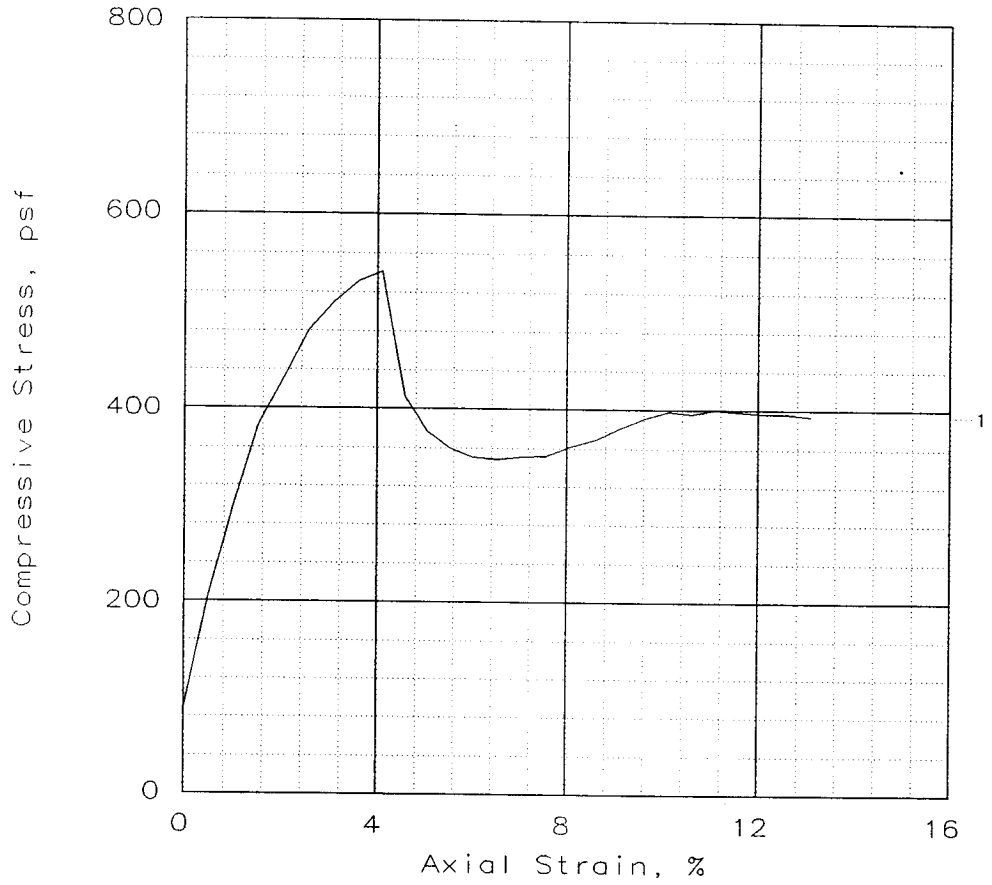
UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	541			
Undrained shear strength, psf	271			
Failure strain, %	4.1			
Strain rate, in/min	0.0001			
Water content, %	35.0			
Wet density, pcf	112.1			
Dry density, pcf	83.0			
Saturation, %	90.4			
Void ratio	1.0605			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M Gr & T CH3 w/ Ins & lys SM

GS= 2.74 | Type: Undisturbed

Project No.: 19080
Date: 10/8/05

Remarks:
Torvane = 0.380 tsf

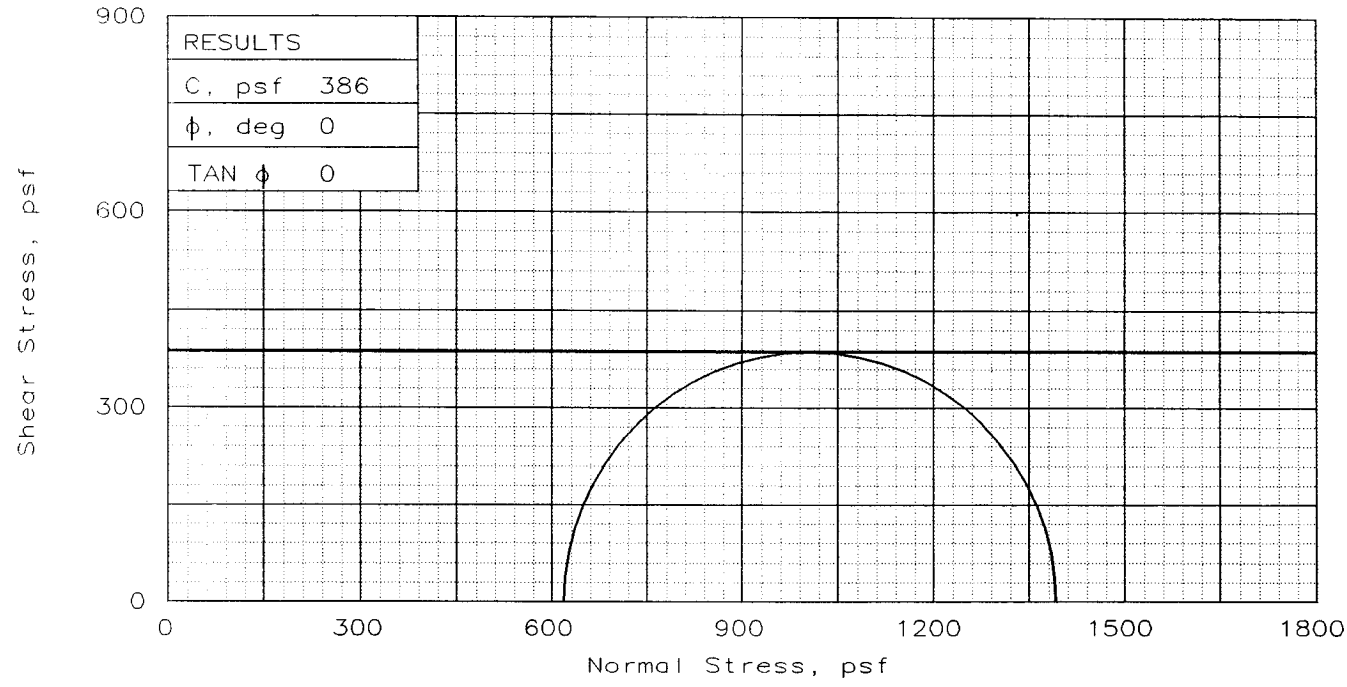
Fig. No.: ———

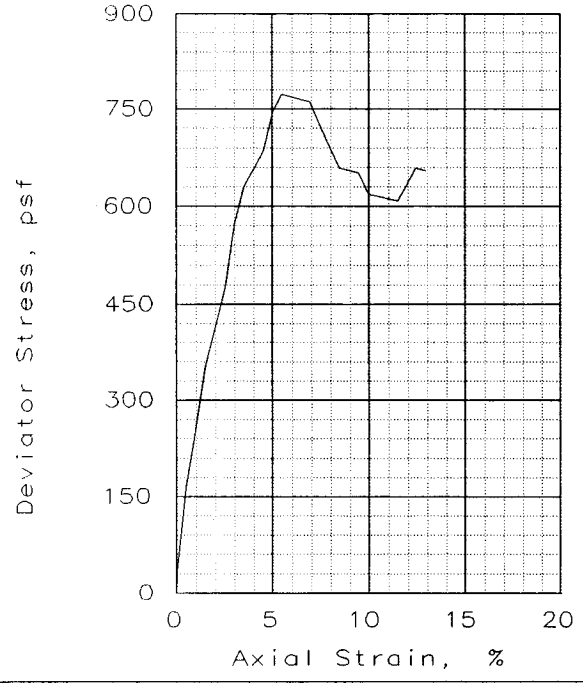
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 3, Depth 2.8', Elev -3.5

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	46.2
	DRY DENSITY, pcf	68.5
	SATURATION, %	85.2
	VOID RATIO	1.462
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	54.3
	DRY DENSITY, pcf	68.4
	SATURATION, %	100.0
	VOID RATIO	1.466
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0564
BACK PRESSURE, psf		0
CELL PRESSURE, psf		619
FAIL. STRESS, psf		773
ULT. STRESS, psf		655
σ_1 FAILURE, psf		1392
σ_3 FAILURE, psf		619

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: So Gr & dGr CH3
w/ SIF
LL= 57 PL= 22 PI= 35
SPECIFIC GRAVITY= 2.7
REMARKS: Torvane = 0.200 tsf

Fig. No.: _____

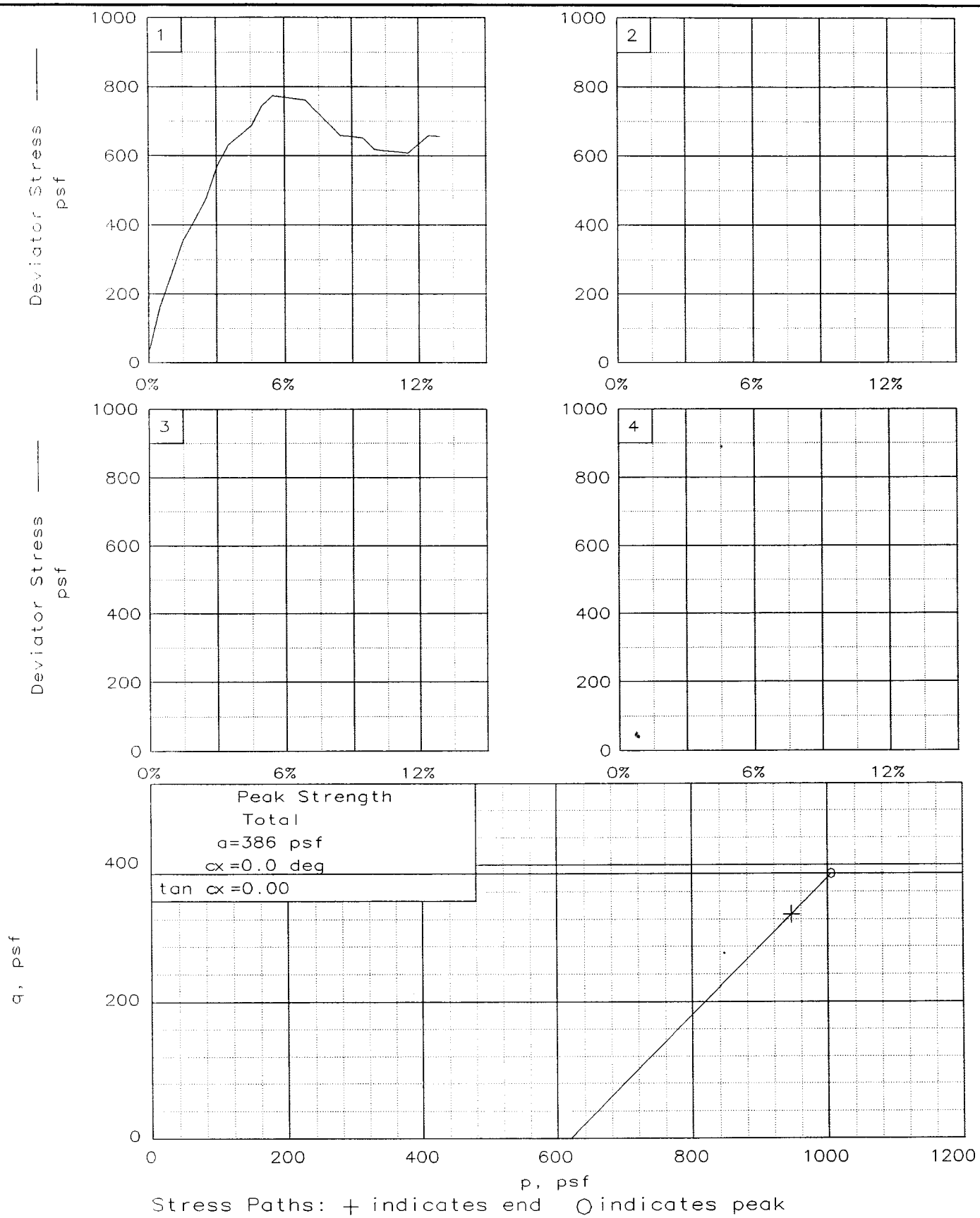
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 11,
Sample 4, Depth 5.3', Elev 1.0

PROJ. NO.: 19080 DATE: 10/8/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



Stress Paths: + indicates end ○ indicates peak

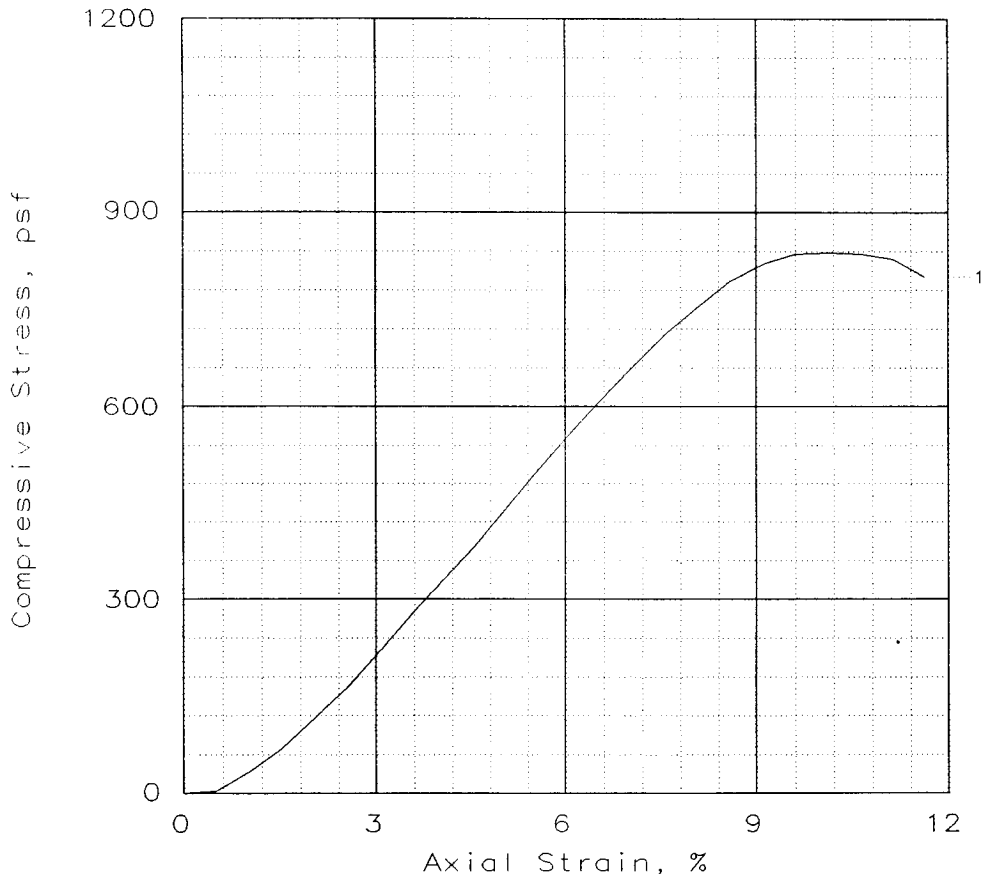
Client: U.S. Army Corps of Engineers

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

Location: Boring 11, Sample 4, Depth 5.3', Elev 1.0

File: UU-25085 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	837			
Undrained shear strength, psf	419			
Failure strain, %	10.1			
Strain rate, in/min	0.0581			
Water content, %	36.7			
Wet density, pcf	109.3			
Dry density, pcf	80.0			
Saturation, %	89.5			
Void ratio	1.1078			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M Gr CL6 w/ SIF

			GS= 2.7	Type: Undisturbed

Project No.: 19080
Date: 10/8/05
Remarks:
Torvane = 0.250 tsf

Fig. No.: ———

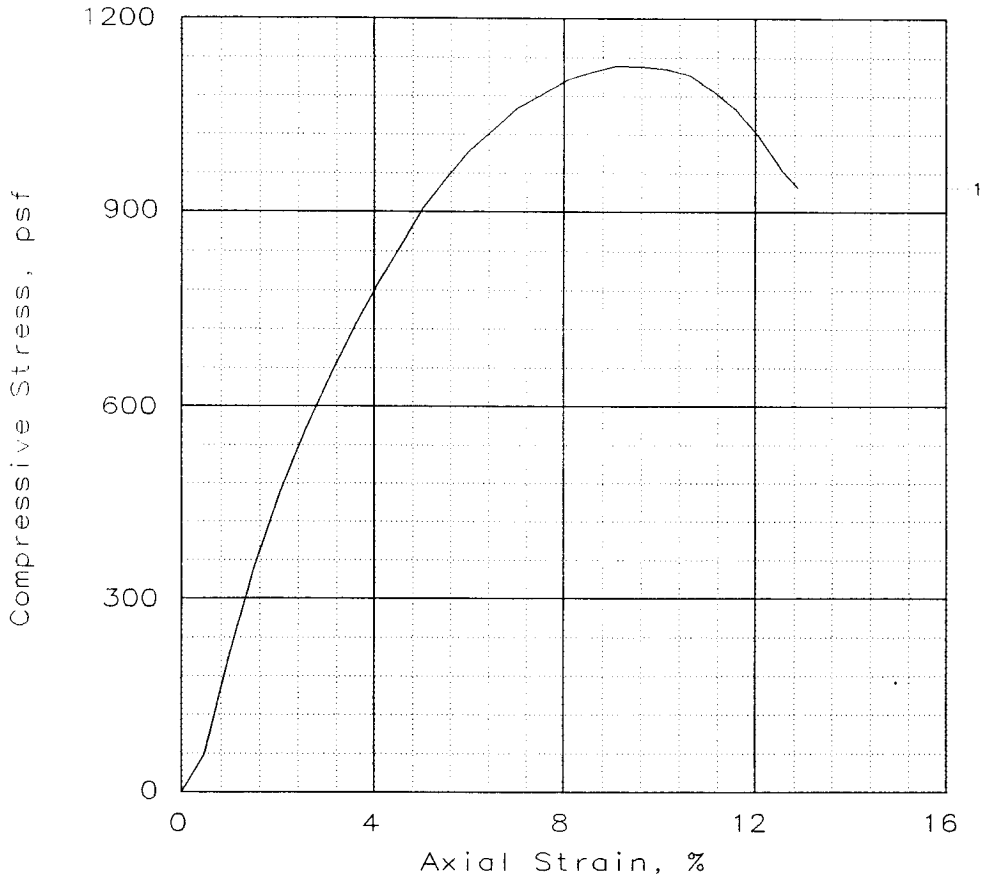
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 5, Depth 7.8', Elev -1.5

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1127			
Undrained shear strength, psf	564			
Failure strain, %	9.1			
Strain rate, in/min	0.0580			
Water content, %	70.5			
Wet density, pcf	95.5			
Dry density, pcf	56.0			
Saturation, %	94.7			
Void ratio	2.0092			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M dGr CHOA w/ Ins SM, wd

