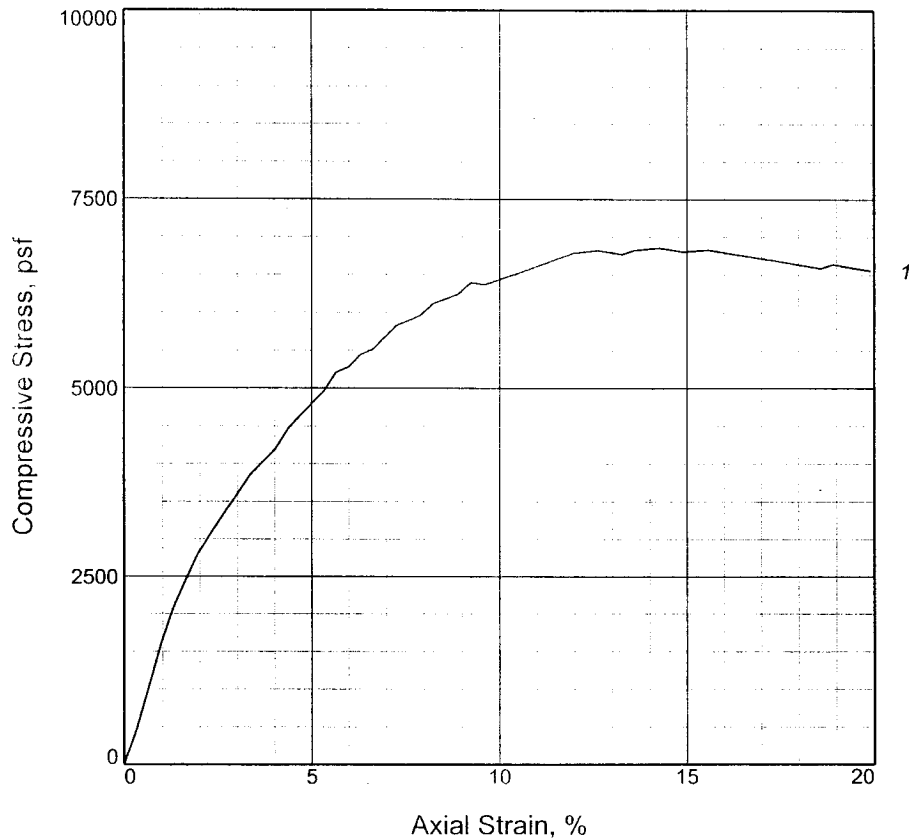


UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	6390.9			
Undrained shear strength, psf	3195.4			
Failure strain, %	9.3			
Strain rate, in./min.	0.058			
Water content, %	29.5			
Wet density, pcf	115.9			
Dry density, pcf	89.5			
Saturation, %	89.4			
Void ratio	0.8974			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: VST GR CH3 W/ ARS & LNS ML, SIF, TR-WD

LL = PL = PI = Assumed GS= 2.72 Type: UNDISTURBED

Project No.: 19082

Date: 11/23/05

Remarks:
TORVANE = 0.575 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal

Source of Sample: B-7G **Depth:** 0.0

Sample Number: 1

UNCONFINED COMPRESSION TEST

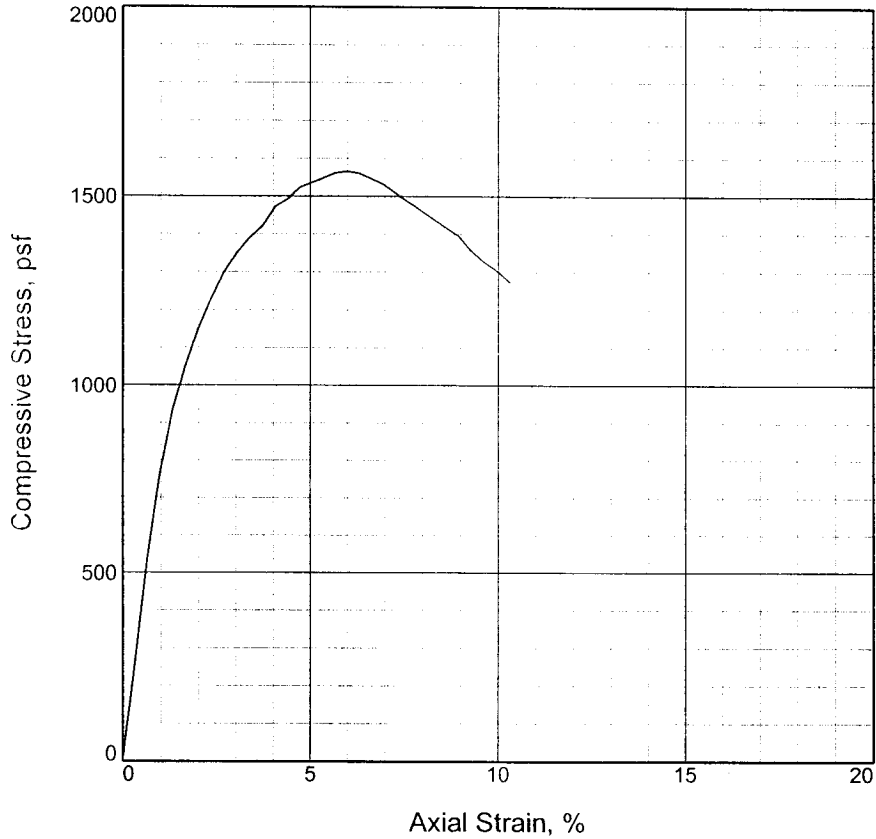
EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: ZH

Checked By: DP

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	1565.6			
Undrained shear strength, psf	782.8			
Failure strain, %	6.0			
Strain rate, in./min.	0.058			
Water content, %	44.7			
Wet density, pcf	105.7			
Dry density, pcf	73.0			
Saturation, %	91.7			
Void ratio	1.3246			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: M GR CH4 W/ ARS ML, TR-WD

LL =	PL =	PI =	Assumed GS= 2.72	Type: UNDISTURBED
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Project No.: 19082
Date: 11/23/05
Remarks:
 TORVANE = 0.575 TSF

