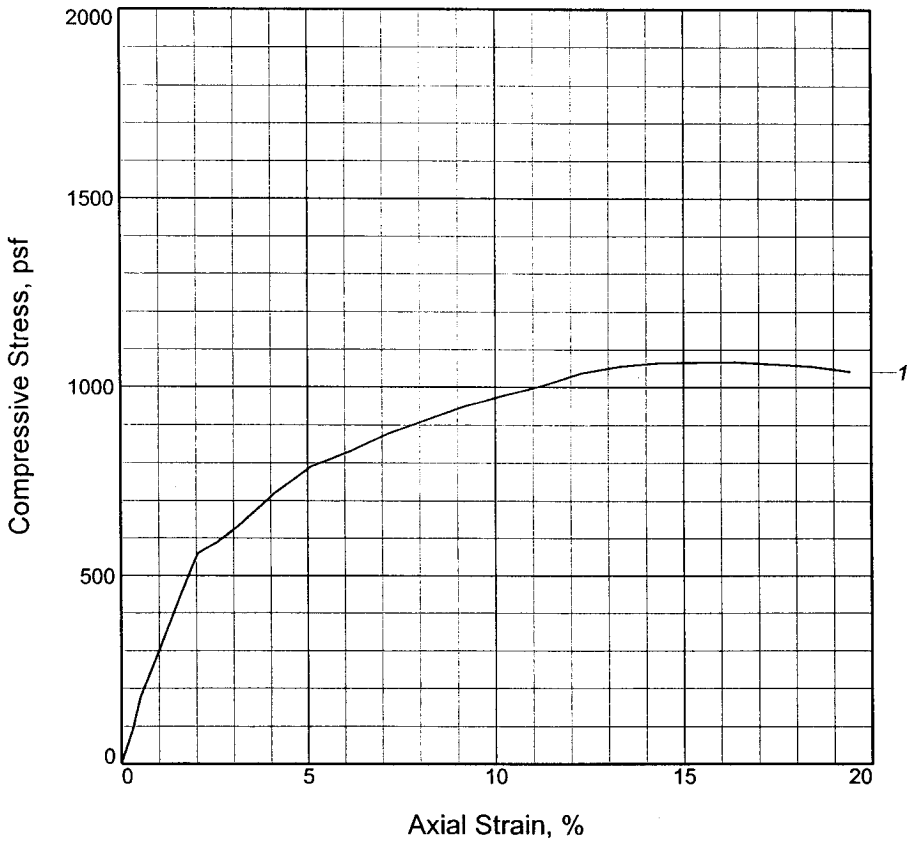
UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	1067.1			
Undrained shear strength, psf	533.6			
Failure strain, %	16.4			
Strain rate, in./min.	0.055			
Water content, %	43.4			
Wet density, pcf	106.6			
Dry density, pcf	74.3			
Saturation, %	91.4			
Void ratio	1.3018			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: M GR CH4 W/ LNS & LYS ML

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

Project No.: 19082
Date: 11-9-05

Remarks:
TORVANE = 0.350 TSF

Figure 1

Client: URS Corporation

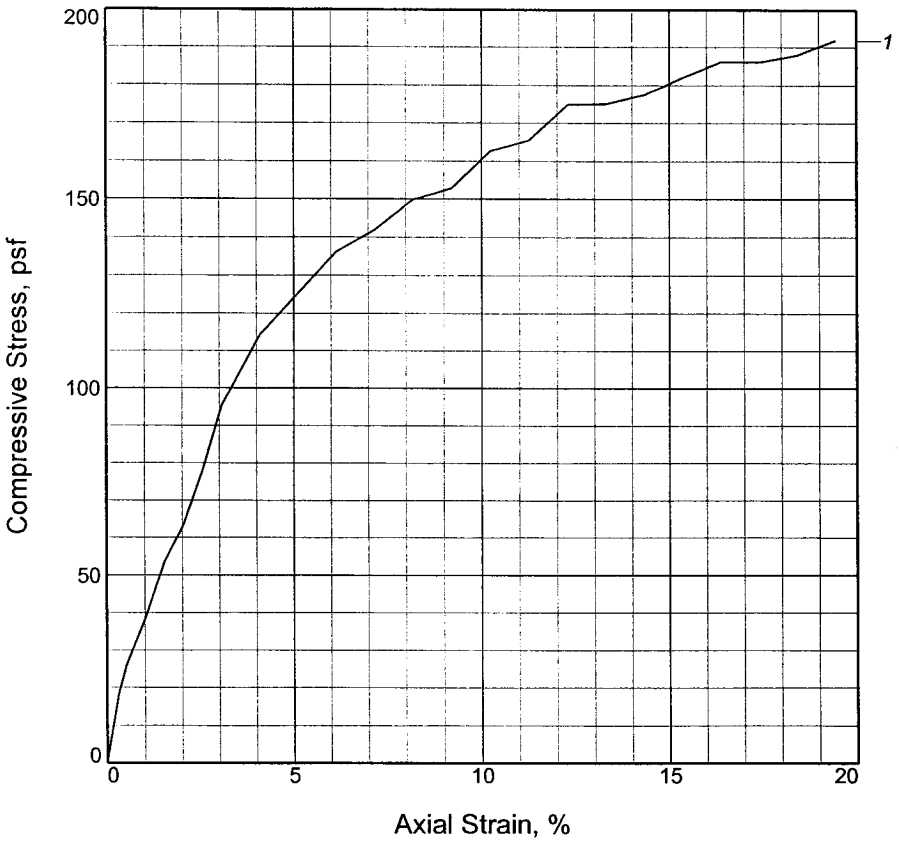
Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal
Source of Sample: B-2WG **Depth:** 5.0
Sample Number: 3

