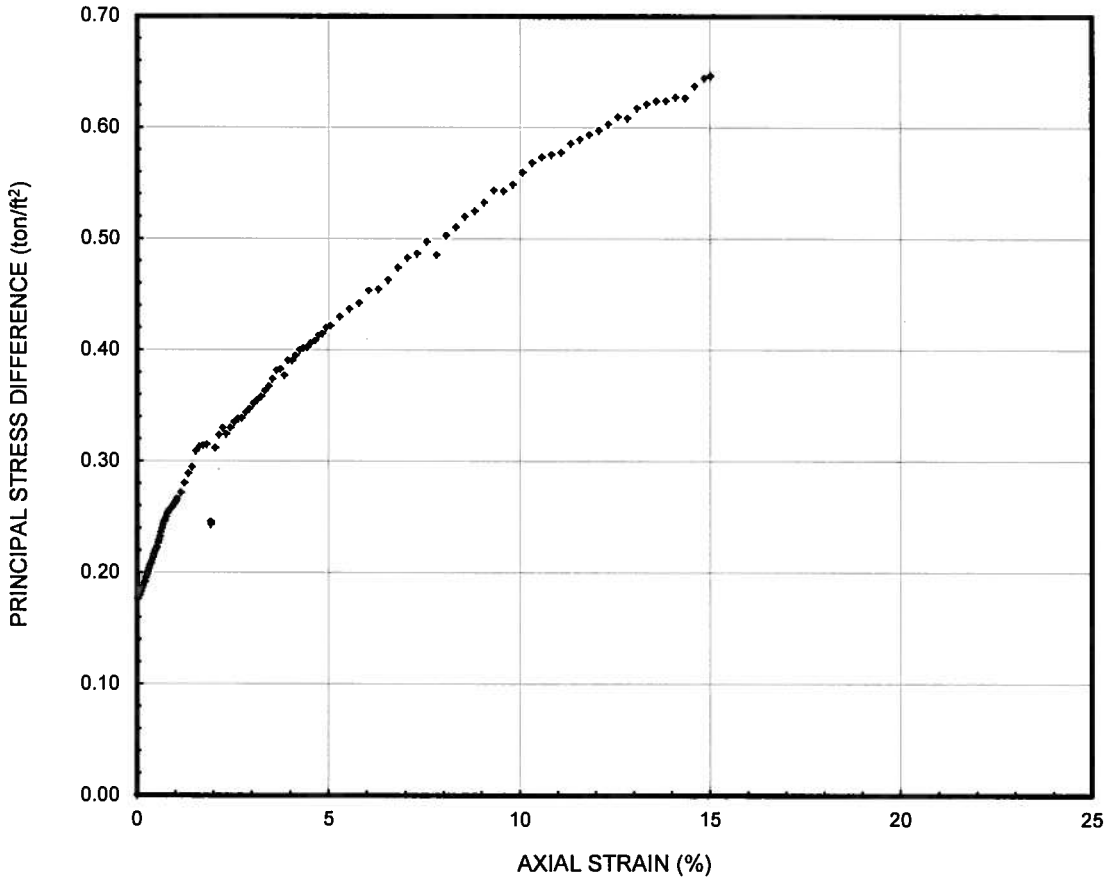
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-06
Depth	58-60 ft
Description	Brown and gray silty clay



Initial Height	2.751	in	**Cell Pressure**	24.0	lb/in^2
Initial Diameter	1.401	in	**Strain Rate**	1.0	%/min
Dry Density	96.1	lb/ft^3	**Peak Stress**	0.66	ton/ft^2
Moisture Content	29.8	%	**Strain at Peak Stress**	15.00	%
Saturation	106.8	%	**Failure Type**	Bulging	

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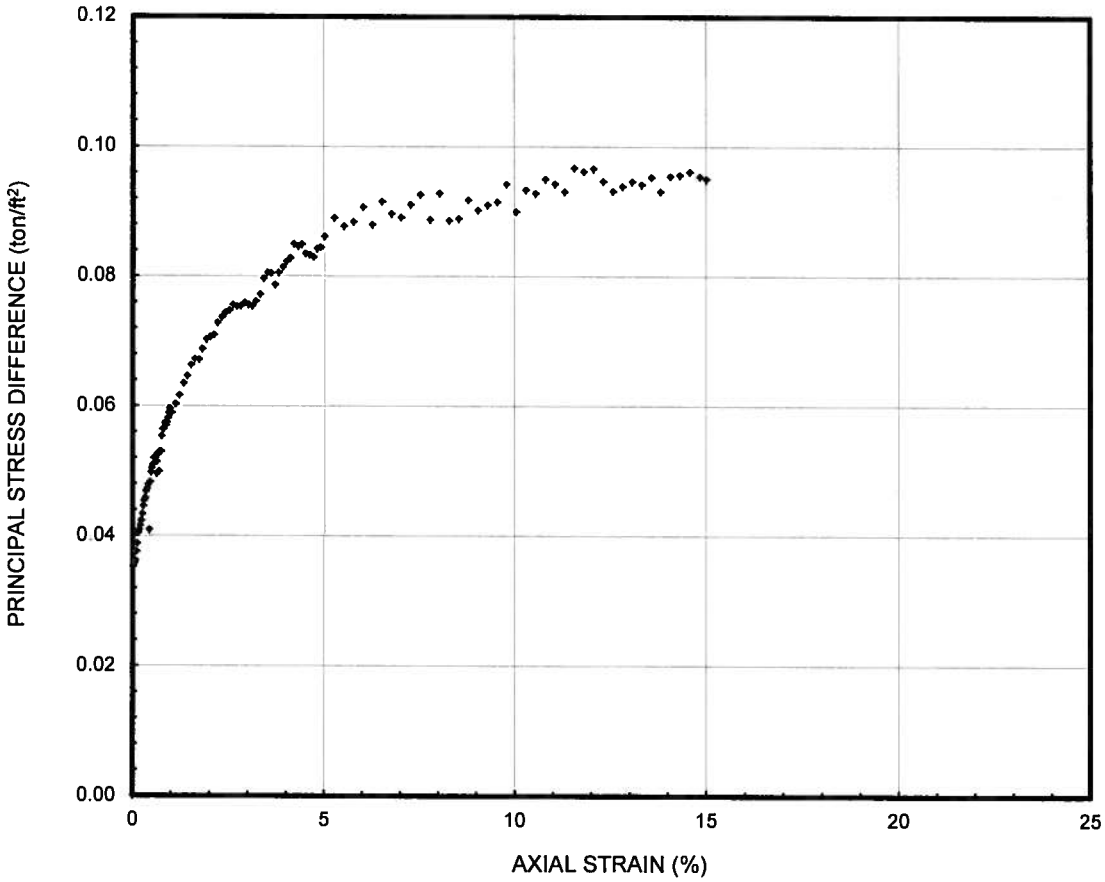
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-07
Depth	2-4 ft
Description	Dark gray clay w/ silt pockets and organics



Initial Height	2.782	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.373	in	**Strain Rate**	1.0	%/min
Dry Density	9.3	lb/ft^3	**Peak Stress**	0.10	ton/ft^2
Moisture Content	74.3	%	**Strain at Peak Stress**	11.57	%
Saturation	11.7	%	**Failure Type**	Bulging	

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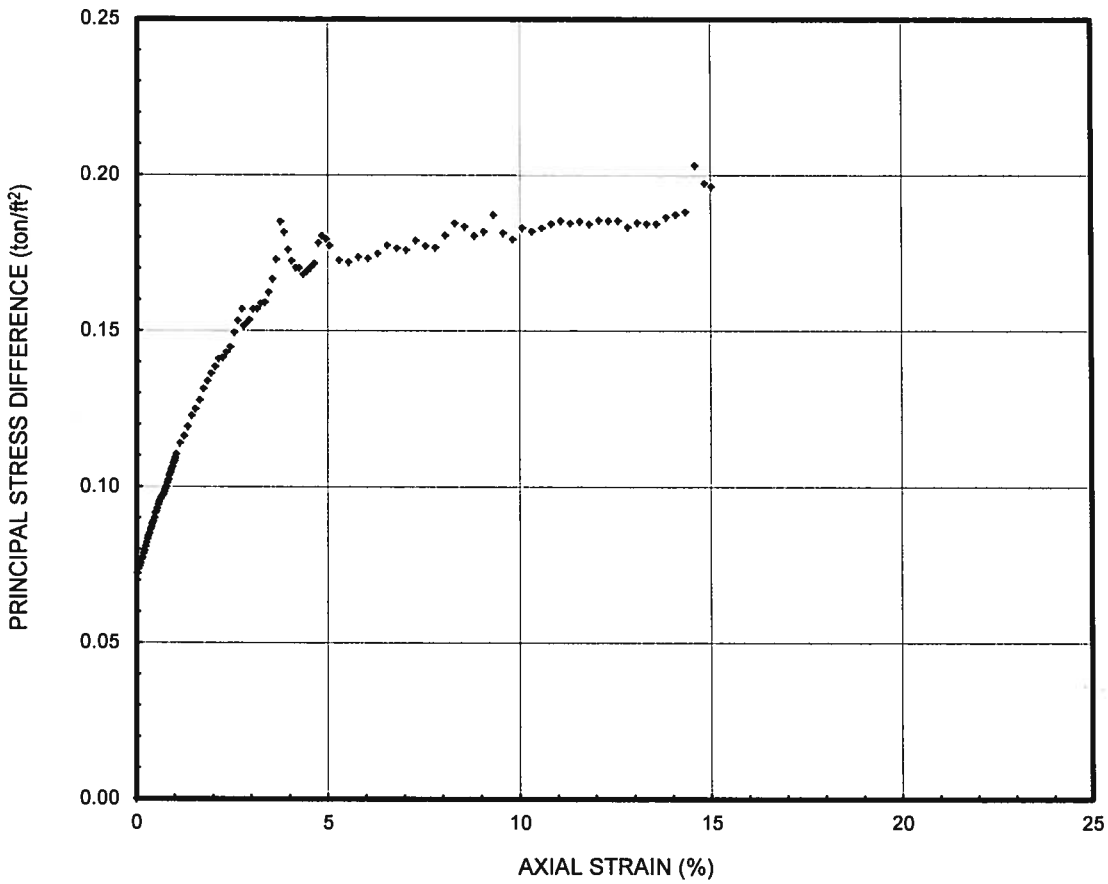
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-07
Depth	8-10 ft
Description	Dark gray organics w/ clay at bottom



Initial Height	2.787	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	1.379	in	**Strain Rate**	1.0	%/min
Dry Density	62.5	lb/ft^3	**Peak Stress**	0.21	ton/ft^2
Moisture Content	63.3	%	**Strain at Peak Stress**	14.58	%
Saturation	100.8	%	**Failure Type**	bulging	

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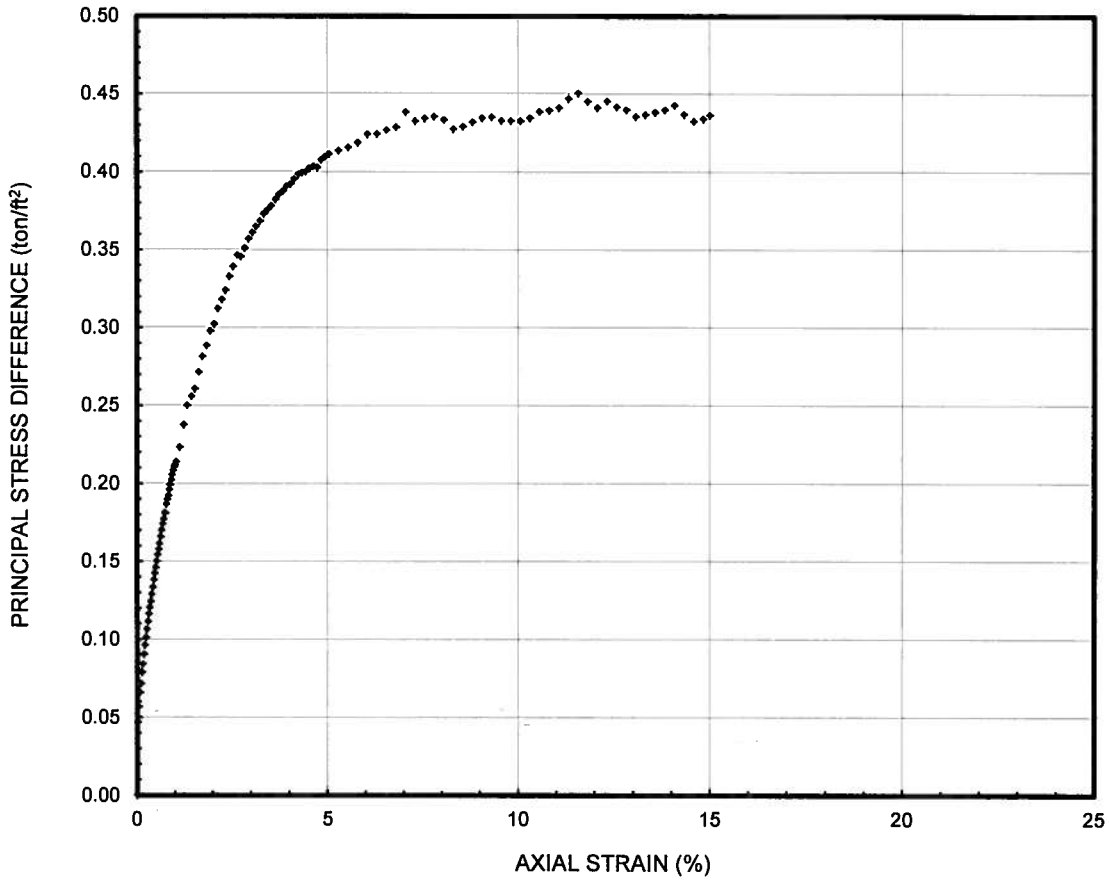
FILE NO. **13-80-3705**	APPROVED BY:	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-07
Depth	10-12 ft
Description	Bluish gray and gray clay w/ trace organics



Initial Height	2.796	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	1.398	in	**Strain Rate**	1.0	%/min
Dry Density	87.2	lb/ft^3	**Peak Stress**	0.46	ton/ft^2
Moisture Content	36.1	%	**Strain at Peak Stress**	11.57	%
Saturation	104.6	%	**Failure Type**	Bulging	

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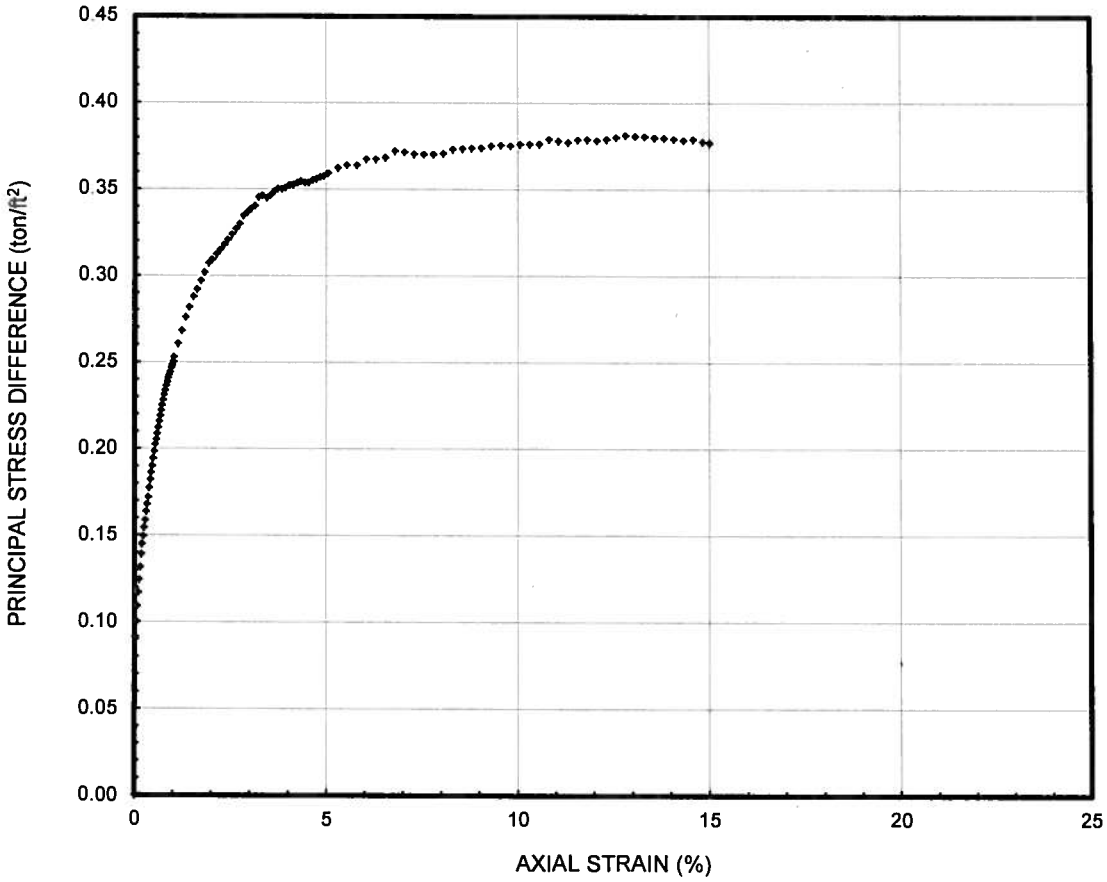
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-07
Depth	14-16 ft
Description	Bluish gray, gray and tan clay w/ trace organics



Initial Height	2.791	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	1.399	in	**Strain Rate**	1.0	%/min
Dry Density	87.6	lb/ft^3	**Peak Stress**	0.39	ton/ft^2
Moisture Content	35.2	%	**Strain at Peak Stress**	12.82	%
Saturation	102.7	%	**Failure Type**	Combination	

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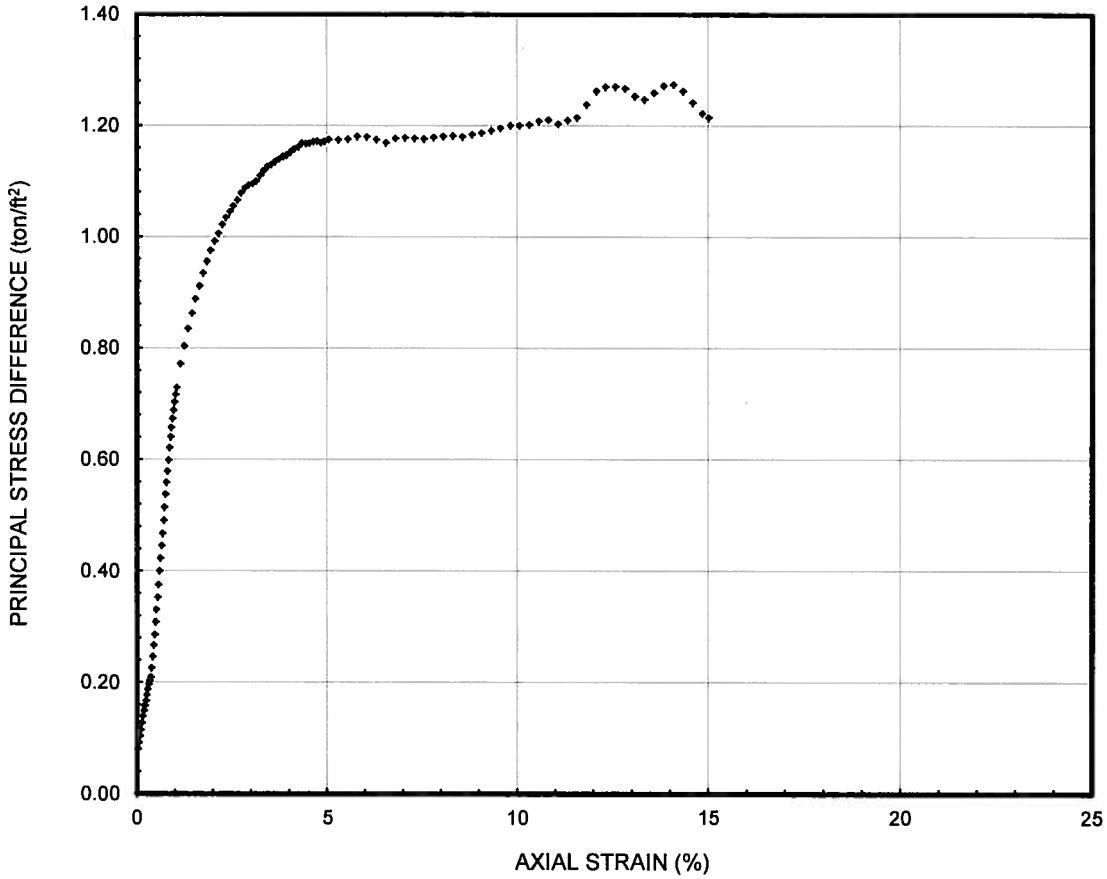
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-07
Depth	18-20 ft
Description	Tan and gray clay w/ silt, trace orgs and fenods



Initial Height	2.792	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	1.413	in	**Strain Rate**	1.0	%/min
Dry Density	102.4	lb/ft^3	**Peak Stress**	1.30	ton/ft^2
Moisture Content	24.7	%	**Strain at Peak Stress**	14.09	%
Saturation	103.2	%	**Failure Type**	Diagonal	

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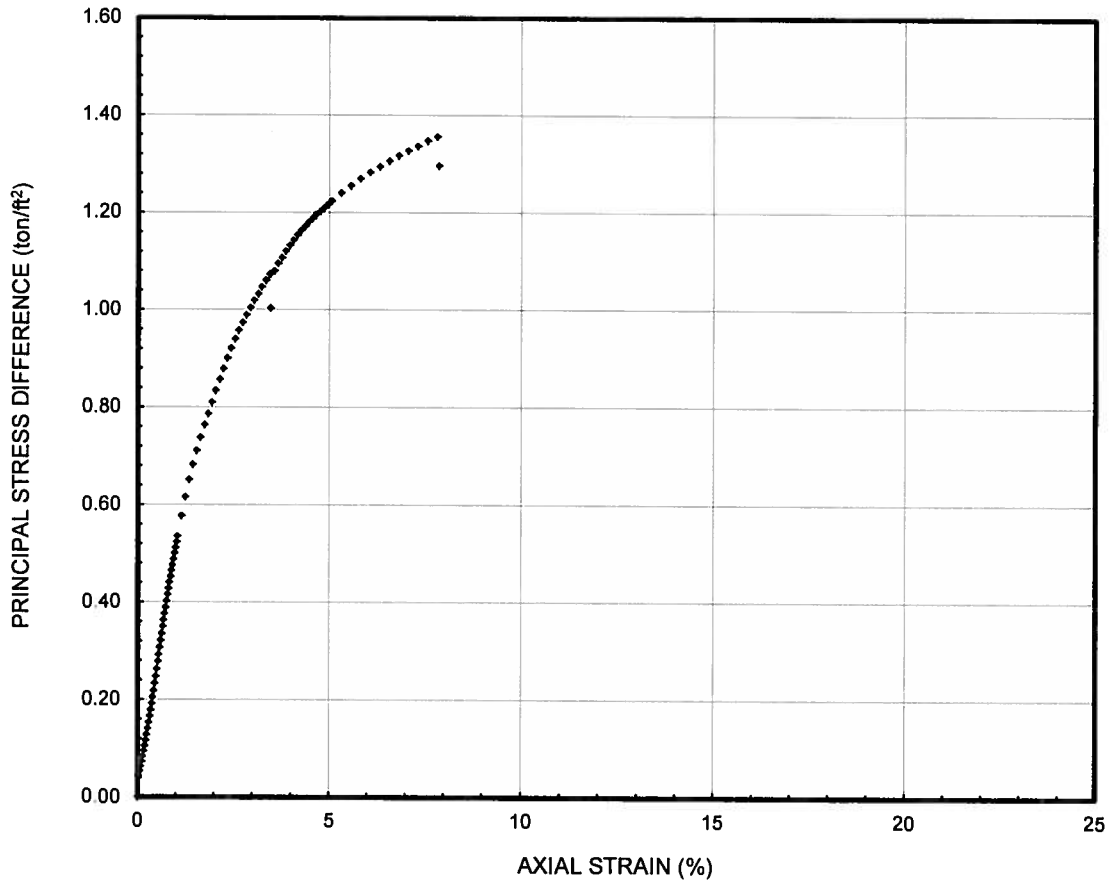
FILE NO: 13-80-3705	APPROVED BY:	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-07
Depth	28-30 ft
Description	Tan and gray clay w/ silt and fenods



Initial Height	5.742	in	**Cell Pressure**	12.0	lb/in^2
Initial Diameter	2.863	in	**Strain Rate**	1.0	%/min
Dry Density	98.2	lb/ft^3	**Peak Stress**	1.39	ton/ft^2
Moisture Content	25.5	%	**Strain at Peak Stress**	7.82	%
Saturation	96.2	%	**Failure Type**	Combination	

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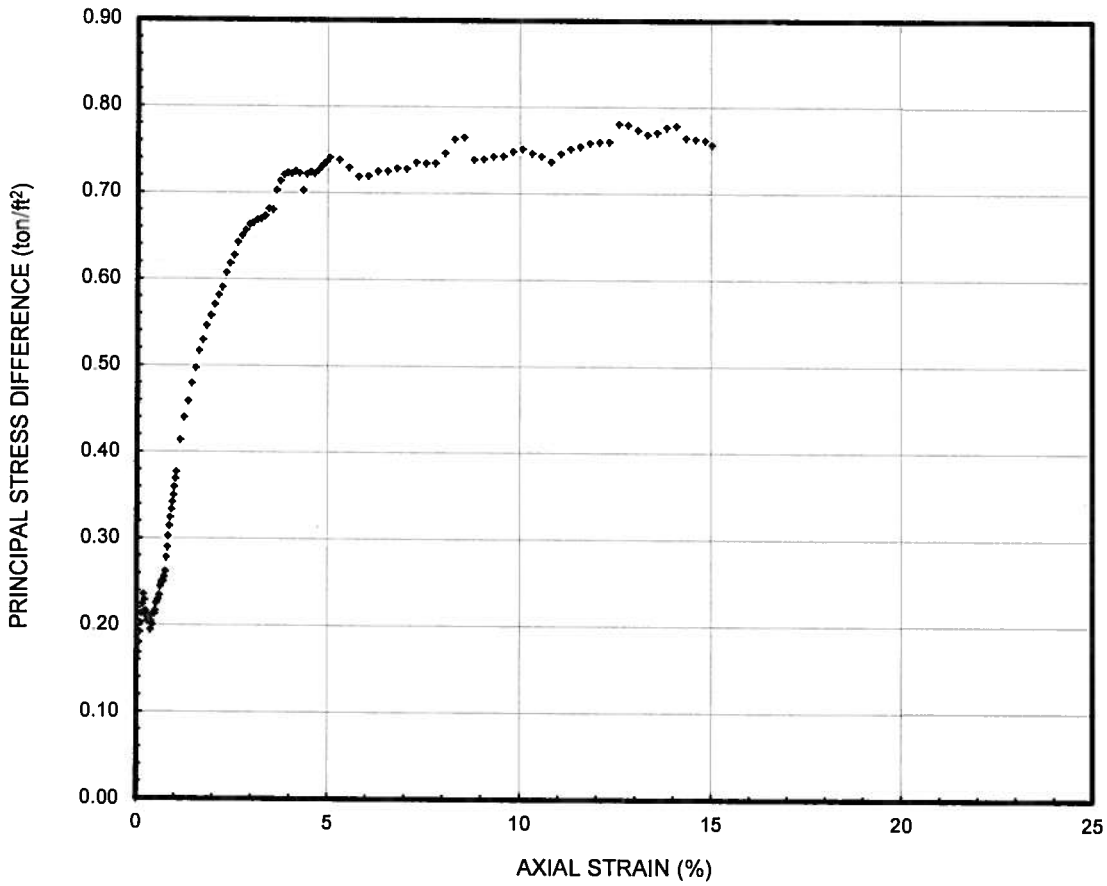
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole Bayou
Project Number	13-80-3705
Boring Number	B-07
Depth	38-40 ft
Description	Tan and light gray clay w/ silt and sand pockets, trace organics and fenods



Initial Height	2.790	in	**Cell Pressure**	16.0	lb/in^2
Initial Diameter	1.393	in	**Strain Rate**	1.0	%/min
Dry Density	97.0	lb/ft^3	**Peak Stress**	0.80	ton/ft^2
Moisture Content	28.2	%	**Strain at Peak Stress**	12.57	%
Saturation	103.2	%	**Failure Type**	Combination	

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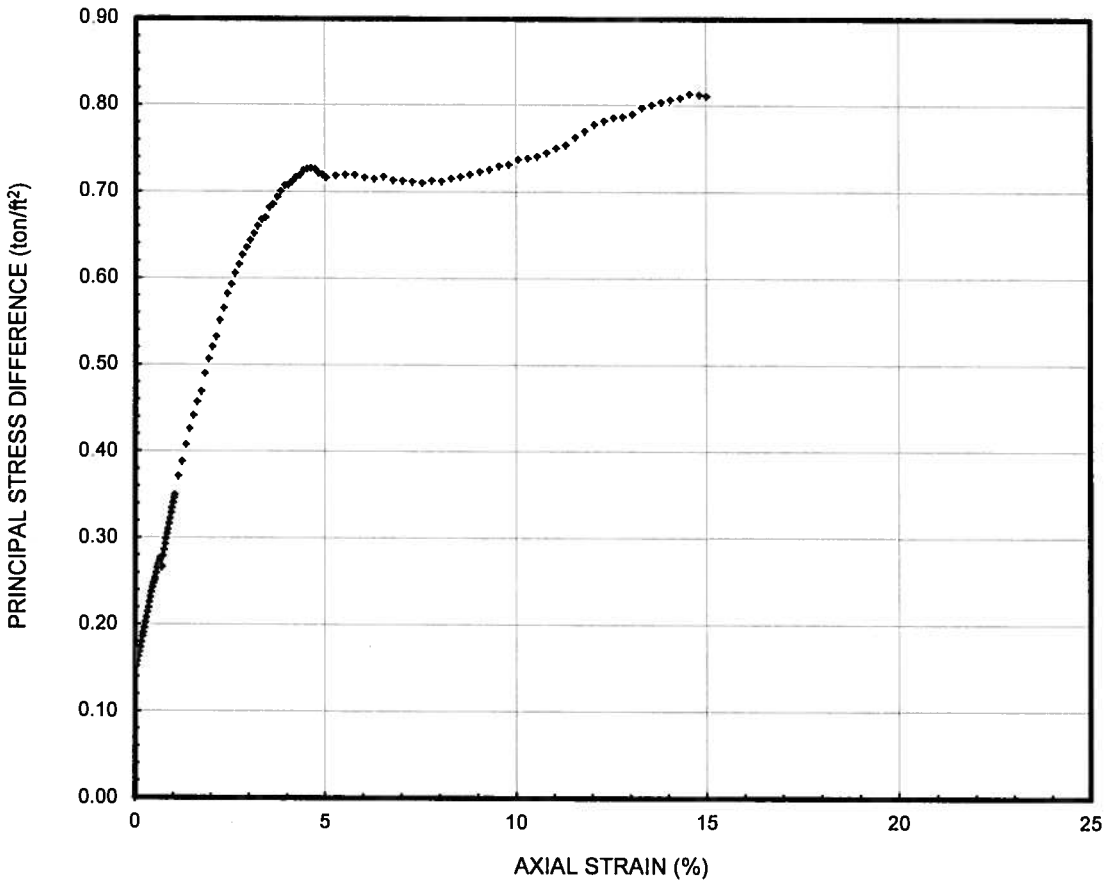
FILE NO: **13-80-3705**	APPROVED BY:	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-07
Depth	48-50 ft
Description	Gray silty clay w/ shell



Initial Height	2.788	in	**Cell Pressure**	20.0	lb/in^2
Initial Diameter	1.375	in	**Strain Rate**	1.0	%/min
Dry Density	94.8	lb/ft^3	**Peak Stress**	0.83	ton/ft^2
Moisture Content	30.2	%	**Strain at Peak Stress**	14.57	%
Saturation	104.7	%	**Failure Type**	Diagonal	

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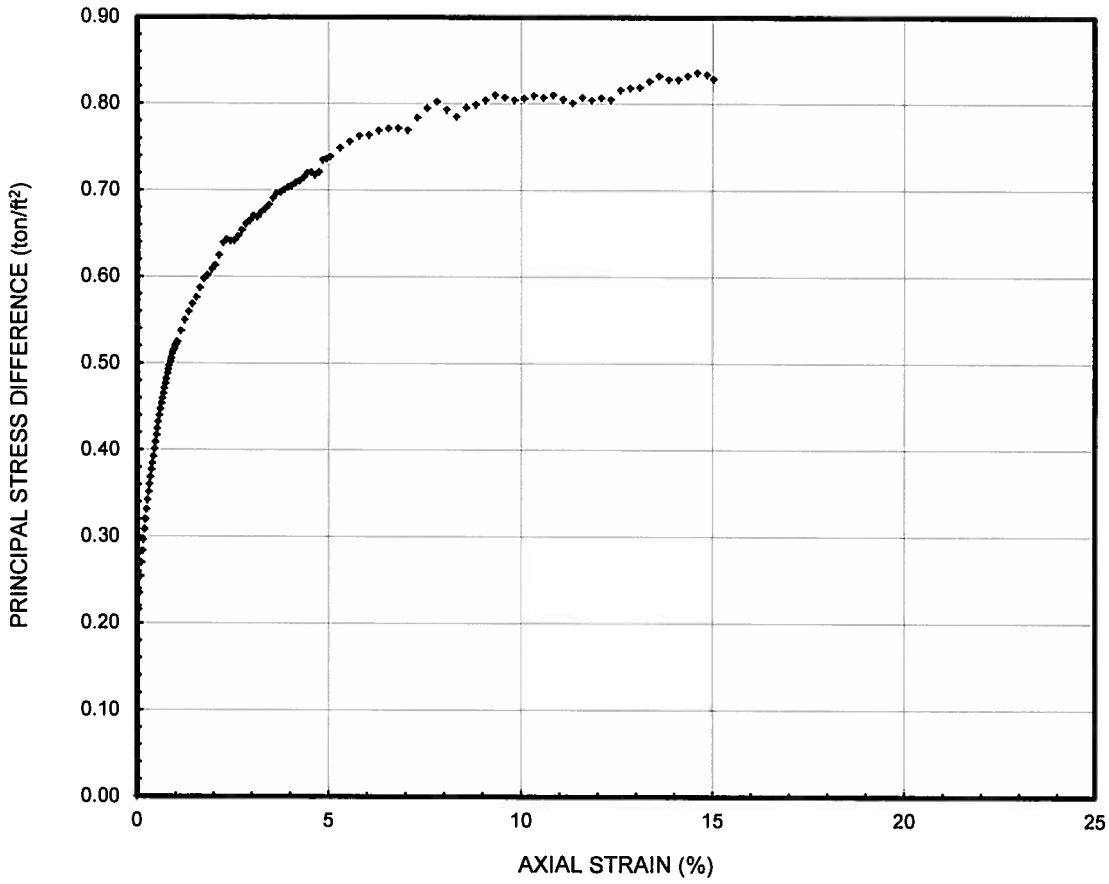
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-07
Depth	58-60 ft
Description	Gray and light gray and tan clay



Initial Height	2.789	in	**Cell Pressure**	24.0	lb/in^2
Initial Diameter	1.400	in	**Strain Rate**	1.0	%/min
Dry Density	93.6	lb/ft^3	**Peak Stress**	0.86	ton/ft^2
Moisture Content	30.8	%	**Strain at Peak Stress**	14.60	%
Saturation	103.9	%	**Failure Type**	Bulging	

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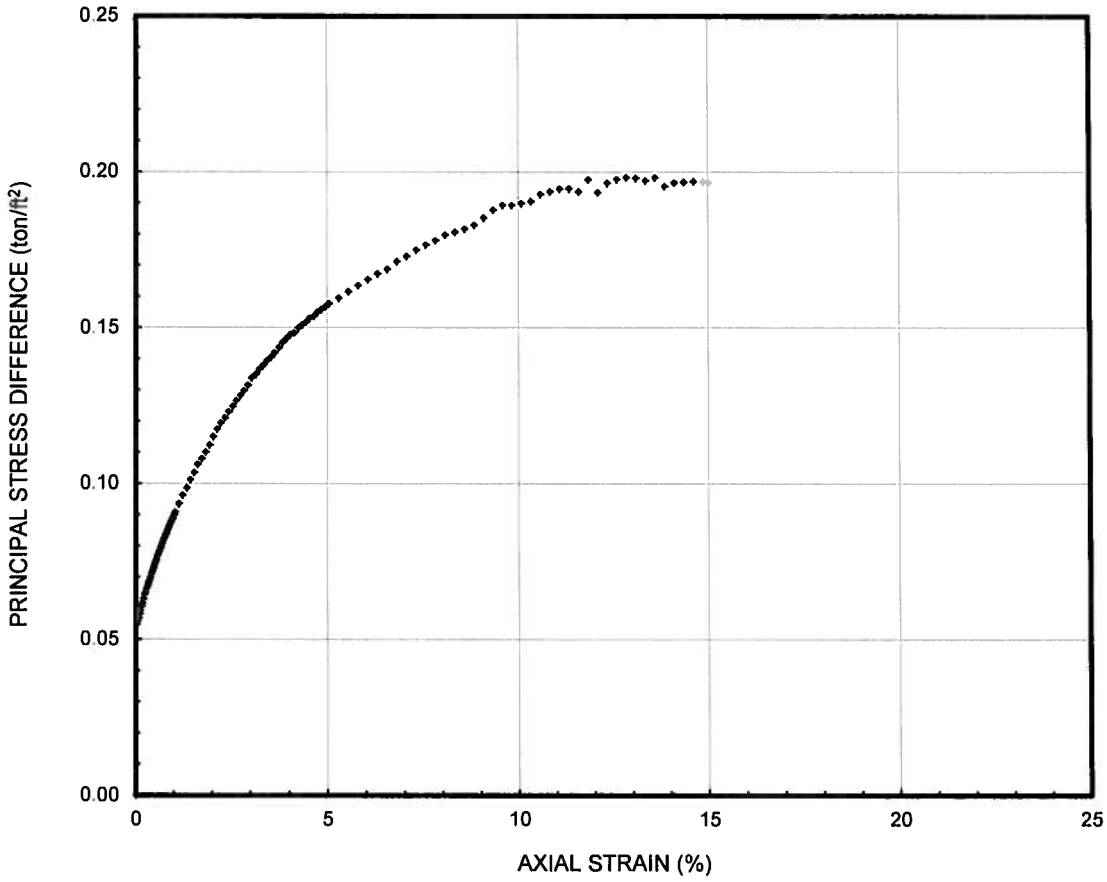
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-08
Depth	2-4 ft
Description	Gray Clay w/ organics



Initial Height	5.727	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	2.835	in	**Strain Rate**	1.0	%/min
Dry Density	63.0	lb/ft^3	**Peak Stress**	0.20	ton/ft^2
Moisture Content	63.6	%	**Strain at Peak Stress**	12.85	%
Saturation	102.4	%	**Failure Type**	Bulging	

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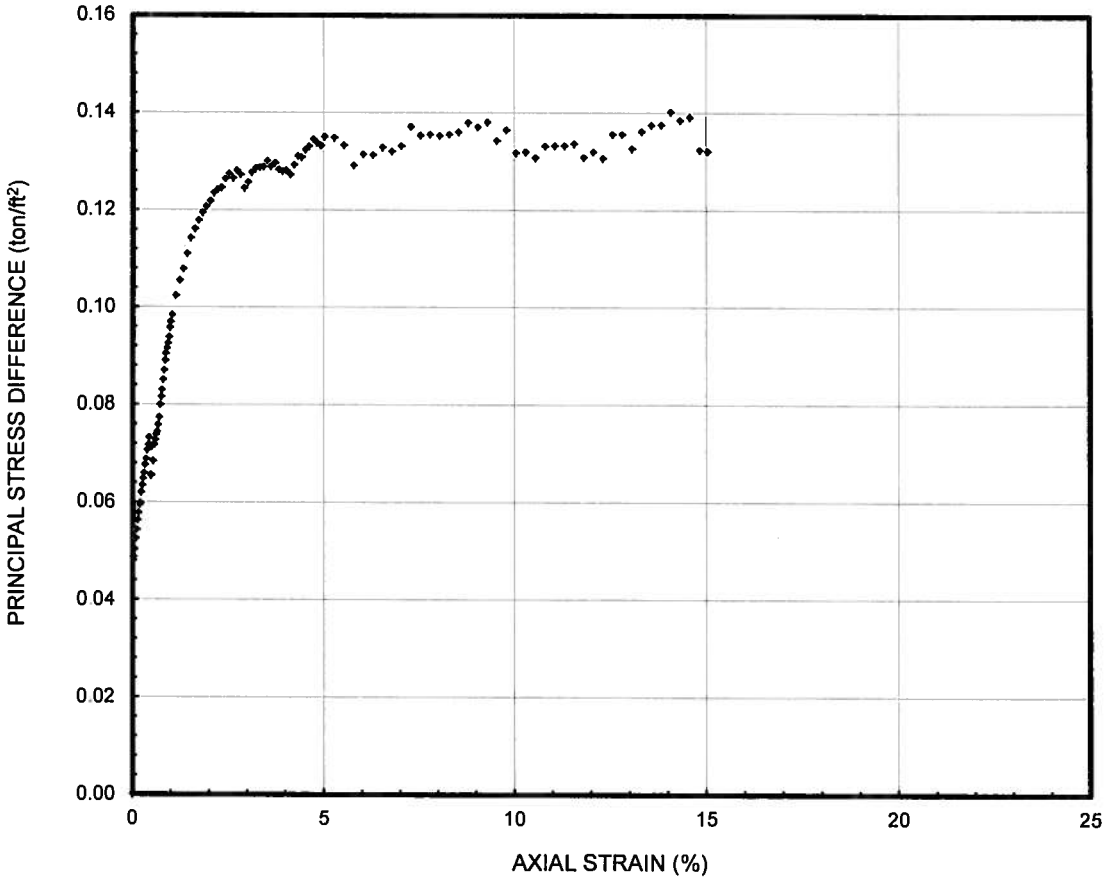
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-08
Depth	6-8 ft
Description	Gray Clay w/ trace organics



Initial Height	2.787	in	**Cell Pressure**	3.0	lb/in^2
Initial Diameter	1.384	in	**Strain Rate**	1.0	%/min
Dry Density	45.4	lb/ft^3	**Peak Stress**	0.14	ton/ft^2
Moisture Content	108.6	%	**Strain at Peak Stress**	14.08	%
Saturation	108.1	%	**Failure Type**	Bulging	

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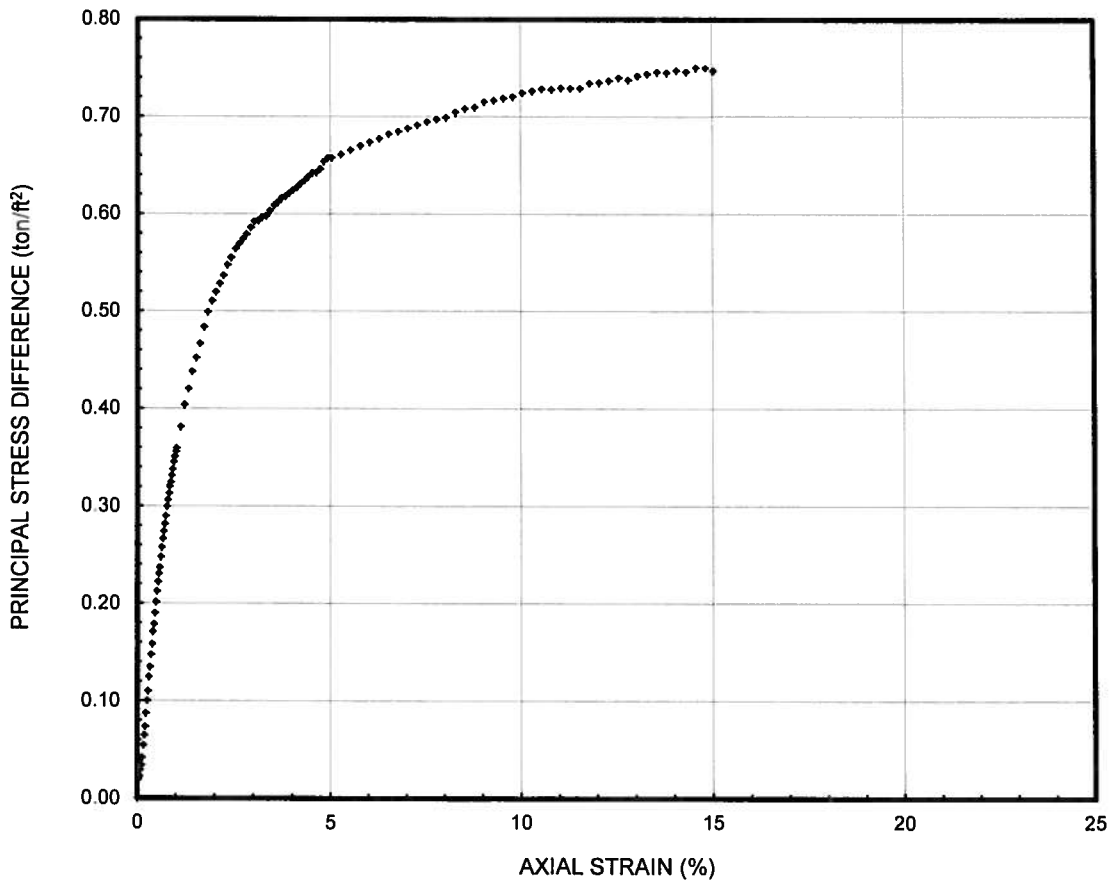
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-08
Depth	10-12 ft
Description	Gray clay w/ trace organics and fenods



Initial Height	5.747	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	2.843	in	**Strain Rate**	1.0	%/min
Dry Density	96.4	lb/ft^3	**Peak Stress**	0.77	ton/ft^2
Moisture Content	28.0	%	**Strain at Peak Stress**	14.57	%
Saturation	101.0	%	**Failure Type**	Bulging	

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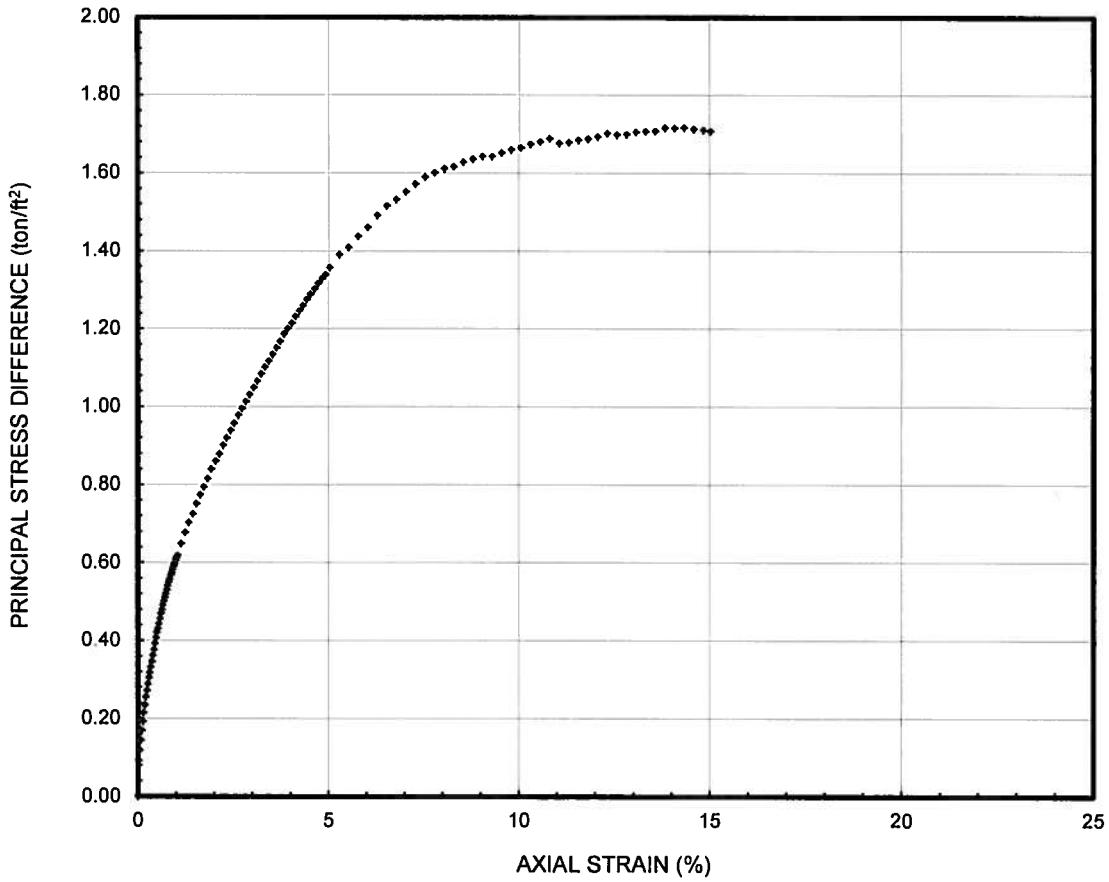
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-08
Depth	14-16 ft
Description	Gray and tan clay w/fenods and trace organics



Initial Height	2.792	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	1.410	in	**Strain Rate**	1.0	%/min
Dry Density	101.1	lb/ft^3	**Peak Stress**	1.76	ton/ft^2
Moisture Content	25.6	%	**Strain at Peak Stress**	14.33	%
Saturation	103.7	%	**Failure Type**	Combination	

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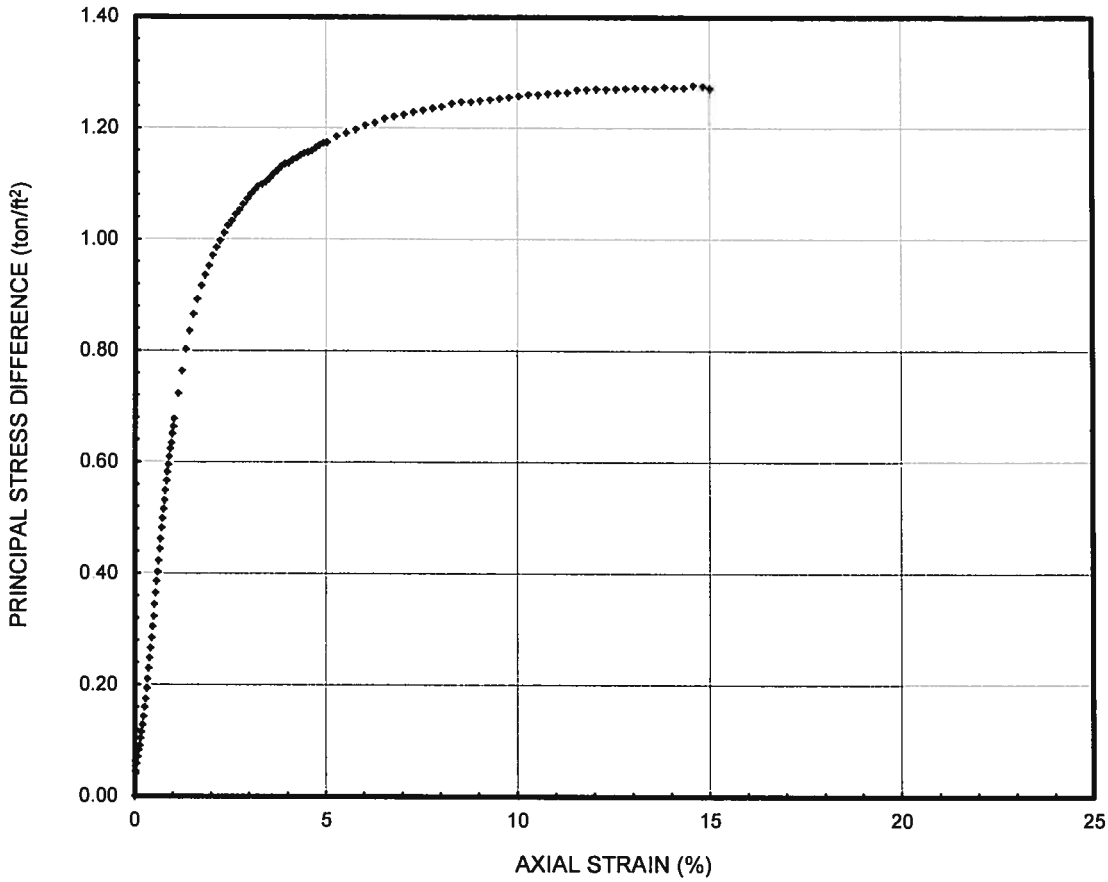
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-08
Depth	18-20 ft
Description	Gray and tan clay w/fenods and trace organics



Initial Height	5.755	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	2.853	in	**Strain Rate**	1.0	%/min
Dry Density	43.5	lb/ft^3	**Peak Stress**	1.31	ton/ft^2
Moisture Content	188.6	%	**Strain at Peak Stress**	14.57	%
Saturation	176.9	%	**Failure Type**	Combination	

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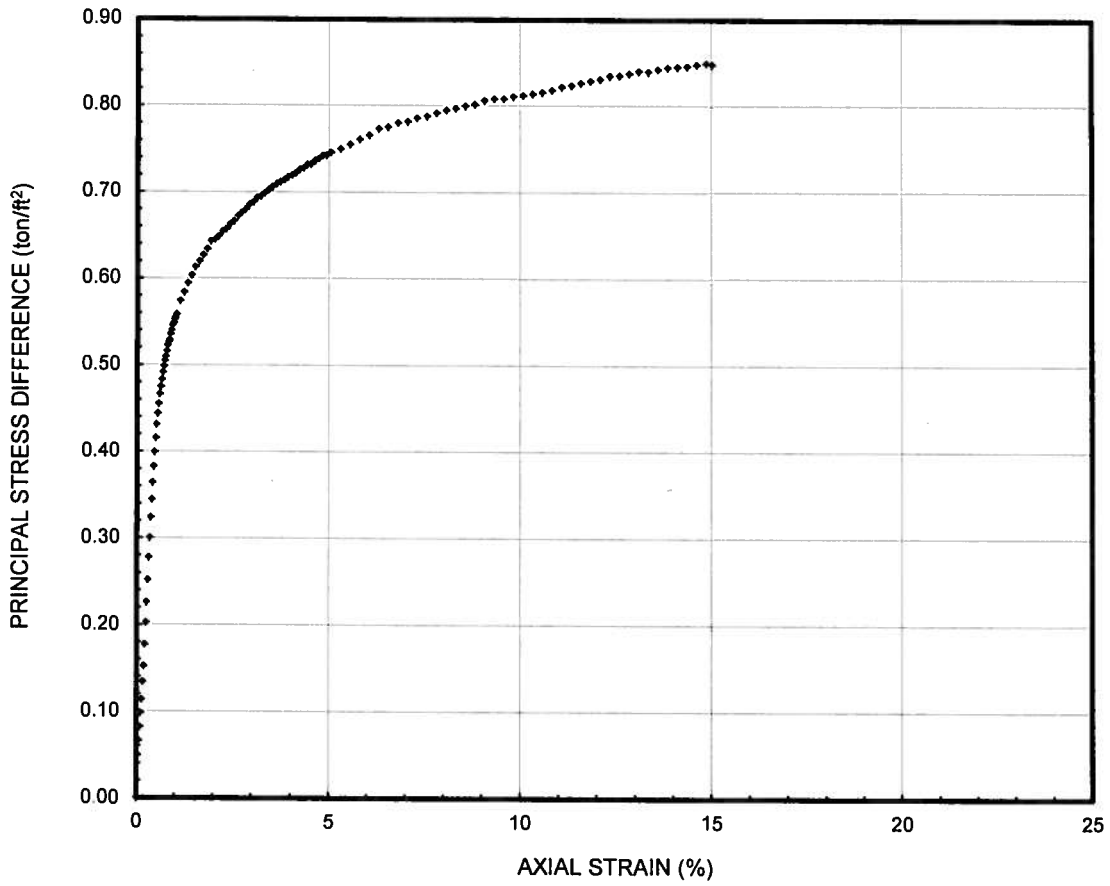
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-08
Depth	28-30 ft
Description	Tan and light gray clay w/ fenods



Initial Height	5.752	in	**Cell Pressure**	12.0	lb/in^2
Initial Diameter	2.823	in	**Strain Rate**	1.0	%/min
Dry Density	80.7	lb/ft^3	**Peak Stress**	0.87	ton/ft^2
Moisture Content	40.3	%	**Strain at Peak Stress**	14.86	%
Saturation	99.8	%	**Failure Type**	Combination	

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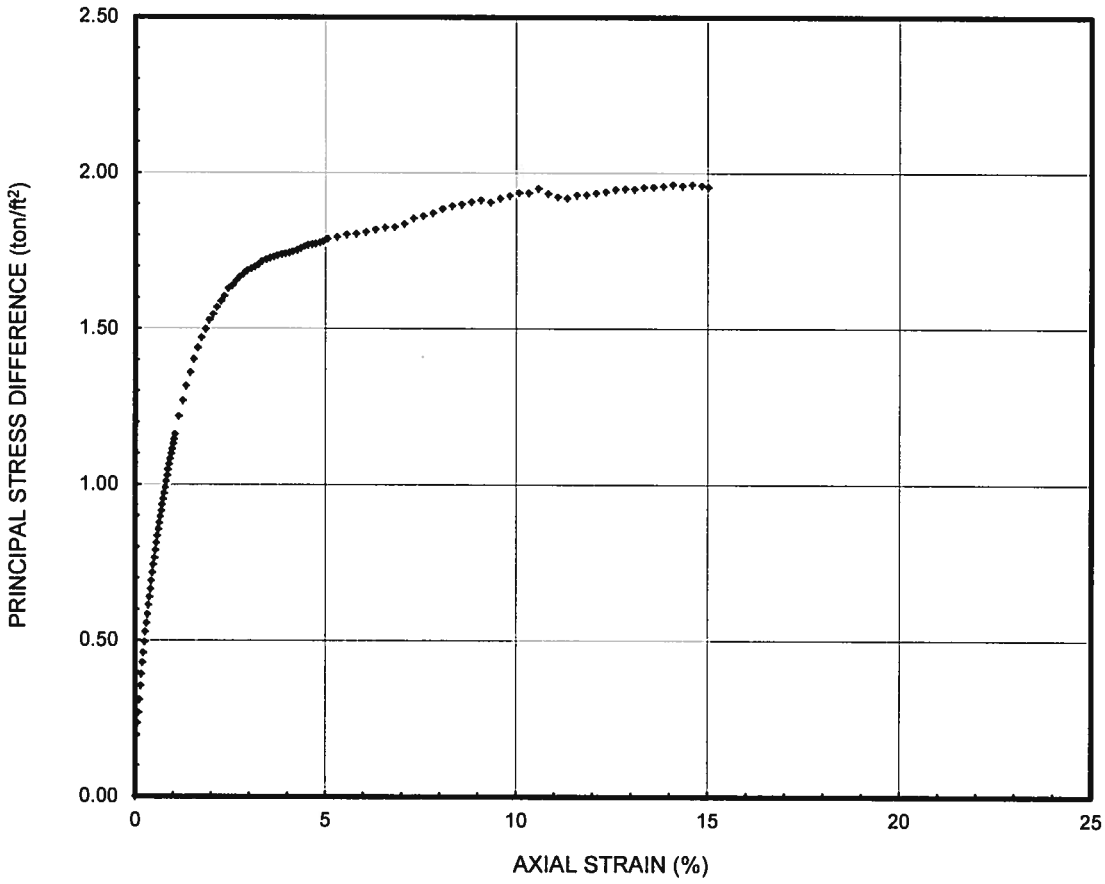
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-08
Depth	38-40 ft
Description	Gray and tan clay w/silt layers, fenods and calnods



Initial Height	2.790	in	**Cell Pressure**	16.0	lb/in^2
Initial Diameter	1.406	in	**Strain Rate**	1.0	%/min
Dry Density	93.7	lb/ft^3	**Peak Stress**	2.01	ton/ft^2
Moisture Content	28.4	%	**Strain at Peak Stress**	14.58	%
Saturation	96.1	%	**Failure Type**	Combination	

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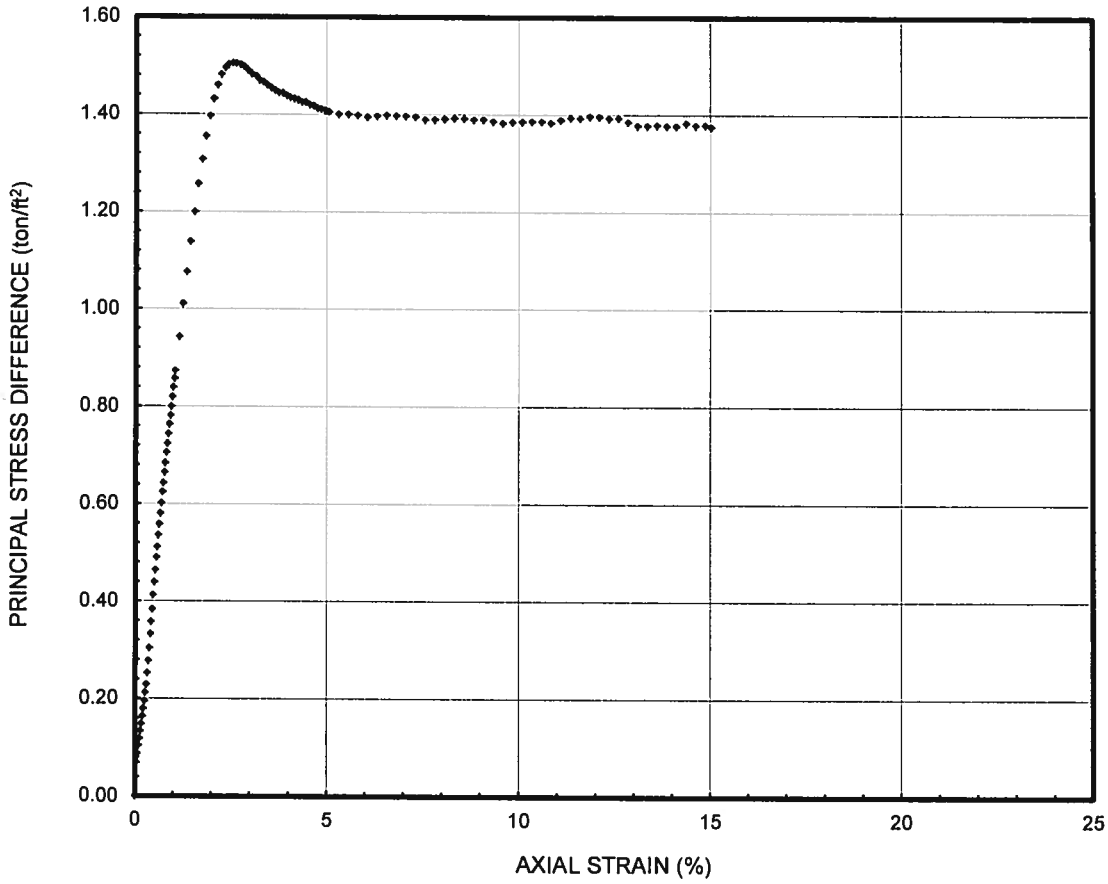
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-08
Depth	43-45 ft
Description	Gray and dark gray clay w/ silt pocket



Initial Height	5.747	in	**Cell Pressure**	18.0	lb/in^2
Initial Diameter	2.862	in	**Strain Rate**	1.0	%/min
Dry Density	84.8	lb/ft^3	**Peak Stress**	1.54	ton/ft^2
Moisture Content	37.4	%	**Strain at Peak Stress**	2.55	%
Saturation	102.2	%	**Failure Type**	Combination	

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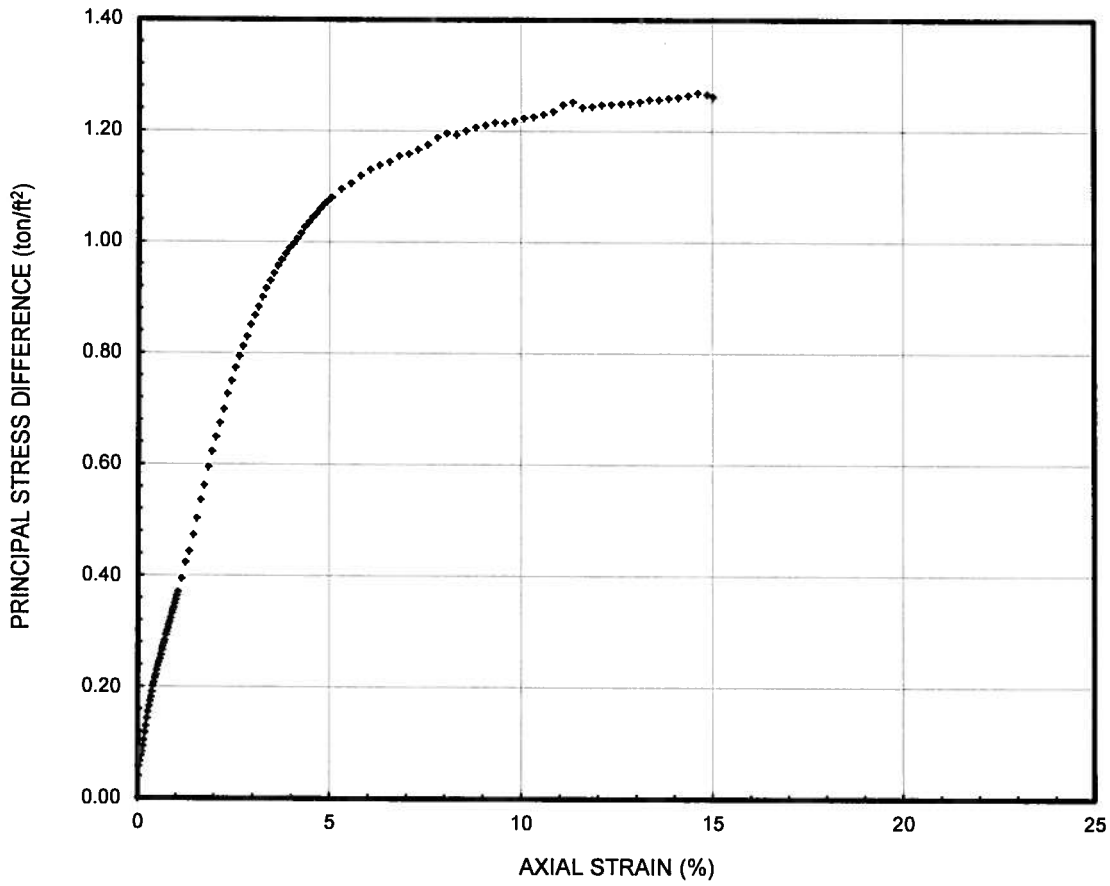
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-08
Depth	58-60 ft
Description	Gray and brown silty clay w/shell



Initial Height	5.744	in	**Cell Pressure**	24.0	lb/in^2
Initial Diameter	2.840	in	**Strain Rate**	1.0	%/min
Dry Density	96.0	lb/ft^3	**Peak Stress**	1.30	ton/ft^2
Moisture Content	28.2	%	**Strain at Peak Stress**	14.61	%
Saturation	100.8	%	**Failure Type**	Bulging	

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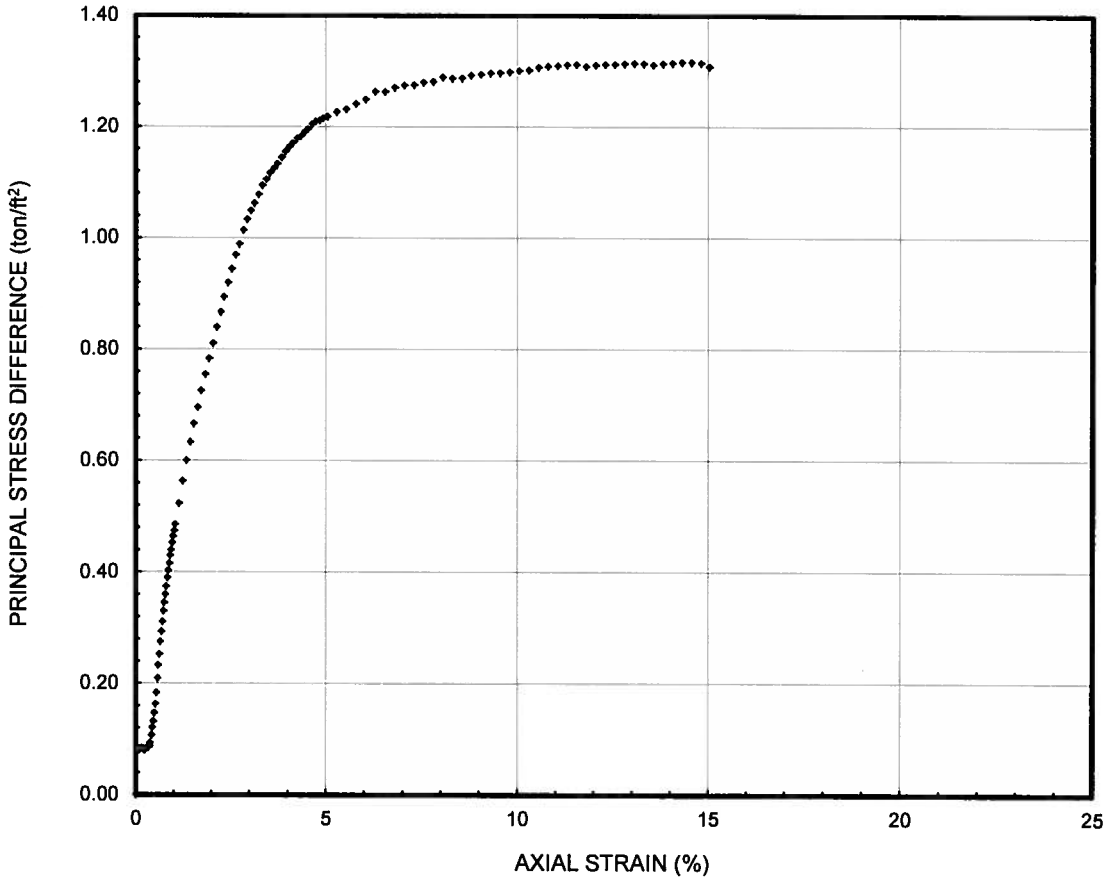
FILE NO. **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	13-80-3705
Project Number	13-80-3705
Boring Number	B-08
Depth	68-70 ft
Description	Gray and brown clay w/ silt



Initial Height	5.743	in	**Cell Pressure**	28.0	lb/in^2
Initial Diameter	2.846	in	**Strain Rate**	1.0	%/min
Dry Density	92.2	lb/ft^3	**Peak Stress**	1.35	ton/ft^2
Moisture Content	30.1	%	**Strain at Peak Stress**	14.56	%
Saturation	98.3	%	**Failure Type**	Bulging	

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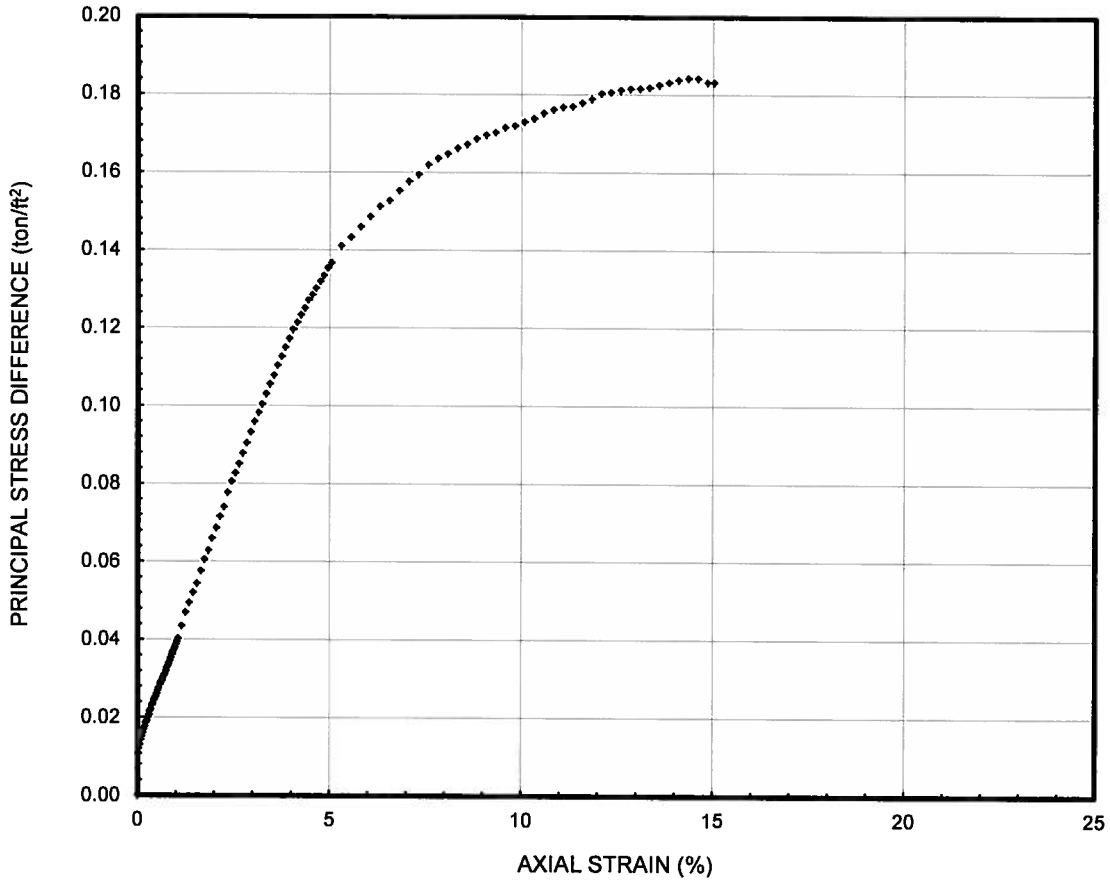
FILE NO 13-80-3705	APPROVED BY:	FIGURE.

