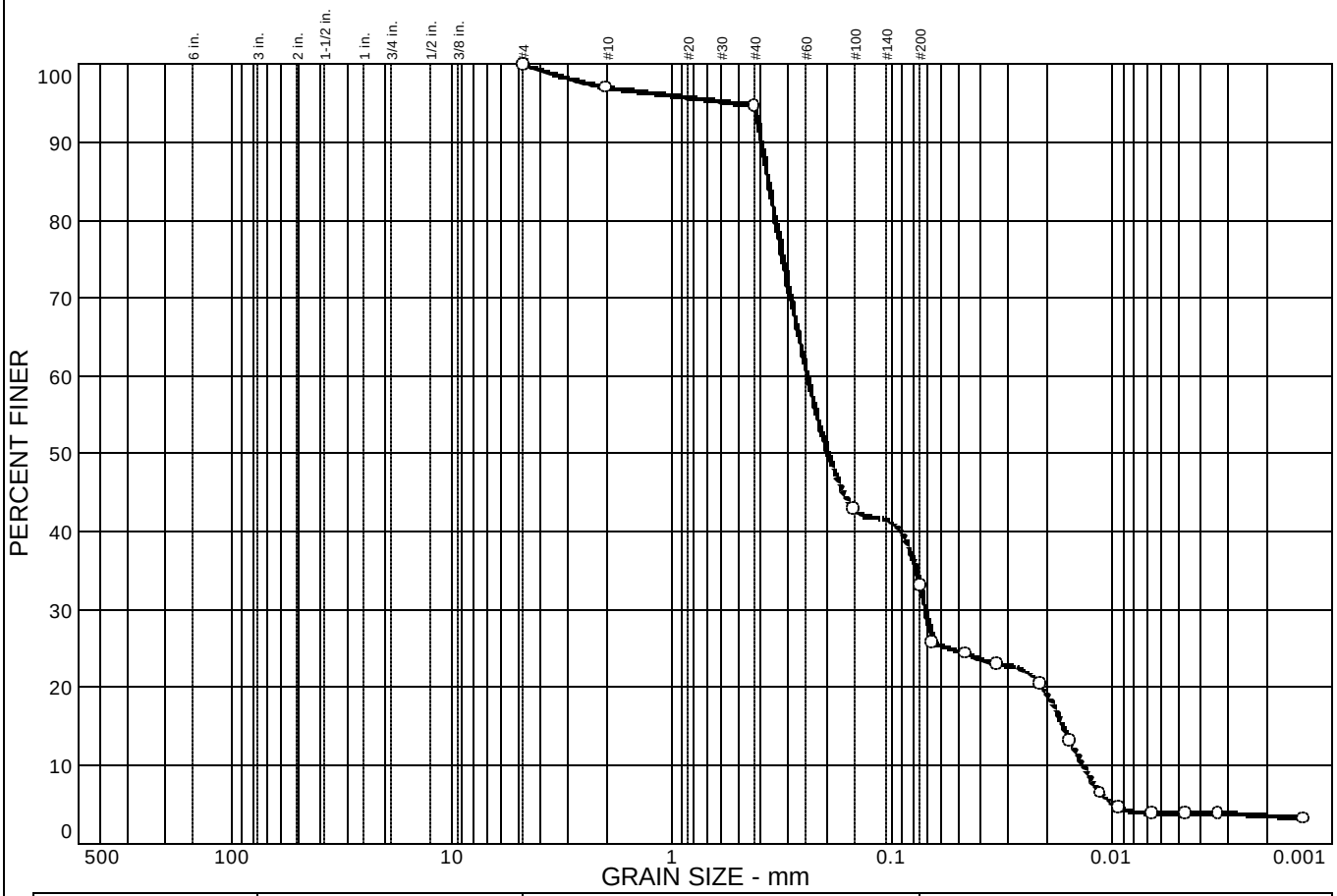
Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	3.0	2.3	61.7	29.1	3.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	97.0		
#40	94.7		
#100	42.9		
#200	33.0		

* (no specification provided)

Soil Description

DARK BROWN SILTY SAND, TRACE CLAY

Atterberg Limits

PL= 38 LL= 59 PI= 21

Coefficients

D_{85}= 0.368 D_{60}= 0.245 D_{50}= 0.197
D_{30}= 0.0712 D_{15}= 0.0168 D_{10}= 0.0137
C_u= 17.85 C_c= 1.51

Classification

USCS= MH AASHTO=

Remarks

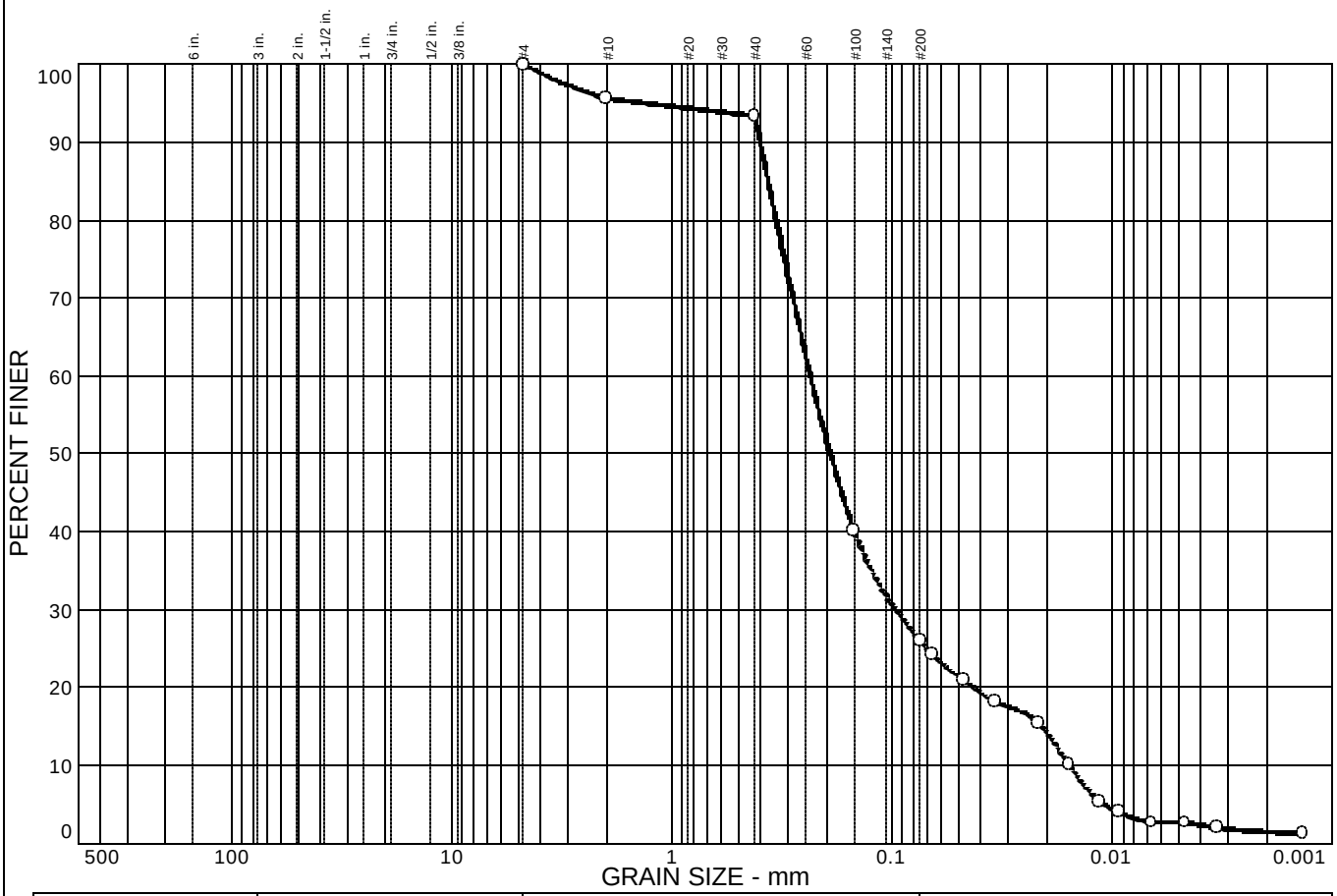
Sample No.: 1RA-06 EA-1 **Source of Sample:** On-site Material **Date:** 06/22/06
Location: **Elev./Depth:**

STS Consultants, Ltd.
1035 Kepler Drive
Green Bay, WI 54311

Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No: 4-29316A **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	4.4	2.2	67.4	23.3	2.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	95.6		
#40	93.4		
#100	40.2		
#200	26.0		

* (no specification provided)

Soil Description

BROWN SILTY SAND, TRACE CLAY

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{85}= 0.370 D_{60}= 0.238 D_{50}= 0.193
D_{30}= 0.0974 D_{15}= 0.0211 D_{10}= 0.0158
C_u= 15.06 C_c= 2.53

Classification

USCS= SM AASHTO=

Remarks

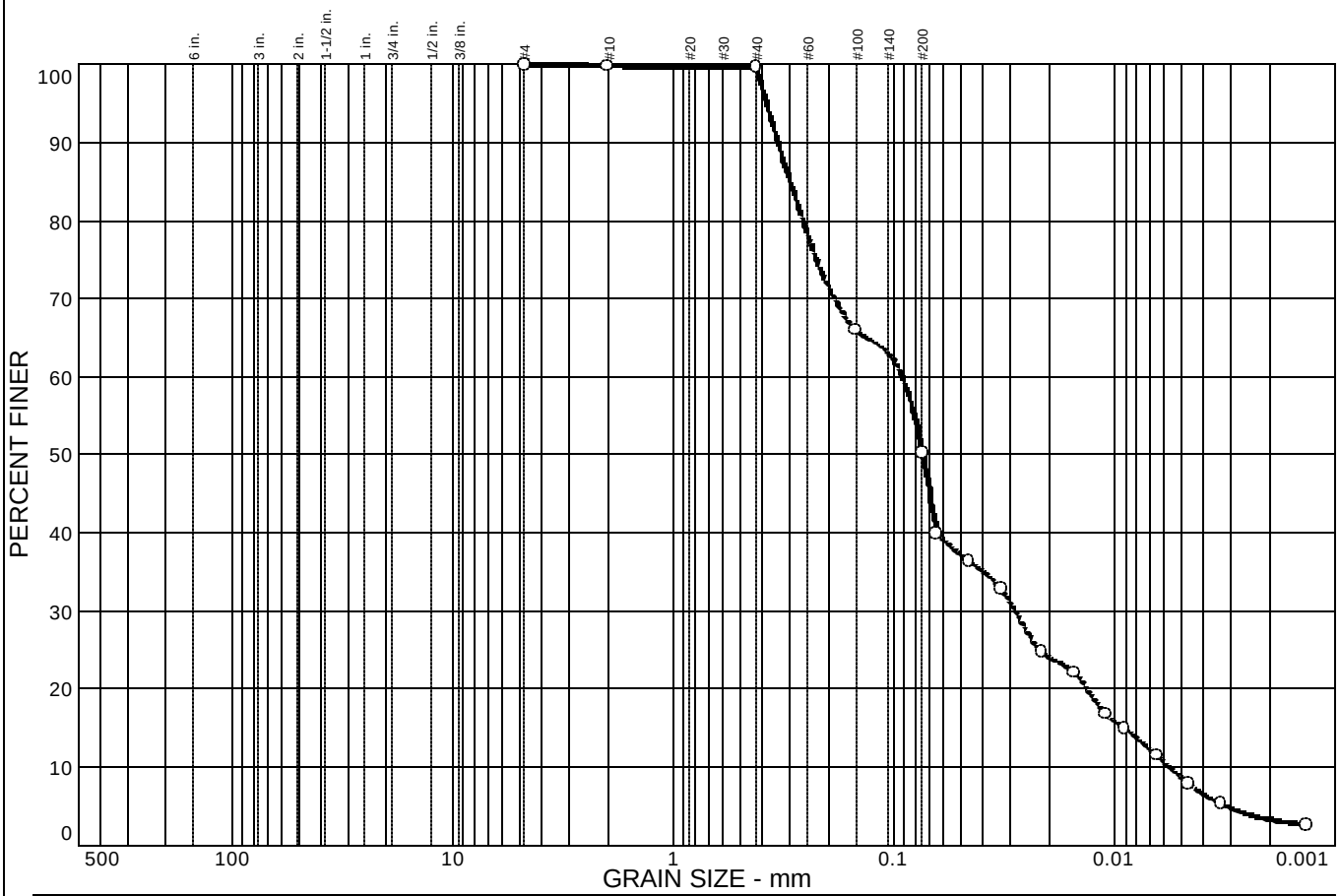
Sample No.: ED-1 COMPOSITE **Source of Sample:** On-site Material **Date:** 07/28/06
Location: **Elev./Depth:**

STS Consultants, Ltd.
1035 Kepler Drive
Green Bay, WI 54311

Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No: 4-29316A **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.2	0.2	49.4	41.6	8.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.8		
#40	99.6		
#100	66.0		
#200	50.2		

* (no specification provided)

Soil Description

DARK GRAY BROWN CLAYEY SILT WITH SAND

Atterberg Limits

PL= 86 LL= 131 PI= 45

Coefficients

D_{85}= 0.299 D_{60}= 0.0926 D_{50}= 0.0748
D_{30}= 0.0286 D_{15}= 0.0091 D_{10}= 0.0057
C_u= 16.24 C_c= 1.55

Classification

USCS= MH AASHTO=

Remarks

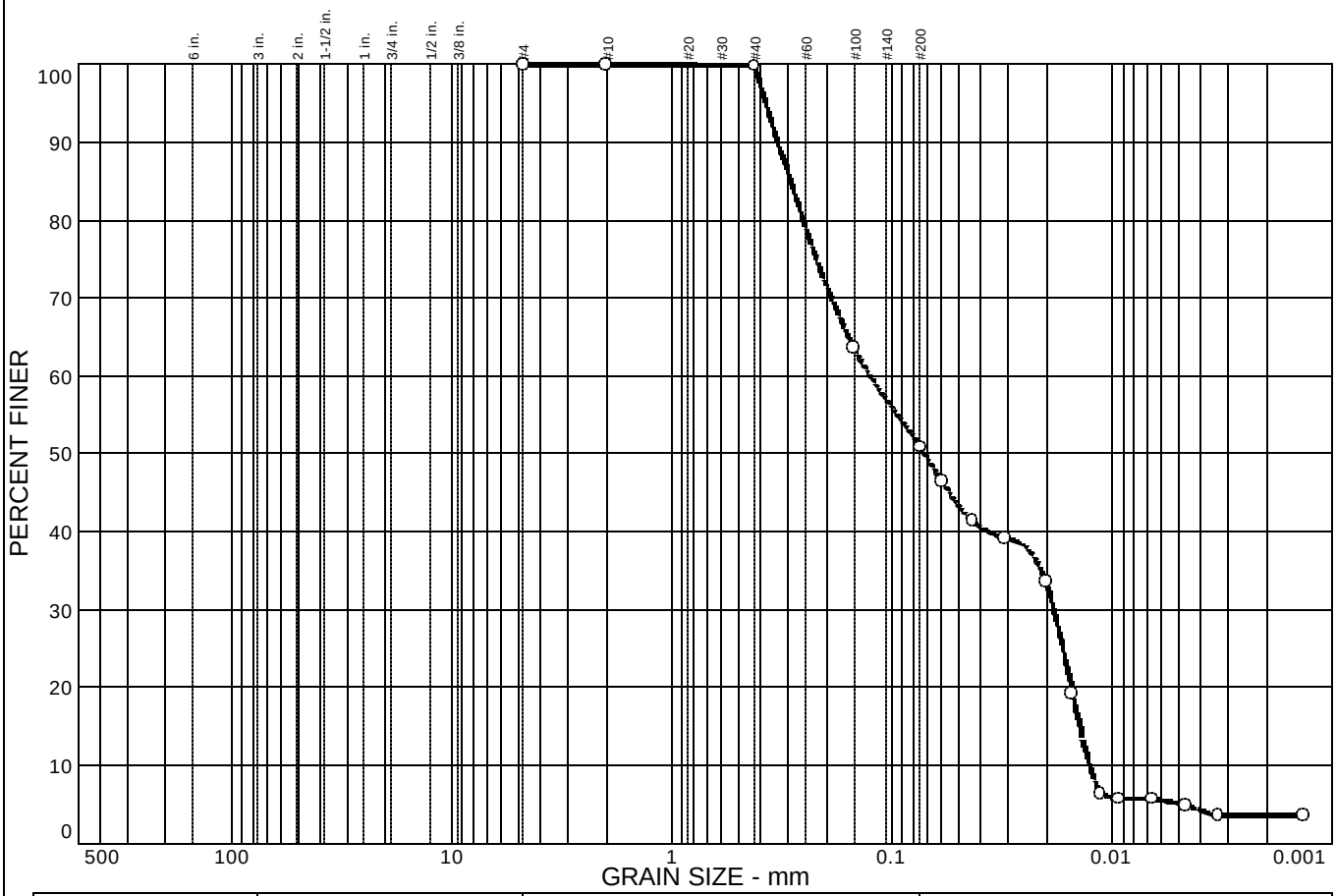
Sample No.: DS-11 **Source of Sample:** On-site Material **Date:** 10/02/06
Location: 1RA-06-ED6-DS-11-COMP **Elev./Depth:**

STS Consultants, Ltd.
1035 Kepler Drive
Green Bay, WI 54311

Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No: 4-29316A **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	0.1	48.9	45.8	5.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#40	99.8		
#100	63.6		
#200	50.9		

* (no specification provided)

Soil Description

DARK GRAY BROWN SILTY CLAY WITH SAND

Atterberg Limits

PL= 35 LL= 88 PI= 53

Coefficients

D_{85}= 0.292 D_{60}= 0.127 D_{50}= 0.0715
D_{30}= 0.0186 D_{15}= 0.0142 D_{10}= 0.0128
C_u= 9.90 C_c= 0.21

Classification

USCS= CH AASHTO=

Remarks

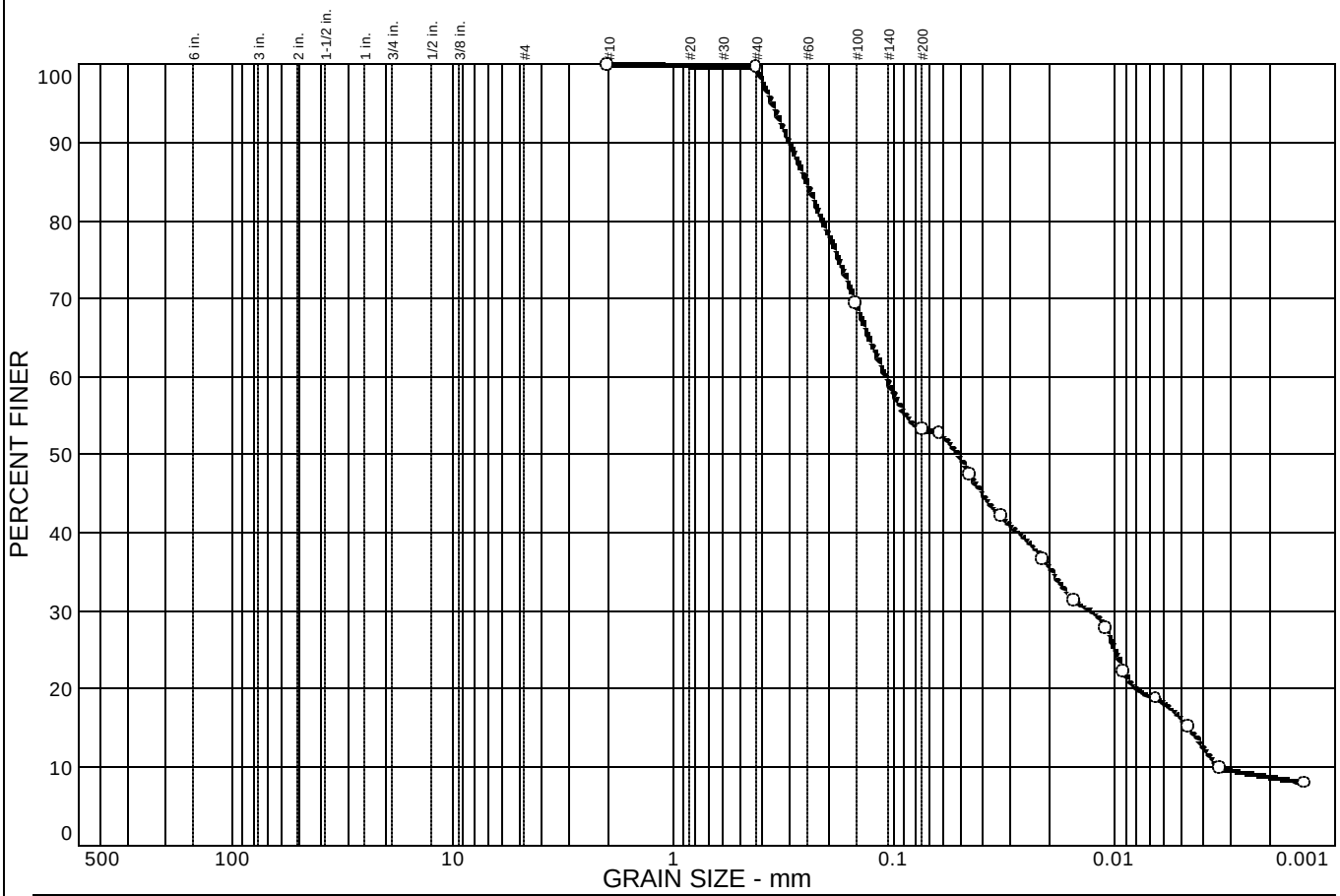
Sample No.: DS-14 **Source of Sample:** On-site Material **Date:** 10/02/06
Location: 1RA-06-ED8-DS-14-COMP **Elev./Depth:**

STS Consultants, Ltd.
1035 Kepler Drive
Green Bay, WI 54311

Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No: 4-29316A **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.4	46.4	37.1	16.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#40	99.6		
#100	69.4		
#200	53.2		

* (no specification provided)

Soil Description

DARK GRAY BROWN SANDY SILT, LITTLE CLAY (ORGANIC)

Atterberg Limits

PL= 68 LL= 204 PI= 136

Coefficients

D_{85}= 0.252 D_{60}= 0.110 D_{50}= 0.0517
D_{30}= 0.0129 D_{15}= 0.0046 D_{10}= 0.0034
C_u= 32.24 C_c= 0.44

Classification

USCS= OH AASHTO=

Remarks

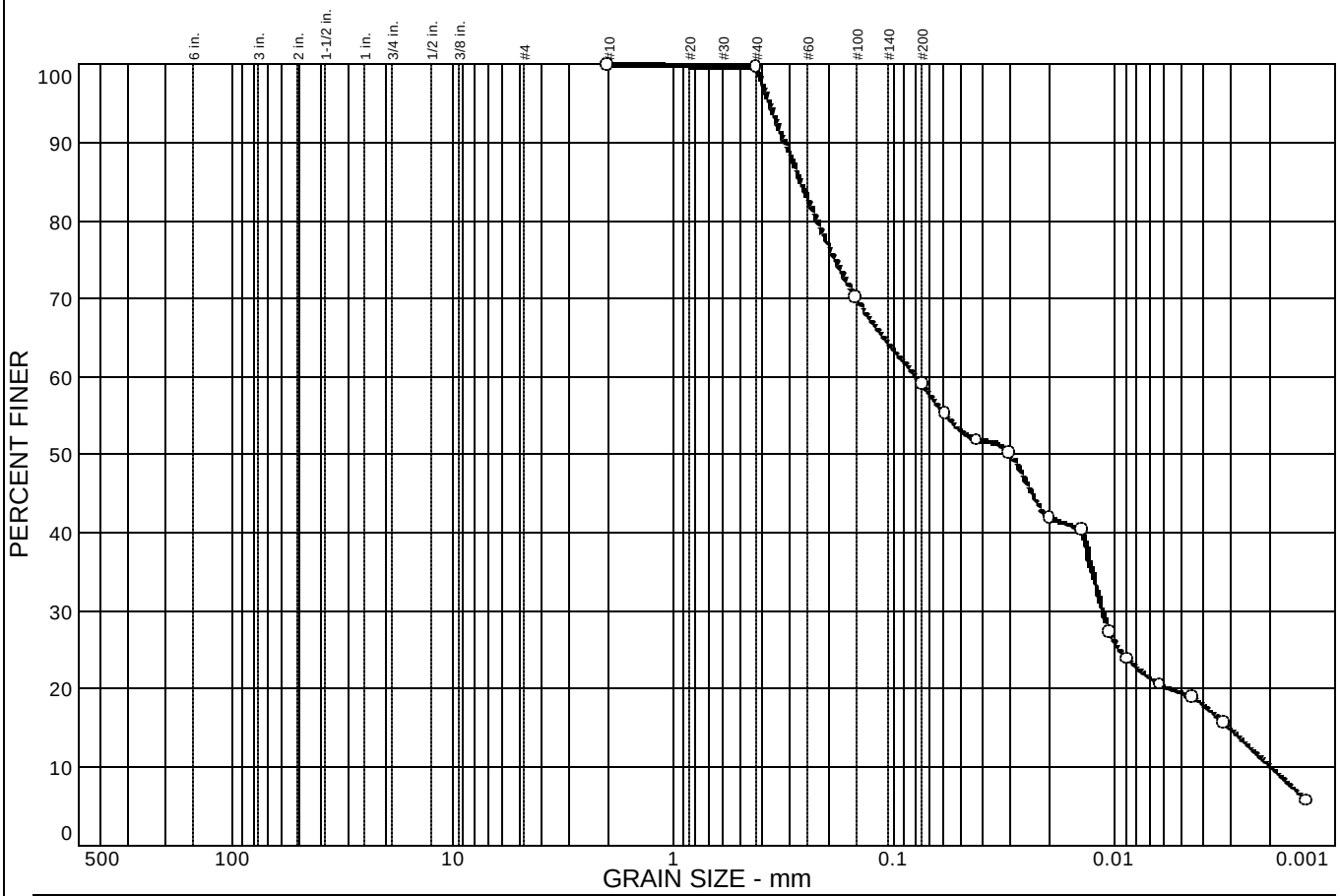
Sample No.: DS-26 **Source of Sample:** On-site Material **Date:** 11/01/06
Location: 1RA-06-ED-14-DS-26 COMP **Elev./Depth:**

STS Consultants, Ltd.
1035 Kepler Drive
Green Bay, WI 54311

Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No: 4-29316A **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.4	40.6	39.5	19.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#40	99.6		
#100	70.1		
#200	59.0		

* (no specification provided)

Soil Description

DARK GRAY BROWN ORGANIC CLAYEY SILT WITH SAND

Atterberg Limits

PL= 73 LL= 160 PI= 87

Coefficients

D_{85}= 0.268 D_{60}= 0.0800 D_{50}= 0.0297
D_{30}= 0.0115 D_{15}= 0.0030 D_{10}= 0.0020
C_u= 40.71 C_c= 0.84

Classification

USCS= OH AASHTO=

Remarks

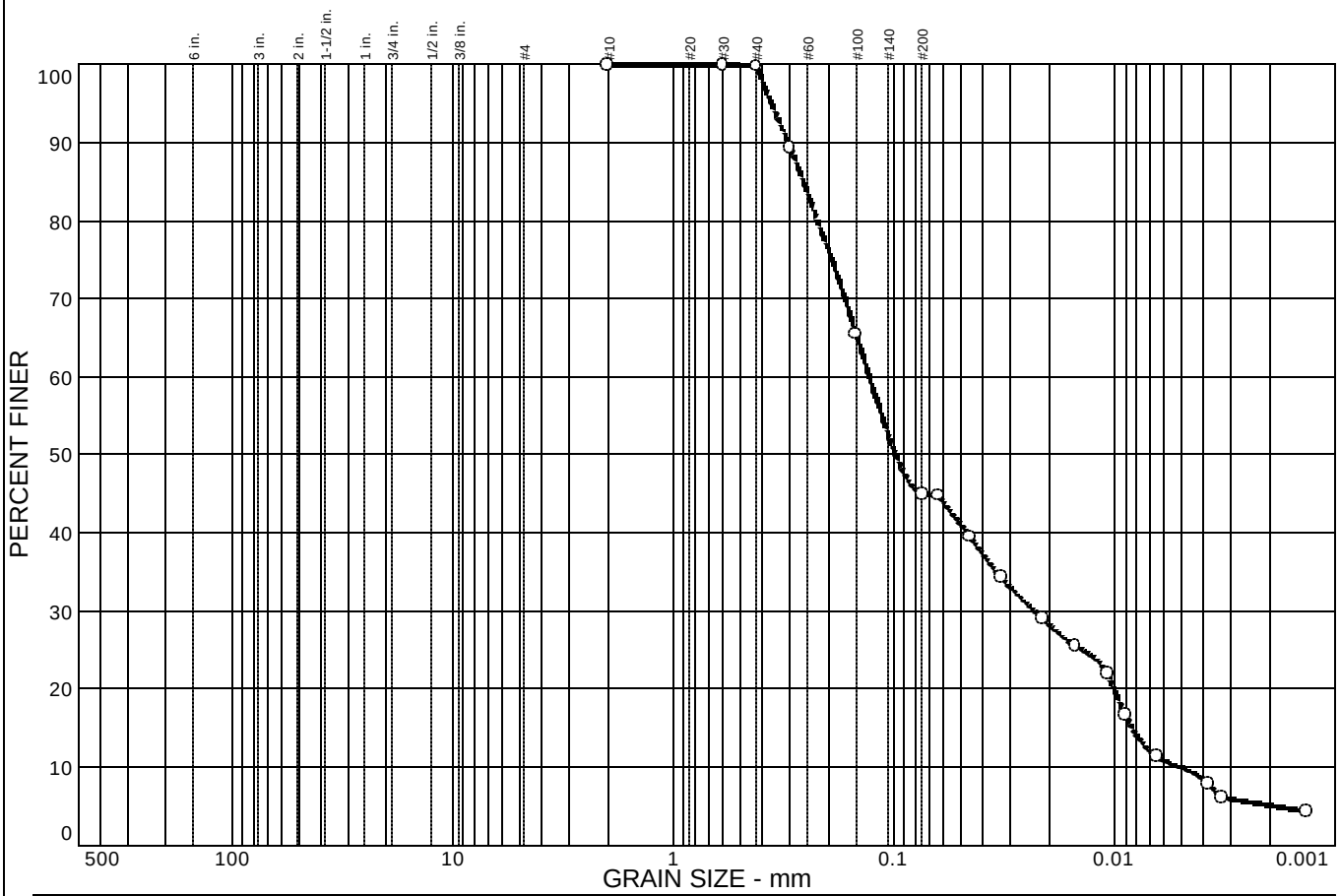
Sample No.: DS-29 COMP **Source of Sample:** On-site Material **Date:** 11/9/06
Location: 1RA-06-NWB1-DS-29 COMP **Elev./Depth:**

STS Consultants, Ltd.
1035 Kepler Drive
Green Bay, WI 54311

Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No: 4-29316A **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.0	0.2	54.9	35.0	9.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#30	99.9		
#40	99.8		
#50	89.4		
#100	65.5		
#200	44.9		

* (no specification provided)

Soil Description

DARK GRAY BROWN ORGANIC SANDY SILT

Atterberg Limits

PL= 101 LL= 204 PI= 103

Coefficients

D_{85}= 0.261 D_{60}= 0.131 D_{50}= 0.0992
D_{30}= 0.0231 D_{15}= 0.0084 D_{10}= 0.0051
C_u= 25.70 C_c= 0.80

Classification

USCS= MH AASHTO=

Remarks

Sample No.: DS-43 COMP **Source of Sample:** On-site Material **Date:** 12/18/06
Location: 1-RA-06-SWC1-DS-43-COMP **Elev./Depth:** COMP

STS Consultants, Ltd.
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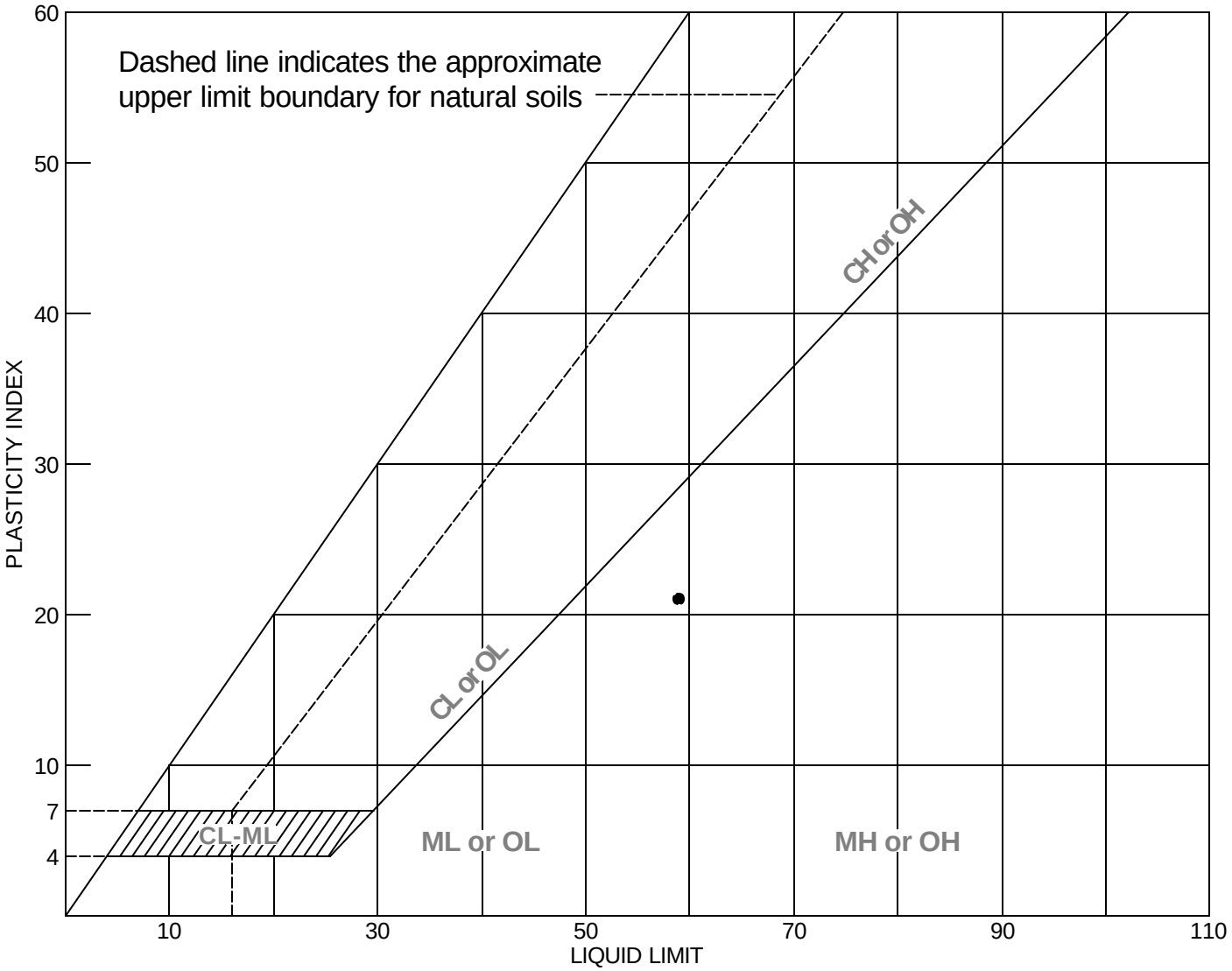
Green Bay, WI 54311

Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No: 4-29316A **Figure**

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	On-site	1RA-06 EA-1		78.4	38	59	21	MH

STS Consultants, Ltd.
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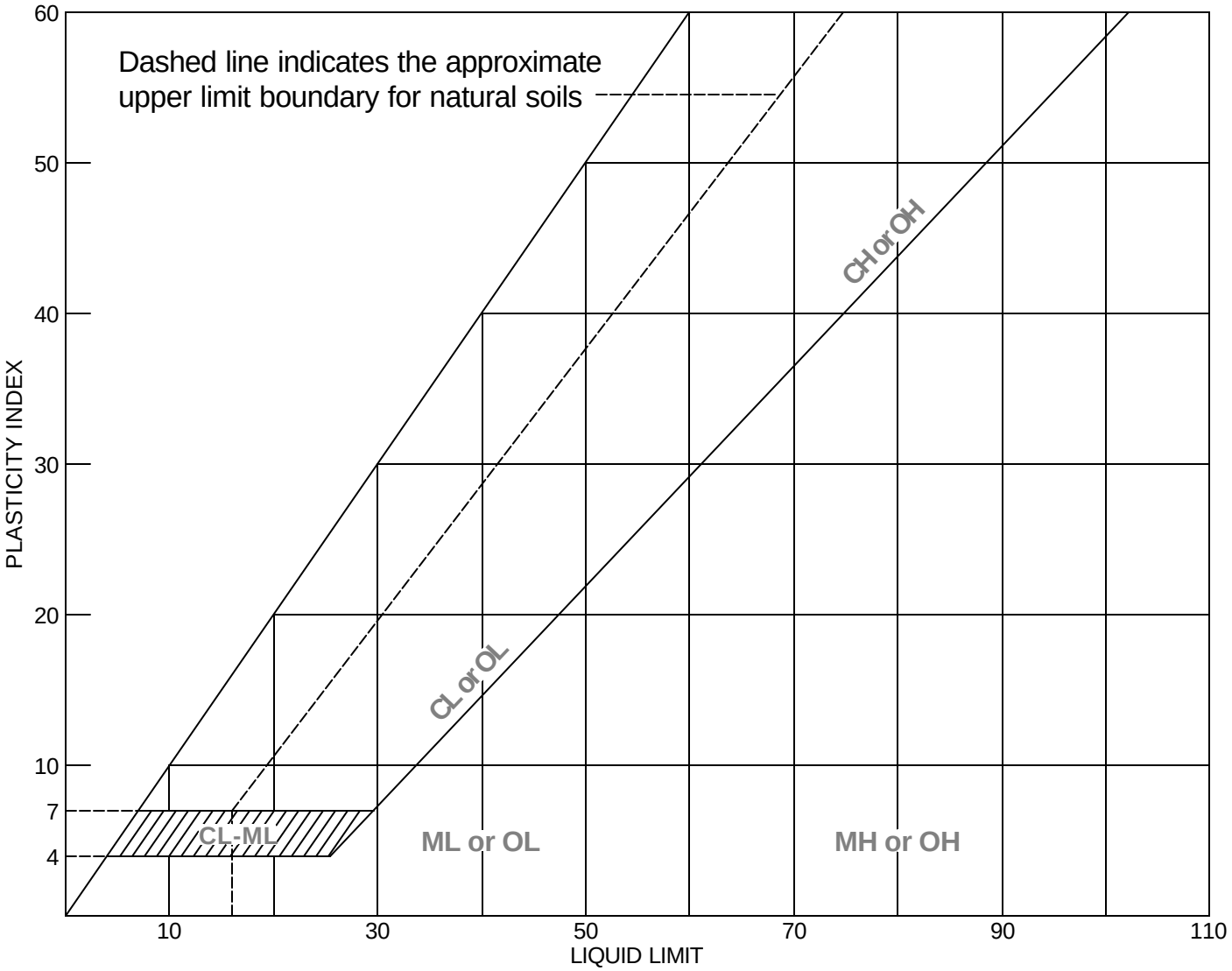
Green Bay, WI 54311

Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No.: 4-29316A **Figure**

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	On-site	ED-1			NP	NV	NP	SM

STS Consultants, Ltd.
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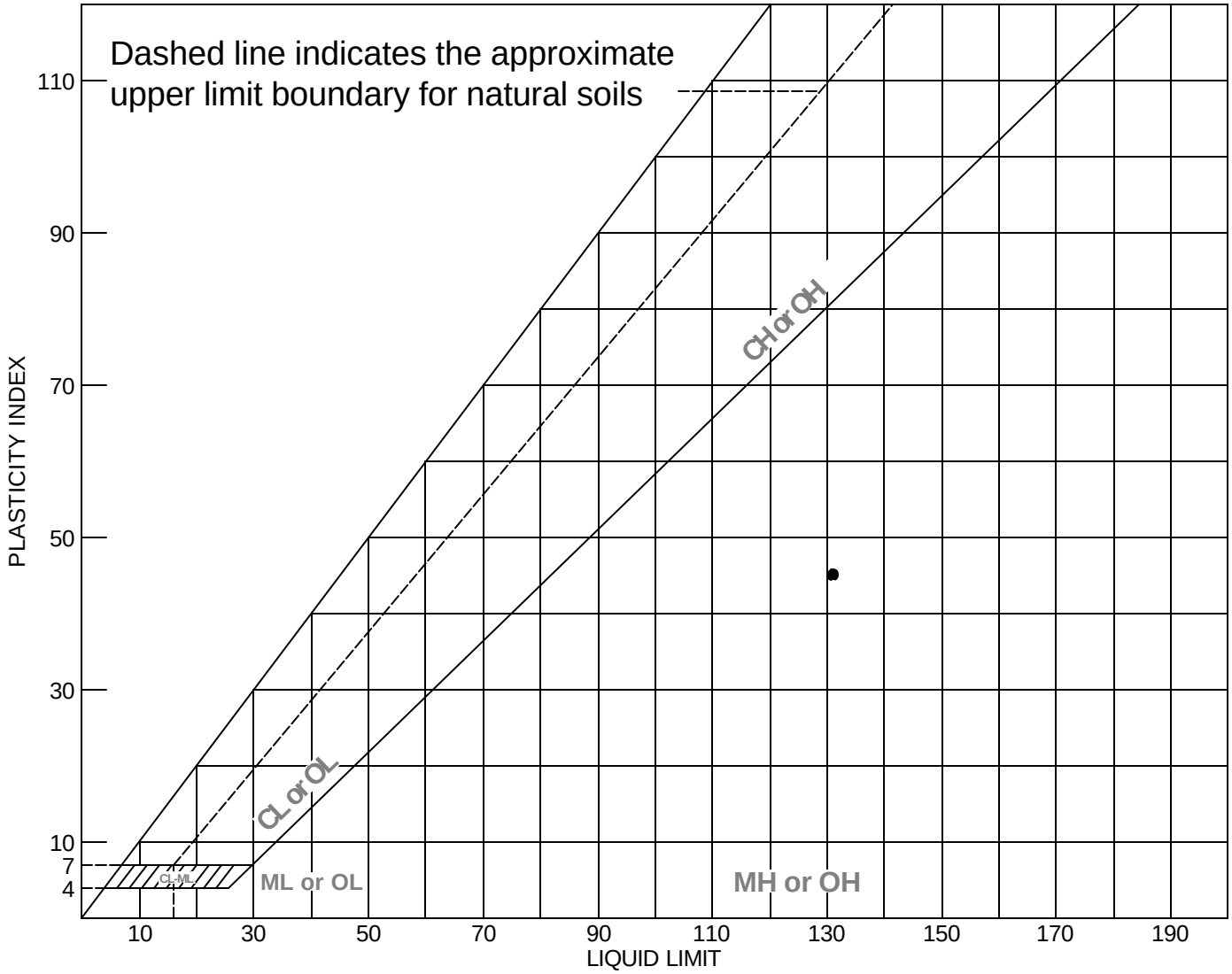
Green Bay, WI 54311

Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No.: 4-29316A **Figure**

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	On-site	DS-11			86	131	45	MH

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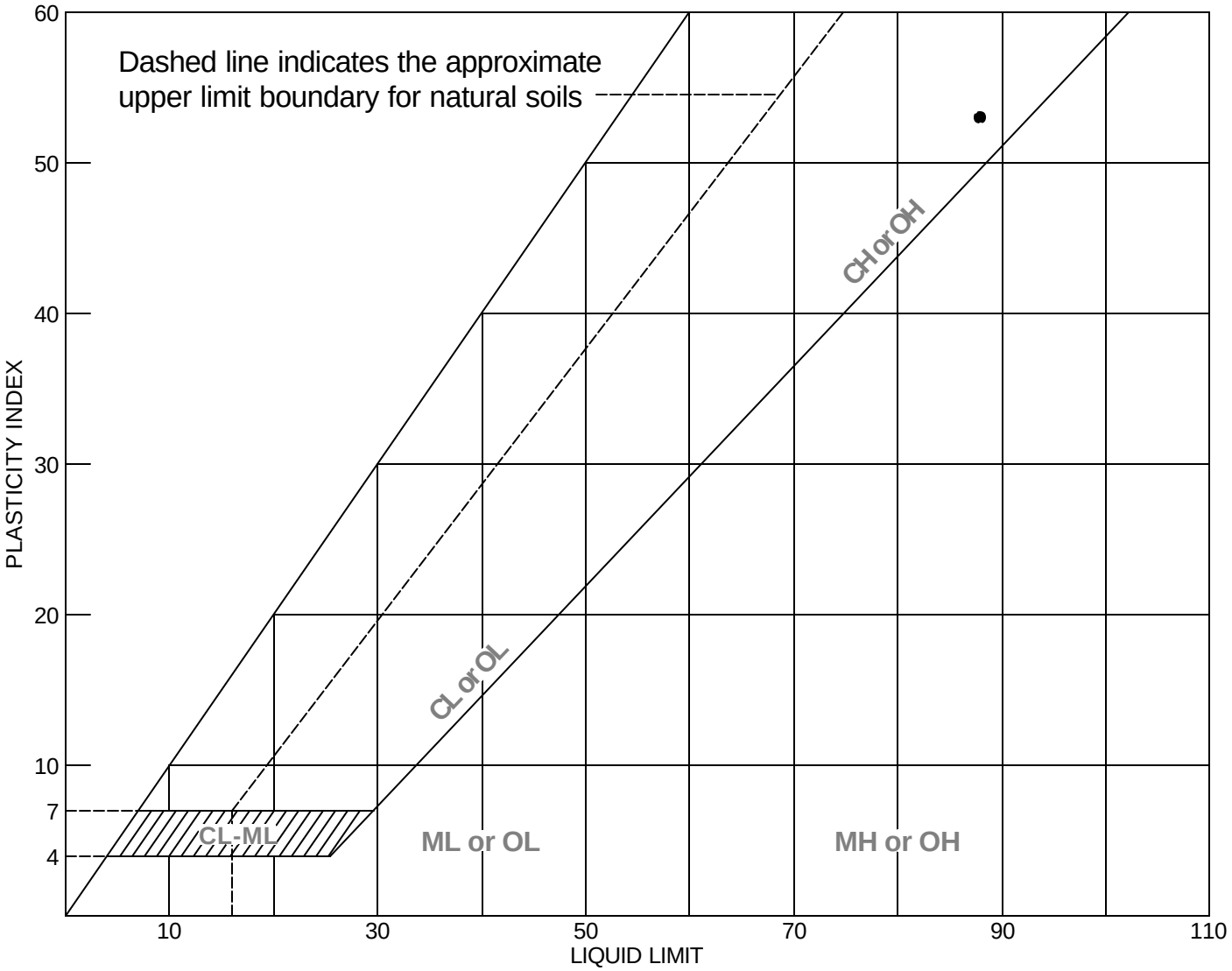
Green Bay, WI 54311

Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No.: 4-29316A **Figure**

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	On-site	DS-14			35	88	53	CH

STS Consultants, Ltd.
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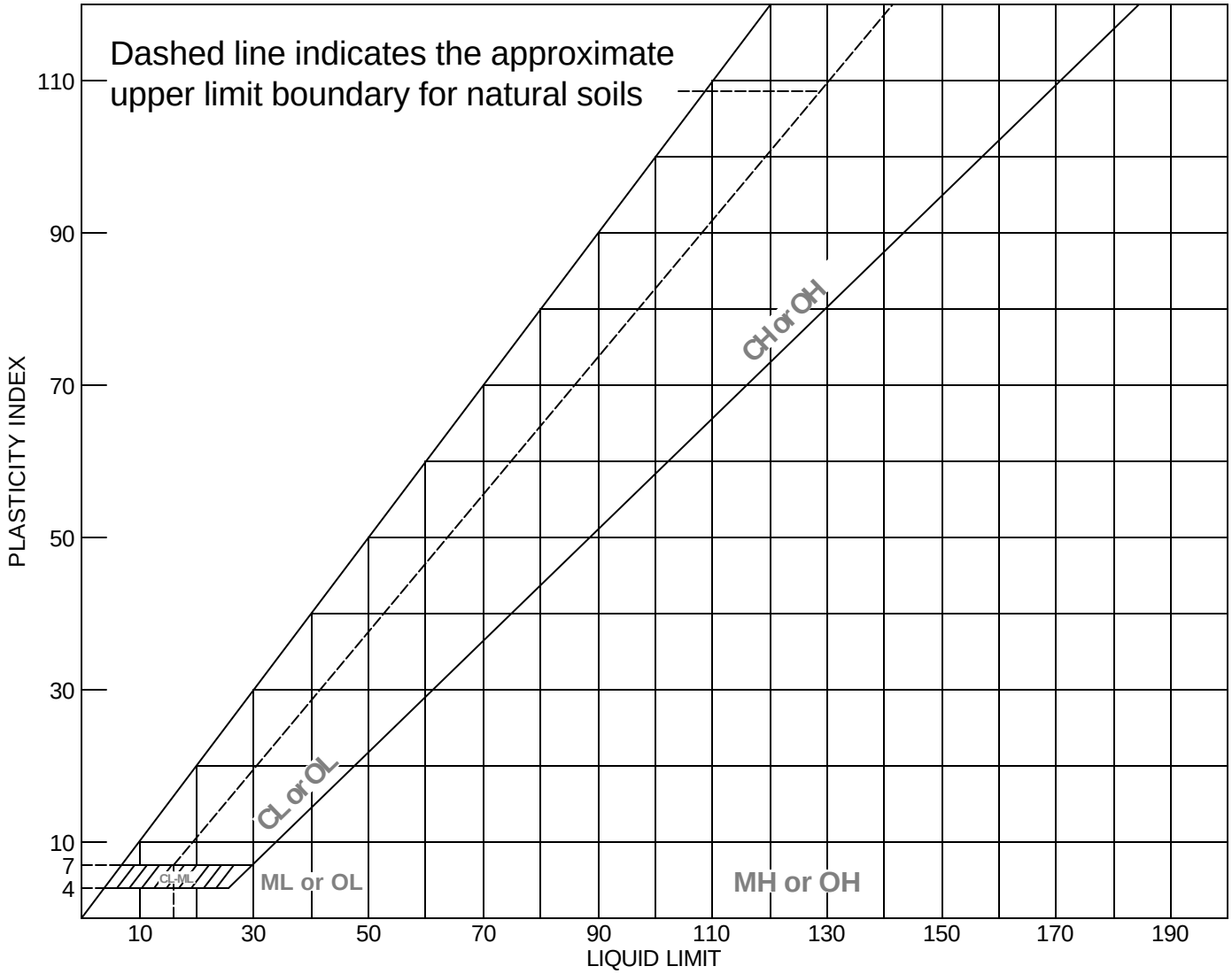
Green Bay, WI 54311

Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No.: 4-29316A **Figure**

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	On-site	DS-26		274.5	68	204	136	OH

STS Consultants, Ltd.
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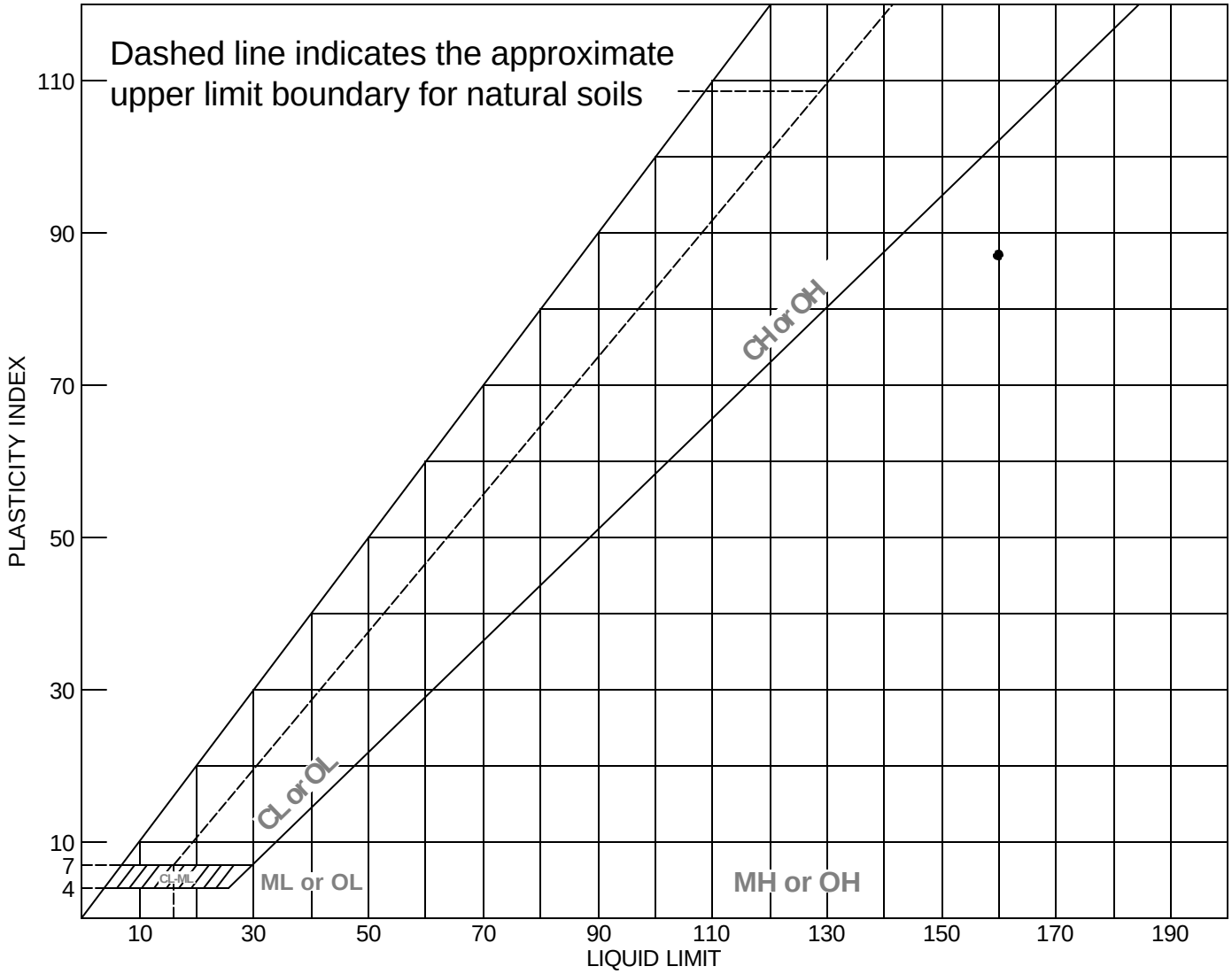
Green Bay, WI 54311

Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No.: 4-29316A **Figure**

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	On-site	DS-29 COMP		183.3	73	160	87	OH

STS Consultants, Ltd.
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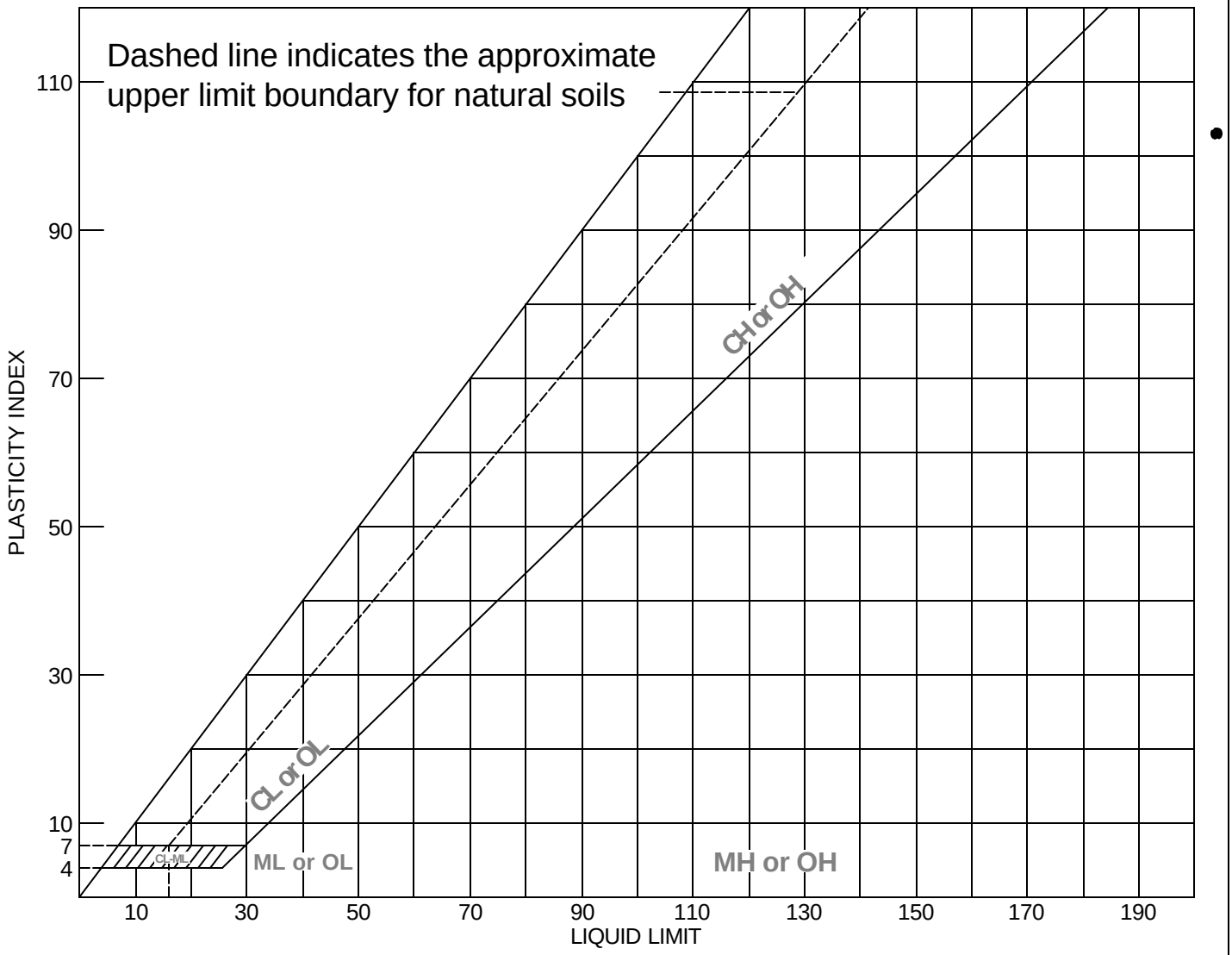
Green Bay, WI 54311

Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No.: 4-29316A **Figure**

LIQUID AND PLASTIC LIMITS TEST REPORT



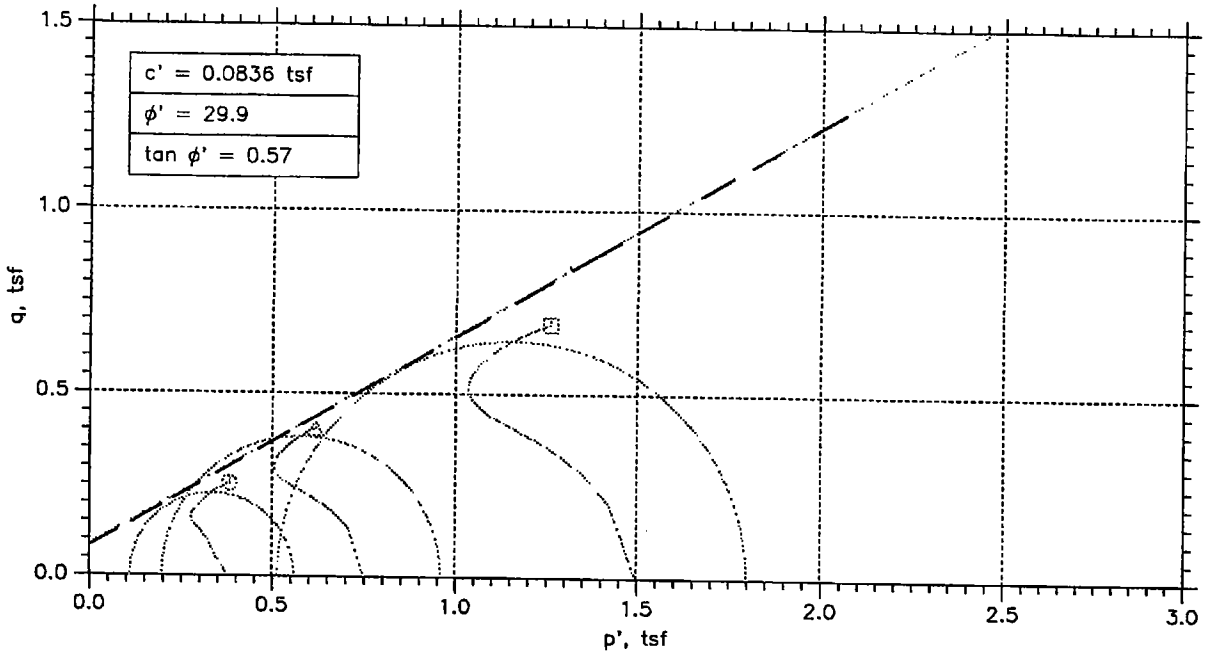
SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	On-site	DS-43 COMP	COMP	257.4	101	204	103	MH

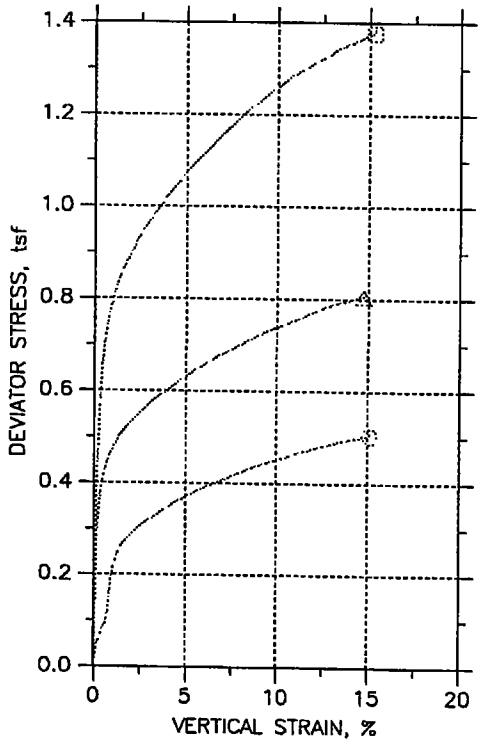
STS Consultants, Ltd.
1035 Kepler Drive
Green Bay, WI 54311

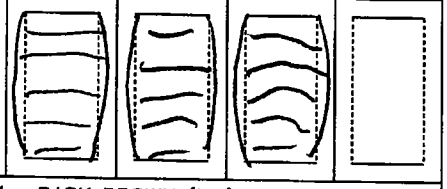
Client: GW Partners LLC
Project: Fox River OU-1 20052 RA

Project No.: 4-29316A **Figure**

TRIAXIAL COMPRESSION TEST REPORT





Symbol		⊙	△	⊡	
Test No.		IRA06(1)	IRA06(2)	IRA06(3)	
Initial	Diameter, in	2.8882	2.8252	2.8079	
	Height, in	5.163	5.5535	5.2646	
	Water Content, %	60.96	54.73	57.17	
	Dry Density, pcf	64.23	66.7	68.71	
	Saturation, %	106.59	102.12	112.41	
	Void Ratio	1.4297	1.3399	1.2715	
Before Shear	Water Content, %	51.18	47.32	40.25	
	Dry Density, pcf	68.25	72.26	78.16	
	Saturation, %	99.43	102.00	100.95	
	Void Ratio	1.2867	1.1599	0.9967	
	Back Press., tsf	5.04	5.0401	5.0398	
Minor Prin. Stress, tsf		0.3744	0.7487	1.4978	
Max. Dev. Stress, tsf		0.50232	0.80478	1.3758	
Time to Failure, min		188.74	199.18	195.15	
Strain Rate, %/min		0.08	0.0759	0.082	
B-Value		---	---	---	
Estimated Specific Gravity		2.50	2.50	2.50	
Liquid Limit		0	0	0	
Plastic Limit		0	0	0	
Plasticity Index		0	0	0	
Failure Sketch					

Project: LOWER FOX RIVER

Location:

Project No.: 29316-A

Boring No.: IRA06EA1DS0

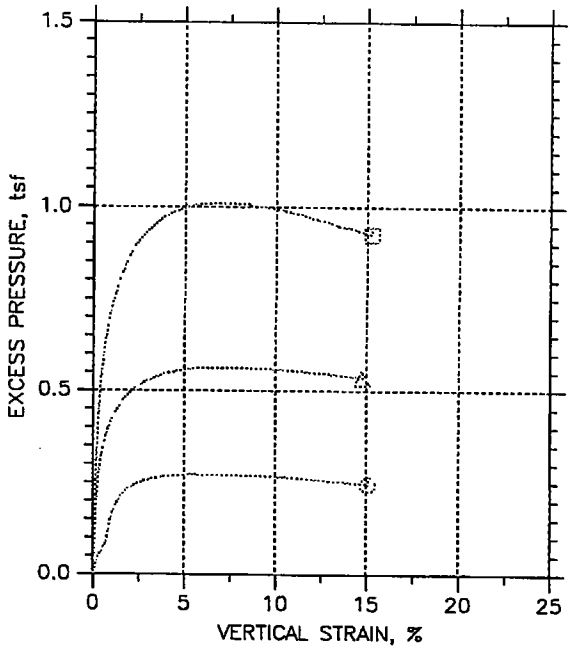
Sample Type: REMOLDED

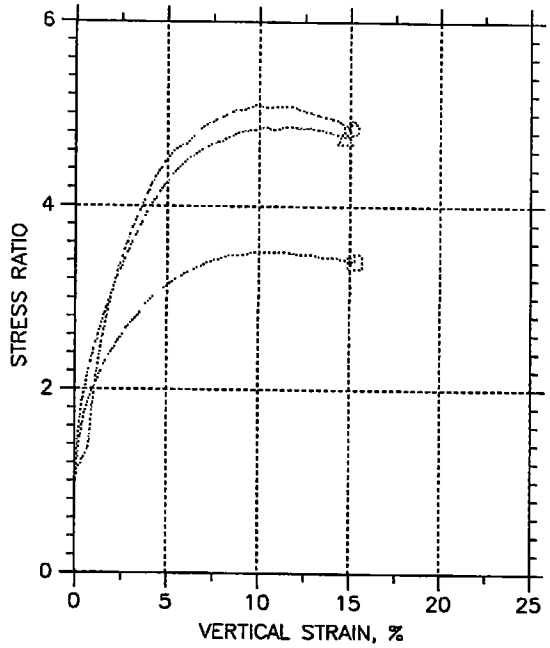
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL TRACE CLAY - DARK BROWN (MH) SHELLS NOTED

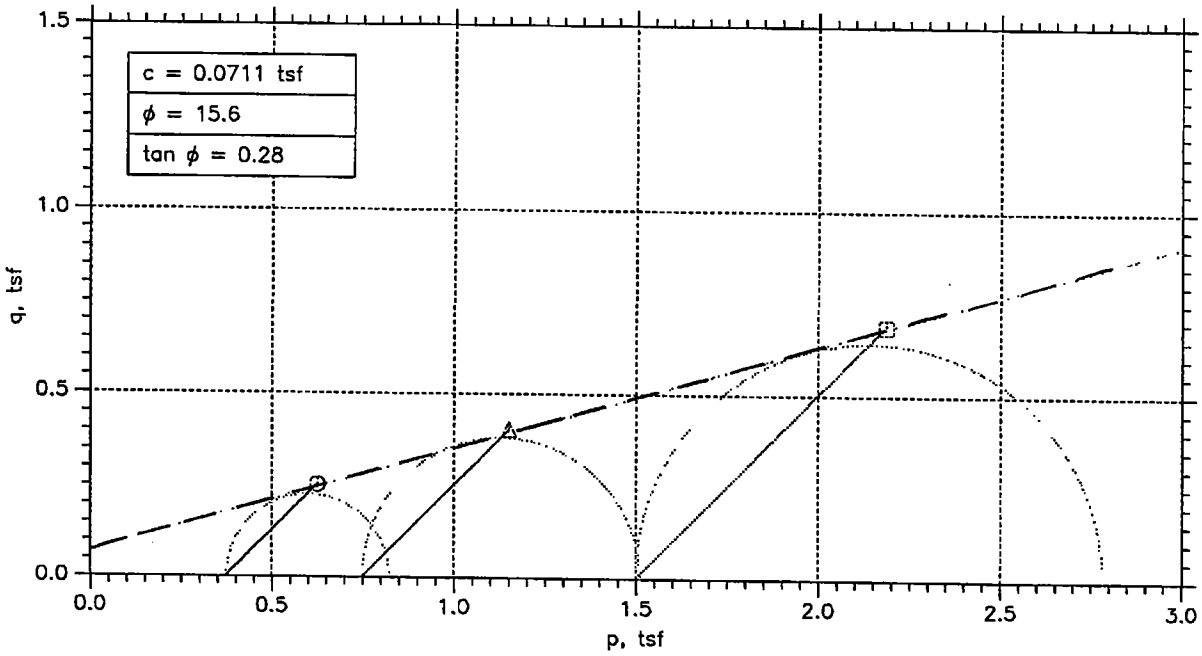
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Fri, 14-JUL-2006 14:32:08

TRIAXIAL COMPRESSION TEST REPORT







Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: IRA06EA1DS0	Tested By: MJS	Checked By: WPQ
Sample No.: IRA06EA1DS0	Test Date: 7/5/06	Depth:
Test No.: IRA06(1)	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL TRACE CLAY - DARK BROWN (MH) SHELLS NOTED		
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767		

Fri, 14-JUL-2006 14:31:28

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: IRA06EA1DS0
Sample No.: IRA06EA1DS0
Test No.: IRA06(1)

Location:
Tested By: MJS
Test Date: 7/5/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL TRACE CLAY - DARK BROWN (MH) SHELLS NOTED
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.16 in
Specimen Area: 6.55 in^2
Specimen Volume: 33.83 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.5515	0	0	5.04	5.4144	5.4144
2	2.0041	0.15743	6.5618	4.0135	0.044038	5.071	5.4144	5.4584
3	4.0041	0.31664	6.5723	5.6724	0.062141	5.0869	5.4144	5.4765
4	6.0041	0.47764	6.5829	7.4383	0.081355	5.1021	5.4144	5.4958
5	8.0041	0.63865	6.5936	8.7226	0.095248	5.1156	5.4144	5.5096
6	10.004	0.79786	6.6042	11.024	0.12018	5.1343	5.4144	5.5346
7	12.004	0.9535	6.6146	17.445	0.18989	5.1858	5.4144	5.6043
8	14.004	1.1127	6.6252	20.388	0.22157	5.2139	5.4144	5.636
9	16.004	1.2701	6.6358	22.261	0.24154	5.2315	5.4144	5.6559
10	18.004	1.4258	6.6463	23.546	0.25507	5.2444	5.4144	5.6695
11	20.004	1.585	6.657	24.616	0.26624	5.2544	5.4144	5.6806
12	24.004	1.9016	6.6785	26.328	0.28384	5.2702	5.4144	5.6982
13	28.004	2.2219	6.7004	27.506	0.29557	5.2807	5.4144	5.71
14	32.004	2.5421	6.7224	28.576	0.30606	5.2877	5.4144	5.7205
15	36.004	2.8641	6.7447	29.486	0.31476	5.2936	5.4144	5.7292
16	40.004	3.1879	6.7672	30.449	0.32396	5.2983	5.4144	5.7384
17	44.004	3.5099	6.7898	31.305	0.33196	5.3012	5.4144	5.7464
18	48.004	3.8301	6.8124	32.215	0.34048	5.3036	5.4144	5.7549
19	52.004	4.1467	6.8349	33.232	0.35007	5.3059	5.4144	5.7645
20	56.004	4.4598	6.8573	34.034	0.35735	5.3071	5.4144	5.7718
21	60.004	4.7764	6.8801	34.783	0.36401	5.3082	5.4144	5.7784
22	68.004	5.4205	6.927	36.282	0.37712	5.31	5.4144	5.7915
23	76.004	6.0663	6.9746	37.727	0.38946	5.3082	5.4144	5.8039
24	84.004	6.7121	7.0229	39.118	0.40105	5.3094	5.4144	5.8154
25	92.004	7.3489	7.0712	40.402	0.41138	5.3088	5.4144	5.8258
26	100	7.9894	7.1204	41.74	0.42207	5.3077	5.4144	5.8365
27	108	8.6352	7.1707	43.024	0.432	5.3071	5.4144	5.8464
28	116	9.2792	7.2216	44.255	0.44123	5.3053	5.4144	5.8556
29	124	9.9107	7.2722	45.379	0.44928	5.3047	5.4144	5.8637
30	132	10.544	7.3237	46.503	0.45717	5.3018	5.4144	5.8716
31	140	11.193	7.3773	47.787	0.46639	5.3	5.4144	5.8808
32	148	11.837	7.4312	48.804	0.47286	5.2983	5.4144	5.8873
33	156	12.471	7.4849	49.767	0.47873	5.2954	5.4144	5.8931
34	164	13.099	7.539	50.837	0.48551	5.293	5.4144	5.8999
35	172	13.741	7.5951	51.908	0.49207	5.2901	5.4144	5.9065
36	180	14.39	7.6527	52.817	0.49693	5.2877	5.4144	5.9113
37	188	15.038	7.7111	53.781	0.50216	5.2836	5.4144	5.9166
38	188.74	15.095	7.7163	53.834	0.50232	5.2836	5.4144	5.9167

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: IRA06EA1DS0
Sample No.: IRA06EA1DS0
Test No.: IRA06(1)

Location:
Tested By: MJS
Test Date: 7/5/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL TRACE CLAY - DARK BROWN (MH) SHELLS NOTED
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.16 in
Specimen Area: 6.55 in^2
Specimen Volume: 33.83 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	5.4144	5.4144	0	0.000	0.3744	0.3744	1.000	0.3744	0
2	0.16	5.4584	5.4144	0.031042	0.705	0.3874	0.34336	1.128	0.36538	0.022019
3	0.32	5.4765	5.4144	0.046856	0.754	0.38969	0.32755	1.190	0.35862	0.031071
4	0.48	5.4958	5.4144	0.062085	0.763	0.39368	0.31232	1.260	0.353	0.040678
5	0.64	5.5096	5.4144	0.075556	0.793	0.3941	0.29885	1.319	0.34647	0.047624
6	0.80	5.5346	5.4144	0.094299	0.785	0.40029	0.28011	1.429	0.3402	0.060091
7	0.95	5.6043	5.4144	0.14584	0.768	0.41846	0.22856	1.831	0.32351	0.094946
8	1.11	5.636	5.4144	0.17395	0.785	0.42202	0.20045	2.105	0.31124	0.11079
9	1.27	5.6559	5.4144	0.19153	0.793	0.42442	0.18288	2.321	0.30365	0.12077
10	1.43	5.6695	5.4144	0.20441	0.801	0.42507	0.16999	2.500	0.29753	0.12754
11	1.58	5.6806	5.4144	0.21437	0.805	0.42627	0.16004	2.664	0.29316	0.13312
12	1.90	5.6982	5.4144	0.23018	0.811	0.42807	0.14422	2.968	0.28614	0.14192
13	2.22	5.71	5.4144	0.24072	0.814	0.42925	0.13368	3.211	0.28146	0.14778
14	2.54	5.7205	5.4144	0.24775	0.809	0.43271	0.12665	3.417	0.27968	0.15303
15	2.86	5.7292	5.4144	0.25361	0.806	0.43556	0.12079	3.606	0.27818	0.15738
16	3.19	5.7384	5.4144	0.2583	0.797	0.44007	0.11611	3.790	0.27809	0.16198
17	3.51	5.7464	5.4144	0.26122	0.787	0.44514	0.11318	3.933	0.27916	0.16598
18	3.83	5.7549	5.4144	0.26357	0.774	0.45131	0.11084	4.072	0.28108	0.17024
19	4.15	5.7645	5.4144	0.26591	0.760	0.45856	0.10849	4.227	0.28353	0.17503
20	4.46	5.7718	5.4144	0.26708	0.747	0.46467	0.10732	4.330	0.286	0.17868
21	4.78	5.7784	5.4144	0.26825	0.737	0.47016	0.10615	4.429	0.28815	0.182
22	5.42	5.7915	5.4144	0.27001	0.716	0.48151	0.10439	4.612	0.29295	0.18856
23	6.07	5.8039	5.4144	0.26825	0.689	0.49561	0.10615	4.669	0.30088	0.19473
24	6.71	5.8154	5.4144	0.26942	0.672	0.50603	0.10498	4.820	0.3055	0.20052
25	7.35	5.8258	5.4144	0.26884	0.653	0.51695	0.10557	4.897	0.31126	0.20569
26	7.99	5.8365	5.4144	0.26767	0.634	0.52881	0.10674	4.954	0.31777	0.21103
27	8.64	5.8464	5.4144	0.26708	0.618	0.53933	0.10732	5.025	0.32332	0.216
28	9.28	5.8556	5.4144	0.26532	0.601	0.55031	0.10908	5.045	0.32969	0.22061
29	9.91	5.8637	5.4144	0.26474	0.589	0.55895	0.10967	5.097	0.33431	0.22464
30	10.54	5.8716	5.4144	0.26181	0.573	0.56977	0.11259	5.060	0.34118	0.22859
31	11.19	5.8808	5.4144	0.26005	0.558	0.58074	0.11435	5.079	0.34755	0.23319
32	11.84	5.8873	5.4144	0.2583	0.546	0.58897	0.11611	5.073	0.35254	0.23643
33	12.47	5.8931	5.4144	0.25537	0.533	0.59776	0.11904	5.022	0.3584	0.23936
34	13.10	5.8999	5.4144	0.25302	0.521	0.60689	0.12138	5.000	0.36414	0.24276
35	13.74	5.9065	5.4144	0.2501	0.508	0.61638	0.12431	4.958	0.37034	0.24604
36	14.39	5.9113	5.4144	0.24775	0.499	0.62358	0.12665	4.924	0.37511	0.24846
37	15.04	5.9166	5.4144	0.24365	0.485	0.63291	0.13075	4.841	0.38183	0.25108
38	15.09	5.9167	5.4144	0.24365	0.485	0.63307	0.13075	4.842	0.38191	0.25116

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: IRA06EA1DS0
Sample No.: I-RA-06-EA1
Test No.: IRA06(2)

Location:
Tested By: MS
Test Date: 7/11/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL TRACE CLAY - DARK BROWN (MH) SHELLS NOTED
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.55 in
Specimen Area: 6.27 in^2
Specimen Volume: 34.81 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.2688	0	0	5.0401	5.7888	5.7888
2	2.0041	0.13616	6.2774	23.812	0.27312	5.2201	5.7888	6.0619
3	4.0041	0.2838	6.2867	30.948	0.35445	5.3032	5.7888	6.1432
4	6.0041	0.42652	6.2957	34.657	0.39635	5.3531	5.7888	6.1852
5	8.0001	0.57416	6.305	37.164	0.42439	5.3897	5.7888	6.2132
6	10	0.72344	6.3145	39.031	0.44504	5.4176	5.7888	6.2338
7	12	0.87108	6.3239	40.412	0.4601	5.4402	5.7888	6.2489
8	14	1.0204	6.3335	41.614	0.47308	5.4588	5.7888	6.2619
9	16	1.168	6.3429	42.637	0.48398	5.4739	5.7888	6.2728
10	18	1.3156	6.3524	43.558	0.4937	5.4867	5.7888	6.2825
11	20	1.4633	6.3619	44.453	0.50309	5.4983	5.7888	6.2919
12	24	1.7569	6.381	46.013	0.5192	5.5175	5.7888	6.308
13	28	2.0489	6.4	47.471	0.53405	5.5343	5.7888	6.3229
14	32	2.3459	6.4194	48.648	0.54563	5.5459	5.7888	6.3344
15	36	2.6428	6.439	49.748	0.55627	5.5558	5.7888	6.3451
16	40	2.943	6.4589	50.848	0.56682	5.5645	5.7888	6.3556
17	44	3.2432	6.479	51.999	0.57785	5.5715	5.7888	6.3667
18	48	3.5417	6.499	52.97	0.58684	5.5773	5.7888	6.3756
19	52.001	3.8403	6.5192	53.917	0.59547	5.5831	5.7888	6.3843
20	56.001	4.1372	6.5394	54.889	0.60434	5.5877	5.7888	6.3931
21	60	4.4292	6.5594	55.861	0.61316	5.59	5.7888	6.402
22	68.001	5.0231	6.6004	57.728	0.62972	5.5953	5.7888	6.4185
23	76.001	5.6218	6.6423	59.621	0.64627	5.5988	5.7888	6.4351
24	84.001	6.2206	6.6847	61.283	0.66007	5.6011	5.7888	6.4489
25	92.002	6.8112	6.727	63.048	0.67481	5.6011	5.7888	6.4636
26	100	7.4001	6.7698	64.506	0.68605	5.6017	5.7888	6.4748
27	108	7.9907	6.8133	66.04	0.69789	5.6005	5.7888	6.4867
28	116	8.5927	6.8581	67.729	0.71105	5.5999	5.7888	6.4998
29	124	9.1866	6.903	69.365	0.7235	5.5988	5.7888	6.5123
30	132	9.7771	6.9482	70.772	0.73337	5.597	5.7888	6.5222
31	140	10.369	6.9941	72.102	0.74225	5.5958	5.7888	6.5311
32	148	10.966	7.041	73.483	0.75143	5.5924	5.7888	6.5402
33	156	11.56	7.0883	74.967	0.76149	5.5912	5.7888	6.5503
34	164	12.144	7.1354	76.527	0.7722	5.5877	5.7888	6.561
35	172	12.74	7.1841	78.011	0.78183	5.5854	5.7888	6.5706
36	180	13.342	7.234	79.417	0.79044	5.5819	5.7888	6.5792
37	188	13.941	7.2843	80.594	0.79661	5.579	5.7888	6.5854
38	196	14.53	7.3345	81.719	0.80221	5.5755	5.7888	6.591
39	199.18	14.762	7.3546	82.205	0.80478	5.5744	5.7888	6.5936

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: IRA06EA1DS0
Sample No.: I-RA-06-EA1
Test No.: IRA06(2)

Location:
Tested By: MS
Test Date: 7/11/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL TRACE CLAY - DARK BROWN (MH) SHELLS NOTED
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.55 in
Specimen Area: 6.27 in^2
Specimen Volume: 34.81 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	5.7888	5.7888	0	0.000	0.7487	0.7487	1.000	0.7487	0
2	0.14	6.0619	5.7888	0.18002	0.659	0.8418	0.56868	1.480	0.70524	0.13656
3	0.28	6.1432	5.7888	0.26307	0.742	0.84008	0.48564	1.730	0.66286	0.17722
4	0.43	6.1852	5.7888	0.31301	0.790	0.83205	0.43569	1.910	0.63387	0.19818
5	0.57	6.2132	5.7888	0.3496	0.824	0.8235	0.39911	2.063	0.6113	0.21219
6	0.72	6.2338	5.7888	0.37747	0.848	0.81627	0.37123	2.199	0.59375	0.22252
7	0.87	6.2489	5.7888	0.40012	0.870	0.80869	0.34859	2.320	0.57864	0.23005
8	1.02	6.2619	5.7888	0.4187	0.885	0.80308	0.33	2.434	0.56654	0.23654
9	1.17	6.2728	5.7888	0.4338	0.896	0.79889	0.3149	2.537	0.5569	0.24199
10	1.32	6.2825	5.7888	0.44658	0.905	0.79583	0.30213	2.634	0.54898	0.24685
11	1.46	6.2919	5.7888	0.45819	0.911	0.7936	0.29051	2.732	0.54206	0.25155
12	1.76	6.308	5.7888	0.47735	0.919	0.79055	0.27135	2.913	0.53095	0.2596
13	2.05	6.3229	5.7888	0.4942	0.925	0.78856	0.25451	3.098	0.52154	0.26703
14	2.35	6.3344	5.7888	0.50581	0.927	0.78853	0.24289	3.246	0.51571	0.27282
15	2.64	6.3451	5.7888	0.51568	0.927	0.78929	0.23302	3.387	0.51116	0.27814
16	2.94	6.3556	5.7888	0.52439	0.925	0.79113	0.22431	3.527	0.50772	0.28341
17	3.24	6.3667	5.7888	0.53136	0.920	0.79519	0.21734	3.659	0.50627	0.28893
18	3.54	6.3756	5.7888	0.53717	0.915	0.79837	0.21153	3.774	0.50495	0.29342
19	3.84	6.3843	5.7888	0.54298	0.912	0.8012	0.20573	3.894	0.50346	0.29774
20	4.14	6.3931	5.7888	0.54762	0.906	0.80542	0.20108	4.005	0.50325	0.30217
21	4.43	6.402	5.7888	0.54994	0.897	0.81192	0.19876	4.085	0.50534	0.30658
22	5.02	6.4185	5.7888	0.55517	0.882	0.82325	0.19353	4.254	0.50839	0.31486
23	5.62	6.4351	5.7888	0.55866	0.864	0.83632	0.19005	4.401	0.51318	0.32313
24	6.22	6.4489	5.7888	0.56098	0.850	0.8478	0.18772	4.516	0.51776	0.33004
25	6.81	6.4636	5.7888	0.56098	0.831	0.86253	0.18772	4.595	0.52513	0.3374
26	7.40	6.4748	5.7888	0.56156	0.819	0.87319	0.18714	4.666	0.53017	0.34302
27	7.99	6.4867	5.7888	0.5604	0.803	0.8862	0.18831	4.706	0.53725	0.34894
28	8.59	6.4998	5.7888	0.55982	0.787	0.89993	0.18889	4.764	0.54441	0.35552
29	9.19	6.5123	5.7888	0.55866	0.772	0.91355	0.19005	4.807	0.5518	0.36175
30	9.78	6.5222	5.7888	0.55691	0.759	0.92516	0.19179	4.824	0.55848	0.36669
31	10.37	6.5311	5.7888	0.55575	0.749	0.9352	0.19295	4.847	0.56408	0.37113
32	10.97	6.5402	5.7888	0.55227	0.735	0.94786	0.19644	4.825	0.57215	0.37571
33	11.56	6.5503	5.7888	0.55111	0.724	0.95908	0.1976	4.854	0.57834	0.38074
34	12.14	6.561	5.7888	0.54762	0.709	0.97328	0.20108	4.840	0.58718	0.3861
35	12.74	6.5706	5.7888	0.5453	0.697	0.98524	0.2034	4.844	0.59432	0.39092
36	13.34	6.5792	5.7888	0.54181	0.685	0.99733	0.20689	4.821	0.60211	0.39522
37	13.94	6.5854	5.7888	0.53891	0.677	1.0064	0.20979	4.797	0.6081	0.3983
38	14.53	6.591	5.7888	0.53543	0.667	1.0155	0.21328	4.761	0.61438	0.4011
39	14.76	6.5936	5.7888	0.53427	0.664	1.0192	0.21444	4.753	0.61683	0.40239

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: IRA06EA1DS0
Sample No.: I-RA-06-EA1
Test No.: IRA06(3)

Location:
Tested By: MJS
Test Date: 7/11/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL TRACE CLAY - DARK BROWN (MH) SHELLS NOTED
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.26 in
Specimen Area: 6.19 in^2
Specimen Volume: 32.60 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.1922	0	0	5.0398	6.5376	6.5376
2	2.0041	0.14054	6.2009	34.964	0.40598	5.3187	6.5376	6.9436
3	4.0041	0.30016	6.2108	49.559	0.57452	5.4781	6.5376	7.1121
4	6.0041	0.45632	6.2206	56.962	0.6593	5.5772	6.5376	7.1969
5	8.0041	0.61247	6.2304	61.739	0.71348	5.6463	6.5376	7.2511
6	10.004	0.76862	6.2402	65.204	0.75233	5.6985	6.5376	7.2899
7	12.004	0.92478	6.25	67.566	0.77837	5.7401	6.5376	7.316
8	14.004	1.0861	6.2602	69.929	0.80427	5.7747	6.5376	7.3419
9	16.004	1.244	6.2702	71.819	0.82469	5.8028	6.5376	7.3623
10	18.004	1.3967	6.2799	73.446	0.84207	5.8298	6.5376	7.3797
11	20.004	1.5477	6.2895	75.021	0.85881	5.8526	6.5376	7.3964
12	24.004	1.8461	6.3087	77.331	0.88257	5.8889	6.5376	7.4202
13	28.004	2.1584	6.3288	79.799	0.90784	5.9165	6.5376	7.4454
14	32.004	2.4724	6.3492	82.214	0.93231	5.9417	6.5376	7.4699
15	36.004	2.7917	6.37	84.314	0.95299	5.9628	6.5376	7.4906
16	40.004	3.1057	6.3907	86.151	0.97061	5.978	6.5376	7.5082
17	44.004	3.4198	6.4115	87.936	0.98751	5.9909	6.5376	7.5251
18	48.004	3.7321	6.4323	89.826	1.0055	6.005	6.5376	7.5431
19	52	4.0409	6.453	91.716	1.0233	6.0155	6.5376	7.5609
20	56	4.3497	6.4738	93.501	1.0399	6.022	6.5376	7.5775
21	60	4.6603	6.4949	95.129	1.0546	6.029	6.5376	7.5922
22	68.001	5.2867	6.5378	98.331	1.0829	6.0384	6.5376	7.6205
23	76.001	5.9182	6.5817	101.43	1.1096	6.0454	6.5376	7.6472
24	84.001	6.5411	6.6256	104.47	1.1353	6.0478	6.5376	7.6729
25	92.001	7.1553	6.6694	107.52	1.1607	6.0495	6.5376	7.6983
26	100	7.7816	6.7147	110.41	1.1839	6.0472	6.5376	7.7215
27	108	8.4149	6.7611	113.35	1.207	6.0472	6.5376	7.7446
28	116	9.05	6.8084	116.13	1.2281	6.0396	6.5376	7.7657
29	124	9.6728	6.8553	118.75	1.2472	6.036	6.5376	7.7848
30	132	10.299	6.9032	121.33	1.2654	6.0308	6.5376	7.803
31	140	10.931	6.9521	124.06	1.2848	6.0231	6.5376	7.8224
32	148	11.564	7.0019	126.37	1.2994	6.0161	6.5376	7.837
33	156	12.196	7.0523	128.68	1.3137	6.0062	6.5376	7.8513
34	164	12.825	7.1032	130.93	1.3272	5.9997	6.5376	7.8648
35	172	13.443	7.1539	133.56	1.3442	5.988	6.5376	7.8818
36	180	14.085	7.2074	135.55	1.3541	5.9815	6.5376	7.8917
37	188	14.717	7.2607	137.76	1.3661	5.9716	6.5376	7.9037
38	195.15	15.268	7.308	139.65	1.3758	5.964	6.5376	7.9134

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: IRA06EA1DS0
Sample No.: I-RA-06-EA1
Test No.: IRA06(3)

Location:
Tested By: MJS
Test Date: 7/11/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL TRACE CLAY - DARK BROWN (MH) SHELLS NOTED
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.26 in
Specimen Area: 6.19 in^2
Specimen Volume: 32.60 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