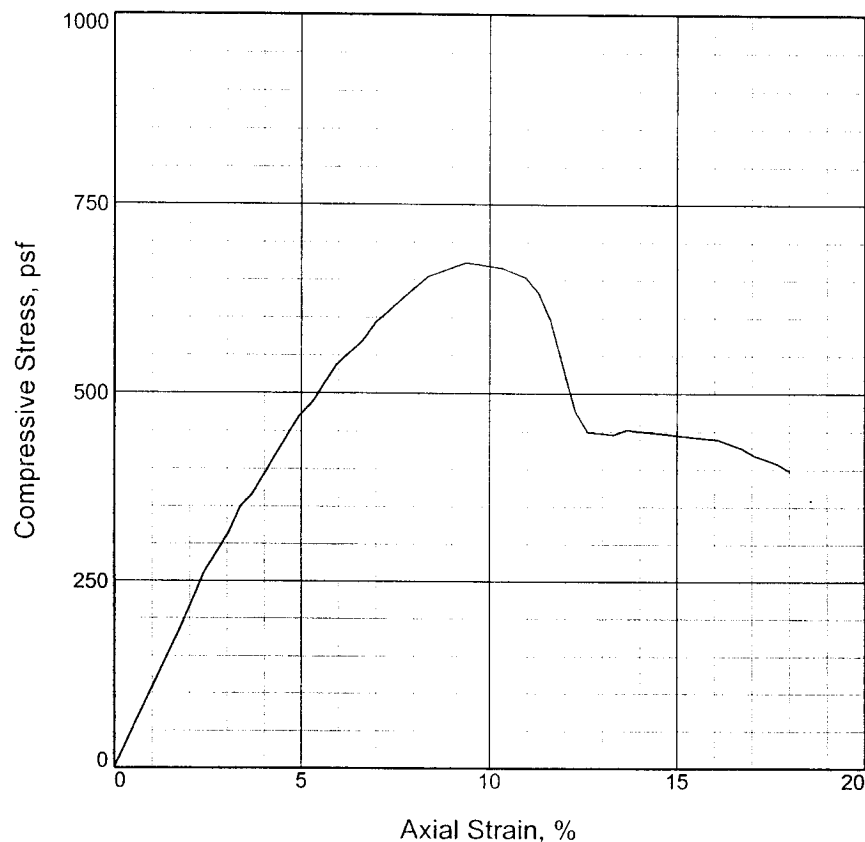
Client: URS Corporation
Project: U.S. Army Corps of Engineers
 Inner Harbor Navigational Canal
Source of Sample: B-7G **Depth:** 5.0
Sample Number: 3

UNCONFINED COMPRESSION TEST
EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: ZH **Checked By:** DP

UNCONFINED COMPRESSION TEST



Specimen No.	1		
Unconfined strength, psf	672.7		
Undrained shear strength, psf	336.3		
Failure strain, %	9.4		
Strain rate, in./min.	0.059		
Water content, %	214.8		
Wet density, pcf	73.0		
Dry density, pcf	23.2		
Saturation, %	92.8		
Void ratio	6.1351		
Specimen diameter, in.	1.388		
Specimen height, in.	2.930		
Height/diameter ratio	2.11		

Description: SO GR & BR CHOB W/ O, RT

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

Project No.: 19082

Date: 11/23/05

Remarks:

TORVANE = 0.150 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal

Source of Sample: B-7G **Depth:** 7.5

Sample Number: 4

UNCONFINED COMPRESSION TEST

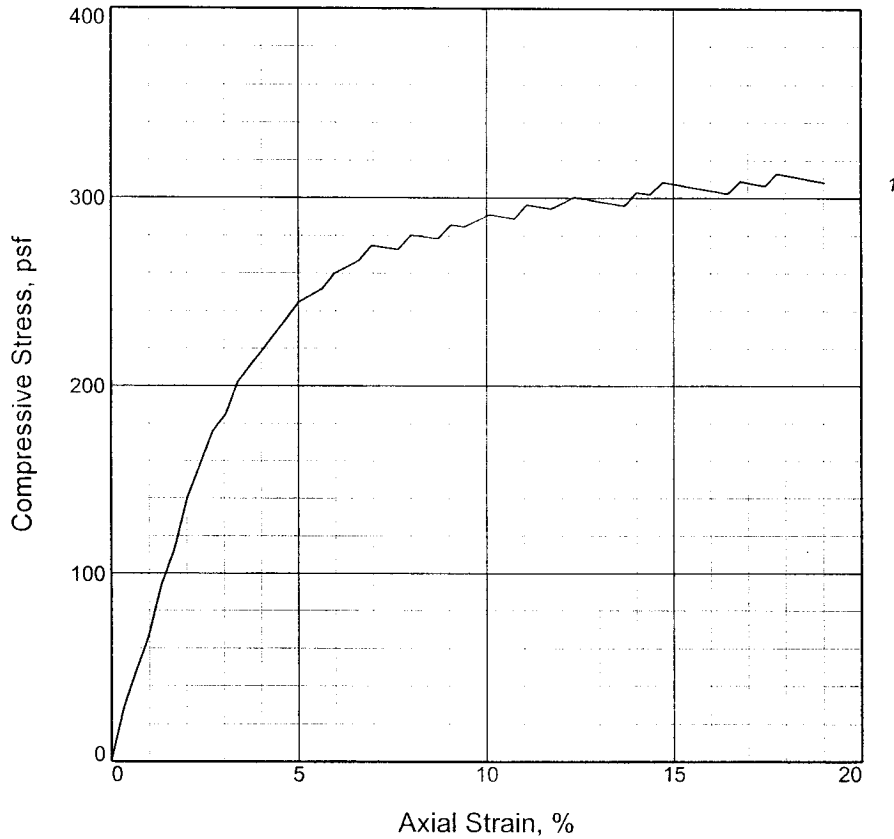
EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: ZH

Checked By: DP

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	274.5			
Undrained shear strength, psf	137.2			
Failure strain, %	7.0			
Strain rate, in./min.	0.059			
Water content, %	73.0			
Wet density, pcf	97.1			
Dry density, pcf	56.1			
Saturation, %	98.0			
Void ratio	2.0253			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: VSO GR CH4 W/ ARS SM, TR-WD

LL = PL = PI = Assumed GS= 2.72 Type: UNDISTUREBED

Project No.: 19082
Date: 11/23/05
Remarks:
 TORVANE = 0.060 TSF

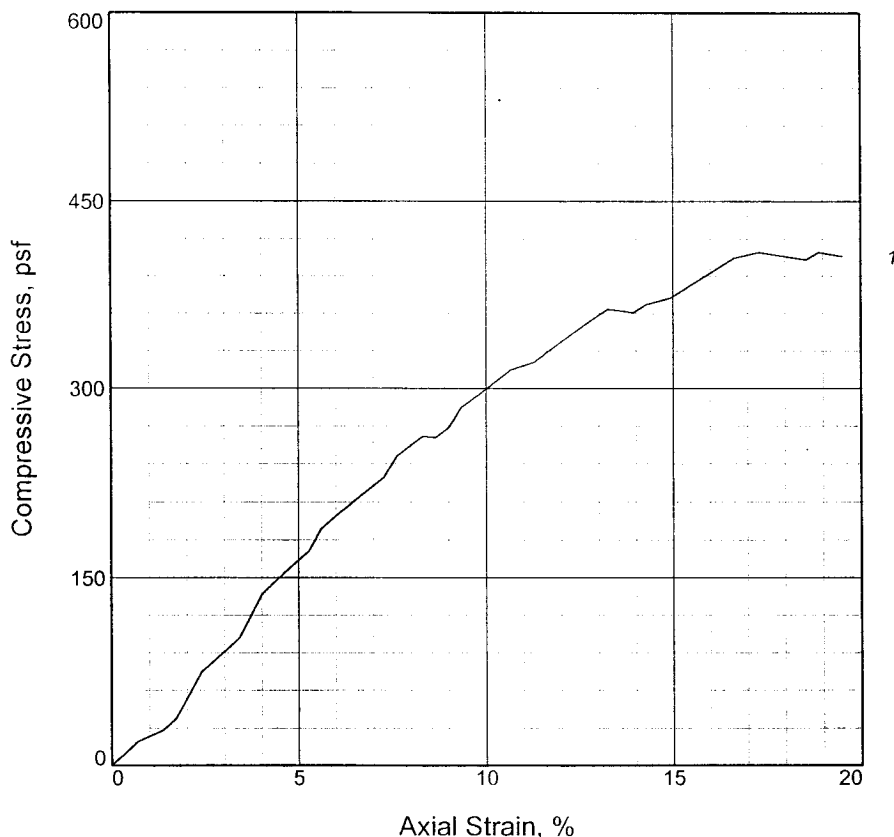
Figure 1

Client: URS Corporation
Project: U.S. Army Corps of Engineers
 Inner Harbor Navigational Canal
Source of Sample: B-7G **Depth:** 12.5
Sample Number: 6

UNCONFINED COMPRESSION TEST
EUSTIS ENGINEERING COMPANY, INC.