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-09
Depth	0-2 ft
Description	Gray clay w/ organics



Initial Height	5.733	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	2.798	in	**Strain Rate**	1.0	%/min
Dry Density	38.0	lb/ft^3	**Peak Stress**	0.19	ton/ft^2
Moisture Content	127.4	%	**Strain at Peak Stress**	14.34	%
Saturation	100.3	%	**Failure Type**	Bulging	

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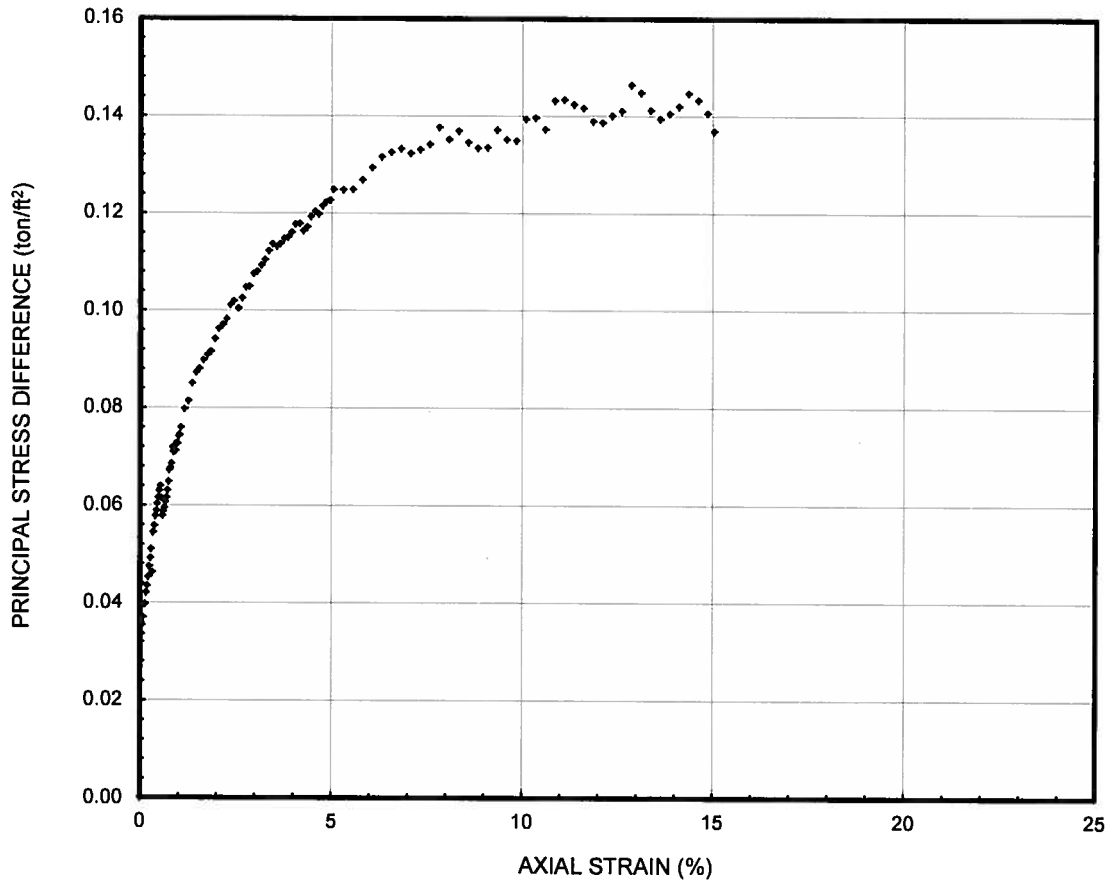
FILE NO: 13-80-3705	APPROVED BY:	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-09
Depth	4-6 ft
Description	Gray clay w/ silt pockets, organics and roots



Initial Height	2.781	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.400	in	**Strain Rate**	1.0	%/min
Dry Density	61.6	lb/ft^3	**Peak Stress**	0.15	ton/ft^2
Moisture Content	66.1	%	**Strain at Peak Stress**	12.85	%
Saturation	102.7	%	**Failure Type**	Bulging	

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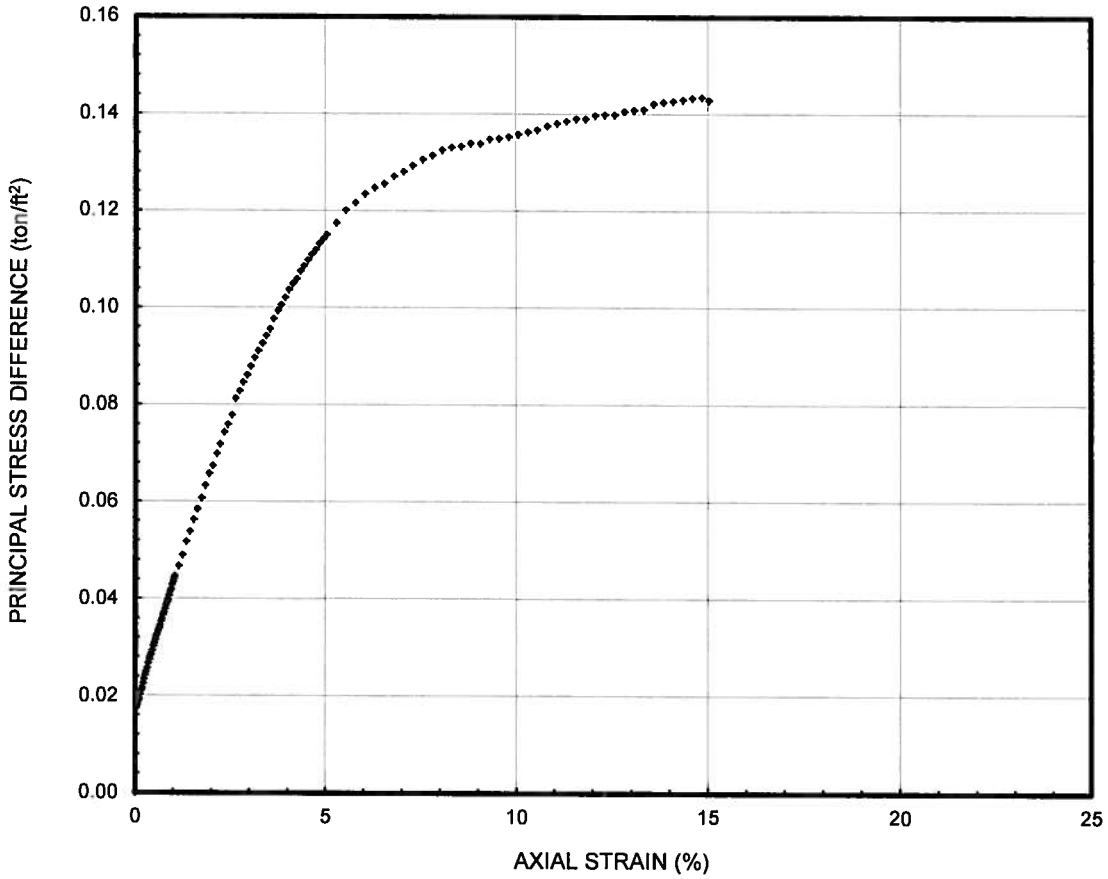
FILE NO. **13-80-3705**	APPROVED BY:	FIGURE

Unconfined Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-09
Depth	8-10 ft
Description	Gray clay w/ organics @ top. Dark brown orgs @ bottom



Initial Height	5.726	in	**Strain Rate**	1.0	%/min
Initial Diameter	2.793	in	**Peak Stress**	0.15	ton/ft^2
Dry Density	30.8	lb/ft^3	**Strain at Peak Stress**	14.84	%
Moisture Content	165.0	%	**Failure Type**	Bulging	
Saturation	99.5	%			

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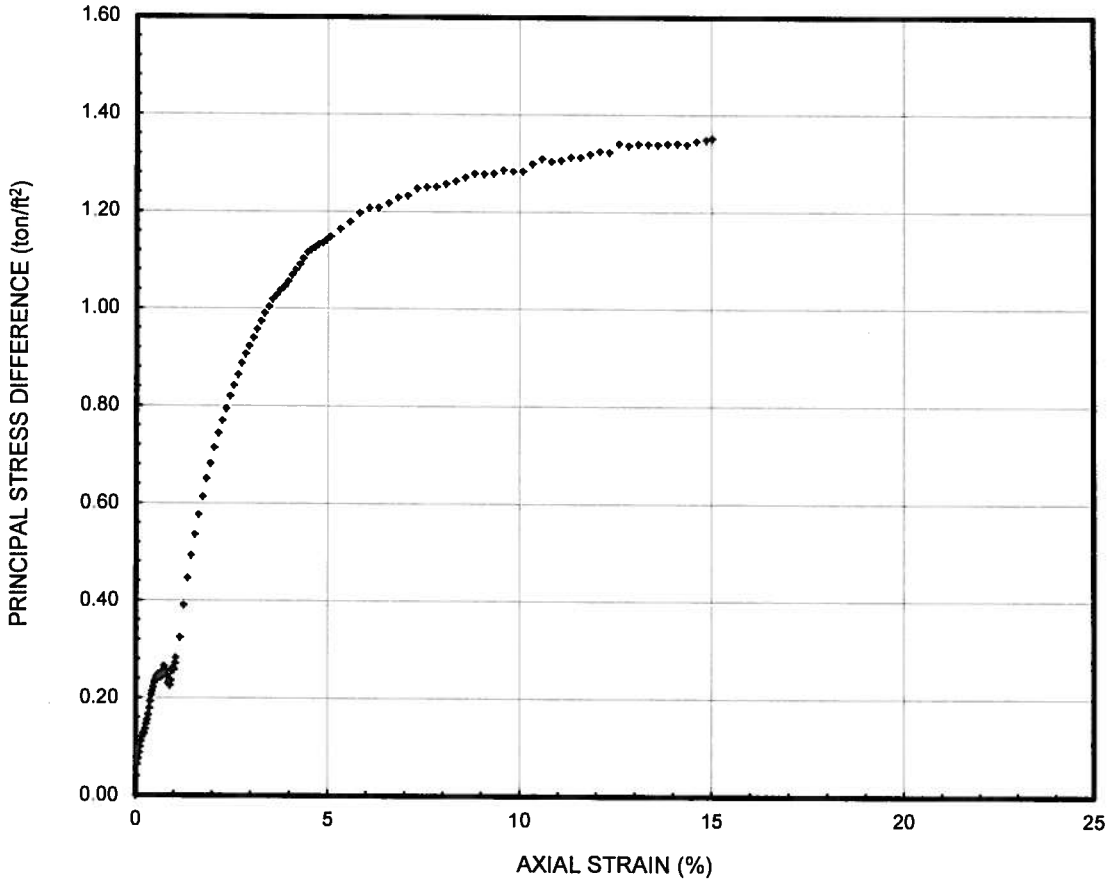
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-09
Depth	12-14 ft
Description	Bluish gray silty clay w/ trace organics and cemented clay



Initial Height	2.796	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	1.408	in	**Strain Rate**	1.0	%/min
Dry Density	100.1	lb/ft^3	**Peak Stress**	1.38	ton/ft^2
Moisture Content	25.0	%	**Strain at Peak Stress**	15.00	%
Saturation	98.7	%	**Failure Type**	Diagonal	

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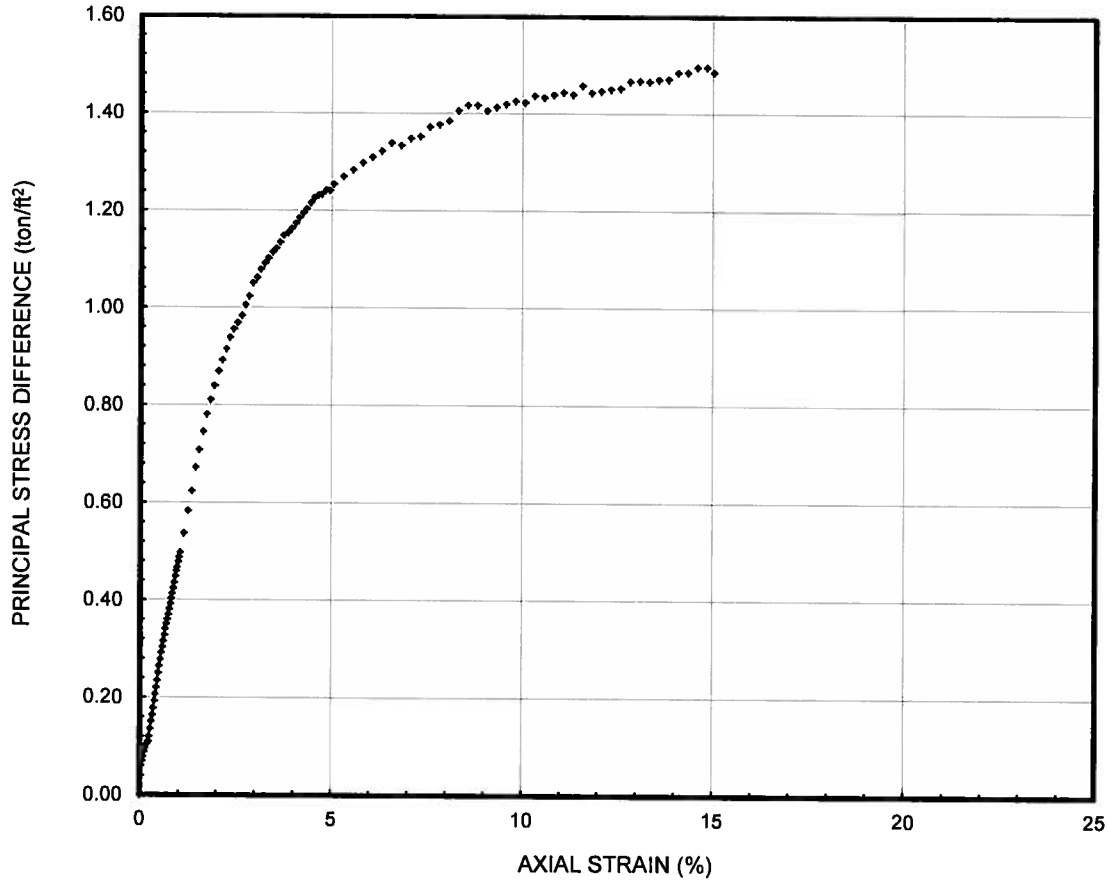
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-09
Depth	16-18 ft
Description	Gray and tan clay w/ silt, fenods, calnods and cemented clay



Initial Height	2.800	in	**Cell Pressure**	7.0	lb/in^2
Initial Diameter	1.403	in	**Strain Rate**	1.0	%/min
Dry Density	106.5	lb/ft^3	**Peak Stress**	1.53	ton/ft^2
Moisture Content	20.5	%	**Strain at Peak Stress**	14.59	%
Saturation	94.7	%	**Failure Type**	Combination	

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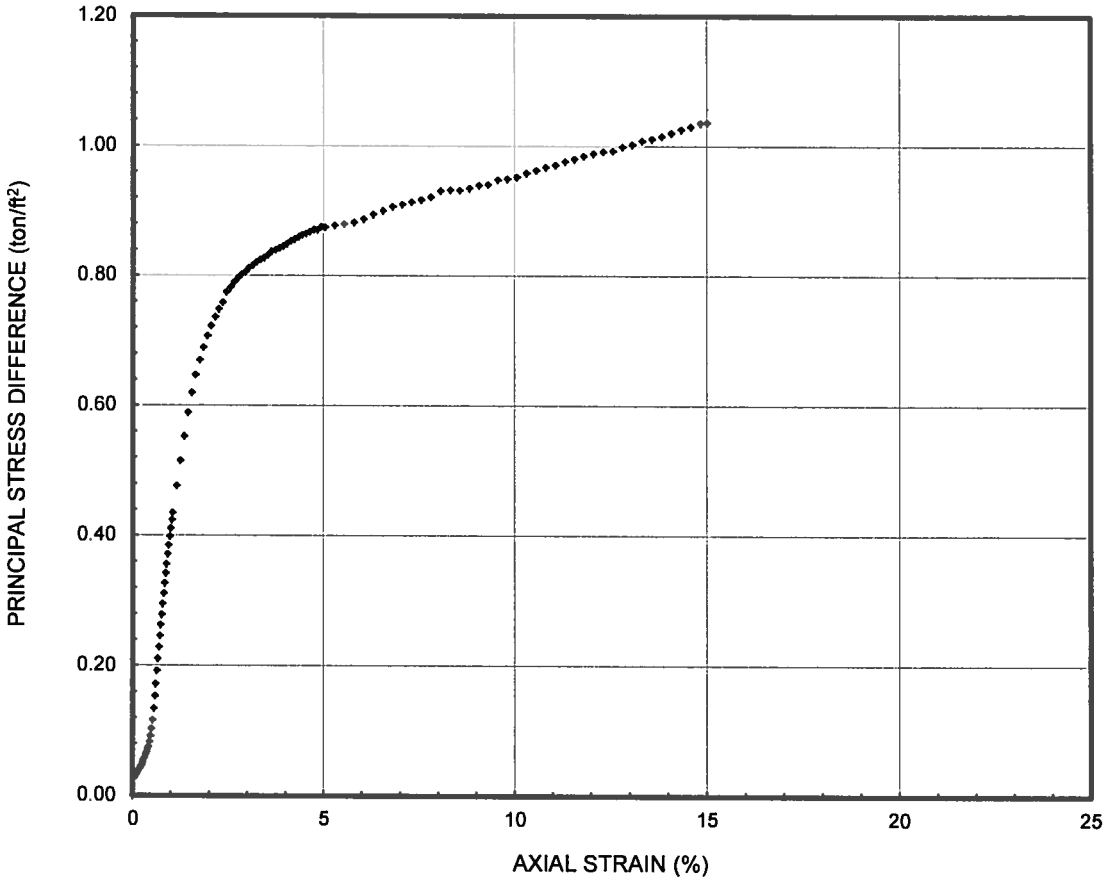
FILE NO: **13-80-3705**	APPROVED BY:	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-09
Depth	23-25 ft
Description	Tan and gray clay w/ silt, fenods and calnods



Initial Height	5.739	in	**Cell Pressure**	10.0	lb/in^2
Initial Diameter	2.875	in	**Strain Rate**	1.0	%/min
Dry Density	98.3	lb/ft^3	**Peak Stress**	1.06	ton/ft^2
Moisture Content	27.0	%	**Strain at Peak Stress**	15.00	%
Saturation	102.0	%	**Failure Type**	Combination	

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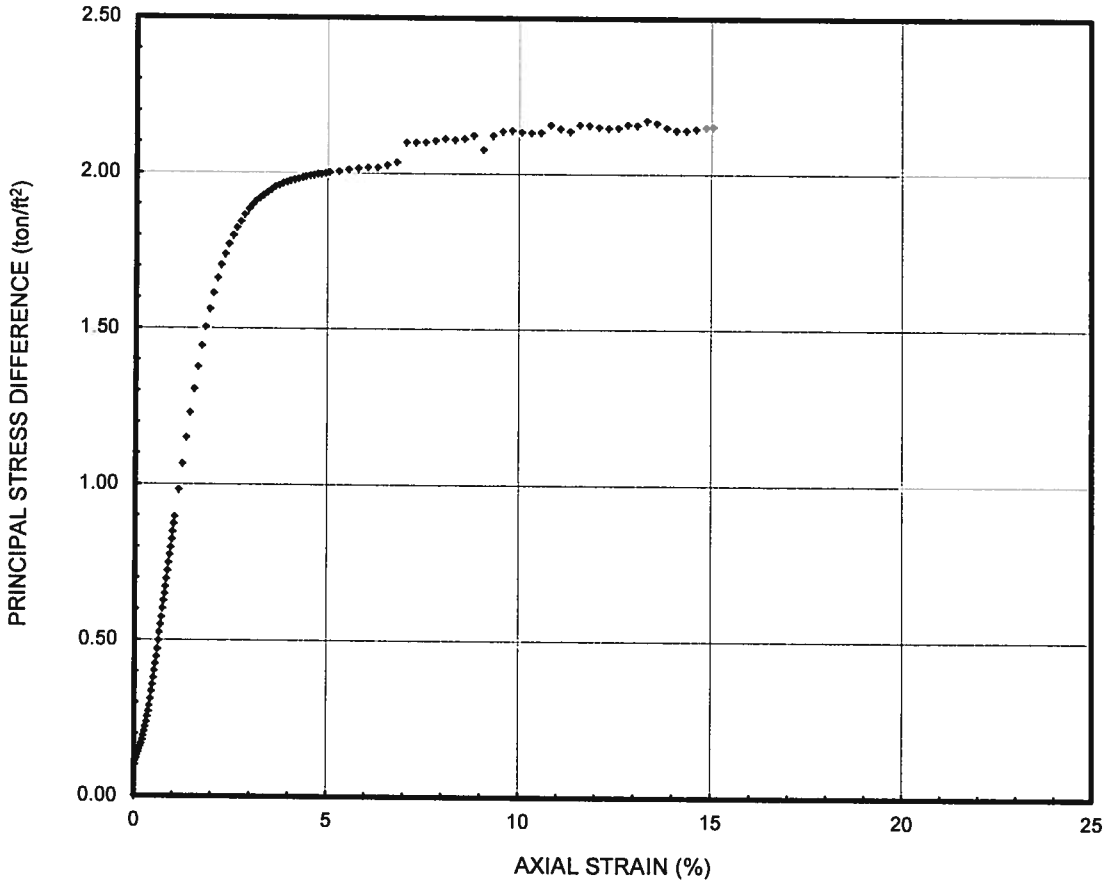
FILE NO: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-09
Depth	33-35 ft
Description	Tan and gray silty sandy clay



Initial Height	2.801	in	**Cell Pressure**	14.0	lb/in^2
Initial Diameter	1.406	in	**Strain Rate**	1.0	%/min
Dry Density	102.5	lb/ft^3	**Peak Stress**	2.22	ton/ft^2
Moisture Content	21.9	%	**Strain at Peak Stress**	13.34	%
Saturation	91.6	%	**Failure Type**	Combination	

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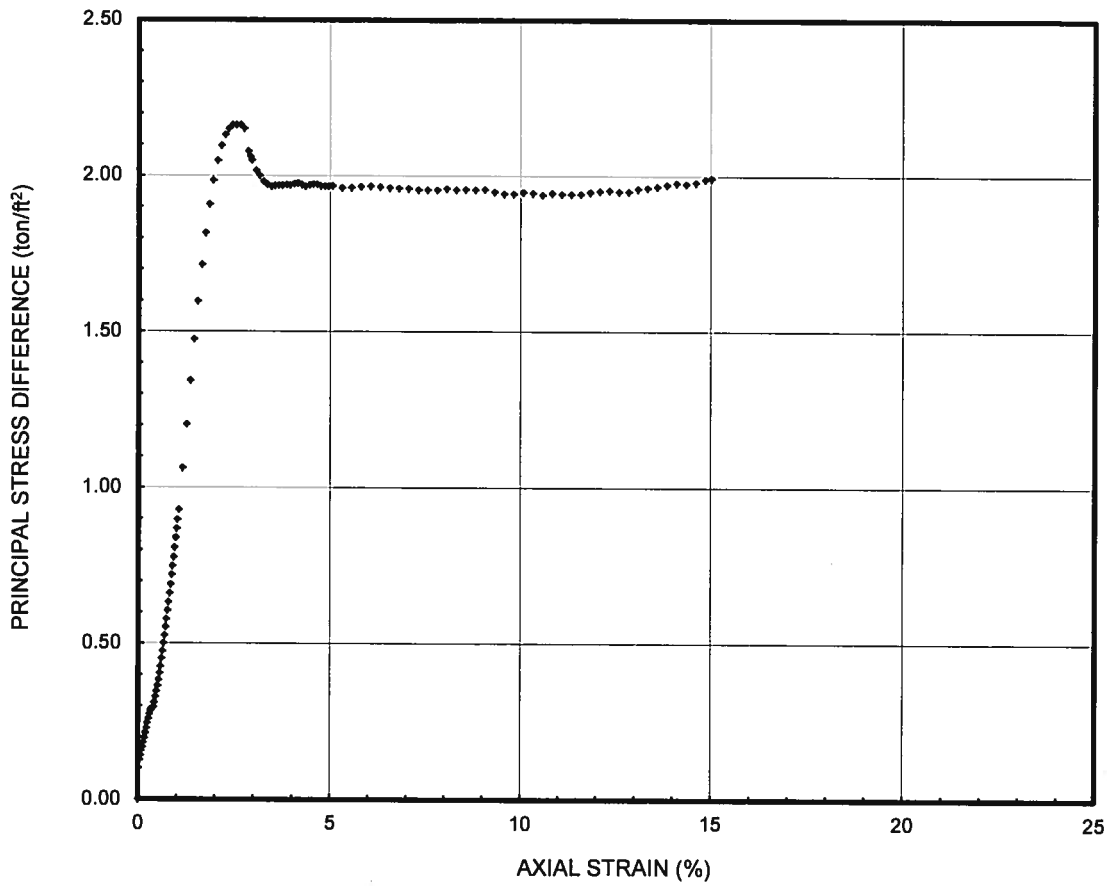
FILE NO: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-09
Depth	38-40 ft
Description	Tan and gray silty clay w/ fenods and calnods



Initial Height	2.812	in	**Cell Pressure**	16.0	lb/in^2
Initial Diameter	1.405	in	**Strain Rate**	1.0	%/min
Dry Density	94.5	lb/ft^3	**Peak Stress**	2.22	ton/ft^2
Moisture Content	27.3	%	**Strain at Peak Stress**	2.65	%
Saturation	94.0	%	**Failure Type**	Diagonal	

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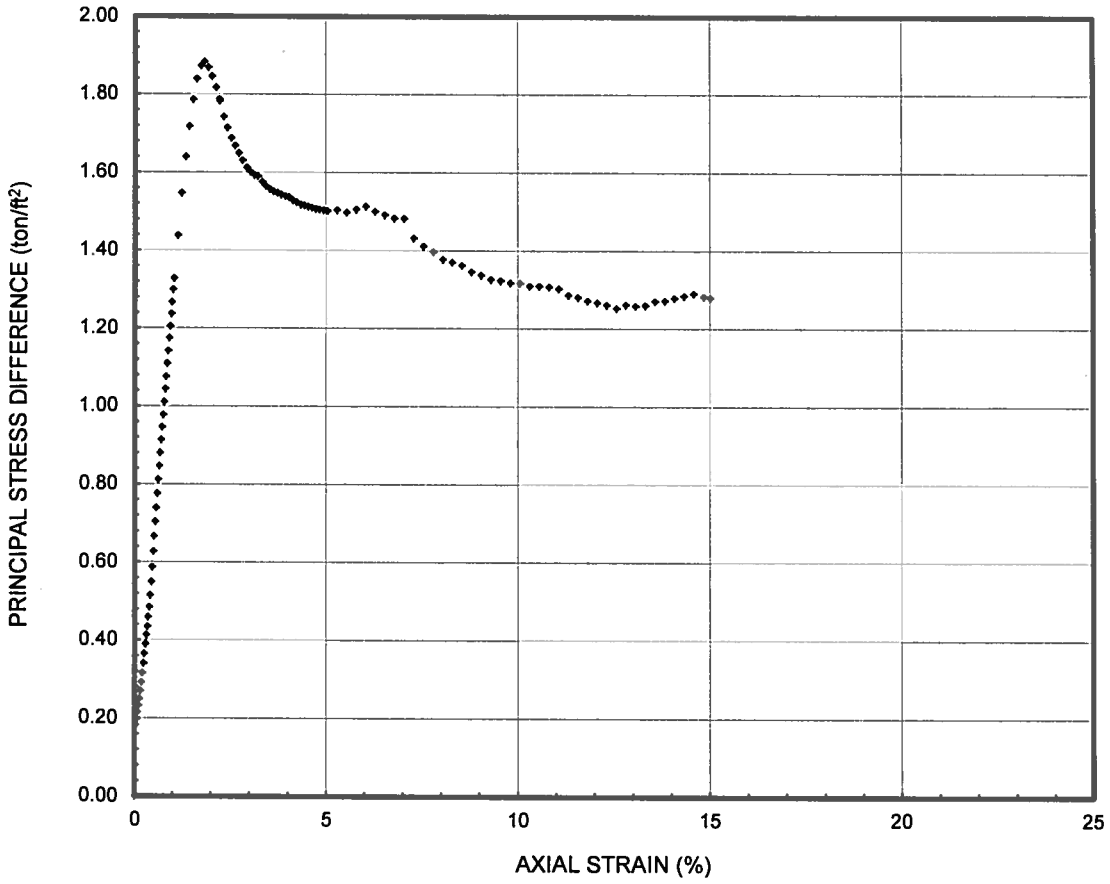
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-09
Depth	48-50 ft
Description	Gray clay w/ sand pockets and fenods



Initial Height	2.786	in	**Cell Pressure**	20.0	lb/in^2
Initial Diameter	1.388	in	**Strain Rate**	1.0	%/min
Dry Density	83.9	lb/ft^3	**Peak Stress**	1.93	ton/ft^2
Moisture Content	38.3	%	**Strain at Peak Stress**	1.84	%
Saturation	102.7	%	**Failure Type**	Diagonal	

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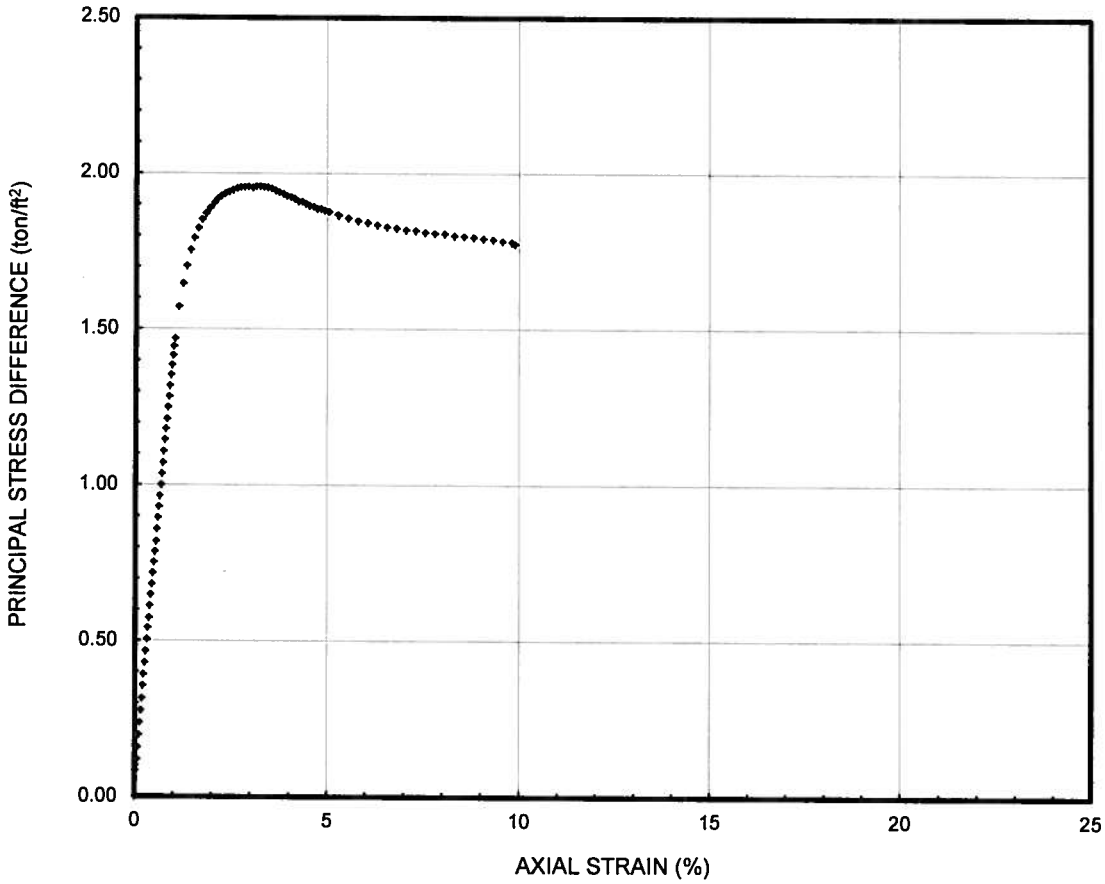
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-09
Depth	58-60 ft
Description	Gray clay w/ organics



Initial Height	5.750	in	**Cell Pressure**	24.0	lb/in^2
Initial Diameter	2.852	in	**Strain Rate**	1.0	%/min
Dry Density	99.0	lb/ft^3	**Peak Stress**	2.00	ton/ft^2
Moisture Content	24.5	%	**Strain at Peak Stress**	3.14	%
Saturation	94.3	%	**Failure Type**	Bulging	

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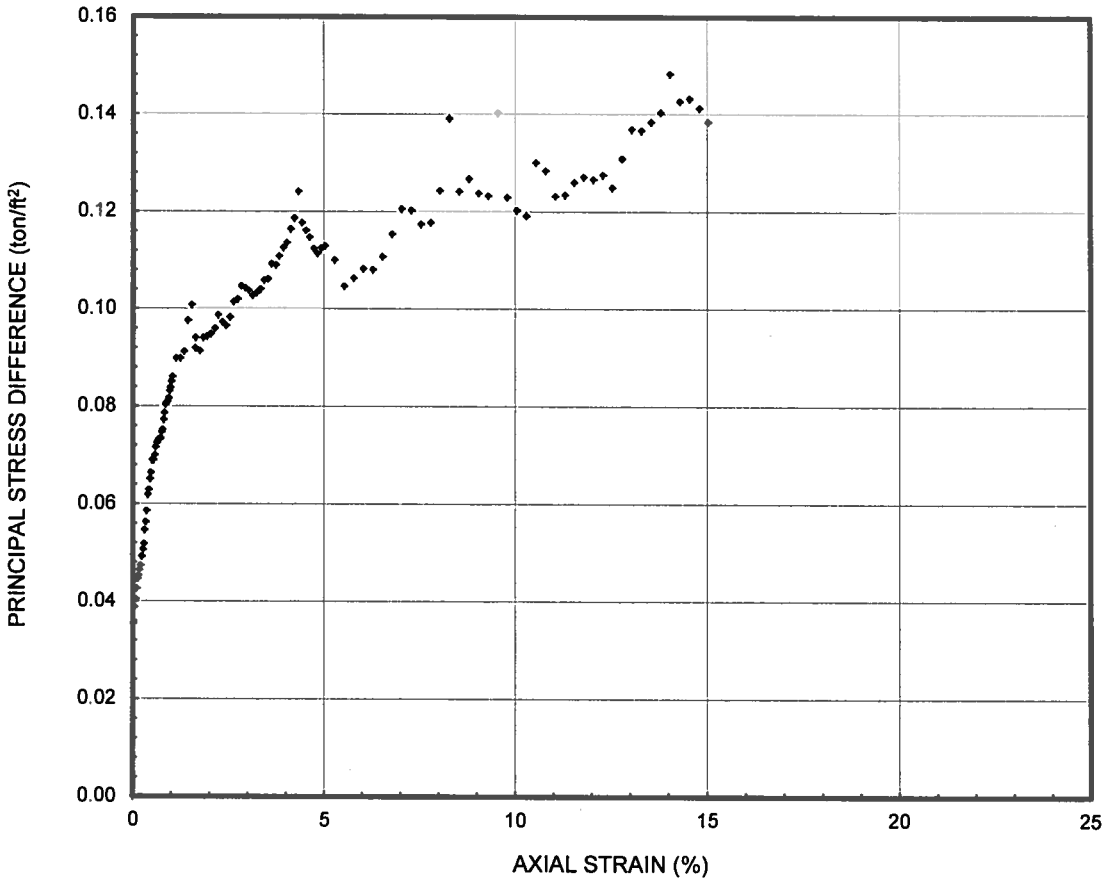
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-10
Depth	0-2 ft
Description	Gray clay w/ organics



Initial Height	2.799	in	**Cell Pressure**	1.0	lb/in^2
Initial Diameter	1.393	in	**Strain Rate**	1.0	%/min
Dry Density	50.5	lb/ft^3	**Peak Stress**	0.15	ton/ft^2
Moisture Content	86.6	%	**Strain at Peak Stress**	14.05	%
Saturation	100.0	%	**Failure Type**	Bulging	

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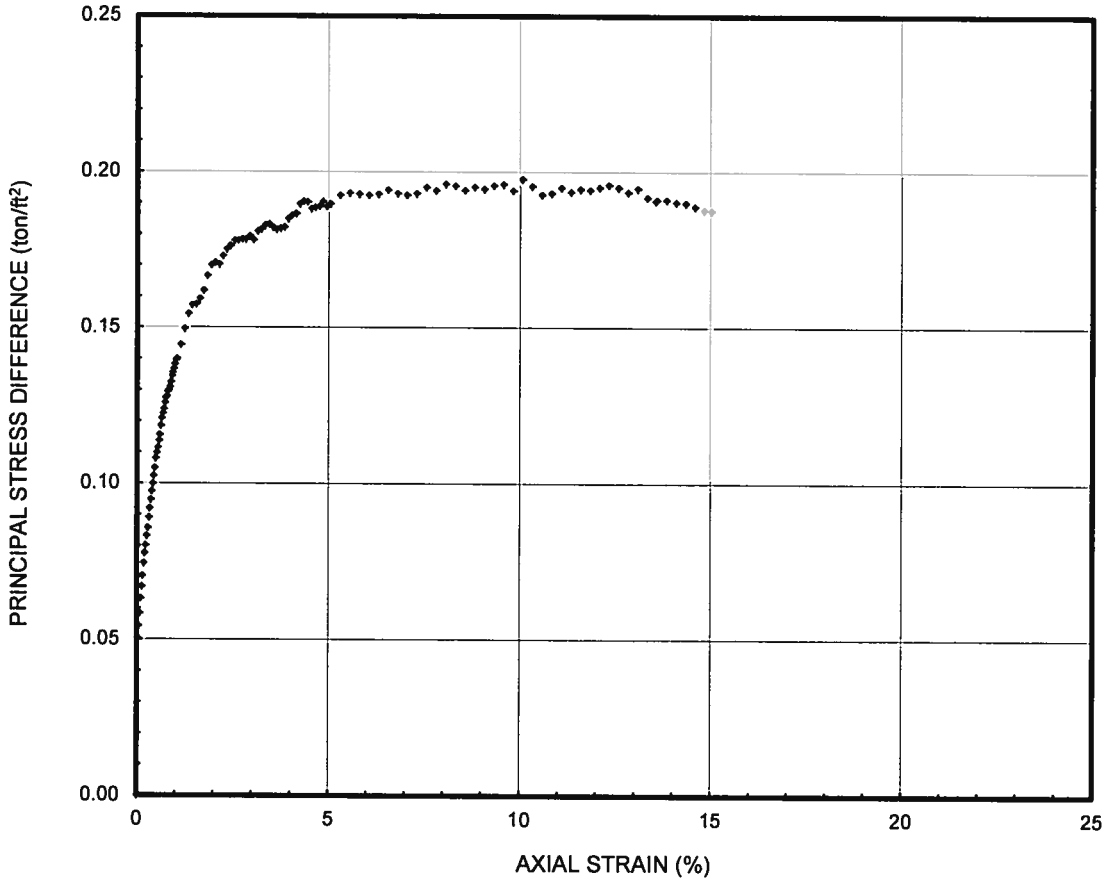
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-10
Depth	4-6 ft
Description	Gray clay w/ trace silt and organics



Initial Height	2.793	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.406	in	**Strain Rate**	1.0	%/min
Dry Density	57.9	lb/ft^3	**Peak Stress**	0.20	ton/ft^2
Moisture Content	73.9	%	**Strain at Peak Stress**	10.07	%
Saturation	104.2	%	**Failure Type**	Bulging	

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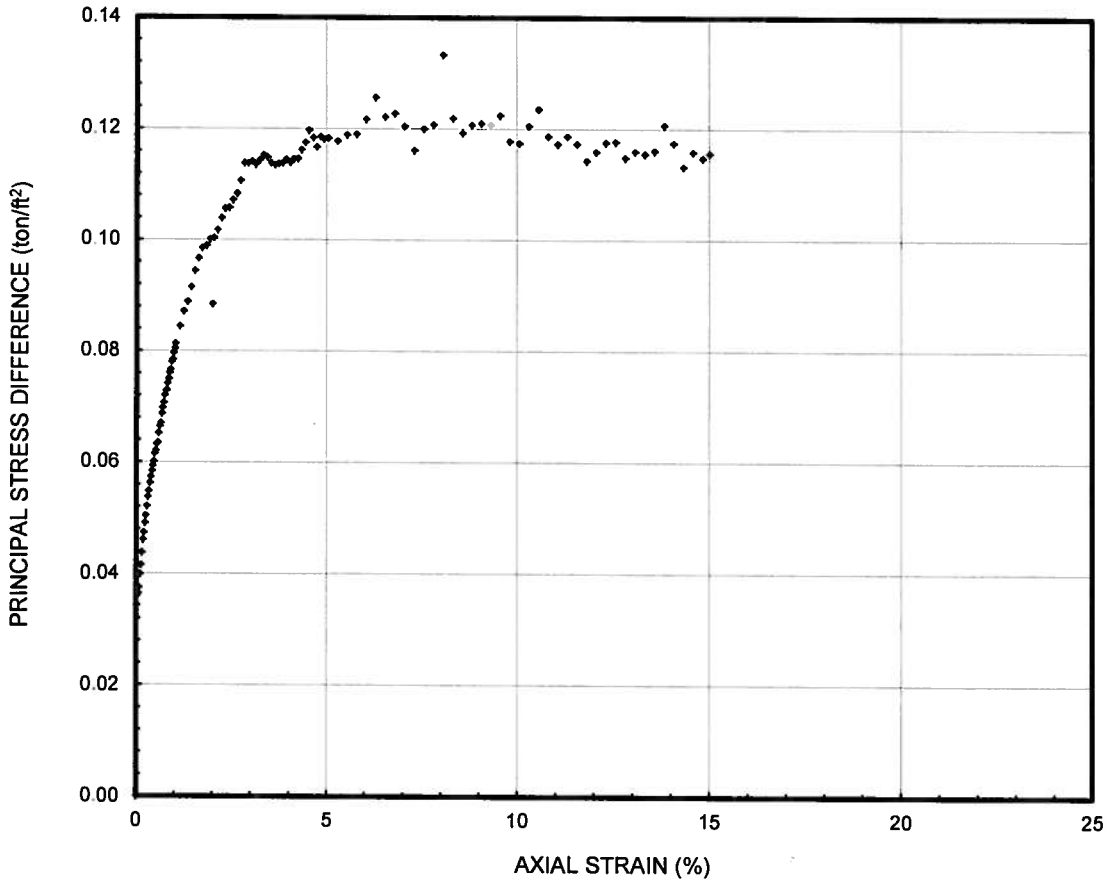
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-10
Depth	8-10 ft
Description	Gray clay w/ sand pockets and shell



Initial Height	2.788	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	1.391	in	**Strain Rate**	1.0	%/min
Dry Density	52.5	lb/ft^3	**Peak Stress**	0.14	ton/ft^2
Moisture Content	85.9	%	**Strain at Peak Stress**	8.06	%
Saturation	104.9	%	**Failure Type**	Bulging	

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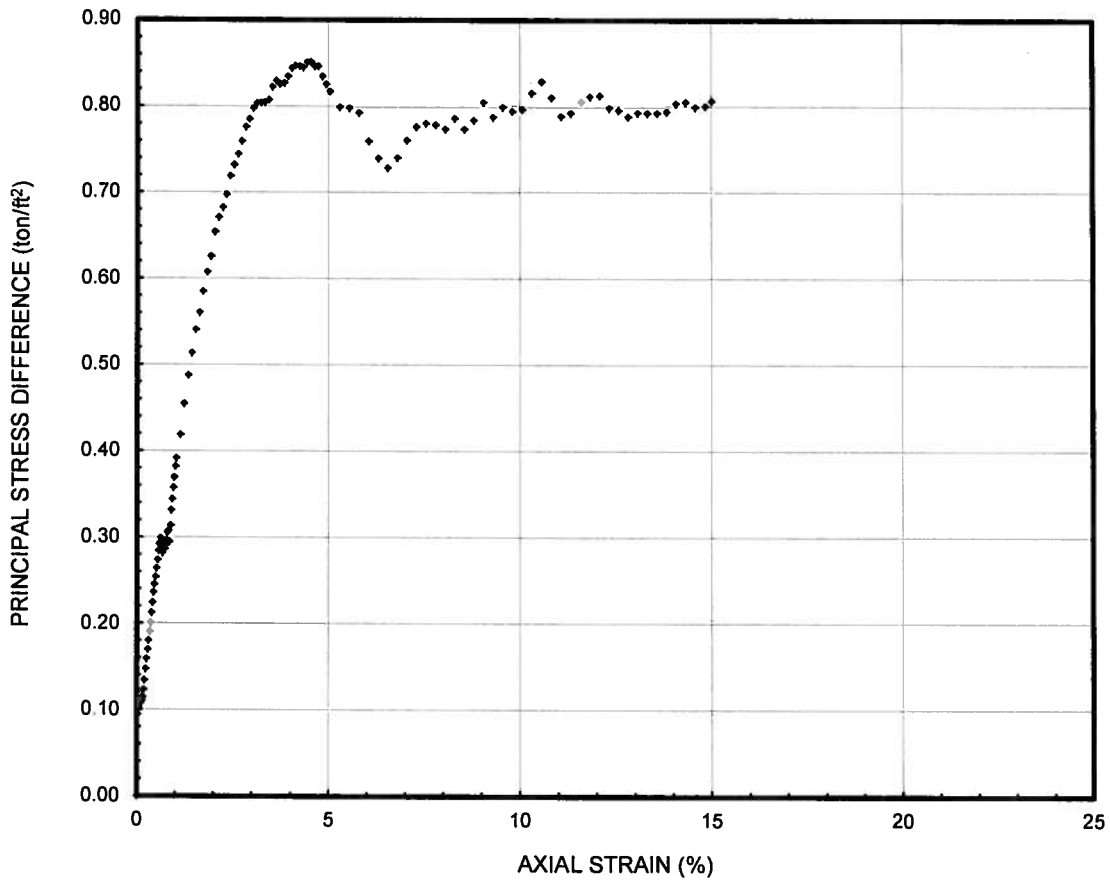
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-10
Depth	12-14 ft
Description	Gray clay w/ silt, trace organics and shell



Initial Height	2.797	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	1.386	in	**Strain Rate**	1.0	%/min
Dry Density	95.4	lb/ft^3	**Peak Stress**	0.87	ton/ft^2
Moisture Content	28.2	%	**Strain at Peak Stress**	4.54	%
Saturation	99.2	%	**Failure Type**	Diagonal	

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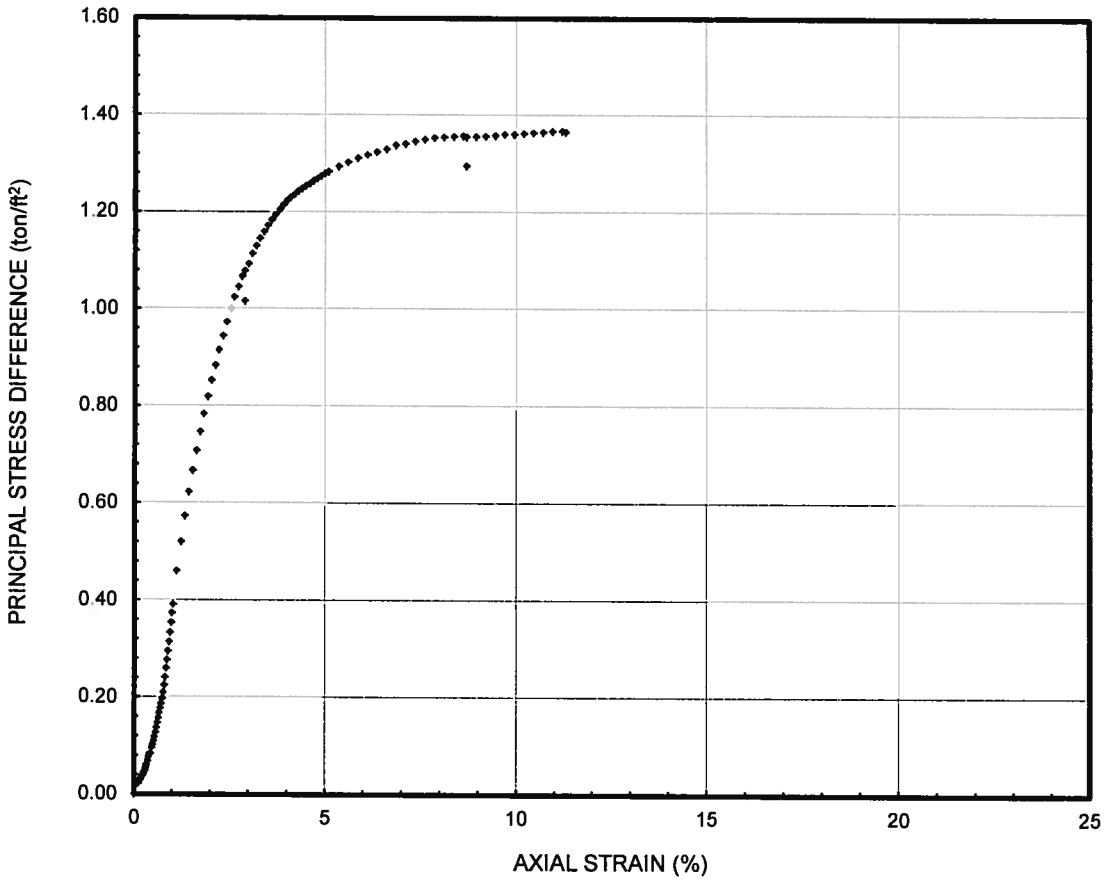
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-10
Depth	18-20 ft
Description	Bluish gray and tan clay w/ silt and fenods



Initial Height	5.758	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	2.846	in	**Strain Rate**	1.0	%/min
Dry Density	101.2	lb/ft^3	**Peak Stress**	1.40	ton/ft^2
Moisture Content	25.2	%	**Strain at Peak Stress**	11.20	%
Saturation	102.1	%	**Failure Type**	Diagonal	

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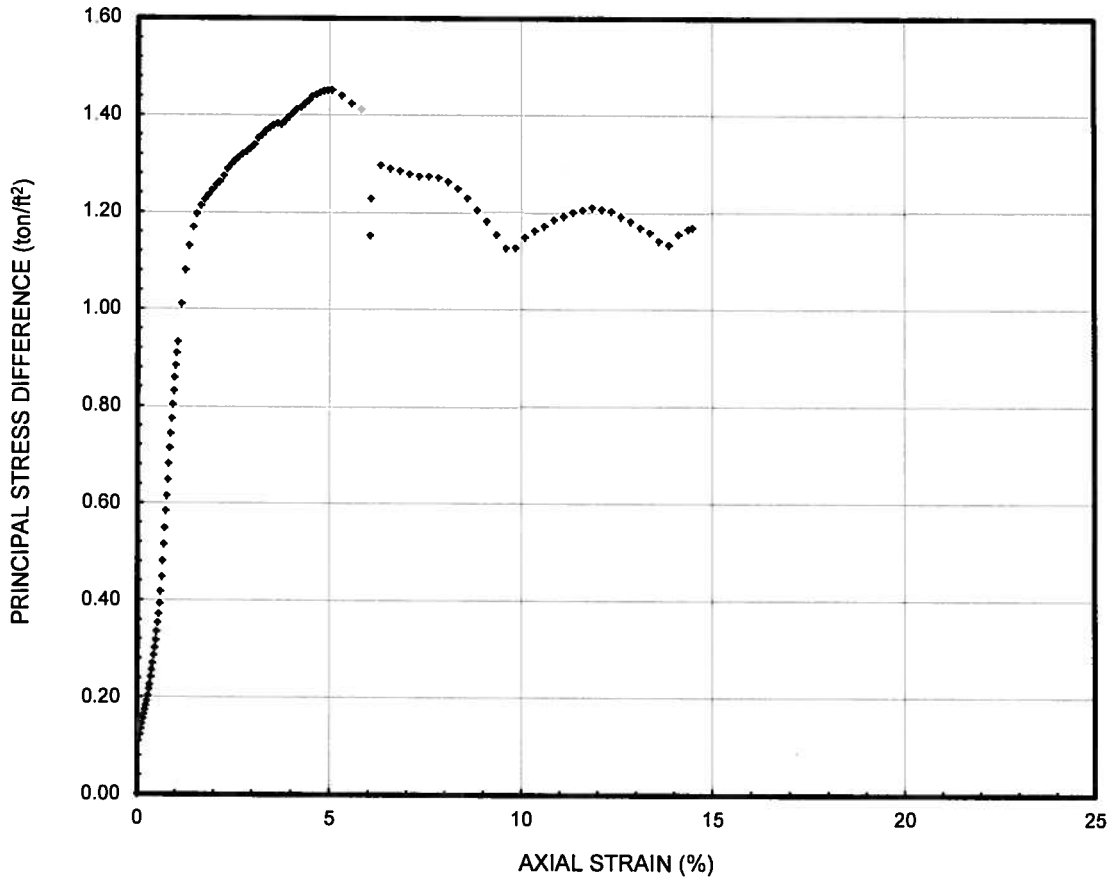
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-10
Depth	28-30 ft
Description	Tan and Gray jointed clay



Initial Height	2.798	in	**Cell Pressure**	12.0	lb/in^2
Initial Diameter	1.404	in	**Strain Rate**	1.0	%/min
Dry Density	79.5	lb/ft^3	**Peak Stress**	1.49	ton/ft^2
Moisture Content	43.4	%	**Strain at Peak Stress**	5.06	%
Saturation	104.6	%	**Failure Type**	Diagonal	

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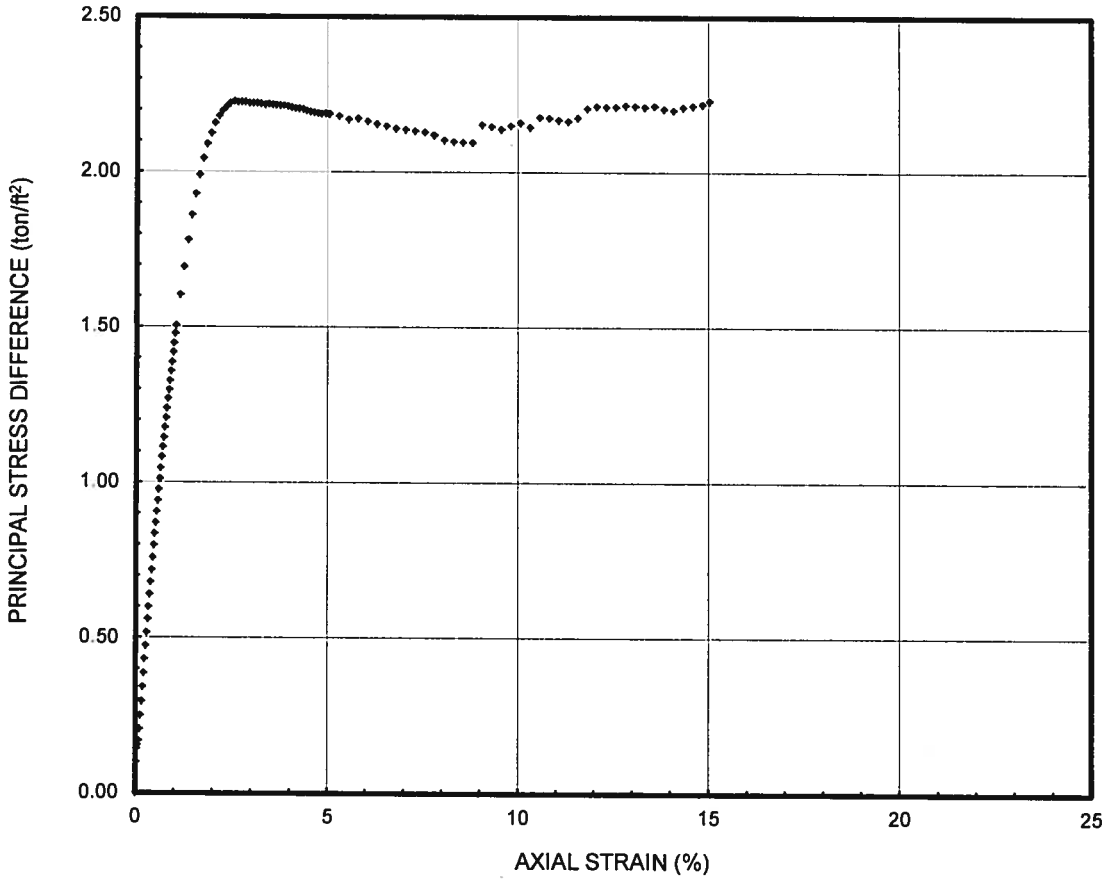
FILE NO: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-10
Depth	33-35 ft
Description	Tan and gray clay w/ silt, sand pockets, fenods and calnods



Initial Height	2.794	in	**Cell Pressure**	14.0	lb/in^2
Initial Diameter	1.421	in	**Strain Rate**	1.0	%/min
Dry Density	101.7	lb/ft^3	**Peak Stress**	2.28	ton/ft^2
Moisture Content	23.0	%	**Strain at Peak Stress**	15.01	%
Saturation	94.6	%	**Failure Type**	Diagonal	

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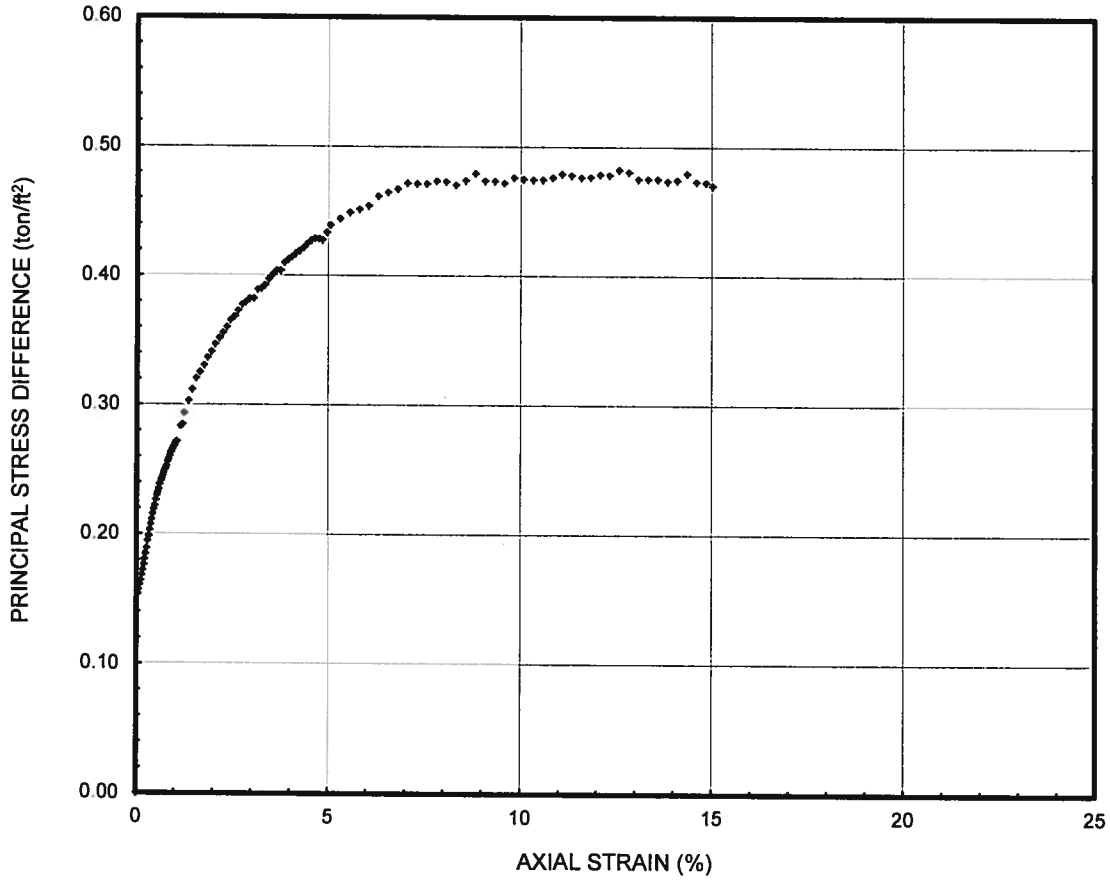
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-10
Depth	58-60 ft
Description	Gray and dark gray clay w/ organics and shell



Initial Height	2.792	in	**Cell Pressure**	24.0	lb/in^2
Initial Diameter	1.399	in	**Strain Rate**	1.0	%/min
Dry Density	74.6	lb/ft^3	**Peak Stress**	0.49	ton/ft^2
Moisture Content	48.3	%	**Strain at Peak Stress**	12.58	%
Saturation	103.4	%	**Failure Type**	Bulging	

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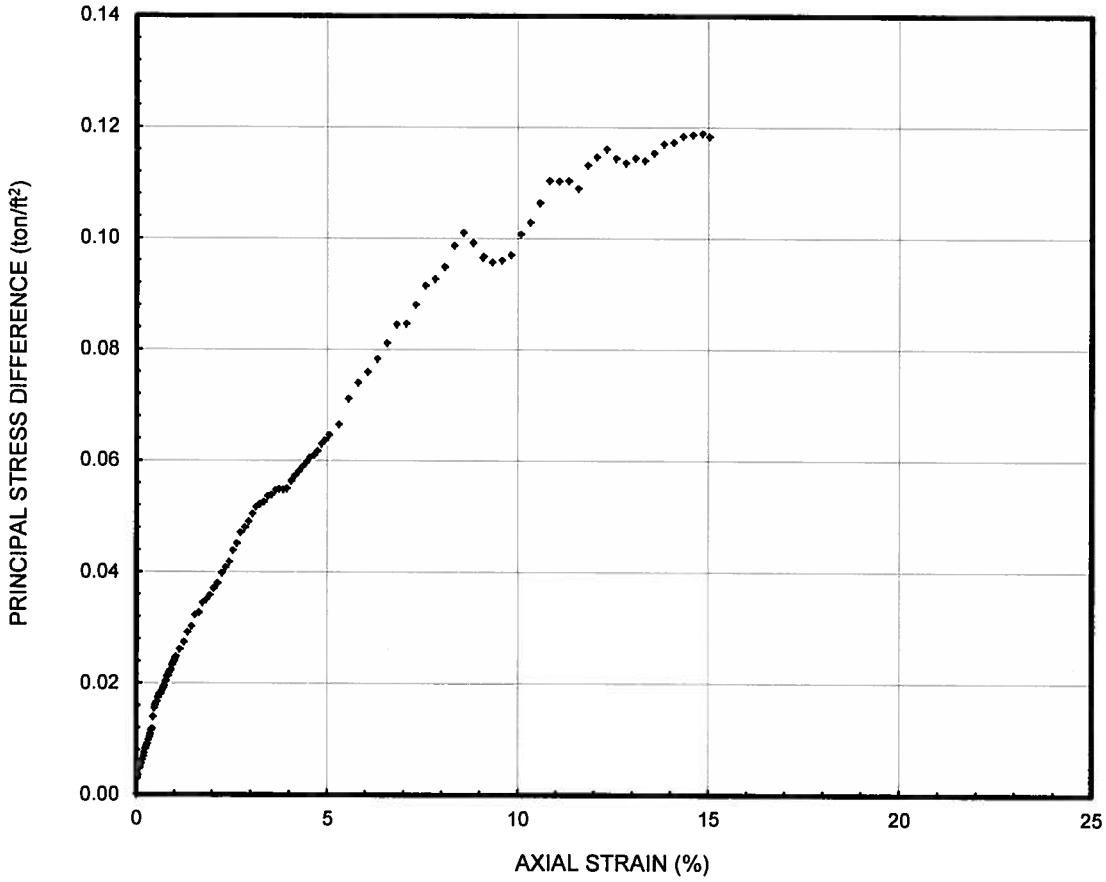
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-11
Depth	0-2 ft
Description	Dark brown organics w/ clay and roots



Initial Height	5.665	in	**Cell Pressure**	1.0	lb/in^2
Initial Diameter	2.749	in	**Strain Rate**	1.0	%/min
Dry Density	12.9	lb/ft^3	**Peak Stress**	0.12	ton/ft^2
Moisture Content	423.6	%	**Strain at Peak Stress**	14.84	%
Saturation	94.7	%	**Failure Type**	Bulging	

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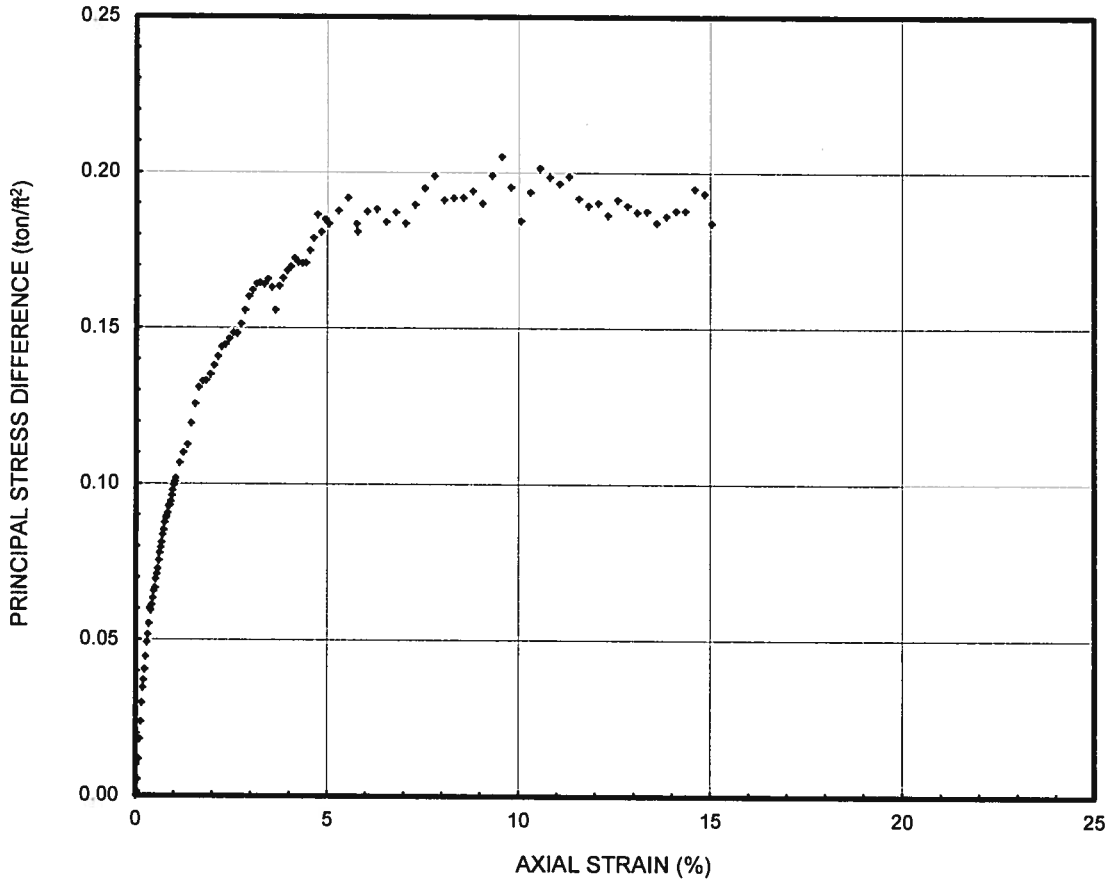
FILE NO. **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-11
Depth	4-6 ft
Description	Gray clay w/ silt and organics



Initial Height	2.783	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.405	in	**Strain Rate**	1.0	%/min
Dry Density	52.1	lb/ft^3	**Peak Stress**	0.21	ton/ft^2
Moisture Content	84.5	%	**Strain at Peak Stress**	9.56	%
Saturation	102.1	%	**Failure Type**	Combination	

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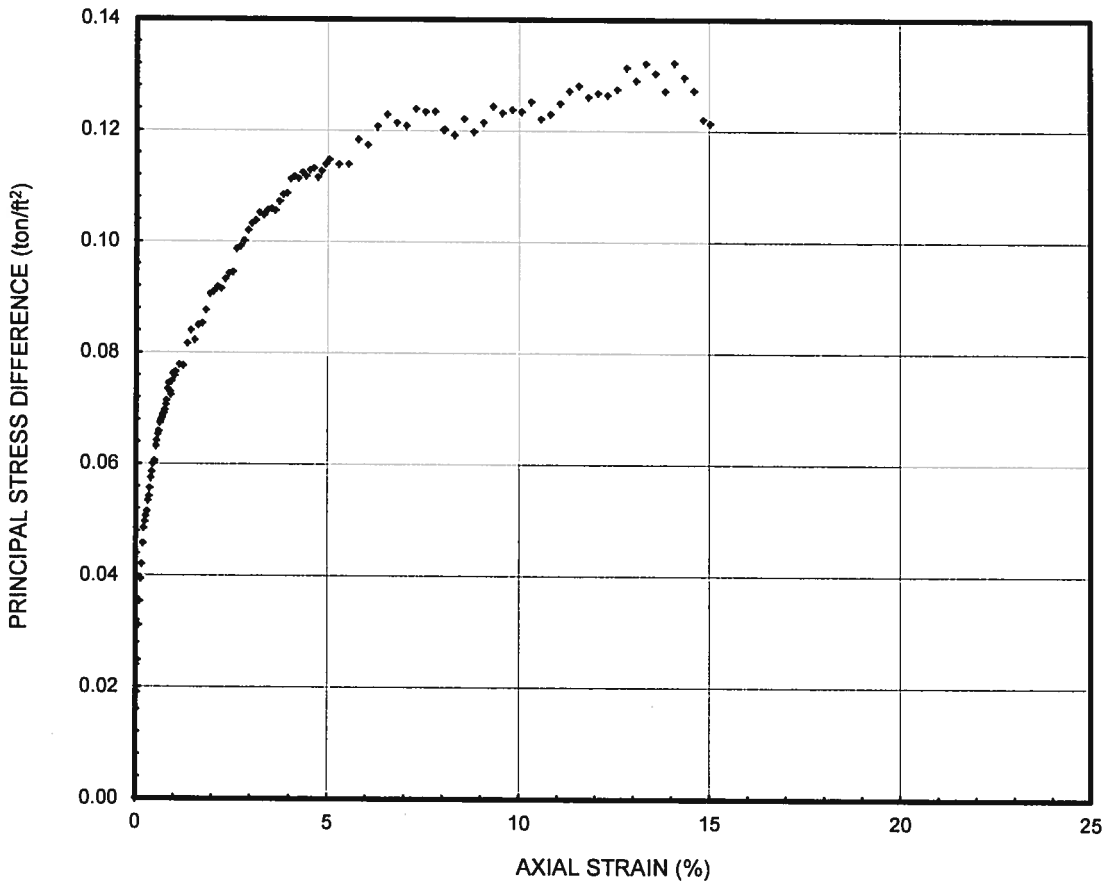
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-11
Depth	8-10 ft
Description	Gray clay w/organics



Initial Height	2.793	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	1.395	in	**Strain Rate**	1.0	%/min
Dry Density	51.2	lb/ft^3	**Peak Stress**	0.14	ton/ft^2
Moisture Content	87.0	%	**Strain at Peak Stress**	14.08	%
Saturation	102.6	%	**Failure Type**	Bulging	

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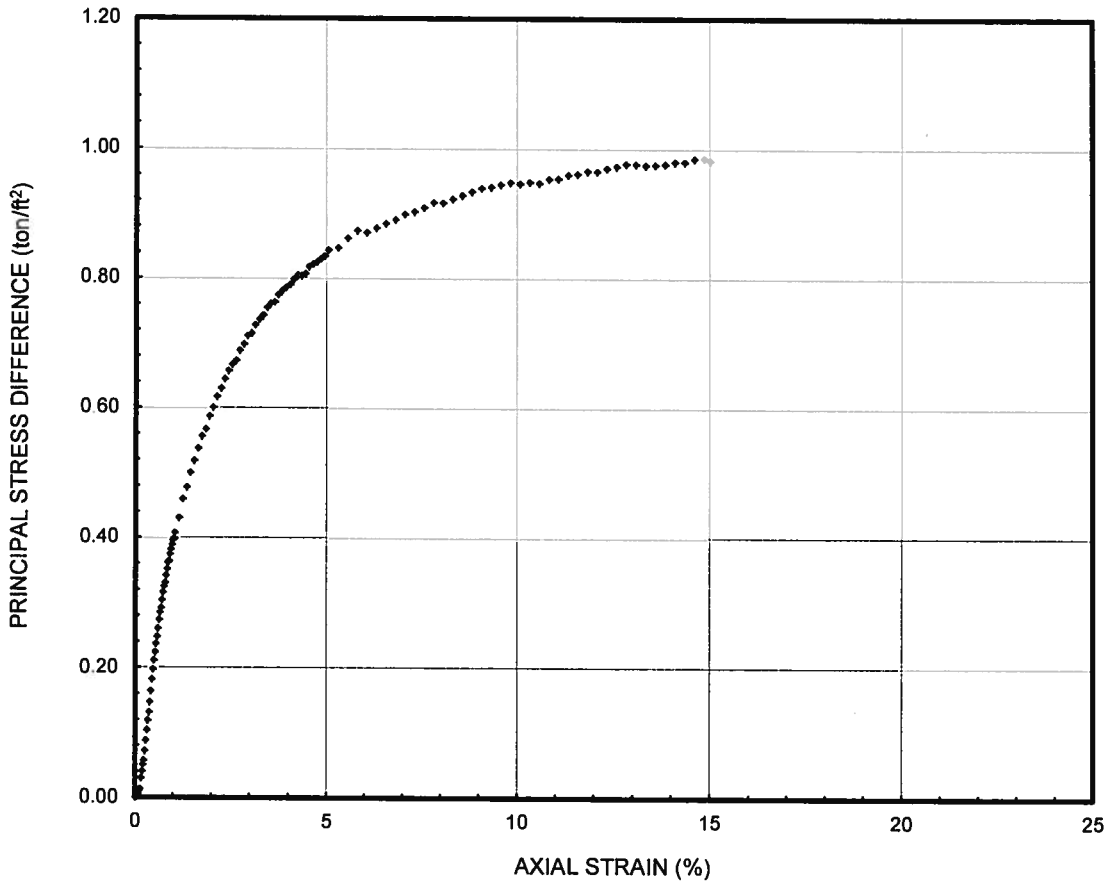
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-11
Depth	14-16 ft
Description	Gray and tan clay w/fenods and trace organics



Initial Height	5.745	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	2.838	in	**Strain Rate**	1.0	%/min
Dry Density	96.3	lb/ft^3	**Peak Stress**	1.01	ton/ft^2
Moisture Content	27.3	%	**Strain at Peak Stress**	14.85	%
Saturation	98.3	%	**Failure Type**	Bulging	

