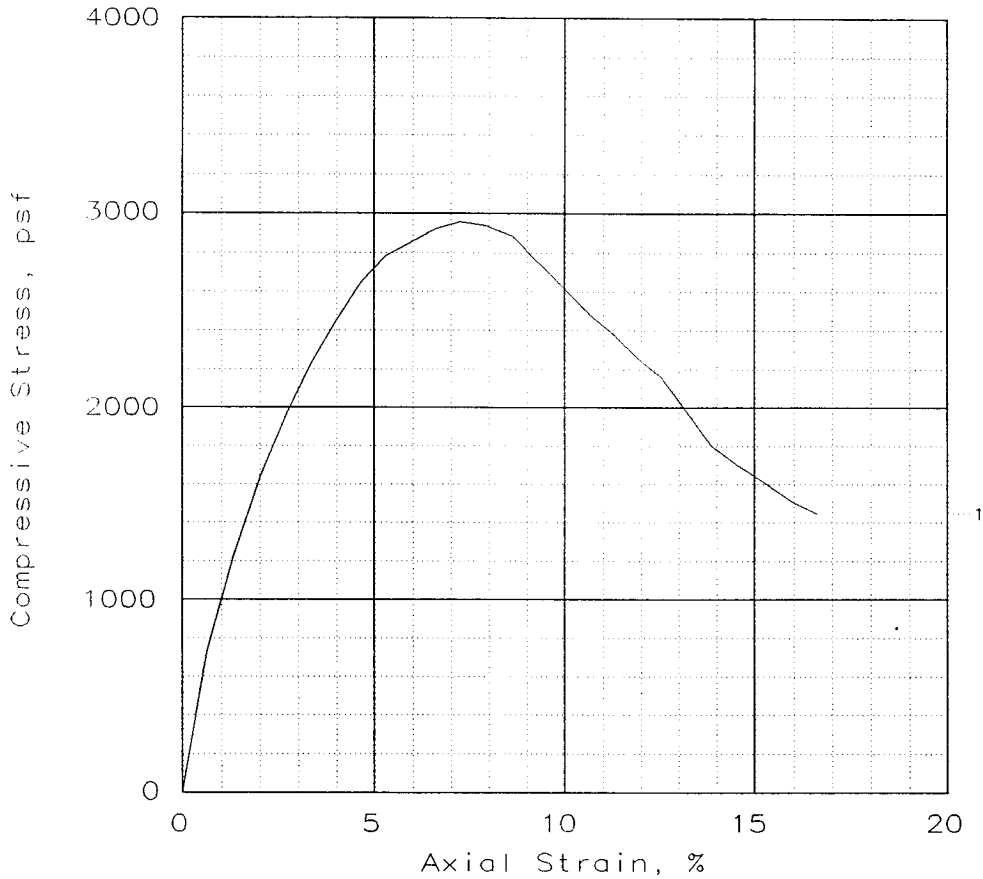


## UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1		
Unconfined strength, psf	2958		
Undrained shear strength, psf	1479		
Failure strain, %	7.3		
Strain rate, in/min	0.0552		
Water content, %	25.2		
Wet density, pcf	117.2		
Dry density, pcf	93.7		
Saturation, %	85.0		
Void ratio	0.7996		
Specimen diameter, in	1.39		
Specimen height, in	2.93		
Height/diameter ratio	2.11		

Description: St Gr & T CL6 w/ SIF

GS= 2.7

Type: Undisturbed

Project No.: 19080

Date: 10/18/05

Remarks:

Torvane = 0.925 tsf

Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls  
at the 17th Street Canal

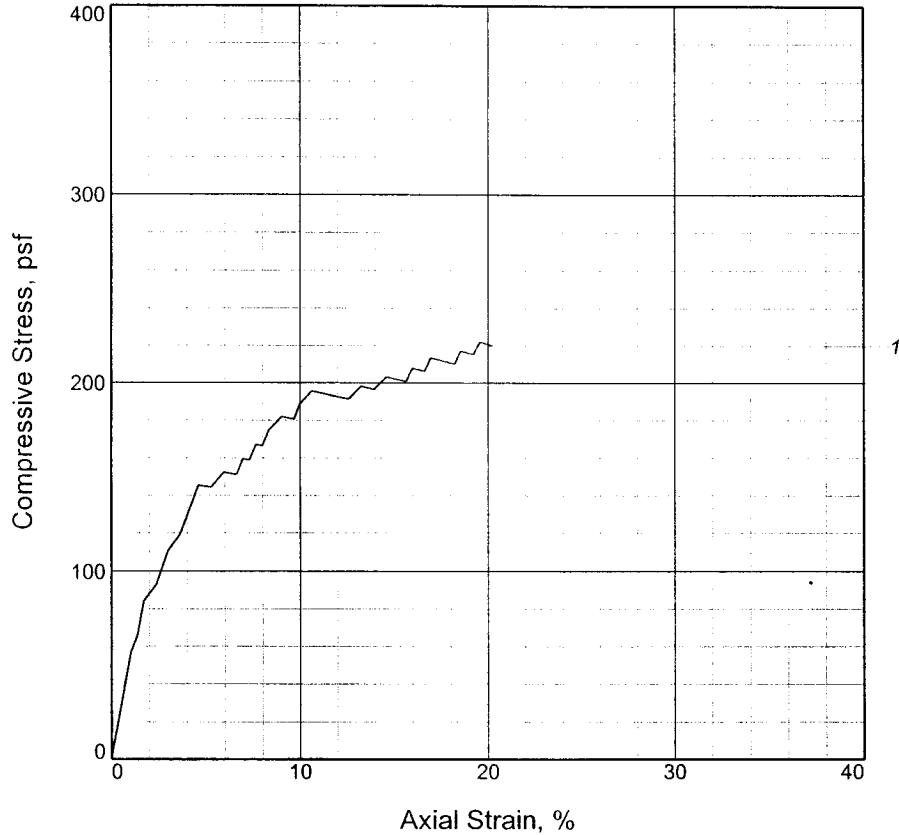
Location: Boring 13,  
Sample 1-B, Depth 1.1', Elev -5.25

UNCONFINED COMPRESSION TEST

**Eustis Engineering Company, Inc.**

Fig. No.: \_\_\_\_\_

# UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	145.2			
Undrained shear strength, psf	72.6			
Failure strain, %	4.6			
Strain rate, in./min.	0.058			
Water content, %	64.3			
Wet density, pcf	101.2			
Dry density, pcf	61.6			
Saturation, %	101.1			
Void ratio	1.6862			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

**Description:** vSo dGr & Br CHOB w/ G, wd

LL =      PL =      PI =      Assumed GS= 2.65      Type: Undisturbed

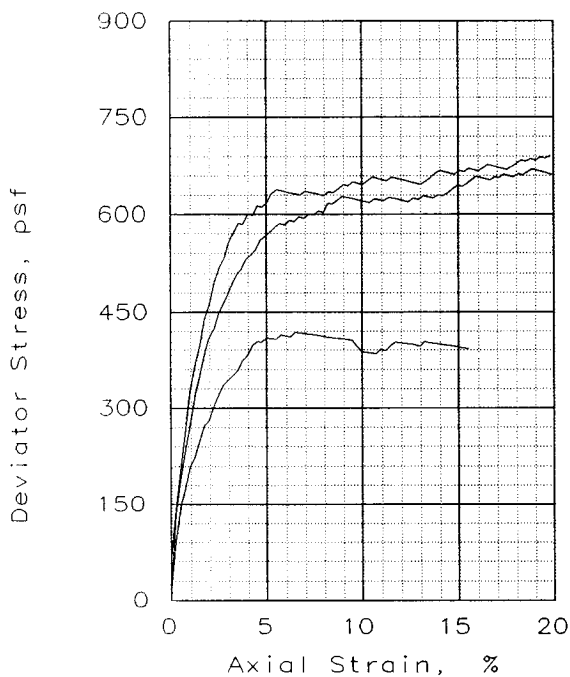
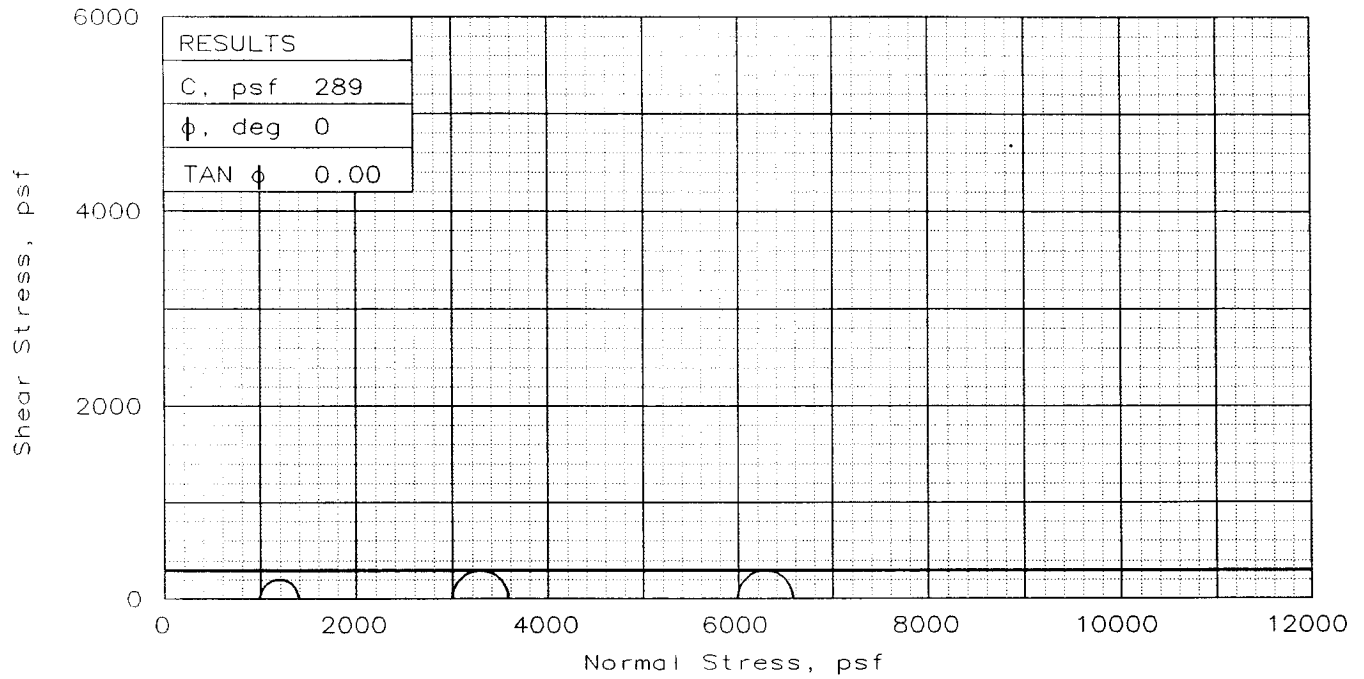
**Project No.:** 19080  
**Date:** 11-12-05  
**Remarks:**

**Client:** LINFIELD, HUNTER & JUNIUS, INC., METAIRIE, LOUISIANA  
**Project:** USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL  
**Source of Sample:** B-13      **Depth:** 4.0  
**Sample Number:** 2A

UNCONFINED COMPRESSION TEST  
**EUSTIS ENGINEERING COMPANY, INC.**

Figure 1

Tested By: RR      Checked By: JS



SPECIMEN NO.:		1	2	3
INITIAL	WATER CONTENT, %	195.9	154.2	223.8
	DRY DENSITY, pcf	24.3	29.7	20.5
	SATURATION, %	89.6	89.8	84.3
	VOID RATIO	5.682	4.464	6.904
	DIAMETER, in	1.39	1.39	1.39
	HEIGHT, in	2.93	2.93	2.93
AT TEST	WATER CONTENT, %	218.5	171.6	265.2
	DRY DENSITY, pcf	24.3	29.7	20.6
	SATURATION, %	100.0	100.0	100.0
	VOID RATIO	5.680	4.461	6.894
	DIAMETER, in	1.39	1.39	1.39
	HEIGHT, in	2.93	2.93	2.93
Strain rate, in/min		0.0289	0.0290	0.0288
BACK PRESSURE, psf		0	0	0
CELL PRESSURE, psf		994	2995	5990
FAIL. STRESS, psf		403	587	586
ULT. STRESS, psf		392	691	662
$\sigma_1$ FAILURE, psf		1397	3582	6577
$\sigma_3$ FAILURE, psf		994	2995	5990

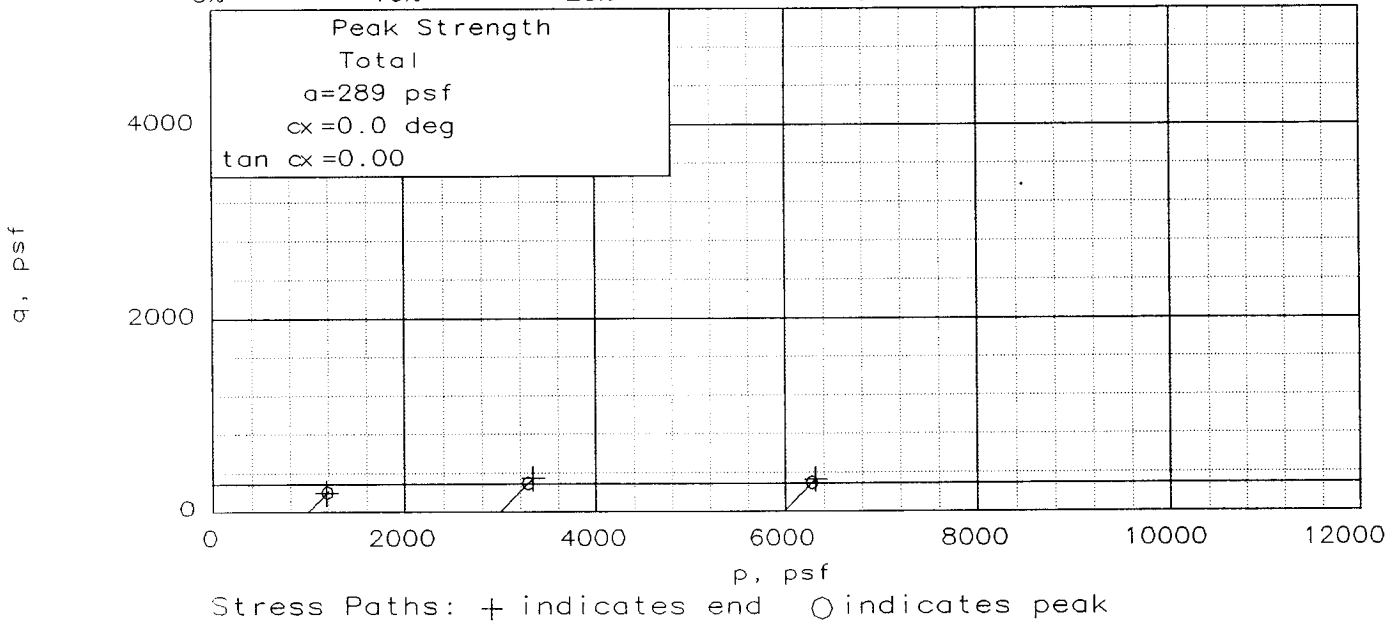
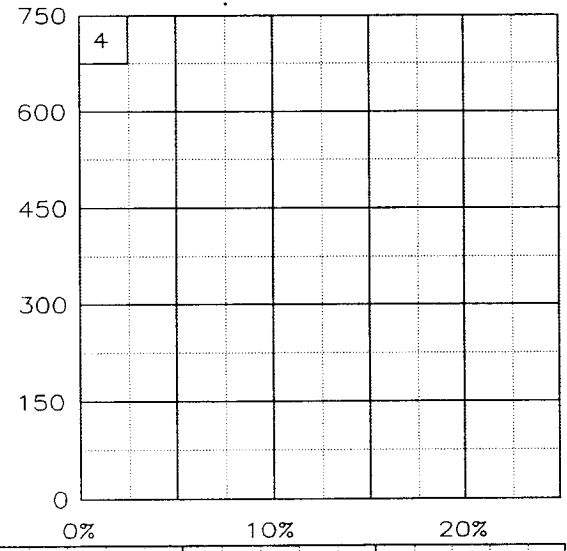
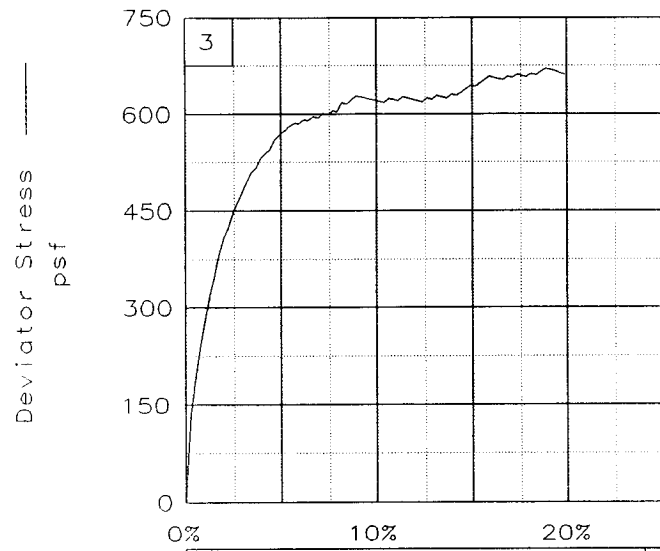
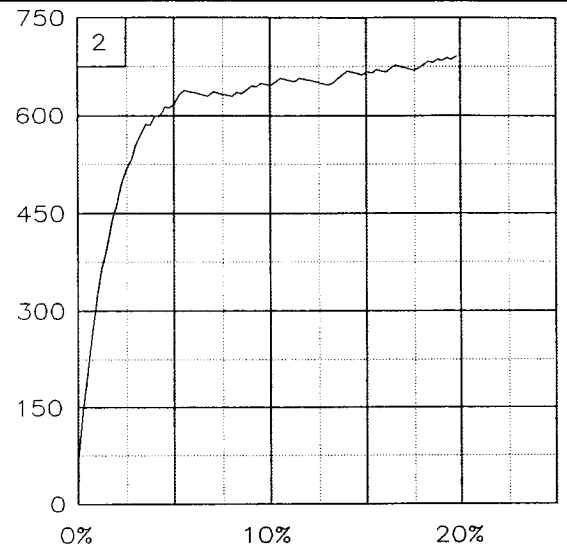
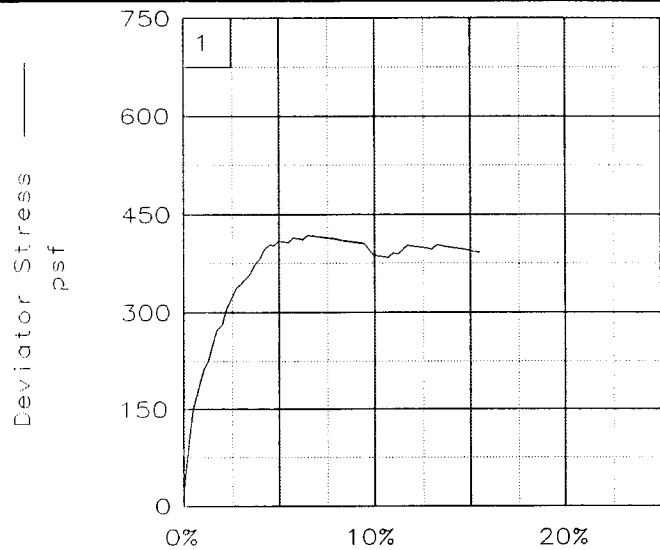
TYPE OF TEST:  
Unconsolidated Undrained  
SAMPLE TYPE: Undisturbed  
DESCRIPTION: So dGr & Gr CHOC  
w/ wd  
LL= 277 PL= 121 PI= 156  
SPECIFIC GRAVITY= 2.6  
REMARKS: Torvane = 0.250 tsf

CLIENT: U.S. Army Corps of Engineers  
PROJECT: Repairs to Levees and Floodwalls  
at the 17th Street Canal  
SAMPLE LOCATION: Boring 13,  
Sample 2-B, Depth 5.1', Elev -9.25  
PROJ. NO.: 19080 DATE: 10/18/05

TRIAXIAL SHEAR TEST REPORT

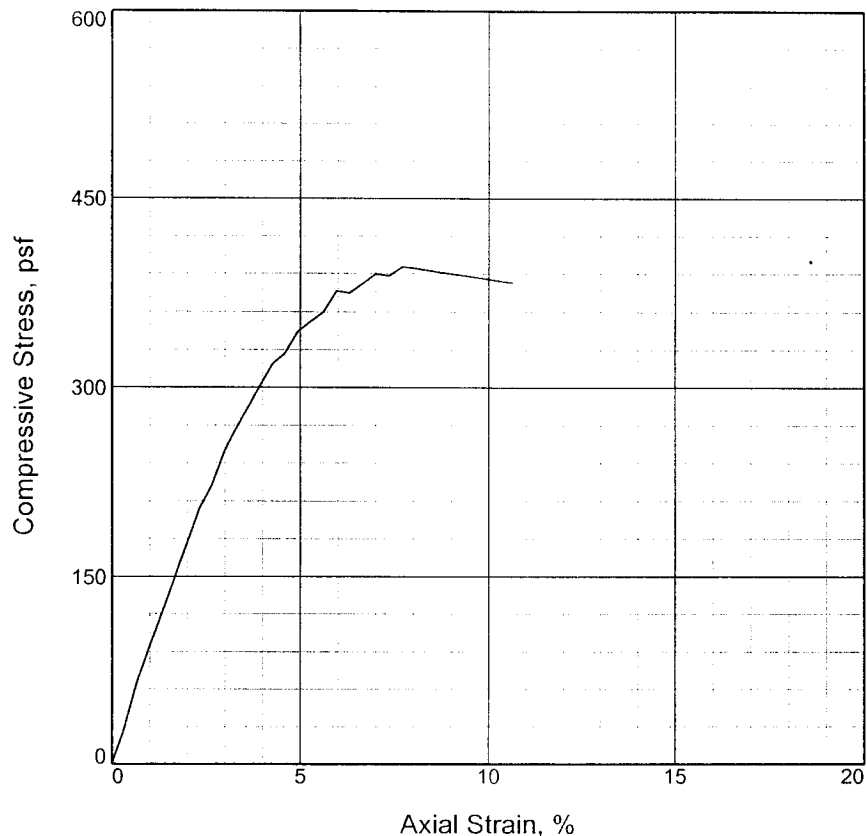
Eustis Engineering Company, Inc.