Tested By: ZH Checked By: DP

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	268.4			
Undrained shear strength, psf	134.2			
Failure strain, %	9.0			
Strain rate, in./min.	0.057			
Water content, %	35.8			
Wet density, pcf	114.5			
Dry density, pcf	84.3			
Saturation, %	96.7			
Void ratio	0.9994			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: VSO GR CL6 W/ LNS & ARS CH

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

Project No.: 19082
Date: 11/23/05
Remarks:
 TORVANE = 0.160 TSF

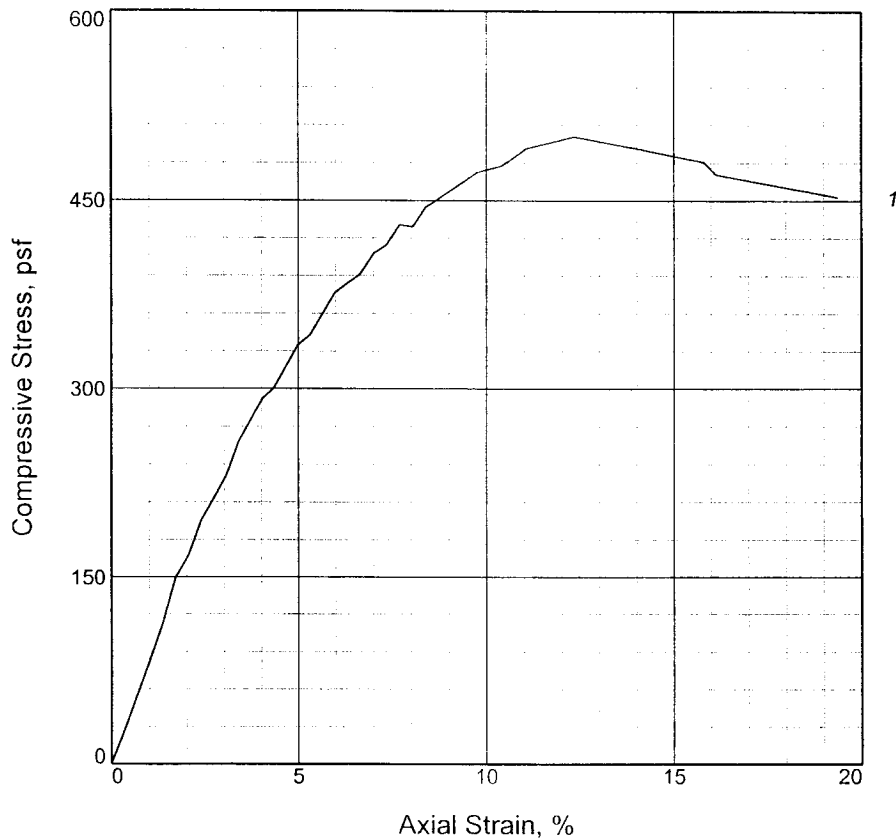
Figure 1

Client: URS Corporation
Project: U.S. Army Corps of Engineers
 Inner Harbor Navigational Canal
Source of Sample: B-7G **Depth:** 17.5
Sample Number: 8

UNCONFINED COMPRESSION TEST
EUSTIS ENGINEERING COMPANY, INC.

Tested By: ZH Checked By: JS

UNCONFINED COMPRESSION TEST



Specimen No.	1		
Unconfined strength, psf	430.4		
Undrained shear strength, psf	215.2		
Failure strain, %	7.7		
Strain rate, in./min.	0.059		
Water content, %	49.1		
Wet density, pcf	104.6		
Dry density, pcf	70.1		
Saturation, %	94.0		
Void ratio	1.4209		
Specimen diameter, in.	1.388		
Specimen height, in.	2.930		
Height/diameter ratio	2.11		

Description: VSO GR CH3 W/ LNS & LYS ML

LL = PL = PI = Assumed GS= 2.72 Type: UNDISTURBED

Project No.: 19082

Date: 11/23/05

Remarks:

TORVANE = 0.100 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal

Source of Sample: B-7G **Depth:** 22.5

Sample Number: 10

UNCONFINED COMPRESSION TEST

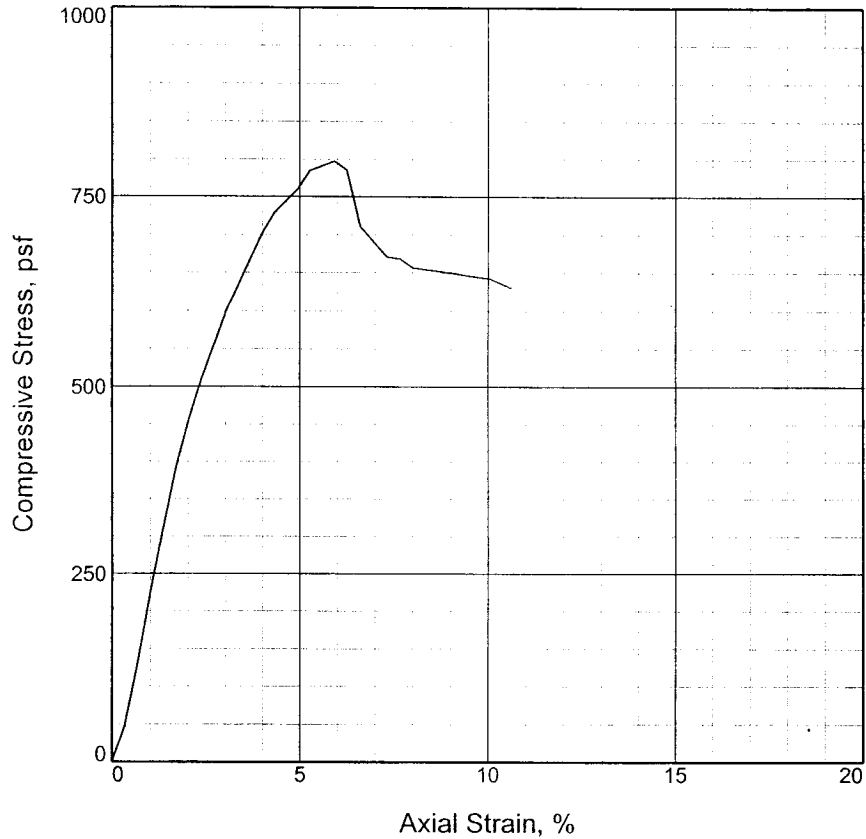
EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: ZH

Checked By: DP

UNCONFINED COMPRESSION TEST



1

Specimen No.	1		
Unconfined strength, psf	796.8		
Undrained shear strength, psf	398.4		
Failure strain, %	5.9		
Strain rate, in./min.	0.059		
Water content, %	64.8		
Wet density, pcf	99.5		
Dry density, pcf	60.4		
Saturation, %	97.2		
Void ratio	1.8117		
Specimen diameter, in.	1.388		
Specimen height, in.	2.930		
Height/diameter ratio	2.11		