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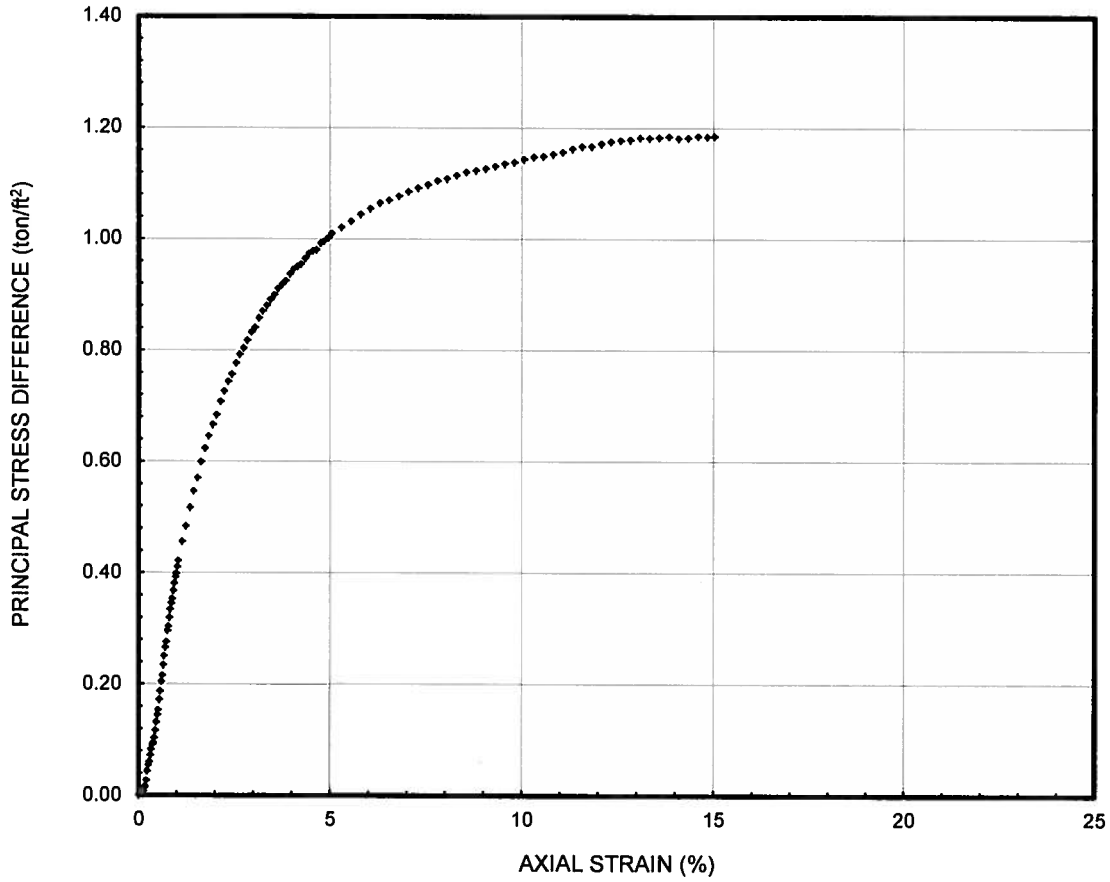
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-11
Depth	16-18 ft
Description	Gray and tan clay w/fenods



Initial Height	5.752	in	**Cell Pressure**	7.0	lb/in^2
Initial Diameter	2.854	in	**Strain Rate**	1.0	%/min
Dry Density	96.6	lb/ft^3	**Peak Stress**	1.21	ton/ft^2
Moisture Content	29.3	%	**Strain at Peak Stress**	15.01	%
Saturation	105.9	%	**Failure Type**	Combination	

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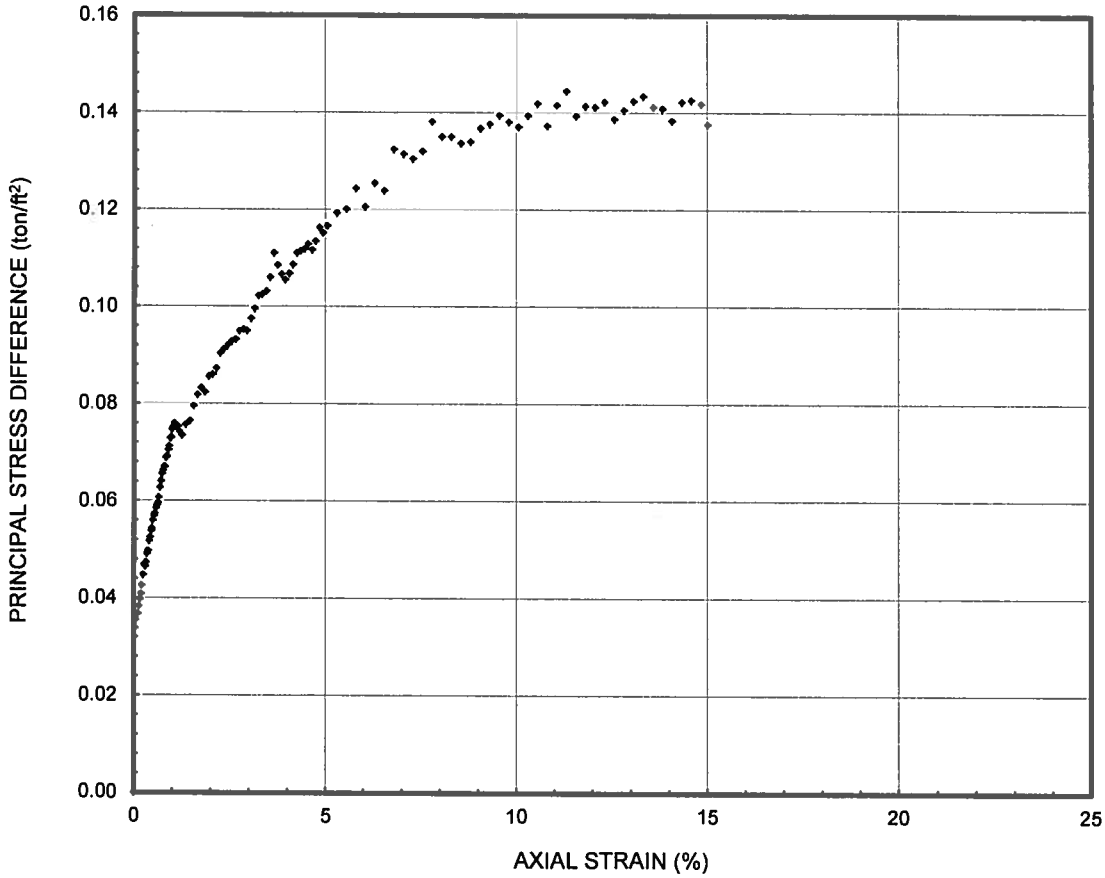
FILE NO. **13-80-3705**	APPROVED BY:	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-12
Depth	2-4 ft
Description	Dark gray clay w/ organics



Initial Height	2.783	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.400	in	**Strain Rate**	1.0	%/min
Dry Density	39.2	lb/ft^3	**Peak Stress**	0.15	ton/ft^2
Moisture Content	125.8	%	**Strain at Peak Stress**	11.32	%
Saturation	103.0	%	**Failure Type**	Bulging	

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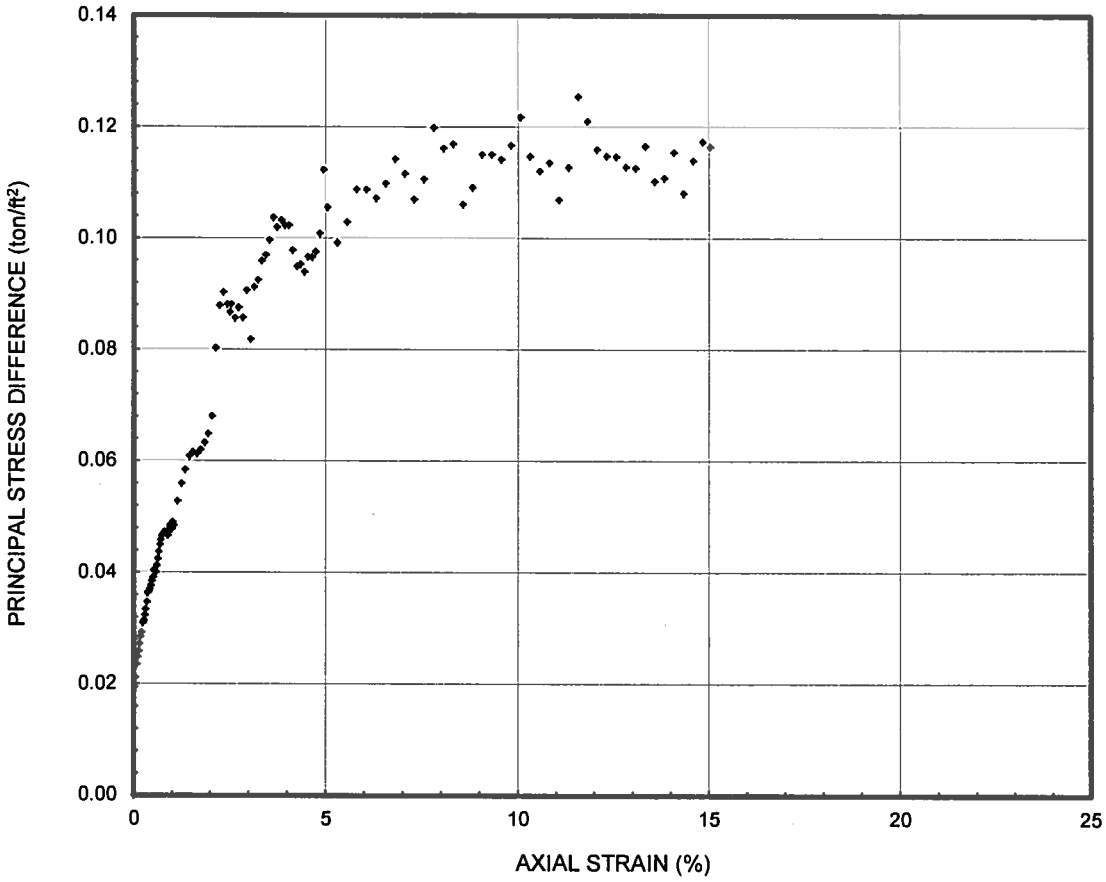
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-12
Depth	4-6 ft
Description	Gray and dark gray w/ organics and silt pockets



Initial Height	2.759	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.407	in	**Strain Rate**	1.0	%/min
Dry Density	59.7	lb/ft^3	**Peak Stress**	0.13	ton/ft^2
Moisture Content	68.8	%	**Strain at Peak Stress**	11.56	%
Saturation	101.8	%	**Failure Type**	Bulging	

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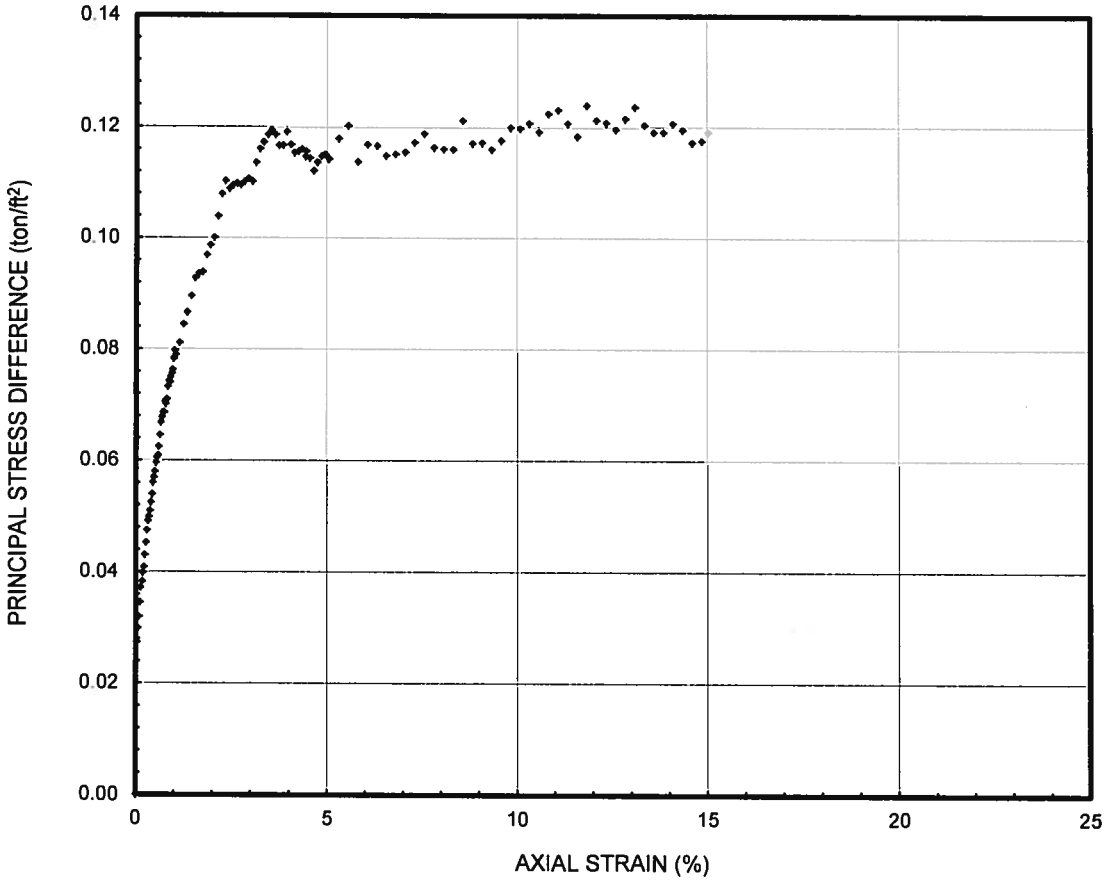
FILE NO: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-12
Depth	8-10 ft
Description	Gray clay w/shell



Initial Height	2.793	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	1.386	in	**Strain Rate**	1.0	%/min
Dry Density	48.7	lb/ft^3	**Peak Stress**	0.13	ton/ft^2
Moisture Content	96.9	%	**Strain at Peak Stress**	11.83	%
Saturation	106.4	%	**Failure Type**	Bulging	

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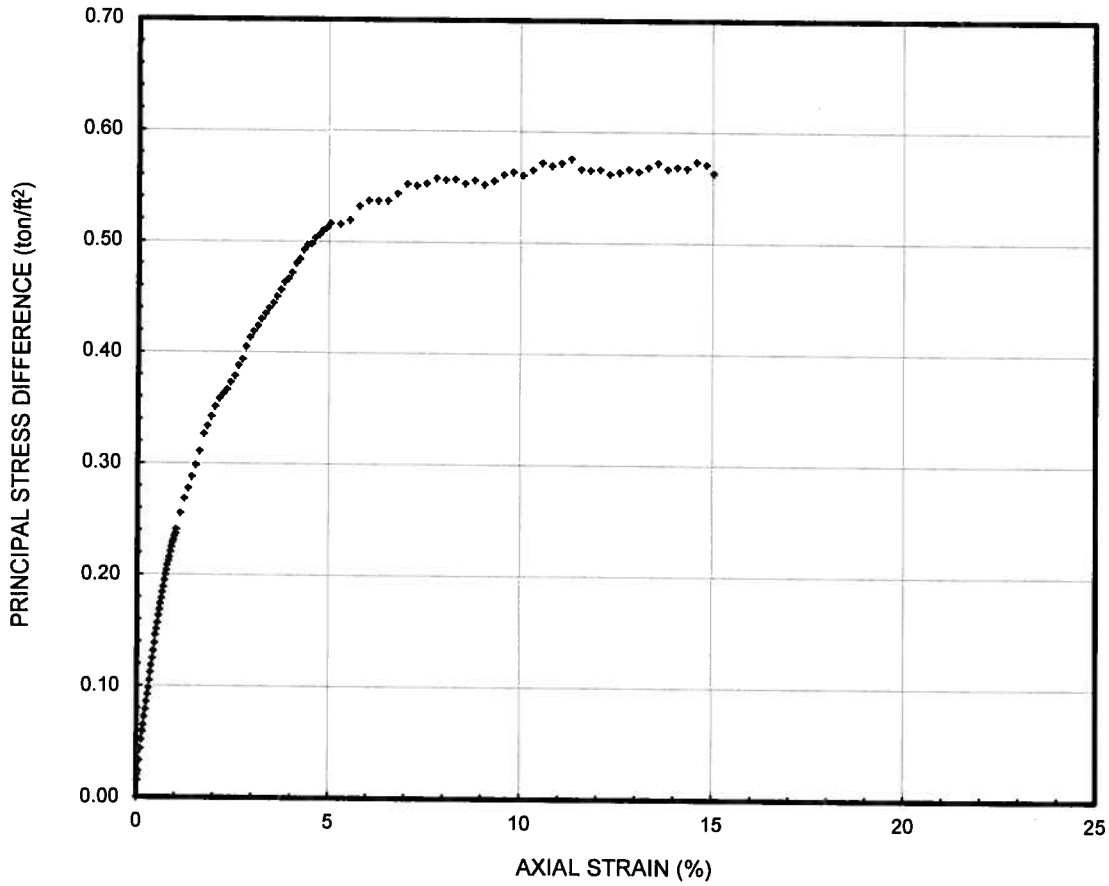
FILE NO: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-12
Depth	12-14 ft
Description	Bluish gray and tan clay w/ trace organics, silt pockets and fenods



Initial Height	2.789	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	1.405	in	**Strain Rate**	1.0	%/min
Dry Density	92.0	lb/ft^3	**Peak Stress**	0.59	ton/ft^2
Moisture Content	31.6	%	**Strain at Peak Stress**	11.31	%
Saturation	102.6	%	**Failure Type**	Combination	

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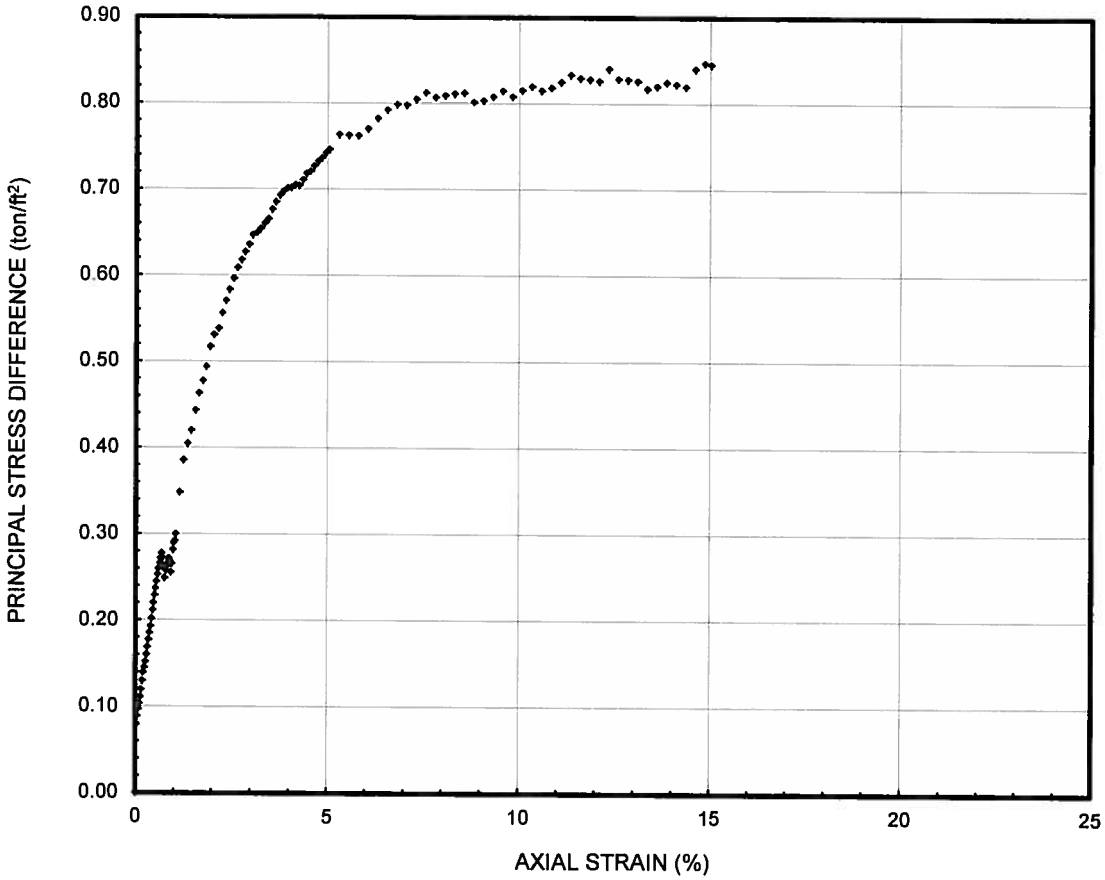
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-12
Depth	14-16 ft
Description	Bluish gray and tan clay w/ silt pockets and fenods



Initial Height	2.789	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	1.382	in	**Strain Rate**	1.0	%/min
Dry Density	100.7	lb/ft^3	**Peak Stress**	0.87	ton/ft^2
Moisture Content	26.4	%	**Strain at Peak Stress**	14.84	%
Saturation	106.0	%	**Failure Type**	Diagonal	

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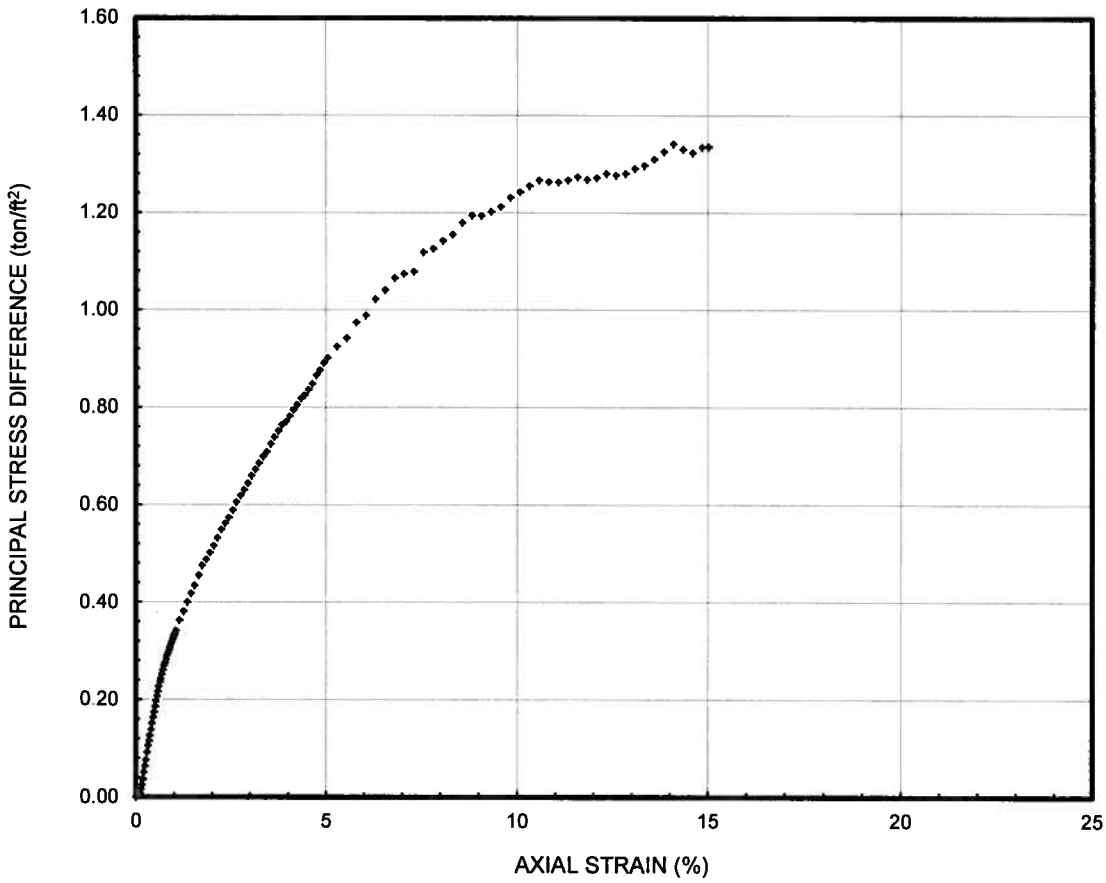
FILE NO: 13-80-3705	APPROVED BY	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-12
Depth	16-18 ft
Description	Gray and tan clay w/trace organics and silt



Initial Height	2.793	in	**Cell Pressure**	7.0	lb/in^2
Initial Diameter	1.417	in	**Strain Rate**	1.0	%/min
Dry Density	106.0	lb/ft^3	**Peak Stress**	1.37	ton/ft^2
Moisture Content	21.3	%	**Strain at Peak Stress**	14.09	%
Saturation	97.6	%	**Failure Type**	Combination	

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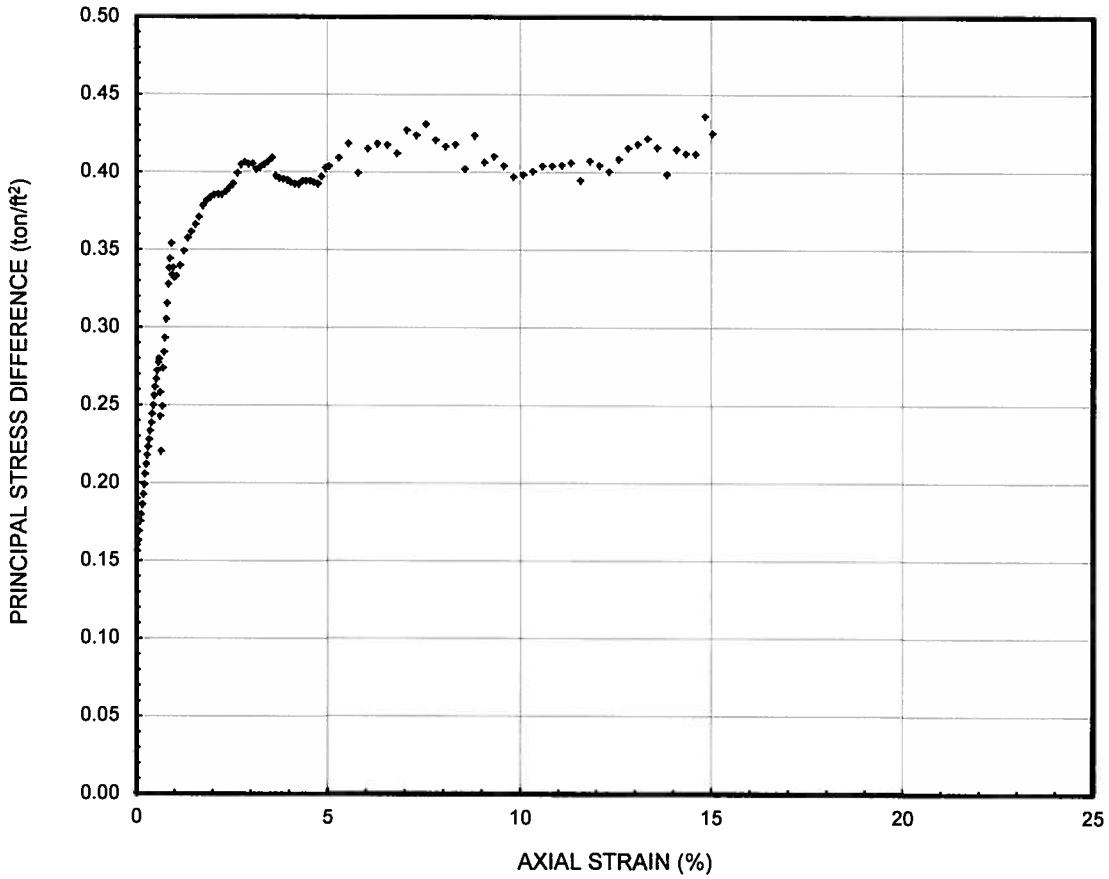
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-12
Depth	38-40 ft
Description	Light gray and tan clay w/ fenods



Initial Height	2.790	in	**Cell Pressure**	0.0	lb/in^2
Initial Diameter	1.410	in	**Strain Rate**	1.0	%/min
Dry Density	84.8	lb/ft^3	**Peak Stress**	0.45	ton/ft^2
Moisture Content	36.4	%	**Strain at Peak Stress**	14.83	%
Saturation	99.5	%	**Failure Type**	Combination	

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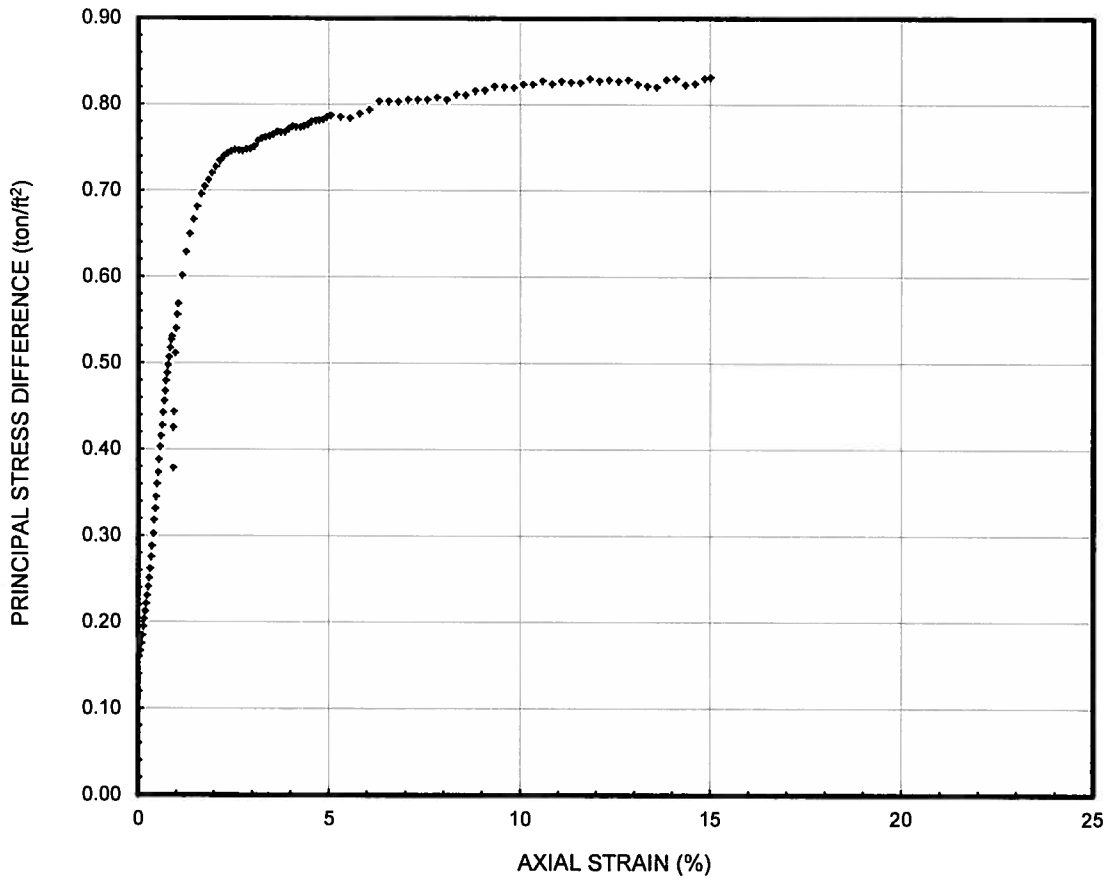
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-12
Depth	43-45 ft
Description	Tan and light gray jointed clay w/ silt pockets and fenods



Initial Height	2.806	in	**Cell Pressure**	18.0	lb/in^2
Initial Diameter	1.405	in	**Strain Rate**	1.0	%/min
Dry Density	89.8	lb/ft^3	**Peak Stress**	0.85	ton/ft^2
Moisture Content	31.8	%	**Strain at Peak Stress**	15.00	%
Saturation	97.9	%	**Failure Type**	Bulging	

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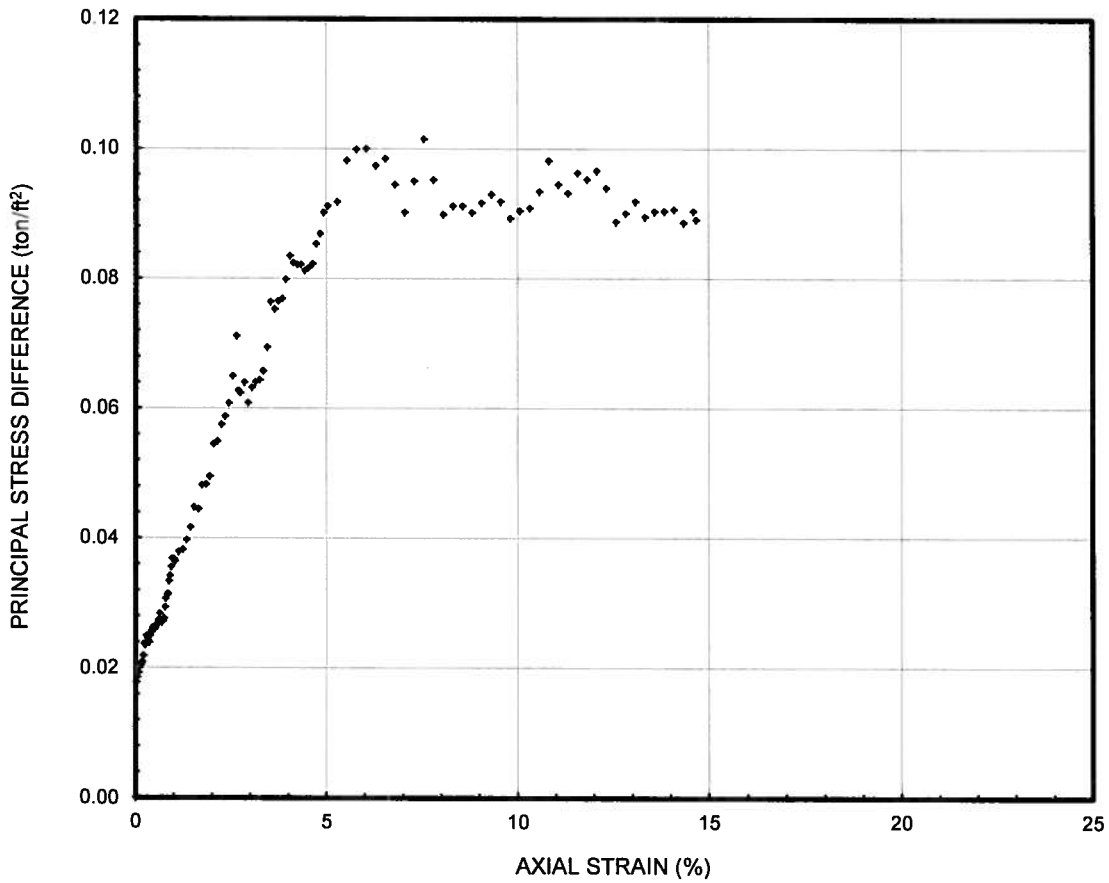
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-13
Depth	2-4 ft
Description	Dark brown organics w/ trace clay



Initial Height	2.771	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.378	in	**Strain Rate**	1.0	%/min
Dry Density	12.5	lb/ft^3	**Peak Stress**	0.10	ton/ft^2
Moisture Content	434.6	%	**Strain at Peak Stress**	7.56	%
Saturation	93.9	%	**Failure Type**	Bulging	

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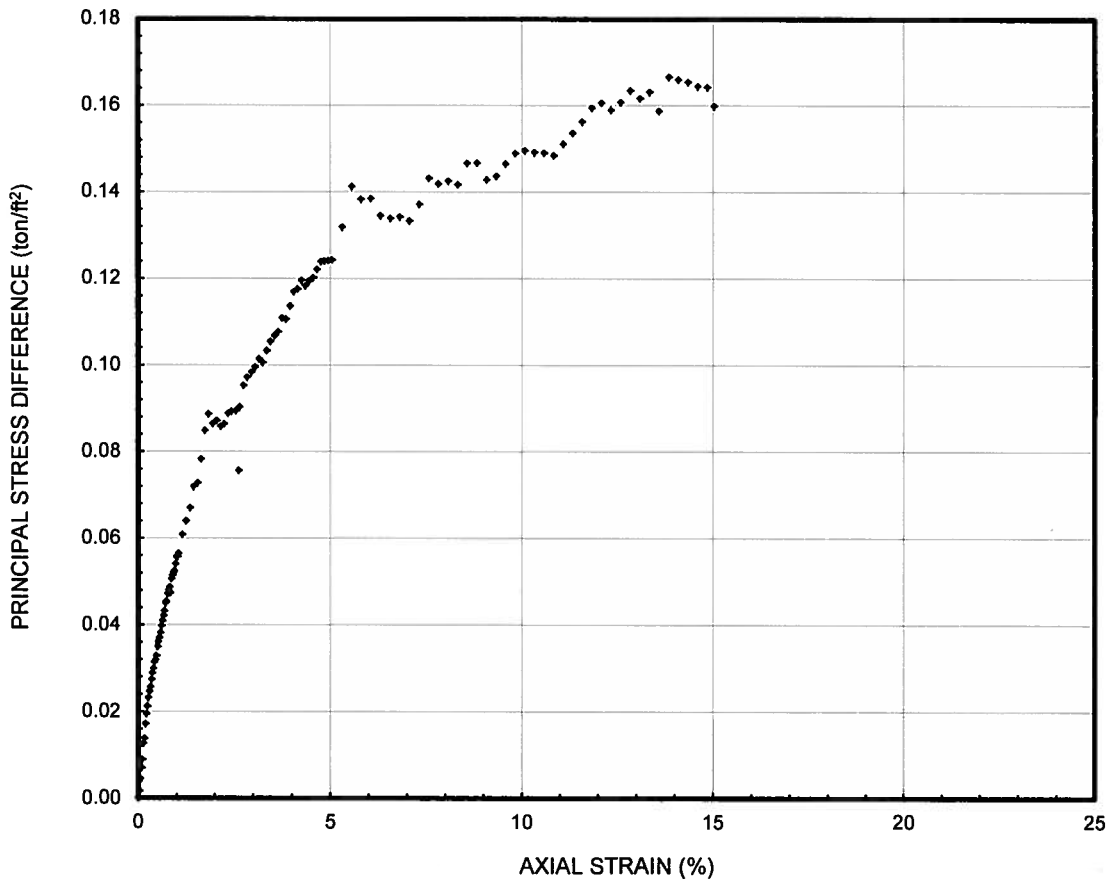
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-13
Depth	6-8 ft
Description	Gray clay w/silt pockets and organics



Initial Height	2.767	in	**Cell Pressure**	3.0	lb/in^2
Initial Diameter	1.377	in	**Strain Rate**	1.0	%/min
Dry Density	71.8	lb/ft^3	**Peak Stress**	0.17	ton/ft^2
Moisture Content	56.2	%	**Strain at Peak Stress**	13.84	%
Saturation	112.6	%	**Failure Type**	Bulging	

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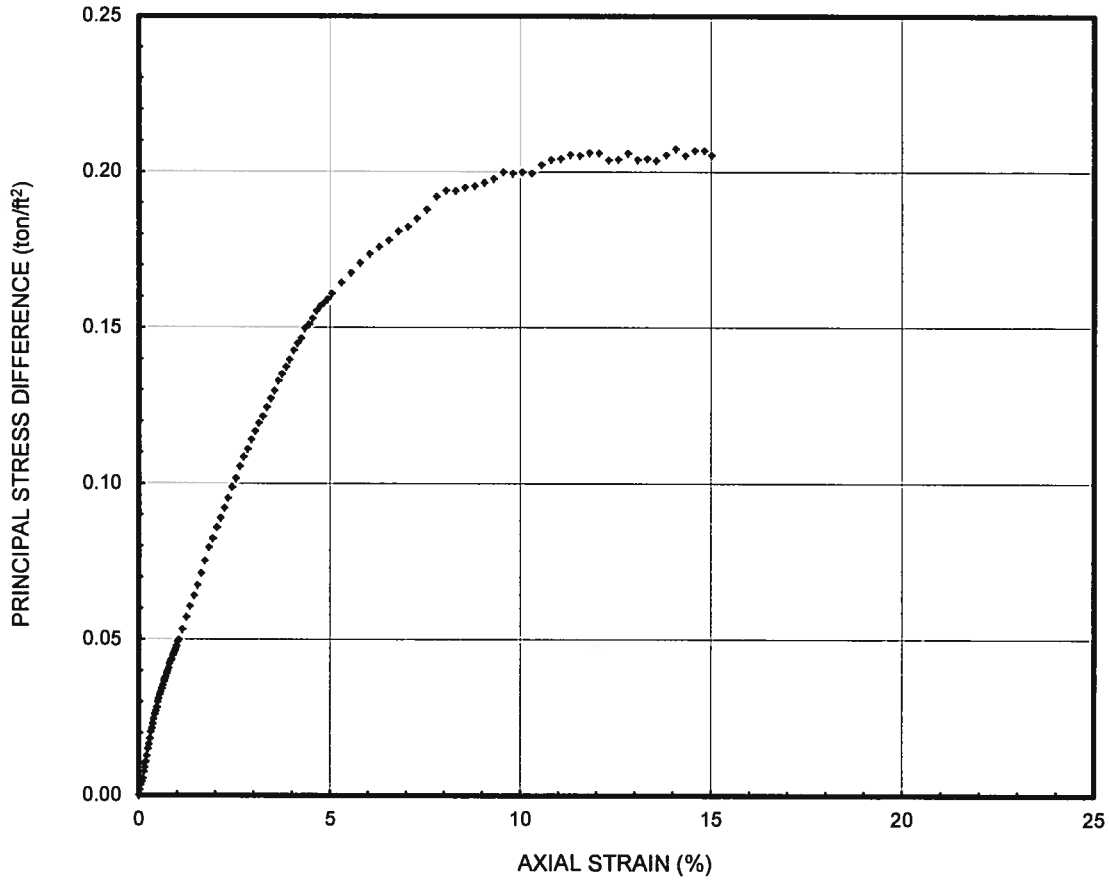
FILE NO **13-80-3705**	APPROVED BY:	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-13
Depth	10-12 ft
Description	Gray clay w/silt pockets and organics



Initial Height	5.713	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	2.854	in	**Strain Rate**	1.0	%/min
Dry Density	84.0	lb/ft^3	**Peak Stress**	0.21	ton/ft^2
Moisture Content	35.1	%	**Strain at Peak Stress**	14.07	%
Saturation	94.3	%	**Failure Type**	Bulging	

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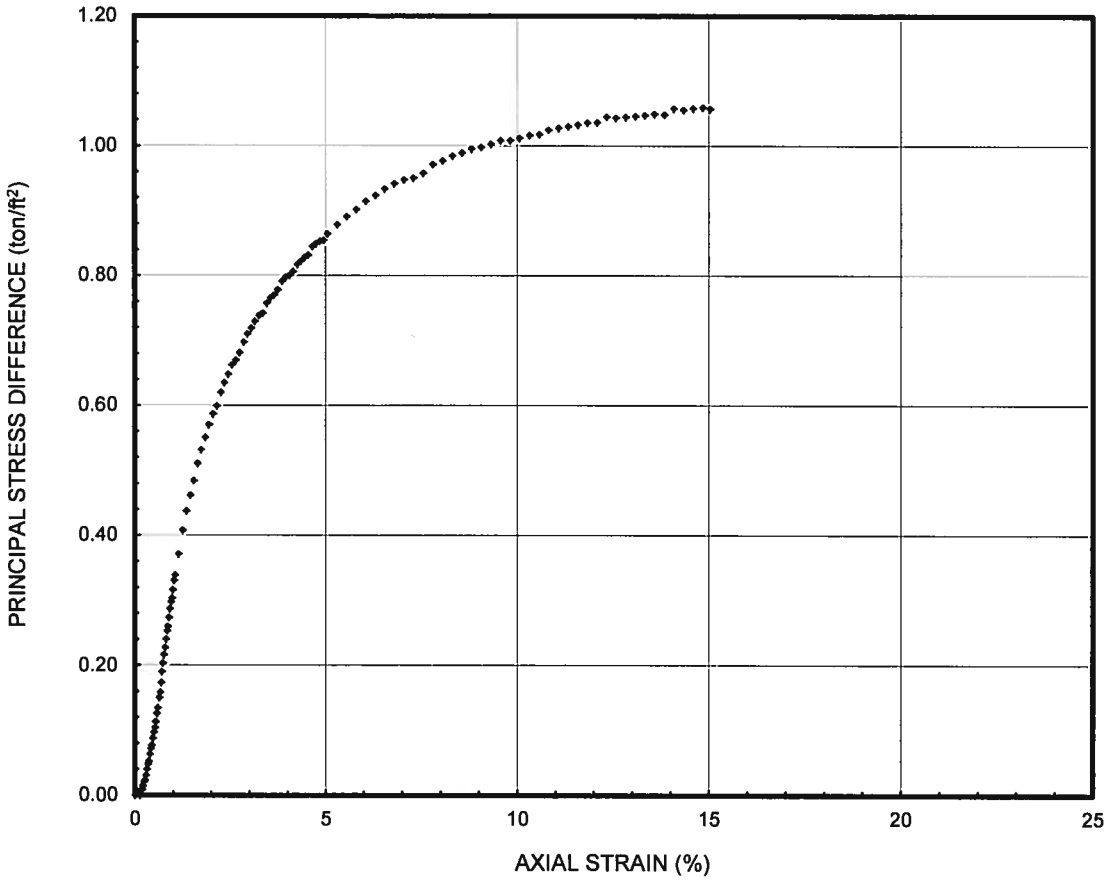
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-13
Depth	14-16 ft
Description	Gray and tan clay w/trace organics



Initial Height	5.756	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	2.844	in	**Strain Rate**	1.0	%/min
Dry Density	98.1	lb/ft^3	**Peak Stress**	1.08	ton/ft^2
Moisture Content	26.5	%	**Strain at Peak Stress**	14.84	%
Saturation	99.6	%	**Failure Type**	Bulging	

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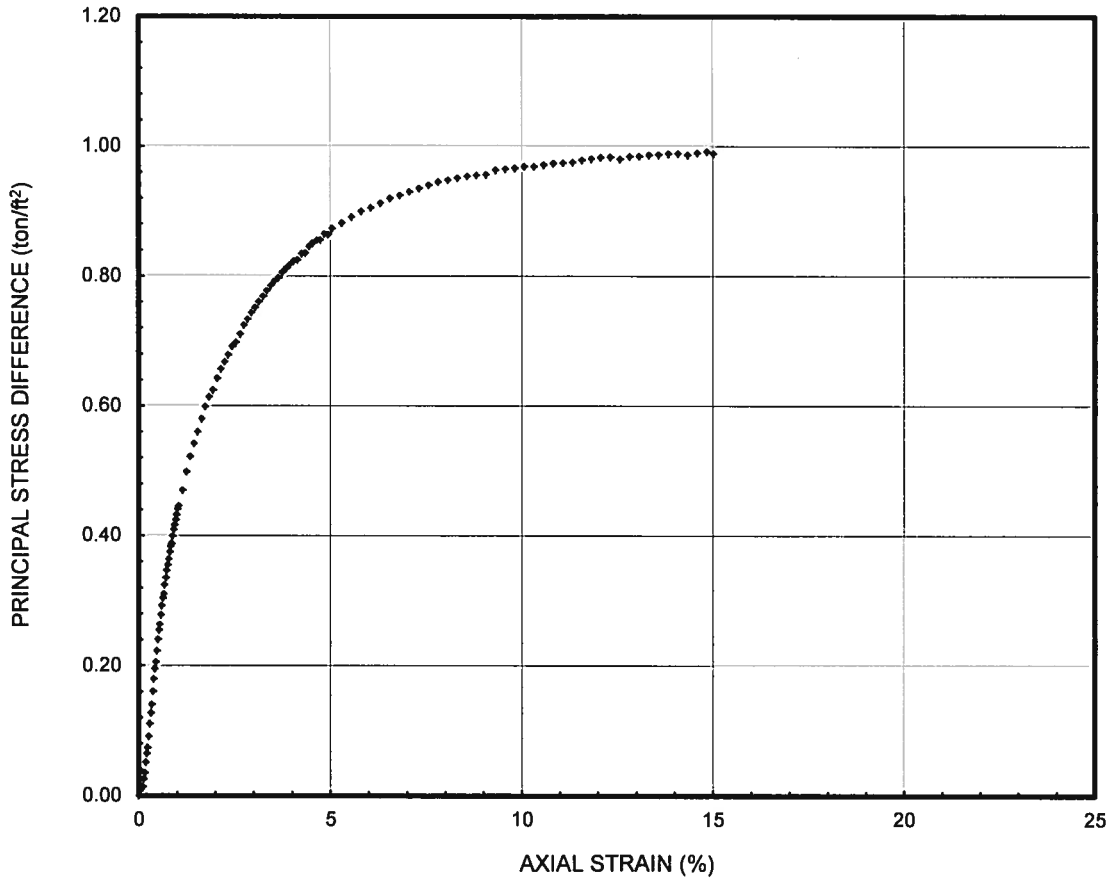
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-13
Depth	18-20 ft
Description	Gray and tan clay w/fenods and silt pockets



Initial Height	5.756	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	2.814	in	**Strain Rate**	1.0	%/min
Dry Density	98.1	lb/ft^3	**Peak Stress**	1.02	ton/ft^2
Moisture Content	28.6	%	**Strain at Peak Stress**	14.83	%
Saturation	107.5	%	**Failure Type**	Combination	

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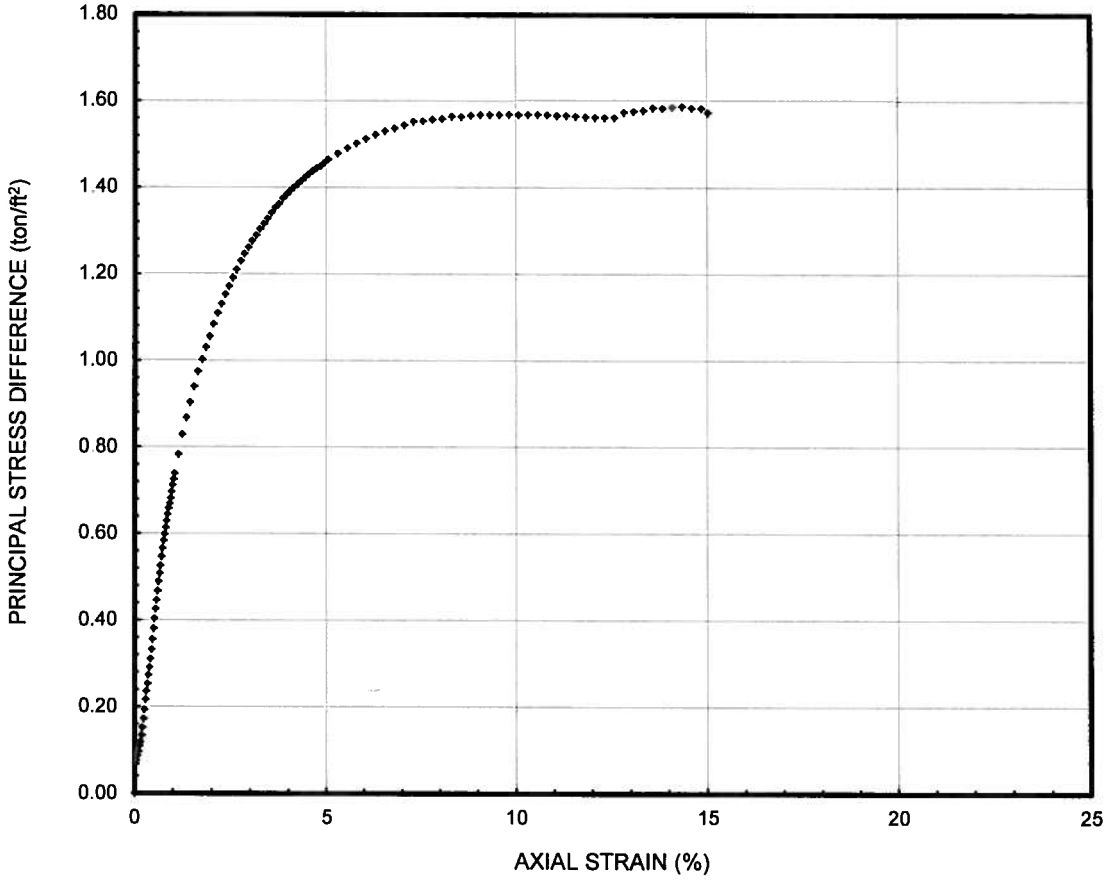
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-13
Depth	23-25 ft
Description	Light gray and tan clay w/fenods, trace organics and calnods



Initial Height	2.798	in	**Cell Pressure**	10.0	lb/in^2
Initial Diameter	1.398	in	**Strain Rate**	1.0	%/min
Dry Density	94.2	lb/ft^3	**Peak Stress**	1.63	ton/ft^2
Moisture Content	30.5	%	**Strain at Peak Stress**	14.35	%
Saturation	104.5	%	**Failure Type**	Combination	

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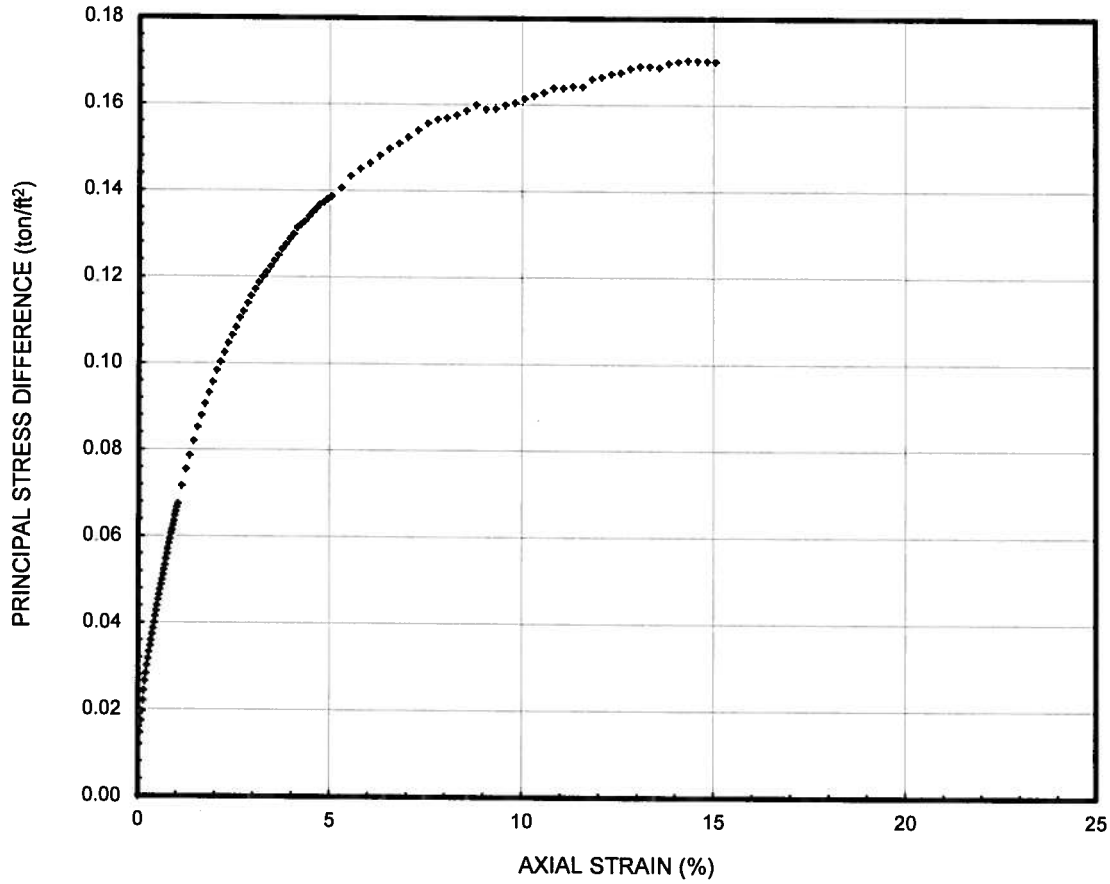
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-14
Depth	4-6 ft
Description	Gray clay w/ organics



Initial Height	5.723	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	2.853	in	**Strain Rate**	1.0	%/min
Dry Density	53.3	lb/ft^3	**Peak Stress**	0.17	ton/ft^2
Moisture Content	85.3	%	**Strain at Peak Stress**	14.32	%
Saturation	106.4	%	**Failure Type**	Bulging	

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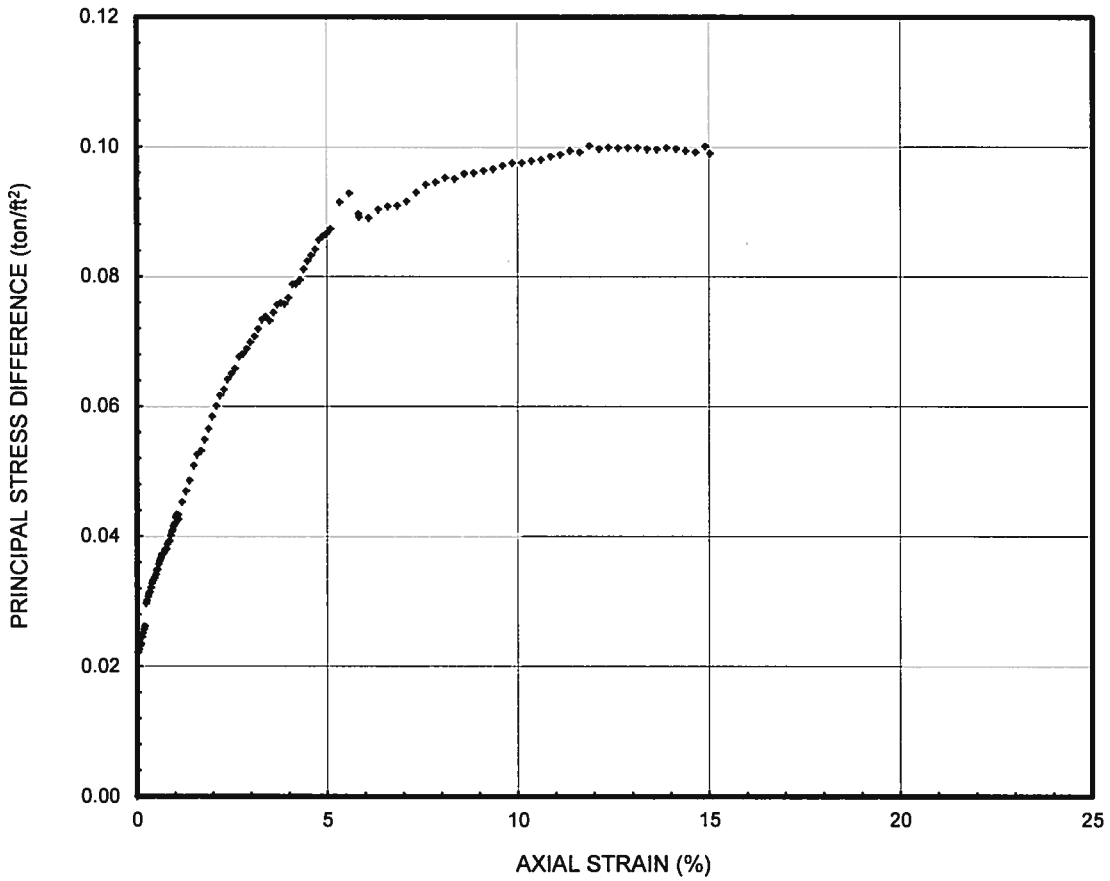
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-14
Depth	6-8 ft
Description	Gray clay w/ organics



Initial Height	5.709	in	**Cell Pressure**	3.0	lb/in^2
Initial Diameter	2.844	in	**Strain Rate**	1.0	%/min
Dry Density	43.1	lb/ft^3	**Peak Stress**	0.10	ton/ft^2
Moisture Content	110.3	%	**Strain at Peak Stress**	11.87	%
Saturation	102.3	%	**Failure Type**	Bulging	

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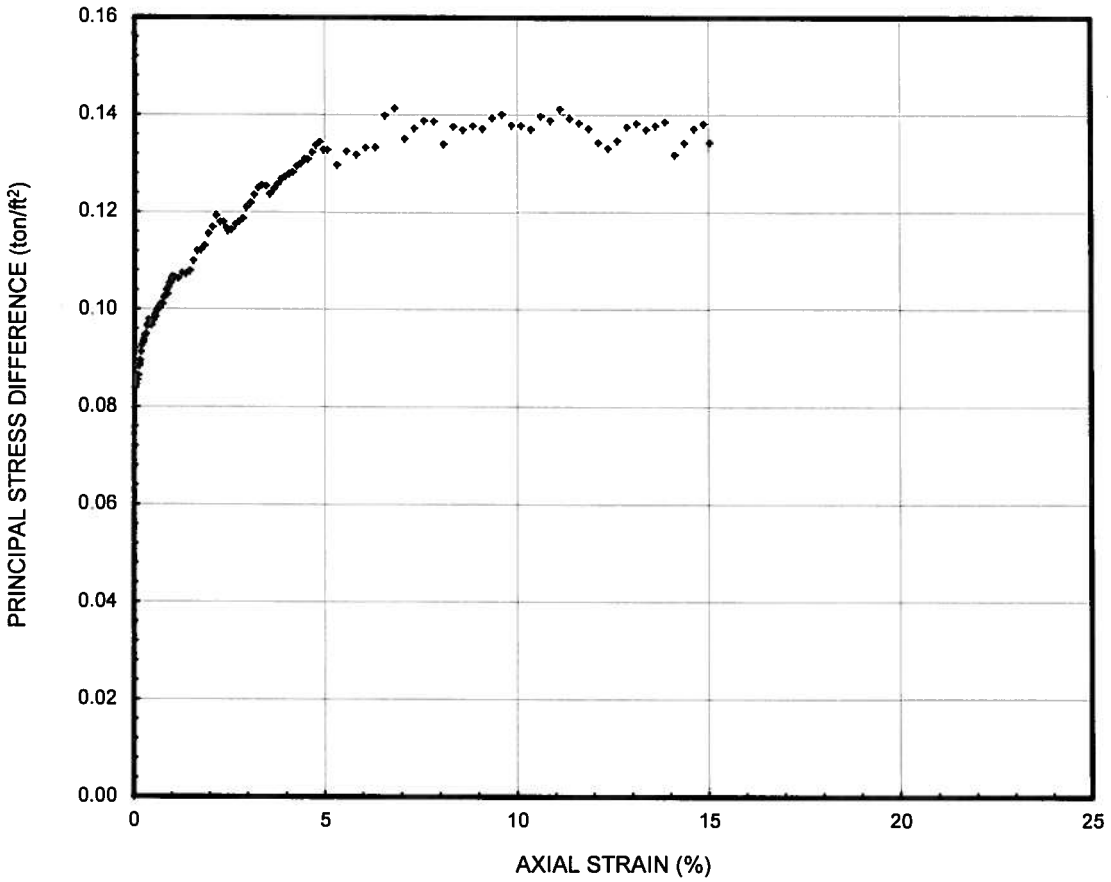
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-14
Depth	10-12 ft
Description	Dark brown organics w/ gray clay and shell



Initial Height	2.788	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	1.390	in	**Strain Rate**	1.0	%/min
Dry Density	22.2	lb/ft^3	**Peak Stress**	0.14	ton/ft^2
Moisture Content	242.5	%	**Strain at Peak Stress**	6.83	%
Saturation	99.2	%	**Failure Type**	Combination	

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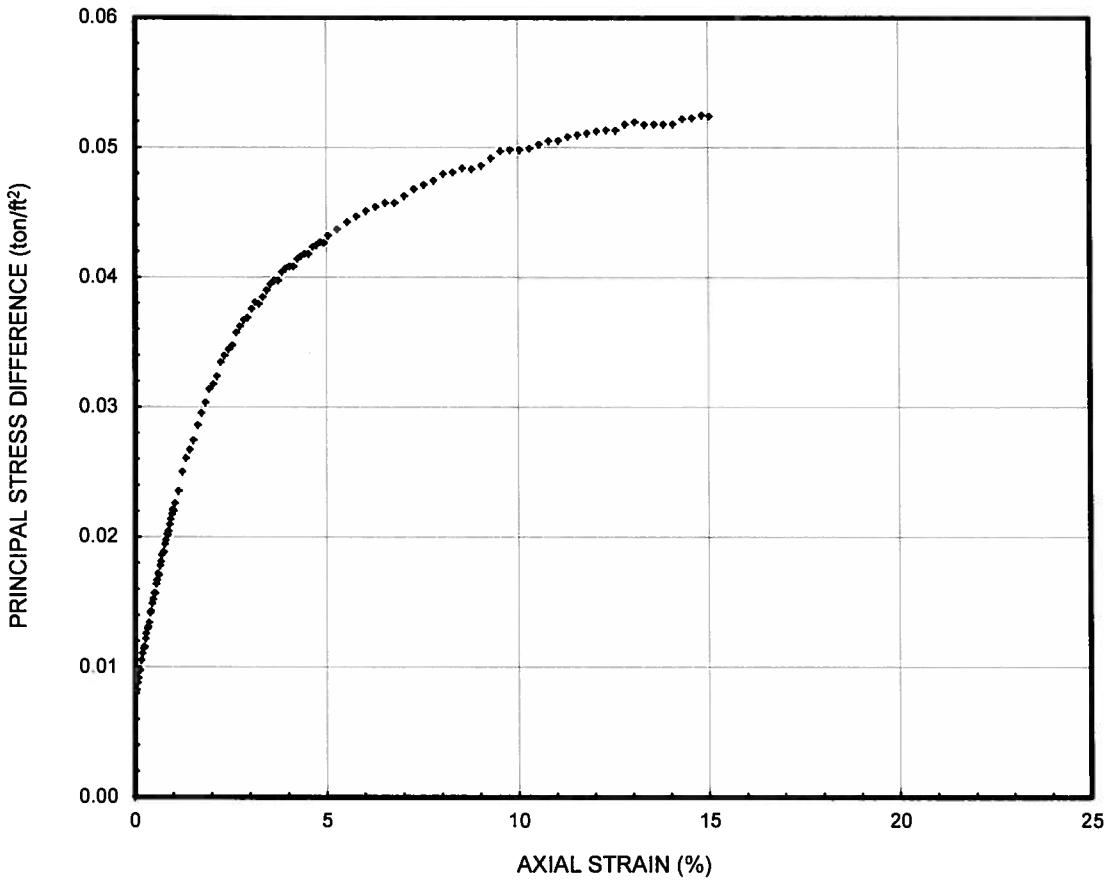
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-14
Depth	14-16 ft
Description	Gray clay w/ trace organics and fenods



Initial Height	5.756	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	2.841	in	**Strain Rate**	1.0	%/min
Dry Density	91.5	lb/ft^3	**Peak Stress**	0.05	ton/ft^2
Moisture Content	30.5	%	**Strain at Peak Stress**	14.83	%
Saturation	97.9	%	**Failure Type**	Combination	

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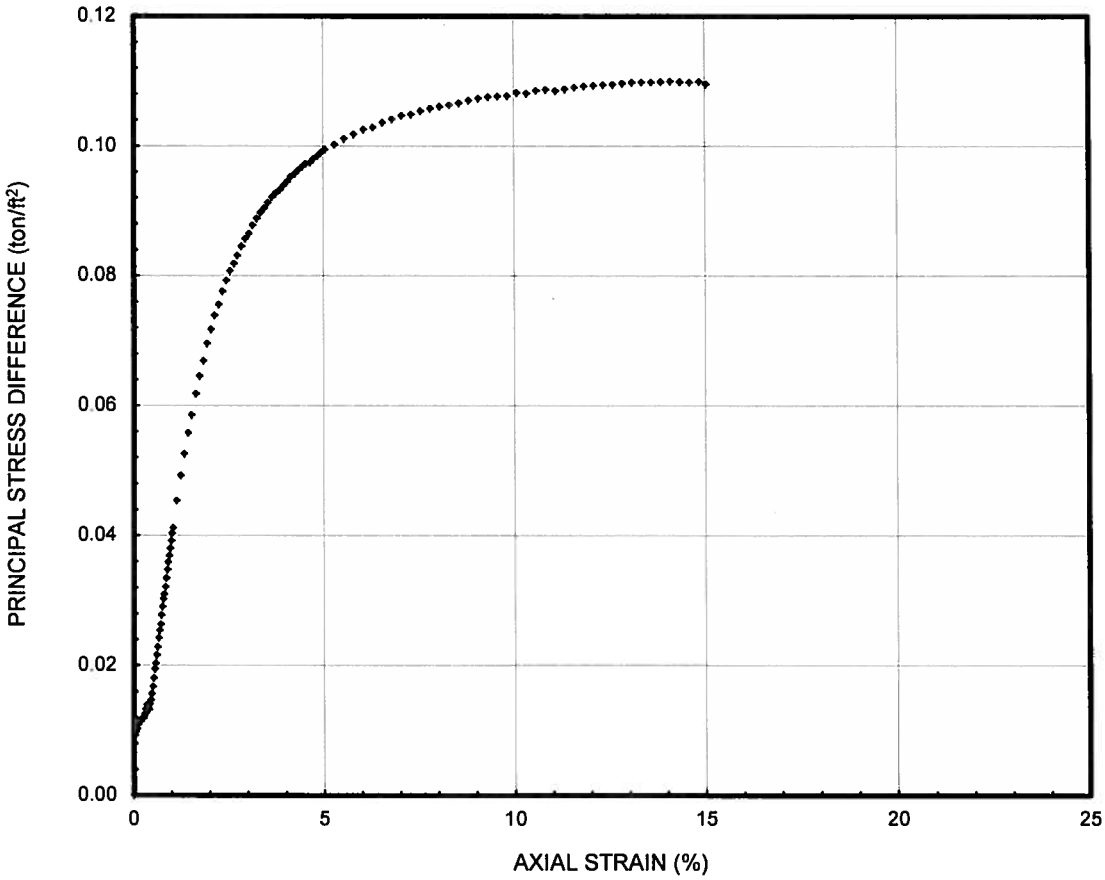
FILE NO **13-80-3705**	APPROVED BY:	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-14
Depth	16-18 ft
Description	Gray and tan clay w/ fenods



Initial Height	5.752	in	**Cell Pressure**	7.0	lb/in^2
Initial Diameter	2.852	in	**Strain Rate**	1.0	%/min
Dry Density	95.4	lb/ft^3	**Peak Stress**	0.11	ton/ft^2
Moisture Content	28.7	%	**Strain at Peak Stress**	14.10	%
Saturation	101.0	%	**Failure Type**	Combination	

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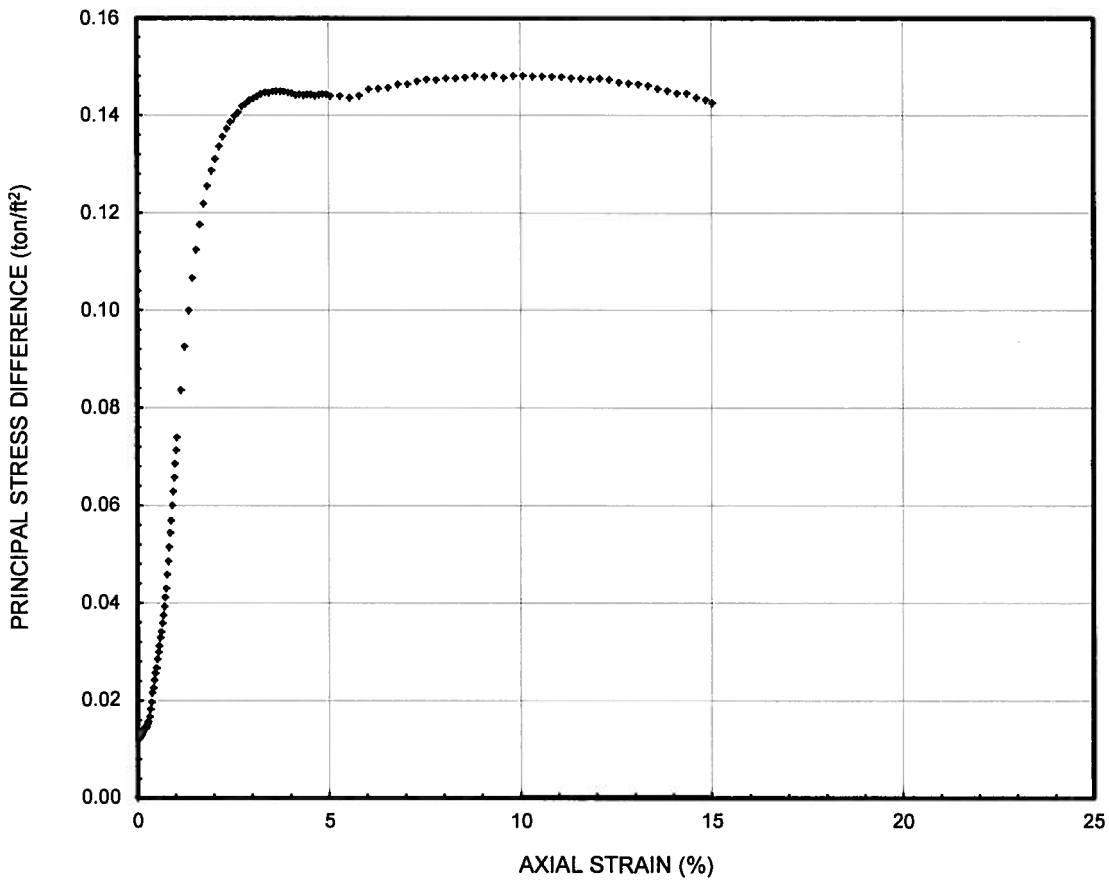
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-14
Depth	28-30 ft
Description	Tan and gray clay w/ fenods and calnods



Initial Height	5.754	in	**Cell Pressure**	12.0	lb/in^2
Initial Diameter	2.868	in	**Strain Rate**	1.0	%/min
Dry Density	88.5	lb/ft^3	**Peak Stress**	0.15	ton/ft^2
Moisture Content	34.8	%	**Strain at Peak Stress**	9.32	%
Saturation	103.9	%	**Failure Type**	Combination	

