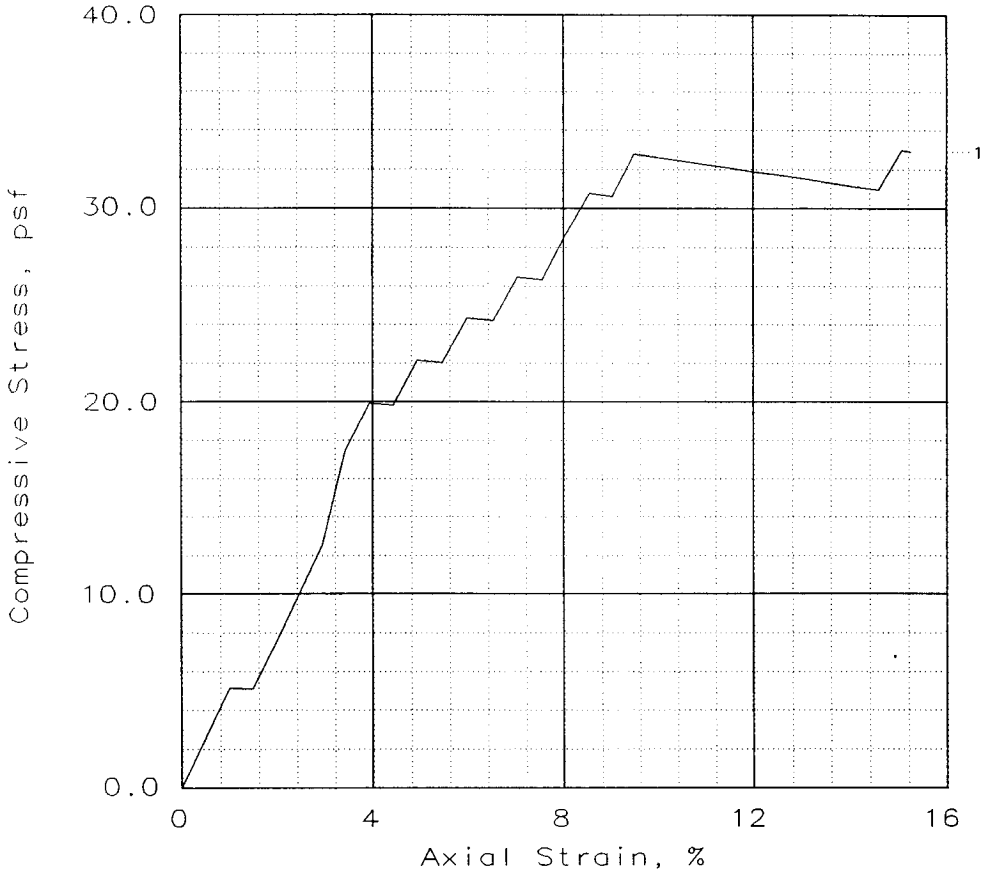
UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	32.8			
Undrained shear strength, psf	16.4			
Failure strain, %	9.5			
Strain rate, in/min	0.0569			
Water content, %	346.4			
Wet density, pcf	68.2			
Dry density, pcf	15.3			
Saturation, %	93.5			
Void ratio	9.6294			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: vSo dBr CHOC w/ rt

LL = 276	PL = 58	PI = 218	GS= 2.6	Type: Undisturbed

Project No.: 19080
Date: 9-30-05
Remarks:

Fig. No.: ———

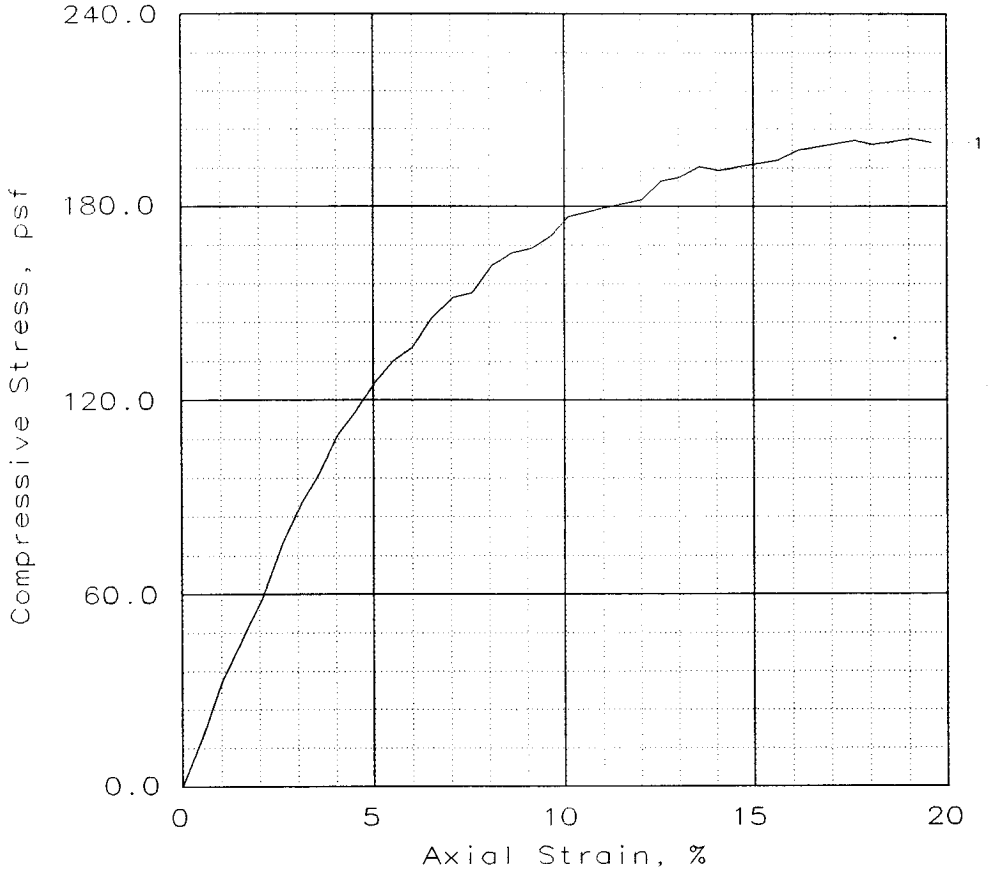
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 1, Depth 14.3', Elev. -12.8

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	192.4			
Undrained shear strength, psf	96.2			
Failure strain, %	13.6			
Strain rate, in/min	0.0568			
Water content, %	42.1			
Wet density, pcf	111.7			
Dry density, pcf	78.6			
Saturation, %	99.4			
Void ratio	1.1447			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: vSo Gr CH2 w/ SIF

			GS= 2.7	Type: Undisturbed

Project No.: 19080
Date: 10-2-05
Remarks:
Torvane = 0.130 tsf

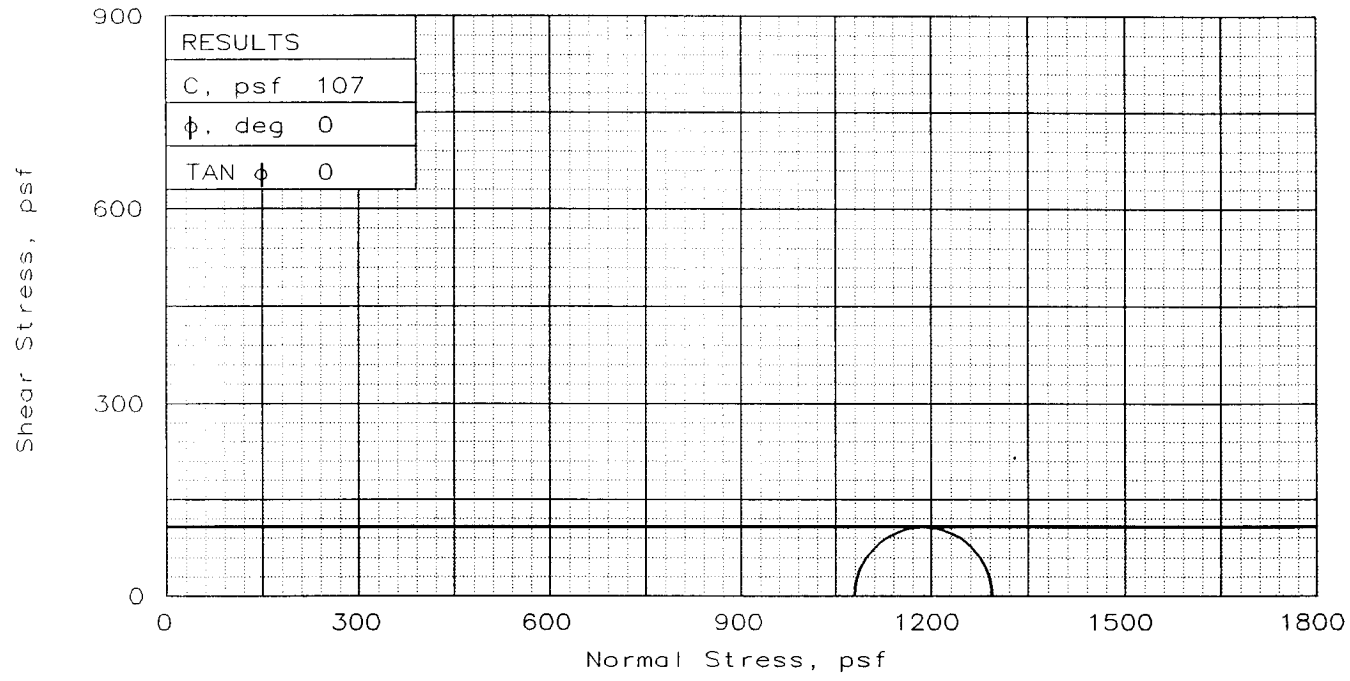
Fig. No.: ———

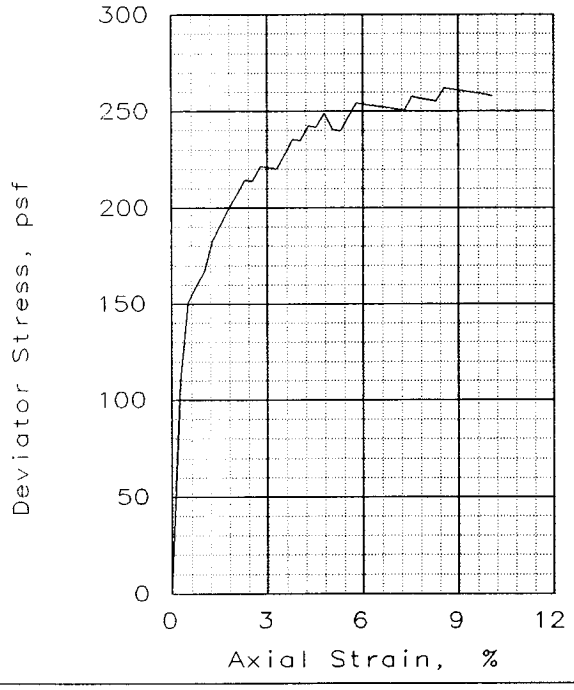
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 2, Depth 16.8', Elev. -15.3

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	415.5
	DRY DENSITY, pcf	12.6
	SATURATION, %	91.0
	VOID RATIO	11.869
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	456.5
	DRY DENSITY, pcf	12.6
	SATURATION, %	100.0
	VOID RATIO	11.870
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0290
BACK PRESSURE, psf		0
CELL PRESSURE, psf		1080
FAIL. STRESS, psf		214
ULT. STRESS, psf		258
σ_1 FAILURE, psf		1294
σ_3 FAILURE, psf		1080

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: vSo dGr CHOC w/ wd
LL= 379 PL= 119 PI= 260
SPECIFIC GRAVITY= 2.6
REMARKS: Torvane = 0.100 tsf

CLIENT: U.S. Army Corps of Engineers

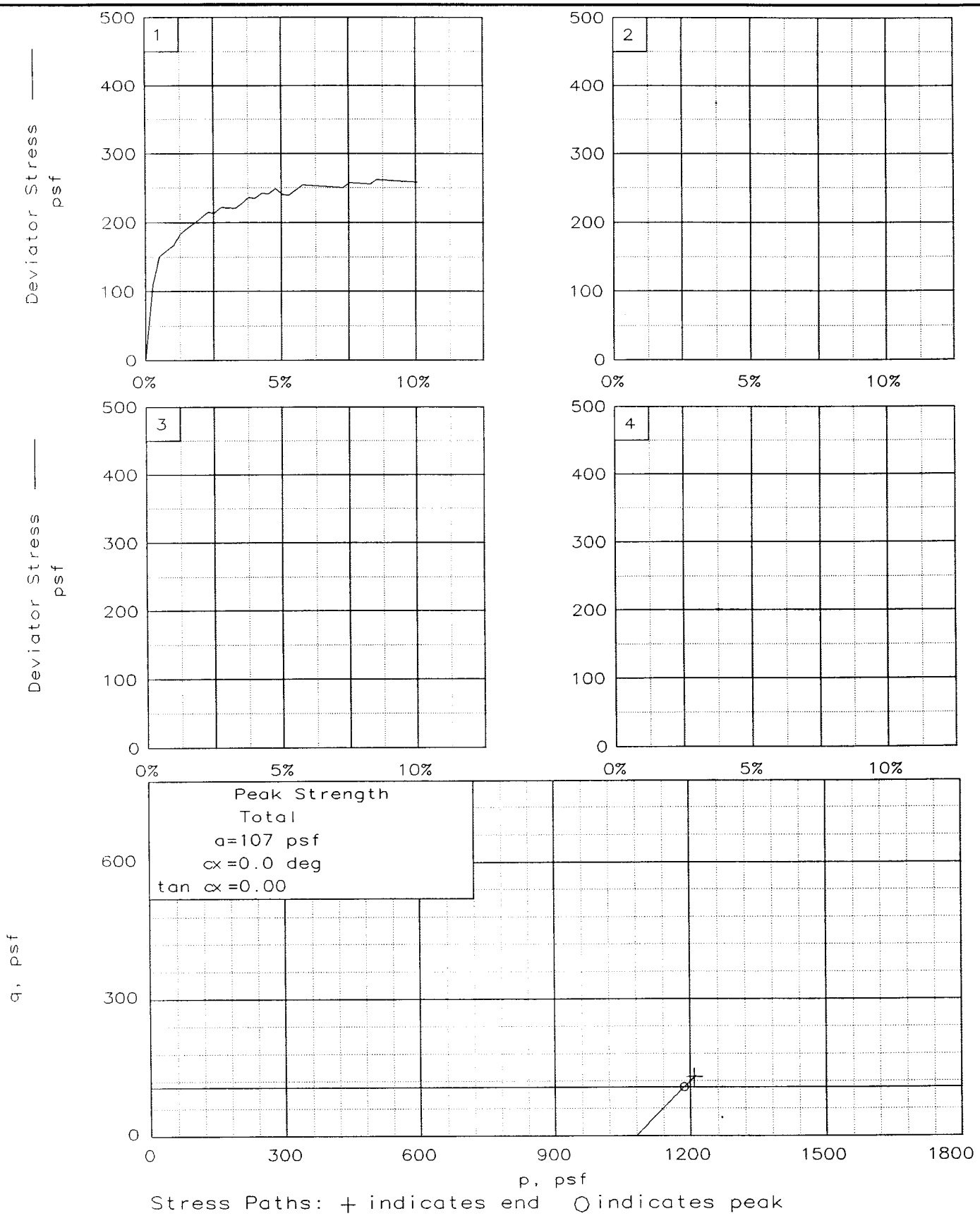
PROJECT: Repairs to Levees and Floodwalls at the 17th Street Canal
SAMPLE LOCATION: Boring 4, Sample 3, Depth 19.3', Elev -17.8

PROJ. NO.: 19080 DATE: 10/24/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.