Description: SO GR CH4

LL =	PL =	PI =	Assumed GS= 2.72	Type: UNDISTURBED
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Project No.: 19082
Date: 11/23/05
Remarks:
 TORVANE = 0.150 TSF

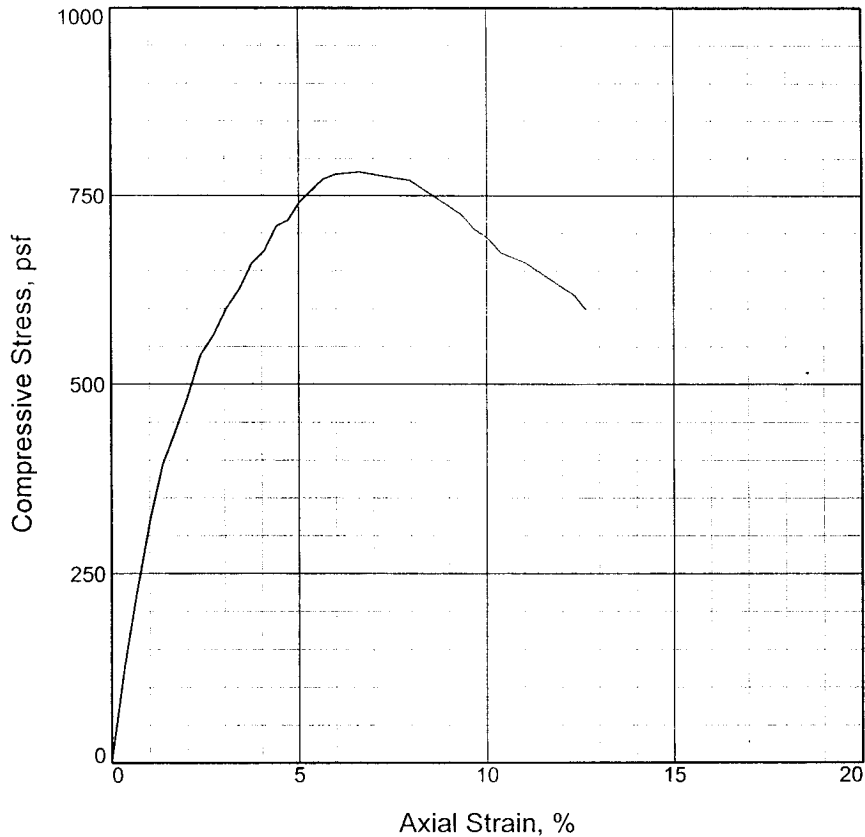
Client: URS Corporation
Project: U.S. Army Corps of Engineers
 Inner Harbor Navigational Canal
Source of Sample: B-7G **Depth:** 27.5
Sample Number: 12

Figure 1

UNCONFINED COMPRESSION TEST
EUSTIS ENGINEERING COMPANY, INC.

Tested By: ZH Checked By: DP

UNCONFINED COMPRESSION TEST



1

Specimen No.	1			
Unconfined strength, psf	782.0			
Undrained shear strength, psf	391.0			
Failure strain, %	6.6			
Strain rate, in./min.	0.058			
Water content, %	70.5			
Wet density, pcf	98.0			
Dry density, pcf	57.5			
Saturation, %	98.1			
Void ratio	1.9544			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: SO GR CH4 W/ ARS SM

LL = **PL =** **PI =** **Assumed GS= 2.72** **Type: UNDISTURBED**

Project No.: 19082
Date: 11/23/05
Remarks:
 TORVANE = 0.200 TSF

Figure 1

Client: URS Corporation

Project: U.S. Army Corps of Engineers
 Inner Harbor Navigational Canal

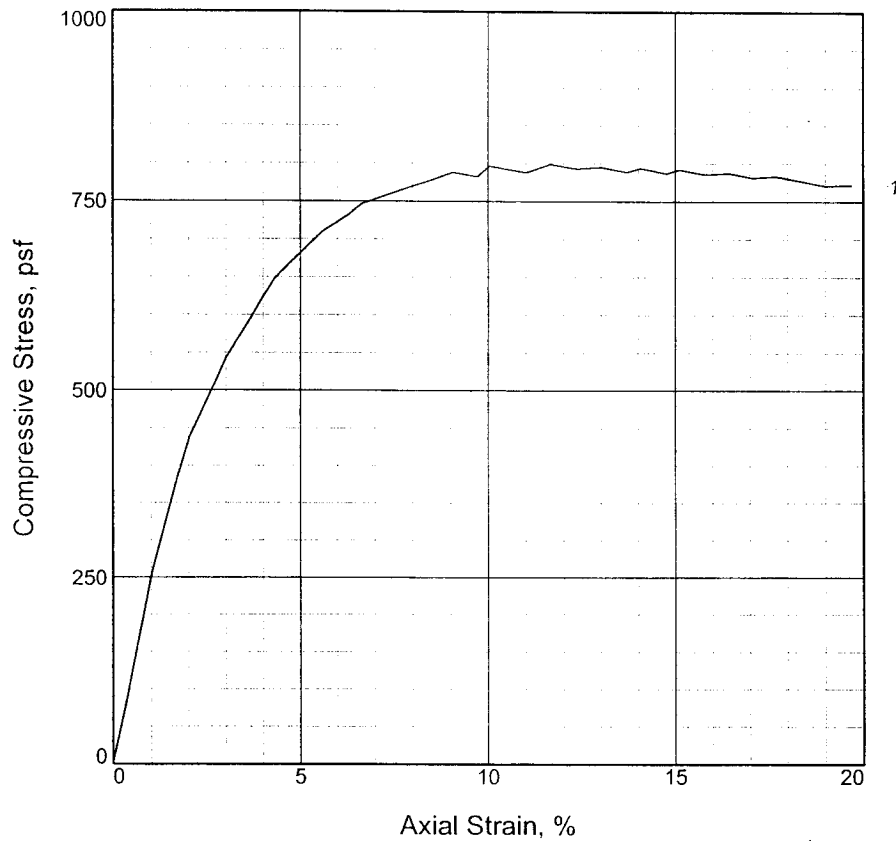
Source of Sample: B-7G **Depth:** 32.5

Sample Number: 14

UNCONFINED COMPRESSION TEST
EUSTIS ENGINEERING COMPANY, INC.

