APPENDIX E

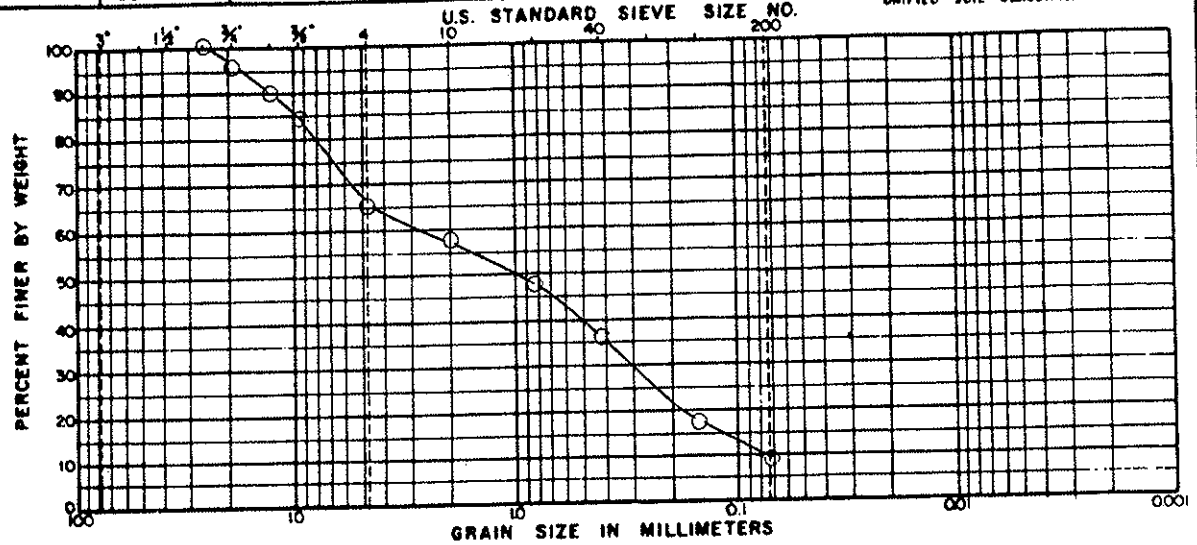
RESULTS OF LABORATORY TESTS

GRAIN-SIZE DISTRIBUTION

PROJ. NO. ~ 4019-0001 ~

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

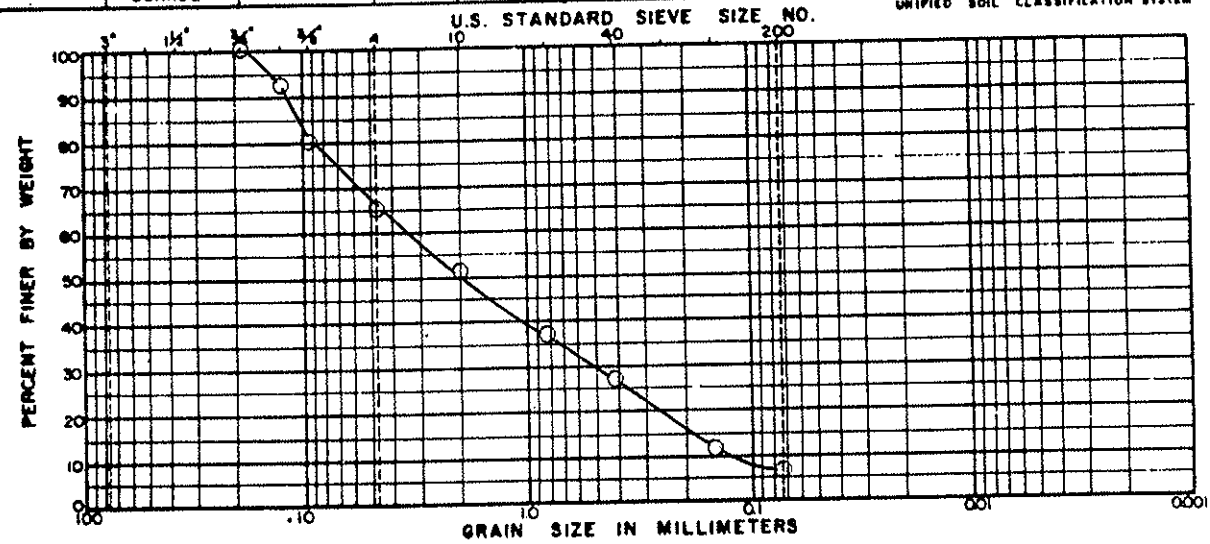
UNIFIED SOIL CLASSIFICATION SYSTEM



BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
PSS-B	S10	35'-37'		OLIVE GRAY F-C SAND, AND F-C GRAVEL, TR. SILT (SP-SM)	8.3	—	—

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

UNIFIED SOIL CLASSIFICATION SYSTEM



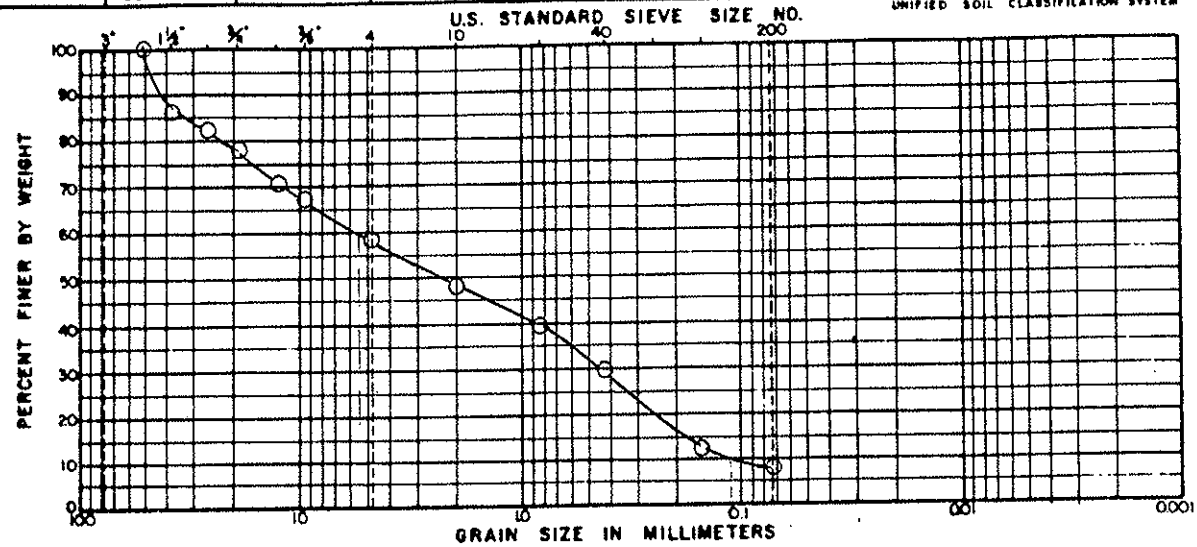
BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
PSS-2	S6	10'-10.4'		GRAY BR. F-C SAND, SOME F GRAVEL TR. SILT, OCC. ASPHALT FRAGS (SP-SM) (FILL)	9.2	—	—

GRAIN-SIZE DISTRIBUTION

PROJ. NO. 4013-001-020

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

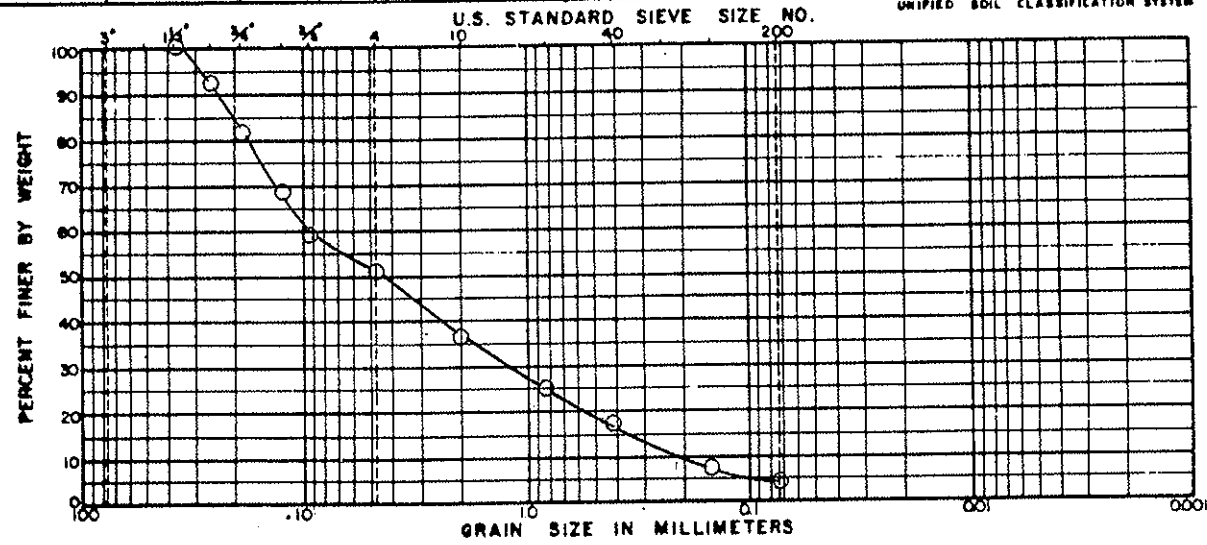
UNIFIED SOIL CLASSIFICATION SYSTEM



BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
PSS-6	S10	30'-32'		BR. F-C SAND, AND F-C GRAVEL,	10.1	–	–
				TR. SILT/CLAYEY SILT (SP-SM)			

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

UNIFIED SOIL CLASSIFICATION SYSTEM



D10 =

BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
PSS-6	S11	32'-34'		GRAY BR. C-F SAND & F-C GRAVEL,	8.3	–	–
				TR. SILT (SP)/(GP)			

PERMEABILITY TEST
(U-TUBE PERMEAMETER)

JOB: A+D LEVEE
JOB NO.: 4019-001-020
TESTED BY: LL SR
DATE: 8-10-10

BORING NO. : PSS-6
SAMPLE NO.: S10
DEPTH: 30'-32'

AS REC'D CONDITION

CLASSIFICATION: BR. F-M-C SAND, AND F-C GRAVEL, TR. SILT/CLAYEY SILT (SP-SM)

PERMEAMETER NO.: 65

* WITH STANDPIPE ☒
** WITHOUT STANDPIPE ☐

SATURATED 5.5 HOURS
SHEEN OBSERVED

DATA:

TEST NO. 1	TEST NO. 2
SAMPLE LENGTH (L): 13.1 cm= 5.16 in	SAMPLE LENGTH (L): 13.1 cm= 5.16 in
H_1 : 31.4 cm= 12.36 in	H_1 : 31.4 cm= 12.36 in
H_2 : 21.9 cm= 8.62 in	H_2 : 21.9 cm= 8.62 in
TIME (START) (T_1): MINS:SECS 0:00 = 7.2 mins (T)	TIME (START) (T_1): MINS:SECS 0:00 = 6.83 mins (T)
TIME (END) (T_2): 7:12	TIME (END) (T_2): 6:50
*r (STANDPIPE) : 0.415 cm= 0.16 in	*r (STANDPIPE) : 0.415 cm= 0.16 in
*R (SAMPLE) : 3.63 cm= 1.43 in	*R (SAMPLE) : 3.63 cm= 1.43 in

$K = 60 \times \frac{(0.16)^2}{(1.43)^2} \times \frac{5.16}{7.2} \times \ln \frac{12.36}{8.62}$

$K = 60 \times 0.0125 \times 0.717 \times 0.3604$

$K = 0.19$ in/hr

$K = 1.34 \times 10^{-4}$ cm/sec

$K = 60 \times \frac{(0.16)^2}{(1.43)^2} \times \frac{5.16}{6.83} \times \ln \frac{12.36}{8.62}$

$K = 60 \times 0.0125 \times 0.755 \times 0.3604$

$K = 0.20$ in/hr

$K = 1.41 \times 10^{-4}$ cm/sec

AVERAGE K VALUE= 1.38×10^{-4} cm/sec AS REC'D CONDITION

very slight cloudiness noted in spill water

$$*K = 60 \text{ (mins/hr.)} \times \frac{r^2}{R^2} \times \frac{L \text{ (in)}}{T \text{ (mins)}} \times \ln \frac{H_1}{H_2}$$

$$**K = 60 \text{ (mins/hr.)} \times \frac{L \text{ (in)}}{T \text{ (mins)}} \times \ln \frac{H_1}{H_2}$$

PAULUS SOKOLOWSKI and SARTOR INC.
CONSULTING ENGINEERS

PERMEABILITY TEST
(U-TUBE PERMEAMETER)

JOB: A-D LEVEE
JOB NO.: 4019-001-020

TESTED BY: LL SR
DATE: 8-10-10

BORING NO. : PSS-6
SAMPLE NO.: 510
DEPTH: 30'-32'

DENSIFIED

CLASSIFICATION: BR. F-M-C SAND, AND F-C GRAVEL, TR. SILT/CLAYEY SILT (SP-SM)

PERMEAMETER NO.: 65

* WITH STANDPIPE ☒
** WITHOUT STANDPIPE ☐

DATA:

TEST NO. 1	TEST NO. 2
SAMPLE LENGTH (L): 12.6 cm= 4.96 in	SAMPLE LENGTH (L): 12.6 cm= 4.96 in
H_1 : 31.4 cm= 12.36 in	H_1 : 31.4 cm= 12.36 in
H_2 : 21.9 cm= 8.62 in	H_2 : 21.9 cm= 8.62 in
TIME (START) (T_1): 0:00 (MINS:SECS) = 11.25 mins (T)	TIME (START) (T_1): 0:00 (MINS:SECS) = 10.78 mins (T)
TIME (END) (T_2): 11:15	TIME (END) (T_2): 10:47
*r (STANDPIPE) : 0.415 cm= 0.16 in	*r (STANDPIPE) : 0.415 cm= 0.16 in
*R (SAMPLE) : 3.63 cm= 1.43 in	*R (SAMPLE) : 3.63 cm= 1.43 in
$K = 60 \times \frac{(0.16)^2}{(1.43)^2} \times \frac{4.96}{11.25} \times \ln \frac{12.36}{8.62}$	$K = 60 \times \frac{(0.16)^2}{(1.43)^2} \times \frac{4.96}{10.78} \times \ln \frac{12.36}{8.62}$
$K = 60 \times 0.0125 \times 0.441 \times 0.3604$	$K = 60 \times 0.0125 \times 0.460 \times 0.3604$
K= 0.119 in/hr.	K= 0.124 in/hr
K= 8.41 x 10^{-5} cm/sec	K= 8.75 x 10^{-5} cm/sec

AVERAGE K VALUE= 8.58 x 10^{-5} cm/sec DENSIFIED

clear spill water

*K = 60 (mins/hr.) x $\frac{r^2}{R^2}$ x $\frac{L\ (in)}{T\ (mins)}$ x ln $\frac{H_1}{H_2}$

**K = 60 (mins/hr.) x $\frac{L\ (in)}{T\ (mins)}$ x ln $\frac{H_1}{H_2}$

PAULUS SOKOLOWSKI and SARTOR INC. CONSULTING ENGINEERS

PERMEABILITY TEST
(U-TUBE PERMEAMETER)

JOB: A-D LEVEE
JOB NO.: 4019-001-020

TESTED BY: LL SR.
DATE: 8-10-10

BORING NO. : PSS-6
SAMPLE NO.: S11
DEPTH: 32'-34'

AS REC'D CONDITION

CLASSIFICATION: GRAY BR. C-F SAND & F-C GRAVEL, TR. SILT (SP)/(GP)

PERMEAMETER NO.: 666

* WITH STANDPIPE ☒
** WITHOUT STANDPIPE ☐

SATURATED 4 HOURS
SHEEN OBSERVED

DATA:

TEST NO. 1	TEST NO. 2
SAMPLE LENGTH (L): 12.9 cm= 5.08 in	SAMPLE LENGTH (L): 12.9 cm= 5.08 in
H_1 : 31.6 cm= 12.44 in	H_1 : 31.6 cm= 12.44 in
H_2 : 22.1 cm= 8.70 in	H_2 : 22.1 cm= 8.70 in
TIME (START) (T_1): 0:00 MINS:SECS = 0.167 mins (T)	TIME (START) (T_1): 0:00 MINS:SECS = 0.183 mins (T)
TIME (END) (T_2): 0:10 SECS	TIME (END) (T_2): 0:11 SECS
*r (STANDPIPE) : 0.415 cm= 0.16 in	*r (STANDPIPE) : 0.415 cm= 0.16 in
*R (SAMPLE) : 3.63 cm= 1.43 in	*R (SAMPLE) : 3.63 cm= 1.43 in
$K = 60 \times \frac{(0.16)^2}{(1.43)^2} \times \frac{5.08}{0.167} \times \ln \frac{12.44}{8.70}$	$K = 60 \times \frac{(0.16)^2}{(1.43)^2} \times \frac{5.08}{0.183} \times \ln \frac{12.44}{8.07}$
$K = 60 \times 0.0125 \times 30.42 \times 0.4328$	$K = 60 \times 0.0125 \times 27.76 \times 0.4328$
$K = 9.87$ in/hr	$K = 9.01$ in/hr
$K = 6.96 \times 10^{-3}$ cm/sec	$K = 6.36 \times 10^{-3}$ cm/sec

AVERAGE K VALUE= 6.66×10^{-3} cm/sec AS REC'D CONDITION

slightly cloudy spill water

$$*K = 60 \text{ (mins/hr.)} \times \frac{r^2}{R^2} \times \frac{L \text{ (in)}}{T \text{ (mins)}} \times \ln \frac{H_1}{H_2}$$

$$**K = 60 \text{ (mins/hr.)} \times \frac{L \text{ (in)}}{T \text{ (mins)}} \times \ln \frac{H_1}{H_2}$$

PAULUS SOKOLOWSKI and SARTOR INC.
CONSULTING ENGINEERS

PERMEABILITY TEST
(U-TUBE PERMEAMETER)

JOB: A.D LEVEE
JOB NO.: 4019-001-020

TESTED BY: LL SR.
DATE: 8-10-10

BORING NO. : PSS-6
SAMPLE NO.: S11
DEPTH: 32'-34'

DENSIFIED

CLASSIFICATION: GRAY BR. C-F SAND & F-C GRAVEL, TR. SILT (SP)/(GP)

PERMEAMETER NO.: 666

* WITH STANDPIPE ☒
** WITHOUT STANDPIPE ☐

DATA:

TEST NO. 1	TEST NO. 2
SAMPLE LENGTH (L): 11.5 cm= 4.53 in	SAMPLE LENGTH (L): 11.5 cm= 4.53 in
H_1 : 31.5 cm= 12.40 in	H_1 : 31.5 cm= 12.40 in
H_2 : 22.0 cm= 8.66 in	H_2 : 22.0 cm= 8.66 in
TIME (START) (T_1): MINS:SECS 0:00 = 0.40 mins (T)	TIME (START) (T_1): MINS:SECS 0:00 = 0.383 mins (T)
TIME (END) (T_2): 0:24 SECS	TIME (END) (T_2): 0:23 SECS
*r (STANDPIPE) : 0.415 cm= 0.16 in	*r (STANDPIPE) : 0.415 cm= 0.16 in
*R (SAMPLE) : 3.63 cm= 1.43 in	*R (SAMPLE) : 3.63 cm= 1.43 in
$K = 60 \times \frac{(0.16)^2}{(1.43)^2} \times \frac{4.53}{0.40} \times \ln \frac{12.40}{8.66}$	$K = 60 \times \frac{(0.16)^2}{(1.43)^2} \times \frac{4.53}{0.383} \times \ln \frac{12.40}{8.66}$
$K = 60 \times 0.0125 \times 11.325 \times 0.3590$	$K = 60 \times 0.0125 \times 11.83 \times 0.3590$
$K = 3.05$ in/hr	$K = 3.18$ in/hr
$K = 2.15 \times 10^{-3}$ cm/sec	$K = 2.25 \times 10^{-3}$ cm/sec

AVERAGE K VALUE= 2.20×10^{-3} cm/sec DENSIFIED

clear spill water

*$K = 60$ (mins/hr.) $\times \frac{r^2}{R^2} \times \frac{L\ (in)}{T\ (mins)} \times \ln \frac{H_1}{H_2}$

**$K = 60$ (mins/hr.) $\times \frac{L\ (in)}{T\ (mins)} \times \ln \frac{H_1}{H_2}$

PAULUS SOKOLOWSKI and SARTOR INC. CONSULTING ENGINEERS

PAULUS SOKOLOWSKI and SARTOR, INC. CONSULTING ENGINEERS

~ A:D LEVEE ~

JOB. NO. 4019-003-020 PROJECT ENGINEER JJL, WWB, MBD TESTED BY LLSR DATE 8-10-10

~ MOIST. CONT. ~

~ DENSITY ~

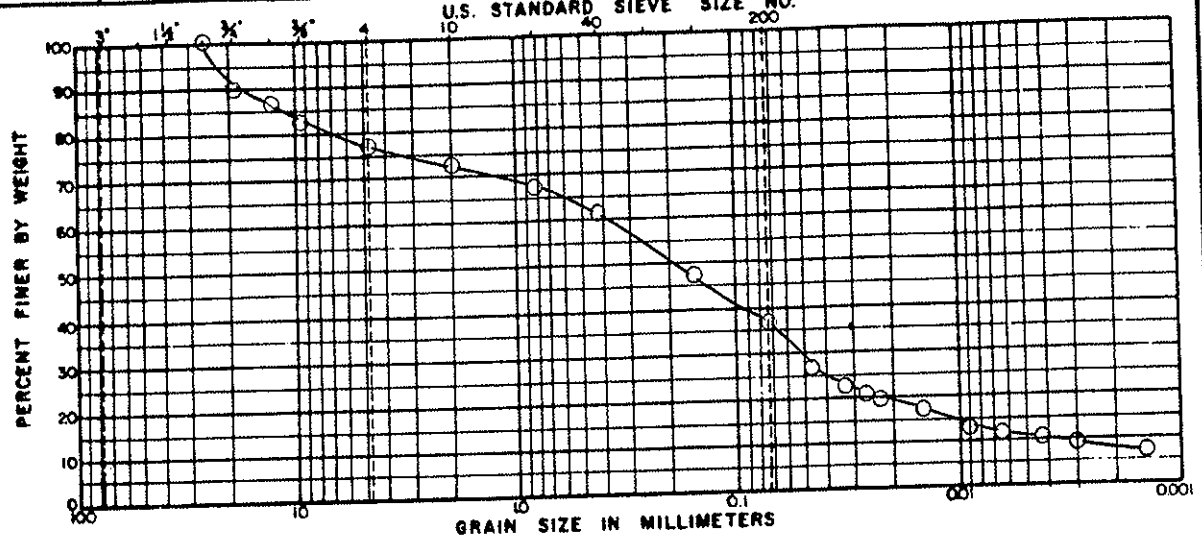
	AS REC'D PSS-6	DENSIFIED PSS-6		AS REC'D PSS-6	DENSIFIED PSS-6						
SAMPLE #	S10 30'-32'	S10 30'-32'		S11 32'-34'	S11 32'-34'						
TARE #	TUBE 65	TUBE 65		TUBE 66	TUBE 66						
WGT. TARE & WET SOIL	1646.9			1565.4							
WGT. TARE & DRY SOIL	1542.5			1486.0							
WGT. WATER	104.4			79.4							
WGT. TARE	505.1			532.2							
WGT. DRY SOIL	1037.4			953.8							
MOIST. CONT. %	10.1 %			8.3%							
WGT. TARE & WET SOIL	1646.9	1646.9		1565.4	1565.4						
WGT. TARE	505.1	505.1		532.2	532.2						
WGT. WET SOIL (grams)	1141.8	1141.8		1033.2	1033.2						
HEIGHT (in)	5.16	4.96		5.08	4.53						
Φ (in)	2.875	2.875		2.875	2.875						
VOLUME (ft^3)	0.0194	0.0186		0.0191	0.0170						
γ_t (lb/ft^3)	129.7	135.3		119.3	134.0						
M.C. %	10.1	10.1		8.3	8.3						
γ_d (lb/ft^3)	117.8	122.9		110.2	123.7						
ESTIMATED G_s	2.70	2.70		2.70	2.70						
e_o	0.430	0.371		0.529	0.362						
S_o	63.4%	73.5%		42.4%	61.9%						
n	0.301	0.271		0.346	0.266						
K (cm/sec)	1.38×10^{-4}	8.58×10^{-5}		6.66×10^{-3}	2.20×10^{-3}						
	(SP-SM)			(SP)	(GP)						

GRAIN-SIZE DISTRIBUTION

PROJ. NO. ~ 4019-0001 ~

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

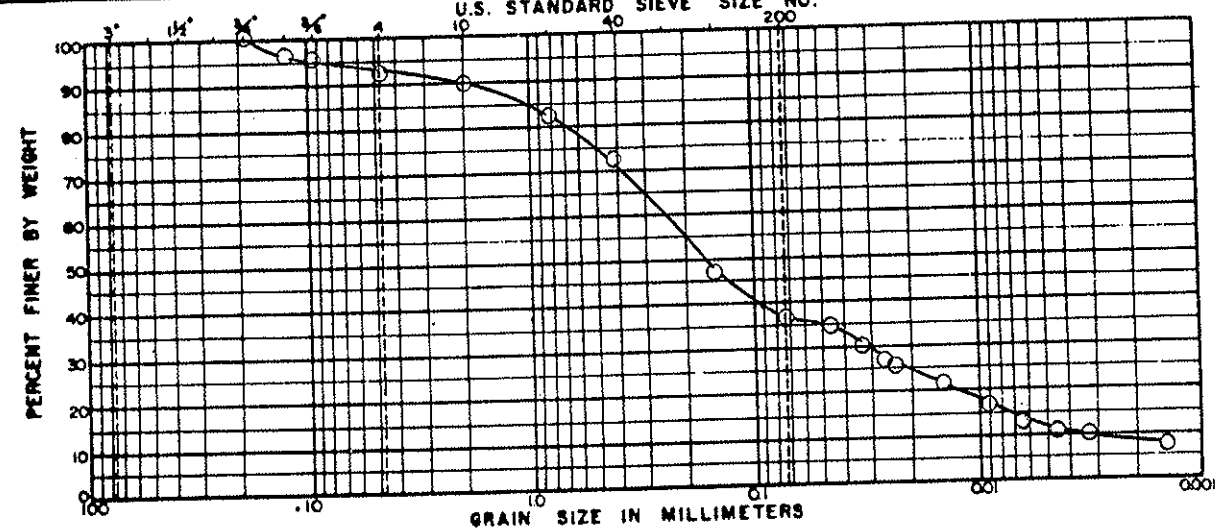
UNIFIED SOIL CLASSIFICATION SYSTEM



BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
PSS-8	S6	15'-17'		OLIVE GRAY BR. F+-C SAND, AND CLAYEY SILT, SOME F-C GRAVEL (SM) (FILL)	11.2	—	—

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

UNIFIED SOIL CLASSIFICATION SYSTEM



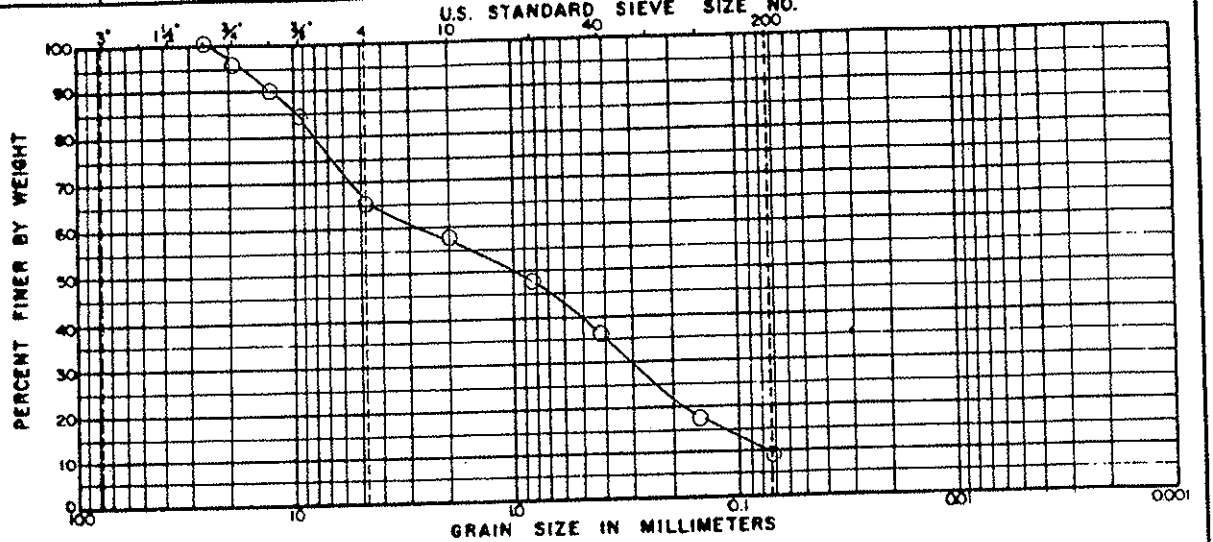
BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
PSS-8	S7	20'-22'		OLIVE TAN GRAY F+-M SAND, AND SILT, TR. F GRAVEL (SM) (FILL)	11.1	—	—

GRAIN-SIZE DISTRIBUTION

PROJ. NO. ~ 4019-0001

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

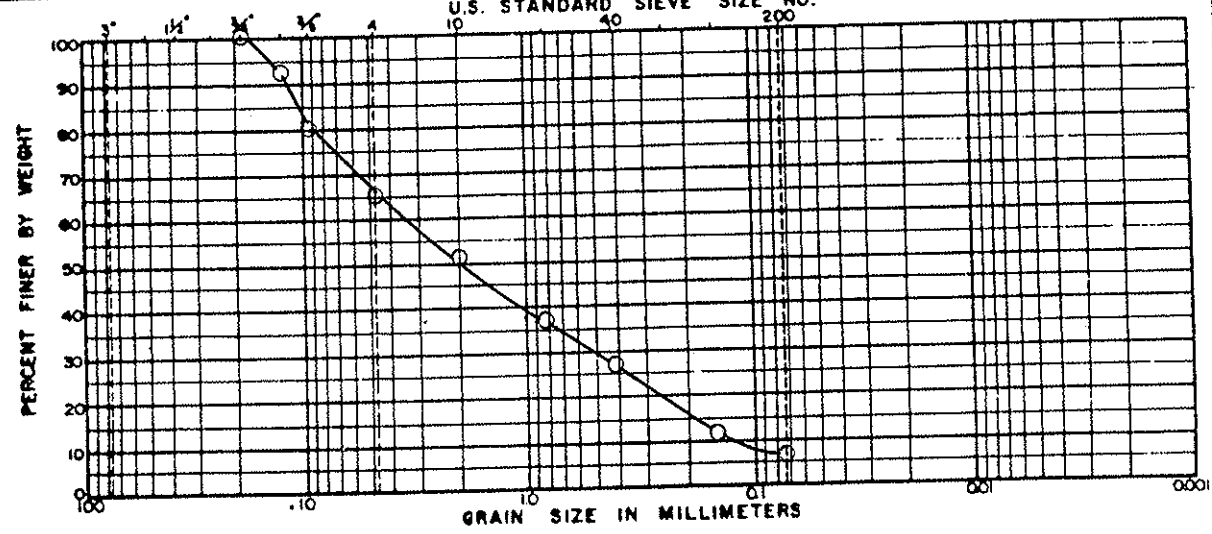
UNIFIED SOIL CLASSIFICATION SYSTEM



BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
PSS-8	S10	35'-37'		OLIVE GRAY F-C SAND, AND F-C GRAVEL, TR. SILT (SP-SM)	8.3	—	—