			GS= 2.7	Type: Undisturbed

Project No.: 19080
Date: 10/8/05
Remarks:
Torvane = 0.300 tsf

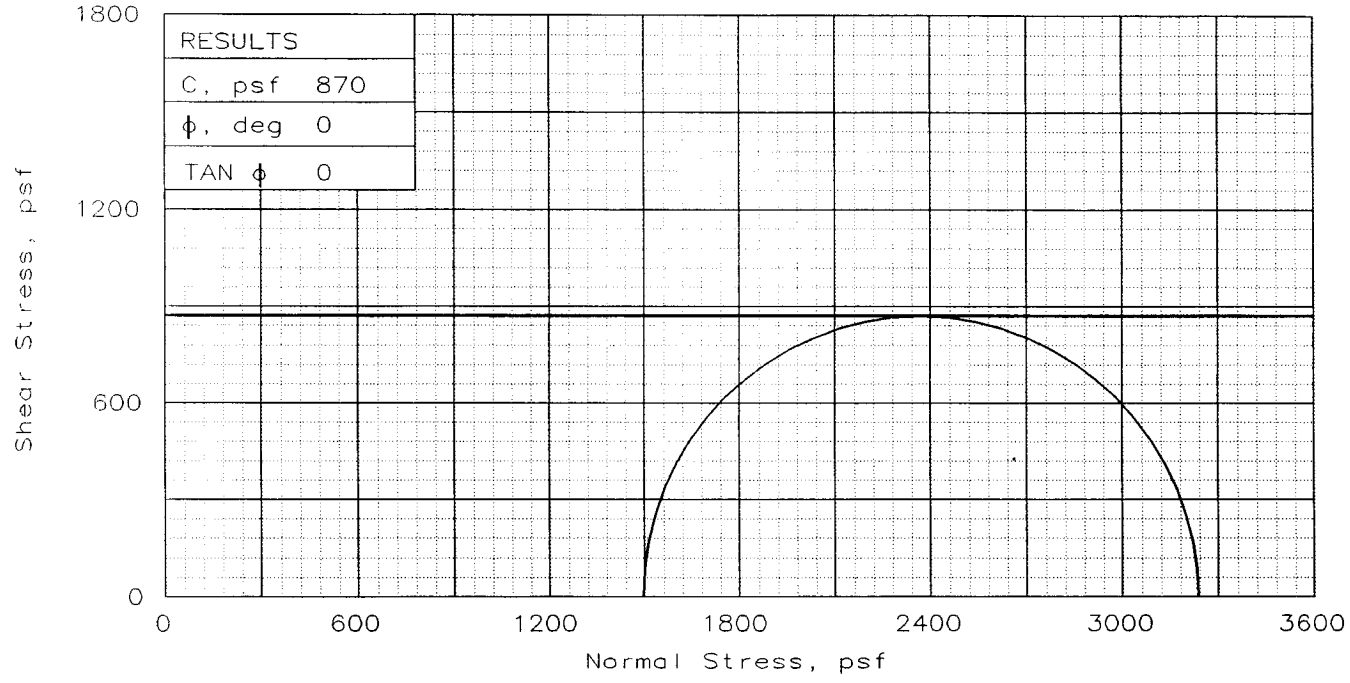
Fig. No.: ———

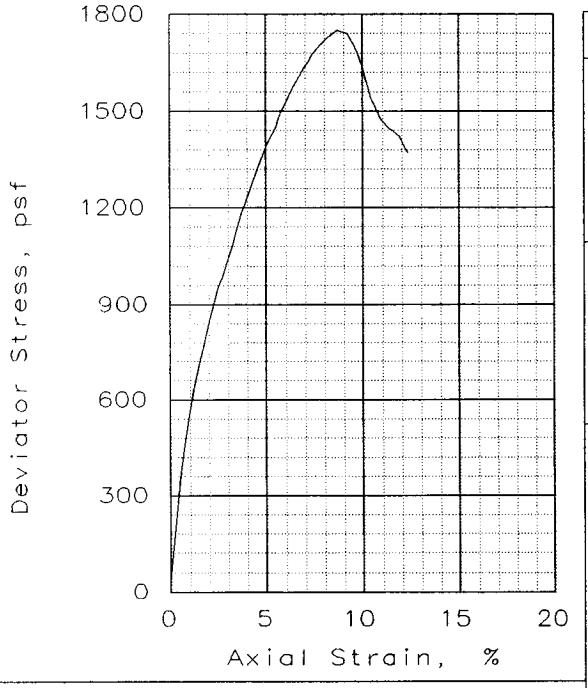
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 11, Depth 20.8', Elev -14.5

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	91.7
	DRY DENSITY, pcf	45.9
	SATURATION, %	92.8
	VOID RATIO	2.669
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	99.7
	DRY DENSITY, pcf	45.7
	SATURATION, %	100.0
	VOID RATIO	2.691
	DIAMETER, in	1.39
	HEIGHT, in	2.94
Strain rate, in/min		0.0288
BACK PRESSURE, psf		0
CELL PRESSURE, psf		1498
FAIL. STRESS, psf		1740
ULT. STRESS, psf		1371
σ_1 FAILURE, psf		3238
σ_3 FAILURE, psf		1498

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: M dGr & Gr CHOA w/ lys ML
LL= 127 PL= 42 PI= 85
SPECIFIC GRAVITY= 2.7
REMARKS: Torvane = 0.370 tsf

Fig. No.: _____

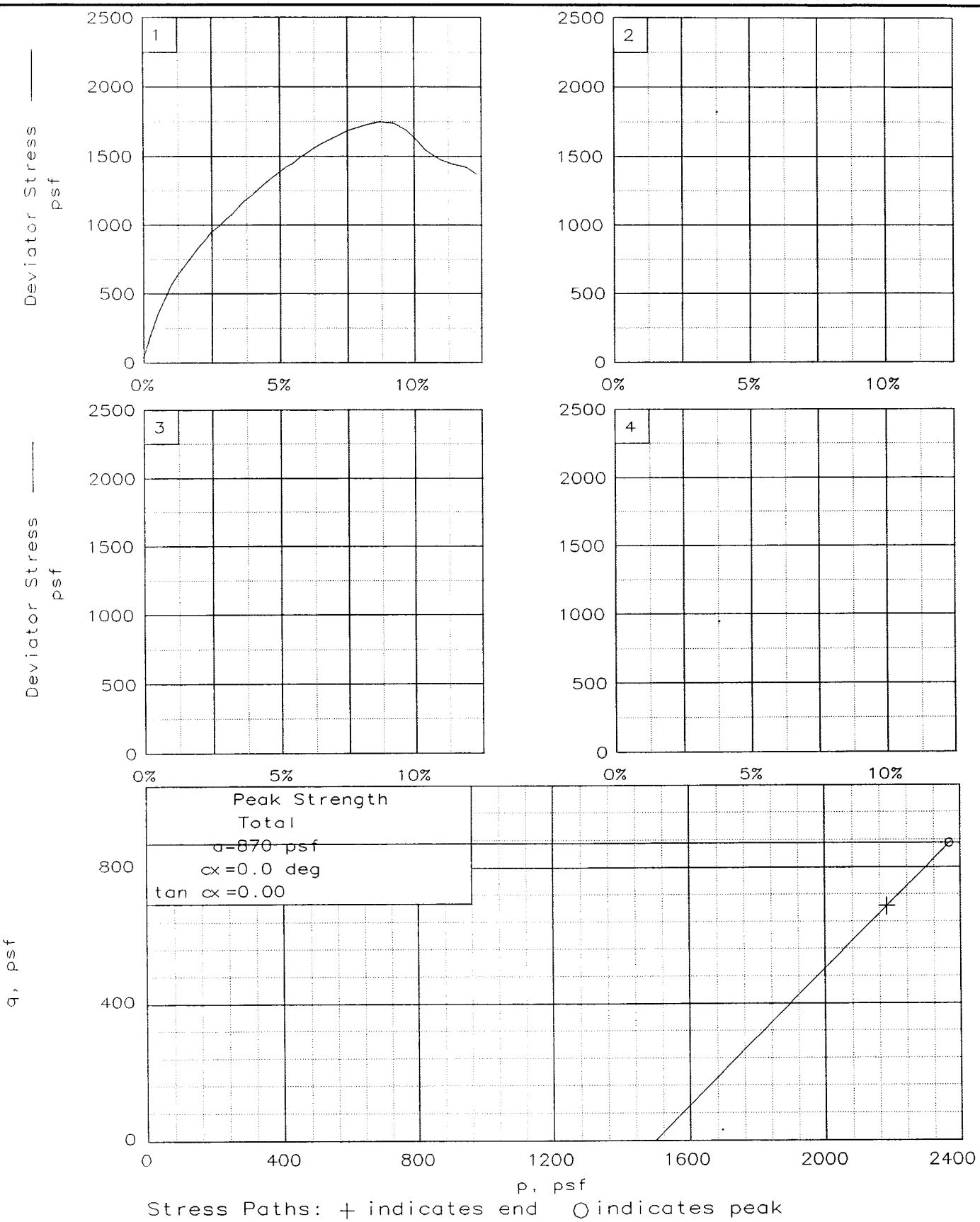
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls at the 17th Street Canal
SAMPLE LOCATION: Boring 11, Sample 12, Depth 22.8', Elev -16.5

PROJ. NO.: 19080 DATE: 10/8/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



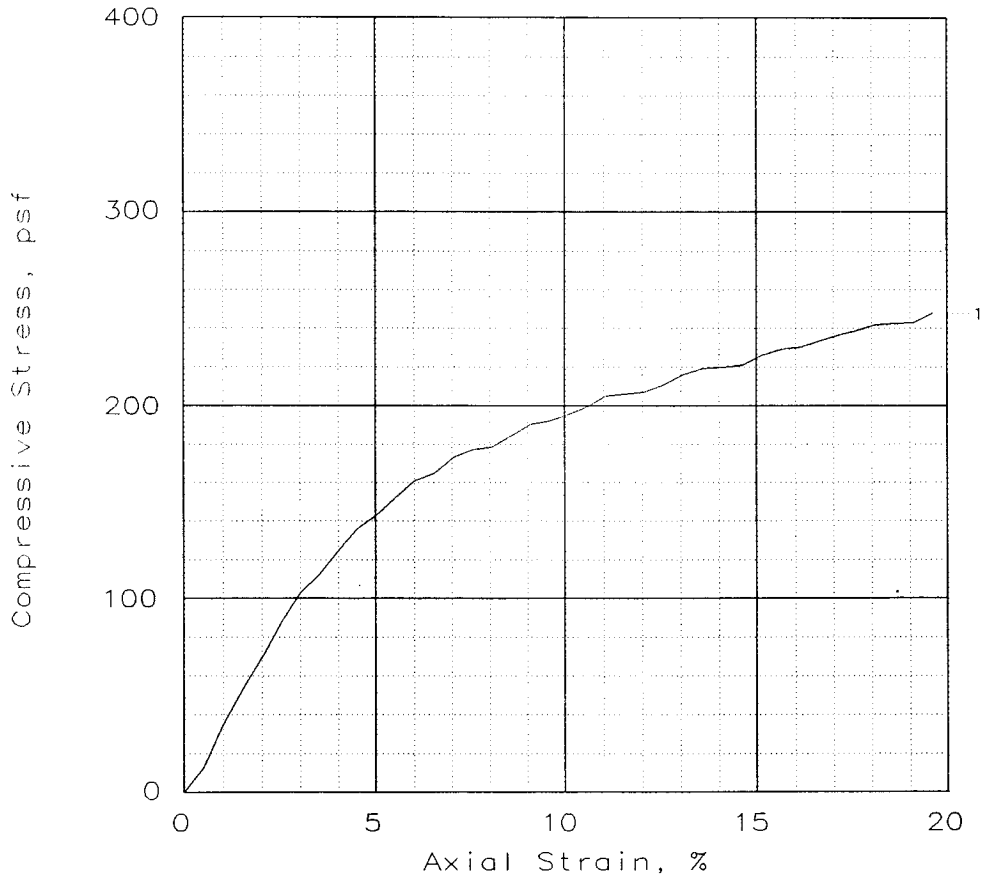
Client: U.S. Army Corps of Engineers

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

Location: Boring 11, Sample 12, Depth 22.8', Elev -16.5

File: UU-25086 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	248			
Undrained shear strength, psf	124			
Failure strain, %	19.6			
Strain rate, in/min	0.0578			
Water content, %	42.6			
Wet density, pcf	106.2			
Dry density, pcf	74.4			
Saturation, %	91.8			
Void ratio	1.2393			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: vSo Gr CL4 w/ lys SM & CH

GS= 2.67 | Type: Undisturbed

Project No.: 19080
Date: 10/8/05
Remarks:
Torvane = 0.130 tsf

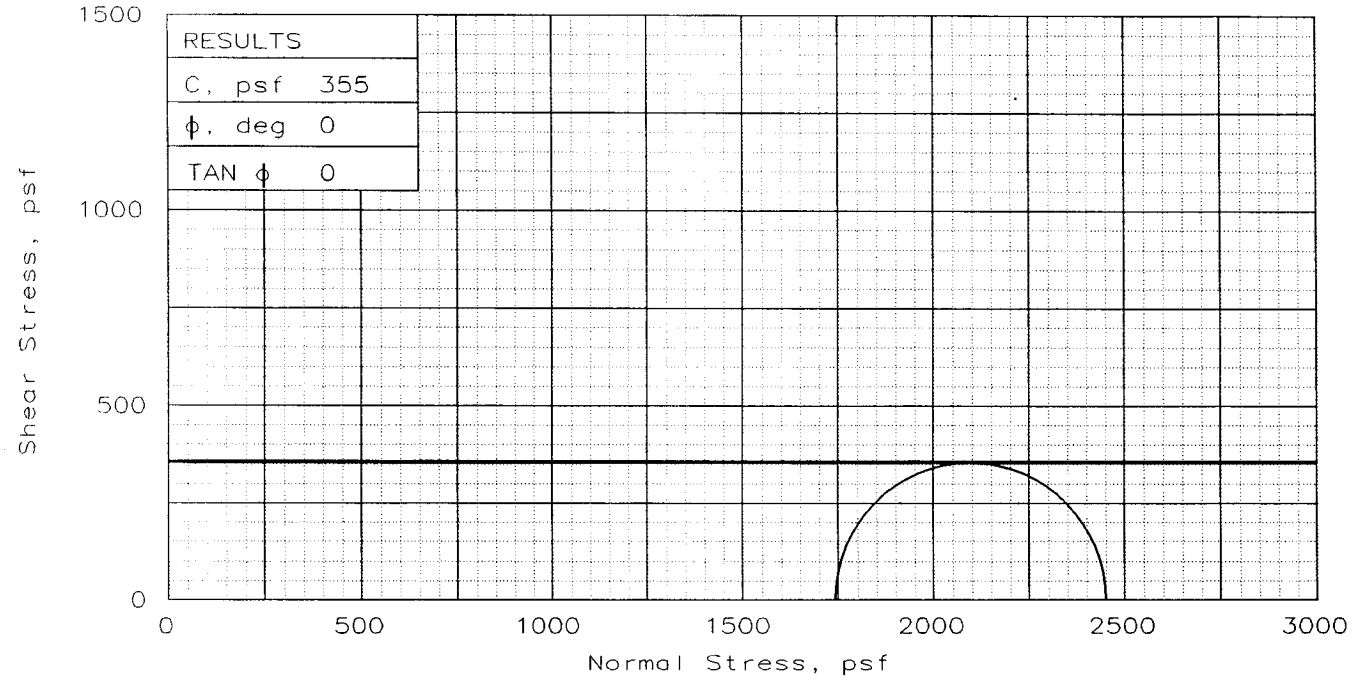
Fig. No.: ———

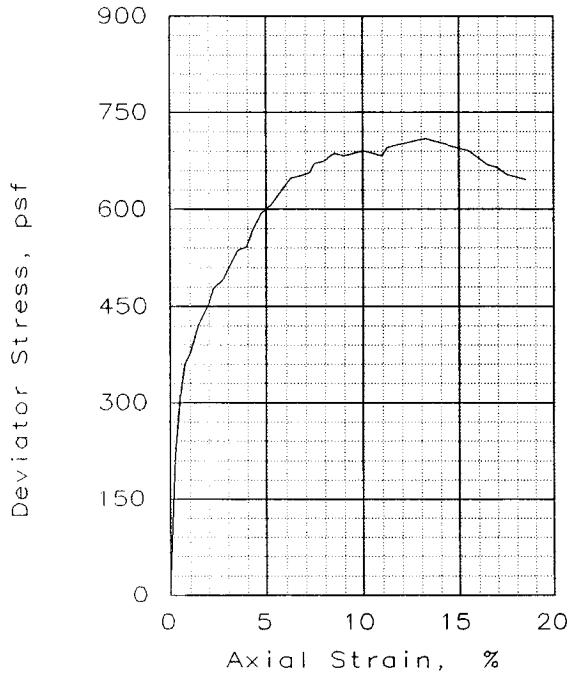
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 13, Depth 25.3', Elev -19.0

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	37.1
	DRY DENSITY, pcf	81.1
	SATURATION, %	92.9
	VOID RATIO	1.077
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	40.1
	DRY DENSITY, pcf	81.0
	SATURATION, %	100.0
	VOID RATIO	1.082
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0290
BACK PRESSURE, psf		0
CELL PRESSURE, psf		1742
FAIL. STRESS, psf		709
ULT. STRESS, psf		646
σ_1 FAILURE, psf		2452
σ_3 FAILURE, psf		1742

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: So Gr CL4
w/ Ins CH
LL= 29 PL= 18 PI= 11
SPECIFIC GRAVITY= 2.7
REMARKS: Torvane = 0.200 tsf

Fig. No.: _____

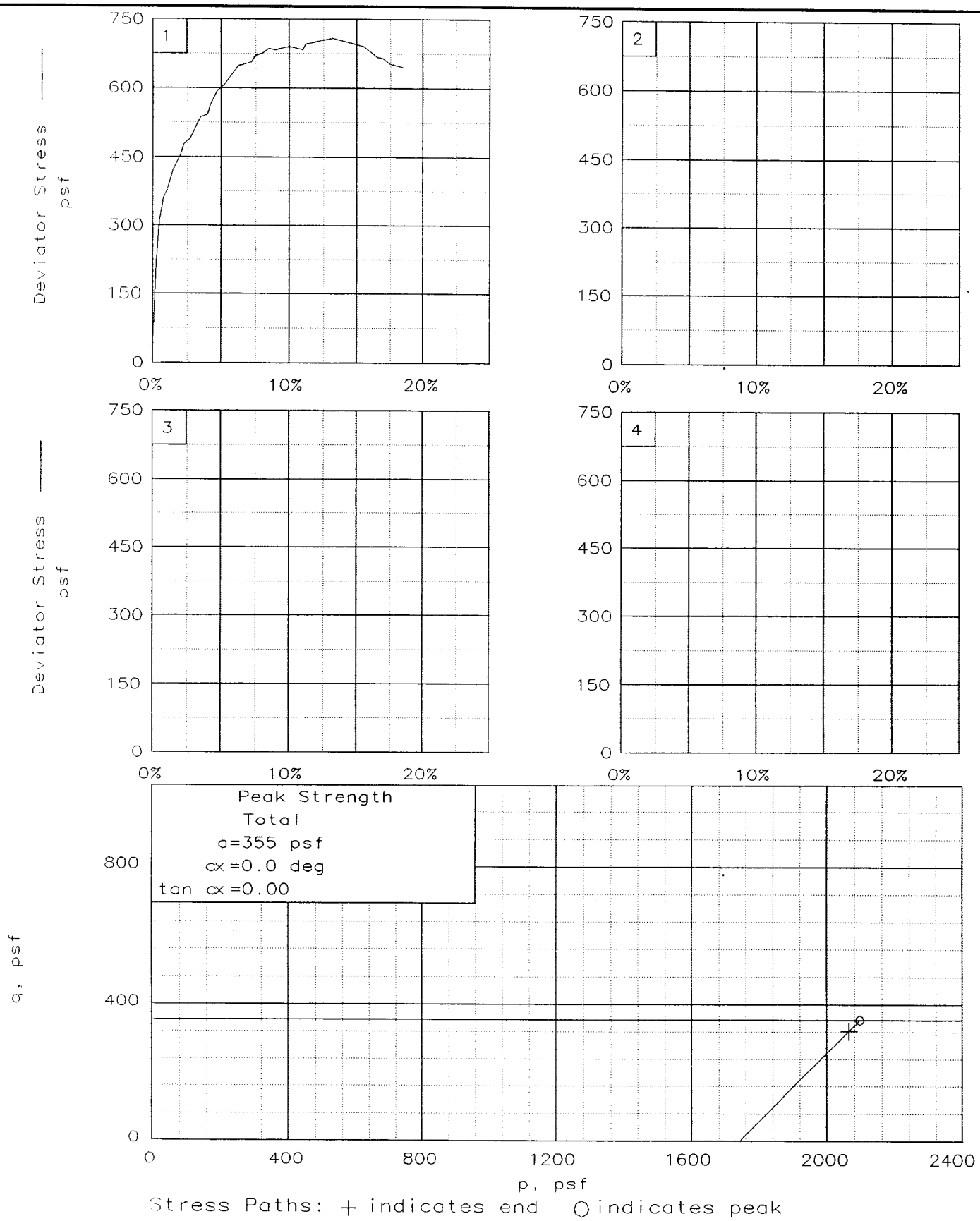
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 11,
Sample 14, Depth 27.8', Elev -21.2