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

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

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	191.8			
Undrained shear strength, psf	95.9			
Failure strain, %	19.5			
Strain rate, in./min.	0.058			
Water content, %	50.2			
Wet density, pcf	103.2			
Dry density, pcf	68.7			
Saturation, %	92.8			
Void ratio	1.4719			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: VSO GR CH4 W/ ARS SM, WD, SIF

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

Project No.: 19082
Date: 11-9-05
Remarks:

Client: URS Corporation

Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal
Source of Sample: B-2WG **Depth:** 10.0
Sample Number: 5

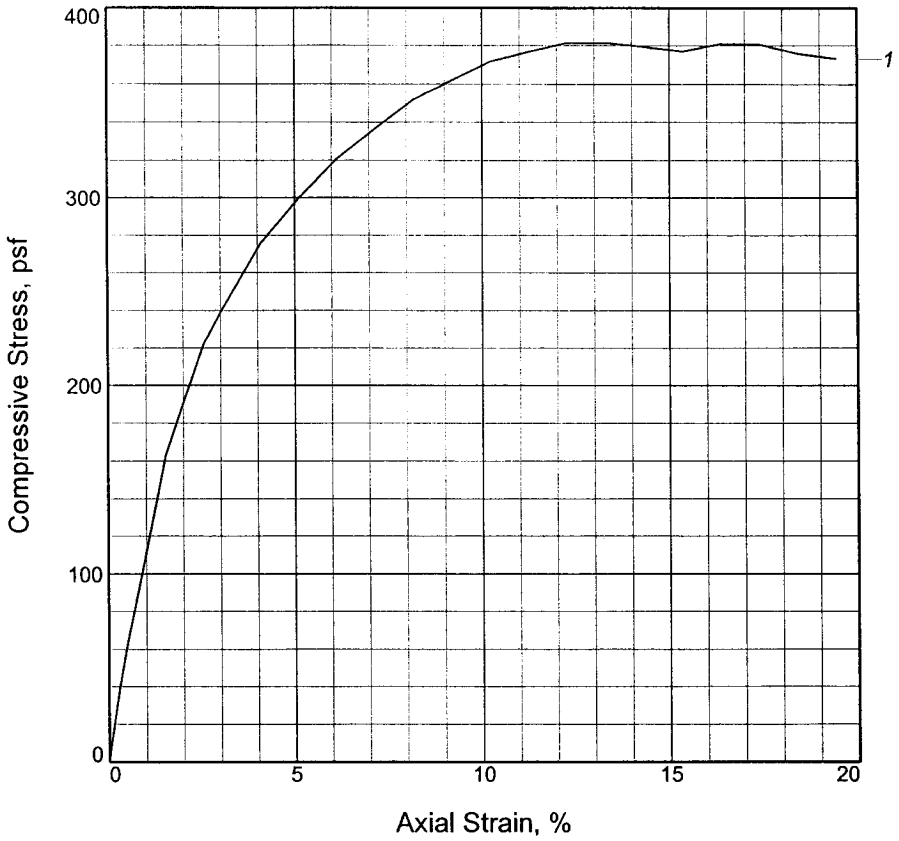
UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: RR **Checked By:** JS

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	381.5			
Undrained shear strength, psf	190.7			
Failure strain, %	13.3			
Strain rate, in./min.	0.059			
Water content, %	69.3			
Wet density, pcf	96.7			
Dry density, pcf	57.1			
Saturation, %	95.2			
Void ratio	1.9942			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: VSO GR CH4 W/ LNS ML

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

Project No.: 19082
Date: 11-9-05

Remarks:
TORVANE = 0.120 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal
Source of Sample: B-2WG **Depth:** 22.5
Sample Number: 10