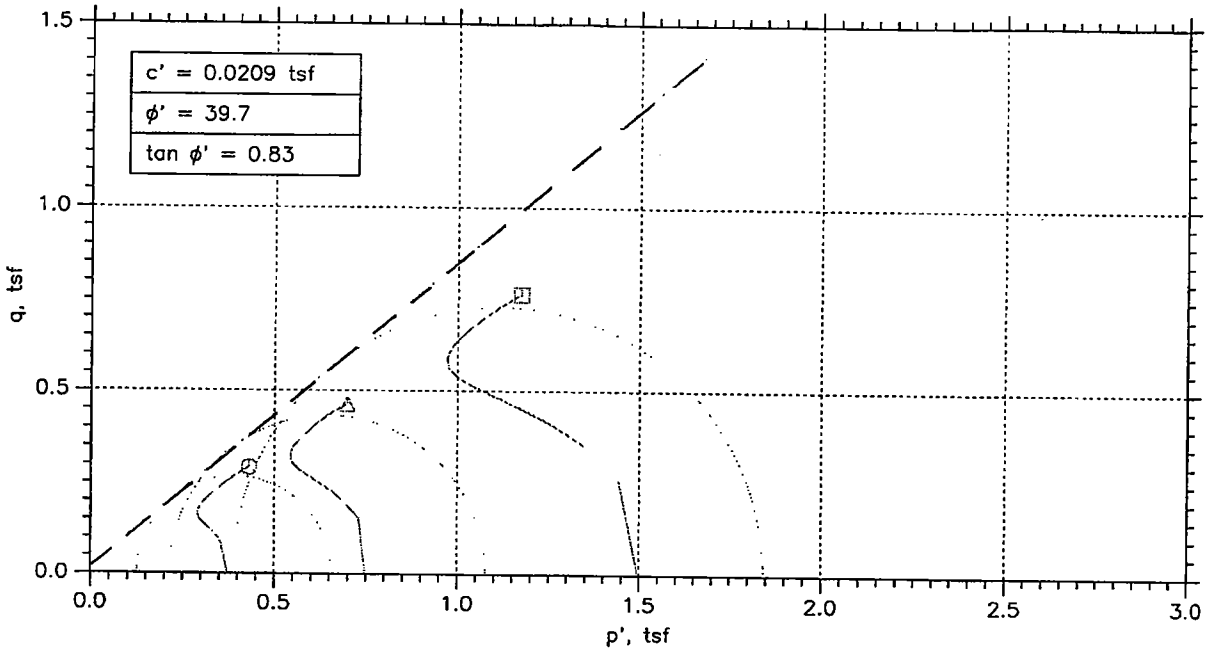
Liquid Limit: 0

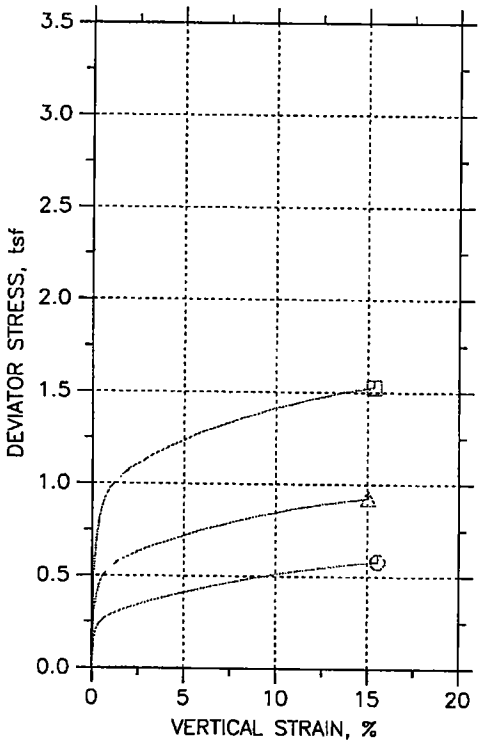
Plastic Limit: 0

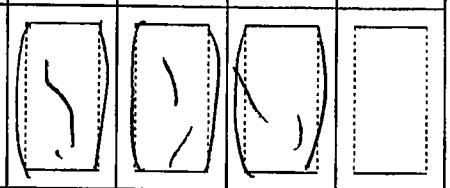
Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	6.5376	6.5376	0	0.000	1.4978	1.4978	1.000	1.4978	0
2	0.14	6.9436	6.5376	0.27895	0.687	1.6248	1.2189	1.333	1.4218	0.20299
3	0.30	7.1121	6.5376	0.43835	0.763	1.634	1.0595	1.542	1.3467	0.28726
4	0.46	7.1969	6.5376	0.53738	0.815	1.6197	0.96042	1.686	1.2901	0.32965
5	0.61	7.2511	6.5376	0.60653	0.850	1.6047	0.89127	1.801	1.248	0.35674
6	0.77	7.2899	6.5376	0.65869	0.876	1.5914	0.83911	1.897	1.2153	0.37617
7	0.92	7.316	6.5376	0.7003	0.900	1.5759	0.7975	1.976	1.1867	0.38918
8	1.09	7.3419	6.5376	0.73487	0.914	1.5672	0.76293	2.054	1.1651	0.40213
9	1.24	7.3623	6.5376	0.763	0.925	1.5595	0.7348	2.122	1.1471	0.41234
10	1.40	7.3797	6.5376	0.78996	0.938	1.5499	0.70784	2.190	1.1289	0.42104
11	1.55	7.3964	6.5376	0.81281	0.946	1.5438	0.68499	2.254	1.1144	0.42941
12	1.85	7.4202	6.5376	0.84915	0.962	1.5312	0.64865	2.361	1.0899	0.44129
13	2.16	7.4454	6.5376	0.87669	0.966	1.5289	0.62111	2.462	1.075	0.45392
14	2.47	7.4699	6.5376	0.90189	0.967	1.5282	0.59591	2.565	1.0621	0.46615
15	2.79	7.4906	6.5376	0.92299	0.969	1.5278	0.57482	2.658	1.0513	0.4765
16	3.11	7.5082	6.5376	0.93822	0.967	1.5302	0.55958	2.735	1.0449	0.48531
17	3.42	7.5251	6.5376	0.95112	0.963	1.5342	0.54669	2.806	1.0404	0.49376
18	3.73	7.5431	6.5376	0.96518	0.960	1.5381	0.53262	2.888	1.0354	0.50274
19	4.04	7.5609	6.5376	0.97573	0.953	1.5454	0.52207	2.960	1.0337	0.51167
20	4.35	7.5775	6.5376	0.98217	0.944	1.5555	0.51563	3.017	1.0356	0.51995
21	4.66	7.5922	6.5376	0.98921	0.938	1.5632	0.50859	3.073	1.0359	0.52728
22	5.29	7.6205	6.5376	0.99858	0.922	1.5821	0.49922	3.169	1.0407	0.54145
23	5.92	7.6472	6.5376	1.0056	0.906	1.6018	0.49219	3.254	1.047	0.55478
24	6.54	7.6729	6.5376	1.008	0.888	1.6252	0.48984	3.318	1.0575	0.56765
25	7.16	7.6983	6.5376	1.0097	0.870	1.6488	0.48808	3.378	1.0684	0.58036
26	7.78	7.7215	6.5376	1.0074	0.851	1.6743	0.49043	3.414	1.0824	0.59193
27	8.41	7.7446	6.5376	1.0074	0.835	1.6975	0.49043	3.461	1.0939	0.60351
28	9.05	7.7657	6.5376	0.99976	0.814	1.7261	0.49805	3.466	1.1121	0.61404
29	9.67	7.7848	6.5376	0.99624	0.799	1.7488	0.50156	3.487	1.1252	0.62362
30	10.30	7.803	6.5376	0.99096	0.783	1.7723	0.50684	3.497	1.1395	0.63271
31	10.93	7.8224	6.5376	0.98335	0.765	1.7992	0.51446	3.497	1.1568	0.64239
32	11.56	7.837	6.5376	0.97631	0.751	1.8209	0.52149	3.492	1.1712	0.6497
33	12.20	7.8513	6.5376	0.96635	0.736	1.8452	0.53145	3.472	1.1883	0.65686
34	12.83	7.8648	6.5376	0.95991	0.723	1.8651	0.5379	3.467	1.2015	0.66358
35	13.44	7.8818	6.5376	0.94819	0.705	1.8938	0.54962	3.446	1.2217	0.67209
36	14.09	7.8917	6.5376	0.94174	0.695	1.9102	0.55606	3.435	1.2331	0.67707
37	14.72	7.9037	6.5376	0.93178	0.682	1.9321	0.56603	3.413	1.2491	0.68303
38	15.27	7.9134	6.5376	0.92416	0.672	1.9495	0.57364	3.398	1.2616	0.68792

TRIAXIAL COMPRESSION TEST REPORT





Symbol		⦶	△	⊡	
Test No.		ED1T1	ED1T2	ED1T3	
Initial	Diameter, in	2.765	2.7713	2.7713	
	Height, in	5.3819	5.5736	5.4713	
	Water Content, %	58.18	68.61	70.92	
	Dry Density, pcf	65.13	59.21	58.37	
	Saturation, %	99.15	100.50	101.64	
	Void Ratio	1.5785	1.8364	1.877	
Before Shear	Water Content, %	49.08	58.77	58.21	
	Dry Density, pcf	72.56	65.78	65.76	
	Saturation, %	100.43	101.79	100.77	
	Void Ratio	1.3145	1.5529	1.5539	
	Back Press., tsf	5.0413	5.0401	5.0402	
Minor Prin. Stress, tsf		0.37306	0.74868	1.4974	
Max. Dev. Stress, tsf		0.57899	0.92413	1.5259	
Time to Failure, min		204	204	204	
Strain Rate, %/min		0.0754	0.0748	0.0781	
B-Value		---	---	---	
Estimated Specific Gravity		2.69	2.69	2.69	
Liquid Limit		0	0	0	
Plastic Limit		0	0	0	
Plasticity Index		0	0	0	
Failure Sketch					

Project: LOWER FOX RIVER

Location:

Project No.: 29316-A

Boring No.: ED-1 COMP

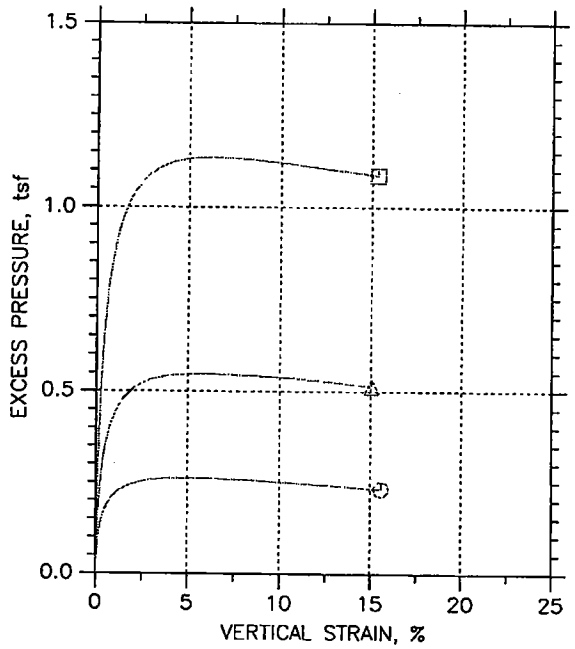
Sample Type: REMOLDED

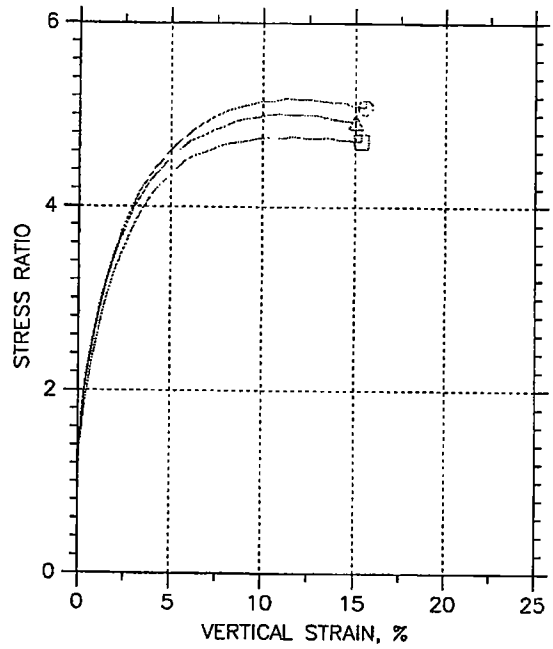
Description: CLAYEY F-C SAND TRACE SILT TRACE ORGANICS - BROWN (SC)

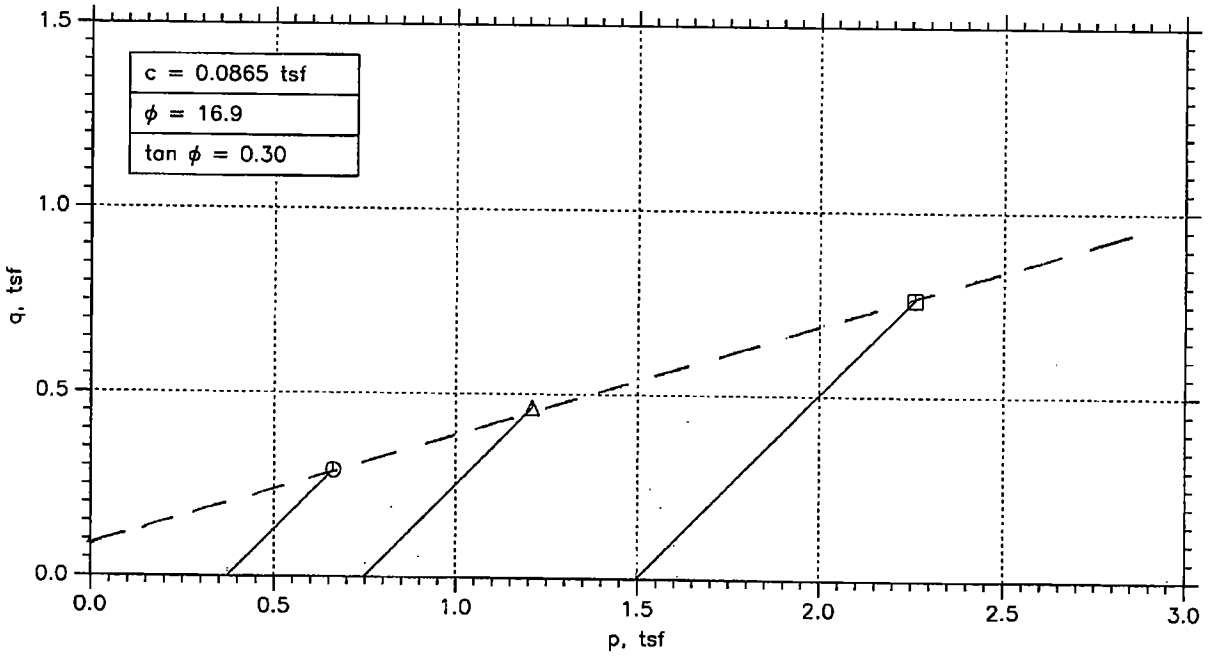
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Fri, 01-SEP-2006 11:11:57

TRIAXIAL COMPRESSION TEST REPORT







Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: ED-1 COMP	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1 COMP	Test Date: 8/18/06	Depth: -
Test No.: ED1T1	Sample Type: REMOLDED	Elevation:
Description: CLAYEY F-C SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767		

Fri, 01-SEP-2006 11:13:21

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: ED-1 COMP
Sample No.: ED-1 COMP
Test No.: ED1T1

Location:
Tested By: MJS
Test Date: 8/18/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth: -
Elevation:

Soil Description: CLAYEY F-C SAND TRACE SILT TRACE ORGANICS - BROWN (SC)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.38 in
Specimen Area: 6.00 in^2
Specimen Volume: 32.31 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.69

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.0044	0	0	5.0413	5.4144	5.4144
2	2.0042	0.10834	6.0109	13.633	0.1633	5.1402	5.4144	5.5777
3	4.0042	0.26069	6.0201	17.93	0.21444	5.1812	5.4144	5.6288
4	6.0042	0.41473	6.0294	19.925	0.23793	5.2064	5.4144	5.6523
5	8.0041	0.56539	6.0385	21.28	0.25373	5.2245	5.4144	5.6681
6	10.004	0.72112	6.048	22.38	0.26643	5.238	5.4144	5.6808
7	12	0.87009	6.0571	23.224	0.27606	5.2485	5.4144	5.6905
8	14	1.0224	6.0664	23.991	0.28475	5.2567	5.4144	5.6991
9	16	1.1782	6.076	24.656	0.29218	5.2637	5.4144	5.7066
10	18	1.3305	6.0853	25.27	0.29899	5.269	5.4144	5.7134
11	20	1.4812	6.0946	25.833	0.30518	5.2737	5.4144	5.7196
12	24	1.7876	6.1137	26.933	0.31719	5.2813	5.4144	5.7316
13	28	2.094	6.1328	27.905	0.32761	5.2871	5.4144	5.742
14	32.001	2.3987	6.1519	28.8	0.33706	5.2912	5.4144	5.7515
15	36.001	2.7	6.171	29.746	0.34707	5.2941	5.4144	5.7615
16	40.001	3.0047	6.1904	30.565	0.3555	5.2965	5.4144	5.7699
17	44.001	3.3145	6.2102	31.46	0.36474	5.2988	5.4144	5.7791
18	48.001	3.6192	6.2298	32.278	0.37305	5.2994	5.4144	5.7875
19	52.001	3.9272	6.2498	33.097	0.38129	5.3	5.4144	5.7957
20	56.002	4.2353	6.2699	33.915	0.38946	5.3006	5.4144	5.8039
21	60.002	4.5383	6.2898	34.708	0.39731	5.3006	5.4144	5.8117
22	68.002	5.1528	6.3306	36.217	0.41191	5.3012	5.4144	5.8263
23	76.003	5.7605	6.3714	37.701	0.42604	5.3006	5.4144	5.8404
24	84.003	6.375	6.4132	39.184	0.43992	5.3	5.4144	5.8543
25	92.003	6.9929	6.4558	40.668	0.45356	5.2988	5.4144	5.868
26	100	7.6073	6.4988	42.1	0.46643	5.2976	5.4144	5.8808
27	108	8.2184	6.542	43.379	0.47742	5.2965	5.4144	5.8918
28	116	8.8261	6.5856	44.735	0.48908	5.2947	5.4144	5.9035
29	124	9.4423	6.6304	46.013	0.49966	5.293	5.4144	5.9141
30	132	10.058	6.6759	47.343	0.5106	5.2912	5.4144	5.925
31	140	10.671	6.7217	48.597	0.52055	5.2889	5.4144	5.935
32	148	11.286	6.7682	49.799	0.52976	5.2877	5.4144	5.9442
33	156	11.895	6.815	50.873	0.53747	5.2854	5.4144	5.9519
34	164	12.511	6.863	51.999	0.54552	5.2836	5.4144	5.9599
35	172	13.122	6.9113	53.073	0.5529	5.2813	5.4144	5.9673
36	180	13.73	6.96	54.147	0.56014	5.2789	5.4144	5.9745
37	188	14.343	7.0098	55.272	0.56772	5.2772	5.4144	5.9821
38	196	14.957	7.0604	56.27	0.57382	5.2742	5.4144	5.9882
39	204	15.574	7.112	57.191	0.57899	5.2725	5.4144	5.9934

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: ED-1 COMP
Sample No.: ED-1 COMP
Test No.: ED1T1

Location:
Tested By: MJS
Test Date: 8/18/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth: -
Elevation:

Soil Description: CLAYEY F-C SAND TRACE SILT TRACE ORGANICS - BROWN (SC)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.38 in
Specimen Area: 6.00 in^2
Specimen Volume: 32.31 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.69

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	5.4144	5.4144	0	0.000	0.37306	0.37306	1.000	0.37306	0
2	0.11	5.5777	5.4144	0.098896	0.606	0.43746	0.27417	1.596	0.35582	0.081648
3	0.26	5.6288	5.4144	0.13986	0.652	0.44764	0.23321	1.920	0.34042	0.10722
4	0.41	5.6523	5.4144	0.16502	0.694	0.44597	0.20804	2.144	0.32701	0.11897
5	0.57	5.6681	5.4144	0.18316	0.722	0.44364	0.1899	2.336	0.31677	0.12687
6	0.72	5.6808	5.4144	0.19662	0.738	0.44287	0.17644	2.510	0.30966	0.13321
7	0.87	5.6905	5.4144	0.20715	0.750	0.44197	0.16591	2.664	0.30394	0.13803
8	1.02	5.6991	5.4144	0.21535	0.756	0.44246	0.15772	2.805	0.30009	0.14237
9	1.18	5.7066	5.4144	0.22237	0.761	0.44287	0.15069	2.939	0.29678	0.14609
10	1.33	5.7134	5.4144	0.22764	0.761	0.44442	0.14543	3.056	0.29492	0.1495
11	1.48	5.7196	5.4144	0.23232	0.761	0.44593	0.14075	3.168	0.29334	0.15259
12	1.79	5.7316	5.4144	0.23992	0.756	0.45032	0.13314	3.382	0.29173	0.15859
13	2.09	5.742	5.4144	0.24578	0.750	0.45489	0.12729	3.574	0.29109	0.1638
14	2.40	5.7515	5.4144	0.24987	0.741	0.46026	0.12319	3.736	0.29172	0.16853
15	2.70	5.7615	5.4144	0.2528	0.728	0.46733	0.12027	3.886	0.2938	0.17353
16	3.00	5.7699	5.4144	0.25514	0.718	0.47342	0.11792	4.015	0.29567	0.17775
17	3.31	5.7791	5.4144	0.25748	0.706	0.48033	0.11558	4.156	0.29795	0.18237
18	3.62	5.7875	5.4144	0.25806	0.692	0.48805	0.115	4.244	0.30152	0.18653
19	3.93	5.7957	5.4144	0.25865	0.678	0.4957	0.11441	4.333	0.30506	0.19064
20	4.24	5.8039	5.4144	0.25924	0.666	0.50329	0.11383	4.421	0.30856	0.19473
21	4.54	5.8117	5.4144	0.25924	0.652	0.51114	0.11383	4.490	0.31248	0.19865
22	5.15	5.8263	5.4144	0.25982	0.631	0.52516	0.11324	4.637	0.3192	0.20596
23	5.76	5.8404	5.4144	0.25924	0.608	0.53987	0.11383	4.743	0.32685	0.21302
24	6.38	5.8543	5.4144	0.25865	0.588	0.55433	0.11441	4.845	0.33437	0.21996
25	6.99	5.868	5.4144	0.25748	0.568	0.56914	0.11558	4.924	0.34236	0.22678
26	7.61	5.8808	5.4144	0.25631	0.550	0.58318	0.11675	4.995	0.34997	0.23321
27	8.22	5.8918	5.4144	0.25514	0.534	0.59534	0.11792	5.049	0.35663	0.23871
28	8.83	5.9035	5.4144	0.25338	0.518	0.60876	0.11968	5.087	0.36422	0.24454
29	9.44	5.9141	5.4144	0.25163	0.504	0.6211	0.12144	5.115	0.37127	0.24983
30	10.06	5.925	5.4144	0.24987	0.489	0.6338	0.12319	5.145	0.37849	0.2553
31	10.67	5.935	5.4144	0.24753	0.476	0.64608	0.12553	5.147	0.38581	0.26028
32	11.29	5.9442	5.4144	0.24636	0.465	0.65646	0.1267	5.181	0.39158	0.26488
33	11.90	5.9519	5.4144	0.24402	0.454	0.66651	0.12904	5.165	0.39778	0.26873
34	12.51	5.9599	5.4144	0.24227	0.444	0.67631	0.1308	5.171	0.40356	0.27276
35	13.12	5.9673	5.4144	0.23992	0.434	0.68604	0.13314	5.153	0.40959	0.27645
36	13.73	5.9745	5.4144	0.23758	0.424	0.69562	0.13548	5.134	0.41555	0.28007
37	14.34	5.9821	5.4144	0.23583	0.415	0.70496	0.13724	5.137	0.4211	0.28386
38	14.96	5.9882	5.4144	0.2329	0.406	0.71398	0.14016	5.094	0.42707	0.28691
39	15.57	5.9934	5.4144	0.23115	0.399	0.7209	0.14192	5.080	0.43141	0.28949

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: ED-1 COMP
Sample No.: ED-1 COMP
Test No.: ED1T2

Location:
Tested By: MJS
Test Date: 8/18/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY F-C SAND TRACE SILT TRACE ORGANICS - BROWN (SC)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 141.57 mm
Specimen Area: 6.03 in^2
Specimen Volume: 550.91 cc

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 psi
Membrane Correction: 0.00 lb/mm
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.69

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress psi	Pore Pressure psi	Horizontal Stress psi	Vertical Stress psi
1	0	0	6.0318	0	0	70.002	80.4	80.4
2	2.0004	0.11269	6.0386	25.044	4.1474	72.334	80.4	84.547
3	4.0004	0.25023	6.0469	33.339	5.5133	73.606	80.4	85.913
4	6.0002	0.39937	6.056	37.887	6.2562	74.432	80.4	86.656
5	8.0004	0.54685	6.0649	40.777	6.7234	75.016	80.4	87.123
6	10	0.69434	6.0739	42.864	7.057	75.437	80.4	87.457
7	12	0.84182	6.083	44.576	7.3281	75.777	80.4	87.728
8	14.001	0.99097	6.0921	45.807	7.5191	76.044	80.4	87.919
9	16.001	1.1385	6.1012	46.984	7.7008	76.263	80.4	88.101
10	18.001	1.2843	6.1102	48.055	7.8646	76.441	80.4	88.265
11	20.001	1.4318	6.1194	48.964	8.0015	76.595	80.4	88.402
12	24.001	1.7284	6.1379	50.516	8.2303	76.83	80.4	88.63
13	28.001	2.025	6.1564	51.961	8.4401	77.016	80.4	88.84
14	32.001	2.32	6.175	53.299	8.6314	77.154	80.4	89.031
15	36.001	2.6133	6.1936	54.53	8.8042	77.251	80.4	89.204
16	40.003	2.9099	6.2125	55.814	8.9841	77.34	80.4	89.384
17	44.003	3.2066	6.2316	56.884	9.1284	77.405	80.4	89.528
18	48.003	3.5032	6.2507	58.008	9.2802	77.446	80.4	89.68
19	52.003	3.7982	6.2699	59.025	9.414	77.494	80.4	89.814
20	56.004	4.0948	6.2893	59.988	9.5381	77.527	80.4	89.938
21	60.004	4.3931	6.3089	61.005	9.6696	77.543	80.4	90.07
22	68.004	4.9847	6.3482	63.145	9.947	77.567	80.4	90.347
23	76.004	5.5779	6.3881	65.232	10.212	77.583	80.4	90.612
24	84.001	6.1645	6.428	67.319	10.473	77.583	80.4	90.873
25	92.001	6.7561	6.4688	68.978	10.663	77.567	80.4	91.063
26	100	7.351	6.5103	70.798	10.875	77.559	80.4	91.275
27	108	7.941	6.5521	72.671	11.091	77.535	80.4	91.491
28	116	8.5309	6.5943	74.383	11.28	77.527	80.4	91.68
29	124	9.1192	6.637	76.256	11.49	77.494	80.4	91.89
30	132	9.7141	6.6807	77.701	11.631	77.47	80.4	92.031
31	140	10.302	6.7246	79.36	11.801	77.446	80.4	92.201
32	148	10.892	6.7691	81.019	11.969	77.413	80.4	92.369
33	156	11.484	6.8143	82.464	12.102	77.373	80.4	92.502
34	164	12.077	6.8603	84.122	12.262	77.332	80.4	92.662
35	172	12.675	6.9073	85.674	12.403	77.3	80.4	92.803
36	180	13.265	6.9543	86.905	12.497	77.259	80.4	92.897
37	188	13.857	7.002	88.243	12.602	77.211	80.4	93.002
38	196	14.452	7.0507	89.581	12.705	77.17	80.4	93.105
39	204	15.048	7.1002	91.133	12.835	77.13	80.4	93.235

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: ED-1 COMP
Sample No.: ED-1 COMP
Test No.: ED1T2

Location:
Tested By: MJS
Test Date: 8/18/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY F-C SAND TRACE SILT TRACE ORGANICS - BROWN (SC)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 141.57 mm
Specimen Area: 6.03 in^2
Specimen Volume: 550.91 cc

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 psi
Membrane Correction: 0.00 lb/mm
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.69

	Vertical Strain %	Total Vertical Stress psi	Total Horizontal Stress psi	Excess Pore Pressure psi	A Parameter	Effective Vertical Stress psi	Effective Horizontal Stress psi	Stress Ratio	Effective p psi	q psi
1	0.00	80.4	80.4	0	0.000	10.398	10.398	1.000	10.398	0
2	0.11	84.547	80.4	2.3328	0.562	12.213	8.0656	1.514	10.139	2.0737
3	0.25	85.913	80.4	3.6046	0.654	12.307	6.7938	1.812	9.5505	2.7567
4	0.40	86.656	80.4	4.4308	0.708	12.224	5.9676	2.048	9.0957	3.1281
5	0.55	87.123	80.4	5.014	0.746	12.108	5.3844	2.249	8.7461	3.3617
6	0.69	87.457	80.4	5.4352	0.770	12.02	4.9632	2.422	8.4917	3.5285
7	0.84	87.728	80.4	5.7754	0.788	11.951	4.623	2.585	8.287	3.664
8	0.99	87.919	80.4	6.0427	0.804	11.875	4.3557	2.726	8.1152	3.7595
9	1.14	88.101	80.4	6.2614	0.813	11.838	4.137	2.861	7.9874	3.8504
10	1.28	88.265	80.4	6.4396	0.819	11.823	3.9588	2.987	7.8911	3.9323
11	1.43	88.402	80.4	6.5935	0.824	11.806	3.8049	3.103	7.8056	4.0008
12	1.73	88.63	80.4	6.8284	0.830	11.8	3.57	3.305	7.6851	4.1151
13	2.03	88.84	80.4	7.0147	0.831	11.824	3.3837	3.494	7.6037	4.2201
14	2.32	89.031	80.4	7.1524	0.829	11.877	3.246	3.659	7.5616	4.3157
15	2.61	89.204	80.4	7.2496	0.823	11.953	3.1488	3.796	7.5508	4.4021
16	2.91	89.384	80.4	7.3387	0.817	12.044	3.0597	3.936	7.5517	4.492
17	3.21	89.528	80.4	7.4035	0.811	12.123	2.9949	4.048	7.559	4.5642
18	3.50	89.68	80.4	7.444	0.802	12.235	2.9544	4.141	7.5945	4.6401
19	3.80	89.814	80.4	7.4926	0.796	12.32	2.9058	4.240	7.6127	4.707
20	4.09	89.938	80.4	7.5251	0.789	12.411	2.8734	4.320	7.6424	4.7691
21	4.39	90.07	80.4	7.5413	0.780	12.527	2.8572	4.384	7.692	4.8348
22	4.98	90.347	80.4	7.5656	0.761	12.78	2.8329	4.511	7.8063	4.9735
23	5.58	90.612	80.4	7.5818	0.742	13.028	2.8167	4.625	7.9224	5.1058
24	6.16	90.873	80.4	7.5818	0.724	13.289	2.8167	4.718	8.053	5.2364
25	6.76	91.063	80.4	7.5656	0.710	13.496	2.8329	4.764	8.1645	5.3316
26	7.35	91.275	80.4	7.5575	0.695	13.716	2.841	4.828	8.2783	5.4373
27	7.94	91.491	80.4	7.5332	0.679	13.957	2.8653	4.871	8.4109	5.5456
28	8.53	91.68	80.4	7.5251	0.667	14.153	2.8734	4.926	8.5133	5.6399
29	9.12	91.89	80.4	7.4926	0.652	14.395	2.9058	4.954	8.6505	5.7448
30	9.71	92.031	80.4	7.4683	0.642	14.561	2.9301	4.969	8.7453	5.8153
31	10.30	92.201	80.4	7.444	0.631	14.756	2.9544	4.995	8.8551	5.9007
32	10.89	92.369	80.4	7.4116	0.619	14.956	2.9868	5.007	8.9712	5.9845
33	11.48	92.502	80.4	7.3711	0.609	15.129	3.0273	4.998	9.078	6.0508
34	12.08	92.662	80.4	7.3306	0.598	15.33	3.0678	4.997	9.1989	6.1311
35	12.68	92.803	80.4	7.2982	0.588	15.504	3.1002	5.001	9.3019	6.2017
36	13.27	92.897	80.4	7.2577	0.581	15.637	3.1407	4.979	9.389	6.2483
37	13.86	93.002	80.4	7.2091	0.572	15.792	3.1893	4.952	9.4905	6.3012
38	14.45	93.105	80.4	7.1686	0.564	15.935	3.2298	4.934	9.5824	6.3526
39	15.05	93.235	80.4	7.1281	0.555	16.105	3.2703	4.925	9.6878	6.4176

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: ED-1 COMP
Sample No.: ED1 COMP
Test No.: ED1T3

Location:
Tested By: MS
Test Date: 8/18/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY F-C SAND TRACE SILT TRACE ORGANICS - BROWN (SC)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.47 in
Specimen Area: 6.03 in^2
Specimen Volume: 33.00 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.69

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.0318	0	0	5.0402	6.5376	6.5376
2	2.0042	0.11353	6.0386	43.207	0.51517	5.3528	6.5376	7.0528
3	4.0041	0.25543	6.0472	59.324	0.70633	5.5448	6.5376	7.2439
4	6.0041	0.40235	6.0561	67.829	0.8064	5.673	6.5376	7.344
5	8.0041	0.5526	6.0653	73.236	0.86938	5.7643	6.5376	7.407
6	10.004	0.69952	6.0743	77.069	0.91352	5.8322	6.5376	7.4511
7	12.004	0.85144	6.0836	80.009	0.94692	5.8849	6.5376	7.4845
8	14	1	6.0927	82.266	0.97218	5.9264	6.5376	7.5098
9	16	1.1503	6.102	84.261	0.99424	5.9604	6.5376	7.5318
10	18	1.2955	6.1109	85.889	1.012	5.9879	6.5376	7.5496
11	20	1.4458	6.1202	87.201	1.0259	6.0119	6.5376	7.5635
12	24.004	1.7463	6.139	89.879	1.0541	6.0493	6.5376	7.5917
13	28.004	2.0468	6.1578	92.031	1.0761	6.0774	6.5376	7.6137
14	32.004	2.3506	6.177	94.131	1.0972	6.0985	6.5376	7.6348
15	36.004	2.6545	6.1962	95.549	1.1103	6.1155	6.5376	7.6479
16	40.004	2.9617	6.2159	97.649	1.1311	6.1295	6.5376	7.6687
17	44.004	3.2639	6.2353	99.643	1.1506	6.1401	6.5376	7.6882
18	48.004	3.5644	6.2547	101.22	1.1652	6.1483	6.5376	7.7028
19	52.004	3.8632	6.2741	102.85	1.1802	6.1553	6.5376	7.7178
20	56.004	4.1604	6.2936	104.53	1.1958	6.1611	6.5376	7.7334
21	60.004	4.4575	6.3132	106	1.2089	6.1646	6.5376	7.7465
22	68.003	5.0652	6.3536	108.94	1.2345	6.1705	6.5376	7.7721
23	76.004	5.6713	6.3944	112.35	1.265	6.1734	6.5376	7.8026
24	84.004	6.2723	6.4354	115.24	1.2893	6.1746	6.5376	7.8269
25	92.004	6.865	6.4764	117.76	1.3091	6.1728	6.5376	7.8467
26	100	7.466	6.5184	120.38	1.3297	6.1723	6.5376	7.8673
27	108	8.0787	6.5619	123.32	1.3531	6.1699	6.5376	7.8907
28	116	8.6847	6.6054	125.68	1.37	6.1676	6.5376	7.9076
29	124	9.2807	6.6488	128.26	1.3889	6.1641	6.5376	7.9265
30	132	9.8851	6.6934	131.04	1.4096	6.1611	6.5376	7.9472
31	140	10.496	6.7391	133.19	1.423	6.1582	6.5376	7.9606
32	148	11.107	6.7854	135.5	1.4378	6.1535	6.5376	7.9754
33	156	11.705	6.8314	138.18	1.4563	6.15	6.5376	7.9939
34	164	12.304	6.8781	140.12	1.4668	6.1459	6.5376	8.0044
35	172	12.917	6.9264	142.43	1.4806	6.1418	6.5376	8.0182
36	180	13.533	6.9758	144.95	1.4961	6.1389	6.5376	8.0337
37	188	14.132	7.0245	146.95	1.5062	6.1336	6.5376	8.0438
38	196	14.732	7.0739	148.78	1.5144	6.1307	6.5376	8.052
39	204	15.336	7.1244	150.99	1.5259	6.1266	6.5376	8.0635

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: ED-1 COMP
Sample No.: ED1 COMP
Test No.: ED1T3

Location:
Tested By: MS
Test Date: 8/18/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY F-C SAND TRACE SILT TRACE ORGANICS - BROWN (SC)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.47 in
Specimen Area: 6.03 in^2
Specimen Volume: 33.00 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

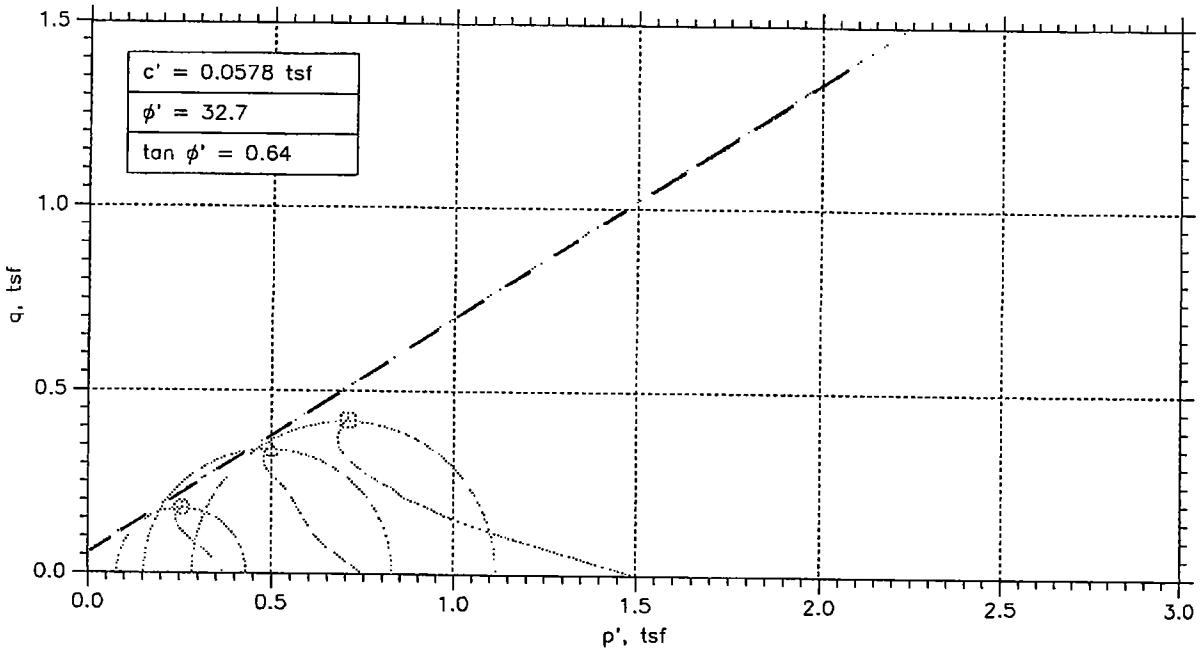
Liquid Limit: 0

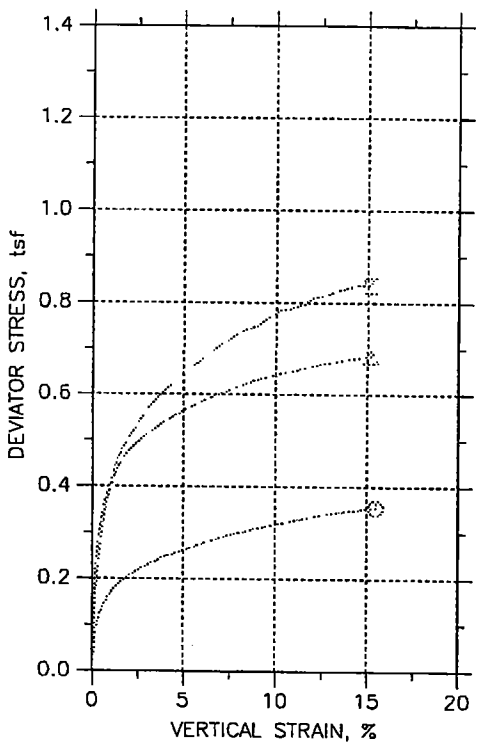
Plastic Limit: 0

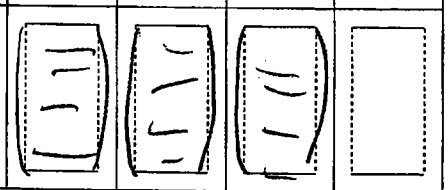
Estimated Specific Gravity: 2.69

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	6.5376	6.5376	0	0.000	1.4974	1.4974	1.000	1.4974	0
2	0.11	7.0528	6.5376	0.31256	0.607	1.7	1.1848	1.435	1.4424	0.25758
3	0.26	7.2439	6.5376	0.50455	0.714	1.6991	0.99281	1.711	1.346	0.35317
4	0.40	7.344	6.5376	0.63274	0.785	1.671	0.86462	1.933	1.2678	0.4032
5	0.55	7.407	6.5376	0.72405	0.833	1.6427	0.77331	2.124	1.208	0.43469
6	0.70	7.4511	6.5376	0.79195	0.867	1.6189	0.70542	2.295	1.1622	0.45676
7	0.85	7.4845	6.5376	0.84462	0.892	1.5997	0.65274	2.451	1.1262	0.47346
8	1.00	7.5098	6.5376	0.88618	0.912	1.5834	0.61118	2.591	1.0973	0.48609
9	1.15	7.5318	6.5376	0.92013	0.925	1.5715	0.57723	2.722	1.0743	0.49712
10	1.30	7.5496	6.5376	0.94764	0.936	1.5617	0.54972	2.841	1.0557	0.50598
11	1.45	7.5635	6.5376	0.97164	0.947	1.5516	0.52572	2.951	1.0386	0.51293
12	1.75	7.5917	6.5376	1.0091	0.957	1.5424	0.48826	3.159	1.0153	0.52706
13	2.05	7.6137	6.5376	1.0372	0.964	1.5362	0.46016	3.338	0.9982	0.53804
14	2.35	7.6348	6.5376	1.0583	0.965	1.5363	0.43909	3.499	0.9877	0.54861
15	2.65	7.6479	6.5376	1.0752	0.968	1.5324	0.42212	3.630	0.97725	0.55513
16	2.96	7.6687	6.5376	1.0893	0.963	1.5392	0.40807	3.772	0.97361	0.56554
17	3.26	7.6882	6.5376	1.0998	0.956	1.5481	0.39753	3.894	0.97284	0.5753
18	3.56	7.7028	6.5376	1.108	0.951	1.5545	0.38934	3.993	0.97192	0.58258
19	3.86	7.7178	6.5376	1.115	0.945	1.5625	0.38232	4.087	0.97243	0.59011
20	4.16	7.7334	6.5376	1.1209	0.937	1.5723	0.37646	4.176	0.97436	0.5979
21	4.46	7.7465	6.5376	1.1244	0.930	1.5818	0.37295	4.241	0.97738	0.60443
22	5.07	7.7721	6.5376	1.1303	0.916	1.6016	0.3671	4.363	0.98434	0.61724
23	5.67	7.8026	6.5376	1.1332	0.896	1.6292	0.36417	4.474	0.99668	0.63251
24	6.27	7.8269	6.5376	1.1344	0.880	1.6523	0.363	4.552	1.0076	0.64463
25	6.86	7.8467	6.5376	1.1326	0.865	1.6739	0.36476	4.589	1.0193	0.65457
26	7.47	7.8673	6.5376	1.132	0.851	1.695	0.36534	4.640	1.0302	0.66484
27	8.08	7.8907	6.5376	1.1297	0.835	1.7208	0.36768	4.680	1.0442	0.67657
28	8.68	7.9076	6.5376	1.1273	0.823	1.74	0.37002	4.702	1.055	0.68498
29	9.28	7.9265	6.5376	1.1238	0.809	1.7624	0.37354	4.718	1.068	0.69444
30	9.89	7.9472	6.5376	1.1209	0.795	1.786	0.37646	4.744	1.0812	0.70478
31	10.50	7.9606	6.5376	1.118	0.786	1.8024	0.37939	4.751	1.0909	0.7115
32	11.11	7.9754	6.5376	1.1133	0.774	1.8219	0.38407	4.744	1.103	0.7189
33	11.70	7.9939	6.5376	1.1098	0.762	1.8439	0.38758	4.757	1.1158	0.72817
34	12.30	8.0044	6.5376	1.1057	0.754	1.8585	0.39168	4.745	1.1251	0.7334
35	12.92	8.0182	6.5376	1.1016	0.744	1.8763	0.39578	4.741	1.1361	0.74028
36	13.53	8.0337	6.5376	1.0987	0.734	1.8948	0.3987	4.752	1.1468	0.74805
37	14.13	8.0438	6.5376	1.0934	0.726	1.9101	0.40397	4.728	1.1571	0.75308
38	14.73	8.052	6.5376	1.0905	0.720	1.9213	0.4069	4.722	1.1641	0.75718
39	15.34	8.0635	6.5376	1.0864	0.712	1.9369	0.411	4.713	1.174	0.76295