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

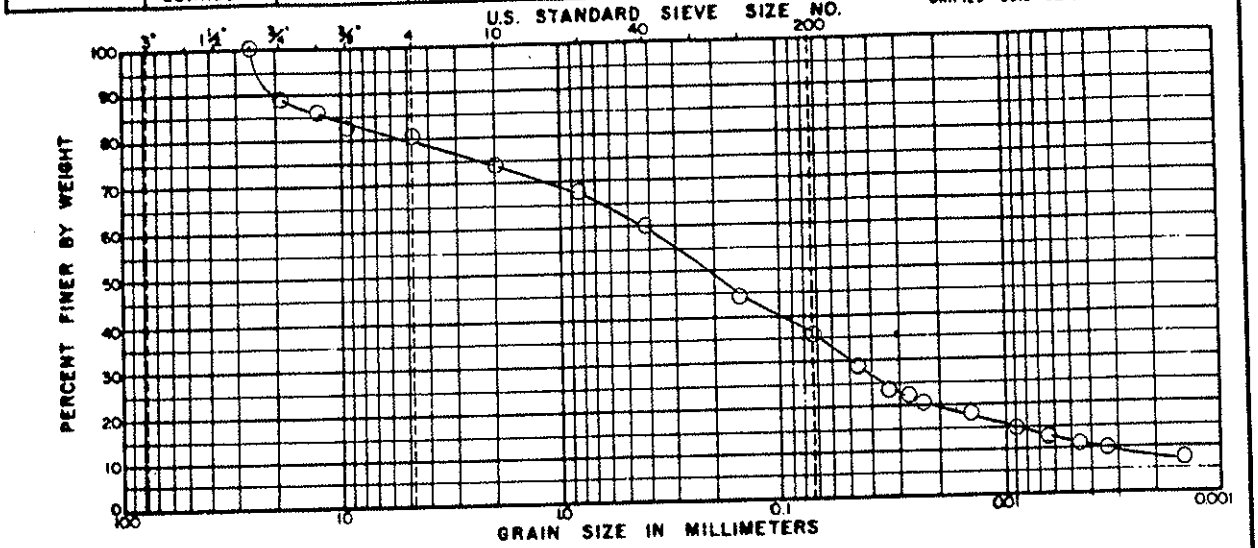
UNIFIED SOIL CLASSIFICATION SYSTEM



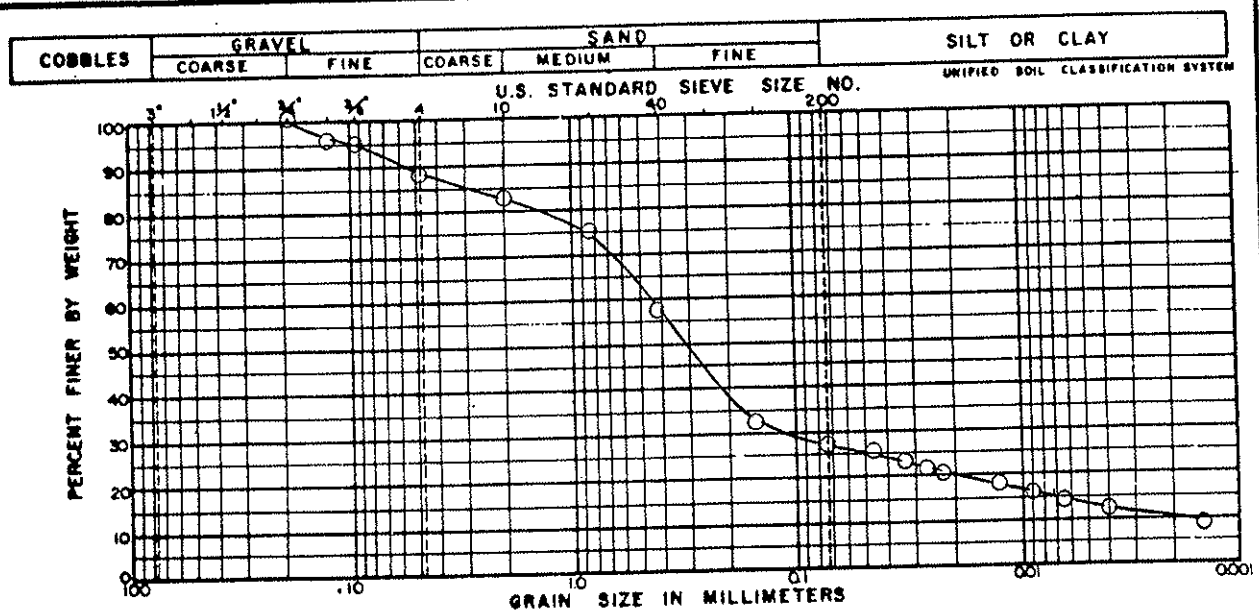
BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
PSS-2	S6	10'-10.4'		GRAY BR. F-C SAND, SOME F GRAVEL, TR. SILT, OCC. ASPHALT FRAGS (SP-SM) (FILL)	9.2	—	—

PROJ. NO. ~ 4019-0001 ~

GRAIN-SIZE DISTRIBUTION



BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
PSS-10	S3	7'-9'		GRAY F+-C SAND, AND CLAYEY SILT, LITTLE+ F-C GRAVEL (SM) (FILL)	8.0	–	–



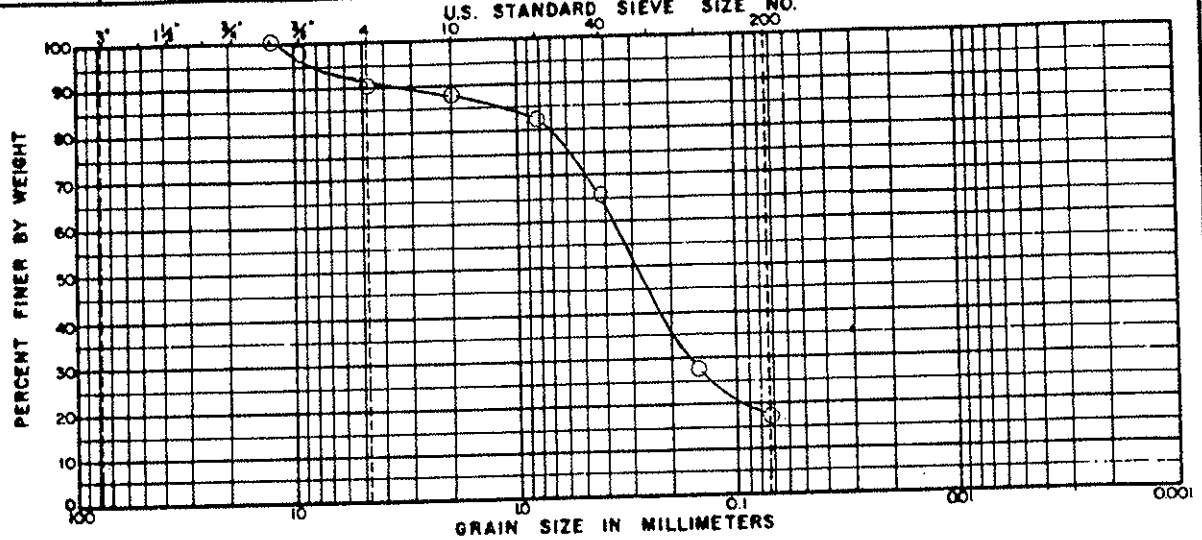
BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
PSS-10	S4	9'-11'		BR. GRAY F+-C SAND, SOME CLAYEY SILT, LITTLE F GRAVEL (SM) (FILL)	10.2	–	–

GRAIN-SIZE DISTRIBUTION

PROJ. NO. ~ 4019-0001

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

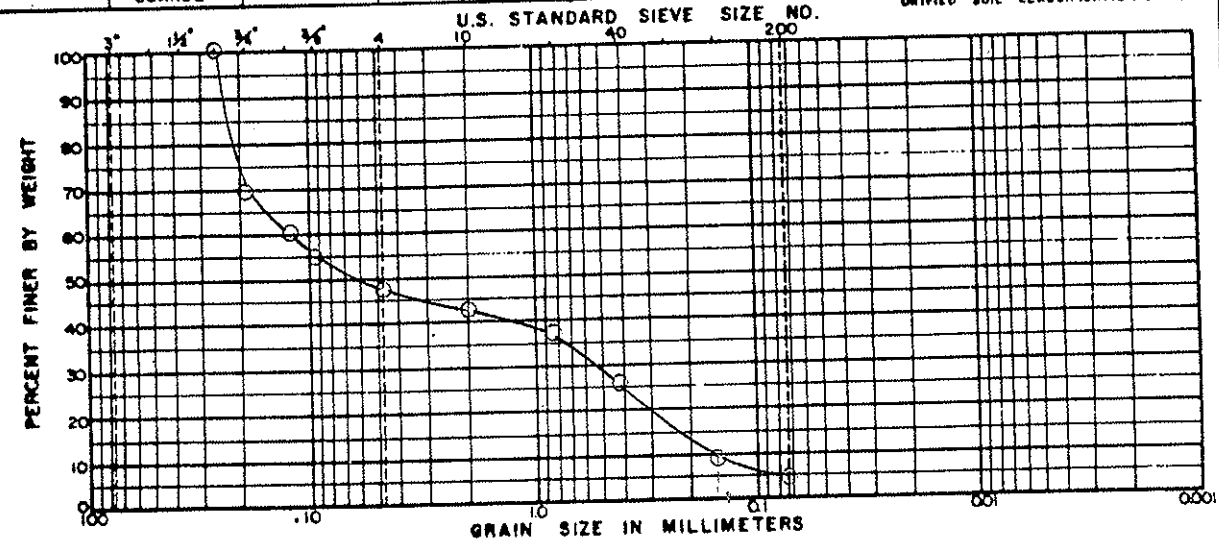
UNIFIED SOIL CLASSIFICATION SYSTEM



BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
PSS-10	S7	25'-27'		DK. GRAY F+-M SAND, LITTLE SILT, LITTLE F GRAVEL, OCC. COAL FRAGS. (SM) (FILL)	14.7	–	–

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

UNIFIED SOIL CLASSIFICATION SYSTEM



BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
PSS-10	S8	30'-32'		GRAY C-F GRAVEL, AND F+-C SAND, TR. SILT (GP)	9.8	–	–

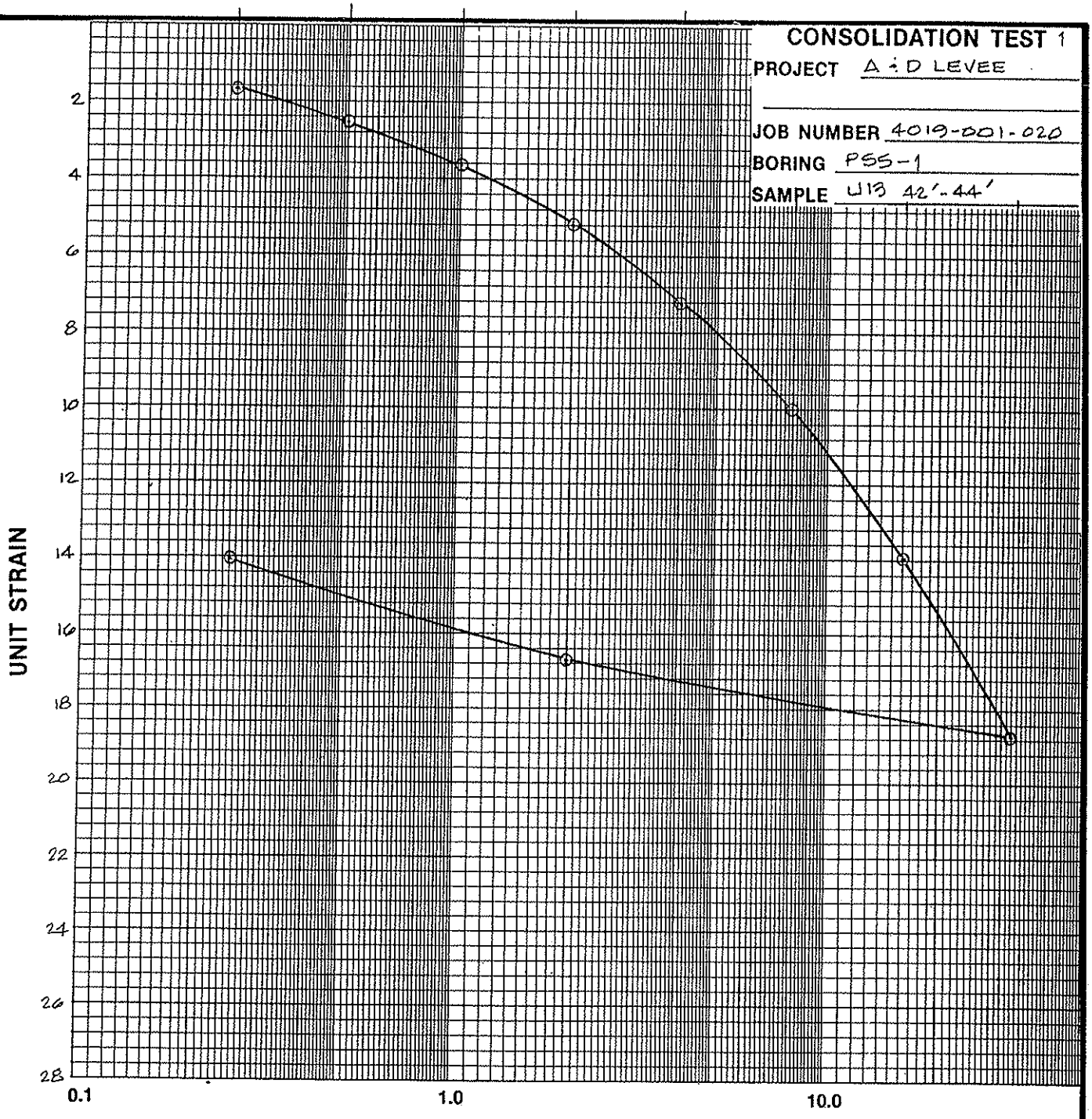
CONSOLIDATION TEST 1

PROJECT A-D LEVEE

JOB NUMBER 4019-001-020

BORING PSS-1

SAMPLE U13 42'-44'



DESCRIPTION OF SAMPLE THINLY LAYERED GRAY SILT: CLAYEY SILT (ML) AND F SAND, SOME/AND SILT (SM)

STRATUM:

PROPERTIES OF CONSOLIDATION SPECIMEN			PROPERTIES OF PLASTICITY LIMIT SPECIMEN		
	ELEVATION OF SPECIMEN			UNIFIED CLASSIFICATION	ML/SM
	DEPTH OF SPECIMEN (FT.)	± 43.1		LIQUID LIMIT (W_L)	
	DIAMETER OF SPECIMEN (IN.)	2.5		PLASTIC LIMIT (W_P)	
	INITIAL THICKNESS OF SPECIMEN (IN.)	1.0		PLASTICITY INDEX (I_P)	NP
	INITIAL WATER CONTENT %	34.7		NATURAL WATER CONT. % (W)	
	FINAL WATER CONTENT %	25.4		LIQUIDITY INDEX = $\frac{W - W_P}{I_P}$	NP
	INITIAL DEGREE SATURATION %	97.0			
	FINAL DEGREE SATURATION %	100		SPECIFIC GRAVITY (G)	2.64

INITIAL VOID RATIO (e_0)	0.944
MOST PROBABLE PRE-CONSOLIDATION STRESS (TSF) SHOWN THUS: P_C↓	5.6
EXISTING OVERBURDEN STRESS (TSF) SHOWN THUS: P_0↓	5.1
COMPRESSION INDEX $C'_C = \frac{C_C}{1 + e_0}$	0.152

PLATE

PAULUS SOKOLOWSKI and SARTOR
CONSULTING ENGINEERS

CONSOLIDATION TEST
CELL # 6B
~ AUTOMATED ~
± 12 HRS / LOAD

TEST # 1
DATA SHEET

PROJECT A & D LEVEE JOB NUMBER 4019-001-020

LOCATION OF PROJECT ANSONIA, CONNECTICUT COUNTY ____ BORING NO. PSS-1 SAMPLE NO. U13

VISUAL CLASSIFICATION THINLY LAYERED GRAY SILT & CLAYEY SILT (ML) & F SAND, SOME/AND SILT (SM) DEPTH 42'-44'

LOADING TEST DATA: LOAD ____ tsf; DATE APPLIED ____; APPLIED BY LLSR

SEE ATTACHED DATA SHEETS

APPARATUS MEASUREMENTS	
Diameter Ring	6.35 cm.
Area Ring	31.67 cm^2
Height Ring, Z_1	1.0 in.

SOIL AND RING WEIGHTS	INITIAL	FINAL
Weight Ring & Wet Soil in gm.	655.29	147.99
Weight Ring in gm. / tare	508.22	11.00
Weight Wet Soil, W_1 in gm.	147.07	136.99
Weight Dry Soil, $W_S = W/1+w$, in gm.	108.80	109.21

SPECIMEN HEIGHTS	INITIAL	FINAL AT ZERO LOAD
Height of gauge block, H_s	in.	in.
Dial reading on gauge block	in.	in.
Dial reading on specimen	in.	in.
Difference in dial reading ΔD	in.	in.
Specimen height $H = H_B \pm \Delta D$	in.	in.
Specimen height by depth gauge	in.	in.
Thickness of stone + filter paper, Z_2	in.	in.
Distance from top of stone to ring	in.	in.
Specimen H +, $H = Z_1 + Z_3 - Z_2$	in.	in.

WATER CONTENT	INITIAL		FINAL
Specimen location			
Container number	LID	"A"	TARE #101
Weight container + wet soil in gm.		117.35	147.99
Weight container + dry soil in gm.		95.03	120.21
Weight water, W_w, in gm.		22.32	27.78
Weight container in gm.		31.57	11.00
Weight dry soil, w_s, in gm.		63.46	109.21
Water content, w in %		35.17	25.44
Average water content			

INITIAL WATER CONTENT DETERMINED FROM FINAL WEIGHT OF DRY SOIL	
Initial weight wet soil in gm.	147.07
Final weight dry soil in gm.	109.21
Weight of water, Ww	37.86
Initial water content in %	34.67

SOLIDS HEIGHT, H_S	
Initial weight dry soil in gm.	108.80
Final weight dry soil in gm.	109.21
Average weight dry soil in gm.	109.01
Solids height, $H_s = \frac{W_s}{GAT_w}$	1.3062 cm.
	0.5143 in.

UNCORRECTED	INITIAL	FINAL
Void Ratio $e = \frac{H-Hs}{Hs}$	0.944	0.6715
Degree of Saturation $S = \frac{WG}{e}$	97.0	100

FINAL READING 0.1403"

H_f at S = 100% = ____ in.

H_f measured = ____ in.

Difference ____ in.

CALCULATIONS: $G_S = 2.64$

$\gamma_t = 114.2$ pcf

$\gamma_d = 84.8$ pcf

UNDISTURBED SAMPLE LOG

Boring No.: PSS-1

Job No.: 4019-001-020

Sample No. & Depth: U13 42'-44'

Project: A & D LEVEE

Recovery: 21"

Date Tested: 8-12-10
REVISED: 8-17-10

Sample Method: SHELBY

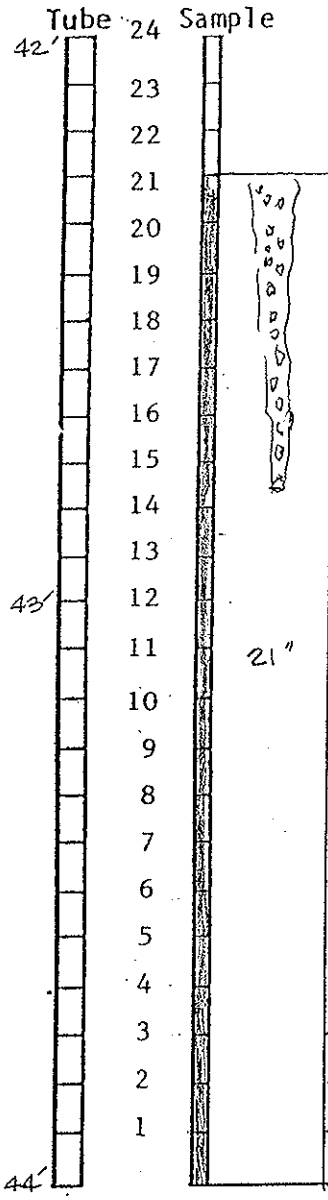
Tested By: LL SR., AL

Date of Sample: 8.3.10

Checked By: MBD

Testing Notes: SEE BELOW

Depth | Length (inches) | Soil Classification



top 6½" disturbed - wet - f gravel & c-f sand in middle of section.

→ Thinly layered gray silt & clayey silt (ML) & f sand, some/and silt (SM)

Note: occ. 1/16" thick silty clay lenses/layers

sporadic mica flakes

(ML) & (SM) non-cohesive, sl. dilatant

typical layer thickness: 1/16" - 1/4"

Remarks: 4" section saved (10"-14") → Consol. Test (difficult trimming)
6½" section saved (3½"-10")

ATTERBERG LIMITS TEST DATA

JOB NO. 4019-001-020

CLASSIFICATION Thinly layered gray silt & clayey silt (ML) & f sand, some f sand silt (SM)

CLIENT/OWNER A & D LEVEE

LOCATION ANSONIA, CONN.

BORING PSS-1 SAMPLE U13 DEPTH 42'-44'

FIELD DENSITY BY ____/__/__

DETERMINATION	1	2
NUMBER OF RINGS		
WT OF RINGS + WET SOIL		
WT OF RINGS	———	———
WT OF WET SOIL		
FIELD DENSITY		
DRY DENSITY		

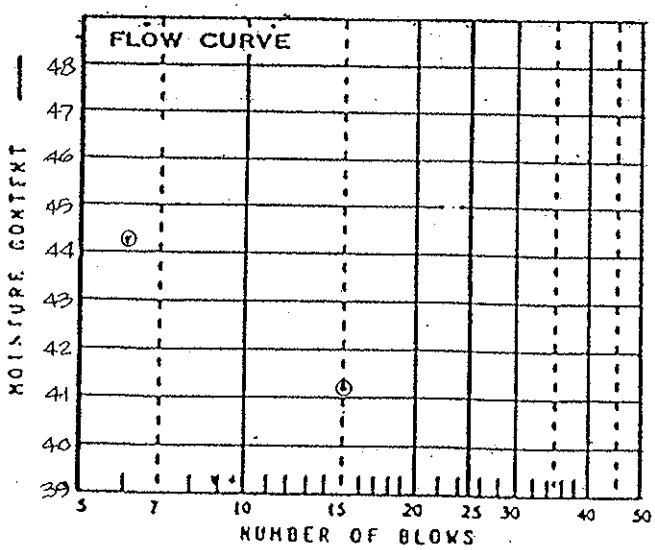
DETERMINATION	1	2
DISH		
WT OF DISH + WET SOIL		
WT OF DISH + DRY SOIL	———	———
WT OF MOISTURE		
WT OF DISH	———	———
WT OF DRY SOIL		
FIELD MOISTURE CONTENT	FROM CONSOL.	

PLASTIC LIMIT BY LL 8/21/10. Unable to roll threads - mat'l brittle & non-plastic

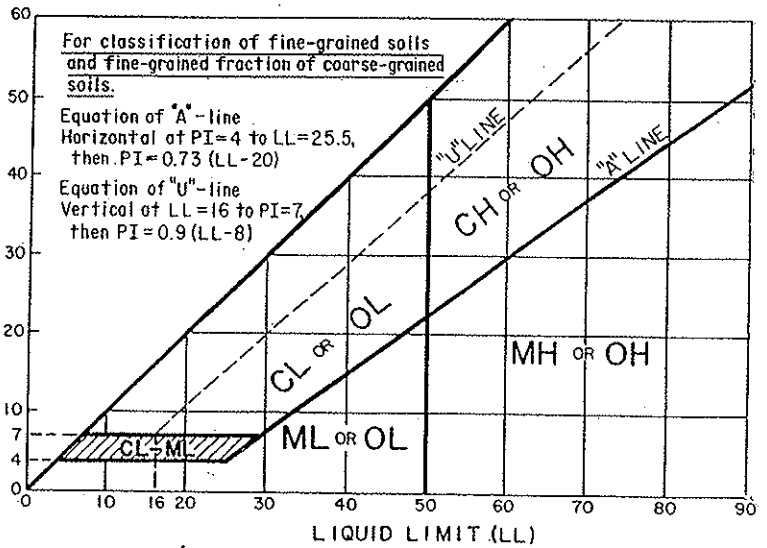
DETERMINATION	1	2	3	4	5	6
DISH (LIDS)						
WT OF DISH + WET SOIL						
WT OF DISH + DRY SOIL	———	———	———	———	———	———
WT OF MOISTURE						
WT OF DISH	———	———	———	———	———	———
WT OF DRY SOIL						
MOISTURE CONTENT						

LIQUID LIMIT Unable to obtain LL pt. >15 blows - mat'l. brittle.

DETERMINATION	1	2	3	4	5	6
DISH (BOTTOMS)	101	102				
NUMBER OF BLOWS	6	15				
WT OF DISH + WET SOIL	27.56	23.58				
WT OF DISH + DRY SOIL	22.60	19.95	———	———	———	———
WT OF MOISTURE	4.96	3.63				
WT OF DISH	11.40	11.14	———	———	———	———
WT OF DRY SOIL	11.20	8.81				
MOISTURE CONTENT	44.3	41.2				



Plasticity Chart



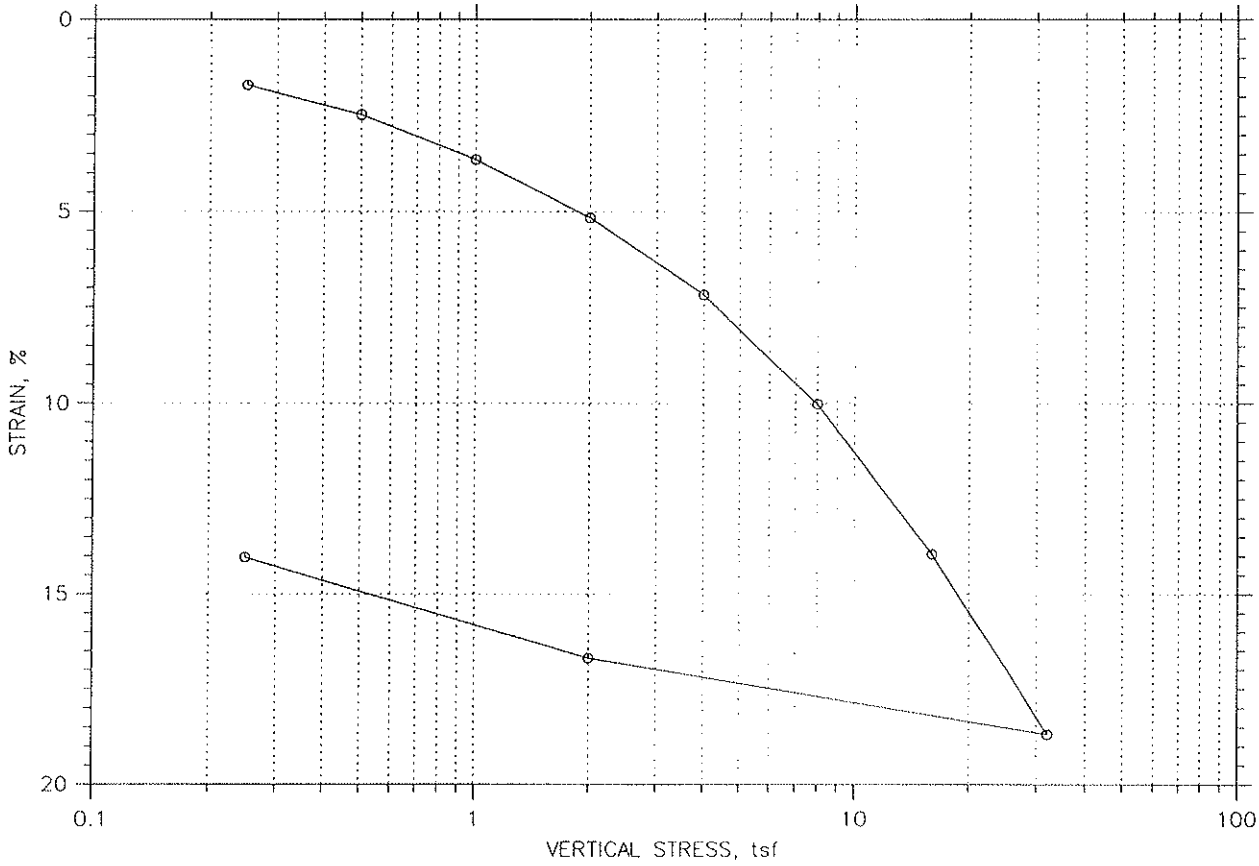
SUMMARY

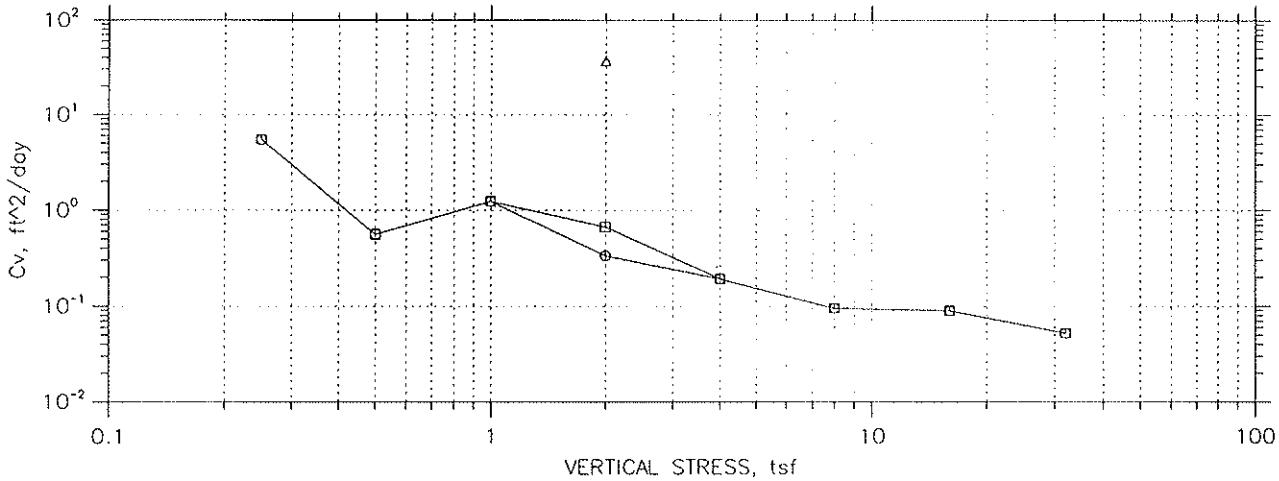
DRY DENSITY	MOISTURE CONTENT	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	IDENTIFICATION
	35.2			NP	(ML)/(SM)

PAULUS SOKOLOWSKI and SARTOR, INC. CONSULTING ENGINEERS

CONSOLIDATION TEST DATA

SUMMARY REPORT



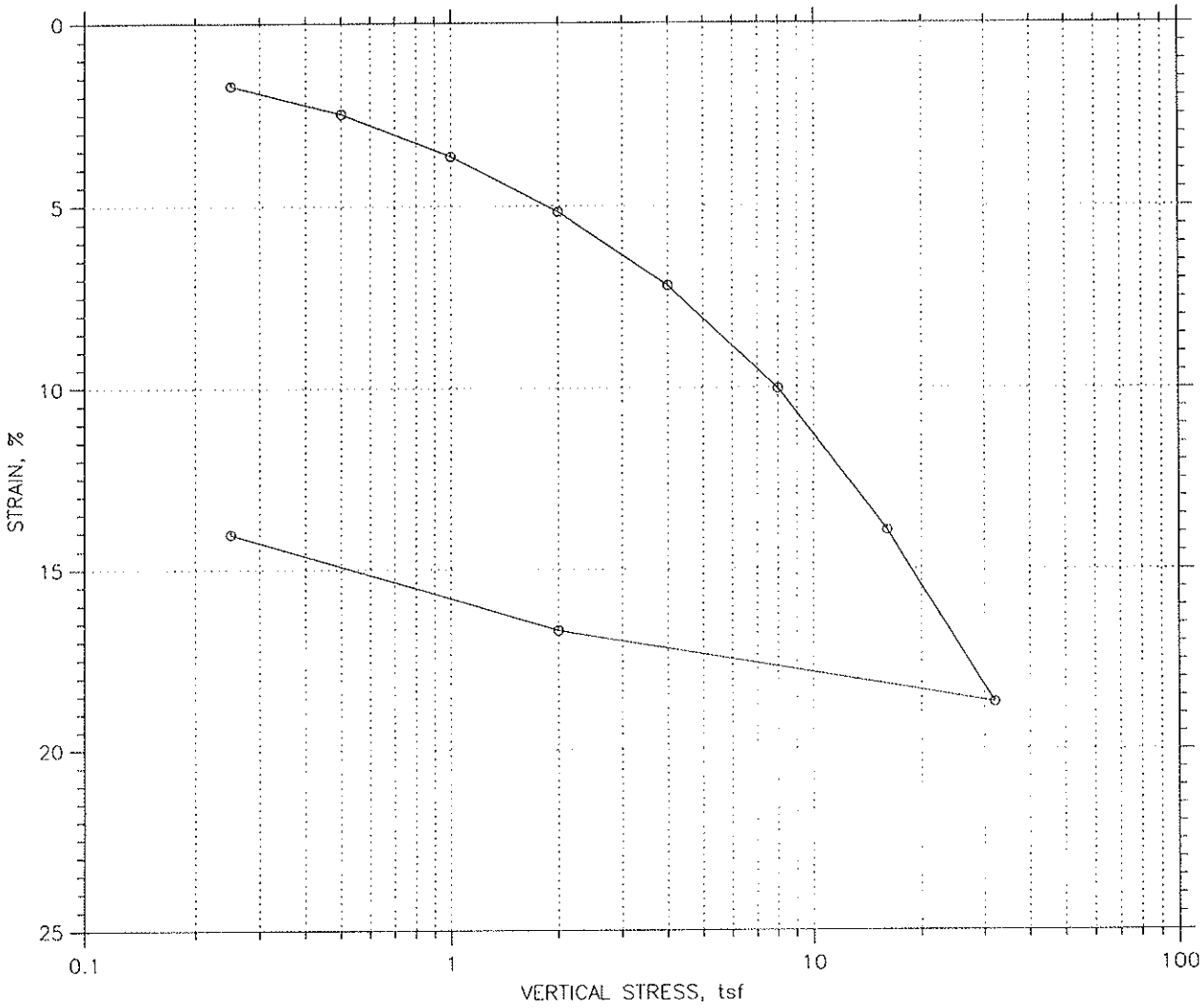


Paulus, Sokolowski & Sartor, LLC
consulting engineers and environmental planners
A KETSPAN BUSINESS SOLUTION
674 Mountain Boulevard Extension
Warren, New Jersey 07059

Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-1	Tested By: LL Sr.	Checked By: LL Sr.
Sample No.: U13	Test Date: 8/17/10	Depth: 42'-44'
Test No.: 1	Sample Type: Undisturbed	Elevation: ---
Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)		
Remarks: See Undisturbed Log for details.		