PROJ. NO.: 19080 DATE: 10/8/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



Stress Paths: + indicates end ○ indicates peak

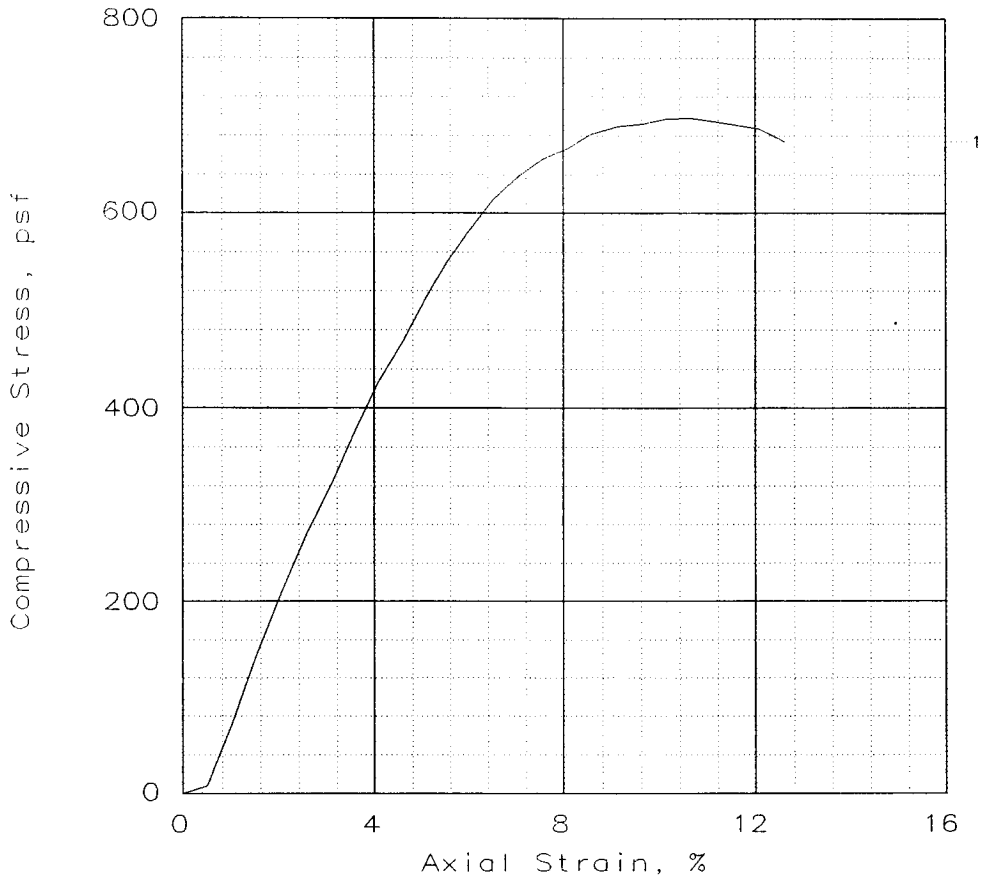
Client: U.S. Army Corps of Engineers

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

Location: Boring 11, Sample 14, Depth 27.8', Elev -21.2

File: UU-25087 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	698			
Undrained shear strength, psf	349			
Failure strain, %	10.1			
Strain rate, in/min	0.0593			
Water content, %	45.1			
Wet density, pcf	107.1			
Dry density, pcf	73.8			
Saturation, %	93.7			
Void ratio	1.3168			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: So Gr CH3 w/ lys & lns ML

			GS= 2.74	Type: Undisturbed

Project No.: 19080
Date: 10/8/05
Remarks:
Torvane = 0.200 tsf

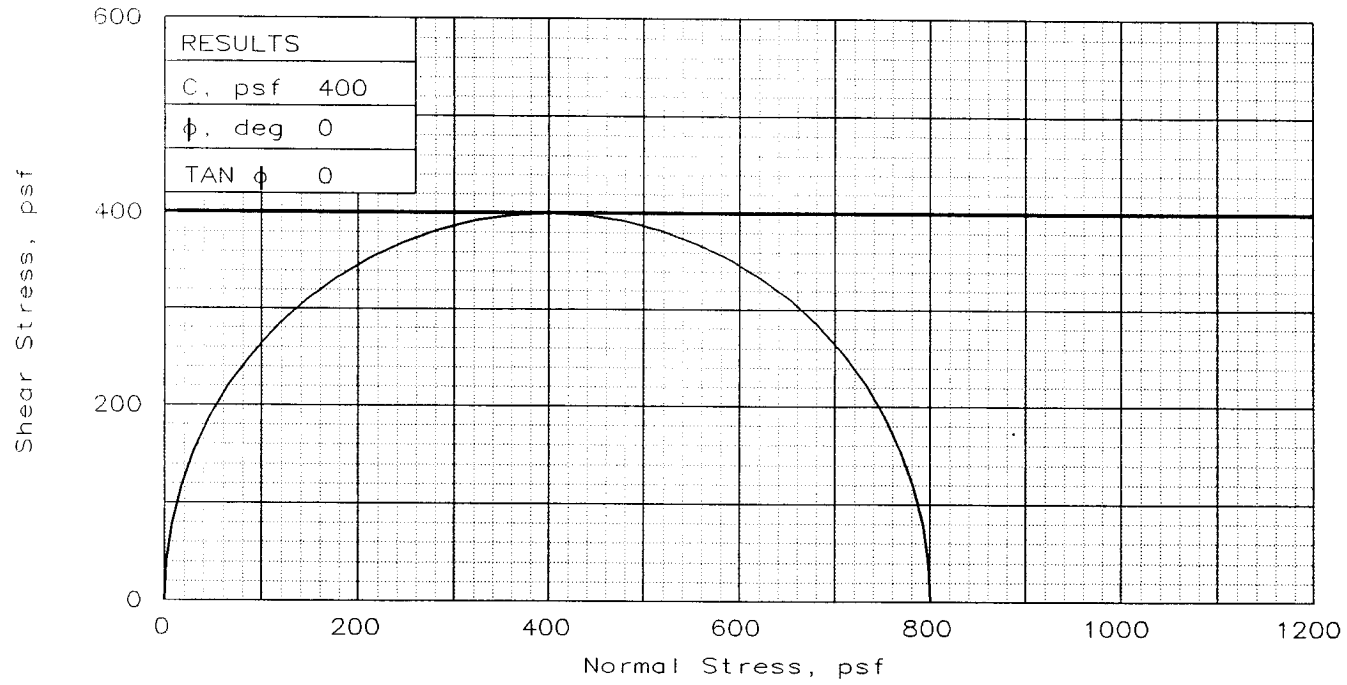
Fig. No.: ———

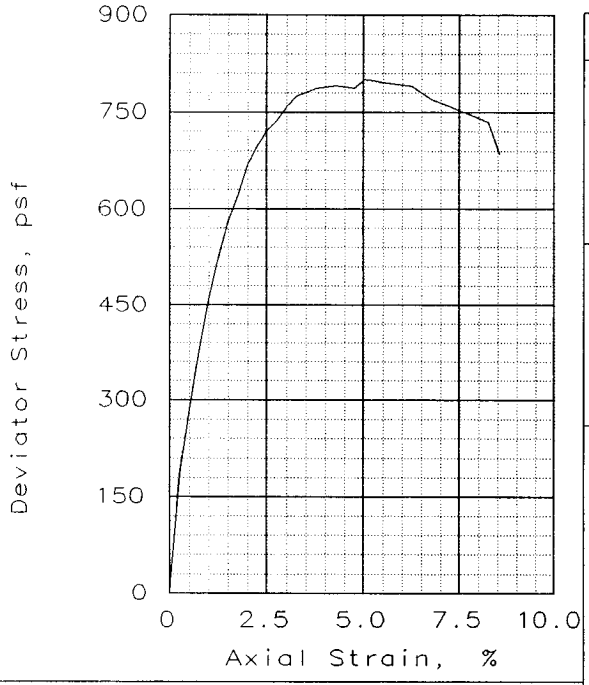
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 15, Depth 30.3', Elev -24.0

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	69.3
	DRY DENSITY, pcf	57.4
	SATURATION, %	95.8
	VOID RATIO	1.983
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	72.6
	DRY DENSITY, pcf	57.2
	SATURATION, %	100.0
	VOID RATIO	1.990
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0285
BACK PRESSURE, psf		0
CELL PRESSURE, psf		0
FAIL. STRESS, psf		801
ULT. STRESS, psf		686
σ_1 FAILURE, psf		801
σ_3 FAILURE, psf		0

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: M Gr CH4
w/ SL
LL= 90 PL= 25 PI= 65
SPECIFIC GRAVITY= 2.74
REMARKS: Torvane = 0.250 tsf

Fig. No.: _____

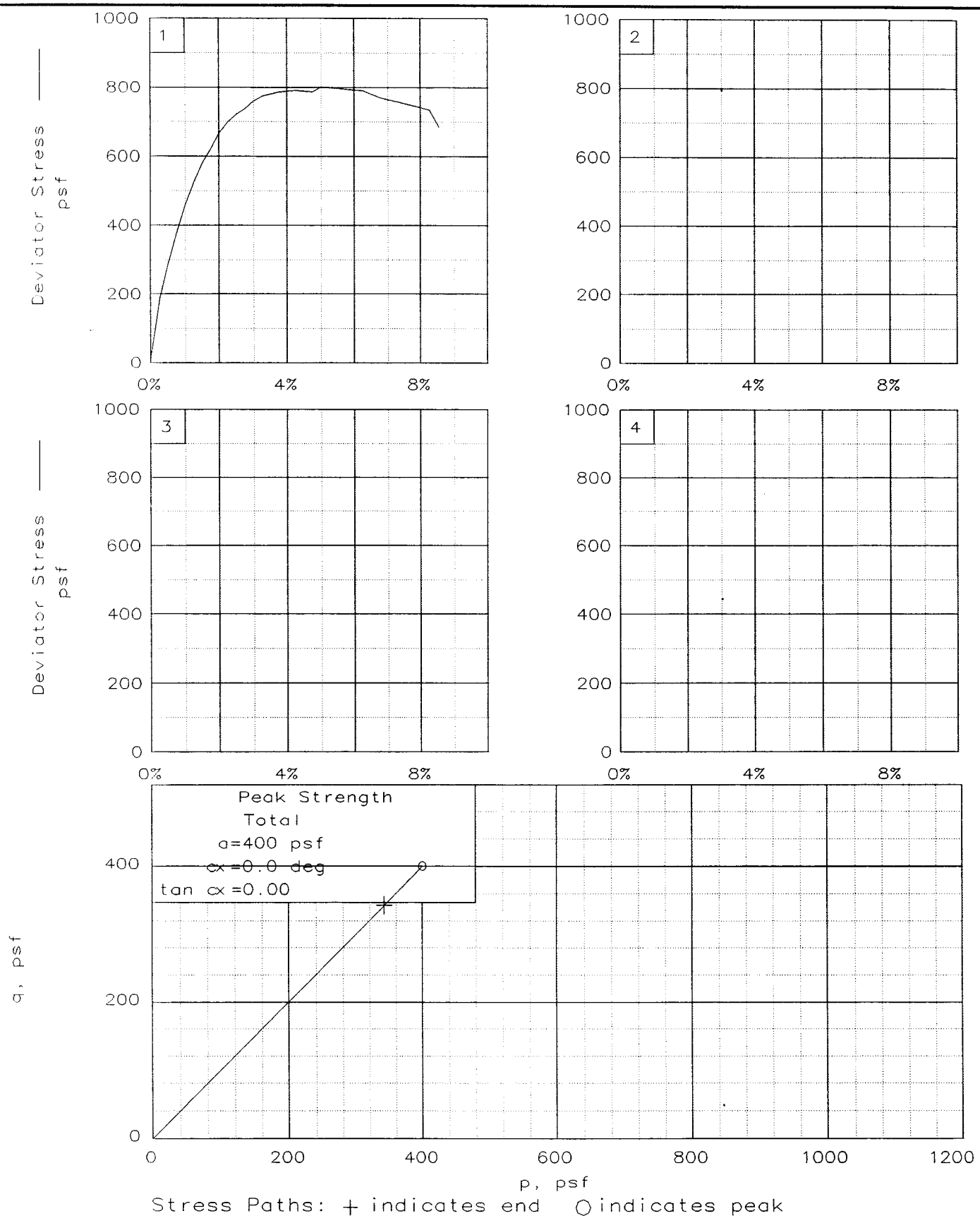
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 11,
Sample 16, Depth 32.8', Elev -26.5

PROJ. NO.: 19080 DATE: 10/8/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



Stress Paths: + indicates end ○ indicates peak

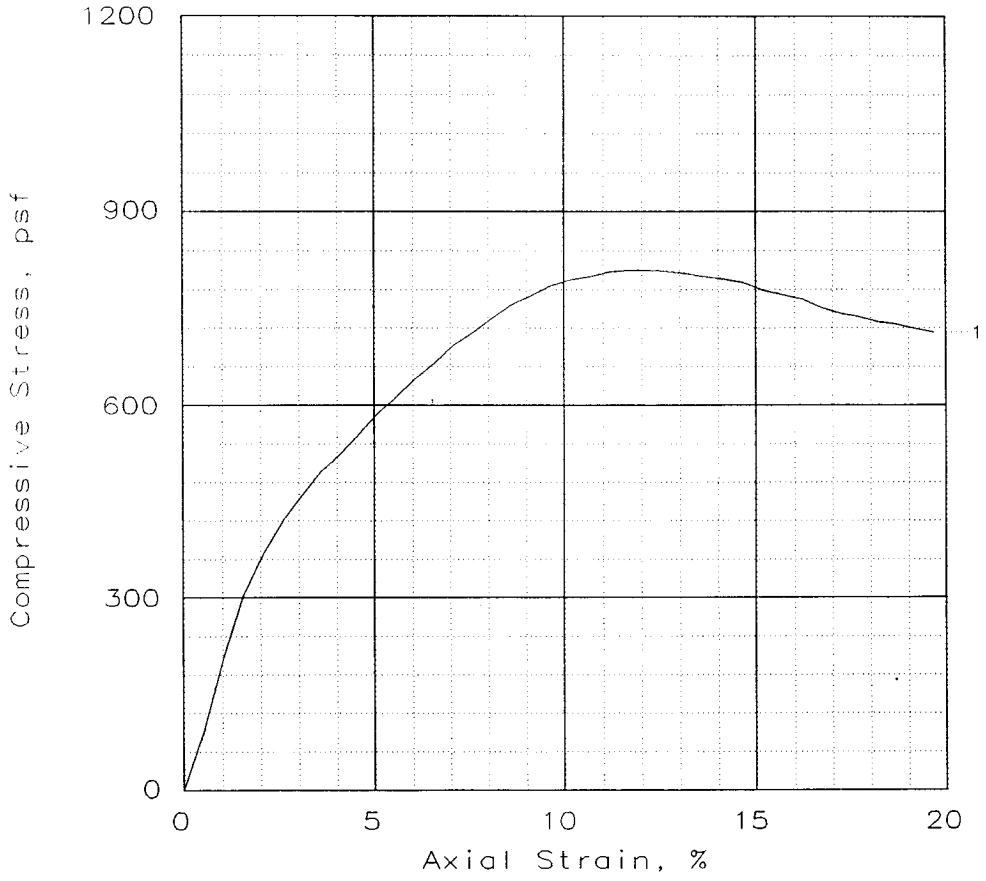
Client: U.S. Army Corps of Engineers

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

Location: Boring 11, Sample 16, Depth 32.8', Elev -26.5

File: UU-25088 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	810			
Undrained shear strength, psf	405			
Failure strain, %	11.6			
Strain rate, in/min	0.0586			
Water content, %	63.5			
Wet density, pcf	98.7			
Dry density, pcf	60.4			
Saturation, %	94.9			
Void ratio	1.8343			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M Gr CH4 w/ Ins ML, SL