Fig. No.: \_\_\_\_\_



Client: U.S. Army Corps of Engineers  
 Project: Repairs to Levees and Floodwalls at the 17th Street Canal  
 Location: Boring 13, Sample 2-B, Depth 5.1', Elev -9.25  
 File: UU-25122      Project No.: 19080      Fig. No.: \_\_\_\_\_

# UNCONFINED COMPRESSION TEST



Specimen No.	1		
Unconfined strength, psf	375.9		
Undrained shear strength, psf	187.9		
Failure strain, %	6.0		
Strain rate, in./min.	0.058		
Water content, %	168.2		
Wet density, pcf	78.5		
Dry density, pcf	29.3		
Saturation, %	95.4		
Void ratio	4.7610		
Specimen diameter, in.	1.388		
Specimen height, in.	2.930		
Height/diameter ratio	2.11		

**Description:** vSo Gr & dGr CHOA w/ wd, rt

LL =      PL =      PI =      Assumed GS= 2.70      Type: Undisturbed

**Project No.:** 19080

**Date:** 11-11-05

**Remarks:**

Torvane = 0.090 tsf

**Client:** LINFIELD, HUNTER & JUNIUS, INC., METAIRIE, LOUISIANA

**Project:** USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL

**Source of Sample:** B-13      **Depth:** 5.7

**Sample Number:** 2C

UNCONFINED COMPRESSION TEST

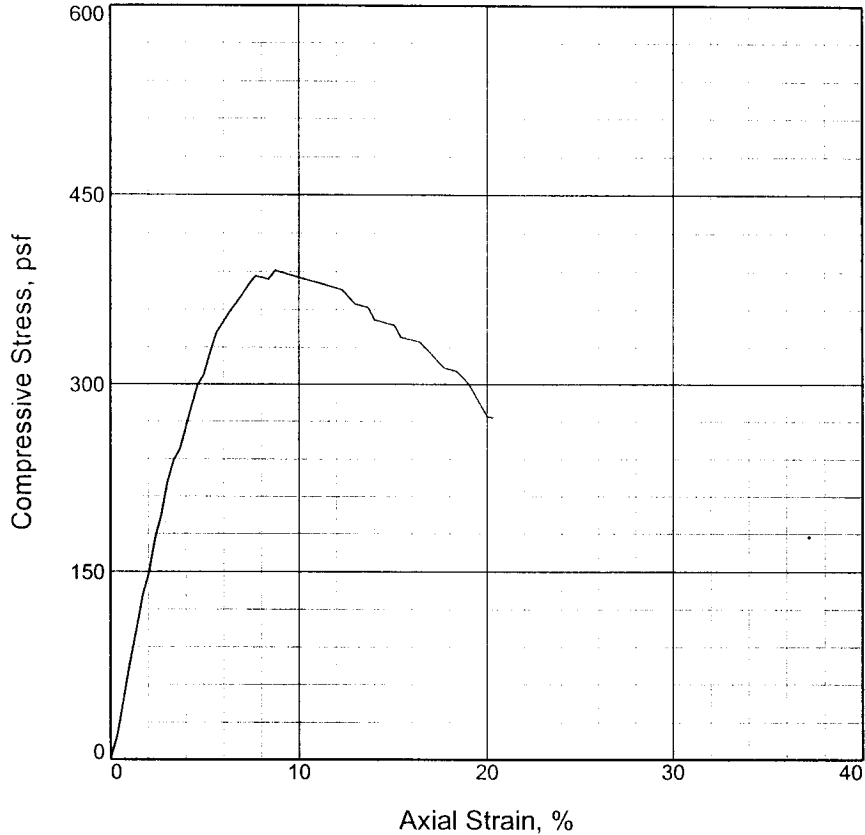
**EUSTIS ENGINEERING COMPANY, INC.**

Figure 1

Tested By: RR

Checked By: JS

# UNCONFINED COMPRESSION TEST



1

Specimen No.	1			
Unconfined strength, psf	386.5			
Undrained shear strength, psf	193.3			
Failure strain, %	7.7			
Strain rate, in./min.	0.059			
Water content, %	219.8			
Wet density, pcf	74.5			
Dry density, pcf	23.3			
Saturation, %	95.5			
Void ratio	6.1004			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

**Description:** vSo dGr & Gr CHOB w/ wd, rt

LL =      PL =      PI =      Assumed GS= 2.65      Type: Undisturbed

**Project No.:** 19080

**Date:** 11-11-05

**Remarks:**

Torvane = 0.110 tsf

**Client:** LINFIELD, HUNTER & JUNIUS, INC., METAIRIE, LOUISIANA

**Project:** USACE - REPAIRS TO LEVEES AND FLOODWALLS AT THE 17TH STREET CANAL

**Source of Sample:** B-13      **Depth:** 8.0

**Sample Number:** 3A

UNCONFINED COMPRESSION TEST

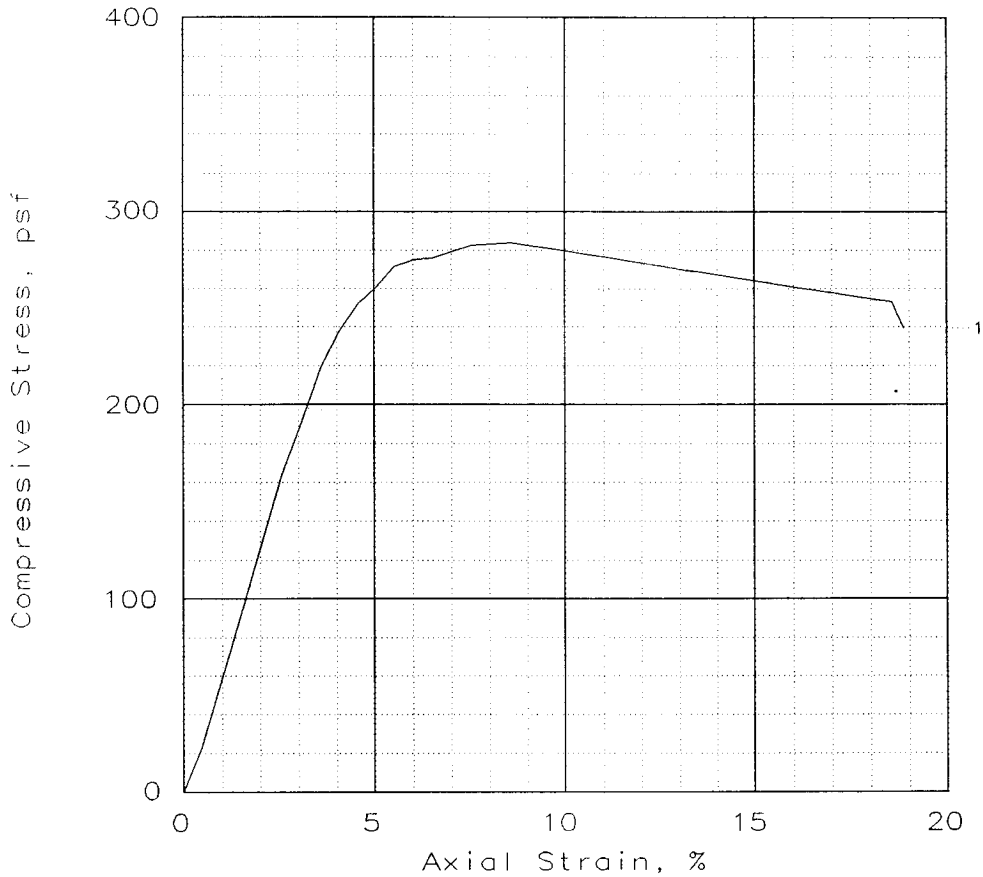
**EUSTIS ENGINEERING COMPANY, INC.**

Figure 1

Tested By: RR

Checked By: JS

## UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	284			
Undrained shear strength, psf	142			
Failure strain, %	8.6			
Strain rate, in/min	0.0576			
Water content, %	74.6			
Wet density, pcf	94.1			
Dry density, pcf	53.9			
Saturation, %	94.1			
Void ratio	2.1739			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: vSo Gr CH4 w/ Tr-wd

GS= 2.74

Type: Undisturbed

Project No.: 19080

Date: 10/18/05

Remarks:

Torvane = 0.100 tsf

Client: U.S. Army Corps of Engineers

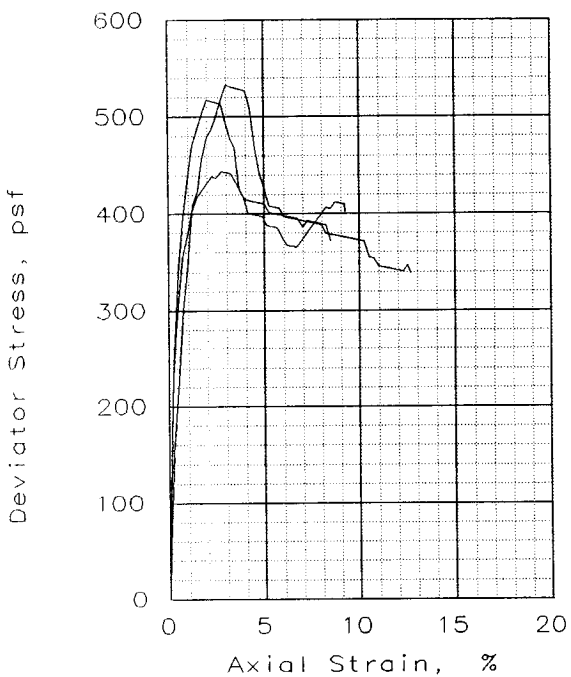
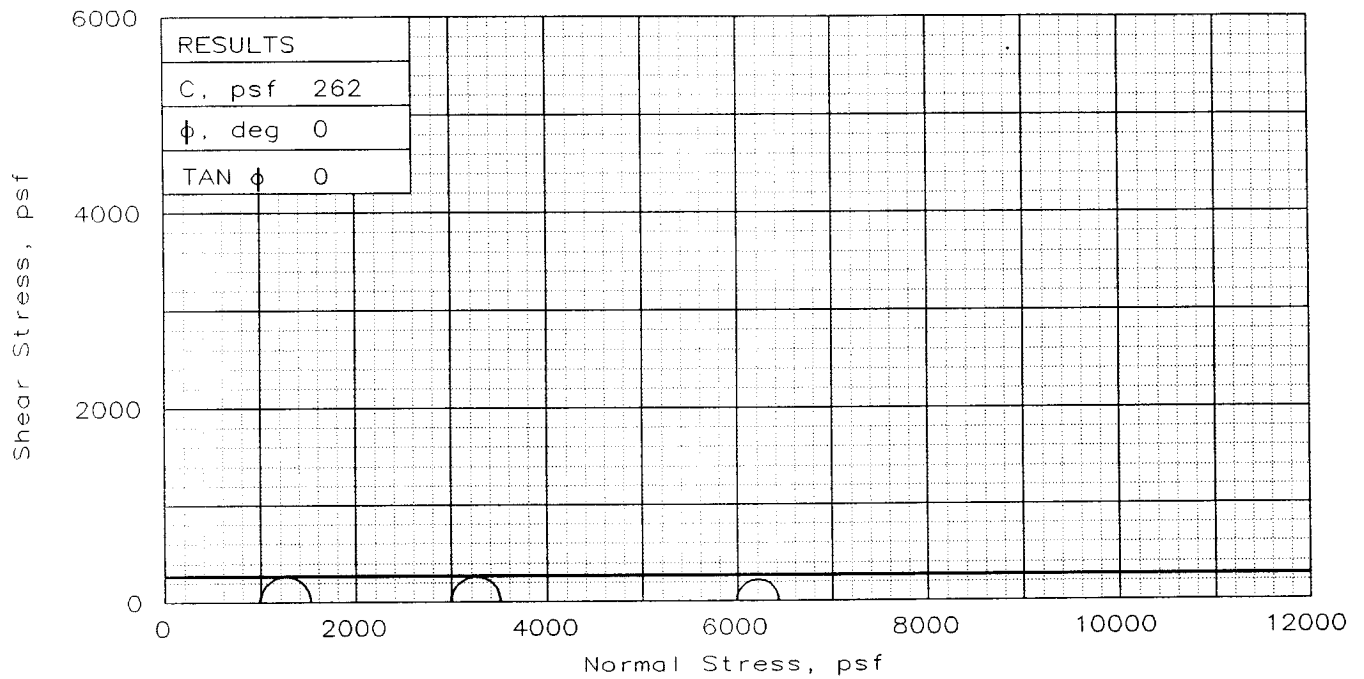
Project: Repairs to Levees and Floodwalls  
at the 17th Street Canal

Location: Boring 13,  
Sample 3-C, Depth 10.0', Elev -14.15

UNCONFINED COMPRESSION TEST

**Eustis Engineering Company, Inc.**

Fig. No.: \_\_\_\_\_



SPECIMEN NO.:		1	2	3
INITIAL	WATER CONTENT, %	85.7	87.3	73.0
	DRY DENSITY, pcf	49.7	48.9	56.1
	SATURATION, %	96.2	95.7	97.5
	VOID RATIO	2.439	2.500	2.051
	DIAMETER, in	1.39	1.39	1.40
	HEIGHT, in	2.93	2.93	2.93
AT TEST	WATER CONTENT, %	88.9	91.1	74.8
	DRY DENSITY, pcf	49.8	48.9	56.1
	SATURATION, %	100.0	100.0	100.0
	VOID RATIO	2.437	2.495	2.049
	DIAMETER, in	1.39	1.39	1.40
	HEIGHT, in	2.93	2.93	2.93
Strain rate, in/min		0.0291	0.0287	0.0289
BACK PRESSURE, psf		0	0	0
CELL PRESSURE, psf		994	2995	5990
FAIL. STRESS, psf		532	517	438
ULT. STRESS, psf		339	402	372
$\sigma_1$ FAILURE, psf		1526	3513	6429
$\sigma_3$ FAILURE, psf		994	2995	5990

TYPE OF TEST:  
Unconsolidated Undrained

SAMPLE TYPE: Undisturbed

DESCRIPTION: So Gr CH4  
w/ SL

LL= 90      PL= 28      PI= 62

SPECIFIC GRAVITY= 2.74

REMARKS: Torvane = 0.160 tsf

CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls  
at the 17th Street Canal