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COLE'S BAYOU MARSH CREATION

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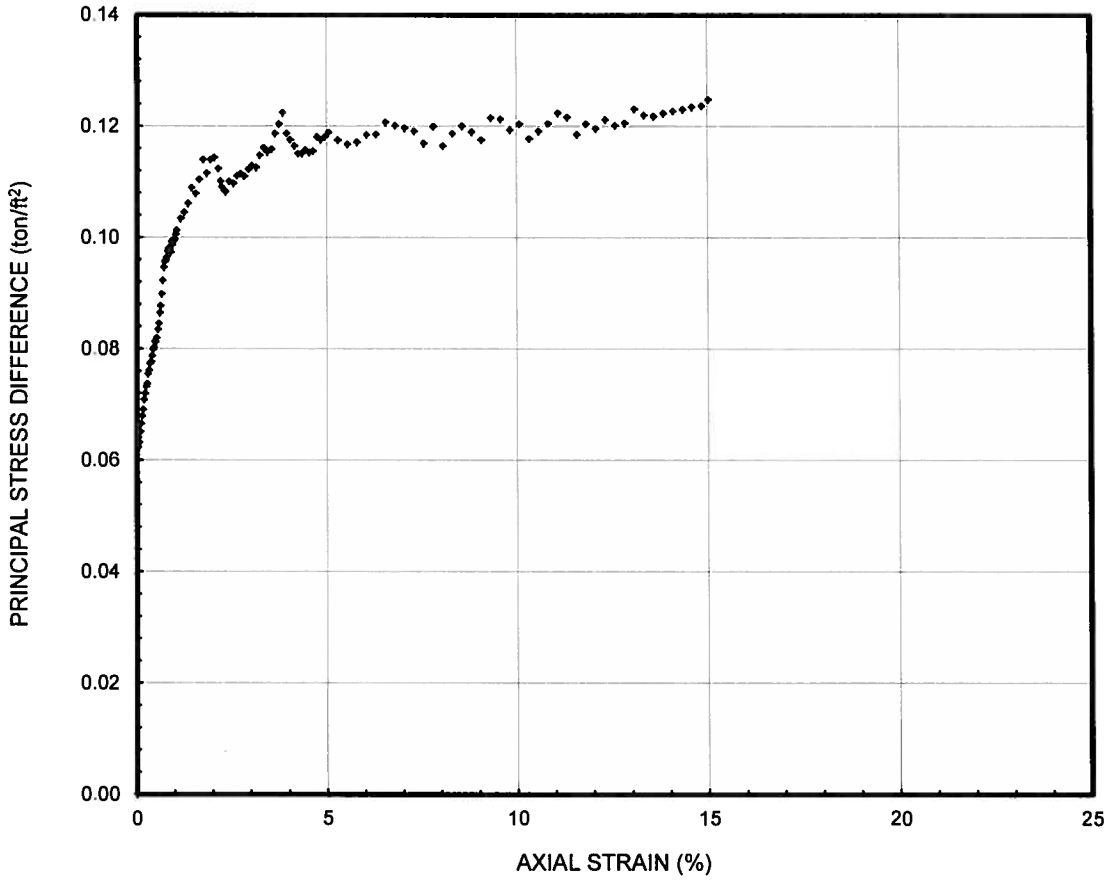
FILE NO: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-15
Depth	4-6 ft
Description	Gray and dark gray clay w/ organics



Initial Height	2.782	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.393	in	**Strain Rate**	1.0	%/min
Dry Density	62.3	lb/ft^3	**Peak Stress**	0.13	ton/ft^2
Moisture Content	65.5	%	**Strain at Peak Stress**	15.02	%
Saturation	103.8	%	**Failure Type**	Bulging	

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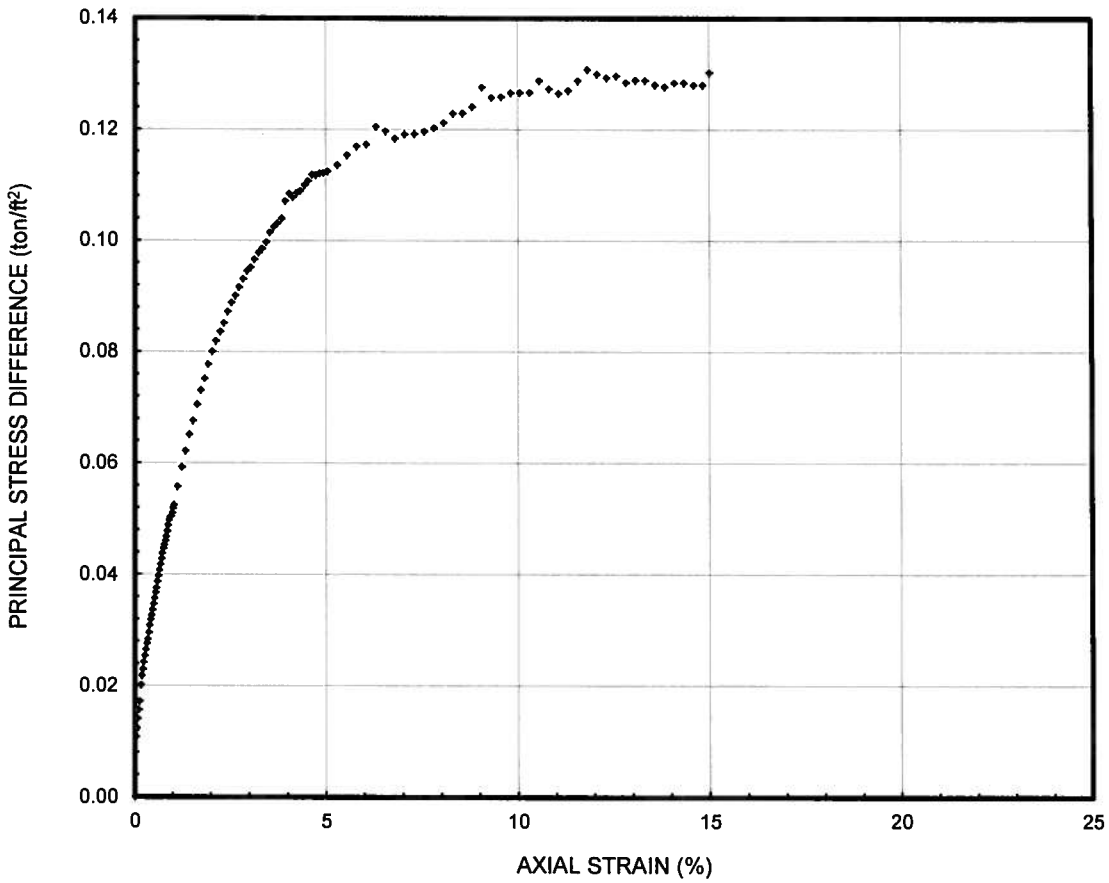
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-15
Depth	6-8 ft
Description	Gray clay w/ trace organics



Initial Height	5.738	in	**Cell Pressure**	3.0	lb/in^2
Initial Diameter	2.823	in	**Strain Rate**	1.0	%/min
Dry Density	54.4	lb/ft^3	**Peak Stress**	0.13	ton/ft^2
Moisture Content	83.3	%	**Strain at Peak Stress**	11.82	%
Saturation	107.3	%	**Failure Type**	Bulging	

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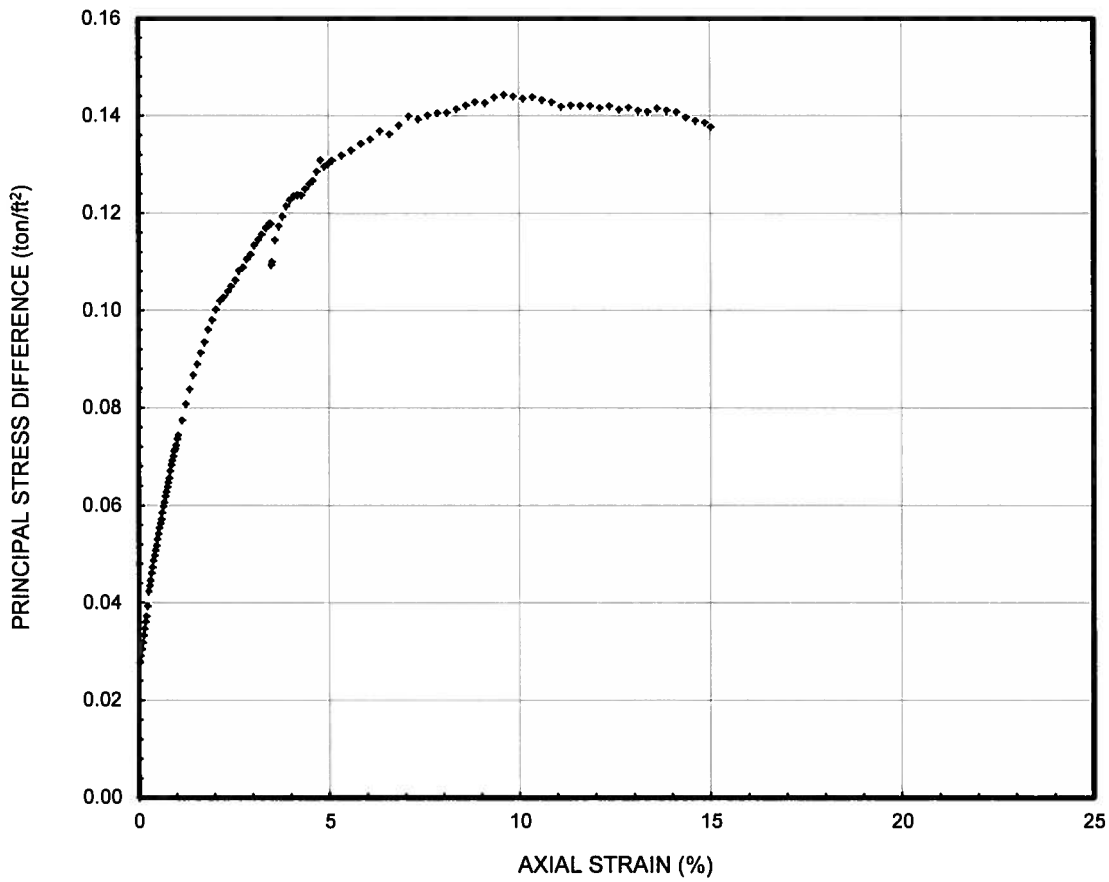
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-15
Depth	10-12 ft
Description	Gray clay w/ trace organics and shell



Initial Height	5.734	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	2.831	in	**Strain Rate**	1.0	%/min
Dry Density	44.1	lb/ft^3	**Peak Stress**	0.15	ton/ft^2
Moisture Content	107.0	%	**Strain at Peak Stress**	9.60	%
Saturation	102.5	%	**Failure Type**	Bulging	

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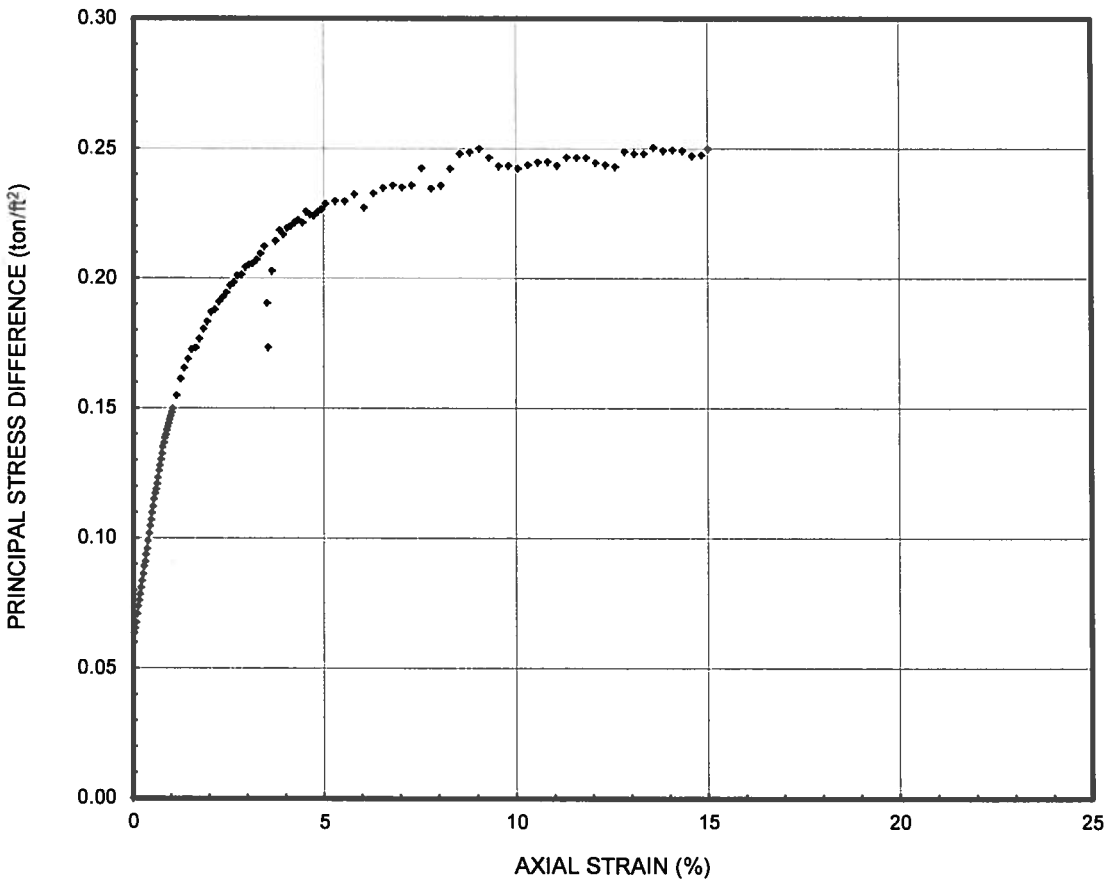
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-15
Depth	14-16 ft
Description	Gray clay w/ trace organics



Initial Height	2.781	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	1.395	in	**Strain Rate**	1.0	%/min
Dry Density	79.6	lb/ft^3	**Peak Stress**	0.26	ton/ft^2
Moisture Content	44.2	%	**Strain at Peak Stress**	13.58	%
Saturation	106.6	%	**Failure Type**	Bulging	

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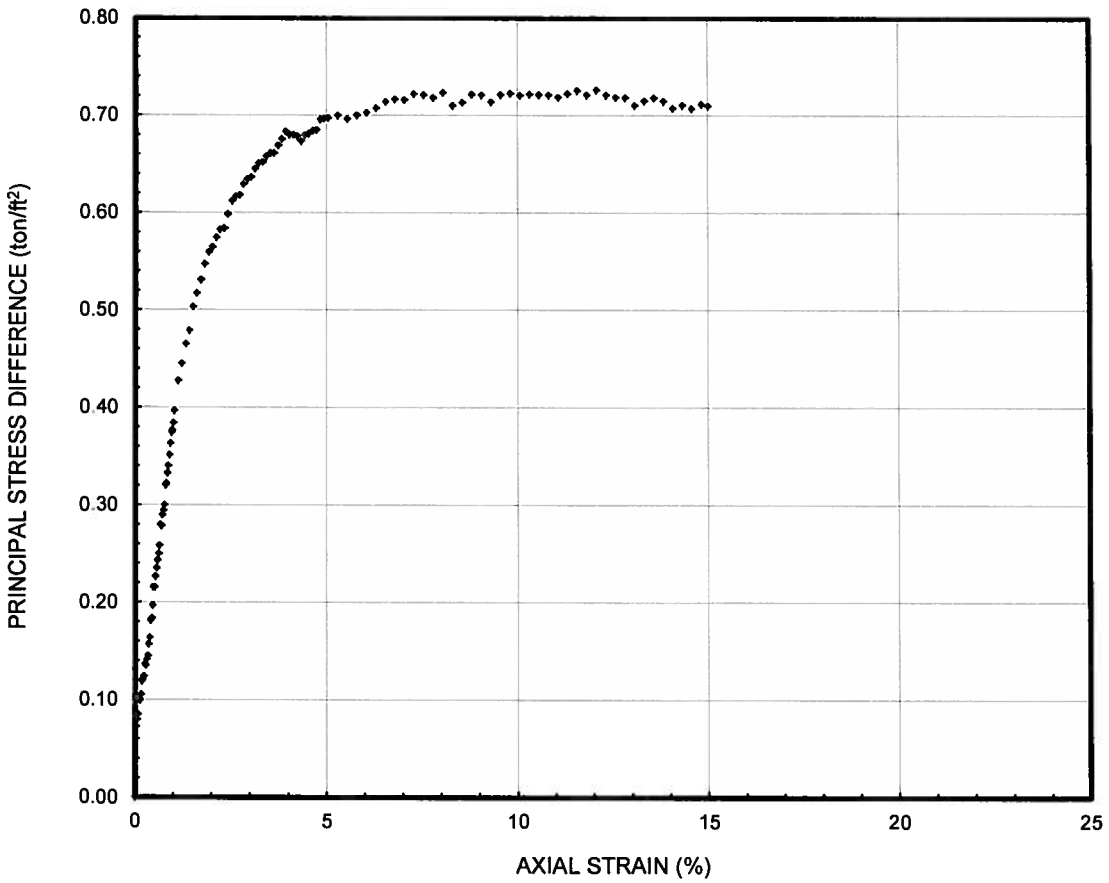
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-15
Depth	16-18 ft
Description	Bluish gray and tan clay w/ fenods



Initial Height	2.798	in	**Cell Pressure**	7.0	lb/in^2
Initial Diameter	1.400	in	**Strain Rate**	1.0	%/min
Dry Density	92.1	lb/ft^3	**Peak Stress**	0.74	ton/ft^2
Moisture Content	32.4	%	**Strain at Peak Stress**	12.07	%
Saturation	105.5	%	**Failure Type**	Combination	

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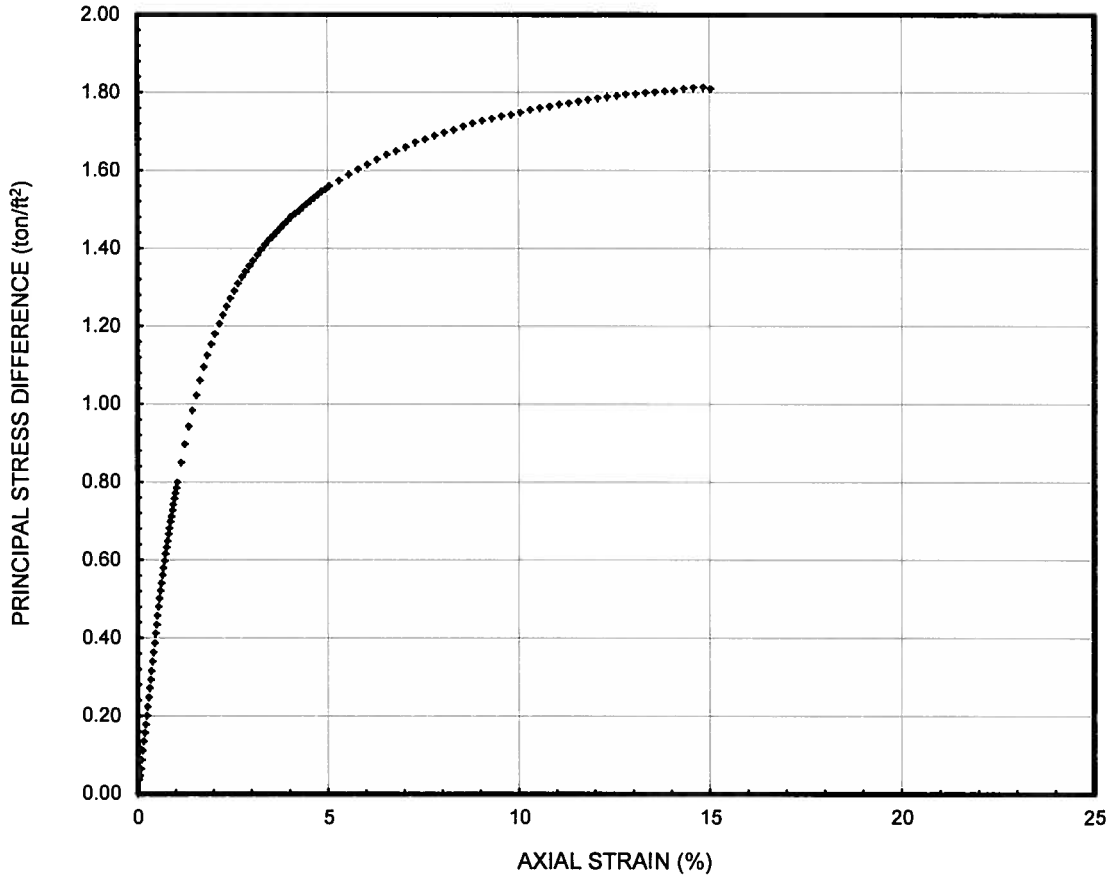
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-15
Depth	23-25 ft
Description	Tan and bluish gray clay w/ fenods and calnods



Initial Height	5.764	in	**Cell Pressure**	10.0	lb/in^2
Initial Diameter	2.870	in	**Strain Rate**	1.0	%/min
Dry Density	102.0	lb/ft^3	**Peak Stress**	1.86	ton/ft^2
Moisture Content	23.8	%	**Strain at Peak Stress**	14.83	%
Saturation	98.4	%	**Failure Type**	Combination	

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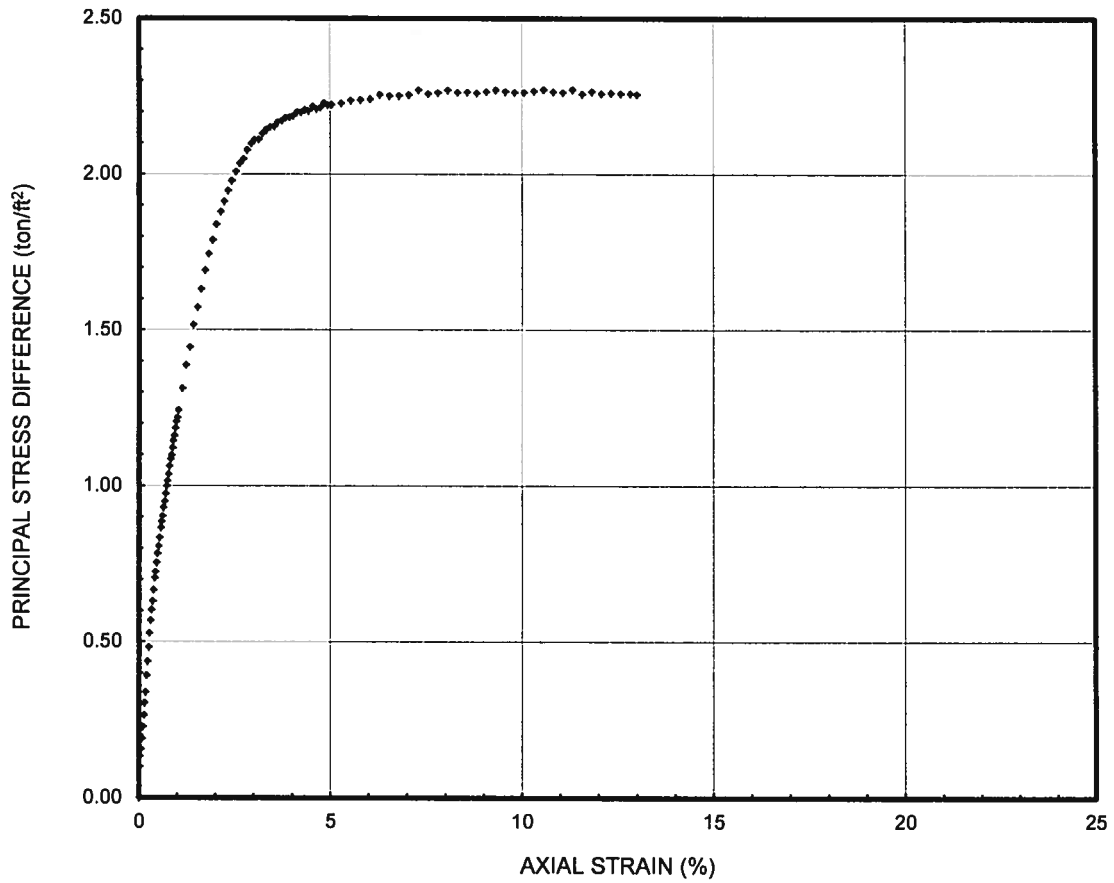
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-15
Depth	33-35 ft
Description	Tan and light gray clay w/ fenods



Initial Height	2.797	in	**Cell Pressure**	14.0	lb/in^2
Initial Diameter	1.412	in	**Strain Rate**	1.0	%/min
Dry Density	103.4	lb/ft^3	**Peak Stress**	2.33	ton/ft^2
Moisture Content	23.7	%	**Strain at Peak Stress**	10.56	%
Saturation	101.6	%	**Failure Type**	Combination	

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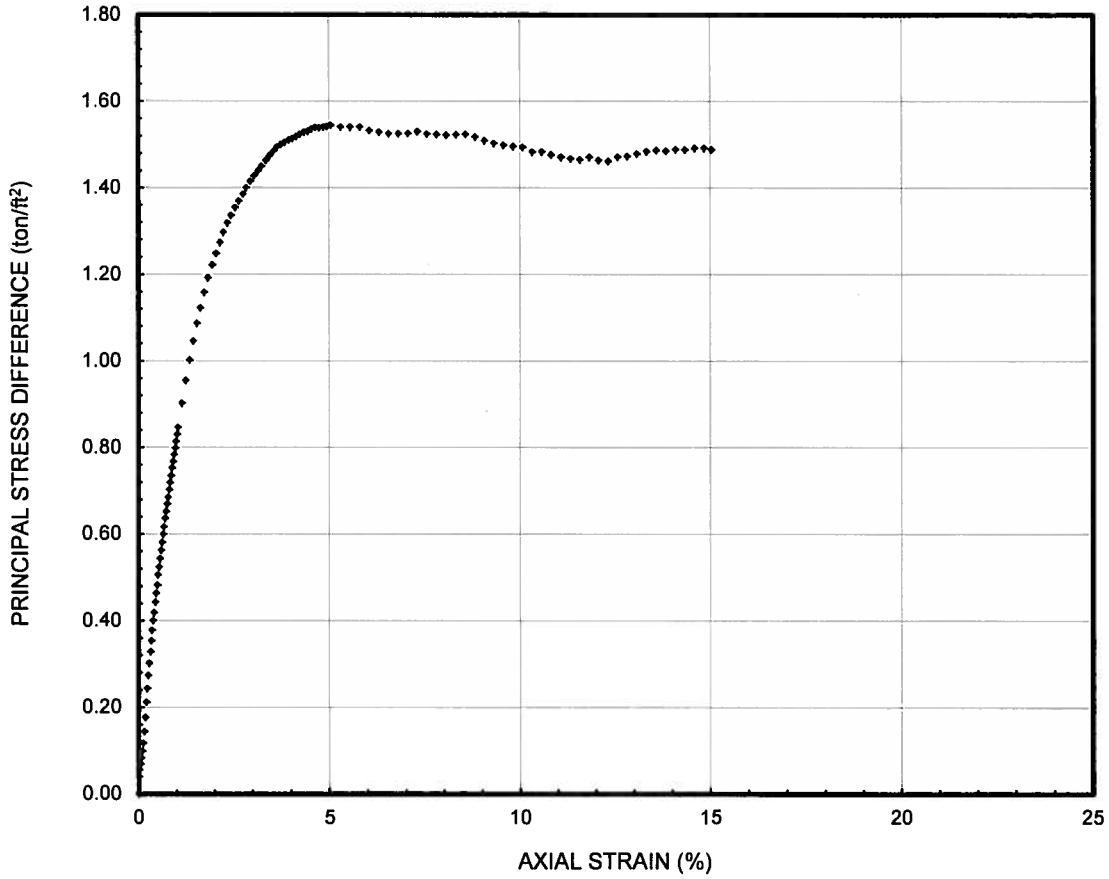
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-15
Depth	43-45 ft
Description	Tan and gray clay w/ silt layer and fenods



Initial Height	5.760	in	**Cell Pressure**	18.0	lb/in^2
Initial Diameter	2.857	in	**Strain Rate**	1.0	%/min
Dry Density	93.6	lb/ft^3	**Peak Stress**	1.58	ton/ft^2
Moisture Content	29.1	%	**Strain at Peak Stress**	5.05	%
Saturation	98.0	%	**Failure Type**	Combination	

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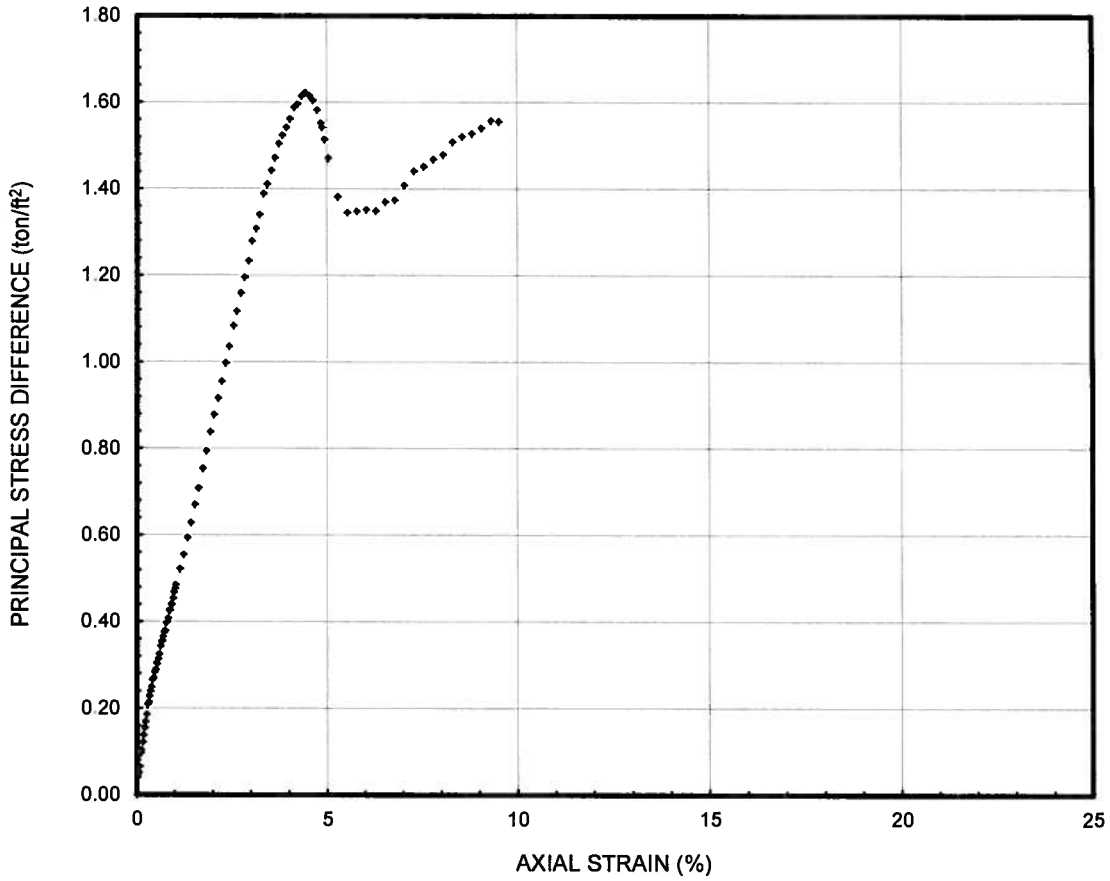
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-15
Depth	53-55 ft
Description	Alternating gray clay and sandy silt layers



Initial Height	2.790	in	**Cell Pressure**	22.0	lb/in^2
Initial Diameter	1.400	in	**Strain Rate**	1.0	%/min
Dry Density	81.0	lb/ft^3	**Peak Stress**	1.66	ton/ft^2
Moisture Content	40.7	%	**Strain at Peak Stress**	4.43	%
Saturation	101.5	%	**Failure Type**	Combination	

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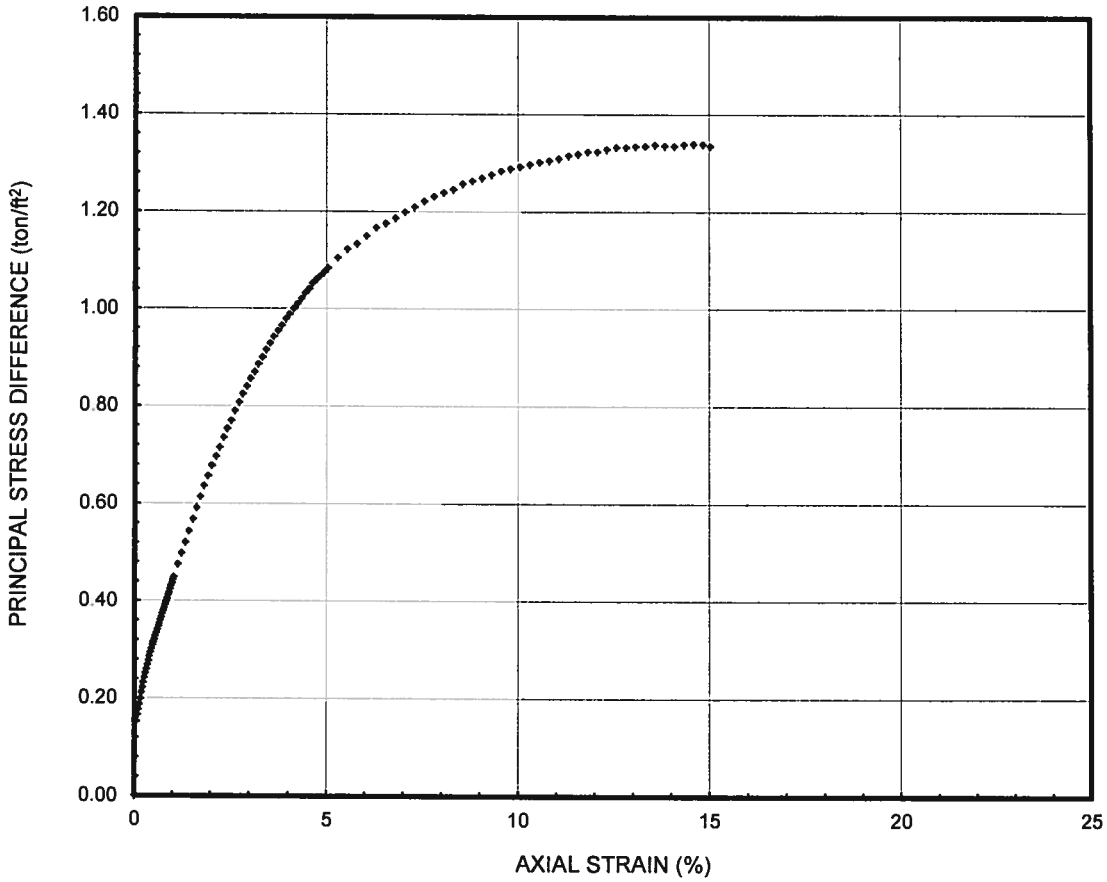
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-15
Depth	63-65 ft
Description	Gray silty clay w/ shells



Initial Height	2.798	in	**Cell Pressure**	26.0	lb/in^2
Initial Diameter	1.397	in	**Strain Rate**	1.0	%/min
Dry Density	94.7	lb/ft^3	**Peak Stress**	1.37	ton/ft^2
Moisture Content	29.9	%	**Strain at Peak Stress**	14.58	%
Saturation	103.7	%	**Failure Type**	Bulging	

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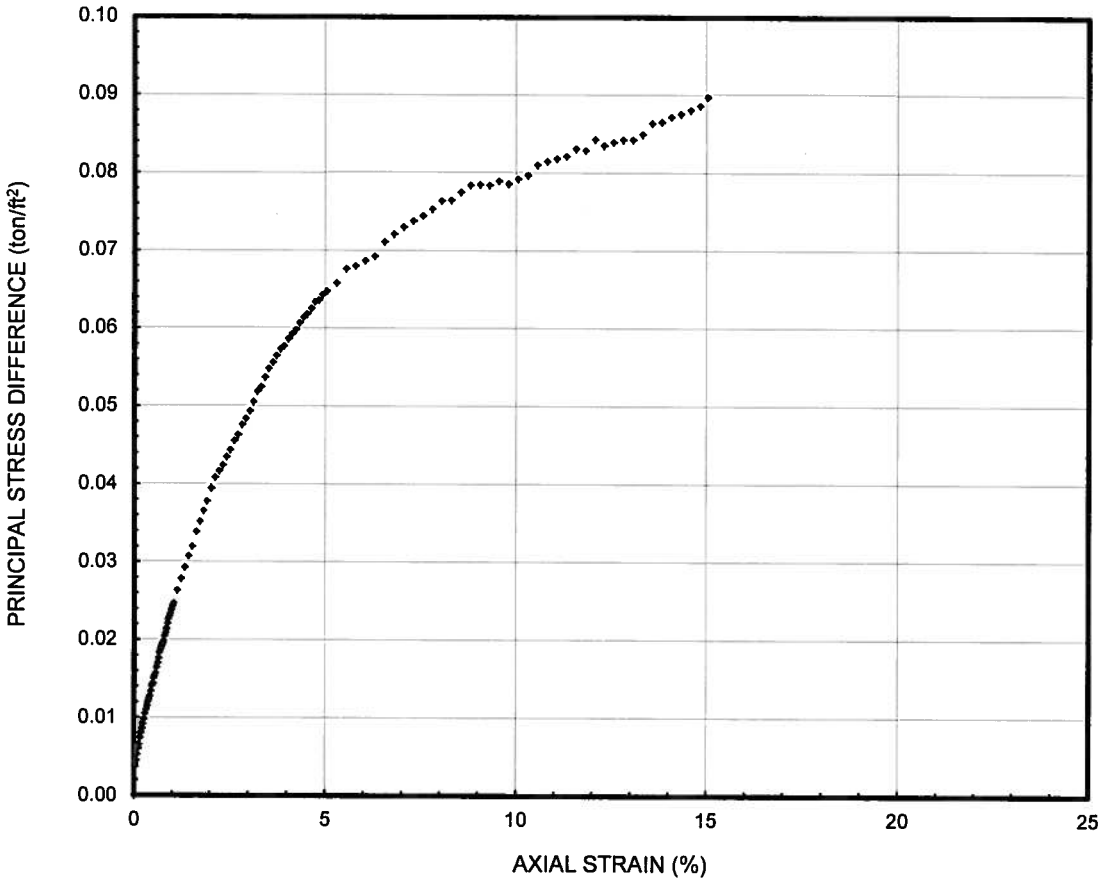
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-16
Depth	2-4 ft
Description	Gray clay w/organics



Initial Height	5.679	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	2.776	in	**Strain Rate**	1.0	%/min
Dry Density	38.6	lb/ft^3	**Peak Stress**	0.09	ton/ft^2
Moisture Content	149.9	%	**Strain at Peak Stress**	15.03	%
Saturation	120.1	%	**Failure Type**	Bulging	

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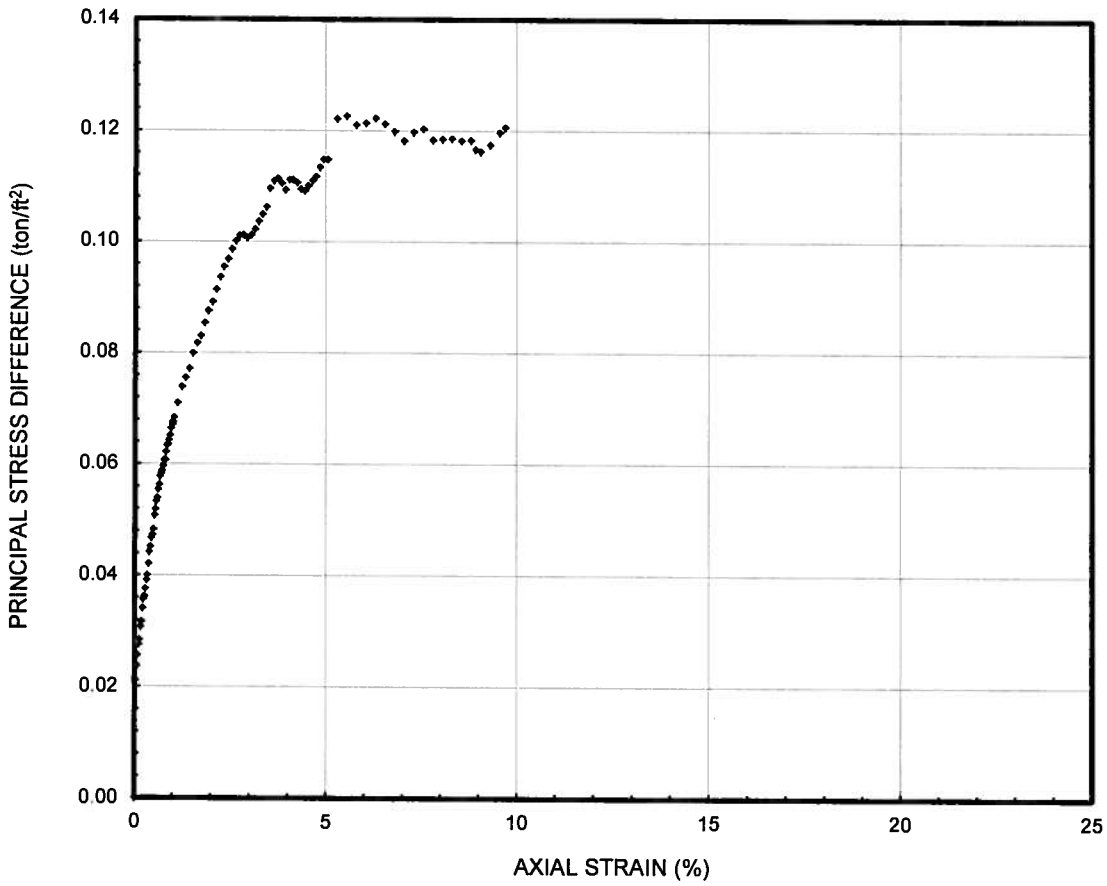
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-16
Depth	4-6 ft
Description	gray clay w/organics and stems



Initial Height	2.767	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.389	in	**Strain Rate**	1.0	%/min
Dry Density	52.9	lb/ft^3	**Peak Stress**	0.13	ton/ft^2
Moisture Content	91.1	%	**Strain at Peak Stress**	5.55	%
Saturation	112.3	%	**Failure Type**	Bulging	

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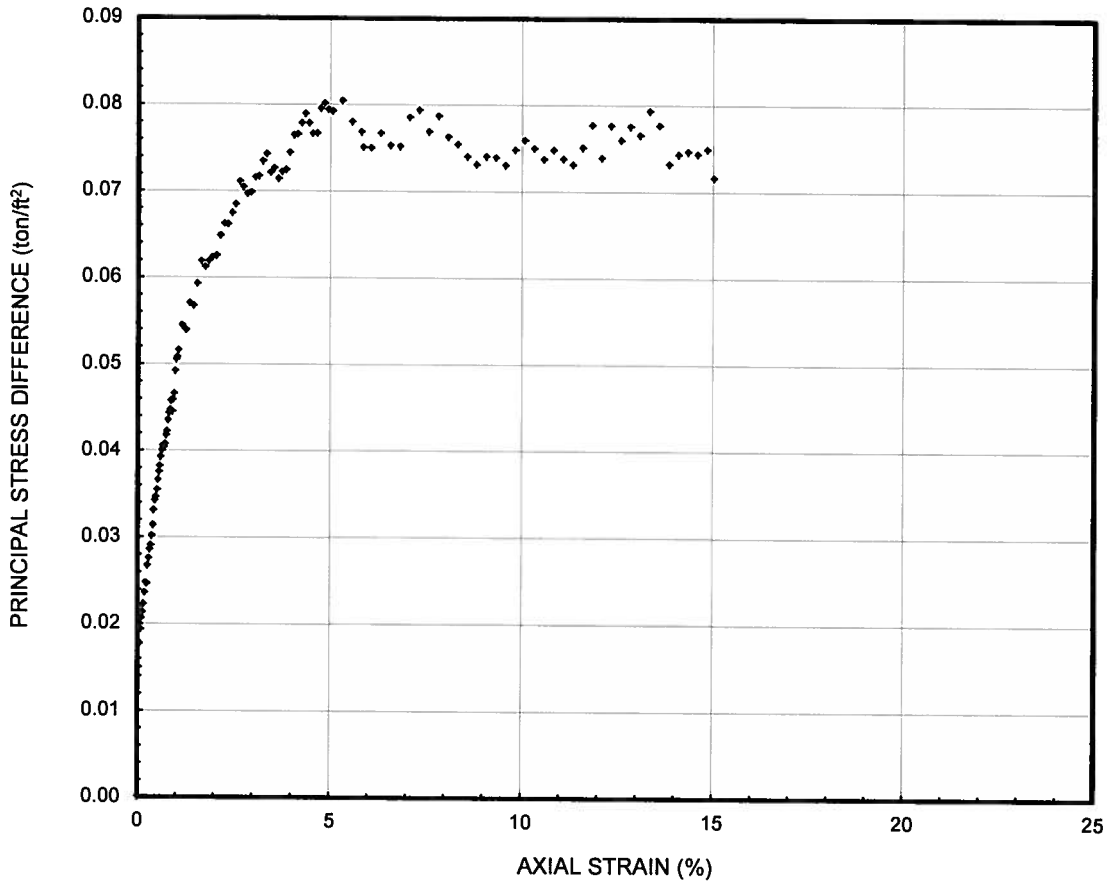
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-16
Depth	8-10 ft
Description	Gray clay w/shells



Initial Height	2.781	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	1.402	in	**Strain Rate**	1.0	%/min
Dry Density	45.3	lb/ft^3	**Peak Stress**	0.08	ton/ft^2
Moisture Content	103.5	%	**Strain at Peak Stress**	5.31	%
Saturation	102.7	%	**Failure Type**	Combination	

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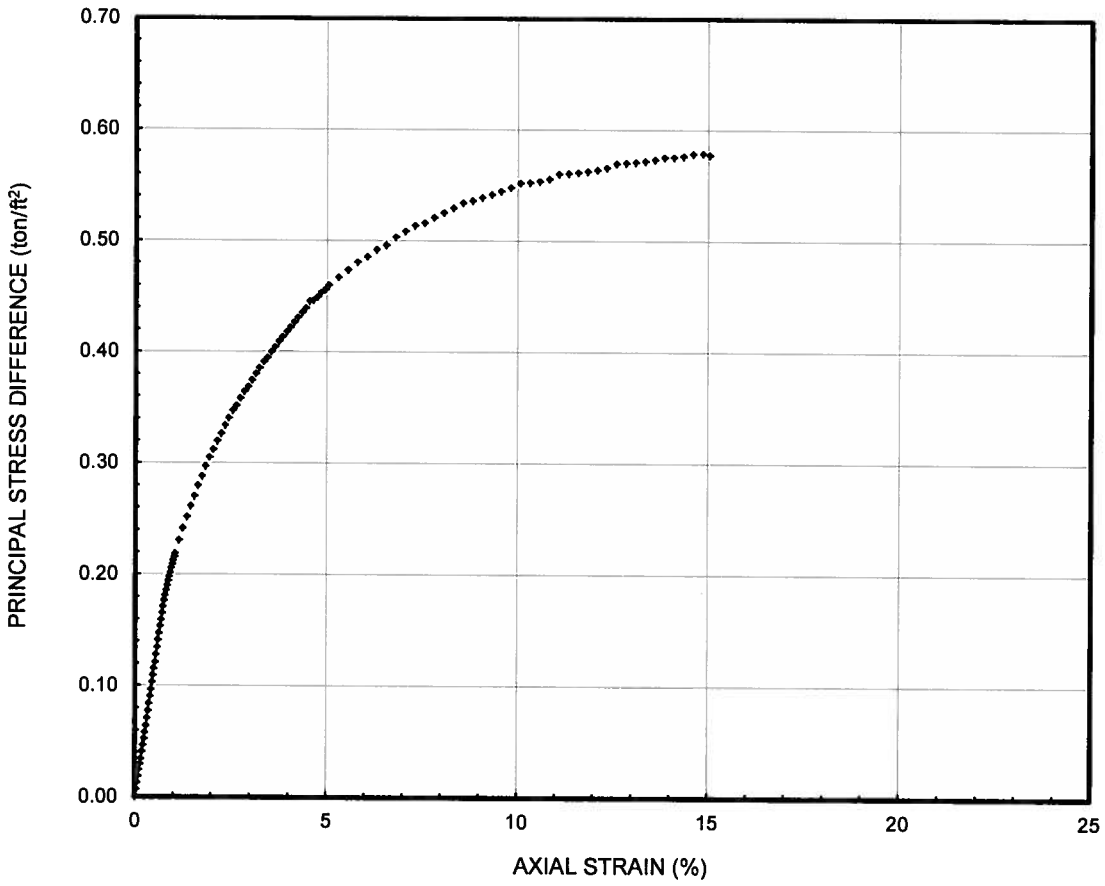
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-16
Depth	14-16 ft
Description	Gray clay w/shells and trace organics



Initial Height	5.761	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	2.838	in	**Strain Rate**	1.0	%/min
Dry Density	86.6	lb/ft^3	**Peak Stress**	0.59	ton/ft^2
Moisture Content	34.1	%	**Strain at Peak Stress**	14.85	%
Saturation	97.4	%	**Failure Type**	Combination	

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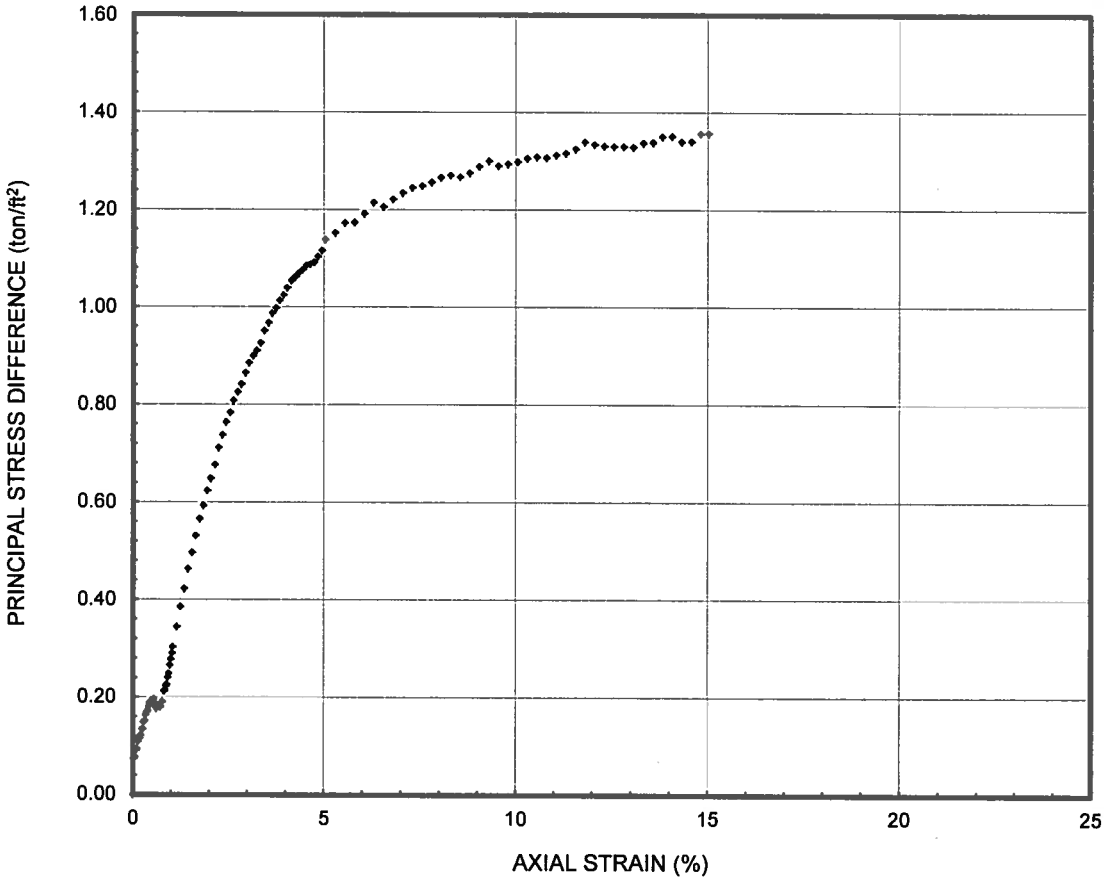
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-16
Depth	18-20 ft
Description	Tan and gray clay w/ fenods and cemented clay



Initial Height	2.797	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	1.392	in	**Strain Rate**	1.0	%/min
Dry Density	102.6	lb/ft^3	**Peak Stress**	1.39	ton/ft^2
Moisture Content	23.8	%	**Strain at Peak Stress**	15.01	%
Saturation	99.9	%	**Failure Type**	Combination	

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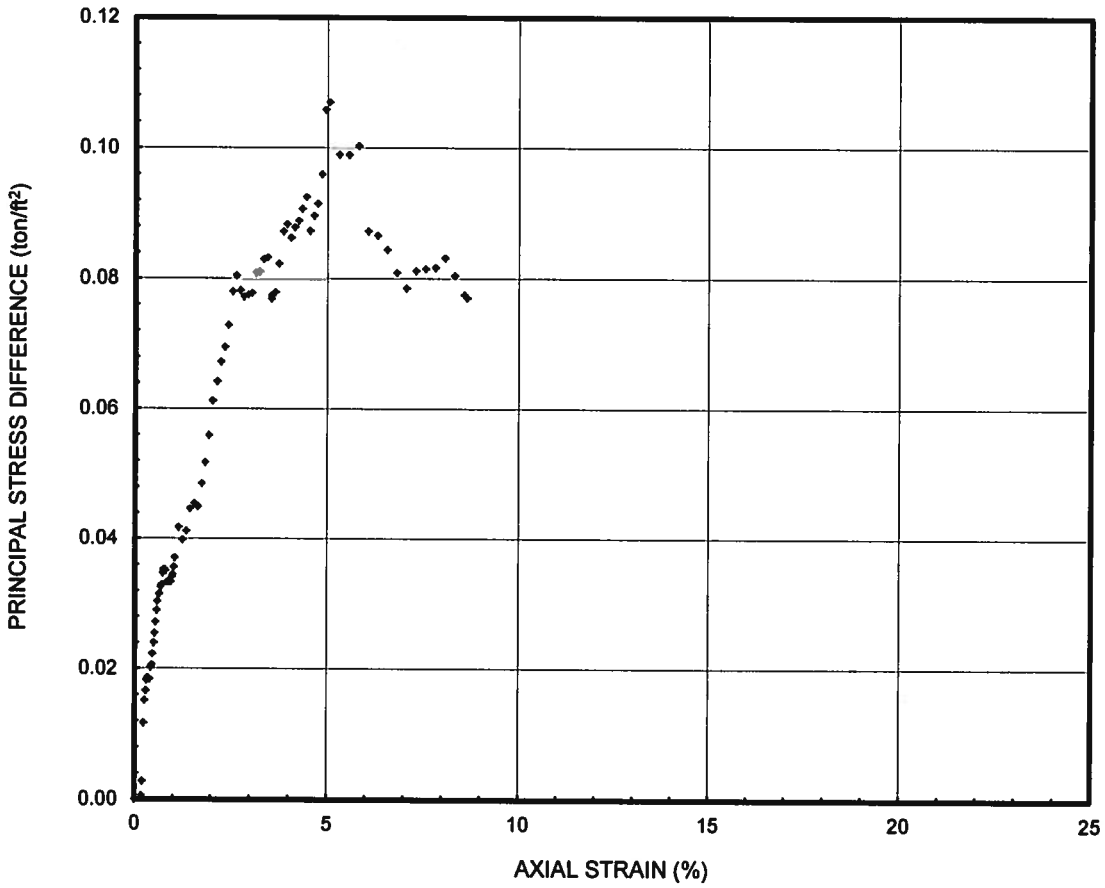
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-17
Depth	2-4 ft
Description	Dark gray clay w/ organics and roots



Initial Height	2.770	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.388	in	**Strain Rate**	1.0	%/min
Dry Density	36.0	lb/ft^3	**Peak Stress**	0.11	ton/ft^2
Moisture Content	134.3	%	**Strain at Peak Stress**	5.05	%
Saturation	98.6	%	**Failure Type**	Bulging	

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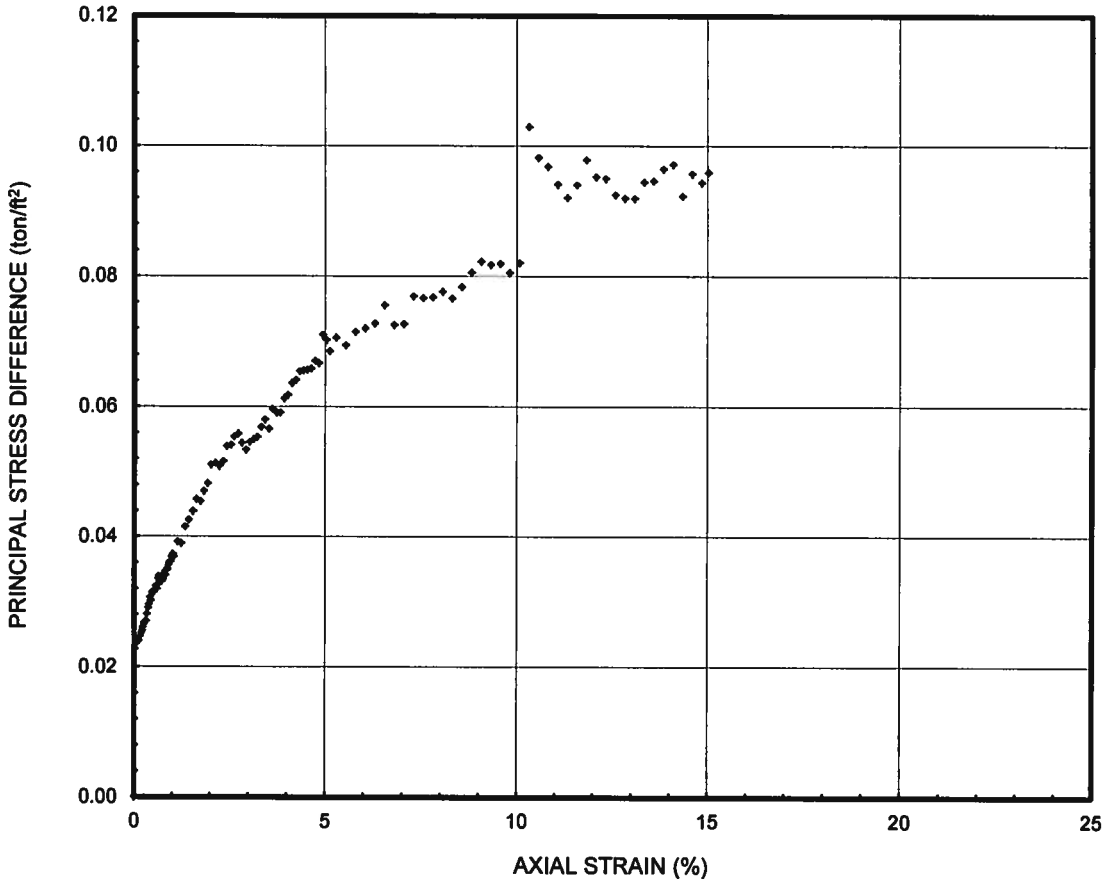
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-17
Depth	6-8 ft
Description	Dark gray clay w/organics and roots



Initial Height	2.774	in	**Cell Pressure**	3.0	lb/in^2
Initial Diameter	1.389	in	**Strain Rate**	1.0	%/min
Dry Density	32.1	lb/ft^3	**Peak Stress**	0.11	ton/ft^2
Moisture Content	162.0	%	**Strain at Peak Stress**	10.32	%
Saturation	103.0	%	**Failure Type**	Bulging	

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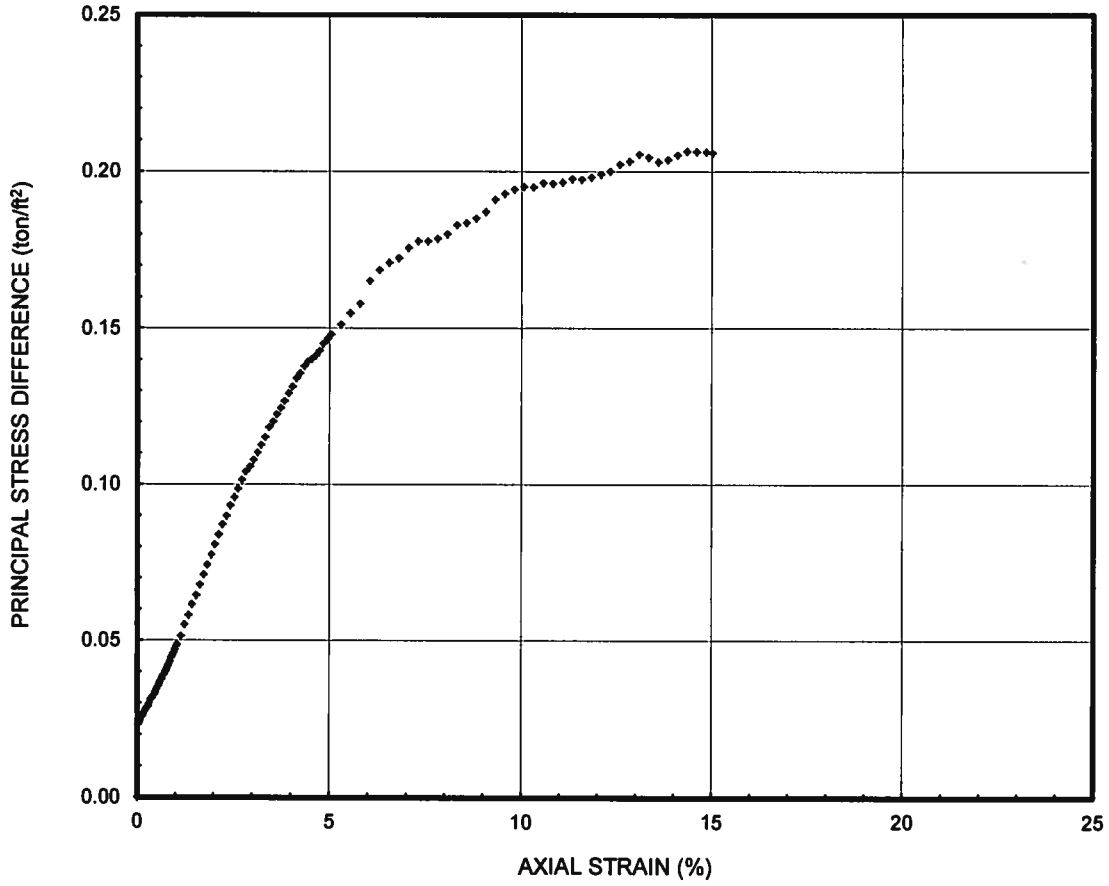
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-17
Depth	12-14 ft
Description	Gray clay w/organics



Initial Height	5.717	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	2.839	in	**Strain Rate**	1.0	%/min
Dry Density	82.2	lb/ft^3	**Peak Stress**	0.21	ton/ft^2
Moisture Content	36.0	%	**Strain at Peak Stress**	14.34	%
Saturation	92.6	%	**Failure Type**	Buging	

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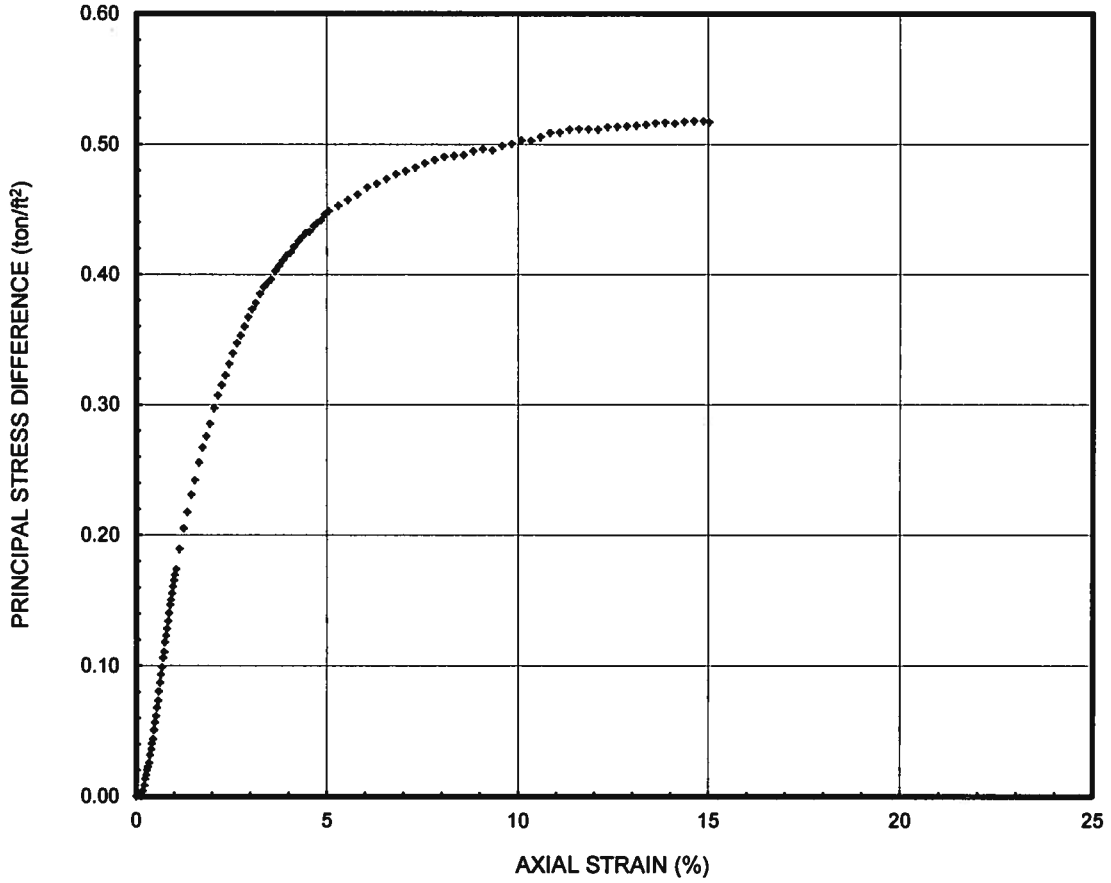
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-17
Depth	14-16 ft
Description	Gray/dark gray clay



Initial Height	5.750	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	2.836	in	**Strain Rate**	1.0	%/min
Dry Density	88.6	lb/ft^3	**Peak Stress**	0.53	ton/ft^2
Moisture Content	32.9	%	**Strain at Peak Stress**	14.61	%
Saturation	98.6	%	**Failure Type**	Bulging	

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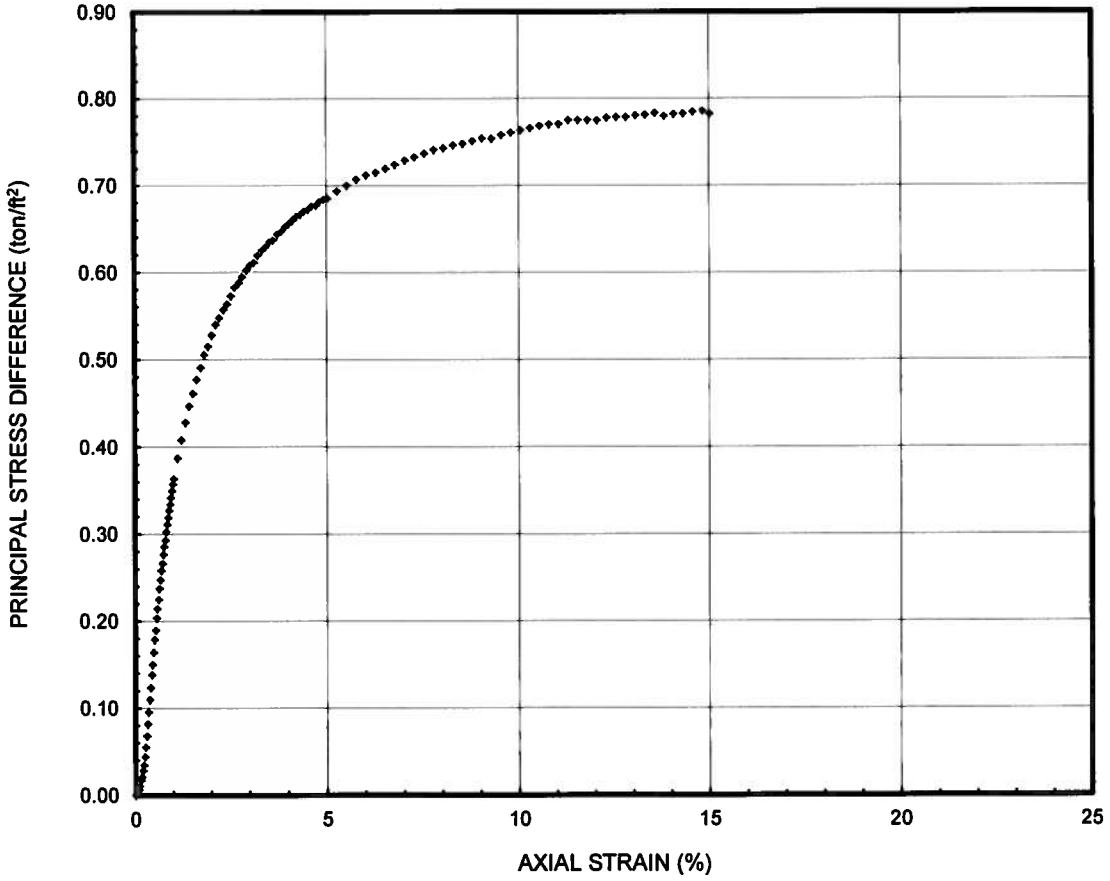
FILE NO. 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	cole's Bayou
Project Number	13-80-3705
Boring Number	B-17
Depth	16-18 ft
Description	Bluish gray/dark gray/tan cl w/trace organic



Initial Height	5.752	in	**Cell Pressure**	7.0	lb/in^2
Initial Diameter	2.837	in	**Strain Rate**	1.0	%/min
Dry Density	96.0	lb/ft^3	**Peak Stress**	0.80	ton/ft^2
Moisture Content	27.0	%	**Strain at Peak Stress**	14.83	%
Saturation	96.6	%	**Failure Type**	Bulging	

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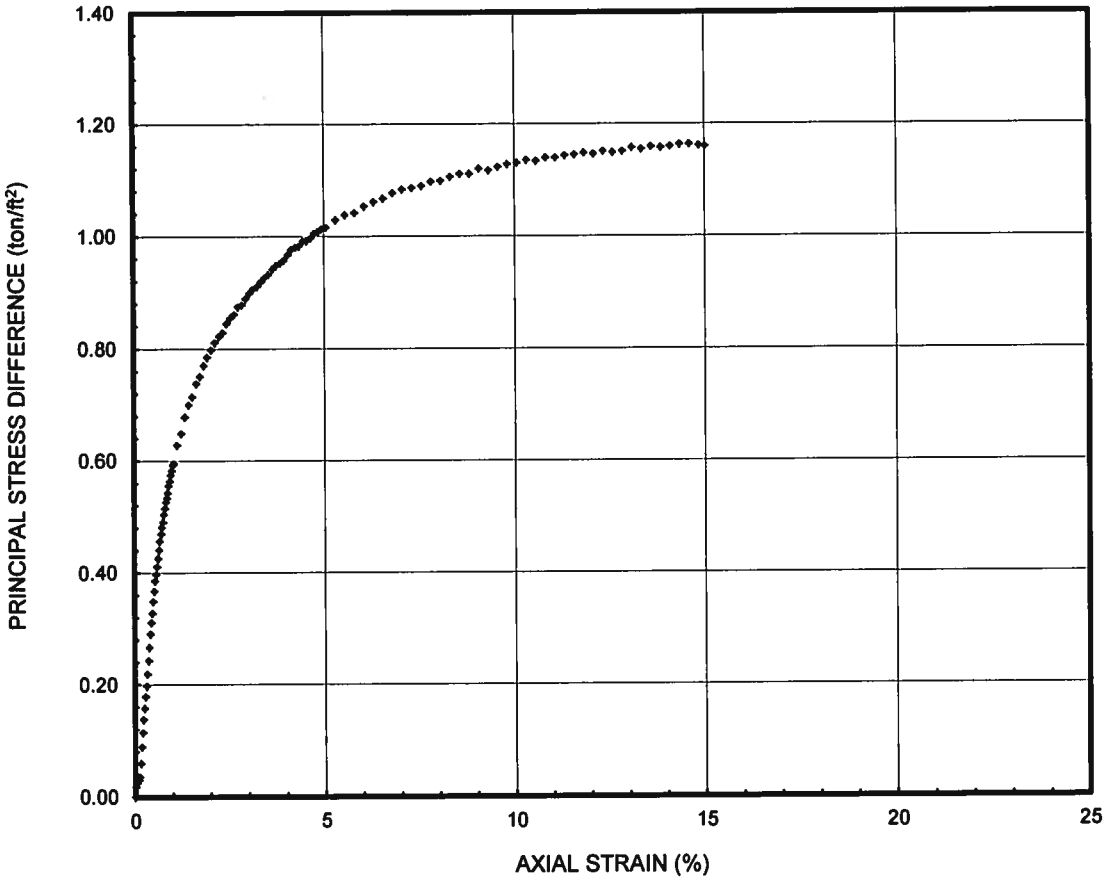
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-17
Depth	18-20 ft
Description	Bluish gray/dark gray/tan clay w/fenods



Initial Height	5.755	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	2.855	in	**Strain Rate**	1.0	%/min
Dry Density	97.3	lb/ft^3	**Peak Stress**	1.19	ton/ft^2
Moisture Content	26.0	%	**Strain at Peak Stress**	14.59	%
Saturation	95.9	%	**Failure Type**	Bulging	

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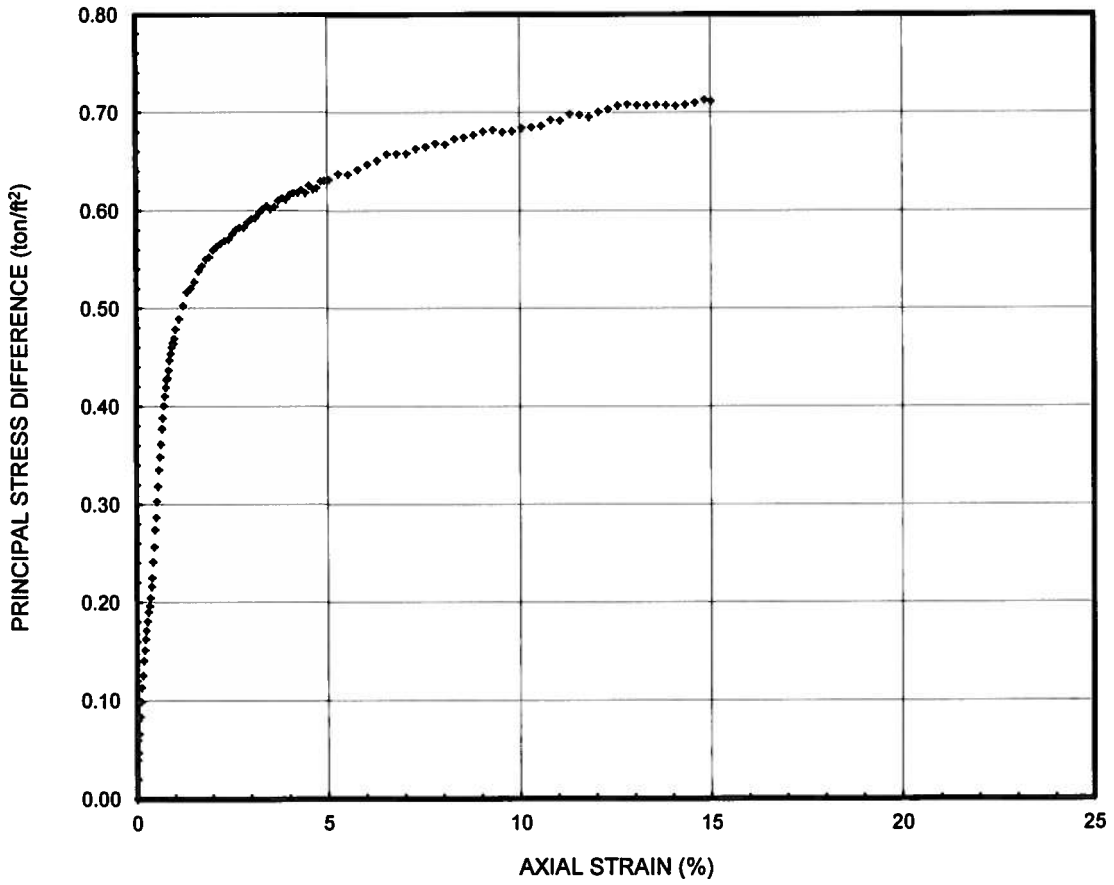
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-17
Depth	38-40 ft
Description	Gray/dark gray clay w/sand pockets, trace organic