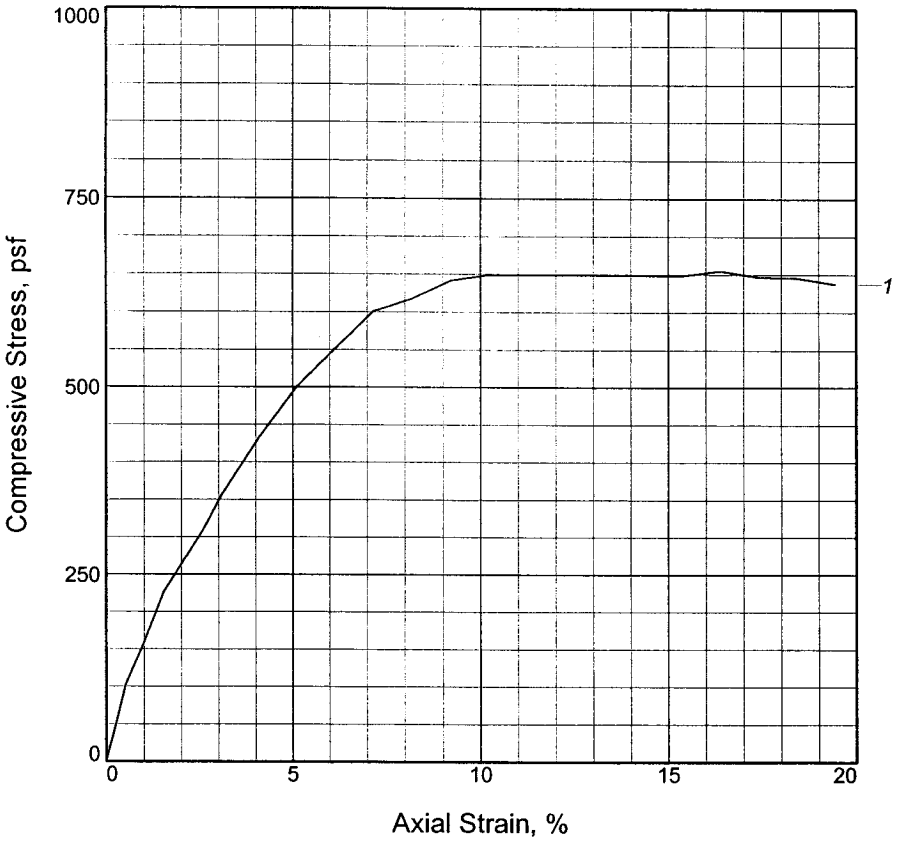
UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Figure 1

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

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	654.5			
Undrained shear strength, psf	327.3			
Failure strain, %	16.4			
Strain rate, in./min.	0.055			
Water content, %	50.8			
Wet density, pcf	104.1			
Dry density, pcf	69.0			
Saturation, %	94.2			
Void ratio	1.4785			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: SO GR CH4 W/ LNS & LYS ML

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

Project No.: 19082
Date: 11-9-05

Remarks:
TORVANE = 0.160 TSF

Figure 1

Client: URS Corporation

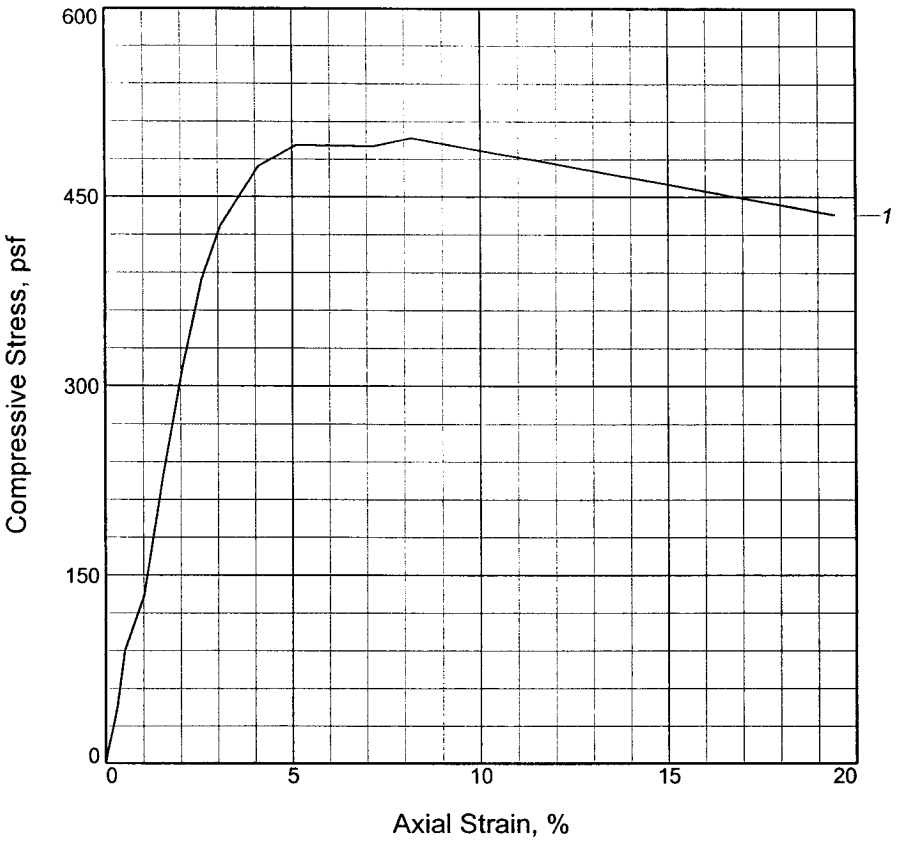
Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal
Source of Sample: B-2WG **Depth:** 27.5
Sample Number: 12