GS= 2.74 | Type: Undisturbed

Project No.: 19080
Date: 10/8/05
Remarks:
Torvane = 0.230 tsf

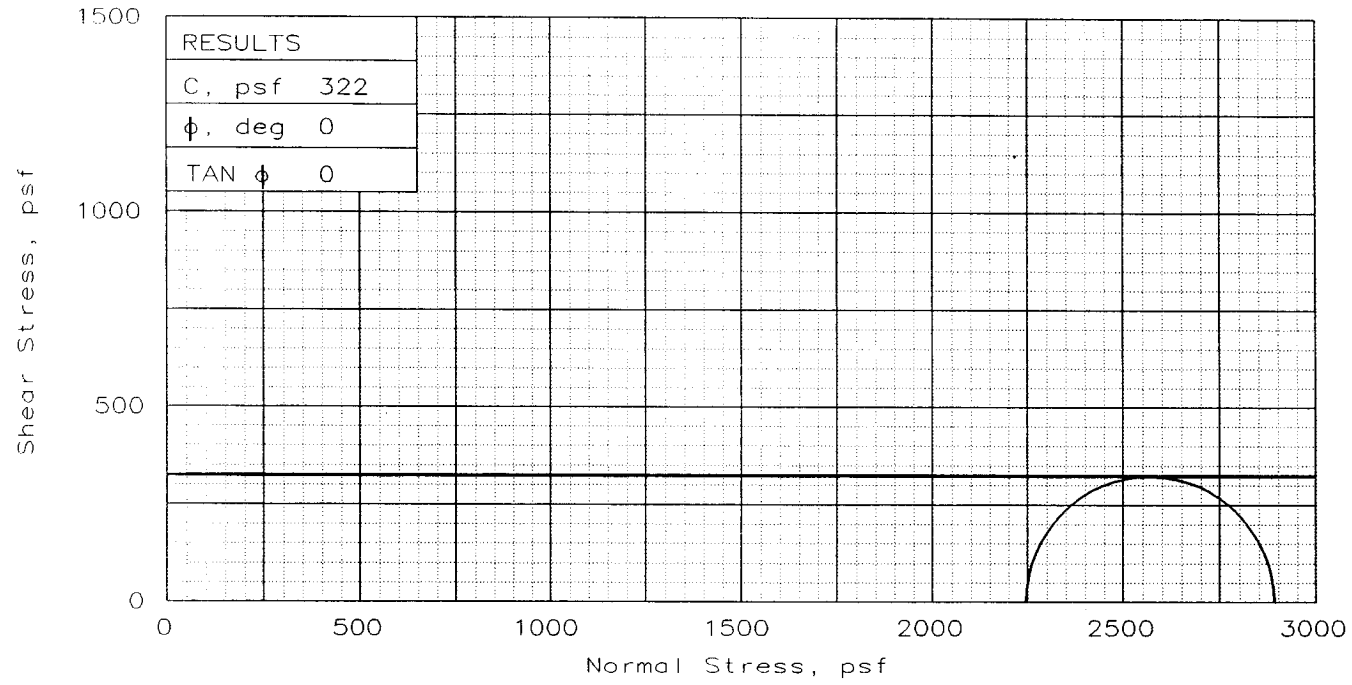
Fig. No.: ———

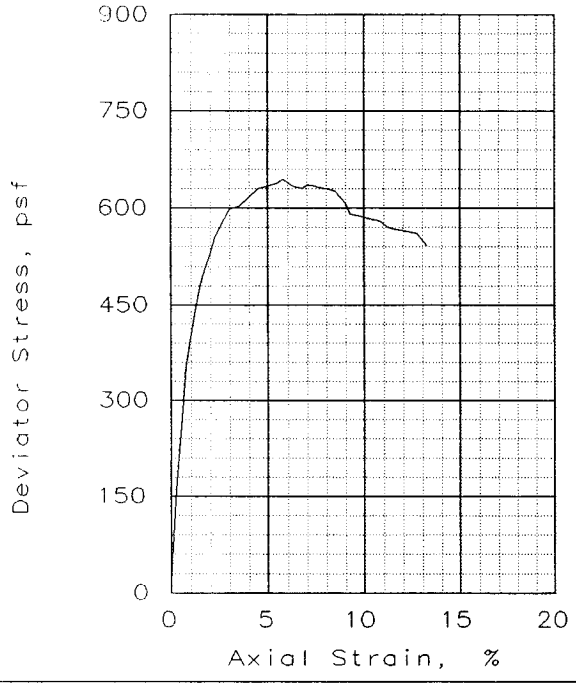
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 17, Depth 35.3', Elev -29.0

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	73.3
	DRY DENSITY, pcf	55.0
	SATURATION, %	95.4
	VOID RATIO	2.108
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	76.8
	DRY DENSITY, pcf	55.1
	SATURATION, %	100.0
	VOID RATIO	2.103
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0288
BACK PRESSURE, psf		0
CELL PRESSURE, psf		2246
FAIL. STRESS, psf		645
ULT. STRESS, psf		542
σ_1 FAILURE, psf		2891
σ_3 FAILURE, psf		2246

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: So Gr CH4
w/ Ins ML, SL
LL= 93 PL= 29 PI= 64
SPECIFIC GRAVITY= 2.74
REMARKS: Torvane = 0.200 tsf

Fig. No.: _____

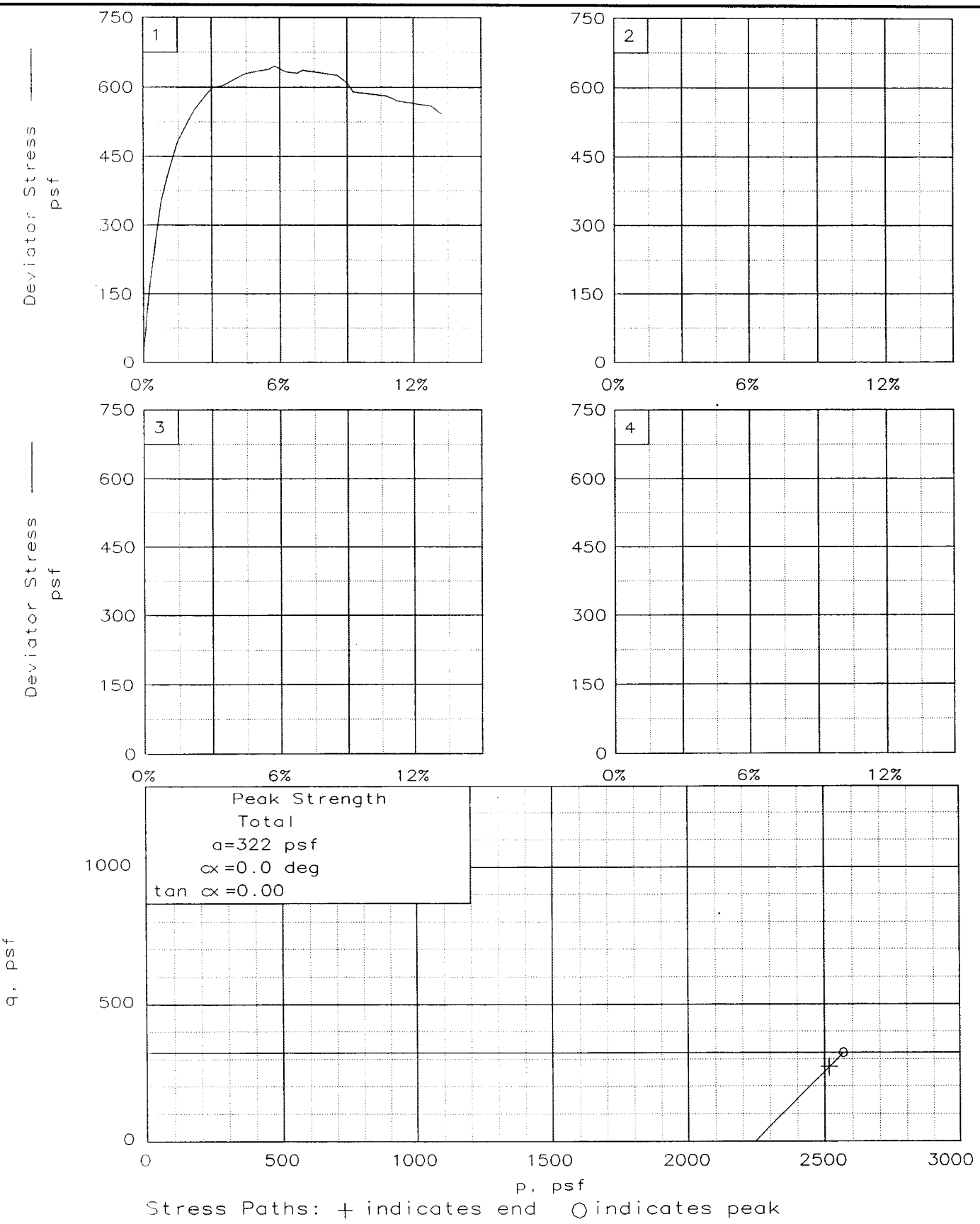
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 11,
Sample 18, Depth 37.8', Elev -31.5

PROJ. NO.: 19080 DATE: 10/8/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



Stress Paths: + indicates end ○ indicates peak

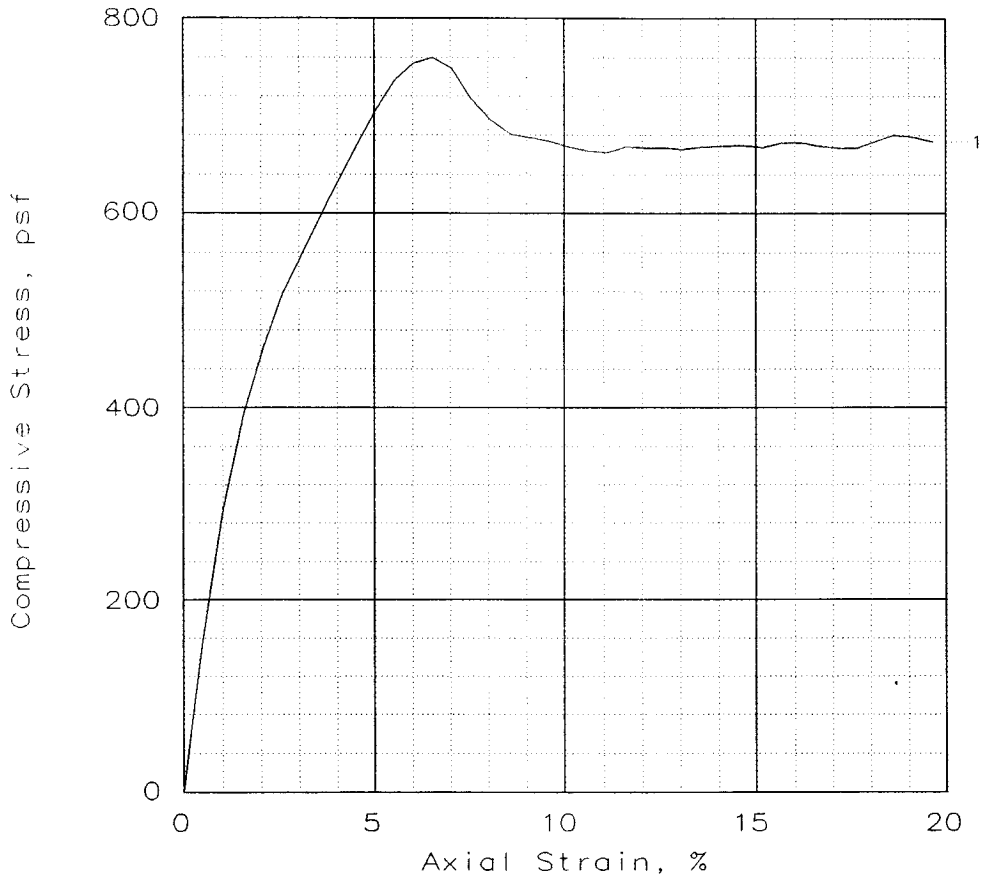
Client: U.S. Army Corps of Engineers

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

Location: Boring 11, Sample 18, Depth 37.8', Elev -31.5

File: UU-25089 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	760			
Undrained shear strength, psf	380			
Failure strain, %	6.5			
Strain rate, in/min	0.0584			
Water content, %	74.8			
Wet density, pcf	95.3			
Dry density, pcf	54.5			
Saturation, %	95.8			
Void ratio	2.1374			
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: 10/8/05
Remarks:
Torvane = 0.270 tsf

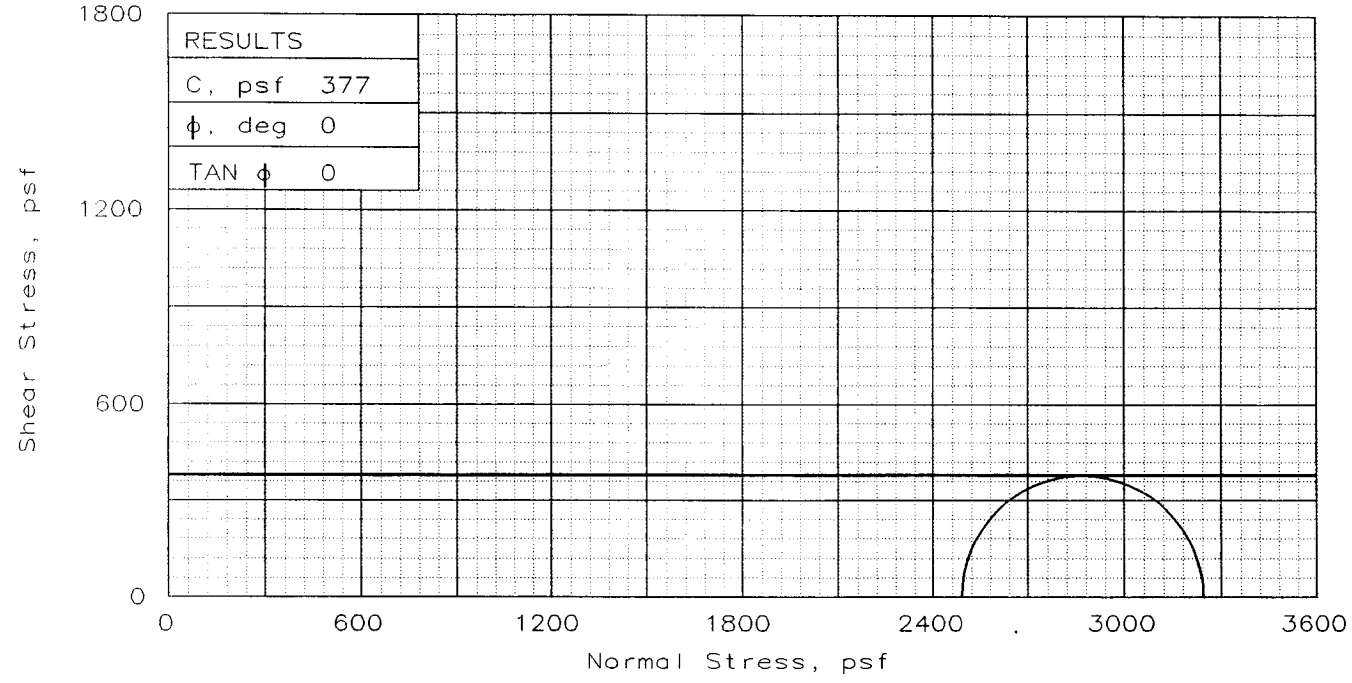
Fig. No.: ———

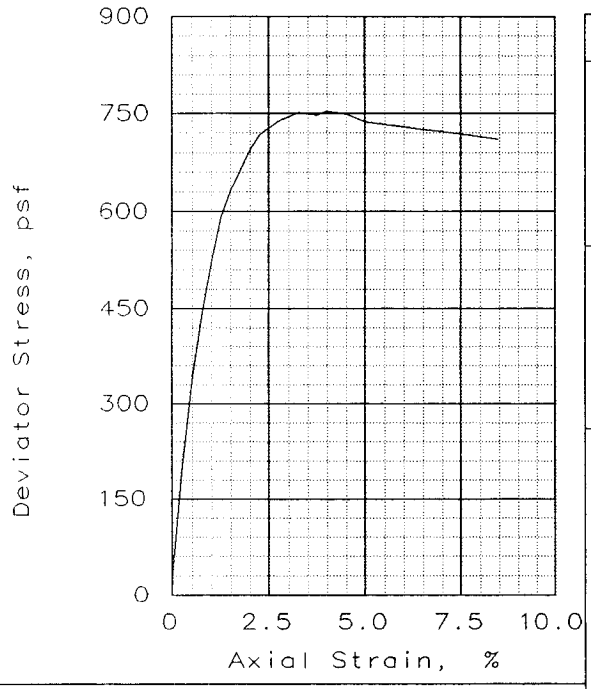
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 19, Depth 40.3', Elev -34.0

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	71.8
	DRY DENSITY, pcf	55.8
	SATURATION, %	95.8
	VOID RATIO	2.041
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	75.1
	DRY DENSITY, pcf	55.8
	SATURATION, %	100.0
	VOID RATIO	2.044
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0287
BACK PRESSURE, psf		0
CELL PRESSURE, psf		2491
FAIL. STRESS, psf		753
ULT. STRESS, psf		710
σ_1 FAILURE, psf		3244
σ_3 FAILURE, psf		2491

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: M Gr CH4
w/ Ins SP, SL, SIF
LL= 92 PL= 27 PI= 65
SPECIFIC GRAVITY= 2.72
REMARKS: Torvane = 0.250 tsf

Fig. No.: _____

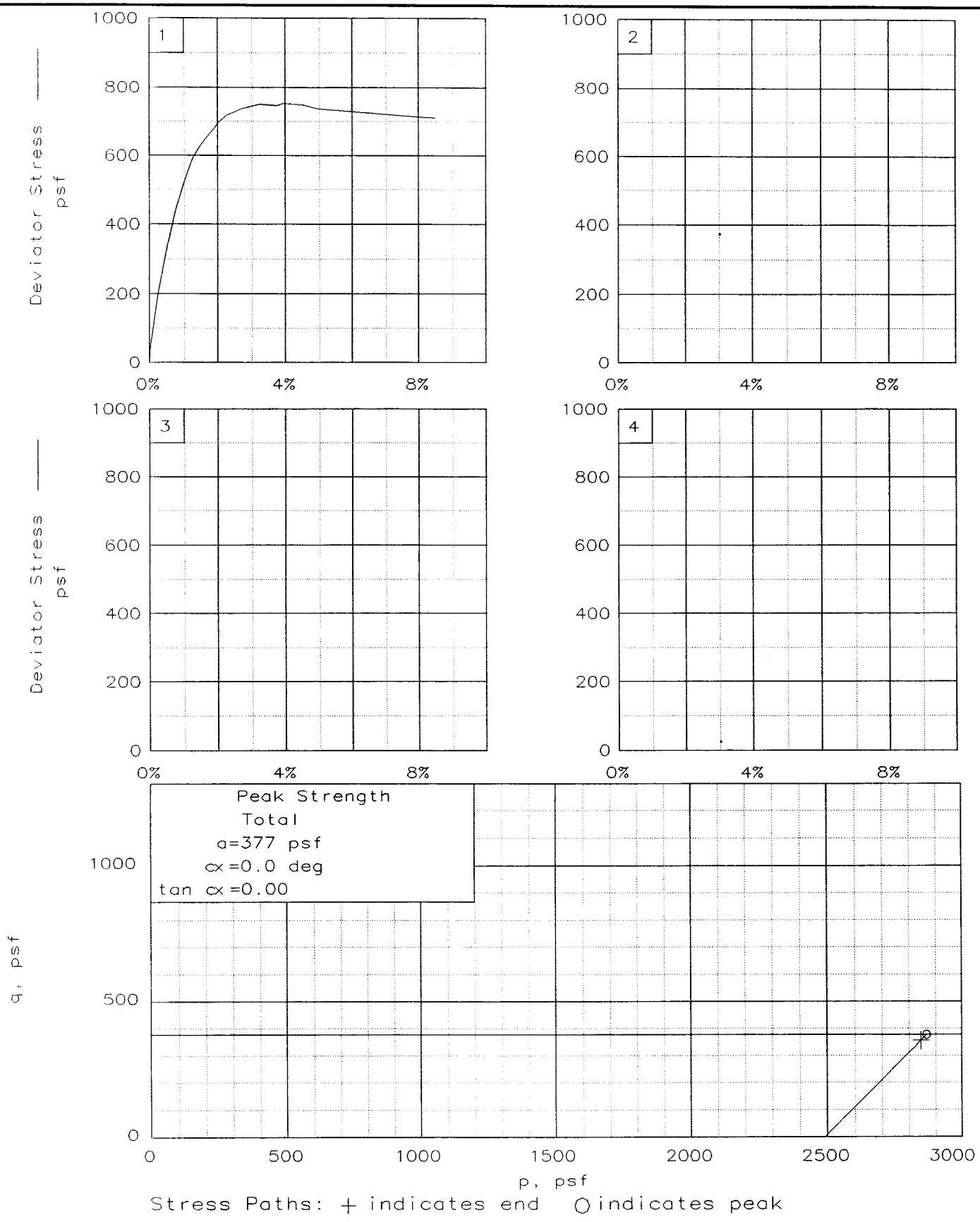
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 11,
Sample 20, Depth 42.8', Elev -36.5

PROJ. NO.: 19080 DATE: 10/8/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