SAMPLE LOCATION: Boring 13,

Sample 4-B, Depth 13.1', Elev -17.25

PROJ. NO.: 19080

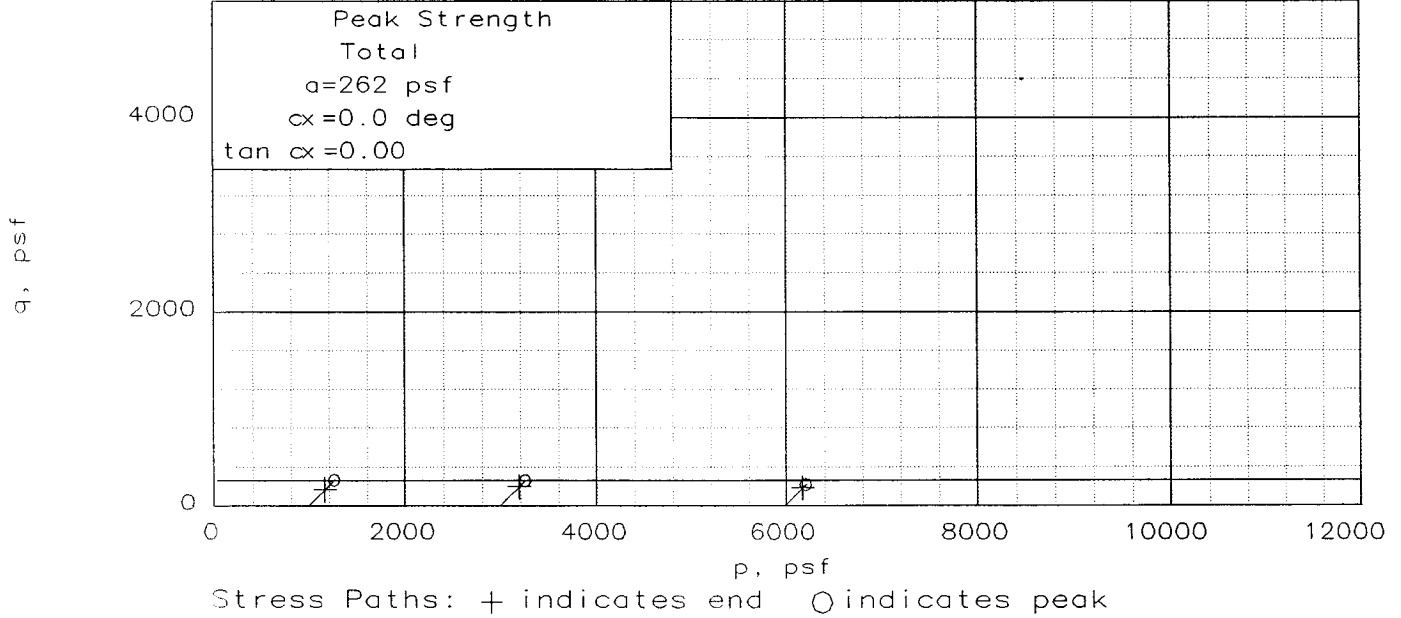
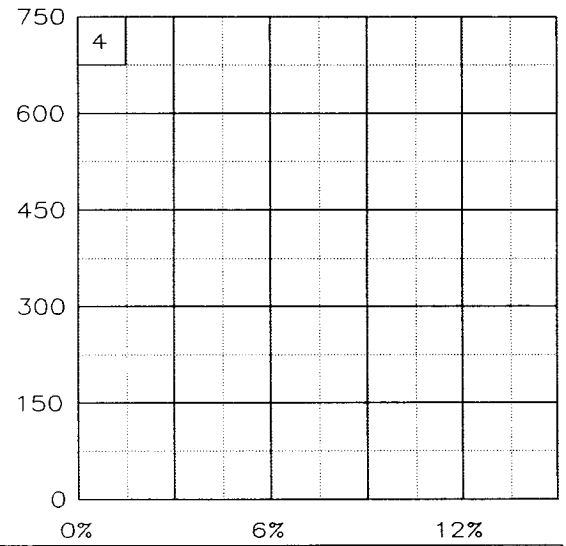
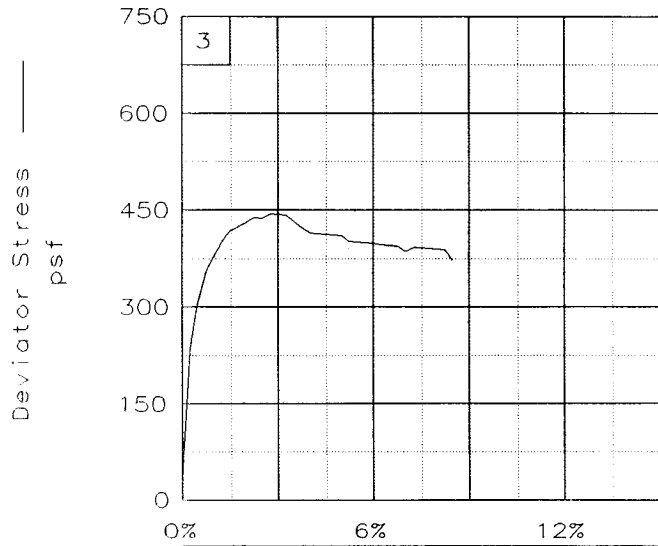
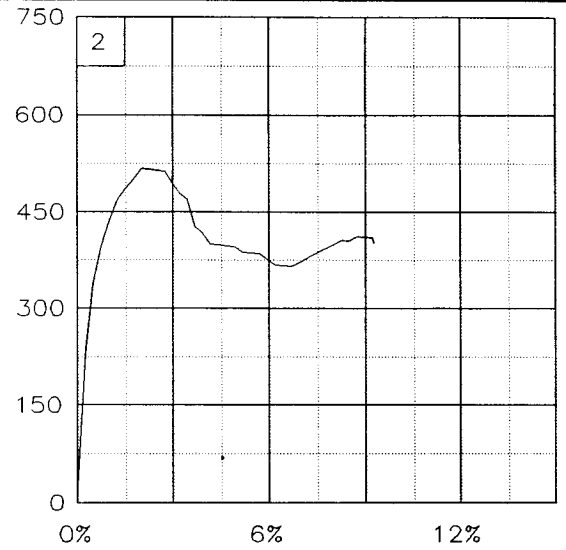
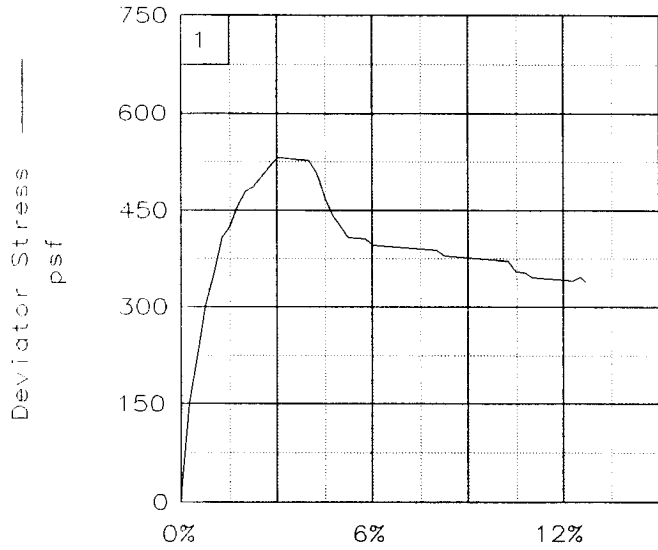
DATE: 10/18/05

TRIAxIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.

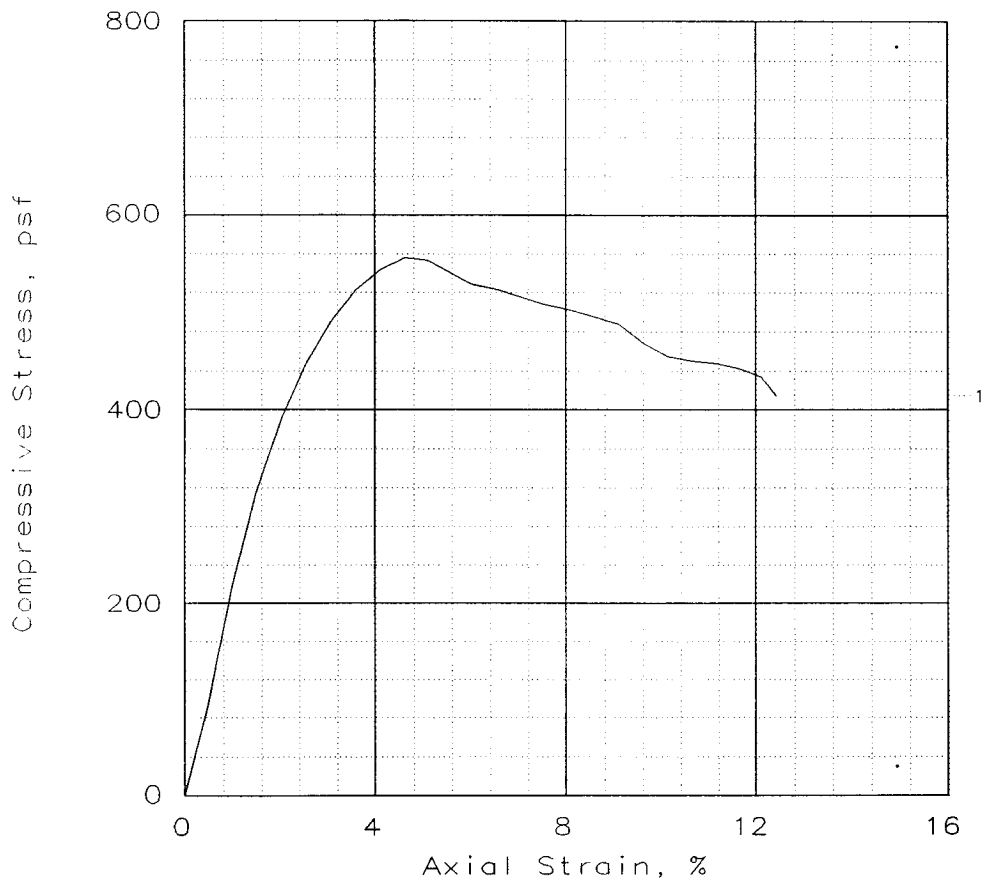
Fig. No.: \_\_\_\_\_





Client: U.S. Army Corps of Engineers  
 Project: Repairs to Levees and Floodwalls at the 17th Street Canal  
 Location: Boring 13, Sample 4-B, Depth 13.1', Elev -17.25  
 File: UU-25123      Project No.: 19080      Fig. No.: \_\_\_\_\_

## UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	556			
Undrained shear strength, psf	278			
Failure strain, %	4.6			
Strain rate, in/min	0.0575			
Water content, %	70.6			
Wet density, pcf	96.7			
Dry density, pcf	56.6			
Saturation, %	95.8			
Void ratio	2.0197			
Specimen diameter, in	1.40			
Specimen height, in	2.93			
Height/diameter ratio	2.09			

Description: So Gr CH4 w/ Ins SM, SL

GS= 2.74

Type: Undisturbed

Project No.: 19080

Date: 10/18/05

Remarks:

Torvane = 0.170 tsf

Client: U.S. Army Corps of Engineers

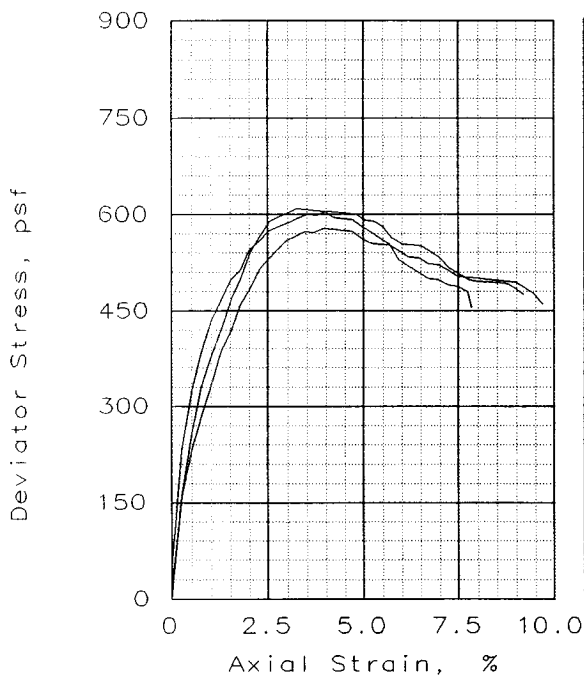
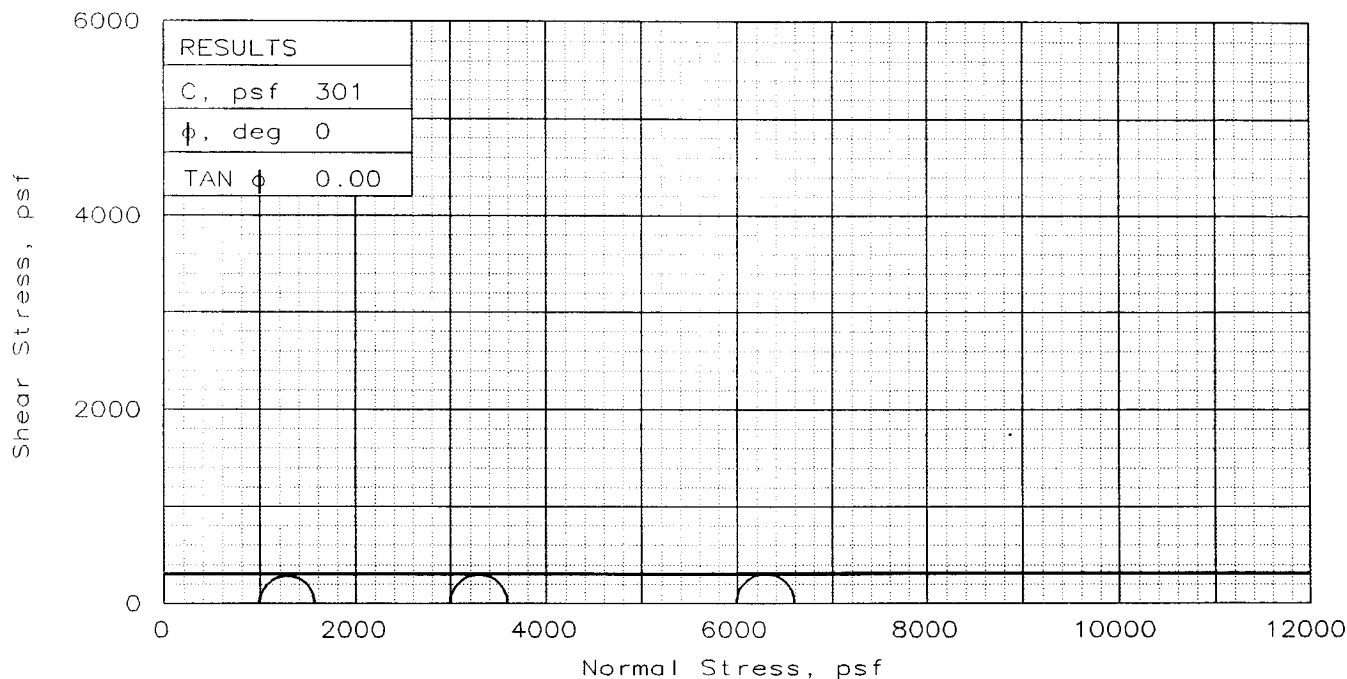
Project: Repairs to Levees and Floodwalls  
at the 17th Street Canal

Location: Boring 13,  
Sample 5-B, Depth 17.1', Elev -21.25

UNCONFINED COMPRESSION TEST

**Eustis Engineering Company, Inc.**

Fig. No.: \_\_\_\_\_



SPECIMEN NO.:		1	2	3
INITIAL	WATER CONTENT, %	71.2	73.3	72.1
	DRY DENSITY, pcf	56.7	55.5	57.3
	SATURATION, %	96.6	96.4	99.4
	VOID RATIO	2.017	2.082	1.986
	DIAMETER, in	1.40	1.40	1.39
	HEIGHT, in	2.93	2.93	2.93
AT TEST	WATER CONTENT, %	73.6	76.0	72.5
	DRY DENSITY, pcf	56.7	55.5	57.3
	SATURATION, %	100.0	100.0	100.0
	VOID RATIO	2.016	2.081	1.986
	DIAMETER, in	1.40	1.40	1.39
	HEIGHT, in	2.93	2.93	2.93
Strain rate, in/min		0.0287	0.0285	0.0287
BACK PRESSURE, psf		0	0	0
CELL PRESSURE, psf		994	2995	5990
FAIL. STRESS, psf		573	600	609
ULT. STRESS, psf		461	475	455
$\sigma_1$ FAILURE, psf		1567	3596	6600
$\sigma_3$ FAILURE, psf		994	2995	5990

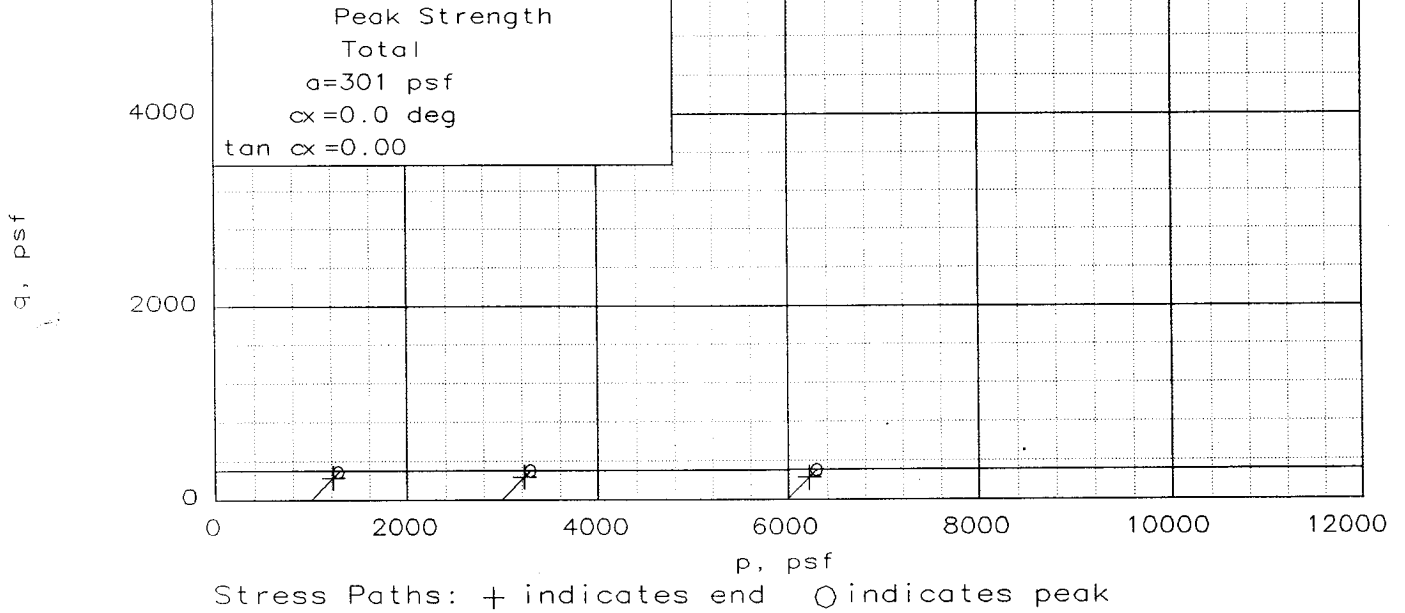
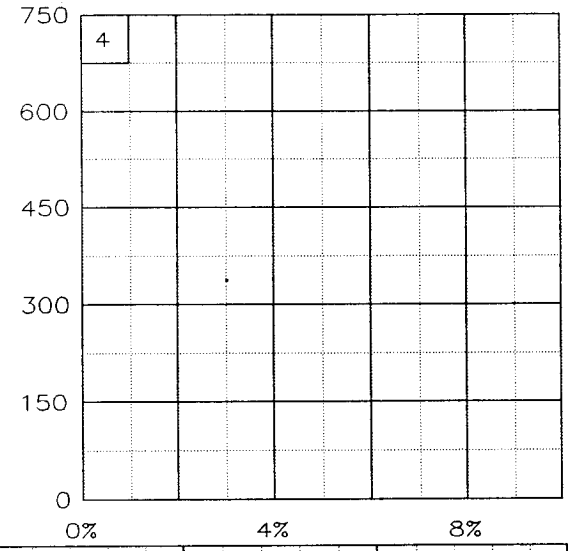
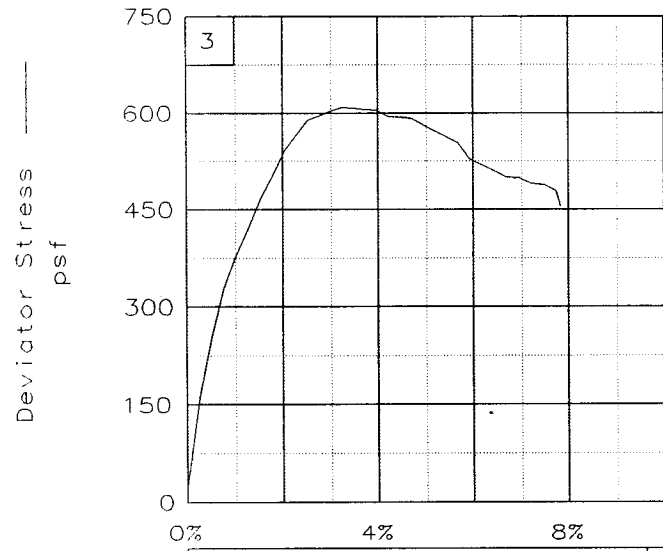
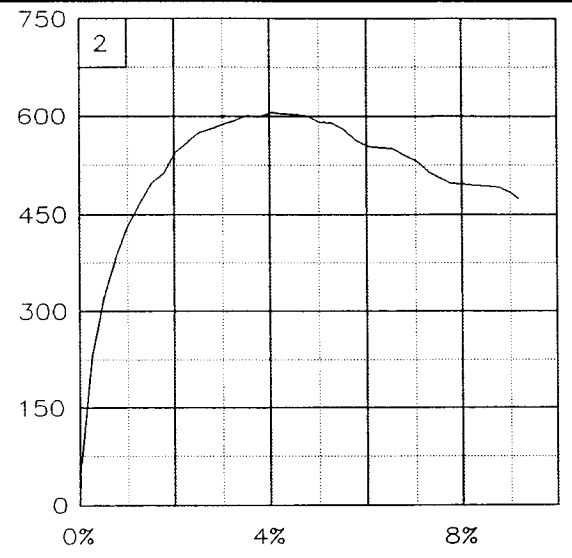
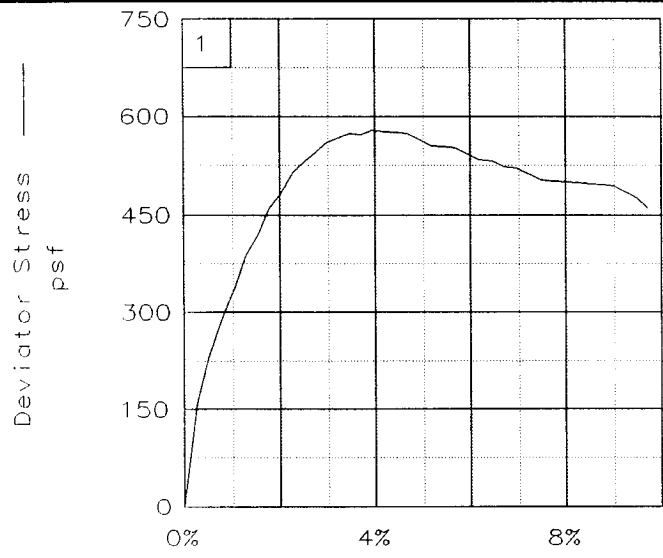
TYPE OF TEST:  
Unconsolidated Undrained  
SAMPLE TYPE: Undisturbed  
DESCRIPTION: So Gr CH4  
w/ Ins SM, SL  
LL= 90 PL= 28 PI= 62  
SPECIFIC GRAVITY= 2.74  
REMARKS: Torvane = 0.170 tsf