Initial Height	5.760	in	**Cell Pressure**	16.0	lb/in^2
Initial Diameter	2.843	in	**Strain Rate**	1.0	%/min
Dry Density	89.2	lb/ft^3	**Peak Stress**	0.73	ton/ft^2
Moisture Content	33.2	%	**Strain at Peak Stress**	14.84	%
Saturation	100.7	%	**Failure Type**	Compination	

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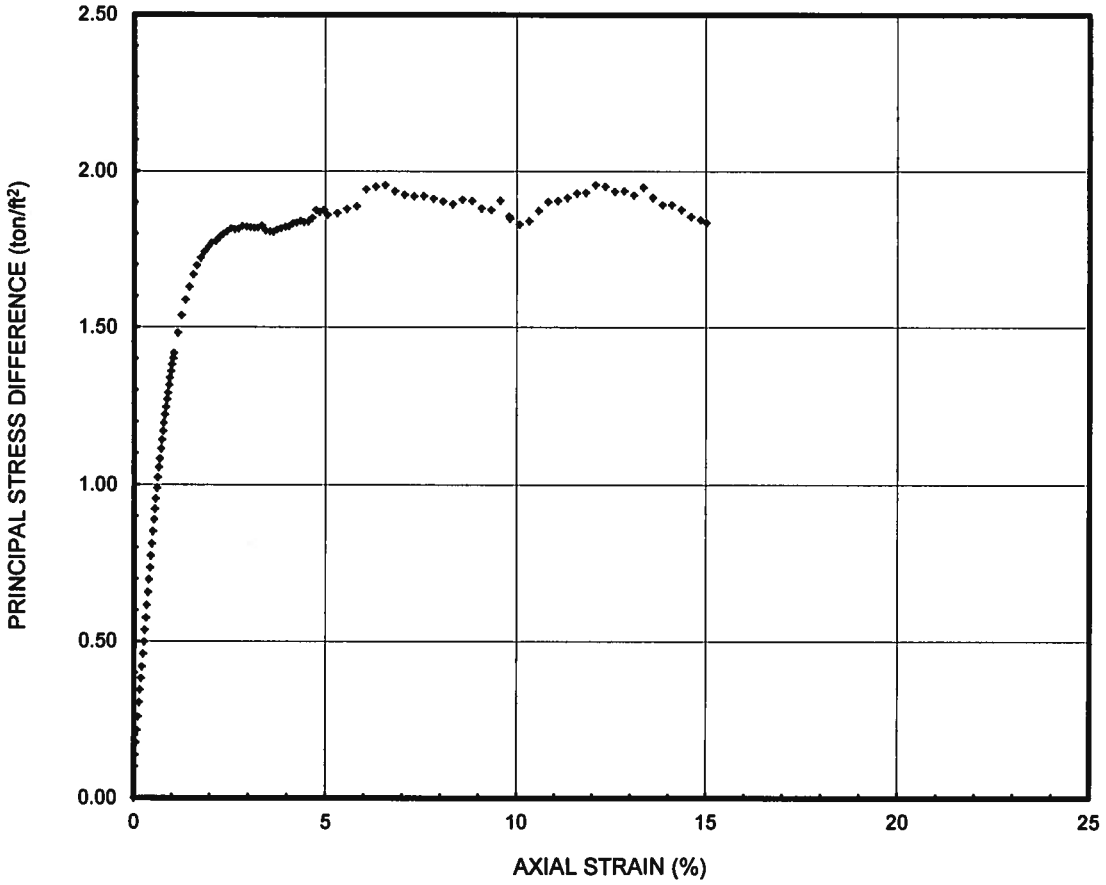
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-17
Depth	48-50 ft
Description	Tan/light gray clay w/silt pockets, fenods



Initial Height	2.797	in	**Cell Pressure**	20.0	lb/in^2
Initial Diameter	1.405	in	**Strain Rate**	1.0	%/min
Dry Density	81.3	lb/ft^3	**Peak Stress**	2.00	ton/ft^2
Moisture Content	39.3	%	**Strain at Peak Stress**	12.08	%
Saturation	99.0	%	**Failure Type**	Combination	

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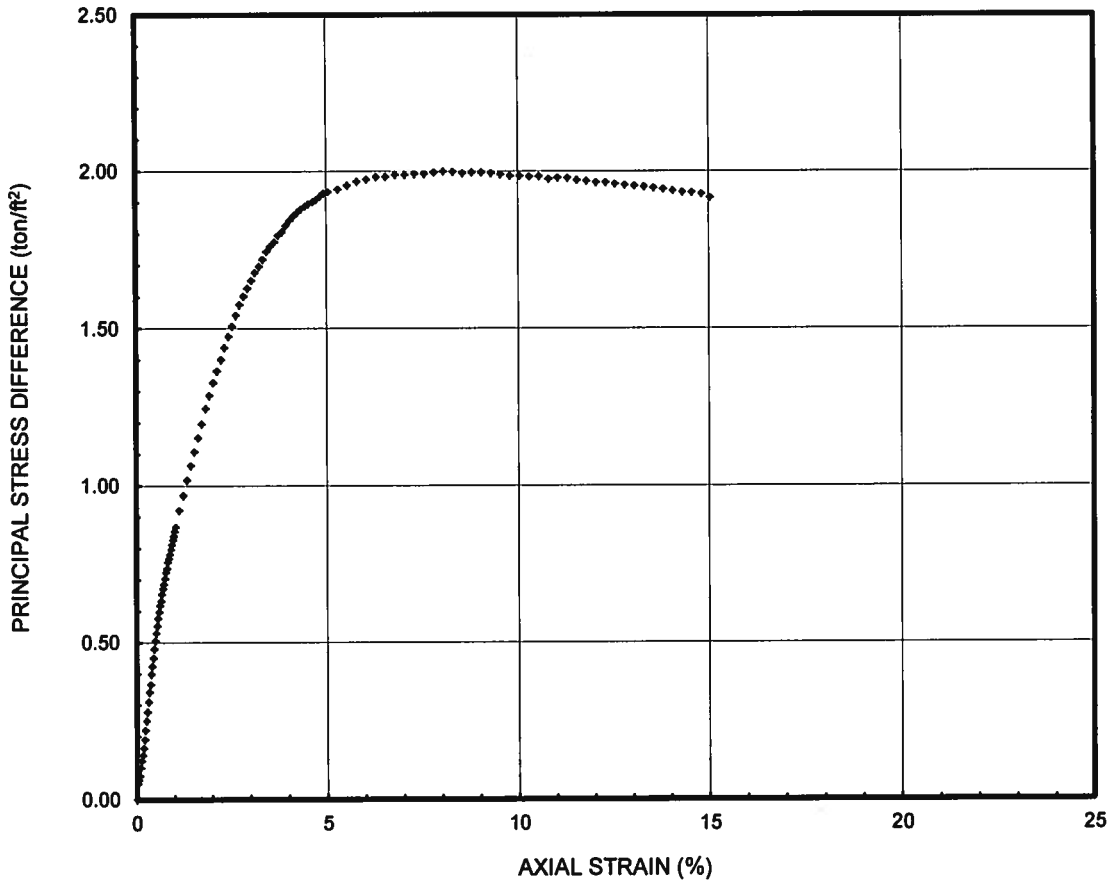
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's bayou
Project Number	13-80-3705
Boring Number	B-17
Depth	53-55 ft
Description	Tan/gray clay w/silty sand pockets, fenods and shell



Initial Height	5.741	in	**Cell Pressure**	22.0	lb/in^2
Initial Diameter	2.852	in	**Strain Rate**	1.0	%/min
Dry Density	93.8	lb/ft^3	**Peak Stress**	2.05	ton/ft^2
Moisture Content	30.2	%	**Strain at Peak Stress**	8.04	%
Saturation	102.4	%	**Failure Type**	Bulging	

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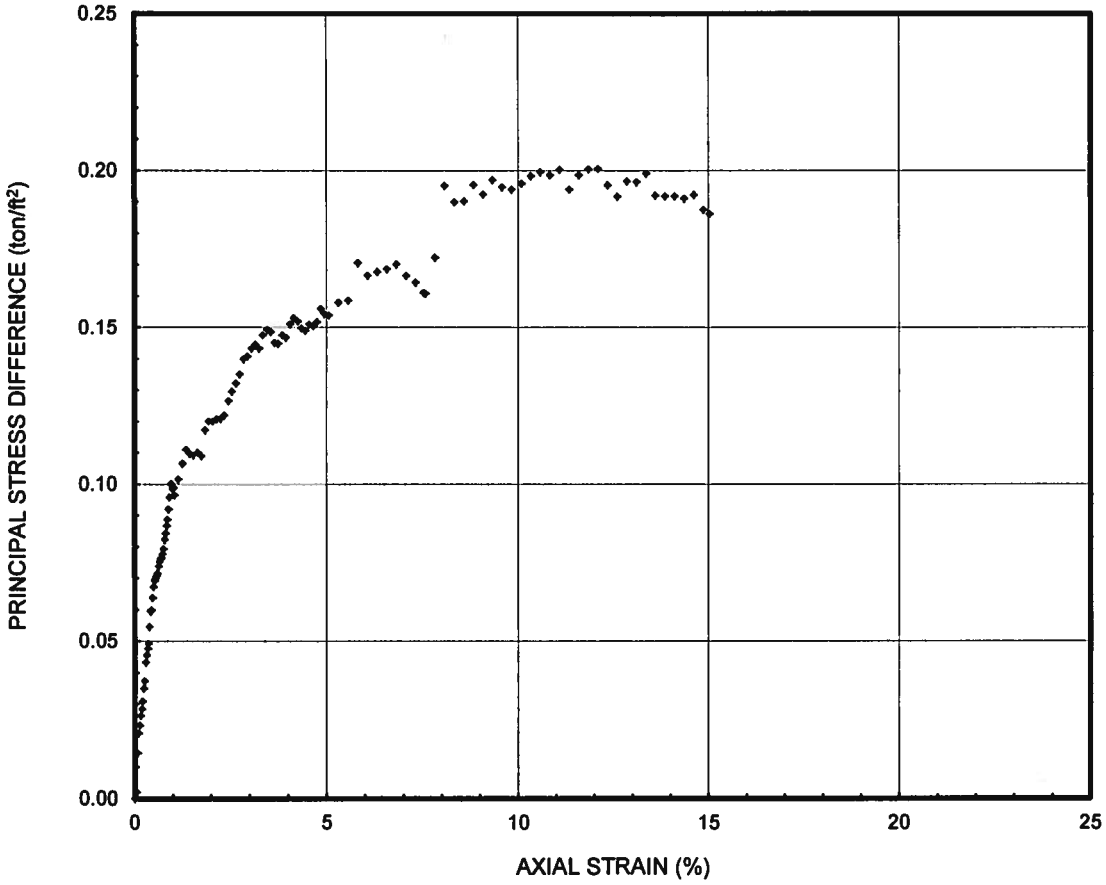
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-18
Depth	2-4 ft
Description	Gray/dark gray clay w/organics and roots



Initial Height	2.796	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.383	in	**Strain Rate**	1.0	%/min
Dry Density	64.8	lb/ft^3	**Peak Stress**	0.21	ton/ft^2
Moisture Content	62.2	%	**Strain at Peak Stress**	12.10	%
Saturation	105.0	%	**Failure Type**	Combination	

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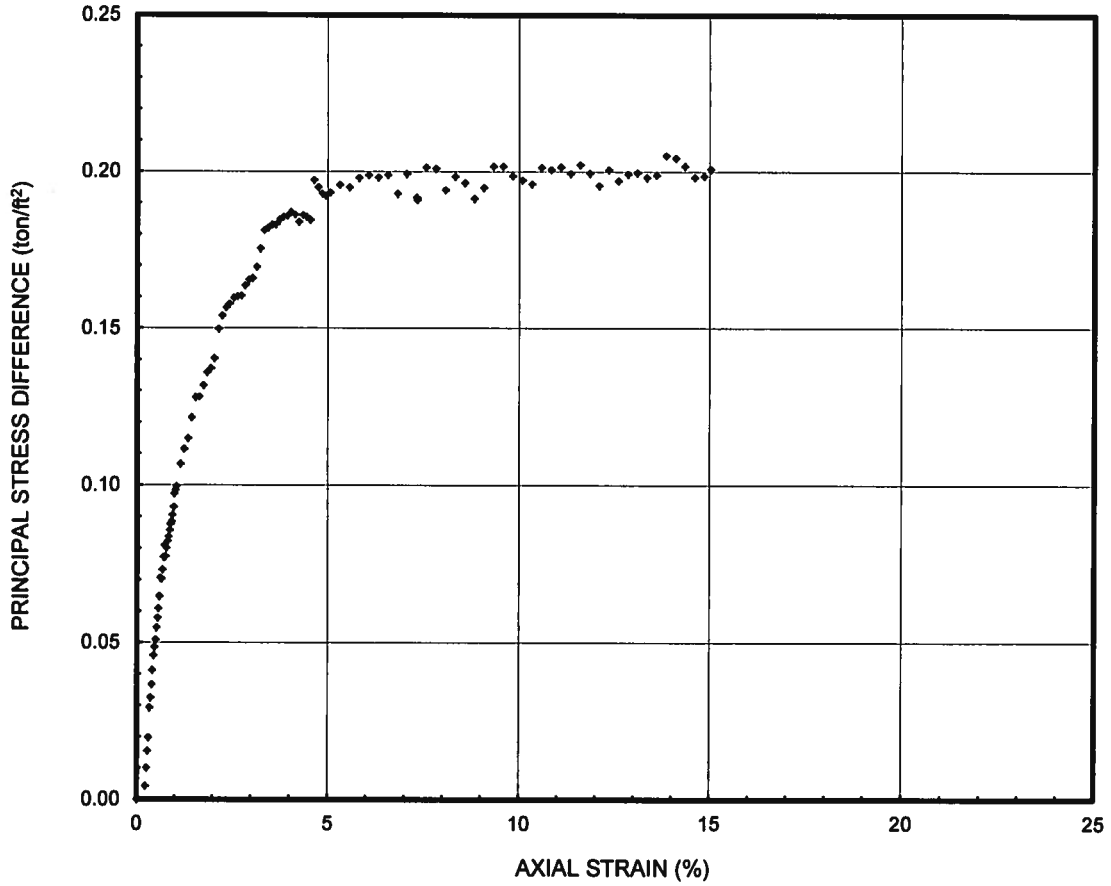
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-18
Depth	6-8 ft
Description	Gray/dark gray clay w/silt pockets and organics



Initial Height	2.791	in	**Cell Pressure**	3.0	lb/in^2
Initial Diameter	1.399	in	**Strain Rate**	1.0	%/min
Dry Density	66.7	lb/ft^3	**Peak Stress**	0.21	ton/ft^2
Moisture Content	59.3	%	**Strain at Peak Stress**	13.84	%
Saturation	104.7	%	**Failure Type**	Bulging	

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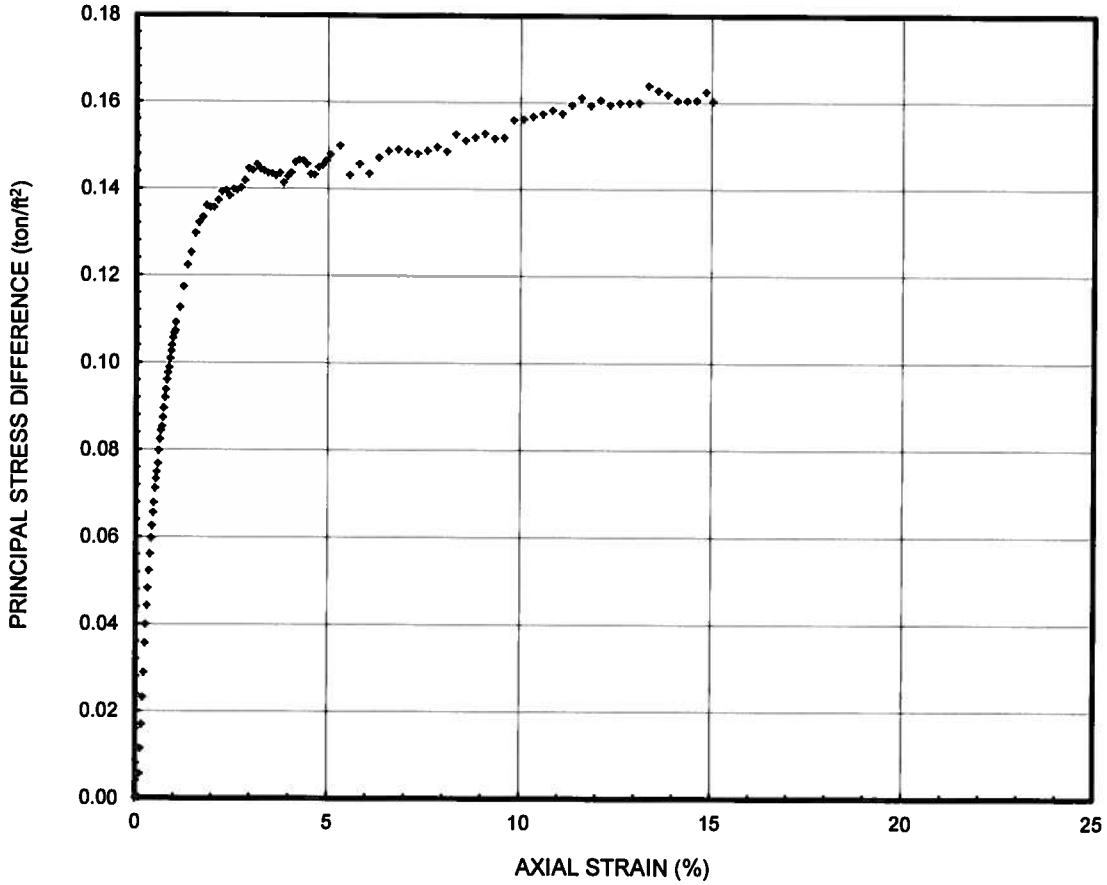
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-18
Depth	8-10 ft
Description	Gray/dark gray clay w/organics



Initial Height	2.799	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	1.390	in	**Strain Rate**	1.0	%/min
Dry Density	65.8	lb/ft^3	**Peak Stress**	0.17	ton/ft^2
Moisture Content	58.1	%	**Strain at Peak Stress**	13.34	%
Saturation	100.3	%	**Failure Type**	Combination	

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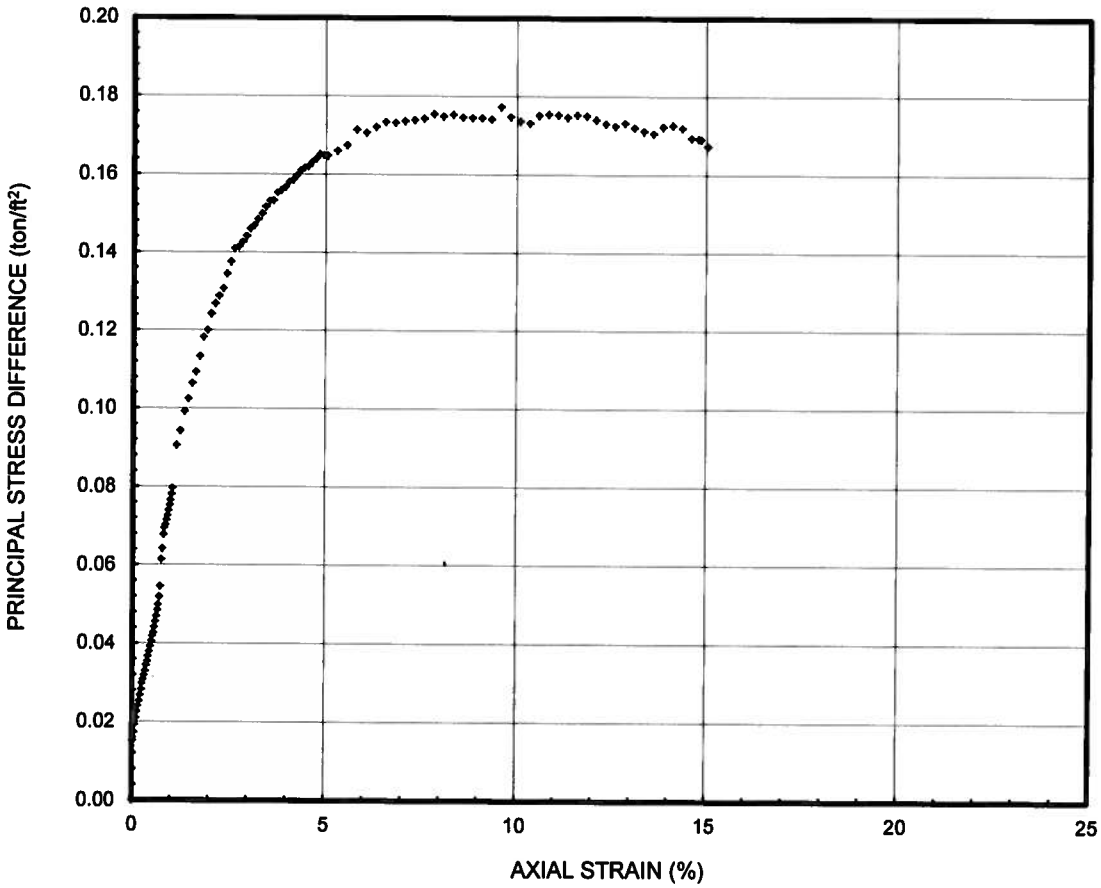
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-18
Depth	14-16 ft
Description	Gray clay w/trace organics and shells



Initial Height	5.736	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	2.834	in	**Strain Rate**	1.0	%/min
Dry Density	56.5	lb/ft^3	**Peak Stress**	0.18	ton/ft^2
Moisture Content	69.6	%	**Strain at Peak Stress**	9.57	%
Saturation	94.7	%	**Failure Type**	Bulging	

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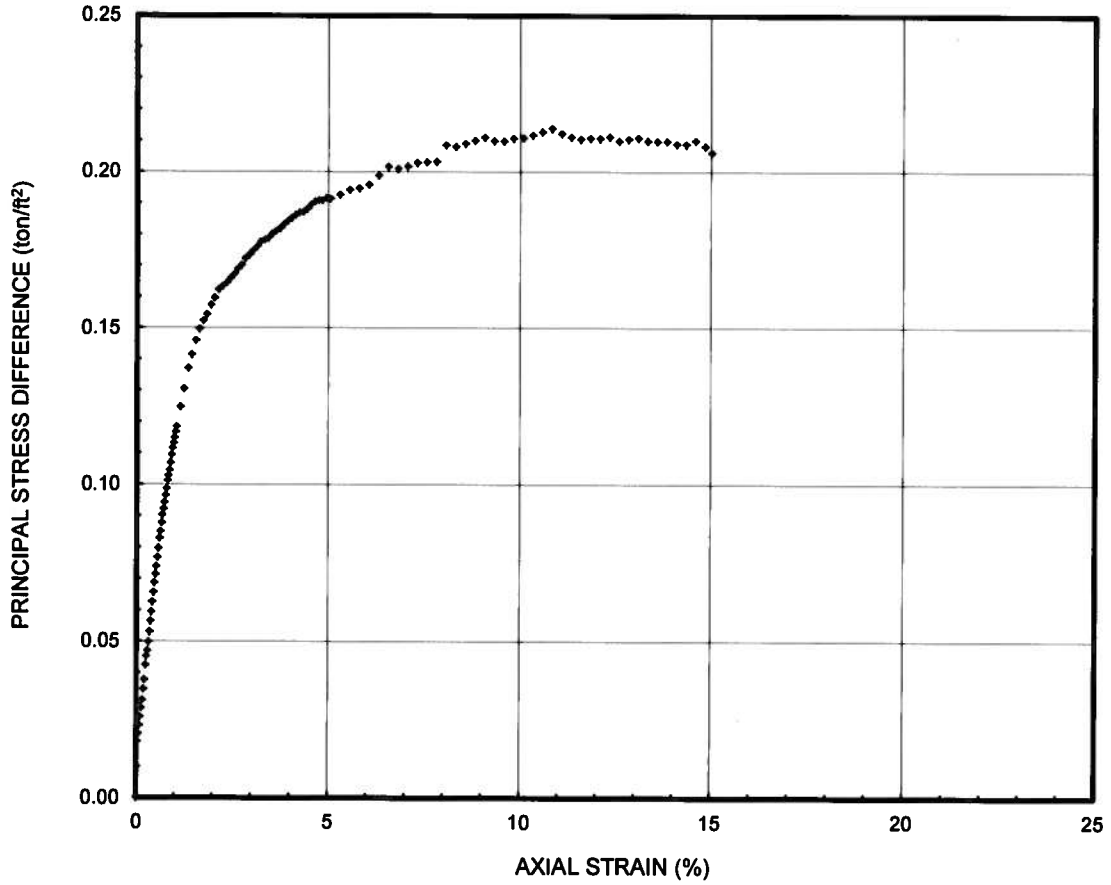
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-18
Depth	18-20 ft
Description	Gray clay w/shells and trace organics



Initial Height	5.754	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	2.821	in	**Strain Rate**	1.0	%/min
Dry Density	63.4	lb/ft^3	**Peak Stress**	0.22	ton/ft^2
Moisture Content	54.0	%	**Strain at Peak Stress**	10.83	%
Saturation	88.0	%	**Failure Type**	Bulging	

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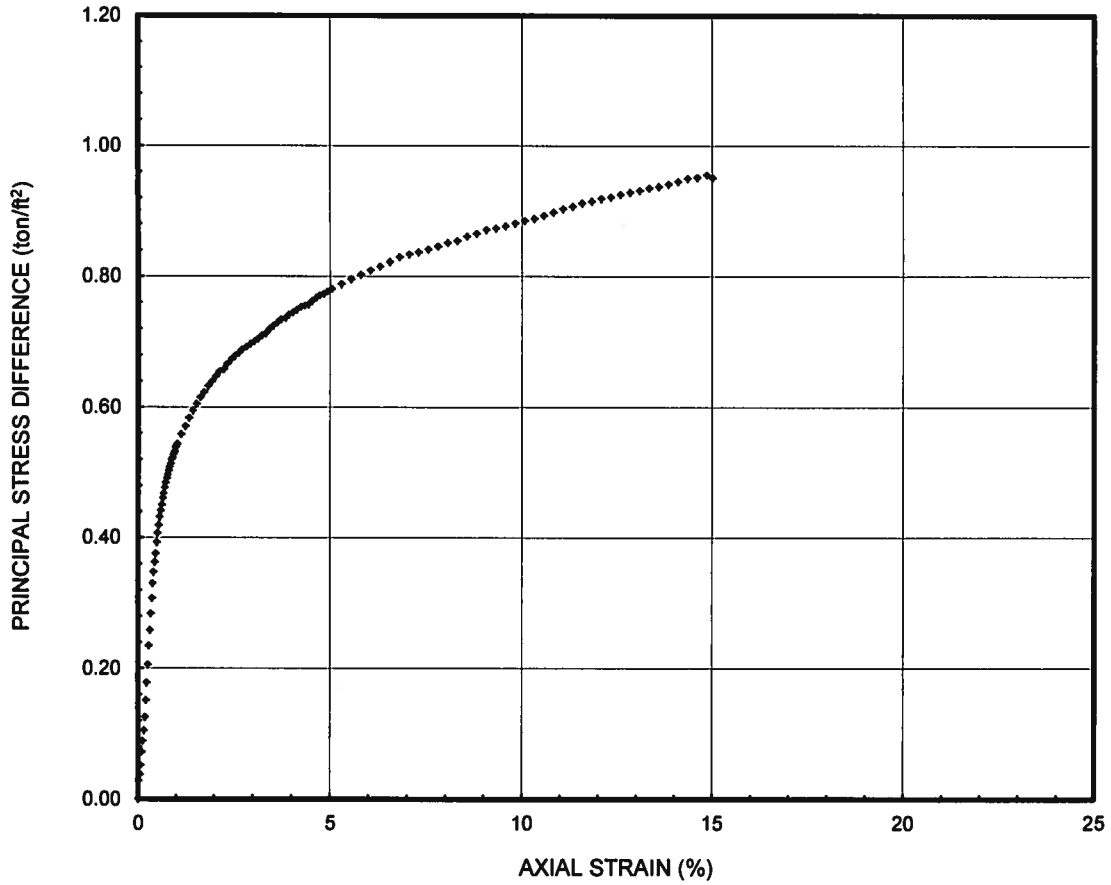
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-18
Depth	28-30 ft
Description	Bluish gray/tan clay w/fenods



Initial Height	5.756	in	**Cell Pressure**	12.0	lb/in^2
Initial Diameter	2.839	in	**Strain Rate**	1.0	%/min
Dry Density	84.6	lb/ft^3	**Peak Stress**	0.98	ton/ft^2
Moisture Content	36.6	%	**Strain at Peak Stress**	14.85	%
Saturation	99.7	%	**Failure Type**	Combination	

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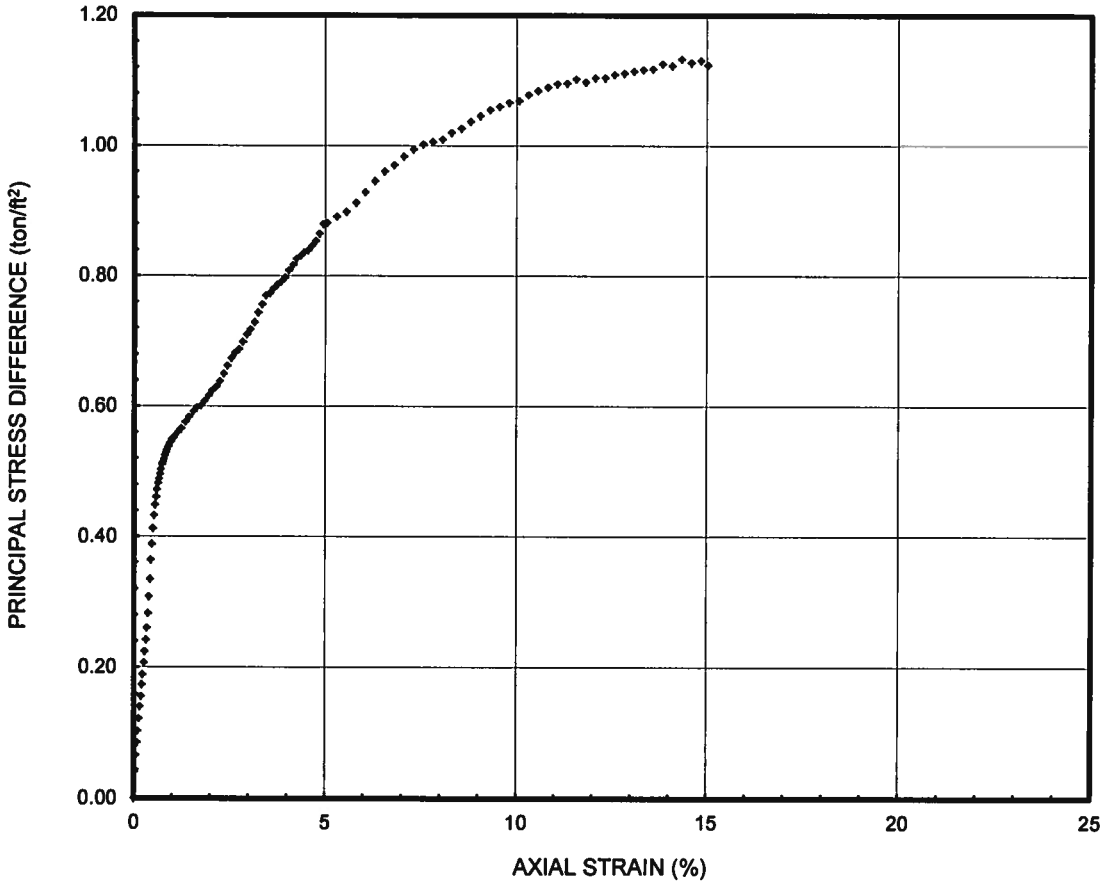
FILE NO.: **13-80-3705**	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-18
Depth	38-40 ft
Description	Light gray/tan gray clay



Initial Height	5.762	in	**Cell Pressure**	16.0	lb/in^2
Initial Diameter	2.873	in	**Strain Rate**	1.0	%/min
Dry Density	90.0	lb/ft^3	**Peak Stress**	1.16	ton/ft^2
Moisture Content	31.4	%	**Strain at Peak Stress**	14.33	%
Saturation	97.2	%	**Failure Type**	Diagonal plane	

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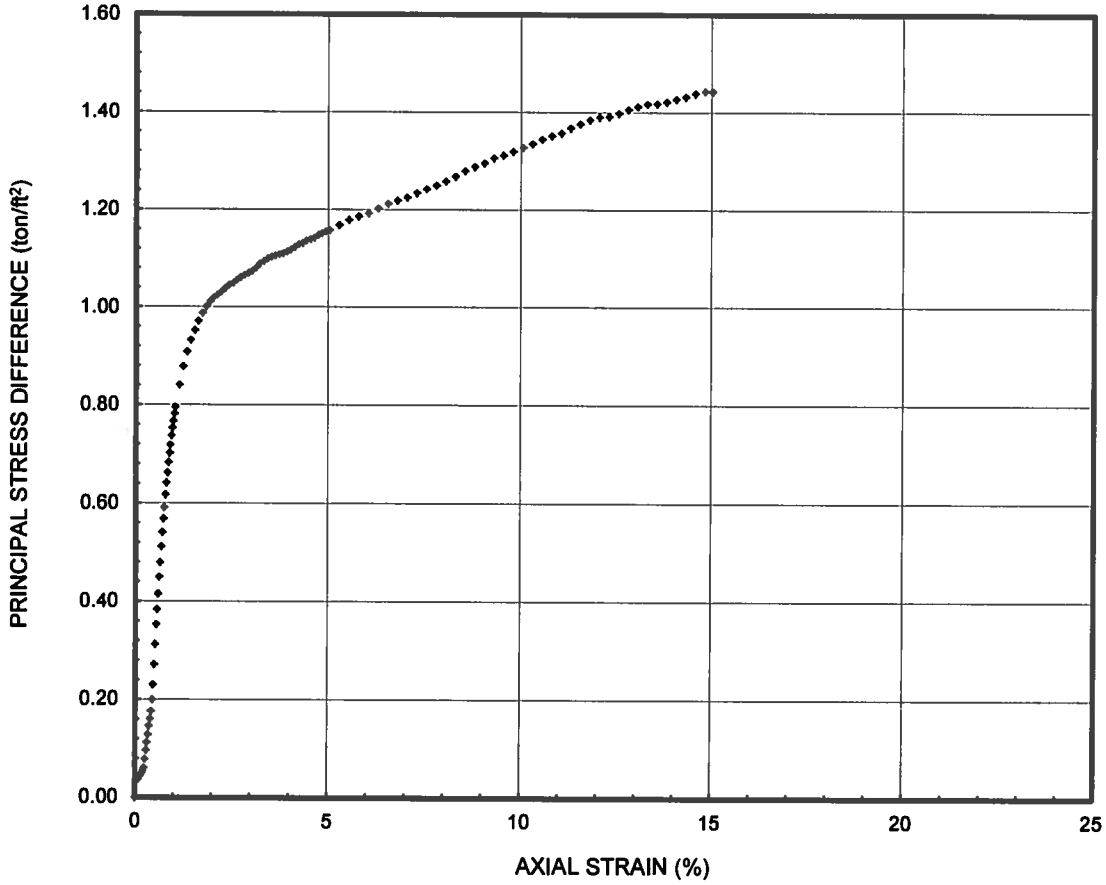
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-18
Depth	43-45 ft
Description	Tan/brown/light gray clay w/fenods, calcium, and cemented clay



Initial Height	5.766	in	**Cell Pressure**	18.0	lb/in^2
Initial Diameter	2.852	in	**Strain Rate**	1.0	%/min
Dry Density	89.4	lb/ft^3	**Peak Stress**	1.48	ton/ft^2
Moisture Content	34.4	%	**Strain at Peak Stress**	14.82	%
Saturation	104.8	%	**Failure Type**	Combination	

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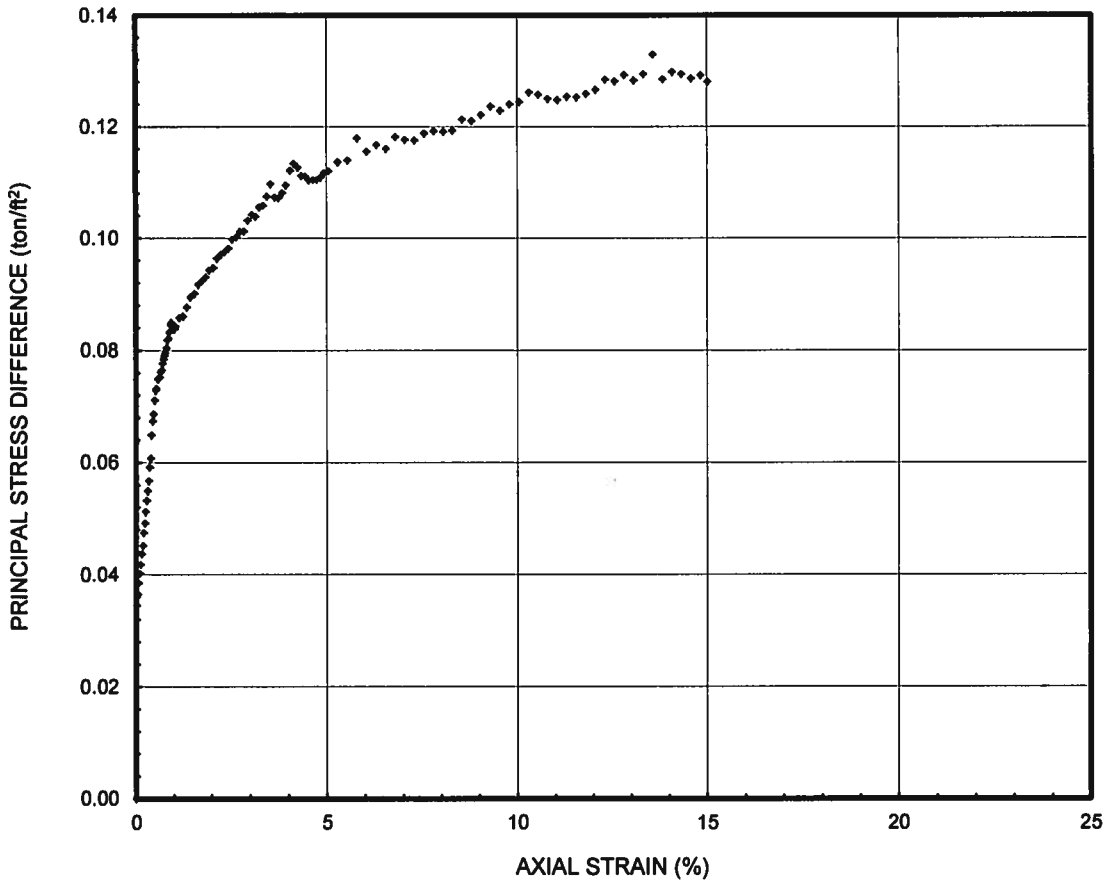
Unconsolidated Undrained Triaxial Compression Test

Project Name COLE'S BAYOU
Project Number 13-80-3705
Boring Number B-19
Depth 0-2 ft
Description Gray jointed clay w/silt, sand and shells



Initial Height	2.777	in	**Cell Pressure**	1.0	lb/in^2
Initial Diameter	1.386	in	**Strain Rate**	1.0	%/min
Dry Density	77.9	lb/ft^3	**Peak Stress**	0.14	ton/ft^2
Moisture Content	45.1	%	**Strain at Peak Stress**	13.57	%
Saturation	104.6	%	**Failure Type**	Bulging	

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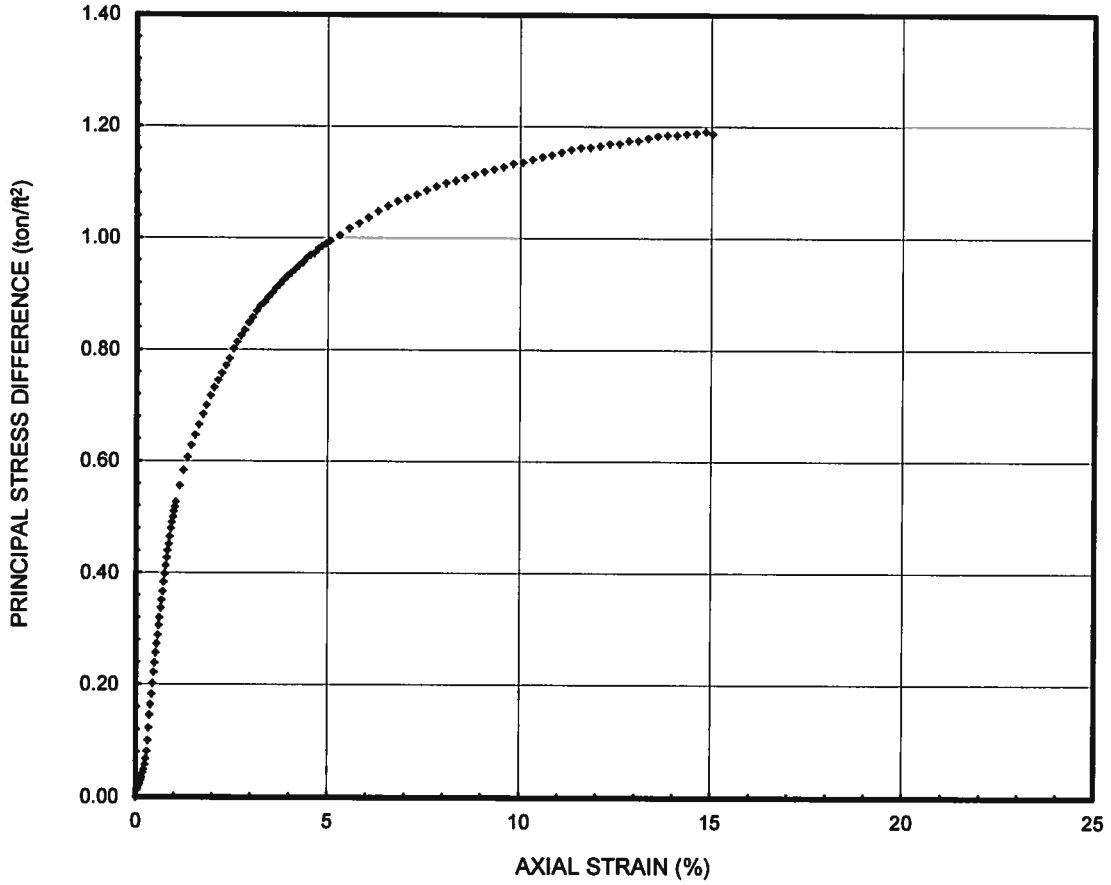
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-19
Depth	4-6 ft
Description	Gray clay w/trace organics and fenods



Initial Height	5.753	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	2.828	in	**Strain Rate**	1.0	%/min
Dry Density	91.5	lb/ft^3	**Peak Stress**	1.22	ton/ft^2
Moisture Content	33.2	%	**Strain at Peak Stress**	14.84	%
Saturation	106.3	%	**Failure Type**	Combination	

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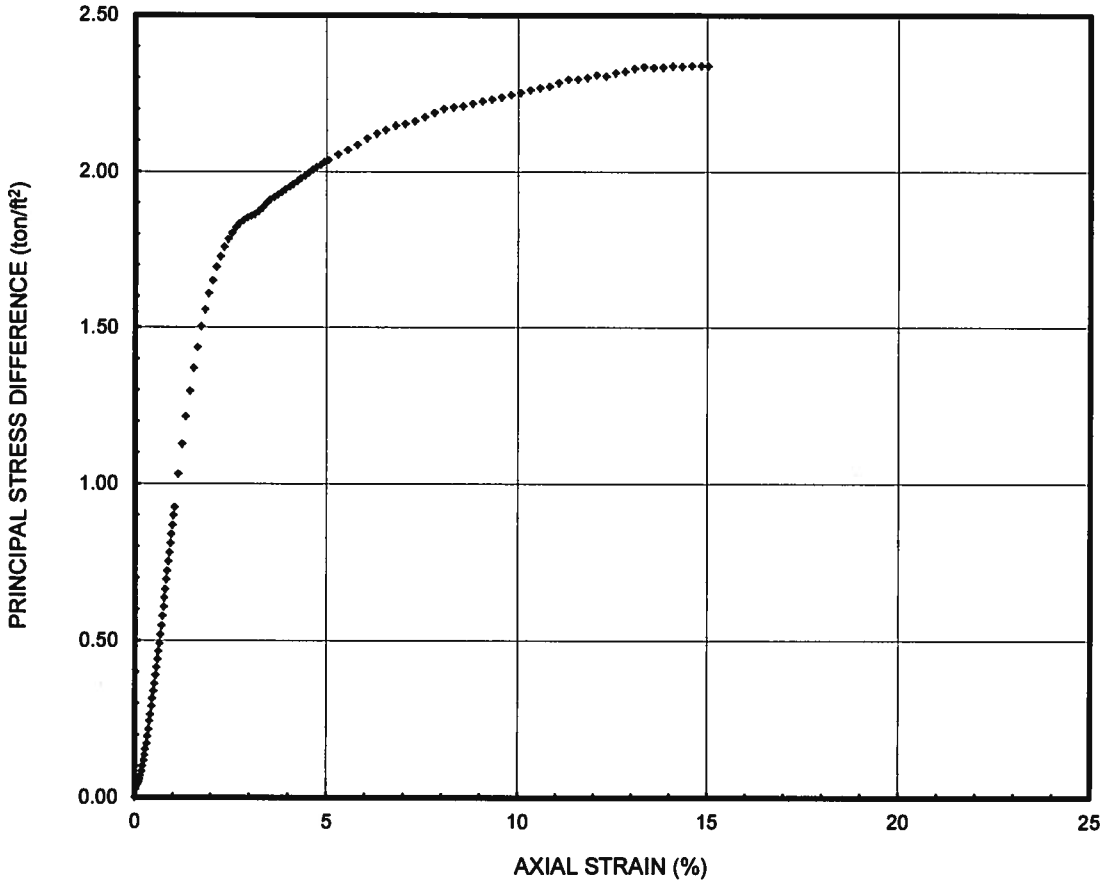
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-19
Depth	6-8 ft
Description	Tan/brown/gray clay w/silt pockets, fenods and trace organics



Initial Height	2.799	in	**Cell Pressure**	3.0	lb/in^2
Initial Diameter	1.399	in	**Strain Rate**	1.0	%/min
Dry Density	105.4	lb/ft^3	**Peak Stress**	2.40	ton/ft^2
Moisture Content	21.8	%	**Strain at Peak Stress**	14.58	%
Saturation	98.4	%	**Failure Type**	Combination	

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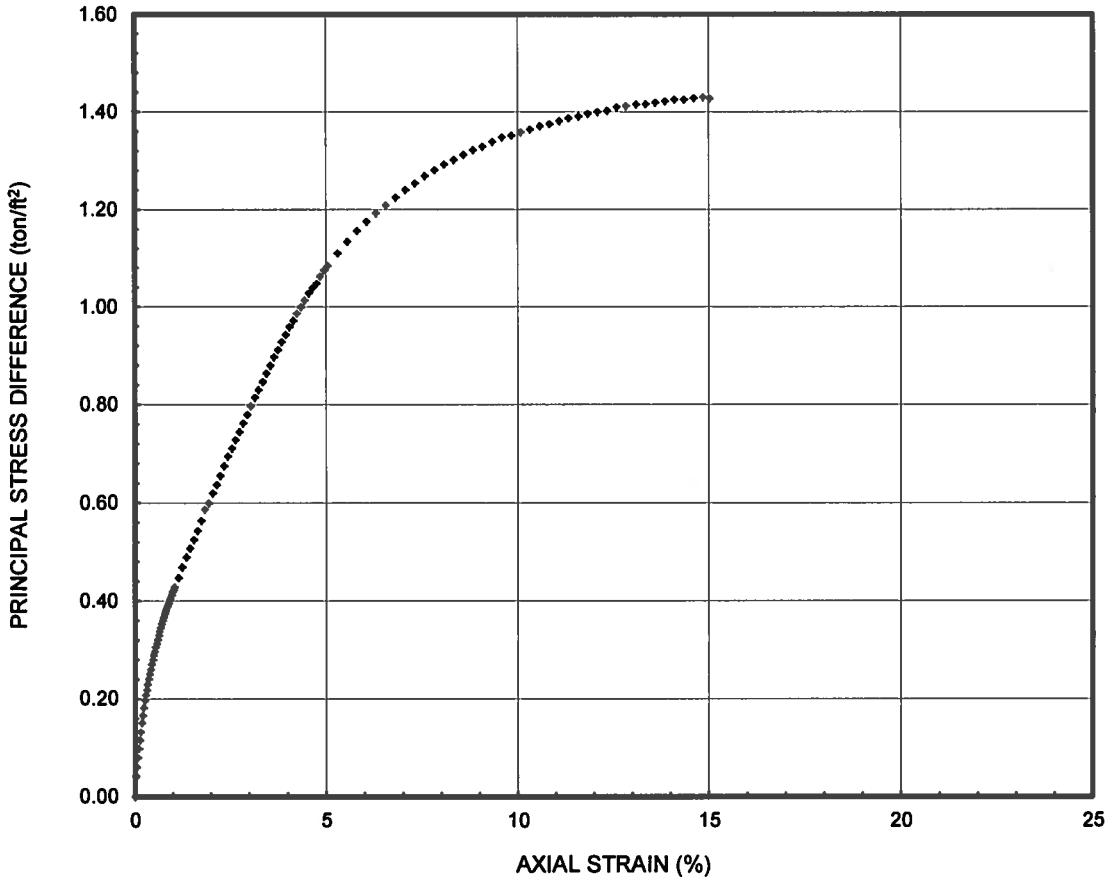
Unconsolidated Undrained Triaxial Compression Test

Project Name Cole's Bayou
Project Number 13-80-3705
Boring Number B-19
Depth 112-14 ft
Description Tan/brown/gray clay w/silt, fenods and trace organics



Initial Height	2.794	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	1.399	in	**Strain Rate**	1.0	%/min
Dry Density	100.7	lb/ft^3	**Peak Stress**	1.46	ton/ft^2
Moisture Content	26.4	%	**Strain at Peak Stress**	14.85	%
Saturation	105.9	%	**Failure Type**	Bulging	

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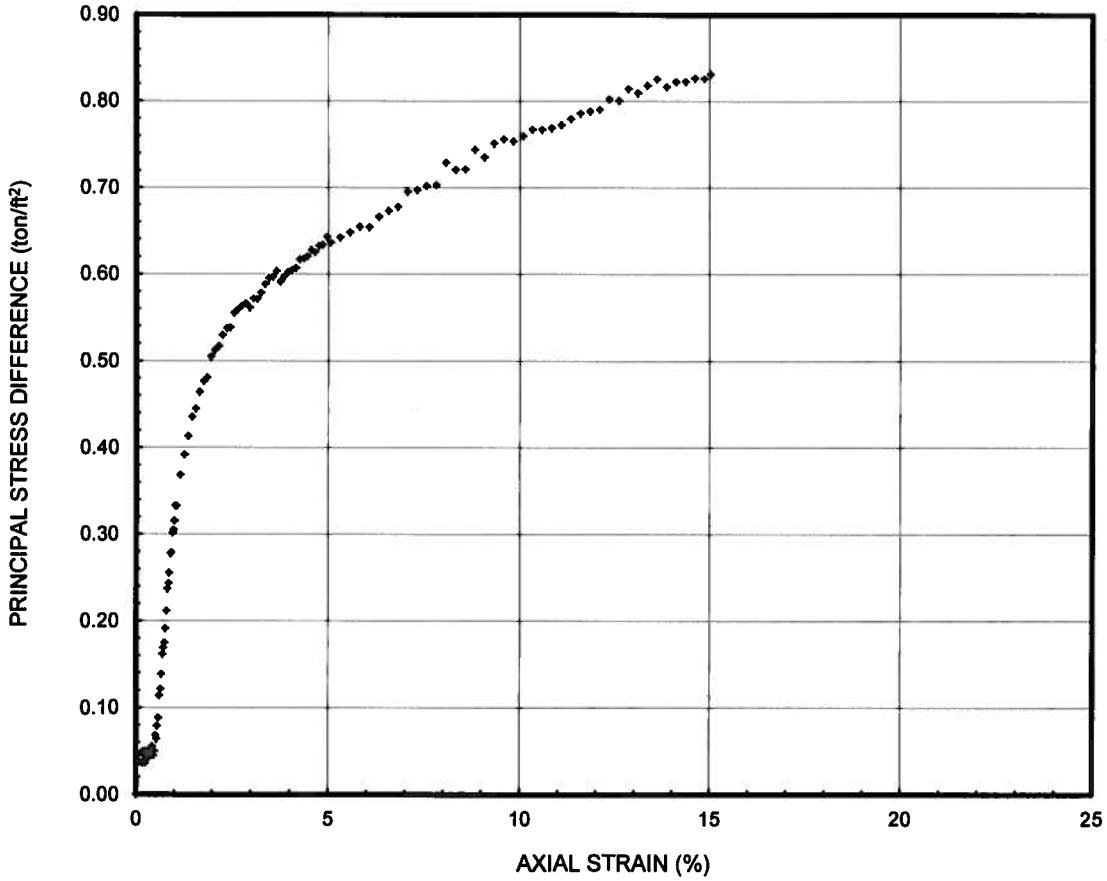
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-19
Depth	16-18 ft
Description	Tan/brown/gray silty clay w/fenods and shells



Initial Height	2.799	in	**Cell Pressure**	7.0	lb/in^2
Initial Diameter	1.392	in	**Strain Rate**	1.0	%/min
Dry Density	97.8	lb/ft^3	**Peak Stress**	0.85	ton/ft^2
Moisture Content	26.6	%	**Strain at Peak Stress**	15.01	%
Saturation	99.2	%	**Failure Type**	Combination	

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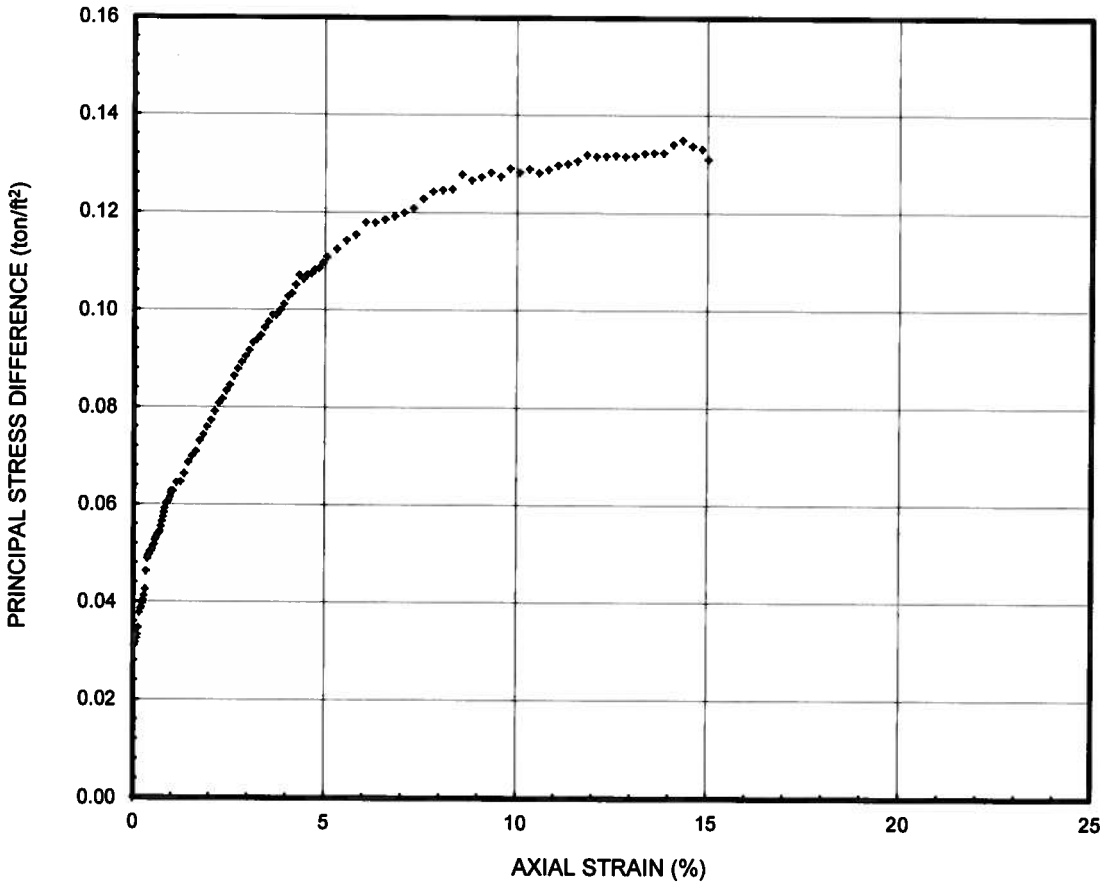
Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-20
Depth	2-4 ft
Description	Gray clay w/trace organics



Initial Height	5.683	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	2.792	in	**Strain Rate**	1.0	%/min
Dry Density	55.4	lb/ft^3	**Peak Stress**	0.14	ton/ft^2
Moisture Content	68.9	%	**Strain at Peak Stress**	14.33	%
Saturation	91.1	%	**Failure Type**	Bulging	

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COLE'S BAYOU MARSH CREATION

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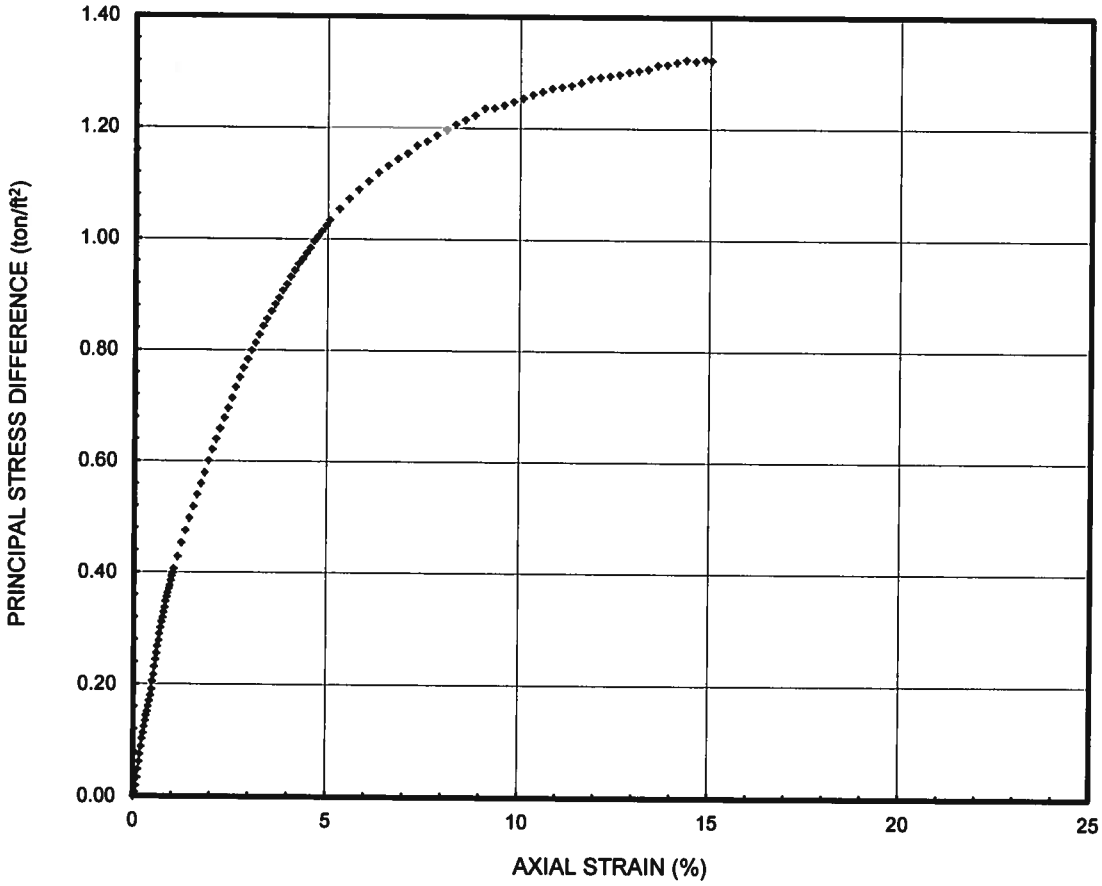
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-20
Depth	4-6 ft
Description	Bluish gray/tan clay w/fenods and cemented clay



Initial Height	5.751	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	2.832	in	**Strain Rate**	1.0	%/min
Dry Density	104.3	lb/ft^3	**Peak Stress**	1.36	ton/ft^2
Moisture Content	23.8	%	**Strain at Peak Stress**	14.85	%
Saturation	104.3	%	**Failure Type**	Combination	

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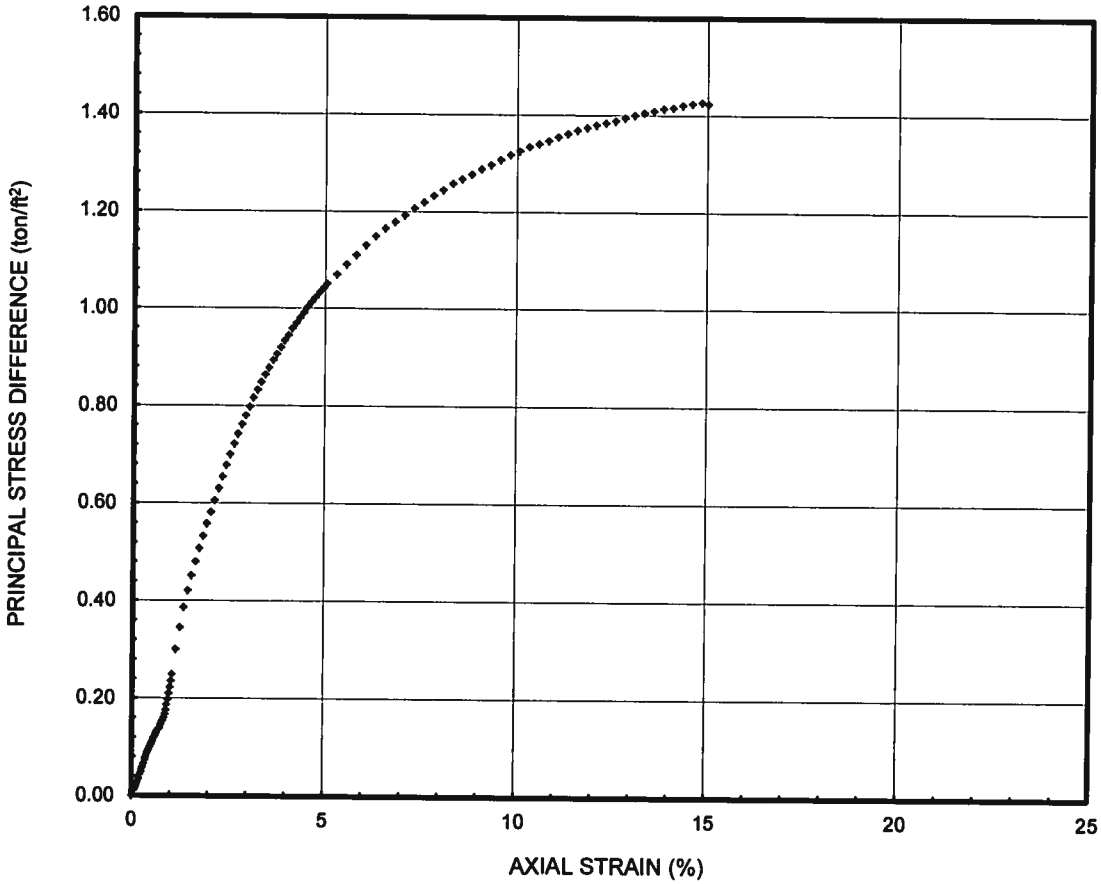
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-20
Depth	8-10 ft
Description	Bluish gray/tan clay w/fenods



Initial Height	5.751	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	2.842	in	**Strain Rate**	1.0	%/min
Dry Density	103.8	lb/ft^3	**Peak Stress**	1.46	ton/ft^2
Moisture Content	23.6	%	**Strain at Peak Stress**	14.83	%
Saturation	102.1	%	**Failure Type**	Combination	

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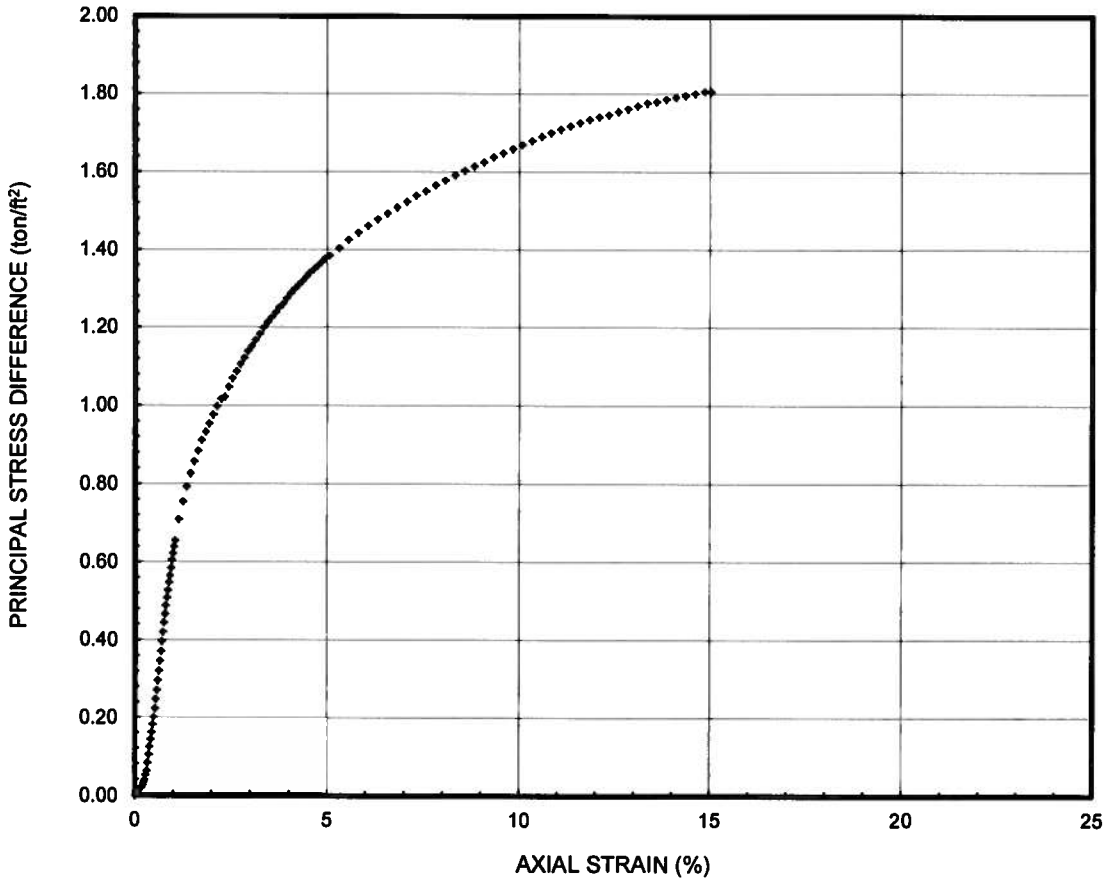
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name COLE'S BAYOU
Project Number 13-80-3705
Boring Number B-20
Depth 10-12 ft
Description Tan/bluish gray clay w/trace organics and fenods



Initial Height	5.747	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	2.851	in	**Strain Rate**	1.0	%/min
Dry Density	99.3	lb/ft^3	**Peak Stress**	1.85	ton/ft^2
Moisture Content	26.4	%	**Strain at Peak Stress**	14.85	%
Saturation	102.3	%	**Failure Type**	Combination	

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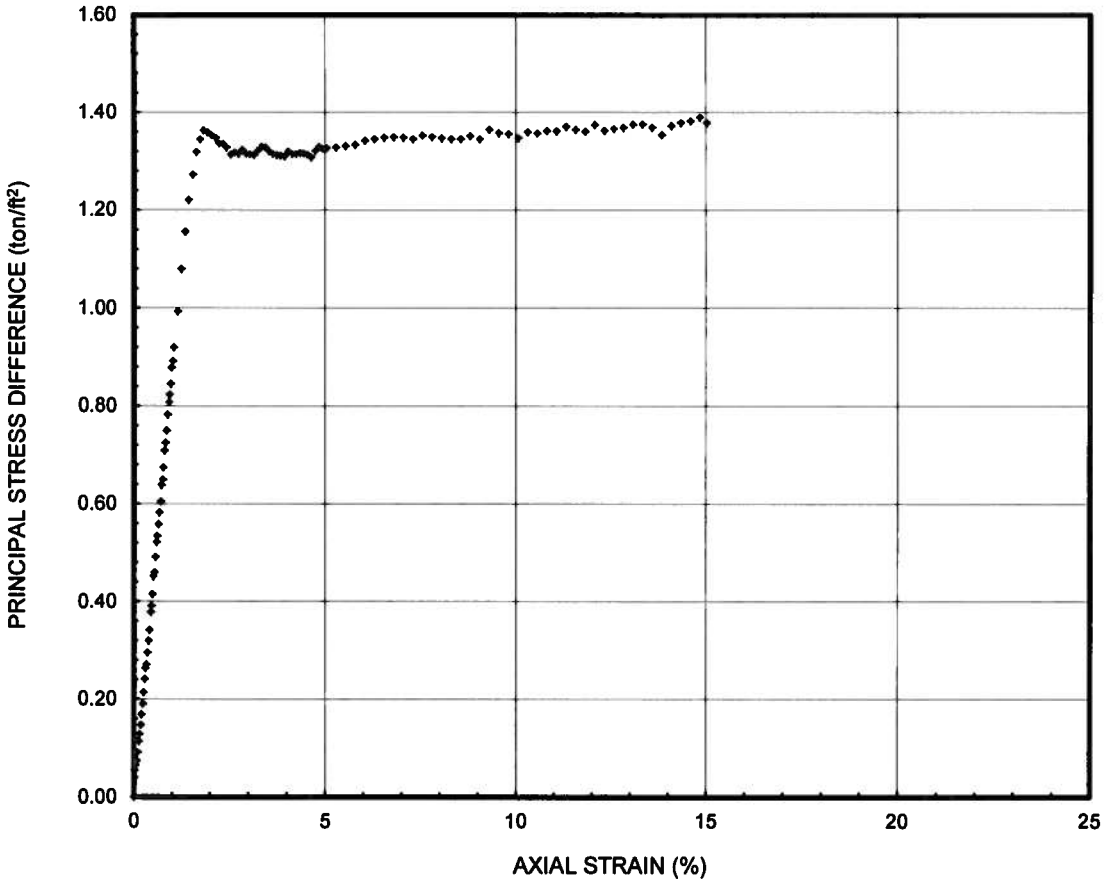
Unconsolidated Undrained Triaxial Compression Test

Project Name COLE'S BAYOU
Project Number 13-80-3705
Boring Number B-20
Depth 16-18 ft
Description Tan/gray silty clay w/fenods and trace organics



Initial Height	2.801	in	**Cell Pressure**	7.0	lb/in^2
Initial Diameter	1.414	in	**Strain Rate**	1.0	%/min
Dry Density	96.0	lb/ft^3	**Peak Stress**	1.42	ton/ft^2
Moisture Content	26.6	%	**Strain at Peak Stress**	14.85	%
Saturation	95.2	%	**Failure Type**	Combination	