TRIAXIAL COMPRESSION TEST REPORT





Symbol		⊙	△	⊡	
Test No.		ED6T1	ED6T2	ED6T3	
Initial	Diameter, in	2.8697	2.8	2.8378	
	Height, in	5.2252	5.3307	5.3142	
	Water Content, %	139.82	127.38	141.20	
	Dry Density, pcf	34.61	37.83	34.58	
	Saturation, %	99.61	101.87	100.49	
	Void Ratio	3.5092	3.126	3.5129	
Before Shear	Water Content, %	129.82	104.25	109.81	
	Dry Density, pcf	36.97	42.9	41.08	
	Saturation, %	100.73	98.81	98.08	
	Void Ratio	3.2218	2.6377	2.7988	
	Back Press., tsf	5.0402	5.0401	5.04	
Minor Prin. Stress, tsf		0.37423	0.74868	1.4976	
Max. Dev. Stress, tsf		0.3538	0.68306	0.83769	
Time to Failure, min		196	196	188	
Strain Rate, %/min		0.08122	0.08762	0.0852	
B-Value		---	---	---	
Estimated Specific Gravity		2.50	2.50	2.50	
Liquid Limit		0	0	0	
Plastic Limit		0	0	0	
Plasticity Index		0	0	0	
Failure Sketch					

Project: LOWER FOX RIVER

Location:

Project No.: 29316-A

Boring No.: ED-6

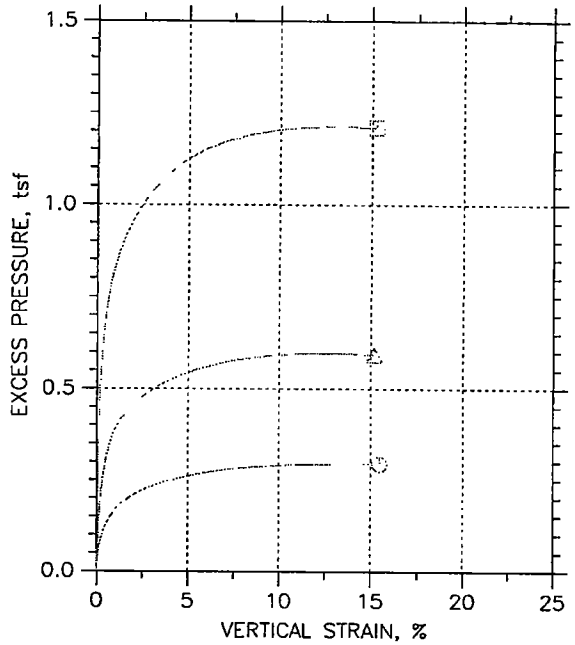
Sample Type: REMOLDED

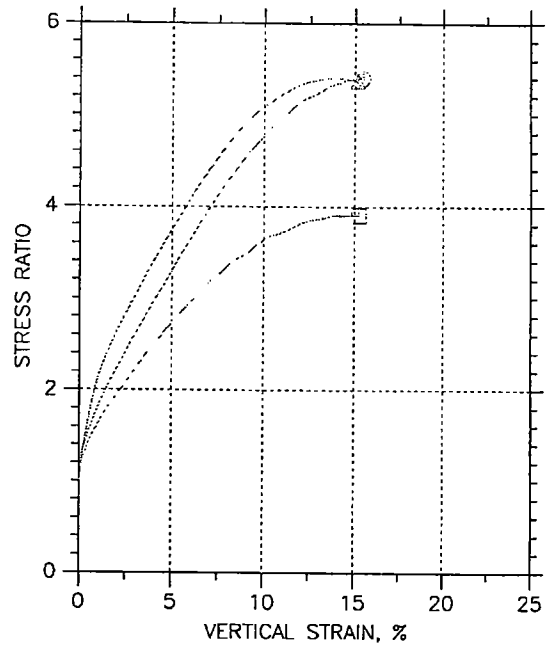
Description: ELASTIC SILT RIVER SEDIMENT - DARK BROWN (MH) ROOTS AND VEGETATION NOTED

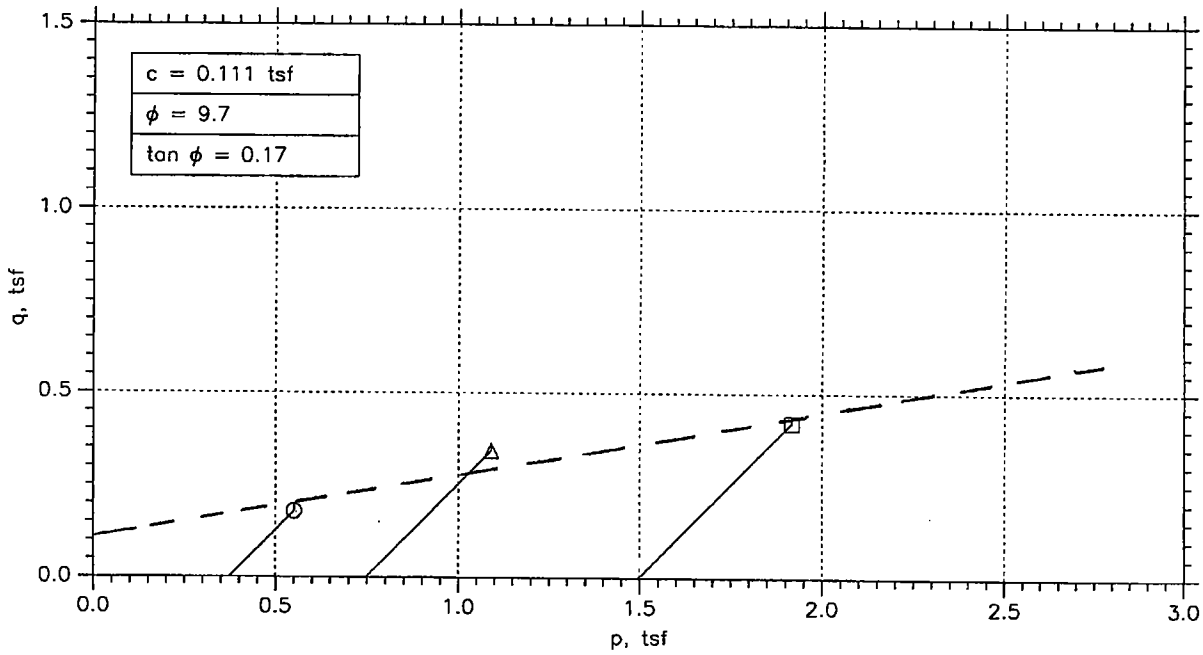
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Wed, 01-NOV-2006 14:15:35

TRIAXIAL COMPRESSION TEST REPORT







Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: ED-6	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/26/06	Depth:
Test No.: ED6T1	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT RIVER SEDIMENT - DARK BROWN (MH) ROOTS AND VEGETATION NOTED		
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767		

Wed, 01-NOV-2006 14:16:53

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: ED-6
Sample No.: ED-6
Test No.: ED6T1

Location:
Tested By: MJS
Test Date: 10/26/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT RIVER SEDIMENT - DARK BROWN (MH) ROOTS AND VEGETATION NOTED
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.23 in
Specimen Area: 6.47 in^2
Specimen Volume: 33.80 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.4678	0	0	5.0402	5.4144	5.4144
2	2.0001	0.14994	6.4775	7.1637	0.079627	5.1127	5.4144	5.494
3	4.0001	0.30861	6.4878	9.7018	0.10767	5.1414	5.4144	5.5221
4	6.0006	0.46553	6.4981	11.457	0.12695	5.1613	5.4144	5.5413
5	8.0006	0.62244	6.5083	12.738	0.14092	5.1771	5.4144	5.5553
6	10.001	0.77936	6.5186	13.877	0.15327	5.19	5.4144	5.5677
7	12.001	0.93628	6.529	14.778	0.16297	5.2011	5.4144	5.5774
8	14.001	1.0949	6.5394	15.585	0.17159	5.2105	5.4144	5.586
9	16.001	1.2519	6.5498	16.273	0.17888	5.2186	5.4144	5.5933
10	18.001	1.4088	6.5602	16.889	0.18536	5.2257	5.4144	5.5998
11	20.001	1.5657	6.5707	17.411	0.19079	5.2321	5.4144	5.6052
12	24.001	1.8865	6.5922	18.384	0.20079	5.2432	5.4144	5.6152
13	28.001	2.2021	6.6135	19.238	0.20944	5.252	5.4144	5.6238
14	32.001	2.5159	6.6348	20.02	0.21726	5.2602	5.4144	5.6317
15	36.001	2.8298	6.6562	20.803	0.22503	5.2672	5.4144	5.6394
16	40.001	3.1453	6.6779	21.373	0.23044	5.2731	5.4144	5.6448
17	44.003	3.4592	6.6996	21.989	0.23632	5.2789	5.4144	5.6507
18	48.003	3.7748	6.7215	22.677	0.24291	5.2836	5.4144	5.6573
19	52.003	4.0938	6.7439	23.246	0.24819	5.2883	5.4144	5.6626
20	56.003	4.4094	6.7662	23.768	0.25292	5.2924	5.4144	5.6673
21	60.003	4.7267	6.7887	24.243	0.25711	5.2965	5.4144	5.6715
22	68.003	5.3579	6.834	25.31	0.26666	5.3041	5.4144	5.6811
23	76.004	5.9908	6.88	26.33	0.27555	5.3093	5.4144	5.6899
24	84	6.6237	6.9266	27.279	0.28356	5.3146	5.4144	5.698
25	92.002	7.2566	6.9739	28.204	0.29119	5.3187	5.4144	5.7056
26	100	7.8948	7.0222	29.058	0.29794	5.3222	5.4144	5.7123
27	108	8.5224	7.0704	29.817	0.30364	5.3251	5.4144	5.718
28	116	9.1484	7.1191	30.671	0.3102	5.3275	5.4144	5.7246
29	124	9.7813	7.169	31.454	0.3159	5.3292	5.4144	5.7303
30	132	10.416	7.2198	32.213	0.32124	5.331	5.4144	5.7356
31	140	11.049	7.2712	32.972	0.32649	5.3322	5.4144	5.7409
32	148	11.683	7.3235	33.707	0.33139	5.3333	5.4144	5.7458
33	156	12.311	7.3759	34.443	0.33621	5.3339	5.4144	5.7506
34	164	12.941	7.4292	35.131	0.34047	5.3339	5.4144	5.7549
35	172	13.572	7.4835	35.795	0.34439	5.3345	5.4144	5.7588
36	180	14.203	7.5385	36.412	0.34777	5.3345	5.4144	5.7622
37	188	14.838	7.5947	37.099	0.35171	5.3345	5.4144	5.7661
38	196	15.469	7.6514	37.598	0.3538	5.3339	5.4144	5.7682

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: ED-6
Sample No.: ED-6
Test No.: ED6T1

Location:
Tested By: MJS
Test Date: 10/26/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT RIVER SEDIMENT - DARK BROWN (MH) ROOTS AND VEGETATION NOTED
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.23 in
Specimen Area: 6.47 in^2
Specimen Volume: 33.80 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	5.4144	5.4144	0	0.000	0.37423	0.37423	1.000	0.37423	0
2	0.15	5.494	5.4144	0.072562	0.911	0.3813	0.30167	1.264	0.34149	0.039814
3	0.31	5.5221	5.4144	0.10124	0.940	0.38067	0.273	1.394	0.32683	0.053834
4	0.47	5.5413	5.4144	0.12113	0.954	0.38005	0.2531	1.502	0.31658	0.063474
5	0.62	5.5553	5.4144	0.13693	0.972	0.37822	0.2373	1.594	0.30776	0.070459
6	0.78	5.5677	5.4144	0.14981	0.977	0.3777	0.22443	1.683	0.30106	0.076636
7	0.94	5.5774	5.4144	0.16092	0.987	0.37628	0.21331	1.764	0.29479	0.081485
8	1.09	5.586	5.4144	0.17029	0.992	0.37554	0.20395	1.841	0.28974	0.085794
9	1.25	5.5933	5.4144	0.17848	0.998	0.37463	0.19575	1.914	0.28519	0.089439
10	1.41	5.5998	5.4144	0.1855	1.001	0.37409	0.18873	1.982	0.28141	0.092682
11	1.57	5.6052	5.4144	0.19194	1.006	0.37308	0.18229	2.047	0.27769	0.095393
12	1.89	5.6152	5.4144	0.20306	1.011	0.37196	0.17118	2.173	0.27157	0.10039
13	2.20	5.6238	5.4144	0.21184	1.011	0.37184	0.1624	2.290	0.26712	0.10472
14	2.52	5.6317	5.4144	0.22003	1.013	0.37147	0.15421	2.409	0.26284	0.10863
15	2.83	5.6394	5.4144	0.22705	1.009	0.37221	0.14718	2.529	0.2597	0.11251
16	3.15	5.6448	5.4144	0.2329	1.011	0.37177	0.14133	2.630	0.25655	0.11522
17	3.46	5.6507	5.4144	0.23875	1.010	0.3718	0.13548	2.744	0.25364	0.11816
18	3.77	5.6573	5.4144	0.24344	1.002	0.37371	0.1308	2.857	0.25226	0.12146
19	4.09	5.6626	5.4144	0.24812	1.000	0.3743	0.12612	2.968	0.25021	0.12409
20	4.41	5.6673	5.4144	0.25221	0.997	0.37494	0.12202	3.073	0.24848	0.12646
21	4.73	5.6715	5.4144	0.25631	0.997	0.37504	0.11792	3.180	0.24648	0.12856
22	5.36	5.6811	5.4144	0.26392	0.990	0.37698	0.11032	3.417	0.24365	0.13333
23	5.99	5.6899	5.4144	0.26918	0.977	0.3806	0.10505	3.623	0.24283	0.13777
24	6.62	5.698	5.4144	0.27445	0.968	0.38334	0.099784	3.842	0.24156	0.14178
25	7.26	5.7056	5.4144	0.27855	0.957	0.38687	0.095688	4.043	0.24128	0.14559
26	7.89	5.7123	5.4144	0.28206	0.947	0.39011	0.092177	4.232	0.24115	0.14897
27	8.52	5.718	5.4144	0.28498	0.939	0.39289	0.089251	4.402	0.24107	0.15182
28	9.15	5.7246	5.4144	0.28732	0.926	0.39711	0.08691	4.569	0.24201	0.1551
29	9.78	5.7303	5.4144	0.28908	0.915	0.40105	0.085155	4.710	0.2431	0.15795
30	10.42	5.7356	5.4144	0.29084	0.905	0.40464	0.083399	4.852	0.24402	0.16062
31	11.05	5.7409	5.4144	0.29201	0.894	0.40872	0.082229	4.971	0.24547	0.16325
32	11.68	5.7458	5.4144	0.29318	0.885	0.41245	0.081058	5.088	0.24675	0.1657
33	12.31	5.7506	5.4144	0.29376	0.874	0.41669	0.080473	5.178	0.24858	0.16811
34	12.94	5.7549	5.4144	0.29376	0.863	0.42094	0.080473	5.231	0.25071	0.17023
35	13.57	5.7588	5.4144	0.29435	0.855	0.42428	0.079888	5.311	0.25208	0.17219
36	14.20	5.7622	5.4144	0.29435	0.846	0.42765	0.079888	5.353	0.25377	0.17388
37	14.84	5.7661	5.4144	0.29435	0.837	0.4316	0.079888	5.403	0.25575	0.17586
38	15.47	5.7682	5.4144	0.29376	0.830	0.43427	0.080473	5.396	0.25737	0.1769

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: ED-6
Sample No.: ED-6
Test No.: ED6T2

Location:
Tested By: MJS
Test Date: 10/26/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT RIVER SEDIMENT - DARK BROWN (MH) ROOTS AND VEGETATION NOTED
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.33 in
Specimen Area: 6.16 in^2
Specimen Volume: 32.82 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.1575	0	0	5.0401	5.7888	5.7888
2	2.0041	0.14901	6.1667	12.541	0.14643	5.2145	5.7888	5.9352
3	4.0041	0.29975	6.176	19.026	0.22181	5.2886	5.7888	6.0106
4	6.0041	0.45049	6.1854	24.064	0.28012	5.337	5.7888	6.0689
5	8.0041	0.60643	6.1951	27.977	0.32515	5.3725	5.7888	6.1139
6	10	0.7589	6.2046	30.924	0.35886	5.3988	5.7888	6.1477
7	12	0.91484	6.2144	33.229	0.38499	5.4186	5.7888	6.1738
8	14	1.0708	6.2242	35.159	0.40671	5.4355	5.7888	6.1955
9	16	1.2267	6.234	36.659	0.4234	5.4489	5.7888	6.2122
10	18	1.3844	6.244	37.838	0.43632	5.4606	5.7888	6.2251
11	20	1.5386	6.2537	38.964	0.44859	5.4705	5.7888	6.2374
12	24	1.8557	6.2739	40.625	0.46622	5.488	5.7888	6.255
13	28	2.1658	6.2938	42.072	0.4813	5.5026	5.7888	6.2701
14	32	2.4742	6.3137	43.198	0.49262	5.5154	5.7888	6.2814
15	36.001	2.7809	6.3337	44.323	0.50386	5.5271	5.7888	6.2927
16	40.001	3.0841	6.3535	45.234	0.51261	5.537	5.7888	6.3014
17	44.001	3.3925	6.3738	46.253	0.52249	5.5463	5.7888	6.3113
18	48.001	3.7061	6.3945	47.217	0.53165	5.5551	5.7888	6.3205
19	52.001	4.0232	6.4156	48.021	0.53892	5.5627	5.7888	6.3277
20	56.002	4.3403	6.4369	48.933	0.54733	5.5697	5.7888	6.3361
21	60.002	4.6556	6.4582	49.736	0.55449	5.5767	5.7888	6.3433
22	68.002	5.2742	6.5004	51.291	0.56811	5.5878	5.7888	6.3569
23	76.004	5.8858	6.5426	52.738	0.58037	5.5971	5.7888	6.3692
24	84	6.5148	6.5866	54.238	0.59289	5.6058	5.7888	6.3817
25	92.001	7.1454	6.6314	55.471	0.60228	5.6128	5.7888	6.3911
26	100	7.7605	6.6756	56.704	0.61158	5.6187	5.7888	6.4004
27	108	8.3652	6.7196	57.937	0.62078	5.6233	5.7888	6.4096
28	116	8.9872	6.7656	59.276	0.63083	5.6274	5.7888	6.4196
29	124	9.6197	6.8129	60.295	0.63721	5.6303	5.7888	6.426
30	132	10.25	6.8608	61.367	0.64401	5.6321	5.7888	6.4328
31	140	10.867	6.9083	62.224	0.64852	5.6344	5.7888	6.4373
32	148	11.487	6.9567	63.296	0.6551	5.6356	5.7888	6.4439
33	156	12.12	7.0067	64.475	0.66254	5.6362	5.7888	6.4513
34	164	12.749	7.0572	65.386	0.66709	5.6362	5.7888	6.4559
35	172	13.367	7.1076	66.244	0.67105	5.6362	5.7888	6.4598
36	180	13.963	7.1569	67.101	0.67506	5.6356	5.7888	6.4639
37	188	14.568	7.2075	68.066	0.67995	5.6338	5.7888	6.4688
38	196	15.18	7.2595	68.87	0.68306	5.6327	5.7888	6.4719

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: ED-6
Sample No.: ED-6
Test No.: ED6T2

Location:
Tested By: MJS
Test Date: 10/26/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT RIVER SEDIMENT - DARK BROWN (MH) ROOTS AND VEGETATION NOTED
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.33 in
Specimen Area: 6.16 in^2
Specimen Volume: 32.82 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	5.7888	5.7888	0	0.000	0.74868	0.74868	1.000	0.74868	0
2	0.15	5.9352	5.7888	0.17438	1.191	0.72073	0.5743	1.255	0.64752	0.073214
3	0.30	6.0106	5.7888	0.24845	1.120	0.72205	0.50024	1.443	0.61114	0.1109
4	0.45	6.0689	5.7888	0.29685	1.060	0.73195	0.45183	1.620	0.59189	0.14006
5	0.61	6.1139	5.7888	0.33243	1.022	0.7414	0.41625	1.781	0.57883	0.16257
6	0.76	6.1477	5.7888	0.35868	0.999	0.74887	0.39001	1.920	0.56944	0.17943
7	0.91	6.1738	5.7888	0.3785	0.983	0.75517	0.37018	2.040	0.56268	0.1925
8	1.07	6.1955	5.7888	0.39542	0.972	0.75997	0.35327	2.151	0.55662	0.20335
9	1.23	6.2122	5.7888	0.40883	0.966	0.76325	0.33985	2.246	0.55155	0.2117
10	1.38	6.2251	5.7888	0.4205	0.964	0.76451	0.32819	2.329	0.54635	0.21816
11	1.54	6.2374	5.7888	0.43041	0.959	0.76687	0.31827	2.409	0.54257	0.2243
12	1.86	6.255	5.7888	0.44791	0.961	0.76699	0.30078	2.550	0.53389	0.23311
13	2.17	6.2701	5.7888	0.46249	0.961	0.7675	0.2862	2.682	0.52685	0.24065
14	2.47	6.2814	5.7888	0.47532	0.965	0.76598	0.27337	2.802	0.51967	0.24631
15	2.78	6.2927	5.7888	0.48698	0.967	0.76556	0.2617	2.925	0.51363	0.25193
16	3.08	6.3014	5.7888	0.4969	0.969	0.7644	0.25179	3.036	0.5081	0.25631
17	3.39	6.3113	5.7888	0.50623	0.969	0.76494	0.24246	3.155	0.5037	0.26124
18	3.71	6.3205	5.7888	0.51498	0.969	0.76536	0.23371	3.275	0.49954	0.26583
19	4.02	6.3277	5.7888	0.52256	0.970	0.76505	0.22613	3.383	0.49559	0.26946
20	4.34	6.3361	5.7888	0.52956	0.968	0.76646	0.21913	3.498	0.4928	0.27367
21	4.66	6.3433	5.7888	0.53655	0.968	0.76662	0.21213	3.614	0.48938	0.27725
22	5.27	6.3569	5.7888	0.54764	0.964	0.76916	0.20105	3.826	0.4851	0.28406
23	5.89	6.3692	5.7888	0.55697	0.960	0.77209	0.19172	4.027	0.4819	0.29018
24	6.51	6.3817	5.7888	0.56572	0.954	0.77586	0.18297	4.240	0.47942	0.29645
25	7.15	6.3911	5.7888	0.57271	0.951	0.77825	0.17597	4.423	0.47711	0.30114
26	7.76	6.4004	5.7888	0.57855	0.946	0.78172	0.17014	4.595	0.47593	0.30579
27	8.37	6.4096	5.7888	0.58321	0.939	0.78626	0.16547	4.752	0.47586	0.31039
28	8.99	6.4196	5.7888	0.58729	0.931	0.79222	0.16139	4.909	0.4768	0.31541
29	9.62	6.426	5.7888	0.59021	0.926	0.79568	0.15847	5.021	0.47708	0.3186
30	10.25	6.4328	5.7888	0.59196	0.919	0.80073	0.15673	5.109	0.47873	0.322
31	10.87	6.4373	5.7888	0.59429	0.916	0.80291	0.15439	5.200	0.47865	0.32426
32	11.49	6.4439	5.7888	0.59546	0.909	0.80833	0.15323	5.275	0.48078	0.32755
33	12.12	6.4513	5.7888	0.59604	0.900	0.81518	0.15264	5.340	0.48391	0.33127
34	12.75	6.4559	5.7888	0.59604	0.893	0.81973	0.15264	5.370	0.48619	0.33354
35	13.37	6.4598	5.7888	0.59604	0.888	0.82369	0.15264	5.396	0.48817	0.33552
36	13.96	6.4639	5.7888	0.59546	0.882	0.82828	0.15323	5.406	0.49075	0.33753
37	14.57	6.4688	5.7888	0.59371	0.873	0.83493	0.15498	5.387	0.49495	0.33998
38	15.18	6.4719	5.7888	0.59254	0.867	0.8392	0.15614	5.375	0.49767	0.34153

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: ED-6
Sample No.: ED-6
Test No.: ED6T3

Location:
Tested By: MJS
Test Date: 10/27/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT RIVER SEDIMENT - DARK BROWN (MH) ROOTS AND VEGETATION NOTED
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.31 in
Specimen Area: 6.32 in^2
Specimen Volume: 33.61 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.3249	0	0	5.04	6.5376	6.5376
2	2.0039	0.14773	6.3342	18.812	0.21383	5.5209	6.5376	6.7514
3	4.0039	0.30242	6.3441	24.547	0.27858	5.6521	6.5376	6.8162
4	6.0039	0.4571	6.3539	28.084	0.31824	5.7282	6.5376	6.8558
5	8.0039	0.61005	6.3637	31.246	0.35352	5.7821	6.5376	6.8911
6	10.004	0.76647	6.3737	33.497	0.3784	5.8225	6.5376	6.916
7	12.004	0.91942	6.3836	35.159	0.39655	5.8559	6.5376	6.9342
8	14.004	1.0724	6.3934	36.981	0.41646	5.8852	6.5376	6.9541
9	16.004	1.2271	6.4034	38.803	0.4363	5.9104	6.5376	6.9739
10	18.004	1.3835	6.4136	40.625	0.45606	5.932	6.5376	6.9937
11	20.004	1.5416	6.4239	42.072	0.47155	5.9514	6.5376	7.0092
12	24.004	1.858	6.4446	43.948	0.49099	5.9847	6.5376	7.0286
13	28.004	2.1725	6.4653	46.146	0.51389	6.0134	6.5376	7.0515
14	32.004	2.4837	6.486	47.7	0.52951	6.038	6.5376	7.0671
15	36.004	2.7948	6.5067	49.683	0.54976	6.0591	6.5376	7.0874
16	40.004	3.1059	6.5276	51.666	0.56988	6.0785	6.5376	7.1075
17	44.004	3.4152	6.5485	52.952	0.5822	6.0972	6.5376	7.1198
18	48	3.7246	6.5696	54.453	0.59678	6.1142	6.5376	7.1344
19	52	4.0305	6.5905	55.739	0.60894	6.1271	6.5376	7.1465
20	56	4.3399	6.6118	56.811	0.61865	6.1376	6.5376	7.1562
21	60	4.6493	6.6333	58.097	0.63061	6.1517	6.5376	7.1682
22	68	5.2767	6.6772	60.723	0.65478	6.1704	6.5376	7.1924
23	76.001	5.9041	6.7217	62.599	0.67053	6.1891	6.5376	7.2081
24	84.001	6.5194	6.766	65.011	0.69181	6.2009	6.5376	7.2294
25	92.001	7.1381	6.8111	67.048	0.70876	6.2132	6.5376	7.2464
26	100	7.769	6.8576	69.138	0.72589	6.2208	6.5376	7.2635
27	108	8.3982	6.9048	71.014	0.7405	6.2296	6.5376	7.2781
28	116	9.0135	6.9514	72.3	0.74885	6.2342	6.5376	7.2865
29	124	9.6235	6.9984	74.444	0.76589	6.2401	6.5376	7.3035
30	132	10.251	7.0473	76.48	0.78138	6.2448	6.5376	7.319
31	140	10.884	7.0973	77.445	0.78566	6.2471	6.5376	7.3233
32	148	11.504	7.1471	78.839	0.79422	6.2501	6.5376	7.3318
33	156	12.118	7.197	81.036	0.8107	6.2506	6.5376	7.3483
34	164	12.743	7.2486	81.947	0.81398	6.2524	6.5376	7.3516
35	172	13.374	7.3014	83.823	0.82659	6.2506	6.5376	7.3642
36	180	14	7.3545	84.895	0.83112	6.2518	6.5376	7.3687
37	188	14.613	7.4073	86.181	0.83769	6.2489	6.5376	7.3753
38	196	15.234	7.4616	86.717	0.83677	6.2495	6.5376	7.3744

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: ED-6
Sample No.: ED-6
Test No.: ED6T3

Location:
Tested By: MJS
Test Date: 10/27/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT RIVER SEDIMENT - DARK BROWN (MH) ROOTS AND VEGETATION NOTED
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.31 in
Specimen Area: 6.32 in^2
Specimen Volume: 33.61 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

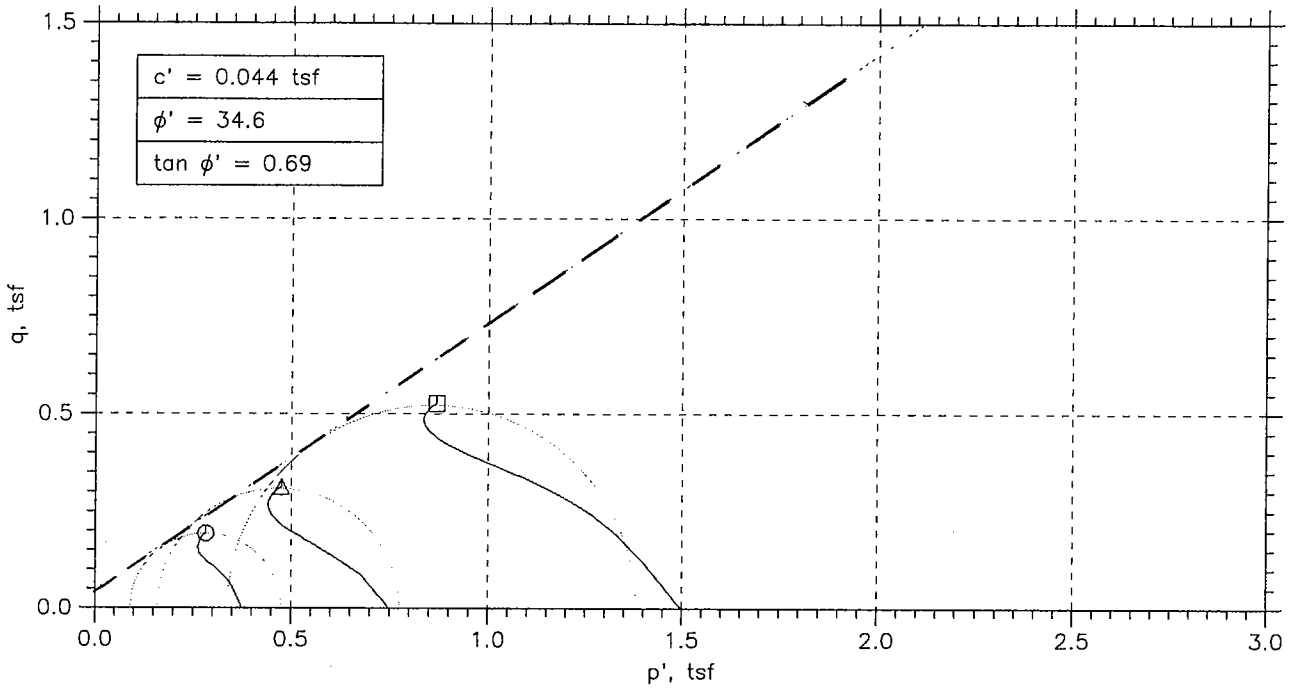
Liquid Limit: 0

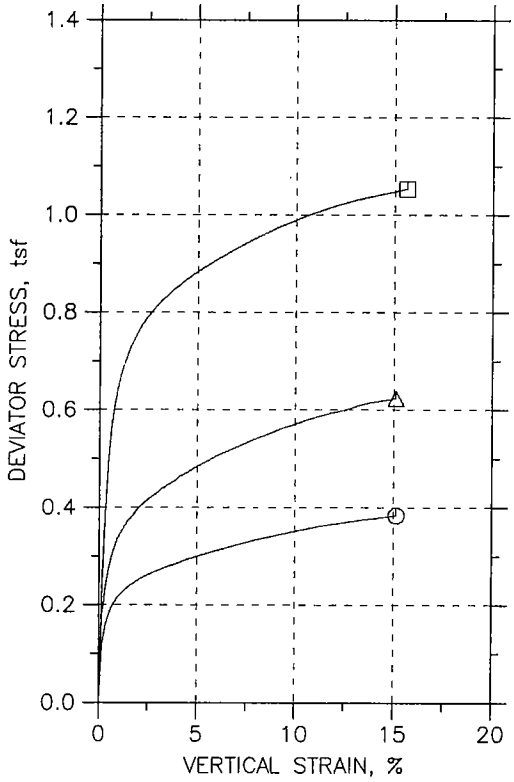
Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	6.5376	6.5376	0	0.000	1.4976	1.4976	1.000	1.4976	0
2	0.15	6.7514	6.5376	0.48086	2.249	1.2306	1.0167	1.210	1.1237	0.10692
3	0.30	6.8162	6.5376	0.61206	2.197	1.1641	0.88554	1.315	1.0248	0.13929
4	0.46	6.8558	6.5376	0.6882	2.163	1.1276	0.8094	1.393	0.96852	0.15912
5	0.61	6.8911	6.5376	0.74209	2.099	1.109	0.75552	1.468	0.93228	0.17676
6	0.77	6.916	6.5376	0.7825	2.068	1.0935	0.7151	1.529	0.9043	0.1892
7	0.92	6.9342	6.5376	0.81589	2.057	1.0783	0.68172	1.582	0.87999	0.19828
8	1.07	6.9541	6.5376	0.84517	2.029	1.0689	0.65243	1.638	0.86066	0.20823
9	1.23	6.9739	6.5376	0.87036	1.995	1.0635	0.62725	1.696	0.8454	0.21815
10	1.38	6.9937	6.5376	0.89203	1.956	1.0616	0.60558	1.753	0.83361	0.22803
11	1.54	7.0092	6.5376	0.91136	1.933	1.0578	0.58625	1.804	0.82202	0.23578
12	1.86	7.0286	6.5376	0.94474	1.924	1.0439	0.55286	1.888	0.79836	0.2455
13	2.17	7.0515	6.5376	0.97344	1.894	1.0381	0.52416	1.980	0.78111	0.25695
14	2.48	7.0671	6.5376	0.99804	1.885	1.0291	0.49956	2.060	0.76432	0.26476
15	2.79	7.0874	6.5376	1.0191	1.854	1.0282	0.47848	2.149	0.75336	0.27488
16	3.11	7.1075	6.5376	1.0385	1.822	1.029	0.45915	2.241	0.74409	0.28494
17	3.42	7.1198	6.5376	1.0572	1.816	1.0226	0.44041	2.322	0.73151	0.2911
18	3.72	7.1344	6.5376	1.0742	1.800	1.0202	0.42342	2.409	0.72181	0.29839
19	4.03	7.1465	6.5376	1.0871	1.785	1.0195	0.41054	2.483	0.71501	0.30447
20	4.34	7.1562	6.5376	1.0976	1.774	1.0186	0.39999	2.547	0.70932	0.30932
21	4.65	7.1682	6.5376	1.1117	1.763	1.0165	0.38594	2.634	0.70124	0.3153
22	5.28	7.1924	6.5376	1.1304	1.726	1.022	0.36719	2.783	0.69458	0.32739
23	5.90	7.2081	6.5376	1.1492	1.714	1.019	0.34845	2.924	0.68372	0.33527
24	6.52	7.2294	6.5376	1.1609	1.678	1.0286	0.33674	3.054	0.68264	0.34591
25	7.14	7.2464	6.5376	1.1732	1.655	1.0332	0.32444	3.185	0.67882	0.35438
26	7.77	7.2635	6.5376	1.1808	1.627	1.0427	0.31682	3.291	0.67977	0.36295
27	8.40	7.2781	6.5376	1.1896	1.606	1.0485	0.30804	3.404	0.67829	0.37025
28	9.01	7.2865	6.5376	1.1943	1.595	1.0522	0.30335	3.469	0.67778	0.37443
29	9.62	7.3035	6.5376	1.2001	1.567	1.0634	0.29749	3.574	0.68044	0.38294
30	10.25	7.319	6.5376	1.2048	1.542	1.0742	0.29281	3.669	0.6835	0.39069
31	10.88	7.3233	6.5376	1.2071	1.536	1.0761	0.29047	3.705	0.68329	0.39283
32	11.50	7.3318	6.5376	1.2101	1.524	1.0818	0.28754	3.762	0.68465	0.39711
33	12.12	7.3483	6.5376	1.2107	1.493	1.0977	0.28695	3.825	0.6923	0.40535
34	12.74	7.3516	6.5376	1.2124	1.489	1.0992	0.28519	3.854	0.69218	0.40699
35	13.37	7.3642	6.5376	1.2107	1.465	1.1135	0.28695	3.881	0.70025	0.4133
36	14.00	7.3687	6.5376	1.2118	1.458	1.1169	0.28578	3.908	0.70134	0.41556
37	14.61	7.3753	6.5376	1.2089	1.443	1.1264	0.28871	3.902	0.70755	0.41884
38	15.23	7.3744	6.5376	1.2095	1.445	1.1249	0.28812	3.904	0.70651	0.41839

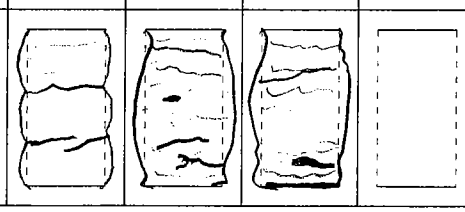
TRIAXIAL COMPRESSION TEST REPORT





Symbol		⊙	△	⊡	
Test No.		CUED8T1	CUED8T2	CUED8T3	
Initial	Diameter, in	2.9217	2.8713	2.8484	
	Height, in	5.1315	5.1693	5.165	
	Water Content, %	89.70	86.02	93.38	
	Dry Density, pcf	48.04	49.98	48.1	
	Saturation, %	98.87	100.37	103.11	
	Void Ratio	2.3135	2.1854	2.3095	
Before Shear	Water Content, %	54.25	47.90	41.50	
	Dry Density, pcf	65.43	71.96	77.34	
	Saturation, %	96.54	100.75	100.00	
	Void Ratio	1.433	1.2123	1.0583	
	Back Press., tsf	5.0401	5.04	5.0402	
Minor Prin. Stress, tsf		0.37428	0.7488	1.4974	
Max. Dev. Stress, tsf		0.38395	0.62386	1.0533	
Time to Failure, min		188	188	196	
Strain Rate, %/min		0.08348	0.08591	0.08634	
B-Value		---	---	---	
Estimated Specific Gravity		2.55	2.55	2.55	
Liquid Limit		0	0	0	
Plastic Limit		0	0	0	
Plasticity Index		0	0	0	

Failure Sketch



Project: LOWER FOX RIVER

Location:

Project No.: 29316-A

Boring No.: ED-8

Sample Type: REMOLDED

Description: CLAYEY SILT RIVER SEDIMENT TRACE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)

Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

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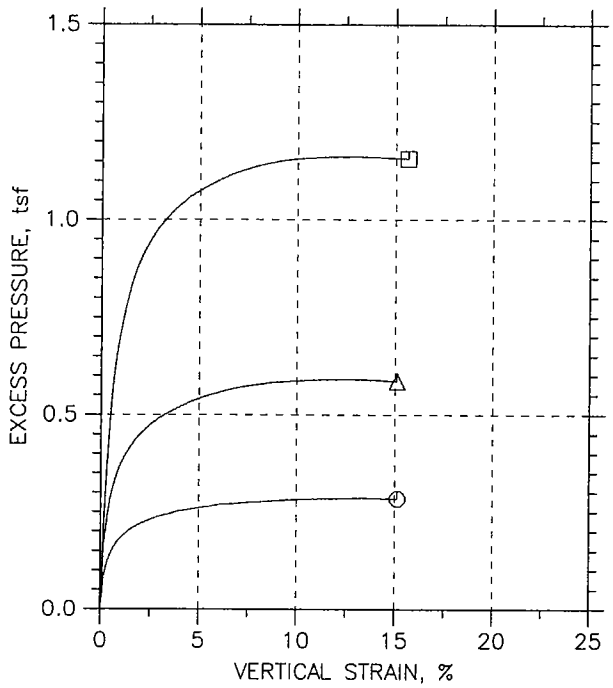
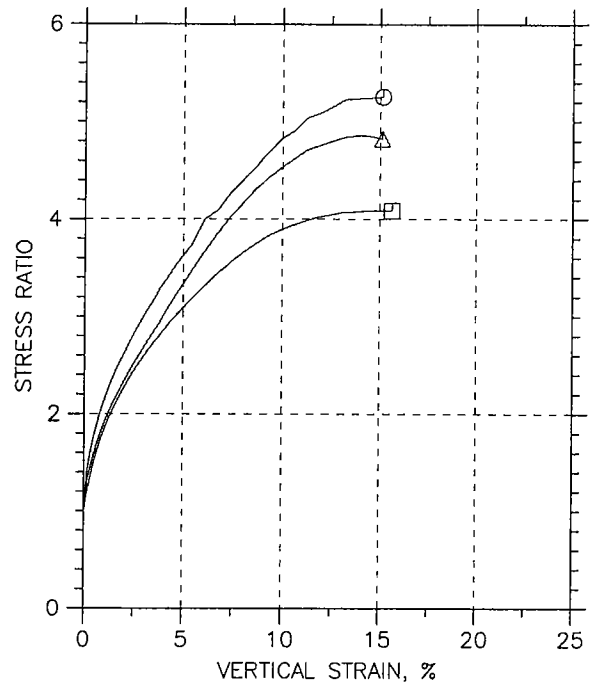
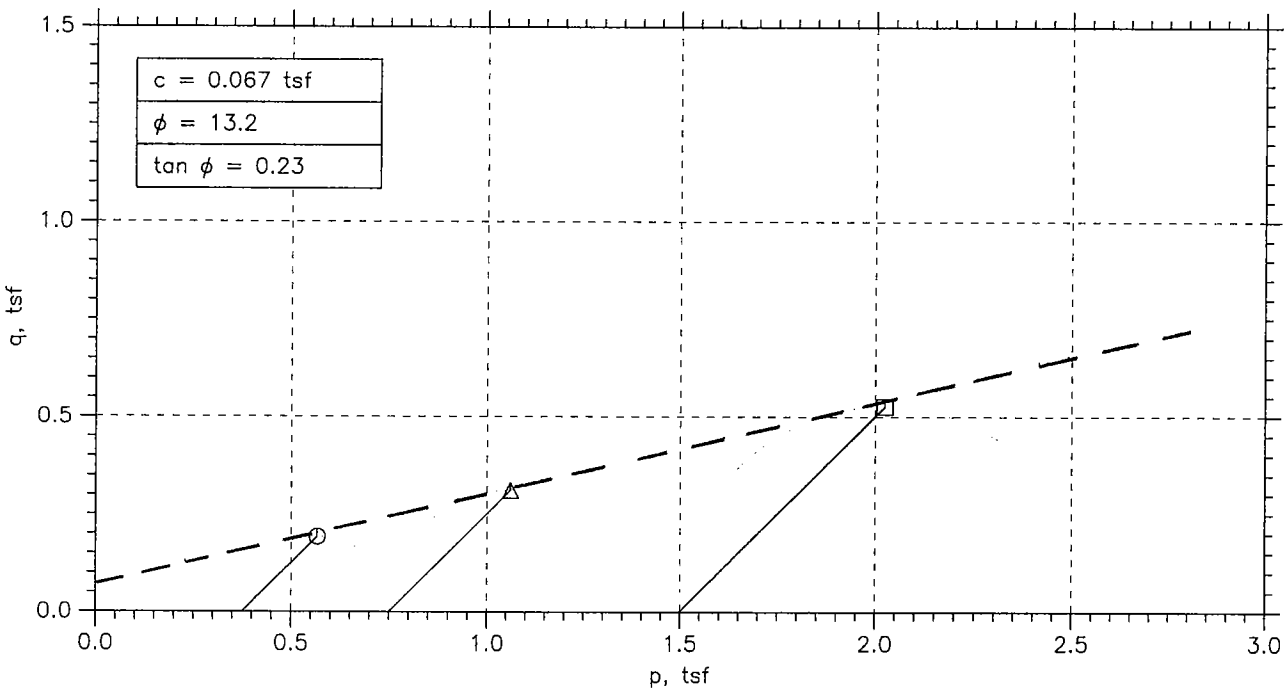
TRIAXIAL COMPRESSION TEST REPORT







Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: ED-8	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 11/10/06	Depth:
Test No.: CUED8T1	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT TRACE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)		
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767		

Wed, 15-NOV-2006 16:42:28

TRIAXIAL TEST

Project: LOW[illegible] FOX RIVER
Boring No.: [illegible]8
Sample No.: [illegible]-8
Test No.: CUED8T1

Location:
Tested By: MJS
Test Date: 11/10/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT RIVER SEDIMENT TRACE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.13 in
Specimen Area: 6.70 in^2
Specimen Volume: 34.40 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.55

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.7042	0	0	5.0401	5.4144	5.4144
2	2.0002	0.14759	6.7141	10.773	0.11552	5.1241	5.4144	5.5299
3	4.0002	0.30958	6.725	14.578	0.15608	5.1591	5.4144	5.5705
4	6.0002	0.46978	6.7358	16.722	0.17874	5.1818	5.4144	5.5931
5	8.0002	0.62997	6.7467	18.169	0.1939	5.197	5.4144	5.6083
6	10	0.79016	6.7576	19.348	0.20615	5.2098	5.4144	5.6205
7	12	0.95035	6.7685	20.259	0.2155	5.2203	5.4144	5.6299
8	14	1.1105	6.7795	21.009	0.22312	5.2291	5.4144	5.6375
9	16	1.2725	6.7906	21.653	0.22958	5.2367	5.4144	5.644
10	18	1.4327	6.8017	22.242	0.23545	5.2431	5.4144	5.6498
11	20	1.5947	6.8129	22.778	0.24072	5.2489	5.4144	5.6551
12	24	1.9205	6.8355	23.636	0.24896	5.2571	5.4144	5.6634
13	28.001	2.2409	6.8579	24.439	0.25659	5.2647	5.4144	5.671
14	32.001	2.5649	6.8807	25.19	0.26359	5.2717	5.4144	5.678
15	36.001	2.8907	6.9038	25.833	0.26941	5.2775	5.4144	5.6838
16	40.001	3.211	6.9266	26.369	0.2741	5.2821	5.4144	5.6885
17	44.001	3.5332	6.9498	27.012	0.27985	5.2856	5.4144	5.6942
18	48.001	3.8482	6.9725	27.441	0.28336	5.2909	5.4144	5.6978
19	52.001	4.1704	6.996	28.03	0.28848	5.2932	5.4144	5.7029
20	56.001	4.4926	7.0196	28.62	0.29356	5.2961	5.4144	5.708
21	60.002	4.8148	7.0433	29.102	0.2975	5.2991	5.4144	5.7119
22	68.002	5.4555	7.0911	30.067	0.30529	5.3031	5.4144	5.7197
23	76.002	6.0999	7.1397	31.032	0.31294	5.3101	5.4144	5.7273
24	84.002	6.7461	7.1892	31.996	0.32044	5.3107	5.4144	5.7348
25	92	7.3886	7.2391	32.908	0.3273	5.3142	5.4144	5.7417
26	100	8.0312	7.2897	33.872	0.33456	5.316	5.4144	5.749
27	108	8.6774	7.3412	34.676	0.34009	5.3183	5.4144	5.7545
28	116	9.3235	7.3935	35.534	0.34603	5.3206	5.4144	5.7604
29	124	9.9697	7.4466	36.391	0.35186	5.3224	5.4144	5.7663
30	132	10.618	7.5006	37.195	0.35705	5.323	5.4144	5.7714
31	140	11.266	7.5554	37.999	0.36212	5.3247	5.4144	5.7765
32	148	11.91	7.6106	38.696	0.36608	5.3247	5.4144	5.7805
33	156	12.554	7.6667	39.393	0.36995	5.3253	5.4144	5.7843
34	164	13.197	7.7235	40.143	0.37422	5.3259	5.4144	5.7886
35	172	13.841	7.7812	40.786	0.37739	5.3253	5.4144	5.7918
36	180	14.484	7.8397	41.429	0.38049	5.3247	5.4144	5.7949
37	188	15.134	7.8997	42.126	0.38395	5.3241	5.4144	5.7983