CONSOLIDATION TEST DATA

SUMMARY REPORT



				Before Test	After Test
Overburden Pressure: 0 tsf				Water Content, %	34.67	25.44
Preconsolidation Pressure: 0 tsf				Dry Unit Weight, pcf	84.76	98.59
Compression Index: 3.81959e-313				Saturation, %	96.90	99.99
Diameter: 2.5 in		Height: 1 in		Void Ratio	0.94	0.67
LL: NP	PL: NP	PI: NP	GS: 2.64			

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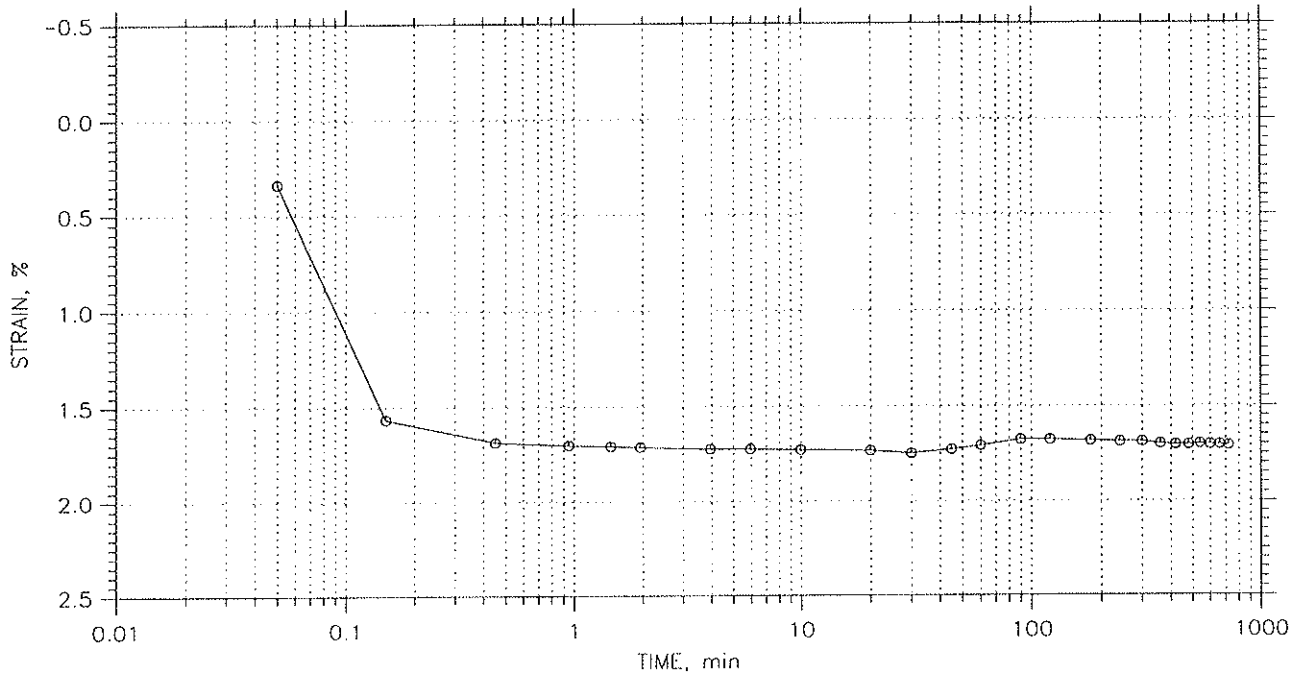
Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
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Remarks: See Undisturbed Log for details.		

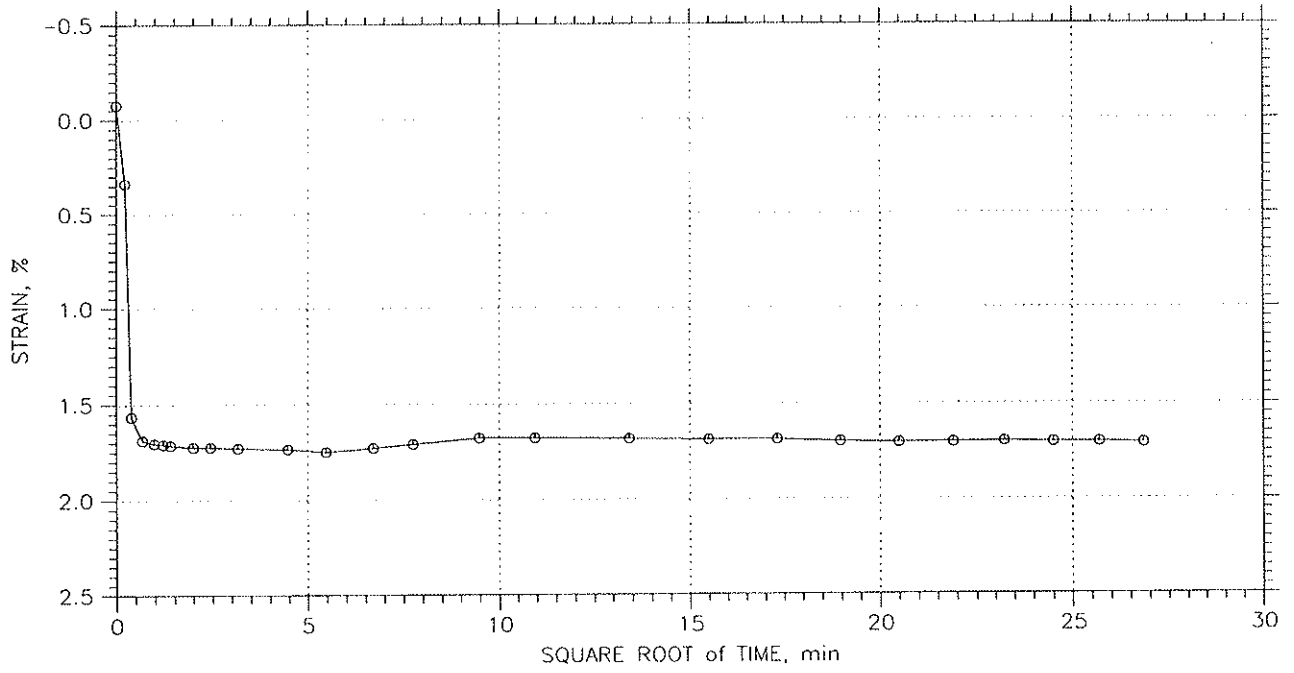
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 1 of 10

Stress: 0.25 tsf





Paulus, Sokolowski & Sartor, LLC consulting engineers and environmental planners A KEYSPAN BUSINESS SOLUTION 67A Mountain Boulevard Extension Warren, New Jersey 07059	Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
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	Test No.: 1	Sample Type: Undisturbed	Elevation: ---
	Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)		
	Remarks: See Undisturbed Log for details.		

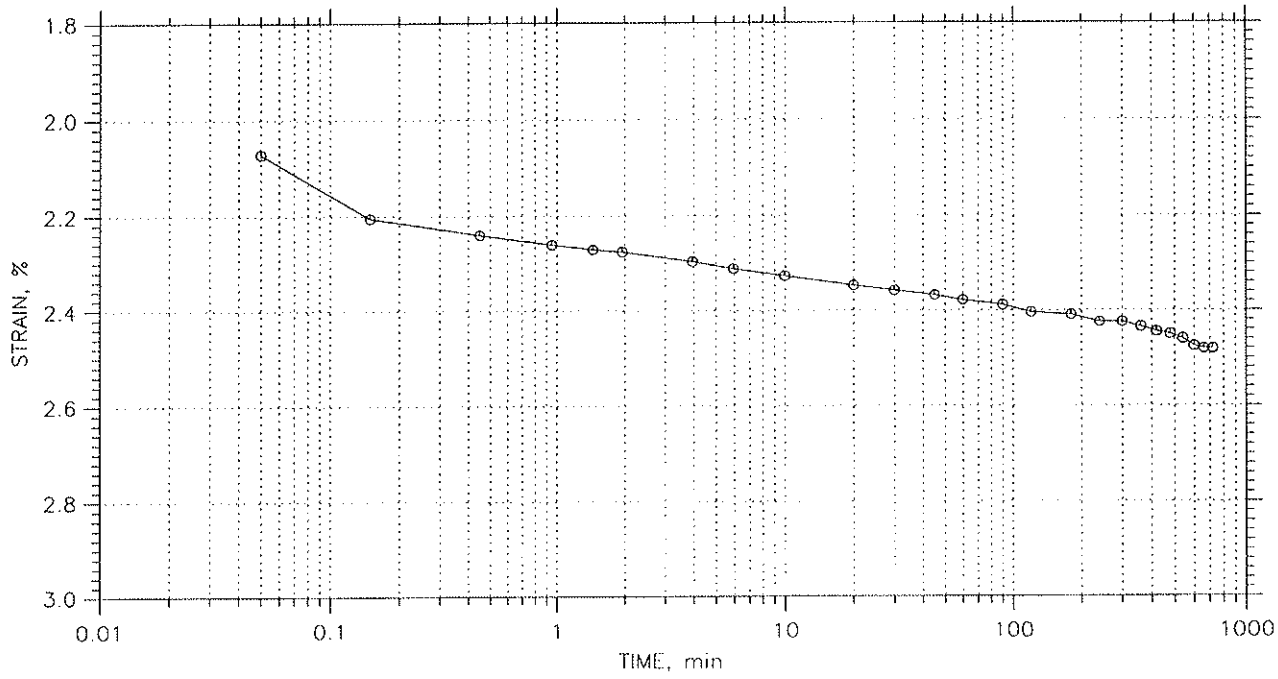
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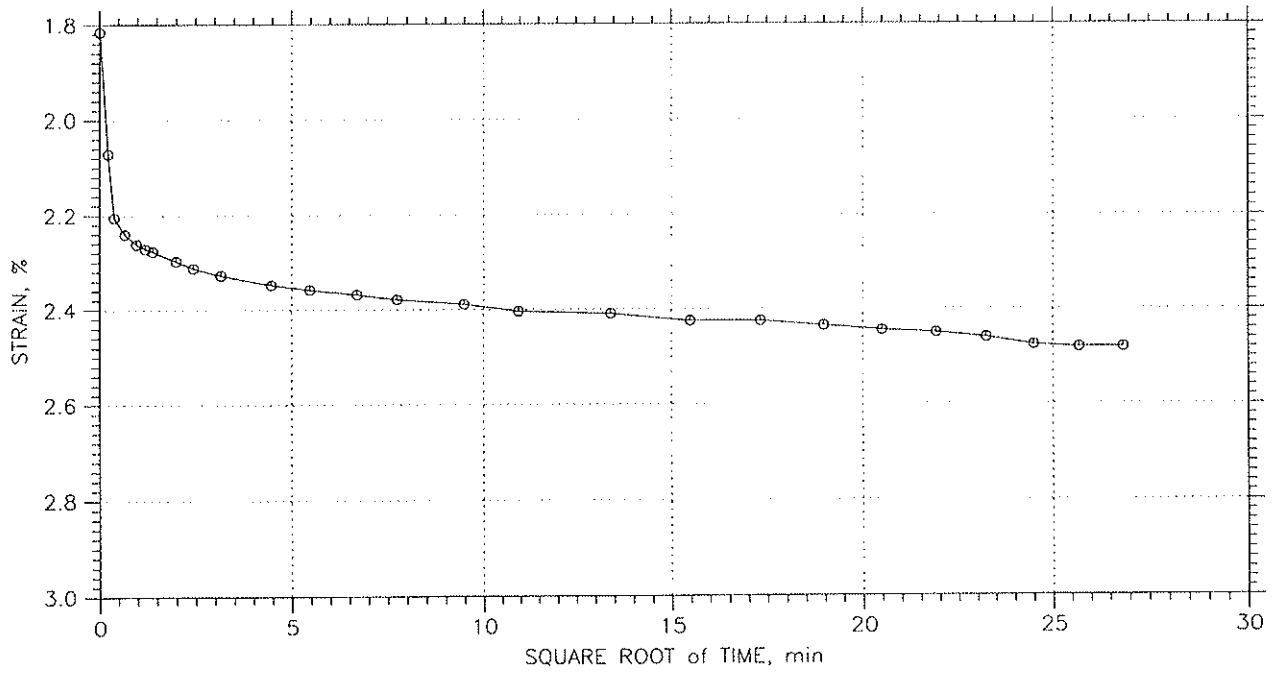
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 2 of 10

Stress: 0.5 tsf





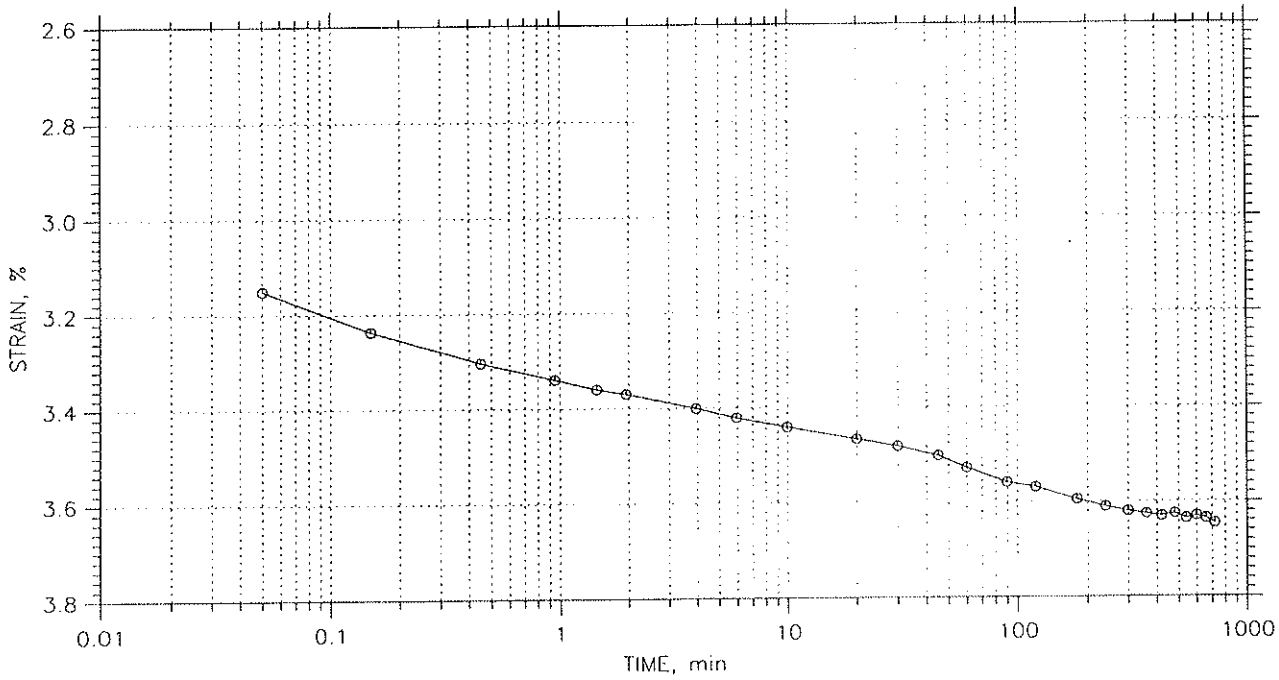
Paulus, Sokolowski & Sartor, LLC consulting engineers and environmental planners A KEYSPAN BUSINESS SOLUTION 684 Mountain Boulevard Extension Warren, New Jersey 07059	Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
	Boring No.: PSS-1	Tested By: LL Sr.	Checked By: LL Sr.
	Sample No.: U13	Test Date: 8/17/10	Depth: 42'-44'
	Test No.: 1	Sample Type: Undisturbed	Elevation: ---
	Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)		
	Remarks: See Undisturbed Log for details.		

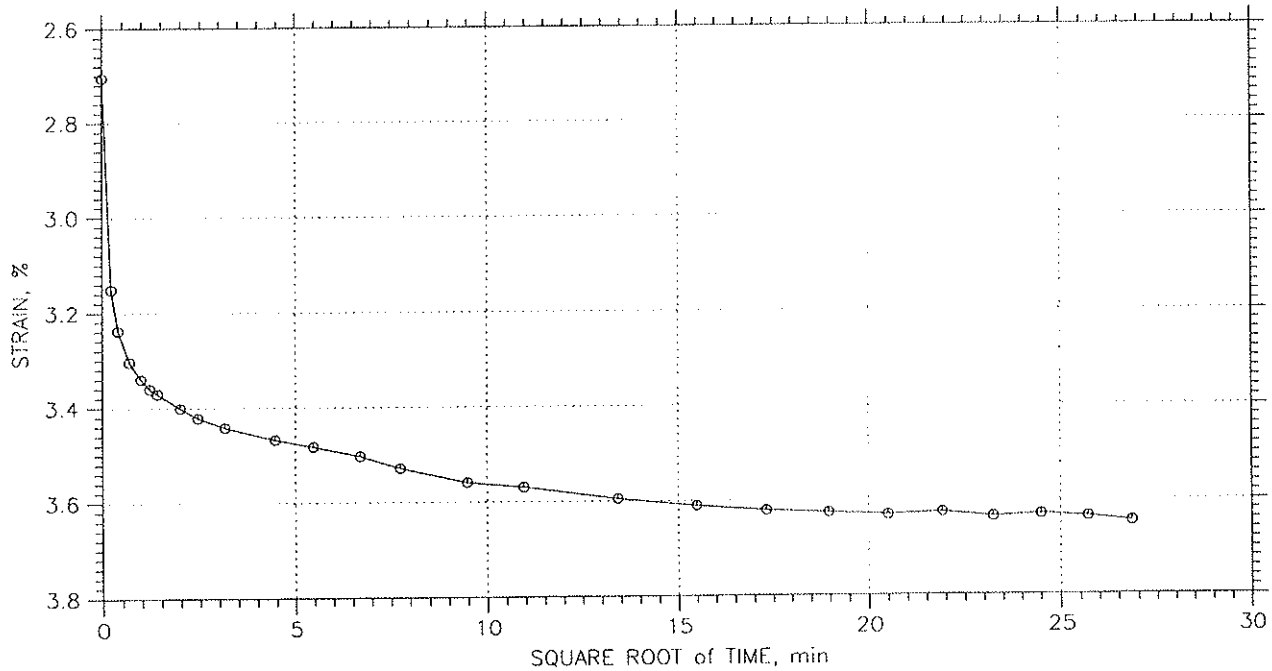
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 10

Stress: 1. tsf





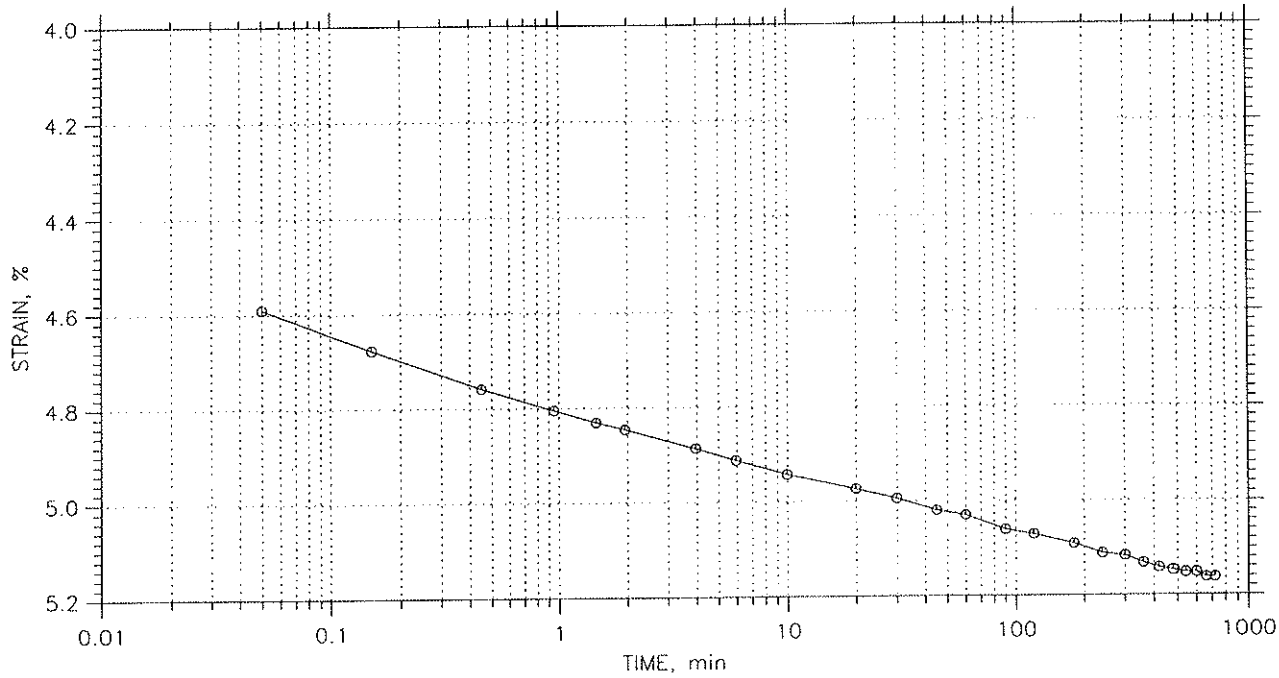
Paulus, Sokolowski & Sartor, LLC consulting engineers and environmental planners A KEYSPAN BUSINESS SOLUTION 61A Mountain Boulevard Extension Warren, New Jersey 07059	Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
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	Sample No.: U13	Test Date: 8/17/10	Depth: 42'-44'
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	Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)		
	Remarks: See Undisturbed Log for details.		

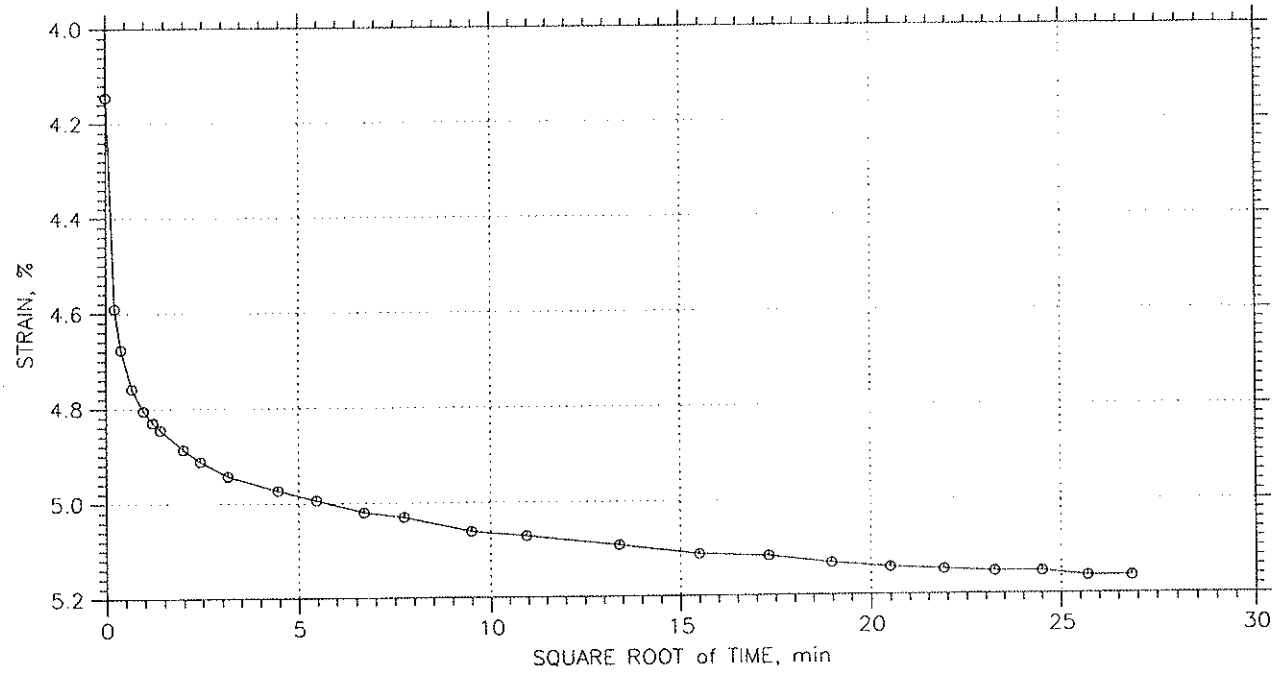
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 10

Stress: 2. tsf





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Warren, New Jersey 07059

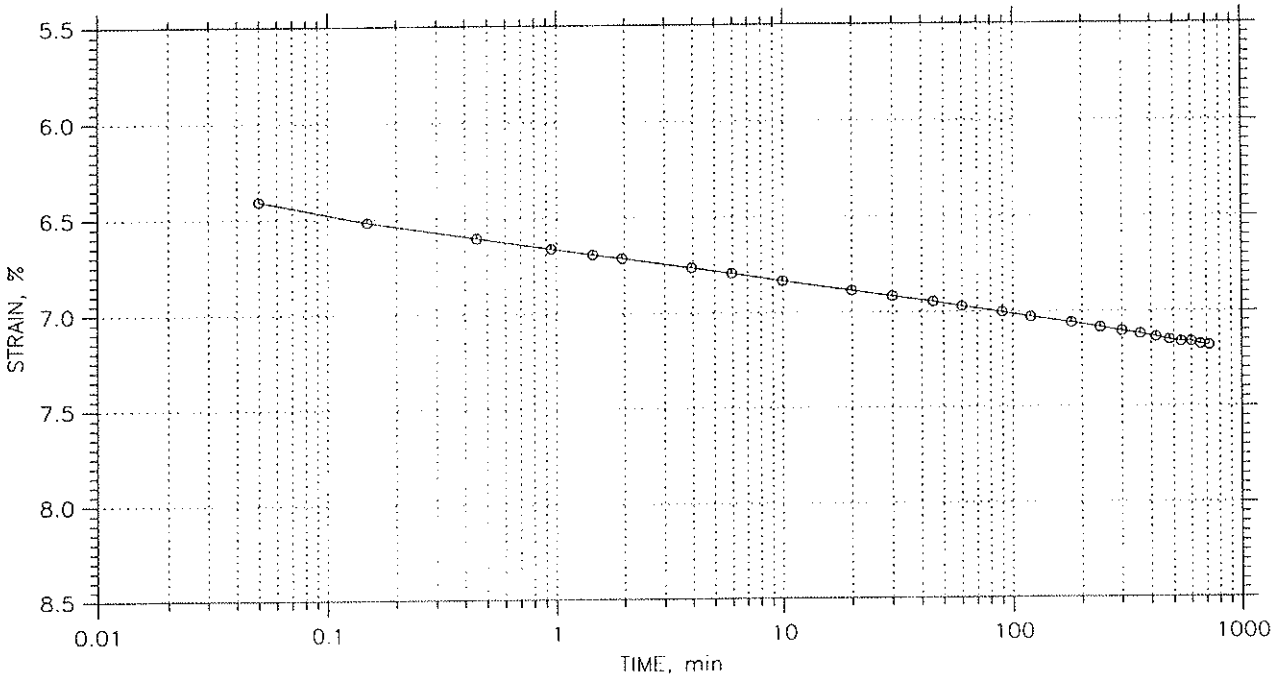
Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-1	Tested By: LL Sr.	Checked By: LL Sr.
Sample No.: U13	Test Date: 8/17/10	Depth: 42'-44'
Test No.: 1	Sample Type: Undisturbed	Elevation: ---
Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)		
Remarks: See Undisturbed Log for details.		

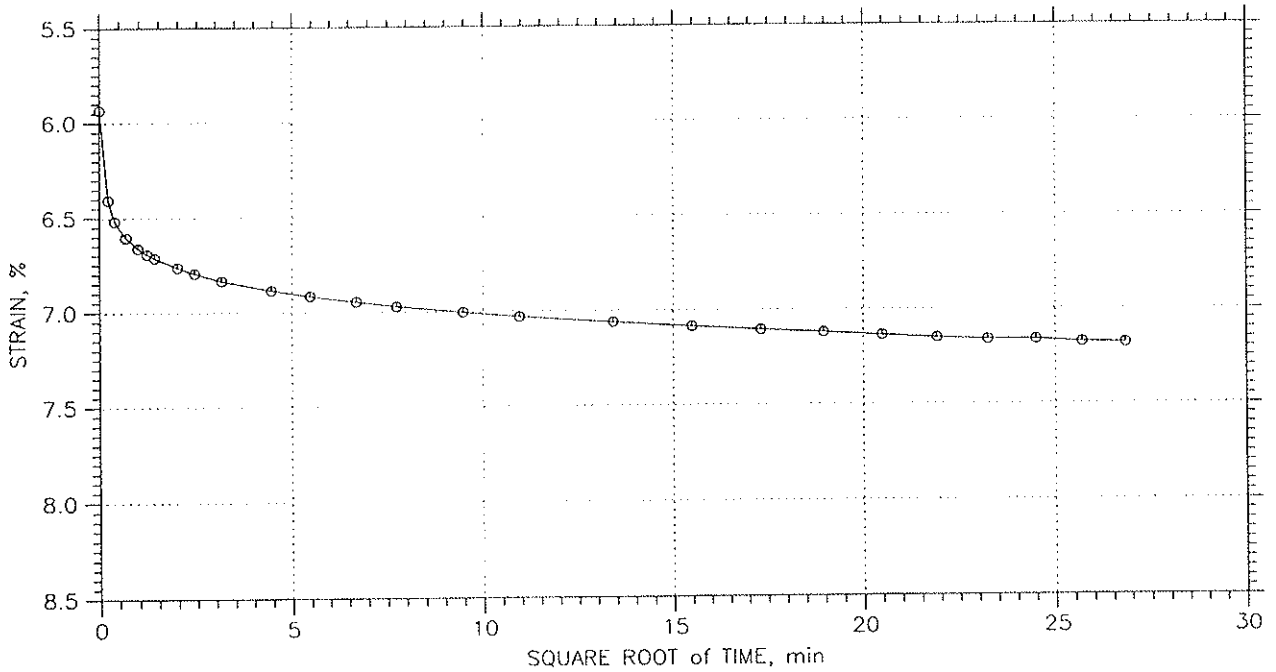
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 10

Stress: 4. tsf





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Warren, New Jersey 07059

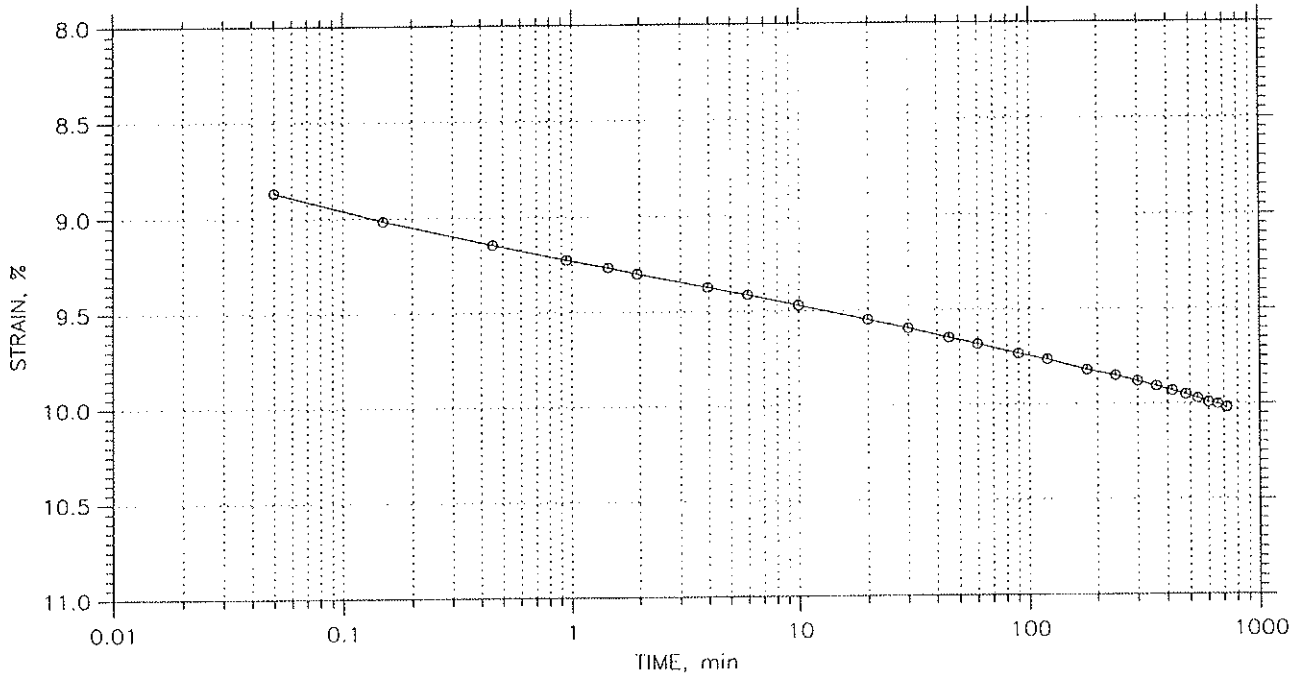
Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-1	Tested By: LL Sr.	Checked By: LL Sr.
Sample No.: U13	Test Date: 8/17/10	Depth: 42'-44'
Test No.: 1	Sample Type: Undisturbed	Elevation: ---
Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)		
Remarks: See Undisturbed Log for details.		