CLIENT: U.S. Army Corps of Engineers  
PROJECT: Repairs to Levees and Floodwalls  
at the 17th Street Canal  
SAMPLE LOCATION: Boring 13,  
Sample 6-B, Depth 21.1', Elev -25.25  
PROJ. NO.: 19080 DATE: 10/18/05

TRIAXIAL SHEAR TEST REPORT

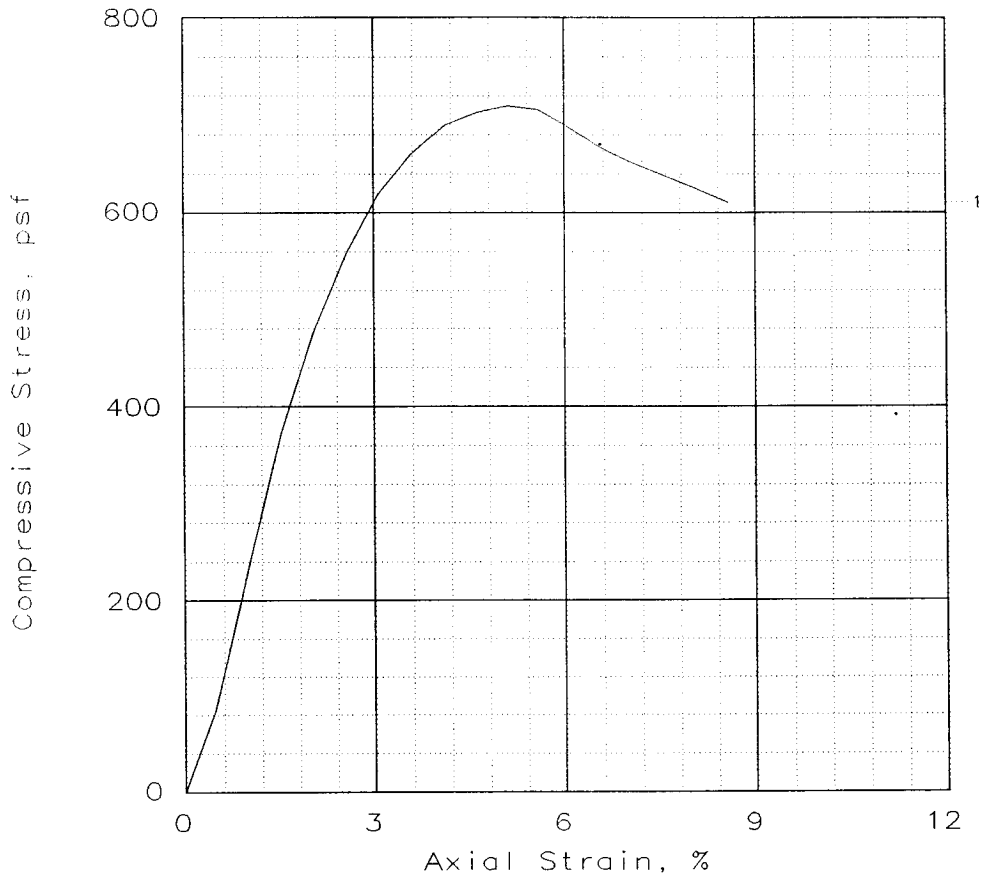
Eustis Engineering Company, Inc.

Fig. No.: \_\_\_\_\_



Client: U.S. Army Corps of Engineers  
 Project: Repairs to Levees and Floodwalls at the 17th Street Canal  
 Location: Boring 13, Sample 6-B, Depth 21.1', Elev -25.25  
 File: UU-25124      Project No.: 19080      Fig. No.: \_\_\_\_\_

# UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	710			
Undrained shear strength, psf	355			
Failure strain, %	5.1			
Strain rate, in/min	0.0562			
Water content, %	85.8			
Wet density, pcf	93.5			
Dry density, pcf	50.3			
Saturation, %	98.1			
Void ratio	2.3984			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: So Gr CH4 w/ SL

GS= 2.74      Type: Undisturbed

Project No.: 19080  
 Date: 10/18/05  
 Remarks:  
 Torvane = 0.250 tsf

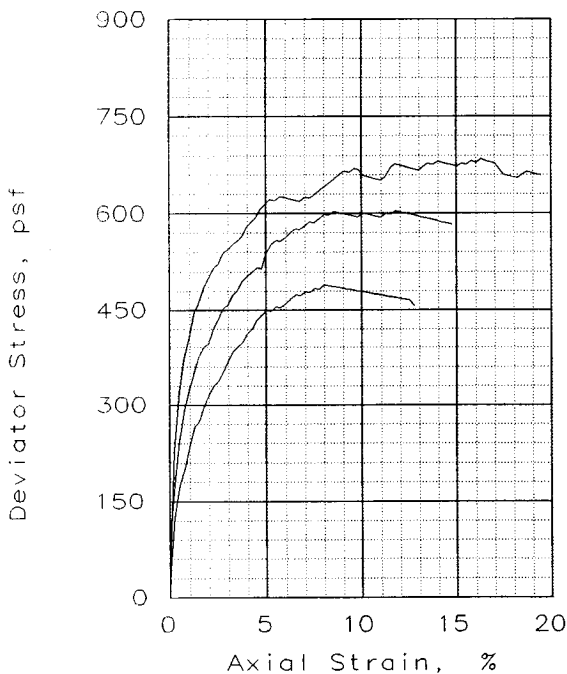
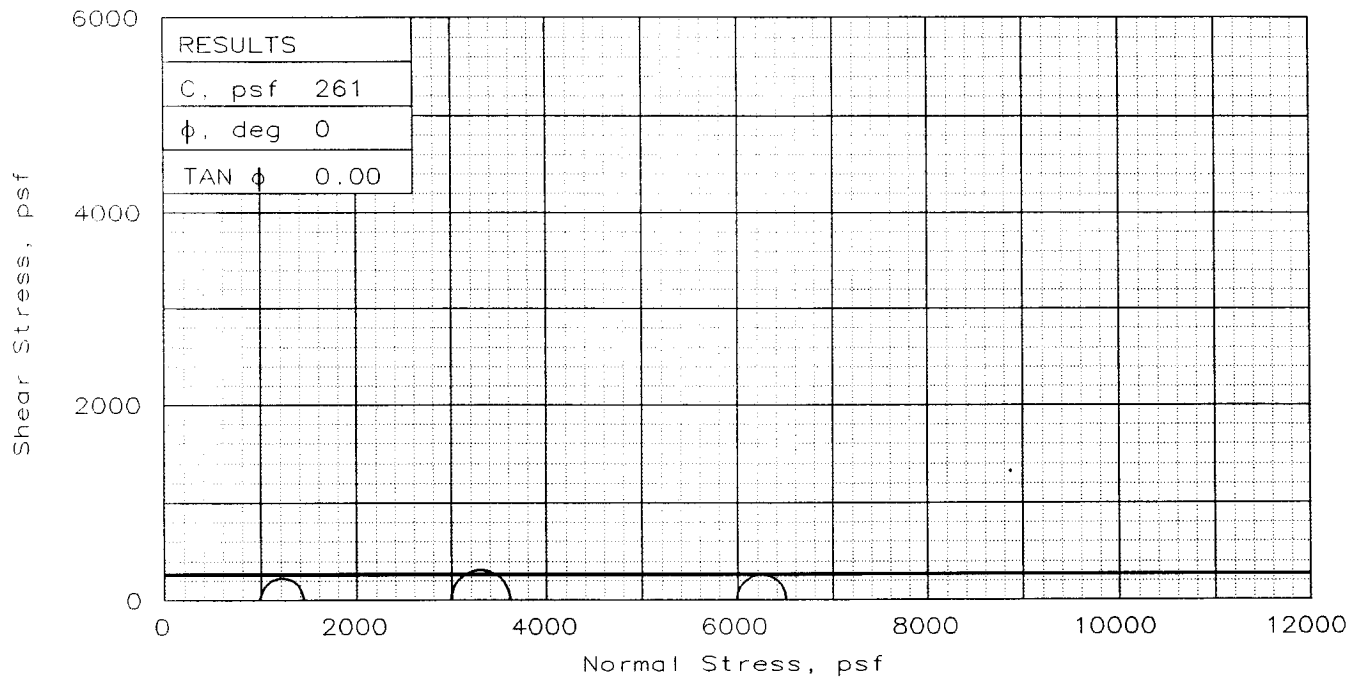
Fig. No.: \_\_\_\_\_

Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls  
 at the 17th Street Canal  
 Location: Boring 13,  
 Sample 7-B, Depth 25.1', Elev -29.25

UNCONFINED COMPRESSION TEST

**Eustis Engineering Company, Inc.**



SPECIMEN NO.:		1	2	3
INITIAL	WATER CONTENT, %	68.4	72.5	72.9
	DRY DENSITY, pcf	59.1	56.6	56.8
	SATURATION, %	99.0	98.3	99.3
	VOID RATIO	1.892	2.021	2.012
	DIAMETER, in	1.39	1.39	1.39
	HEIGHT, in	2.93	2.93	2.93
AT TEST	WATER CONTENT, %	69.0	73.6	73.3
	DRY DENSITY, pcf	59.2	56.7	56.9
	SATURATION, %	100.0	100.0	100.0
	VOID RATIO	1.890	2.018	2.008
	DIAMETER, in	1.39	1.39	1.39
	HEIGHT, in	2.93	2.93	2.93
Strain rate, in/min		0.0290	0.0290	0.0289
BACK PRESSURE, psf		0	0	0
CELL PRESSURE, psf		994	2995	5990
FAIL. STRESS, psf		449	622	516
ULT. STRESS, psf		457	658	583
$\sigma_1$ FAILURE, psf		1443	3617	6507
$\sigma_3$ FAILURE, psf		994	2995	5990

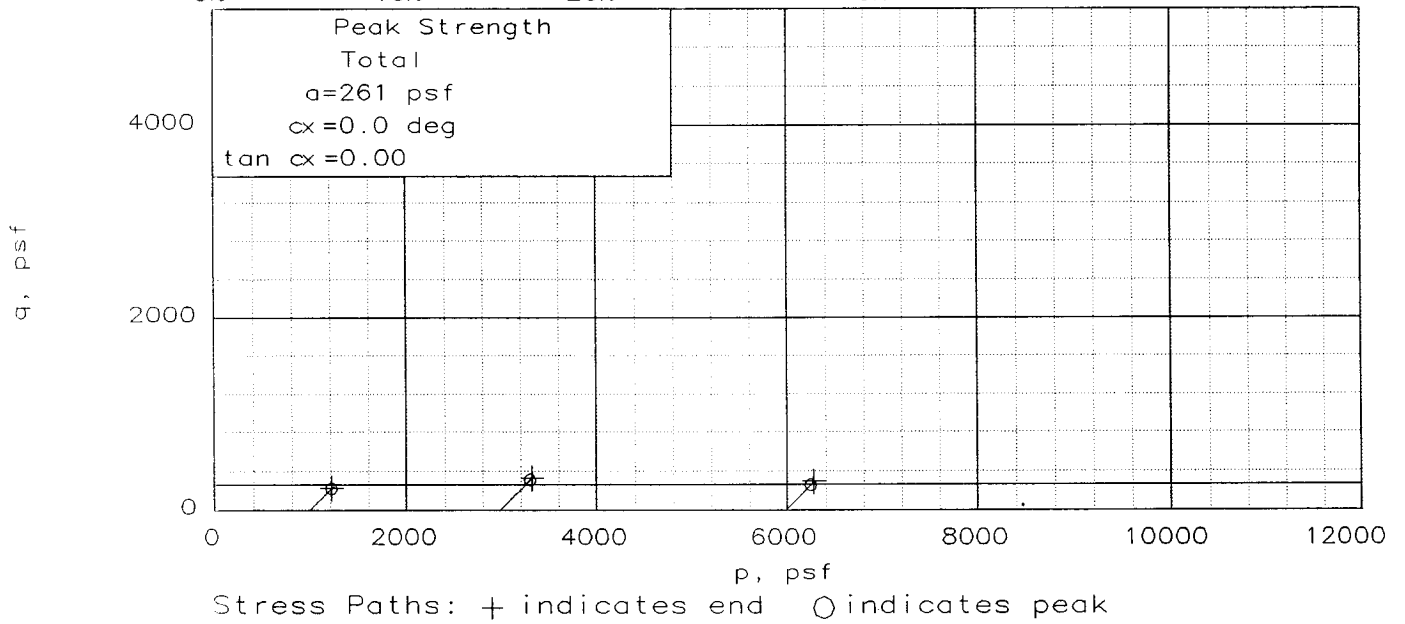
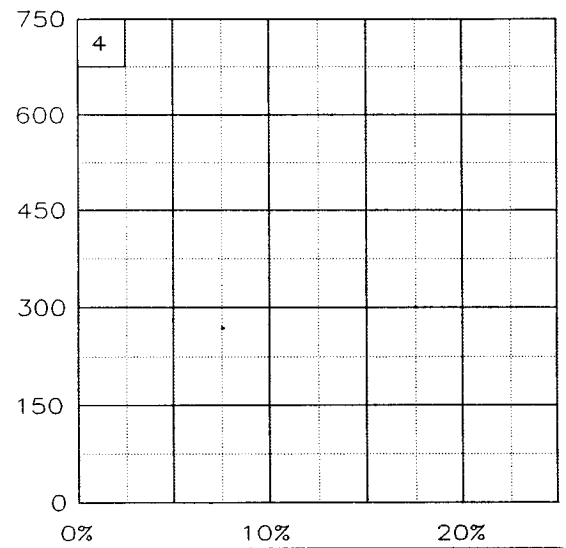
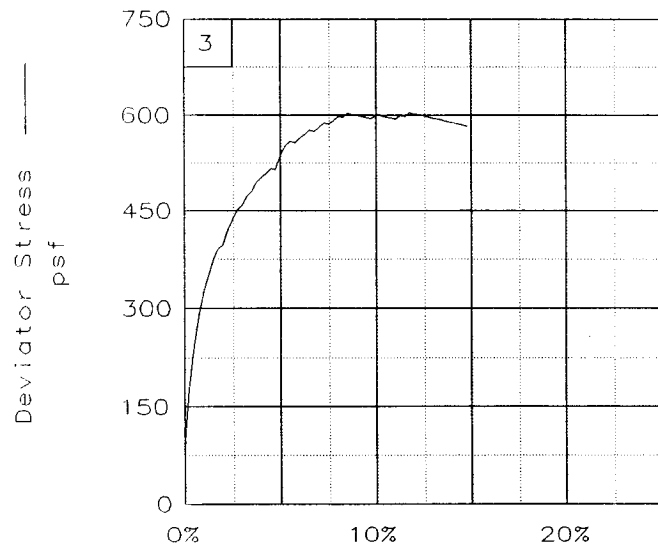
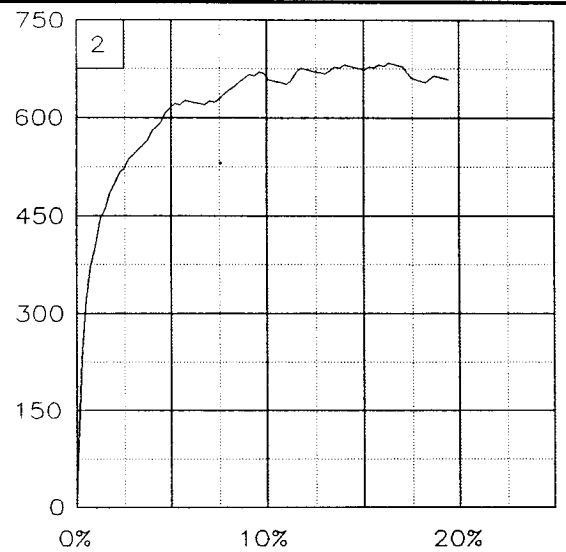
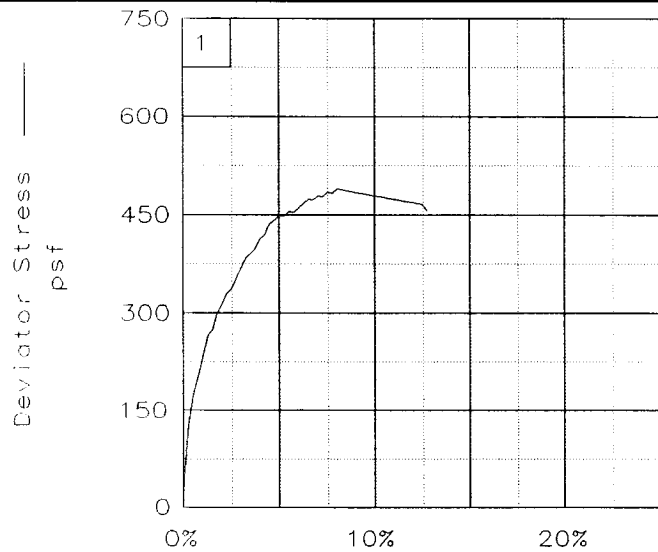
TYPE OF TEST:  
 Unconsolidated Undrained  
 SAMPLE TYPE: Undisturbed  
 DESCRIPTION: So Gr CH4  
 w/ Ins SM, SL  
 LL= 90      PL= 23      PI= 67  
 SPECIFIC GRAVITY= 2.74  
 REMARKS: Torvane = 0.150 tsf

CLIENT: U.S. Army Corps of Engineers  
 PROJECT: Repairs to Levees and Floodwalls  
 at the 17th Street Canal  
 SAMPLE LOCATION: Boring 13,  
 Sample 8-A, Depth 28.3', Elev -32.45  
 PROJ. NO.: 19080      DATE: 10/18/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.