Fig. No.: _____



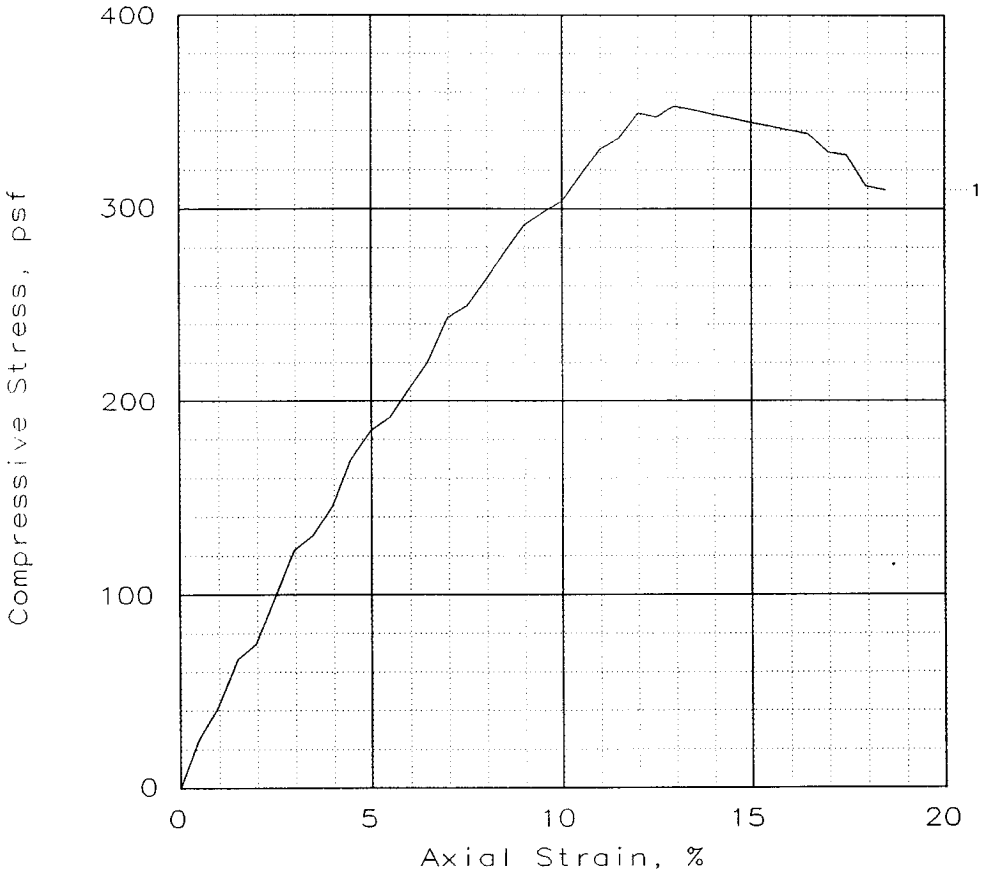
Client: U.S. Army Corps of Engineers

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

Location: Boring 4, Sample 3, Depth 19.3', Elev -17.8

File: UU-25164 Project No.: 19080 Fig. No.: _____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	349			
Undrained shear strength, psf	175			
Failure strain, %	12.0			
Strain rate, in/min	0.0572			
Water content, %	34.5			
Wet density, pcf	113.7			
Dry density, pcf	84.5			
Saturation, %	94.9			
Void ratio	0.9717			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: vSo Gr CL4 w/ lys CH

			GS= 2.67	Type: Undisturbed

Project No.: 19080
Date: 10-2-05
Remarks:
Torvane = 0.070 tsf

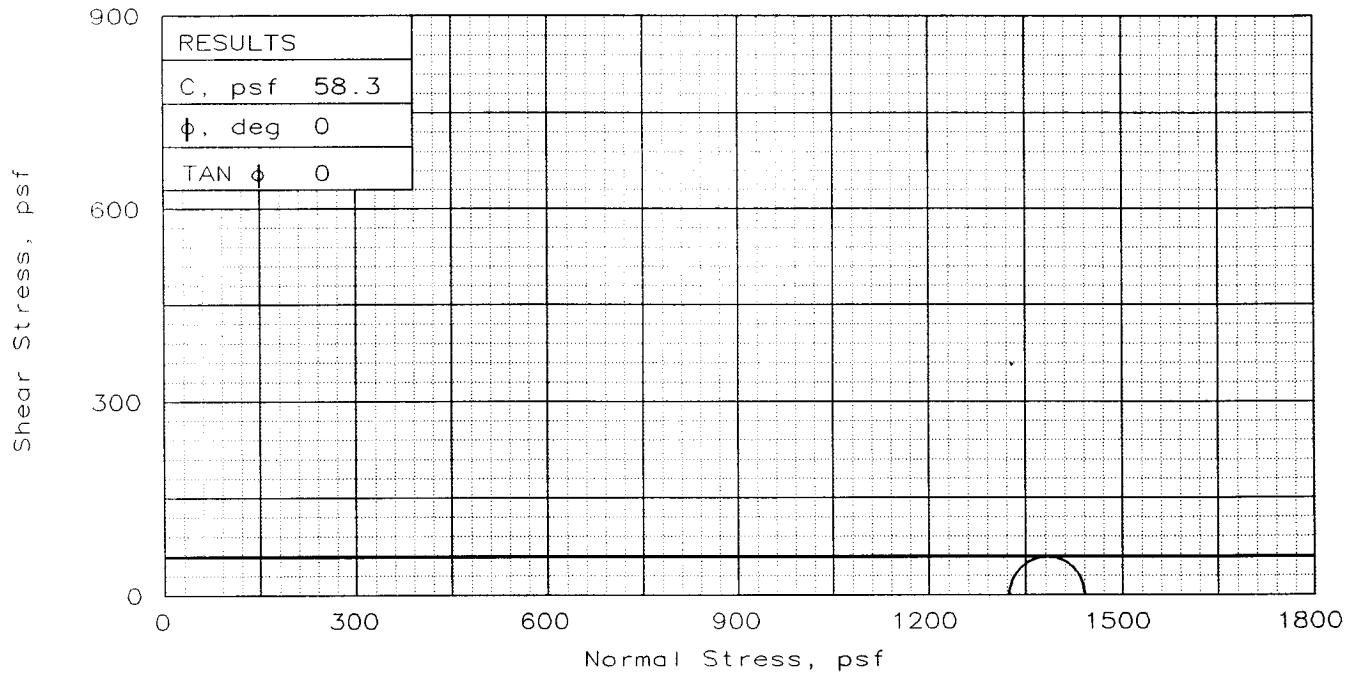
Fig. No.: ———

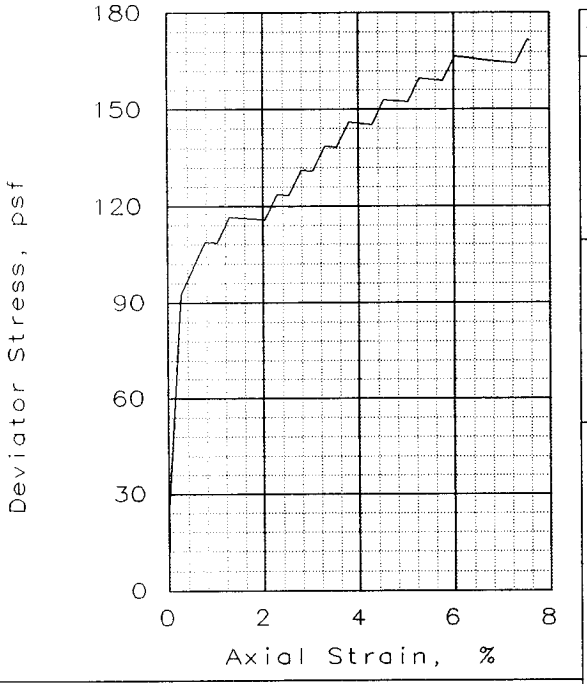
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 4, Depth 21.8', Elev. -20.3

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	70.7
	DRY DENSITY, pcf	57.6
	SATURATION, %	98.4
	VOID RATIO	1.970
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	72.0
	DRY DENSITY, pcf	57.5
	SATURATION, %	100.0
	VOID RATIO	1.973
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0286
BACK PRESSURE, psf		0
CELL PRESSURE, psf		1325
FAIL. STRESS, psf		117
ULT. STRESS, psf		172
σ_1 FAILURE, psf		1441
σ_3 FAILURE, psf		1325

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: vSo Gr CH3
w/ Ins ML
LL= 84 PL= 24 PI= 60
SPECIFIC GRAVITY= 2.74
REMARKS: Torvane = 0.070 tsf

Fig. No.: _____

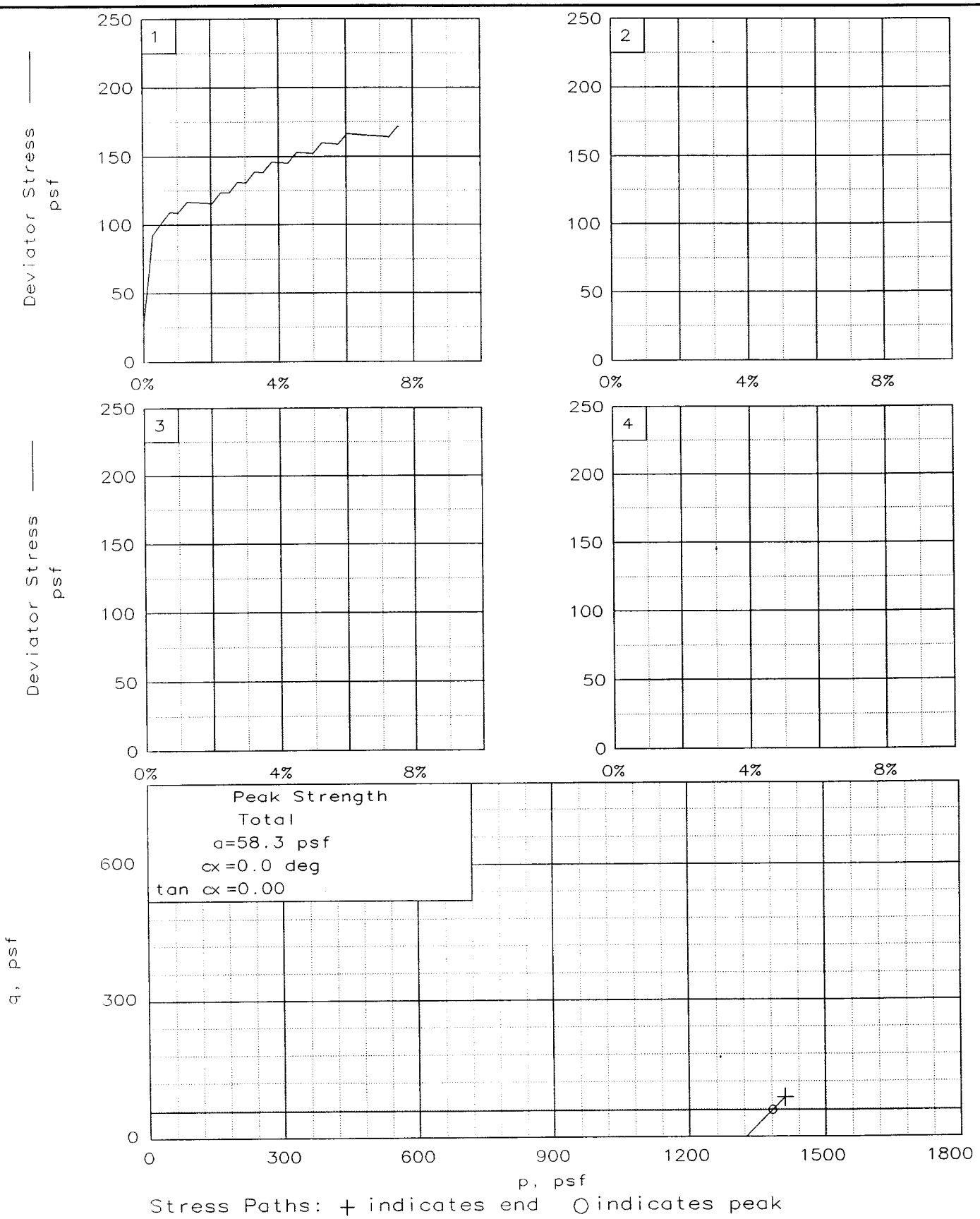
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 4,
Sample 5, Depth 24.3', Elev -22.8

PROJ. NO.: 19080 DATE: 10/24/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



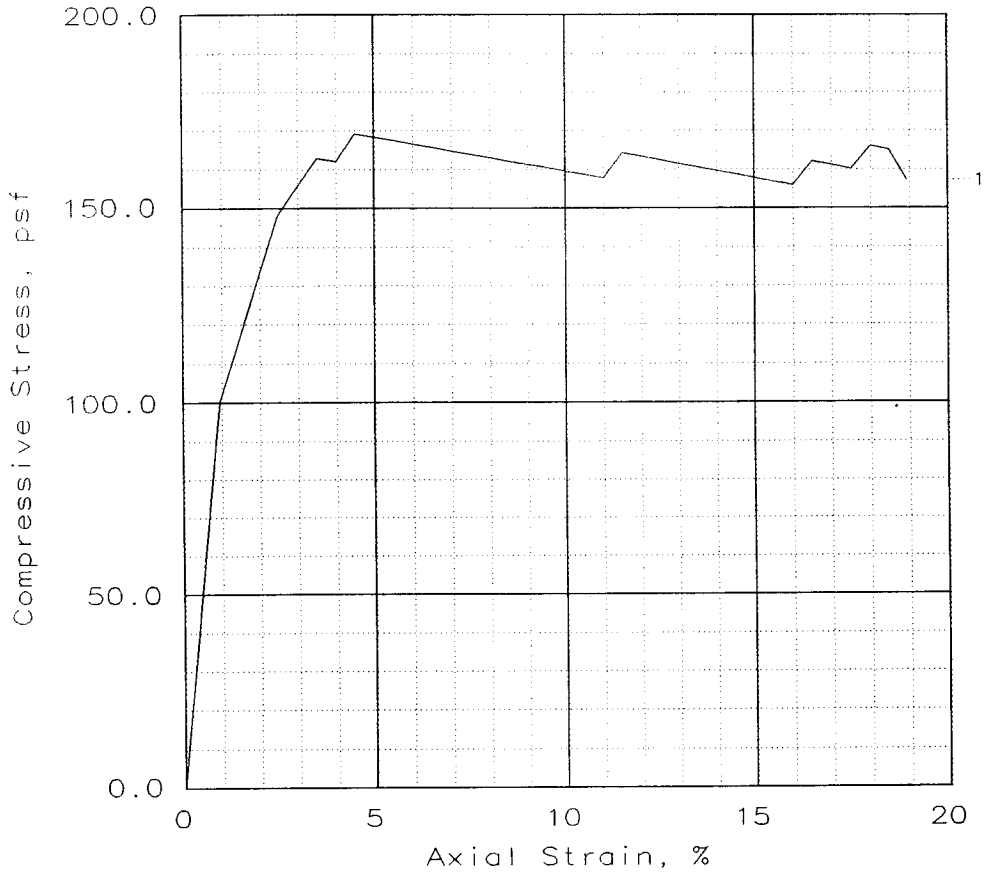
Client: U.S. Army Corps of Engineers

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

Location: Boring 4, Sample 5, Depth 24.3', Elev -22.8

File: UU-25165 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	162.9			
Undrained shear strength, psf	81.4			
Failure strain, %	3.5			
Strain rate, in/min	0.0573			
Water content, %	81.8			
Wet density, pcf	93.4			
Dry density, pcf	51.4			
Saturation, %	96.3			
Void ratio	2.3272			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: vSo Gr CH4

GS= 2.74 | Type: Undisturbed

Project No.: 19080
Date: 10-2-05
Remarks:
Torvane = 0.070 tsf

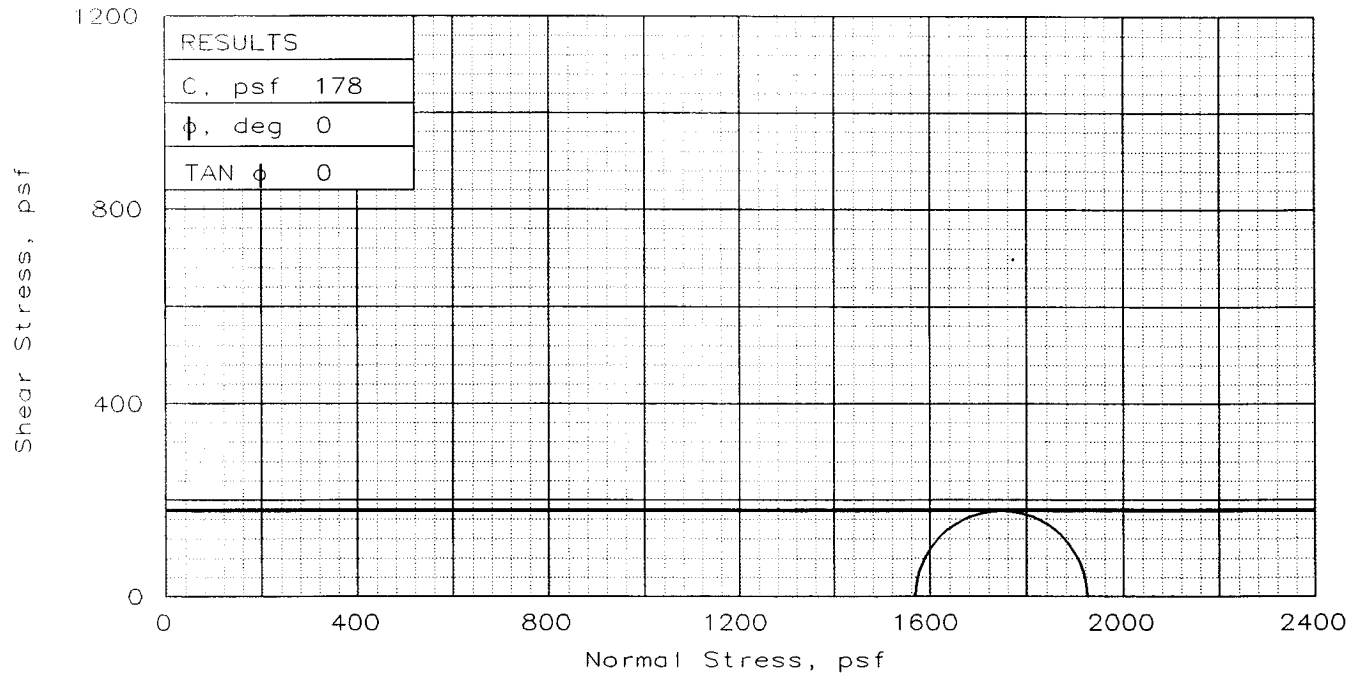
Fig. No.: ———

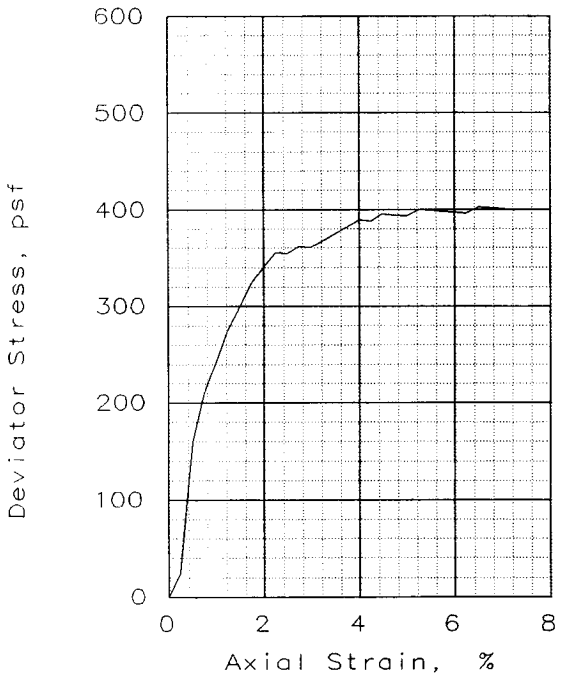
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 6, Depth 26.8', Elev. -25.3

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	79.7
	DRY DENSITY, pcf	53.1
	SATURATION, %	98.3
	VOID RATIO	2.223
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	81.0
	DRY DENSITY, pcf	53.1
	SATURATION, %	100.0
	VOID RATIO	2.219
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0287
BACK PRESSURE, psf		0
CELL PRESSURE, psf		1570
FAIL. STRESS, psf		355
ULT. STRESS, psf		400
σ_1 FAILURE, psf		1925
σ_3 FAILURE, psf		1570

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: vSo Gr CH4
w/ Ins ML
LL= 91 PL= 27 PI= 64
SPECIFIC GRAVITY= 2.74
REMARKS: Torvane = 0.150 tsf