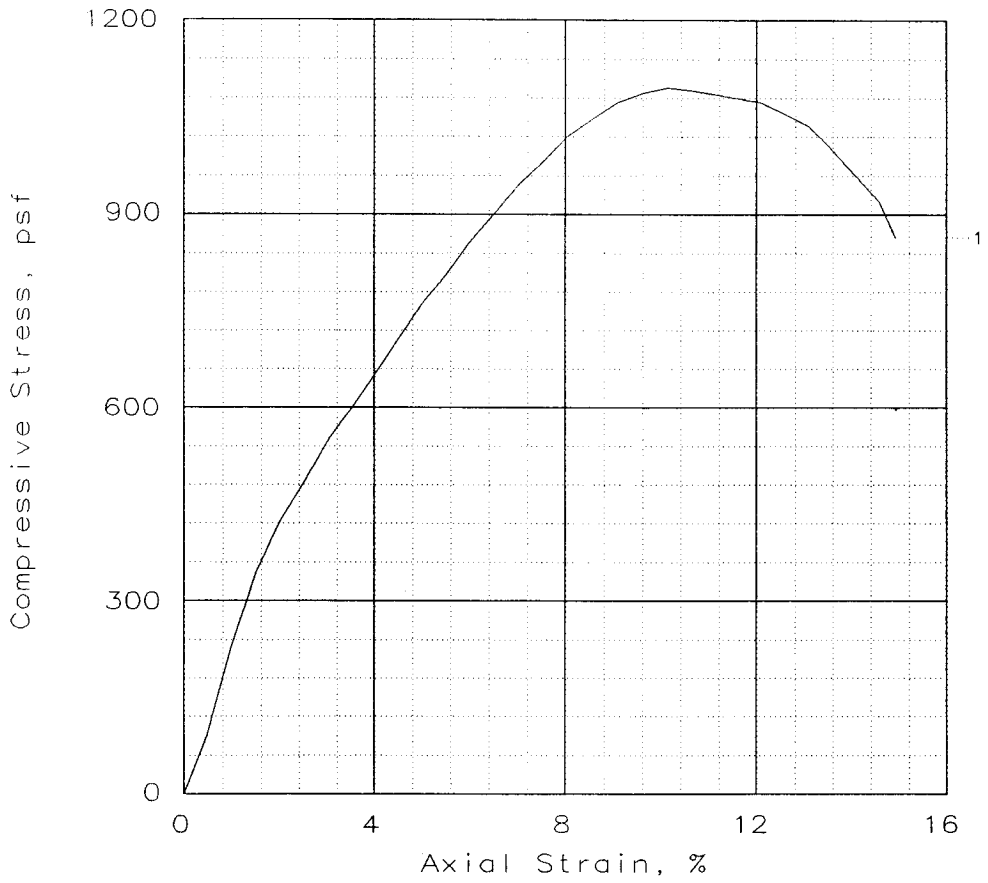
Client: U.S. Army Corps of Engineers

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

Location: Boring 11, Sample 20, Depth 42.8', Elev -36.5

File: UU-25090 Project No.: 19080 Fig. No.: _____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1092			
Undrained shear strength, psf	546			
Failure strain, %	10.6			
Strain rate, in/min	0.0578			
Water content, %	72.9			
Wet density, pcf	95.4			
Dry density, pcf	55.2			
Saturation, %	95.4			
Void ratio	2.0788			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M Gr CH4 w/ ars & Ins SM

GS= 2.72 | Type: Undisturbed

Project No.: 19080
Date: 10/8/05
Remarks:
Torvane = 0.400 tsf

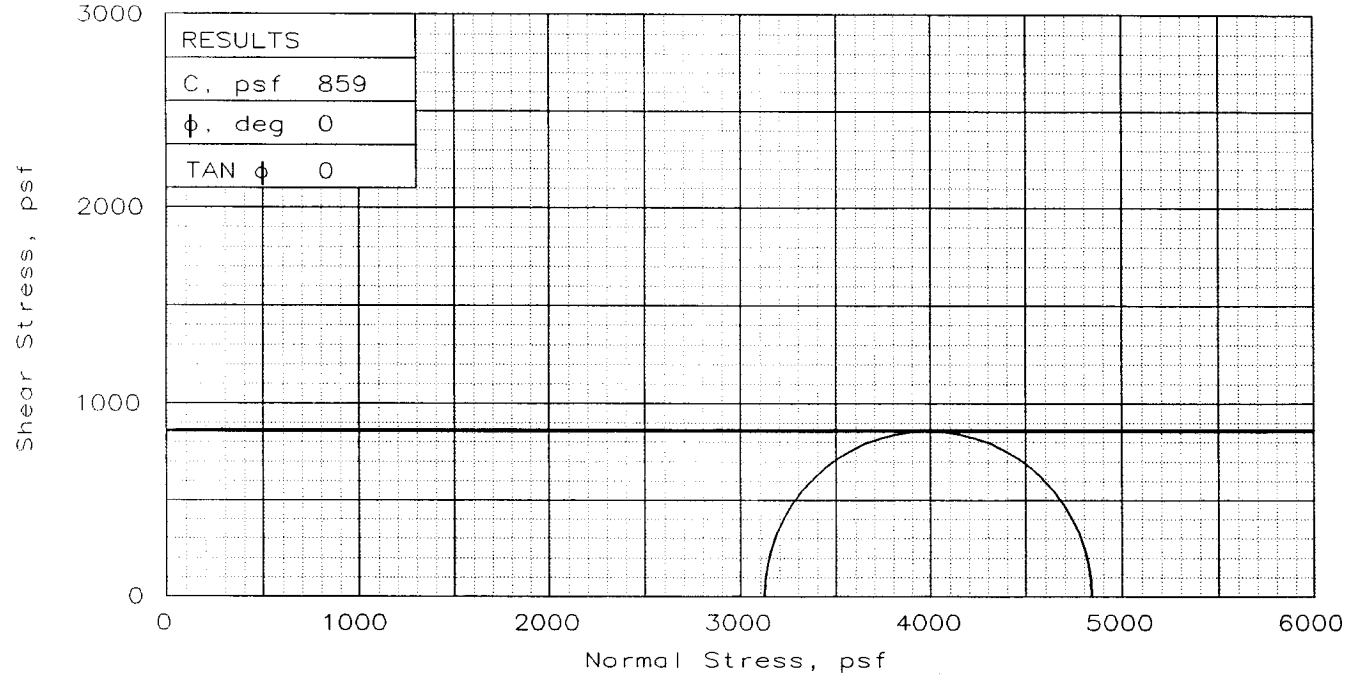
Fig. No.: ———

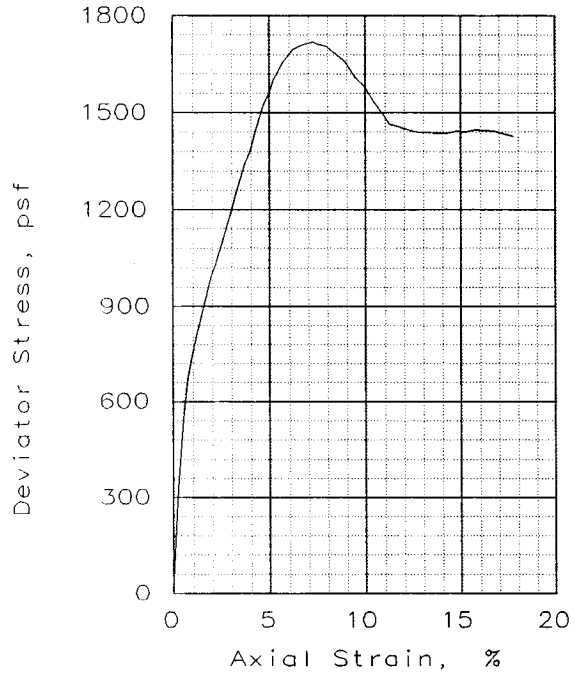
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 24, Depth 52.8', Elev -46.5

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	57.7
	DRY DENSITY, pcf	64.3
	SATURATION, %	95.7
	VOID RATIO	1.639
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	60.0
	DRY DENSITY, pcf	64.5
	SATURATION, %	100.0
	VOID RATIO	1.631
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0290
BACK PRESSURE, psf		0
CELL PRESSURE, psf		3125
FAIL. STRESS, psf		1718
ULT. STRESS, psf		1426
σ_1 FAILURE, psf		4843
σ_3 FAILURE, psf		3125

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: M Gr CH4
w/ ars & lns SM, SL, SIF
LL= 80 PL= 24 PI= 56
SPECIFIC GRAVITY= 2.72
REMARKS: Torvane = 0.400 tsf

Fig. No.: _____

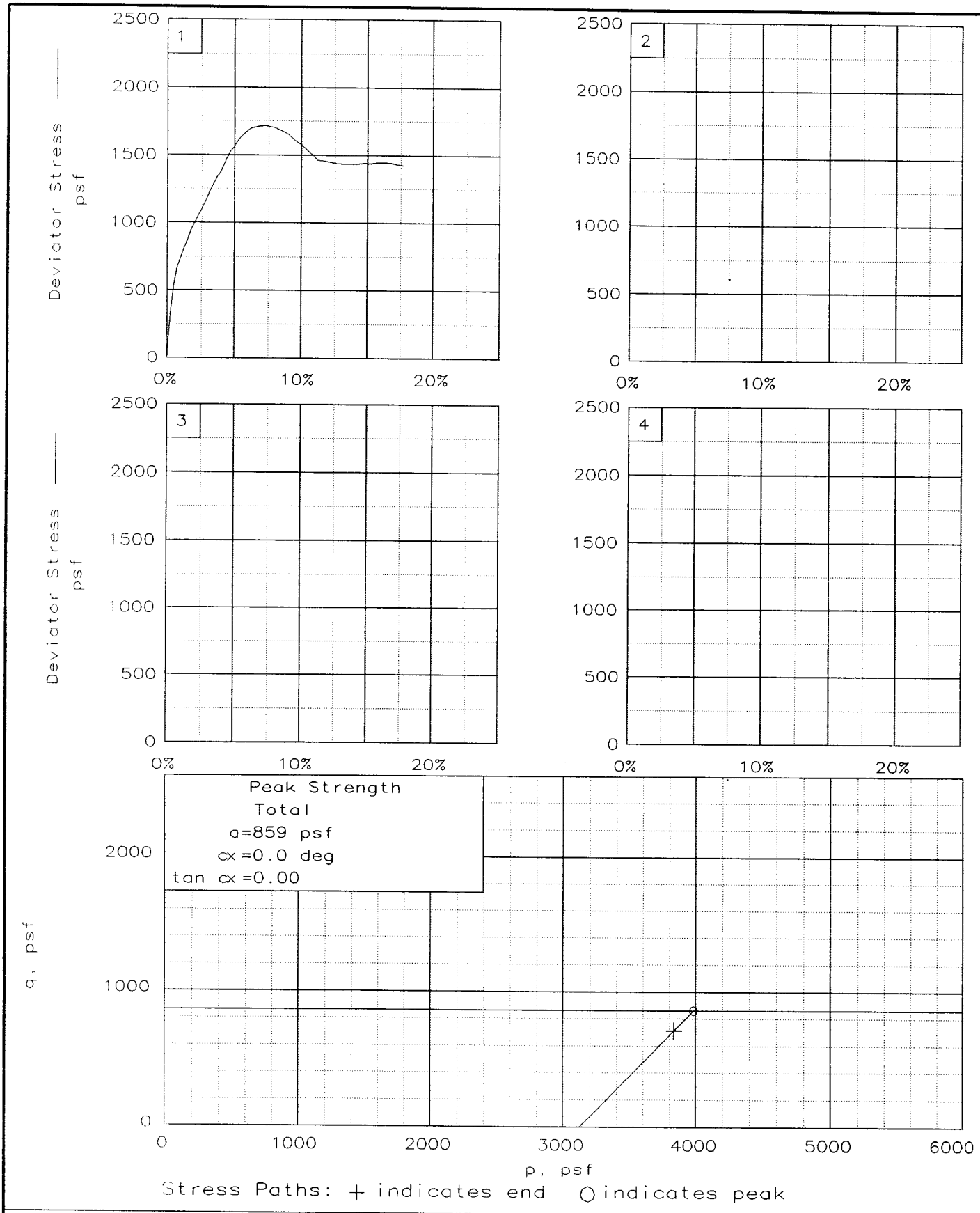
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 11,
Sample 25, Depth 55.3', Elev -49.0

PROJ. NO.: 19080 DATE: 10/8/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



Stress Paths: + indicates end ○ indicates peak

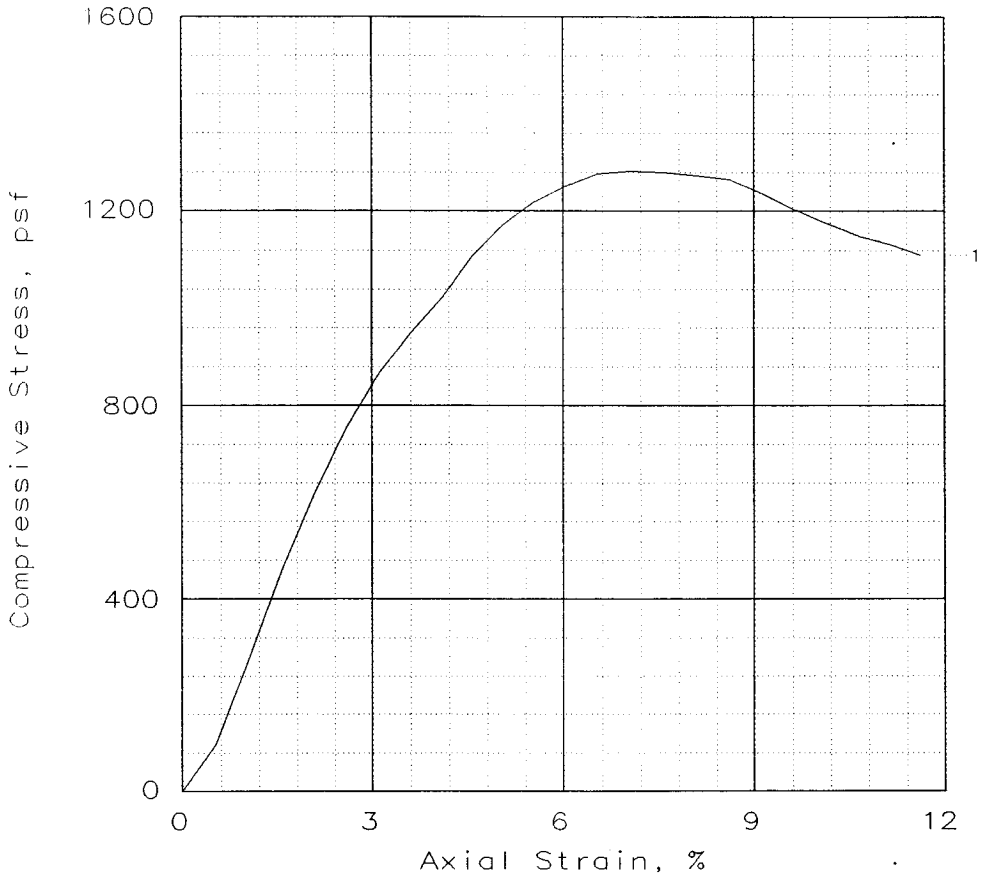
Client: U.S. Army Corps of Engineers

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

Location: Boring 11, Sample 25, Depth 55.3', Elev -49.0

File: UU-25091 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1283			
Undrained shear strength, psf	641			
Failure strain, %	7.0			
Strain rate, in/min	0.0574			
Water content, %	48.7			
Wet density, pcf	103.1			
Dry density, pcf	69.3			
Saturation, %	91.4			
Void ratio	1.4505			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M Gr CH4 w/ ars & lns SM, SIF, SL

GS= 2.72 | Type: Undisturbed

Project No.: 19080
Date: 10/8/05
Remarks:
Torvane = 0.370 tsf

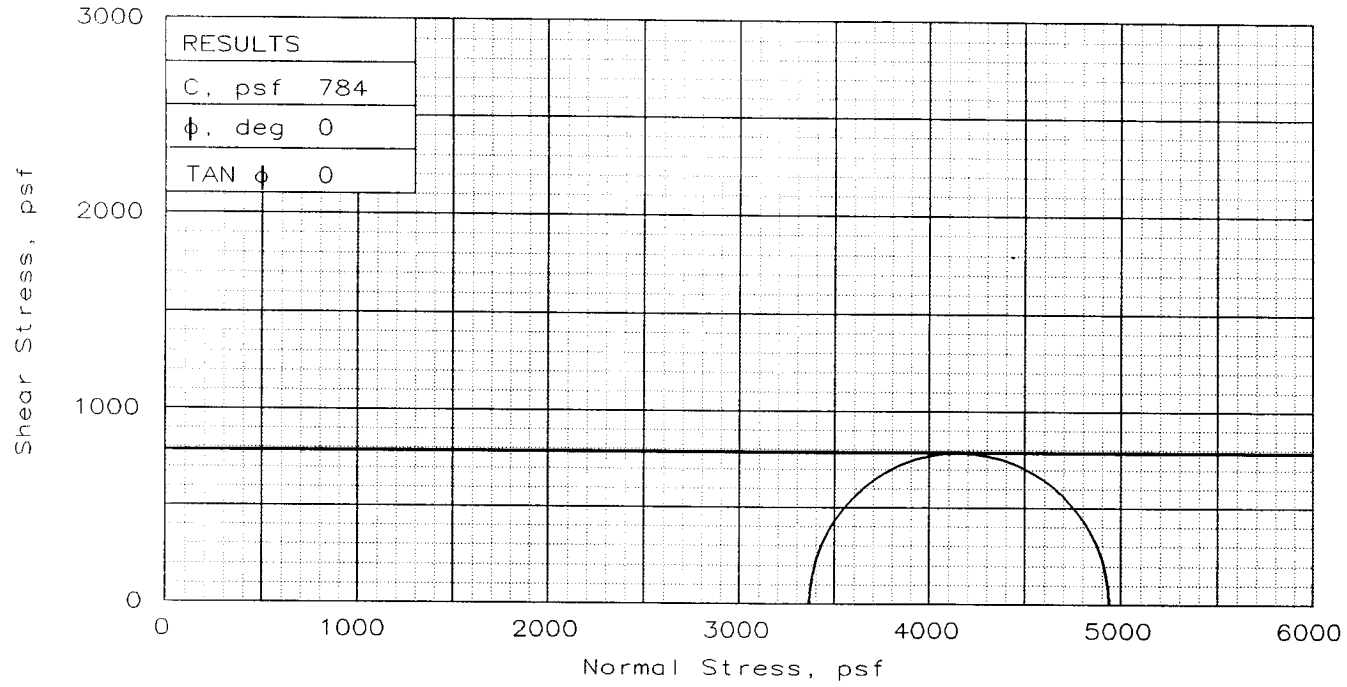
Fig. No.: ———

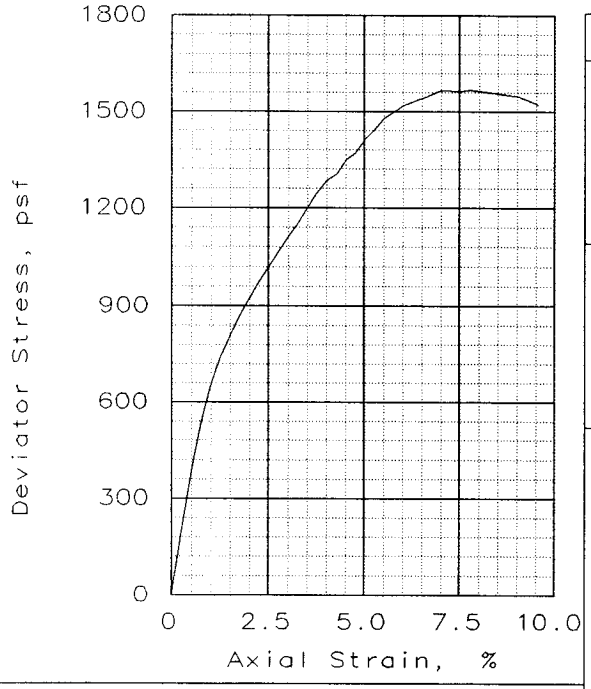
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 26, Depth 57.8', Elev -51.5