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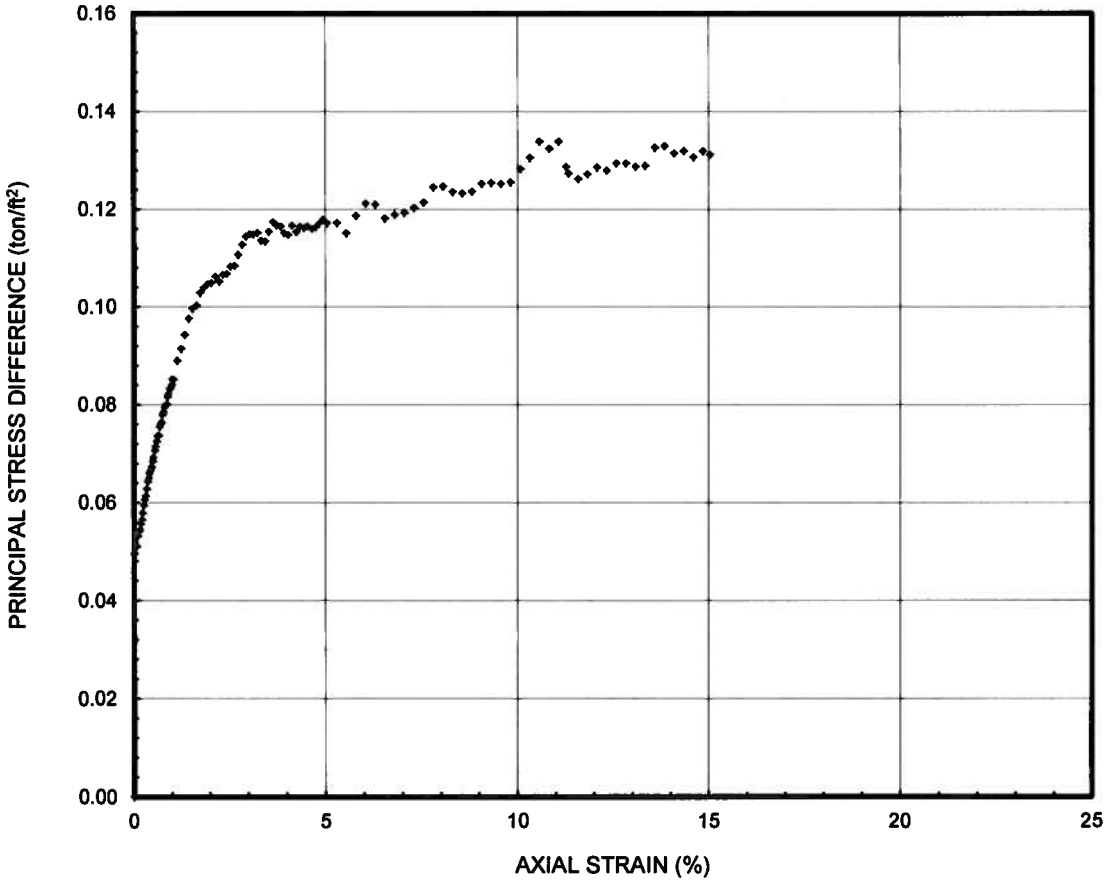
Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-21
Depth	0-2 ft
Description	Gray clay w/organics



Initial Height	2.780	in	**Cell Pressure**	1.0	lb/in^2
Initial Diameter	1.390	in	**Strain Rate**	1.0	%/min
Dry Density	30.2	lb/ft^3	**Peak Stress**	0.14	ton/ft^2
Moisture Content	169.9	%	**Strain at Peak Stress**	10.57	%
Saturation	100.2	%	**Failure Type**	Combination	

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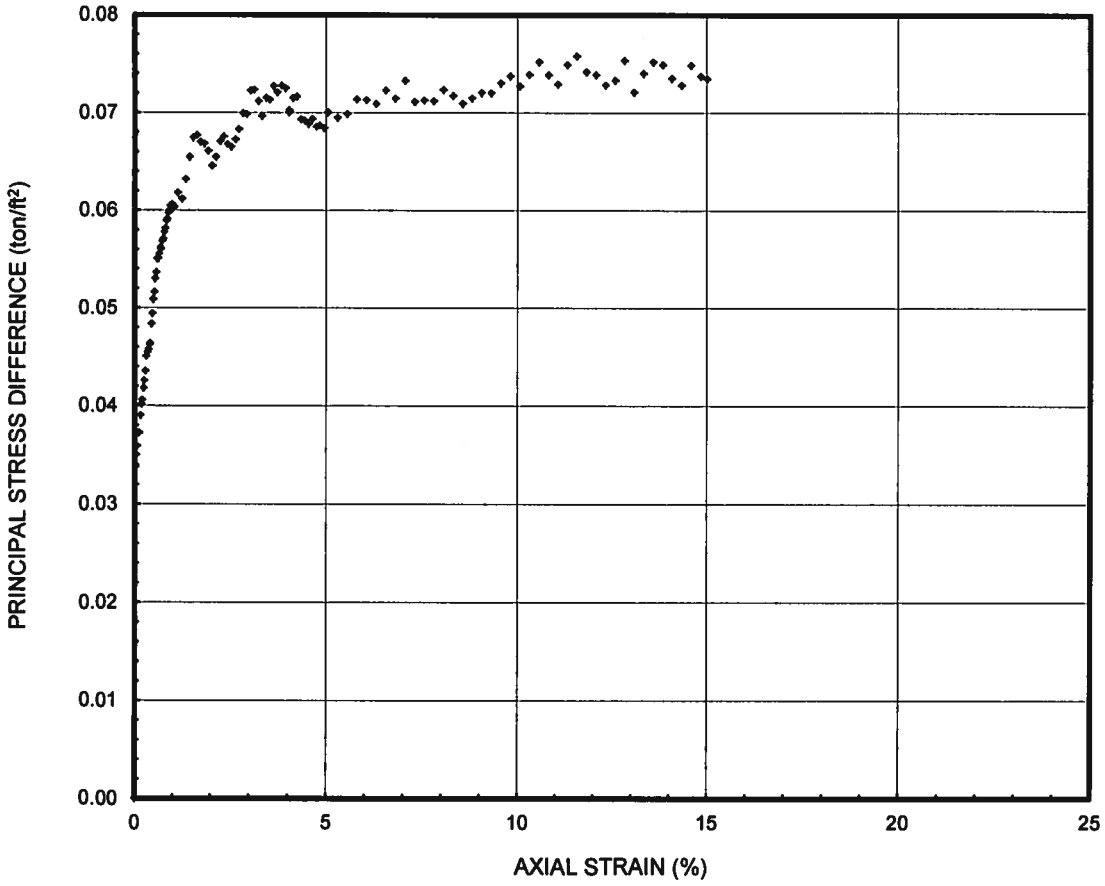
Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-21
Depth	2-4 ft
Description	Gray clay w/shells and trace organics



Initial Height	2.797	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.385	in	**Strain Rate**	1.0	%/min
Dry Density	45.7	lb/ft^3	**Peak Stress**	0.08	ton/ft^2
Moisture Content	101.4	%	**Strain at Peak Stress**	11.57	%
Saturation	101.9	%	**Failure Type**	Bulging	

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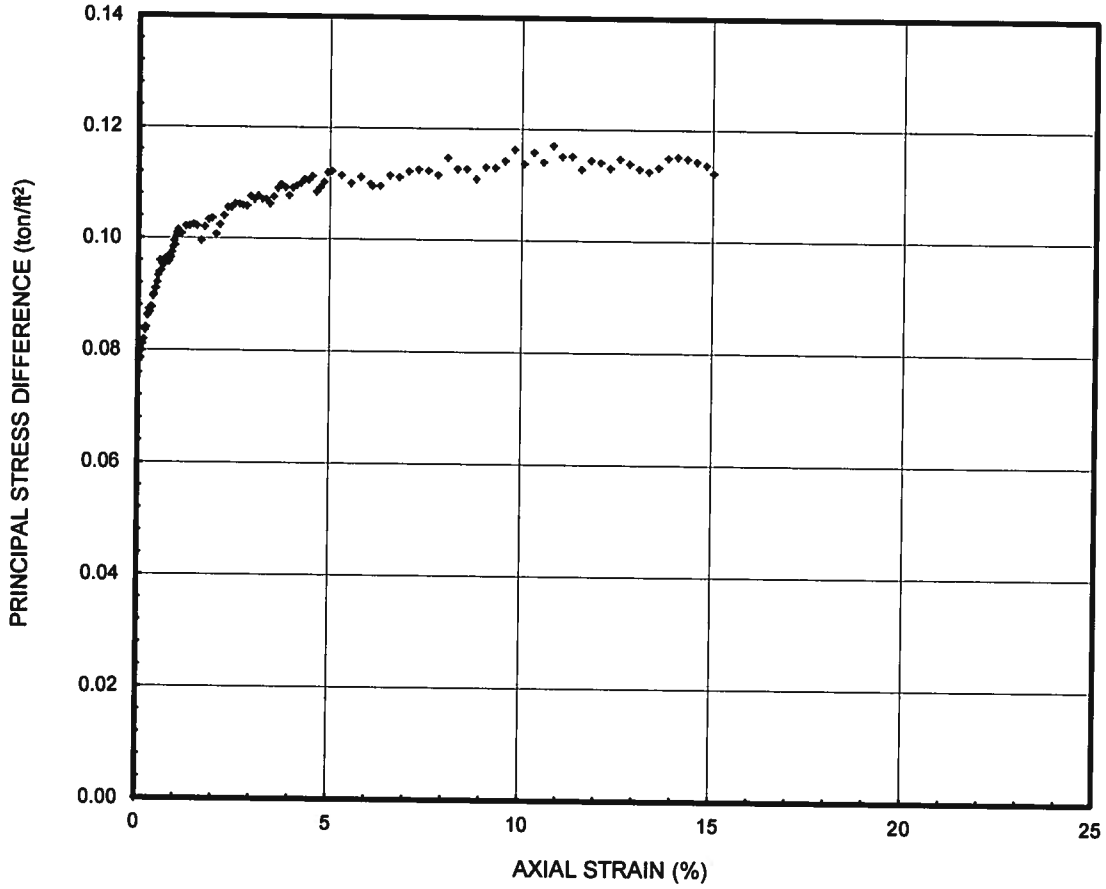
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name COLE'S BAYOU
Project Number 13-80-3705
Boring Number B-21
Depth 6-8 ft
Description Gray clay bottom w/organics and brown organic top w/clay



Initial Height	2.794	in	**Cell Pressure**	3.0	lb/in^2
Initial Diameter	1.365	in	**Strain Rate**	1.0	%/min
Dry Density	38.5	lb/ft^3	**Peak Stress**	0.12	ton/ft^2
Moisture Content	128.4	%	**Strain at Peak Stress**	10.81	%
Saturation	102.6	%	**Failure Type**	Bulging	

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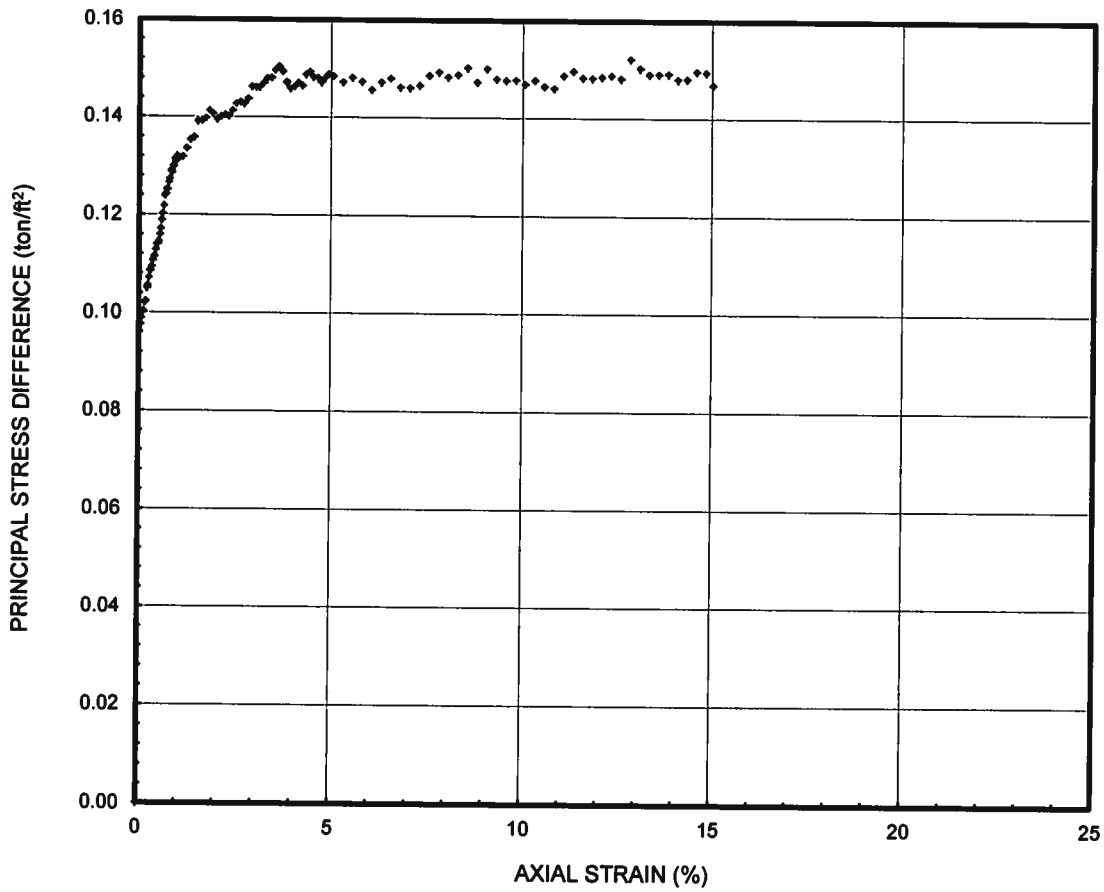
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-21
Depth	10-12 ft
Description	Gray clay w/trace organics



Initial Height	2.791	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	1.398	in	**Strain Rate**	1.0	%/min
Dry Density	51.6	lb/ft^3	**Peak Stress**	0.16	ton/ft^2
Moisture Content	84.8	%	**Strain at Peak Stress**	12.83	%
Saturation	101.1	%	**Failure Type**	Bulging	

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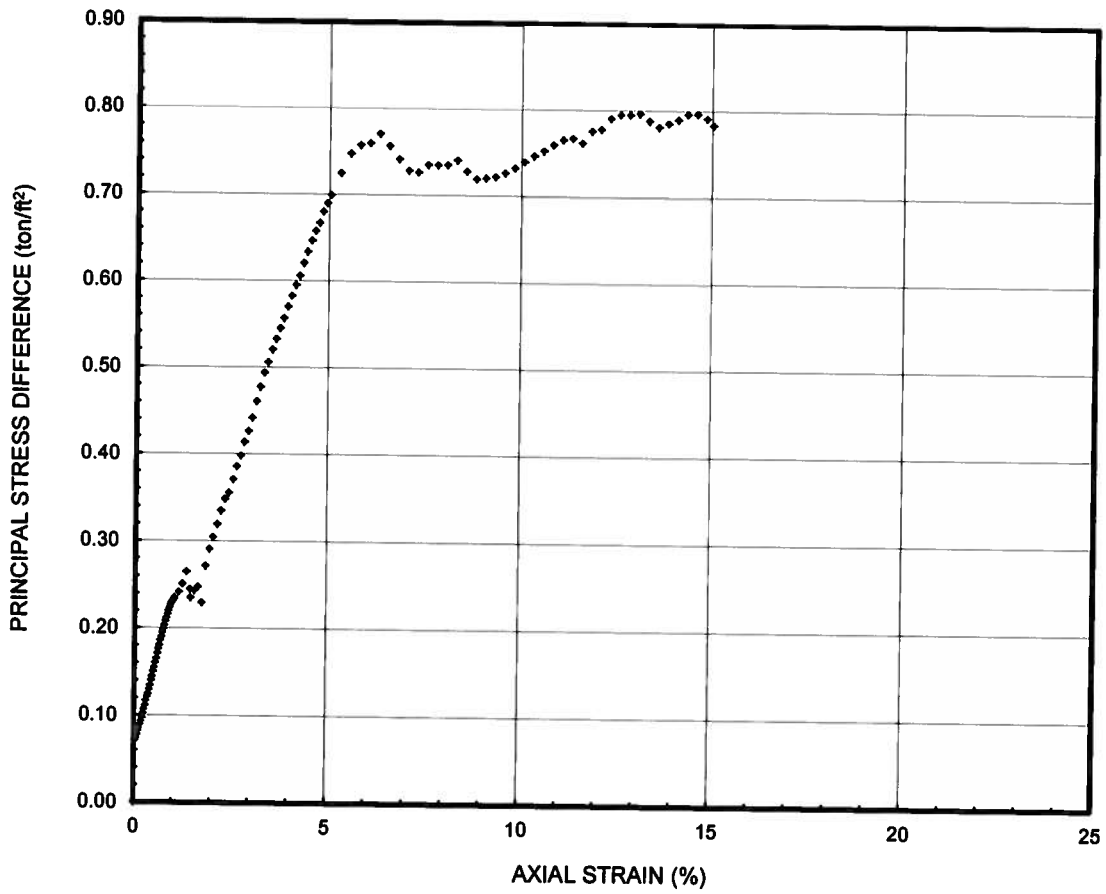
Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-21
Depth	14-16 ft
Description	Bluish gray silty clay w/fine sand and trace organics



Initial Height	2.780	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	1.390	in	**Strain Rate**	1.0	%/min
Dry Density	102.4	lb/ft^3	**Peak Stress**	0.82	ton/ft^2
Moisture Content	25.5	%	**Strain at Peak Stress**	14.60	%
Saturation	106.6	%	**Failure Type**	Combination	

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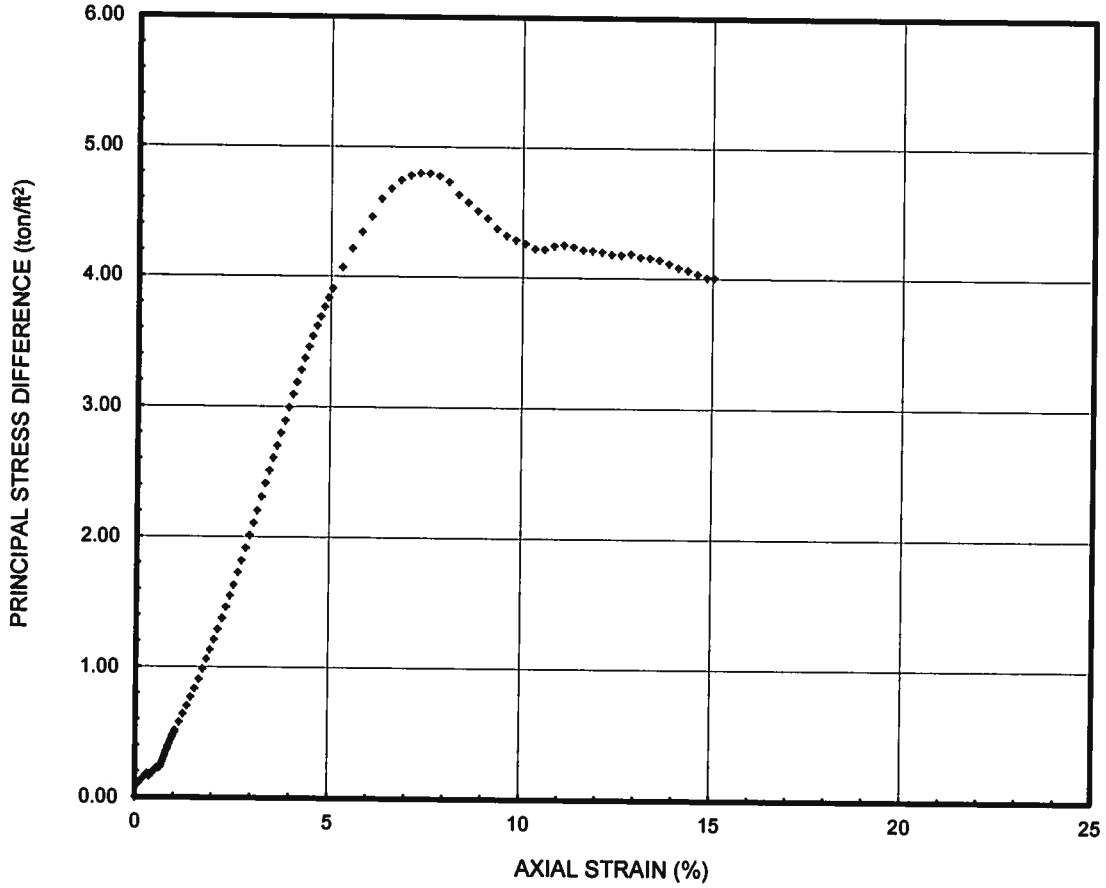
Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-21
Depth	18-20 ft
Description	Gray silty sand



Initial Height	2.787	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	1.389	in	**Strain Rate**	1.0	%/min
Dry Density	106.5	lb/ft^3	**Peak Stress**	4.91	ton/ft^2
Moisture Content	22.8	%	**Strain at Peak Stress**	7.30	%
Saturation	105.8	%	**Failure Type**	Combination	

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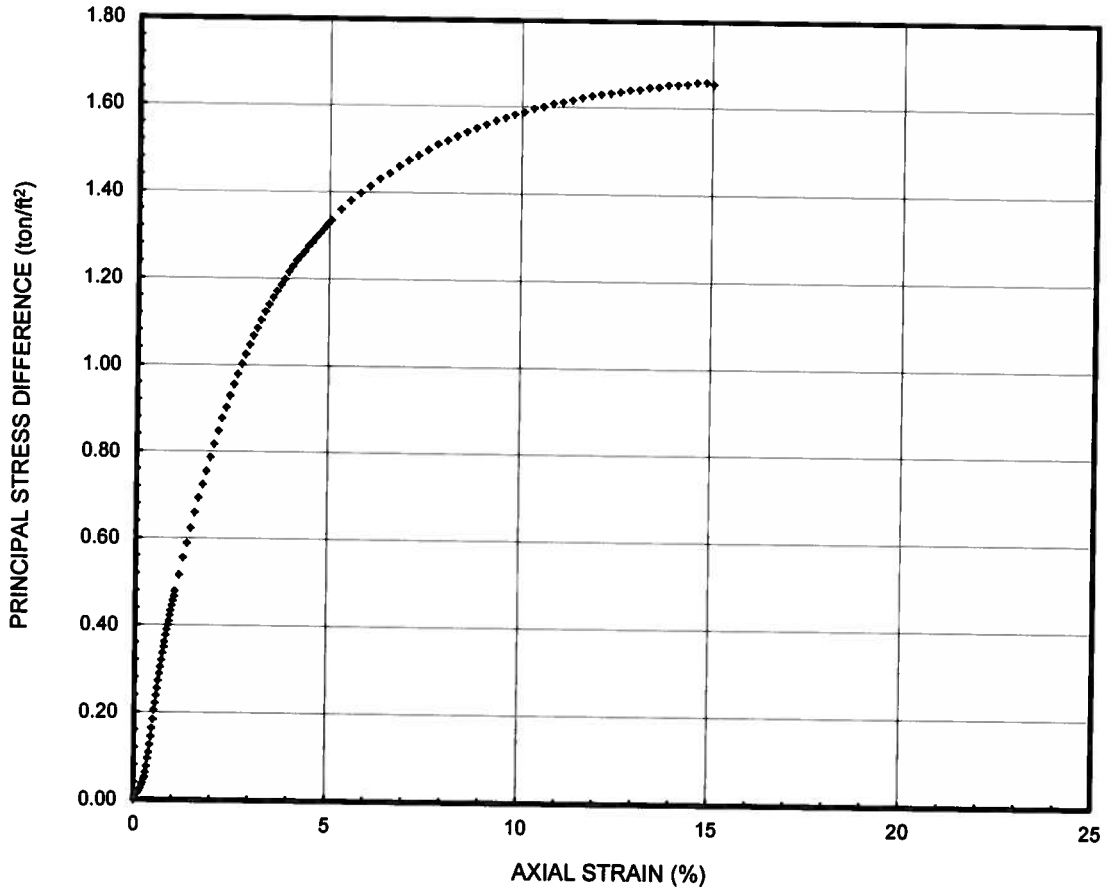
Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-22
Depth	4-6 ft
Description	Gray/tan clay w/fenods and trace organics



Initial Height	5.749	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	2.838	in	**Strain Rate**	1.0	%/min
Dry Density	104.5	lb/ft^3	**Peak Stress**	1.70	ton/ft^2
Moisture Content	22.4	%	**Strain at Peak Stress**	14.83	%
Saturation	98.6	%	**Failure Type**	Bulging	

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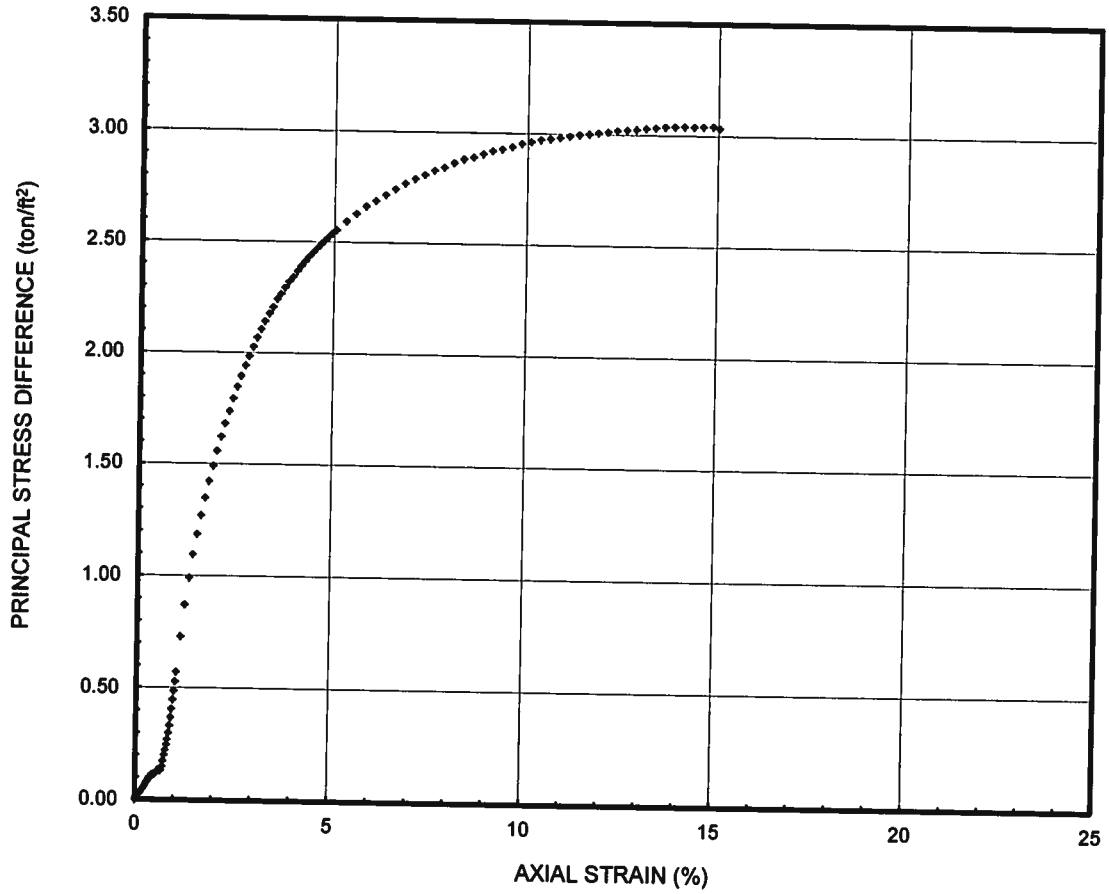
Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-22
Depth	6-8 ft
Description	Gray/tan clay w/fenods



Initial Height	5.753	in	**Cell Pressure**	3.0	lb/in^2
Initial Diameter	2.861	in	**Strain Rate**	1.0	%/min
Dry Density	109.5	lb/ft^3	**Peak Stress**	3.11	ton/ft^2
Moisture Content	19.0	%	**Strain at Peak Stress**	14.85	%
Saturation	95.3	%	**Failure Type**	Combination	

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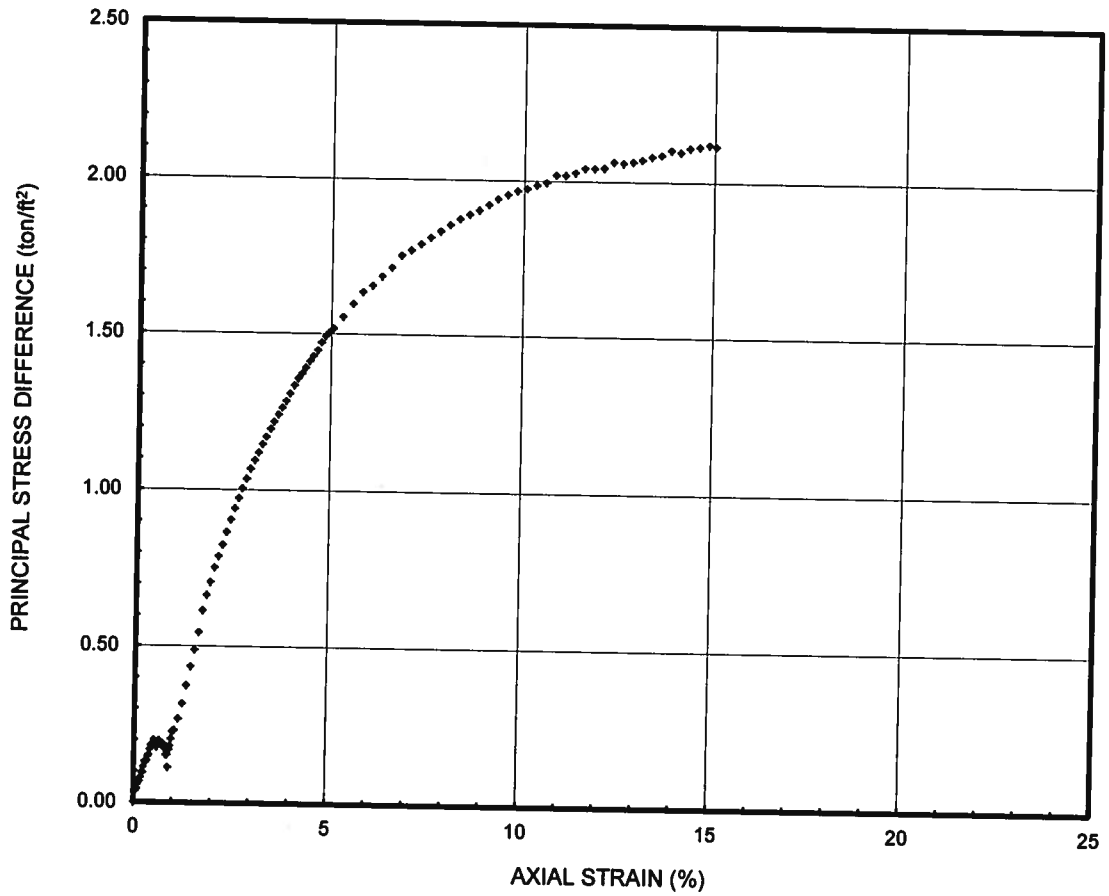
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-22
Depth	10-12 ft
Description	Tan/brown/gray clay w/fenods and shells



Initial Height	2.790	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	1.402	in	**Strain Rate**	1.0	%/min
Dry Density	98.9	lb/ft^3	**Peak Stress**	2.17	ton/ft^2
Moisture Content	26.5	%	**Strain at Peak Stress**	14.84	%
Saturation	101.6	%	**Failure Type**	Combination	

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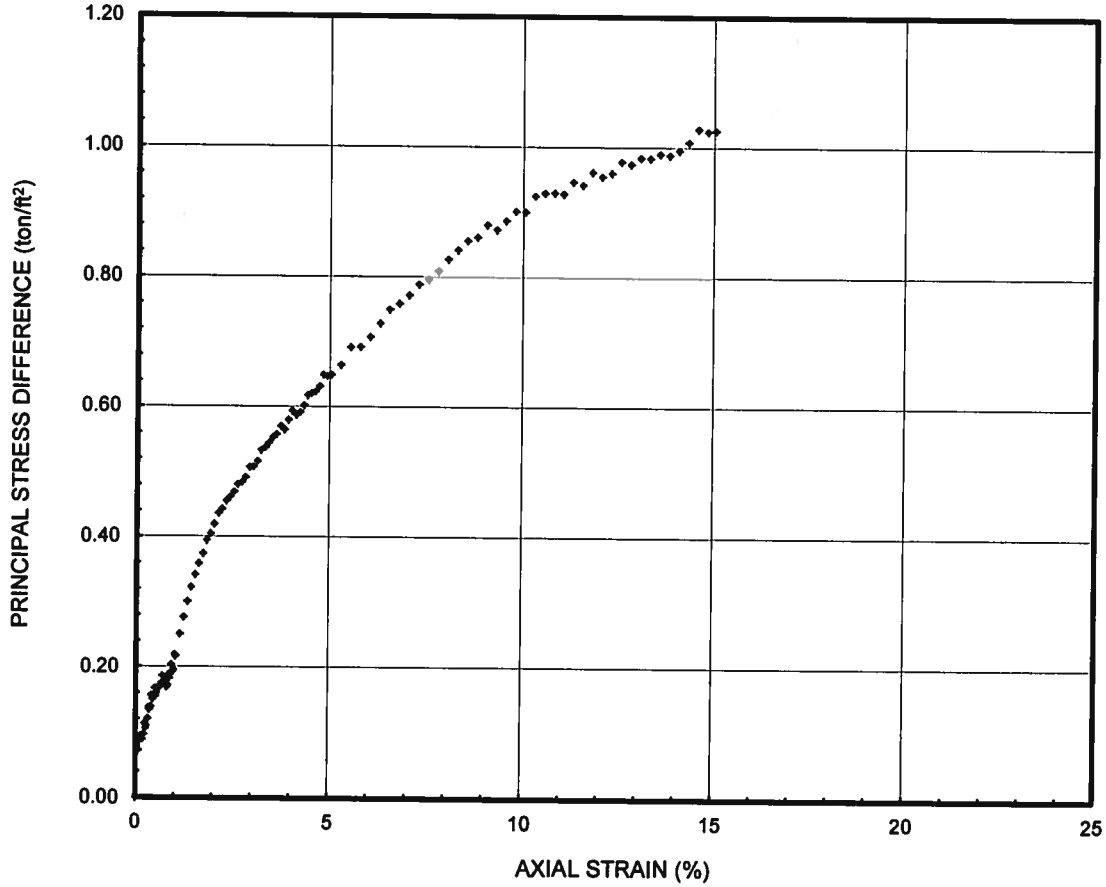
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-22
Depth	14-16 ft
Description	Tan/gray clay w/silt and fenods



Initial Height	2.792	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	1.389	in	**Strain Rate**	1.0	%/min
Dry Density	100.4	lb/ft^3	**Peak Stress**	1.05	ton/ft^2
Moisture Content	26.1	%	**Strain at Peak Stress**	14.58	%
Saturation	104.0	%	**Failure Type**	Combination	

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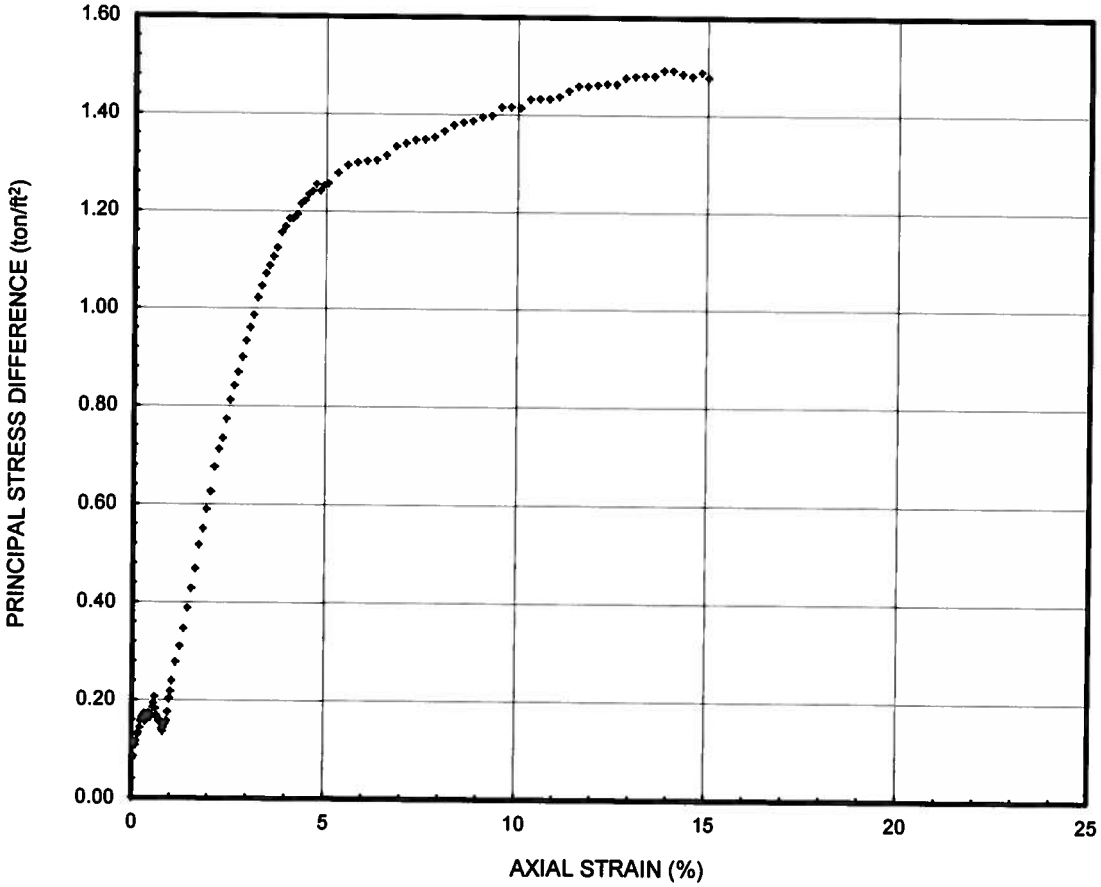
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-22
Depth	18-20 ft
Description	Tan/gray clay w/silt and fenods



Initial Height	2.796	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	1.389	in	**Strain Rate**	1.0	%/min
Dry Density	99.6	lb/ft^3	**Peak Stress**	1.53	ton/ft^2
Moisture Content	26.1	%	**Strain at Peak Stress**	14.07	%
Saturation	101.7	%	**Failure Type**	Combination	

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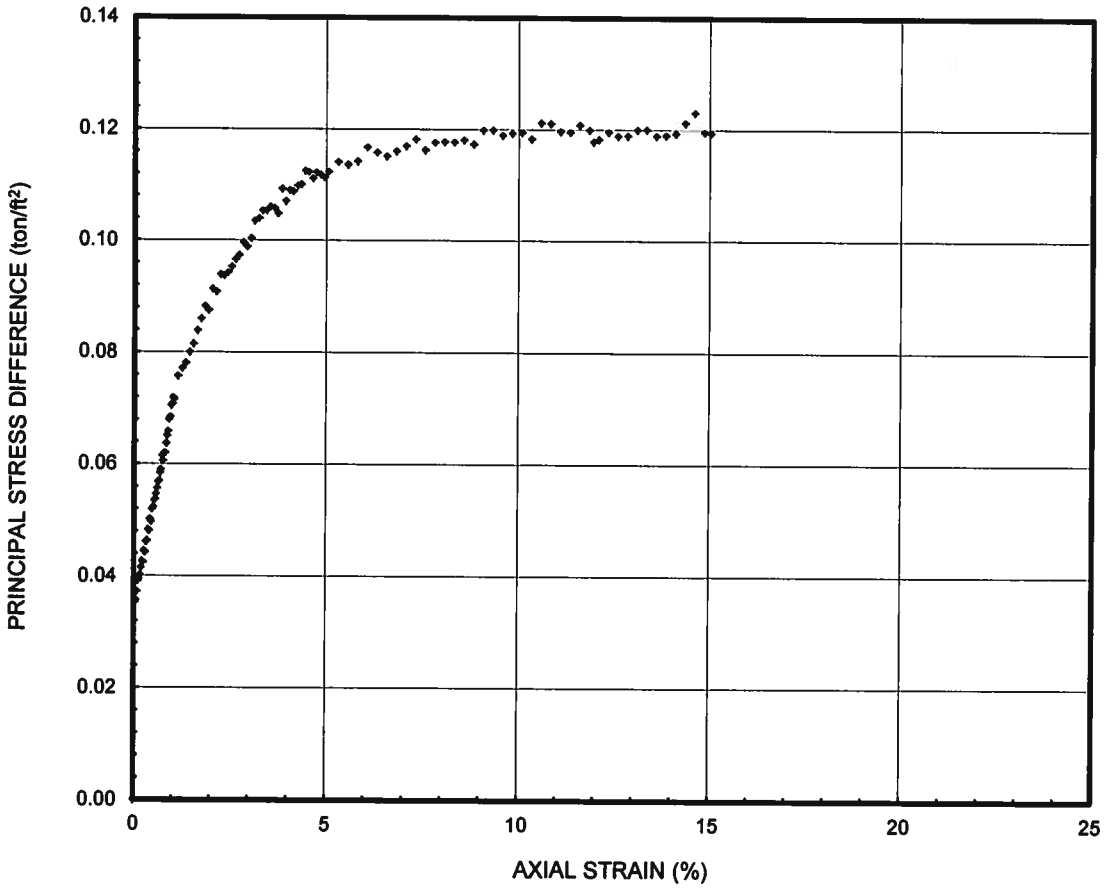
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-23
Depth	2-4 ft
Description	Gray clay (bottom) w/organics at the top



Initial Height	2.785	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.384	in	**Strain Rate**	1.0	%/min
Dry Density	54.4	lb/ft^3	**Peak Stress**	0.13	ton/ft^2
Moisture Content	79.6	%	**Strain at Peak Stress**	14.60	%
Saturation	102.3	%	**Failure Type**	Bulging	

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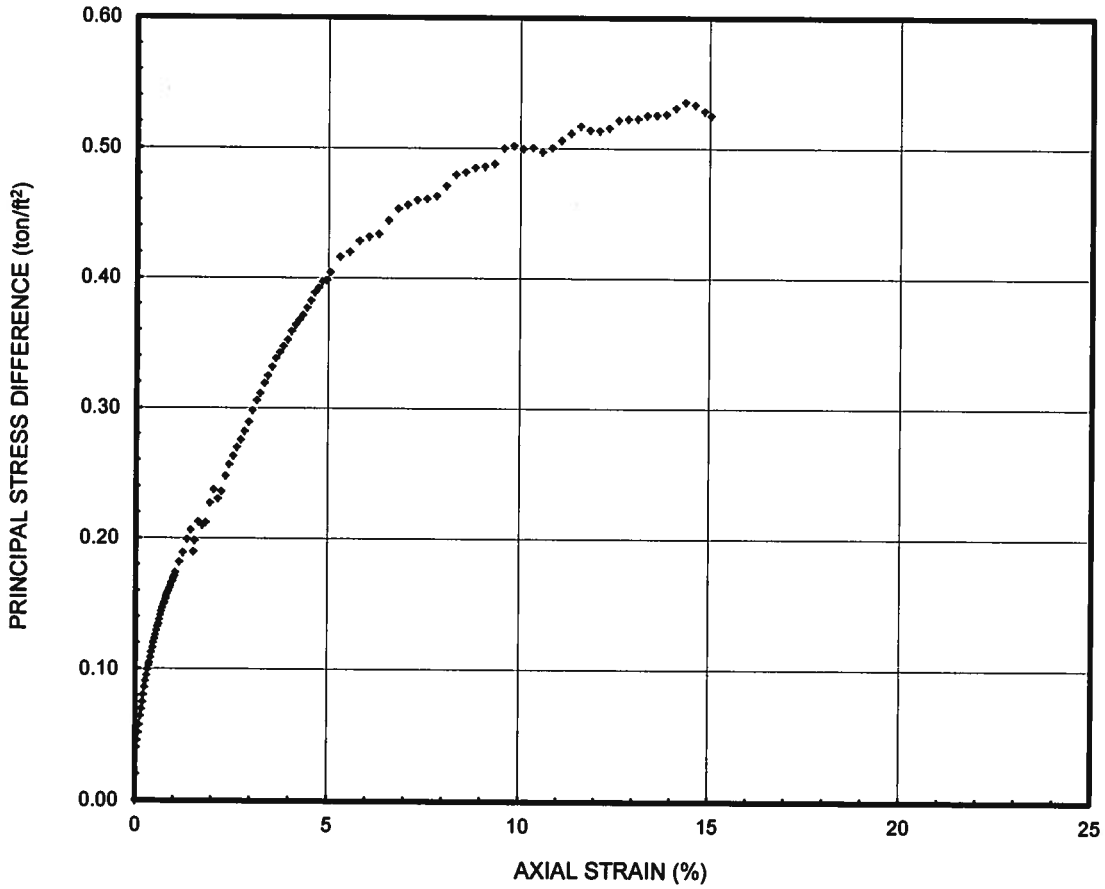
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-23
Depth	4-6 ft
Description	Gray clay w/trace organics and silt



Initial Height	2.794	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.393	in	**Strain Rate**	1.0	%/min
Dry Density	92.4	lb/ft^3	**Peak Stress**	0.55	ton/ft^2
Moisture Content	31.4	%	**Strain at Peak Stress**	14.35	%
Saturation	102.8	%	**Failure Type**	Combination	

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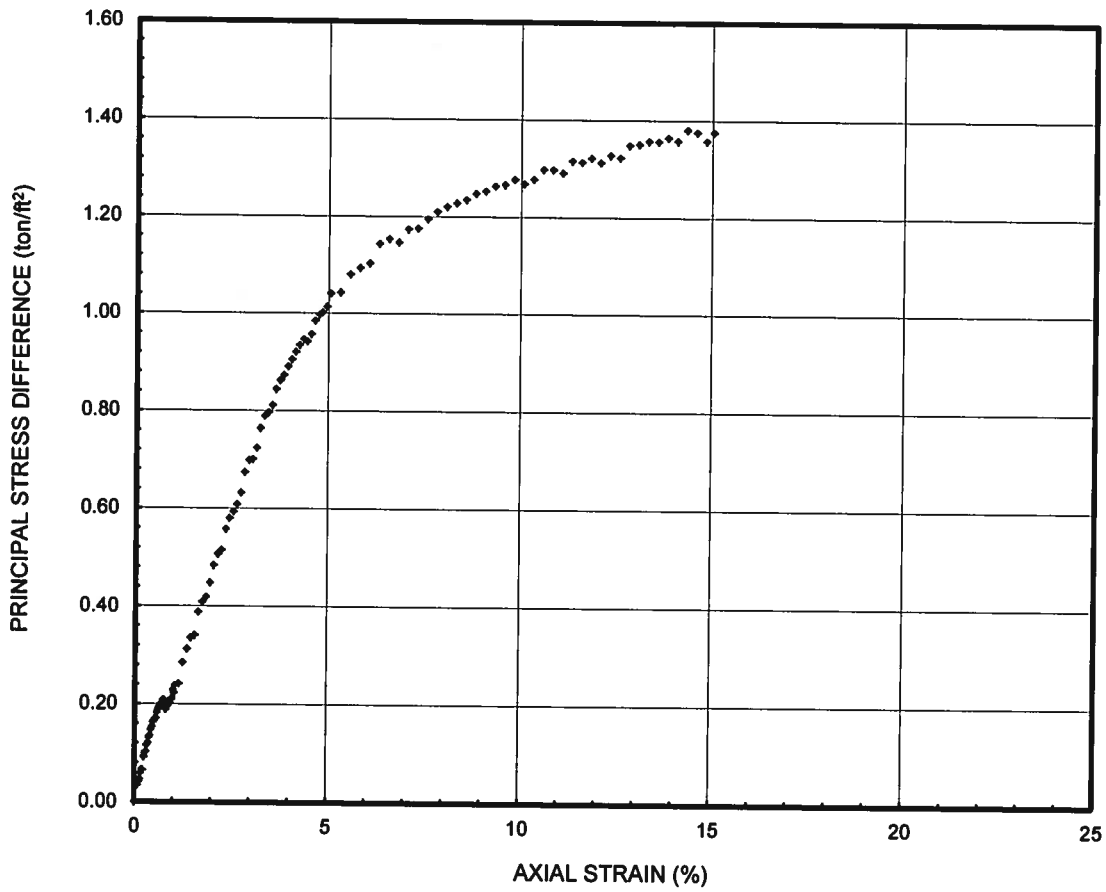
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-23
Depth	6-8 ft
Description	Gray clay w/silt and trace organics



Initial Height	2.795	in	**Cell Pressure**	3.0	lb/in^2
Initial Diameter	1.398	in	**Strain Rate**	1.0	%/min
Dry Density	103.0	lb/ft^3	**Peak Stress**	1.41	ton/ft^2
Moisture Content	24.8	%	**Strain at Peak Stress**	14.33	%
Saturation	105.0	%	**Failure Type**	Combination	

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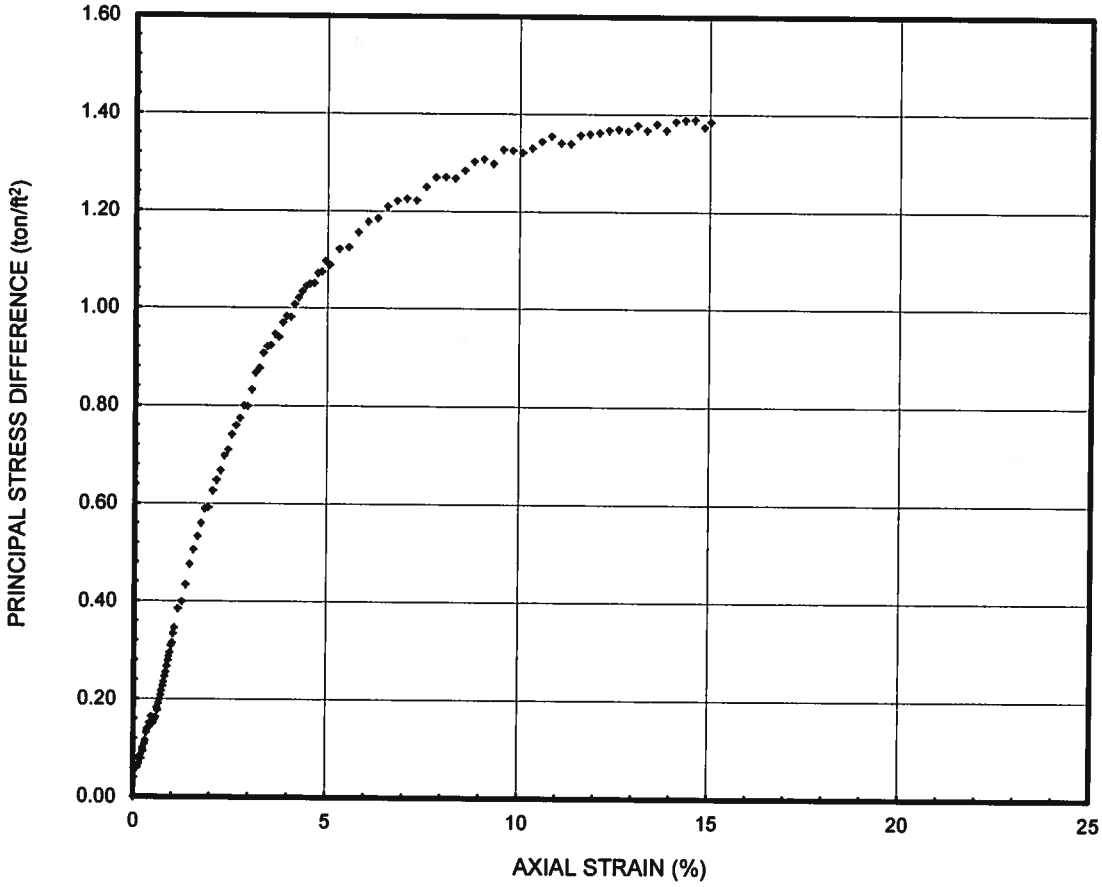
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-23
Depth	10-12 ft
Description	Gray/tan clay w/silt, fenods and trace organics



Initial Height	2.796	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	1.394	in	**Strain Rate**	1.0	%/min
Dry Density	102.0	lb/ft^3	**Peak Stress**	1.42	ton/ft^2
Moisture Content	25.2	%	**Strain at Peak Stress**	14.59	%
Saturation	103.9	%	**Failure Type**	Combination	

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COLE'S BAYOU MARSH CREATION

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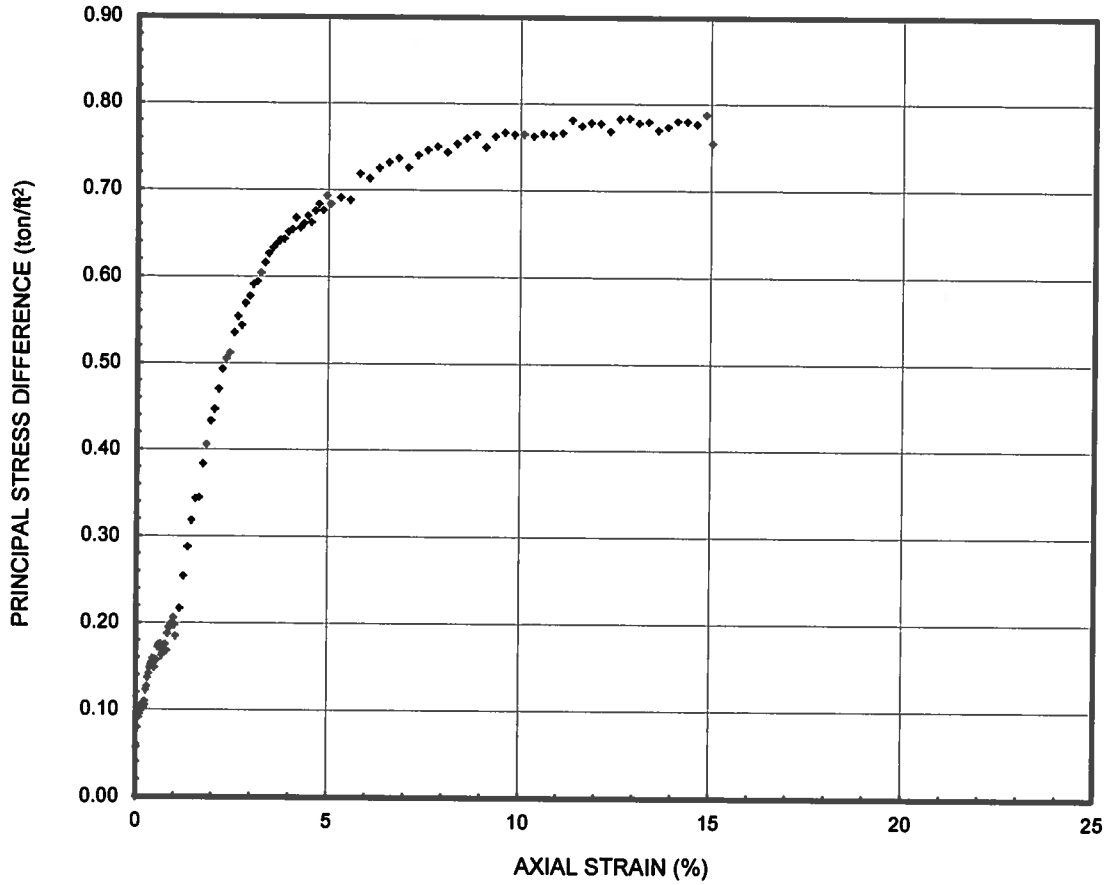
FILE NO. 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-23
Depth	16-18 ft
Description	Light gray/tan/gray clay w/fenods, trace organics and shells



Initial Height	2.765	in	**Cell Pressure**	7.0	lb/in^2
Initial Diameter	1.400	in	**Strain Rate**	1.0	%/min
Dry Density	96.2	lb/ft^3	**Peak Stress**	0.81	ton/ft^2
Moisture Content	27.4	%	**Strain at Peak Stress**	14.86	%
Saturation	98.3	%	**Failure Type**	Combination	

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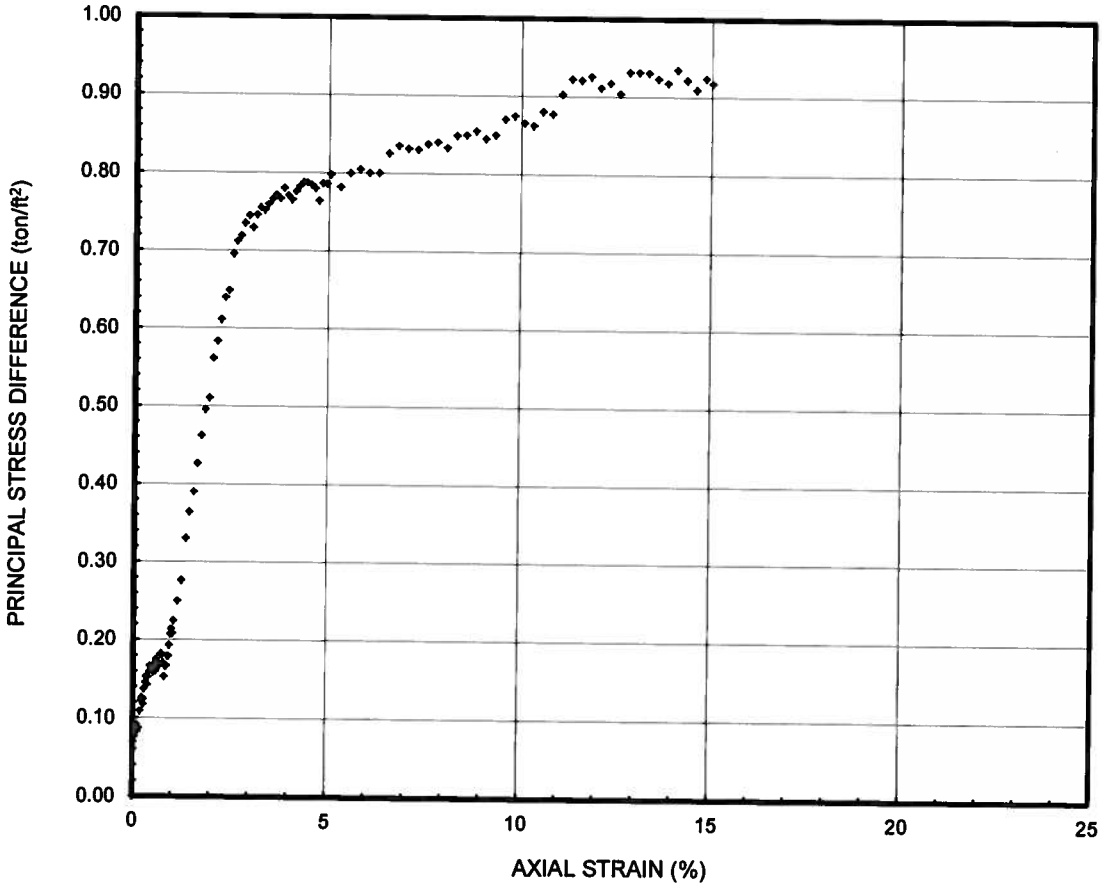
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-23
Depth	18-20 ft
Description	Light gray/tan silty clay w/fenods



Initial Height	2.795	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	1.390	in	**Strain Rate**	1.0	%/min
Dry Density	95.0	lb/ft^3	**Peak Stress**	0.96	ton/ft^2
Moisture Content	28.7	%	**Strain at Peak Stress**	14.08	%
Saturation	100.2	%	**Failure Type**	Combination	

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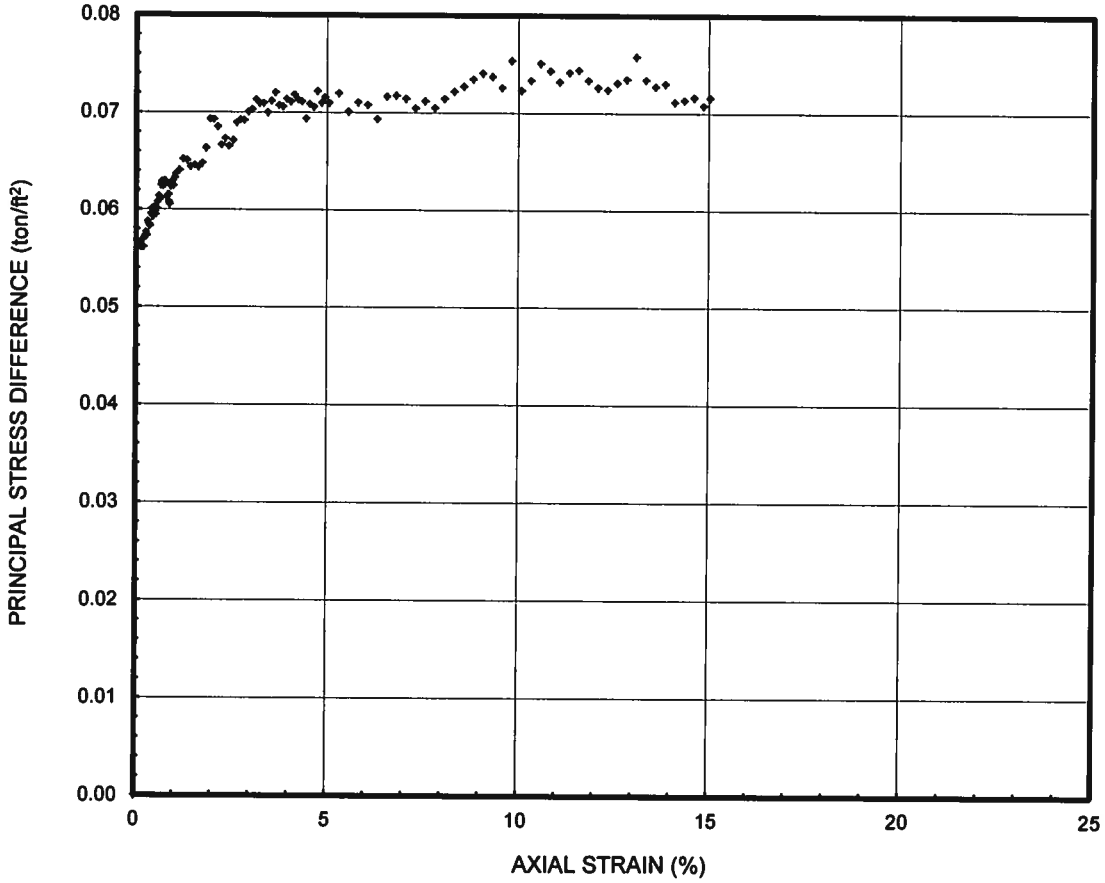
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-24
Depth	2-4 ft
Description	Gray clay w/organics



Initial Height	2.768	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.390	in	**Strain Rate**	1.0	%/min
Dry Density	42.8	lb/ft^3	**Peak Stress**	0.08	ton/ft^2
Moisture Content	115.8	%	**Strain at Peak Stress**	13.09	%
Saturation	106.3	%	**Failure Type**	Combination	

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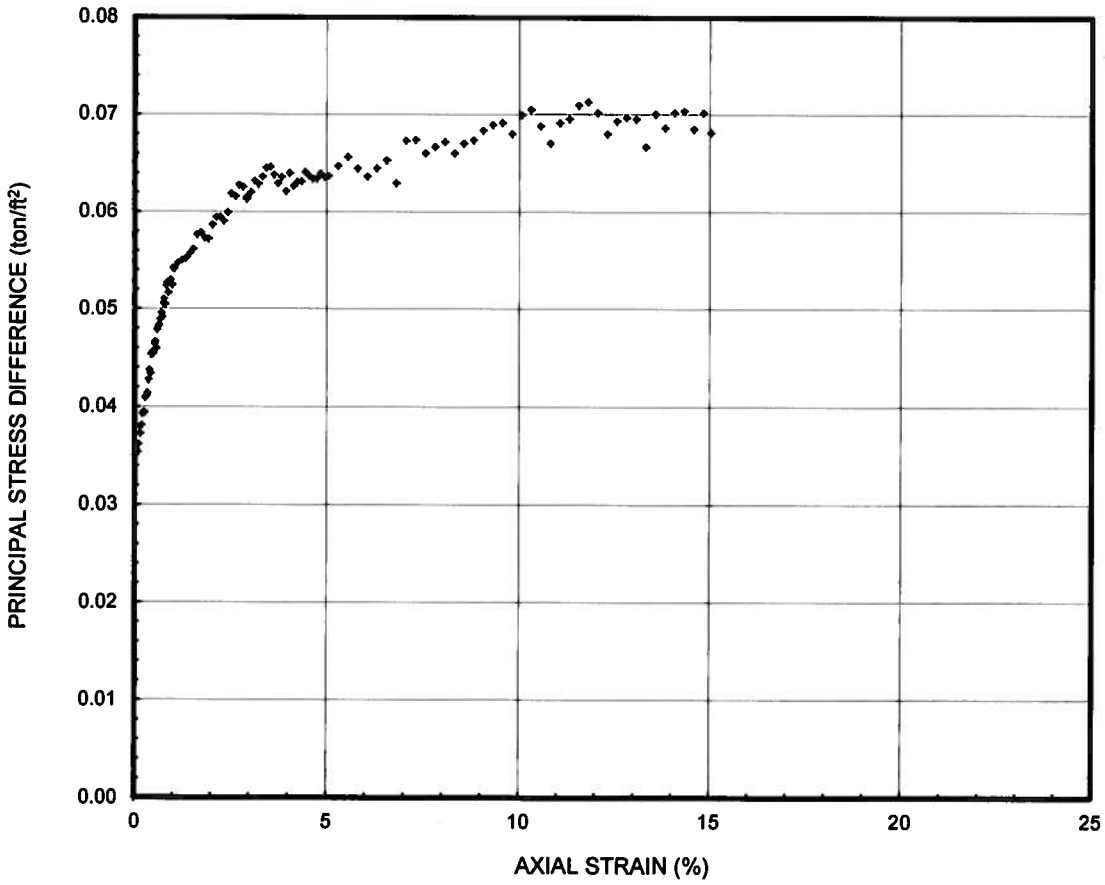
Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-24
Depth	4-6 ft
Description	Gray clay w/shells and trace organics



Initial Height	2.786	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.406	in	**Strain Rate**	1.0	%/min
Dry Density	45.0	lb/ft^3	**Peak Stress**	0.07	ton/ft^2
Moisture Content	103.4	%	**Strain at Peak Stress**	11.81	%
Saturation	101.6	%	**Failure Type**	Bulging	

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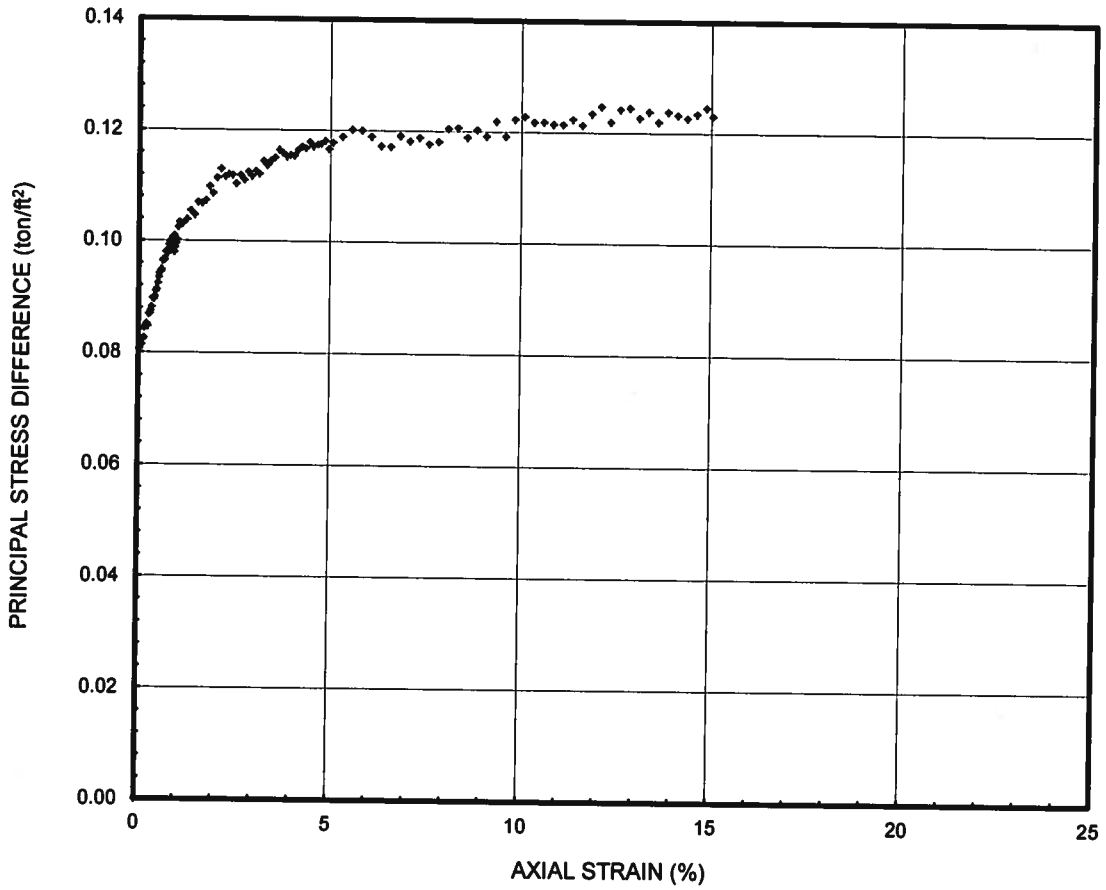
Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-24
Depth	8-10 ft
Description	Gray clay w/brown organics



Initial Height	2.779	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	1.395	in	**Strain Rate**	1.0	%/min
Dry Density	39.5	lb/ft^3	**Peak Stress**	0.13	ton/ft^2
Moisture Content	136.2	%	**Strain at Peak Stress**	12.09	%
Saturation	112.6	%	**Failure Type**	Bulging	

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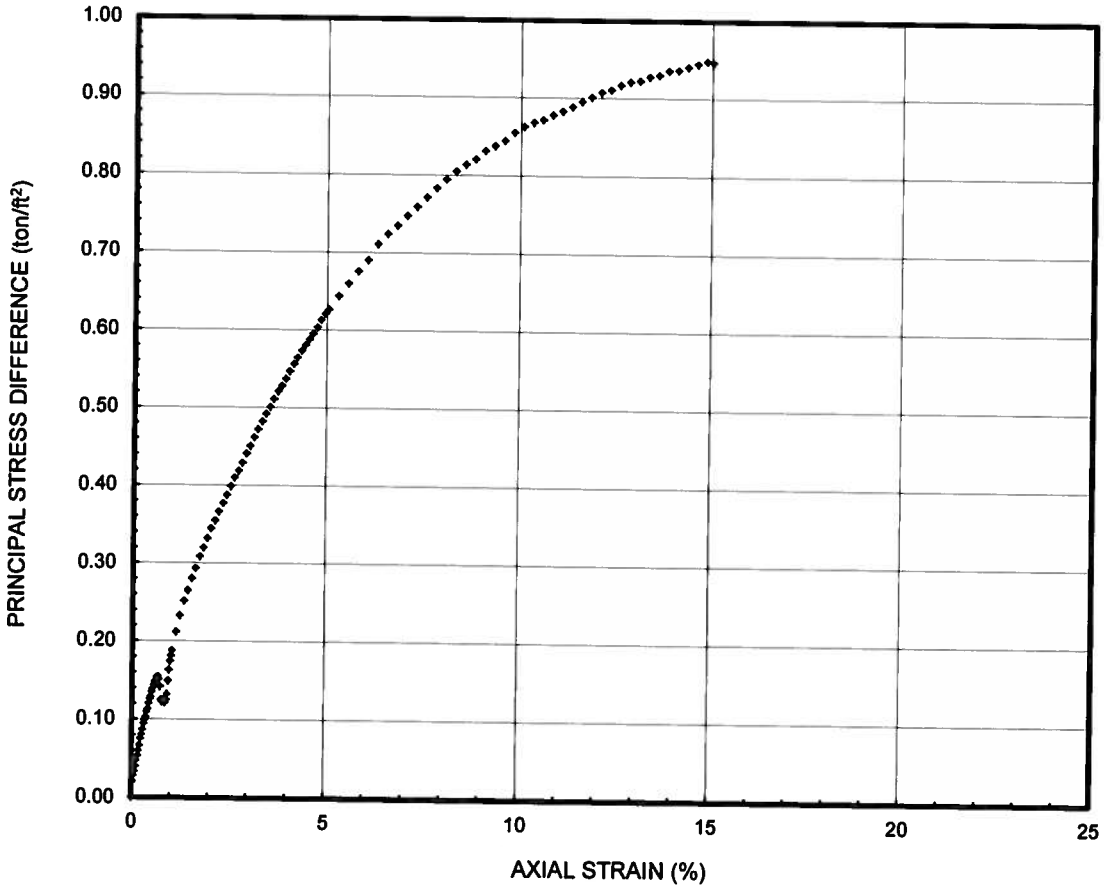
Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-24
Depth	14-16 ft
Description	Bluish gray clay w/trace organics



Initial Height	5.743	in	**Cell Pressure**	6.0	lb/in^2
Initial Diameter	2.857	in	**Strain Rate**	1.0	%/min
Dry Density	98.9	lb/ft^3	**Peak Stress**	0.97	ton/ft^2
Moisture Content	25.9	%	**Strain at Peak Stress**	14.86	%
Saturation	99.4	%	**Failure Type**	Bulging	

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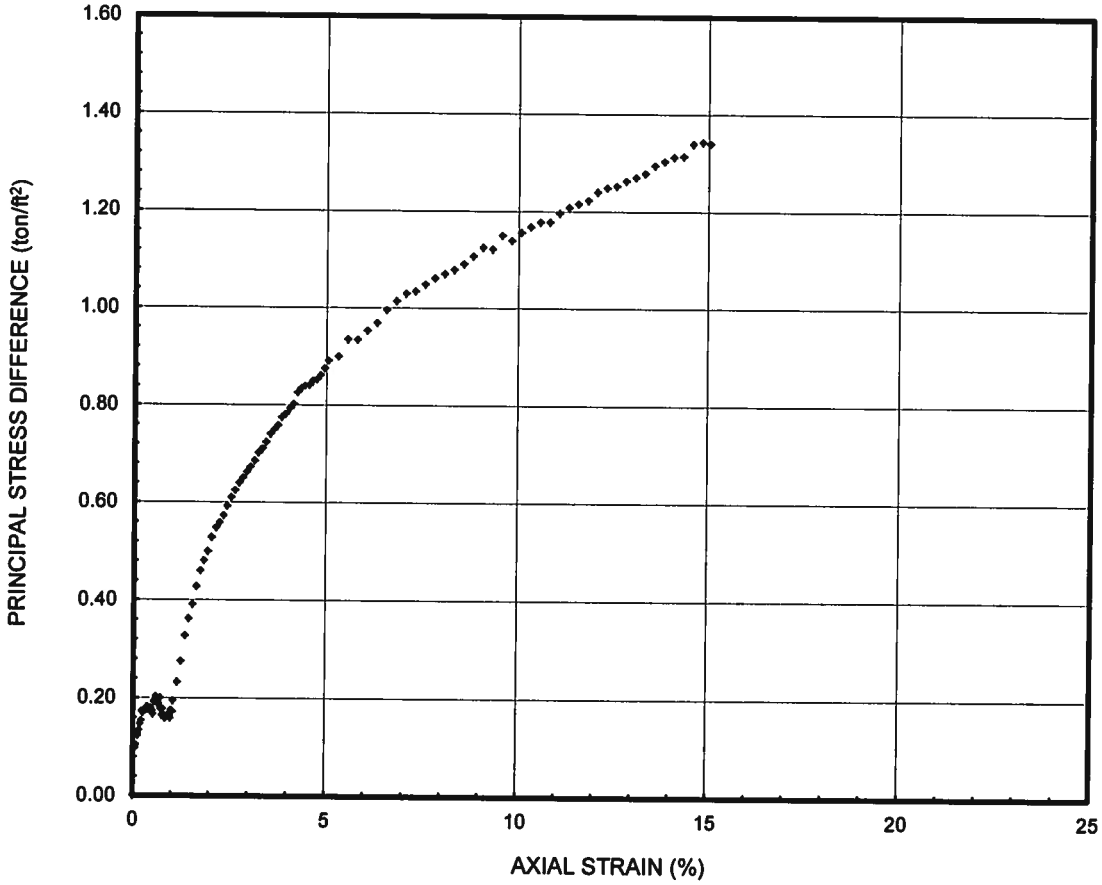
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	COLE'S BAYOU
Project Number	13-80-3705
Boring Number	B-24
Depth	18-20 ft
Description	Bluish gray silty clay w/trace organics