Fig. No.: _____

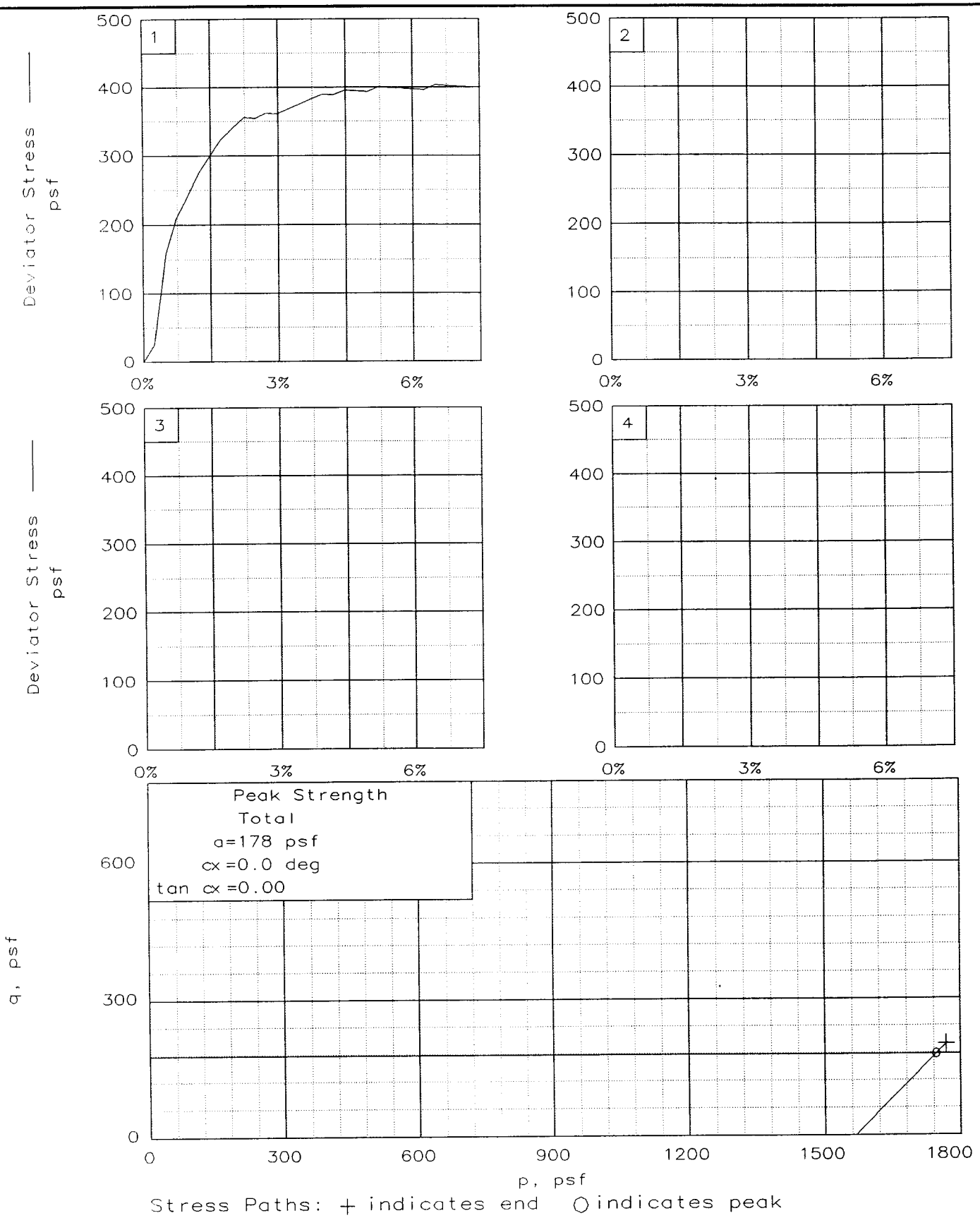
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 4,
Sample 7, Depth 29.3', Elev -27.8

PROJ. NO.: 19080 DATE: 10/24/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



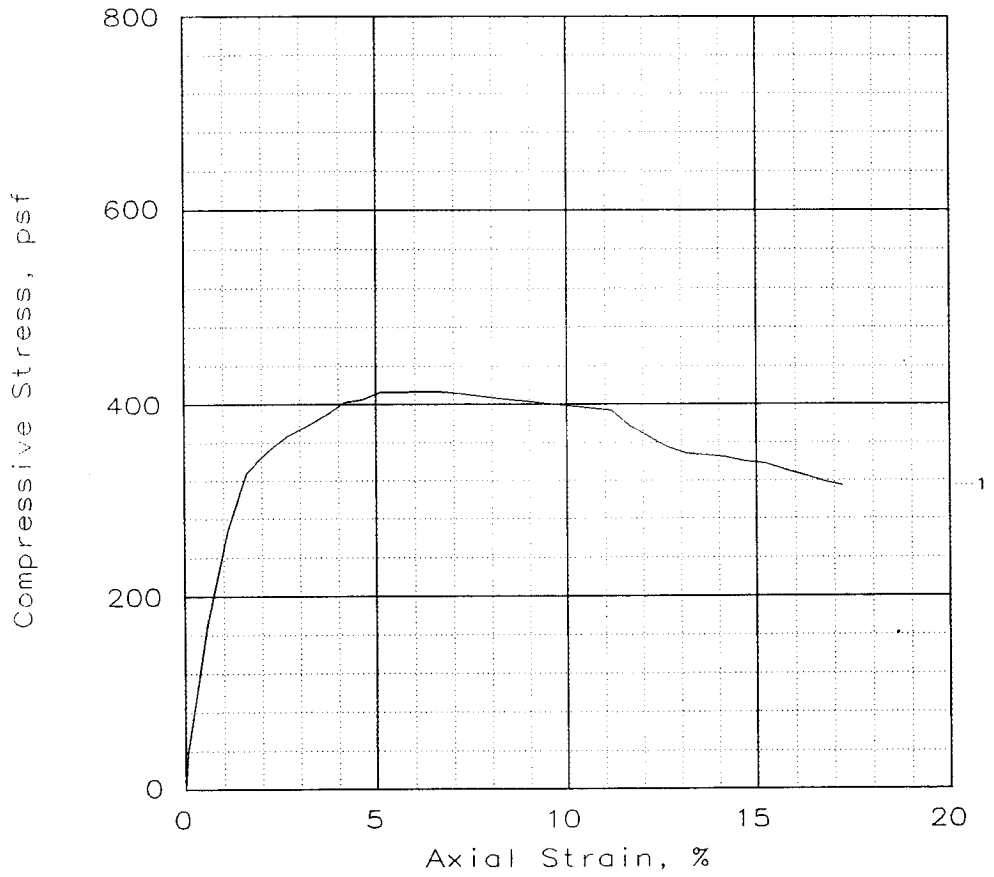
Client: U.S. Army Corps of Engineers

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

Location: Boring 4, Sample 7, Depth 29.3', Elev -27.8

File: UU-25166 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	413			
Undrained shear strength, psf	206			
Failure strain, %	5.1			
Strain rate, in/min	0.0571			
Water content, %	88.7			
Wet density, pcf	90.7			
Dry density, pcf	48.1			
Saturation, %	95.3			
Void ratio	2.5327			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: vSo Gr CH4 w/ ars SM

GS= 2.72 | Type: Undisturbed

Project No.: 19080
Date: 10-2-05
Remarks:
Torvane = 0.150 tsf

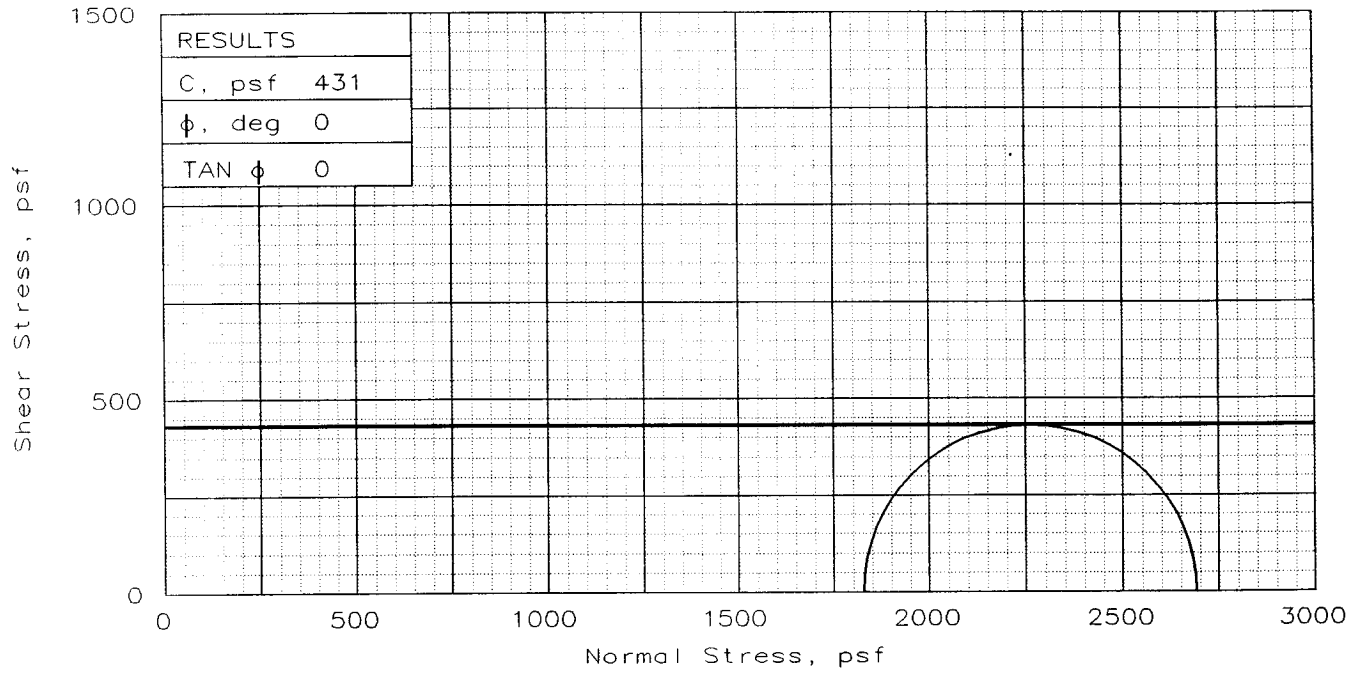
Fig. No.: ———

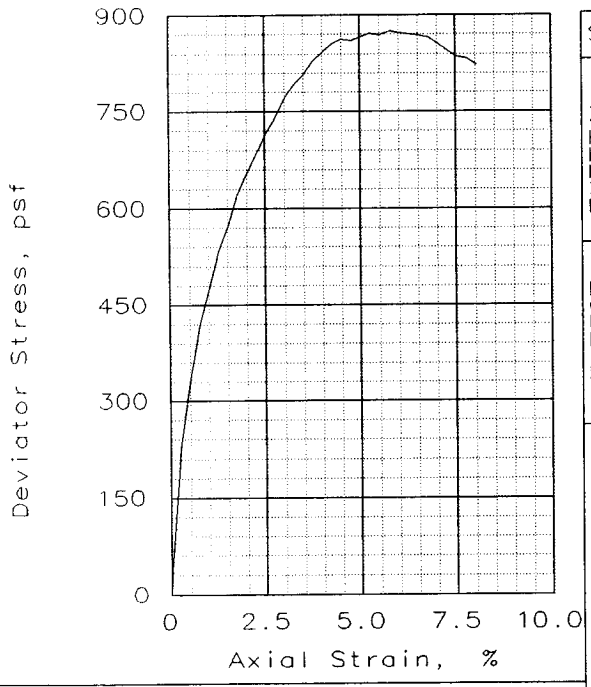
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 8, Depth 31.8', Elev. -30.3

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	58.8
	DRY DENSITY, pcf	63.3
	SATURATION, %	95.1
	VOID RATIO	1.681
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	61.8
	DRY DENSITY, pcf	63.3
	SATURATION, %	100.0
	VOID RATIO	1.681
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0287
BACK PRESSURE, psf		0
CELL PRESSURE, psf		1829
FAIL. STRESS, psf		863
ULT. STRESS, psf		823
σ_1 FAILURE, psf		2691
σ_3 FAILURE, psf		1829

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: So Gr CH3
w/ ars & lns SM
LL= 81 PL= 23 PI= 58
SPECIFIC GRAVITY= 2.72
REMARKS: Torvane = 0.200 tsf

Fig. No.: _____

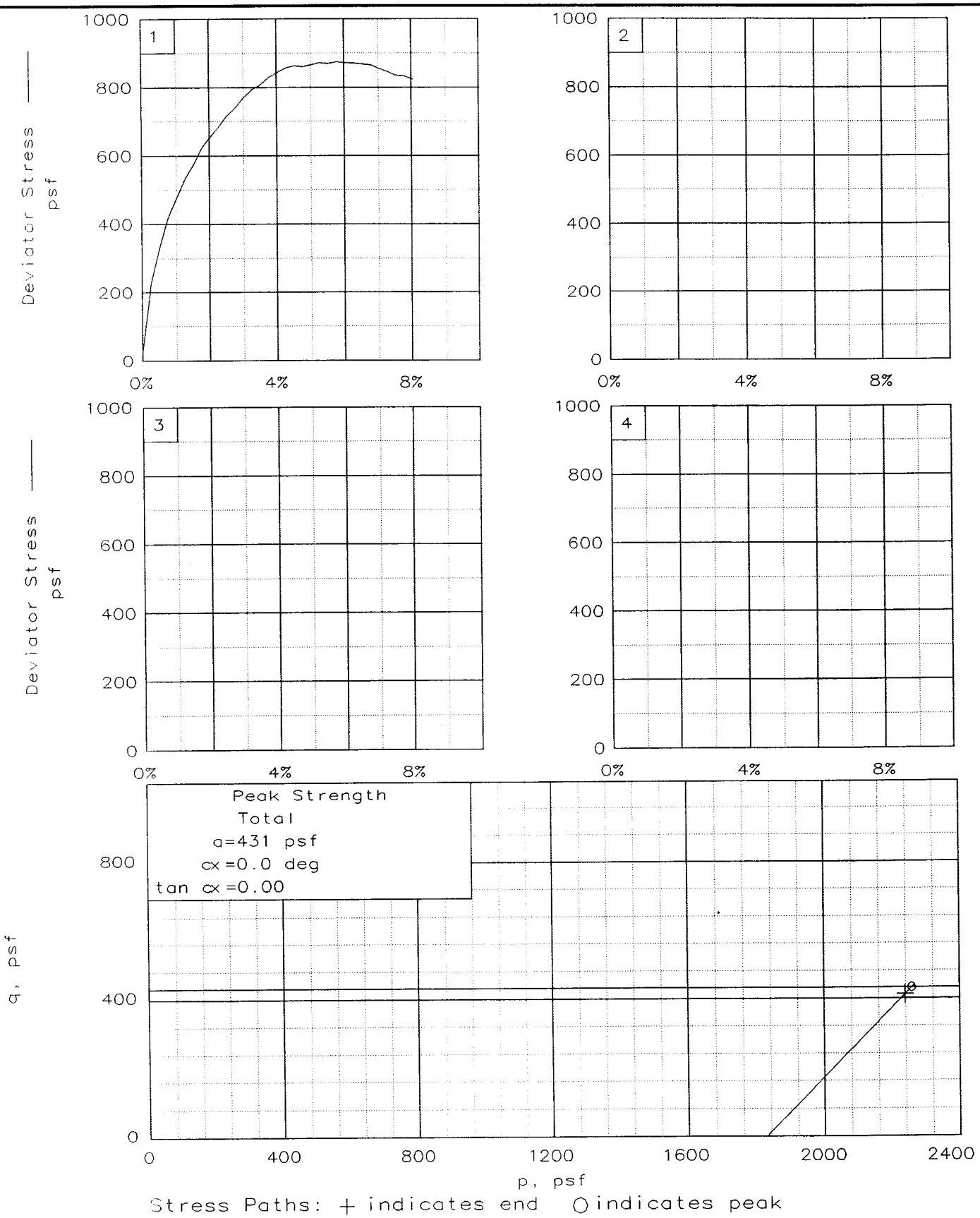
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 4,
Sample 9, Depth 34.3', Elev -34.8

PROJ. NO.: 19080 DATE: 10/24/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



Stress Paths: + indicates end ○ indicates peak

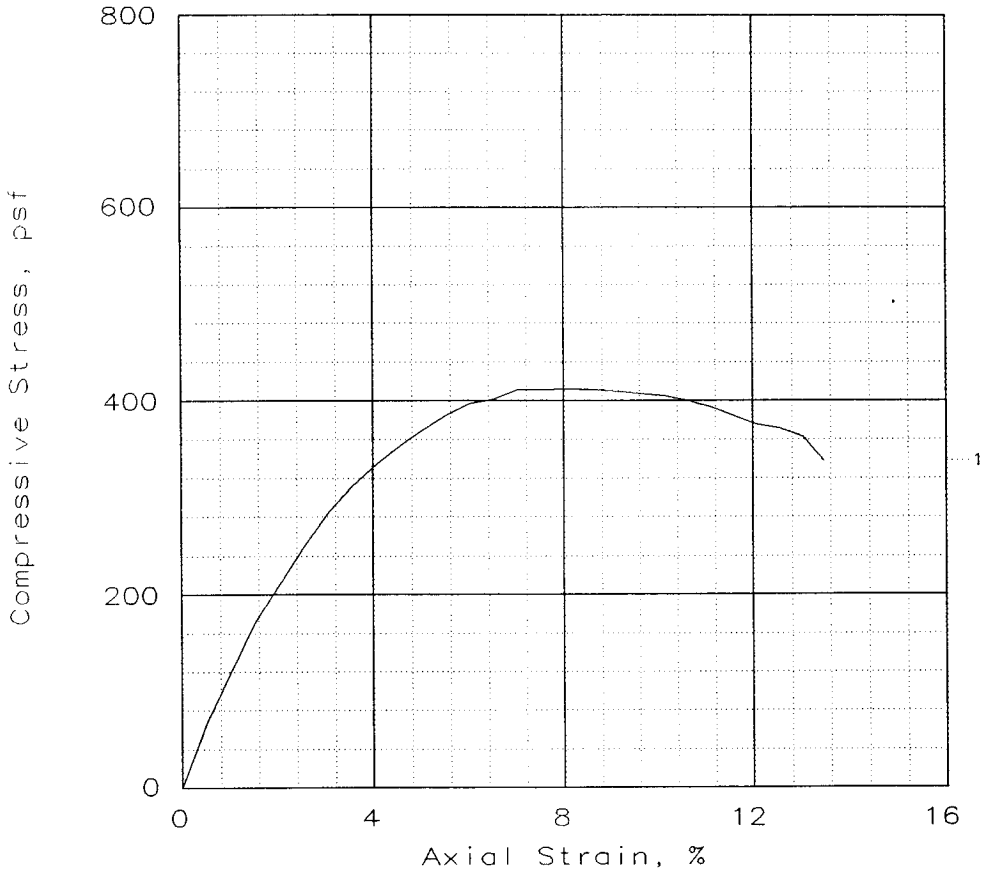
Client: U.S. Army Corps of Engineers

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

Location: Boring 4, Sample 9, Depth 34.3', Elev -34.8

File: UU-25167 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	412			
Undrained shear strength, psf	206			
Failure strain, %	7.0			
Strain rate, in/min	0.0556			
Water content, %	37.9			
Wet density, pcf	108.6			
Dry density, pcf	78.7			
Saturation, %	89.7			
Void ratio	1.1411			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: vSo Gr CL5 w/ SIF