Fig. No.: \_\_\_\_\_



Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls at the 17th Street Canal

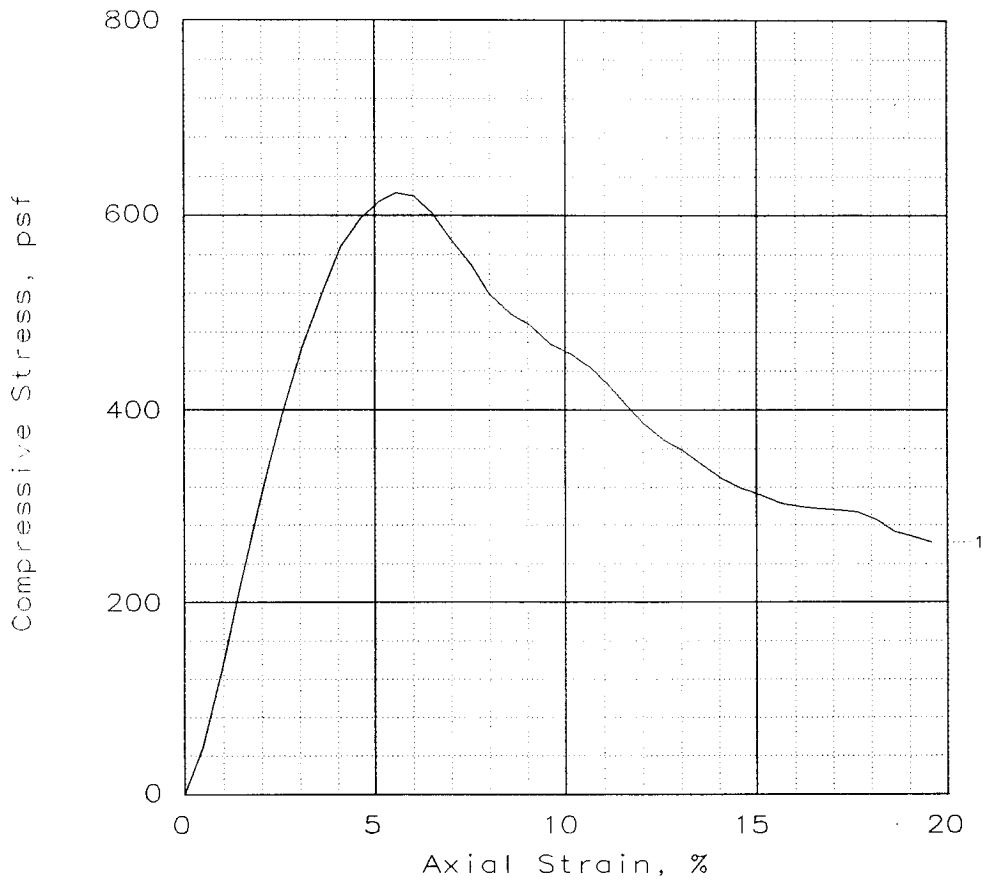
Location: Boring 13, Sample 8-A, Depth 28.3', Elev -32.45

File: UU-25125

Project No.: 19080

Fig. No.: \_\_\_\_\_

## UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	623			
Undrained shear strength, psf	312			
Failure strain, %	5.6			
Time to failure, min	0			
Water content, %	48.1			
Wet density, pcf	106.4			
Dry density, pcf	71.9			
Saturation, %	96.4			
Void ratio	1.3459			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: So Gr CH3 w/ SIF

GS= 2.7

Type: Undisturbed

Project No.: 19080

Date: 10/18/05

Remarks:

Torvane = 0.150 tsf

Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls  
at the 17th Street Canal

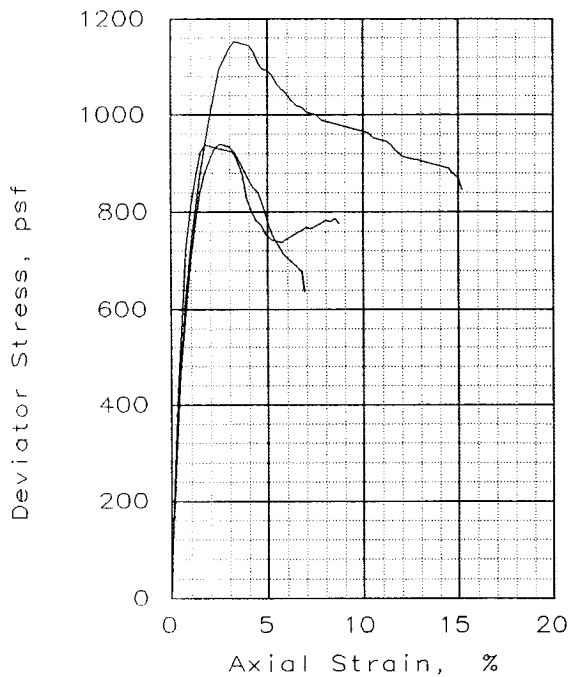
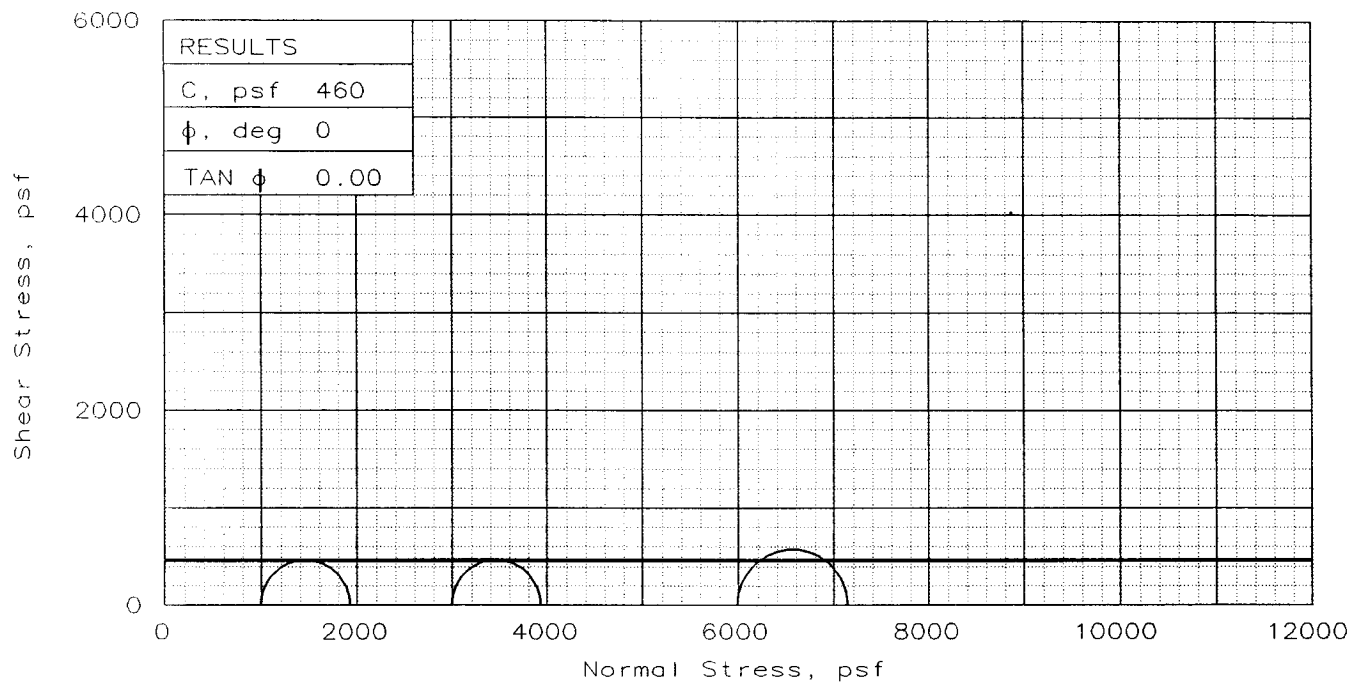
Location: Boring 13,  
Sample 11-B, Depth 37.1', Elev -41.25

UNCONFINED COMPRESSION TEST

**Eustis Engineering Company, Inc.**

Fig. No.: \_\_\_\_\_





SPECIMEN NO.:		1	2	3
INITIAL	WATER CONTENT, %	77.7	74.5	83.2
	DRY DENSITY, pcf	53.0	54.8	51.0
	SATURATION, %	95.7	96.3	97.0
	VOID RATIO	2.225	2.120	2.351
	DIAMETER, in	1.39	1.39	1.39
	HEIGHT, in	2.93	2.93	2.93
AT TEST	WATER CONTENT, %	81.1	77.3	85.6
	DRY DENSITY, pcf	53.1	54.9	51.1
	SATURATION, %	100.0	100.0	100.0
	VOID RATIO	2.223	2.117	2.345
	DIAMETER, in	1.39	1.39	1.39
	HEIGHT, in	2.93	2.93	2.93
Strain rate, in/min		0.0289	0.0287	0.0290
BACK PRESSURE, psf		0	0	0
CELL PRESSURE, psf		994	2995	5990
FAIL. STRESS, psf		932	938	1153
ULT. STRESS, psf		777	637	846
$\sigma_1$ FAILURE, psf		1925	3933	7143
$\sigma_3$ FAILURE, psf		994	2995	5990

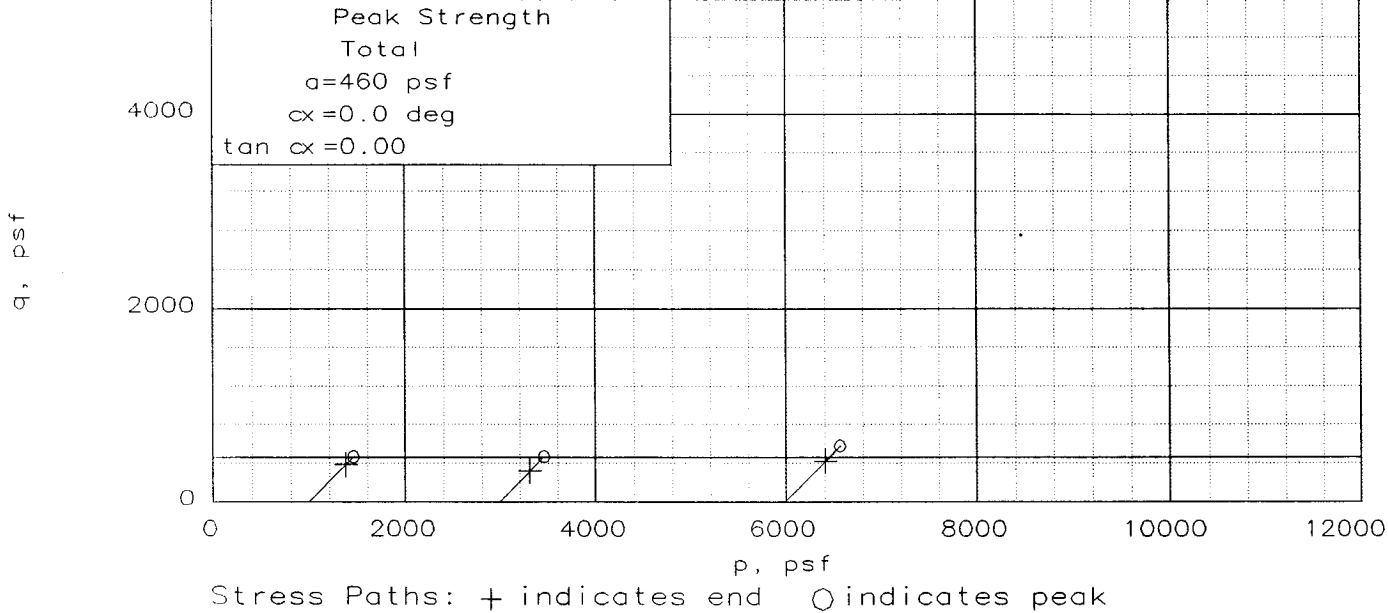
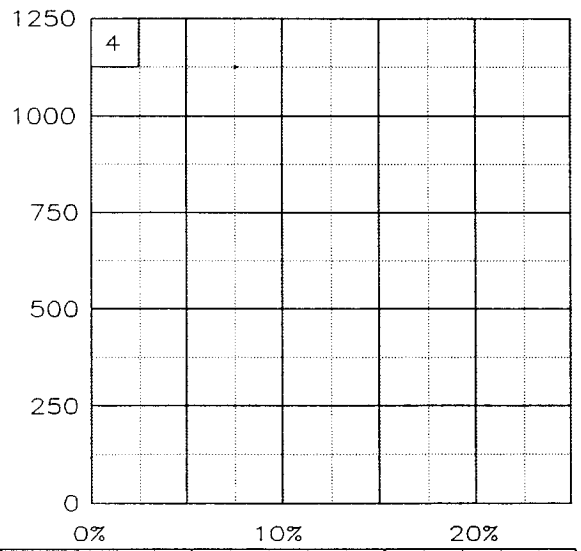
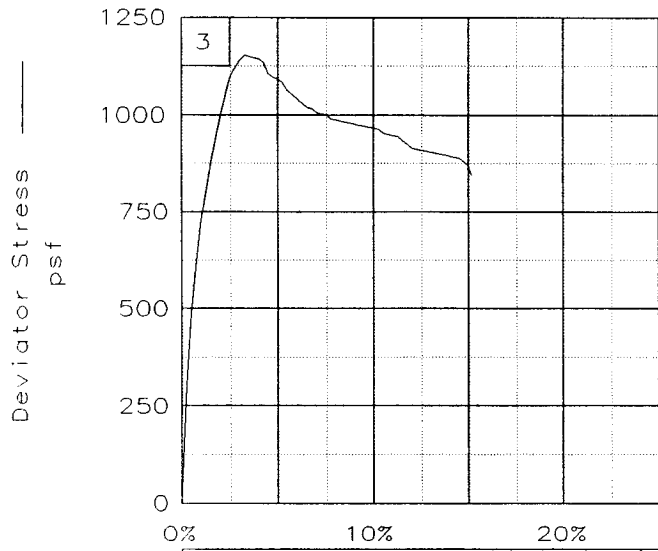
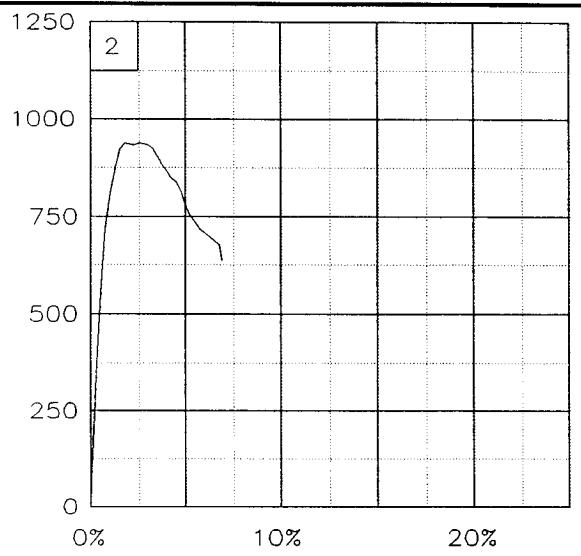
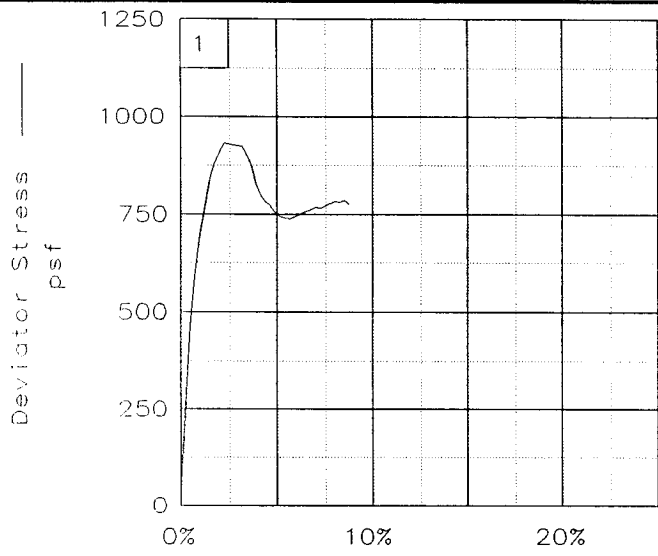
TYPE OF TEST:  
 Unconsolidated Undrained  
 SAMPLE TYPE: Undisturbed  
 DESCRIPTION: So Gr CH4  
 w/ Ins SM, Tr-wd, SL  
 LL= 89      PL= 31      PI= 58  
 SPECIFIC GRAVITY= 2.74  
 REMARKS: Torvane = 0.270 tsf

CLIENT: U.S. Army Corps of Engineers  
 PROJECT: Repairs to Levees and Floodwalls  
 at the 17th Street Canal  
 SAMPLE LOCATION: Boring 13,  
 Sample 12-B, Depth 41.1', Elev -45.25  
 PROJ. NO.: 19080      DATE: 10/18/05

TRIAXIAL SHEAR TEST REPORT

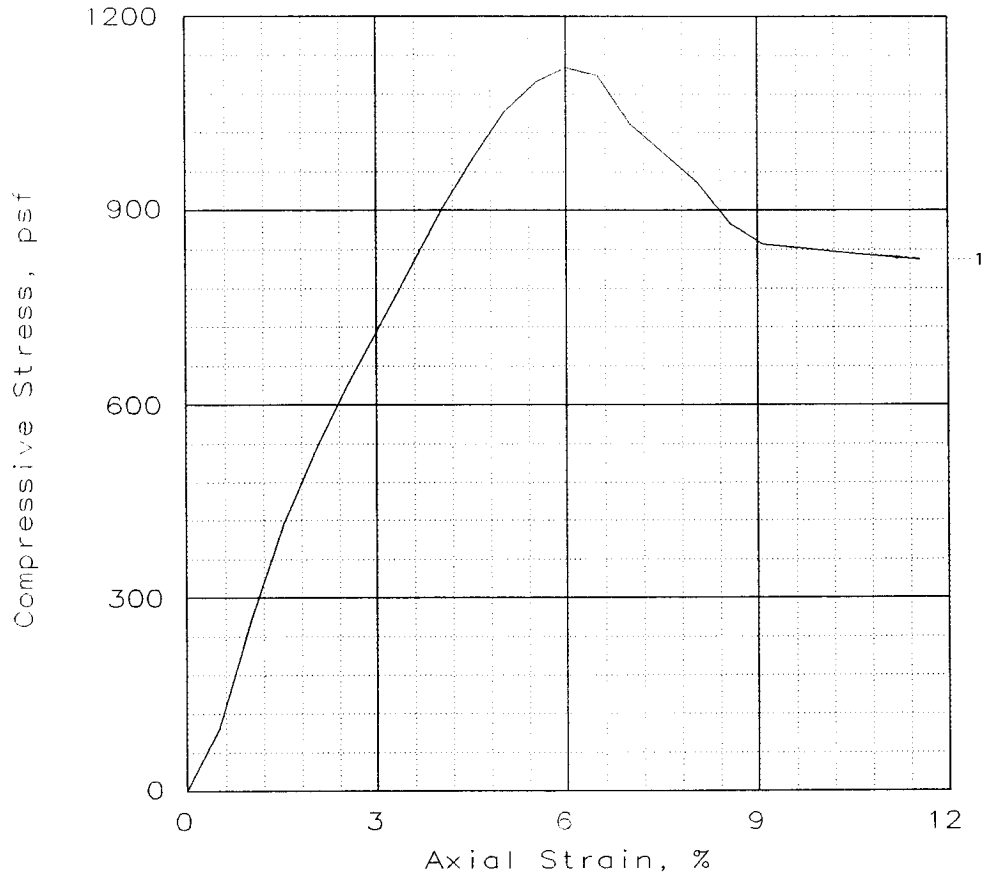
Eustis Engineering Company, Inc.