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	54.1
	DRY DENSITY, pcf	67.0
	SATURATION, %	95.4
	VOID RATIO	1.553
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	56.4
	DRY DENSITY, pcf	67.2
	SATURATION, %	100.0
	VOID RATIO	1.544
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0288
BACK PRESSURE, psf		0
CELL PRESSURE, psf		3370
FAIL. STRESS, psf		1569
ULT. STRESS, psf		1523
σ_1 FAILURE, psf		4938
σ_3 FAILURE, psf		3370

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: M Gr CH4
w/ Ins SM
LL= 81 PL= 23 PI= 58
SPECIFIC GRAVITY= 2.74
REMARKS:

Fig. No.: _____

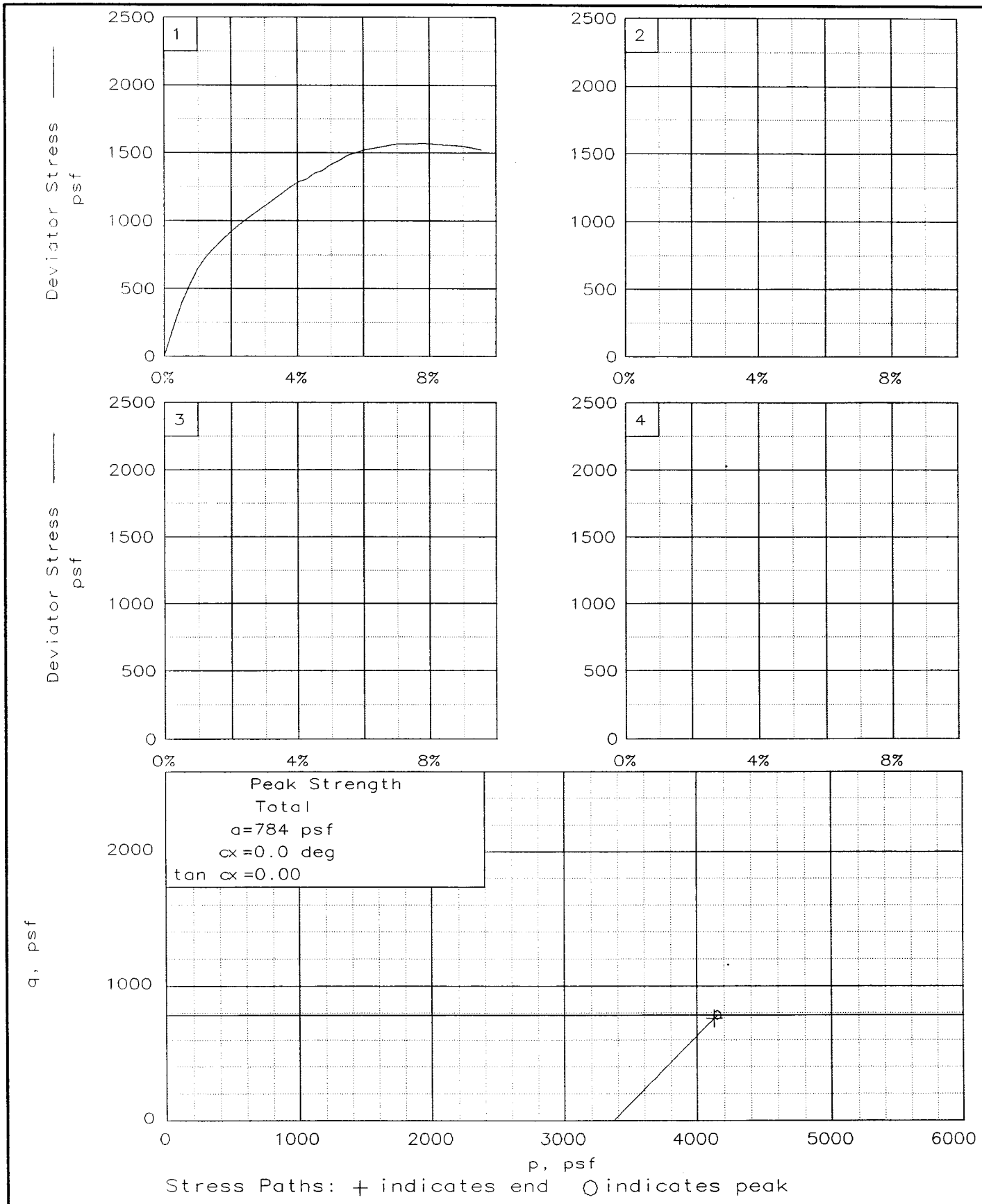
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 11,
Sample 27, Depth 60.3', Elev 54.0

PROJ. NO.: 19080 DATE: 10/8/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



Stress Paths: + indicates end ○ indicates peak

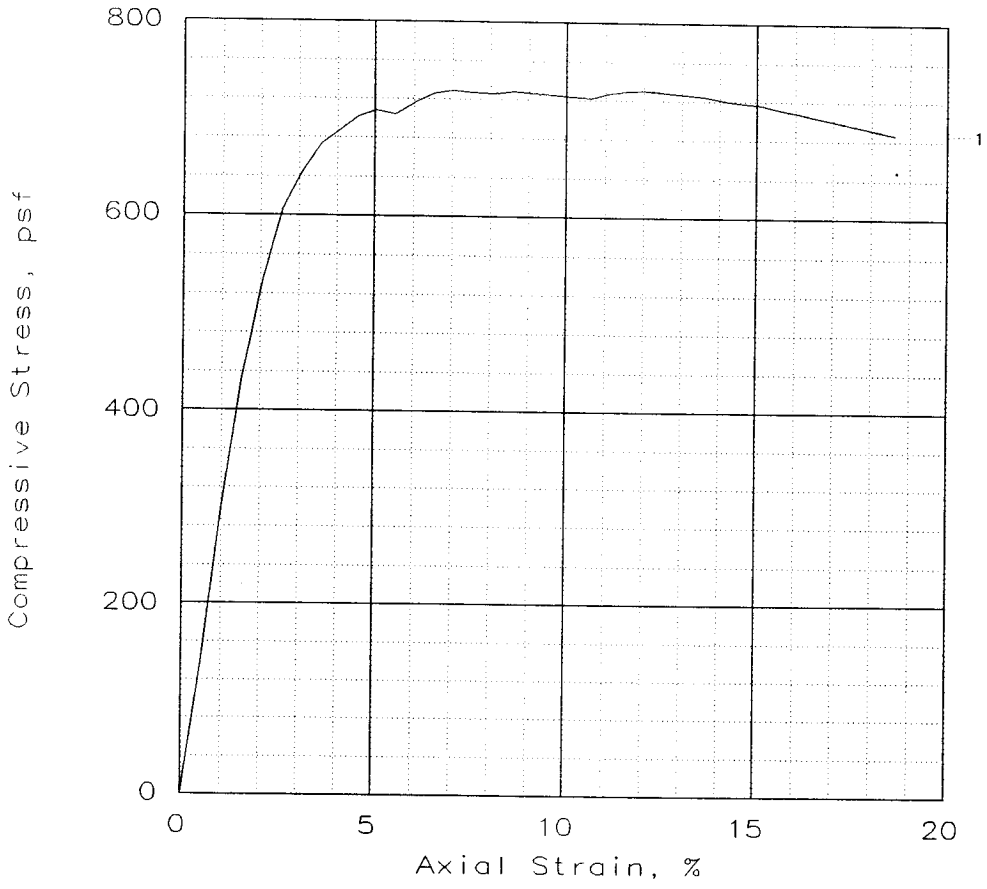
Client: U.S. Army Corps of Engineers

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

Location: Boring 11, Sample 27, Depth 60.3', Elev 54.0

File: UU-25092 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	708			
Undrained shear strength, psf	354			
Failure strain, %	5.0			
Strain rate, in/min	0.0509			
Water content, %	53.7			
Wet density, pcf	101.7			
Dry density, pcf	66.2			
Saturation, %	92.9			
Void ratio	1.5844			
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: 10/8/05
Remarks:
Torvane = 0.360 tsf

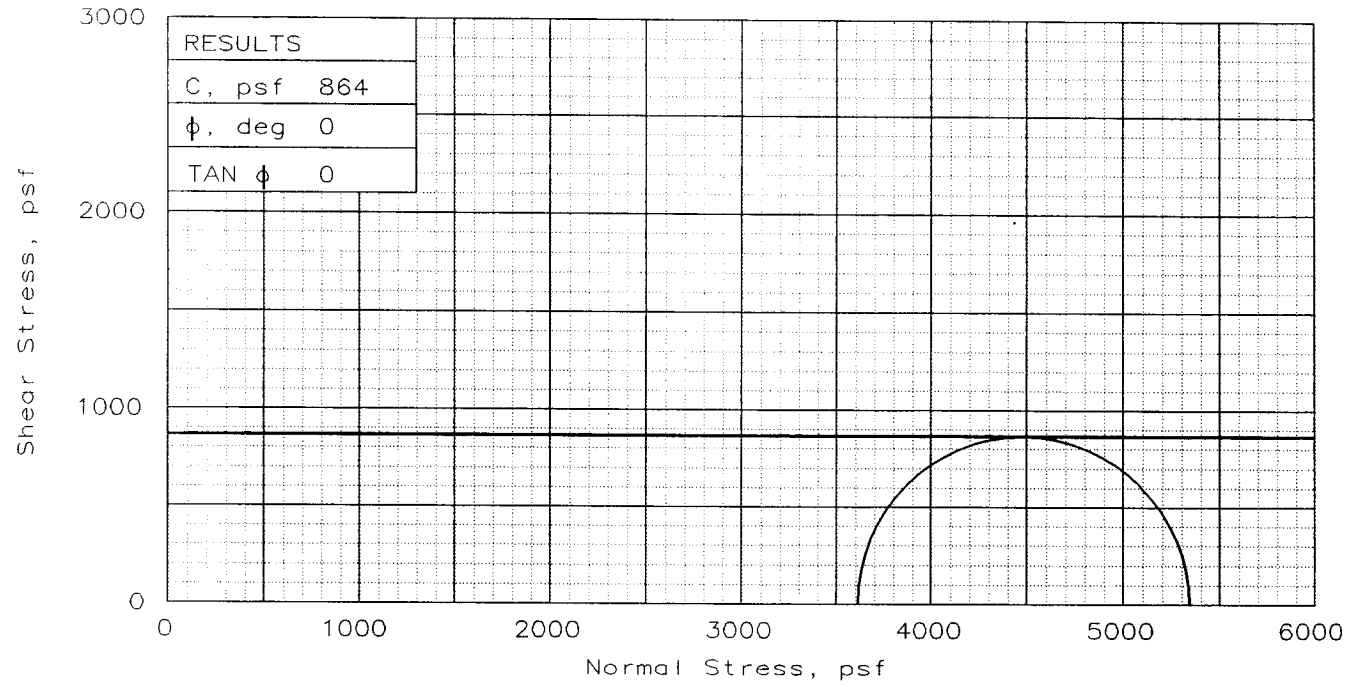
Fig. No.: ———

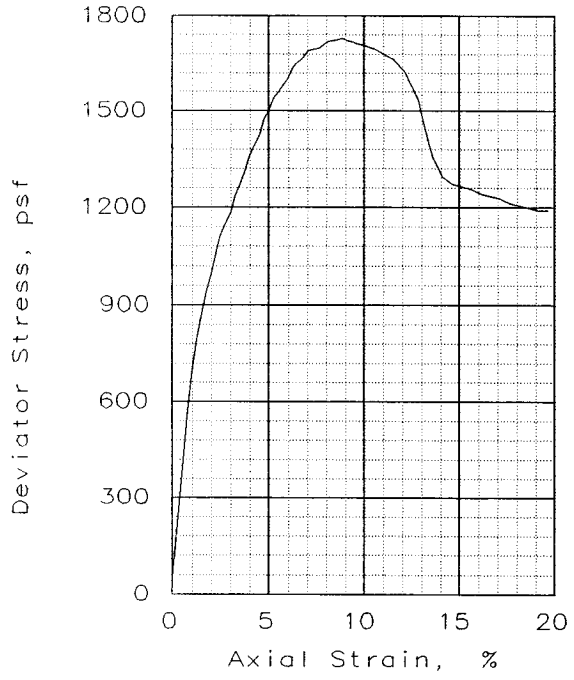
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 28, Depth 62.8', Elev -56.5

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	52.6
	DRY DENSITY, pcf	68.2
	SATURATION, %	95.6
	VOID RATIO	1.507
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	54.6
	DRY DENSITY, pcf	68.5
	SATURATION, %	100.0
	VOID RATIO	1.497
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0286
BACK PRESSURE, psf		0
CELL PRESSURE, psf		3614
FAIL. STRESS, psf		1728
ULT. STRESS, psf		1190
σ_1 FAILURE, psf		5342
σ_3 FAILURE, psf		3614

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: M Gr CH4
w/ SIF, SL
LL= 73 PL= 11 PI= 62
SPECIFIC GRAVITY= 2.74
REMARKS: Torvane = 0.460 tsf

Fig. No.: _____

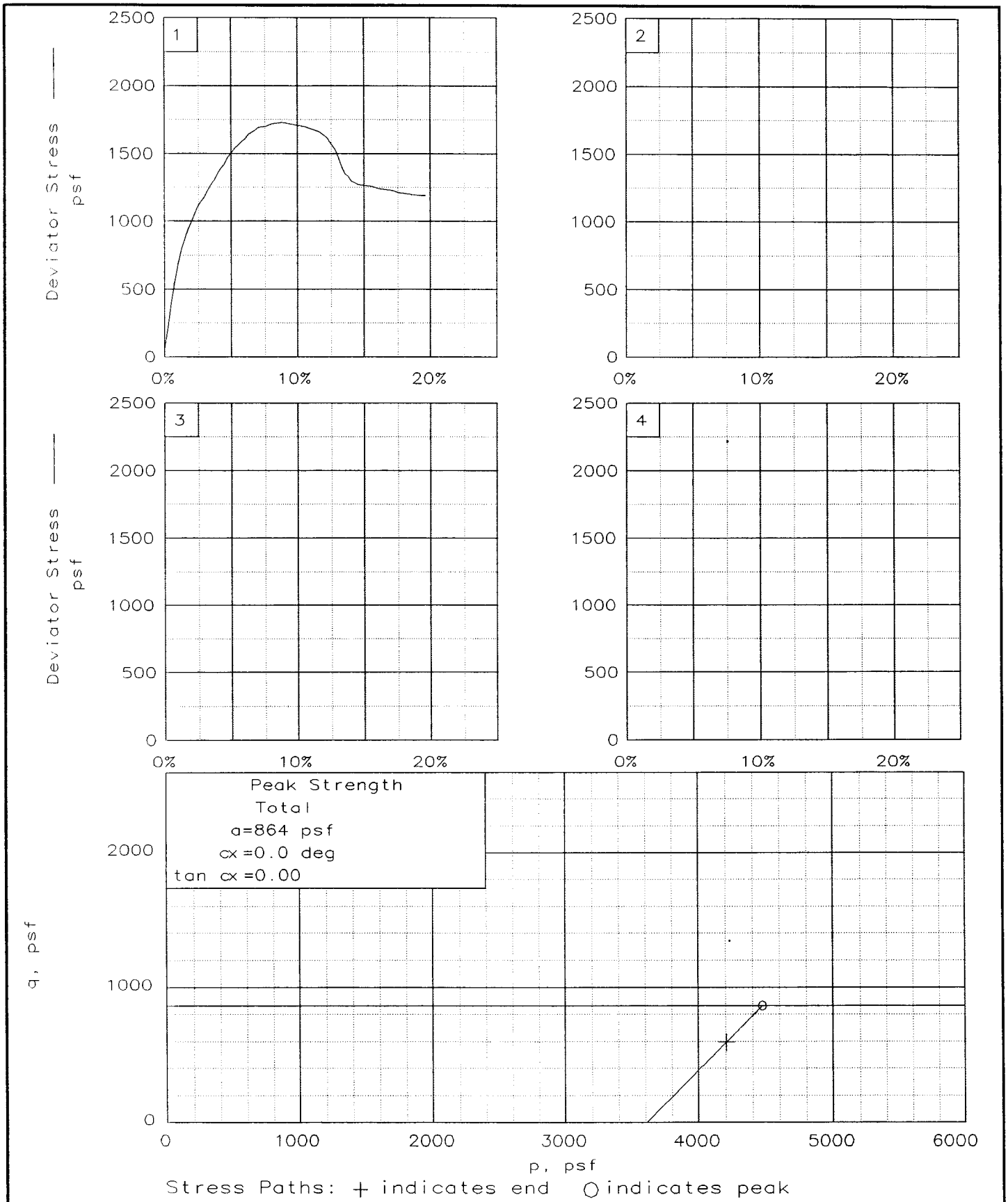
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 11,
Sample 29, Depth 65.3', Elev -59.0

PROJ. NO.: 19080 DATE: 10/8/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



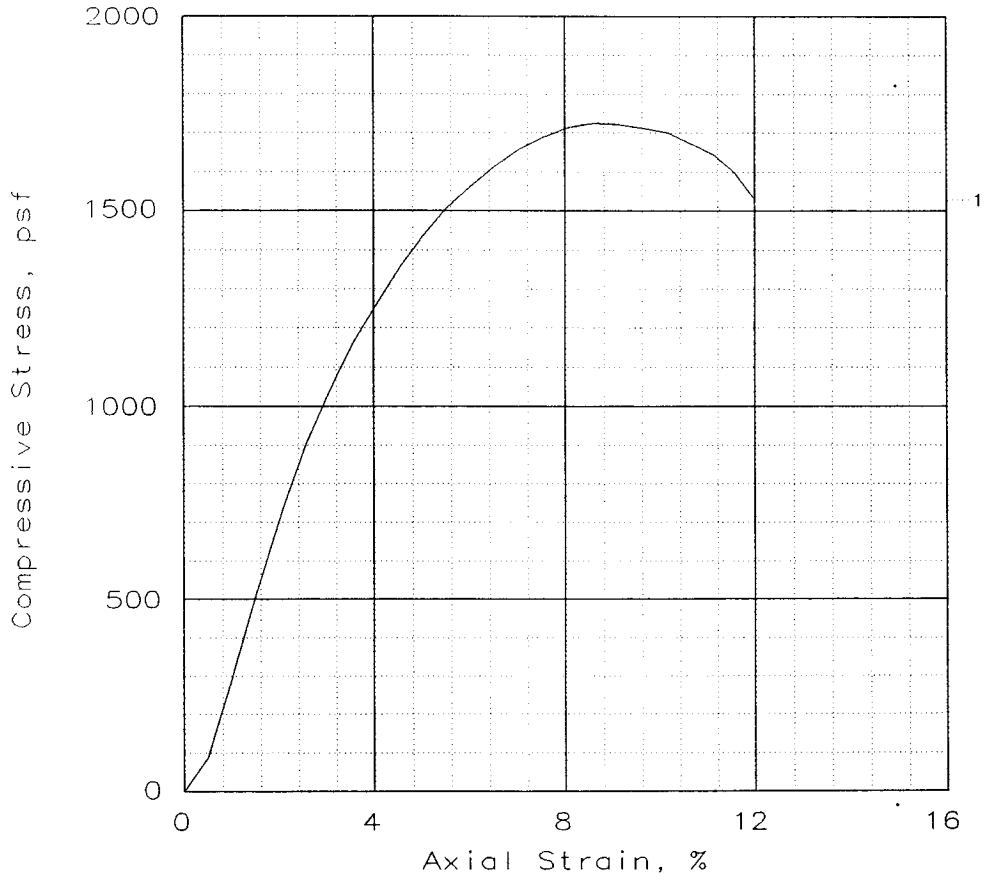
Client: U.S. Army Corps of Engineers

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

Location: Boring 11, Sample 29, Depth 65.3', Elev -59.0

File: UU-25093 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1725			
Undrained shear strength, psf	862			
Failure strain, %	8.6			
Strain rate, in/min	0.0579			
Water content, %	55.6			
Wet density, pcf	102.1			
Dry density, pcf	65.6			
Saturation, %	94.8			
Void ratio	1.6061			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M Gr CH4 w/ Tr-wd, SL