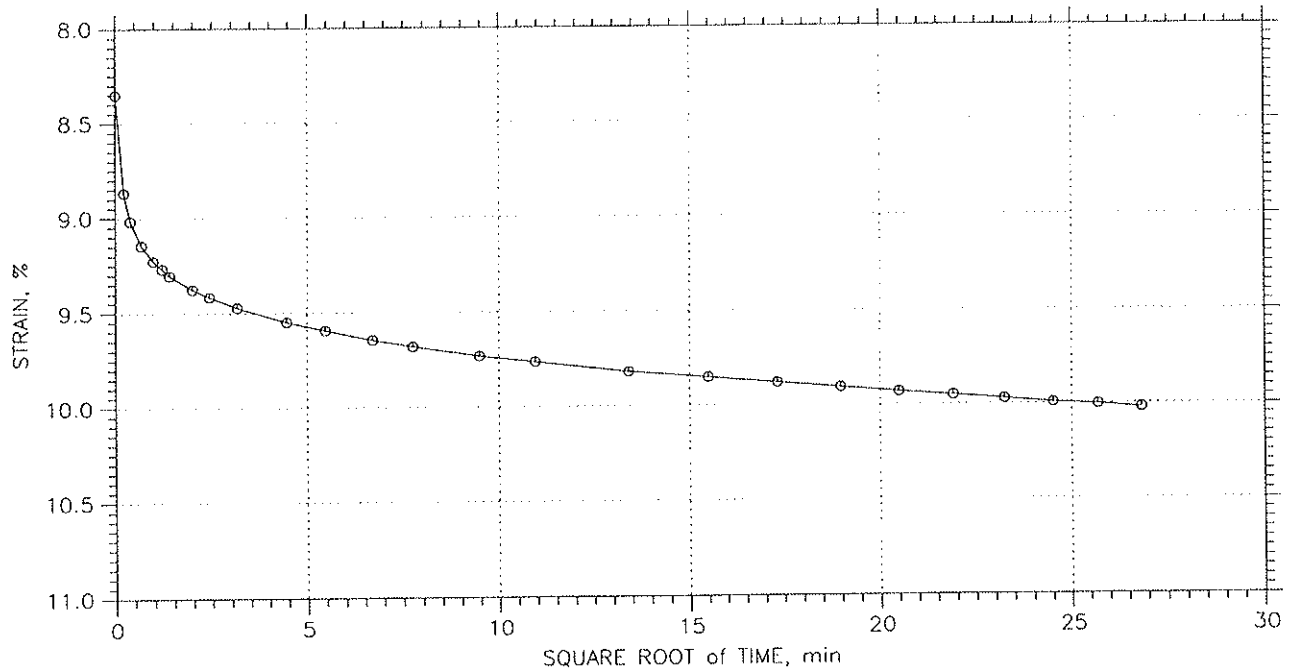
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 10

Stress: 8. tsf





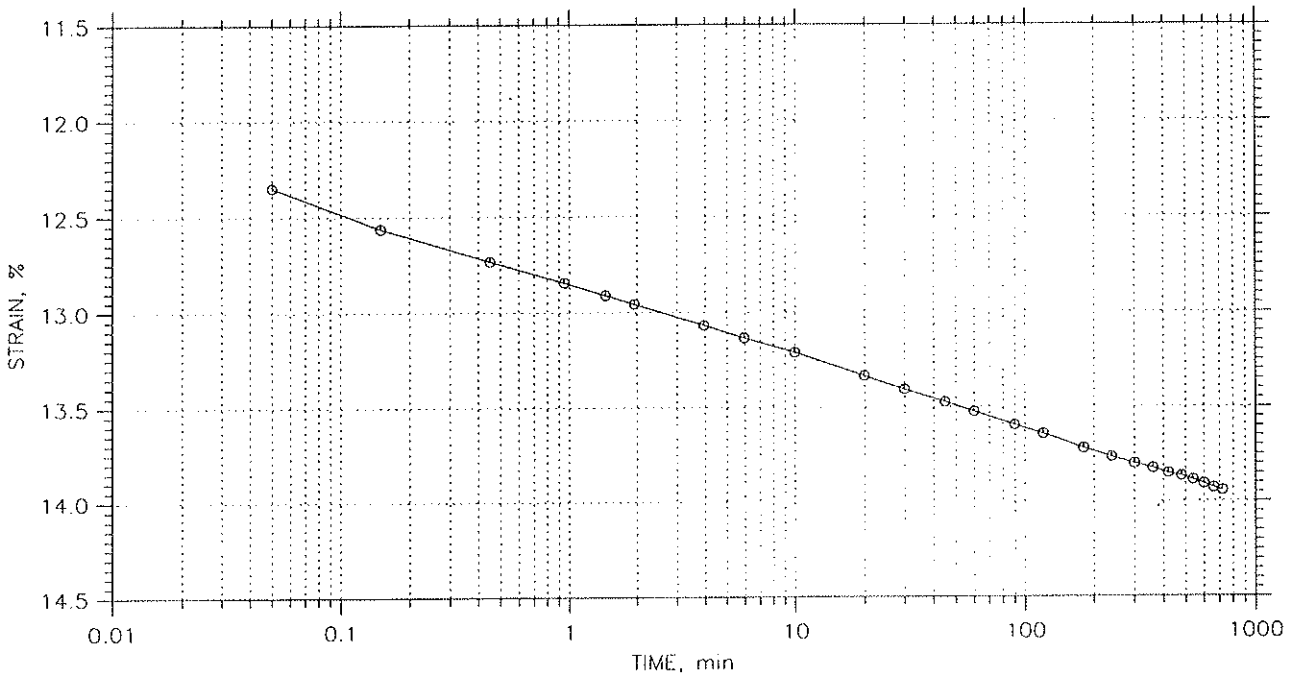
Paulus, Sokolowski & Sartor, LLC consulting engineers and environmental planners A KEYSPAN BUSINESS SOLUTION 67A Mountain Boulevard Extension Warren, New Jersey 07059	Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
	Boring No.: PSS-1	Tested By: LL Sr.	Checked By: LL Sr.
	Sample No.: U13	Test Date: 8/17/10	Depth: 42'-44'
	Test No.: 1	Sample Type: Undisturbed	Elevation: ---
	Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)		
	Remarks: See Undisturbed Log for details.		

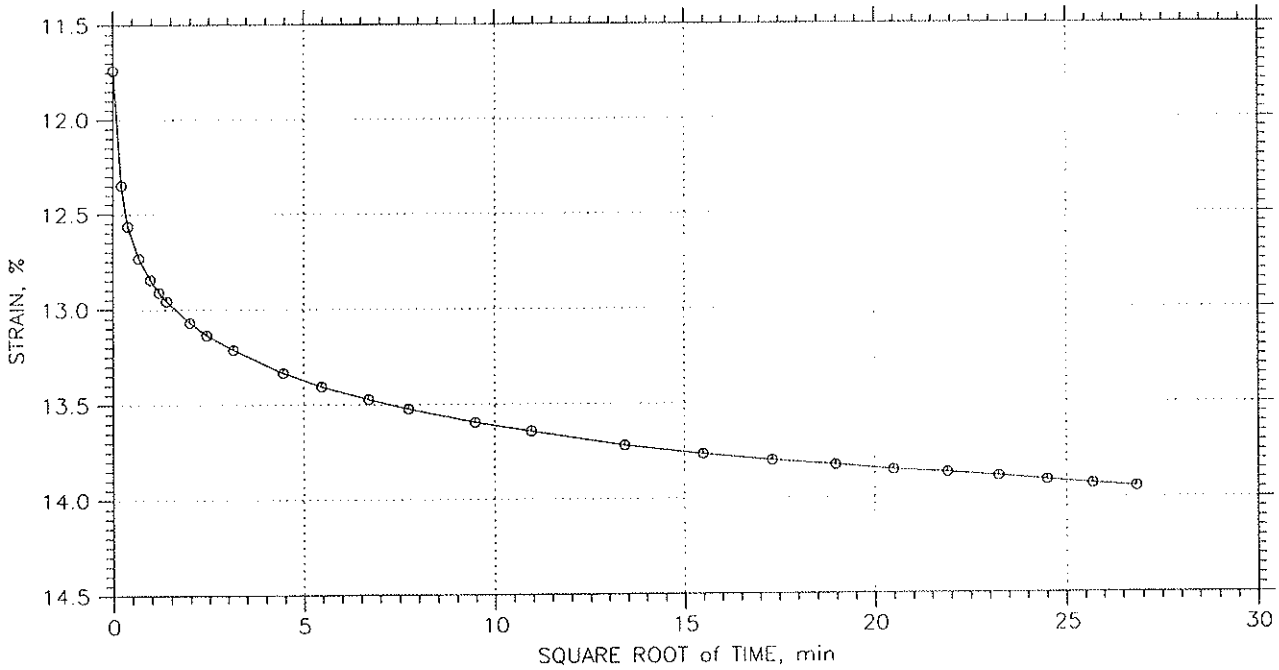
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 10

Stress: 16. tsf





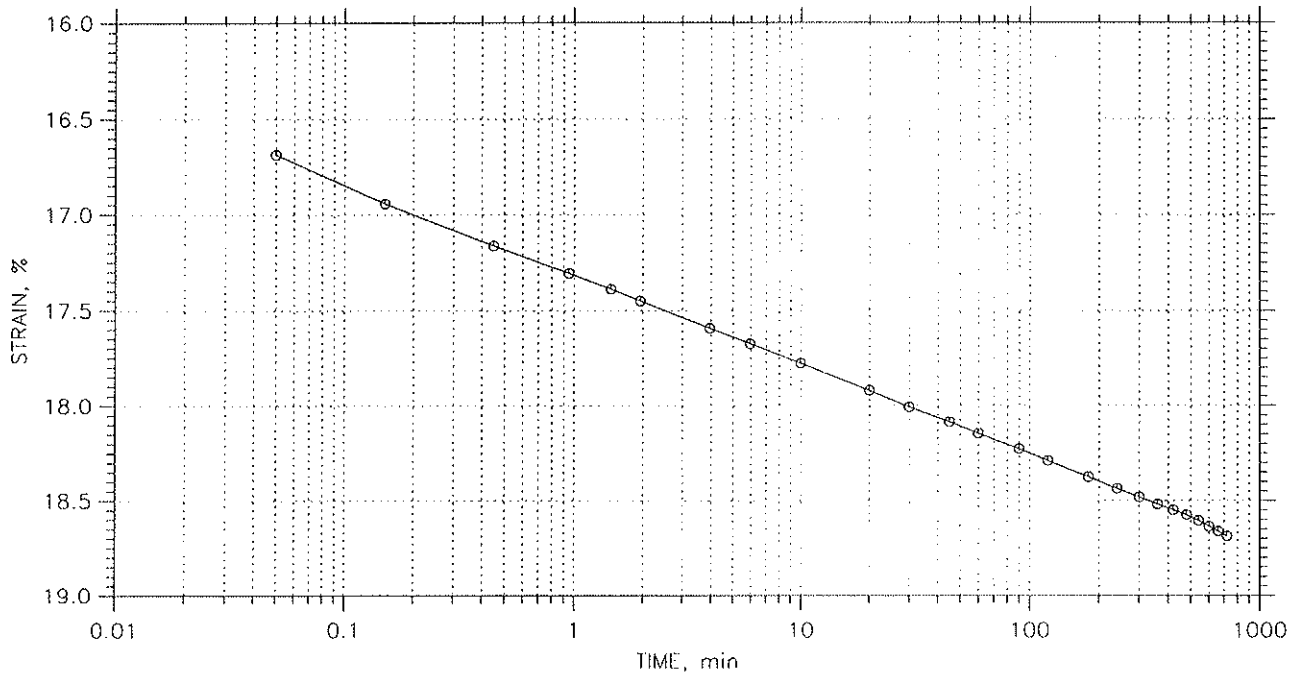
Paulus, Sokolowski & Sartor, LLC consulting engineers and environmental planners A KEYSPAN BUSINESS SOLUTION 684 Mountain Boulevard Extension Warren, New Jersey 07059	Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
	Boring No.: PSS-1	Tested By: LL Sr.	Checked By: LL Sr.
	Sample No.: U13	Test Date: 8/17/10	Depth: 42'-44'
	Test No.: 1	Sample Type: Undisturbed	Elevation: ---
	Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)		
	Remarks: See Undisturbed Log for details.		

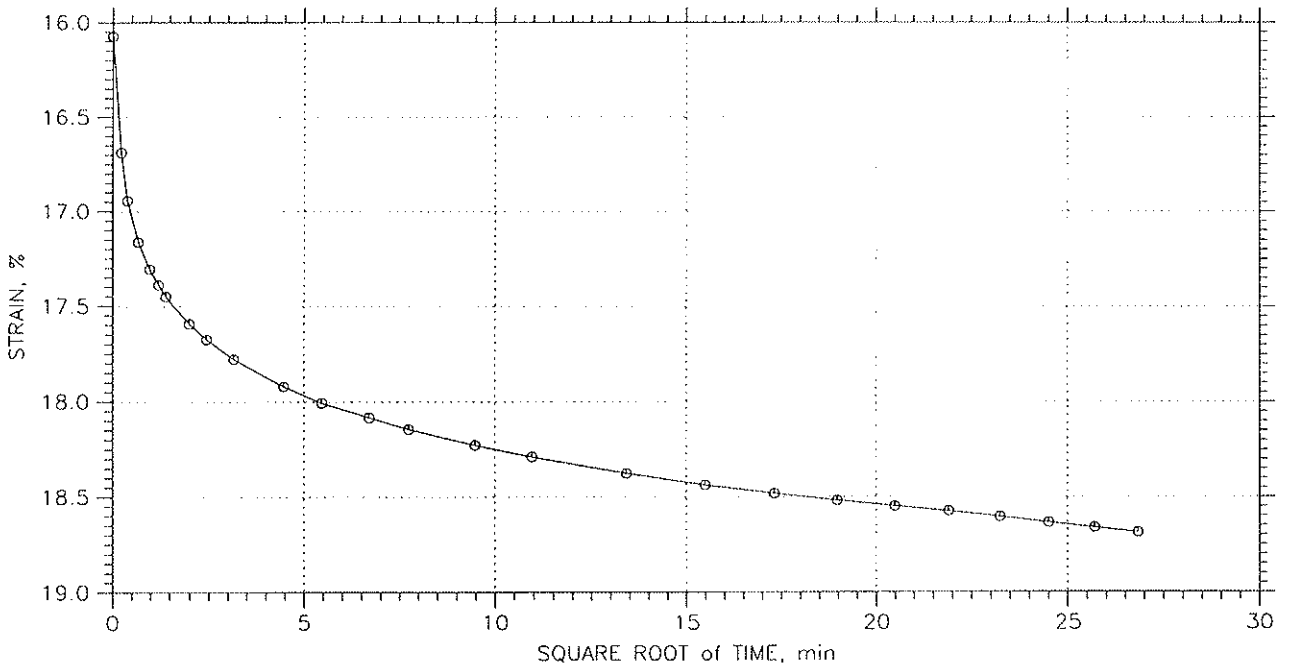
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 10

Stress: 32. tsf





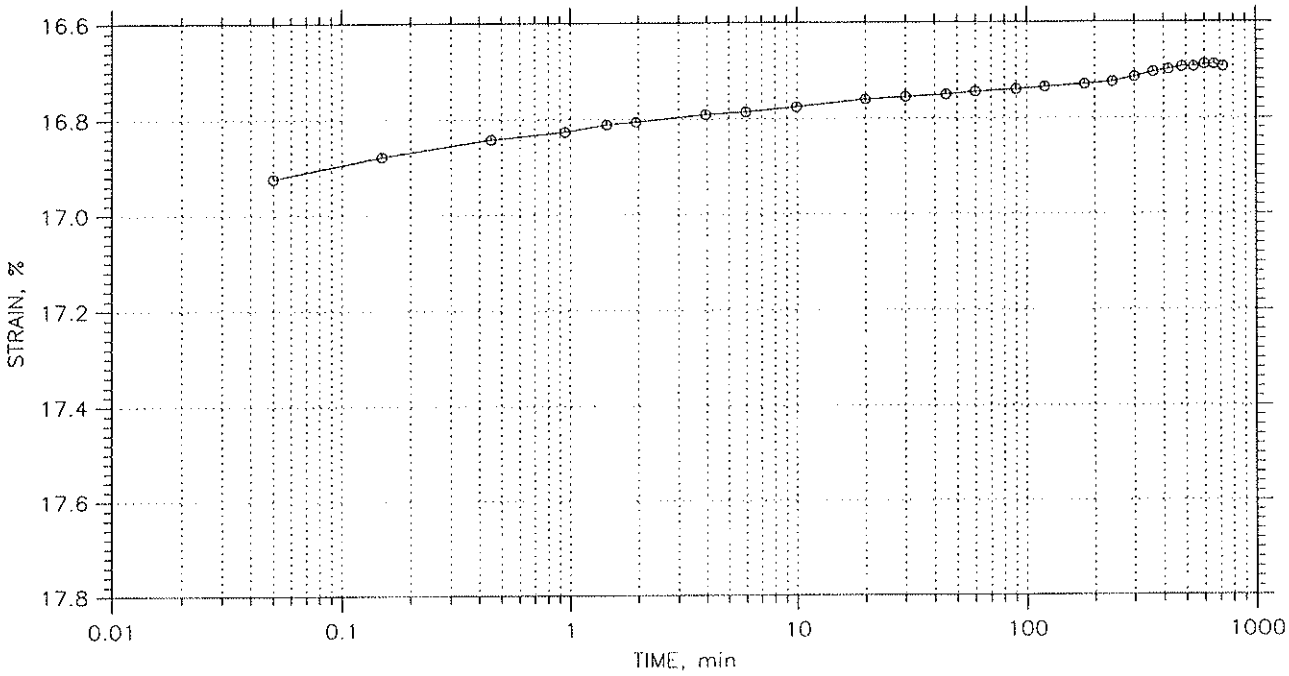
Paulus, Sokolowski & Sartor, LLC consulting engineers and environmental planners A KEYSPAN BUSINESS SOLUTION 67A Mountain Boulevard Extension Warren, New Jersey 07059	Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
	Boring No.: PSS-1	Tested By: LL Sr.	Checked By: LL Sr.
	Sample No.: U13	Test Date: 8/17/10	Depth: 42'-44'
	Test No.: 1	Sample Type: Undisturbed	Elevation: ---
	Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)		
	Remarks: See Undisturbed Log for details.		

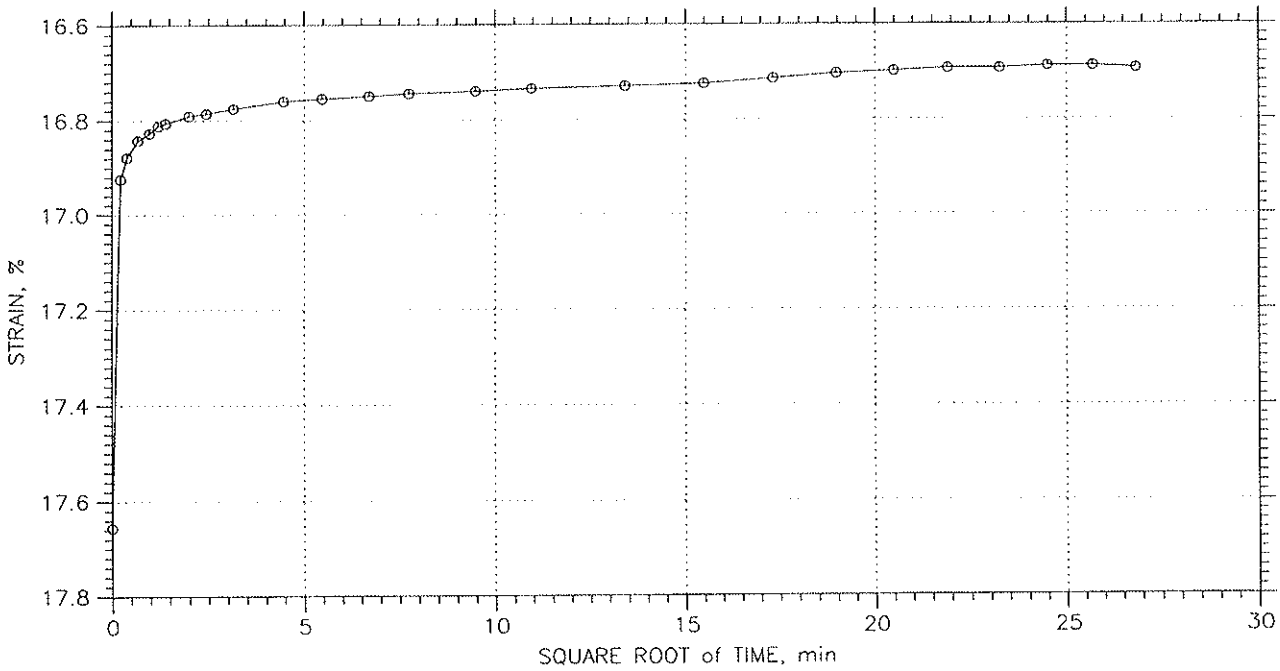
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 10

Stress: 2. tsf





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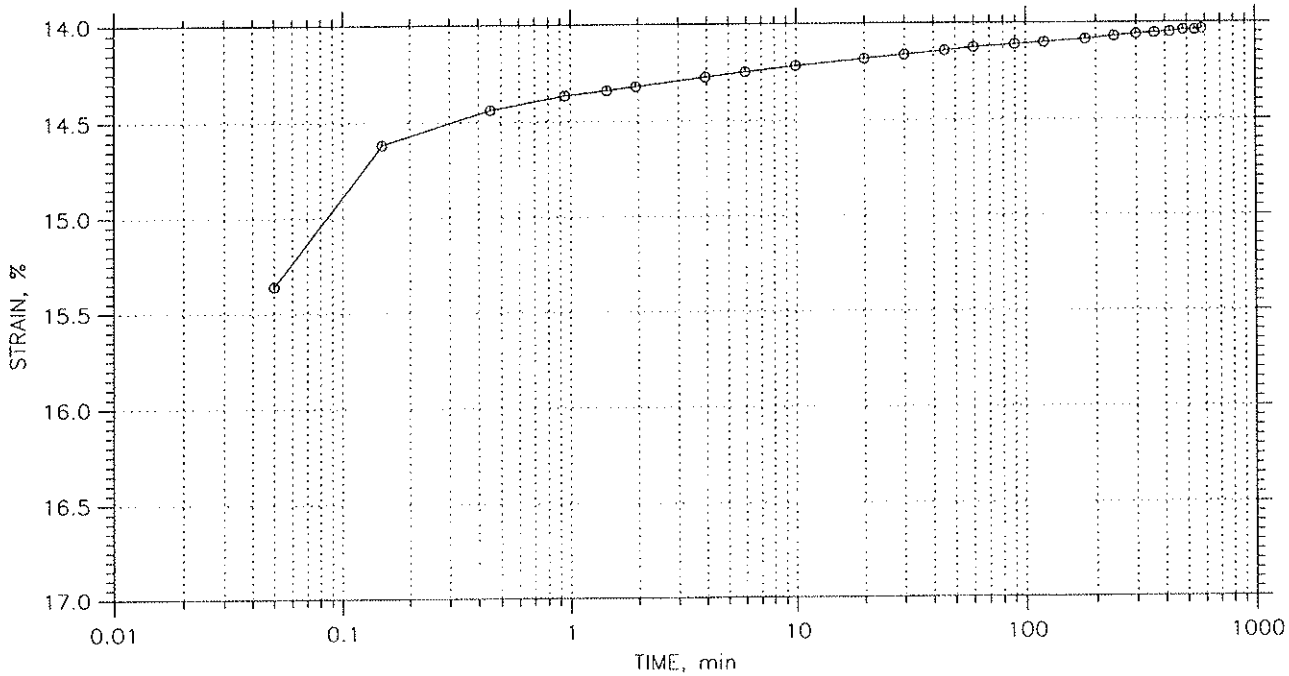
Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-1	Tested By: LL Sr.	Checked By: LL Sr.
Sample No.: U13	Test Date: 8/17/10	Depth: 42'-44'
Test No.: 1	Sample Type: Undisturbed	Elevation: ---
Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)		
Remarks: See Undisturbed Log for details.		

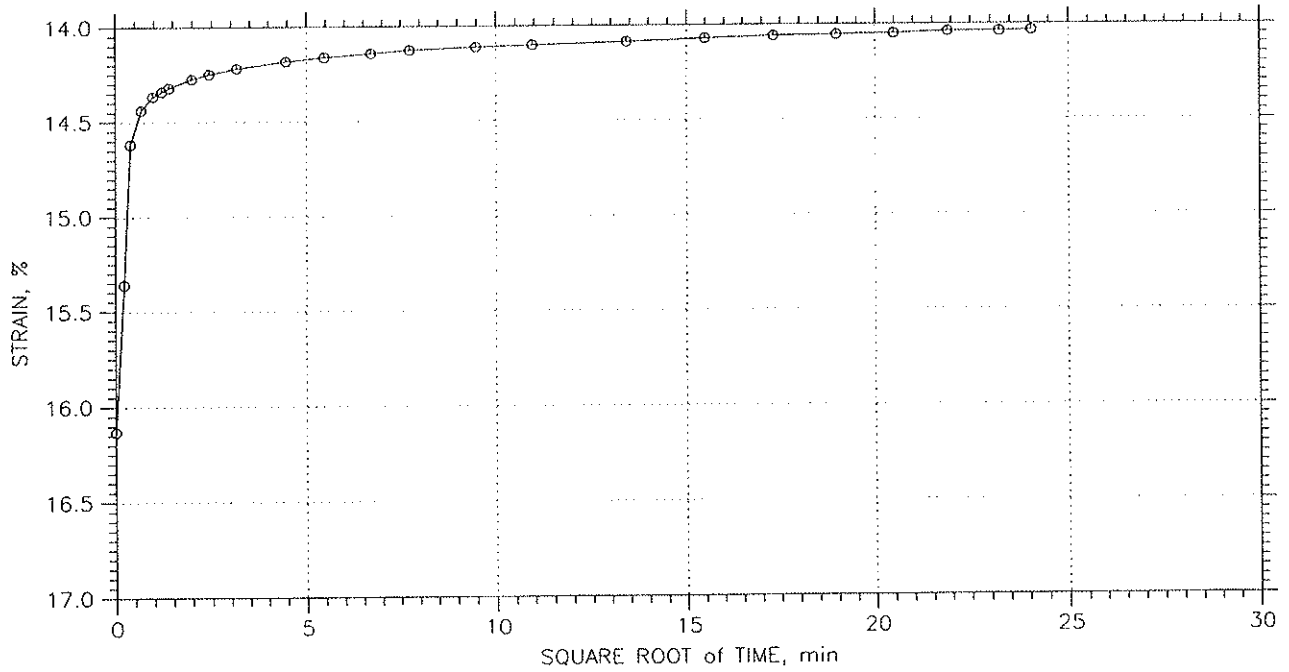
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 10

Stress: 0.25 tsf





Paulus, Sokolowski & Sartor, LLC consulting engineers and environmental planners A KEYSPAN BUSINESS SOLUTION 67A Mountain Boulevard Extension Warren, New Jersey 07059	Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
	Boring No.: PSS-1	Tested By: LL Sr.	Checked By: LL Sr.
	Sample No.: U13	Test Date: 8/17/10	Depth: 42'-44'
	Test No.: 1	Sample Type: Undisturbed	Elevation: ---
	Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)		
	Remarks: See Undisturbed Log for details.		

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-1
Sample No.: U13
Test No.: 1

Location: Ansonia, Conn.
Tested By: LL Sr.
Test Date: 8/17/10
Sample Type: Undisturbed

Project No.: 40190001020
Checked By: LL Sr.
Depth: 42'-44'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)
Remarks: See Undisturbed Log for details.

Estimated Specific Gravity: 2.64
Initial Void Ratio: 0.94
Final Void Ratio: 0.67

Liquid Limit: NP
Plastic Limit: NP
Plasticity Index: NP

Initial Height: 1.00 in
Specimen Diameter: 2.50 in

	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
Container ID	A	RING	ring	101
Wt. Container + Wet Soil, gm	117.35	655.29	645.21	147.99
Wt. Container + Dry Soil, gm	95.03	617.43	617.43	120.21
Wt. Container, gm	31.57	508.22	508.22	11
Wt. Dry Soil, gm	63.46	109.21	109.21	109.21
Water Content, %	35.17	34.67	25.44	25.44
Void Ratio	---	0.94	0.67	---
Degree of Saturation, %	---	96.90	99.99	---
Dry Unit Weight, pcf	---	84.756	98.593	---

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-1
Sample No.: U13
Test No.: 1

Location: Ansonia, Conn.
Tested By: LL Sr.
Test Date: 8/17/10
Sample Type: Undisturbed

Project No.: 40190001020
Checked By: LL Sr.
Depth: 42'-44'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)
Remarks: See Undisturbed Log for details.