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Tested By: RR **Checked By:** JS

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	496.7			
Undrained shear strength, psf	248.3			
Failure strain, %	8.2			
Strain rate, in./min.	0.058			
Water content, %	72.2			
Wet density, pcf	94.0			
Dry density, pcf	54.6			
Saturation, %	92.8			
Void ratio	2.1337			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: VSO GR CH4 W/ LNS ML

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

Project No.: 19082
Date: 11-6-05

Remarks:
TORVANE = 0.150 TSF

Figure 1

Client: URS Corporation

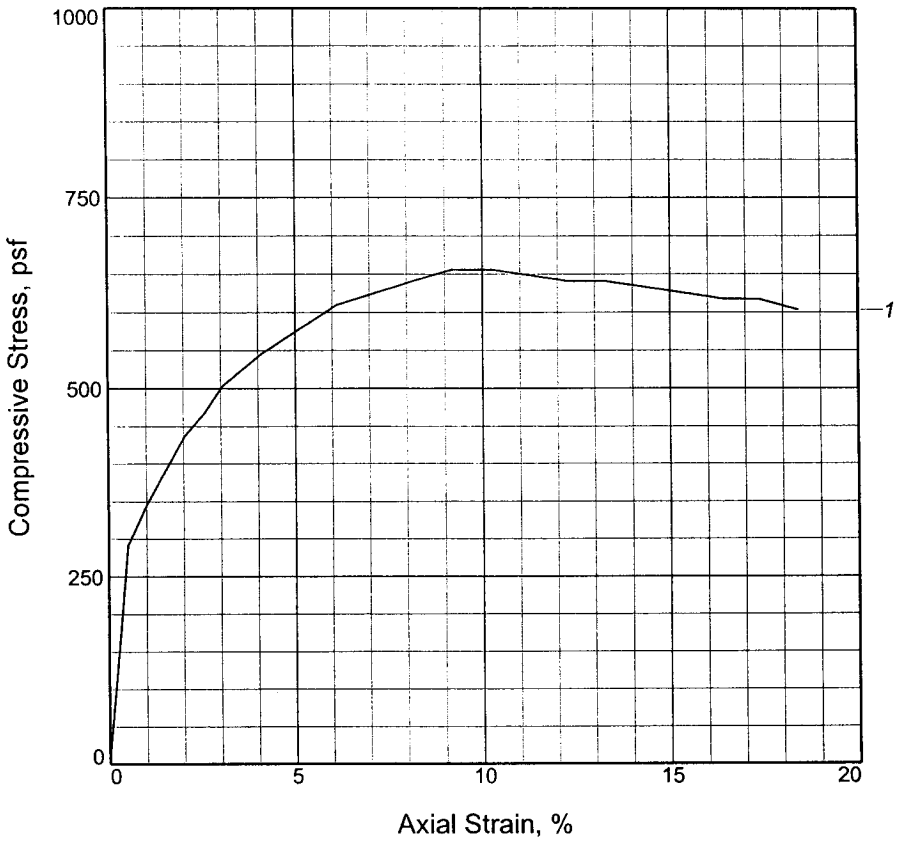
Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal
Source of Sample: B-2WG **Depth:** 32.5
Sample Number: 14

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

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

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	655.9			
Undrained shear strength, psf	328.0			
Failure strain, %	9.2			
Strain rate, in./min.	0.059			
Water content, %	66.0			
Wet density, pcf	96.4			
Dry density, pcf	58.1			
Saturation, %	93.0			
Void ratio	1.9456			
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