Fig. No.: \_\_\_\_\_



Client: U.S. Army Corps of Engineers  
 Project: Repairs to Levees and Floodwalls at the 17th Street Canal  
 Location: Boring 13, Sample 12-B, Depth 41.1', Elev -45.25  
 File: UU-25126      Project No.: 19080      Fig. No.: \_\_\_\_\_

## UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1122			
Undrained shear strength, psf	561			
Failure strain, %	6.0			
Strain rate, in/min	0.0578			
Water content, %	61.4			
Wet density, pcf	99.8			
Dry density, pcf	61.8			
Saturation, %	95.6			
Void ratio	1.7456			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M Gr CH4 w/ ars SM

GS= 2.72

Type: Undisturbed

Project No.: 19080

Date: 10/18/05

Remarks:

Torvane = 0.250 tsf

Client: U.S. Army Corps of Engineers

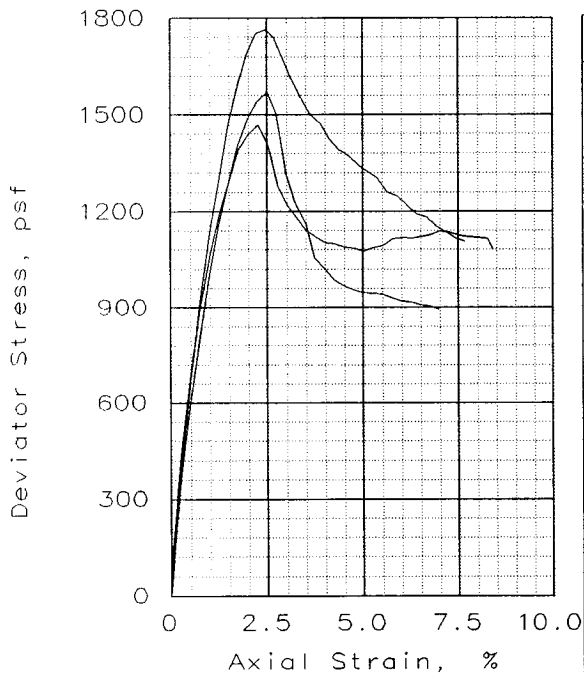
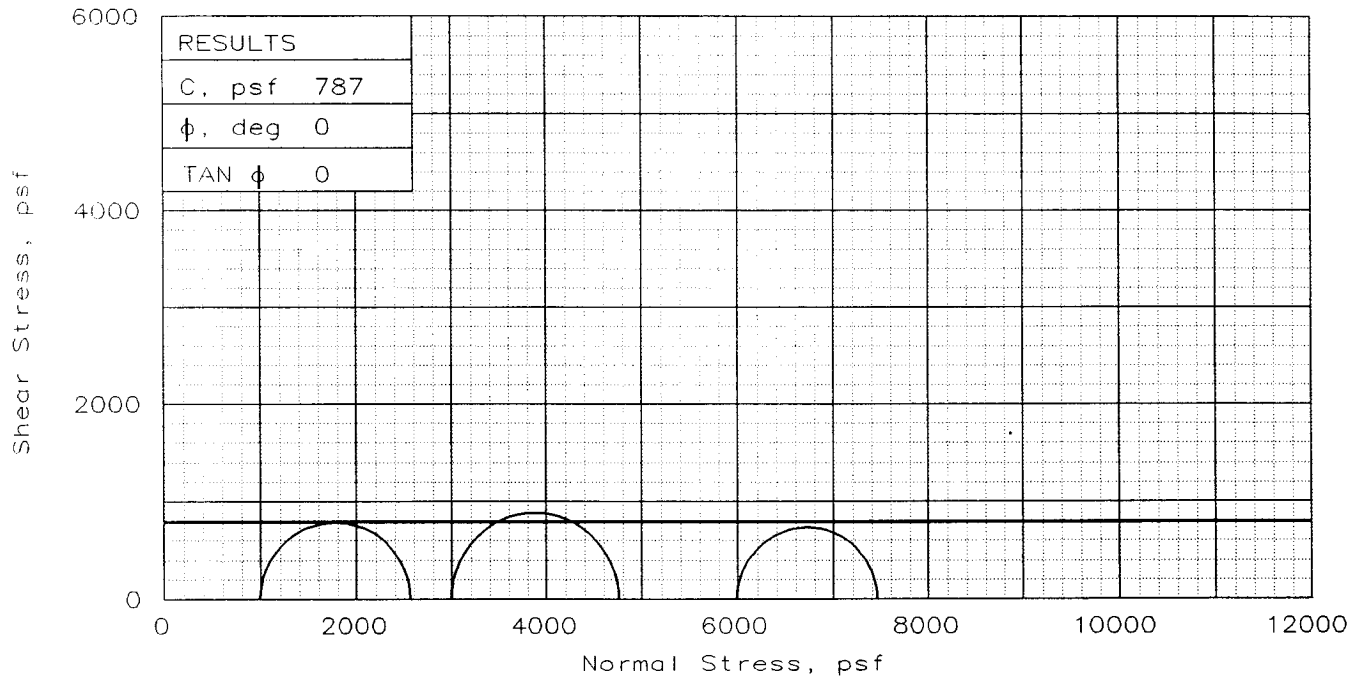
Project: Repairs to Levees and Floodwalls  
at the 17th Street Canal

Location: Boring 13,  
Sample 13-B, Depth 45.1', Elev -49.25

UNCONFINED COMPRESSION TEST

**Eustis Engineering Company, Inc.**

Fig. No.: \_\_\_\_\_



SPECIMEN NO.:		1	2	3
INITIAL	WATER CONTENT, %	57.4	57.2	57.5
	DRY DENSITY, pcf	64.5	64.9	64.3
	SATURATION, %	95.2	95.8	95.0
	VOID RATIO	1.651	1.636	1.659
	DIAMETER, in	1.39	1.39	1.39
HEIGHT, in	2.93	2.93	2.93	
AT TEST	WATER CONTENT, %	60.3	59.9	60.5
	DRY DENSITY, pcf	64.5	64.8	64.4
	SATURATION, %	100.0	100.0	100.0
	VOID RATIO	1.653	1.641	1.658
	DIAMETER, in	1.39	1.39	1.39
HEIGHT, in	2.93	2.93	2.93	
Strain rate, in/min		0.0289	0.0285	0.0288
BACK PRESSURE, psf		0	0	0
CELL PRESSURE, psf		994	2995	5990
FAIL. STRESS, psf		1571	1765	1469
ULT. STRESS, psf		895	1106	1083
$\sigma_1$ FAILURE, psf		2565	4761	7459
$\sigma_3$ FAILURE, psf		994	2995	5990

TYPE OF TEST:  
Unconsolidated Undrained  
SAMPLE TYPE: Undisturbed  
DESCRIPTION: M Gr CH4  
w/ SL  
LL= 77      PL= 25      PI= 52  
SPECIFIC GRAVITY= 2.74  
REMARKS: Torvane = 0.320 tsf

CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls  
at the 17th Street Canal

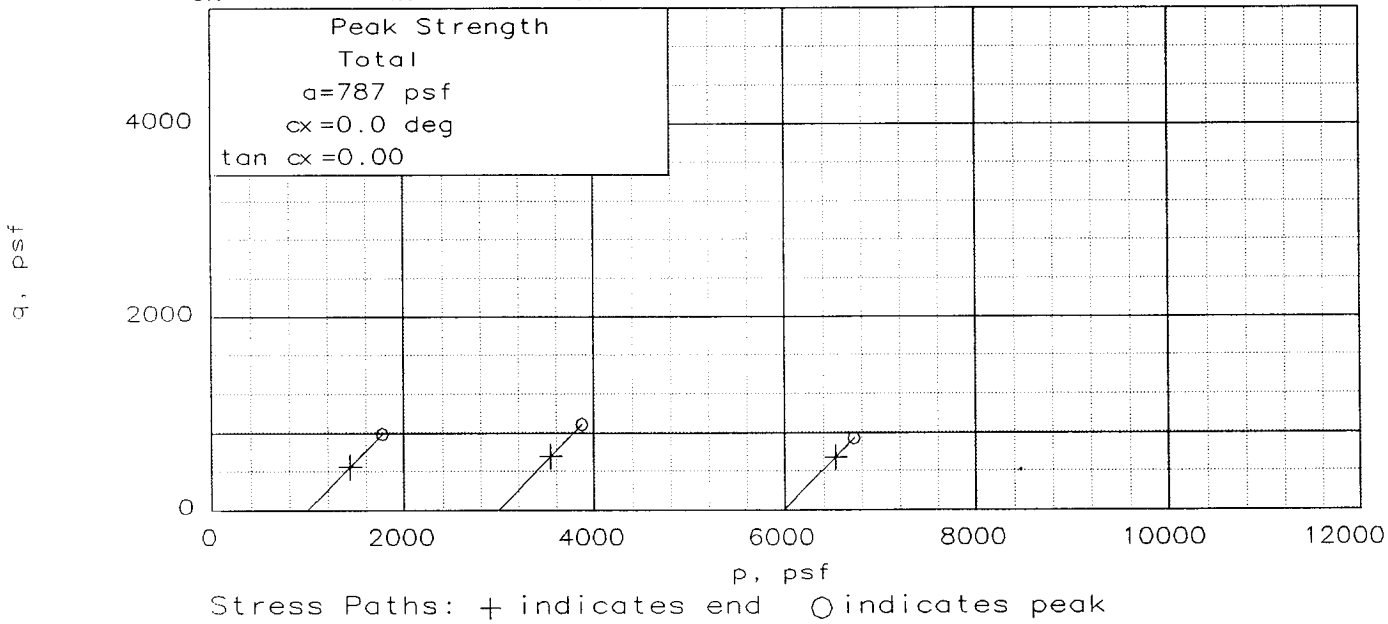
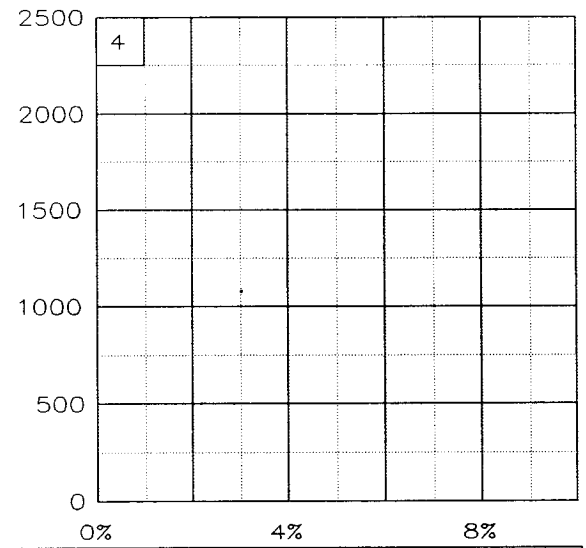
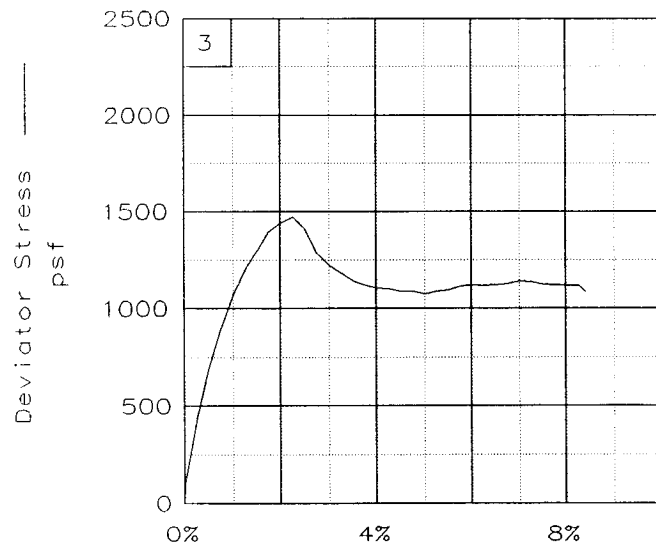
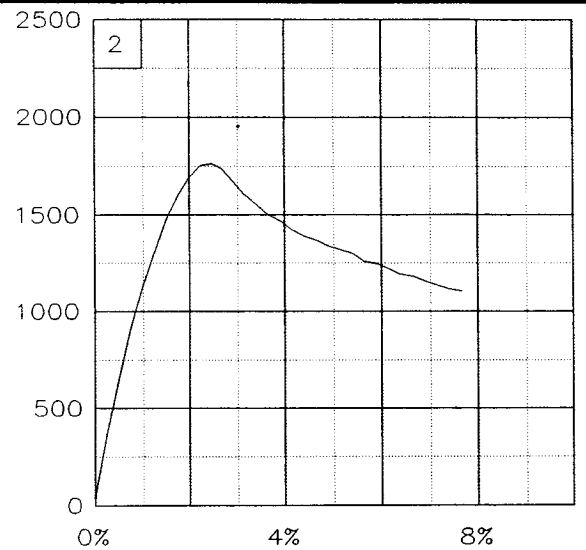
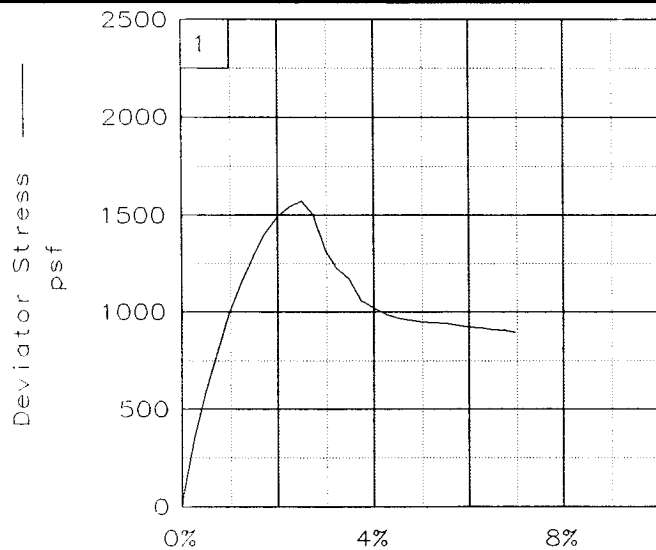
SAMPLE LOCATION: Boring 13,  
Sample 14-B, Depth 49.1', Elev -53.25

PROJ. NO.: 19080      DATE: 10/18/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.

Fig. No.: \_\_\_\_\_



Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls at the 17th Street Canal

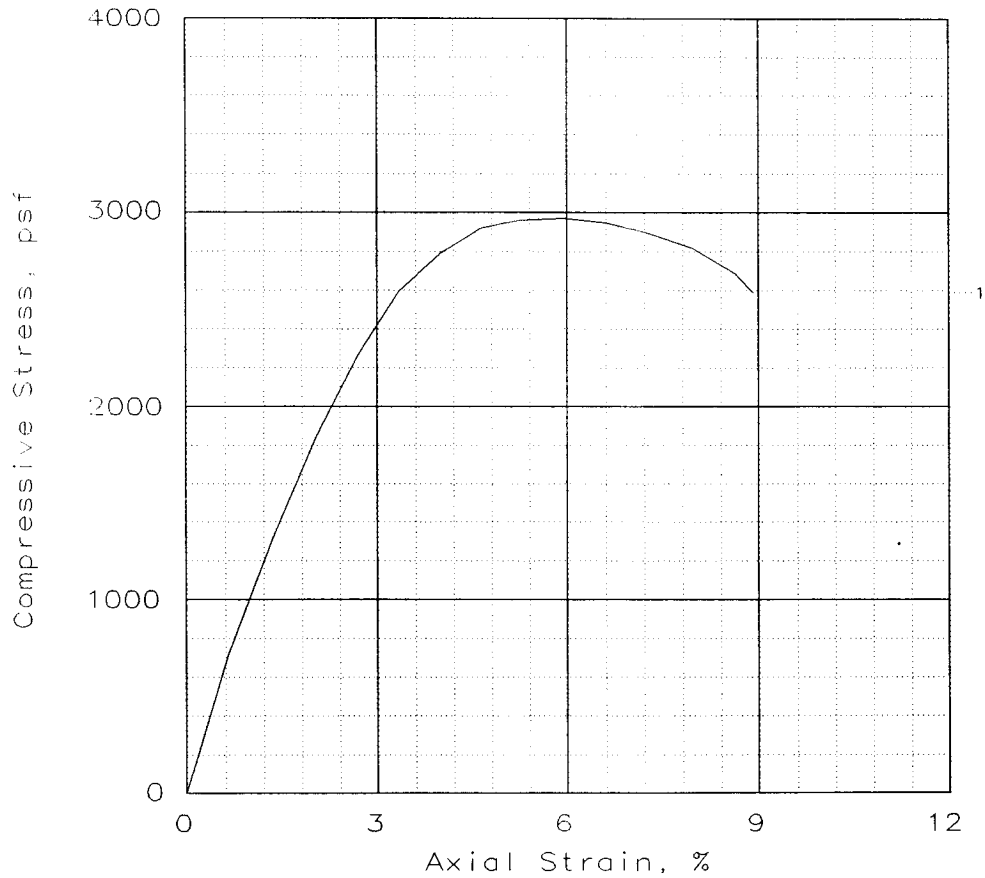
Location: Boring 13, Sample 14-B, Depth 49.1', Elev -53.25

File: UU-25127

Project No.: 19080

Fig. No.: \_\_\_\_\_

## UNCONFINED COMPRESSION TEST



SPECIMEN NO. :	1			
Unconfined strength, psf	2970			
Undrained shear strength, psf	1485			
Failure strain, %	5.9			
Strain rate, in/min	0.0568			
Water content, %	19.5			
Wet density, pcf	127.4			
Dry density, pcf	106.6			
Saturation, %	90.6			
Void ratio	0.5809			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: St IGr & T CL6 w/ rt

GS= 2.7

Type: Undisturbed

Project No.: 19080

Date: 10/18/05

Remarks:

Torvane = 0.875 tsf

Client: U.S. Army Corps of Engineers

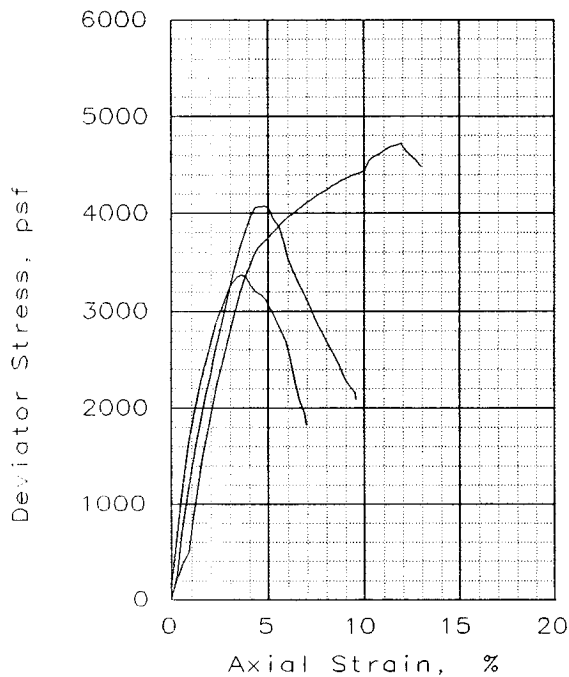
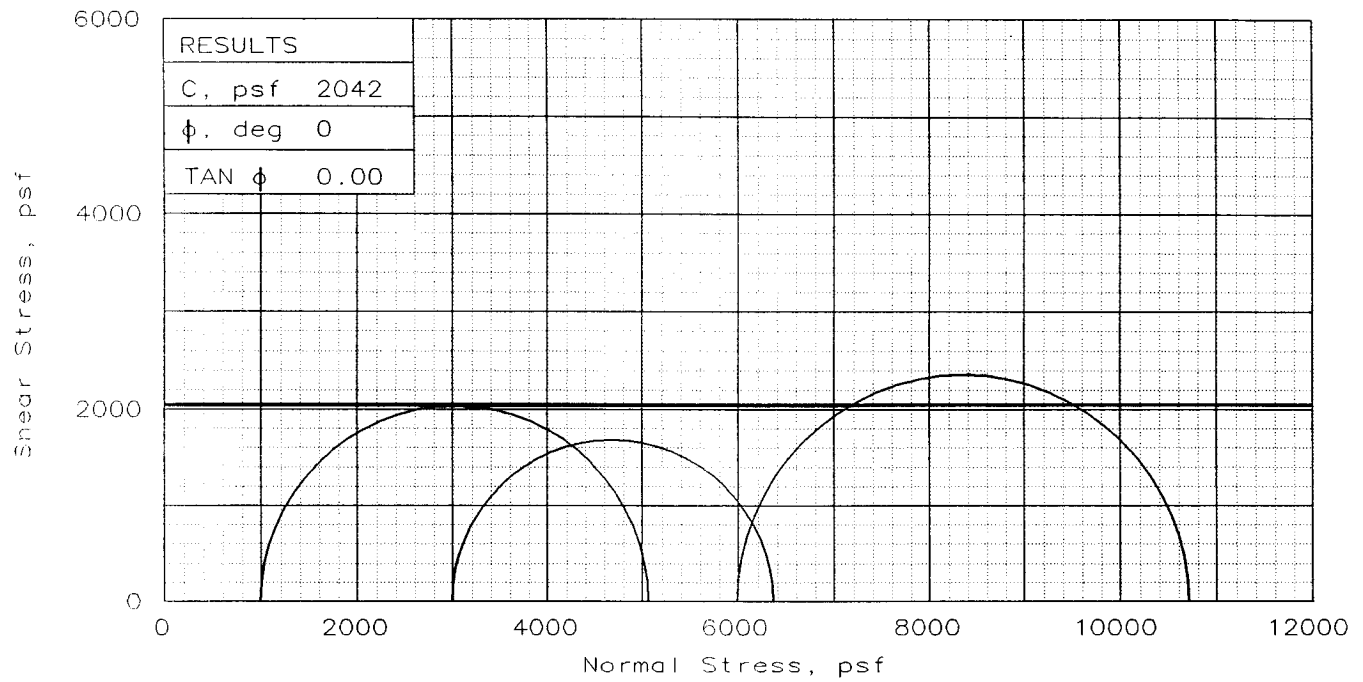
Project: Repairs to Levees and Floodwalls  
at the 17th Street Canal