	Applied Stress tsf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting Sq.Rt. min	T50 Fitting Log min	Coefficient of Consolidation. Sq.Rt. ft^2/day	Coefficient of Consolidation. Log ft^2/day	Coefficient of Consolidation. Ave. ft^2/day
1	0.25	0.01709	0.911	1.71	0.1	0.0	5.49e+000	0.00e+000	5.49e+000
2	0.5	0.02481	0.896	2.48	0.8	0.0	5.60e-001	0.00e+000	5.60e-001
3	1	0.03646	0.874	3.65	0.4	0.0	1.23e+000	0.00e+000	1.23e+000
4	2	0.05163	0.844	5.16	1.3	0.0	3.36e-001	3.70e+001	6.66e-001
5	4	0.07183	0.805	7.18	2.2	0.0	1.93e-001	0.00e+000	1.93e-001
6	8	0.1002	0.750	10.02	4.3	0.0	9.52e-002	0.00e+000	9.52e-002
7	16	0.1394	0.673	13.94	4.3	0.0	8.94e-002	0.00e+000	8.94e-002
8	32	0.1869	0.581	18.69	6.6	0.0	5.23e-002	0.00e+000	5.23e-002
9	2	0.1669	0.620	16.69	0.1	0.0	2.28e+000	0.00e+000	2.28e+000
10	0.25	0.1403	0.672	14.03	0.1	0.0	4.68e+000	0.00e+000	4.68e+000

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-1
Sample No.: U13
Test No.: 1

Location: Ansonia, Conn.
Tested By: LL Sr.
Test Date: 8/17/10
Sample Type: Undisturbed

Project No.: 40190001020
Checked By: LL Sr.
Depth: 42'-44'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 1 of 10
Applied Stress: 0.25 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	0.0222	-0.0007666	-0.08	0.946
2	0.05	0.22	0.0464	0.003377	0.34	0.938
3	0.15	0.39	0.248	0.01566	1.57	0.914
4	0.45	0.67	0.246	0.01688	1.69	0.912
5	0.95	0.97	0.248	0.01704	1.70	0.911
6	1.45	1.20	0.248	0.01709	1.71	0.911
7	1.95	1.40	0.246	0.01714	1.71	0.911
8	3.95	1.99	0.246	0.01724	1.72	0.911
9	5.95	2.44	0.248	0.01724	1.72	0.911
10	9.95	3.15	0.248	0.01729	1.73	0.911
11	19.95	4.47	0.248	0.01734	1.73	0.911
12	29.95	5.47	0.248	0.0175	1.75	0.910
13	44.95	6.70	0.25	0.01729	1.73	0.911
14	59.95	7.74	0.248	0.01709	1.71	0.911
15	89.95	9.48	0.248	0.01678	1.68	0.912
16	119.95	10.95	0.248	0.01678	1.68	0.912
17	179.95	13.41	0.248	0.01683	1.68	0.912
18	239.95	15.49	0.248	0.01688	1.69	0.912
19	299.95	17.32	0.248	0.01688	1.69	0.912
20	359.95	18.97	0.248	0.01699	1.70	0.911
21	419.95	20.49	0.248	0.01704	1.70	0.911
22	479.95	21.91	0.248	0.01704	1.70	0.911
23	539.95	23.24	0.248	0.01699	1.70	0.911
24	599.95	24.49	0.246	0.01704	1.70	0.911
25	659.95	25.69	0.248	0.01704	1.70	0.911
26	719.95	26.83	0.25	0.01709	1.71	0.911
27	720.11	26.83	0.248	0.01709	1.71	0.911

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-1
Sample No.: U13
Test No.: 1

Location: Ansonia, Conn.
Tested By: LL Sr.
Test Date: 8/17/10
Sample Type: Undisturbed

Project No.: 40190001020
Checked By: LL Sr.
Depth: 42'-44'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 2 of 10
Applied Stress: 0.5 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	0.355	0.01816	1.82	0.909
2	0.05	0.22	0.464	0.02072	2.07	0.904
3	0.15	0.39	0.492	0.02205	2.20	0.902
4	0.45	0.67	0.496	0.02241	2.24	0.901
5	0.95	0.97	0.498	0.02261	2.26	0.901
6	1.45	1.20	0.496	0.02271	2.27	0.900
7	1.95	1.40	0.498	0.02276	2.28	0.900
8	3.95	1.99	0.498	0.02297	2.30	0.900
9	5.95	2.44	0.498	0.02312	2.31	0.900
10	9.95	3.15	0.498	0.02328	2.33	0.899
11	19.95	4.47	0.498	0.02348	2.35	0.899
12	29.95	5.47	0.498	0.02358	2.36	0.899
13	44.95	6.70	0.498	0.02368	2.37	0.898
14	59.95	7.74	0.498	0.02379	2.38	0.898
15	89.95	9.48	0.498	0.02389	2.39	0.898
16	119.95	10.95	0.498	0.02404	2.40	0.898
17	179.95	13.41	0.496	0.02409	2.41	0.898
18	239.95	15.49	0.498	0.02425	2.42	0.897
19	299.95	17.32	0.5	0.02425	2.42	0.897
20	359.95	18.97	0.498	0.02435	2.43	0.897
21	419.95	20.49	0.498	0.02445	2.45	0.897
22	479.95	21.91	0.498	0.0245	2.45	0.897
23	539.95	23.24	0.498	0.02461	2.46	0.897
24	599.95	24.49	0.498	0.02476	2.48	0.896
25	659.95	25.69	0.5	0.02481	2.48	0.896
26	719.95	26.83	0.5	0.02481	2.48	0.896
27	720.01	26.83	0.498	0.02481	2.48	0.896

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-1
Sample No.: U13
Test No.: 1

Location: Ansonia, Conn.
Tested By: LL Sr.
Test Date: 8/17/10
Sample Type: Undisturbed

Project No.: 40190001020
Checked By: LL Sr.
Depth: 42'-44'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 3 of 10
Applied Stress: 1 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	0.774	0.02705	2.71	0.892
2	0.05	0.22	0.984	0.0315	3.15	0.883
3	0.15	0.39	0.996	0.03237	3.24	0.882
4	0.45	0.67	0.998	0.03304	3.30	0.880
5	0.95	0.97	0.996	0.0334	3.34	0.880
6	1.45	1.20	0.996	0.0336	3.36	0.879
7	1.95	1.40	0.996	0.0337	3.37	0.879
8	3.95	1.99	0.996	0.03401	3.40	0.878
9	5.95	2.44	0.998	0.03421	3.42	0.878
10	9.95	3.15	0.996	0.03442	3.44	0.878
11	19.95	4.47	0.998	0.03467	3.47	0.877
12	29.95	5.47	0.998	0.03483	3.48	0.877
13	44.95	6.70	0.998	0.03503	3.50	0.876
14	59.95	7.74	0.998	0.03529	3.53	0.876
15	89.95	9.48	0.998	0.0356	3.56	0.875
16	119.95	10.95	0.998	0.0357	3.57	0.875
17	179.95	13.41	0.998	0.03595	3.60	0.875
18	239.95	15.49	0.998	0.03611	3.61	0.874
19	299.95	17.32	0.998	0.03621	3.62	0.874
20	359.95	18.97	0.998	0.03626	3.63	0.874
21	419.95	20.49	0.998	0.03631	3.63	0.874
22	479.95	21.91	0.998	0.03626	3.63	0.874
23	539.95	23.24	0.998	0.03636	3.64	0.874
24	599.95	24.49	1	0.03631	3.63	0.874
25	659.95	25.69	0.998	0.03636	3.64	0.874
26	719.95	26.83	0.998	0.03646	3.65	0.874
27	720.02	26.83	0.998	0.03646	3.65	0.874

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-1
Sample No.: U13
Test No.: 1

Location: Ansonia, Conn.
Tested By: LL Sr.
Test Date: 8/17/10
Sample Type: Undisturbed

Project No.: 40190001020
Checked By: LL Sr.
Depth: 42'-44'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 4 of 10
Applied Stress: 2 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	1.73	0.04145	4.15	0.864
2	0.05	0.22	1.95	0.0459	4.59	0.855
3	0.15	0.39	1.98	0.04677	4.68	0.854
4	0.45	0.67	1.99	0.04759	4.76	0.852
5	0.95	0.97	2	0.04805	4.81	0.851
6	1.45	1.20	2	0.04831	4.83	0.851
7	1.95	1.39	2	0.04846	4.85	0.850
8	3.95	1.99	2	0.04887	4.89	0.849
9	5.95	2.44	2	0.04912	4.91	0.849
10	9.95	3.15	2	0.04943	4.94	0.848
11	19.95	4.47	2	0.04974	4.97	0.848
12	29.95	5.47	2	0.04994	4.99	0.847
13	44.95	6.70	2	0.0502	5.02	0.847
14	59.95	7.74	2	0.0503	5.03	0.847
15	89.95	9.48	2	0.05061	5.06	0.846
16	119.95	10.95	2	0.05071	5.07	0.846
17	179.95	13.41	2	0.05092	5.09	0.846
18	239.95	15.49	2	0.05112	5.11	0.845
19	299.95	17.32	2	0.05117	5.12	0.845
20	359.95	18.97	2	0.05132	5.13	0.845
21	419.95	20.49	2	0.05143	5.14	0.845
22	479.95	21.91	2	0.05148	5.15	0.844
23	539.95	23.24	2	0.05153	5.15	0.844
24	599.95	24.49	2	0.05153	5.15	0.844
25	659.95	25.69	2	0.05163	5.16	0.844
26	719.95	26.83	2	0.05163	5.16	0.844
27	720.02	26.83	2	0.05163	5.16	0.844

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-1
Sample No.: U13
Test No.: 1

Location: Ansonia, Conn.
Tested By: LL Sr.
Test Date: 8/17/10
Sample Type: Undisturbed

Project No.: 40190001020
Checked By: LL Sr.
Depth: 42'-44'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 5 of 10
Applied Stress: 4 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	3.62	0.05935	5.93	0.829
2	0.05	0.22	3.92	0.06405	6.41	0.820
3	0.15	0.39	3.98	0.06518	6.52	0.818
4	0.45	0.67	4	0.06605	6.60	0.816
5	0.95	0.97	3.99	0.06661	6.66	0.815
6	1.45	1.20	4	0.06692	6.69	0.814
7	1.95	1.40	4	0.06712	6.71	0.814
8	3.95	1.99	4	0.06763	6.76	0.813
9	5.95	2.44	4	0.06794	6.79	0.812
10	9.95	3.15	4	0.06835	6.84	0.812
11	19.95	4.47	4	0.06886	6.89	0.811
12	29.95	5.47	4	0.06917	6.92	0.810
13	44.95	6.70	4	0.06948	6.95	0.809
14	59.95	7.74	4	0.06973	6.97	0.809
15	89.95	9.48	4	0.07004	7.00	0.808
16	119.95	10.95	4	0.07029	7.03	0.808
17	179.95	13.41	4	0.0706	7.06	0.807
18	239.95	15.49	4	0.07086	7.09	0.807
19	299.95	17.32	4	0.07106	7.11	0.806
20	359.95	18.97	4	0.07122	7.12	0.806
21	419.95	20.49	4	0.07137	7.14	0.806
22	479.95	21.91	4	0.07152	7.15	0.805
23	539.95	23.24	4	0.07162	7.16	0.805
24	599.95	24.49	4	0.07162	7.16	0.805
25	659.95	25.69	4	0.07178	7.18	0.805
26	719.95	26.83	4	0.07183	7.18	0.805
27	720.02	26.83	4	0.07183	7.18	0.805

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-1
Sample No.: U13
Test No.: 1

Location: Ansonia, Conn.
Tested By: LL Sr.
Test Date: 8/17/10
Sample Type: Undisturbed

Project No.: 40190001020
Checked By: LL Sr.
Depth: 42'-44'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 6 of 10
Applied Stress: 8 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	7.43	0.08351	8.35	0.782
2	0.05	0.22	7.88	0.08868	8.87	0.772
3	0.15	0.39	7.98	0.09017	9.02	0.769
4	0.45	0.67	7.98	0.09144	9.14	0.767
5	0.95	0.97	7.99	0.09226	9.23	0.765
6	1.45	1.20	8	0.09267	9.27	0.764
7	1.95	1.40	8	0.09303	9.30	0.764
8	3.95	1.99	8	0.09375	9.37	0.762
9	5.95	2.44	8	0.09416	9.42	0.761
10	9.95	3.15	8	0.09472	9.47	0.760
11	19.95	4.47	8	0.09549	9.55	0.759
12	29.95	5.47	8	0.09595	9.59	0.758
13	44.95	6.70	8	0.09646	9.65	0.757
14	59.95	7.74	8	0.09682	9.68	0.756
15	89.95	9.48	8	0.09733	9.73	0.755
16	119.95	10.95	8	0.09763	9.76	0.755
17	179.95	13.41	8	0.0982	9.82	0.754
18	239.95	15.49	8	0.0985	9.85	0.753
19	299.95	17.32	8	0.09881	9.88	0.752
20	359.95	18.97	8	0.09907	9.91	0.752
21	419.95	20.49	8	0.09932	9.93	0.751
22	479.95	21.91	8	0.09953	9.95	0.751
23	539.95	23.24	8	0.09973	9.97	0.751
24	599.95	24.49	8	0.09994	9.99	0.750
25	659.95	25.69	8	0.1	10.00	0.750
26	719.95	26.83	8	0.1002	10.02	0.750
27	720.02	26.83	8	0.1002	10.02	0.750

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-1
Sample No.: U13
Test No.: 1

Location: Ansonia, Conn.
Tested By: LL Sr.
Test Date: 8/17/10
Sample Type: Undisturbed

Project No.: 40190001020
Checked By: LL Sr.
Depth: 42'-44'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 7 of 10
Applied Stress: 16 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	15.1	0.1174	11.74	0.716
2	0.05	0.22	15.8	0.1235	12.35	0.704
3	0.15	0.39	16	0.1256	12.56	0.700
4	0.45	0.67	16	0.1273	12.73	0.697
5	0.95	0.97	16	0.1284	12.84	0.695
6	1.45	1.20	16	0.1291	12.91	0.693
7	1.95	1.39	16	0.1296	12.96	0.693
8	3.95	1.99	16	0.1307	13.07	0.690
9	5.95	2.44	16	0.1314	13.14	0.689
10	9.95	3.15	16	0.1321	13.21	0.688
11	19.95	4.47	16	0.1334	13.34	0.685
12	29.95	5.47	16	0.1341	13.41	0.684
13	44.95	6.70	16	0.1347	13.47	0.683
14	59.95	7.74	16	0.1352	13.52	0.682
15	89.95	9.48	16	0.136	13.60	0.680
16	119.95	10.95	16	0.1364	13.64	0.679
17	179.95	13.41	16	0.1372	13.72	0.678
18	239.95	15.49	16	0.1377	13.77	0.677
19	299.95	17.32	16	0.138	13.80	0.676
20	359.95	18.97	16	0.1383	13.83	0.676
21	419.95	20.49	16	0.1385	13.85	0.675
22	479.95	21.91	16	0.1387	13.87	0.675
23	539.95	23.24	16	0.1389	13.89	0.674
24	599.95	24.49	16	0.1391	13.91	0.674
25	659.95	25.69	16	0.1393	13.93	0.674
26	719.95	26.83	16	0.1394	13.94	0.673
27	720.03	26.83	16	0.1394	13.94	0.673

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-1
Sample No.: U13
Test No.: 1

Location: Ansonia, Conn.
Tested By: LL Sr.
Test Date: 8/17/10
Sample Type: Undisturbed

Project No.: 40190001020
Checked By: LL Sr.
Depth: 42'-44'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 8 of 10
Applied Stress: 32 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	31	0.1607	16.07	0.632
2	0.05	0.22	31.8	0.1669	16.69	0.620
3	0.15	0.39	32	0.1694	16.94	0.615
4	0.45	0.67	32	0.1716	17.16	0.611
5	0.95	0.97	32	0.1731	17.31	0.608
6	1.45	1.20	32	0.1739	17.39	0.606
7	1.95	1.39	32	0.1745	17.45	0.605
8	3.95	1.99	32	0.1759	17.59	0.602
9	5.95	2.44	32	0.1767	17.67	0.601
10	9.95	3.15	32	0.1778	17.78	0.599
11	19.95	4.47	32	0.1792	17.92	0.596
12	29.95	5.47	32	0.1801	18.01	0.594
13	44.95	6.70	32	0.1808	18.08	0.593
14	59.95	7.74	32	0.1815	18.15	0.592
15	89.95	9.48	32	0.1823	18.23	0.590
16	119.95	10.95	32	0.1829	18.29	0.589
17	179.95	13.41	32	0.1838	18.38	0.587
18	239.95	15.49	32	0.1844	18.44	0.586
19	299.95	17.32	32	0.1848	18.48	0.585
20	359.95	18.97	32	0.1852	18.52	0.584
21	419.95	20.49	32	0.1855	18.55	0.584
22	479.95	21.91	32	0.1858	18.58	0.583
23	539.95	23.24	32	0.1861	18.61	0.583
24	599.95	24.49	32	0.1864	18.64	0.582
25	659.95	25.69	32	0.1866	18.66	0.582
26	719.95	26.83	32	0.1869	18.69	0.581
27	720.02	26.83	32	0.1869	18.69	0.581

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-1
Sample No.: U13
Test No.: 1

Location: Ansonia, Conn.
Tested By: LL Sr.
Test Date: 8/17/10
Sample Type: Undisturbed

Project No.: 40190001020
Checked By: LL Sr.
Depth: 42'-44'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 9 of 10
Applied Stress: 2 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	3.17	0.1766	17.66	0.601
2	0.05	0.22	2.04	0.1692	16.92	0.615
3	0.15	0.39	2.01	0.1688	16.88	0.616
4	0.45	0.67	2	0.1684	16.84	0.617
5	0.95	0.97	2	0.1683	16.83	0.617
6	1.45	1.20	2	0.1681	16.81	0.618
7	1.95	1.40	2	0.1681	16.81	0.618
8	3.95	1.99	2	0.1679	16.79	0.618
9	5.95	2.44	2	0.1679	16.79	0.618
10	9.95	3.15	2	0.1678	16.78	0.618
11	19.95	4.47	2	0.1676	16.76	0.619
12	29.95	5.47	2	0.1676	16.76	0.619
13	44.95	6.70	2	0.1675	16.75	0.619
14	59.95	7.74	2	0.1675	16.75	0.619
15	89.95	9.48	2	0.1674	16.74	0.619
16	119.95	10.95	2	0.1673	16.73	0.619
17	179.95	13.41	2	0.1673	16.73	0.619
18	239.95	15.49	2	0.1672	16.72	0.619
19	299.95	17.32	2	0.1671	16.71	0.620
20	359.95	18.97	2	0.167	16.70	0.620
21	419.95	20.49	2	0.167	16.70	0.620
22	479.95	21.91	2	0.1669	16.69	0.620
23	539.95	23.24	2	0.1669	16.69	0.620
24	599.95	24.49	2	0.1669	16.69	0.620
25	659.95	25.69	2	0.1669	16.69	0.620
26	719.95	26.83	2	0.1669	16.69	0.620
27	720.03	26.83	2	0.1669	16.69	0.620

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-1
Sample No.: U13
Test No.: 1

Location: Ansonia, Conn.
Tested By: LL Sr.
Test Date: 8/17/10
Sample Type: Undisturbed

Project No.: 40190001020
Checked By: LL Sr.
Depth: 42'-44'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, some/and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 10 of 10
Applied Stress: 0.25 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	0.704	0.1613	16.13	0.631
2	0.05	0.22	0.393	0.1536	15.36	0.646
3	0.15	0.39	0.28	0.1462	14.62	0.660
4	0.45	0.67	0.25	0.1444	14.44	0.664
5	0.95	0.97	0.25	0.1437	14.37	0.665
6	1.45	1.20	0.25	0.1434	14.34	0.666
7	1.95	1.40	0.25	0.1432	14.32	0.666
8	3.95	1.99	0.248	0.1427	14.27	0.667
9	5.95	2.44	0.248	0.1425	14.25	0.667
10	9.95	3.15	0.248	0.1422	14.22	0.668
11	19.95	4.47	0.248	0.1418	14.18	0.669
12	29.95	5.47	0.248	0.1416	14.16	0.669
13	44.95	6.70	0.25	0.1414	14.14	0.670
14	59.95	7.74	0.248	0.1413	14.13	0.670
15	89.95	9.48	0.248	0.1411	14.11	0.670
16	119.95	10.95	0.248	0.141	14.10	0.670
17	179.95	13.41	0.248	0.1409	14.09	0.671
18	239.95	15.49	0.248	0.1407	14.07	0.671
19	299.95	17.32	0.248	0.1406	14.06	0.671
20	359.95	18.97	0.246	0.1405	14.05	0.671
21	419.95	20.49	0.248	0.1405	14.05	0.671
22	479.95	21.91	0.248	0.1404	14.04	0.672
23	539.95	23.24	0.248	0.1404	14.04	0.672
24	578.91	24.06	0.248	0.1403	14.03	0.672

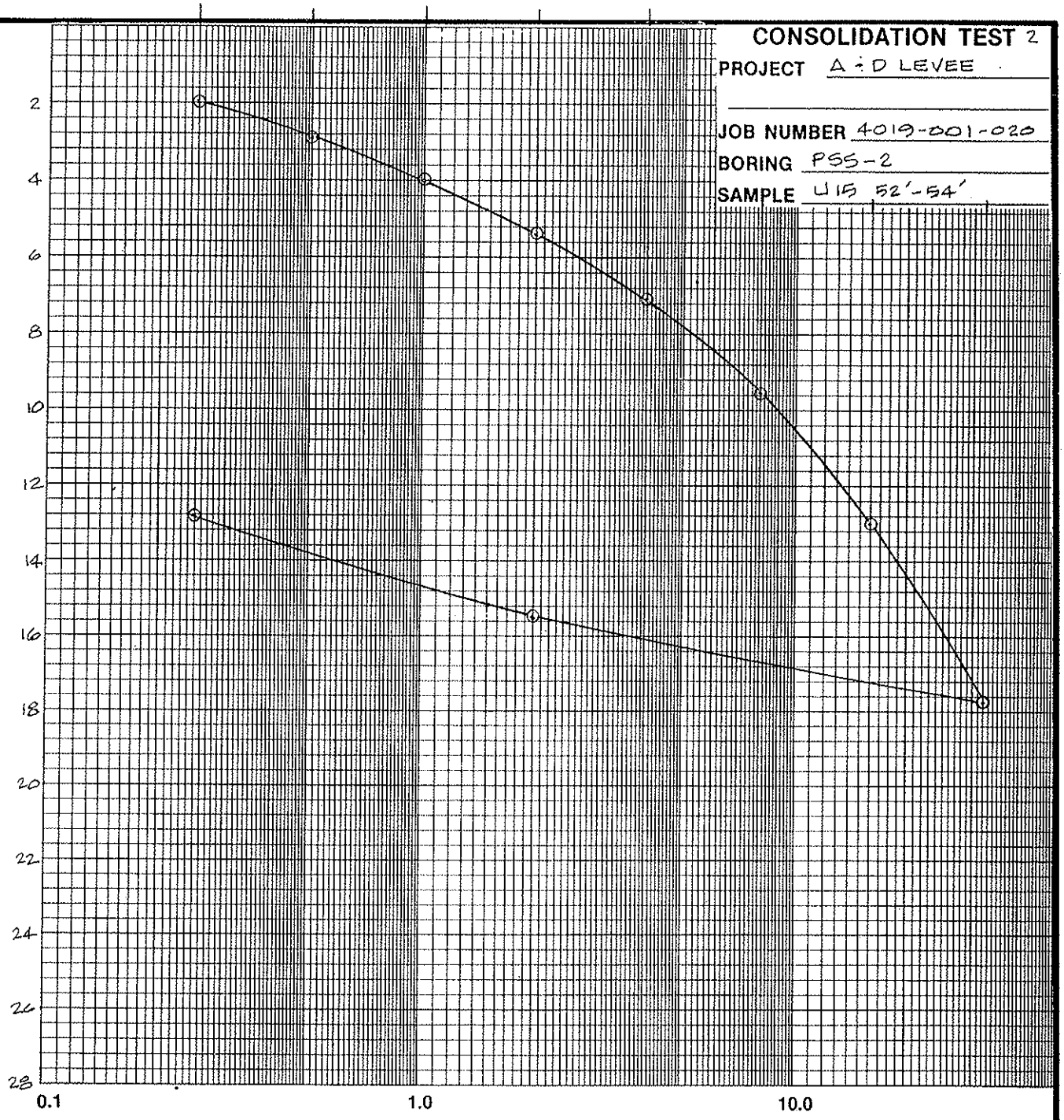
CONSOLIDATION TEST 2

PROJECT A + D LEVEE

JOB NUMBER 4019-001-020

BORING PSS-2

SAMPLE U15 52'-54'



DESCRIPTION OF SAMPLE THINLY LAYERED GRAY SILT : CLAYEY SILT (ML) AND F SAND, AND SILT (SM)

STRATUM:

PROPERTIES OF CONSOLIDATION SPECIMEN			PROPERTIES OF PLASTICITY LIMIT SPECIMEN		
	ELEVATION OF SPECIMEN			UNIFIED CLASSIFICATION	ML/SM
	DEPTH OF SPECIMEN (FT.)	±52.7		LIQUID LIMIT (W_L)	
	DIAMETER OF SPECIMEN (IN.)	2.5		PLASTIC LIMIT (W_P)	
	INITIAL THICKNESS OF SPECIMEN (IN.)	1.0		PLASTICITY INDEX (I_P)	NP
	INITIAL WATER CONTENT %	35.8		NATURAL WATER CONT. % (W)	
	FINAL WATER CONTENT %	26.7		LIQUIDITY INDEX = $\frac{W - W_P}{I_P}$	NP
	INITIAL DEGREE SATURATION %	99.0			
	FINAL DEGREE SATURATION %	100		SPECIFIC GRAVITY (G)	2.69

INITIAL VOID RATIO (e_0)	0.972
MOST PROBABLE PRE-CONSOLIDATION STRESS (TSF) SHOWN THUS: $P_C\downarrow$	6.4
EXISTING OVERBURDEN STRESS (TSF) SHOWN THUS: $P_0\downarrow$	5.38
COMPRESSION INDEX $C'_C = \frac{C_C}{1 + e_0}$	0.141

PLATE

PAULUS SOKOLOWSKI and SARTOR
CONSULTING ENGINEERS

CONSOLIDATION TEST
CELL # 69
~ AUTOMATED ~
± 12 HOURS/LOAD

TEST #2
DATA SHEET

PROJECT A & D LEVEE JOB NUMBER 4019-001-020

LOCATION OF PROJECT ANSONIA, CONNECTICUT COUNTY _____ BORING NO. PSS-2 SAMPLE NO. U15

VISUAL CLASSIFICATION THINLY LAYERED SILT & CLAYEY SILT (ML) & F-SAND, AND SILT (SM) DEPTH 52'-54'

LOADING TEST DATA: LOAD SEE ATTACHED DATA SHEETS tsf; DATE APPLIED _____; APPLIED BY LLSR

APPARATUS MEASUREMENTS	
Diameter Ring	6.35 cm.
Area Ring	31.67 cm^2
Height Ring, Z_1	1.0 in.

SOIL AND RING WEIGHTS	INITIAL	FINAL
Weight Ring & Wet Soil in gm.	687.46	150.01
Weight Ring in gm./tare	538.50	11.00
Weight Wet Soil, W_t in gm.	148.96	139.01
Weight Dry Soil, $W_s = W/1+w$, in gm.	109.79	109.71

SPECIMEN HEIGHTS	INITIAL	FINAL AT ZERO LOAD
Height of gauge block, H_s	in.	in.
Dial reading on gauge block	in.	in.
Dial reading on specimen	in.	in.
Difference in dial reading ΔD	in.	in.
Specimen height $H = H_B \pm \Delta D$	in.	in.
Specimen height by depth gauge	in.	in.
Thickness of stone + filter paper, Z_2	in.	in.
Distance from top of stone to ring	in.	in.
Specimen H +, $H = Z_1 + Z_3 - Z_2$	in.	in.

WATER CONTENT	INITIAL		FINAL
Specimen location			
Container number	"LID	"B"	TARE #105
Weight container + wet soil in gm.		121.06	150.01
Weight container + dry soil in gm.		97.72	120.71
Weight water, W_{w_1} in gm.		23.34	29.30
Weight container in gm.		32.28	11.00
Weight dry soil, w_s, in gm.		65.44	109.71
Water content, w in %		35.67	26.71
Average water content			

INITIAL WATER CONTENT DETERMINED FROM FINAL WEIGHT OF DRY SOIL	
Initial weight wet soil in gm.	148.96
Final weight dry soil in gm.	109.71
Weight of water, Ww	39.25
Initial water content in %	35.78

SOLIDS HEIGHT, H_S	
Initial weight dry soil in gm.	109.79
Final weight dry soil in gm.	109.71
Average weight dry soil in gm.	109.75
Solids height, $H_s = \frac{W_s}{GA\gamma_w}$	1.2878 cm.
	0.5070 in.

UNCORRECTED	INITIAL	FINAL
Void Ratio $e = \frac{H-Hs}{Hs}$	0.9723	0.7183
Degree of Saturation $S = \frac{WG}{e}$	99.0	100

FINAL READING 0.1288"

H_f at S = 100% = _____ in.

H_f measured = _____ in.

Difference _____ in.

CALCULATIONS: $G_S = 2.69$

$\gamma_t = 115.6$ pcf

$\gamma_d = 85.2$ pcf

ATTERBERG LIMITS TEST DATA

JOB NO. 4019-001-020

CLASSIFICATION Thinly layered gray silt; clayey silt (ML) & fine sand, and silt (SM)

CLIENT/OWNER A & D LEVEE

LOCATION ANSONIA, CONN

BORING PSS-2 SAMPLE U15 DEPTH 52'-54'

FIELD DENSITY BY ____/__/__

DETERMINATION	1	2
NUMBER OF RINGS		
WT OF RINGS + WET SOIL		
WT OF RINGS		
WT OF WET SOIL		
FIELD DENSITY		
DRY DENSITY		

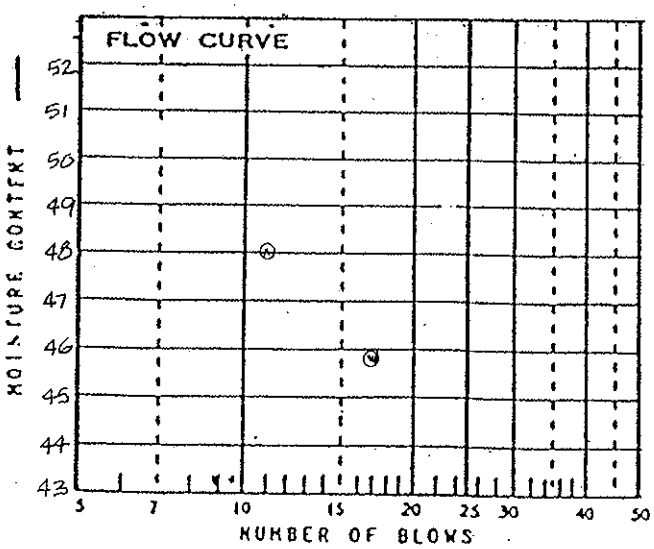
DETERMINATION	1	2
DISH		
WT OF DISH + WET SOIL		
WT OF DISH + DRY SOIL		
WT OF MOISTURE		
WT OF DISH		
WT OF DRY SOIL		
FIELD MOISTURE CONTENT	FROM CONSOL.	

PLASTIC LIMIT BY LL 8/21/10. Unable to roll threads - mat'l. brittle; non plastic.