Project No.: 19082
Date: 11-9-05
Remarks:
TORVANE = 0.200 TSF

Figure 1

Client: URS Corporation

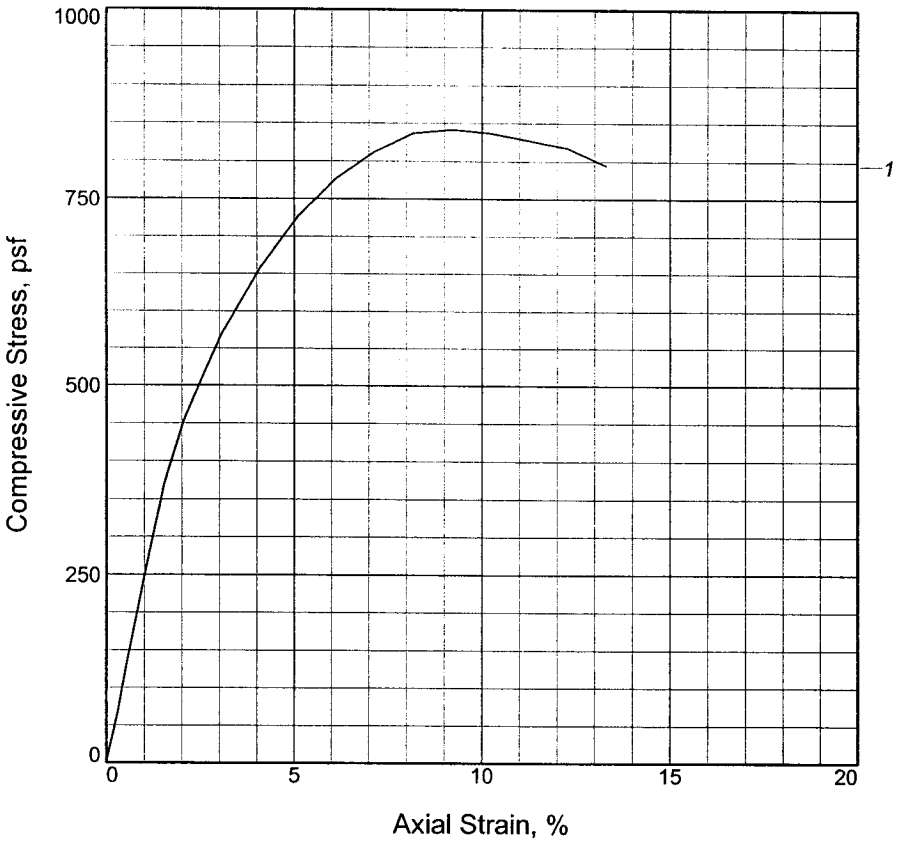
Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal
Source of Sample: B-2WG **Depth:** 37.5
Sample Number: 16

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Tested By: RR **Checked By:** JS

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	841.3			
Undrained shear strength, psf	420.7			
Failure strain, %	9.2			
Strain rate, in./min.	0.059			
Water content, %	62.3			
Wet density, pcf	98.0			
Dry density, pcf	60.4			
Saturation, %	93.1			
Void ratio	1.8326			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: SO GR CH4 W/ LNS ML

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

Project No.: 19082
Date: 11-9-05

Remarks:
TORVANE = 0.200 TSF

Figure 1

Client: URS Corporation

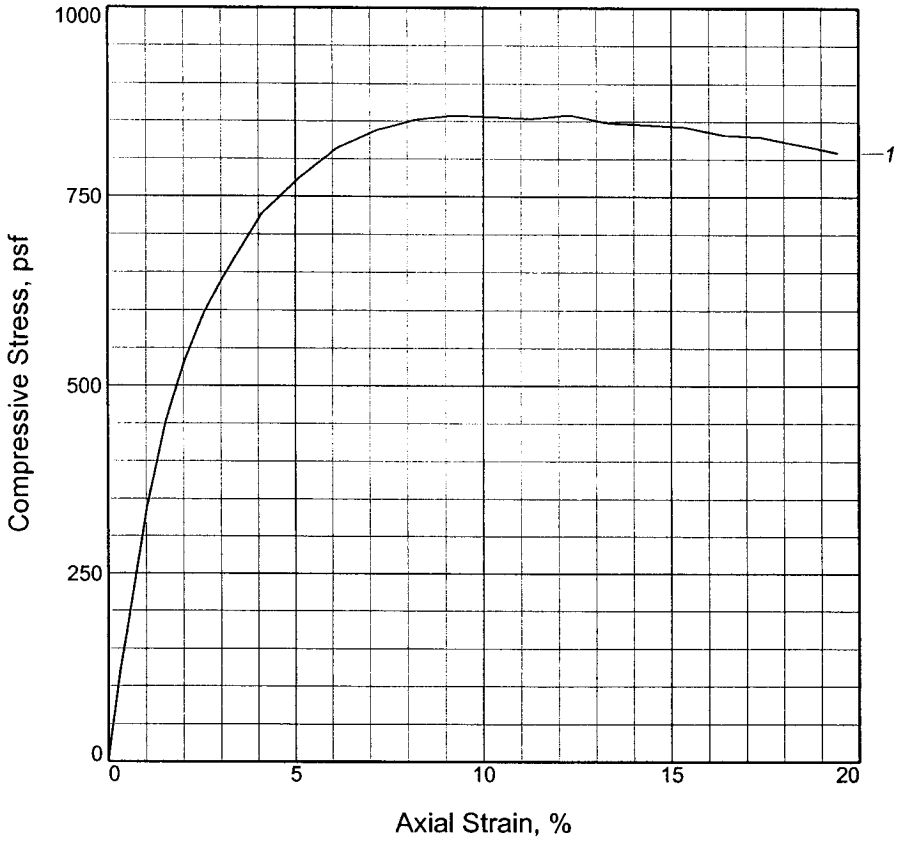
Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal
Source of Sample: B-2WG **Depth:** 42.5
Sample Number: 18