TRIAXIAL TEST

Project: LOW[illegible] FOX RIVER
Boring No.: 8
Sample No.: [illegible]-8
Test No.: CUED8T1

Location:
Tested By: MJS
Test Date: 11/10/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT RIVER SEDIMENT TRACE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.13 in
Specimen Area: 6.70 in^2
Specimen Volume: 34.40 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.55

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	5.4144	5.4144	0	0.000	0.37428	0.37428	1.000	0.37428	0
2	0.15	5.5299	5.4144	0.083982	0.727	0.40582	0.2903	1.398	0.34806	0.057761
3	0.31	5.5705	5.4144	0.11898	0.762	0.41139	0.25531	1.611	0.33335	0.078038
4	0.47	5.5931	5.4144	0.14172	0.793	0.4113	0.23256	1.769	0.32193	0.08937
5	0.63	5.6083	5.4144	0.15688	0.809	0.4113	0.2174	1.892	0.31435	0.096948
6	0.79	5.6205	5.4144	0.16971	0.823	0.41072	0.20457	2.008	0.30764	0.10307
7	0.95	5.6299	5.4144	0.18021	0.836	0.40958	0.19407	2.110	0.30182	0.10775
8	1.11	5.6375	5.4144	0.18896	0.847	0.40845	0.18532	2.204	0.29689	0.11156
9	1.27	5.644	5.4144	0.19654	0.856	0.40732	0.17774	2.292	0.29253	0.11479
10	1.43	5.6498	5.4144	0.20296	0.862	0.40677	0.17133	2.374	0.28905	0.11772
11	1.59	5.6551	5.4144	0.20879	0.867	0.40622	0.1655	2.455	0.28586	0.12036
12	1.92	5.6634	5.4144	0.21695	0.871	0.40629	0.15733	2.582	0.28181	0.12448
13	2.24	5.671	5.4144	0.22454	0.875	0.40634	0.14975	2.713	0.27804	0.12829
14	2.56	5.678	5.4144	0.23154	0.878	0.40634	0.14275	2.847	0.27454	0.13179
15	2.89	5.6838	5.4144	0.23737	0.881	0.40633	0.13692	2.968	0.27162	0.13471
16	3.21	5.6885	5.4144	0.24203	0.883	0.40635	0.13225	3.073	0.2693	0.13705
17	3.53	5.6942	5.4144	0.24553	0.877	0.4086	0.12875	3.174	0.26868	0.13992
18	3.85	5.6978	5.4144	0.25078	0.885	0.40686	0.1235	3.294	0.26518	0.14168
19	4.17	5.7029	5.4144	0.25311	0.877	0.40965	0.12117	3.381	0.26541	0.14424
20	4.49	5.708	5.4144	0.25603	0.872	0.41181	0.11826	3.482	0.26503	0.14678
21	4.81	5.7119	5.4144	0.25895	0.870	0.41284	0.11534	3.579	0.26409	0.14875
22	5.46	5.7197	5.4144	0.26303	0.862	0.41655	0.11126	3.744	0.2639	0.15264
23	6.10	5.7273	5.4144	0.27003	0.863	0.41719	0.10426	4.002	0.26073	0.15647
24	6.75	5.7348	5.4144	0.27061	0.844	0.42412	0.10367	4.091	0.2639	0.16022
25	7.39	5.7417	5.4144	0.27411	0.837	0.42747	0.10018	4.267	0.26382	0.16365
26	8.03	5.749	5.4144	0.27586	0.825	0.43298	0.098426	4.399	0.2657	0.16728
27	8.68	5.7545	5.4144	0.27819	0.818	0.43618	0.096093	4.539	0.26614	0.17005
28	9.32	5.7604	5.4144	0.28052	0.811	0.4398	0.09376	4.691	0.26678	0.17302
29	9.97	5.7663	5.4144	0.28227	0.802	0.44387	0.09201	4.824	0.26794	0.17593
30	10.62	5.7714	5.4144	0.28286	0.792	0.44847	0.091427	4.905	0.26995	0.17852
31	11.27	5.7765	5.4144	0.28461	0.786	0.4518	0.089678	5.038	0.27074	0.18106
32	11.91	5.7805	5.4144	0.28461	0.777	0.45576	0.089678	5.082	0.27272	0.18304
33	12.55	5.7843	5.4144	0.28519	0.771	0.45904	0.089094	5.152	0.27407	0.18497
34	13.20	5.7886	5.4144	0.28577	0.764	0.46273	0.088511	5.228	0.27562	0.18711
35	13.84	5.7918	5.4144	0.28519	0.756	0.46649	0.089094	5.236	0.27779	0.1887
36	14.48	5.7949	5.4144	0.28461	0.748	0.47016	0.089678	5.243	0.27992	0.19024
37	15.13	5.7983	5.4144	0.28402	0.740	0.47421	0.090261	5.254	0.28223	0.19197

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.:
Sample No.: -8
Test No.: CUED8T2

Location:
Tested By: MJS
Test Date: 11/9/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)
Remarks:

Specimen Height: 5.17 in
Specimen Area: 6.47 in^2
Specimen Volume: 33.47 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.55

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.4749	0	0	5.04	5.7888	5.7888
2	2.0041	0.1483	6.4845	15.864	0.17615	5.2016	5.7888	5.9649
3	4.0041	0.30732	6.4949	21.117	0.23409	5.2743	5.7888	6.0229
4	6.0041	0.46456	6.5051	24.493	0.27109	5.3217	5.7888	6.0599
5	8.0041	0.62536	6.5157	26.958	0.2979	5.3569	5.7888	6.0867
6	10.004	0.78081	6.5259	28.888	0.31872	5.3838	5.7888	6.1075
7	12.004	0.94162	6.5365	30.549	0.3365	5.4055	5.7888	6.1253
8	14.004	1.0989	6.5469	31.621	0.34776	5.4236	5.7888	6.1366
9	16.004	1.2597	6.5575	32.747	0.35955	5.4394	5.7888	6.1484
10	18.004	1.4205	6.5682	33.872	0.3713	5.4529	5.7888	6.1601
11	20.004	1.5831	6.5791	34.569	0.37832	5.4646	5.7888	6.1671
12	24.004	1.9029	6.6005	36.123	0.39404	5.4851	5.7888	6.1828
13	28.004	2.2209	6.622	37.41	0.40675	5.5015	5.7888	6.1955
14	32.004	2.539	6.6436	38.589	0.4182	5.515	5.7888	6.207
15	36.004	2.8588	6.6655	39.607	0.42783	5.5273	5.7888	6.2166
16	40.004	3.1804	6.6876	40.625	0.43738	5.5378	5.7888	6.2262
17	44	3.4967	6.7095	41.59	0.4463	5.5466	5.7888	6.2351
18	48	3.8129	6.7316	42.447	0.45401	5.5548	5.7888	6.2428
19	52	4.1345	6.7542	43.573	0.46449	5.563	5.7888	6.2533
20	56	4.4615	6.7773	44.377	0.47145	5.5706	5.7888	6.2602
21	60	4.7778	6.7998	45.234	0.47897	5.5771	5.7888	6.2678
22	68	5.421	6.8461	46.896	0.4932	5.5888	5.7888	6.282
23	76.002	6.066	6.8931	48.557	0.5072	5.5982	5.7888	6.296
24	84.003	6.7075	6.9405	50.004	0.51874	5.6064	5.7888	6.3075
25	92.004	7.3578	6.9892	51.505	0.53059	5.6128	5.7888	6.3194
26	100	8.0064	7.0385	52.899	0.54113	5.6175	5.7888	6.3299
27	108	8.655	7.0884	54.238	0.55092	5.6222	5.7888	6.3397
28	116	9.3018	7.139	55.739	0.56216	5.6245	5.7888	6.351
29	124	9.9486	7.1903	56.972	0.57049	5.6269	5.7888	6.3593
30	132	10.59	7.2418	58.312	0.57975	5.6286	5.7888	6.3685
31	140	11.239	7.2948	59.491	0.58718	5.6304	5.7888	6.376
32	148	11.878	7.3477	60.67	0.5945	5.6304	5.7888	6.3833
33	156	12.525	7.402	61.635	0.59952	5.631	5.7888	6.3883
34	164	13.174	7.4573	63.028	0.60853	5.6304	5.7888	6.3973
35	172	13.817	7.513	64.207	0.61532	5.6292	5.7888	6.4041
36	180	14.458	7.5693	65.118	0.61941	5.628	5.7888	6.4082
37	188	15.102	7.6267	66.083	0.62386	5.6257	5.7888	6.4127

TRIAXIAL TEST

Project: LO[illegible] FOX RIVER
Boring No.: [illegible]
Sample No.: [illegible]-8
Test No.: CUED8T2

Location:
Tested By: MJS
Test Date: 11/9/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)
Remarks:

Specimen Height: 5.17 in
Specimen Area: 6.47 in^2
Specimen Volume: 33.47 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.55

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	5.7888	5.7888	0	0.000	0.7488	0.7488	1.000	0.7488	0
2	0.15	5.9649	5.7888	0.16165	0.918	0.7633	0.58715	1.300	0.67522	0.088073
3	0.31	6.0229	5.7888	0.23428	1.001	0.74861	0.51452	1.455	0.63157	0.11705
4	0.46	6.0599	5.7888	0.28172	1.039	0.73817	0.46708	1.580	0.60263	0.13555
5	0.63	6.0867	5.7888	0.31687	1.064	0.72984	0.43194	1.690	0.58089	0.14895
6	0.78	6.1075	5.7888	0.34381	1.079	0.72372	0.405	1.787	0.56436	0.15936
7	0.94	6.1253	5.7888	0.36548	1.086	0.71983	0.38332	1.878	0.55158	0.16825
8	1.10	6.1366	5.7888	0.38364	1.103	0.71293	0.36517	1.952	0.53905	0.17388
9	1.26	6.1484	5.7888	0.39945	1.111	0.7089	0.34935	2.029	0.52913	0.17978
10	1.42	6.1601	5.7888	0.41292	1.112	0.70719	0.33588	2.105	0.52153	0.18565
11	1.58	6.1671	5.7888	0.42464	1.122	0.70248	0.32417	2.167	0.51333	0.18916
12	1.90	6.1828	5.7888	0.44514	1.130	0.69771	0.30367	2.298	0.50069	0.19702
13	2.22	6.1955	5.7888	0.46154	1.135	0.69402	0.28727	2.416	0.49064	0.20337
14	2.54	6.207	5.7888	0.47501	1.136	0.692	0.2738	2.527	0.4829	0.2091
15	2.86	6.2166	5.7888	0.48731	1.139	0.68933	0.2615	2.636	0.47541	0.21392
16	3.18	6.2262	5.7888	0.49785	1.138	0.68833	0.25096	2.743	0.46964	0.21869
17	3.50	6.2351	5.7888	0.50664	1.135	0.68847	0.24217	2.843	0.46532	0.22315
18	3.81	6.2428	5.7888	0.51484	1.134	0.68798	0.23397	2.940	0.46098	0.22701
19	4.13	6.2533	5.7888	0.52303	1.126	0.69026	0.22577	3.057	0.45802	0.23225
20	4.46	6.2602	5.7888	0.53065	1.126	0.6896	0.21816	3.161	0.45388	0.23572
21	4.78	6.2678	5.7888	0.53709	1.121	0.69068	0.21171	3.262	0.4512	0.23948
22	5.42	6.282	5.7888	0.54881	1.113	0.6932	0.2	3.466	0.4466	0.2466
23	6.07	6.296	5.7888	0.55818	1.101	0.69782	0.19063	3.661	0.44423	0.2536
24	6.71	6.3075	5.7888	0.56638	1.092	0.70117	0.18243	3.844	0.4418	0.25937
25	7.36	6.3194	5.7888	0.57282	1.080	0.70657	0.17598	4.015	0.44128	0.26529
26	8.01	6.3299	5.7888	0.57751	1.067	0.71243	0.1713	4.159	0.44186	0.27056
27	8.66	6.3397	5.7888	0.58219	1.057	0.71753	0.16661	4.307	0.44207	0.27546
28	9.30	6.351	5.7888	0.58453	1.040	0.72643	0.16427	4.422	0.44535	0.28108
29	9.95	6.3593	5.7888	0.58688	1.029	0.73242	0.16193	4.523	0.44717	0.28524
30	10.59	6.3685	5.7888	0.58863	1.015	0.73992	0.16017	4.620	0.45004	0.28987
31	11.24	6.376	5.7888	0.59039	1.005	0.74559	0.15841	4.707	0.452	0.29359
32	11.88	6.3833	5.7888	0.59039	0.993	0.75292	0.15841	4.753	0.45566	0.29725
33	12.53	6.3883	5.7888	0.59098	0.986	0.75735	0.15783	4.799	0.45759	0.29976
34	13.17	6.3973	5.7888	0.59039	0.970	0.76695	0.15841	4.841	0.46268	0.30427
35	13.82	6.4041	5.7888	0.58922	0.958	0.77491	0.15959	4.856	0.46725	0.30766
36	14.46	6.4082	5.7888	0.58805	0.949	0.78017	0.16076	4.853	0.47046	0.3097
37	15.10	6.4127	5.7888	0.58571	0.939	0.78696	0.1631	4.825	0.47503	0.31193

TRIAXIAL TEST

Project: LO[illegible] FOX RIVER
Boring No.:
Sample No.: [illegible]-8
Test No.: CUED8T3

Location:
Tested By: MJS
Test Date: 11/9/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)
Remarks:

Specimen Height: 5.16 in
Specimen Area: 6.37 in^2
Specimen Volume: 32.91 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.55

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.3723	0	0	5.0402	6.5376	6.5376
2	2.0041	0.14464	6.3816	21.42	0.24167	5.2608	6.5376	6.7793
3	4.0041	0.29809	6.3914	34.039	0.38346	5.4001	6.5376	6.9211
4	6.0041	0.45332	6.4014	43.884	0.49359	5.5253	6.5376	7.0312
5	8.0041	0.61383	6.4117	49.932	0.56072	5.6148	6.5376	7.0983
6	10.004	0.77258	6.422	54.131	0.60689	5.6815	6.5376	7.1445
7	12.004	0.93309	6.4324	57.428	0.64282	5.7354	6.5376	7.1804
8	14.004	1.0918	6.4427	60.132	0.67201	5.7798	6.5376	7.2096
9	16.004	1.2488	6.4529	62.054	0.69238	5.8173	6.5376	7.23
10	18.004	1.4058	6.4632	63.809	0.71083	5.8489	6.5376	7.2484
11	20.004	1.561	6.4734	65.47	0.72818	5.8764	6.5376	7.2658
12	24.004	1.8768	6.4942	68.032	0.75425	5.922	6.5376	7.2918
13	28.004	2.196	6.5154	70.19	0.77565	5.9583	6.5376	7.3132
14	32.004	2.5153	6.5368	72.088	0.79402	5.9882	6.5376	7.3316
15	36.004	2.8275	6.5578	73.701	0.80919	6.0127	6.5376	7.3468
16	40.004	3.1556	6.58	75.29	0.82385	6.0344	6.5376	7.3614
17	44.004	3.4819	6.6022	76.666	0.83607	6.0525	6.5376	7.3737
18	48.004	3.8012	6.6241	77.899	0.84671	6.0689	6.5376	7.3843
19	52.004	4.1204	6.6462	79.157	0.85752	6.083	6.5376	7.3951
20	56.004	4.4361	6.6682	80.343	0.86751	6.0958	6.5376	7.4051
21	60	4.7501	6.6901	81.505	0.87717	6.1064	6.5376	7.4148
22	68.004	5.3833	6.7349	83.592	0.89365	6.1251	6.5376	7.4313
23	76.002	6.0289	6.7812	85.656	0.90946	6.1421	6.5376	7.4471
24	84.002	6.6727	6.828	87.696	0.92475	6.1567	6.5376	7.4623
25	92.002	7.3024	6.8743	89.594	0.93838	6.1678	6.5376	7.476
26	100	7.9357	6.9216	91.563	0.95245	6.1772	6.5376	7.4901
27	108	8.5795	6.9704	93.413	0.9649	6.1848	6.5376	7.5025
28	116	9.2286	7.0202	95.263	0.97703	6.1912	6.5376	7.5146
29	124	9.8636	7.0697	96.924	0.9871	6.1953	6.5376	7.5247
30	132	10.495	7.1195	98.655	0.9977	6.1977	6.5376	7.5353
31	140	11.134	7.1707	100.22	1.0063	6.1994	6.5376	7.5439
32	148	11.784	7.2236	101.93	1.016	6.2012	6.5376	7.5536
33	156	12.426	7.2766	103.42	1.0233	6.2012	6.5376	7.5609
34	164	13.058	7.3294	104.89	1.0304	6.2018	6.5376	7.568
35	172	13.696	7.3836	106.29	1.0365	6.2006	6.5376	7.5741
36	180	14.34	7.4391	107.74	1.0428	6.2	6.5376	7.5804
37	188	14.993	7.4963	109.07	1.0476	6.1982	6.5376	7.5852
38	196	15.63	7.5528	110.49	1.0533	6.1965	6.5376	7.5909

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.:
Sample No.: -8
Test No.: CUED8T3

Location:
Tested By: MJS
Test Date: 11/9/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)
Remarks:

Specimen Height: 5.16 in
Specimen Area: 6.37 in^2
Specimen Volume: 32.91 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

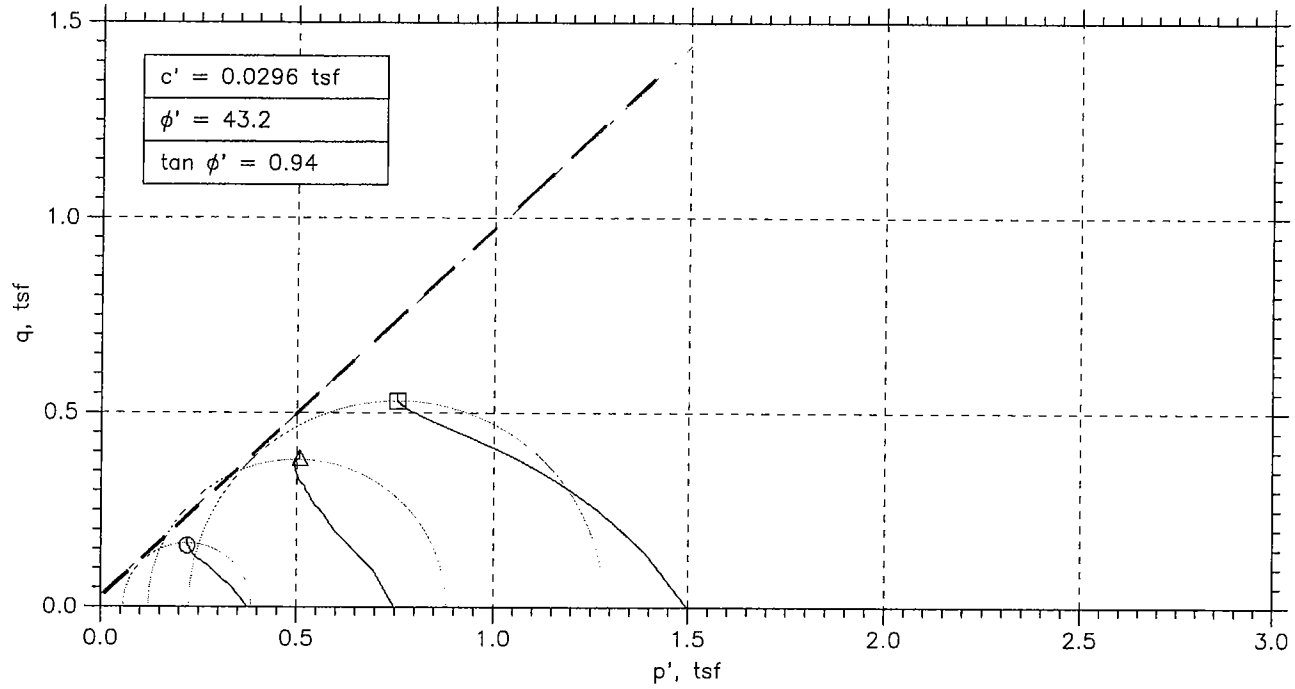
Liquid Limit: 0

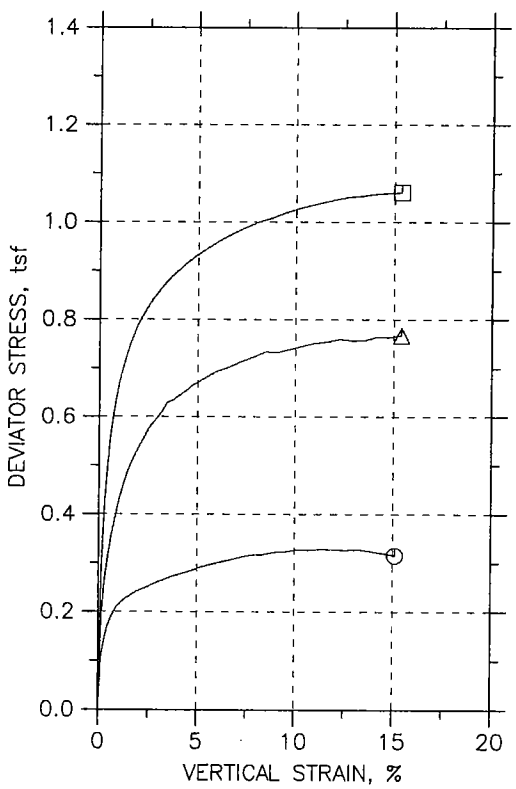
Plastic Limit: 0

Estimated Specific Gravity: 2.55

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	6.5376	6.5376	0	0.000	1.4974	1.4974	1.000	1.4974	0
2	0.14	6.7793	6.5376	0.22061	0.913	1.5185	1.2768	1.189	1.3977	0.12084
3	0.30	6.9211	6.5376	0.35989	0.939	1.521	1.1375	1.337	1.3293	0.19173
4	0.45	7.0312	6.5376	0.48512	0.983	1.5059	1.0123	1.488	1.2591	0.24679
5	0.61	7.0983	6.5376	0.57465	1.025	1.4835	0.92279	1.608	1.2031	0.28036
6	0.77	7.1445	6.5376	0.64136	1.057	1.463	0.85608	1.709	1.1595	0.30345
7	0.93	7.1804	6.5376	0.6952	1.081	1.4451	0.80224	1.801	1.1236	0.32141
8	1.09	7.2096	6.5376	0.73967	1.101	1.4298	0.75777	1.887	1.0938	0.336
9	1.25	7.23	6.5376	0.77712	1.122	1.4127	0.72031	1.961	1.0665	0.34619
10	1.41	7.2484	6.5376	0.80872	1.138	1.3995	0.68871	2.032	1.0441	0.35542
11	1.56	7.2658	6.5376	0.83622	1.148	1.3894	0.66121	2.101	1.0253	0.36409
12	1.88	7.2918	6.5376	0.88187	1.169	1.3698	0.61557	2.225	0.99269	0.37712
13	2.20	7.3132	6.5376	0.91815	1.184	1.3549	0.57928	2.339	0.96711	0.38782
14	2.52	7.3316	6.5376	0.94799	1.194	1.3435	0.54944	2.445	0.94645	0.39701
15	2.83	7.3468	6.5376	0.97257	1.202	1.334	0.52486	2.542	0.92946	0.40459
16	3.16	7.3614	6.5376	0.99422	1.207	1.3271	0.50321	2.637	0.91513	0.41192
17	3.48	7.3737	6.5376	1.0124	1.211	1.3211	0.48507	2.724	0.90311	0.41804
18	3.80	7.3843	6.5376	1.0287	1.215	1.3154	0.46869	2.807	0.89204	0.42336
19	4.12	7.3951	6.5376	1.0428	1.216	1.3122	0.45464	2.886	0.8834	0.42876
20	4.44	7.4051	6.5376	1.0557	1.217	1.3093	0.44177	2.964	0.87552	0.43375
21	4.75	7.4148	6.5376	1.0662	1.216	1.3084	0.43123	3.034	0.86982	0.43858
22	5.38	7.4313	6.5376	1.0849	1.214	1.3062	0.41251	3.166	0.85933	0.44683
23	6.03	7.4471	6.5376	1.1019	1.212	1.305	0.39554	3.299	0.85027	0.45473
24	6.67	7.4623	6.5376	1.1165	1.207	1.3057	0.38091	3.428	0.84328	0.46237
25	7.30	7.476	6.5376	1.1276	1.202	1.3082	0.36979	3.538	0.83898	0.46919
26	7.94	7.4901	6.5376	1.137	1.194	1.3129	0.36043	3.643	0.83665	0.47623
27	8.58	7.5025	6.5376	1.1446	1.186	1.3177	0.35282	3.735	0.83527	0.48245
28	9.23	7.5146	6.5376	1.1511	1.178	1.3234	0.34638	3.821	0.8349	0.48851
29	9.86	7.5247	6.5376	1.1551	1.170	1.3294	0.34229	3.884	0.83584	0.49355
30	10.50	7.5353	6.5376	1.1575	1.160	1.3376	0.33995	3.935	0.8388	0.49885
31	11.13	7.5439	6.5376	1.1592	1.152	1.3445	0.33819	3.976	0.84134	0.50315
32	11.78	7.5536	6.5376	1.161	1.143	1.3524	0.33643	4.020	0.84441	0.50798
33	12.43	7.5609	6.5376	1.161	1.135	1.3598	0.33643	4.042	0.84811	0.51167
34	13.06	7.568	6.5376	1.1616	1.127	1.3663	0.33585	4.068	0.85106	0.51521
35	13.70	7.5741	6.5376	1.1604	1.120	1.3735	0.33702	4.075	0.85527	0.51825
36	14.34	7.5804	6.5376	1.1598	1.112	1.3804	0.3376	4.089	0.85899	0.52138
37	14.99	7.5852	6.5376	1.1581	1.105	1.3869	0.33936	4.087	0.86315	0.52379
38	15.63	7.5909	6.5376	1.1563	1.098	1.3944	0.34112	4.088	0.86777	0.52665

TRIAXIAL COMPRESSION TEST REPORT





Symbol		⊙	△	⊡	
Test No.		ED14T1	ED14T2	ED14T3	
Initial	Diameter, in	2.7969	2.8173	2.8335	
	Height, in	5.3654	5.2701	5.0228	
	Water Content, %	233.45	220.59	188.33	
	Dry Density, pcf	23.58	24.11	27.61	
	Saturation, %	103.88	100.75	101.18	
	Void Ratio	5.6185	5.4737	4.6533	
Before Shear	Water Content, %	119.17	99.29	85.90	
	Dry Density, pcf	39.77	45.63	50.97	
	Saturation, %	101.22	101.73	103.16	
	Void Ratio	3.0024	2.4888	2.1233	
	Back Press., tsf	5.0401	5.0402	5.0402	
Minor Prin. Stress, tsf		0.37428	0.74856	1.4974	
Max. Dev. Stress, tsf		0.32886	0.7677	1.061	
Time to Failure, min		148	196	188	
Strain Rate, %/min		0.0758	0.0914	0.09828	
B-Value		---	---	---	
Estimated Specific Gravity		2.50	2.50	2.50	
Liquid Limit		0	0	0	
Plastic Limit		0	0	0	
Plasticity Index		0	0	0	

Project: LOWER FOX RIVER

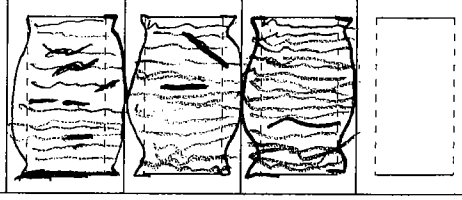
Location:

Project No.: 29316-A

Boring No.: ED-14

Sample Type: REMOLDED

Failure Sketch



Description: CLAYEY SILT TRACE F-C SAND TRACE F GRAVEL TRACE ORGANICS - DARK BROWN (CL-ML)

Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

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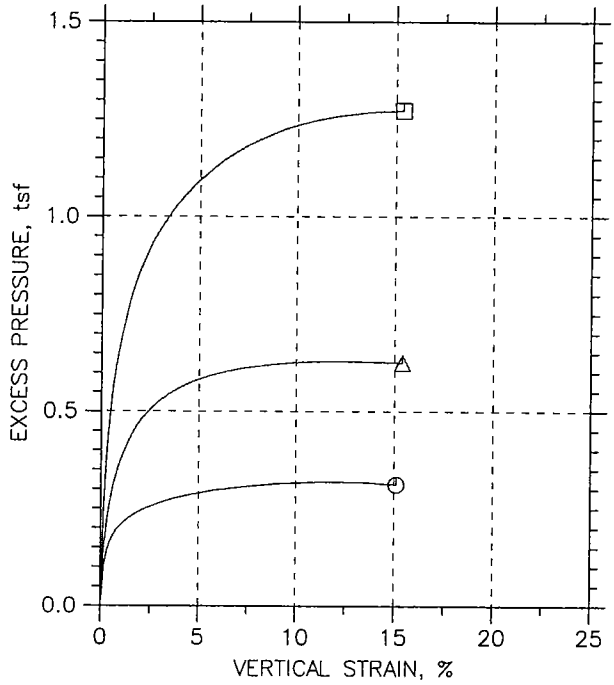
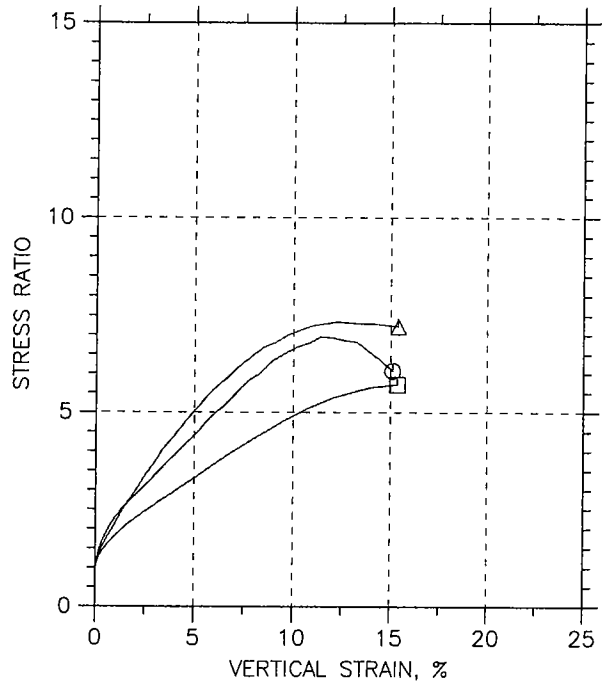
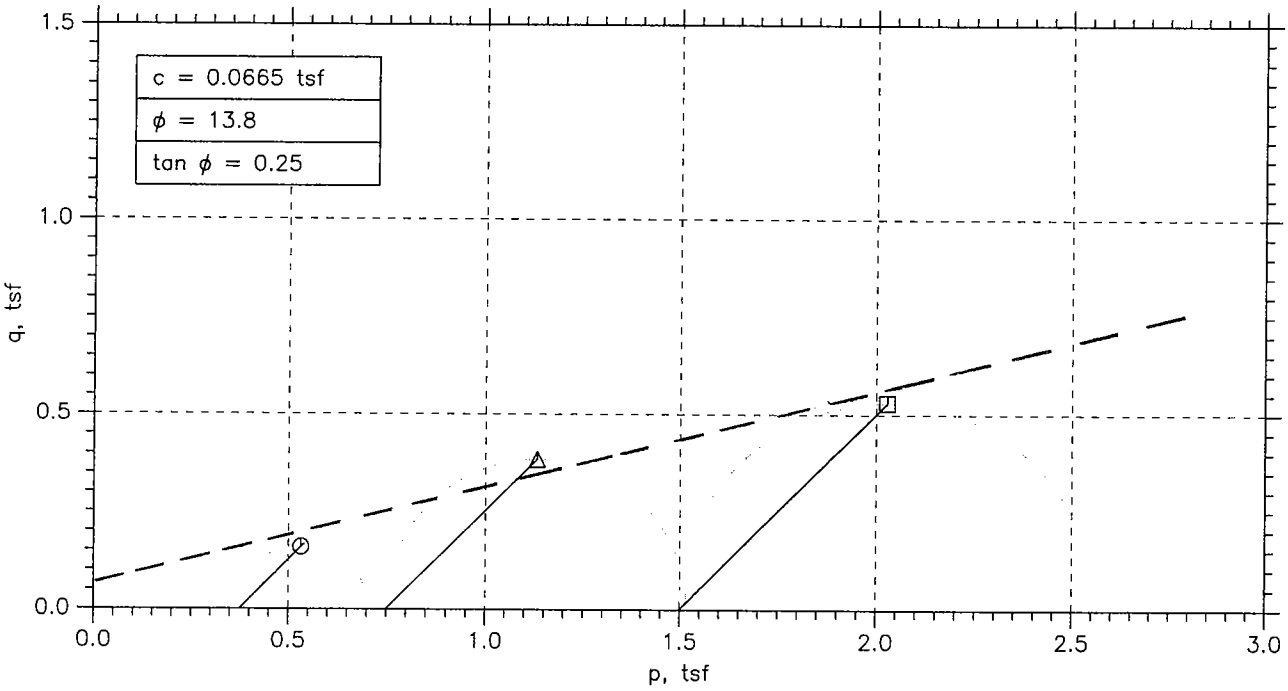
TRIAXIAL COMPRESSION TEST REPORT







Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-14	Test Date: 11/20/06	Depth:
Test No.: ED14T1	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT TRACE F-C SAND TRACE F GRAVEL TRACE ORGANICS - DARK BROWN (CL-ML)		
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767		

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TRIAXIAL TEST

Project: LO[illegible] FOX RIVER
Boring No.:
Sample No.: ED-14
Test No.: ED14T1

Location:
Tested By: MJS
Test Date: 11/20/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT TRACE F-C SAND TRACE F GRAVEL TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.37 in
Specimen Area: 6.14 in^2
Specimen Volume: 32.96 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.1437	0	0	5.0401	5.4144	5.4144
2	2.0007	0.1446	6.1526	9.3256	0.10913	5.1381	5.4144	5.5235
3	4.0007	0.29609	6.1619	12.434	0.14529	5.1789	5.4144	5.5597
4	6.001	0.45102	6.1715	14.524	0.16945	5.2034	5.4144	5.5838
5	8.001	0.60251	6.1809	16.025	0.18667	5.2203	5.4144	5.6011
6	10.001	0.75572	6.1905	17.097	0.19885	5.2337	5.4144	5.6133
7	12.001	0.90893	6.2	18.062	0.20975	5.2437	5.4144	5.6241
8	14.001	1.0639	6.2097	18.598	0.21563	5.2518	5.4144	5.63
9	16.001	1.2188	6.2195	19.187	0.22212	5.2588	5.4144	5.6365
10	18.001	1.3737	6.2292	19.723	0.22797	5.2652	5.4144	5.6424
11	20.001	1.5304	6.2392	20.098	0.23193	5.2699	5.4144	5.6463
12	24.001	1.8437	6.2591	20.902	0.24044	5.2798	5.4144	5.6548
13	28.001	2.1553	6.279	21.438	0.24583	5.288	5.4144	5.6602
14	32.002	2.4686	6.2992	22.028	0.25178	5.2944	5.4144	5.6662
15	36.002	2.7784	6.3193	22.617	0.25769	5.3002	5.4144	5.6721
16	40.002	3.0849	6.3392	23.153	0.26297	5.3061	5.4144	5.6774
17	44.002	3.3913	6.3593	23.636	0.2676	5.3107	5.4144	5.682
18	48.002	3.6977	6.3796	24.171	0.2728	5.3154	5.4144	5.6872
19	52.002	4.0058	6.4001	24.493	0.27554	5.3189	5.4144	5.6899
20	56.003	4.3157	6.4208	24.922	0.27946	5.323	5.4144	5.6939
21	60.002	4.6238	6.4415	25.351	0.28336	5.3265	5.4144	5.6978
22	68.002	5.2453	6.4838	26.315	0.29222	5.3317	5.4144	5.7066
23	76.002	5.8598	6.5261	27.066	0.29861	5.3376	5.4144	5.713
24	84.002	6.471	6.5687	27.762	0.3043	5.3411	5.4144	5.7187
25	92.002	7.0924	6.6127	28.513	0.31045	5.3451	5.4144	5.7249
26	100	7.7156	6.6573	29.263	0.31648	5.3486	5.4144	5.7309
27	108	8.3284	6.7018	29.531	0.31726	5.351	5.4144	5.7317
28	116	8.9395	6.7468	30.228	0.32258	5.3539	5.4144	5.737
29	124	9.5541	6.7927	30.549	0.32381	5.3556	5.4144	5.7382
30	132	10.176	6.8396	31.085	0.32723	5.3568	5.4144	5.7416
31	140	10.794	6.887	31.246	0.32666	5.358	5.4144	5.7411
32	148	11.408	6.9348	31.675	0.32886	5.3591	5.4144	5.7433
33	156	12.021	6.9831	31.782	0.32769	5.3591	5.4144	5.7421
34	164	12.639	7.0325	31.943	0.32704	5.3585	5.4144	5.7414
35	172	13.26	7.0829	32.264	0.32798	5.358	5.4144	5.7424
36	180	13.877	7.1336	32.104	0.32402	5.3562	5.4144	5.7384
37	188	14.49	7.1847	31.943	0.32011	5.3545	5.4144	5.7345
38	196	15.108	7.237	31.728	0.31566	5.3521	5.4144	5.7301

TRIAXIAL TEST

Project: LO[illegible] FOX RIVER
Boring No.:
Sample No.: [illegible]-14
Test No.: ED14T1

Location:
Tested By: MJS
Test Date: 11/20/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT TRACE F-C SAND TRACE F GRAVEL TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.37 in
Specimen Area: 6.14 in^2
Specimen Volume: 32.96 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	5.4144	5.4144	0	0.000	0.37428	0.37428	1.000	0.37428	0
2	0.14	5.5235	5.4144	0.09798	0.898	0.38544	0.27631	1.395	0.33087	0.054566
3	0.30	5.5597	5.4144	0.1388	0.955	0.38077	0.23548	1.617	0.30812	0.072644
4	0.45	5.5838	5.4144	0.1633	0.964	0.38043	0.21099	1.803	0.29571	0.084724
5	0.60	5.6011	5.4144	0.18021	0.965	0.38074	0.19407	1.962	0.28741	0.093336
6	0.76	5.6133	5.4144	0.19363	0.974	0.37951	0.18066	2.101	0.28008	0.099425
7	0.91	5.6241	5.4144	0.20354	0.970	0.38049	0.17074	2.228	0.27562	0.10487
8	1.06	5.63	5.4144	0.21171	0.982	0.37821	0.16258	2.326	0.2704	0.10782
9	1.22	5.6365	5.4144	0.2187	0.985	0.3777	0.15558	2.428	0.26664	0.11106
10	1.37	5.6424	5.4144	0.22512	0.988	0.37713	0.14917	2.528	0.26315	0.11398
11	1.53	5.6463	5.4144	0.22979	0.991	0.37643	0.1445	2.605	0.26047	0.11597
12	1.84	5.6548	5.4144	0.2397	0.997	0.37503	0.13458	2.787	0.25481	0.12022
13	2.16	5.6602	5.4144	0.24786	1.008	0.37225	0.12642	2.945	0.24933	0.12291
14	2.47	5.6662	5.4144	0.25428	1.010	0.37178	0.12	3.098	0.24589	0.12589
15	2.78	5.6721	5.4144	0.26011	1.009	0.37187	0.11417	3.257	0.24302	0.12885
16	3.08	5.6774	5.4144	0.26594	1.011	0.37131	0.10834	3.427	0.23983	0.13149
17	3.39	5.682	5.4144	0.27061	1.011	0.37127	0.10367	3.581	0.23747	0.1338
18	3.70	5.6872	5.4144	0.27528	1.009	0.37181	0.099009	3.755	0.23541	0.1364
19	4.01	5.6899	5.4144	0.27878	1.012	0.37105	0.09551	3.885	0.23328	0.13777
20	4.32	5.6939	5.4144	0.28286	1.012	0.37089	0.091427	4.057	0.23116	0.13973
21	4.62	5.6978	5.4144	0.28636	1.011	0.37128	0.087928	4.223	0.22961	0.14168
22	5.25	5.7066	5.4144	0.29161	0.998	0.3749	0.082679	4.534	0.22879	0.14611
23	5.86	5.713	5.4144	0.29744	0.996	0.37545	0.076847	4.886	0.22615	0.1493
24	6.47	5.7187	5.4144	0.30094	0.989	0.37765	0.073348	5.149	0.2255	0.15215
25	7.09	5.7249	5.4144	0.30502	0.983	0.37972	0.069265	5.482	0.22449	0.15523
26	7.72	5.7309	5.4144	0.30852	0.975	0.38225	0.065766	5.812	0.22401	0.15824
27	8.33	5.7317	5.4144	0.31085	0.980	0.38069	0.063433	6.002	0.22206	0.15863
28	8.94	5.737	5.4144	0.31377	0.973	0.3831	0.060517	6.330	0.22181	0.16129
29	9.55	5.7382	5.4144	0.31552	0.974	0.38258	0.058767	6.510	0.22067	0.16191
30	10.18	5.7416	5.4144	0.31668	0.968	0.38483	0.057601	6.681	0.22122	0.16362
31	10.79	5.7411	5.4144	0.31785	0.973	0.38309	0.056435	6.788	0.21976	0.16333
32	11.41	5.7433	5.4144	0.31902	0.970	0.38413	0.055268	6.950	0.2197	0.16443
33	12.02	5.7421	5.4144	0.31902	0.974	0.38296	0.055268	6.929	0.21911	0.16385
34	12.64	5.7414	5.4144	0.31843	0.974	0.38289	0.055851	6.855	0.21937	0.16352
35	13.26	5.7424	5.4144	0.31785	0.969	0.38441	0.056435	6.812	0.22042	0.16399
36	13.88	5.7384	5.4144	0.3161	0.976	0.38221	0.058184	6.569	0.2202	0.16201
37	14.49	5.7345	5.4144	0.31435	0.982	0.38004	0.059934	6.341	0.21999	0.16005
38	15.11	5.7301	5.4144	0.31202	0.988	0.37793	0.062267	6.070	0.2201	0.15783

TRIAXIAL TEST

Project: LO' FOX RIVER
Boring No.:
Sample No.: ED-14
Test No.: ED14T2

Location:
Tested By: MS
Test Date: 11/20/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT TRACE F-C SAND TRACE F GRAVEL TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.27 in
Specimen Area: 6.23 in^2
Specimen Volume: 32.85 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.2339	0	0	5.0402	5.7888	5.7888
2	2.0041	0.14559	6.243	16.627	0.19176	5.1895	5.7888	5.9806
3	4.0042	0.29985	6.2527	22.784	0.26235	5.2597	5.7888	6.0512
4	6.0041	0.4541	6.2624	27.204	0.31277	5.3101	5.7888	6.1016
5	8.0041	0.60836	6.2721	30.624	0.35154	5.3481	5.7888	6.1403
6	10.004	0.76435	6.282	33.465	0.38356	5.3791	5.7888	6.1724
7	12.004	0.92207	6.292	36.096	0.41305	5.4055	5.7888	6.2019
8	14.004	1.0798	6.302	38.569	0.44065	5.4289	5.7888	6.2295
9	16.004	1.2375	6.3121	40.726	0.46456	5.4482	5.7888	6.2534
10	18	1.3935	6.322	42.516	0.4842	5.4658	5.7888	6.273
11	20	1.5547	6.3324	44.147	0.50195	5.481	5.7888	6.2908
12	24	1.8719	6.3529	46.514	0.52717	5.5067	5.7888	6.316
13	28	2.1891	6.3735	48.777	0.55103	5.5272	5.7888	6.3398
14	32	2.5062	6.3942	51.25	0.57709	5.5454	5.7888	6.3659
15	36	2.8165	6.4146	52.723	0.59179	5.56	5.7888	6.3806
16	40.003	3.1267	6.4352	54.355	0.60815	5.5723	5.7888	6.3969
17	44.003	3.437	6.4558	56.407	0.62909	5.584	5.7888	6.4179
18	48.003	3.749	6.4768	57.091	0.63466	5.5934	5.7888	6.4235
19	52.003	4.0644	6.4981	58.143	0.64424	5.6022	5.7888	6.433
20	56.003	4.3833	6.5197	59.143	0.65314	5.6098	5.7888	6.4419
21	60.003	4.7005	6.5414	60.3	0.66371	5.6168	5.7888	6.4525
22	68.003	5.3297	6.5849	62.089	0.67889	5.6279	5.7888	6.4677
23	76.004	5.9519	6.6285	63.826	0.69329	5.6373	5.7888	6.4821
24	84.004	6.581	6.6731	65.036	0.70171	5.6443	5.7888	6.4905
25	92.004	7.205	6.718	66.562	0.71338	5.6507	5.7888	6.5022
26	100	7.8428	6.7645	67.877	0.72248	5.6554	5.7888	6.5113
27	108	8.4616	6.8102	69.403	0.73376	5.6595	5.7888	6.5226
28	116	9.0769	6.8563	69.772	0.73269	5.6624	5.7888	6.5215
29	124	9.7078	6.9042	70.877	0.73913	5.6654	5.7888	6.5279
30	132	10.346	6.9533	71.982	0.74535	5.6671	5.7888	6.5342
31	140	10.98	7.0029	73.087	0.75144	5.6683	5.7888	6.5402
32	148	11.602	7.0522	73.823	0.75371	5.6689	5.7888	6.5425
33	156	12.228	7.1024	74.981	0.76011	5.6689	5.7888	6.5489
34	164	12.869	7.1547	75.191	0.75667	5.6689	5.7888	6.5455
35	172	13.507	7.2075	75.823	0.75744	5.6683	5.7888	6.5462
36	180	14.128	7.2595	77.086	0.76453	5.6671	5.7888	6.5533
37	188	14.753	7.3128	77.612	0.76414	5.6665	5.7888	6.5529
38	196	15.389	7.3678	78.559	0.7677	5.6654	5.7888	6.5565