Tested By: ZH **Checked By:** DP

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	787.5			
Undrained shear strength, psf	393.7			
Failure strain, %	9.1			
Strain rate, in./min.	0.056			
Water content, %	67.4			
Wet density, pcf	97.9			
Dry density, pcf	58.4			
Saturation, %	95.9			
Void ratio	1.9266			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: SO GR CH4 W/ SL

LL =	PL =	PI =	Assumed GS= 2.74	Type: UNDISTURBED
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Project No.: 19082

Date: 11/23/05

Remarks:

TORVANE = 0.200 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal

Source of Sample: B-7G **Depth:** 37.5

Sample Number: 16

UNCONFINED COMPRESSION TEST

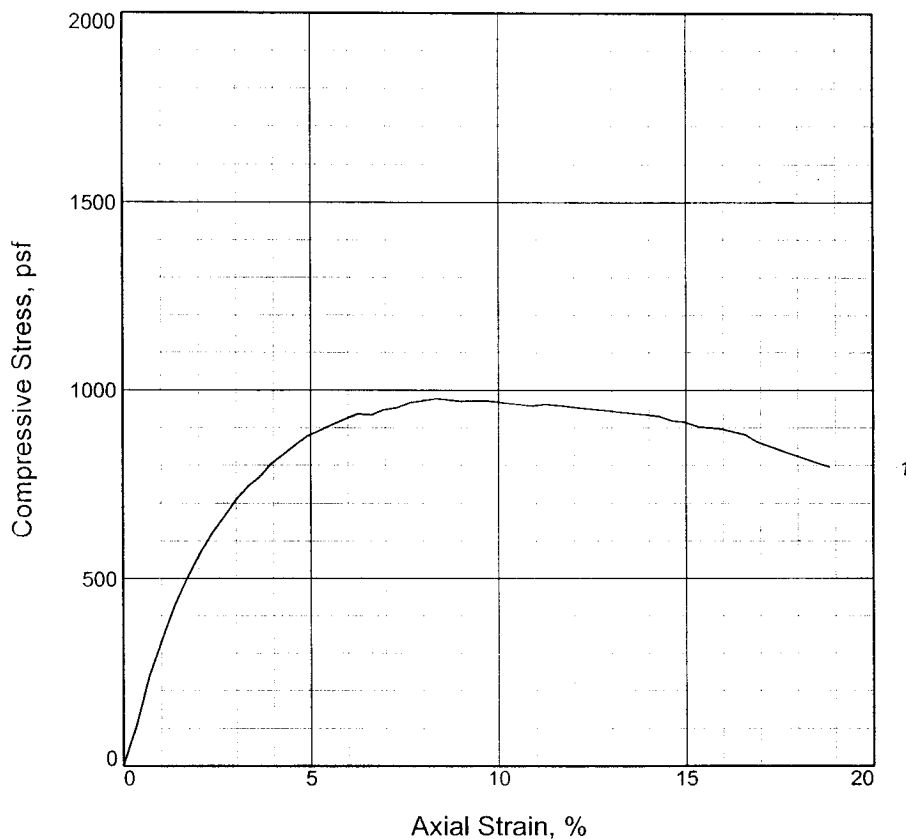
EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: ZH

Checked By: DP

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	936.6			
Undrained shear strength, psf	468.3			
Failure strain, %	6.3			
Strain rate, in./min.	0.001			
Water content, %	67.1			
Wet density, pcf	96.0			
Dry density, pcf	57.4			
Saturation, %	93.3			
Void ratio	1.9567			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: SO GR CH4 W/ ARS & LNS SM

LL = **PL =** **PI =** **Assumed GS= 2.72** **Type: UNDISTURBED**

Project No.: 19082
Date: 11/23/05
Remarks:
 TORVANE = 0.160 TSF

Figure 1

Client: URS Corporation

Project: U.S. Army Corps of Engineers
 Inner Harbor Navigational Canal

Source of Sample: B-7G **Depth:** 42.5

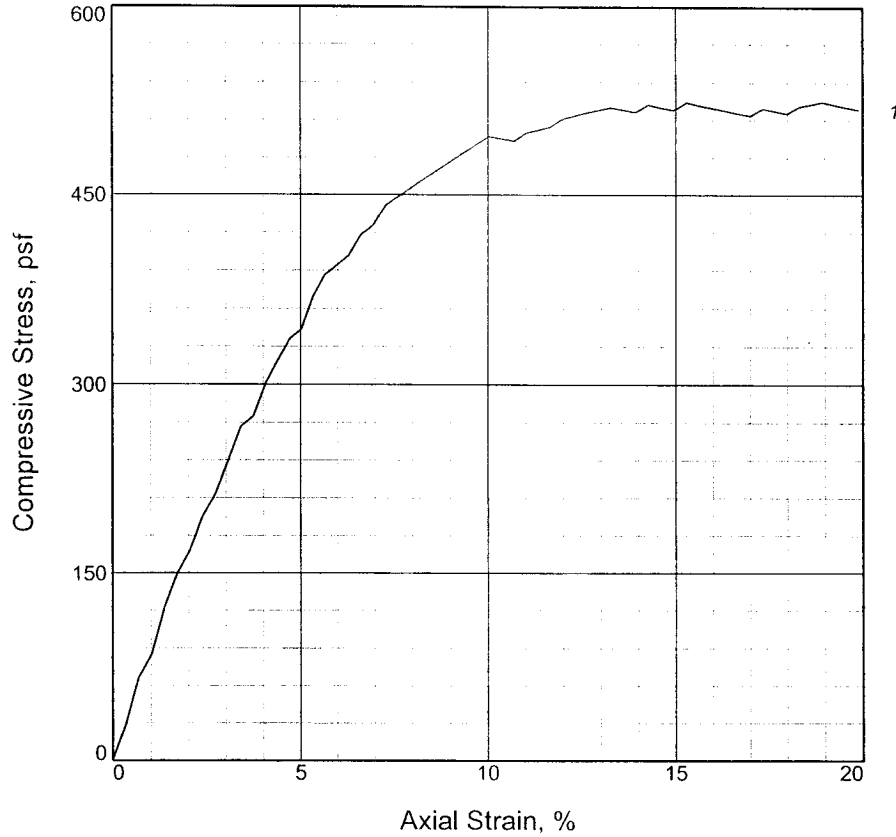
Sample Number: 18

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Tested By: ZH **Checked By:** JS

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	496.6			
Undrained shear strength, psf	248.3			
Failure strain, %	10.0			
Strain rate, in./min.	0.058			
Water content, %	49.1			
Wet density, pcf	105.3			
Dry density, pcf	70.6			
Saturation, %	95.1			
Void ratio	1.4046			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: VSO GR CH4 W/ LNS & ARS SM, SIF