Location: Boring 13,  
Sample 15-C, Depth 54.0', Elev -59.15

UNCONFINED COMPRESSION TEST

**Eustis Engineering Company, Inc.**

Fig. No.: \_\_\_\_\_

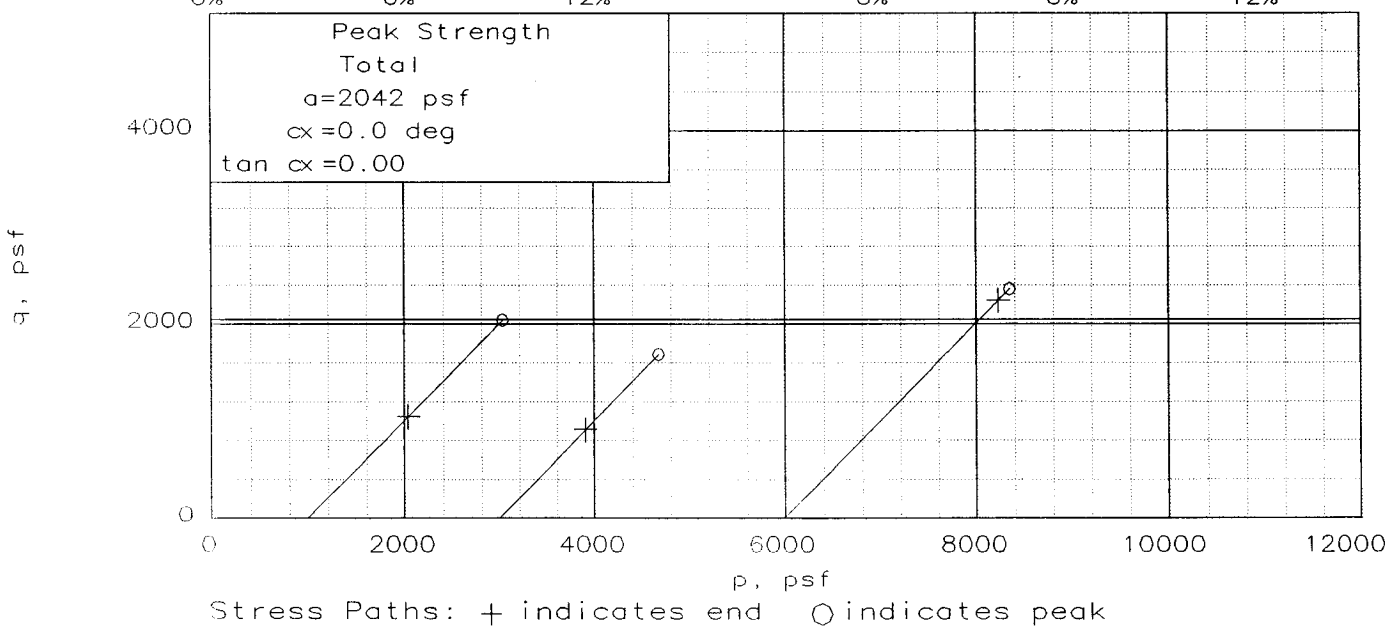
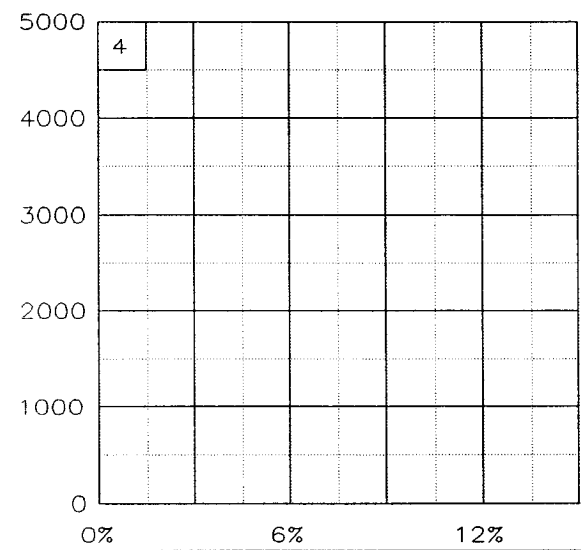
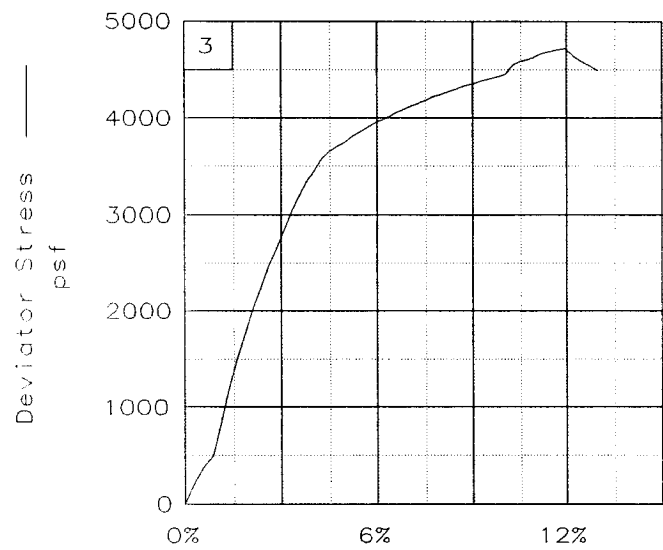
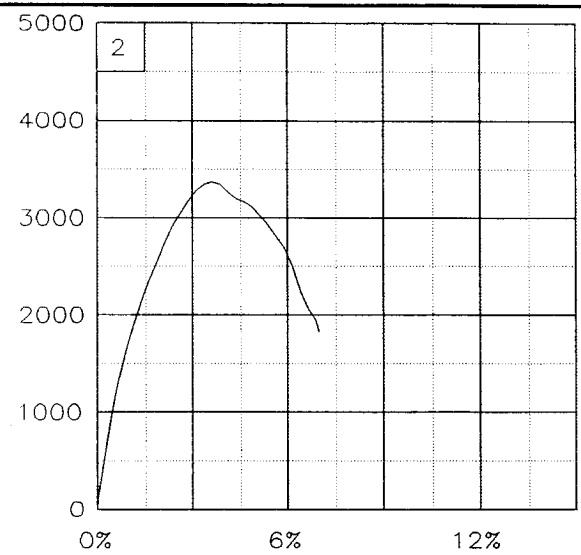
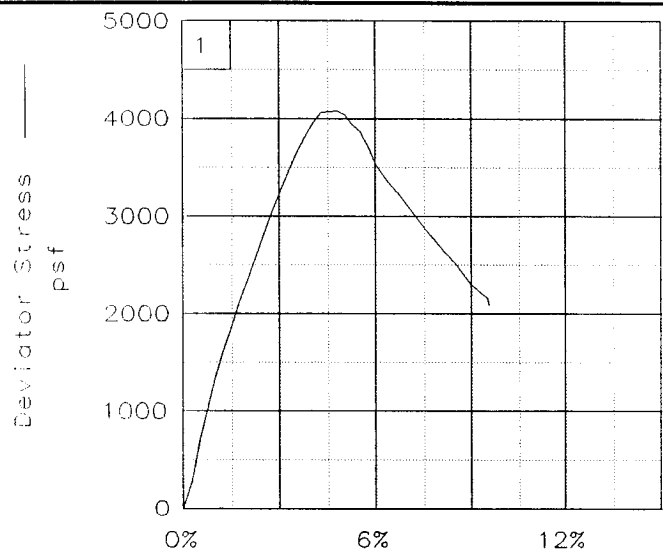


SPECIMEN NO.:		1	2	3
INITIAL	WATER CONTENT, %	20.0	20.4	21.0
	DRY DENSITY, pcf	104.6	104.1	103.2
	SATURATION, %	88.2	89.2	87.4
	VOID RATIO	0.611	0.619	0.657
	DIAMETER, in	1.39	1.39	1.39
	HEIGHT, in	2.93	2.93	2.93
AT TEST	WATER CONTENT, %	22.6	23.0	23.8
	DRY DENSITY, pcf	104.7	104.0	103.5
	SATURATION, %	100.0	100.0	100.0
	VOID RATIO	0.610	0.620	0.653
	DIAMETER, in	1.39	1.39	1.39
	HEIGHT, in	2.93	2.93	2.93
Time to failure, min		0	0	0
BACK PRESSURE, psf		0	0	0
CELL PRESSURE, psf		994	2995	5990
FAIL. STRESS, psf		4074	3369	4721
ULT. STRESS, psf		2093	1827	4486
$\sigma_1$ FAILURE, psf		5067	6365	10711
$\sigma_3$ FAILURE, psf		994	2995	5990

TYPE OF TEST:  
 Unconsolidated Undrained  
 SAMPLE TYPE: Undisturbed  
 DESCRIPTION: vSt T & IGr CH3  
 w/ SL  
 LL= 62      PL= 17      PI= 45  
 SPECIFIC GRAVITY= 2.7  
 REMARKS: Torvane = 1.750 tsf

CLIENT: U.S. Army Corps of Engineers  
 PROJECT: Repairs to Levees and Floodwalls  
 at the 17th Street Canal  
 SAMPLE LOCATION: Boring 13,  
 Sample 16-A, Depth 56.3', Elev -60.45  
 PROJ. NO.: 19080      DATE: 10/18/05

Fig. No.: \_\_\_\_\_



Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls at the 17th Street Canal

Location: Boring 13, Sample 16-A, Depth 56.3', Elev -60.45

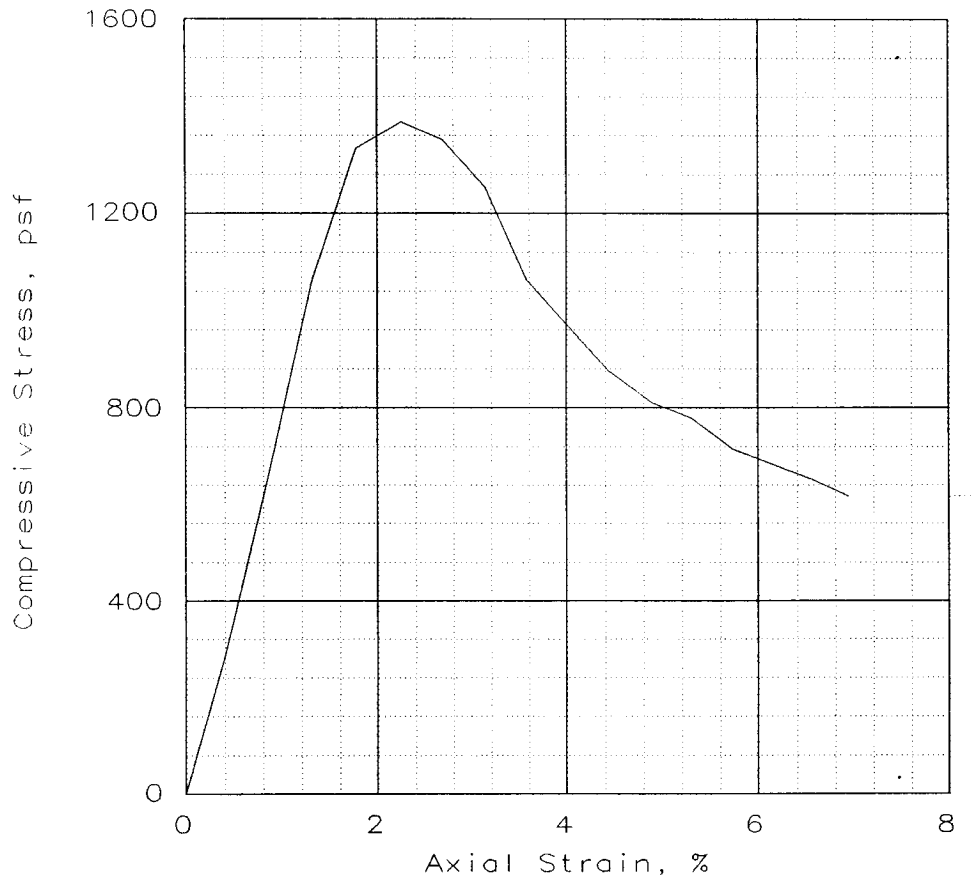
File: UU-25128

Project No.: 19080

Fig. No.: \_\_\_\_\_



## UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1389			
Undrained shear strength, psf	694			
Failure strain, %	2.3			
Strain rate, in/min	0.0378			
Water content, %	24.3			
Wet density, pcf	122.1			
Dry density, pcf	98.2			
Saturation, %	91.7			
Void ratio	0.7166			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M T & IGr CL5

GS= 2.7

Type: Undisturbed

Project No.: 19080

Date: 10/18/05

Remarks:

Client: U.S. Army Corps of Engineers

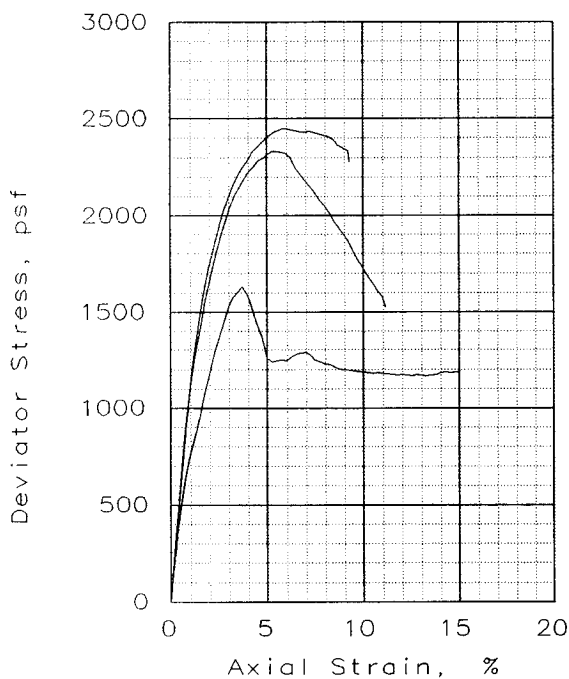
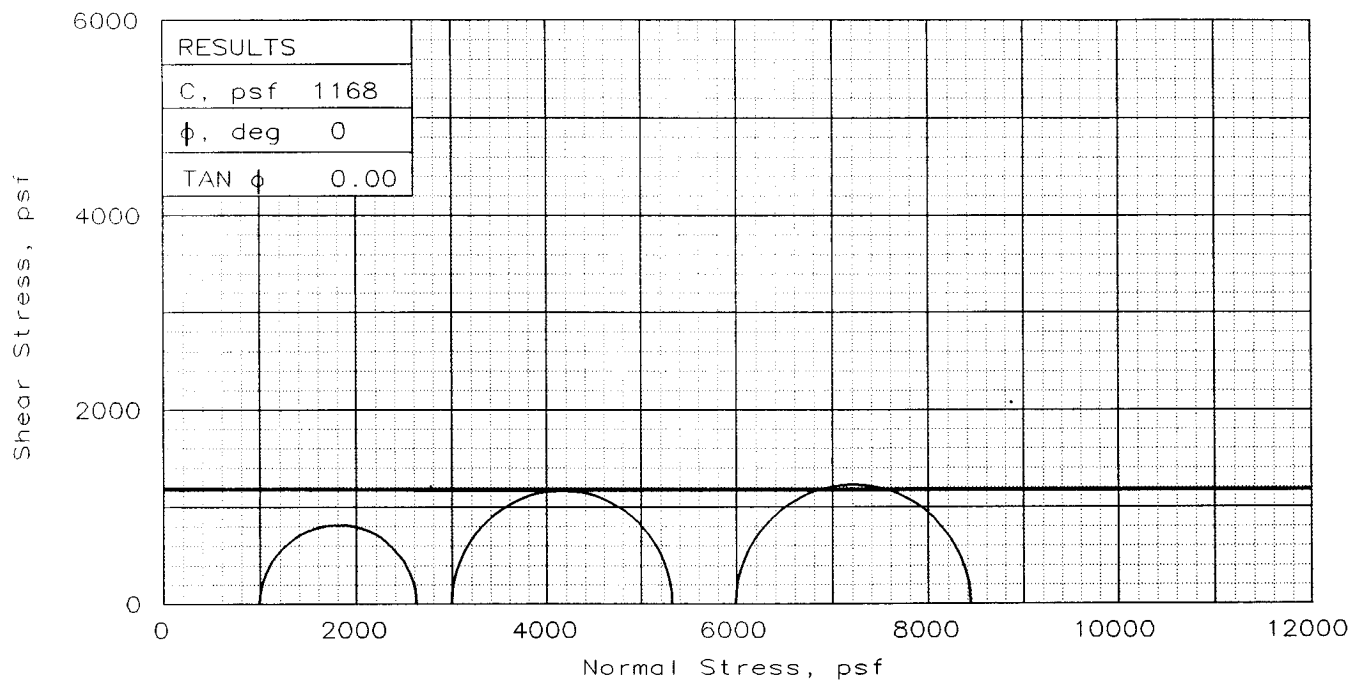
Project: Repairs to Levees and Floodwalls  
at the 17th Street Canal

Location: Boring 13,  
Sample 17-B, Depth 61.1', Elev -65.25

UNCONFINED COMPRESSION TEST

**Eustis Engineering Company, Inc.**

Fig. No.: \_\_\_\_\_



SPECIMEN NO.:		1	2	3
INITIAL	WATER CONTENT, %	27.1	28.1	26.4
	DRY DENSITY, pcf	89.1	92.3	93.2
	SATURATION, %	82.0	90.2	88.0
	VOID RATIO	0.893	0.852	0.809
	DIAMETER, in	1.39	1.39	1.39
	HEIGHT, in	2.93	2.93	2.93
AT TEST	WATER CONTENT, %	33.1	31.1	29.9
	DRY DENSITY, pcf	89.1	92.4	93.3
	SATURATION, %	100.0	100.0	100.0
	VOID RATIO	0.893	0.851	0.807
	DIAMETER, in	1.39	1.39	1.39
	HEIGHT, in	2.93	2.93	2.93
Strain rate, in/min		0.0291	0.0289	0.0287
BACK PRESSURE, psf		0	0	0
CELL PRESSURE, psf		994	2995	5990
FAIL. STRESS, psf		1633	2333	2448
ULT. STRESS, psf		1184	1528	2278
$\sigma_1$ FAILURE, psf		2627	5328	8439
$\sigma_3$ FAILURE, psf		994	2995	5990