GS= 2.74 | Type: Undisturbed

Project No.: 19080
Date: 10/8/05
Remarks:
Torvane = 0.400 tsf

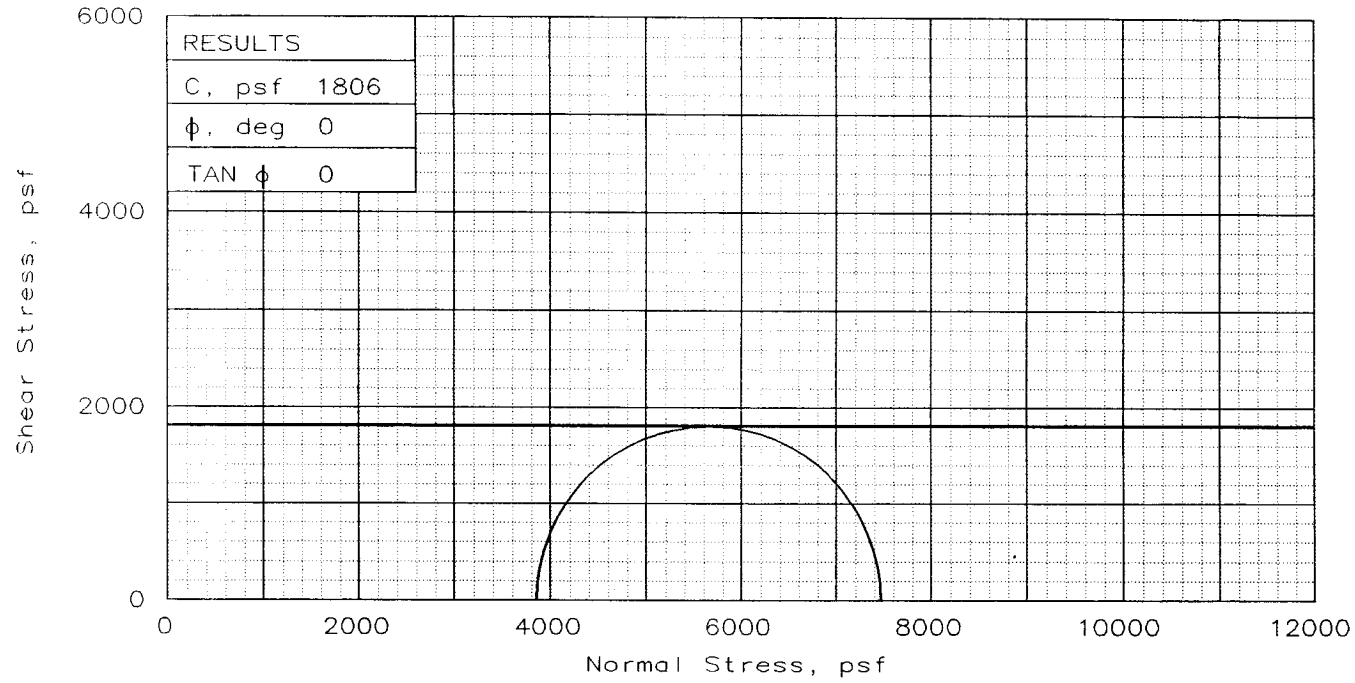
Fig. No.: ———

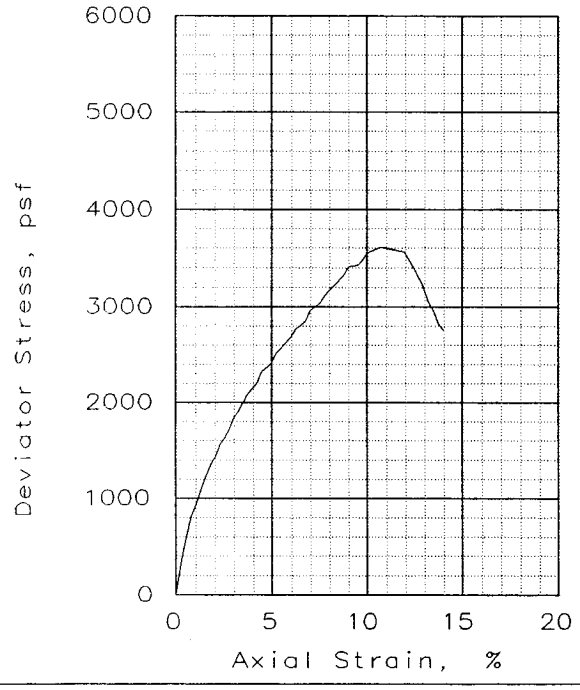
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 30, Depth 67.8', Elev -61.5

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	18.9
	DRY DENSITY, pcf	106.7
	SATURATION, %	85.9
	VOID RATIO	0.603
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	21.7
	DRY DENSITY, pcf	107.4
	SATURATION, %	100.0
	VOID RATIO	0.593
	DIAMETER, in	1.39
	HEIGHT, in	2.92
Strain rate, in/min		0.0289
BACK PRESSURE, psf		0
CELL PRESSURE, psf		3859
FAIL. STRESS, psf		3611
ULT. STRESS, psf		2771
σ_1 FAILURE, psf		7471
σ_3 FAILURE, psf		3859

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: St Gr & T CL4

LL= 37 PL= 13 PI= 24
SPECIFIC GRAVITY= 2.74
REMARKS: Torvane = 0.420 tsf

Fig. No.: _____

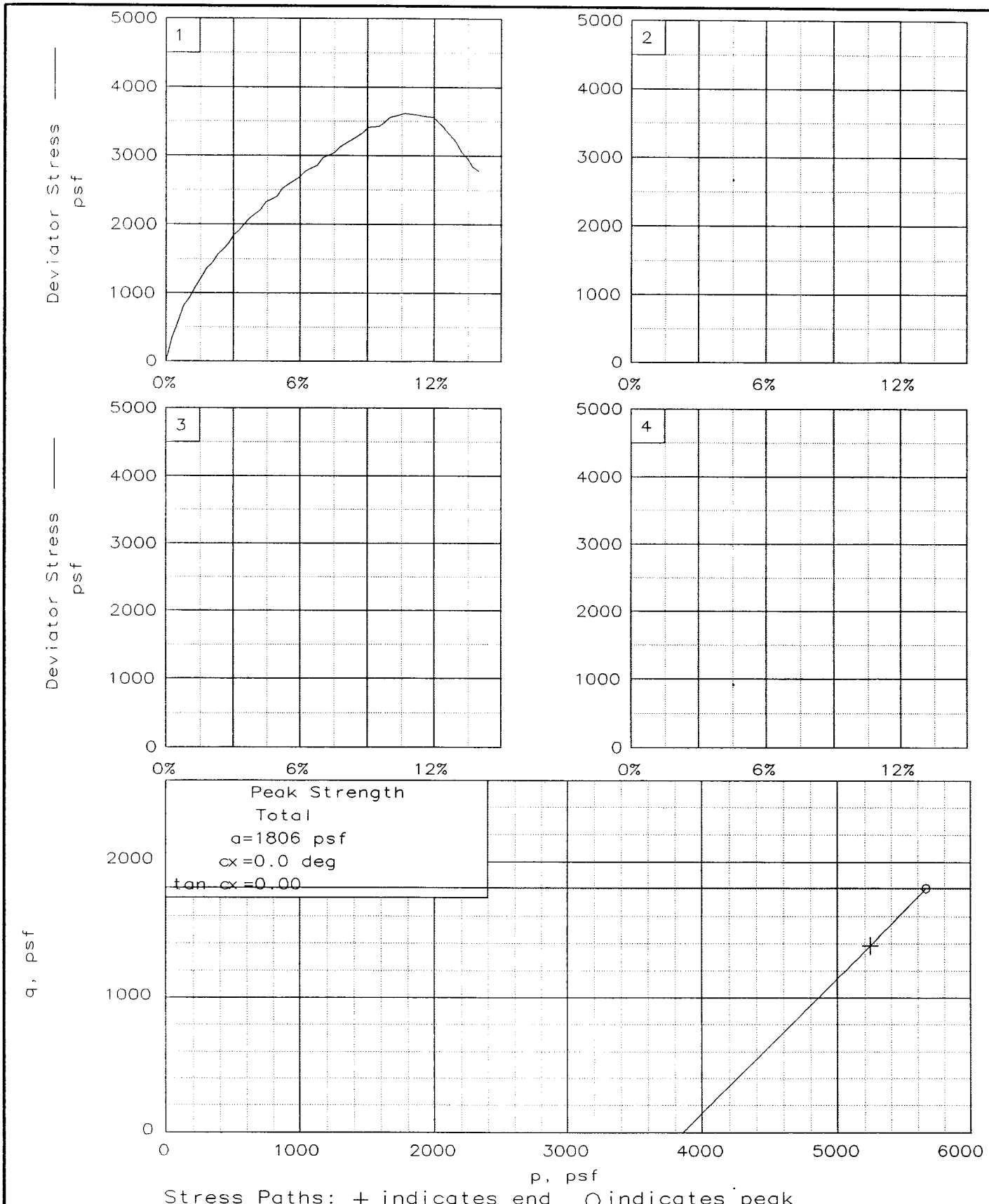
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 11,
Sample 31, Depth 70.3', Elev -64.0

PROJ. NO.: 19080 DATE: 10/8/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



Stress Paths: + indicates end ○ indicates peak

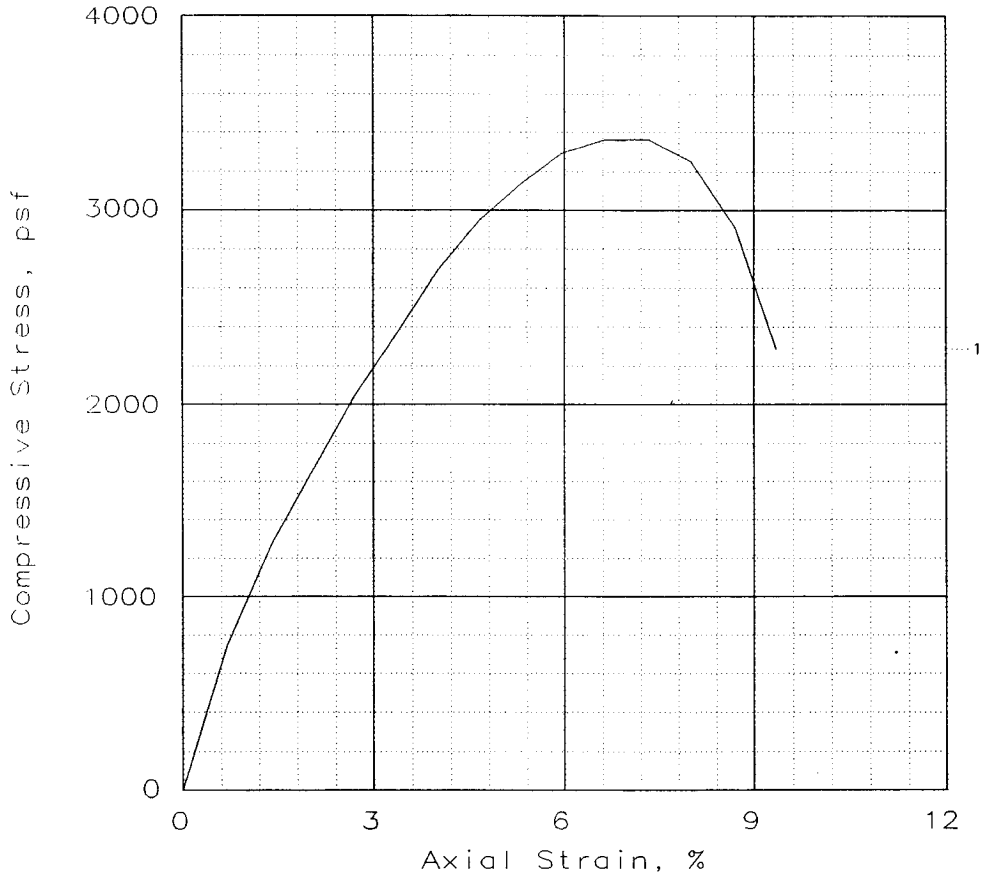
Client: U.S. Army Corps of Engineers

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

Location: Boring 11, Sample 31, Depth 70.3', Elev -64.0

File: UU-25094 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	3366			
Undrained shear strength, psf	1683			
Failure strain, %	7.3			
Strain rate, in/min	0.0571			
Water content, %	17.0			
Wet density, pcf	126.1			
Dry density, pcf	107.8			
Saturation, %	81.3			
Void ratio	0.5636			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: St gnGr & T CL5 w/ ars CH

			GS= 2.7	Type: Undisturbed

Project No.: 19080
Date: 10/8/05
Remarks:
Torvane = 1.225 tsf

Fig. No.: ———

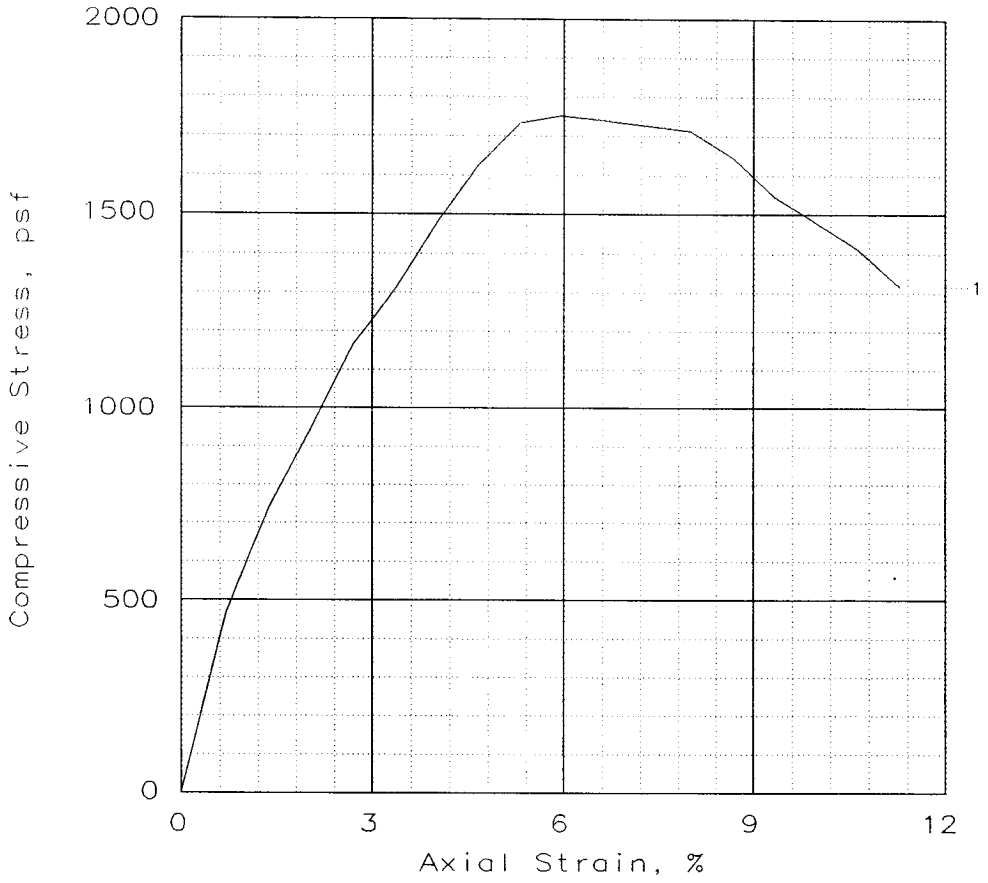
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 33, Depth 75.8', Elev -69.5

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1740			
Undrained shear strength, psf	870			
Failure strain, %	6.6			
Strain rate, in/min	0.0565			
Water content, %	31.4			
Wet density, pcf	117.8			
Dry density, pcf	89.7			
Saturation, %	94.7			
Void ratio	0.9074			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

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

			GS= 2.74	Type: Undisturbed

Project No.: 19080
Date: 10/8/05
Remarks:
Torvane = 0.400 tsf

Fig. No.: ——

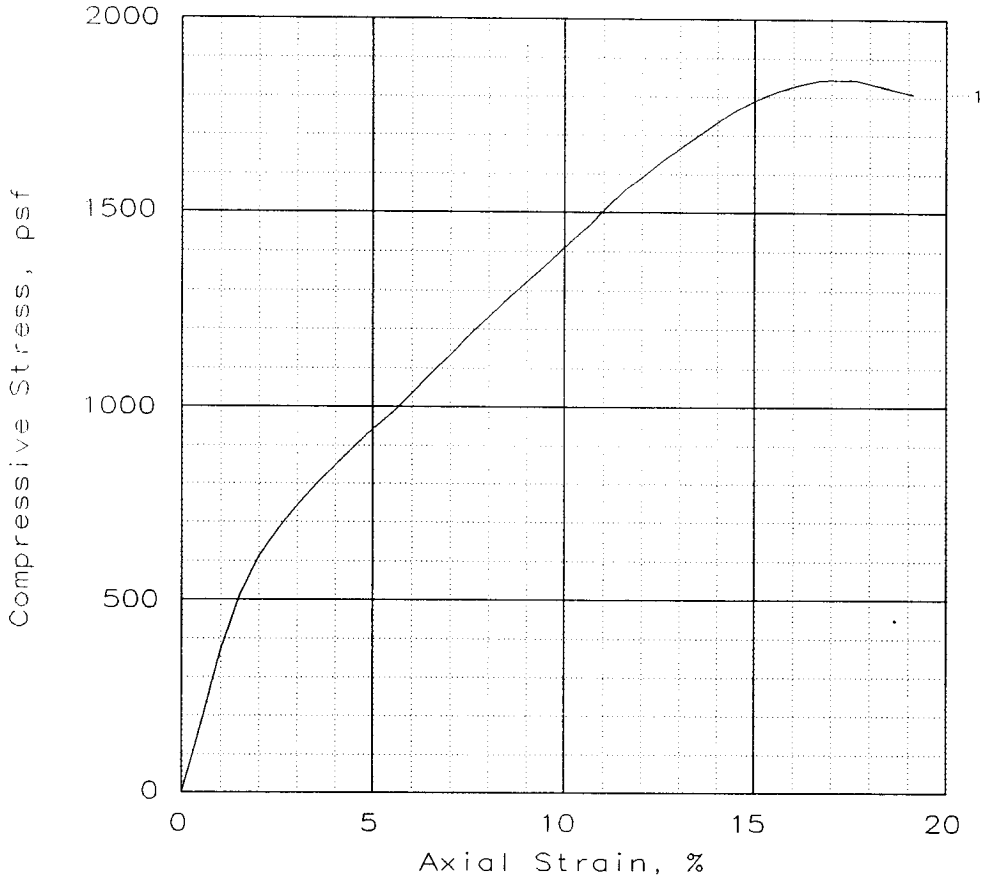
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 37, Depth 85.3', Elev -79.0