			GS= 2.7	Type: Undisturbed

Project No.: 19080
Date: 10-2-05
Remarks:
Torvane = 0.150 tsf

Fig. No.: ———

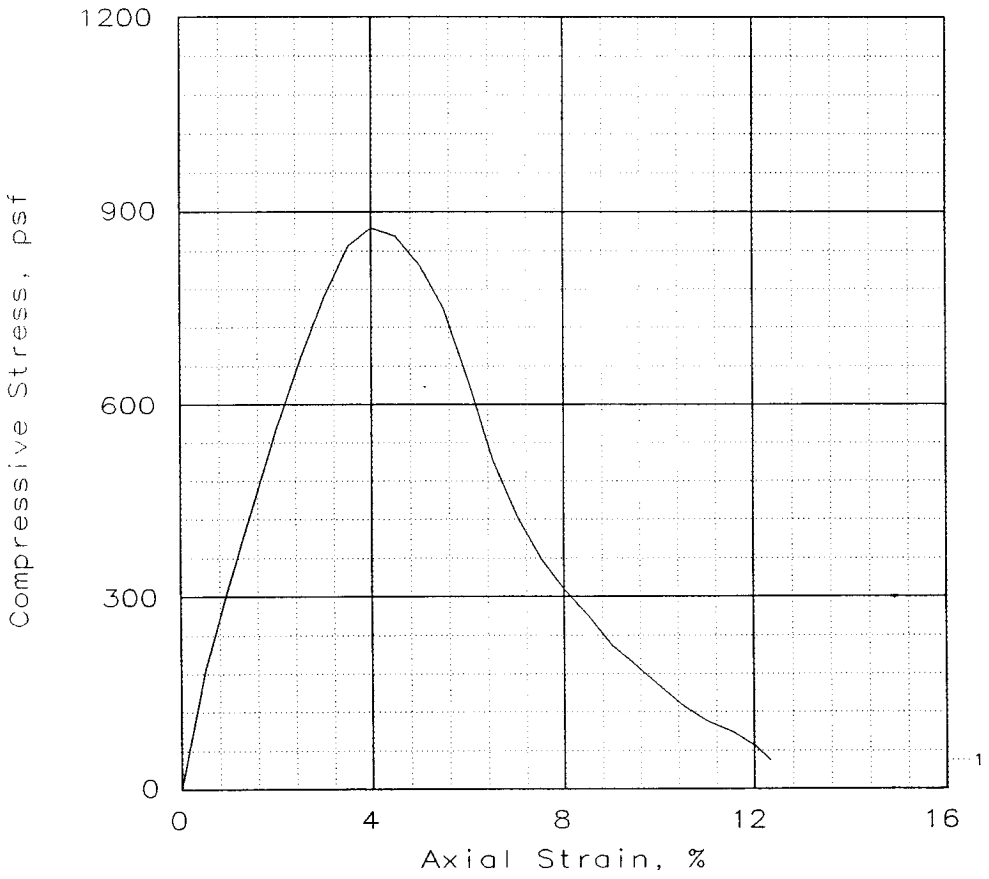
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 10, Depth 36.8', Elev. -35.3

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	875			
Undrained shear strength, psf	438			
Failure strain, %	4.0			
Strain rate, in/min	0.0564			
Water content, %	58.3			
Wet density, pcf	100.4			
Dry density, pcf	63.4			
Saturation, %	94.1			
Void ratio	1.6968			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: So Gr CH3 w/ Ins SM

			GS= 2.74	Type: Undisturbed

Project No.: 19080
Date: 10-2-05
Remarks:
Torvane = 0.330 tsf

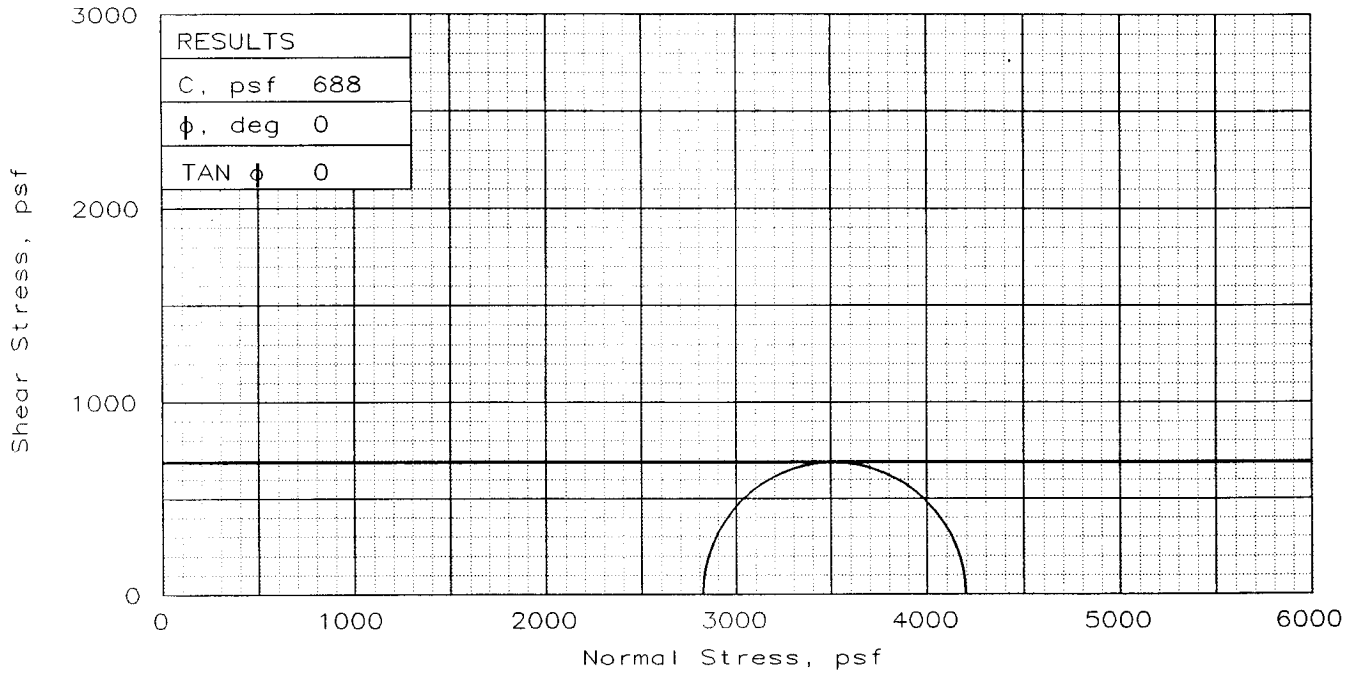
Fig. No.: ———

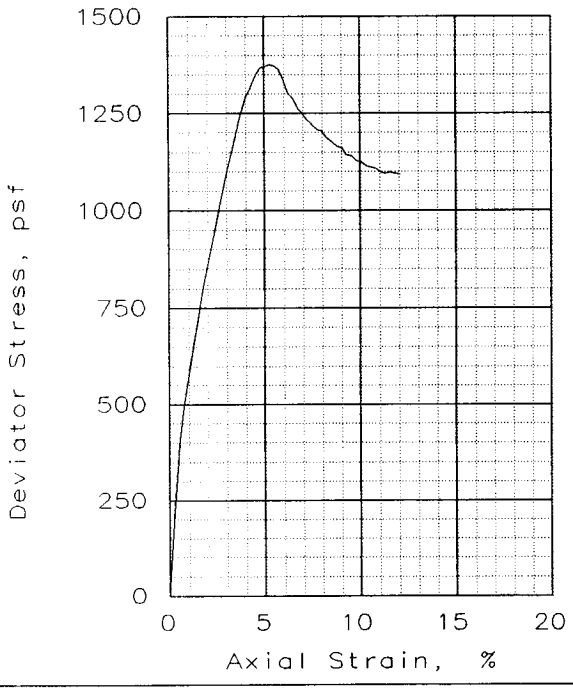
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 16, Depth 50.8', Elev. -49.3

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	65.1
	DRY DENSITY, pcf	59.1
	SATURATION, %	94.3
	VOID RATIO	1.893
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	68.9
	DRY DENSITY, pcf	59.2
	SATURATION, %	100.0
	VOID RATIO	1.889
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0288
BACK PRESSURE, psf		0
CELL PRESSURE, psf		2822
FAIL. STRESS, psf		1376
ULT. STRESS, psf		1092
σ_1 FAILURE, psf		4199
σ_3 FAILURE, psf		2822

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: M Gr CH4
w/ SIF
LL= 85 PL= 25 PI= 60
SPECIFIC GRAVITY= 2.74
REMARKS: Torvane = 0.400 tsf

Fig. No.: _____

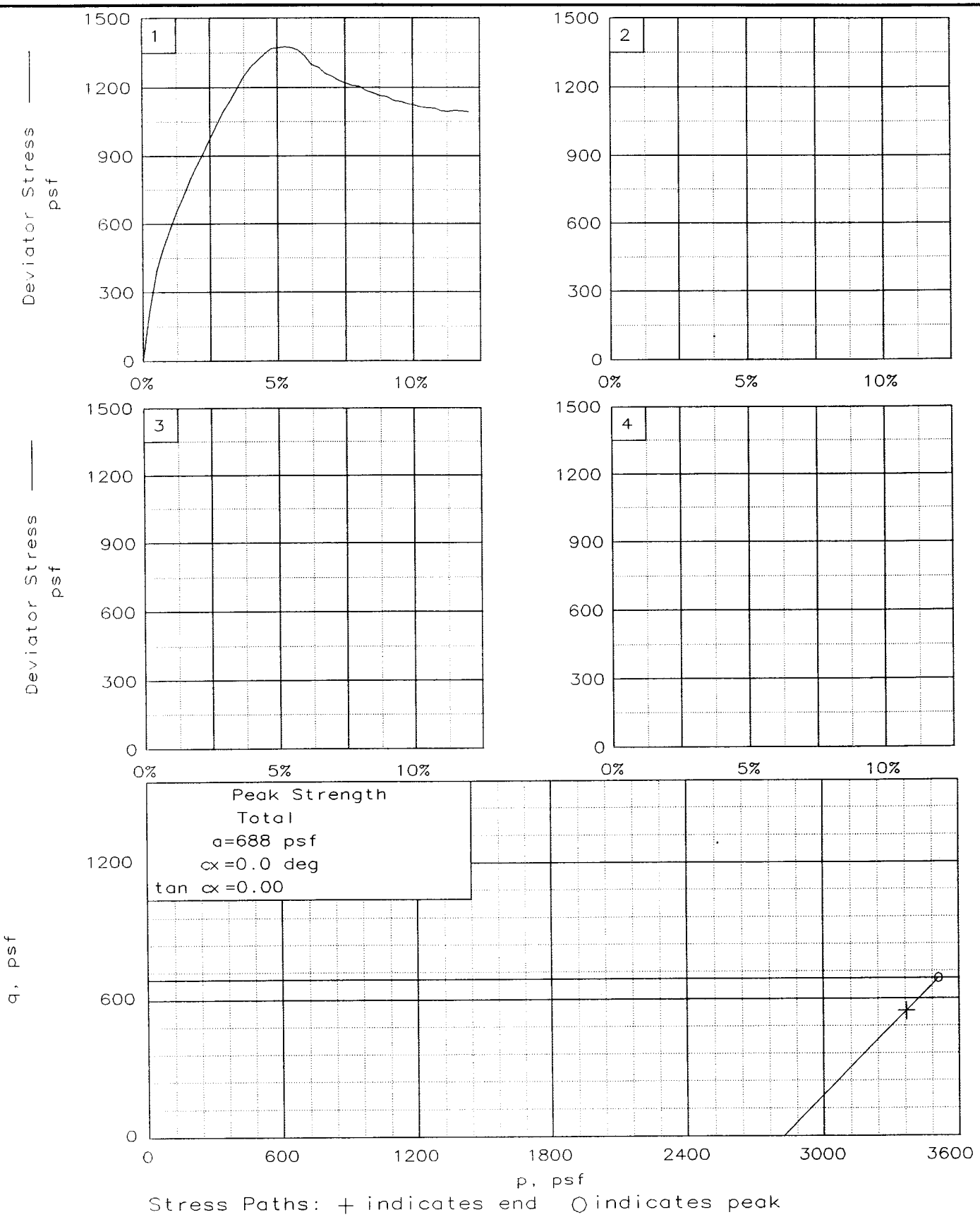
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 4,
Sample 17, Depth 54.3', Elev -52.8

PROJ. NO.: 19080 DATE: 10/24/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



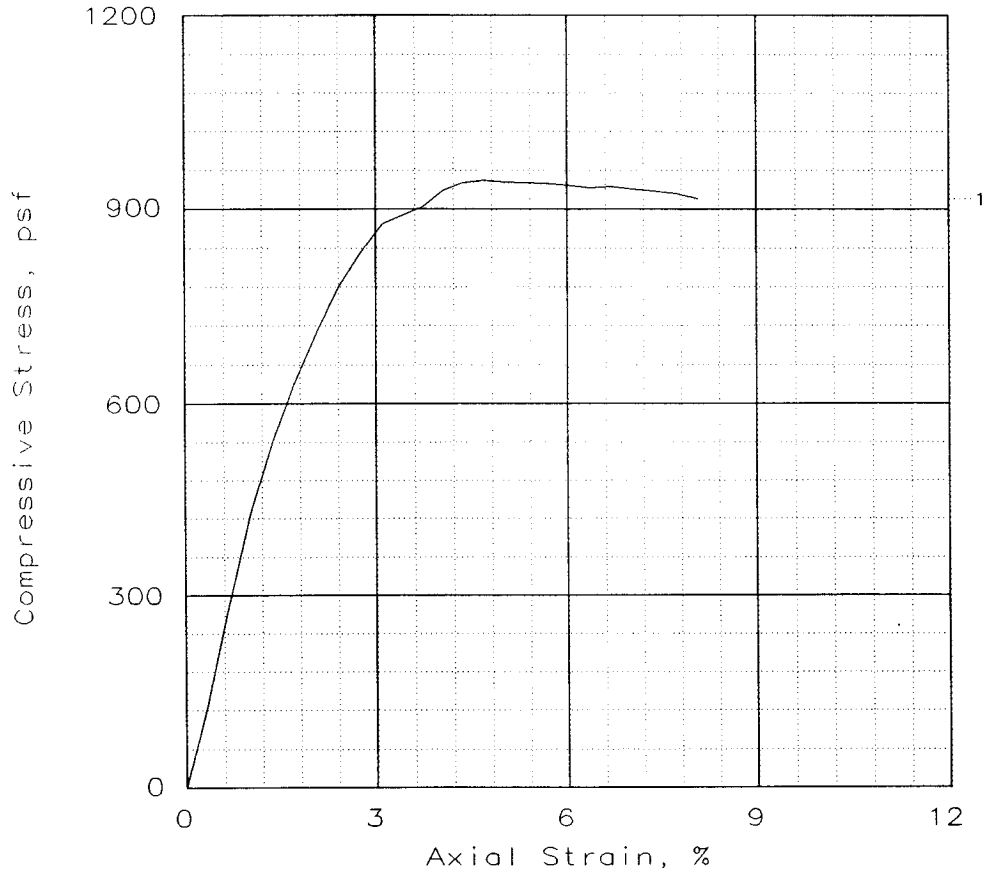
Client: U.S. Army Corps of Engineers

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

Location: Boring 4, Sample 17, Depth 54.3', Elev -52.8

File: UU-25168 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	945			
Undrained shear strength, psf	472			
Failure strain, %	4.7			
Strain rate, in/min	0.0536			
Water content, %	56.7			
Wet density, pcf	100.7			
Dry density, pcf	64.3			
Saturation, %	93.5			
Void ratio	1.6623			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: So Gr CH4 w/ SIF, SL

			GS= 2.74	Type: Undisturbed

Project No.: 19080
Date: 10/24/05
Remarks:
Torvane = 0.370 tsf

Fig. No.: ———

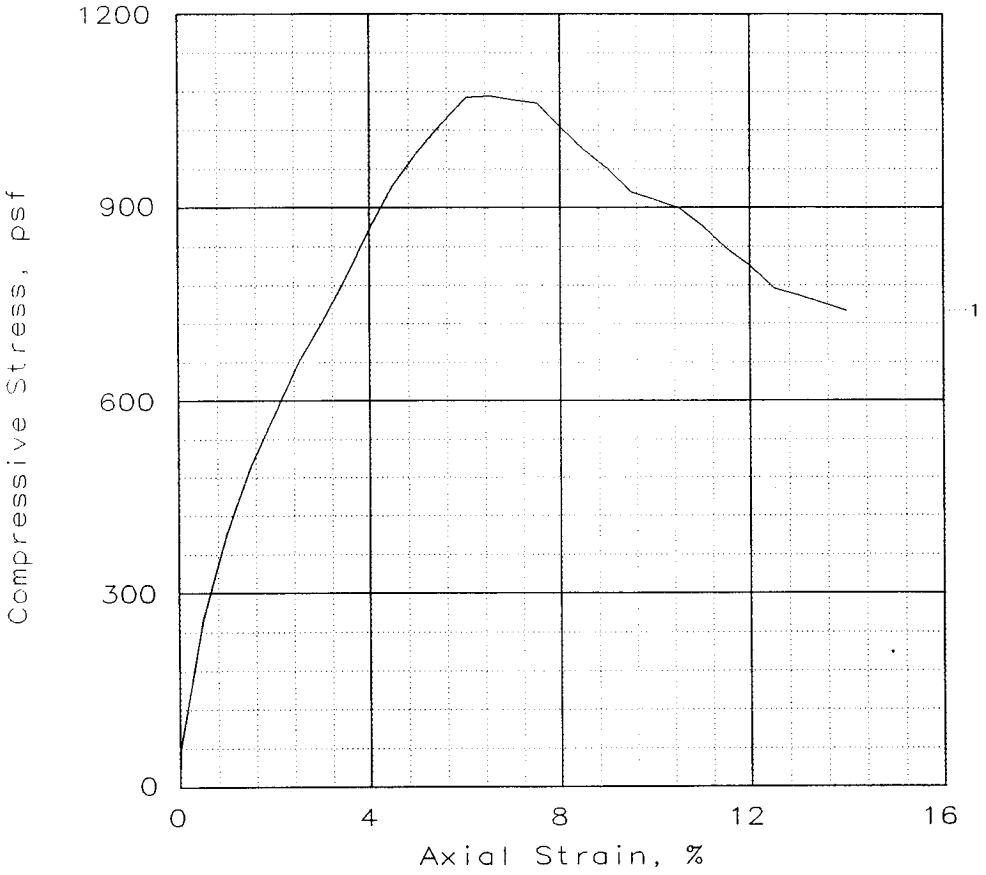
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 18, Depth 56.8', Elev -55.3