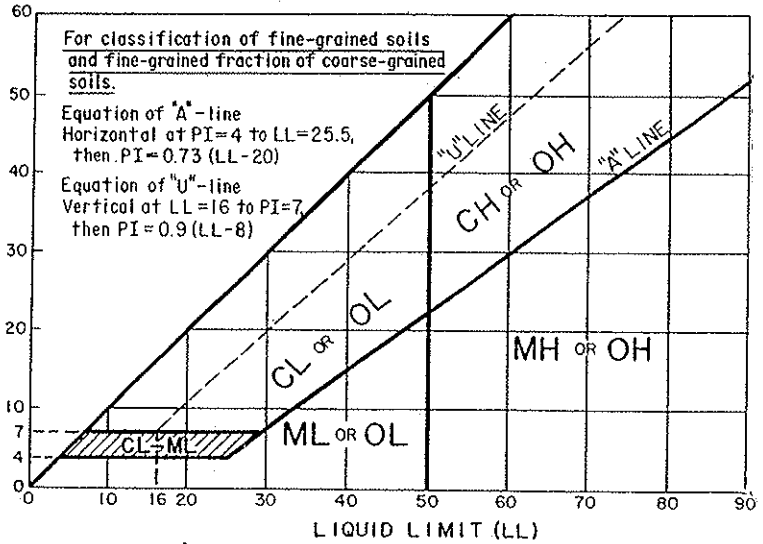
DETERMINATION	1	2	3	4	5	6
DISH (LIDS)						
WT OF DISH + WET SOIL						
WT OF DISH + DRY SOIL						
WT OF MOISTURE						
WT OF DISH						
WT OF DRY SOIL						
MOISTURE CONTENT						

LIQUID LIMIT – Unable to obtain LL pt. > 17 blows - mat'l, brittle

DETERMINATION	1	2	3	4	5	6
DISH (BOTTOMS)	103	104				
NUMBER OF BLOWS	17	11				
WT OF DISH + WET SOIL	24.76	23.26				
WT OF DISH + DRY SOIL	20.48	19.40				
WT OF MOISTURE	4.28	3.86				
WT OF DISH	11.14	11.18				
WT OF DRY SOIL	9.34	8.22				
MOISTURE CONTENT	45.8	47.0				



Plasticity Chart



SUMMARY

DRY DENSITY	MOISTURE CONTENT	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	IDENTIFICATION
	35.7			NP	(ML)/(SM)

PAULUS SOKOLOWSKI and SARTOR, INC. CONSULTING ENGINEERS

UNDISTURBED SAMPLE LOG

Boring No.: PSS-2

Job No.: 4019-001-020

Sample No. & Depth: U15 52'-54'

Project: A & D LEVEE

Recovery: 21"

Date Tested: 8-12-10
REVISED 8-17-10

Sample Method: SHELBY

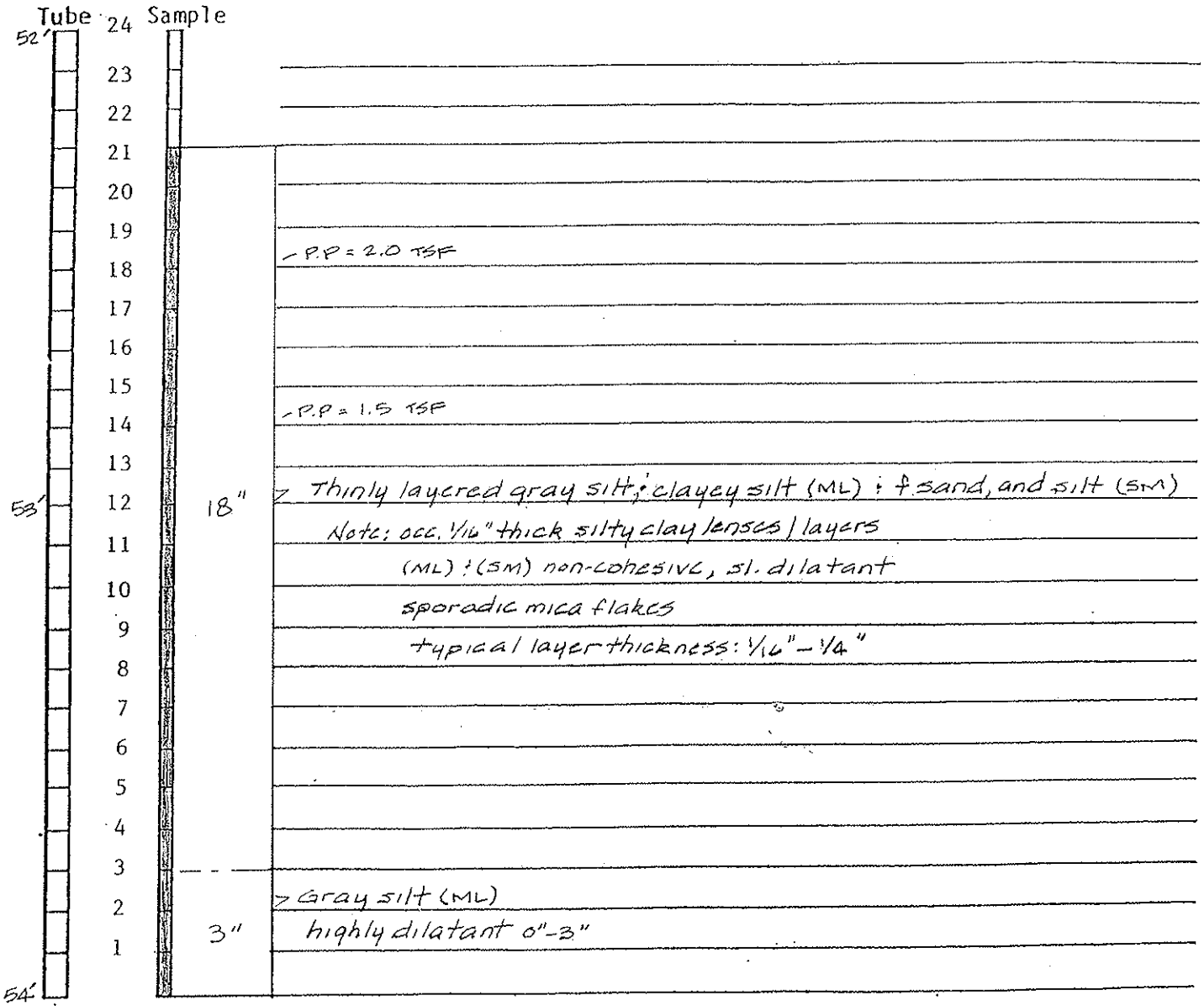
Tested By: LL SR., AL

Date of Sample: 7-30-10

Checked By: MBD

Testing Notes: SEE BELOW

Depth	Length (inches)	Soil Classification



Remarks: 4" section saved (14"-18") - Consol: Test (difficult trimming)
11" " " (3"-14")

SPECIFIC GRAVITY TEST

Soil Sample: Both: Thinly layered gray silt & clayey silt (ML) & f sand, and silt (SM)

Job No. 4019-001-020

Date 8.17.10

Location: ANSONIA, CONN.

Boring No. _____

Sample No. _____ Depth _____

Determination No.	PSS-1 U13 42'-44' 1	PSS-2 U15 52'-54' 2	3	4
Bottle No.	"D"	"D"		
Wt. Bottle + Water + Soil, W_1 gms	392.36	392.75		
Temperature, T, °C	21°C	21°C		
Wt. Bottle + Water, W_2, gms	361.27	361.27		
Tare No.	C	D		
Wt. Tare + Dry Soil, gms	82.02	82.19		
Wt. Tare, gms	32.02	32.19		
Wt. Soil, Ws, gms	50.00	50.00		
Specific Gravity of Water at T, Gt	0.9980	0.9980		
Specific Gravity of Soil Gs	2.64	2.69		

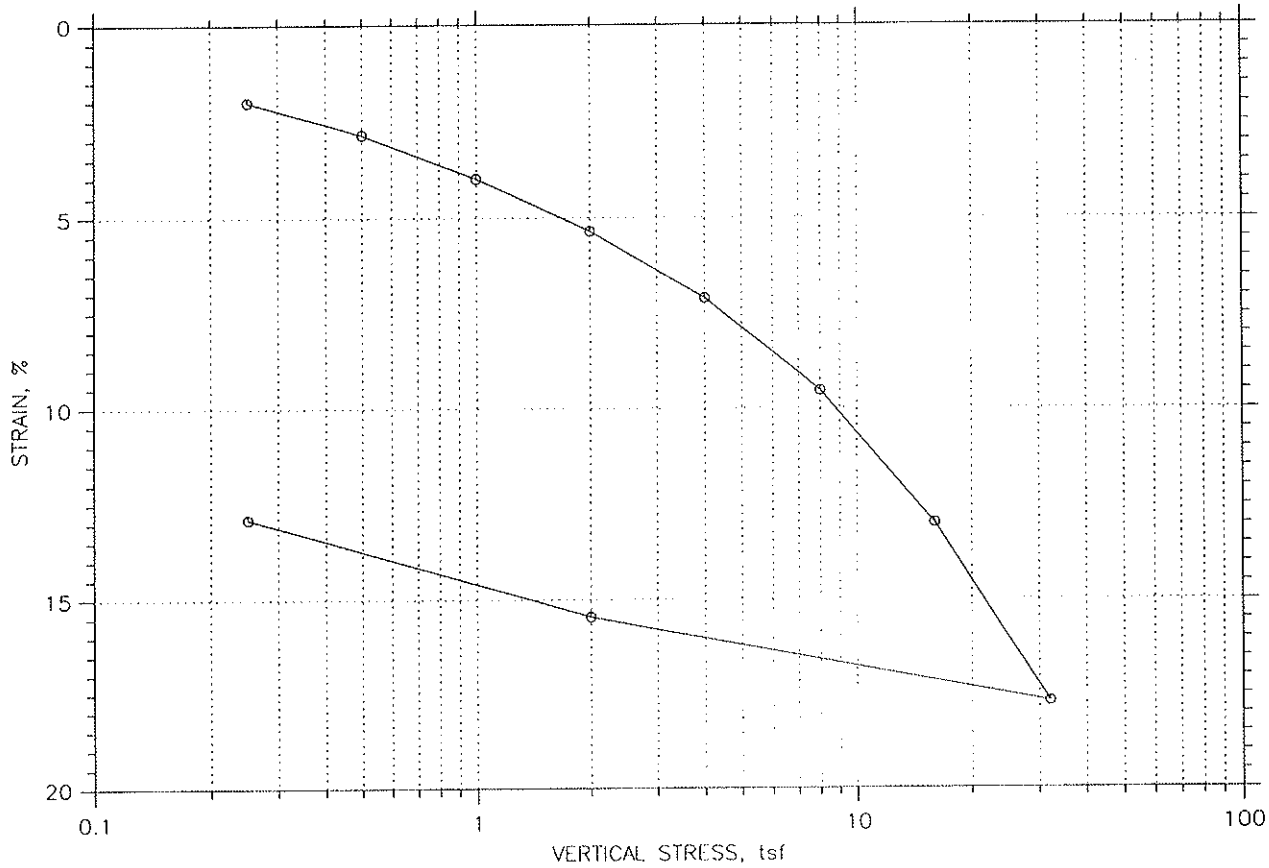
Remarks

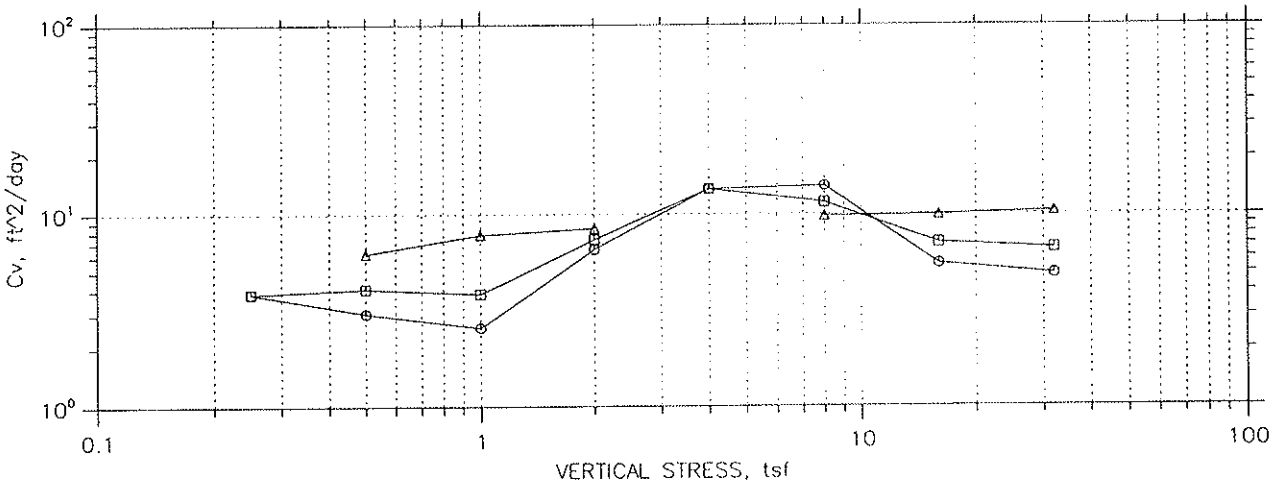
$$Gs = \frac{Ws\,(Gt)}{Ws - (W_1 - W_2)}$$

PAULUS SOKOLOWSKI and SARTOR INC. CONSULTING ENGINEERS

CONSOLIDATION TEST DATA

SUMMARY REPORT



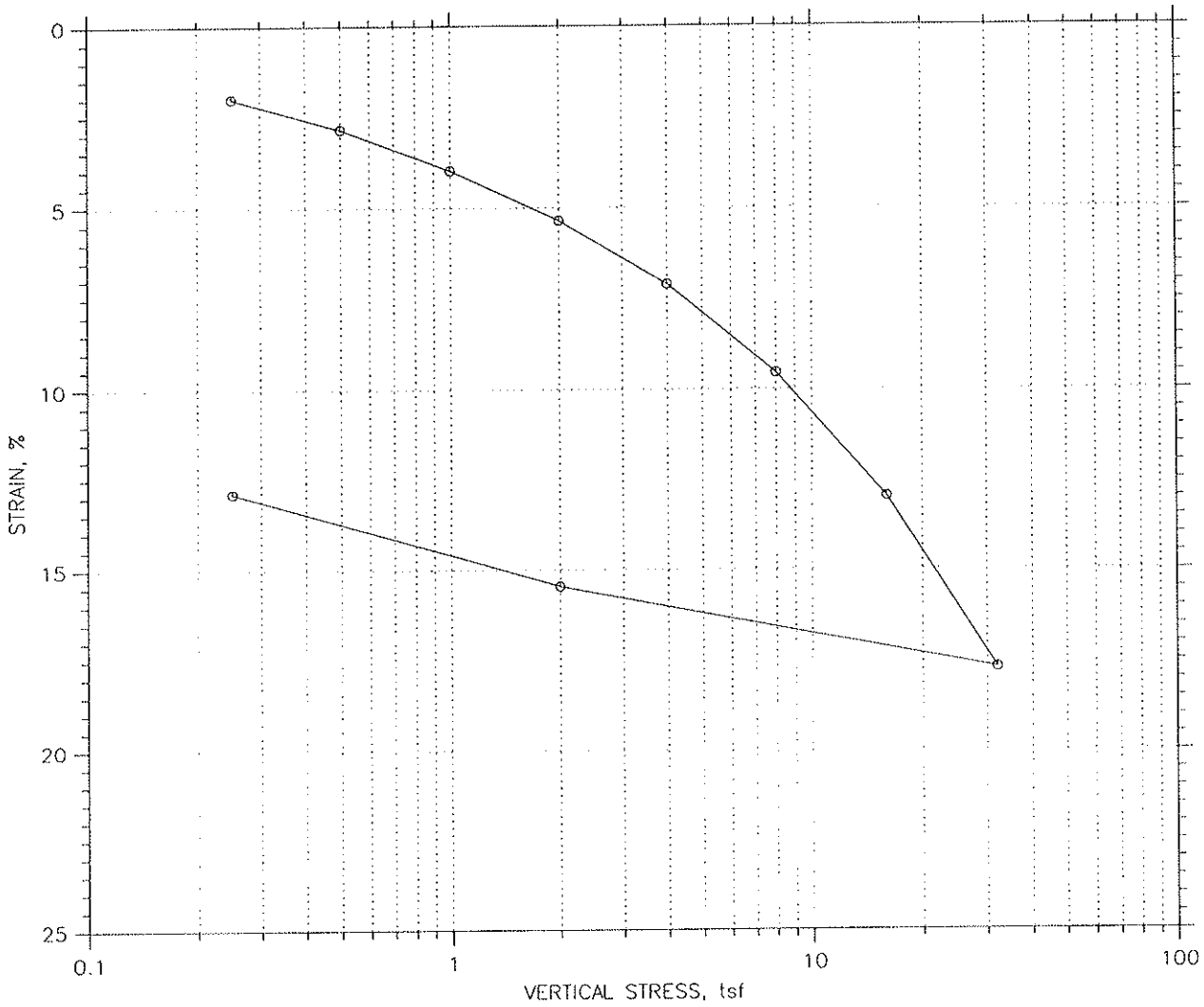


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Warren, New Jersey 07059

Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-2	Tested By: LL Sr.,	Checked By: LL Sr
Sample No.: U15	Test Date: 8/17/10	Depth: 52'-54'
Test No.: 2	Sample Type: undisturbed	Elevation: ---
Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)		
Remarks: See Undisturbed Log for details.		

CONSOLIDATION TEST DATA

SUMMARY REPORT



				Before Test	After Test
Overburden Pressure: 0 tsf				Water Content, %	35.78	26.71
Preconsolidation Pressure: 0 tsf				Dry Unit Weight, pcf	85.14	97.73
Compression Index: 3.81959e-313				Saturation, %	98.98	100.02
Diameter: 2.5 in		Height: 1 in		Void Ratio	0.97	0.72
LL: NP	PL: NP	PI: NP	GS: 2.69			

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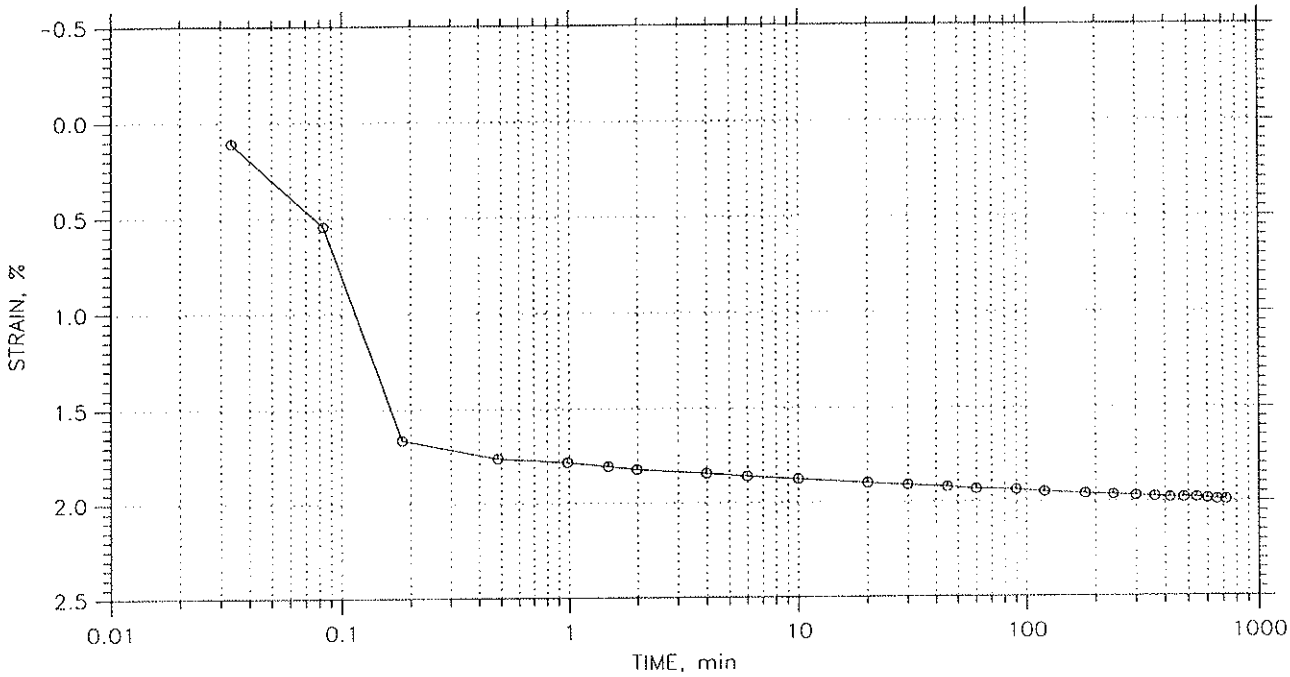
Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-2	Tested By: LL Sr.,	Checked By: LL Sr
Sample No.: U15	Test Date: 8/17/10	Depth: 52'-54'
Test No.: 2	Sample Type: undisturbed	Elevation: ---
Description: Thinly layered gray silt & cloyey silt (ML) & f-sand, and silt (SM)		
Remarks: See Undisturbed Log for details.		

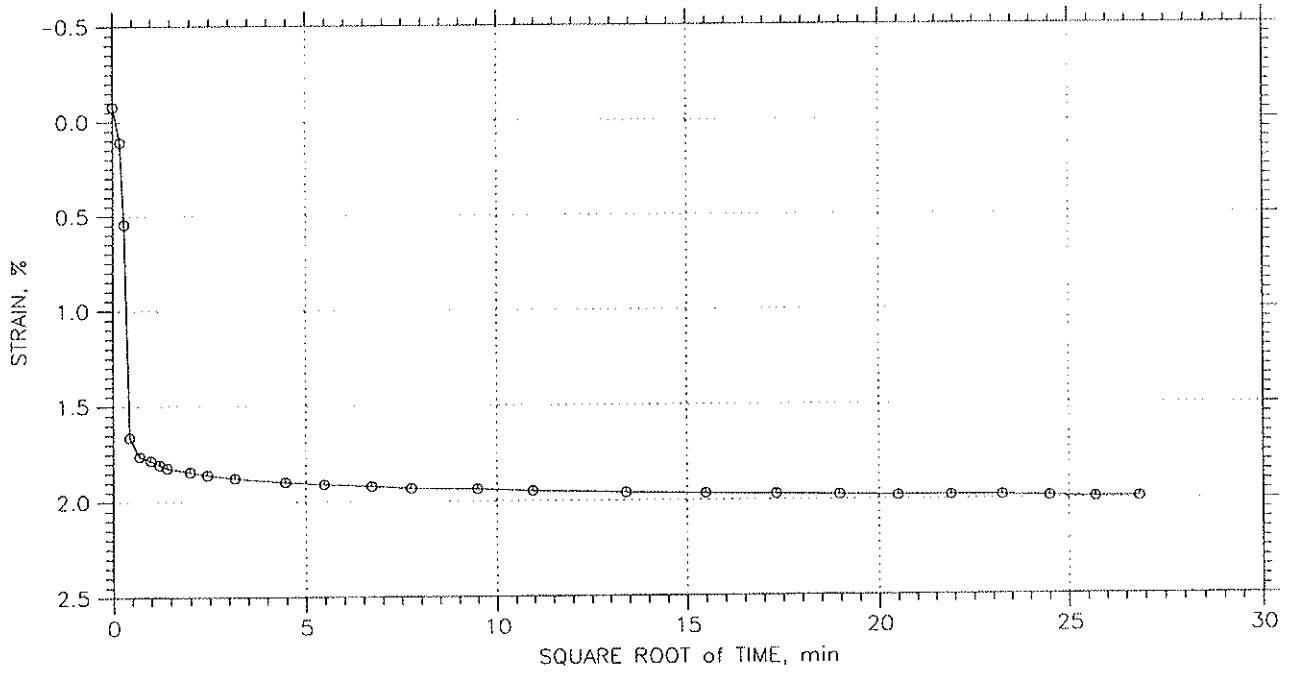
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 1 of 10

Stress: 0.25 tsf





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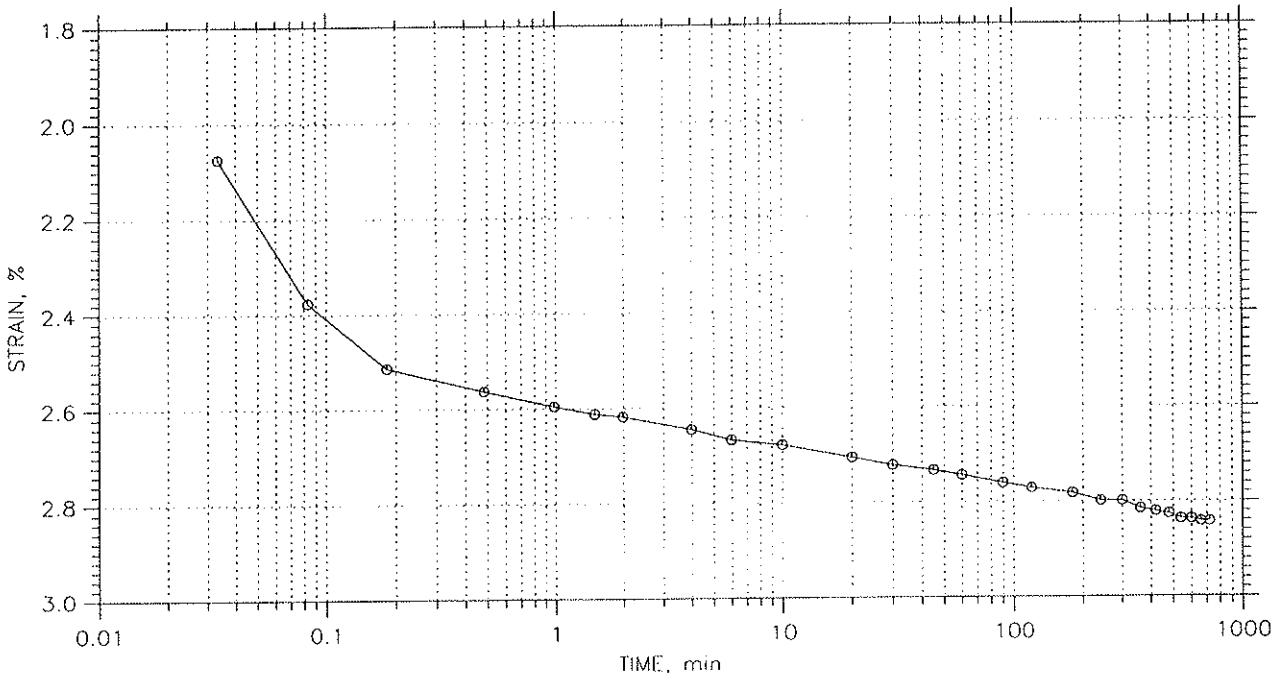
Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-2	Tested By: LL Sr.,	Checked By: LL Sr
Sample No.: U15	Test Date: 8/17/10	Depth: 52'-54'
Test No.: 2	Sample Type: undisturbed	Elevation: ---
Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)		
Remarks: See Undisturbed Log for details.		

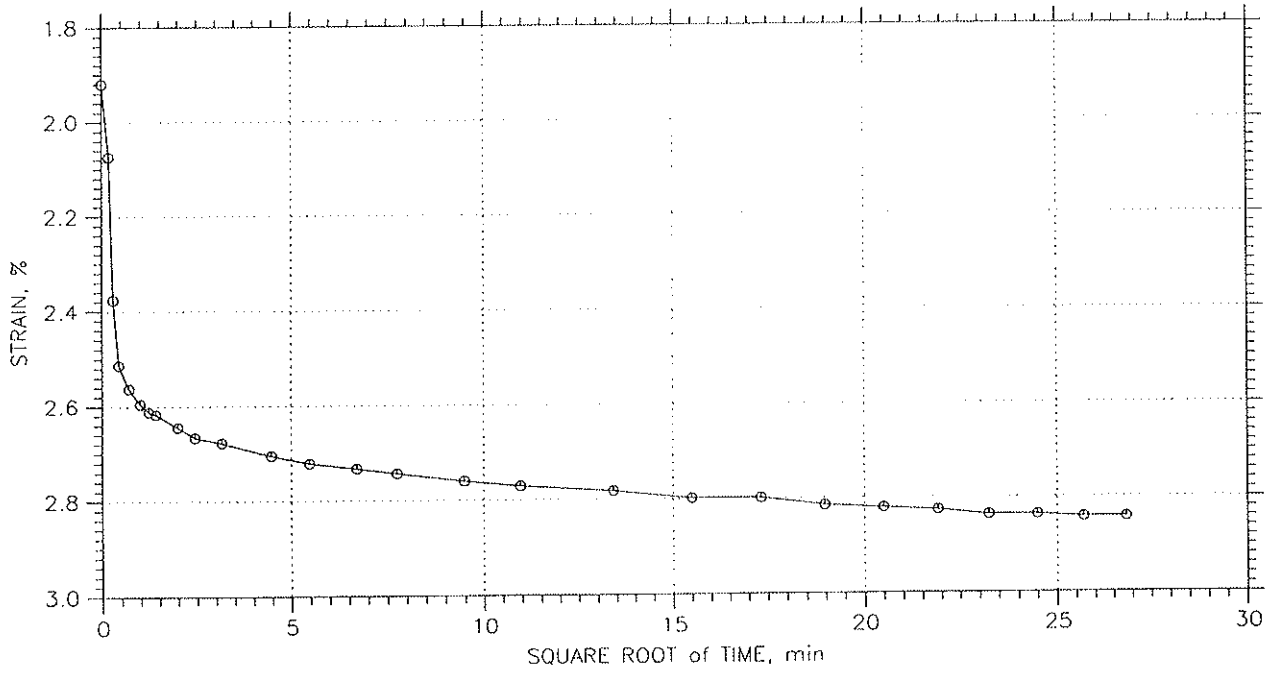
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 2 of 10

Stress: 0.5 tsf





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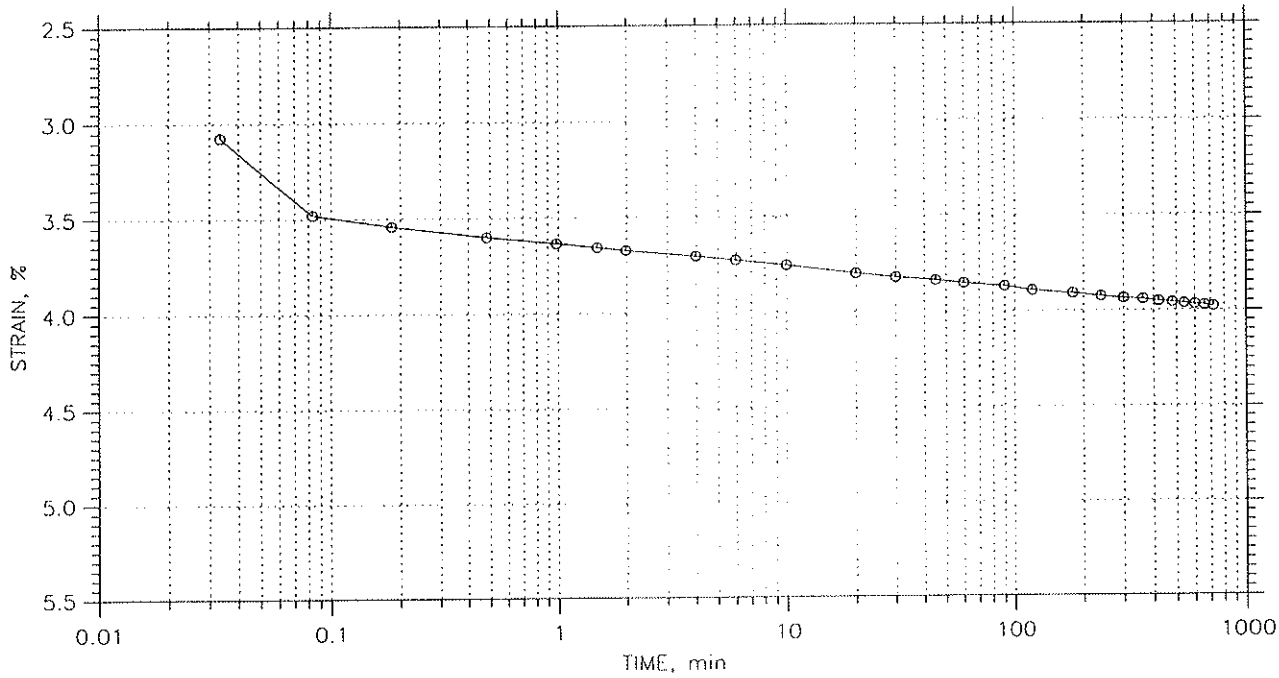
Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-2	Tested By: LL Sr.,	Checked By: LL Sr
Sample No.: U15	Test Date: 8/17/10	Depth: 52'-54'
Test No.: 2	Sample Type: undisturbed	Elevation: ---
Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)		
Remarks: See Undisturbed Log for details.		