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1845			
Undrained shear strength, psf	922			
Failure strain, %	17.1			
Strain rate, in/min	0.0577			
Water content, %	35.2			
Wet density, pcf	114.7			
Dry density, pcf	84.8			
Saturation, %	95.5			
Void ratio	1.0025			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M Gr & T CH3 w/ ars & Ins SM, SL

GS= 2.72 | Type: Undisturbed

Project No.: 19080
Date: 10/8/05
Remarks:
Torvane = 0.625 tsf

Fig. No.: ——

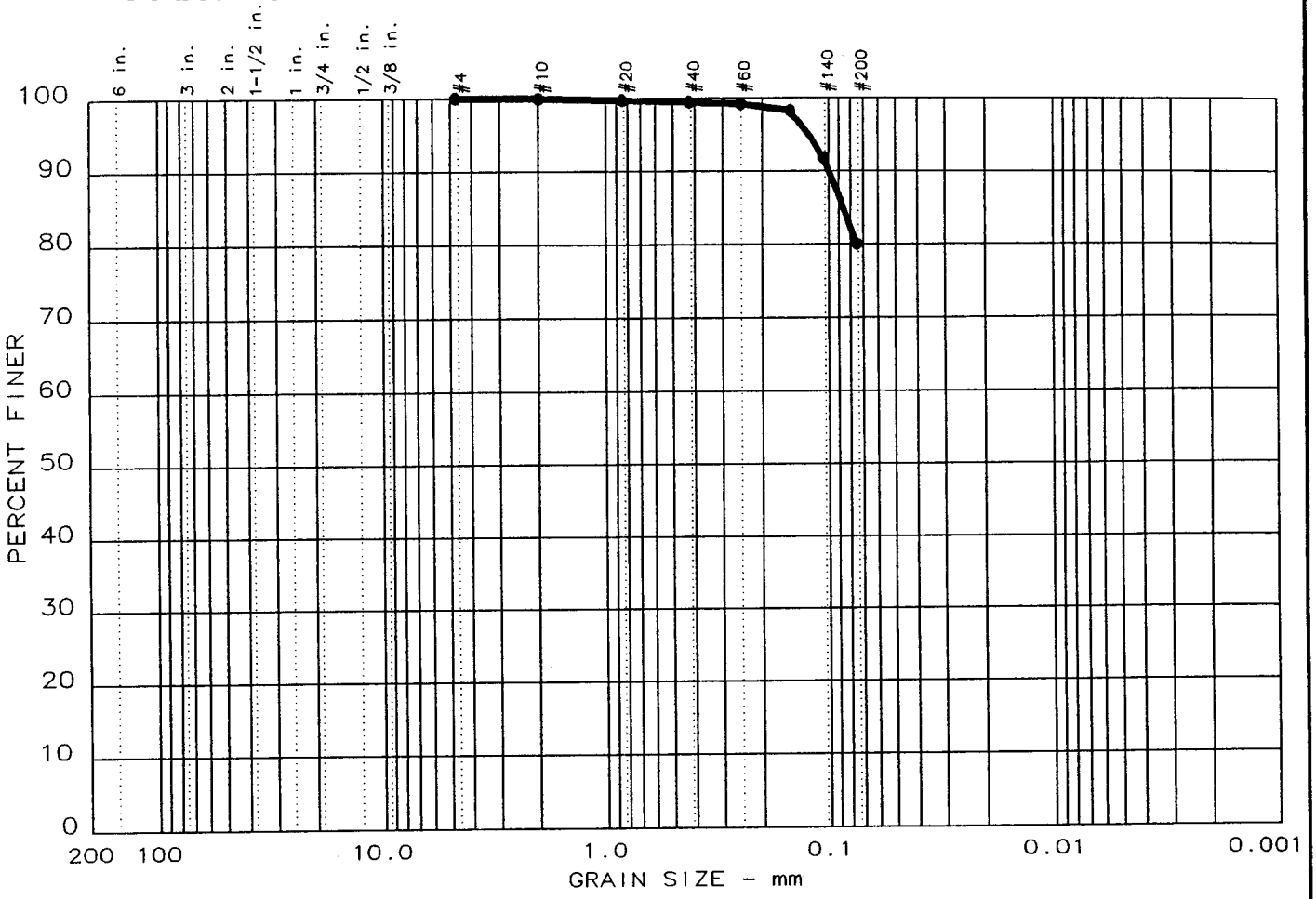
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 11,
Sample 41, Depth 95.3', Elev -89.0

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	8	0.0	0.0	20.0	80.0		CL6		

SIEVE inches size	PERCENT FINER ●		
	GRAIN SIZE		
D_{60} D_{30} D_{10}			
	COEFFICIENTS		
C_c C_u			

SIEVE number size	PERCENT FINER ●		
4	100.0		
10	99.9		
20	99.7		
40	99.4		
60	99.2		
100	98.2		
140	91.8		
200	80.0		

Sample information:
● Boring 11, Sample 2
ST T & GR CL6 W/ SIF & RT

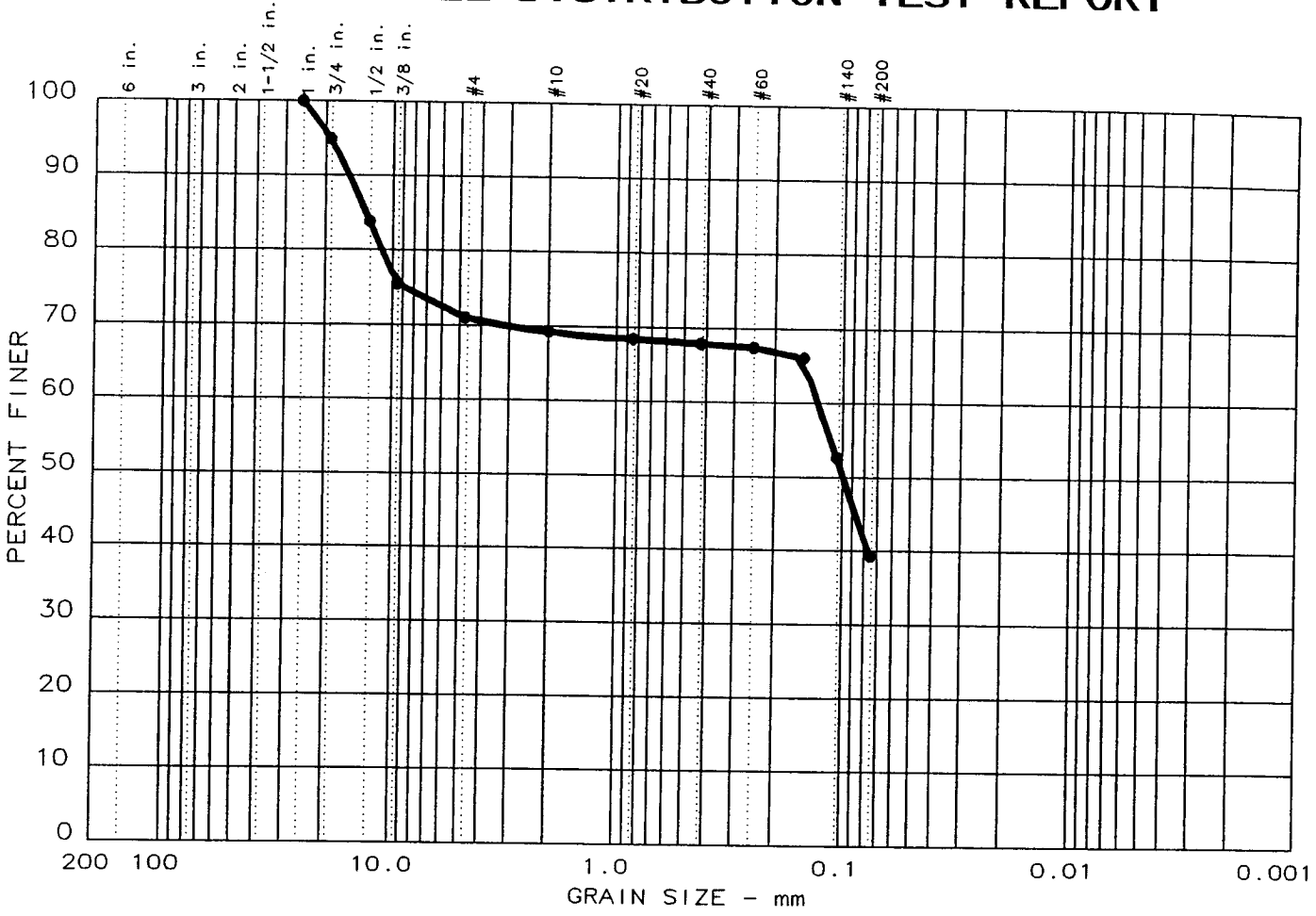
Remarks:
Sample depth 1.5'

Eustis Engineering Company, Inc.

Project No.: 19080
Project: USACE - 17TH Street Canal

Date: 10-17-05 Data Sheet No. ——

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	9	0.0	28.9	31.8	39.3		CL4-s		

SIEVE inches size	PERCENT FINER ●		
1	100.0		
0.75	94.9		
0.5	83.8		
0.375	75.5		
	GRAIN SIZE		
D_{60}	0.13		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
4	71.1		
10	69.3		
20	68.5		
40	67.9		
60	67.4		
100	66.1		
140	52.7		
200	39.3		

Sample information:
● Boring 11, Sample 6
SO GR CL4-s W/ SIF

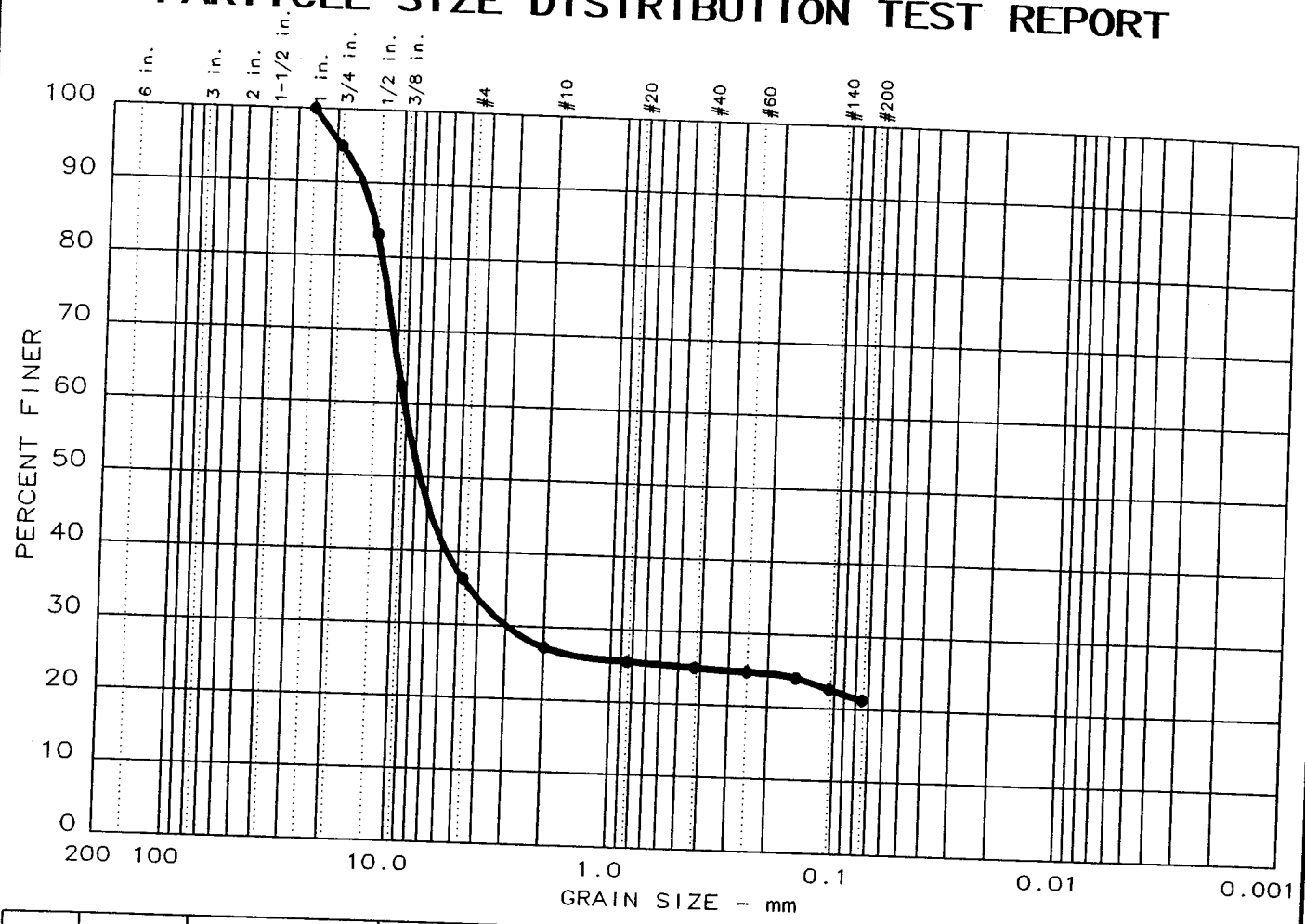
Remarks:
Sample depth 10.0'

Eustis Engineering Company, Inc.

Project No.: 19080
Project: USACE - 17TH Street Canal

Date: 10-17-05 Data Sheet No. ——

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	10	0.0	63.7	15.1	21.2		SI		

SIEVE inches size	PERCENT FINER ●
1	100.0
0.75	94.9
0.5	83.0
0.375	62.4

	GRAIN SIZE
D_{60}	9.19
D_{30}	2.94
D_{10}	

	COEFFICIENTS
C_c	
C_u	

SIEVE number size	PERCENT FINER ●
4	36.3
10	27.2
20	25.6
40	25.1
60	24.7
100	24.1
140	22.6
200	21.3

Sample information:

● Boring 11, Sample 8
SI W/ ARS CH

Remarks:

Sample depth 14.0'

Eustis Engineering Company, Inc.

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Project: USACE - 17TH Street Canal

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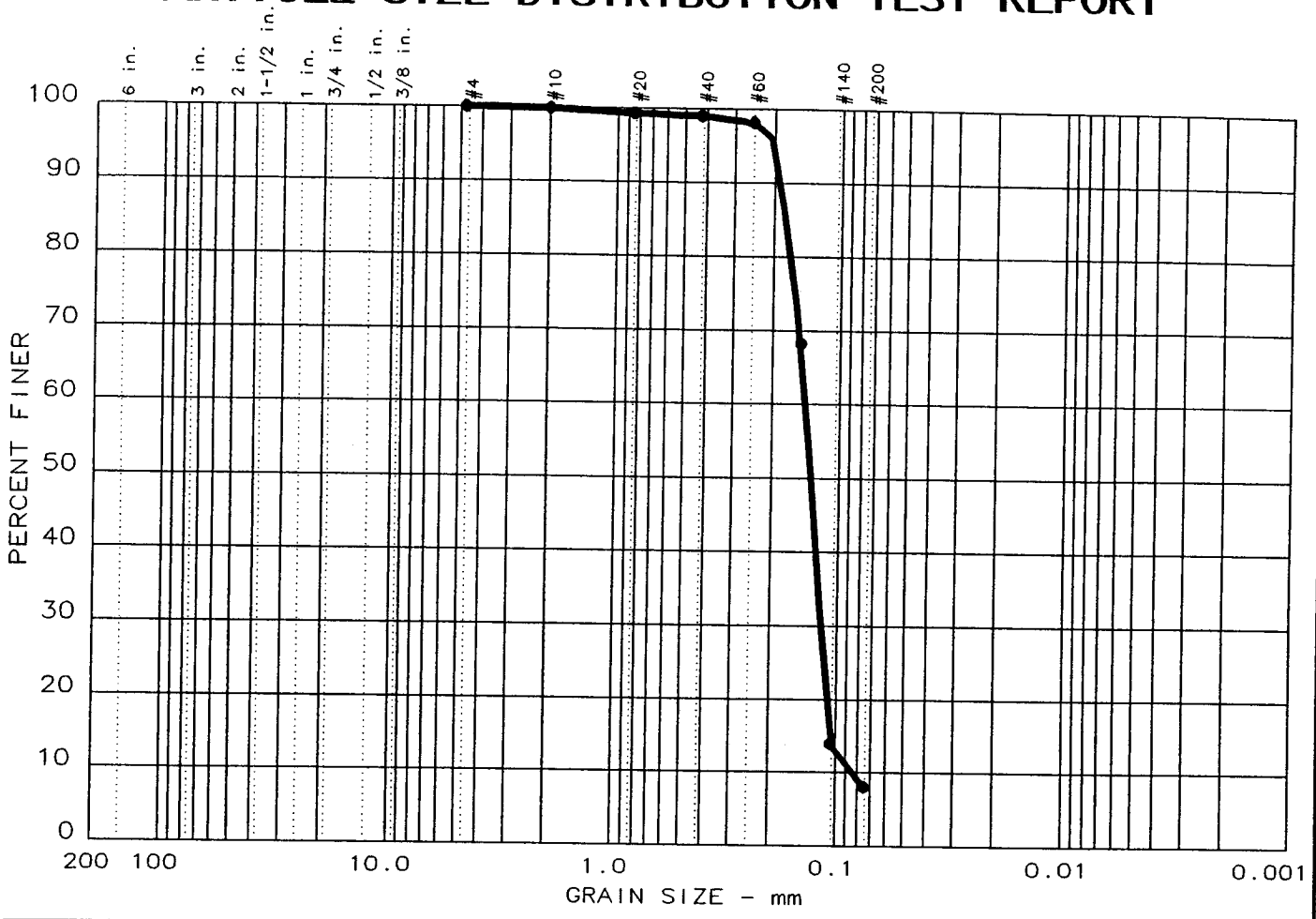
PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	11	0.0	0.0	91.9	8.1		SP		

SIEVE inches size	PERCENT FINER ●		
	GRAIN SIZE		
D_{60}	0.14		
D_{30}	0.12		
D_{10}	0.08		
	COEFFICIENTS		
C_c	1.16		
C_u	1.7		

SIEVE number size	PERCENT FINER ●		
4	100.0		
10	99.9		
20	99.3		
40	99.0		
60	98.2		
100	68.3		
140	14.0		
200	8.1		

Sample information:
● Boring 11, Sample 21
GR SP

Remarks:
Sample depth 45.0'

Eustis Engineering Company, Inc.

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Date: 10-17-05 Data Sheet No. ——