TRIAXIAL TEST

Project: LO FOX RIVER
Boring No.:
Sample No.: ED-14
Test No.: ED14T2

Location:
Tested By: MS
Test Date: 11/20/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT TRACE F-C SAND TRACE F GRAVEL TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.27 in
Specimen Area: 6.23 in^2
Specimen Volume: 32.85 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	5.7888	5.7888	0	0.000	0.74856	0.74856	1.000	0.74856	0
2	0.15	5.9806	5.7888	0.14926	0.778	0.79106	0.5993	1.320	0.69518	0.09588
3	0.30	6.0512	5.7888	0.2195	0.837	0.79142	0.52906	1.496	0.66024	0.13118
4	0.45	6.1016	5.7888	0.26984	0.863	0.79149	0.47873	1.653	0.63511	0.15638
5	0.61	6.1403	5.7888	0.30788	0.876	0.79222	0.44068	1.798	0.61645	0.17577
6	0.76	6.1724	5.7888	0.3389	0.884	0.79321	0.40966	1.936	0.60144	0.19178
7	0.92	6.2019	5.7888	0.36524	0.884	0.79637	0.38332	2.078	0.58984	0.20653
8	1.08	6.2295	5.7888	0.38866	0.882	0.80056	0.3599	2.224	0.58023	0.22033
9	1.24	6.2534	5.7888	0.40797	0.878	0.80515	0.34059	2.364	0.57287	0.23228
10	1.39	6.273	5.7888	0.42553	0.879	0.80723	0.32303	2.499	0.56513	0.2421
11	1.55	6.2908	5.7888	0.44075	0.878	0.80976	0.30781	2.631	0.55879	0.25098
12	1.87	6.316	5.7888	0.4665	0.885	0.80923	0.28206	2.869	0.54564	0.26359
13	2.19	6.3398	5.7888	0.48699	0.884	0.8126	0.26157	3.107	0.53708	0.27551
14	2.51	6.3659	5.7888	0.50514	0.875	0.82051	0.24342	3.371	0.53197	0.28854
15	2.82	6.3806	5.7888	0.51977	0.878	0.82058	0.22879	3.587	0.52469	0.29589
16	3.13	6.3969	5.7888	0.53206	0.875	0.82465	0.2165	3.809	0.52057	0.30407
17	3.44	6.4179	5.7888	0.54377	0.864	0.83388	0.20479	4.072	0.51934	0.31454
18	3.75	6.4235	5.7888	0.55313	0.872	0.83009	0.19543	4.248	0.51276	0.31733
19	4.06	6.433	5.7888	0.56191	0.872	0.83089	0.18665	4.452	0.50877	0.32212
20	4.38	6.4419	5.7888	0.56952	0.872	0.83218	0.17904	4.648	0.50561	0.32657
21	4.70	6.4525	5.7888	0.57655	0.869	0.83573	0.17202	4.858	0.50387	0.33186
22	5.33	6.4677	5.7888	0.58767	0.866	0.83979	0.16089	5.220	0.50034	0.33945
23	5.95	6.4821	5.7888	0.59703	0.861	0.84482	0.15153	5.575	0.49817	0.34665
24	6.58	6.4905	5.7888	0.60406	0.861	0.84622	0.1445	5.856	0.49536	0.35086
25	7.21	6.5022	5.7888	0.61049	0.856	0.85145	0.13807	6.167	0.49476	0.35669
26	7.84	6.5113	5.7888	0.61518	0.851	0.85586	0.13338	6.417	0.49462	0.36124
27	8.46	6.5226	5.7888	0.61927	0.844	0.86305	0.12929	6.675	0.49617	0.36688
28	9.08	6.5215	5.7888	0.6222	0.849	0.85905	0.12636	6.798	0.49271	0.36635
29	9.71	6.5279	5.7888	0.62513	0.846	0.86257	0.12343	6.988	0.493	0.36957
30	10.35	6.5342	5.7888	0.62688	0.841	0.86703	0.12168	7.126	0.49435	0.37268
31	10.98	6.5402	5.7888	0.62805	0.836	0.87195	0.12051	7.236	0.49623	0.37572
32	11.60	6.5425	5.7888	0.62864	0.834	0.87363	0.11992	7.285	0.49678	0.37686
33	12.23	6.5489	5.7888	0.62864	0.827	0.88003	0.11992	7.338	0.49998	0.38006
34	12.87	6.5455	5.7888	0.62864	0.831	0.8766	0.11992	7.310	0.49826	0.37834
35	13.51	6.5462	5.7888	0.62805	0.829	0.87795	0.12051	7.285	0.49923	0.37872
36	14.13	6.5533	5.7888	0.62688	0.820	0.88621	0.12168	7.283	0.50394	0.38227
37	14.75	6.5529	5.7888	0.6263	0.820	0.88641	0.12226	7.250	0.50433	0.38207
38	15.39	6.5565	5.7888	0.62513	0.814	0.89113	0.12343	7.220	0.50728	0.38385

TRIAXIAL TEST

Project: LO[illegible] FOX RIVER
Boring No.:
Sample No.: [illegible]-14
Test No.: ED14T3

Location:
Tested By: MJS
Test Date: 11/21/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT TRACE F-C SAND TRACE F GRAVEL TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.02 in
Specimen Area: 6.31 in^2
Specimen Volume: 31.67 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.3056	0	0	5.0402	6.5376	6.5376
2	2.004	0.13422	6.3141	24.717	0.28185	5.2895	6.5376	6.8195
3	4.004	0.28114	6.3234	36.459	0.41514	5.4276	6.5376	6.9527
4	6.004	0.43712	6.3333	44.358	0.50429	5.5247	6.5376	7.0419
5	8	0.59492	6.3433	49.861	0.56595	5.5978	6.5376	7.1036
6	10.004	0.75453	6.3535	54.107	0.61316	5.6564	6.5376	7.1508
7	12.004	0.91415	6.3638	57.571	0.65136	5.7055	6.5376	7.189
8	14.004	1.0756	6.3741	60.441	0.68272	5.7471	6.5376	7.2203
9	16	1.237	6.3846	62.837	0.70862	5.7833	6.5376	7.2462
10	18.001	1.3966	6.3949	64.972	0.73151	5.8149	6.5376	7.2691
11	20.001	1.558	6.4054	66.893	0.75191	5.8436	6.5376	7.2895
12	24.001	1.8827	6.4266	69.953	0.78372	5.891	6.5376	7.3213
13	28.001	2.211	6.4482	72.491	0.80943	5.932	6.5376	7.347
14	32.001	2.5429	6.4701	74.816	0.83256	5.9683	6.5376	7.3702
15	36.001	2.873	6.4921	76.737	0.85104	5.9981	6.5376	7.3886
16	40.001	3.2013	6.5141	78.587	0.86862	6.025	6.5376	7.4062
17	44.001	3.5278	6.5362	80.153	0.88293	6.049	6.5376	7.4205
18	48.002	3.8507	6.5581	81.505	0.89482	6.0701	6.5376	7.4324
19	52.002	4.1771	6.5805	82.905	0.9071	6.09	6.5376	7.4447
20	56.002	4.5018	6.6028	84.138	0.91748	6.1075	6.5376	7.4551
21	60.002	4.8319	6.6257	85.372	0.92771	6.1251	6.5376	7.4653
22	68.002	5.4958	6.6723	87.696	0.94632	6.1549	6.5376	7.4839
23	76.002	6.156	6.7192	89.855	0.96284	6.1824	6.5376	7.5004
24	84.002	6.8089	6.7663	91.824	0.97709	6.2041	6.5376	7.5147
25	92.003	7.4637	6.8142	93.626	0.98928	6.2234	6.5376	7.5269
26	100	8.1239	6.8631	95.405	1.0009	6.2392	6.5376	7.5385
27	108	8.7878	6.9131	96.829	1.0085	6.2532	6.5376	7.5461
28	116	9.4444	6.9632	98.537	1.0189	6.2667	6.5376	7.5565
29	124	10.097	7.0138	100.08	1.0274	6.2761	6.5376	7.565
30	132	10.75	7.0651	101.45	1.0339	6.2854	6.5376	7.5715
31	140	11.411	7.1178	102.88	1.0407	6.2925	6.5376	7.5783
32	148	12.067	7.1709	104.21	1.0463	6.2989	6.5376	7.5839
33	156	12.722	7.2247	105.51	1.0515	6.3024	6.5376	7.5891
34	164	13.377	7.2793	106.53	1.0537	6.3071	6.5376	7.5913
35	172	14.033	7.3349	107.76	1.0578	6.31	6.5376	7.5954
36	180	14.697	7.392	108.78	1.0596	6.3112	6.5376	7.5972
37	188	15.359	7.4498	109.78	1.061	6.3129	6.5376	7.5986

TRIAXIAL TEST

Project: LO FOX RIVER
Boring No.:
Sample No.: ED-14
Test No.: ED14T3

Location:
Tested By: MJS
Test Date: 11/21/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT TRACE F-C SAND TRACE F GRAVEL TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.02 in
Specimen Area: 6.31 in^2
Specimen Volume: 31.67 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

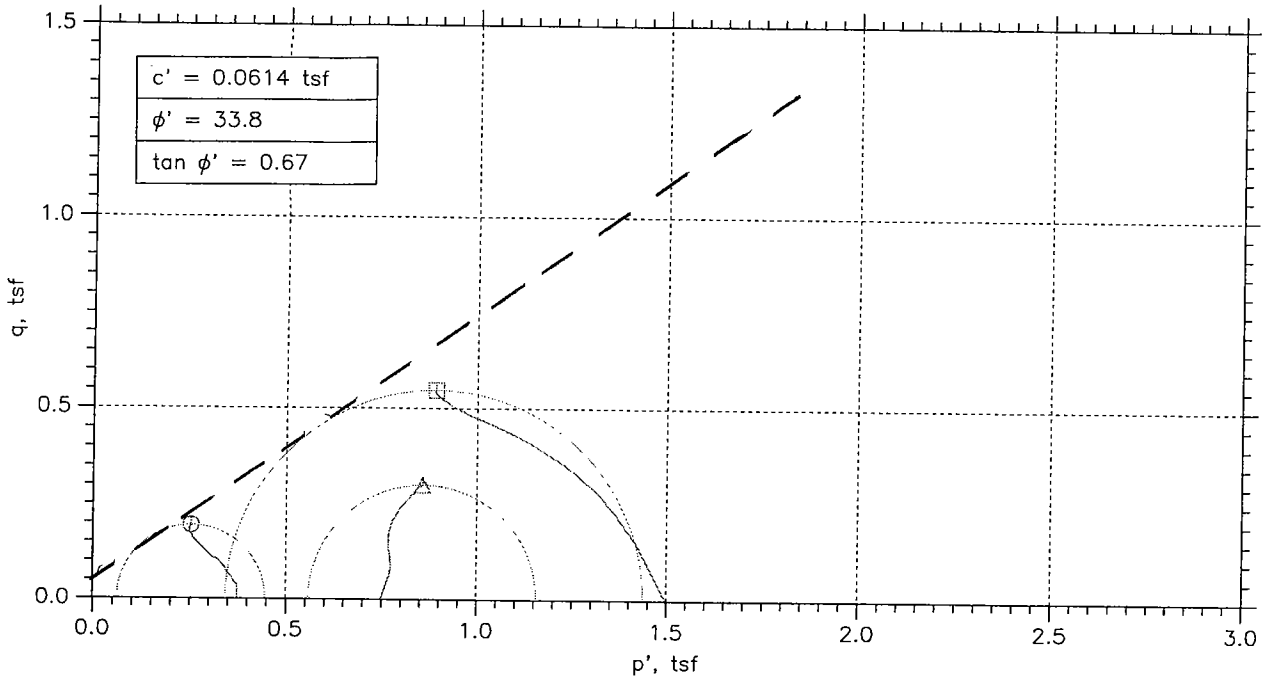
Liquid Limit: 0

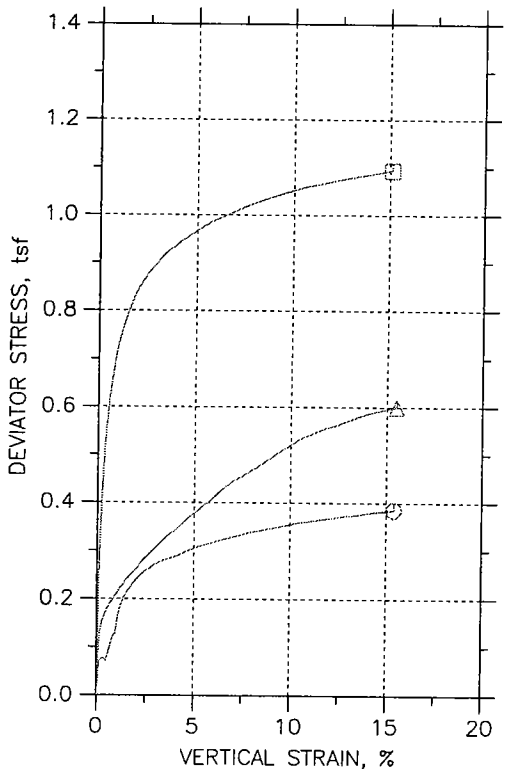
Plastic Limit: 0

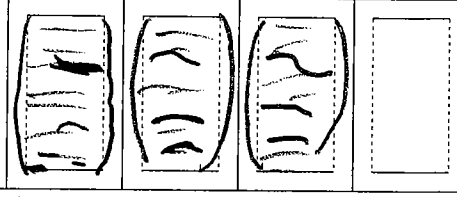
Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	6.5376	6.5376	0	0.000	1.4974	1.4974	1.000	1.4974	0
2	0.13	6.8195	6.5376	0.24929	0.884	1.53	1.2481	1.226	1.3891	0.14093
3	0.28	6.9527	6.5376	0.38739	0.933	1.5252	1.11	1.374	1.3176	0.20757
4	0.44	7.0419	6.5376	0.48453	0.961	1.5172	1.0129	1.498	1.265	0.25214
5	0.59	7.1036	6.5376	0.55768	0.985	1.5057	0.93976	1.602	1.2227	0.28298
6	0.75	7.1508	6.5376	0.6162	1.005	1.4944	0.88124	1.696	1.1878	0.30658
7	0.91	7.189	6.5376	0.66535	1.021	1.4834	0.83208	1.783	1.1578	0.32568
8	1.08	7.2203	6.5376	0.7069	1.035	1.4733	0.79054	1.864	1.1319	0.34136
9	1.24	7.2462	6.5376	0.74318	1.049	1.4629	0.75425	1.940	1.1086	0.35431
10	1.40	7.2691	6.5376	0.77478	1.059	1.4542	0.72265	2.012	1.0884	0.36576
11	1.56	7.2895	6.5376	0.80345	1.069	1.4459	0.69398	2.083	1.0699	0.37596
12	1.88	7.3213	6.5376	0.85085	1.086	1.4303	0.64658	2.212	1.0384	0.39186
13	2.21	7.347	6.5376	0.89182	1.102	1.4151	0.60562	2.337	1.0103	0.40472
14	2.54	7.3702	6.5376	0.9281	1.115	1.4019	0.56934	2.462	0.98561	0.41628
15	2.87	7.3886	6.5376	0.95794	1.126	1.3905	0.53949	2.577	0.96501	0.42552
16	3.20	7.4062	6.5376	0.98486	1.134	1.3812	0.51257	2.695	0.94688	0.43431
17	3.53	7.4205	6.5376	1.0089	1.143	1.3715	0.48858	2.807	0.93005	0.44147
18	3.85	7.4324	6.5376	1.0299	1.151	1.3623	0.46752	2.914	0.91493	0.44741
19	4.18	7.4447	6.5376	1.0498	1.157	1.3547	0.44762	3.026	0.90117	0.45355
20	4.50	7.4551	6.5376	1.0674	1.163	1.3475	0.43006	3.133	0.8888	0.45874
21	4.83	7.4653	6.5376	1.0849	1.169	1.3402	0.41251	3.249	0.87636	0.46385
22	5.50	7.4839	6.5376	1.1148	1.178	1.329	0.38266	3.473	0.85582	0.47316
23	6.16	7.5004	6.5376	1.1423	1.186	1.318	0.35516	3.711	0.83658	0.48142
24	6.81	7.5147	6.5376	1.1639	1.191	1.3106	0.33351	3.930	0.82205	0.48855
25	7.46	7.5269	6.5376	1.1832	1.196	1.3035	0.3142	4.149	0.80884	0.49464
26	8.12	7.5385	6.5376	1.199	1.198	1.2993	0.2984	4.354	0.79884	0.50044
27	8.79	7.5461	6.5376	1.2131	1.203	1.2928	0.28435	4.547	0.78859	0.50424
28	9.44	7.5565	6.5376	1.2265	1.204	1.2898	0.27089	4.761	0.78033	0.50944
29	10.10	7.565	6.5376	1.2359	1.203	1.2889	0.26153	4.928	0.77521	0.51368
30	10.75	7.5715	6.5376	1.2453	1.204	1.2861	0.25217	5.100	0.76913	0.51696
31	11.41	7.5783	6.5376	1.2523	1.203	1.2858	0.24515	5.245	0.76548	0.52033
32	12.07	7.5839	6.5376	1.2587	1.203	1.285	0.23871	5.383	0.76185	0.52314
33	12.72	7.5891	6.5376	1.2622	1.200	1.2867	0.2352	5.471	0.76095	0.52575
34	13.38	7.5913	6.5376	1.2669	1.202	1.2842	0.23052	5.571	0.75737	0.52685
35	14.03	7.5954	6.5376	1.2698	1.200	1.2854	0.22759	5.648	0.7565	0.52891
36	14.70	7.5972	6.5376	1.271	1.200	1.286	0.22642	5.680	0.75621	0.52979
37	15.36	7.5986	6.5376	1.2728	1.200	1.2857	0.22466	5.723	0.75516	0.5305

TRIAXIAL COMPRESSION TEST REPORT





Symbol		⊙	△	⊡	
Test No.		NWB1T1	NWB1T2	NWB1T3	
Initial	Diameter, in	2.8358	2.8295	2.7945	
	Height, in	5.2598	5.4795	5.3299	
	Water Content, %	161.35	171.40	166.14	
	Dry Density, pcf	30.87	29.1	30.34	
	Saturation, %	99.45	98.22	100.21	
	Void Ratio	4.0561	4.3626	4.1447	
Before Shear	Water Content, %	97.92	85.55	71.42	
	Dry Density, pcf	45.89	50.36	57.54	
	Saturation, %	101.97	101.88	104.27	
	Void Ratio	2.4007	2.0993	1.7124	
	Back Press., tsf	5.0398	5.04	5.0401	
Minor Prin. Stress, tsf		0.3746	0.7488	1.4975	
Max. Dev. Stress, tsf		0.38466	0.59913	1.0936	
Time to Failure, min		195.91	204	196	
Strain Rate, %/min		0.082	0.08233	0.0896	
B-Value		---	---	---	
Estimated Specific Gravity		2.50	2.50	2.50	
Liquid Limit		0	0	0	
Plastic Limit		0	0	0	
Plasticity Index		0	0	0	
Failure Sketch					

Project: LOWER FOX RIVER

Location:

Project No.: 29316-A

Boring No.: NWB1

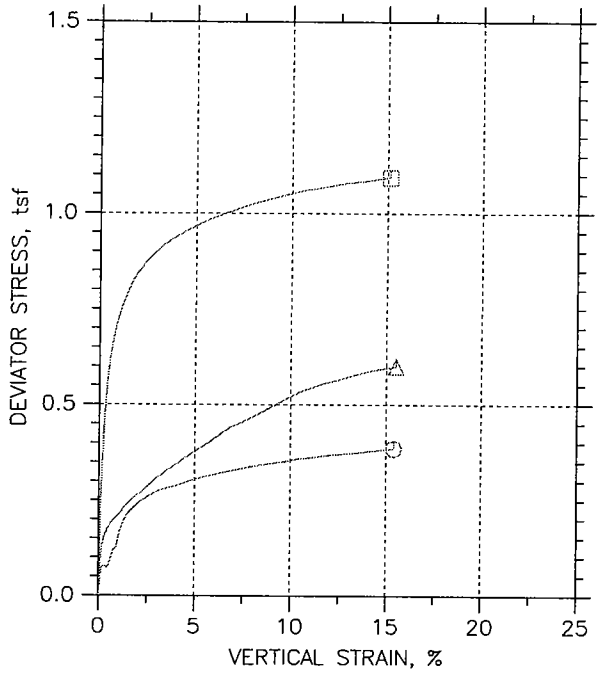
Sample Type: REMOLDED

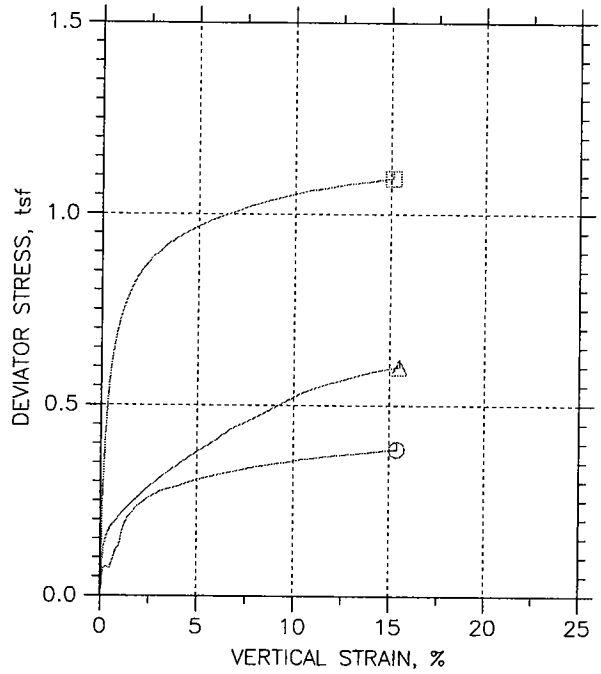
Description: CLAYEY SILT LITTLE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)

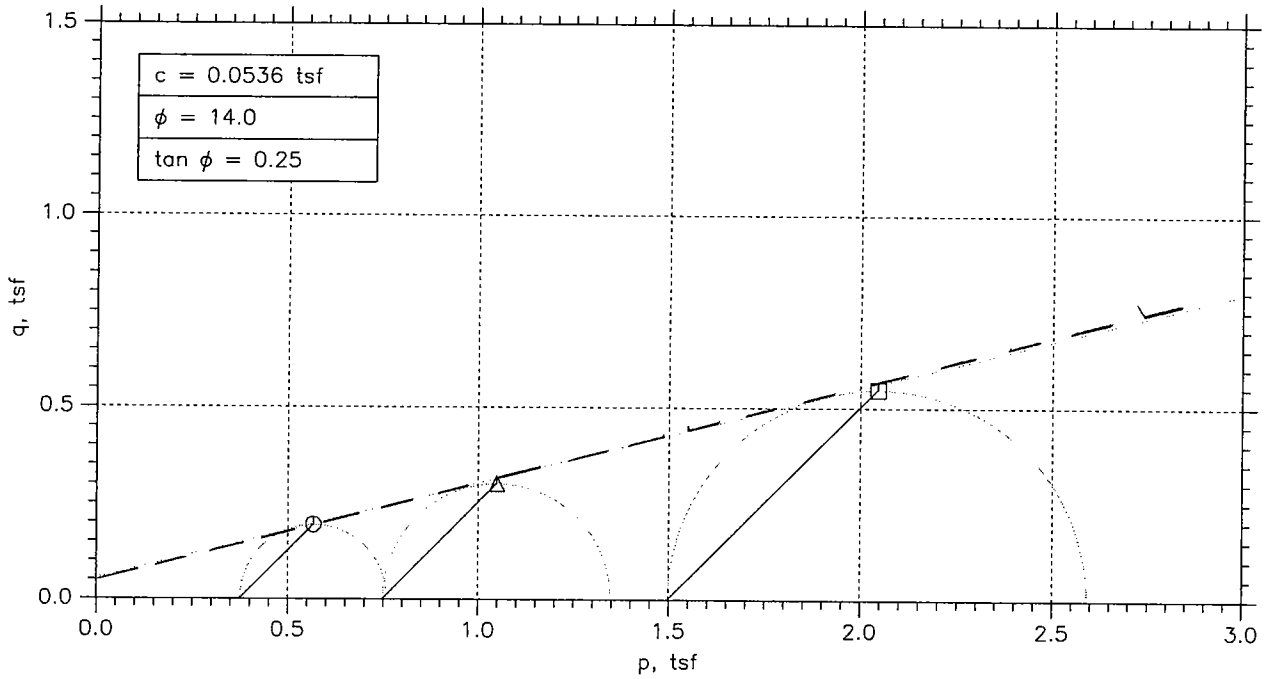
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Wed, 06-DEC-2006 15:32:42

TRIAXIAL COMPRESSION TEST REPORT







Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: NWB1	Tested By: MJS	Checked By: WPQ
Sample No.: NWB1T1	Test Date: 11/27/06	Depth:
Test No.: NWB1T1	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT LITTLE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)		
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767		

Wed, 06-DEC-2006 15:38:37

TRIAXIAL TEST

Project: LO' ˜ FOX RIVER
Boring No.: :1
Sample No.: wwB1T1
Test No.: NWB1T1

Location:
Tested By: MJS
Test Date: 11/27/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT LITTLE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.26 in
Specimen Area: 6.32 in^2
Specimen Volume: 33.22 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.3161	0	0	5.0398	5.4144	5.4144
2	2.0039	0.14587	6.3253	6.1563	0.070076	5.0738	5.4144	5.4845
3	4	0.3039	6.3354	6.7351	0.076543	5.0802	5.4144	5.4909
4	6	0.46193	6.3454	6.2089	0.070452	5.0791	5.4144	5.4849
5	8	0.61996	6.3555	8.1558	0.092395	5.0955	5.4144	5.5068
6	10	0.77626	6.3655	10.261	0.11606	5.1154	5.4144	5.5305
7	12	0.93429	6.3757	11.26	0.12716	5.1271	5.4144	5.5416
8	14	1.0906	6.3857	14.68	0.16552	5.1564	5.4144	5.5799
9	16	1.2434	6.3956	16.627	0.18719	5.1769	5.4144	5.6016
10	18.002	1.398	6.4057	18.048	0.20286	5.191	5.4144	5.6173
11	20.002	1.556	6.4159	19.1	0.21435	5.2109	5.4144	5.6287
12	24.002	1.8686	6.4364	20.732	0.23191	5.2303	5.4144	5.6463
13	28.002	2.1846	6.4572	22.047	0.24583	5.2431	5.4144	5.6602
14	32.002	2.5042	6.4783	23.099	0.25673	5.2531	5.4144	5.6711
15	36.002	2.8202	6.4994	23.994	0.2658	5.2637	5.4144	5.6802
16	40.002	3.138	6.5207	24.836	0.27423	5.2719	5.4144	5.6886
17	44.002	3.4541	6.5421	25.415	0.2797	5.2771	5.4144	5.6941
18	48.003	3.7667	6.5633	25.888	0.28399	5.2818	5.4144	5.6984
19	52.004	4.0793	6.5847	26.309	0.28767	5.2889	5.4144	5.7021
20	56.002	4.3919	6.6062	26.941	0.29362	5.2941	5.4144	5.708
21	60.002	4.7062	6.628	27.572	0.29951	5.2965	5.4144	5.7139
22	68.002	5.34	6.6724	28.624	0.30888	5.3064	5.4144	5.7233
23	76.002	5.9774	6.7176	29.519	0.31638	5.3111	5.4144	5.7308
24	84.002	6.6025	6.7626	30.413	0.3238	5.3199	5.4144	5.7382
25	92.002	7.226	6.8081	31.203	0.32999	5.3234	5.4144	5.7444
26	100	7.8564	6.8546	32.097	0.33714	5.3299	5.4144	5.7515
27	108	8.4937	6.9024	32.781	0.34195	5.334	5.4144	5.7563
28	116	9.1154	6.9496	33.518	0.34726	5.3375	5.4144	5.7617
29	124	9.7354	6.9973	34.149	0.35138	5.3416	5.4144	5.7658
30	132	10.362	7.0463	34.991	0.35755	5.3428	5.4144	5.7719
31	140	11.01	7.0975	35.57	0.36083	5.3463	5.4144	5.7752
32	148	11.637	7.1479	36.254	0.36518	5.3463	5.4144	5.7796
33	156	12.255	7.1983	36.833	0.36842	5.3498	5.4144	5.7828
34	164	12.879	7.2498	37.464	0.37207	5.348	5.4144	5.7865
35	172	13.511	7.3028	37.99	0.37456	5.3516	5.4144	5.789
36	180	14.153	7.3574	38.727	0.37898	5.3498	5.4144	5.7934
37	188	14.784	7.4118	39.306	0.38182	5.3521	5.4144	5.7962
38	195.91	15.397	7.4655	39.885	0.38466	5.3527	5.4144	5.7991

TRIAXIAL TEST

Project: LO[illegible] FOX RIVER
Boring No.: [illegible]1
Sample No.: [illegible]WB1T1
Test No.: NWB1T1

Location:
Tested By: MJS
Test Date: 11/27/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT LITTLE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.26 in
Specimen Area: 6.32 in^2
Specimen Volume: 33.22 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	5.4144	5.4144	0	0.000	0.3746	0.3746	1.000	0.3746	0
2	0.15	5.4845	5.4144	0.033989	0.485	0.41069	0.34061	1.206	0.37565	0.035038
3	0.30	5.4909	5.4144	0.040436	0.528	0.41071	0.33417	1.229	0.37244	0.038272
4	0.46	5.4849	5.4144	0.039264	0.557	0.40579	0.33534	1.210	0.37056	0.035226
5	0.62	5.5068	5.4144	0.055672	0.603	0.41132	0.31893	1.290	0.36513	0.046198
6	0.78	5.5305	5.4144	0.075597	0.651	0.41506	0.299	1.388	0.35703	0.058028
7	0.93	5.5416	5.4144	0.087317	0.687	0.41445	0.28728	1.443	0.35087	0.063581
8	1.09	5.5799	5.4144	0.11662	0.705	0.42351	0.25798	1.642	0.34075	0.082762
9	1.24	5.6016	5.4144	0.13713	0.733	0.42466	0.23747	1.788	0.33107	0.093593
10	1.40	5.6173	5.4144	0.15119	0.745	0.42627	0.22341	1.908	0.32484	0.10143
11	1.56	5.6287	5.4144	0.17112	0.798	0.41783	0.20348	2.053	0.31066	0.10717
12	1.87	5.6463	5.4144	0.19046	0.821	0.41606	0.18414	2.259	0.3001	0.11596
13	2.18	5.6602	5.4144	0.20335	0.827	0.41708	0.17125	2.436	0.29417	0.12292
14	2.50	5.6711	5.4144	0.21331	0.831	0.41802	0.16129	2.592	0.28965	0.12836
15	2.82	5.6802	5.4144	0.22386	0.842	0.41654	0.15074	2.763	0.28364	0.1329
16	3.14	5.6886	5.4144	0.23207	0.846	0.41677	0.14254	2.924	0.27965	0.13711
17	3.45	5.6941	5.4144	0.23734	0.849	0.41697	0.13726	3.038	0.27711	0.13985
18	3.77	5.6984	5.4144	0.24203	0.852	0.41657	0.13257	3.142	0.27457	0.142
19	4.08	5.7021	5.4144	0.24906	0.866	0.41322	0.12554	3.291	0.26938	0.14384
20	4.39	5.708	5.4144	0.25433	0.866	0.41389	0.12027	3.441	0.26708	0.14681
21	4.71	5.7139	5.4144	0.25668	0.857	0.41744	0.11792	3.540	0.26768	0.14976
22	5.34	5.7233	5.4144	0.26664	0.863	0.41684	0.10796	3.861	0.2624	0.15444
23	5.98	5.7308	5.4144	0.27133	0.858	0.41966	0.10327	4.064	0.26147	0.15819
24	6.60	5.7382	5.4144	0.28012	0.865	0.41829	0.094483	4.427	0.25638	0.1619
25	7.23	5.7444	5.4144	0.28364	0.860	0.42096	0.090967	4.628	0.25596	0.16499
26	7.86	5.7515	5.4144	0.29008	0.860	0.42166	0.08452	4.989	0.25309	0.16857
27	8.49	5.7563	5.4144	0.29418	0.860	0.42236	0.080418	5.252	0.25139	0.17097
28	9.12	5.7617	5.4144	0.2977	0.857	0.42416	0.076902	5.516	0.25053	0.17363
29	9.74	5.7658	5.4144	0.3018	0.859	0.42418	0.0728	5.827	0.24849	0.17569
30	10.36	5.7719	5.4144	0.30297	0.847	0.42917	0.071628	5.992	0.2504	0.17877
31	11.01	5.7752	5.4144	0.30649	0.849	0.42895	0.068112	6.298	0.24853	0.18042
32	11.64	5.7796	5.4144	0.30649	0.839	0.43329	0.068112	6.362	0.2507	0.18259
33	12.26	5.7828	5.4144	0.31001	0.841	0.43301	0.064596	6.703	0.2488	0.18421
34	12.88	5.7865	5.4144	0.30825	0.828	0.43842	0.066354	6.607	0.25239	0.18603
35	13.51	5.789	5.4144	0.31176	0.832	0.4374	0.062837	6.961	0.25012	0.18728
36	14.15	5.7934	5.4144	0.31001	0.818	0.44358	0.064596	6.867	0.25409	0.18949
37	14.78	5.7962	5.4144	0.31235	0.818	0.44408	0.062251	7.134	0.25316	0.19091
38	15.40	5.7991	5.4144	0.31294	0.814	0.44632	0.061665	7.238	0.25399	0.19233

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.
Sample No.: NWB1
Test No.: NWB1T2

Location:
Tested By: MJS
Test Date: 11/21/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT TRACE F-C SAND TRACE F GRAVEL TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.48 in
Specimen Area: 6.29 in^2
Specimen Volume: 34.46 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.2881	0	0	5.04	5.7888	5.7888
2	2.0041	0.13822	6.2968	10.897	0.1246	5.0804	5.7888	5.9134
3	4.0041	0.29161	6.3065	13.555	0.15476	5.0927	5.7888	5.9436
4	6.0041	0.445	6.3162	15.061	0.17169	5.0997	5.7888	5.9605
5	8.0041	0.59838	6.3259	16.124	0.18352	5.1062	5.7888	5.9723
6	10.004	0.7484	6.3355	17.01	0.19331	5.112	5.7888	5.9821
7	12.004	0.9001	6.3452	17.896	0.20307	5.1179	5.7888	5.9919
8	14	1.0501	6.3548	18.694	0.2118	5.1226	5.7888	6.0006
9	16	1.2018	6.3646	19.58	0.2215	5.1279	5.7888	6.0103
10	18	1.3485	6.374	20.288	0.22917	5.132	5.7888	6.018
11	20.001	1.4985	6.3837	21.086	0.23782	5.1366	5.7888	6.0266
12	24.001	1.7968	6.4031	22.415	0.25204	5.1454	5.7888	6.0408
13	28.001	2.0986	6.4229	23.655	0.26517	5.1536	5.7888	6.054
14	32.001	2.402	6.4428	25.072	0.28019	5.1607	5.7888	6.069
15	36.001	2.7054	6.4629	26.313	0.29314	5.1671	5.7888	6.0819
16	40.001	3.0105	6.4833	27.553	0.30599	5.173	5.7888	6.0948
17	44.001	3.3122	6.5035	28.616	0.31681	5.1794	5.7888	6.1056
18	48.001	3.6139	6.5238	29.768	0.32853	5.1847	5.7888	6.1173
19	52.001	3.9123	6.5441	30.743	0.33824	5.1894	5.7888	6.127
20	56.001	4.2055	6.5641	31.894	0.34984	5.194	5.7888	6.1386
21	60.001	4.5039	6.5846	32.957	0.36037	5.1981	5.7888	6.1492
22	68.003	5.1073	6.6265	34.995	0.38024	5.2046	5.7888	6.169
23	76.002	5.7141	6.6692	36.944	0.39885	5.2116	5.7888	6.1876
24	84.002	6.321	6.7124	39.248	0.42099	5.2169	5.7888	6.2098
25	92.002	6.9143	6.7551	41.374	0.44099	5.221	5.7888	6.2298
26	100	7.5127	6.7989	42.88	0.4541	5.2245	5.7888	6.2429
27	108	8.1229	6.844	44.652	0.46975	5.2274	5.7888	6.2585
28	116	8.728	6.8894	46.424	0.48517	5.2298	5.7888	6.274
29	124	9.3179	6.9342	48.373	0.50227	5.2309	5.7888	6.2911
30	132	9.9079	6.9796	50.145	0.51728	5.2327	5.7888	6.3061
31	140	10.51	7.0265	52.005	0.53289	5.2327	5.7888	6.3217
32	148	11.12	7.0748	53.423	0.54369	5.2333	5.7888	6.3325
33	156	11.747	7.125	54.84	0.55417	5.2309	5.7888	6.343
34	164	12.379	7.1764	55.992	0.56176	5.2339	5.7888	6.3506
35	172	12.981	7.2261	57.321	0.57114	5.2344	5.7888	6.3599
36	180	13.593	7.2772	58.65	0.58028	5.2333	5.7888	6.3691
37	188	14.216	7.3301	59.89	0.58827	5.2333	5.7888	6.3771
38	196	14.845	7.3843	60.865	0.59346	5.2315	5.7888	6.3823
39	204	15.507	7.4422	61.928	0.59913	5.2309	5.7888	6.3879

TRIAXIAL TEST

Project: LO' FOX RIVER
Boring No.:
Sample No.: NWB1
Test No.: NWB1T2

Location:
Tested By: MJS
Test Date: 11/21/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT TRACE F-C SAND TRACE F GRAVEL TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.48 in
Specimen Area: 6.29 in^2
Specimen Volume: 34.46 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	5.7888	5.7888	0	0.000	0.7488	0.7488	1.000	0.7488	0
2	0.14	5.9134	5.7888	0.040414	0.324	0.83299	0.70839	1.176	0.77069	0.062302
3	0.29	5.9436	5.7888	0.052713	0.341	0.85085	0.69609	1.222	0.77347	0.077378
4	0.44	5.9605	5.7888	0.059742	0.348	0.86075	0.68906	1.249	0.77491	0.085844
5	0.60	5.9723	5.7888	0.066185	0.361	0.86614	0.68262	1.269	0.77438	0.091761
6	0.75	5.9821	5.7888	0.072042	0.373	0.87008	0.67676	1.286	0.77342	0.096657
7	0.90	5.9919	5.7888	0.077899	0.384	0.87398	0.67091	1.303	0.77244	0.10154
8	1.05	6.0006	5.7888	0.082584	0.390	0.87802	0.66622	1.318	0.77212	0.1059
9	1.20	6.0103	5.7888	0.087856	0.397	0.88245	0.66095	1.335	0.7717	0.11075
10	1.35	6.018	5.7888	0.091956	0.401	0.88602	0.65685	1.349	0.77144	0.11459
11	1.50	6.0266	5.7888	0.096641	0.406	0.88998	0.65216	1.365	0.77107	0.11891
12	1.80	6.0408	5.7888	0.10543	0.418	0.89542	0.64338	1.392	0.7694	0.12602
13	2.10	6.054	5.7888	0.11363	0.429	0.90035	0.63518	1.417	0.76776	0.13259
14	2.40	6.069	5.7888	0.12066	0.431	0.90834	0.62815	1.446	0.76824	0.1401
15	2.71	6.0819	5.7888	0.1271	0.434	0.91484	0.62171	1.472	0.76828	0.14657
16	3.01	6.0948	5.7888	0.13296	0.435	0.92184	0.61585	1.497	0.76885	0.153
17	3.31	6.1056	5.7888	0.1394	0.440	0.92622	0.60941	1.520	0.76781	0.15841
18	3.61	6.1173	5.7888	0.14467	0.440	0.93267	0.60414	1.544	0.7684	0.16427
19	3.91	6.127	5.7888	0.14935	0.442	0.93769	0.59945	1.564	0.76857	0.16912
20	4.21	6.1386	5.7888	0.15404	0.440	0.9446	0.59476	1.588	0.76968	0.17492
21	4.50	6.1492	5.7888	0.15814	0.439	0.95104	0.59066	1.610	0.77085	0.18019
22	5.11	6.169	5.7888	0.16458	0.433	0.96446	0.58422	1.651	0.77434	0.19012
23	5.71	6.1876	5.7888	0.17161	0.430	0.97604	0.57719	1.691	0.77662	0.19942
24	6.32	6.2098	5.7888	0.17688	0.420	0.99291	0.57192	1.736	0.78242	0.21049
25	6.91	6.2298	5.7888	0.18098	0.410	1.0088	0.56782	1.777	0.78832	0.22049
26	7.51	6.2429	5.7888	0.1845	0.406	1.0184	0.56431	1.805	0.79136	0.22705
27	8.12	6.2585	5.7888	0.18743	0.399	1.0311	0.56138	1.837	0.79625	0.23487
28	8.73	6.274	5.7888	0.18977	0.391	1.0442	0.55904	1.868	0.80162	0.24259
29	9.32	6.2911	5.7888	0.19094	0.380	1.0601	0.55786	1.900	0.809	0.25114
30	9.91	6.3061	5.7888	0.1927	0.373	1.0734	0.55611	1.930	0.81475	0.25864
31	10.51	6.3217	5.7888	0.1927	0.362	1.089	0.55611	1.958	0.82255	0.26645
32	11.12	6.3325	5.7888	0.19328	0.356	1.0992	0.55552	1.979	0.82736	0.27184
33	11.75	6.343	5.7888	0.19094	0.345	1.112	0.55786	1.993	0.83495	0.27709
34	12.38	6.3506	5.7888	0.19387	0.345	1.1167	0.55494	2.012	0.83582	0.28088
35	12.98	6.3599	5.7888	0.19445	0.340	1.1255	0.55435	2.030	0.83992	0.28557
36	13.59	6.3691	5.7888	0.19328	0.333	1.1358	0.55552	2.045	0.84566	0.29014
37	14.22	6.3771	5.7888	0.19328	0.329	1.1438	0.55552	2.059	0.84966	0.29414
38	14.84	6.3823	5.7888	0.19153	0.323	1.1507	0.55728	2.065	0.85401	0.29673
39	15.51	6.3879	5.7888	0.19094	0.319	1.157	0.55786	2.074	0.85743	0.29957

TRIAXIAL TEST

Project: LO FOX RIVER
Boring No.: 1
Sample No.: 81
Test No.: NWB1T3

Location:
Tested By: MS
Test Date: 11/27/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT LITTLE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.33 in
Specimen Area: 6.13 in^2
Specimen Volume: 32.69 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.1333	0	0	5.0401	6.5376	6.5376
2	2.004	0.13161	6.1414	25.713	0.30146	5.2701	6.5376	6.8391
3	4.0006	0.27861	6.1504	39.258	0.45957	5.406	6.5376	6.9972
4	6.0006	0.42732	6.1596	47.489	0.5551	5.4971	6.5376	7.0927
5	8.0006	0.57945	6.169	53.087	0.61959	5.5645	6.5376	7.1572
6	10.001	0.73499	6.1787	57.262	0.66727	5.6173	6.5376	7.2049
7	12.001	0.88883	6.1883	60.607	0.70515	5.6609	6.5376	7.2428
8	14.001	1.041	6.1978	63.121	0.73328	5.6969	6.5376	7.2709
9	16.001	1.1982	6.2077	65.28	0.75715	5.7283	6.5376	7.2948
10	18.001	1.3503	6.2173	67.201	0.77824	5.7555	6.5376	7.3158
11	20.001	1.5059	6.2271	68.933	0.79703	5.7799	6.5376	7.3346
12	24.001	1.8135	6.2466	71.898	0.82872	5.8223	6.5376	7.3663
13	28.001	2.1161	6.2659	74.033	0.8507	5.856	6.5376	7.3883
14	32.001	2.4203	6.2854	76.049	0.87115	5.8862	6.5376	7.4087
15	36.001	2.7263	6.3052	77.757	0.88792	5.9123	6.5376	7.4255
16	40.002	3.0357	6.3253	79.18	0.9013	5.9356	6.5376	7.4389
17	44.002	3.3485	6.3458	80.746	0.91615	5.9571	6.5376	7.4538
18	48.003	3.663	6.3665	81.932	0.92658	5.9751	6.5376	7.4642
19	52.003	3.9741	6.3871	83.118	0.93696	5.9925	6.5376	7.4746
20	56.003	4.2869	6.408	84.233	0.94644	6.0087	6.5376	7.484
21	60	4.5963	6.4288	85.205	0.95427	6.0233	6.5376	7.4919
22	68	5.2082	6.4703	87.245	0.97085	6.0494	6.5376	7.5084
23	76.001	5.8252	6.5127	89.167	0.98577	6.0697	6.5376	7.5234
24	84.001	6.4491	6.5561	90.756	0.99669	6.0895	6.5376	7.5343
25	92.001	7.0696	6.5999	92.417	1.0082	6.1051	6.5376	7.5458
26	100	7.6866	6.644	94.101	1.0198	6.1185	6.5376	7.5574
27	108	8.302	6.6886	95.595	1.029	6.1319	6.5376	7.5666
28	116	8.9207	6.734	97.018	1.0373	6.1429	6.5376	7.5749
29	124	9.5515	6.781	98.465	1.0455	6.1522	6.5376	7.5831
30	132	10.17	6.8277	99.865	1.0531	6.1603	6.5376	7.5907
31	140	10.786	6.8748	101.26	1.0605	6.1679	6.5376	7.5981
32	148	11.399	6.9224	102.36	1.0646	6.1742	6.5376	7.6022
33	156	12.025	6.9716	103.61	1.0701	6.1789	6.5376	7.6077
34	164	12.649	7.0214	104.92	1.0759	6.1835	6.5376	7.6135
35	172	13.259	7.0708	106.08	1.0802	6.1876	6.5376	7.6178
36	180	13.873	7.1212	107.22	1.084	6.1905	6.5376	7.6216
37	188	14.496	7.1732	108.48	1.0888	6.1923	6.5376	7.6264
38	196	15.125	7.2263	109.76	1.0936	6.1934	6.5376	7.6312