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Tested By: JL **Checked By:** JS

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	858.2			
Undrained shear strength, psf	429.1			
Failure strain, %	12.3			
Strain rate, in./min.	0.055			
Water content, %	59.7			
Wet density, pcf	97.0			
Dry density, pcf	60.7			
Saturation, %	90.0			
Void ratio	1.8171			
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

Project No.: 19082
Date: 11-9-05

Remarks:
TORVANE = 0.260 TSF

Client: URS Corporation

Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal
Source of Sample: B-2WG **Depth:** 47.5
Sample Number: 20

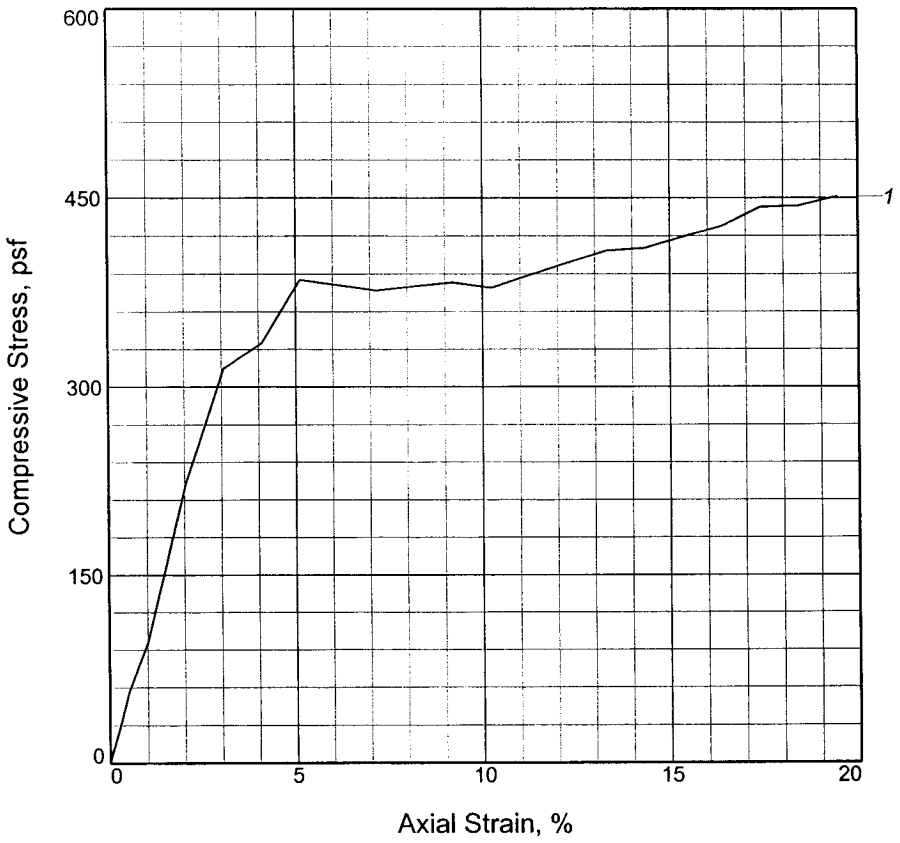
UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Figure 1

Tested By: RR **Checked By:** JS

UNCONFINED COMPRESSION TEST



Specimen No.	1			
Unconfined strength, psf	451.2			
Undrained shear strength, psf	225.6			
Failure strain, %	19.5			
Strain rate, in./min.	0.058			
Water content, %	55.6			
Wet density, pcf	100.0			
Dry density, pcf	64.3			
Saturation, %	91.7			
Void ratio	1.6618			
Specimen diameter, in.	1.388			
Specimen height, in.	2.930			
Height/diameter ratio	2.11			