LL = PL = PI = Assumed GS= 2.72 Type: UNDISTURBED

Project No.: 19082
Date: 11/23/05
Remarks:
 TORVANE = 0.120 TSF

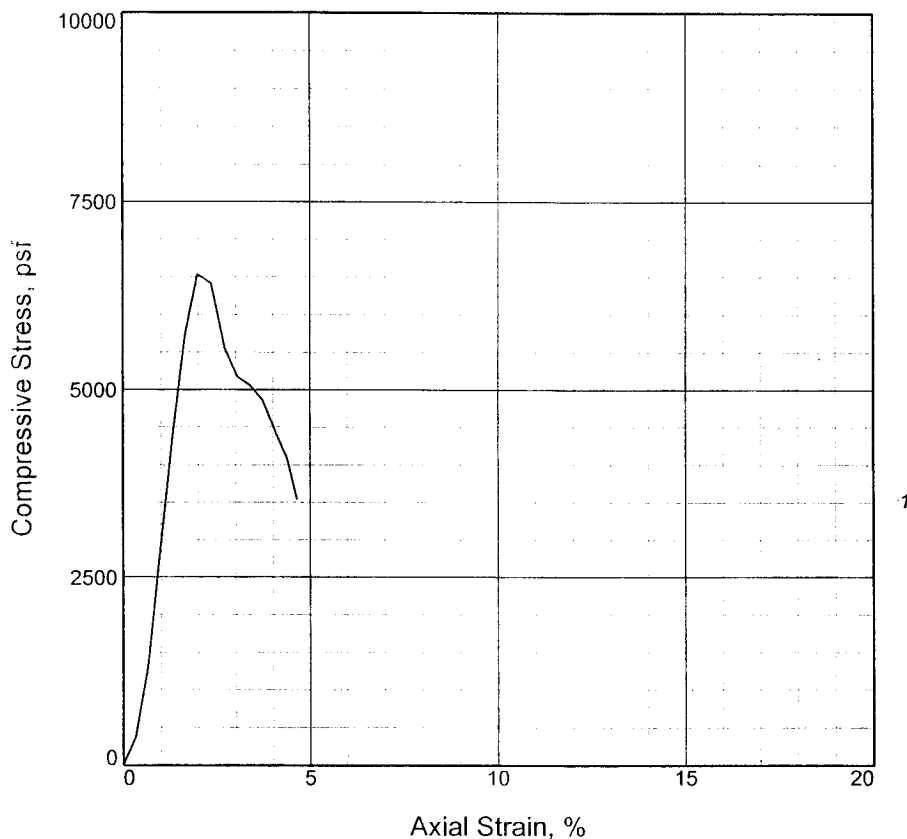
Figure 1

Client: URS Corporation
Project: U.S. Army Corps of Engineers
 Inner Harbor Navigational Canal
Source of Sample: B-7G **Depth:** 47.5
Sample Number: 20

UNCONFINED COMPRESSION TEST
EUSTIS ENGINEERING COMPANY, INC.

Tested By: ZH Checked By: DP

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	6529.2			
Undrained shear strength, psf	3264.6			
Failure strain, %	2.0			
Strain rate, in./min.	0.058			
Water content, %	27.0			
Wet density, pcf	118.4			
Dry density, pcf	93.2			
Saturation, %	90.1			
Void ratio	0.8085			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: VST GNGR CH2

LL = PL = PI = Assumed GS= 2.7 Type: UNDISTURBED

Project No.: 19082

Date: 11/23/05

Remarks:

Client: URS Corporation

Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal

Source of Sample: B-7G **Depth:** 65.0

Sample Number: 27

UNCONFINED COMPRESSION TEST

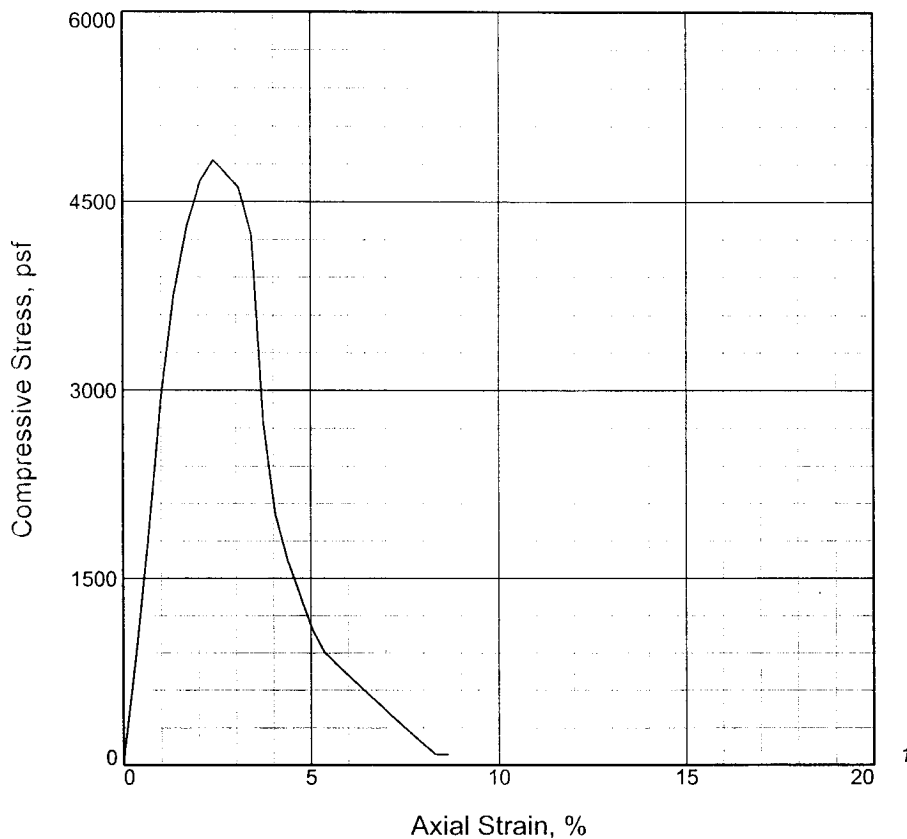
EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: ZH

Checked By: DP

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	4829.5			
Undrained shear strength, psf	2414.8			
Failure strain, %	2.4			
Strain rate, in./min.	0.059			
Water content, %	35.5			
Wet density, pcf	110.1			
Dry density, pcf	81.3			
Saturation, %	88.7			
Void ratio	1.0893			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: VST GNGR CH4 W/ ARS SM, SL

LL = PL = PI = Assumed GS= 2.72 Type: UNDISTURBED

Project No.: 19082
Date: 11/23/05
Remarks:
 TORVANE = 0.925 TSF

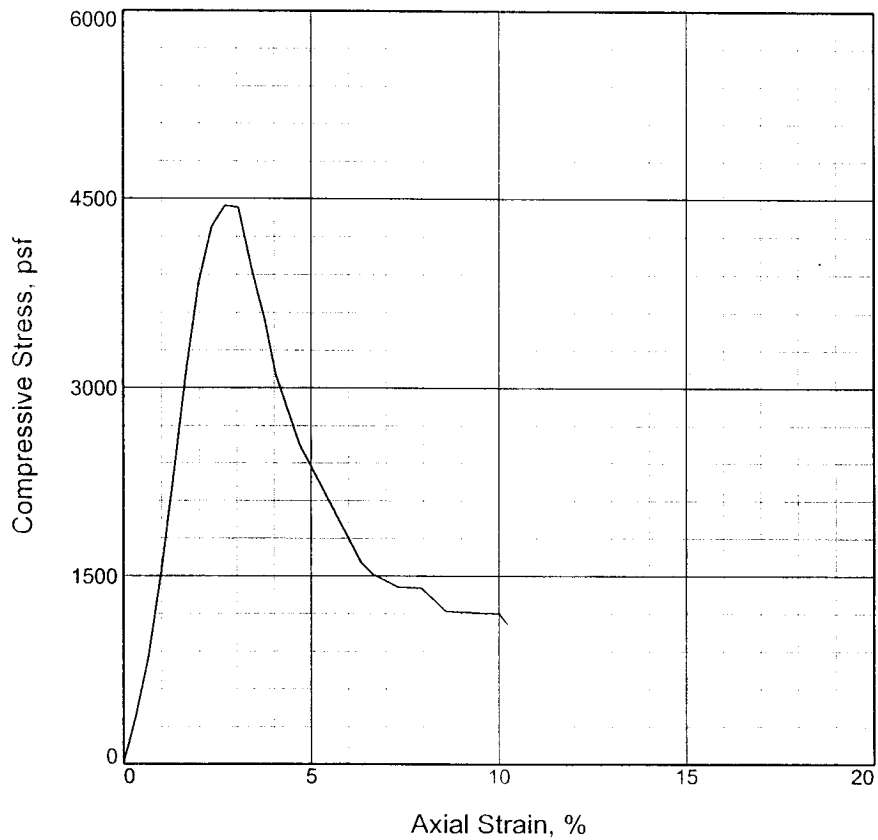
Figure 1

Client: URS Corporation
Project: U.S. Army Corps of Engineers
 Inner Harbor Navigational Canal
Source of Sample: B-7G **Depth:** 67.5
Sample Number: 28

UNCONFINED COMPRESSION TEST
EUSTIS ENGINEERING COMPANY, INC.