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1073			
Undrained shear strength, psf	537			
Failure strain, %	6.5			
Strain rate, in/min	0.0575			
Water content, %	60.5			
Wet density, pcf	99.7			
Dry density, pcf	62.1			
Saturation, %	94.5			
Void ratio	1.7553			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M Gr CH4 w/ SIF, SL

			GS= 2.74	Type: Undisturbed

Project No.: 19080
Date: 10-2-05
Remarks:
Torvane = 0.350 tsf

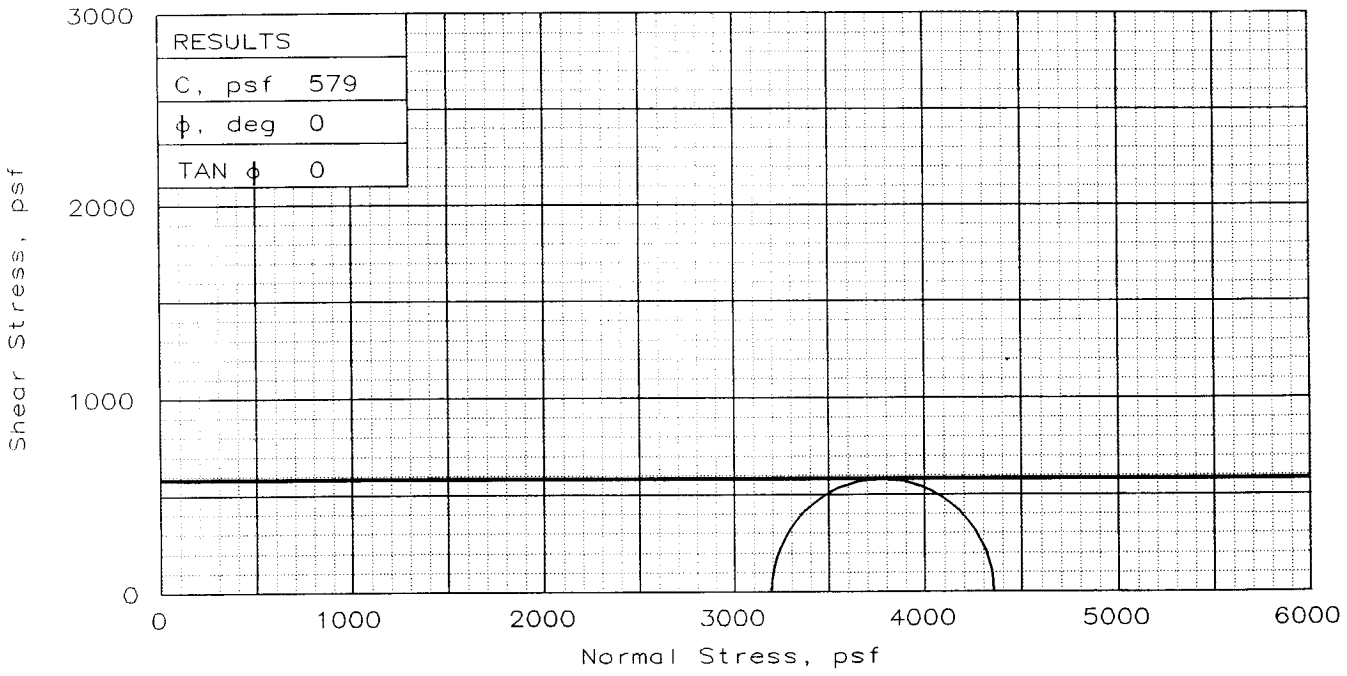
Fig. No.: ———

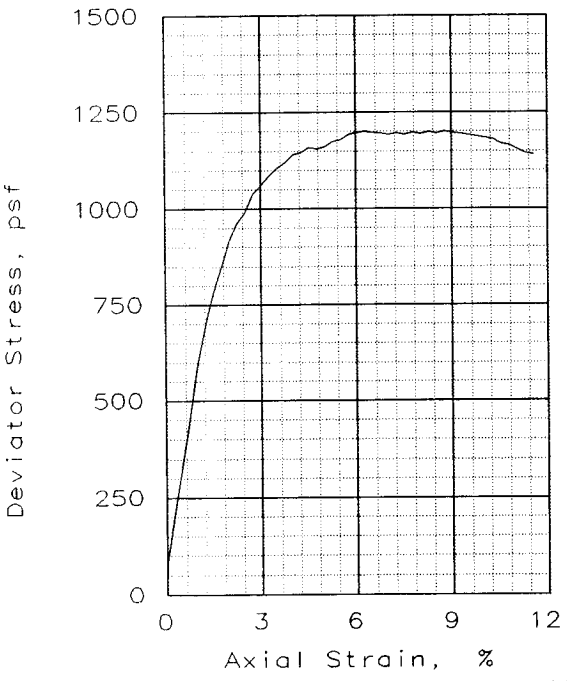
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 19, Depth 59.3', Elev. -57.8

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	49.8
	DRY DENSITY, pcf	69.4
	SATURATION, %	93.7
	VOID RATIO	1.447
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	52.5
	DRY DENSITY, pcf	70.0
	SATURATION, %	100.0
	VOID RATIO	1.427
	DIAMETER, in	1.38
	HEIGHT, in	2.92
Strain rate, in/min		0.0288
BACK PRESSURE, psf		0
CELL PRESSURE, psf		3197
FAIL. STRESS, psf		1159
ULT. STRESS, psf		1141
σ_1 FAILURE, psf		4356
σ_3 FAILURE, psf		3197

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: M Gr CH4
w/ ars SM, SL
LL= 73 PL= 20 PI= 53
SPECIFIC GRAVITY= 2.72
REMARKS: Torvane = 0.370 tsf

Fig. No.: _____

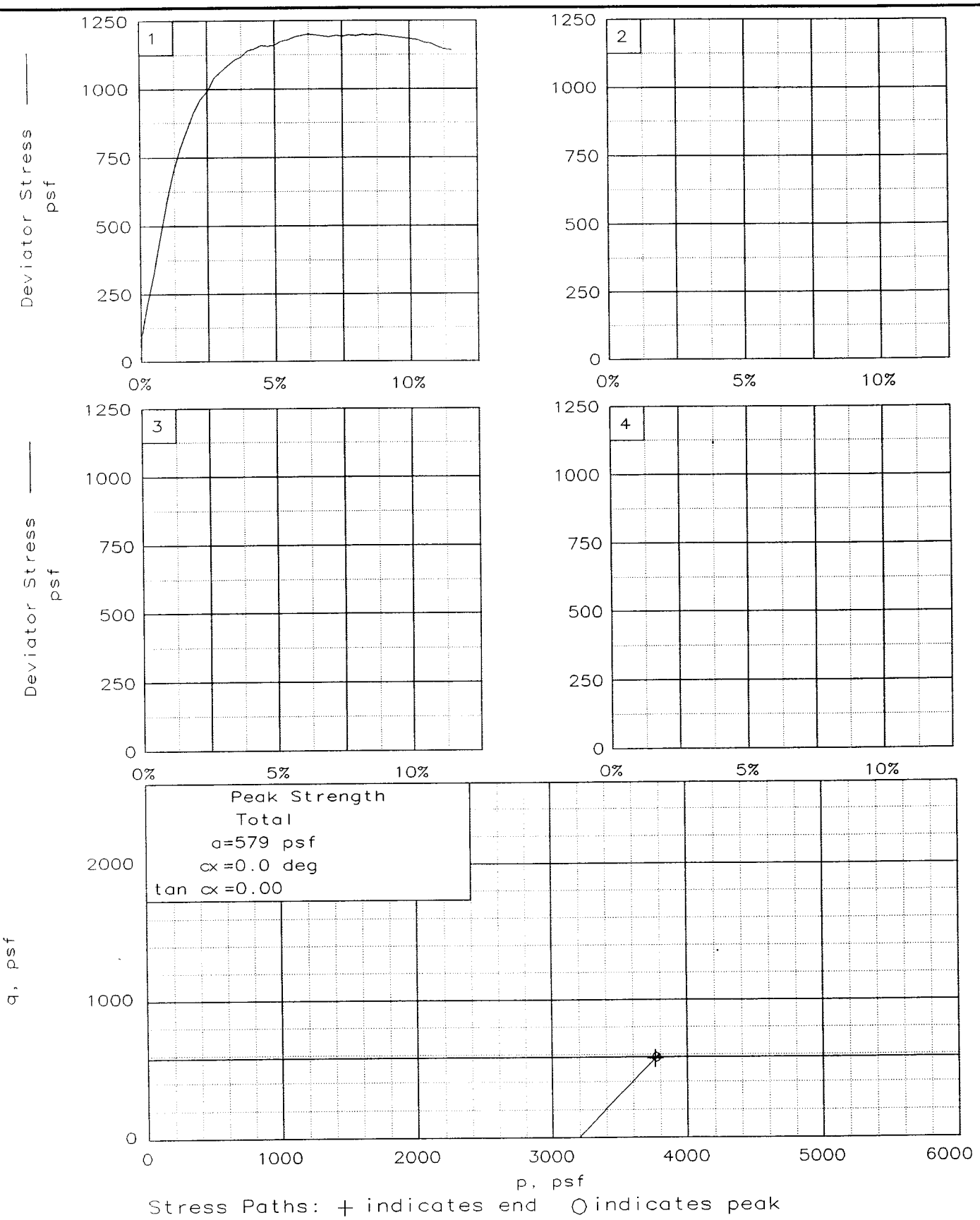
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 4,
Sample 20, Depth 61.8', Elev -60.3

PROJ. NO.: 19080 DATE: 10/24/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



Stress Paths: + indicates end ○ indicates peak

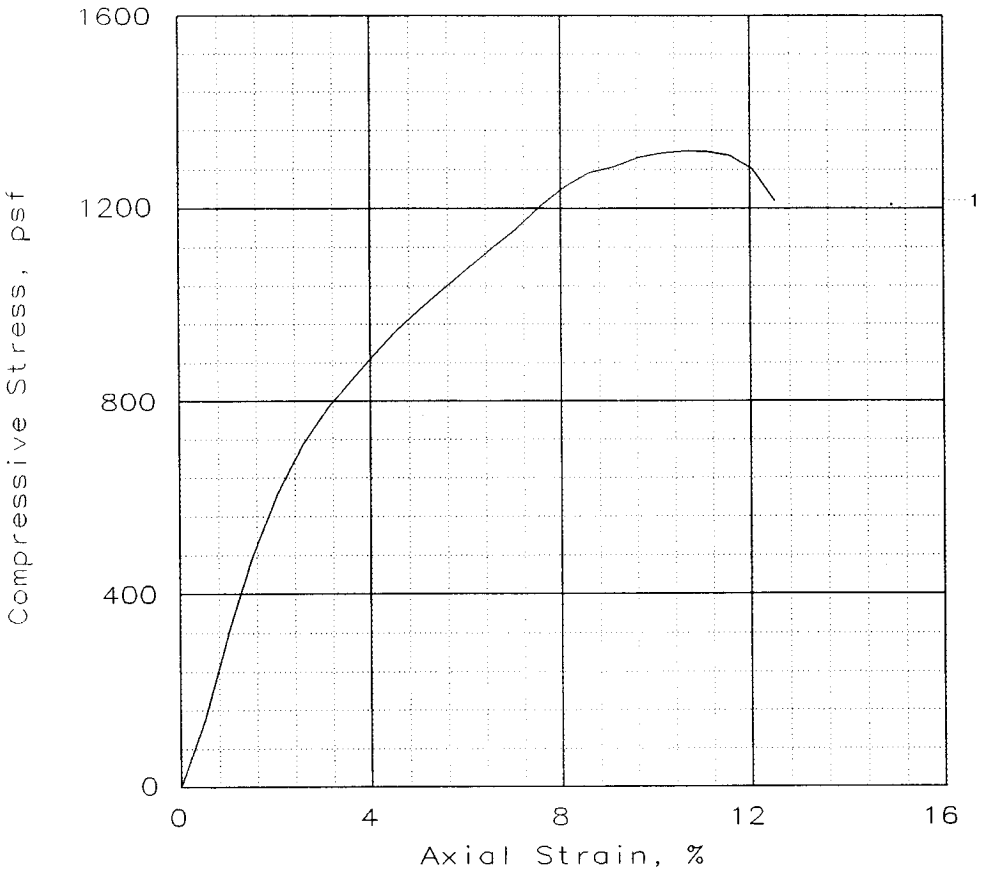
Client: U.S. Army Corps of Engineers

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

Location: Boring 4, Sample 20, Depth 61.8', Elev -60.3

File: UU-25169 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1318			
Undrained shear strength, psf	659			
Failure strain, %	10.6			
Strain rate, in/min	0.0556			
Water content, %	58.2			
Wet density, pcf	99.6			
Dry density, pcf	63.0			
Saturation, %	92.9			
Void ratio	1.7167			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M Gr CH4 w/ SIF, SL

GS= 2.74 | Type: Undisturbed

Project No.: 19080
Date: 10/24/05
Remarks:
Torvane = 0.400 tsf

Fig. No.: ———

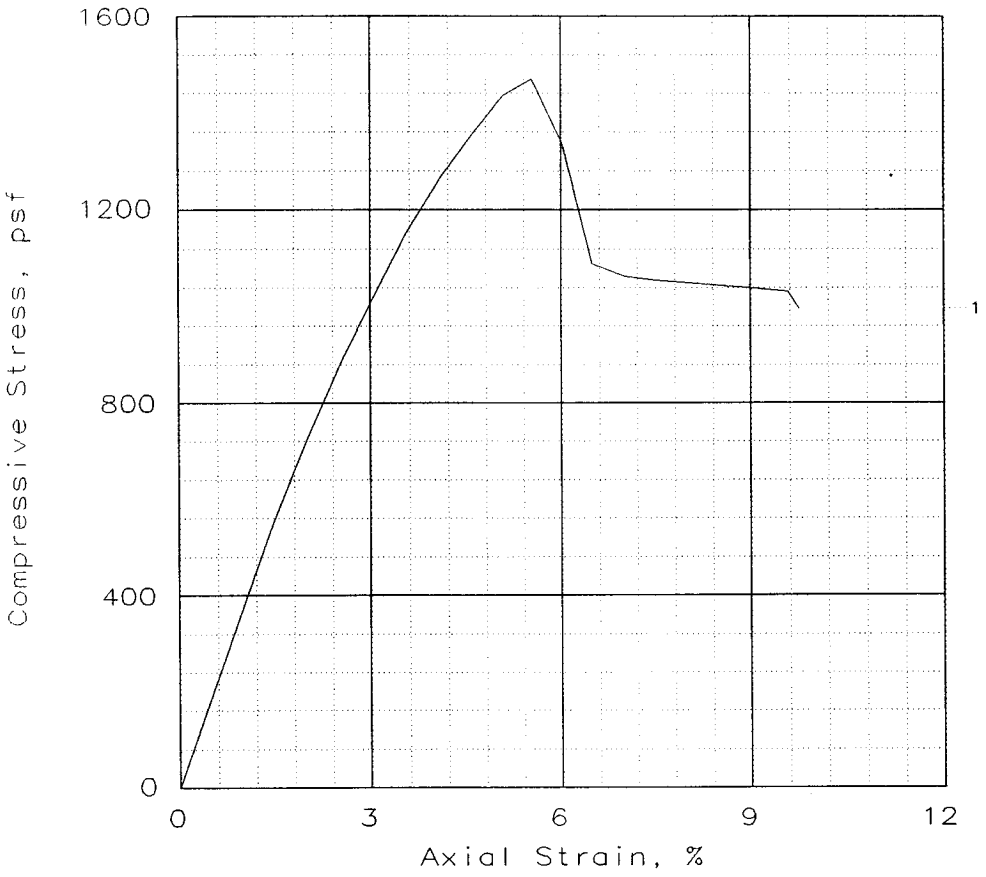
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 21, Depth 64.3', Elev -62.8

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1470			
Undrained shear strength, psf	735			
Failure strain, %	5.5			
Strain rate, in/min	0.0625			
Water content, %	56.6			
Wet density, pcf	101.6			
Dry density, pcf	64.9			
Saturation, %	95.2			
Void ratio	1.6173			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