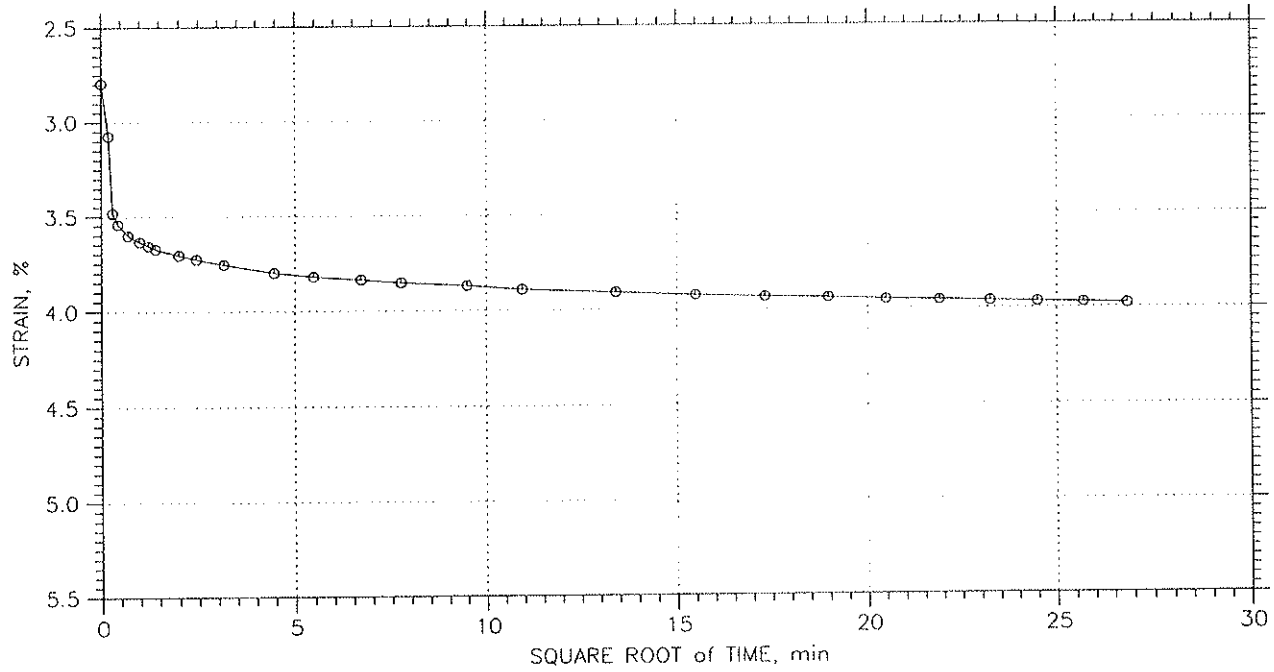
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 10

Stress: 1. tsf





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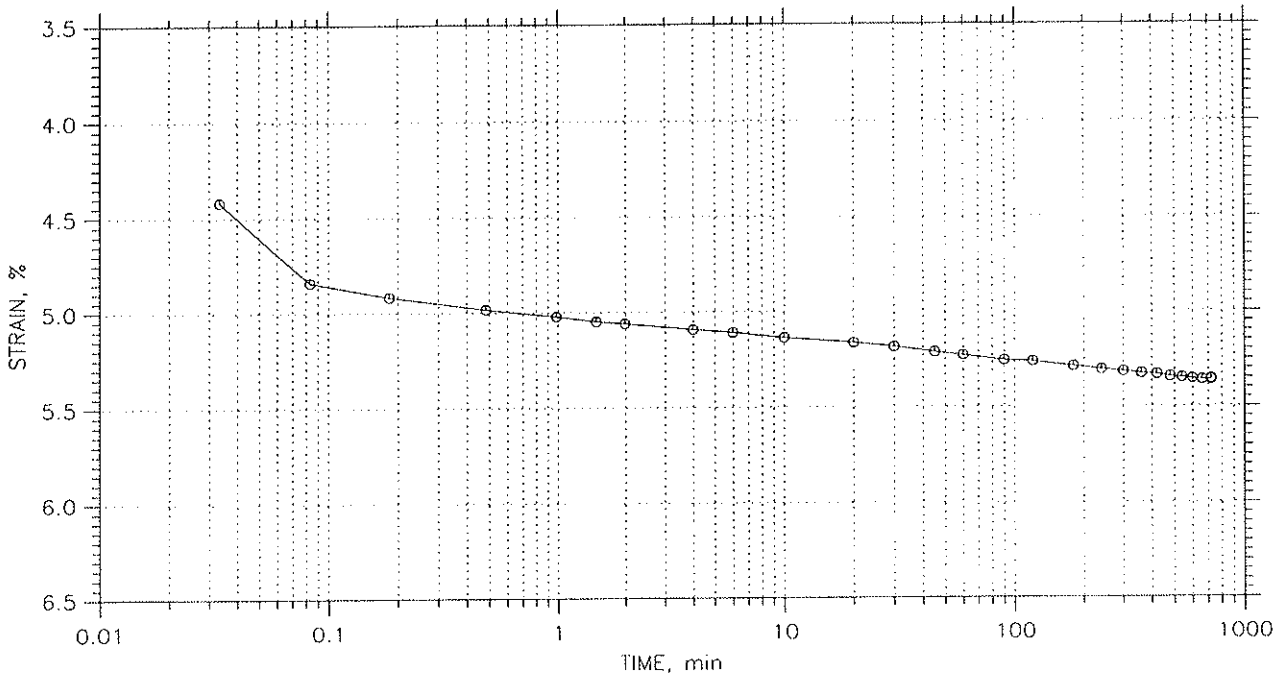
Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-2	Tested By: LL Sr.,	Checked By: LL Sr
Sample No.: U15	Test Date: 8/17/10	Depth: 52'-54'
Test No.: 2	Sample Type: undisturbed	Elevation: ---
Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)		
Remarks: See Undisturbed Log for details.		

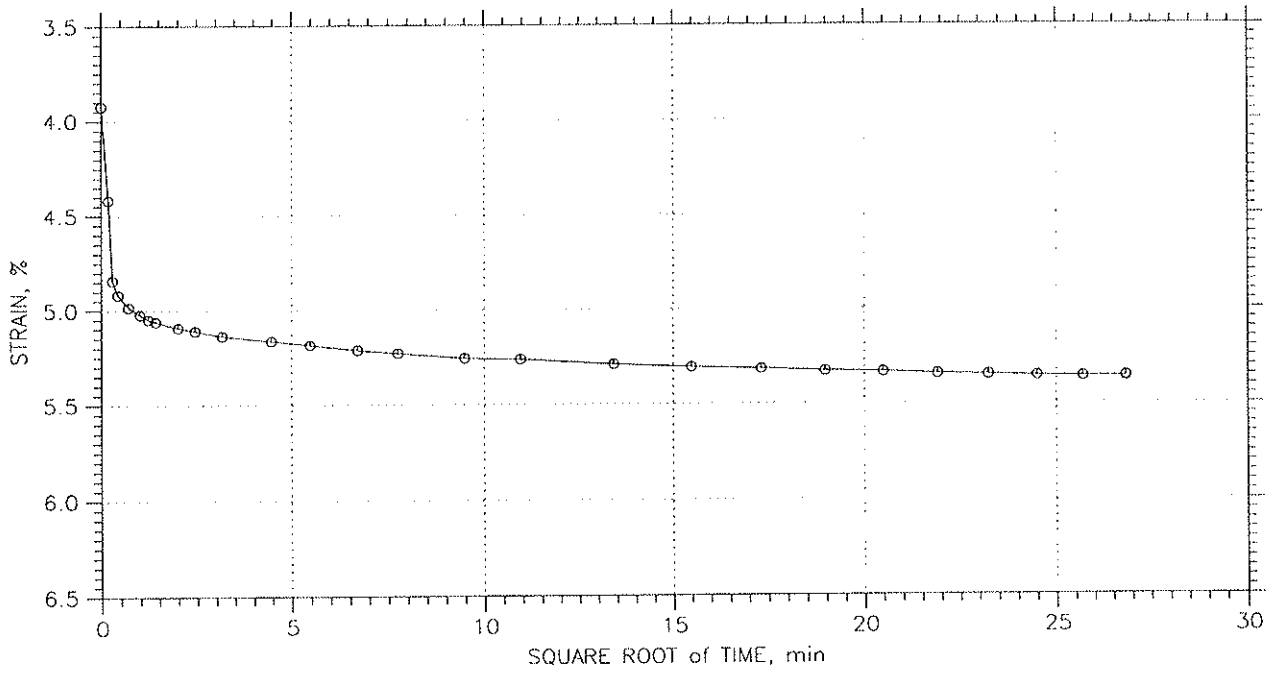
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 10

Stress: 2. tsf





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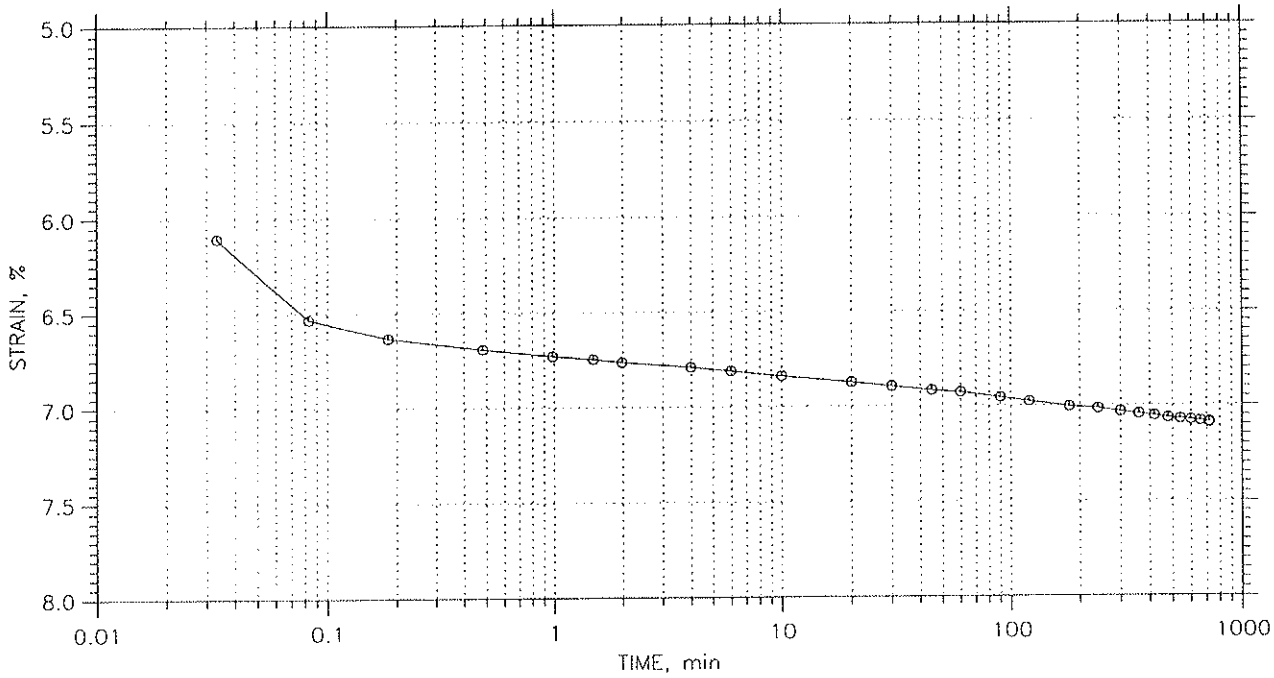
Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-2	Tested By: LL Sr.,	Checked By: LL Sr
Sample No.: U15	Test Date: 8/17/10	Depth: 52'-54'
Test No.: 2	Sample Type: undisturbed	Elevation: ---
Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)		
Remarks: See Undisturbed Log for details.		

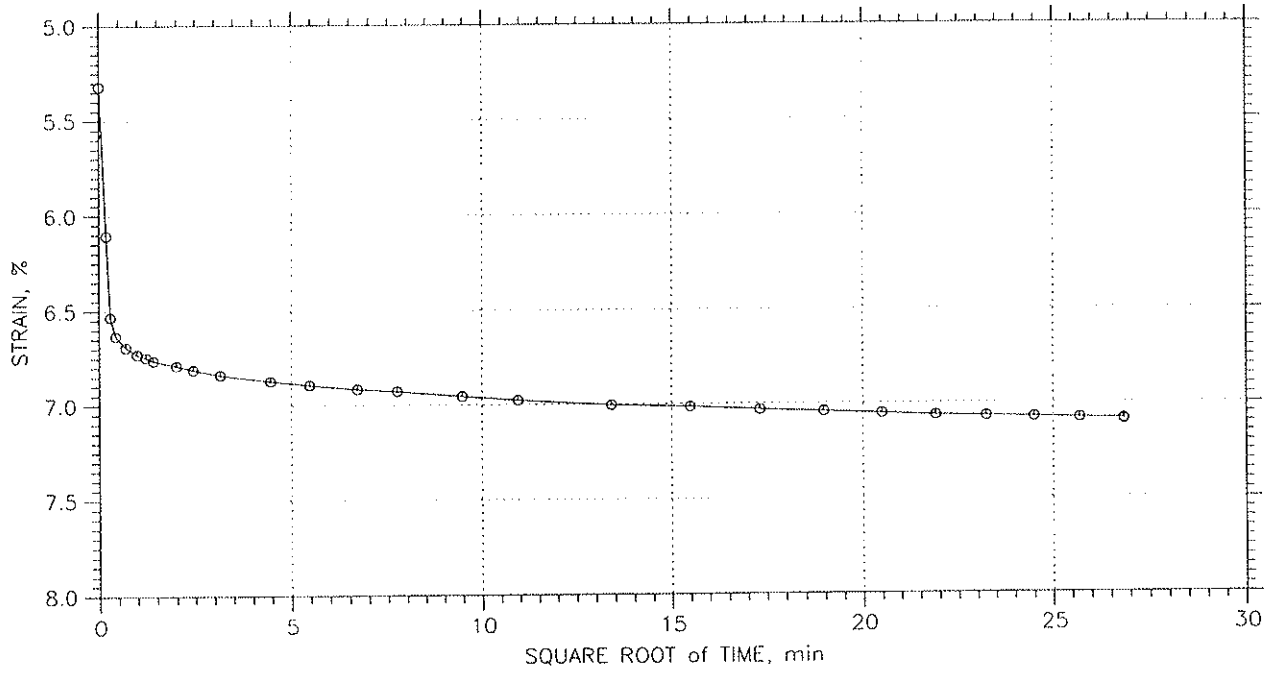
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 10

Stress: 4. tsf





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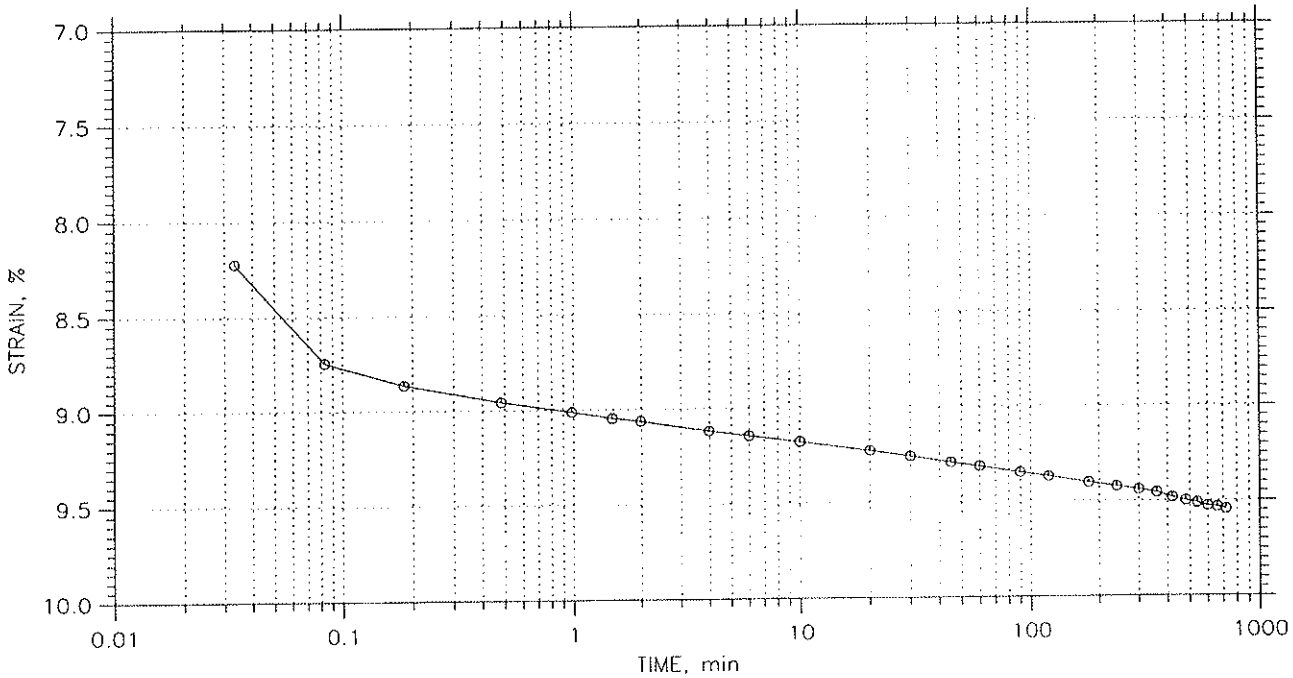
Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-2	Tested By: LL Sr.,	Checked By: LL Sr
Sample No.: U15	Test Date: 8/17/10	Depth: 52'-54'
Test No.: 2	Sample Type: undisturbed	Elevation: ---
Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)		
Remarks: See Undisturbed Log for details.		

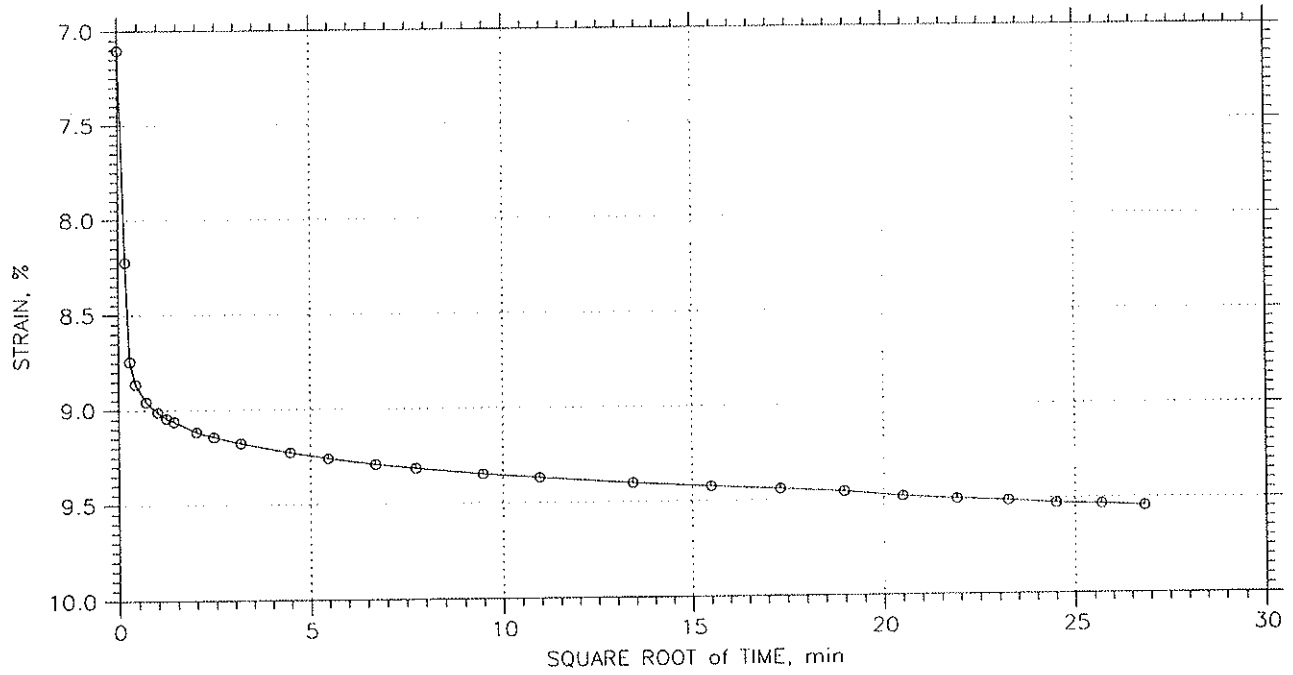
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 10

Stress: 8. tsf





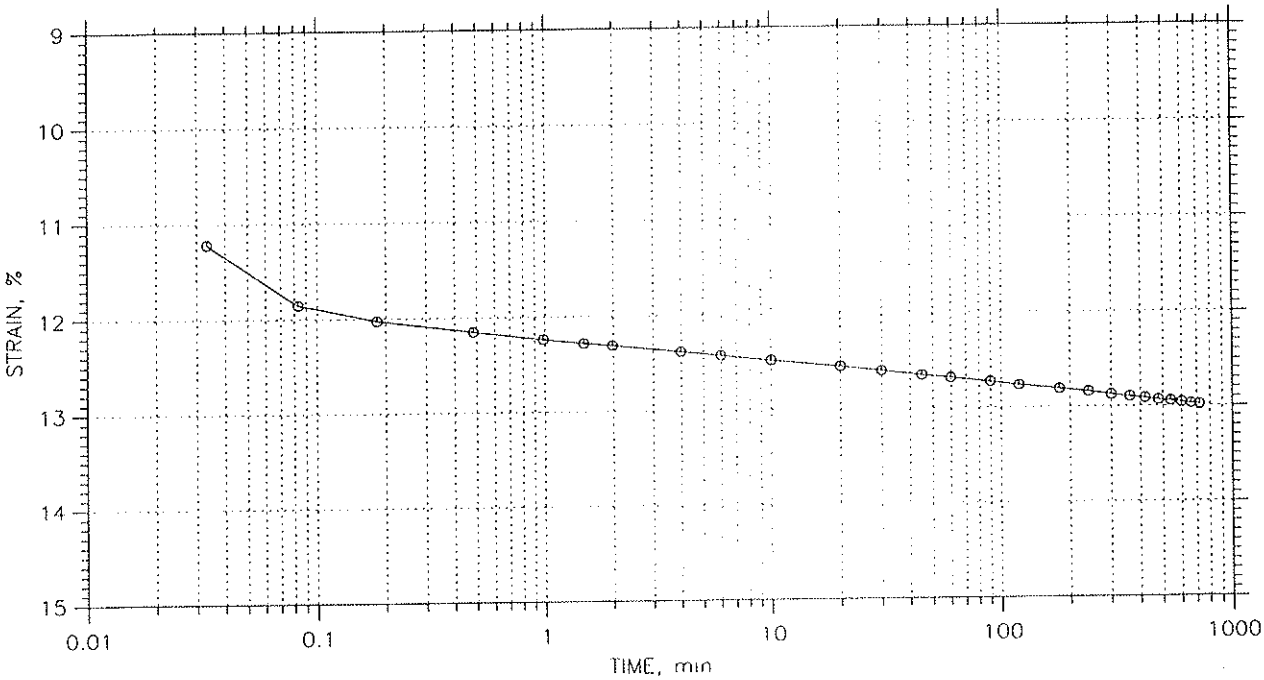
Paulus, Sokolowski & Sartor, LLC consulting engineers and environmental planners A KETSPAN BUSINESS SOLUTION 67A Mountain Boulevard Extension Warren, New Jersey 07059	Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
	Boring No.: PSS-2	Tested By: LL Sr.,	Checked By: LL Sr
	Sample No.: U15	Test Date: 8/17/10	Depth: 52'-54'
	Test No.: 2	Sample Type: undisturbed	Elevation: ---
	Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)		
	Remarks: See Undisturbed Log for details.		

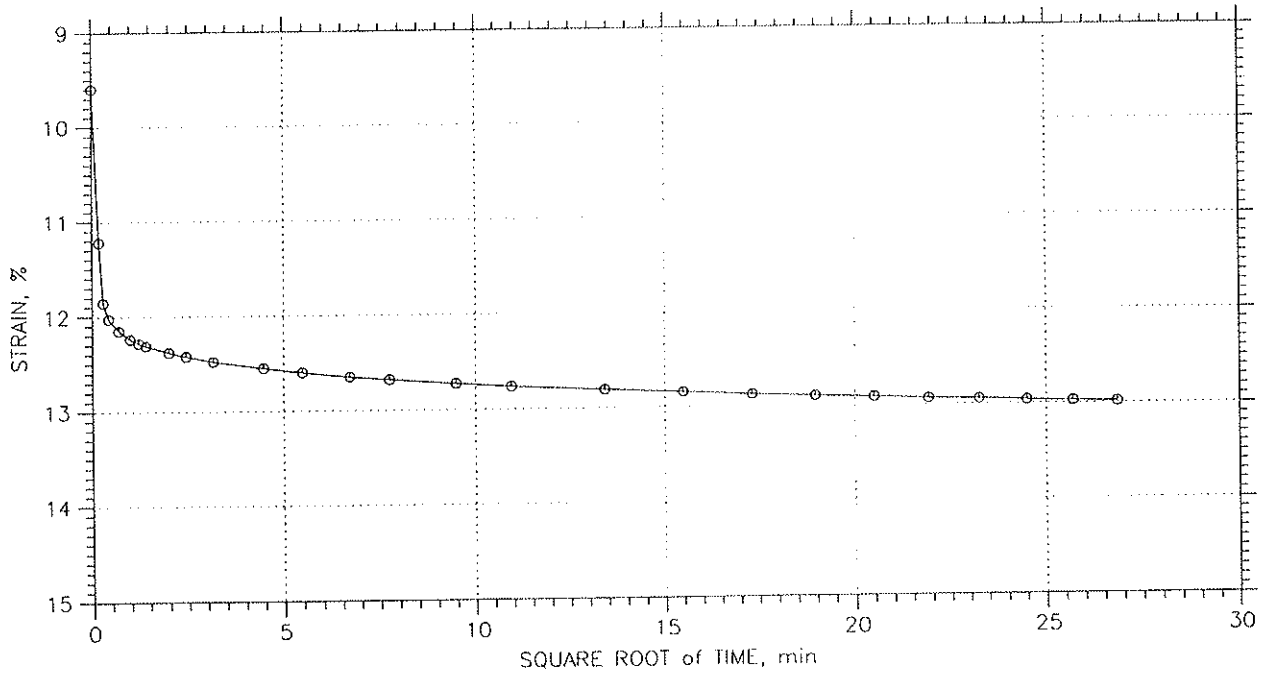
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 10

Stress: 16. tsf





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67A Mountain Boulevard Extension
Warren, New Jersey 07059

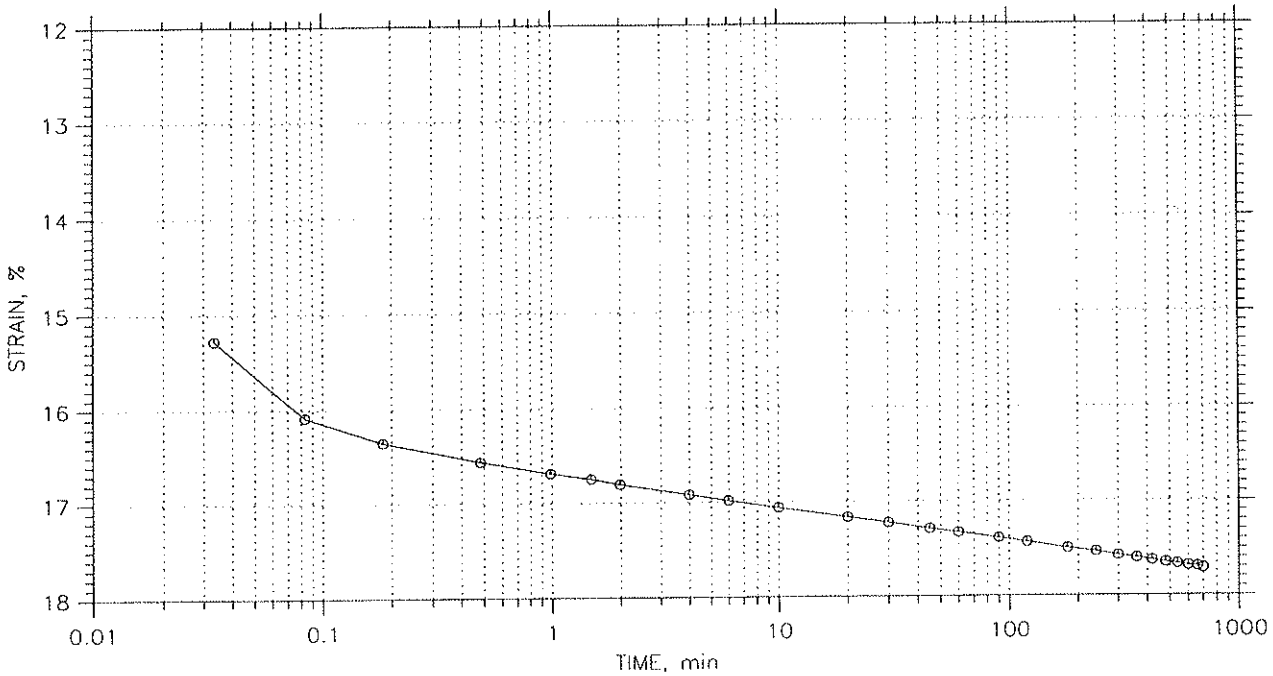
Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-2	Tested By: LL Sr.,	Checked By: LL Sr
Sample No.: U15	Test Date: 8/17/10	Depth: 52'-54'
Test No.: 2	Sample Type: undisturbed	Elevation: ---
Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)		
Remarks: See Undisturbed Log for details.		

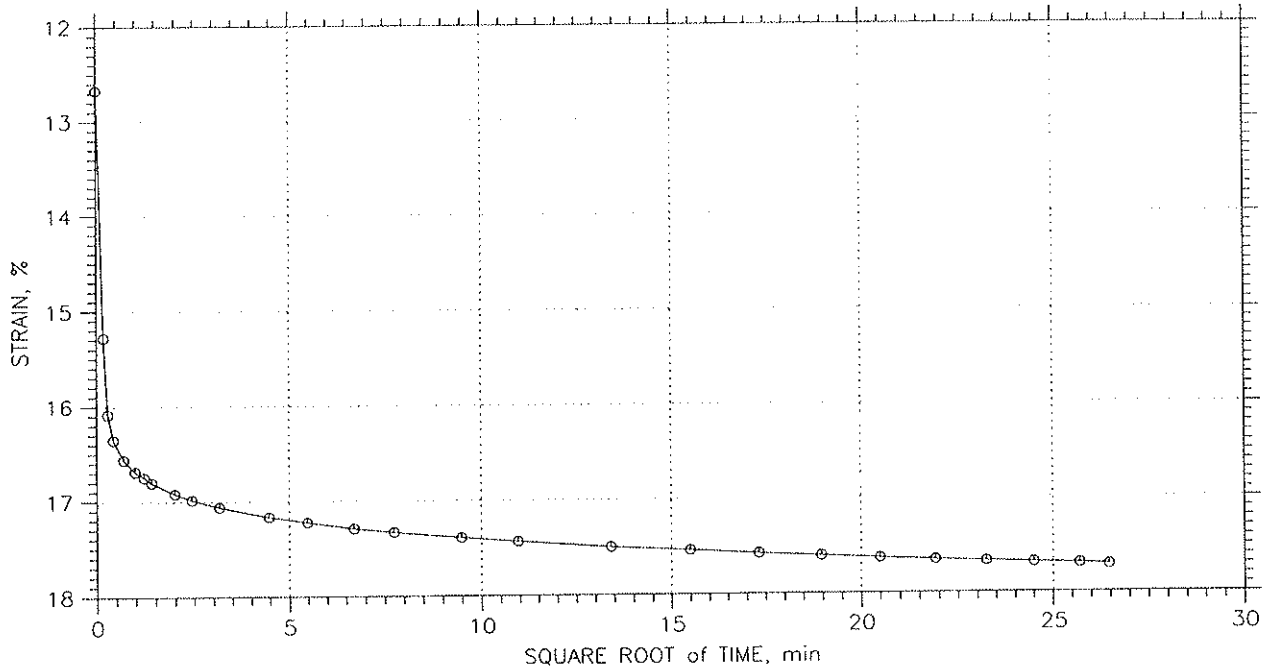
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 10

Stress: 32. tsf





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Warren, New Jersey 07059

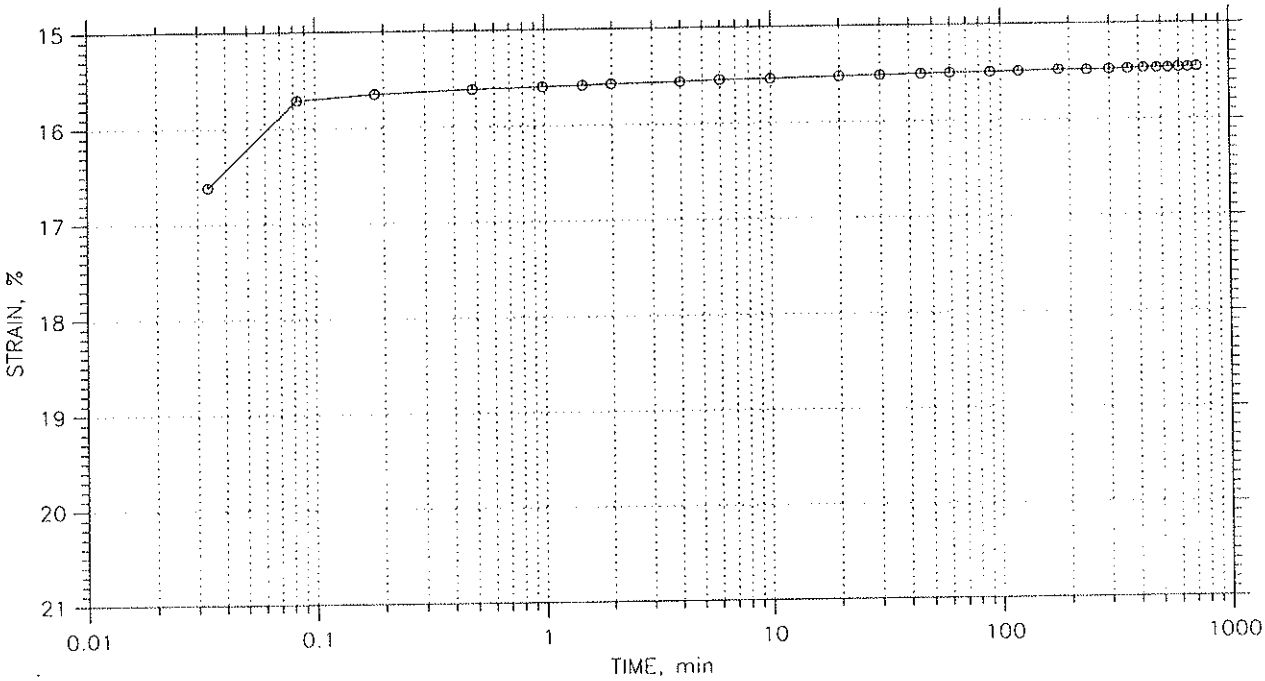
Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-2	Tested By: LL Sr.,	Checked By: LL Sr
Sample No.: U15	Test Date: 8/17/10	Depth: 52'-54'
Test No.: 2	Sample Type: undisturbed	Elevation: ---
Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)		
Remarks: See Undisturbed Log for details.		