Initial Height	2.793	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	1.386	in	**Strain Rate**	1.0	%/min
Dry Density	105.3	lb/ft^3	**Peak Stress**	1.38	ton/ft^2
Moisture Content	22.8	%	**Strain at Peak Stress**	14.83	%
Saturation	102.3	%	**Failure Type**	Bulging	

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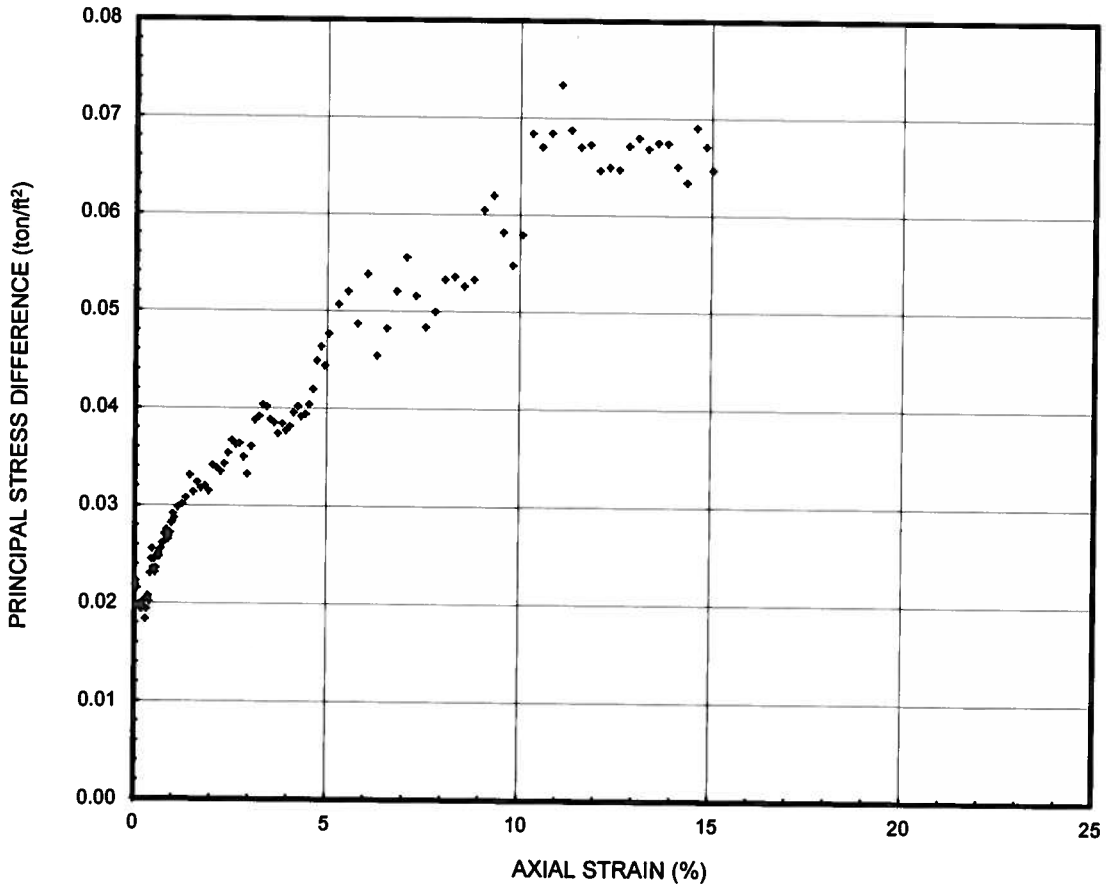
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-25
Depth	2-4 ft
Description	Dark organics w/clay and roots



Initial Height	2.762	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	1.375	in	**Strain Rate**	1.0	%/min
Dry Density	29.4	lb/ft^3	**Peak Stress**	0.08	ton/ft^2
Moisture Content	190.1	%	**Strain at Peak Stress**	11.07	%
Saturation	108.4	%	**Failure Type**	Bulging	

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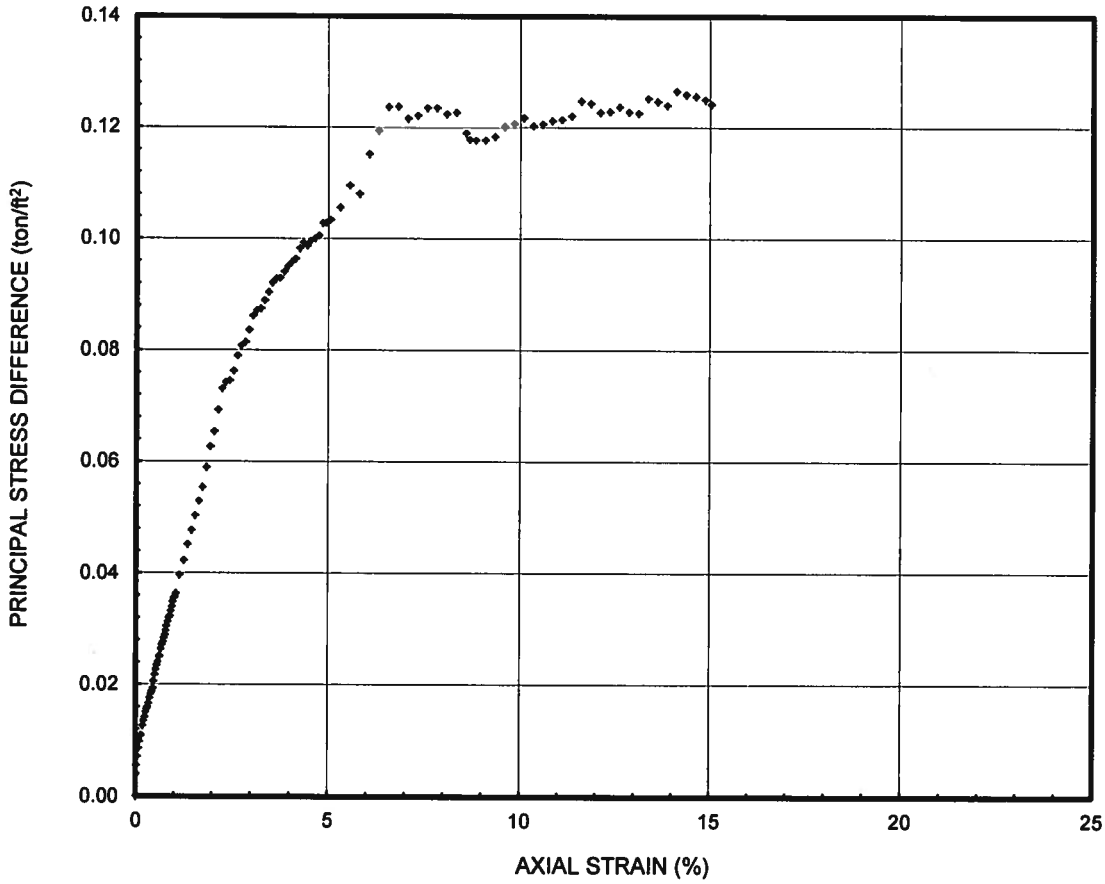
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-25
Depth	4-6 ft
Description	Gray clay w/organics and roots



Initial Height	5.715	in	**Cell Pressure**	2.0	lb/in^2
Initial Diameter	2.816	in	**Strain Rate**	1.0	%/min
Dry Density	43.5	lb/ft^3	**Peak Stress**	0.13	ton/ft^2
Moisture Content	108.9	%	**Strain at Peak Stress**	14.11	%
Saturation	102.4	%	**Failure Type**	Bulging	

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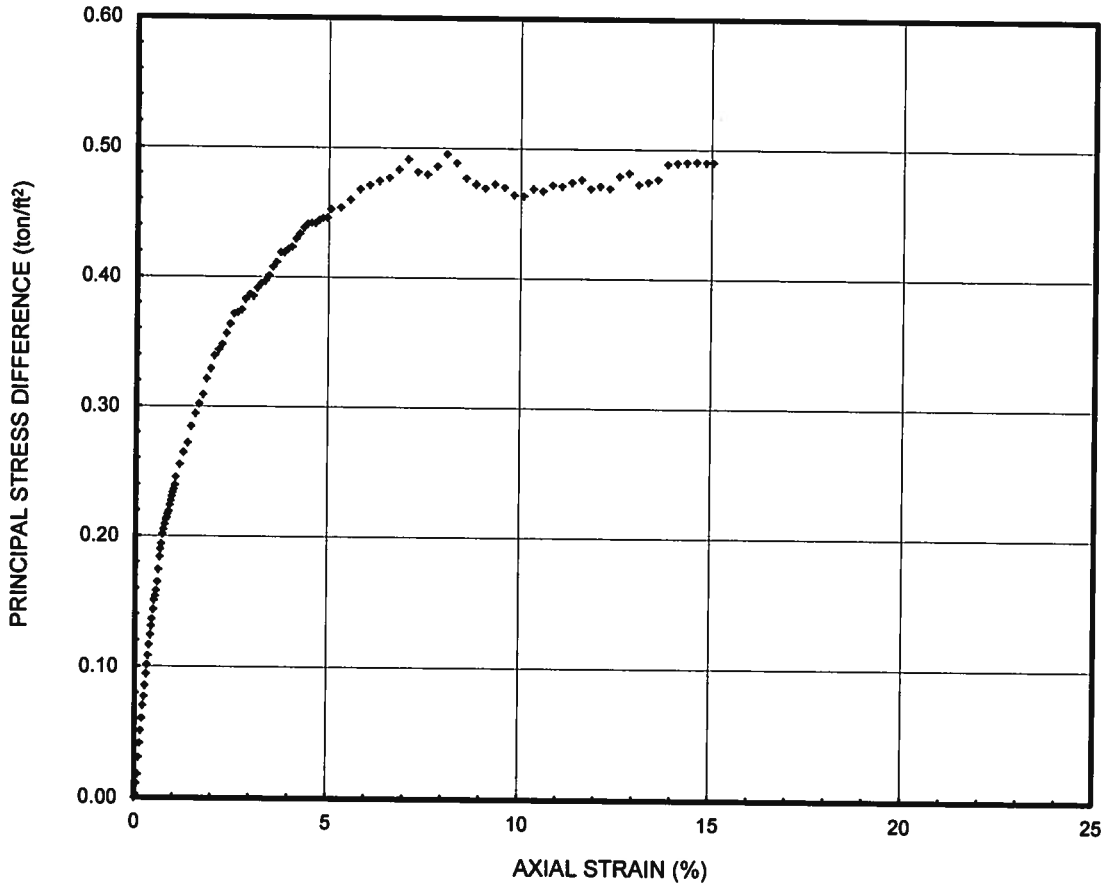
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-25
Depth	8-10 ft
Description	Gray/tan clay w/fenods and trace organics



Initial Height	2.797	in	**Cell Pressure**	4.0	lb/in^2
Initial Diameter	1.399	in	**Strain Rate**	1.0	%/min
Dry Density	89.6	lb/ft^3	**Peak Stress**	0.51	ton/ft^2
Moisture Content	32.1	%	**Strain at Peak Stress**	8.06	%
Saturation	98.4	%	**Failure Type**	Combination	

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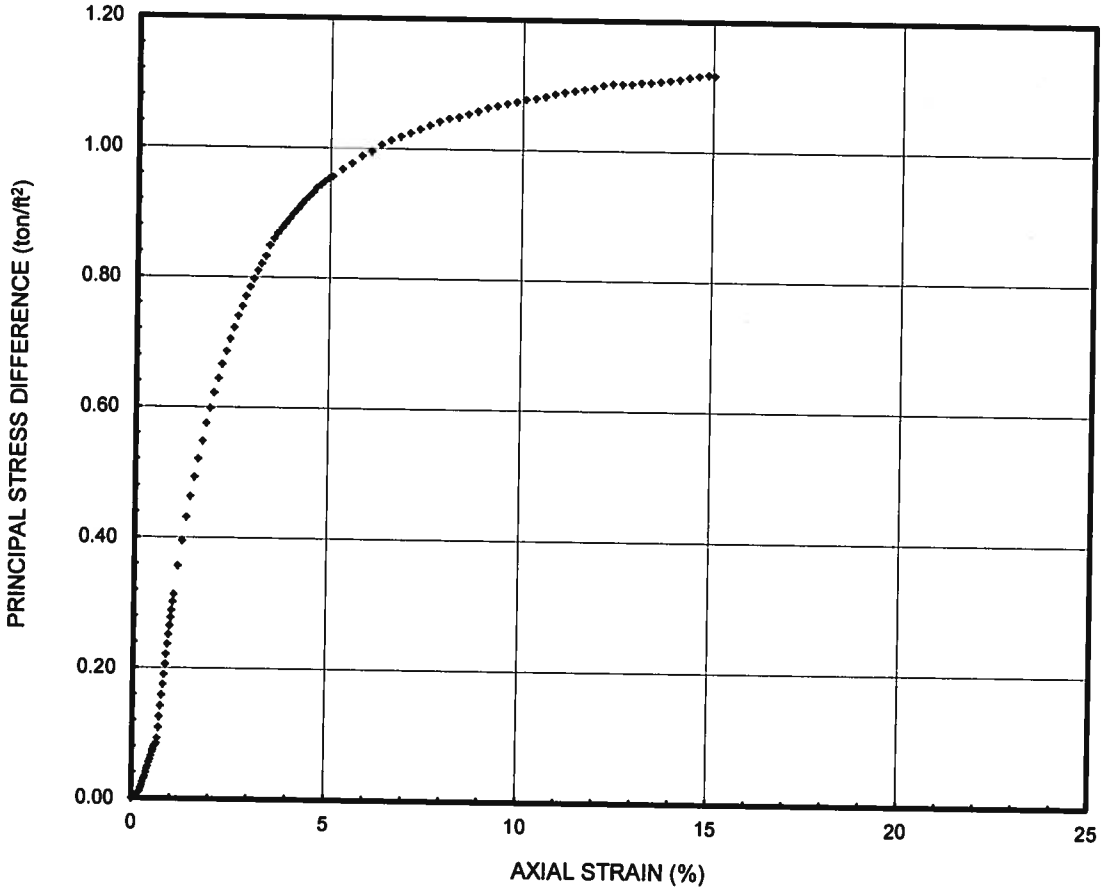
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-25
Depth	10-12 ft
Description	Gray/tan clay w/fenods and cemented silt



Initial Height	5.751	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	2.848	in	**Strain Rate**	1.0	%/min
Dry Density	96.9	lb/ft^3	**Peak Stress**	1.15	ton/ft^2
Moisture Content	27.1	%	**Strain at Peak Stress**	14.85	%
Saturation	99.0	%	**Failure Type**	Bulging	

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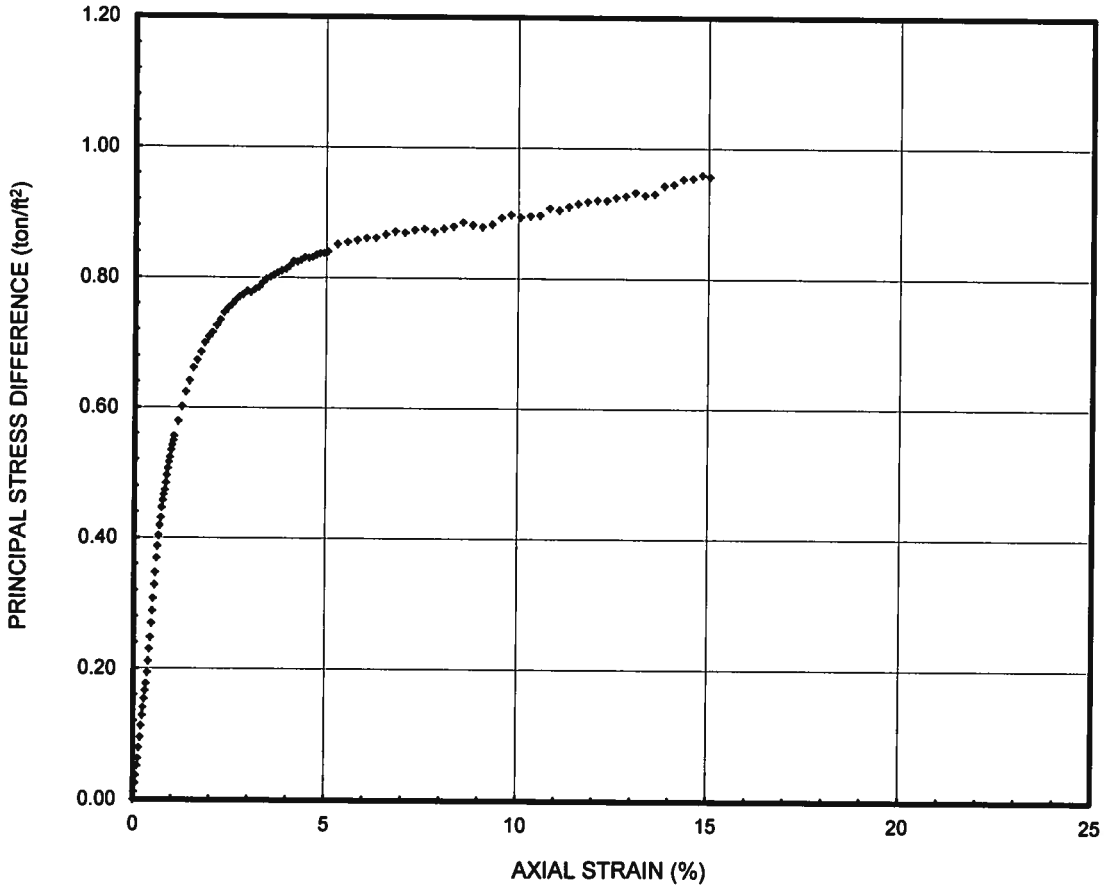
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-25
Depth	18-20 ft
Description	Tan/gray clay w/calcium nods, fenods and silt layer



Initial Height	2.794	in	**Cell Pressure**	8.0	lb/in^2
Initial Diameter	1.416	in	**Strain Rate**	1.0	%/min
Dry Density	-4.4	lb/ft^3	**Peak Stress**	0.98	ton/ft^2
Moisture Content	-2871.5	%	**Strain at Peak Stress**	14.82	%
Saturation	199.1	%	**Failure Type**	Bulging	

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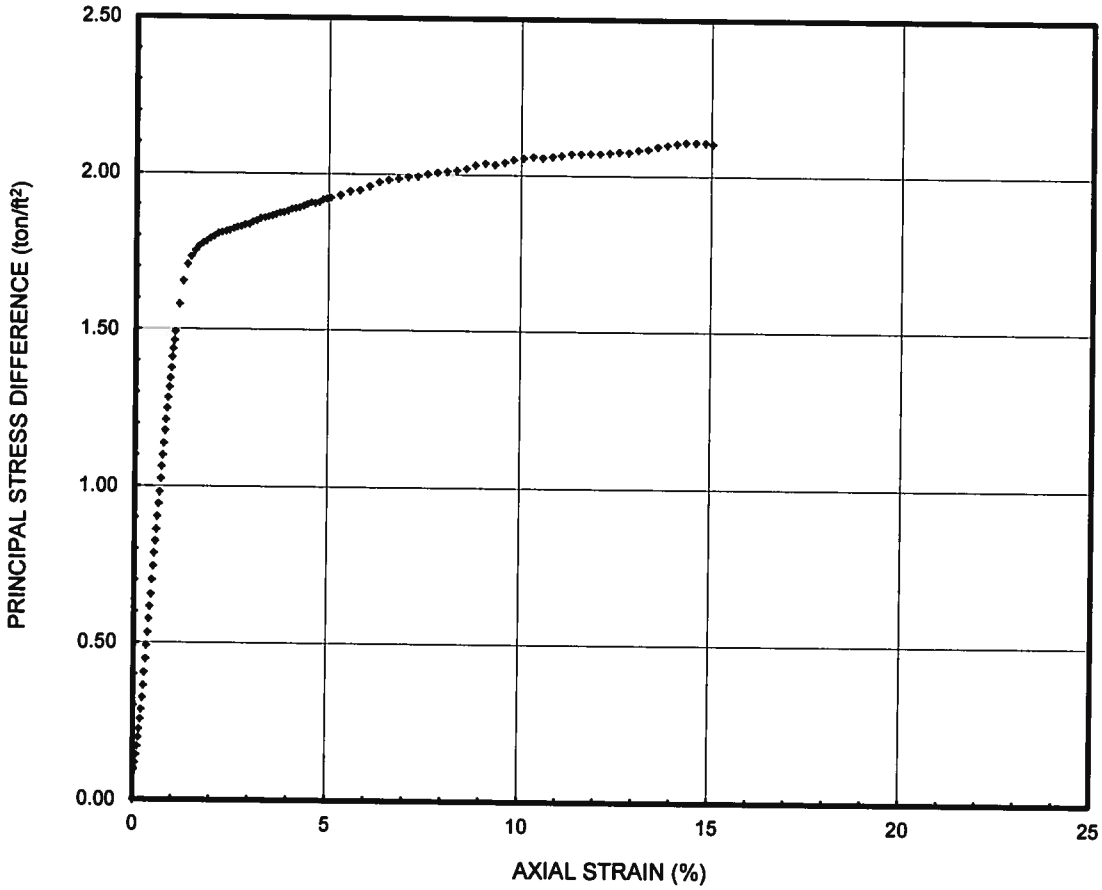
Unconsolidated Undrained Triaxial Compression Test

Project Name	Cole's Bayou
Project Number	13-80-3705
Boring Number	B-25
Depth	23-25 ft
Description	Tan and Gray silty clay top/gray clay bottom w/trace organics, fenods and calcium



Initial Height	2.798	in	**Cell Pressure**	10.0	lb/in^2
Initial Diameter	1.416	in	**Strain Rate**	1.0	%/min
Dry Density	95.6	lb/ft^3	**Peak Stress**	2.16	ton/ft^2
Moisture Content	27.8	%	**Strain at Peak Stress**	14.32	%
Saturation	98.5	%	**Failure Type**	Combination	

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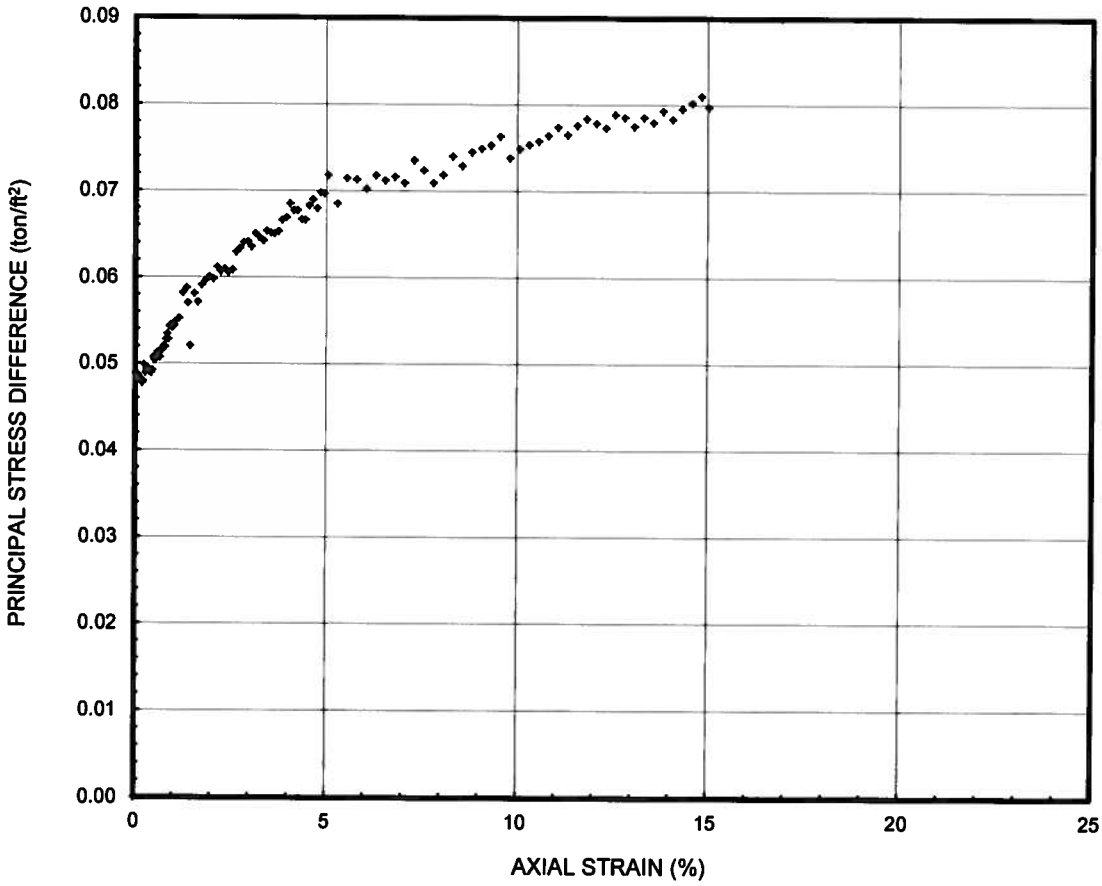
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconfined Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-26
Depth	2-4 ft
Description	Dark organics (top) and gray clay w/organics (bottom)



Initial Height	2.759	in	**Strain Rate**	1.0	%/min
Initial Diameter	1.380	in	**Peak Stress**	0.08	ton/ft^2
Dry Density	28.4	lb/ft^3	**Strain at Peak Stress**	14.83	%
Moisture Content	186.0	%	**Failure Type**	Bulging	
Saturation	101.8	%			

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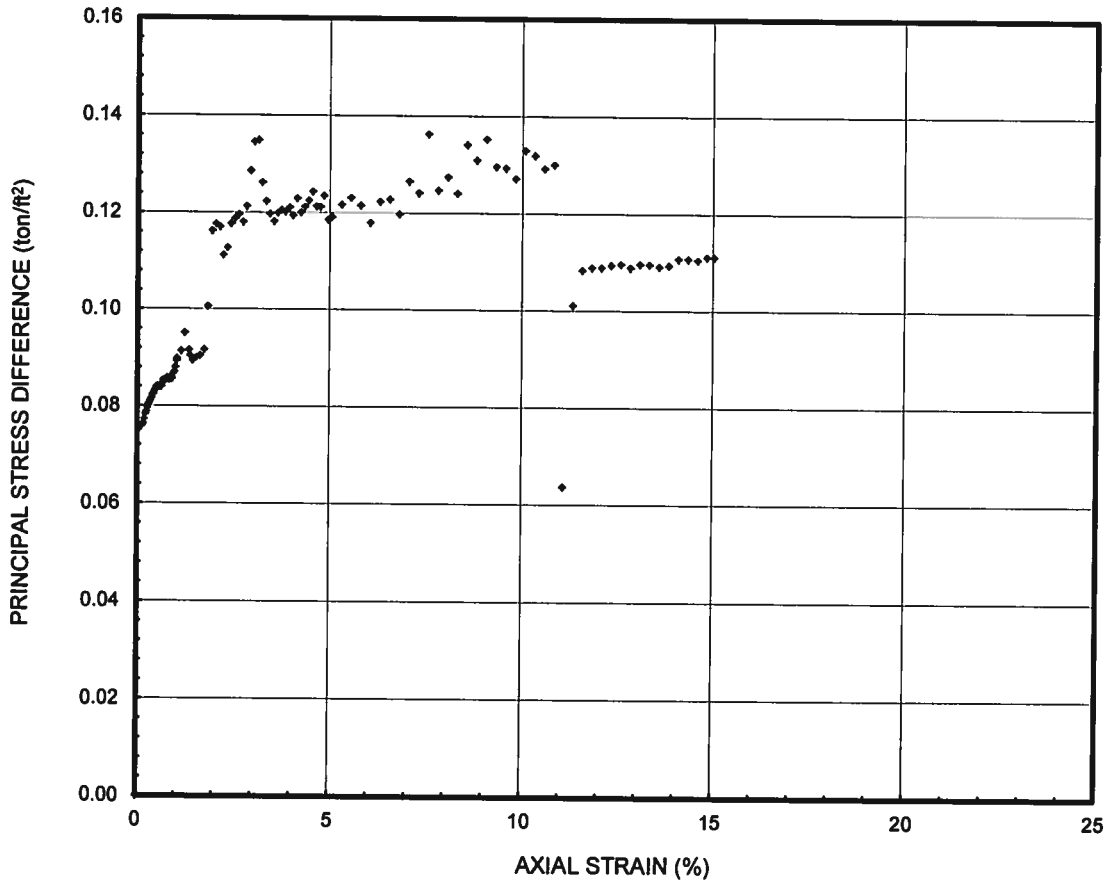
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconfined Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-26
Depth	6-8 ft
Description	Gray clay w/organics



Initial Height	2.735	in	**Strain Rate**	1.0	%/min
Initial Diameter	1.416	in	**Peak Stress**	0.14	ton/ft^2
Dry Density	47.5	lb/ft^3	**Strain at Peak Stress**	7.56	%
Moisture Content	98.7	%	**Failure Type**	Bulging	
Saturation	104.6	%			

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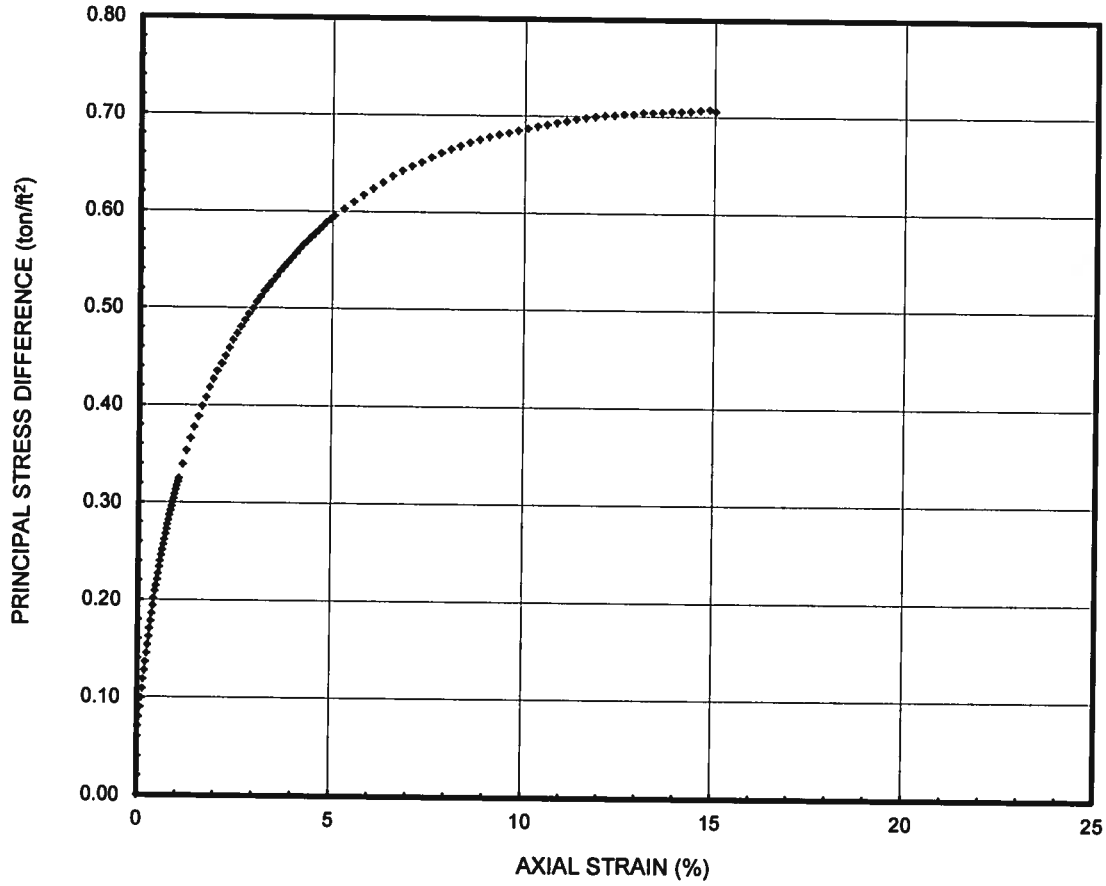
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-26
Depth	10-12 ft
Description	Bluish gray/tan clay w/fenods and trace organics



Initial Height	5.747	in	**Cell Pressure**	5.0	lb/in^2
Initial Diameter	2.836	in	**Strain Rate**	1.0	%/min
Dry Density	15.7	lb/ft^3	**Peak Stress**	0.72	ton/ft^2
Moisture Content	2655.0	%	**Strain at Peak Stress**	14.85	%
Saturation	36.9	%	**Failure Type**	Bulging	

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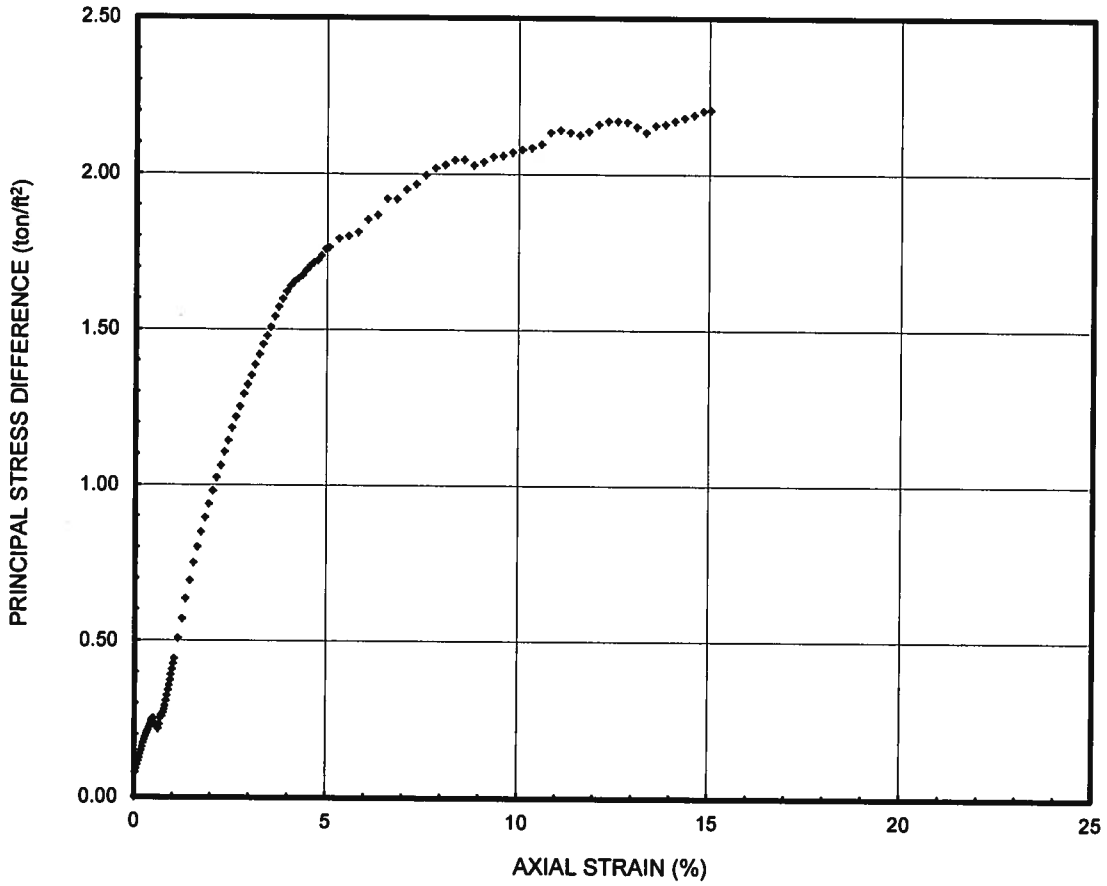
Unconfined Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-26
Depth	16-18 ft
Description	Tan/gray clay w/calcium nods and cemented clay



Initial Height	2.798	in	**Strain Rate**	1.0	%/min
Initial Diameter	1.399	in	**Peak Stress**	2.26	ton/ft^2
Dry Density	106.6	lb/ft^3	**Strain at Peak Stress**	15.02	%
Moisture Content	22.1	%	**Failure Type**	Combination	
Saturation	102.6	%			

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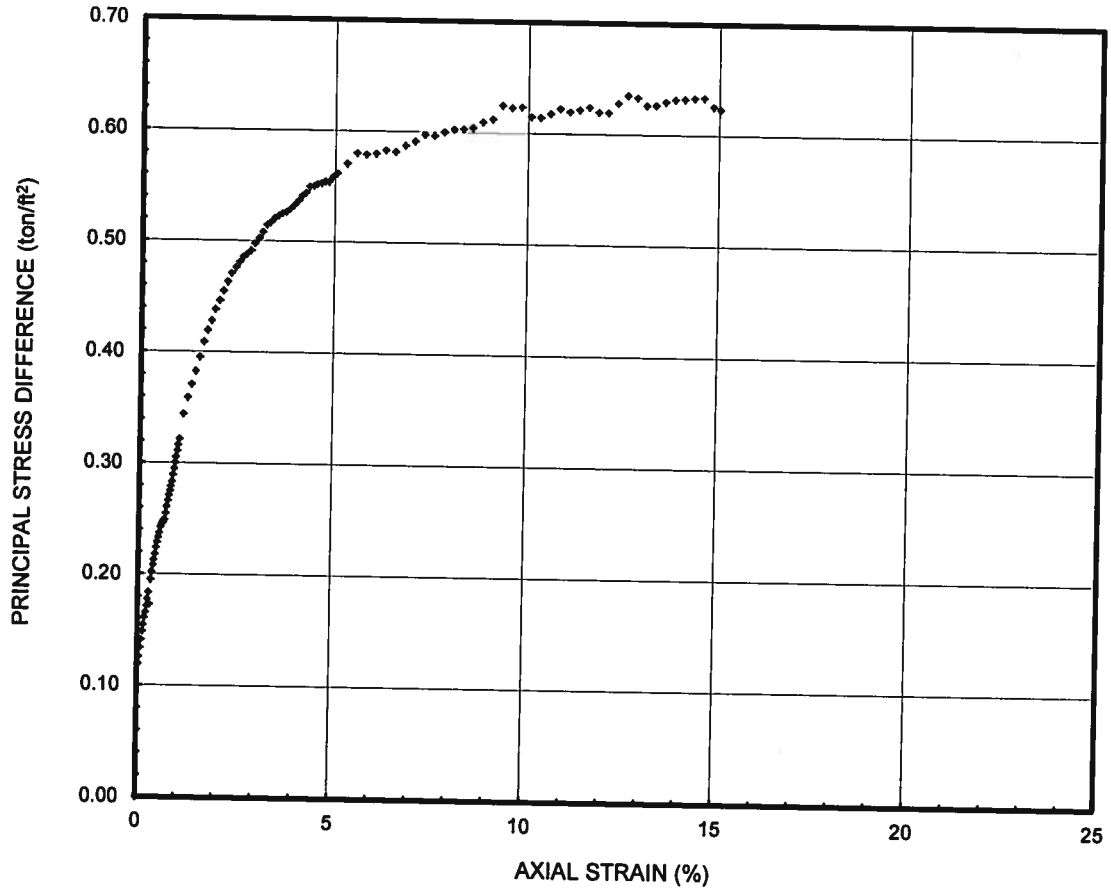
Unconsolidated Undrained Triaxial Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-26
Depth	23-25 ft
Description	Tan/light gray clay w/fenods, cemented clay and calcium



Initial Height	2.793	in	**Cell Pressure**	10.0	lb/in^2
Initial Diameter	1.399	in	**Strain Rate**	1.0	%/min
Dry Density	1.8	lb/ft^3	**Peak Stress**	0.65	ton/ft^2
Moisture Content	2716.3	%	**Strain at Peak Stress**	12.58	%
Saturation	38.2	%	**Failure Type**	Combination	

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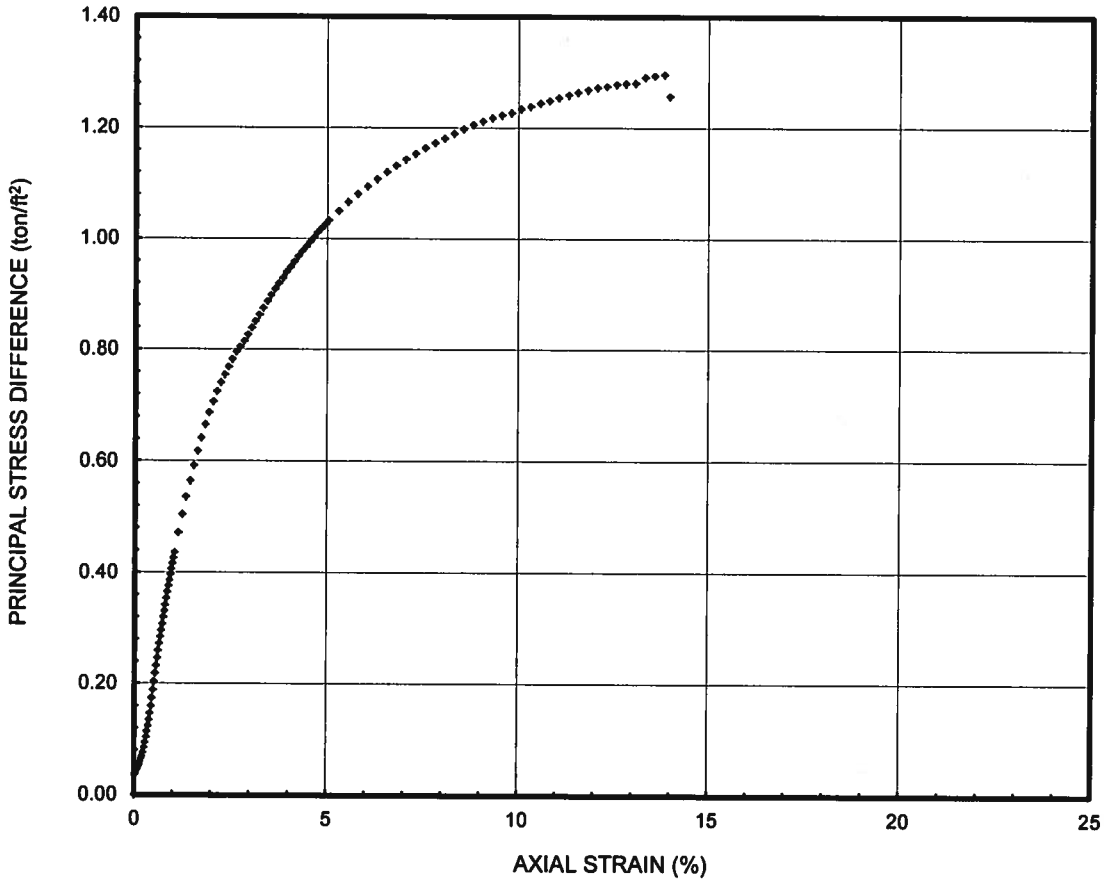
Unconfined Compression Test

Project Name	Coles Bayou
Project Number	13-80-3705
Boring Number	B-26
Depth	28-30 ft
Description	Light gray/tan jointed clay w/fenods



Initial Height	5.751	in	**Strain Rate**	1.0	%/min
Initial Diameter	2.875	in	**Peak Stress**	1.33	ton/ft^2
Dry Density	91.3	lb/ft^3	**Strain at Peak Stress**	13.83	%
Moisture Content	29.7	%	**Failure Type**	Combination	
Saturation	95.0	%			

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Geotechnical, Environmental and Materials Consultants

COLE'S BAYOU MARSH CREATION

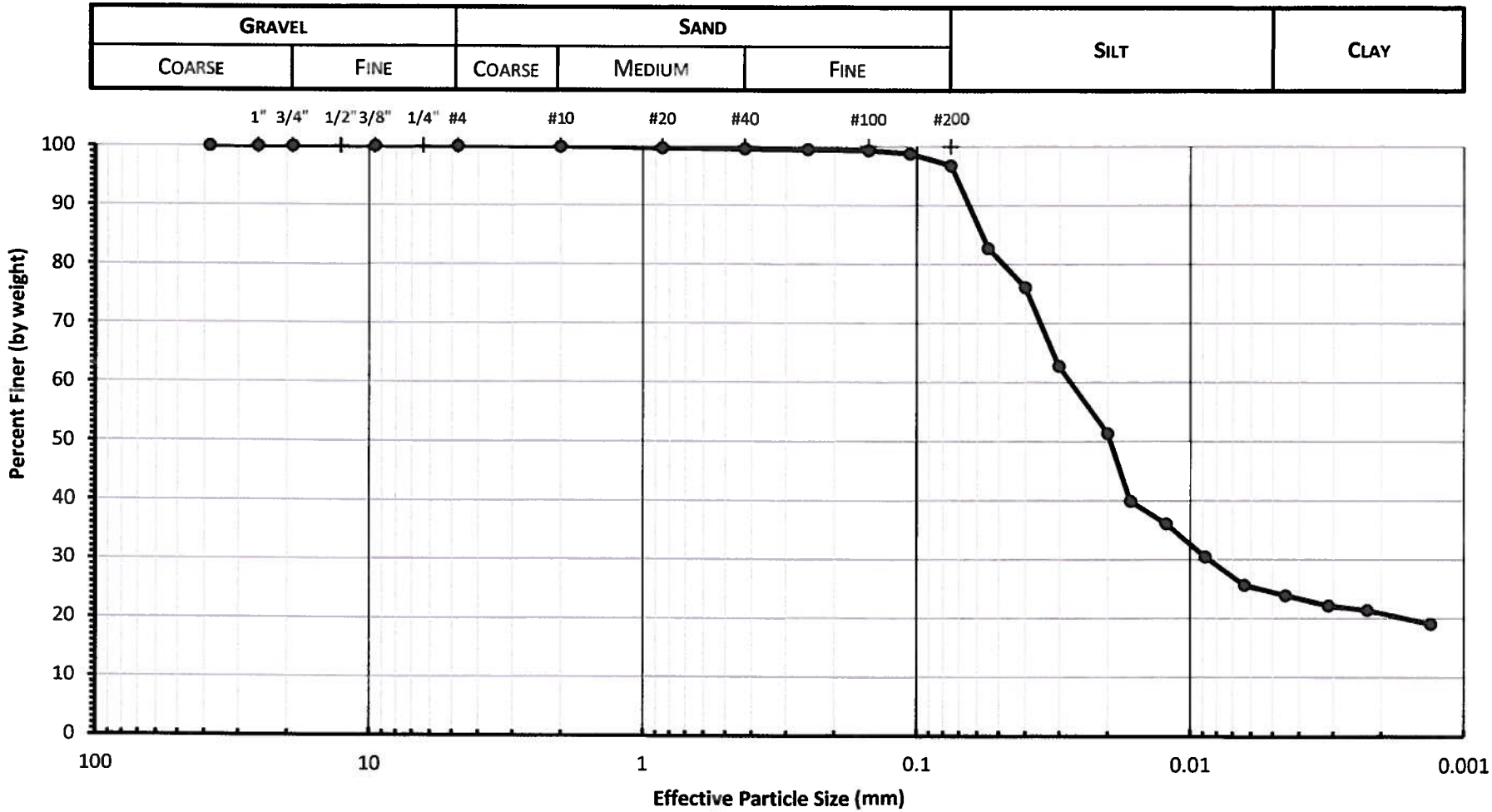
CPRA

DRAWN BY: SRT	CHECKED BY: RER	DATE: 12-20-13
FILE NO.: 13-80-3705	APPROVED BY:	FIGURE:

APPENDIX E. PARTICAL SIZE ANALYSES

Client:
Project: Coles Bayou
AAI Project No.13-80-3705

PARTICLE SIZE ANALYSIS
(ASTM D422)



SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-01	23-25	Gray and tan silty clay	0.0	3.2	72.3	24.5

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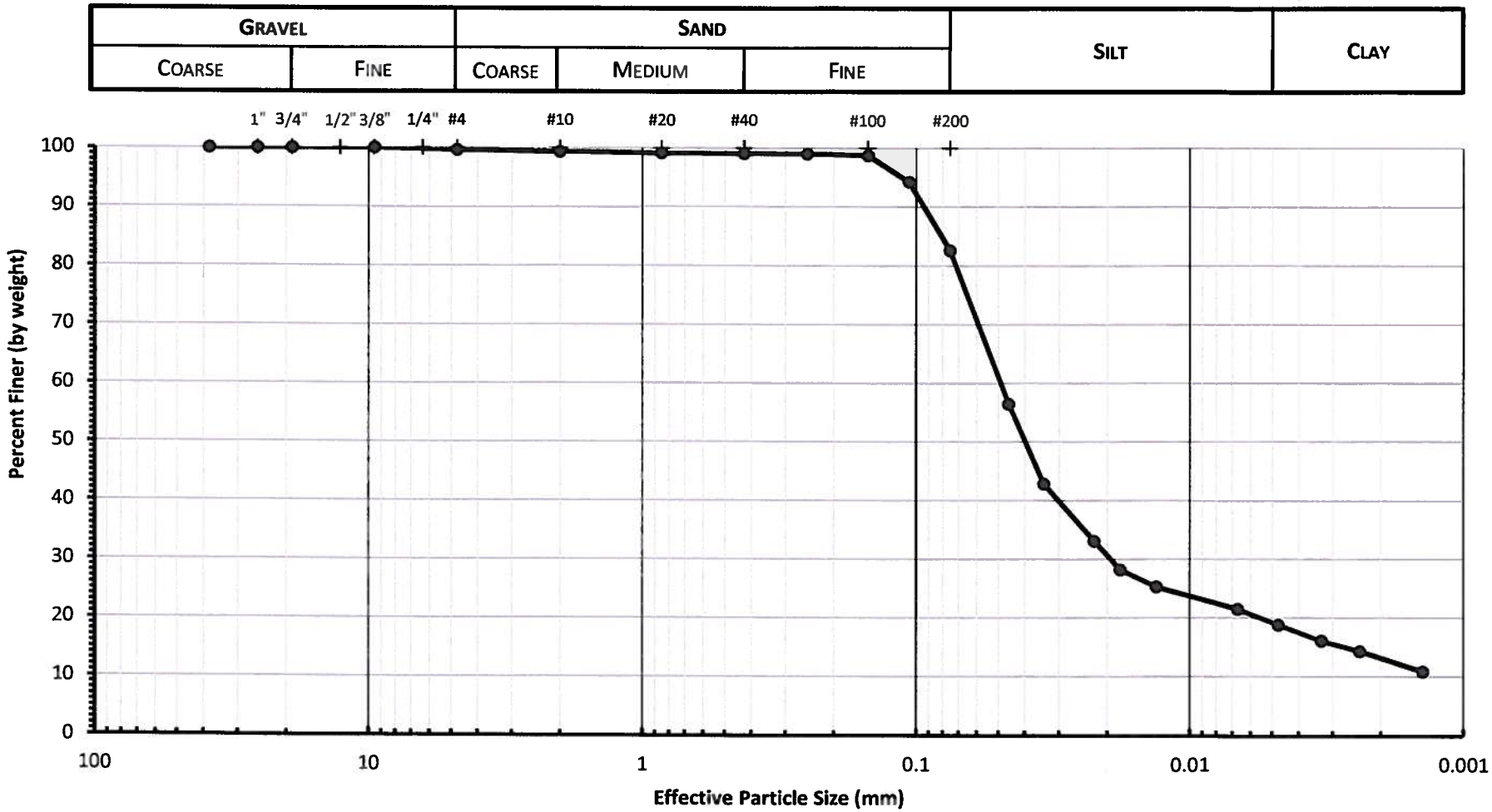

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-02	33-35	Tan and gray silty clay w/ sand	0.4	17.0	63.4	19.2

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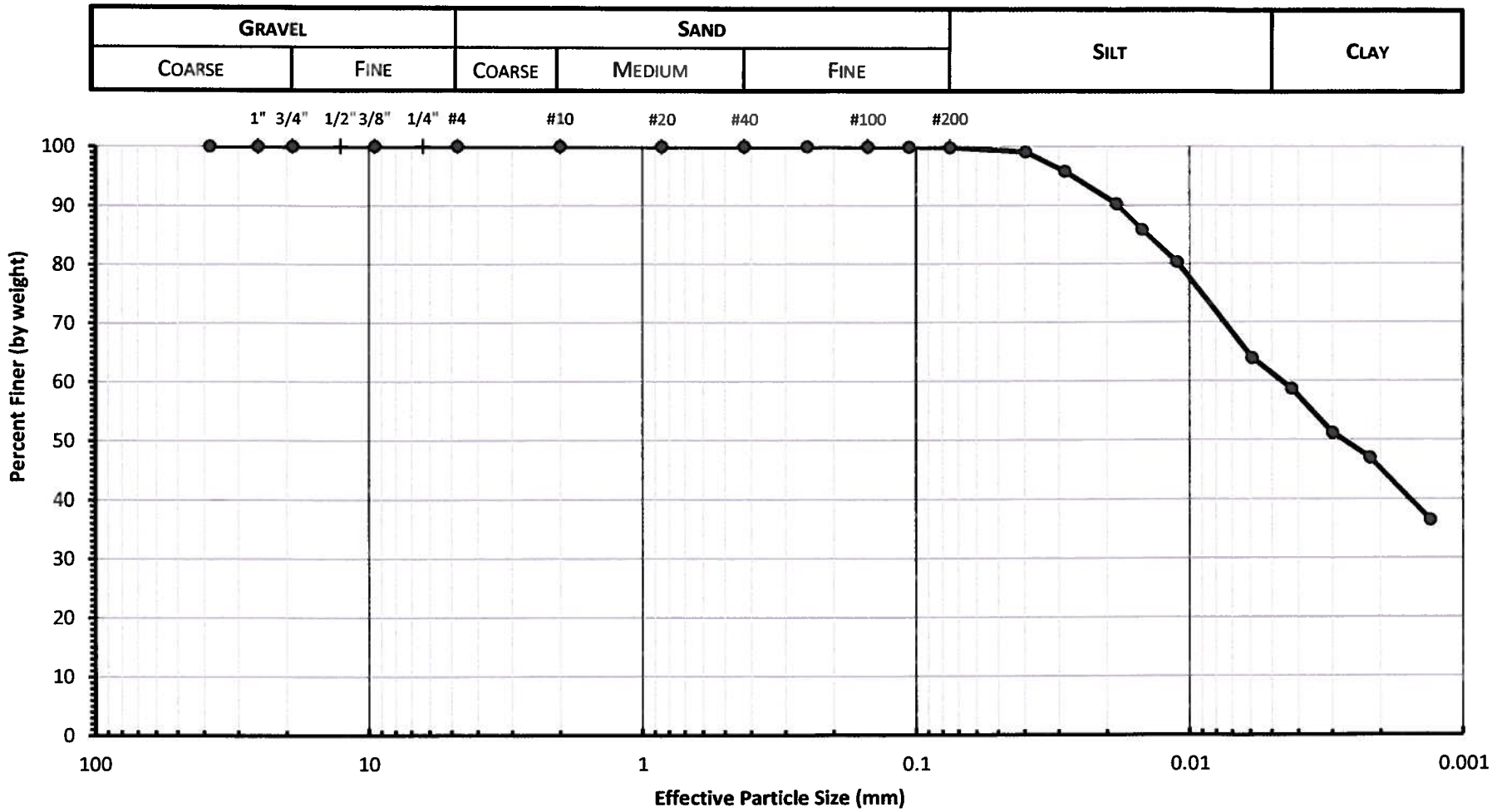

Sample Identification		Visual Identification	% Gravel	% Sand	% Silt	% Clay
Boring	Depth (ft)					
B-02	38-40	Light gray and tan clay	0.0	0.2	38.7	61.2

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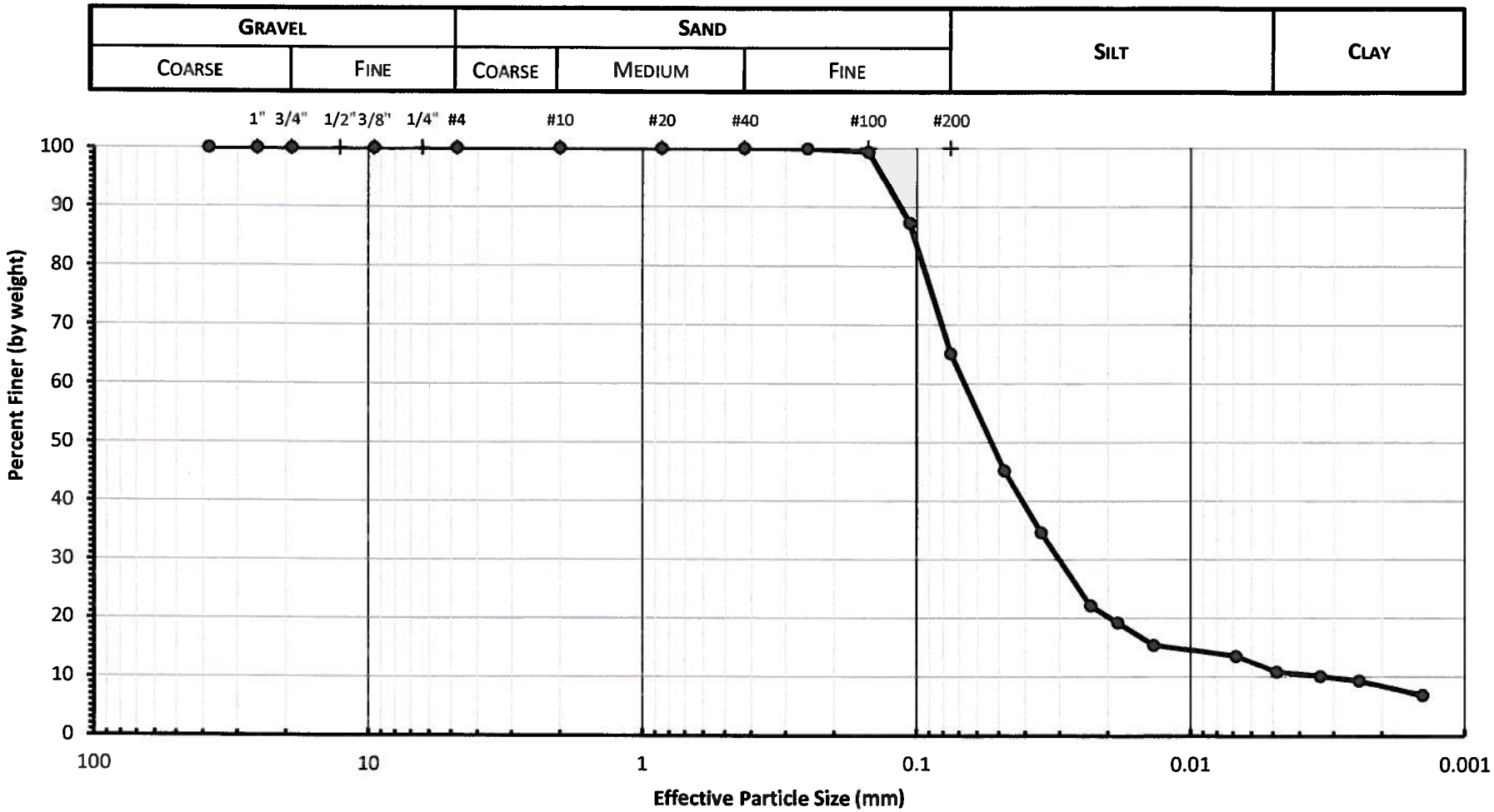

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-02	48-50	Gray sandy clay	0.0	34.9	54.0	11.1

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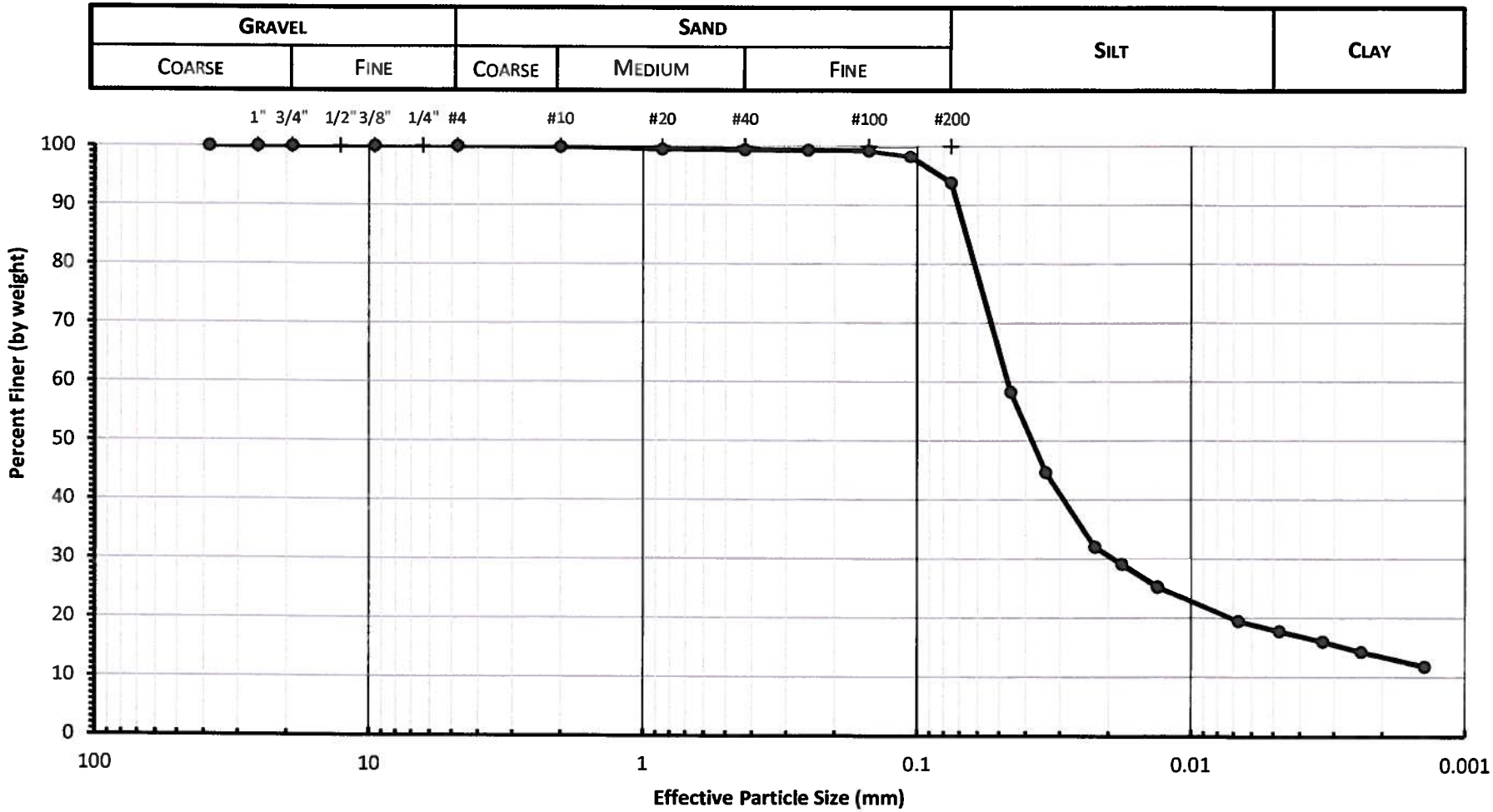

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-02	73-75	Gray silty clay w/ trace sand	0.0	6.2	75.8	18.0

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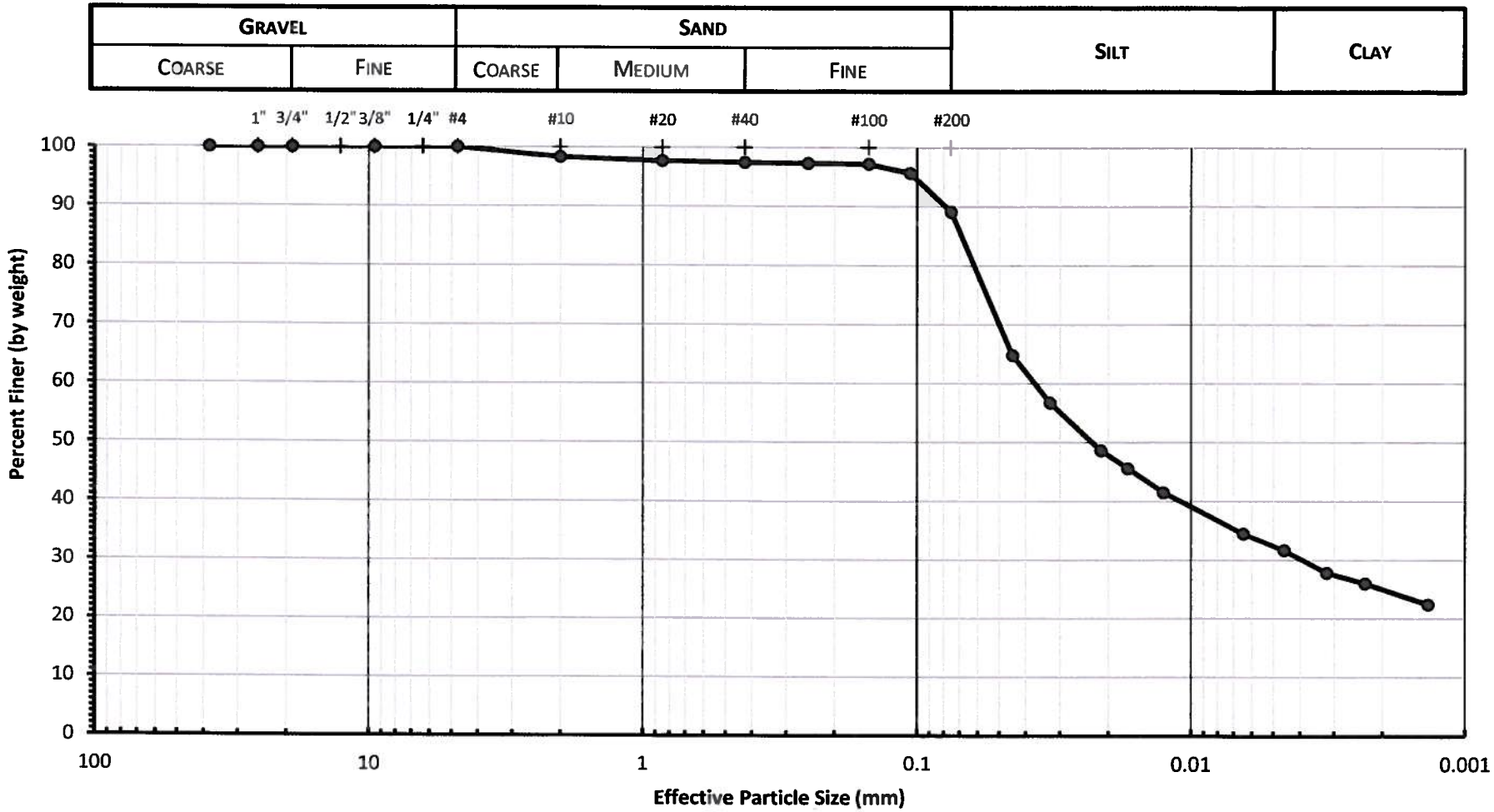

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-02	78-80	Gray and brown silty clay w/ trace sand	0.0	10.9	56.7	32.4

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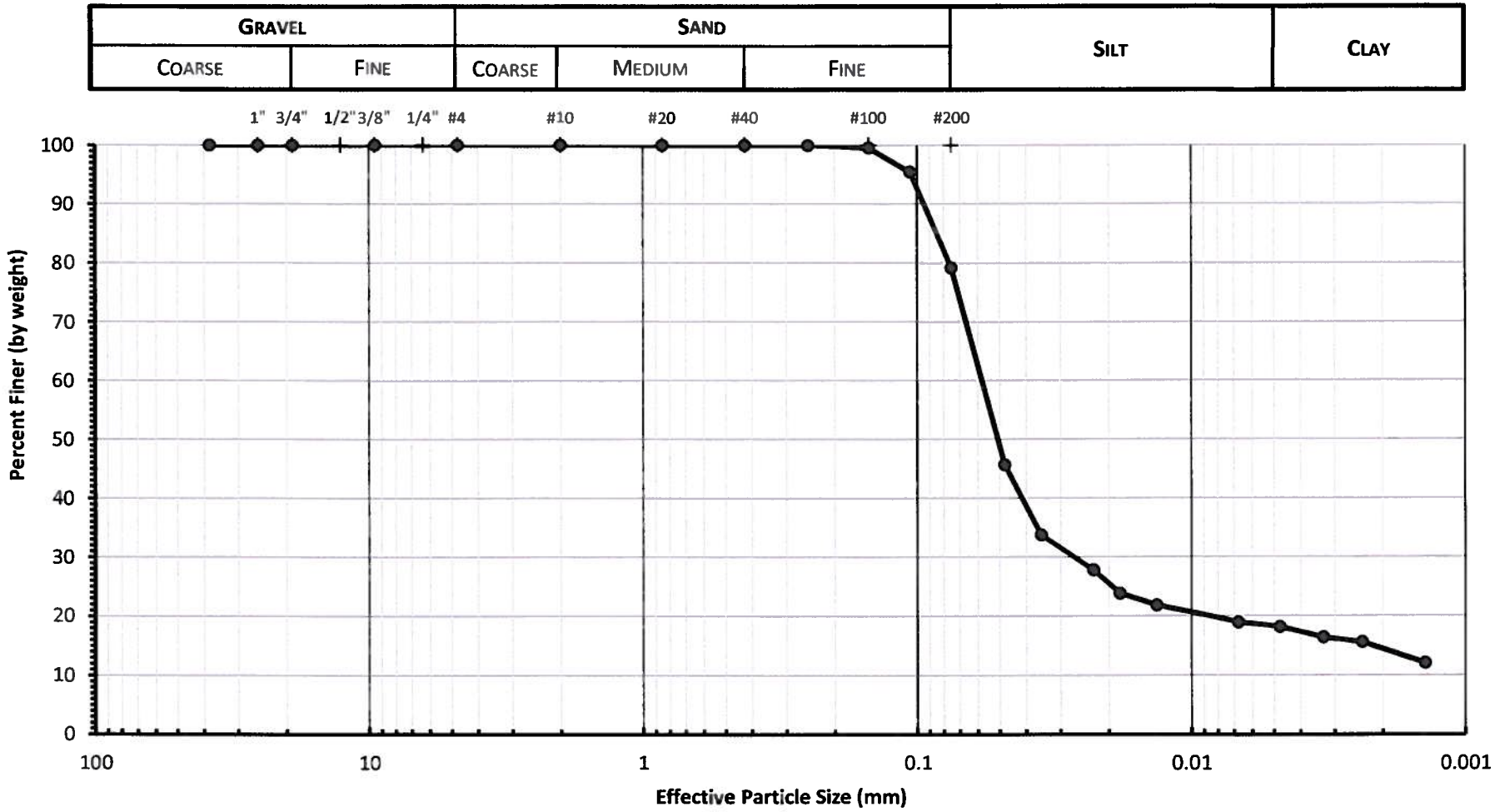

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-04	23-25	Tan and gray clay w/ sand	0.0	20.9	60.8	18.3

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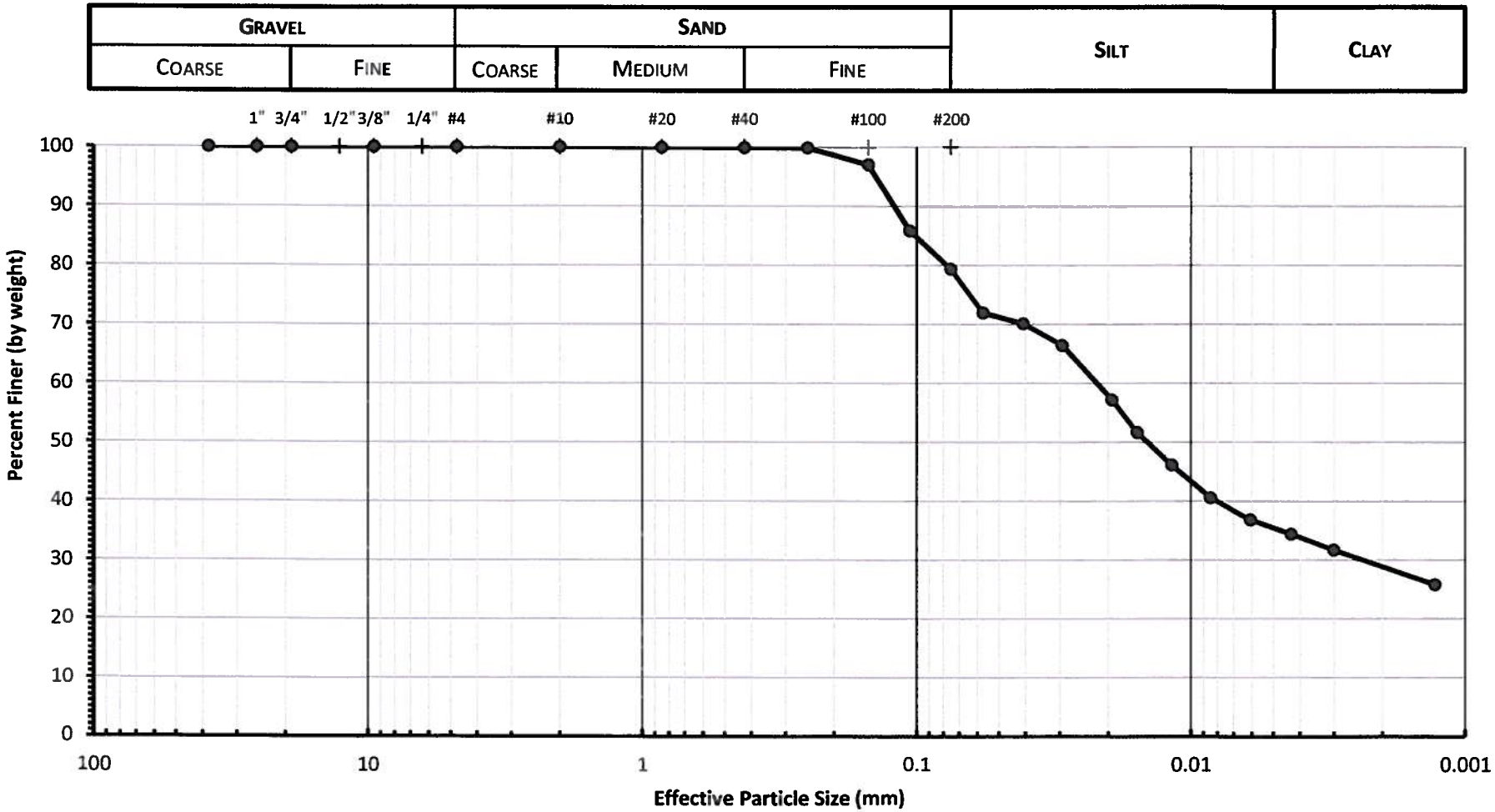