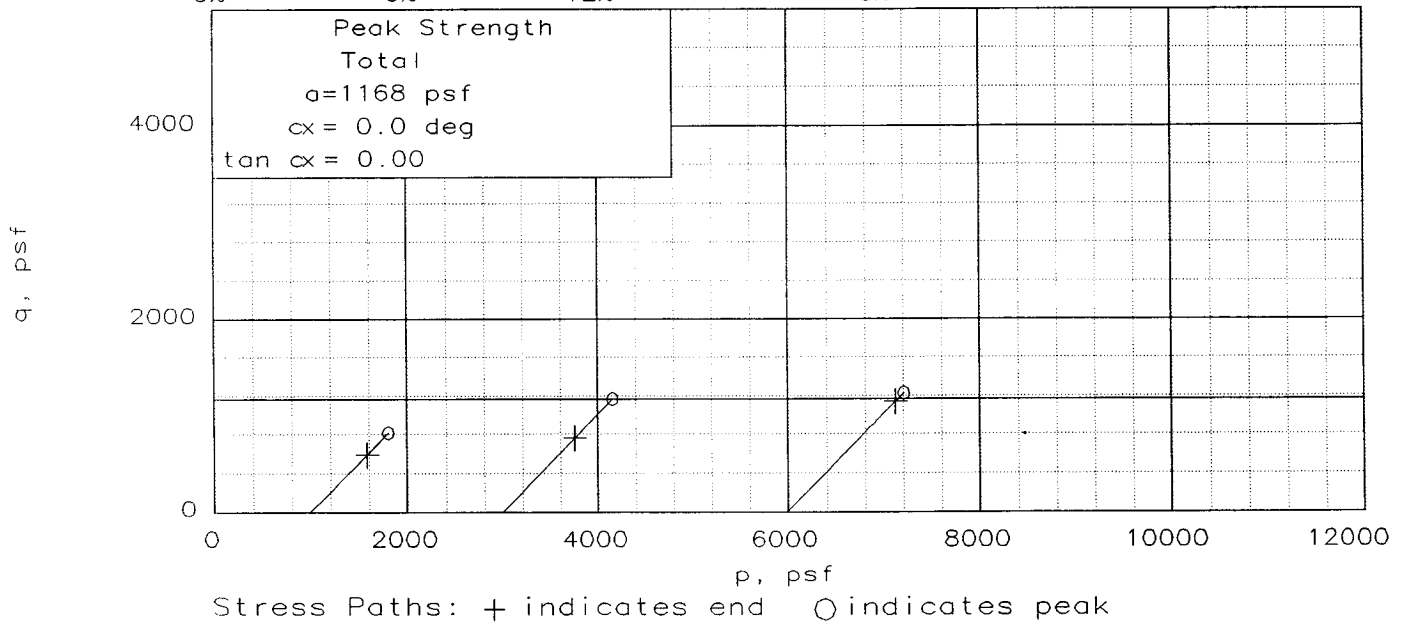
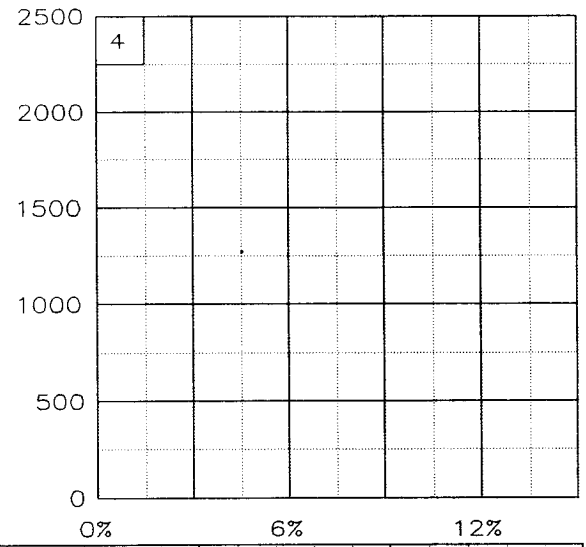
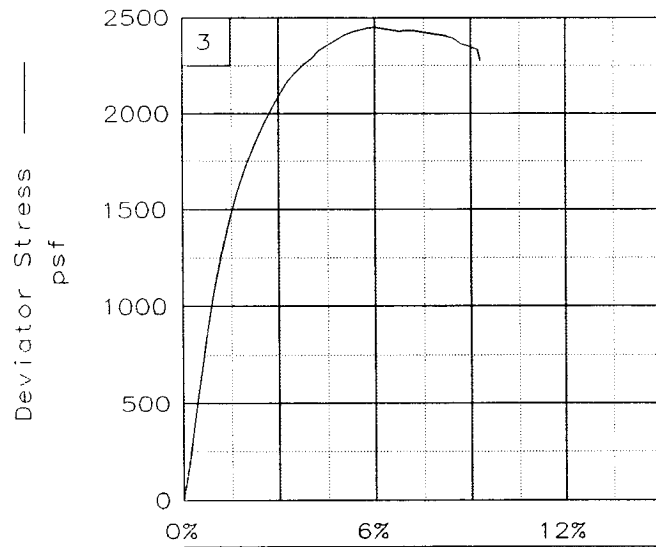
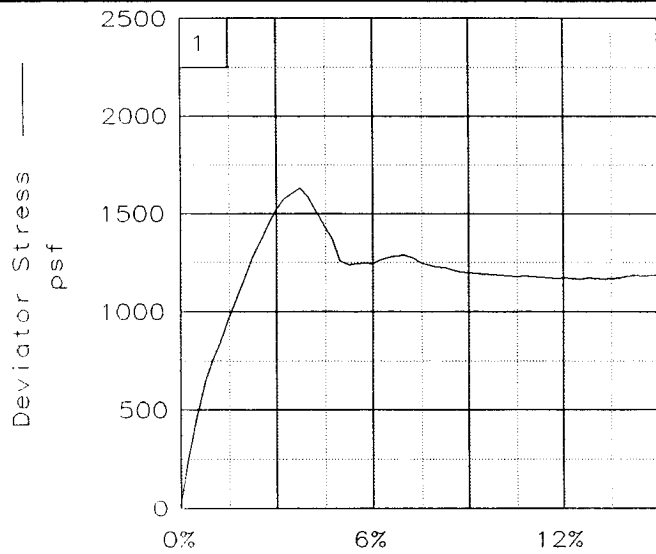
TYPE OF TEST:  
Unconsolidated Undrained  
SAMPLE TYPE: Undisturbed  
DESCRIPTION: St 1Gr & T CH2  
w/ SL  
LL= 58      PL= 17      PI= 41  
SPECIFIC GRAVITY= 2.7  
REMARKS: Torvane = 0.900 tsf

CLIENT: U.S. Army Corps of Engineers  
PROJECT: Repairs to Levees and Floodwalls  
at the 17th Street Canal  
SAMPLE LOCATION: Boring 13,  
Sample 18-B, Depth 65.1', Elev -69.25  
PROJ. NO.: 19080      DATE: 10/18/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.

Fig. No.: \_\_\_\_\_



Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls at the 17th Street Canal

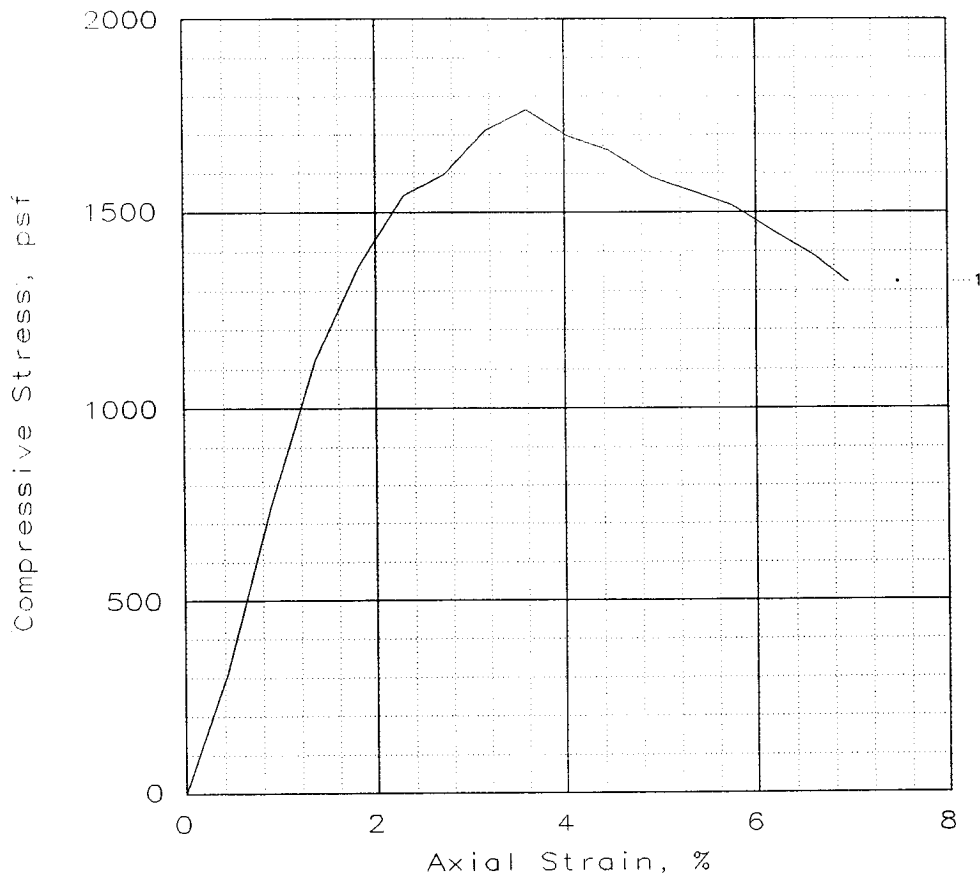
Location: Boring 13, Sample 18-B, Depth 65.1', Elev -69.25

File: UU-25129

Project No.: 19080

Fig. No.: \_\_\_\_\_

## UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1766			
Undrained shear strength, psf	883			
Failure strain, %	3.6			
Strain rate, in/min	0.0377			
Water content, %	35.5			
Wet density, pcf	113.1			
Dry density, pcf	83.5			
Saturation, %	92.7			
Void ratio	1.0494			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M T & IGr CH4 w/ Ins SM, cc, SL

GS= 2.74

Type: Undisturbed

Project No.: 19080

Date: 10/18/05

Remarks:

Torvane = 1.000 tsf

Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls  
at the 17th Street Canal

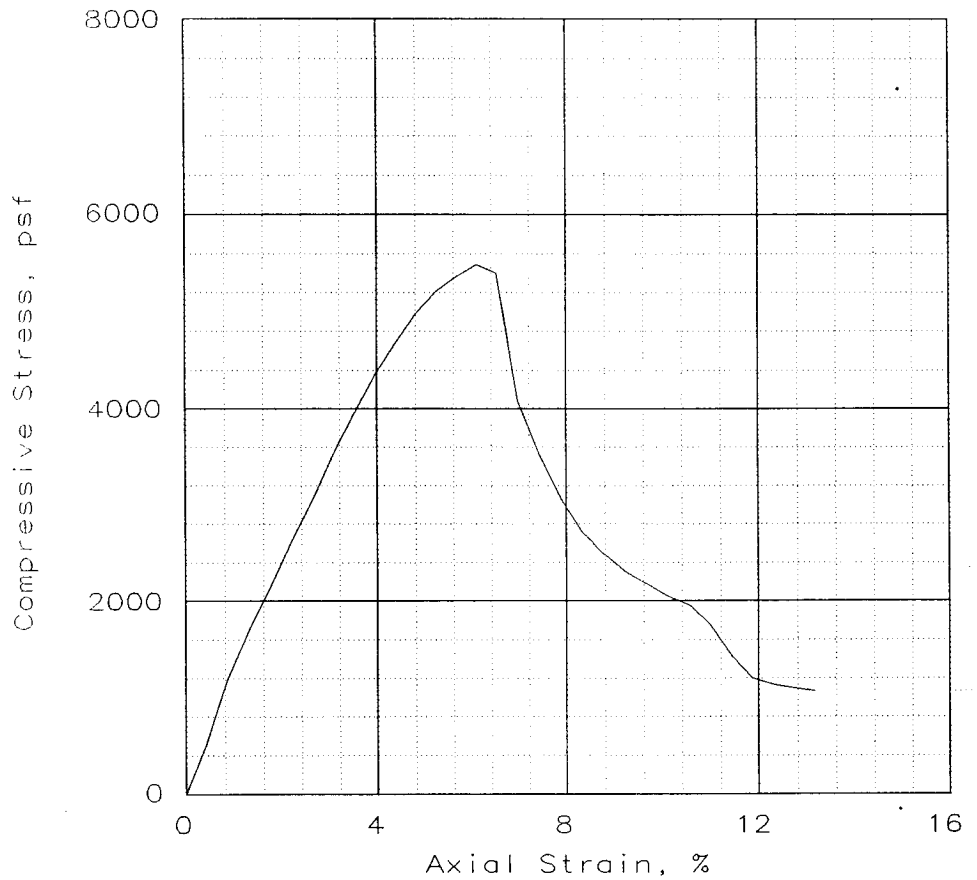
Location: Boring 13,  
Sample 22-B, Depth 75.1', Elev -79.25

UNCONFINED COMPRESSION TEST

**Eustis Engineering Company, Inc.**

Fig. No.: \_\_\_\_\_

## UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	5485			
Undrained shear strength, psf	2743			
Failure strain, %	6.1			
Strain rate, in/min	0.0374			
Water content, %	36.2			
Wet density, pcf	113.7			
Dry density, pcf	83.4			
Saturation, %	94.6			
Void ratio	1.0502			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: vSt Gr & T CH4 w/ Ins SM, SL

GS = 2.74

Type: Undisturbed

Project No.: 19080

Date: 10/18/05

Remarks:

Torvane = 1.625 tsf

Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls  
at the 17th Street Canal

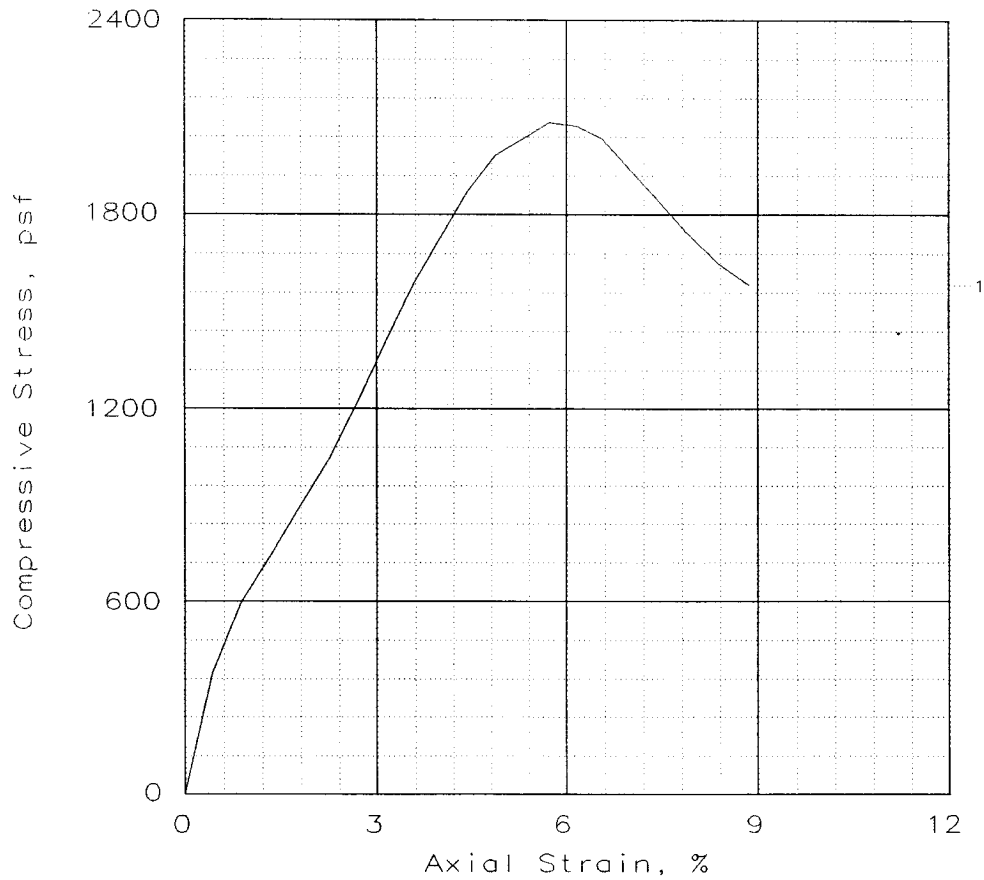
Location: Boring 13,  
Sample 24-B, Depth 81.1', Elev -85.25

UNCONFINED COMPRESSION TEST

**Eustis Engineering Company, Inc.**

Fig. No.: \_\_\_\_\_

## UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	2084			
Undrained shear strength, psf	1042			
Failure strain, %	5.7			
Strain rate, in/min	0.0383			
Water content, %	39.3			
Wet density, pcf	112.7			
Dry density, pcf	80.9			
Saturation, %	96.5			
Void ratio	1.1142			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: St Gr CH4 w/ Ins SM, SL

GS= 2.74

Type: Undisturbed

Project No.: 19080

Date: 10/18/05

Remarks:

Torvane = 0.500 tsf

Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls  
at the 17th Street Canal

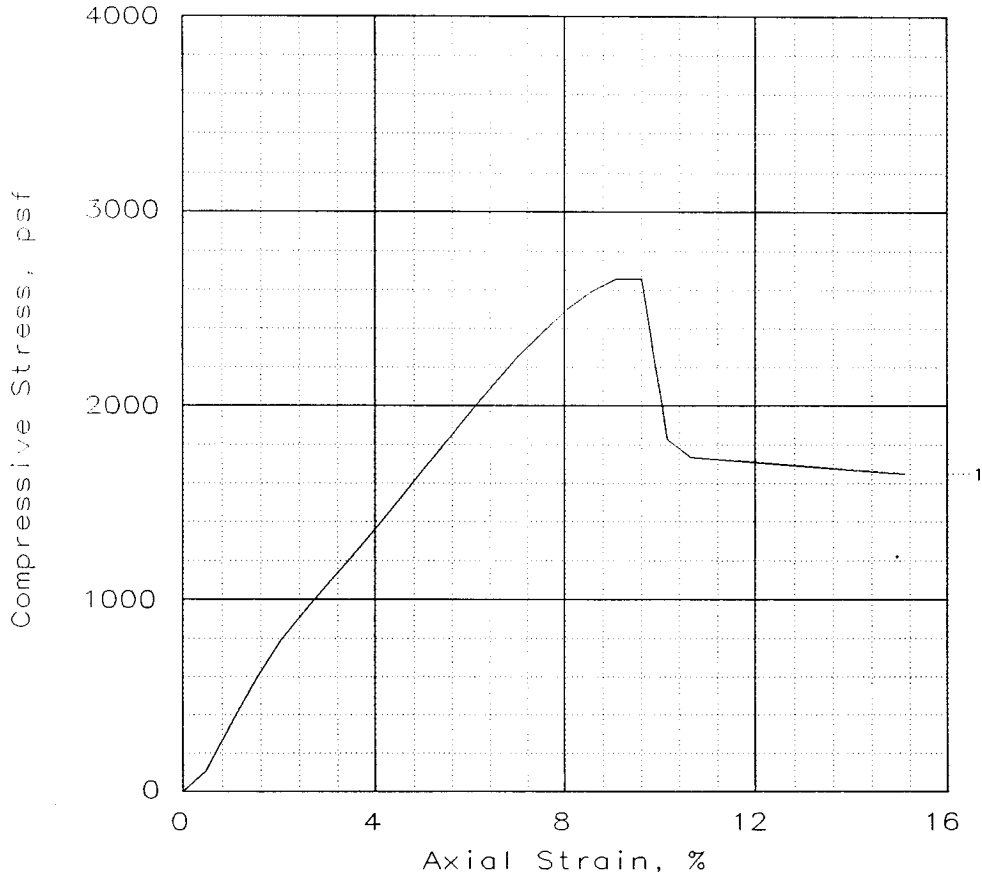
Location: Boring 13,  
Sample 26-B, Depth 87.1', Elev -91.25

UNCONFINED COMPRESSION TEST

**Eustis Engineering Company, Inc.**

Fig. No.: \_\_\_\_\_

## UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	2655			
Undrained shear strength, psf	1327			
Failure strain, %	9.1			
Strain rate, in/min	0.0576			
Water content, %	40.7			
Wet density, pcf	109.9			
Dry density, pcf	78.1			
Saturation, %	93.6			
Void ratio	1.1904			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: St Gr CH4 w/ Ins SM, SL

GS= 2.74

Type: Undisturbed

Project No.: 19080

Date: 10/18/05

Remarks:

Torvane = 0.625 tsf

Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls  
at the 17th Street Canal

Location: Boring 13,  
Sample 27-B, Depth 91.1', Elev -95.25

UNCONFINED COMPRESSION TEST

**Eustis Engineering Company, Inc.**

Fig. No.: \_\_\_\_\_