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

			GS= 2.72	Type: Undisturbed

Project No.: 19080
Date: 10-2-05
Remarks:
Torvane = 0.390 tsf

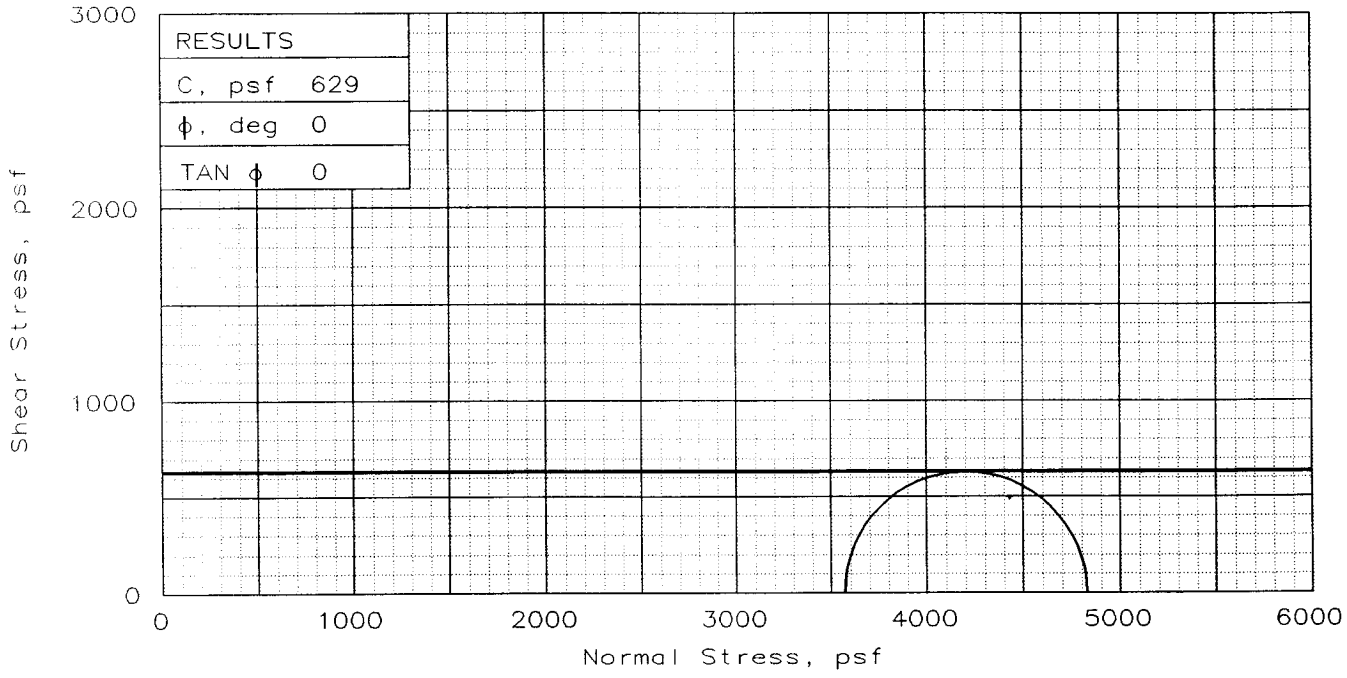
Fig. No.: ———

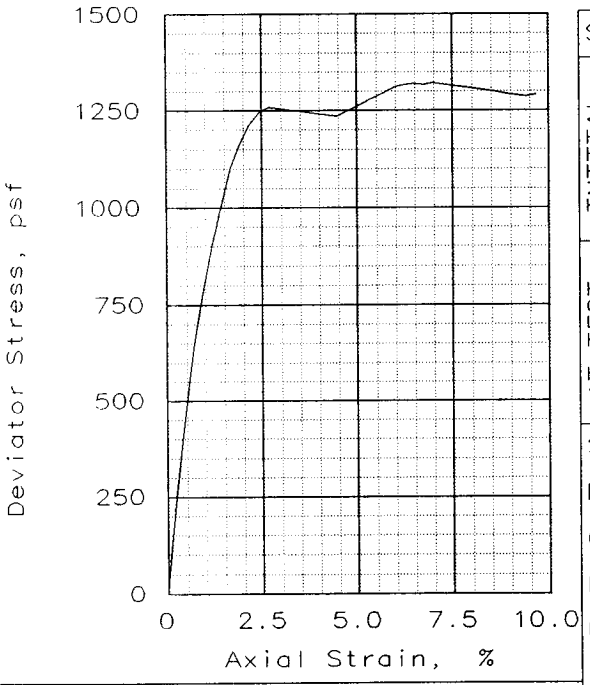
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal·
Location: Boring 4,
Sample 22, Depth 66.8', Elev. -65.3

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	79.2
	DRY DENSITY, pcf	50.5
	SATURATION, %	90.9
	VOID RATIO	2.386
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	87.1
	DRY DENSITY, pcf	50.5
	SATURATION, %	100.0
	VOID RATIO	2.386
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0284
BACK PRESSURE, psf		0
CELL PRESSURE, psf		3571
FAIL. STRESS, psf		1259
ULT. STRESS, psf		1291
σ_1 FAILURE, psf		4830
σ_3 FAILURE, psf		3571

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: M Gr CH4
w/ wd
LL= 116 PL= 34 PI= 82
SPECIFIC GRAVITY= 2.74
REMARKS: Torvane = 0.400 tsf

Fig. No.: _____

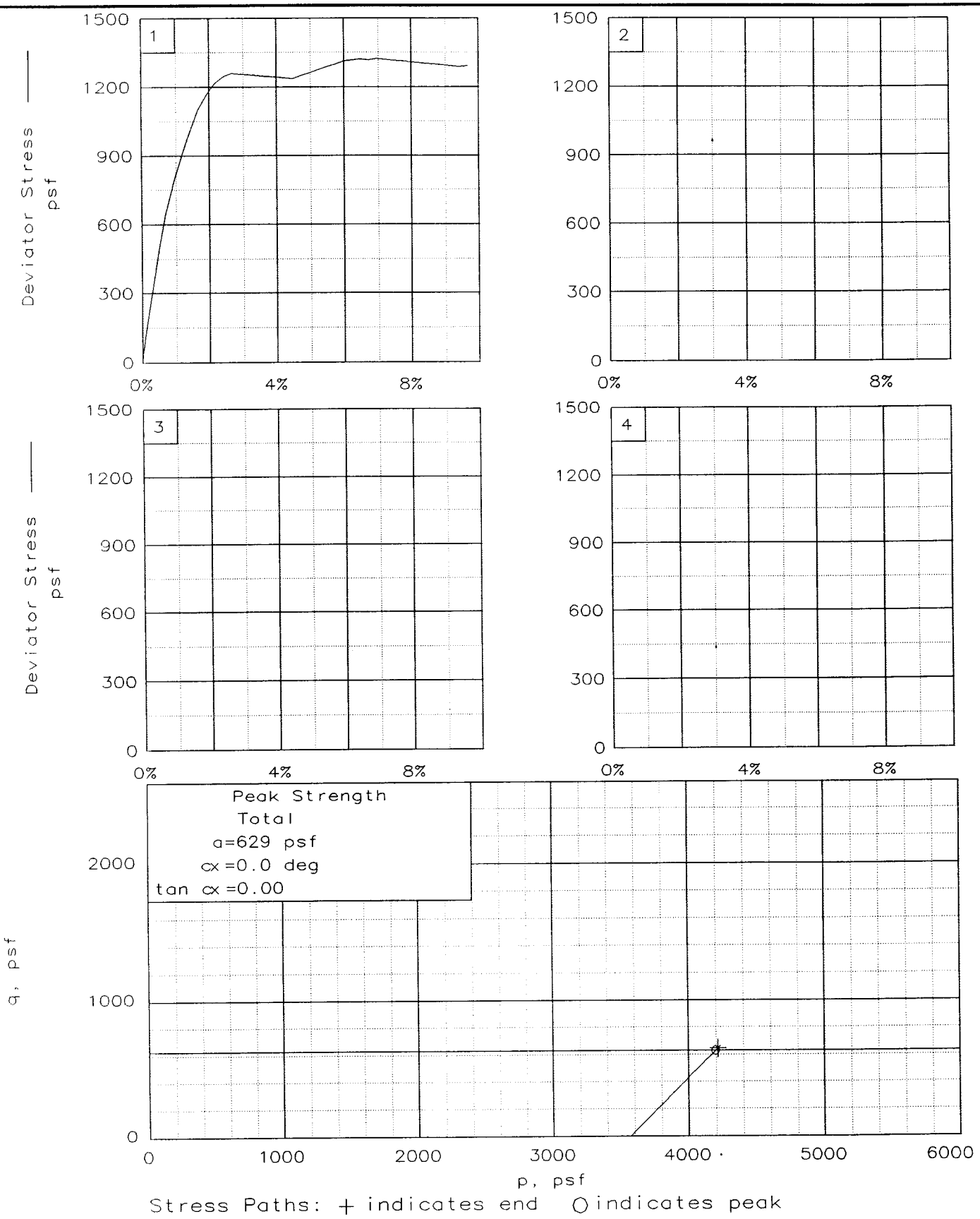
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 4,
Sample 23, Depth 69.3', Elev -67.8

PROJ. NO.: 19080 DATE: 10/24/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



Stress Paths: + indicates end ○ indicates peak

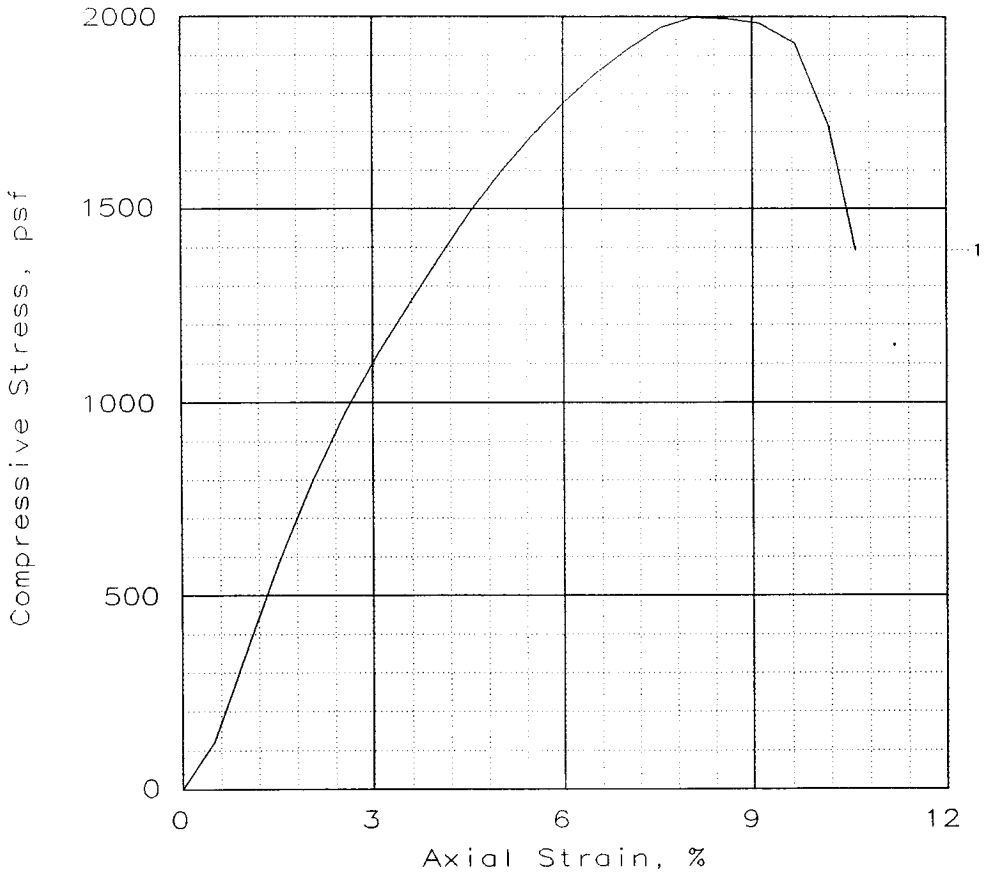
Client: U.S. Army Corps of Engineers

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

Location: Boring 4, Sample 23, Depth 69.3', Elev -67.8

File: UU-25170 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1999			
Undrained shear strength, psf	999			
Failure strain, %	8.1			
Strain rate, in/min	0.0557			
Water content, %	66.5			
Wet density, pcf	95.9			
Dry density, pcf	57.6			
Saturation, %	92.5			
Void ratio	1.9688			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M Gr CH4 w/ wd, SL

			GS= 2.74	Type: Undisturbed

Project No.: 19080
Date: 10/24/05
Remarks:
Torvane = 0.450 tsf

Fig. No.: ———

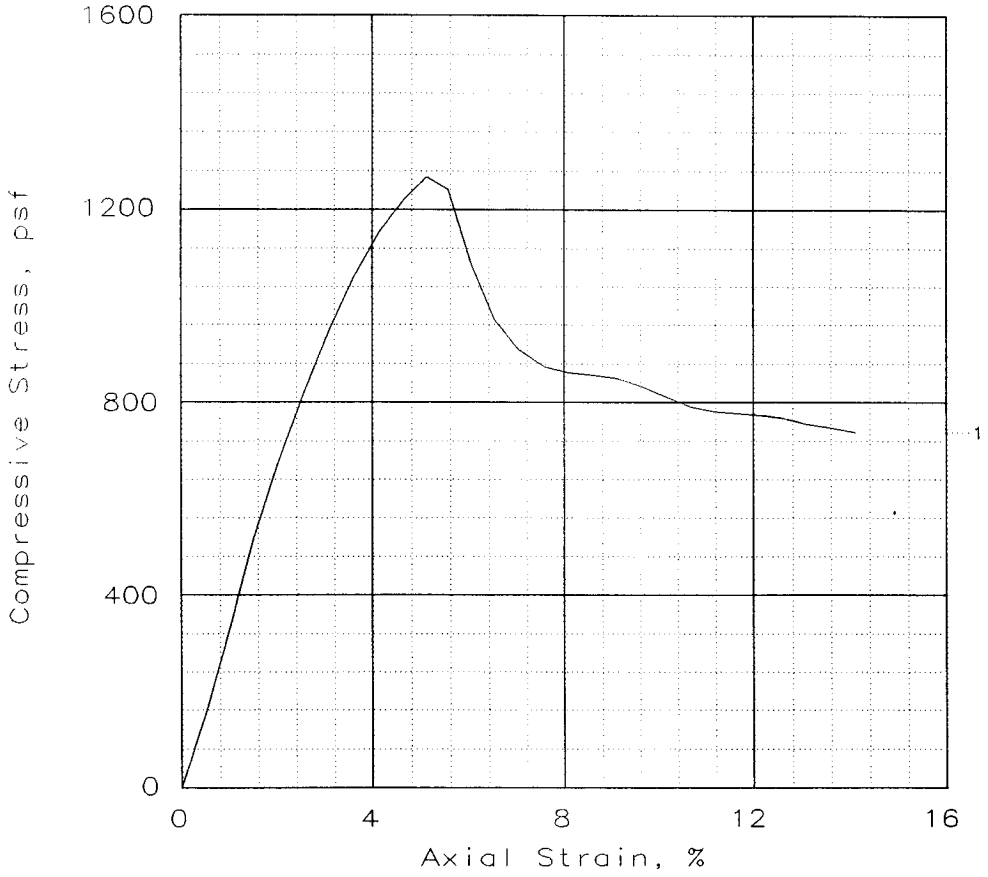
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 24, Depth 71.8', Elev -70.3

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1267			
Undrained shear strength, psf	634			
Failure strain, %	5.1			
Strain rate, in/min	0.0576			
Water content, %	68.1			
Wet density, pcf	96.6			
Dry density, pcf	57.5			
Saturation, %	94.4			
Void ratio	1.9770			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: M Gr CH4

GS= 2.74 | Type: Undisturbed

Project No.: 19080
Date: 10-2-05
Remarks:
Torvane = 0.370 tsf

Fig. No.: ———

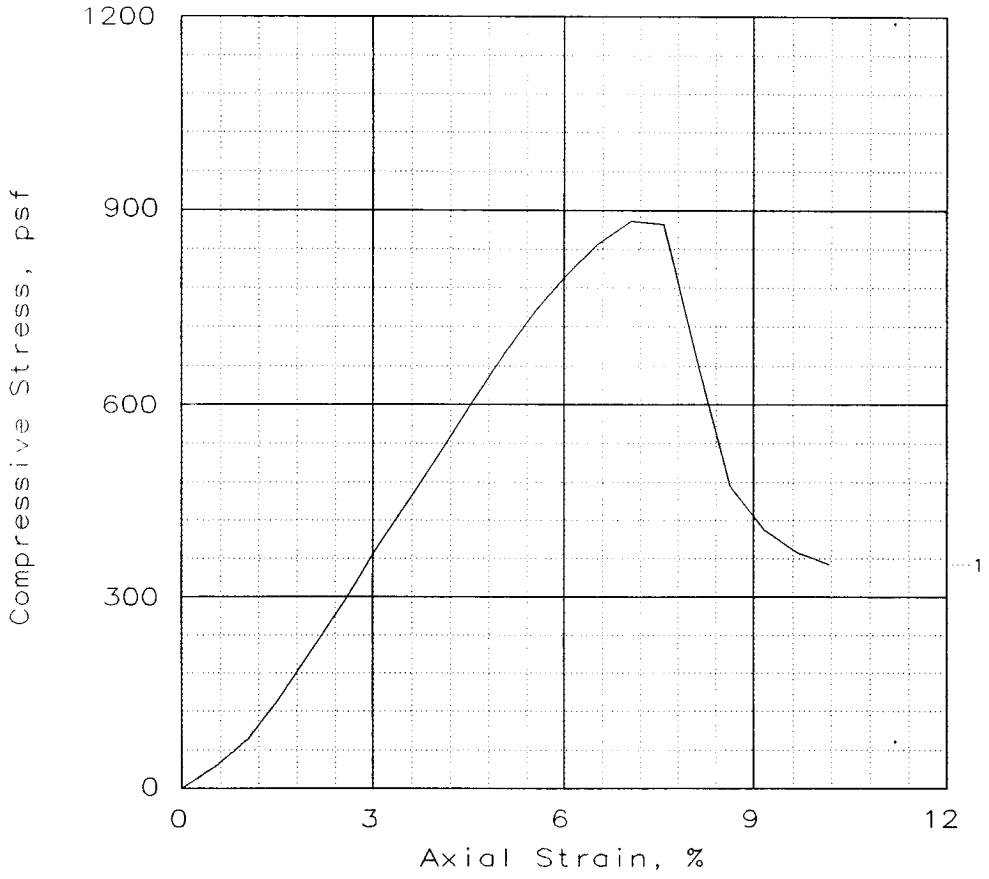
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 25, Depth 74.3', Elev. -72.8

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	883			
Undrained shear strength, psf	441			
Failure strain, %	7.1			
Strain rate, in/min	0.0566			
Water content, %	20.4			
Wet density, pcf	123.8			
Dry density, pcf	102.8			
Saturation, %	86.1			
Void ratio	0.6401			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: So Gr CL3