Description: VSO GR CH4 W/ LYS SM, SIF

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

Project No.: 19082
Date: 11-9-05

Remarks:
TORVANE = 0.150 TSF

Figure 1

Client: URS Corporation

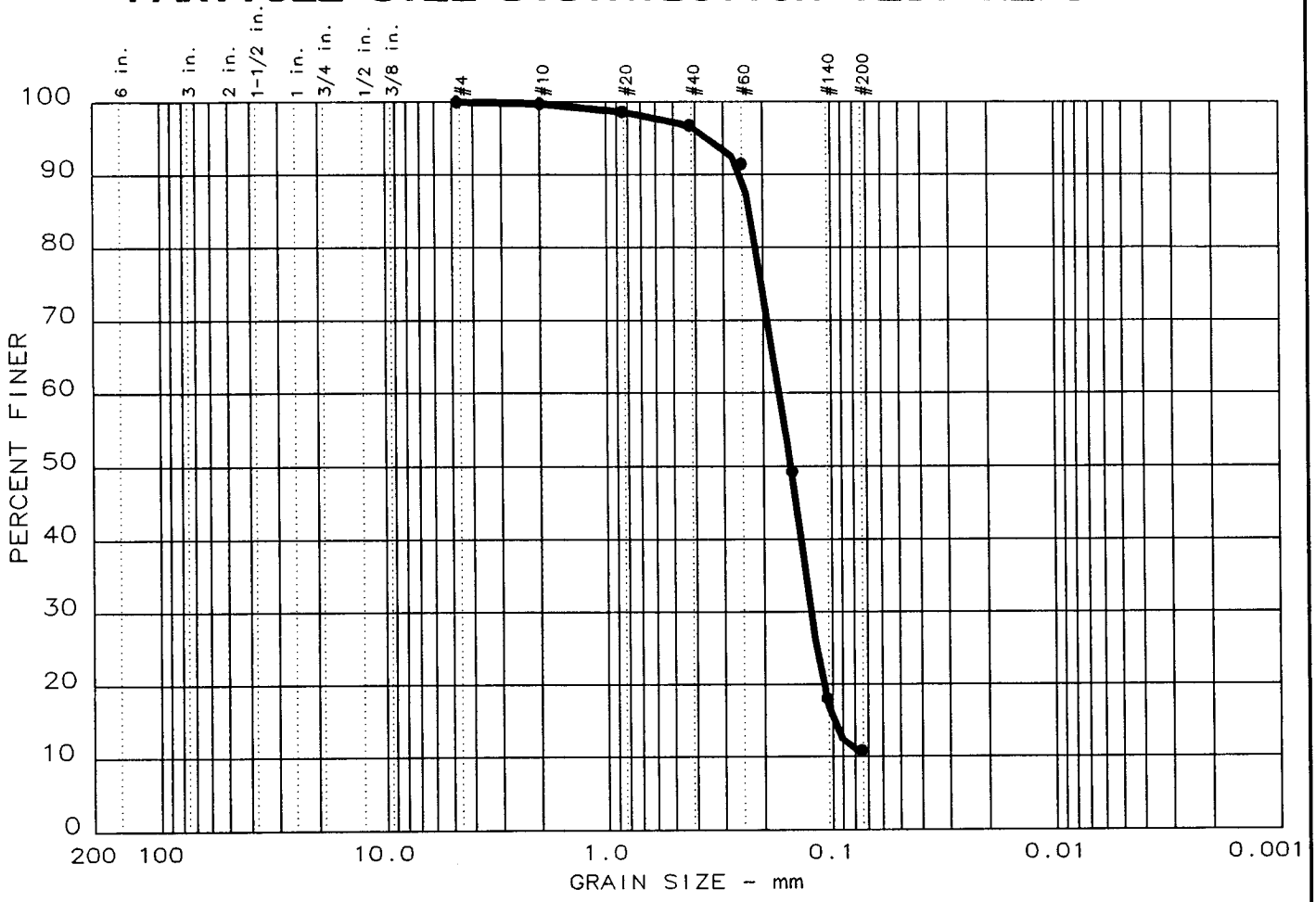
Project: U.S. Army Corps of Engineers
Inner Harbor Navigational Canal
Source of Sample: B-2WG **Depth:** 52.5
Sample Number: 22

UNCONFINED COMPRESSION TEST

EUSTIS ENGINEERING COMPANY, INC.