TRIAXIAL TEST

Project: LOWER FOX RIVER
Boring No.: [illegible]1
Sample No.: [illegible]81
Test No.: NWB1T3

Location:
Tested By: MS
Test Date: 11/27/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT LITTLE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.33 in
Specimen Area: 6.13 in^2
Specimen Volume: 32.69 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

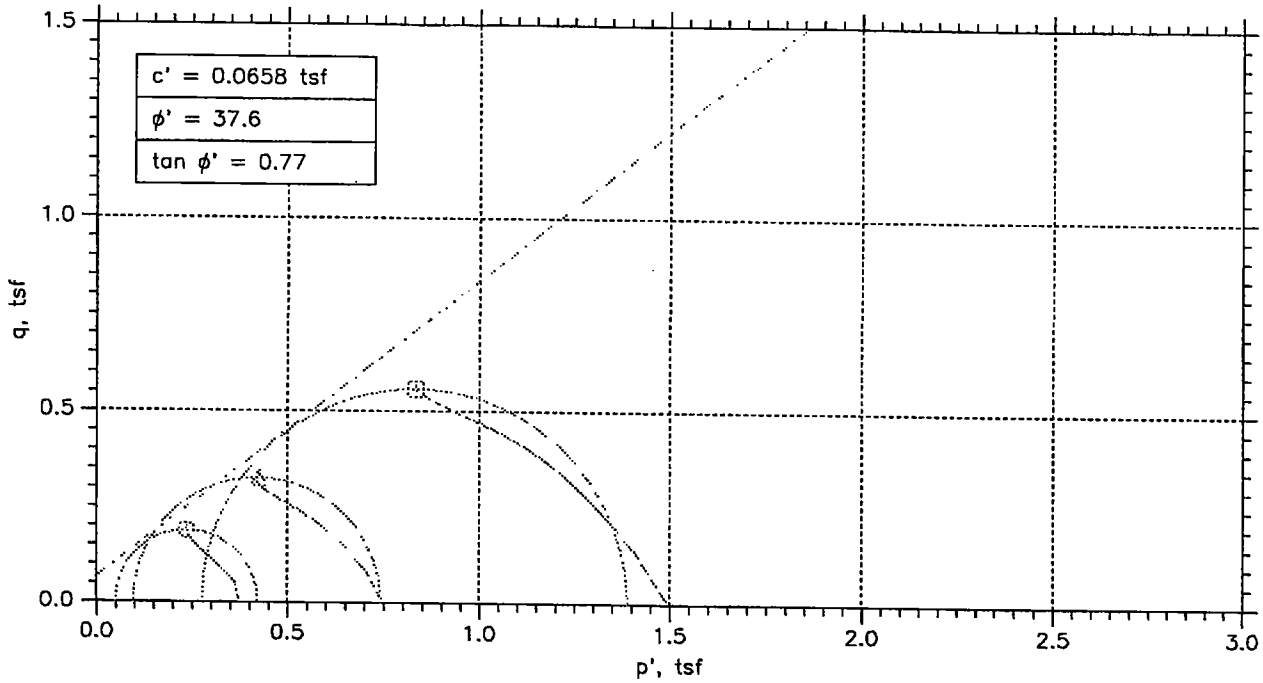
Liquid Limit: 0

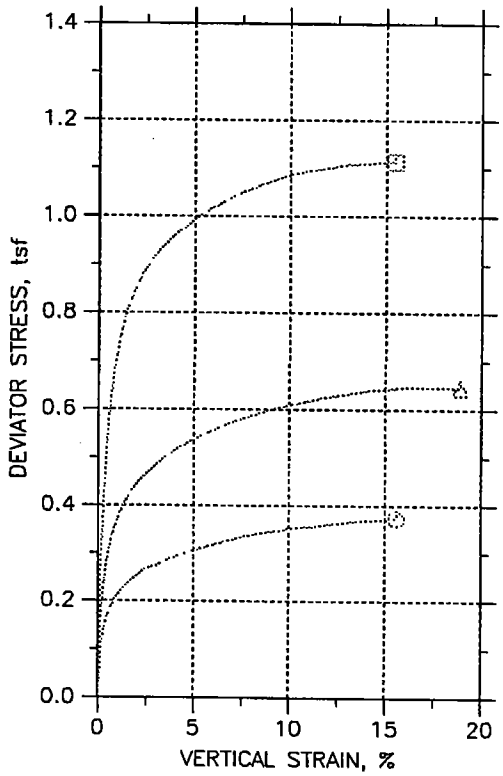
Plastic Limit: 0

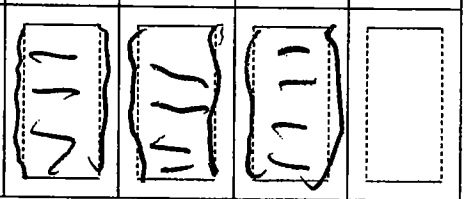
Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	6.5376	6.5376	0	0.000	1.4975	1.4975	1.000	1.4975	0
2	0.13	6.8391	6.5376	0.22997	0.763	1.569	1.2675	1.238	1.4183	0.15073
3	0.28	6.9972	6.5376	0.36586	0.796	1.5912	1.1316	1.406	1.3614	0.22979
4	0.43	7.0927	6.5376	0.45703	0.823	1.5956	1.0405	1.534	1.318	0.27755
5	0.58	7.1572	6.5376	0.52439	0.846	1.5927	0.97311	1.637	1.2829	0.3098
6	0.73	7.2049	6.5376	0.57724	0.865	1.5875	0.92026	1.725	1.2539	0.33364
7	0.89	7.2428	6.5376	0.62079	0.880	1.5819	0.87671	1.804	1.2293	0.35258
8	1.04	7.2709	6.5376	0.6568	0.896	1.574	0.84071	1.872	1.2073	0.36664
9	1.20	7.2948	6.5376	0.68816	0.909	1.5665	0.80935	1.936	1.1879	0.37858
10	1.35	7.3158	6.5376	0.71545	0.919	1.5603	0.78205	1.995	1.1712	0.38912
11	1.51	7.3346	6.5376	0.73984	0.928	1.5547	0.75766	2.052	1.1562	0.39852
12	1.81	7.3663	6.5376	0.78223	0.944	1.544	0.71527	2.159	1.1296	0.41436
13	2.12	7.3883	6.5376	0.81592	0.959	1.5323	0.68159	2.248	1.1069	0.42535
14	2.42	7.4087	6.5376	0.84611	0.971	1.5225	0.65139	2.337	1.087	0.43557
15	2.73	7.4255	6.5376	0.87225	0.982	1.5132	0.62526	2.420	1.0692	0.44396
16	3.04	7.4389	6.5376	0.89548	0.994	1.5033	0.60203	2.497	1.0527	0.45065
17	3.35	7.4538	6.5376	0.91696	1.001	1.4967	0.58054	2.578	1.0386	0.45808
18	3.66	7.4642	6.5376	0.93496	1.009	1.4891	0.56254	2.647	1.0258	0.46329
19	3.97	7.4746	6.5376	0.95239	1.016	1.4821	0.54512	2.719	1.0136	0.46848
20	4.29	7.484	6.5376	0.96865	1.023	1.4753	0.52886	2.790	1.0021	0.47322
21	4.60	7.4919	6.5376	0.98316	1.030	1.4686	0.51434	2.855	0.99147	0.47713
22	5.21	7.5084	6.5376	1.0093	1.040	1.4591	0.48821	2.989	0.97363	0.48542
23	5.83	7.5234	6.5376	1.0296	1.044	1.4537	0.46788	3.107	0.96077	0.49289
24	6.45	7.5343	6.5376	1.0494	1.053	1.4448	0.44814	3.224	0.94648	0.49835
25	7.07	7.5458	6.5376	1.065	1.056	1.4407	0.43246	3.331	0.93656	0.5041
26	7.69	7.5574	6.5376	1.0784	1.058	1.4389	0.4191	3.433	0.92898	0.50988
27	8.30	7.5666	6.5376	1.0918	1.061	1.4348	0.40574	3.536	0.92027	0.51452
28	8.92	7.5749	6.5376	1.1028	1.063	1.432	0.39471	3.628	0.91337	0.51866
29	9.55	7.5831	6.5376	1.1121	1.064	1.4309	0.38542	3.713	0.90817	0.52275
30	10.17	7.5907	6.5376	1.1202	1.064	1.4304	0.37729	3.791	0.90384	0.52655
31	10.79	7.5981	6.5376	1.1278	1.063	1.4303	0.36974	3.868	0.90001	0.53027
32	11.40	7.6022	6.5376	1.1342	1.065	1.428	0.36335	3.930	0.89565	0.5323
33	12.02	7.6077	6.5376	1.1388	1.064	1.4288	0.35871	3.983	0.89374	0.53503
34	12.65	7.6135	6.5376	1.1434	1.063	1.4299	0.35406	4.039	0.89199	0.53793
35	13.26	7.6178	6.5376	1.1475	1.062	1.4302	0.34999	4.086	0.89008	0.54009
36	13.87	7.6216	6.5376	1.1504	1.061	1.4311	0.34709	4.123	0.88912	0.54202
37	14.50	7.6264	6.5376	1.1522	1.058	1.4342	0.34535	4.153	0.88976	0.54441
38	15.13	7.6312	6.5376	1.1533	1.055	1.4378	0.34419	4.177	0.89097	0.54678

TRIAXIAL COMPRESSION TEST REPORT





Symbol		⊙	△	⊡	
Test No.		RA06T1	RA06T2	RA06T3	
Initial	Diameter, in	2.8307	2.8075	2.8138	
	Height, in	5.4067	5.4764	5.4287	
	Water Content, %	112.38	175.46	78.84	
	Dry Density, pcf	40.83	29.51	53.64	
	Saturation, %	98.85	101.83	102.17	
	Void Ratio	2.8989	4.3939	1.9676	
Before Shear	Water Content, %	140.87	219.17	203.57	
	Dry Density, pcf	34.51	24.09	25.63	
	Saturation, %	100.00	100.00	100.00	
	Void Ratio	3.5219	5.4792	5.0892	
	Back Press., tsf	5.0402	5.04	5.0401	
Minor Prin. Stress, tsf		0.37416	0.7488	1.4975	
Max. Dev. Stress, tsf		0.37205	0.64601	1.1125	
Time to Failure, min		203.12	234	204	
Strain Rate, %/min		0.0823	0.0801	0.0791	
B-Value		---	---	---	
Estimated Specific Gravity		2.50	2.50	2.50	
Liquid Limit		0	0	0	
Plastic Limit		0	0	0	
Plasticity Index		0	0	0	
Failure Sketch					

Project: LOWER FOX RIVER

Location:

Project No.: 429316-A

Boring No.: 1RA-06-SWC1

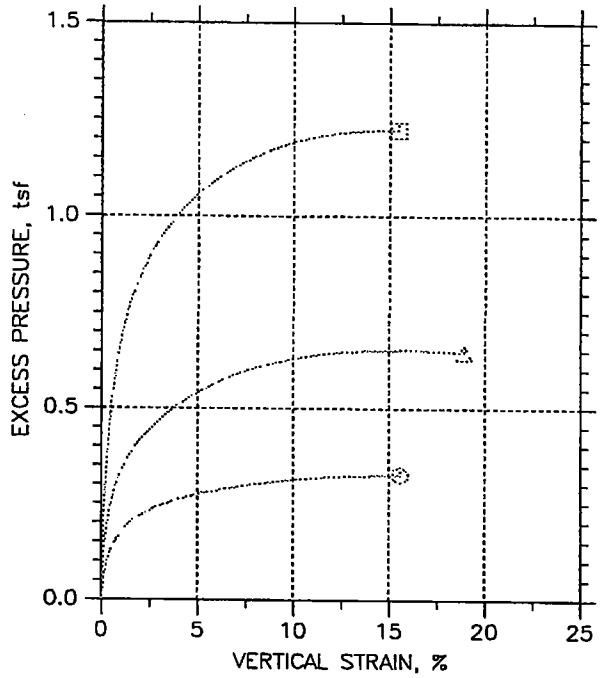
Sample Type: REMOLDED

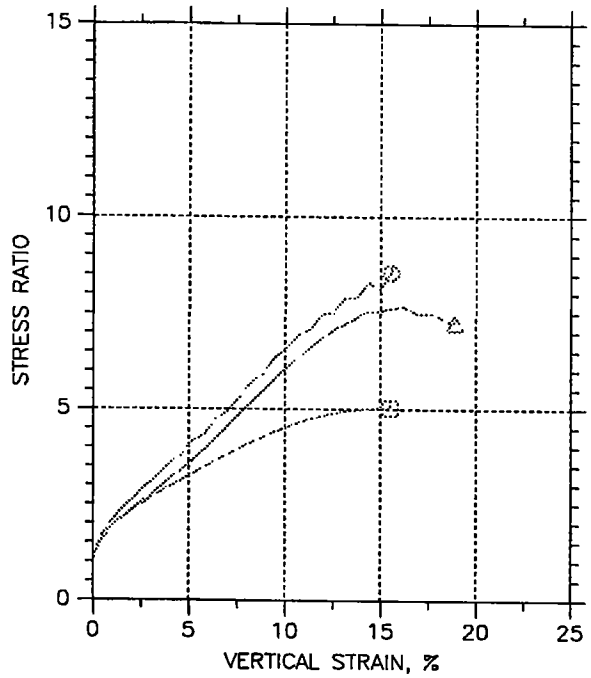
Description: CLAYEY SILT RIVER SEDIMENT TRACE F-M SAND - DARK BROWN (CL-ML)

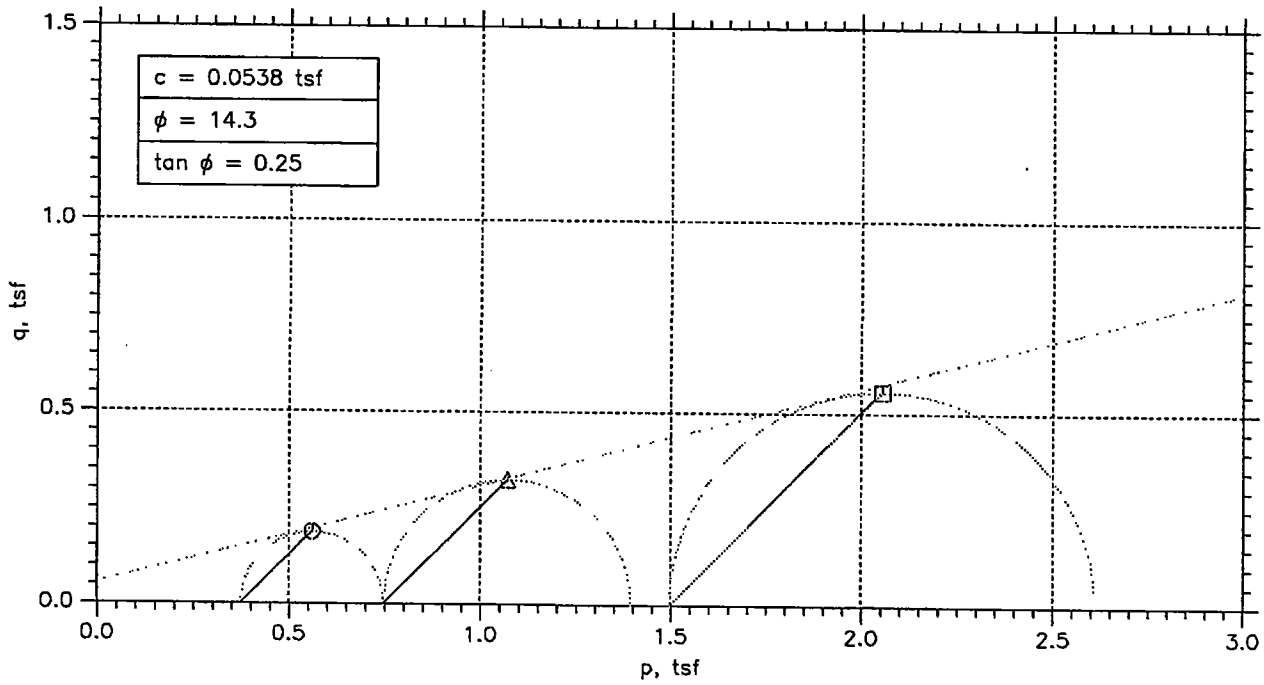
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Thu, 18-JAN-2007 15:12:49

TRIAXIAL COMPRESSION TEST REPORT







Project: LOWER FOX RIVER	Location:	Project No.: 429316-A
Boring No.: 1RA-06-SWC1	Tested By: MJS	Checked By: WPQ
Sample No.: 1RA-06-SWC1	Test Date: 1/11/07	Depth:
Test No.: RA06T1	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT TRACE F-M SAND - DARK BROWN (CL-ML)		
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767		

Thu, 18-JAN-2007 15:13:28

TRIAXIAL TEST

Project: LOWER [illegible] RIVER
Boring No.: 1RA-06-SWC1
Sample No.: 1RA-06-SWC1
Test No.: RA06T1

Location:
Tested By: MJS
Test Date: 1/11/07
Sample Type: REMOLDED

Project No.: 429316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT RIVER SEDIMENT TRACE F-M SAND - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.41 in
Specimen Area: 6.29 in^2
Specimen Volume: 34.03 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.2933	0	0	5.0402	5.4144	5.4144
2	2.0001	0.14867	6.3027	9.2608	0.10579	5.1064	5.4144	5.5202
3	4.0001	0.3041	6.3125	12.313	0.14044	5.1392	5.4144	5.5548
4	6	0.45446	6.3221	14.312	0.163	5.1614	5.4144	5.5774
5	8.0003	0.60482	6.3316	15.838	0.1801	5.179	5.4144	5.5945
6	10.001	0.75855	6.3414	16.943	0.19237	5.1924	5.4144	5.6068
7	12.001	0.9106	6.3512	17.995	0.20401	5.2035	5.4144	5.6184
8	14.001	1.061	6.3608	18.837	0.21323	5.2135	5.4144	5.6276
9	16.001	1.213	6.3706	19.679	0.22241	5.2217	5.4144	5.6368
10	18.001	1.3634	6.3803	20.205	0.22801	5.2311	5.4144	5.6424
11	20.001	1.5154	6.3902	20.942	0.23596	5.2381	5.4144	5.6504
12	24.001	1.8161	6.4097	21.837	0.24529	5.2504	5.4144	5.6597
13	28.001	2.1185	6.4295	22.573	0.25278	5.258	5.4144	5.6672
14	32	2.4243	6.4497	23.573	0.26315	5.2668	5.4144	5.6776
15	36.003	2.7318	6.4701	24.152	0.26876	5.2755	5.4144	5.6832
16	40.003	3.0427	6.4908	24.573	0.27257	5.282	5.4144	5.687
17	44.002	3.3535	6.5117	25.309	0.27985	5.2867	5.4144	5.6942
18	48.002	3.6593	6.5324	25.783	0.28418	5.2931	5.4144	5.6986
19	52.002	3.9651	6.5532	26.414	0.29022	5.299	5.4144	5.7046
20	56.002	4.2692	6.574	26.993	0.29564	5.3025	5.4144	5.71
21	60.002	4.5716	6.5948	27.414	0.2993	5.306	5.4144	5.7137
22	68.002	5.1832	6.6374	28.309	0.30708	5.3159	5.4144	5.7215
23	76.003	5.8049	6.6812	29.15	0.31414	5.32	5.4144	5.7285
24	84.003	6.4181	6.7249	29.992	0.32111	5.3282	5.4144	5.7355
25	92.003	7.028	6.7691	30.782	0.32741	5.3311	5.4144	5.7418
26	100	7.6362	6.8136	31.571	0.33361	5.337	5.4144	5.748
27	108	8.2562	6.8597	32.308	0.3391	5.3417	5.4144	5.7535
28	116	8.8813	6.9067	32.886	0.34283	5.3446	5.4144	5.7572
29	124	9.4912	6.9533	33.465	0.34653	5.3493	5.4144	5.7609
30	132	10.098	7.0002	34.097	0.3507	5.351	5.4144	5.7651
31	140	10.711	7.0483	34.623	0.35368	5.3546	5.4144	5.7681
32	148	11.339	7.0982	35.044	0.35546	5.3557	5.4144	5.7699
33	156	11.951	7.1475	35.728	0.3599	5.3587	5.4144	5.7743
34	164	12.558	7.1971	36.149	0.36163	5.3587	5.4144	5.776
35	172	13.167	7.2477	36.675	0.36434	5.3616	5.4144	5.7787
36	180	13.792	7.3002	37.201	0.3669	5.361	5.4144	5.7813
37	188	14.413	7.3531	37.675	0.3689	5.3639	5.4144	5.7833
38	196	15.027	7.4063	38.096	0.37034	5.3622	5.4144	5.7847
39	203.12	15.57	7.4539	38.517	0.37205	5.3651	5.4144	5.7864

TRIAXIAL TEST

Project: LOWER RIVER
Boring No.: 1RA-06-SWC1
Sample No.: 1RA-06-SWC1
Test No.: RA06T1

Location:
Tested By: MJS
Test Date: 1/11/07
Sample Type: REMOLDED

Project No.: 429316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT RIVER SEDIMENT TRACE F-M SAND - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.41 in
Specimen Area: 6.29 in^2
Specimen Volume: 34.03 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	5.4144	5.4144	0	0.000	0.37416	0.37416	1.000	0.37416	0
2	0.15	5.5202	5.4144	0.066142	0.625	0.41381	0.30802	1.343	0.36092	0.052896
3	0.30	5.5548	5.4144	0.09892	0.704	0.41568	0.27524	1.510	0.34546	0.070218
4	0.45	5.5774	5.4144	0.12116	0.743	0.416	0.253	1.644	0.3345	0.081498
5	0.60	5.5945	5.4144	0.13872	0.770	0.41554	0.23544	1.765	0.32549	0.090051
6	0.76	5.6068	5.4144	0.15218	0.791	0.41435	0.22198	1.867	0.31816	0.096185
7	0.91	5.6184	5.4144	0.16331	0.800	0.41486	0.21086	1.968	0.31286	0.102
8	1.06	5.6276	5.4144	0.17326	0.813	0.41413	0.2009	2.061	0.30752	0.10661
9	1.21	5.6368	5.4144	0.18145	0.816	0.41512	0.19271	2.154	0.30392	0.11121
10	1.36	5.6424	5.4144	0.19082	0.837	0.41136	0.18334	2.244	0.29735	0.11401
11	1.52	5.6504	5.4144	0.19784	0.838	0.41228	0.17632	2.338	0.2943	0.11798
12	1.82	5.6597	5.4144	0.21013	0.857	0.40932	0.16403	2.495	0.28667	0.12264
13	2.12	5.6672	5.4144	0.21774	0.861	0.4092	0.15642	2.616	0.28281	0.12639
14	2.42	5.6776	5.4144	0.22652	0.861	0.41079	0.14764	2.782	0.27922	0.13158
15	2.73	5.6832	5.4144	0.2353	0.875	0.40762	0.13886	2.936	0.27324	0.13438
16	3.04	5.687	5.4144	0.24174	0.887	0.405	0.13242	3.058	0.26871	0.13629
17	3.35	5.6942	5.4144	0.24642	0.881	0.40759	0.12774	3.191	0.26766	0.13992
18	3.66	5.6986	5.4144	0.25286	0.890	0.40548	0.1213	3.343	0.26339	0.14209
19	3.97	5.7046	5.4144	0.25871	0.891	0.40566	0.11545	3.514	0.26055	0.14511
20	4.27	5.71	5.4144	0.26223	0.887	0.40757	0.11194	3.641	0.25975	0.14782
21	4.57	5.7137	5.4144	0.26574	0.888	0.40772	0.10842	3.760	0.25807	0.14965
22	5.18	5.7215	5.4144	0.27569	0.898	0.40556	0.098473	4.118	0.25201	0.15354
23	5.80	5.7285	5.4144	0.27979	0.891	0.40852	0.094375	4.329	0.25145	0.15707
24	6.42	5.7355	5.4144	0.28798	0.897	0.40729	0.086181	4.726	0.24674	0.16056
25	7.03	5.7418	5.4144	0.29091	0.889	0.41067	0.083254	4.933	0.24696	0.16371
26	7.64	5.748	5.4144	0.29676	0.890	0.41101	0.077401	5.310	0.24421	0.16681
27	8.26	5.7535	5.4144	0.30144	0.889	0.41182	0.072718	5.663	0.24227	0.16955
28	8.88	5.7572	5.4144	0.30437	0.888	0.41262	0.069792	5.912	0.24121	0.17141
29	9.49	5.7609	5.4144	0.30905	0.892	0.41164	0.065109	6.322	0.23837	0.17326
30	10.10	5.7651	5.4144	0.31081	0.886	0.41405	0.063353	6.536	0.2387	0.17535
31	10.71	5.7681	5.4144	0.31432	0.889	0.41352	0.059841	6.910	0.23668	0.17684
32	11.34	5.7699	5.4144	0.31549	0.888	0.41413	0.05867	7.059	0.2364	0.17773
33	11.95	5.7743	5.4144	0.31842	0.885	0.41564	0.055744	7.456	0.23569	0.17995
34	12.56	5.776	5.4144	0.31842	0.880	0.41738	0.055744	7.487	0.23656	0.18082
35	13.17	5.7787	5.4144	0.32134	0.882	0.41715	0.052817	7.898	0.23499	0.18217
36	13.79	5.7813	5.4144	0.32076	0.874	0.42031	0.053403	7.871	0.23685	0.18345
37	14.41	5.7833	5.4144	0.32369	0.877	0.41938	0.050476	8.308	0.23493	0.18445
38	15.03	5.7847	5.4144	0.32193	0.869	0.42258	0.052232	8.090	0.2374	0.18517
39	15.57	5.7864	5.4144	0.32486	0.873	0.42135	0.049305	8.546	0.23533	0.18602

TRIAXIAL TEST

Project: LOWER [illegible] RIVER
Boring No.: 1RA-06-SWC1
Sample No.: 1RA-06-SWC1
Test No.: RA06T2

Location:
Tested By: MJS
Test Date: 1/8/06
Sample Type: REMOLDED

Project No.: 429316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT RIVER SEDIMENT TRACE F-M SAND - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.48 in
Specimen Area: 6.19 in^2
Specimen Volume: 33.90 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.1905	0	0	5.04	5.7888	5.7888
2	2.0002	0.12818	6.1984	13.828	0.16062	5.1636	5.7888	5.9494
3	4.0002	0.2766	6.2076	19.562	0.2269	5.2268	5.7888	6.0157
4	6.0002	0.42501	6.2169	23.689	0.27435	5.2713	5.7888	6.0632
5	8.0002	0.57512	6.2263	26.637	0.30803	5.3041	5.7888	6.0968
6	10	0.72522	6.2357	28.834	0.33293	5.3311	5.7888	6.1217
7	12	0.87701	6.2452	30.871	0.3559	5.3533	5.7888	6.1447
8	14	1.0271	6.2547	32.318	0.37202	5.3727	5.7888	6.1608
9	16	1.1789	6.2643	33.819	0.3887	5.3891	5.7888	6.1775
10	18	1.3324	6.2741	34.944	0.40101	5.4037	5.7888	6.1898
11	20	1.4859	6.2838	35.909	0.41144	5.4166	5.7888	6.2002
12	24	1.7894	6.3033	37.731	0.43099	5.4394	5.7888	6.2198
13	28	2.0981	6.3231	39.125	0.4455	5.4594	5.7888	6.2343
14	32	2.4017	6.3428	40.625	0.46116	5.4769	5.7888	6.25
15	36	2.7002	6.3623	41.697	0.47188	5.4927	5.7888	6.2607
16	40.001	3.0122	6.3827	42.876	0.48366	5.5068	5.7888	6.2725
17	44.001	3.3124	6.4025	43.841	0.49301	5.5203	5.7888	6.2818
18	48.001	3.6143	6.4226	44.752	0.50169	5.532	5.7888	6.2905
19	52.001	3.9179	6.4429	45.717	0.51089	5.5437	5.7888	6.2997
20	56.001	4.2248	6.4635	46.574	0.51881	5.5548	5.7888	6.3076
21	60.001	4.5301	6.4842	47.217	0.5243	5.5648	5.7888	6.3131
22	68.001	5.1423	6.5261	48.825	0.53867	5.5824	5.7888	6.3275
23	76.001	5.7394	6.5674	50.219	0.55056	5.5988	5.7888	6.3394
24	84.001	6.3364	6.6093	51.451	0.5605	5.6134	5.7888	6.3493
25	92.001	6.9453	6.6525	52.738	0.57078	5.6257	5.7888	6.3596
26	100	7.5592	6.6967	53.917	0.57969	5.6368	5.7888	6.3685
27	108	8.1697	6.7412	54.935	0.58674	5.6462	5.7888	6.3755
28	116	8.7667	6.7853	56.061	0.59487	5.6544	5.7888	6.3837
29	124	9.379	6.8312	57.079	0.60161	5.6614	5.7888	6.3904
30	132	9.9946	6.8779	58.044	0.60762	5.6673	5.7888	6.3964
31	140	10.602	6.9246	58.955	0.613	5.6726	5.7888	6.4018
32	148	11.202	6.9714	59.866	0.61829	5.6772	5.7888	6.4071
33	156	11.813	7.0197	60.777	0.62338	5.6808	5.7888	6.4122
34	164	12.438	7.0698	61.635	0.62769	5.6843	5.7888	6.4165
35	172	13.04	7.1188	62.439	0.63151	5.6866	5.7888	6.4203
36	180	13.636	7.1679	63.189	0.63472	5.6884	5.7888	6.4235
37	188	14.24	7.2183	64.1	0.63937	5.6907	5.7888	6.4282
38	196	14.854	7.2704	64.69	0.64063	5.6907	5.7888	6.4294
39	204	15.472	7.3236	65.386	0.64283	5.6913	5.7888	6.4316
40	214	16.231	7.39	66.244	0.64541	5.6919	5.7888	6.4342
41	224	16.984	7.4569	66.78	0.64479	5.689	5.7888	6.4336
42	234	17.751	7.5265	67.53	0.64601	5.689	5.7888	6.4348
43	244	18.512	7.5968	67.959	0.6441	5.686	5.7888	6.4329
44	249.63	18.927	7.6356	68.334	0.64435	5.6854	5.7888	6.4332

TRIAXIAL TEST

Project: LOWER [illegible]X RIVER
Boring No.: 1RA-06-SWC1
Sample No.: 1RA-06-SWC1
Test No.: RA06T2

Location:
Tested By: MJS
Test Date: 1/8/06
Sample Type: REMOLDED

Project No.: 429316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT RIVER SEDIMENT TRACE F-M SAND - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.48 in
Specimen Area: 6.19 in^2
Specimen Volume: 33.90 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	5.7888	5.7888	0	0.000	0.7488	0.7488	1.000	0.7488	0
2	0.13	5.9494	5.7888	0.12358	0.769	0.78584	0.62522	1.257	0.70553	0.08031
3	0.28	6.0157	5.7888	0.18684	0.823	0.78886	0.56196	1.404	0.67541	0.11345
4	0.43	6.0632	5.7888	0.23135	0.843	0.7918	0.51745	1.530	0.65463	0.13718
5	0.58	6.0968	5.7888	0.26415	0.858	0.79268	0.48465	1.636	0.63866	0.15401
6	0.73	6.1217	5.7888	0.2911	0.874	0.79064	0.45771	1.727	0.62418	0.16647
7	0.88	6.1447	5.7888	0.31335	0.880	0.79136	0.43545	1.817	0.6134	0.17795
8	1.03	6.1608	5.7888	0.33268	0.894	0.78815	0.41612	1.894	0.60214	0.18601
9	1.18	6.1775	5.7888	0.34908	0.898	0.78842	0.39972	1.972	0.59407	0.19435
10	1.33	6.1898	5.7888	0.36372	0.907	0.78609	0.38508	2.041	0.58559	0.20051
11	1.49	6.2002	5.7888	0.37661	0.915	0.78364	0.3722	2.105	0.57792	0.20572
12	1.79	6.2198	5.7888	0.39945	0.927	0.78034	0.34935	2.234	0.56485	0.21549
13	2.10	6.2343	5.7888	0.41937	0.941	0.77494	0.32944	2.352	0.55219	0.22275
14	2.40	6.25	5.7888	0.43694	0.947	0.77302	0.31187	2.479	0.54245	0.23058
15	2.70	6.2607	5.7888	0.45275	0.959	0.76793	0.29605	2.594	0.53199	0.23594
16	3.01	6.2725	5.7888	0.46681	0.965	0.76566	0.282	2.715	0.52383	0.24183
17	3.31	6.2818	5.7888	0.48028	0.974	0.76154	0.26853	2.836	0.51503	0.24651
18	3.61	6.2905	5.7888	0.49199	0.981	0.7585	0.25681	2.954	0.50766	0.25084
19	3.92	6.2997	5.7888	0.50371	0.986	0.75599	0.2451	3.084	0.50054	0.25545
20	4.22	6.3076	5.7888	0.51484	0.992	0.75278	0.23397	3.217	0.49337	0.25941
21	4.53	6.3131	5.7888	0.52479	1.001	0.74831	0.22401	3.340	0.48616	0.26215
22	5.14	6.3275	5.7888	0.54236	1.007	0.74512	0.20644	3.609	0.47578	0.26934
23	5.74	6.3394	5.7888	0.55876	1.015	0.7406	0.19004	3.897	0.46532	0.27528
24	6.34	6.3493	5.7888	0.57341	1.023	0.7359	0.1754	4.196	0.45565	0.28025
25	6.95	6.3596	5.7888	0.58571	1.026	0.73388	0.1631	4.500	0.44849	0.28539
26	7.56	6.3685	5.7888	0.59683	1.030	0.73166	0.15197	4.814	0.44182	0.28985
27	8.17	6.3755	5.7888	0.60621	1.033	0.72934	0.1426	5.115	0.43597	0.29337
28	8.77	6.3837	5.7888	0.6144	1.033	0.72927	0.1344	5.426	0.43183	0.29743
29	9.38	6.3904	5.7888	0.62143	1.033	0.72898	0.12737	5.723	0.42818	0.3008
30	9.99	6.3964	5.7888	0.62729	1.032	0.72914	0.12151	6.000	0.42533	0.30381
31	10.60	6.4018	5.7888	0.63256	1.032	0.72924	0.11624	6.273	0.42274	0.3065
32	11.20	6.4071	5.7888	0.63725	1.031	0.72985	0.11156	6.542	0.4207	0.30914
33	11.81	6.4122	5.7888	0.64076	1.028	0.73143	0.10804	6.770	0.41973	0.31169
34	12.44	6.4165	5.7888	0.64428	1.026	0.73222	0.10453	7.005	0.41838	0.31385
35	13.04	6.4203	5.7888	0.64662	1.024	0.73369	0.10219	7.180	0.41794	0.31575
36	13.64	6.4235	5.7888	0.64838	1.022	0.73515	0.10043	7.320	0.41779	0.31736
37	14.24	6.4282	5.7888	0.65072	1.018	0.73746	0.098086	7.518	0.41777	0.31969
38	14.85	6.4294	5.7888	0.65072	1.016	0.73872	0.098086	7.531	0.4184	0.32032
39	15.47	6.4316	5.7888	0.6513	1.013	0.74033	0.0975	7.593	0.41891	0.32141
40	16.23	6.4342	5.7888	0.65189	1.010	0.74232	0.096915	7.660	0.41962	0.3227
41	16.98	6.4336	5.7888	0.64896	1.006	0.74463	0.099843	7.458	0.42224	0.32239
42	17.75	6.4348	5.7888	0.64896	1.005	0.74585	0.099843	7.470	0.42285	0.323
43	18.51	6.4329	5.7888	0.64603	1.003	0.74687	0.10277	7.267	0.42482	0.32205
44	18.93	6.4332	5.7888	0.64545	1.002	0.74771	0.10336	7.234	0.42553	0.32218

TRIAXIAL TEST

Project: LOWER [illegible] RIVER
Boring No.: 1RA-06-SWC1
Sample No.: 1RA-06-SWC1
Test No.: RA06T3

Location:
Tested By: MJS
Test Date: 1/9/07
Sample Type: REMOLDED

Project No.: 429316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT RIVER SEDIMENT TRACE F-M SAND - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.43 in
Specimen Area: 6.22 in^2
Specimen Volume: 33.76 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

Plastic Limit: 0

Estimated Specific Gravity: 2.50

	Time min	Vertical Strain %	Corrected Area in^2	Deviator Load lb	Deviator Stress tsf	Pore Pressure tsf	Horizontal Stress tsf	Vertical Stress tsf
1	0	0	6.2183	0	0	5.0401	6.5376	6.5376
2	2.0041	0.13258	6.2265	23.27	0.26908	5.2614	6.5376	6.8067
3	4.0002	0.27522	6.2354	35.439	0.40921	5.392	6.5376	6.9468
4	6.0002	0.42122	6.2446	44.002	0.50735	5.4867	6.5376	7.0449
5	8.0001	0.56554	6.2536	50.454	0.5809	5.561	6.5376	7.1185
6	10	0.70987	6.2627	55.554	0.63868	5.6214	6.5376	7.1763
7	12	0.85754	6.2721	59.634	0.68457	5.6713	6.5376	7.2222
8	14.001	1.0069	6.2815	62.932	0.72133	5.712	6.5376	7.2589
9	16.001	1.1579	6.2911	65.588	0.75064	5.7468	6.5376	7.2882
10	18.001	1.3107	6.3009	67.937	0.77631	5.7776	6.5376	7.3139
11	20.001	1.465	6.3107	69.953	0.7981	5.8043	6.5376	7.3357
12	24.001	1.7688	6.3302	73.25	0.83314	5.8496	6.5376	7.3707
13	28.002	2.0809	6.3504	75.788	0.85927	5.8874	6.5376	7.3969
14	32.002	2.3864	6.3703	78.042	0.88206	5.9199	6.5376	7.4197
15	36.003	2.6867	6.39	79.892	0.9002	5.9478	6.5376	7.4378
16	40.003	2.9888	6.4099	81.576	0.91632	5.9733	6.5376	7.4539
17	44.003	3.2875	6.4297	83.118	0.93077	5.996	6.5376	7.4684
18	48.003	3.5896	6.4498	84.47	0.94295	6.0163	6.5376	7.4806
19	52.003	3.895	6.4703	85.822	0.95501	6.0355	6.5376	7.4926
20	56.003	4.2021	6.491	87.079	0.9659	6.0529	6.5376	7.5035
21	60.004	4.5109	6.512	88.147	0.97459	6.0686	6.5376	7.5122
22	68.004	5.1235	6.5541	90.424	0.99336	6.0976	6.5376	7.531
23	76.004	5.7309	6.5963	92.488	1.0095	6.1226	6.5376	7.5471
24	84.004	6.3334	6.6387	94.385	1.0237	6.1441	6.5376	7.5613
25	92.004	6.9459	6.6824	96.188	1.0364	6.1632	6.5376	7.574
26	100	7.5635	6.7271	97.92	1.048	6.1801	6.5376	7.5856
27	108	8.176	6.772	99.533	1.0582	6.1946	6.5376	7.5958
28	116	8.7768	6.8166	101.03	1.0671	6.2074	6.5376	7.6047
29	124	9.3826	6.8621	102.47	1.0752	6.2184	6.5376	7.6128
30	132	10.004	6.9095	103.94	1.0832	6.2277	6.5376	7.6208
31	140	10.609	6.9563	105.25	1.0894	6.2358	6.5376	7.627
32	148	11.207	7.0031	106.44	1.0943	6.2422	6.5376	7.6319
33	156	11.809	7.0509	107.57	1.0985	6.248	6.5376	7.6361
34	164	12.427	7.1007	108.74	1.1026	6.2521	6.5376	7.6402
35	172	13.048	7.1514	109.8	1.1055	6.2556	6.5376	7.6431
36	180	13.65	7.2013	110.75	1.1073	6.2579	6.5376	7.6449
37	188	14.249	7.2516	111.73	1.1093	6.2596	6.5376	7.6469
38	196	14.855	7.3032	112.67	1.1108	6.2608	6.5376	7.6484
39	204	15.476	7.3568	113.67	1.1125	6.2614	6.5376	7.6501

TRIAXIAL TEST

Project: LOWER X RIVER
Boring No.: 1RA-06-SWC1
Sample No.: 1RA-06-SWC1
Test No.: RA06T3

Location:
Tested By: MJS
Test Date: 1/9/07
Sample Type: REMOLDED

Project No.: 429316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT RIVER SEDIMENT TRACE F-M SAND - DARK BROWN (CL-ML)
Remarks: FAILURE CRITERIA = MAXIMUM EFFECTIVE STRESS RATIO TEST PERFORMED AS PER ASTM D 4767

Specimen Height: 5.43 in
Specimen Area: 6.22 in^2
Specimen Volume: 33.76 in^3

Piston Area: 0.00 in^2
Piston Friction: 0.00 lb
Piston Weight: 0.00 lb

Filter Strip Correction: 0.00 tsf
Membrane Correction: 0.00 lb/in
Correction Type: Uniform