			GS= 2.7	Type: Undisturbed

Project No.: 19080
Date: 10-2-05
Remarks:
Torvane = 0.230 tsf

Fig. No.: ———

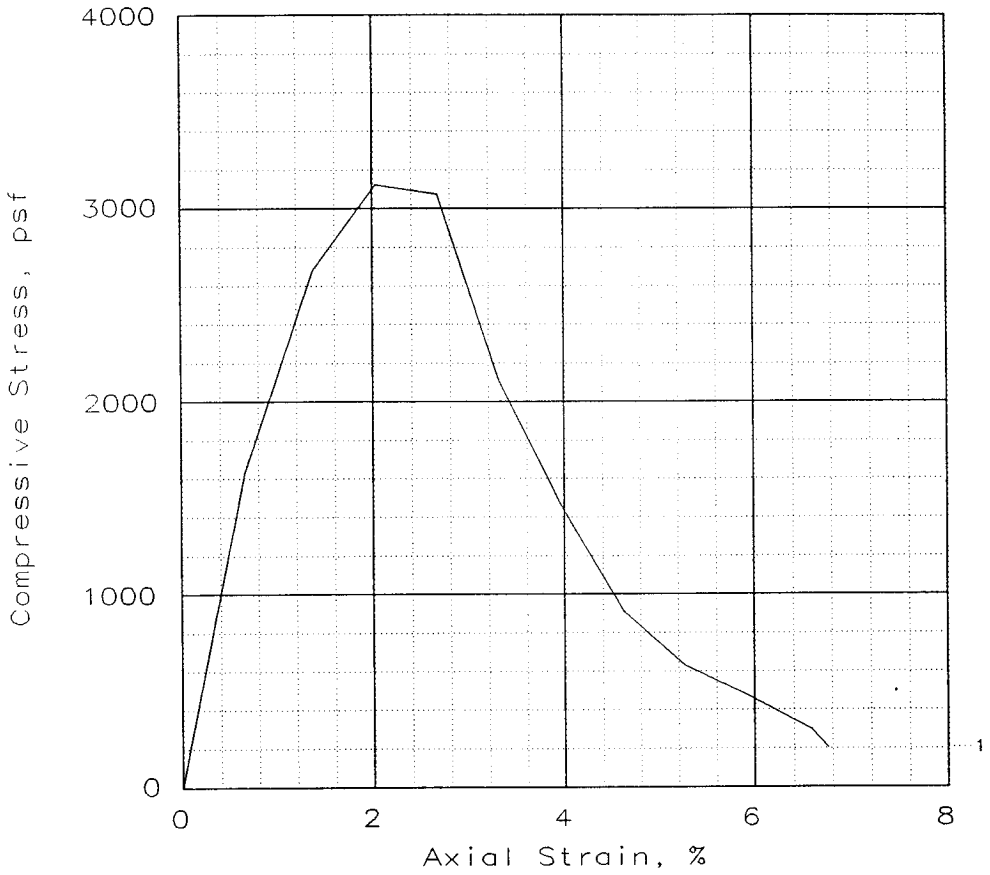
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 27, Depth 79.0', Elev. -77.5

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	3124			
Undrained shear strength, psf	1562			
Failure strain, %	2.0			
Strain rate, in/min	0.0531			
Water content, %	35.3			
Wet density, pcf	114.6			
Dry density, pcf	84.7			
Saturation, %	94.8			
Void ratio	1.0203			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: St Br & Gr CH4 w/ Ins SM, SL

LL = 88	PL = 24	PI = 64	GS= 2.74	Type: Undisturbed

Project No.: 19080
Date: 10-2-05
Remarks:
Torvane = 1.250 tsf

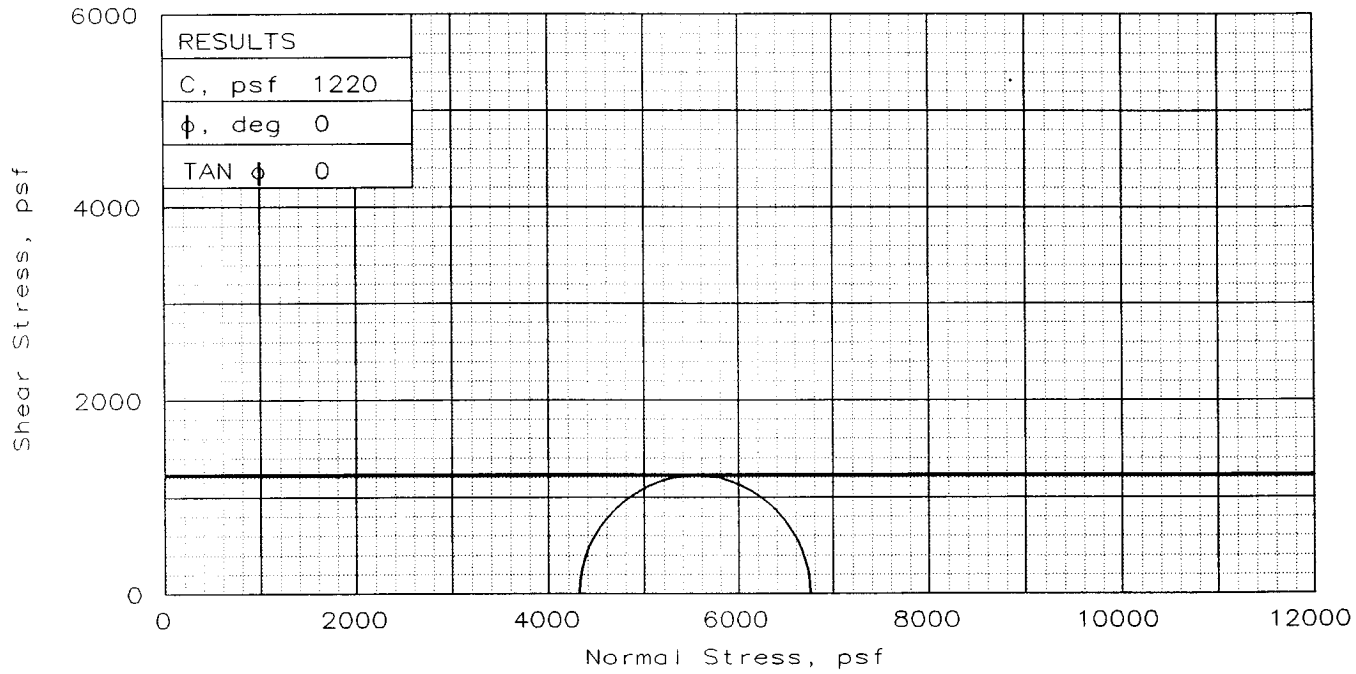
Fig. No.: ——

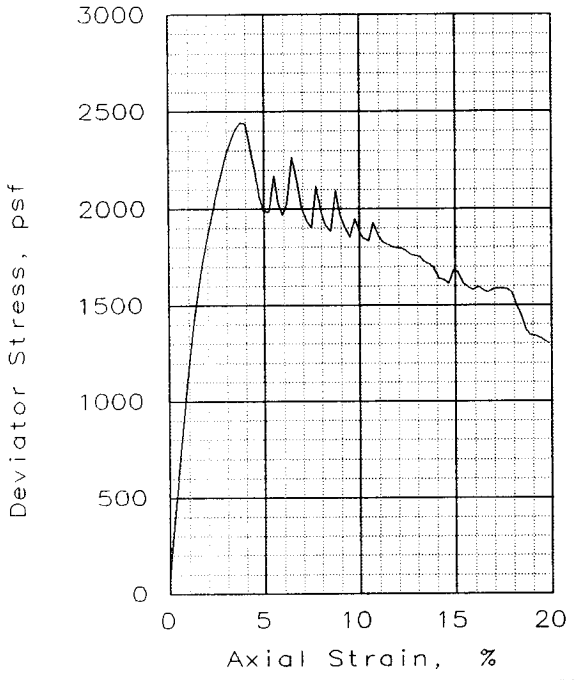
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 28, Depth 81.8', Elev. -80.3

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	38.2
	DRY DENSITY, pcf	82.3
	SATURATION, %	97.1
	VOID RATIO	1.077
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	39.3
	DRY DENSITY, pcf	82.4
	SATURATION, %	100.0
	VOID RATIO	1.077
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0274
BACK PRESSURE, psf		0
CELL PRESSURE, psf		4320
FAIL. STRESS, psf		2440
ULT. STRESS, psf		1302
σ_1 FAILURE, psf		6760
σ_3 FAILURE, psf		4320

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: St T & lGr CH4
w/ SL

SPECIFIC GRAVITY= 2.74
REMARKS: Torvane = 1.250 tsf

CLIENT: U.S. Army Corps of Engineers

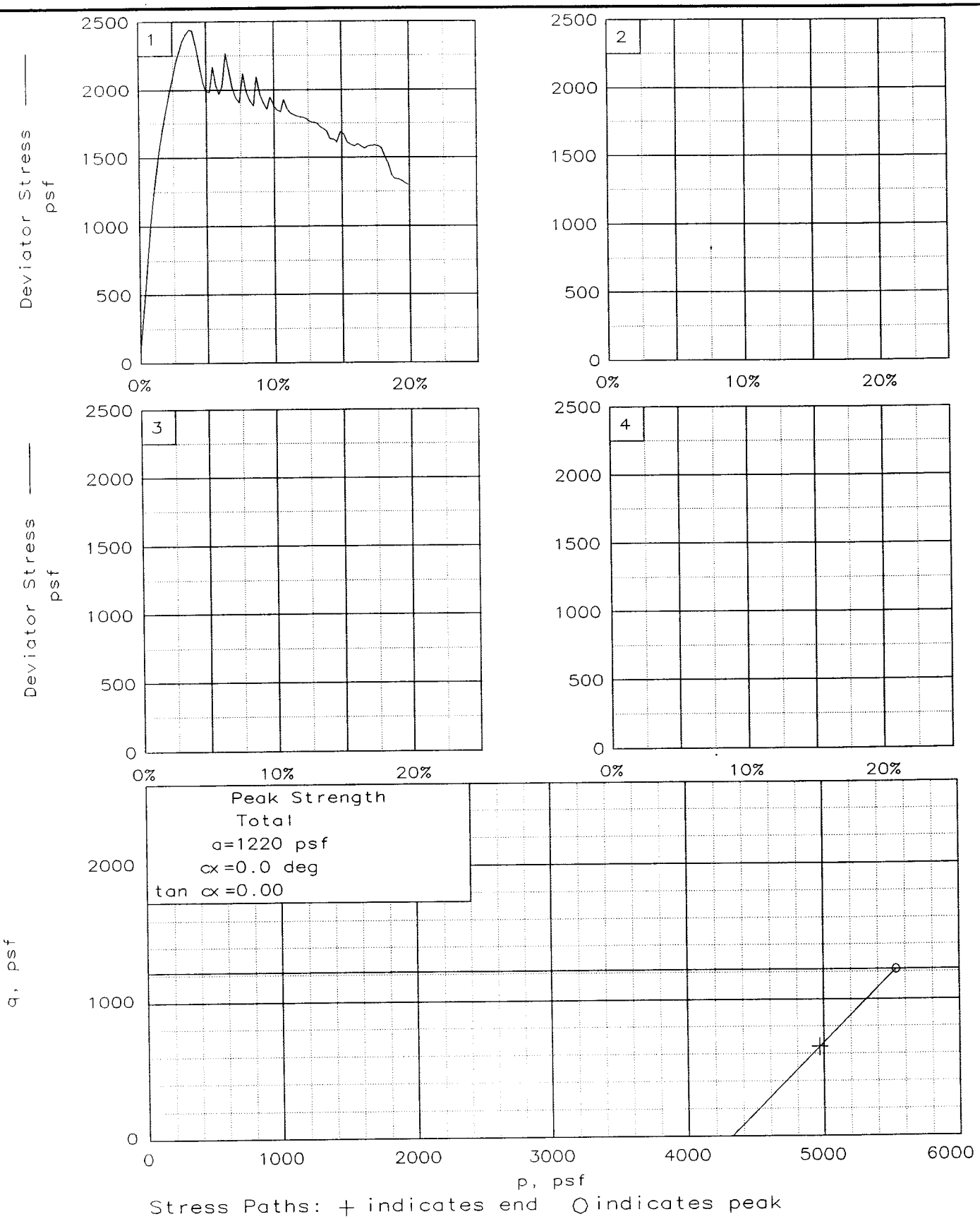
PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 4,
Sample 29, Depth 84.3', Elev -82.8

PROJ. NO.: 19080 DATE: 10/24/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.

Fig. No.: _____



Stress Paths: + indicates end ○ indicates peak

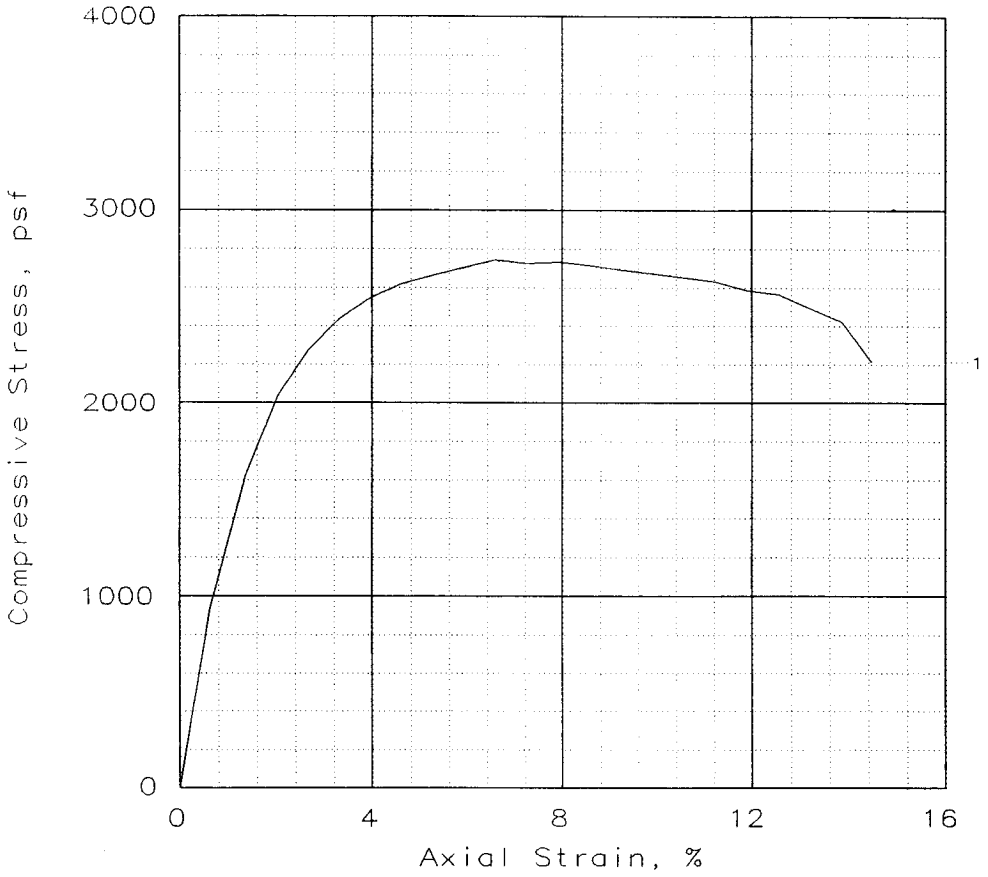
Client: U.S. Army Corps of Engineers

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

Location: Boring 4, Sample 29, Depth 84.3', Elev -82.8

File: UU-25171 Project No.: 19080 Fig. No.: ____

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	2744			
Undrained shear strength, psf	1372			
Failure strain, %	6.6			
Strain rate, in/min	0.0558			
Water content, %	38.8			
Wet density, pcf	112.0			
Dry density, pcf	80.7			
Saturation, %	94.9			
Void ratio	1.1200			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: St Br & Gr CH4 w/ Ins SM, SL

			GS= 2.74	Type: Undisturbed

Project No.: 19080
Date: 10-2-05
Remarks:
Torvane = 1.000 tsf

Fig. No.: ———

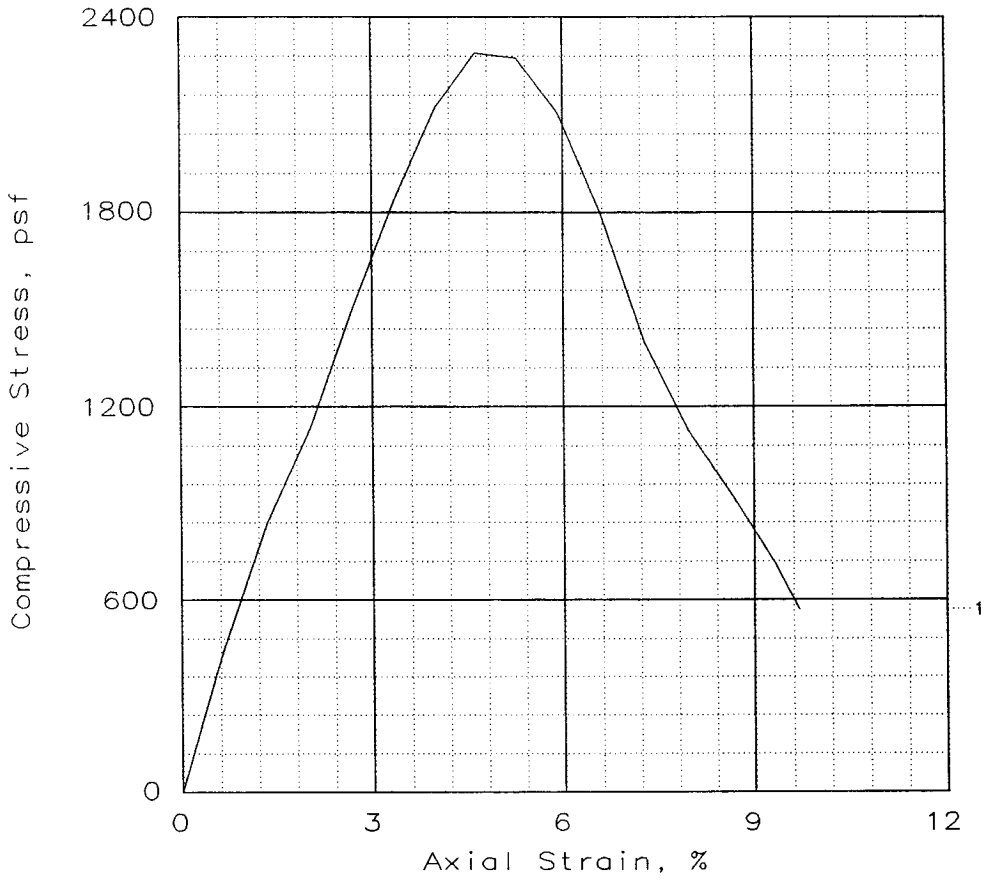
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 30, Depth 86.8', Elev. -85.3

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	2289			
Undrained shear strength, psf	1144			
Failure strain, %	4.6			
Strain rate, in/min	0.0541			
Water content, %	30.7			
Wet density, pcf	117.2			
Dry density, pcf	89.7			
Saturation, %	92.7			
Void ratio	0.9076			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: St Gr & T CH2