Tested By: RR **Checked By:** JS

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.0	89.2	10.8		SM1-s		

SIEVE inches size	PERCENT FINER ●		
	GRAIN SIZE		
D_{60} D_{30} D_{10}	0.17 0.12		
	COEFFICIENTS		
C_c C_u			

SIEVE number size	PERCENT FINER ●
4	100.0
10	99.7
20	98.6
40	96.7
60	91.4
100	49.2
140	18.0
200	10.8

Sample information:
● Boring 2WG, Sample 25
GR SM1-s

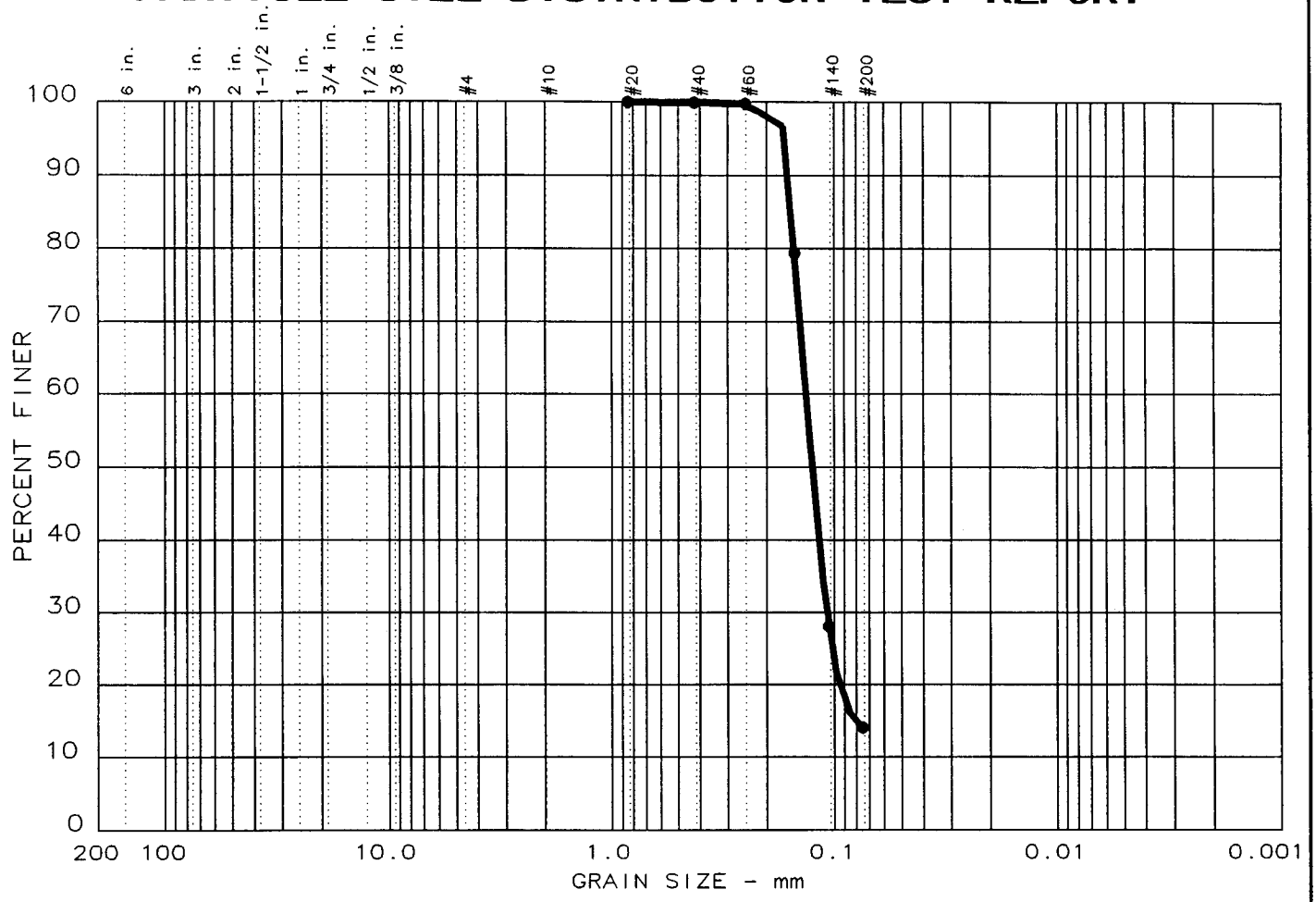
Remarks:
Sample depth 60.0'

Eustis Engineering Company, Inc.

Project No.: 19082
Project: USACE

Date: 11-16-05 Data Sheet No. ——

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	0.0	0.0	86.0	14.0		SM1-s		

SIEVE inches size	PERCENT FINER ●		
GRAIN SIZE			
D_{60}	0.13		
D_{30}	0.11		
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ●
20	100.0
40	99.9
60	99.7
100	79.4
140	28.1
200	14.0

Sample information:
● Boring 2WG, Sample 32
GR SM1-s

Remarks:
Sample depth 77.5'

Eustis Engineering Company, Inc.

Project No.: 19082
Project: USACE

Date: 11-16-05 Data Sheet No. ——