Tested By: zh Checked By: dp

UNCONFINED COMPRESSION TEST



1

Specimen No.	1			
Unconfined strength, psf	4444.9			
Undrained shear strength, psf	2222.5			
Failure strain, %	2.7			
Strain rate, in./min.	0.058			
Water content, %	27.9			
Wet density, pcf	122.9			
Dry density, pcf	96.1			
Saturation, %	99.8			
Void ratio	0.7537			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: VST GNGR CL6 W/ ARS CH

LL = PL = PI = Assumed GS= 2.7 Type: UNDISTURBED

Project No.: 19082
Date: 11/23/05
Remarks:

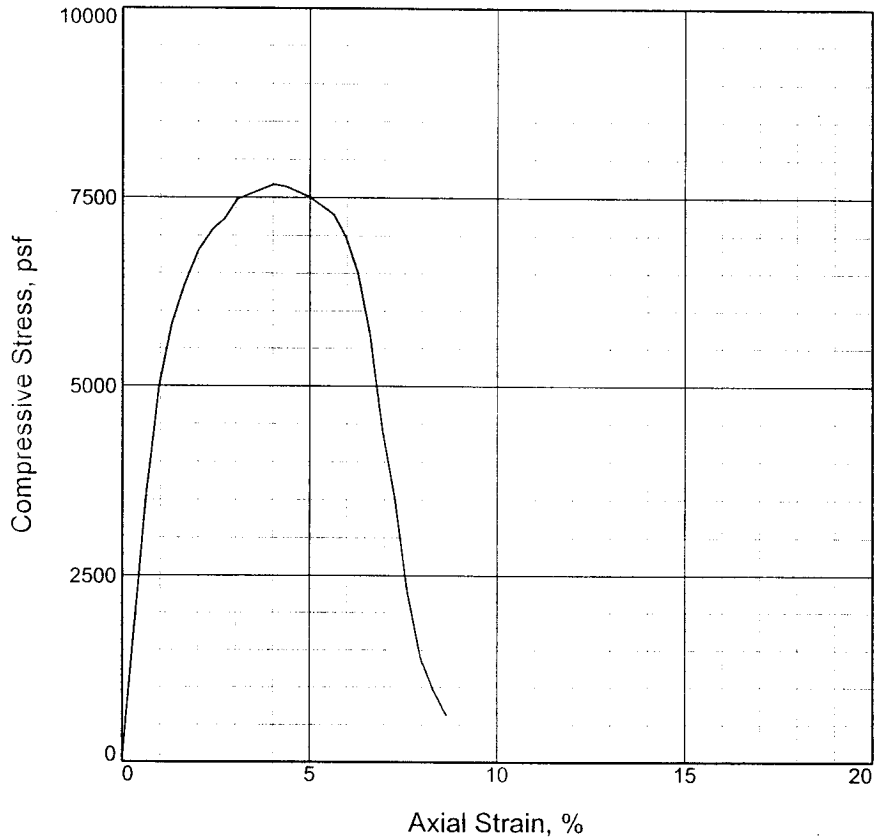
Client: URS Corporation
Project: U.S. Army Corps of Engineers
 Inner Harbor Navigational Canal
Source of Sample: B-7G **Depth:** 72.5
Sample Number: 30

Figure 1

UNCONFINED COMPRESSION TEST
EUSTIS ENGINEERING COMPANY, INC.

Tested By: ZH Checked By: DP

UNCONFINED COMPRESSION TEST



1

Specimen No.	1		
Unconfined strength, psf	7673.0		
Undrained shear strength, psf	3836.5		
Failure strain, %	4.0		
Strain rate, in./min.	0.055		
Water content, %	48.4		
Wet density, pcf	106.9		
Dry density, pcf	72.0		
Saturation, %	96.4		
Void ratio	1.3760		
Specimen diameter, in.	1.388		
Specimen height, in.	2.930		
Height/diameter ratio	2.11		

Description: VST GR & T CH4 W/ SL

LL = PL = PI = Assumed GS= 2.74 Type: UNDISTURBED

Project No.: 19082

Date: 11/23/05

Remarks:

TORVANE = 0.625 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal

Source of Sample: B-7G **Depth:** 77.5

Sample Number: 32

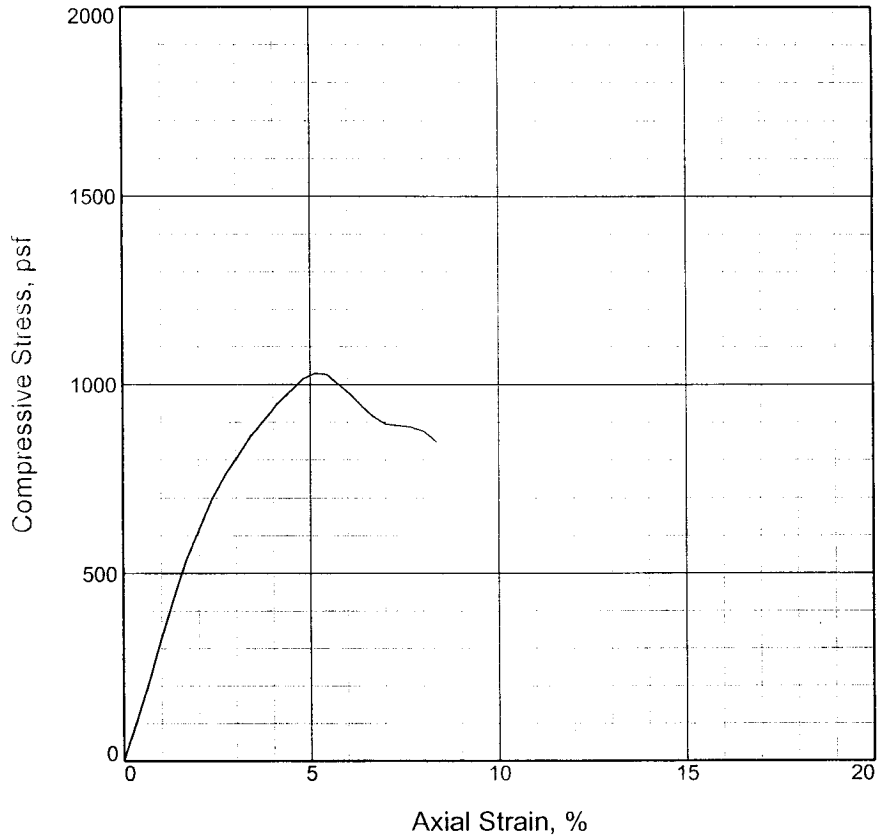
UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: ZH Checked By: DP