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-05	23-25	Tan and gray silty clay w/ sand	0.0	20.6	43.9	35.4

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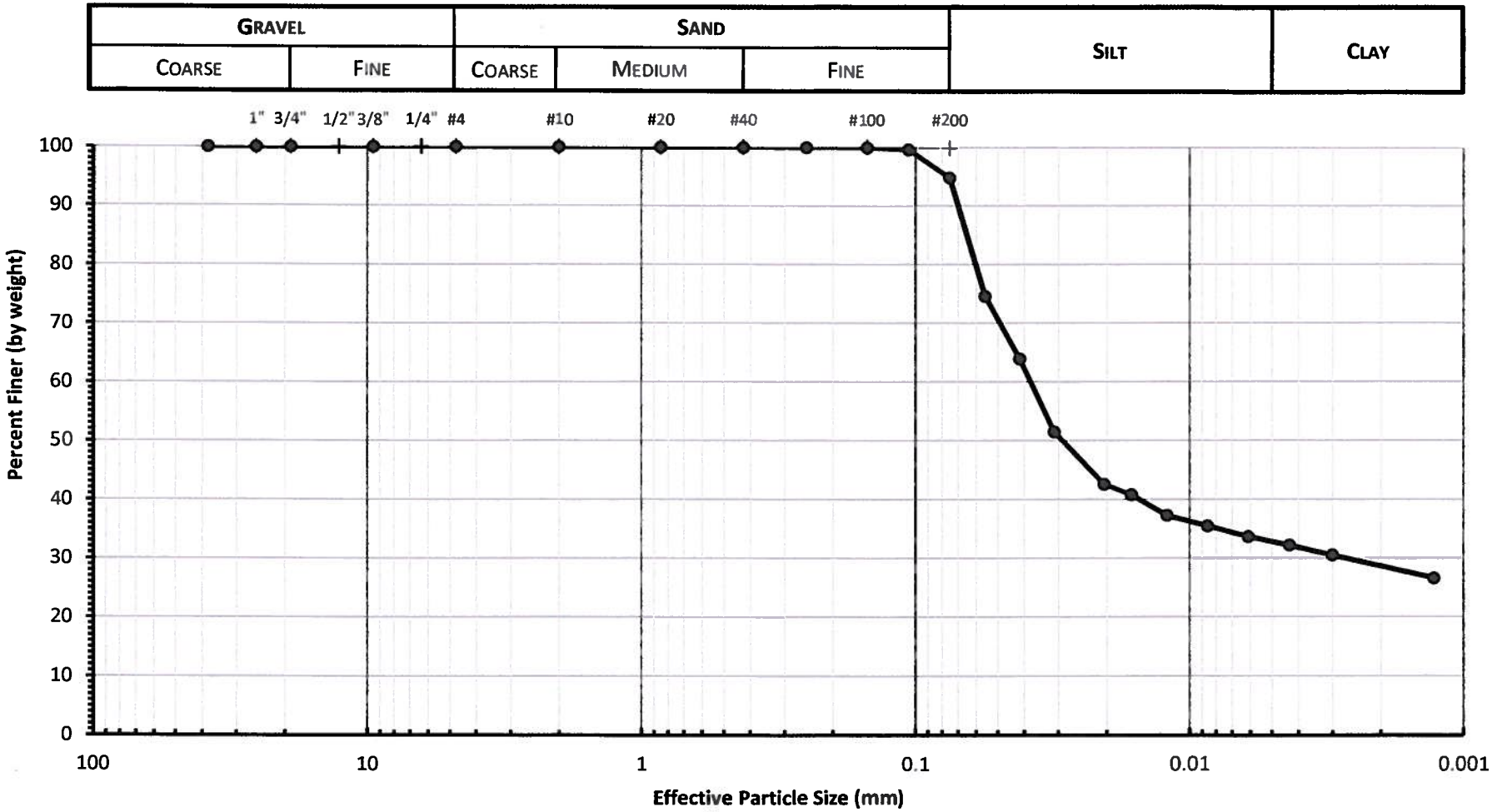

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-05	33-35	Tan and gray silty clay w/trace sand	0.0	5.2	62.0	32.8

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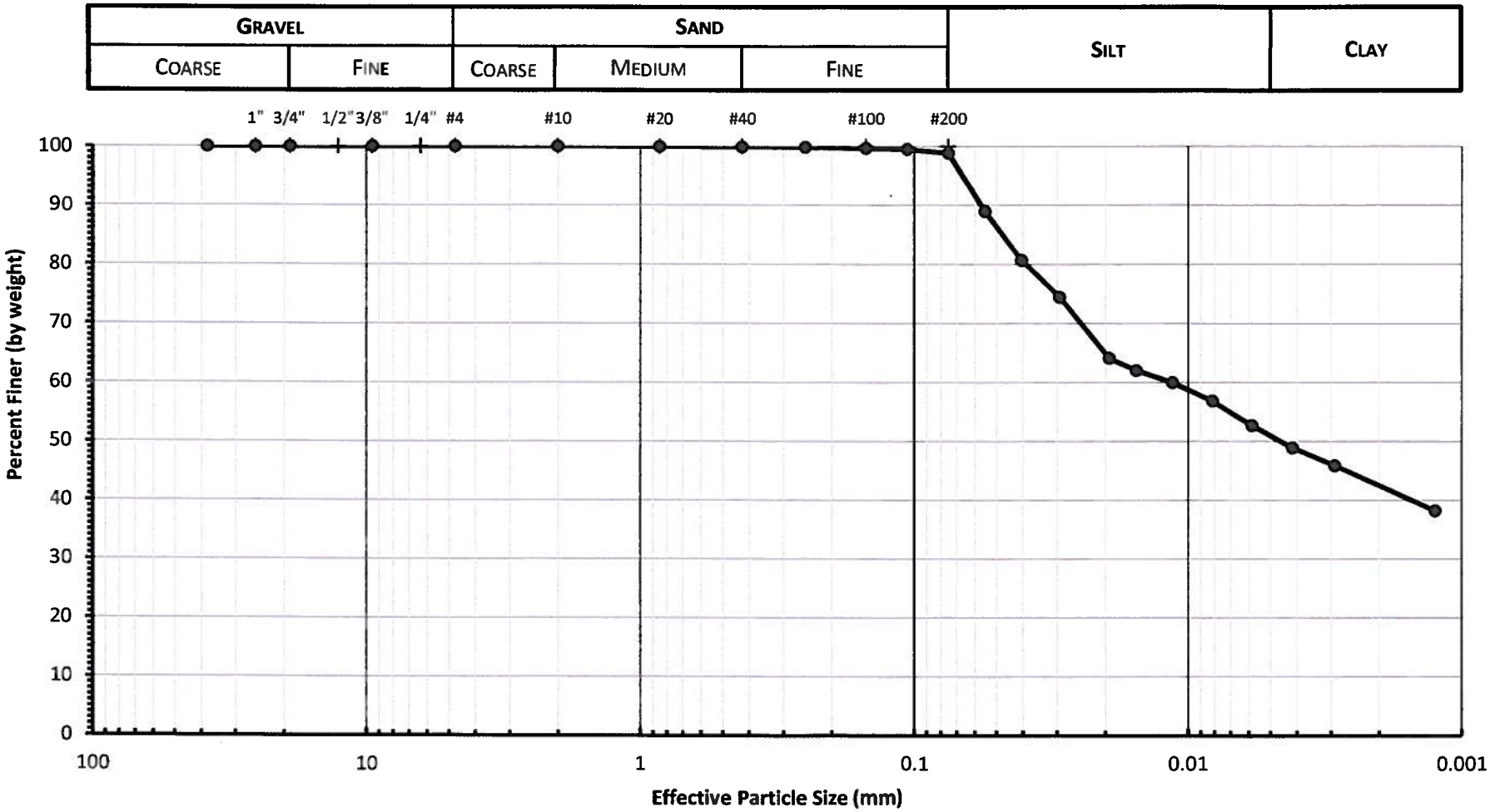

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-05	48-50	Gray clay	0.0	1.1	48.0	50.9

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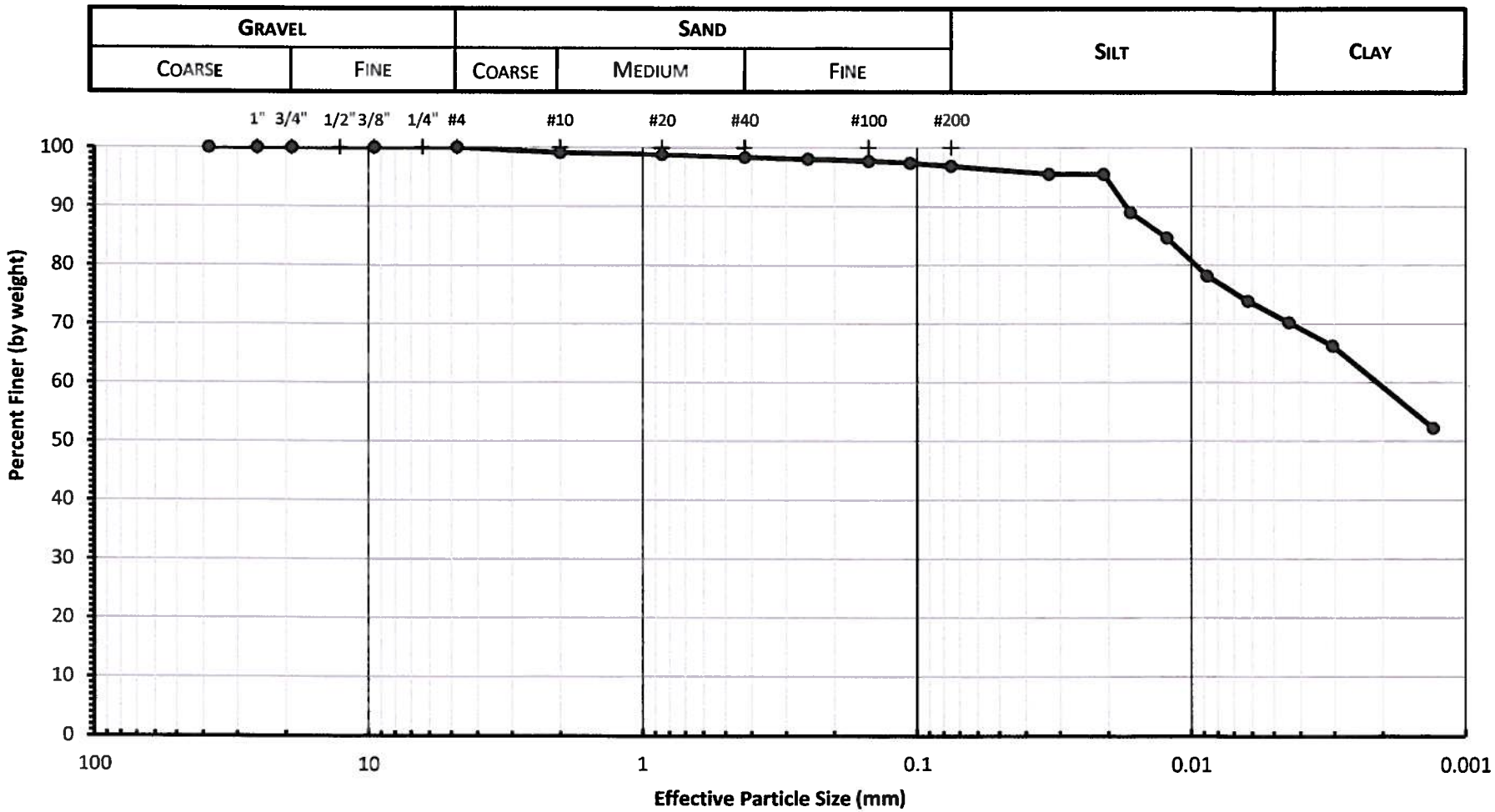

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-06	2-4	Gray organic clay	0.0	3.1	25.4	71.5

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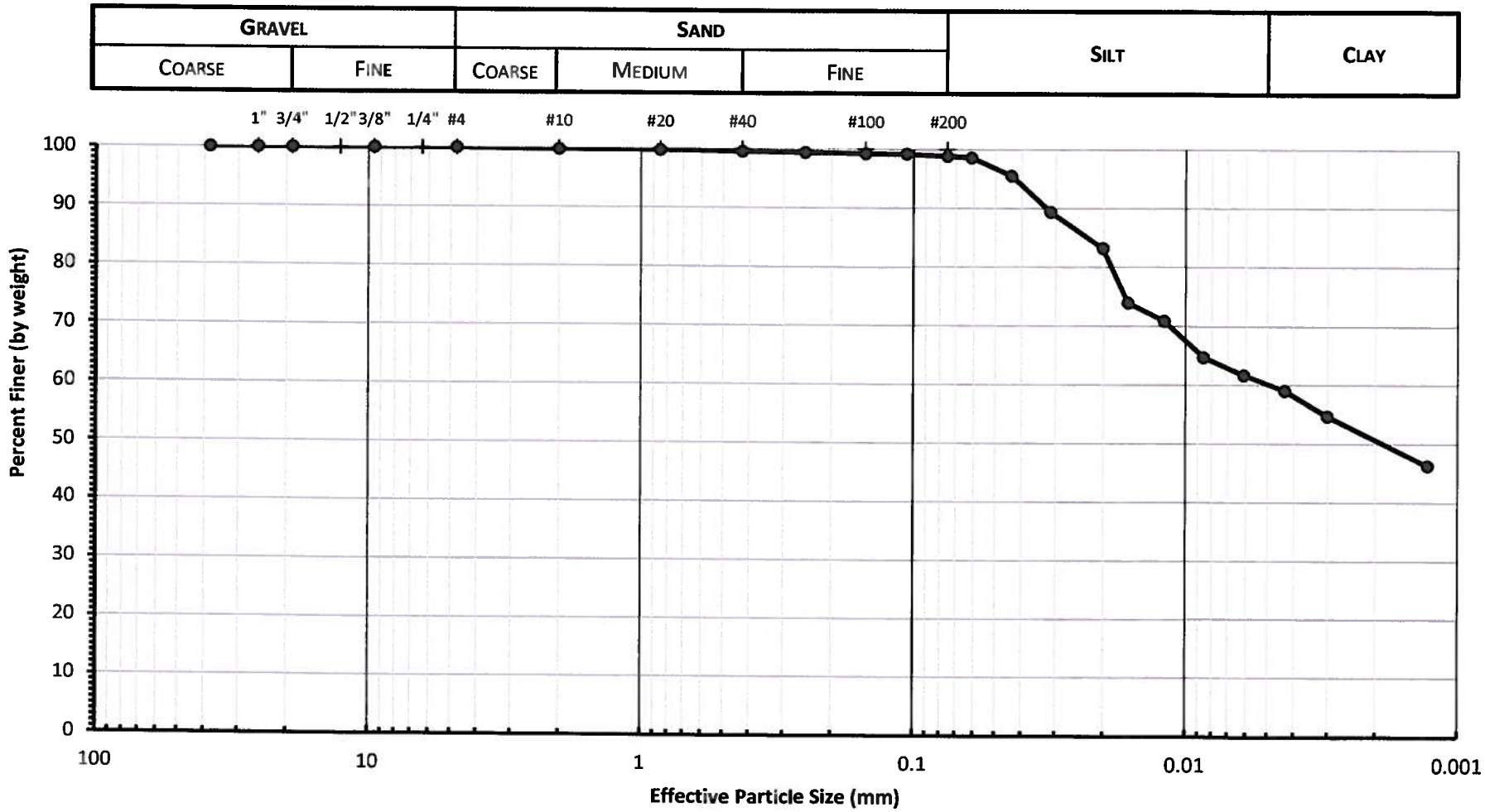

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-06	6-8 BI 2	Gray clay w/organics	0.0	1.2	38.7	60.1

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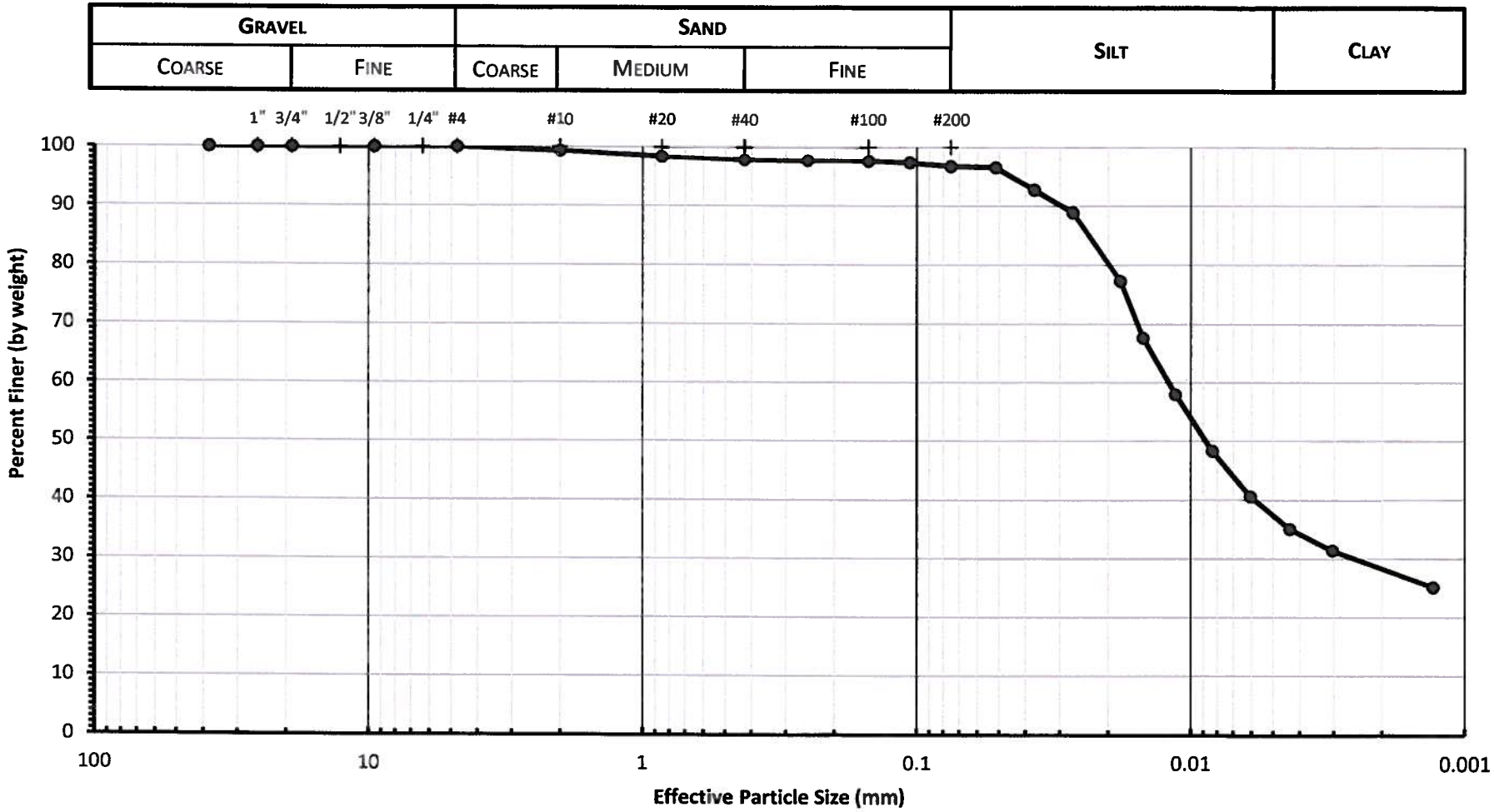

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-06	23.5-25	Tan and gray clay	0.0	3.2	59.6	37.2

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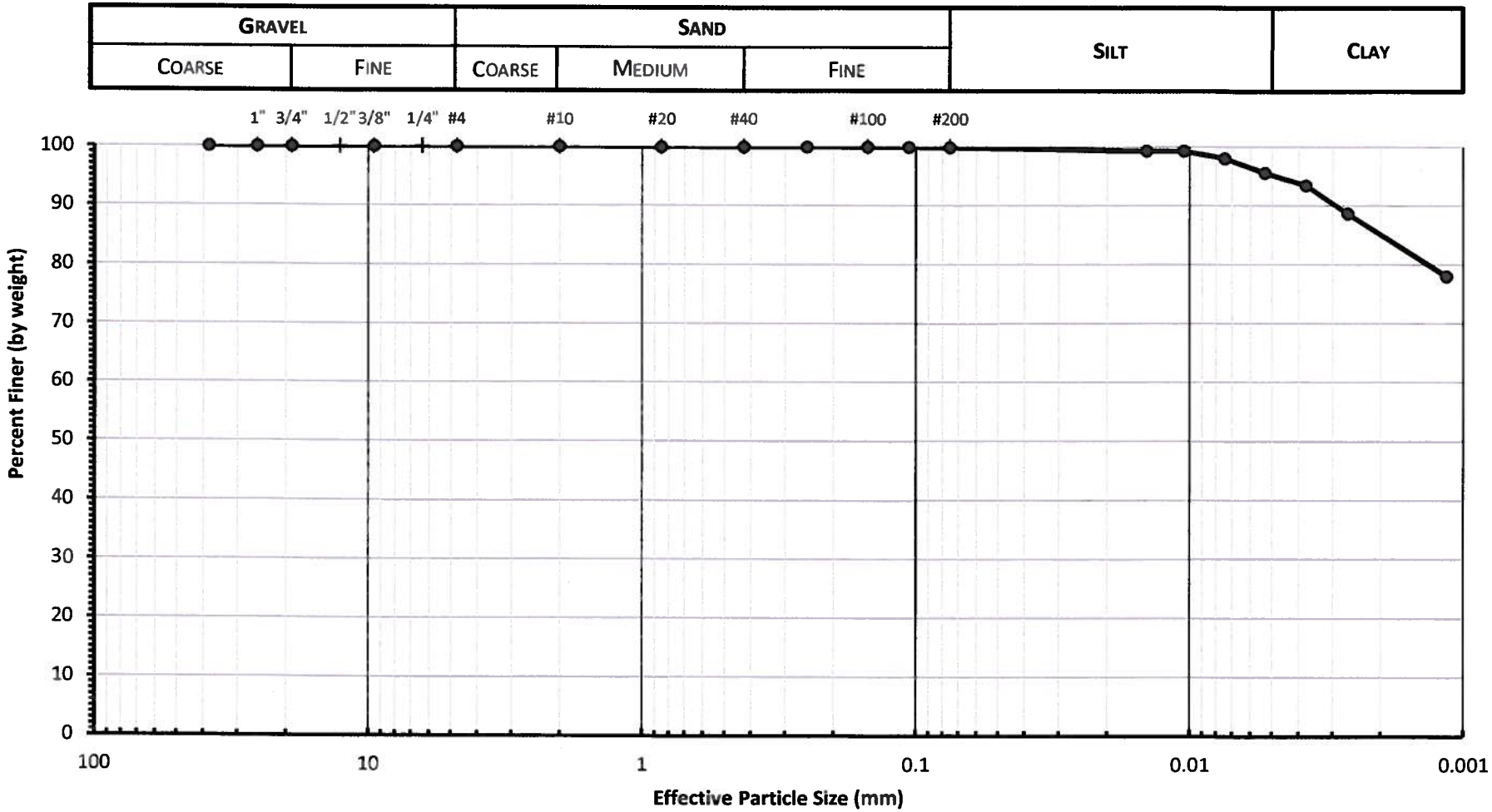

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-06	28-30	Tan and gray clay	0.0	0.2	4.6	95.2

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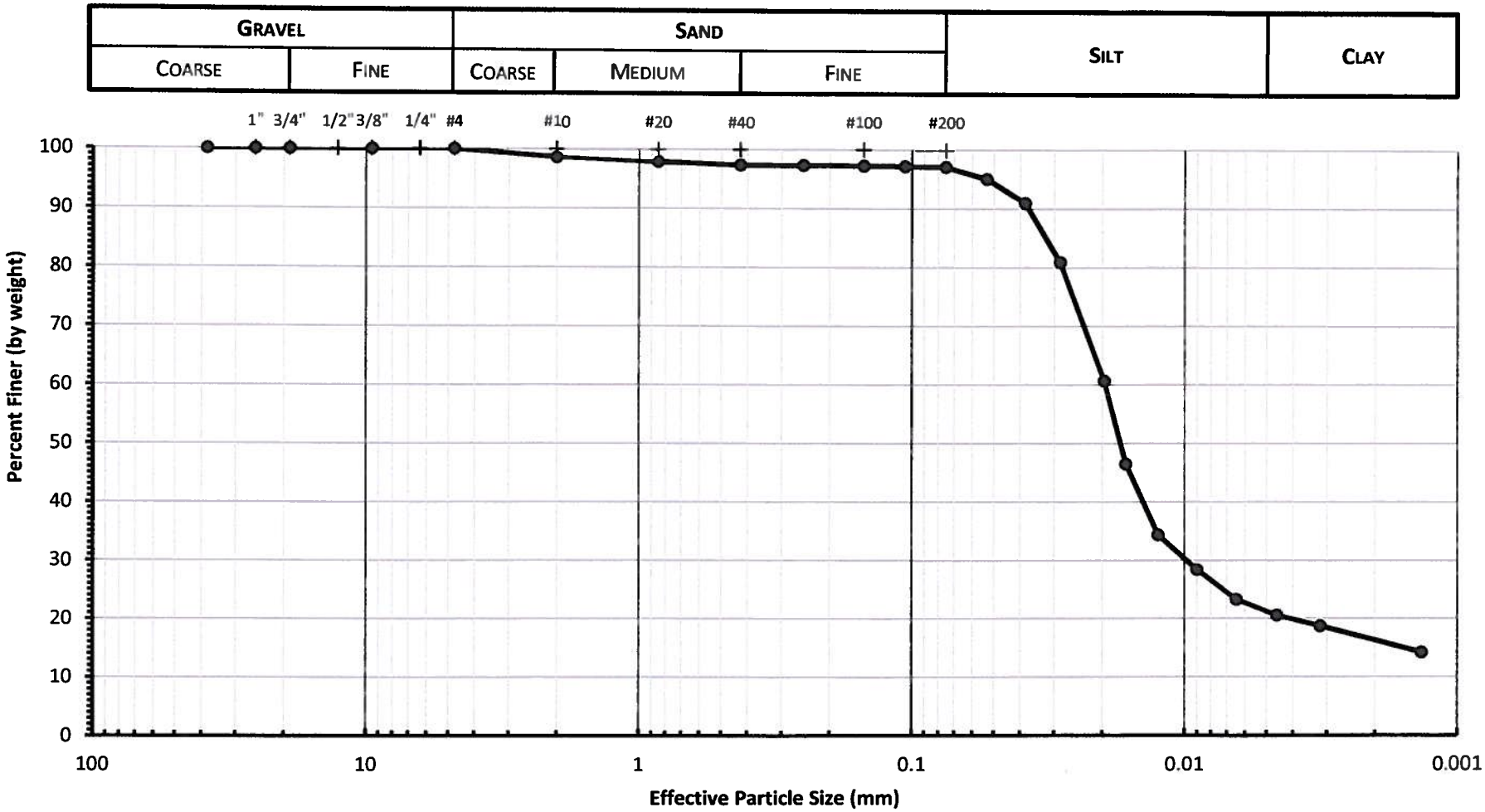

Sample Identification		Visual Identification	% Gravel	% Sand	% Silt	% Clay
Boring	Depth (ft)					
B-06	48-50	Gray silty clay	0.0	3.0	75.8	21.2

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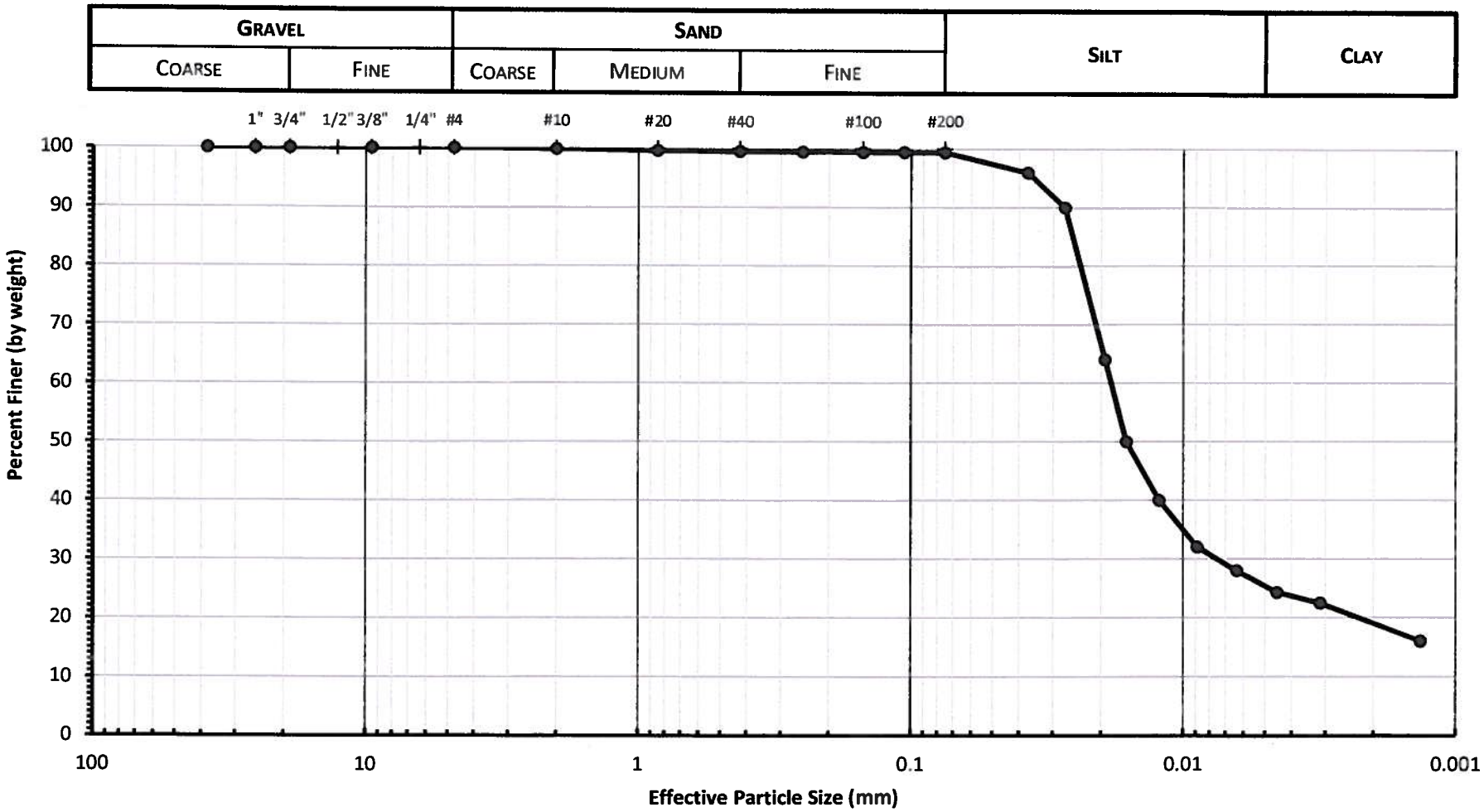

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-06	58-60	Gray silty clay	0.0	0.6	74.1	25.3

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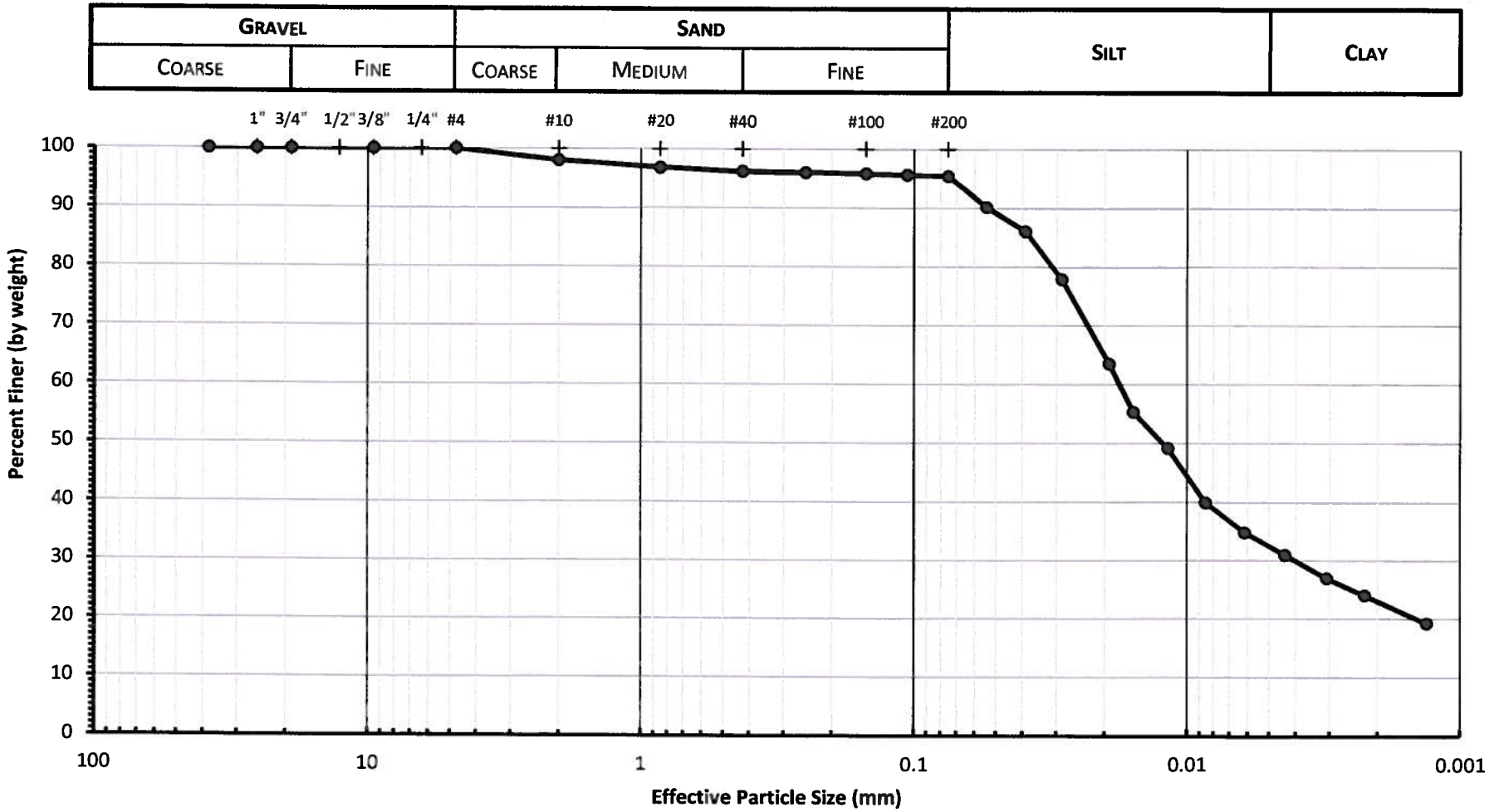

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-07	48-50	Gray silty clay	0.0	4.5	63.1	32.4

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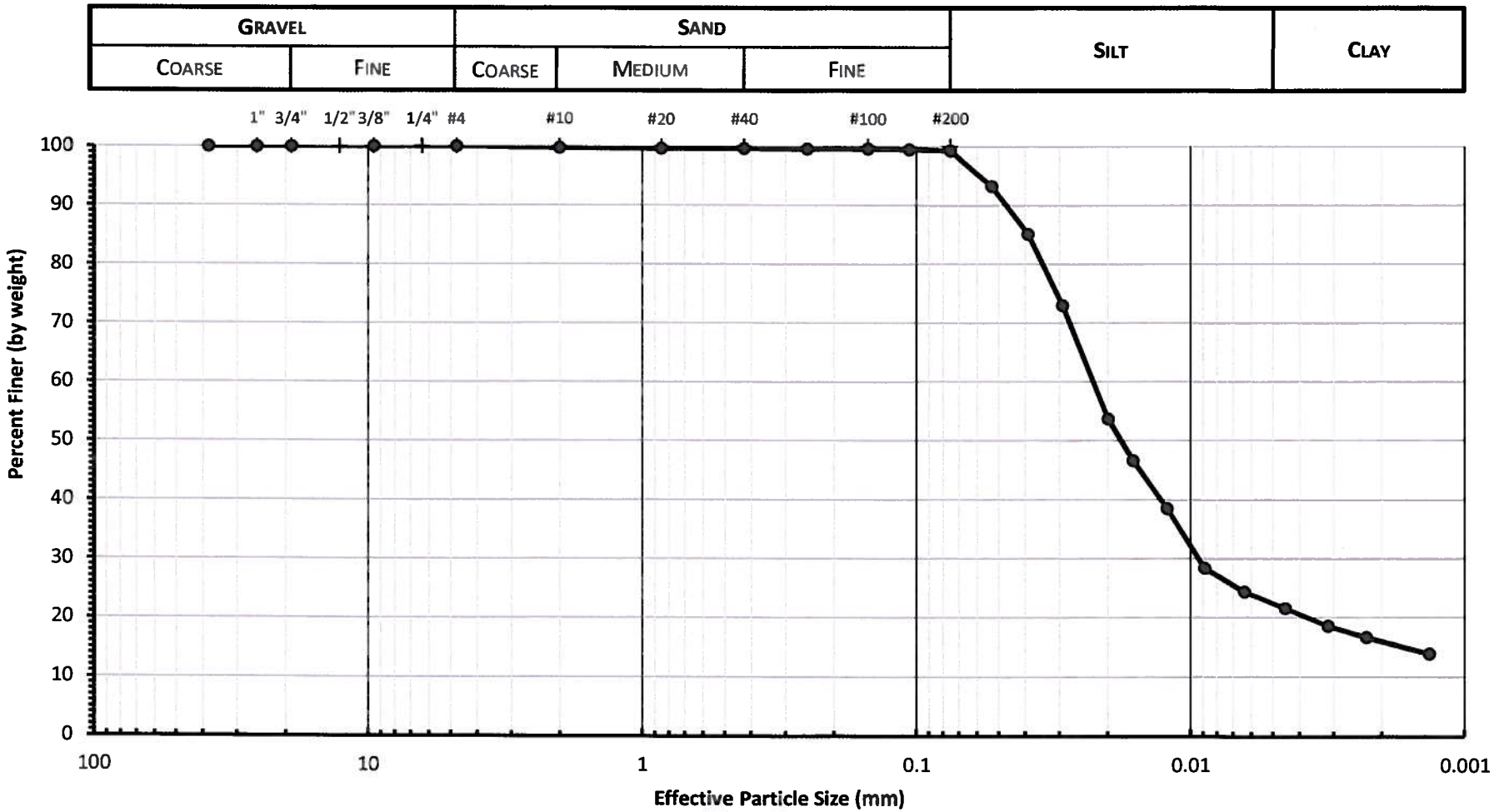

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-07	58-60	Gray clay w/organics	0.0	0.7	76.9	22.3

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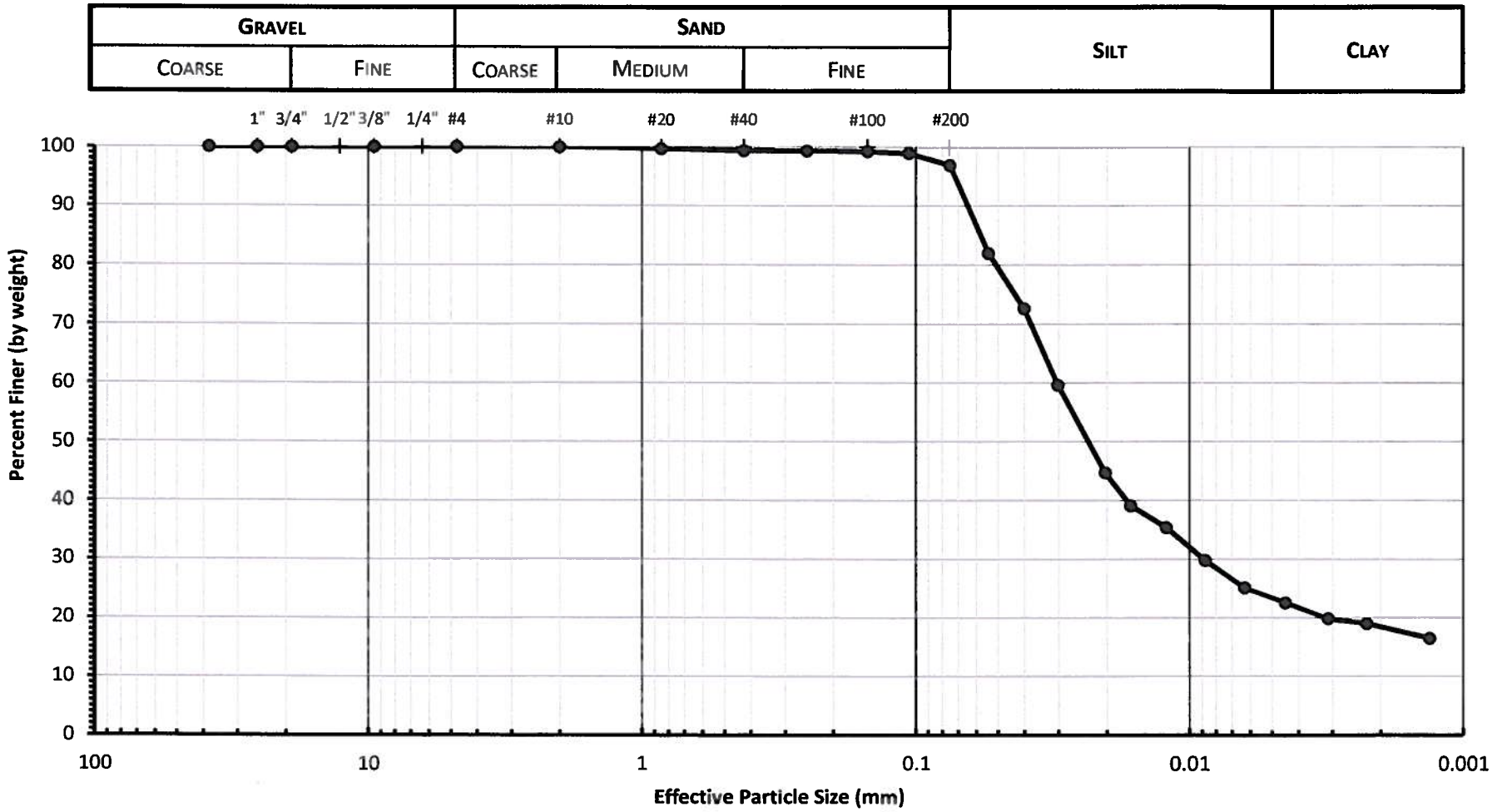

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-08	58-60	Gray silty clay	0.0	3.1	73.5	23.4

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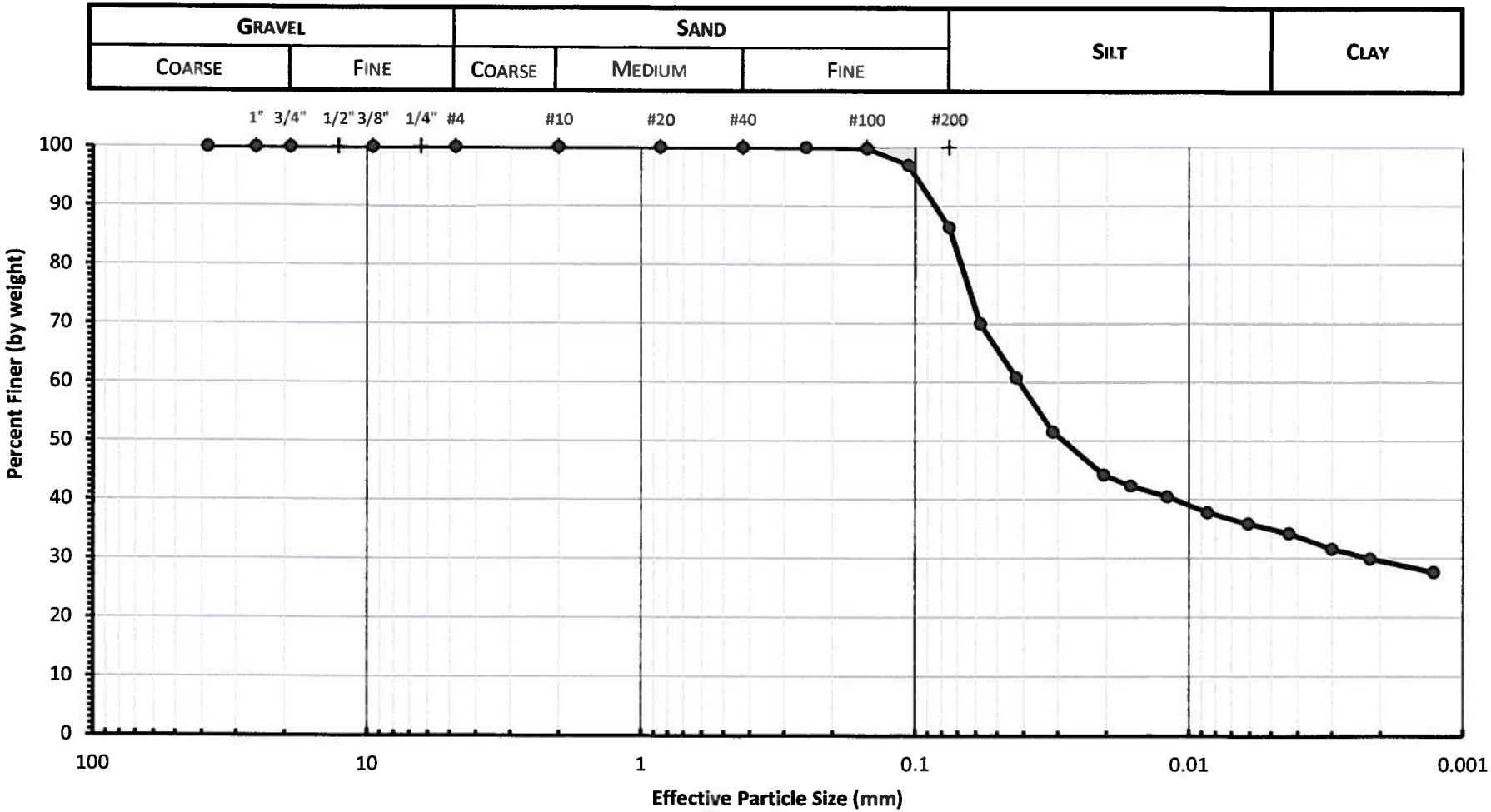

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-09	33-35	Gray and tan silty clay w/trace sand	0.0	13.6	51.4	34.9

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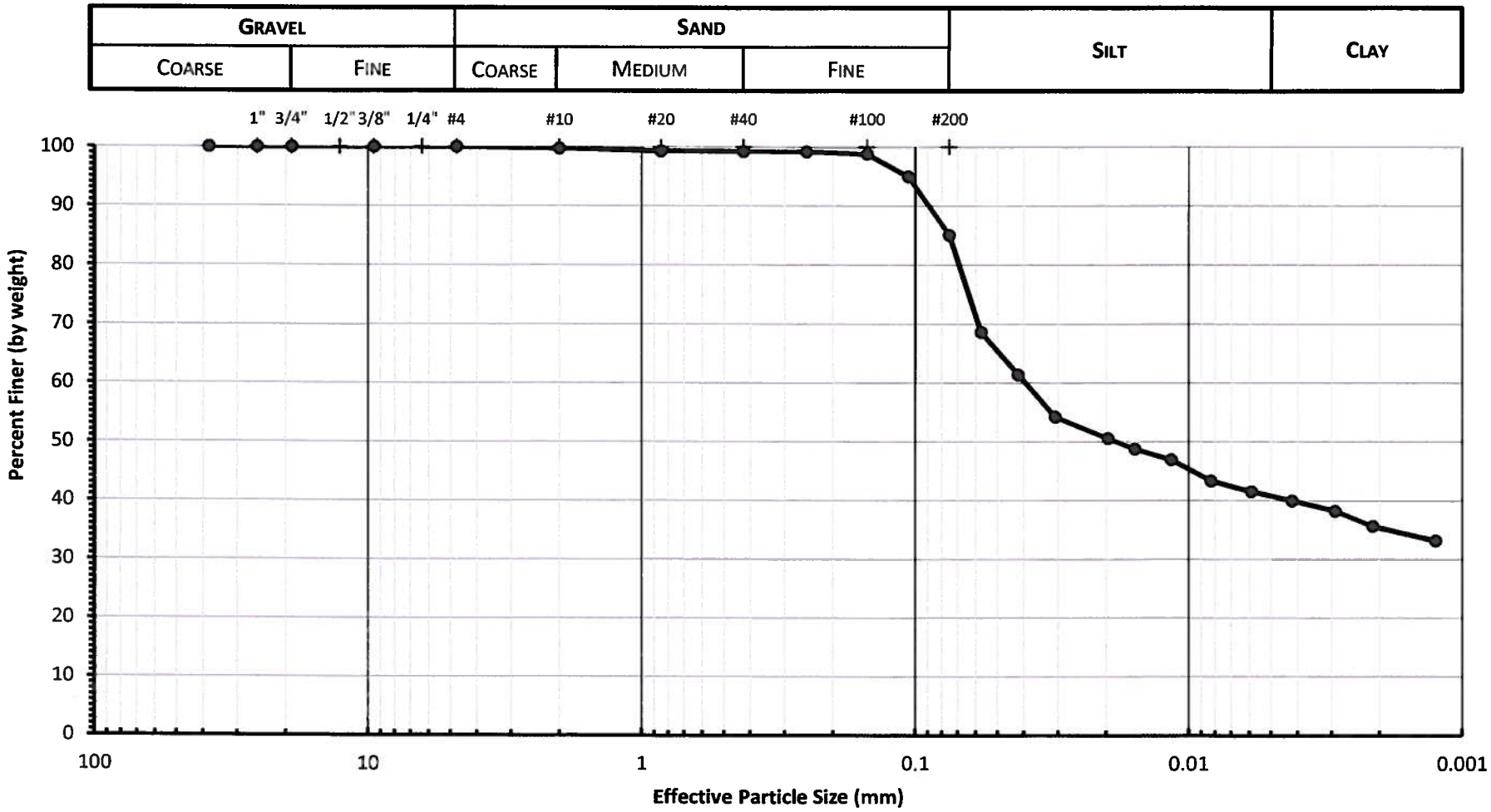

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-10	33-35	Gray and tan silty clay w/ sand	0.0	15.0	44.3	40.8

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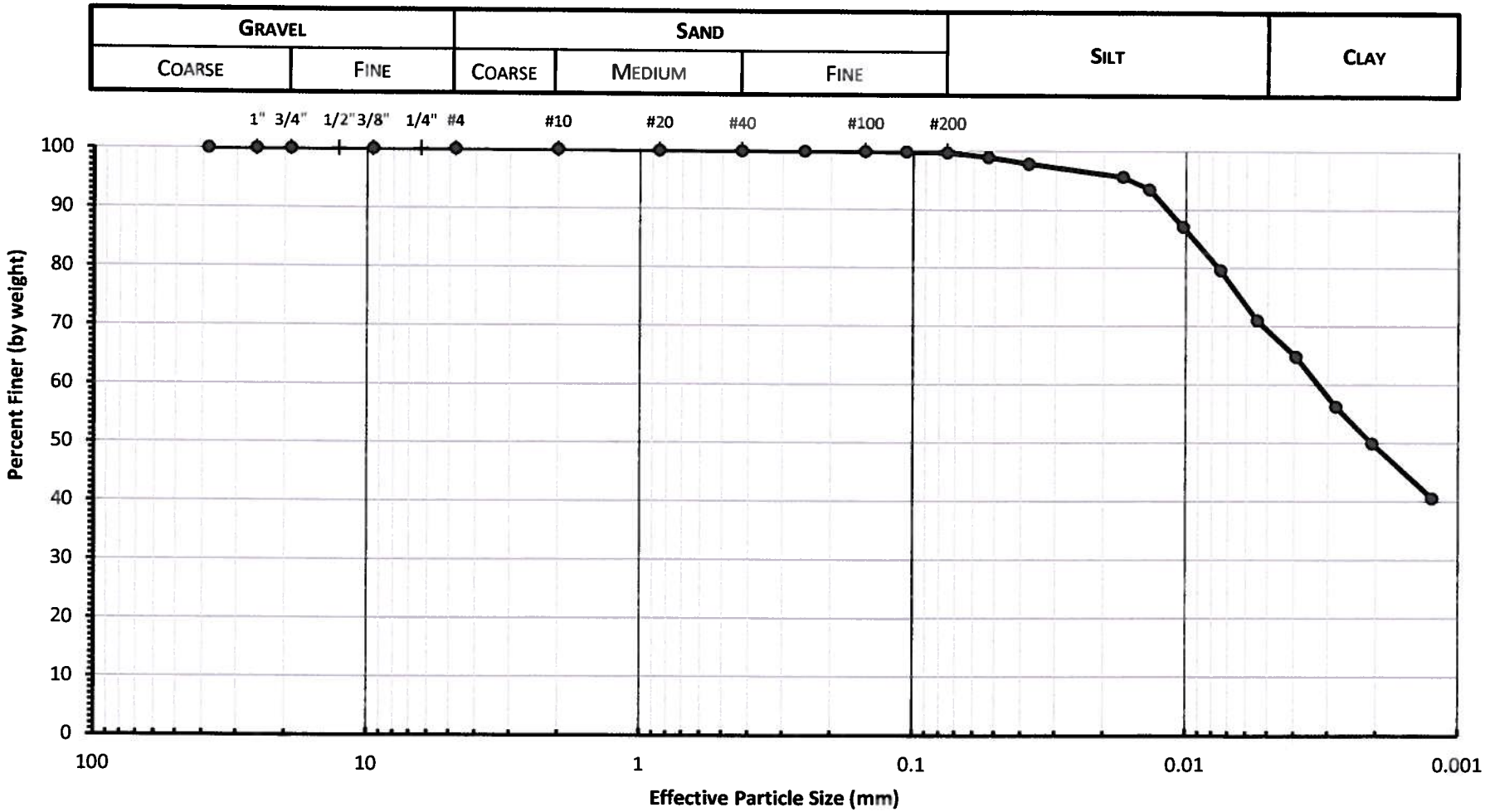

Sample Identification		Visual Identification	% Gravel	% Sand	% Silt	% Clay
Boring	Depth (ft)					
B-10	43-45	Gray clay	0.0	0.3	30.5	69.2

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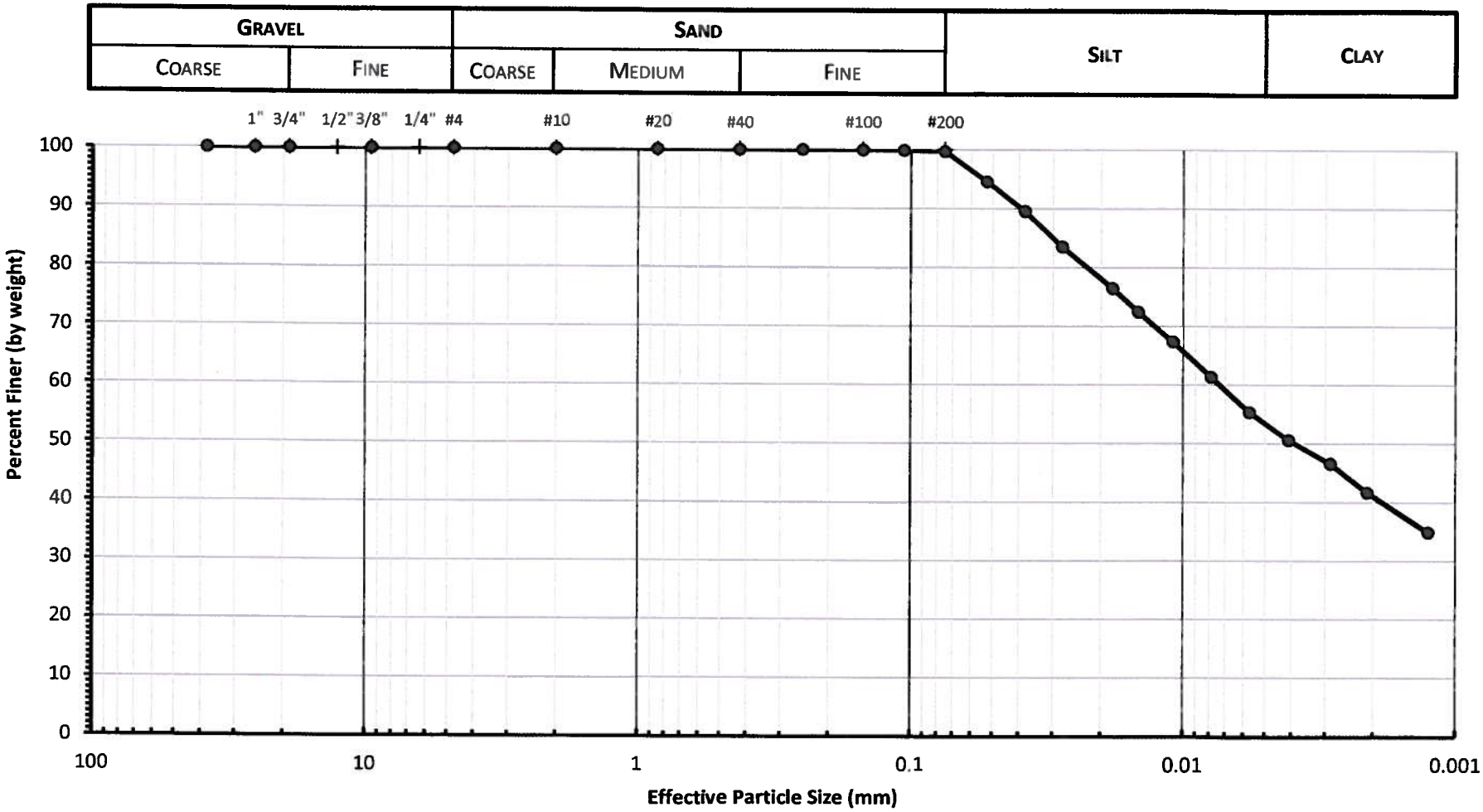
(ASTM D422)



SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-12	43-45	Gray clay	0.0	0.3	46.4	53.3

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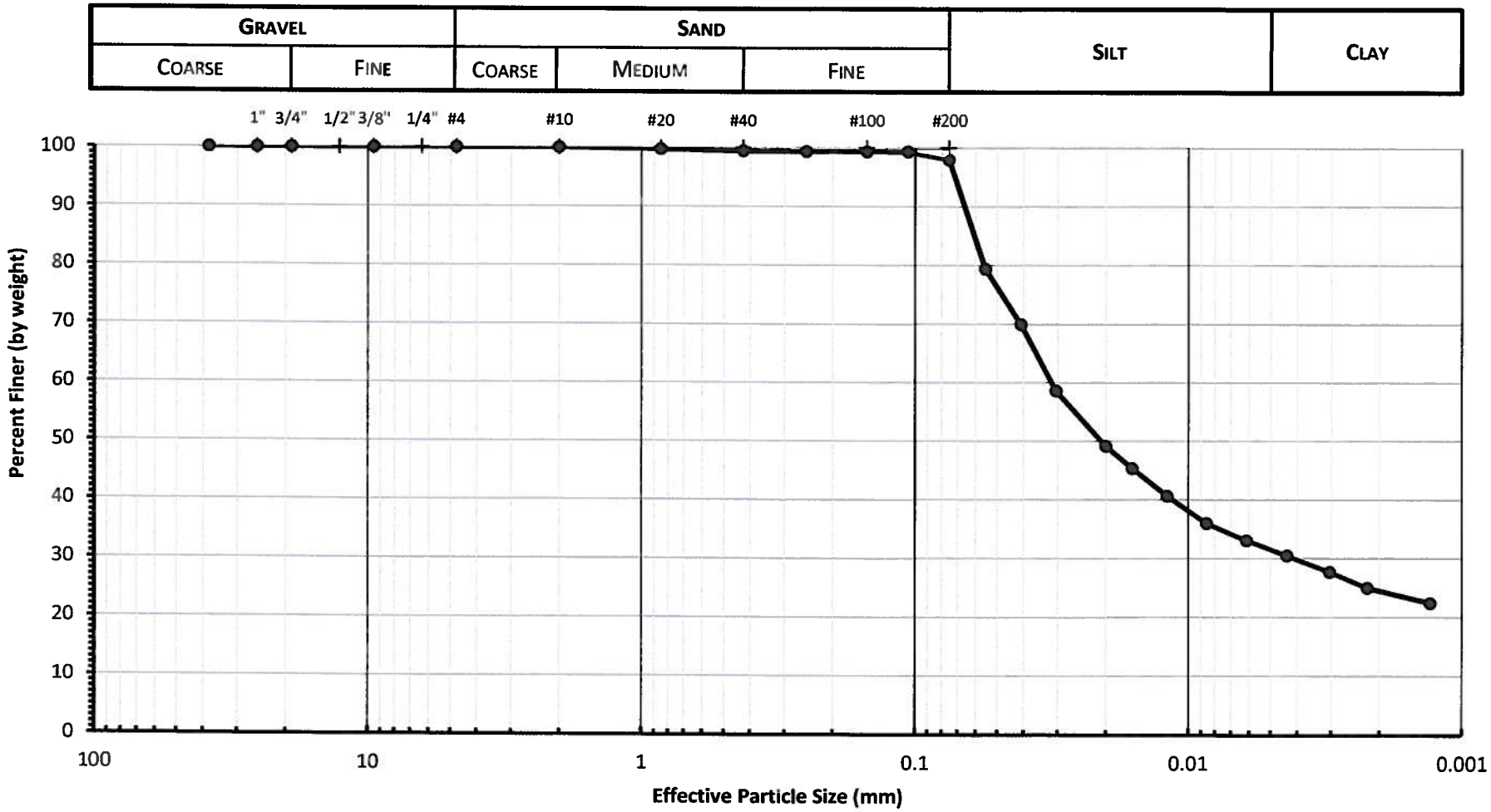
225-752-4878 (fax)

Client:
Project: Cole's Bayou
AAI Project No.13-80-3705

PARTICLE SIZE ANALYSIS
(ASTM D422)



SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-20	16-18	Tan and gray silty clay	0.0	2.0	66.5	31.5

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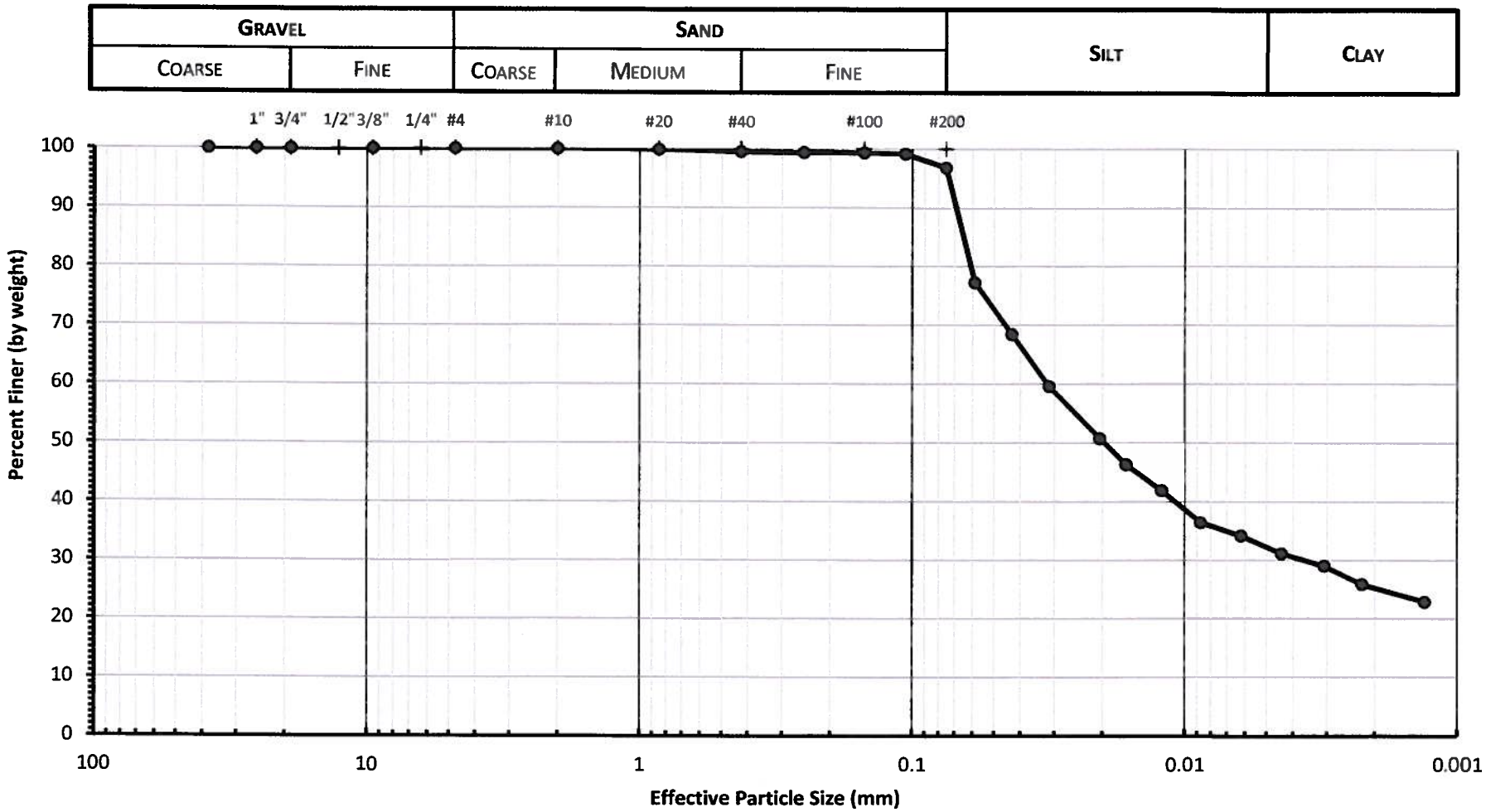

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-23	18-20	Tan and gray silty clay	0.0	3.2	64.6	32.2

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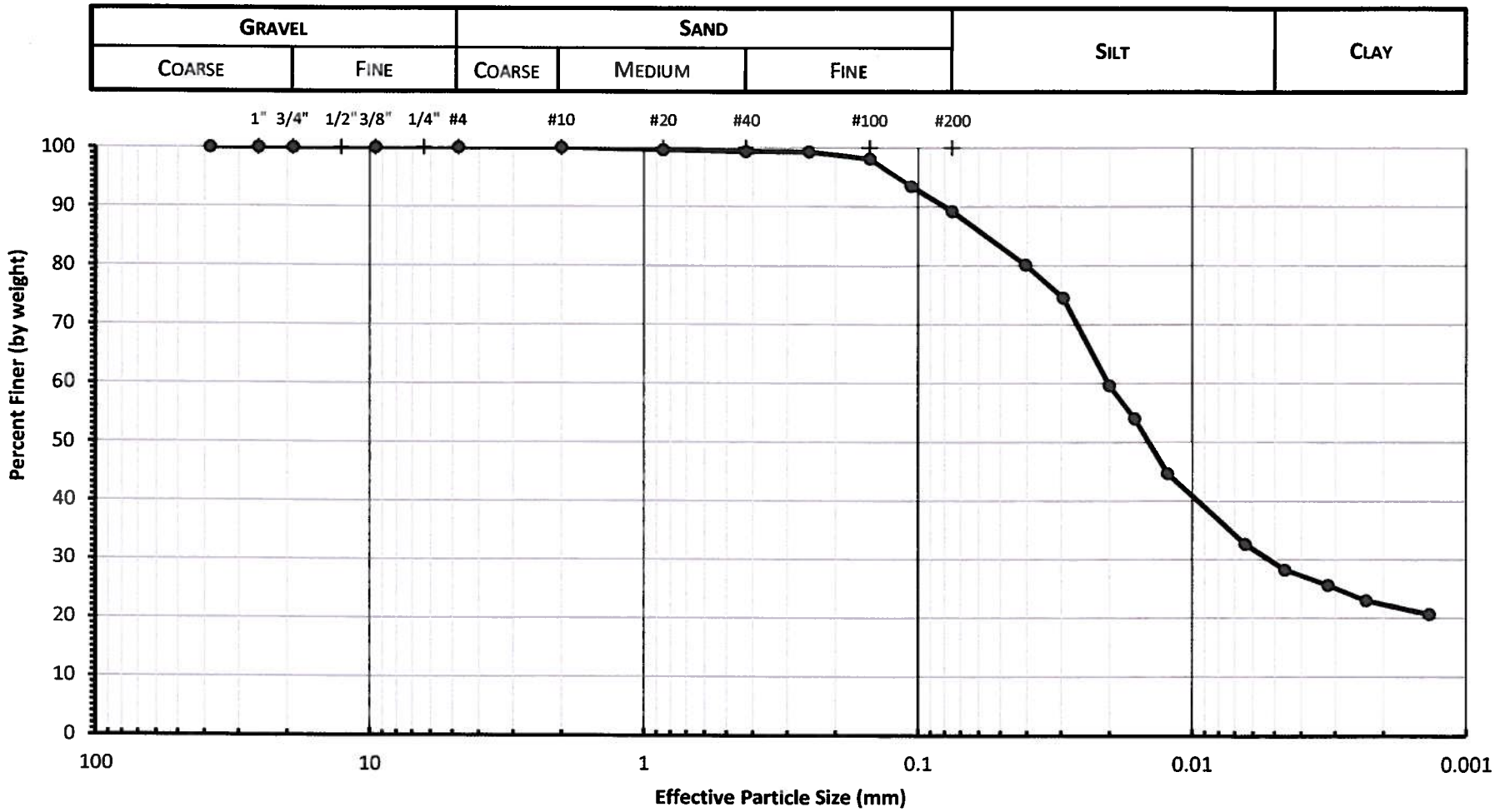

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-25	23-25	Tan and gray clay w/ trace sand	0.0	10.8	59.9	29.3

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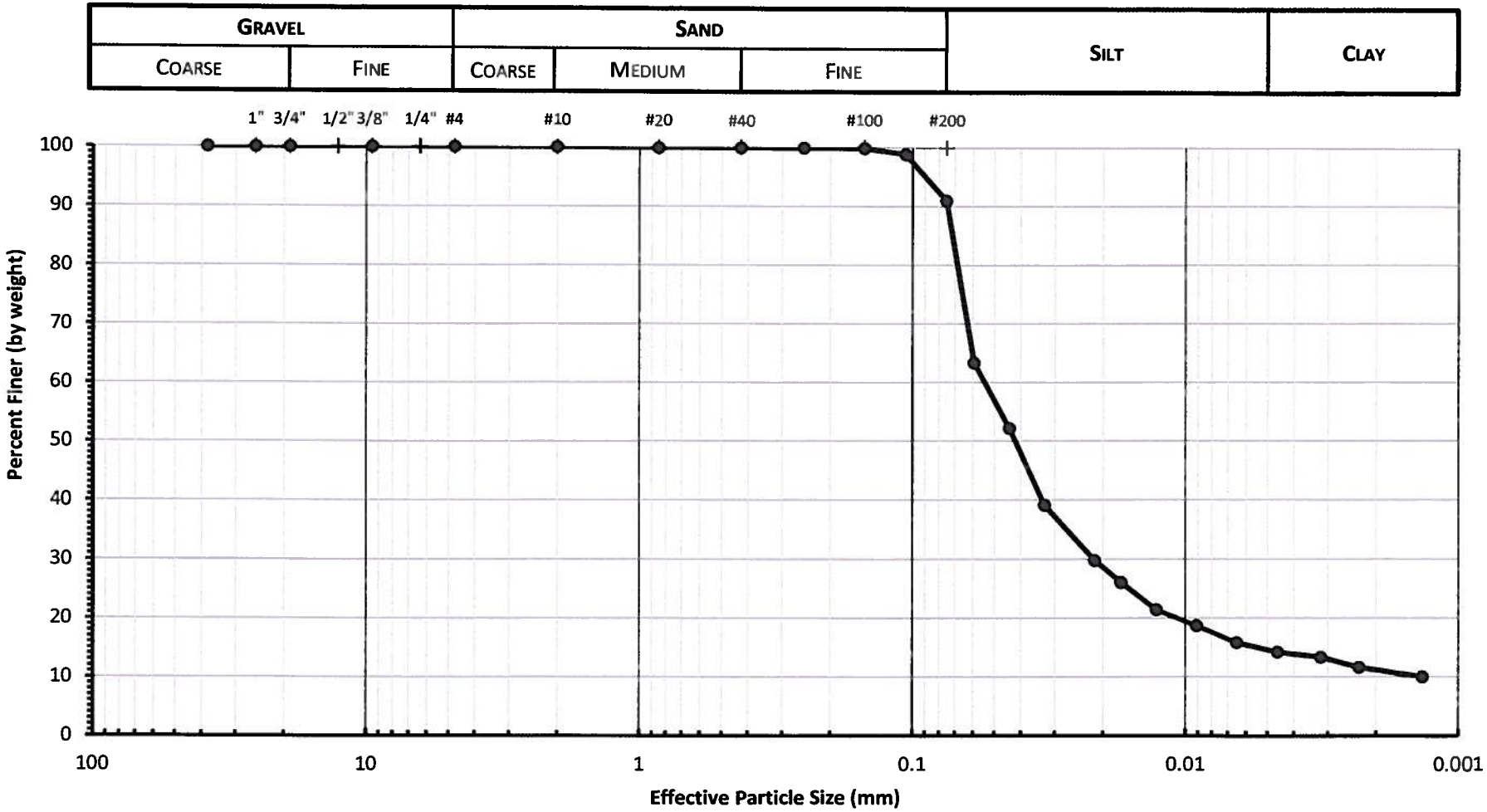

SAMPLE IDENTIFICATION		VISUAL IDENTIFICATION	% GRAVEL	% SAND	% SILT	% CLAY
BORING	DEPTH (FT)					
B-26	23-25	Tan clay	0.0	9.1	76.3	14.6

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