LL = 55	PL = 19	PI = 36	GS= 2.74	Type: Undisturbed

Project No.: 19080
Date: 10-2-05
Remarks:
Torvane = 0.625 tsf

Fig. No.: ———

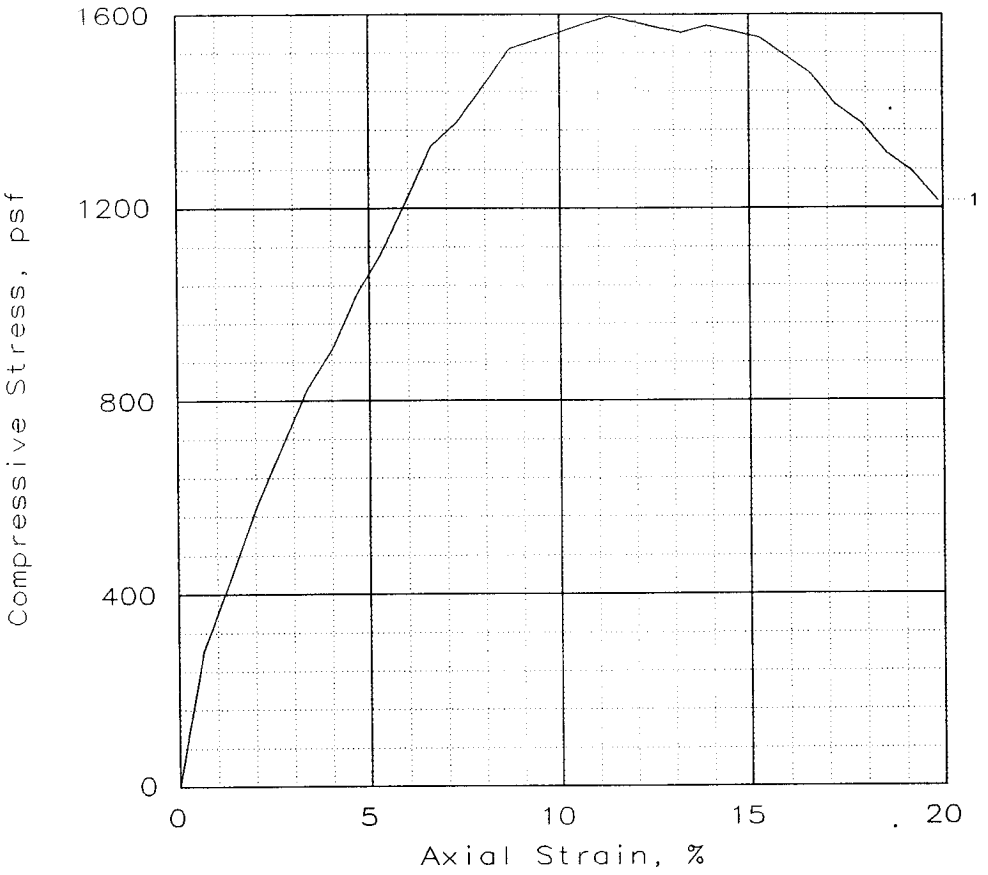
Client: U.S. Army Corps of Engineers

Project: Repairs to Levees and Floodwalls
at the 17th Street Canal
Location: Boring 4,
Sample 32, Depth 91.8', Elev. -90.3

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.

UNCONFINED COMPRESSION TEST



SPECIMEN NO.:	1			
Unconfined strength, psf	1596			
Undrained shear strength, psf	798			
Failure strain, %	11.3			
Strain rate, in/min	0.0568			
Water content, %	37.7			
Wet density, pcf	113.6			
Dry density, pcf	82.5			
Saturation, %	96.2			
Void ratio	1.0746			
Specimen diameter, in	1.39			
Specimen height, in	2.93			
Height/diameter ratio	2.11			

Description: St Gr CH4 w/ Ins SM, SIF

GS= 2.74 | Type: Undisturbed

Project No.: 19080

Date: 10-2-05

Remarks:

Torvane = 0.500 tsf

Fig. No.: ———

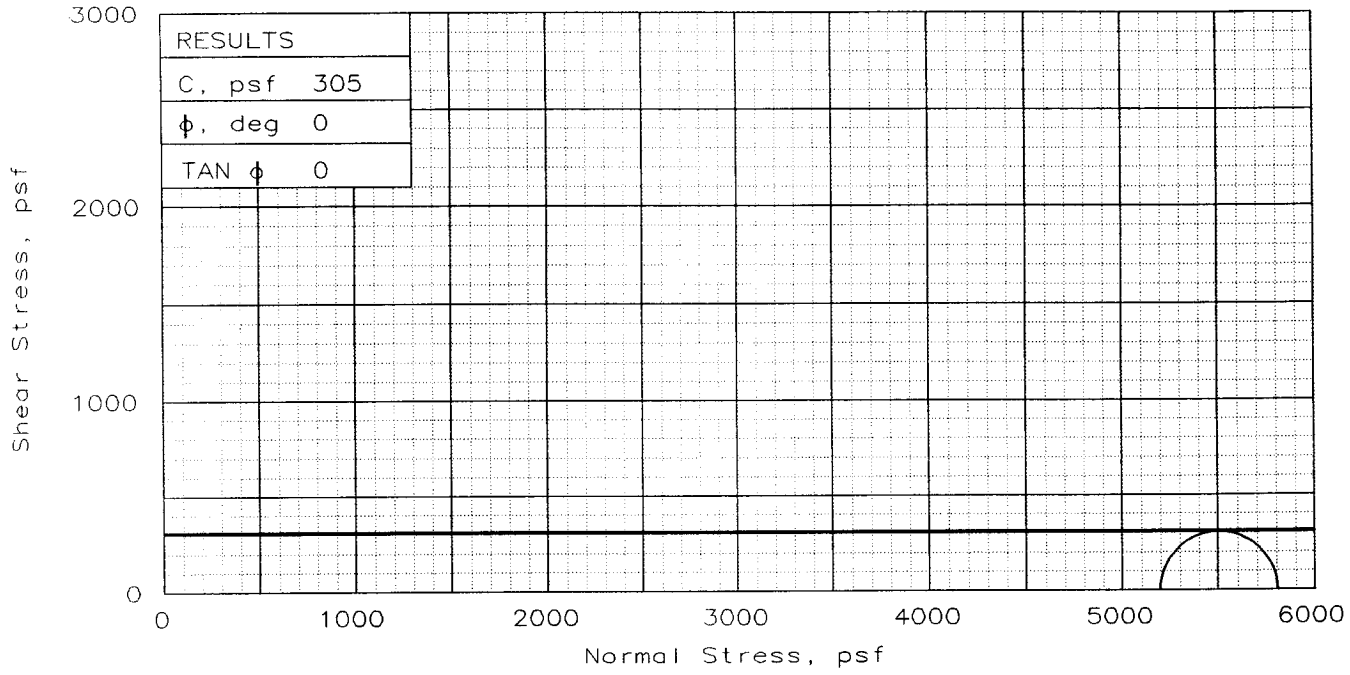
Client: U.S. Army Corps of Engineers

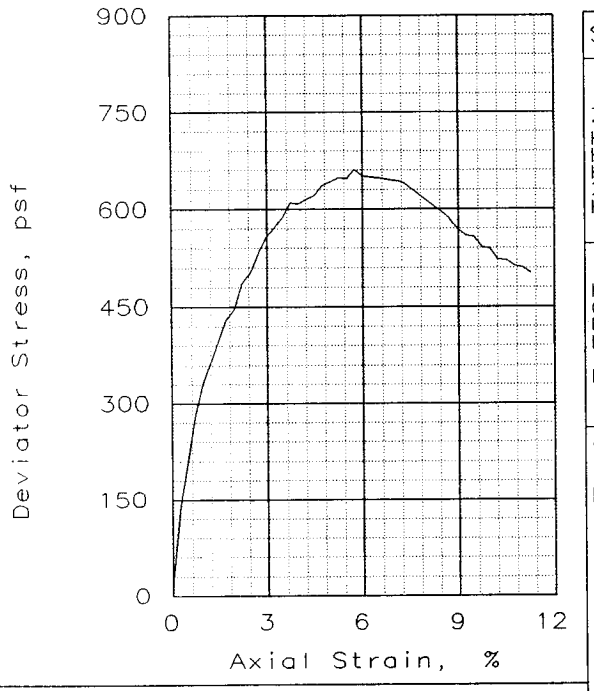
Project: Repairs to Levees and Floodwalls
at the 17th Street Canal

Location: Boring 4,
Sample 34, Depth 96.8', Elev. -95.3

UNCONFINED COMPRESSION TEST

Eustis Engineering Company, Inc.





SPECIMEN NO.:		1
INITIAL	WATER CONTENT, %	35.1
	DRY DENSITY, pcf	81.4
	SATURATION, %	87.3
	VOID RATIO	1.101
	DIAMETER, in	1.39
	HEIGHT, in	2.93
AT TEST	WATER CONTENT, %	40.2
	DRY DENSITY, pcf	81.4
	SATURATION, %	100.0
	VOID RATIO	1.100
	DIAMETER, in	1.39
	HEIGHT, in	2.93
Strain rate, in/min		0.0288
BACK PRESSURE, psf		0
CELL PRESSURE, psf		5198
FAIL. STRESS, psf		610
ULT. STRESS, psf		502
σ_1 FAILURE, psf		5808
σ_3 FAILURE, psf		5198

TYPE OF TEST:
Unconsolidated Undrained
SAMPLE TYPE: Undisturbed
DESCRIPTION: So Gr CH3
w/ Ins & lys SP, SIF

SPECIFIC GRAVITY= 2.74
REMARKS: Torvane = 0.300 tsf

Fig. No.: _____

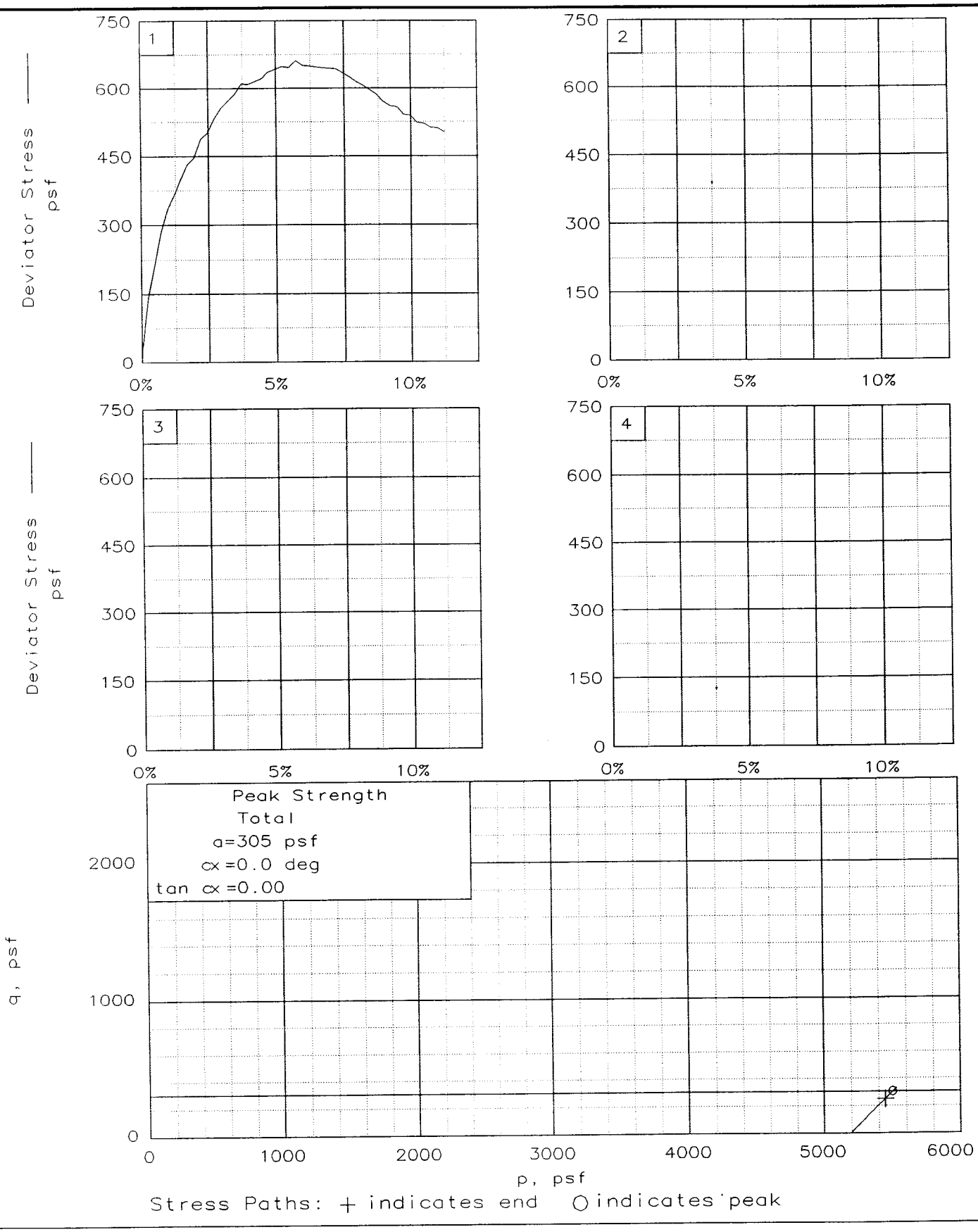
CLIENT: U.S. Army Corps of Engineers

PROJECT: Repairs to Levees and Floodwalls
at the 17th Street Canal
SAMPLE LOCATION: Boring 4,
Sample 36, Depth 101.8', Elev -100.3

PROJ. NO.: 19080 DATE: 10/24/05

TRIAXIAL SHEAR TEST REPORT

Eustis Engineering Company, Inc.



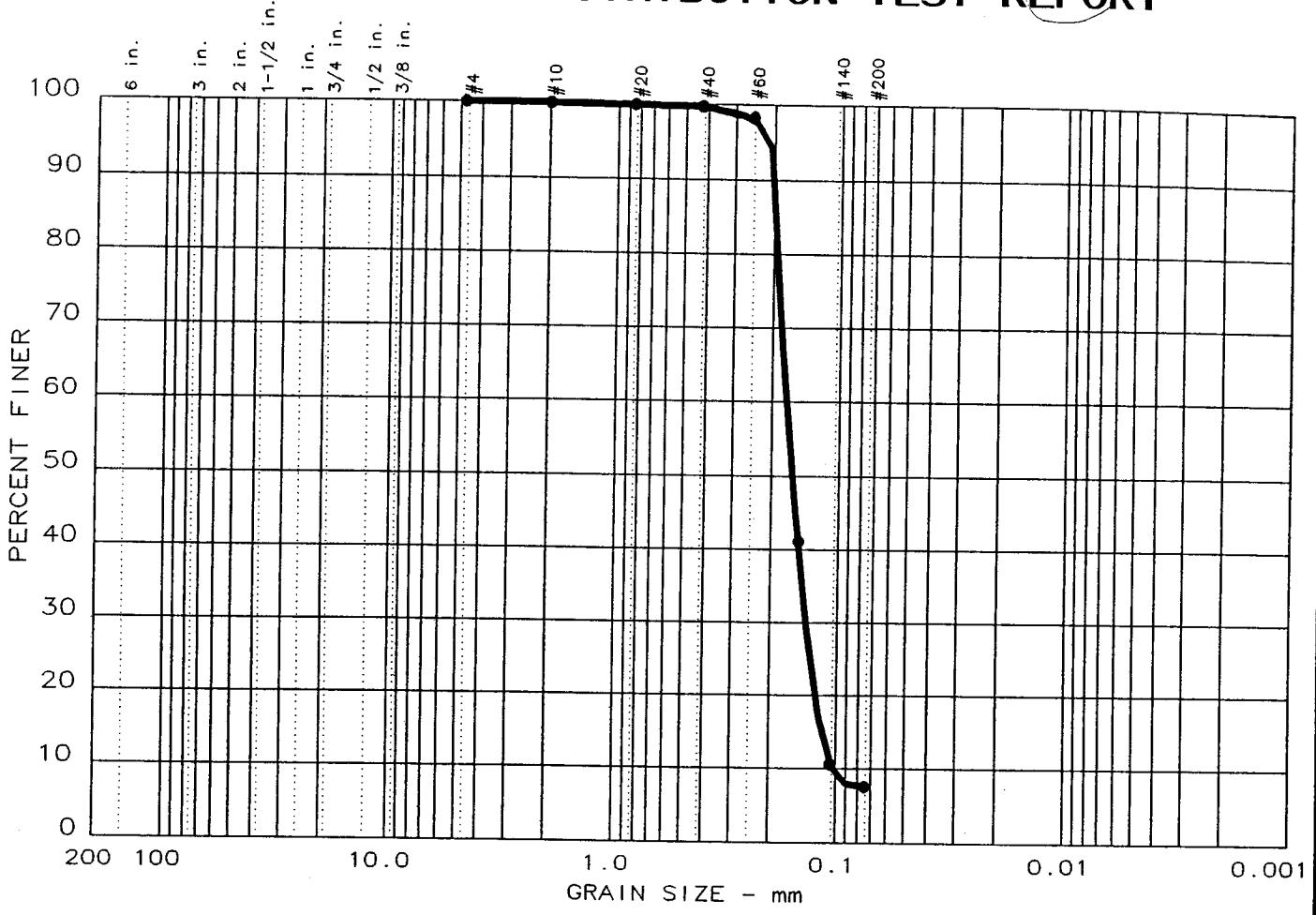
Client: U.S. Army Corps of Engineers

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

Location: Boring 4, Sample 36, Depth 101.8', Elev -100.3

File: UU-25172 Project No.: 19080 Fig. No.: ____

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	15	0.0	0.0	92.4	7.6		SP		

SIEVE inches size	PERCENT FINER ●		
	GRAIN SIZE		
D_{60}	0.17		
D_{30}	0.14		
D_{10}	0.10		
	COEFFICIENTS		
C_c	1.09		
C_u	1.7		

SIEVE number size	PERCENT FINER ●		
4	100.0		
10	99.9		
20	99.8		
40	99.7		
60	98.3		
100	41.1		
140	10.6		
200	7.6		

Sample information:
● Boring 4, Sample 12
GR SP W/ TR SIF

Remarks:
Sample depth 41.5'-44.0'

Eustis Engineering Company, Inc.

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

Date: 10-31-05 Data Sheet No. ____