UNCONFINED COMPRESSION TEST



Specimen No.	1		
Unconfined strength, psf	1029.1		
Undrained shear strength, psf	514.6		
Failure strain, %	5.1		
Strain rate, in./min.	0.059		
Water content, %	53.4		
Wet density, pcf	102.1		
Dry density, pcf	66.5		
Saturation, %	93.2		
Void ratio	1.5704		
Specimen diameter, in.	1.388		
Specimen height, in.	2.930		
Height/diameter ratio	2.11		

Description: M GR CH4 W/ SIF, LNS ML, SL

LL = PL = PI = Assumed GS= 2.74 **Type:** UNDISTURBED

Project No.: 19082
Date: 12-8-05
Remarks:
 TORVANE = 0.310 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers
 Inner Harbor Navigational Canal
Source of Sample: B-7G **Depth:** 82.5
Sample Number: 34

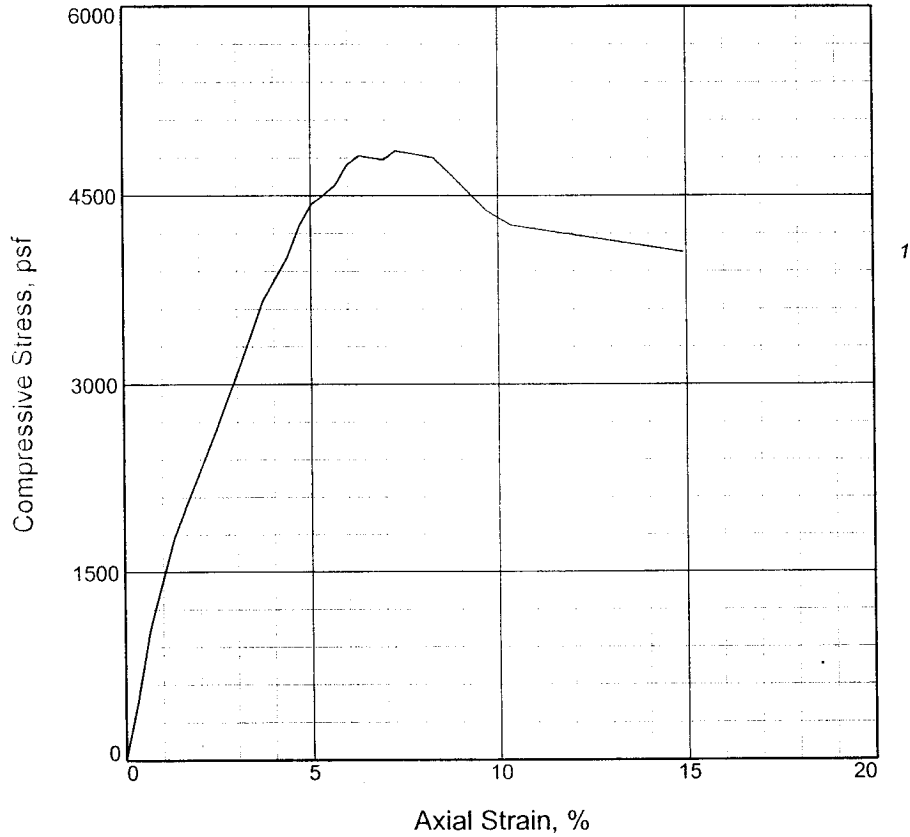
UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: JL _____ Checked By: JS _____

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	4814.8			
Undrained shear strength, psf	2407.4			
Failure strain, %	6.3			
Strain rate, in./min.	0.058			
Water content, %	37.2			
Wet density, pcf	114.1			
Dry density, pcf	83.2			
Saturation, %	96.4			
Void ratio	1.0556			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: VST GR CH3 W/ LNS ML, WD, SIF, SL

LL = PL = PI = Assumed GS= 2.74 Type: UNDISTURBED

Project No.: 19082
Date: 12-8-05
Remarks:
 TORVANE = 0.600 TSF

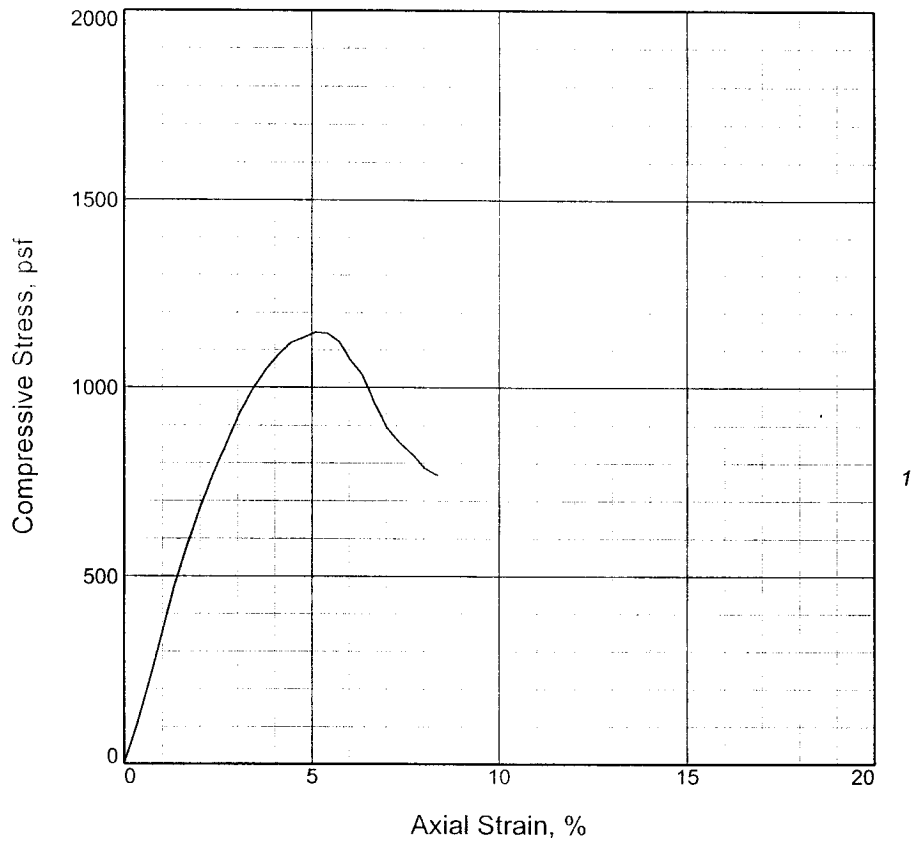
Figure 1

Client: URS Corporation
Project: U.S. Army Corps of Engineers
 Inner Harbor Navigational Canal
Source of Sample: B-7G **Depth:** 87.5
Sample Number: 36

UNCONFINED COMPRESSION TEST
EUSTIS ENGINEERING COMPANY, INC.

Tested By: ZH Checked By: JS

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	1146.8			
Undrained shear strength, psf	573.4			
Failure strain, %	5.1			
Strain rate, in./min.	0.059			
Water content, %	59.1			
Wet density, pcf	100.5			
Dry density, pcf	63.1			
Saturation, %	94.8			
Void ratio	1.7093			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: M GR CH4 W/ LNS ML, SIF, SL

LL =	PL =	PI =	Assumed GS= 2.74	Type: UNDISTURBED
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Project No.: 19082

Date: 12-8-05

Remarks:

TORVANE = 0.250 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal

Source of Sample: B-7G **Depth:** 92.5

Sample Number: 38

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: RR

Checked By: JS