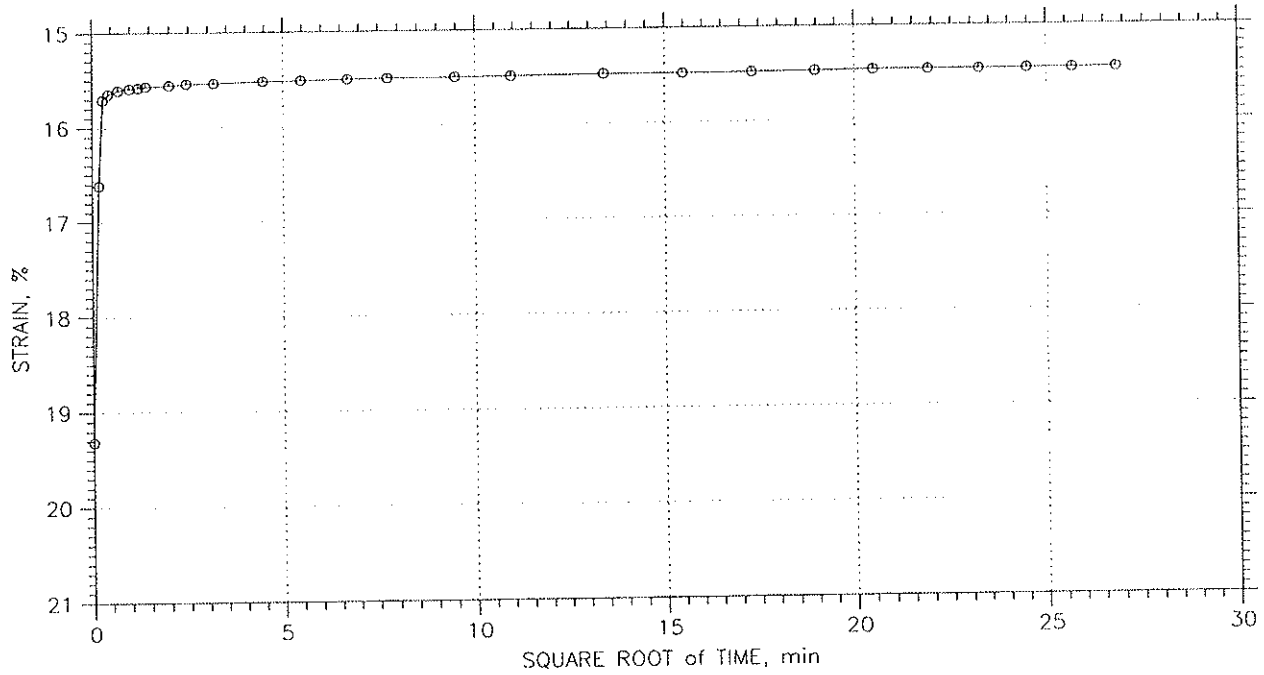
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 10

Stress: 2. tsf





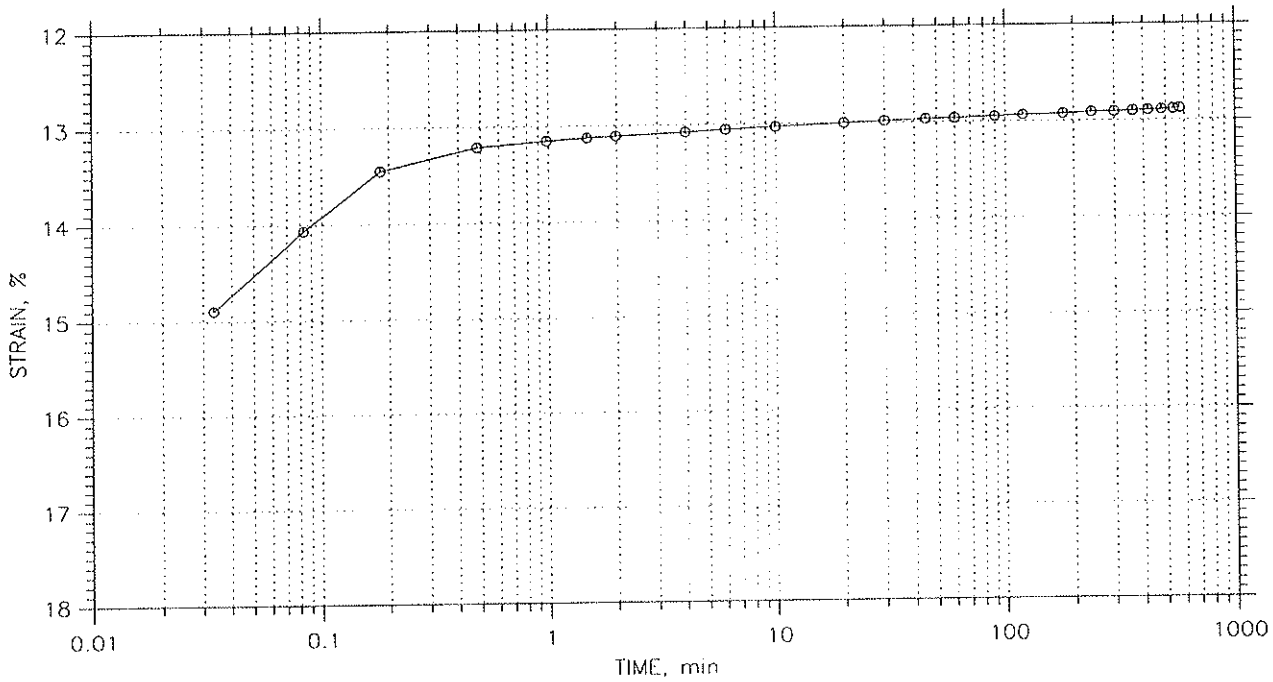
Paulus, Sokolowski & Sartor, LLC consulting engineers and environmental planners A KEYSPAN BUSINESS SOLUTION 67A Mountain Boulevard Extension Warren, New Jersey 07059	Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
	Boring No.: PSS-2	Tested By: LL Sr.,	Checked By: LL Sr
	Sample No.: U15	Test Date: 8/17/10	Depth: 52'-54'
	Test No.: 2	Sample Type: undisturbed	Elevation: ---
	Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)		
	Remarks: See Undisturbed Log for details.		

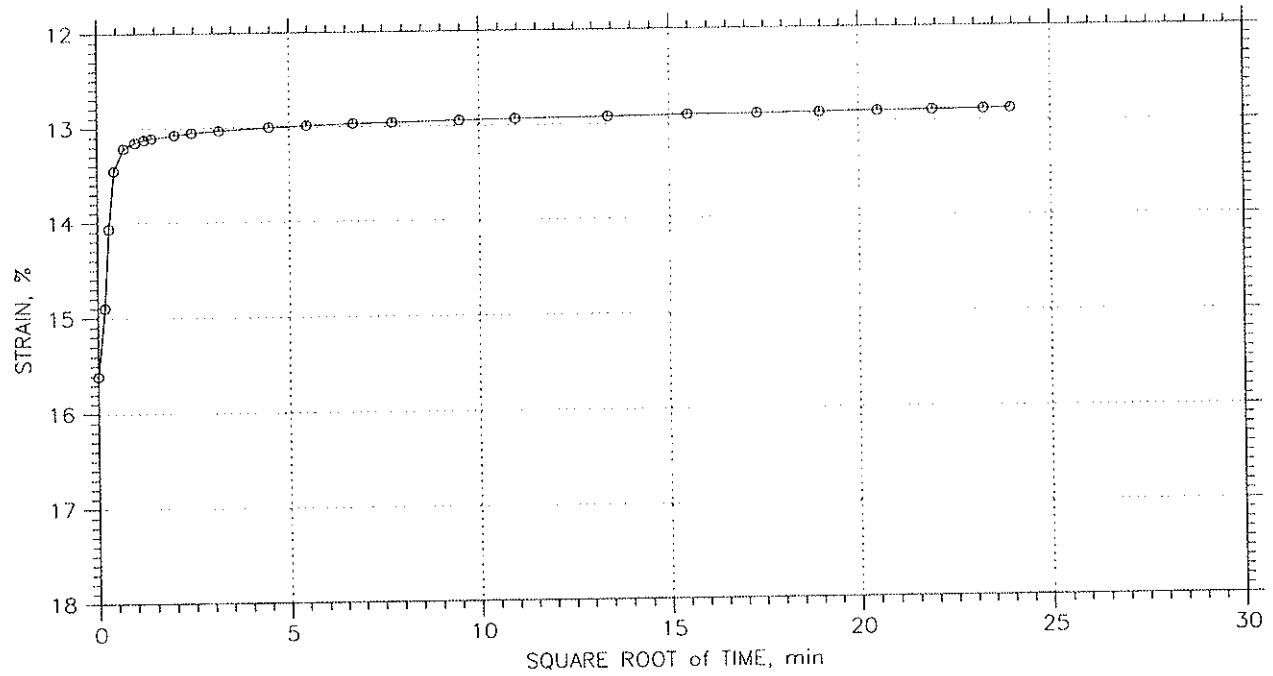
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 10

Stress: 0.25 tsf





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Project: A&D Levee	Location: Ansonia, Conn.	Project No.: 40190001020
Boring No.: PSS-2	Tested By: LL Sr.,	Checked By: LL Sr
Sample No.: U15	Test Date: 8/17/10	Depth: 52'-54'
Test No.: 2	Sample Type: undisturbed	Elevation: ---
Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)		
Remarks: See Undisturbed Log for details.		

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-2
Sample No.: U15
Test No.: 2

Location: Ansonia, Conn.
Tested By: LL Sr.,
Test Date: 8/17/10
Sample Type: undisturbed

Project No.: 40190001020
Checked By: LL Sr
Depth: 52'-54'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)
Remarks: See Undisturbed Log for details.

Estimated Specific Gravity: 2.69
Initial Void Ratio: 0.97
Final Void Ratio: 0.72

Liquid Limit: NP
Plastic Limit: NP
Plasticity Index: NP

Initial Height: 1.00 in
Specimen Diameter: 2.50 in

	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
Container ID	B	RING	ring	105
Wt. Container + Wet Soil, gm	121.06	687.46	677.51	150.01
Wt. Container + Dry Soil, gm	97.72	648.21	648.21	120.71
Wt. Container, gm	32.28	538.5	538.5	11
Wt. Dry Soil, gm	65.44	109.71	109.71	109.71
Water Content, %	35.67	35.78	26.71	26.71
Void Ratio	---	0.97	0.72	---
Degree of Saturation, %	---	98.98	100.02	---
Dry Unit Weight, pcf	---	85.144	97.731	---

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-2
Sample No.: U15
Test No.: 2

Location: Ansonia, Conn.
Tested By: LL Sr.,
Test Date: 8/17/10
Sample Type: undisturbed

Project No.: 40190001020
Checked By: LL Sr
Depth: 52'-54'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)
Remarks: See Undisturbed Log for details.

	Applied Stress tsf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting Sq.Rt. min	T50 Fitting Log min	Coefficient of Consolidation Sq.Rt. ft^2/day	Coefficient of Consolidation Log ft^2/day	Coefficient of Consolidation Ave. ft^2/day
1	0.25	0.01992	0.933	1.99	0.1	0.0	3.86e+000	0.00e+000	3.86e+000
2	0.5	0.02843	0.916	2.84	0.2	0.1	3.05e+000	6.22e+000	4.09e+000
3	1	0.0398	0.894	3.98	0.2	0.1	2.58e+000	7.80e+000	3.87e+000
4	2	0.05357	0.867	5.36	0.1	0.1	6.56e+000	8.43e+000	7.38e+000
5	4	0.07093	0.832	7.09	0.0	0.0	1.35e+001	0.00e+000	1.35e+001
6	8	0.09545	0.784	9.55	0.0	0.0	1.40e+001	9.75e+000	1.15e+001
7	16	0.1299	0.716	12.99	0.1	0.0	5.52e+000	9.89e+000	7.09e+000
8	32	0.1771	0.623	17.71	0.1	0.0	4.90e+000	1.03e+001	6.65e+000
9	2	0.1546	0.667	15.46	0.0	0.0	2.48e+001	0.00e+000	2.48e+001
10	0.25	0.1288	0.718	12.88	0.1	0.0	4.49e+000	0.00e+000	4.49e+000

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-2
Sample No.: U15
Test No.: 2

Location: Ansonia, Conn.
Tested By: LL Sr.,
Test Date: 8/17/10
Sample Type: undisturbed

Project No.: 40190001020
Checked By: LL Sr
Depth: 52'-54'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 1 of 10
Applied Stress: 0.25 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	0.0137	-0.0007666	-0.08	0.974
2	0.03	0.18	0.0294	0.001099	0.11	0.970
3	0.08	0.29	0.0705	0.005435	0.54	0.962
4	0.18	0.43	0.235	0.01663	1.66	0.940
5	0.48	0.70	0.245	0.01762	1.76	0.938
6	0.98	0.99	0.247	0.01784	1.78	0.937
7	1.48	1.22	0.247	0.01806	1.81	0.937
8	1.98	1.41	0.249	0.01822	1.82	0.936
9	3.98	2.00	0.249	0.01844	1.84	0.936
10	5.98	2.45	0.249	0.01861	1.86	0.936
11	9.98	3.16	0.249	0.01877	1.88	0.935
12	19.98	4.47	0.249	0.01899	1.90	0.935
13	29.98	5.48	0.249	0.0191	1.91	0.935
14	44.98	6.71	0.249	0.01921	1.92	0.934
15	59.98	7.74	0.249	0.01932	1.93	0.934
16	89.98	9.49	0.249	0.01938	1.94	0.934
17	119.98	10.95	0.249	0.01949	1.95	0.934
18	179.98	13.42	0.249	0.0196	1.96	0.934
19	239.98	15.49	0.249	0.01965	1.97	0.934
20	299.98	17.32	0.249	0.01971	1.97	0.933
21	359.98	18.97	0.249	0.01976	1.98	0.933
22	419.98	20.49	0.249	0.01982	1.98	0.933
23	479.98	21.91	0.249	0.01982	1.98	0.933
24	539.98	23.24	0.249	0.01982	1.98	0.933
25	599.98	24.49	0.249	0.01987	1.99	0.933
26	659.98	25.69	0.249	0.01992	1.99	0.933
27	719.98	26.83	0.249	0.01992	1.99	0.933
28	720.12	26.84	0.249	0.01992	1.99	0.933

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-2
Sample No.: U15
Test No.: 2

Location: Ansonia, Conn.
Tested By: LL Sr.,
Test Date: 8/17/10
Sample Type: undisturbed

Project No.: 40190001020
Checked By: LL Sr
Depth: 52'-54'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 2 of 10
Applied Stress: 0.5 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	0.264	0.01921	1.92	0.934
2	0.03	0.18	0.351	0.02074	2.07	0.931
3	0.08	0.29	0.472	0.02376	2.38	0.925
4	0.18	0.43	0.492	0.02513	2.51	0.923
5	0.48	0.70	0.498	0.02563	2.56	0.922
6	0.98	0.99	0.498	0.02596	2.60	0.921
7	1.48	1.22	0.498	0.02612	2.61	0.921
8	1.98	1.41	0.498	0.02618	2.62	0.921
9	3.98	2.00	0.499	0.02645	2.65	0.920
10	5.98	2.45	0.499	0.02667	2.67	0.920
11	9.98	3.16	0.499	0.02678	2.68	0.919
12	19.98	4.47	0.499	0.02705	2.71	0.919
13	29.98	5.48	0.499	0.02722	2.72	0.919
14	44.98	6.71	0.499	0.02733	2.73	0.918
15	59.98	7.74	0.499	0.02744	2.74	0.918
16	89.98	9.49	0.499	0.0276	2.76	0.918
17	119.98	10.95	0.499	0.02771	2.77	0.918
18	179.98	13.42	0.499	0.02782	2.78	0.917
19	239.98	15.49	0.501	0.02799	2.80	0.917
20	299.98	17.32	0.499	0.02799	2.80	0.917
21	359.98	18.97	0.499	0.02815	2.82	0.917
22	419.98	20.49	0.499	0.02821	2.82	0.917
23	479.98	21.91	0.499	0.02826	2.83	0.917
24	539.98	23.24	0.501	0.02837	2.84	0.916
25	599.98	24.49	0.499	0.02837	2.84	0.916
26	659.98	25.69	0.499	0.02843	2.84	0.916
27	719.98	26.83	0.499	0.02843	2.84	0.916
28	720.05	26.83	0.499	0.02843	2.84	0.916

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-2
Sample No.: U15
Test No.: 2

Location: Ansonia, Conn.
Tested By: LL Sr.,
Test Date: 8/17/10
Sample Type: undisturbed

Project No.: 40190001020
Checked By: LL Sr
Depth: 52'-54'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 3 of 10
Applied Stress: 1 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	0.613	0.02795	2.79	0.917
2	0.03	0.18	0.791	0.03075	3.07	0.912
3	0.08	0.29	0.975	0.03481	3.48	0.904
4	0.18	0.43	0.993	0.03541	3.54	0.902
5	0.48	0.70	0.997	0.03601	3.60	0.901
6	0.98	0.99	0.997	0.03634	3.63	0.901
7	1.48	1.22	0.997	0.03656	3.66	0.900
8	1.98	1.41	0.997	0.03673	3.67	0.900
9	3.98	2.00	0.997	0.03706	3.71	0.899
10	5.98	2.45	0.999	0.03728	3.73	0.899
11	9.98	3.16	0.999	0.03755	3.76	0.898
12	19.98	4.47	0.999	0.03799	3.80	0.897
13	29.98	5.48	0.999	0.03821	3.82	0.897
14	44.98	6.71	0.999	0.03837	3.84	0.897
15	59.98	7.74	0.999	0.03854	3.85	0.896
16	89.98	9.49	0.999	0.0387	3.87	0.896
17	119.98	10.95	0.999	0.03892	3.89	0.896
18	179.98	13.42	0.999	0.03909	3.91	0.895
19	239.98	15.49	0.999	0.03925	3.93	0.895
20	299.98	17.32	0.999	0.03936	3.94	0.895
21	359.98	18.97	0.999	0.03942	3.94	0.895
22	419.98	20.49	0.999	0.03953	3.95	0.894
23	479.98	21.91	0.999	0.03958	3.96	0.894
24	539.98	23.24	0.999	0.03964	3.96	0.894
25	599.98	24.49	0.999	0.03969	3.97	0.894
26	659.98	25.69	0.999	0.03975	3.97	0.894
27	719.98	26.83	0.999	0.0398	3.98	0.894
28	720.05	26.83	0.997	0.0398	3.98	0.894

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-2
Sample No.: U15
Test No.: 2

Location: Ansonia, Conn.
Tested By: LL Sr.,
Test Date: 8/17/10
Sample Type: undisturbed

Project No.: 40190001020
Checked By: LL Sr
Depth: 52'-54'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 4 of 10
Applied Stress: 2 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	1.3	0.03924	3.92	0.895
2	0.03	0.18	1.73	0.04418	4.42	0.885
3	0.08	0.29	1.95	0.04841	4.84	0.877
4	0.18	0.43	1.98	0.04918	4.92	0.875
5	0.48	0.70	2	0.04983	4.98	0.874
6	0.98	0.99	2	0.05022	5.02	0.873
7	1.48	1.22	2	0.05049	5.05	0.873
8	1.98	1.41	2	0.0506	5.06	0.873
9	3.98	2.00	2	0.05093	5.09	0.872
10	5.98	2.45	2	0.0511	5.11	0.872
11	9.98	3.16	2	0.05137	5.14	0.871
12	19.98	4.47	2	0.05165	5.16	0.870
13	29.98	5.48	2	0.05187	5.19	0.870
14	44.98	6.71	2	0.05214	5.21	0.869
15	59.98	7.74	2	0.0523	5.23	0.869
16	89.98	9.49	2	0.05258	5.26	0.869
17	119.98	10.95	2	0.05263	5.26	0.869
18	179.98	13.42	2	0.05291	5.29	0.868
19	239.98	15.49	2	0.05307	5.31	0.868
20	299.98	17.32	2	0.05318	5.32	0.867
21	359.98	18.97	2	0.05329	5.33	0.867
22	419.98	20.49	2	0.05335	5.33	0.867
23	479.98	21.91	2	0.05346	5.35	0.867
24	539.98	23.24	2	0.05351	5.35	0.867
25	599.98	24.49	2	0.05357	5.36	0.867
26	659.98	25.69	2	0.05362	5.36	0.867
27	719.98	26.83	2	0.05362	5.36	0.867
28	720.05	26.83	2	0.05357	5.36	0.867

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-2
Sample No.: U15
Test No.: 2

Location: Ansonia, Conn.
Tested By: LL Sr.,
Test Date: 8/17/10
Sample Type: undisturbed

Project No.: 40190001020
Checked By: LL Sr
Depth: 52'-54'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 5 of 10
Applied Stress: 4 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	2.72	0.0532	5.32	0.867
2	0.03	0.18	3.65	0.06105	6.11	0.852
3	0.08	0.29	3.93	0.06533	6.53	0.843
4	0.18	0.43	3.99	0.06632	6.63	0.842
5	0.48	0.70	3.99	0.06692	6.69	0.840
6	0.98	0.99	4	0.06731	6.73	0.840
7	1.48	1.22	4	0.06747	6.75	0.839
8	1.98	1.41	4	0.06764	6.76	0.839
9	3.98	2.00	4	0.06791	6.79	0.838
10	5.98	2.45	4	0.06813	6.81	0.838
11	9.98	3.16	4	0.06841	6.84	0.837
12	19.98	4.47	4	0.06873	6.87	0.837
13	29.98	5.48	4	0.06895	6.90	0.836
14	44.98	6.71	4	0.06917	6.92	0.836
15	59.98	7.74	4	0.06928	6.93	0.836
16	89.98	9.49	4	0.06956	6.96	0.835
17	119.98	10.95	4	0.06978	6.98	0.835
18	179.98	13.42	4	0.07005	7.01	0.834
19	239.98	15.49	4	0.07016	7.02	0.834
20	299.98	17.32	4	0.07033	7.03	0.834
21	359.98	18.97	4	0.07044	7.04	0.833
22	419.98	20.49	4	0.07055	7.05	0.833
23	479.98	21.91	4	0.07066	7.07	0.833
24	539.98	23.24	4	0.07071	7.07	0.833
25	599.98	24.49	4	0.07077	7.08	0.833
26	659.98	25.69	4	0.07082	7.08	0.833
27	719.98	26.83	4	0.07088	7.09	0.833
28	720.05	26.83	4	0.07093	7.09	0.832

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-2
Sample No.: U15
Test No.: 2

Location: Ansonia, Conn.
Tested By: LL Sr.,
Test Date: 8/17/10
Sample Type: undisturbed

Project No.: 40190001020
Checked By: LL Sr
Depth: 52'-54'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 6 of 10
Applied Stress: 8 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	5.77	0.07103	7.10	0.832
2	0.03	0.18	7.42	0.08223	8.22	0.810
3	0.08	0.29	7.9	0.08744	8.74	0.800
4	0.18	0.43	7.99	0.08865	8.86	0.797
5	0.48	0.70	8	0.08958	8.96	0.796
6	0.98	0.99	8	0.09013	9.01	0.795
7	1.48	1.22	8	0.09046	9.05	0.794
8	1.98	1.41	8	0.09062	9.06	0.794
9	3.98	2.00	8	0.09117	9.12	0.792
10	5.98	2.45	8	0.09145	9.14	0.792
11	9.98	3.16	8	0.09178	9.18	0.791
12	19.98	4.47	8	0.09227	9.23	0.790
13	29.98	5.48	8	0.0926	9.26	0.790
14	44.98	6.71	8	0.09293	9.29	0.789
15	59.98	7.74	8	0.09315	9.31	0.789
16	89.98	9.49	8	0.09348	9.35	0.788
17	119.98	10.95	8	0.0937	9.37	0.788
18	179.98	13.42	8	0.09403	9.40	0.787
19	239.98	15.49	8	0.09425	9.42	0.786
20	299.98	17.32	8	0.09441	9.44	0.786
21	359.98	18.97	8	0.09458	9.46	0.786
22	419.98	20.49	8	0.09485	9.48	0.785
23	479.98	21.91	8	0.09501	9.50	0.785
24	539.98	23.24	8	0.09512	9.51	0.785
25	599.98	24.49	8	0.09529	9.53	0.784
26	659.98	25.69	8	0.09534	9.53	0.784
27	719.98	26.83	8	0.09545	9.55	0.784
28	720.05	26.83	8	0.09545	9.55	0.784

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-2
Sample No.: U15
Test No.: 2

Location: Ansonia, Conn.
Tested By: LL Sr.,
Test Date: 8/17/10
Sample Type: undisturbed

Project No.: 40190001020
Checked By: LL Sr
Depth: 52'-54'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 7 of 10
Applied Stress: 16 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	12	0.09599	9.60	0.783
2	0.03	0.18	15.1	0.1122	11.22	0.751
3	0.08	0.29	15.9	0.1185	11.85	0.739
4	0.18	0.43	16	0.1202	12.02	0.735
5	0.48	0.70	16	0.1215	12.15	0.733
6	0.98	0.99	16	0.1224	12.24	0.731
7	1.48	1.22	16	0.1228	12.28	0.730
8	1.98	1.41	16	0.1231	12.31	0.730
9	3.98	2.00	16	0.1238	12.38	0.728
10	5.98	2.45	16	0.1243	12.43	0.727
11	9.98	3.16	16	0.1248	12.48	0.726
12	19.98	4.47	16	0.1255	12.55	0.725
13	29.98	5.48	16	0.126	12.60	0.724
14	44.98	6.71	16	0.1265	12.65	0.723
15	59.98	7.74	16	0.1268	12.68	0.722
16	89.98	9.49	16	0.1273	12.73	0.721
17	119.98	10.95	16	0.1277	12.77	0.721
18	179.98	13.42	16	0.1281	12.81	0.720
19	239.98	15.49	16	0.1284	12.84	0.719
20	299.98	17.32	16	0.1288	12.88	0.718
21	359.98	18.97	16	0.129	12.90	0.718
22	419.98	20.49	16	0.1291	12.91	0.718
23	479.98	21.91	16	0.1294	12.94	0.717
24	539.98	23.24	16	0.1295	12.95	0.717
25	599.98	24.49	16	0.1296	12.96	0.717
26	659.98	25.69	16	0.1297	12.97	0.716
27	719.98	26.83	16	0.1299	12.99	0.716
28	720.06	26.83	16	0.1299	12.99	0.716

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-2
Sample No.: U15
Test No.: 2

Location: Ansonia, Conn.
Tested By: LL Sr.,
Test Date: 8/17/10
Sample Type: undisturbed

Project No.: 40190001020
Checked By: LL Sr
Depth: 52'-54'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 8 of 10
Applied Stress: 32 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	24.3	0.1267	12.67	0.722
2	0.03	0.18	30.7	0.1528	15.28	0.671
3	0.08	0.29	31.8	0.1608	16.08	0.655
4	0.18	0.43	31.9	0.1635	16.35	0.650
5	0.48	0.70	32	0.1656	16.56	0.646
6	0.98	0.99	32	0.1669	16.69	0.643
7	1.48	1.22	32	0.1675	16.75	0.642
8	1.98	1.41	32	0.168	16.80	0.641
9	3.98	2.00	32	0.1692	16.92	0.639
10	5.98	2.45	32	0.1698	16.98	0.637
11	9.98	3.16	32	0.1706	17.06	0.636
12	19.98	4.47	32	0.1717	17.17	0.634
13	29.98	5.48	32	0.1723	17.23	0.633
14	44.98	6.71	32	0.1729	17.29	0.631
15	59.98	7.74	32	0.1733	17.33	0.631
16	89.98	9.49	32	0.1739	17.39	0.629
17	119.98	10.95	32	0.1743	17.43	0.628
18	179.98	13.42	32	0.175	17.50	0.627
19	239.98	15.49	32	0.1754	17.54	0.626
20	299.98	17.32	32	0.1758	17.58	0.626
21	359.98	18.97	32	0.1761	17.61	0.625
22	419.98	20.49	32	0.1763	17.63	0.625
23	479.98	21.91	32	0.1765	17.65	0.624
24	539.98	23.24	32	0.1767	17.67	0.624
25	599.98	24.49	32	0.1769	17.69	0.623
26	659.98	25.69	32	0.177	17.70	0.623
27	700.26	26.46	32	0.1771	17.71	0.623

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-2
Sample No.: U15
Test No.: 2

Location: Ansonia, Conn.
Tested By: LL Sr.,
Test Date: 8/17/10
Sample Type: undisturbed

Project No.: 40190001020
Checked By: LL Sr
Depth: 52'-54'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 9 of 10
Applied Stress: 2 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	17.3	0.1931	19.31	0.591
2	0.03	0.18	3.49	0.1661	16.61	0.645
3	0.08	0.29	2.06	0.1571	15.71	0.663
4	0.18	0.43	2.01	0.1565	15.65	0.664
5	0.48	0.70	2	0.1561	15.61	0.664
6	0.98	0.99	2	0.1559	15.59	0.665
7	1.48	1.22	2	0.1558	15.58	0.665
8	1.98	1.41	2	0.1557	15.57	0.665
9	3.98	2.00	2	0.1556	15.56	0.665
10	5.98	2.45	2	0.1554	15.54	0.666
11	9.98	3.16	2	0.1554	15.54	0.666
12	19.98	4.47	2	0.1552	15.52	0.666
13	29.98	5.48	2	0.1552	15.52	0.666
14	44.98	6.71	2	0.1551	15.51	0.667
15	59.98	7.74	2	0.155	15.50	0.667
16	89.98	9.49	2	0.1549	15.49	0.667
17	119.98	10.95	2	0.1549	15.49	0.667
18	179.98	13.42	2	0.1548	15.48	0.667
19	239.98	15.49	2	0.1548	15.48	0.667
20	299.98	17.32	2	0.1548	15.48	0.667
21	359.98	18.97	2	0.1547	15.47	0.667
22	419.98	20.49	2	0.1547	15.47	0.667
23	479.98	21.91	2	0.1547	15.47	0.667
24	539.98	23.24	2	0.1547	15.47	0.667
25	599.98	24.49	2	0.1546	15.46	0.667
26	659.98	25.69	2	0.1546	15.46	0.667
27	719.98	26.83	2	0.1546	15.46	0.667
28	720.07	26.83	2	0.1546	15.46	0.667

CONSOLIDATION TEST DATA

Project: A&D Levee
Boring No.: PSS-2
Sample No.: U15
Test No.: 2

Location: Ansonia, Conn.
Tested By: LL Sr.,
Test Date: 8/17/10
Sample Type: undisturbed

Project No.: 40190001020
Checked By: LL Sr
Depth: 52'-54'
Elevation: ---

Soil Description: Thinly layered gray silt & clayey silt (ML) & f-sand, and silt (SM)
Remarks: See Undisturbed Log for details.

Constant Load Step: 10 of 10
Applied Stress: 0.25 tsf

	Elapsed Time min	Sq.Rt. of Time min	Stress tsf	Displacement in	Strain %	Void Ratio
1	0.00	0.00	1.31	0.1561	15.61	0.664
2	0.03	0.18	0.689	0.1489	14.89	0.679
3	0.08	0.29	0.358	0.1407	14.07	0.695
4	0.18	0.43	0.286	0.1345	13.45	0.707
5	0.48	0.70	0.257	0.1321	13.21	0.712
6	0.98	0.99	0.253	0.1315	13.15	0.713
7	1.48	1.22	0.251	0.1313	13.13	0.713
8	1.98	1.41	0.251	0.1311	13.11	0.714
9	3.98	2.00	0.249	0.1308	13.08	0.714
10	5.98	2.45	0.249	0.1306	13.06	0.715
11	9.98	3.16	0.251	0.1303	13.03	0.715
12	19.98	4.47	0.249	0.13	13.00	0.716
13	29.98	5.48	0.249	0.1298	12.98	0.716
14	44.98	6.71	0.249	0.1297	12.97	0.717
15	59.98	7.74	0.249	0.1296	12.96	0.717
16	89.98	9.49	0.249	0.1295	12.95	0.717
17	119.98	10.95	0.249	0.1293	12.93	0.717
18	179.98	13.42	0.249	0.1292	12.92	0.717
19	239.98	15.49	0.249	0.1291	12.91	0.718
20	299.98	17.32	0.251	0.1291	12.91	0.718
21	359.98	18.97	0.249	0.129	12.90	0.718
22	419.98	20.49	0.249	0.129	12.90	0.718
23	479.98	21.91	0.249	0.1289	12.89	0.718
24	539.98	23.24	0.249	0.1289	12.89	0.718
25	573.63	23.95	0.249	0.1288	12.88	0.718