Liquid Limit: 0

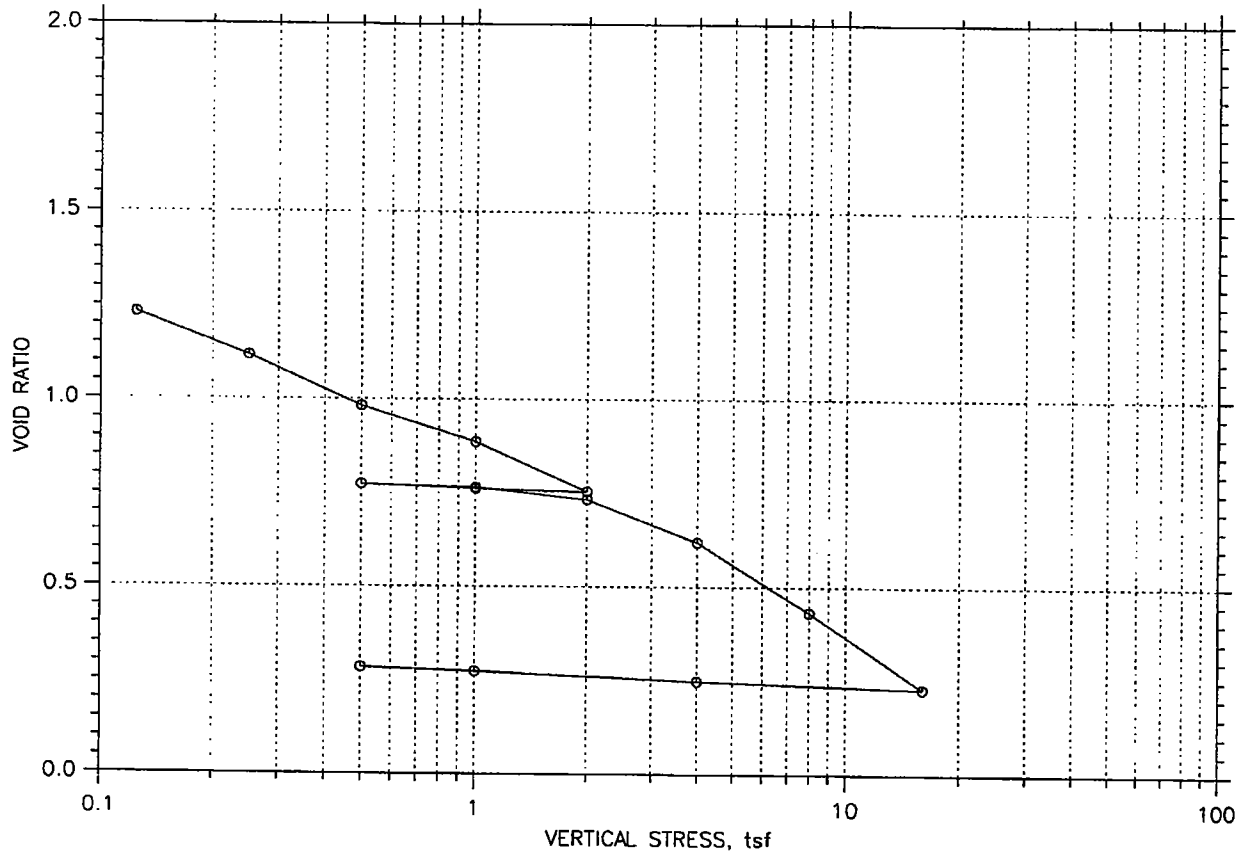
Plastic Limit: 0

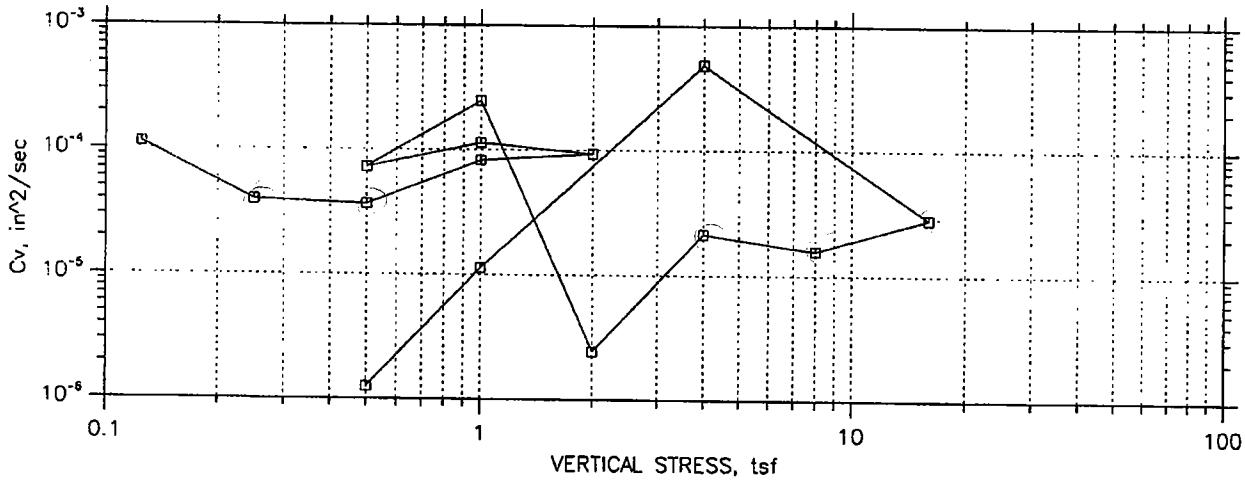
Estimated Specific Gravity: 2.50

	Vertical Strain %	Total Vertical Stress tsf	Total Horizontal Stress tsf	Excess Pore Pressure tsf	A Parameter	Effective Vertical Stress tsf	Effective Horizontal Stress tsf	Stress Ratio	Effective p tsf	q tsf
1	0.00	6.5376	6.5376	0	0.000	1.4975	1.4975	1.000	1.4975	0
2	0.13	6.8067	6.5376	0.22126	0.822	1.5453	1.2762	1.211	1.4108	0.13454
3	0.28	6.9468	6.5376	0.35192	0.860	1.5548	1.1456	1.357	1.3502	0.20461
4	0.42	7.0449	6.5376	0.44658	0.880	1.5583	1.0509	1.483	1.3046	0.25367
5	0.57	7.1185	6.5376	0.52091	0.897	1.5575	0.97659	1.595	1.267	0.29045
6	0.71	7.1763	6.5376	0.5813	0.910	1.5549	0.9162	1.697	1.2355	0.31934
7	0.86	7.2222	6.5376	0.63125	0.922	1.5508	0.86626	1.790	1.2085	0.34229
8	1.01	7.2589	6.5376	0.6719	0.931	1.5469	0.82561	1.874	1.1863	0.36067
9	1.16	7.2882	6.5376	0.70674	0.942	1.5414	0.79076	1.949	1.1661	0.37532
10	1.31	7.3139	6.5376	0.73752	0.950	1.5363	0.75998	2.021	1.1481	0.38816
11	1.47	7.3357	6.5376	0.76423	0.958	1.5314	0.73327	2.088	1.1323	0.39905
12	1.77	7.3707	6.5376	0.80953	0.972	1.5211	0.68798	2.211	1.1045	0.41657
13	2.08	7.3969	6.5376	0.84728	0.986	1.5095	0.65023	2.321	1.0799	0.42964
14	2.39	7.4197	6.5376	0.8798	0.997	1.4998	0.61771	2.428	1.0587	0.44103
15	2.69	7.4378	6.5376	0.90767	1.008	1.49	0.58983	2.526	1.0399	0.4501
16	2.99	7.4539	6.5376	0.93322	1.018	1.4806	0.56428	2.624	1.0224	0.45816
17	3.29	7.4684	6.5376	0.95587	1.027	1.4724	0.54163	2.718	1.007	0.46538
18	3.59	7.4806	6.5376	0.9762	1.035	1.4643	0.52131	2.809	0.99278	0.47148
19	3.90	7.4926	6.5376	0.99536	1.042	1.4572	0.50214	2.902	0.97965	0.47751
20	4.20	7.5035	6.5376	1.0128	1.049	1.4506	0.48472	2.993	0.96767	0.48295
21	4.51	7.5122	6.5376	1.0285	1.055	1.4436	0.46904	3.078	0.95634	0.4873
22	5.12	7.531	6.5376	1.0575	1.065	1.4334	0.44001	3.258	0.93668	0.49668
23	5.73	7.5471	6.5376	1.0825	1.072	1.4246	0.41504	3.432	0.9198	0.50476
24	6.33	7.5613	6.5376	1.104	1.078	1.4172	0.39355	3.601	0.90537	0.51183
25	6.95	7.574	6.5376	1.1231	1.084	1.4108	0.37438	3.768	0.89258	0.51819
26	7.56	7.5856	6.5376	1.14	1.088	1.4056	0.35754	3.931	0.88156	0.52402
27	8.18	7.5958	6.5376	1.1545	1.091	1.4013	0.34303	4.085	0.87215	0.52912
28	8.78	7.6047	6.5376	1.1673	1.094	1.3974	0.33025	4.231	0.8638	0.53355
29	9.38	7.6128	6.5376	1.1783	1.096	1.3944	0.31922	4.368	0.85682	0.5376
30	10.00	7.6208	6.5376	1.1876	1.096	1.3931	0.30992	4.495	0.8515	0.54158
31	10.61	7.627	6.5376	1.1957	1.098	1.3912	0.30179	4.610	0.84648	0.54468
32	11.21	7.6319	6.5376	1.2021	1.099	1.3897	0.29541	4.704	0.84255	0.54714
33	11.81	7.6361	6.5376	1.2079	1.100	1.3881	0.2896	4.793	0.83884	0.54924
34	12.43	7.6402	6.5376	1.212	1.099	1.3881	0.28553	4.861	0.83682	0.55129
35	13.05	7.6431	6.5376	1.2155	1.099	1.3876	0.28205	4.920	0.8348	0.55275
36	13.65	7.6449	6.5376	1.2178	1.100	1.3871	0.27973	4.959	0.83339	0.55367
37	14.25	7.6469	6.5376	1.2195	1.099	1.3873	0.27798	4.991	0.83264	0.55465
38	14.86	7.6484	6.5376	1.2207	1.099	1.3876	0.27682	5.013	0.83224	0.55541
39	15.48	7.6501	6.5376	1.2213	1.098	1.3887	0.27624	5.027	0.83248	0.55624

CONSOLIDATION TEST DATA

SUMMARY REPORT





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No.: RA06EA1DS	Test Date: 6/26/06	Depth:
Test No.: 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks: Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

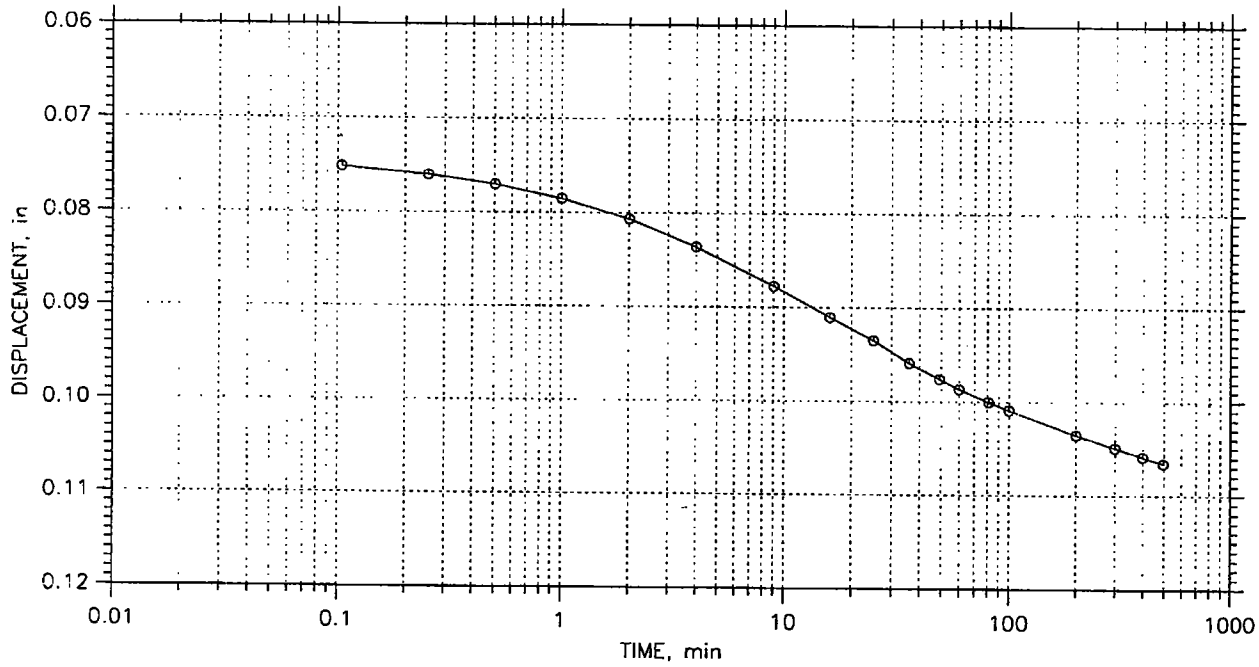
Fri, 14-JUL-2006 16:09:40

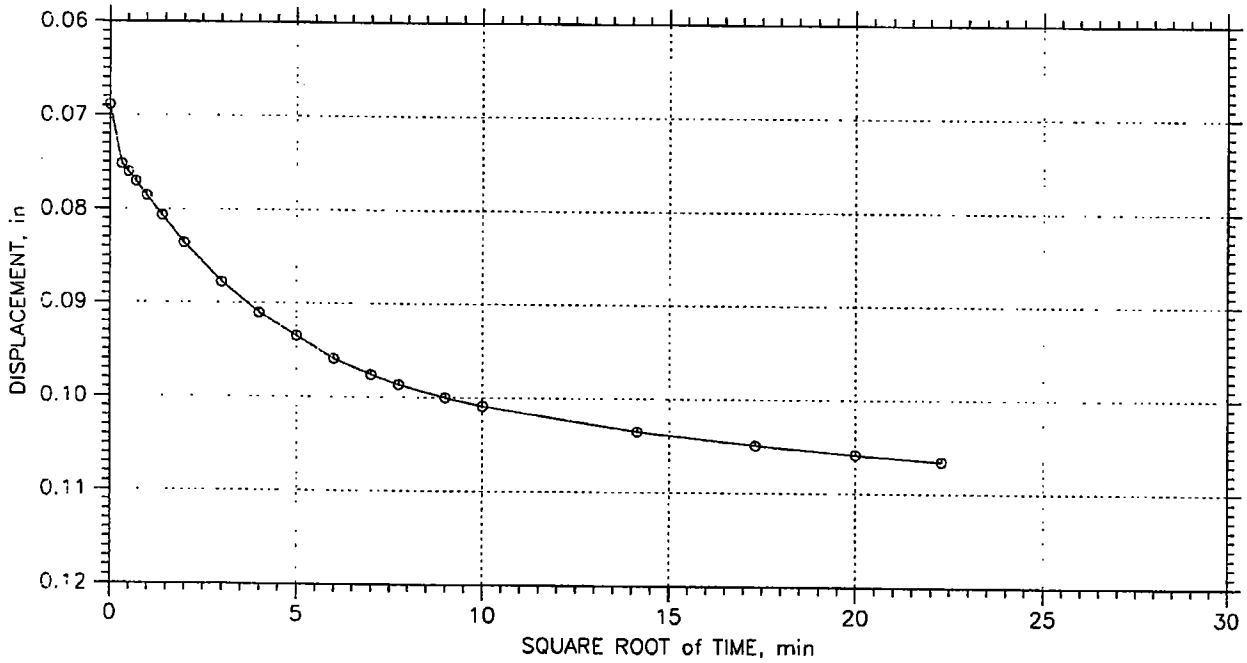
CONSOLIDATION TEST DATA

TIME CURVES

Step: 2 of 15

Stress: 0.25 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No.: RA06EA1DS	Test Date: 6/26/06	Depth:
Test No.: 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks: Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

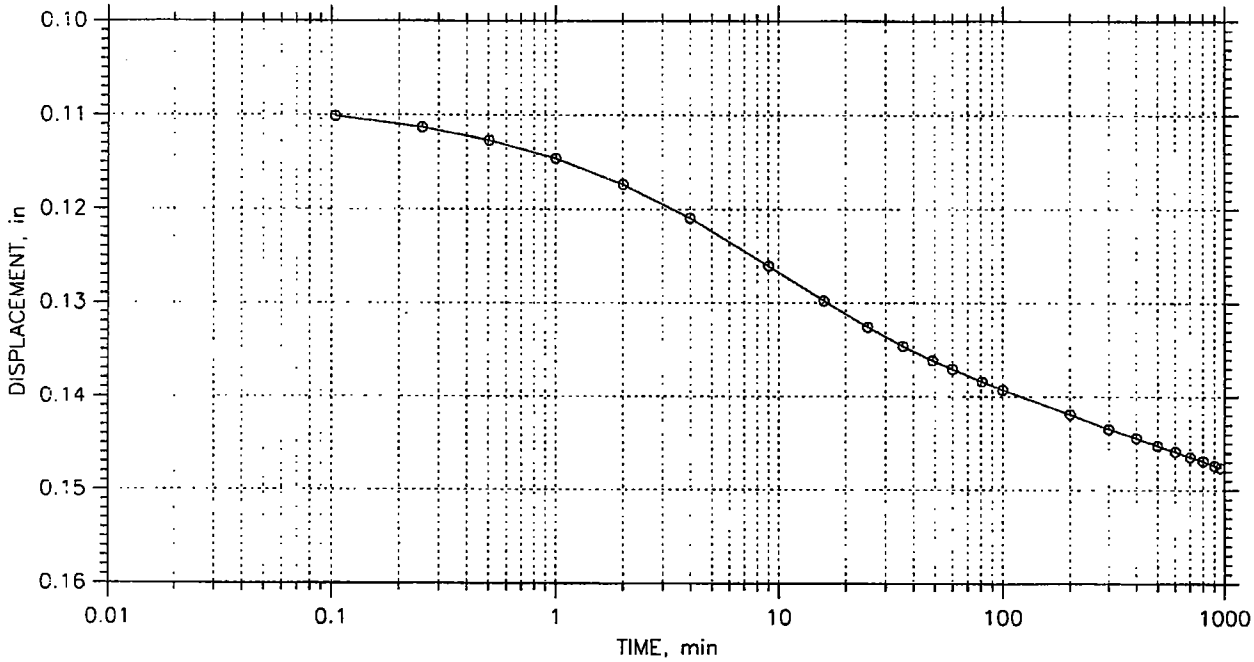
Fri, 14-JUL-2006 16:10:50

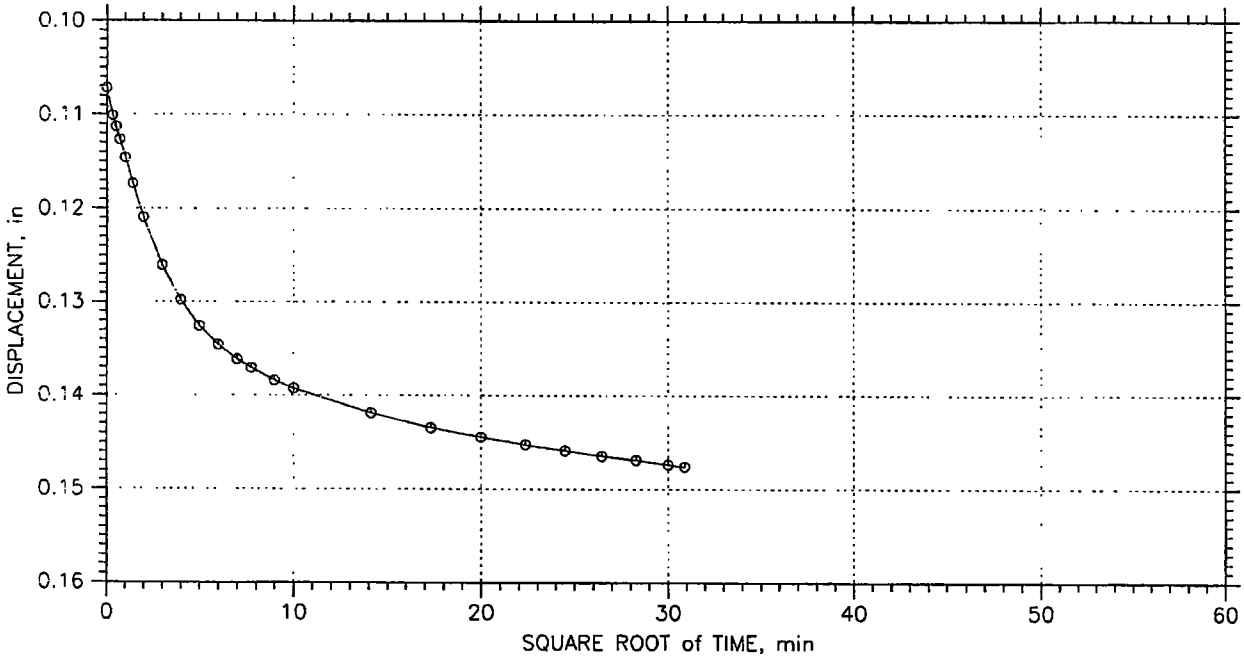
CONSOLIDATION TEST DATA

TIME CURVES

Step: 3 of 15

Stress: 0.5 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No.: RA06EA1DS	Test Date: 6/26/06	Depth:
Test No.: 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks: Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

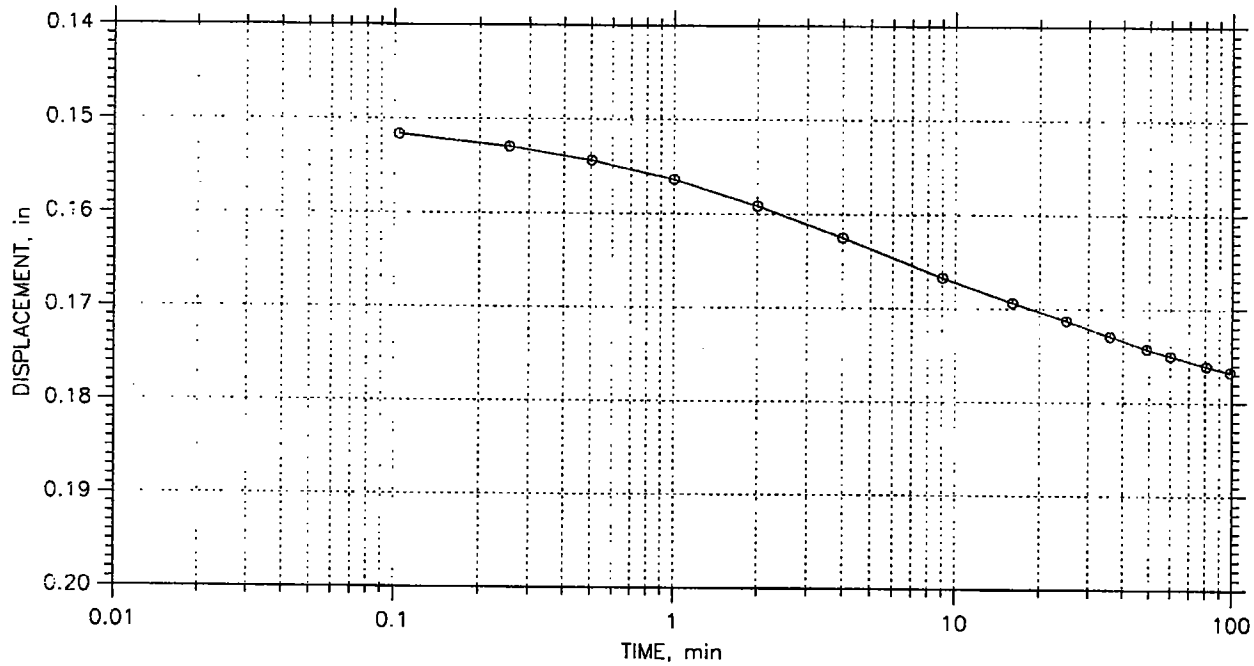
Fri, 14-JUL-2006 16:10:50

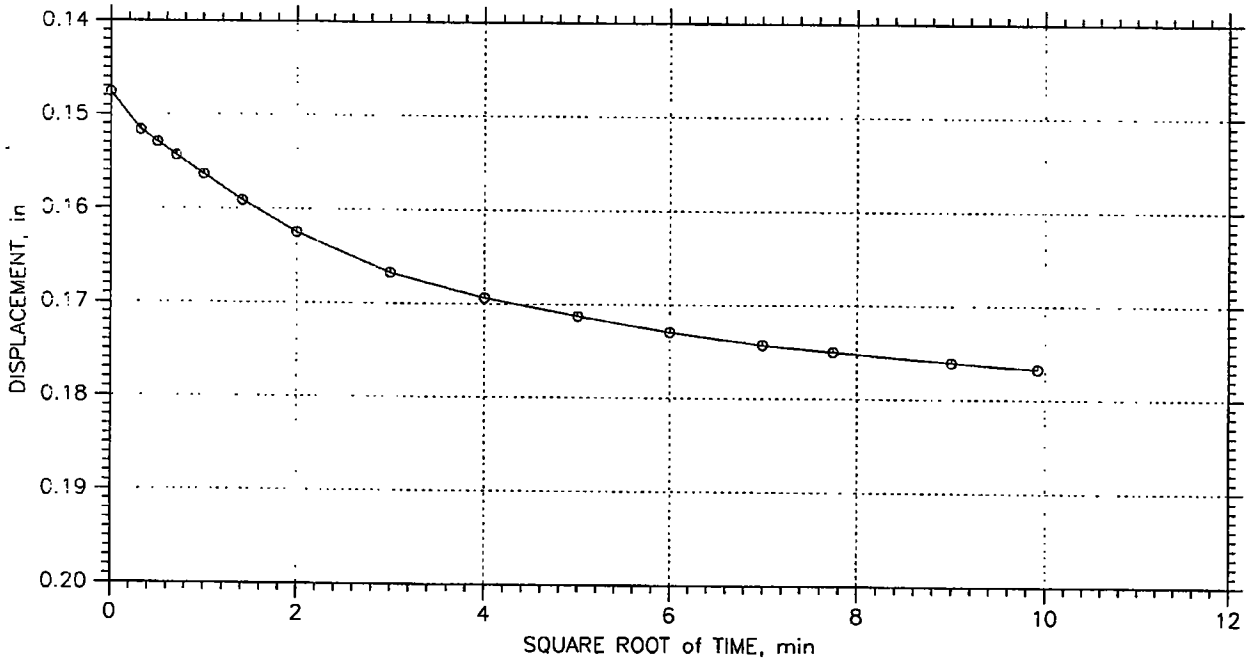
CONSOLIDATION TEST DATA

TIME CURVES

Step: 4 of 15

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No.: RA06EA1DS	Test Date: 6/26/06	Depth:
Test No.: 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks. Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

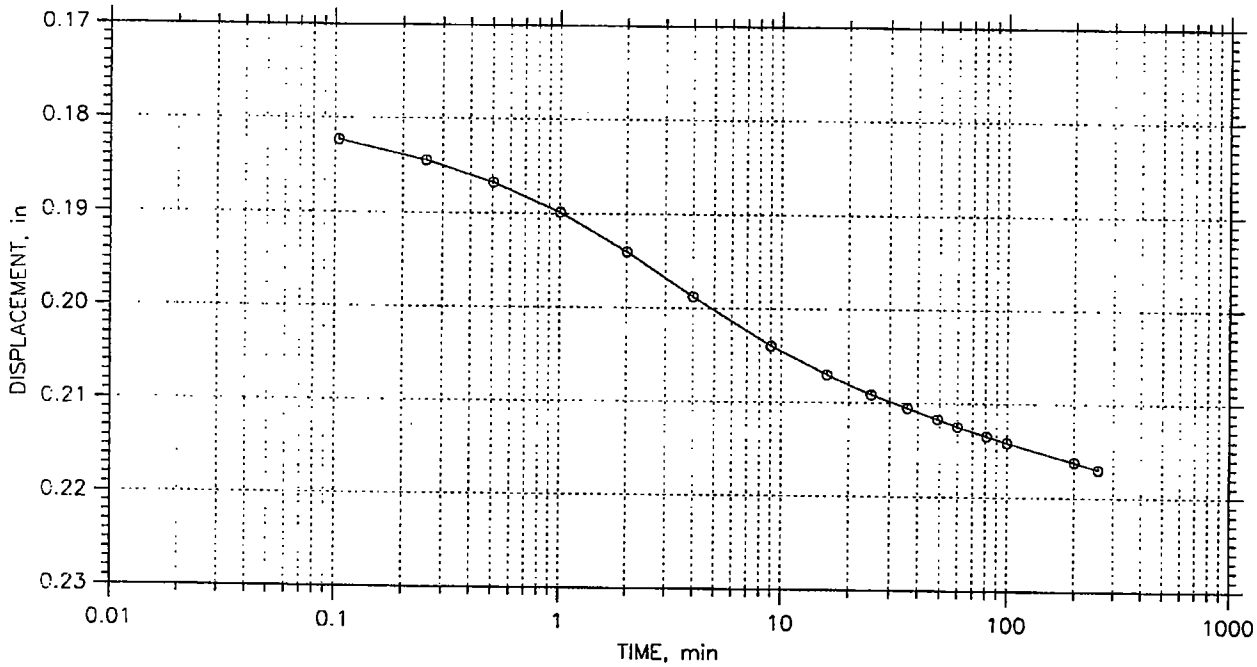
Fri, 14-JUL-2006 16:10:50

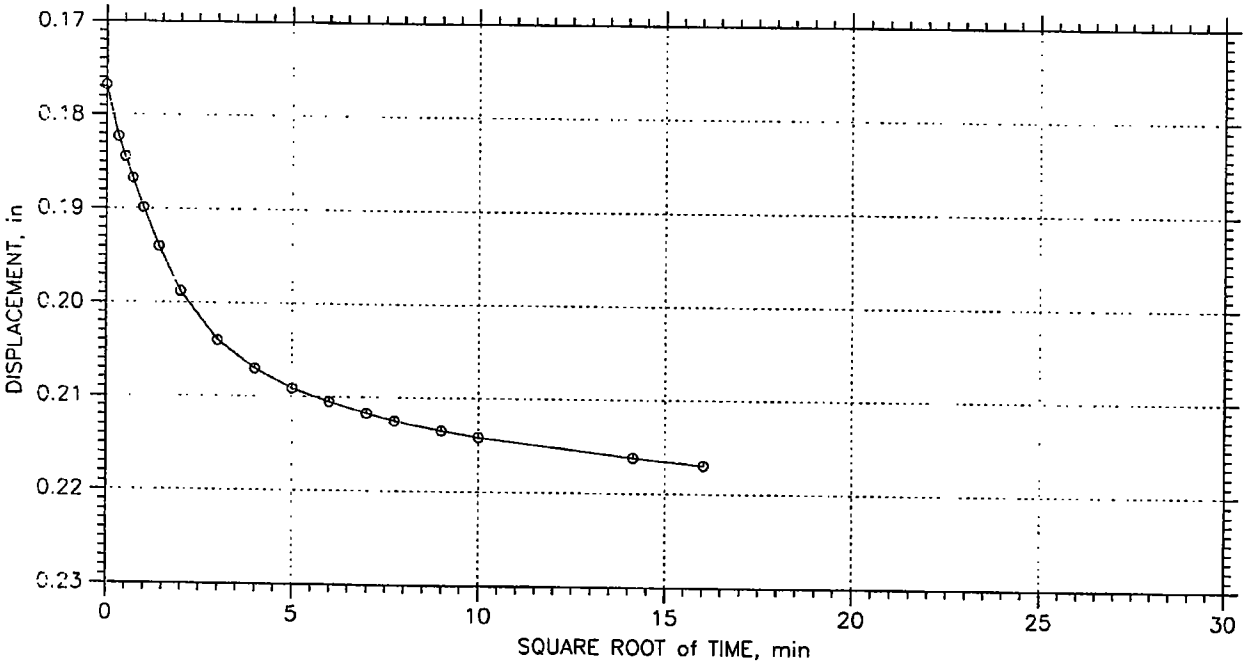
CONSOLIDATION TEST DATA

TIME CURVES

Step: 5 of 15

Stress: 2. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No.: RA06EA1DS	Test Date: 6/26/06	Depth:
Test No.: 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks: Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

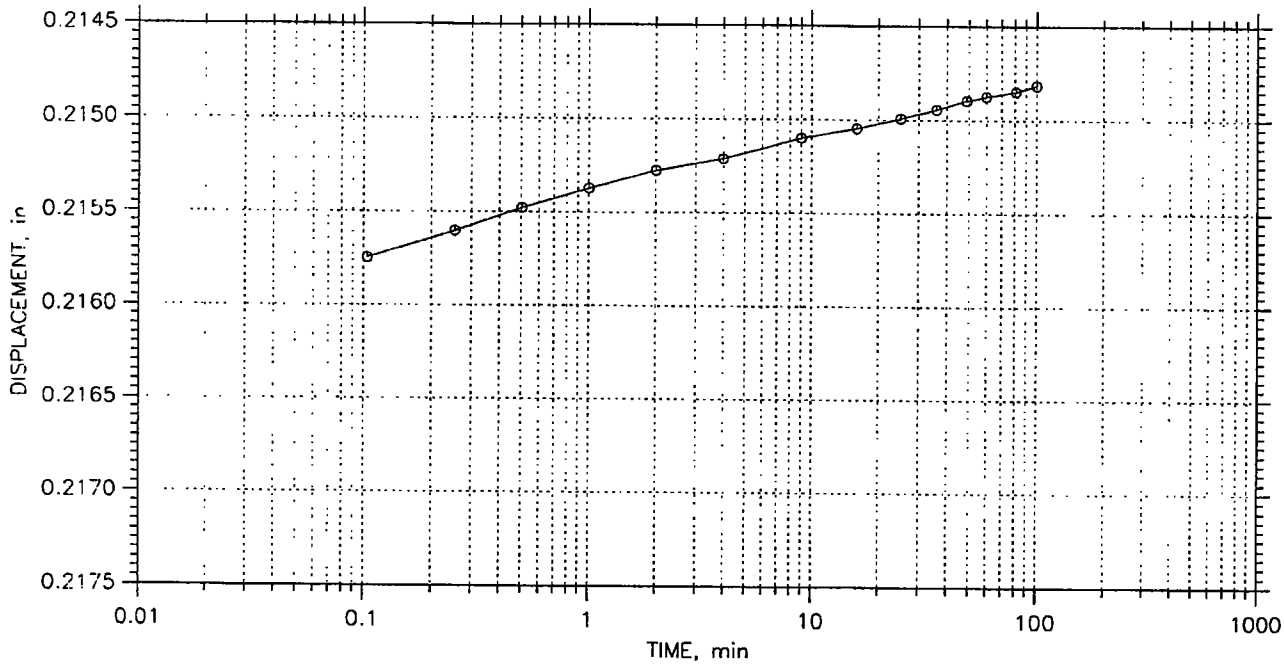
Fri, 14-JUL-2006 16:10:50

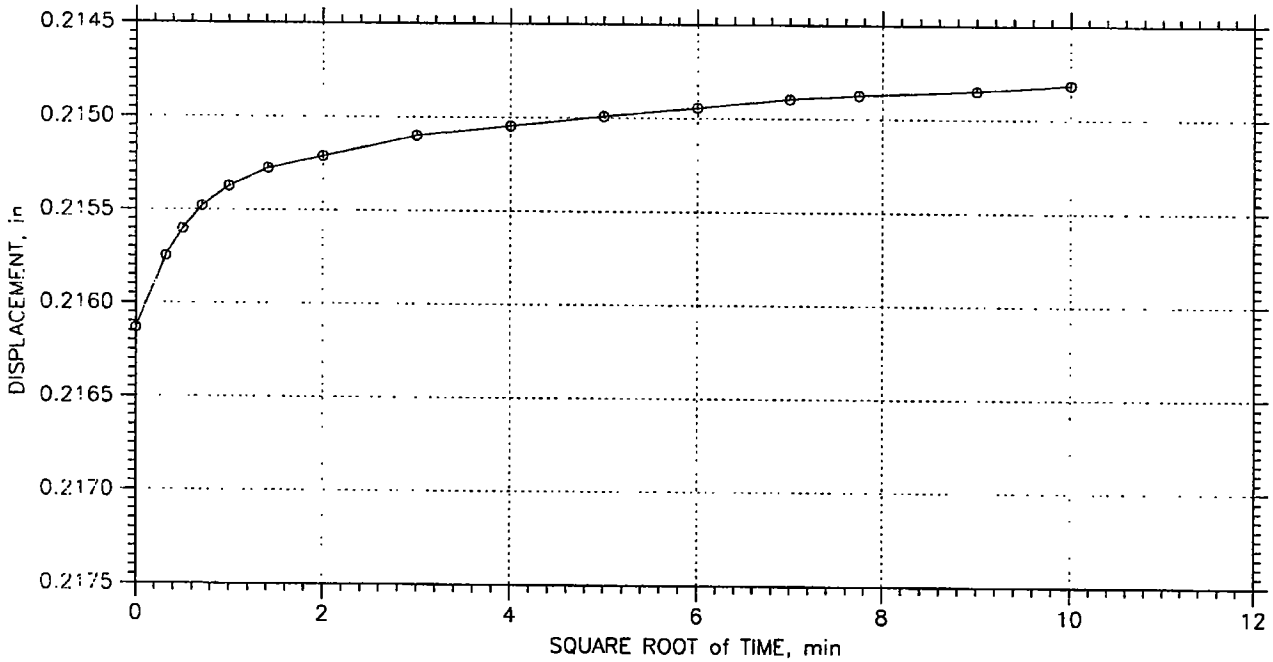
CONSOLIDATION TEST DATA

TIME CURVES

Step: 6 of 15

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No.: RA06EA1DS	Test Date: 6/26/06	Depth:
Test No.: 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks: Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

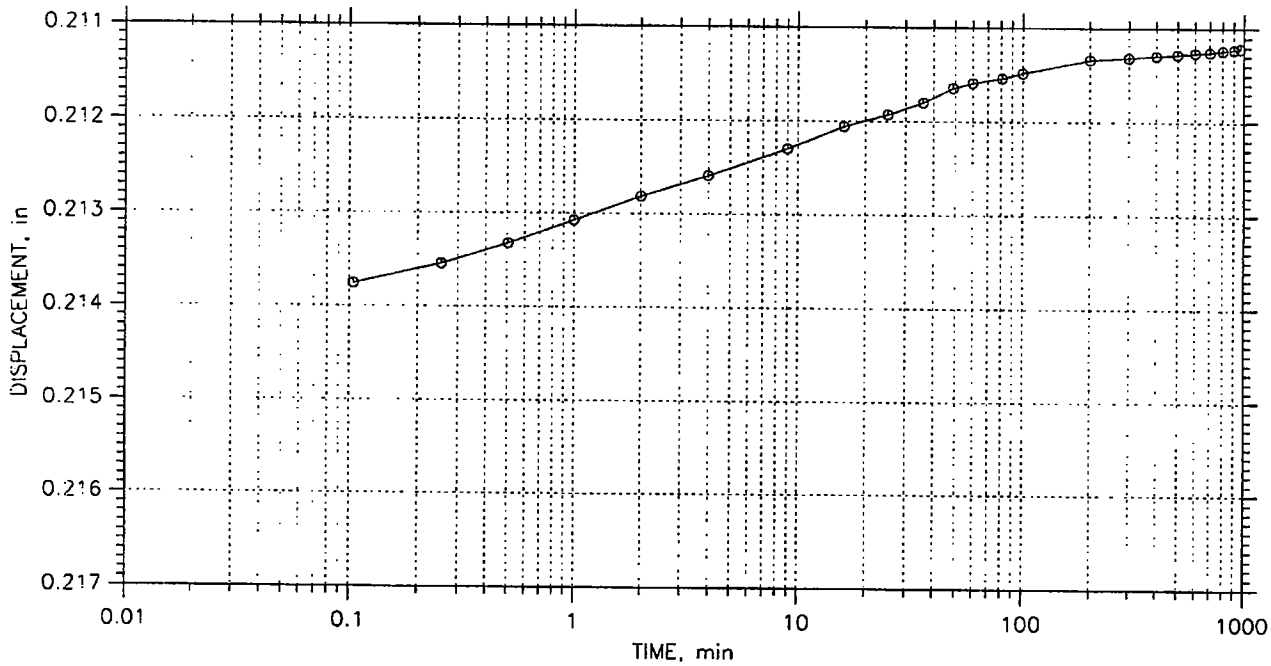
Fri, 14-JUL-2006 16:10:50

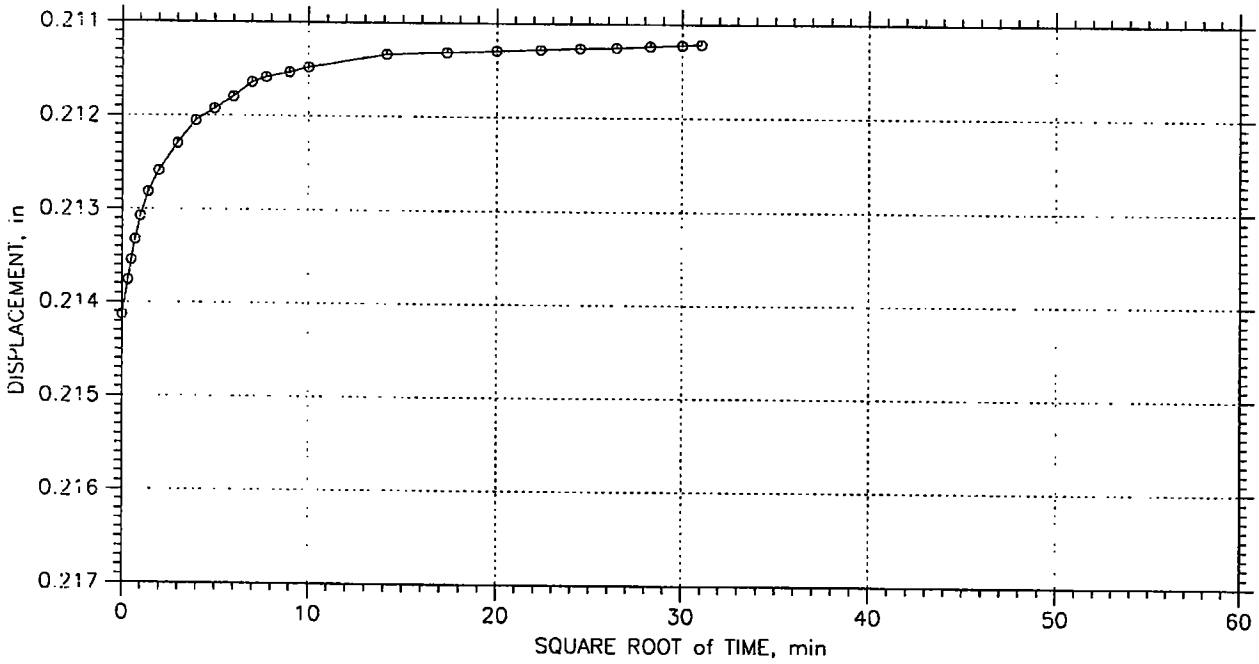
CONSOLIDATION TEST DATA

TIME CURVES

Step: 7 of 15

Stress: 0.5 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No.: RA06EA1DS	Test Date: 6/26/06	Depth:
Test No.: 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks: Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

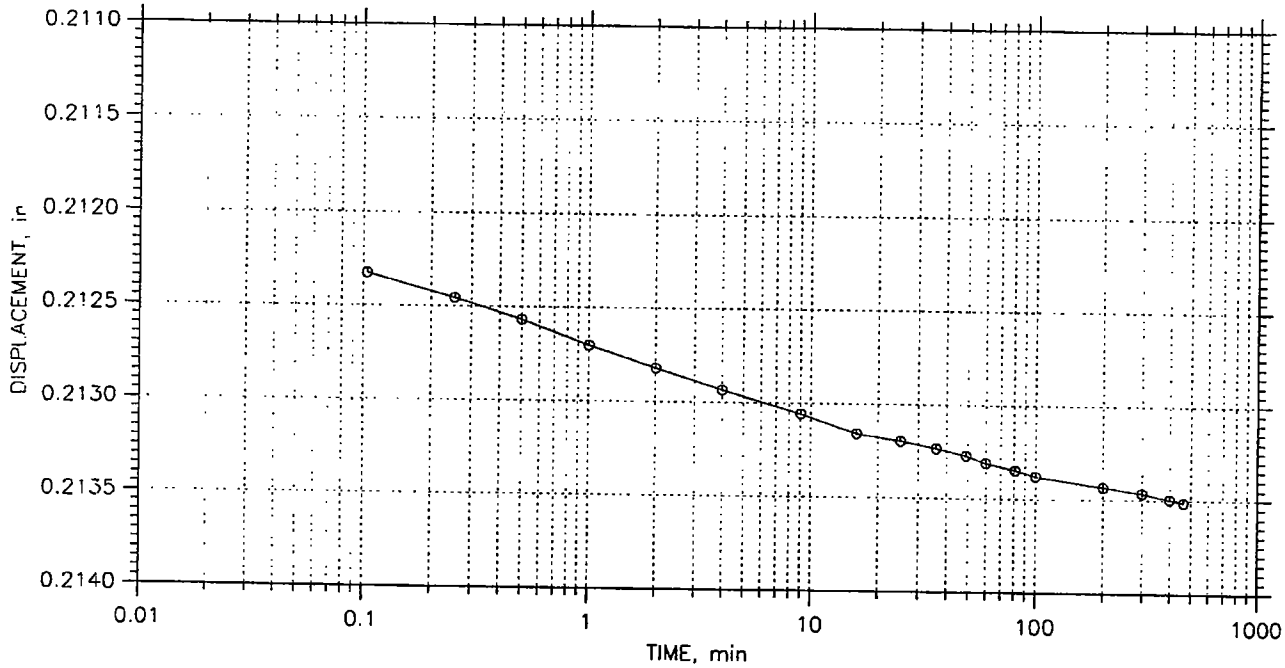
Fri, 14-JUL-2006 16:10:51

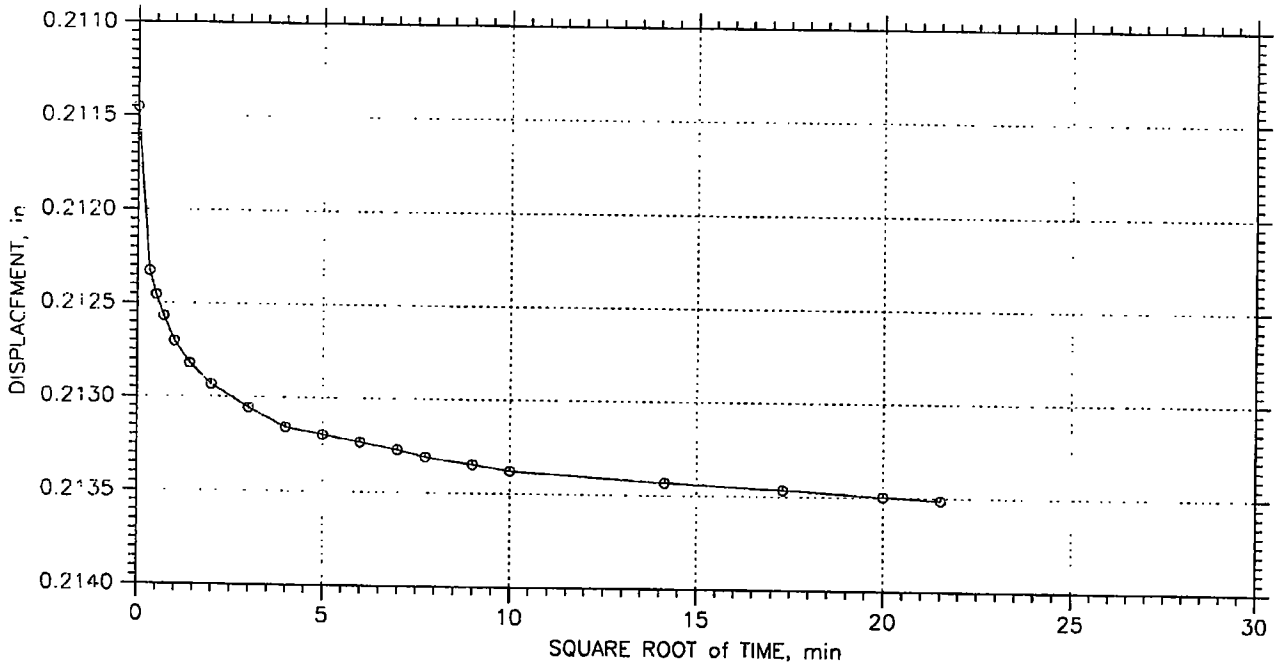
CONSOLIDATION TEST DATA

TIME CURVES

Step: 8 of 15

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No RA06EA1DS	Test Date: 6/26/06	Depth:
Test No.: 7RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks: Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

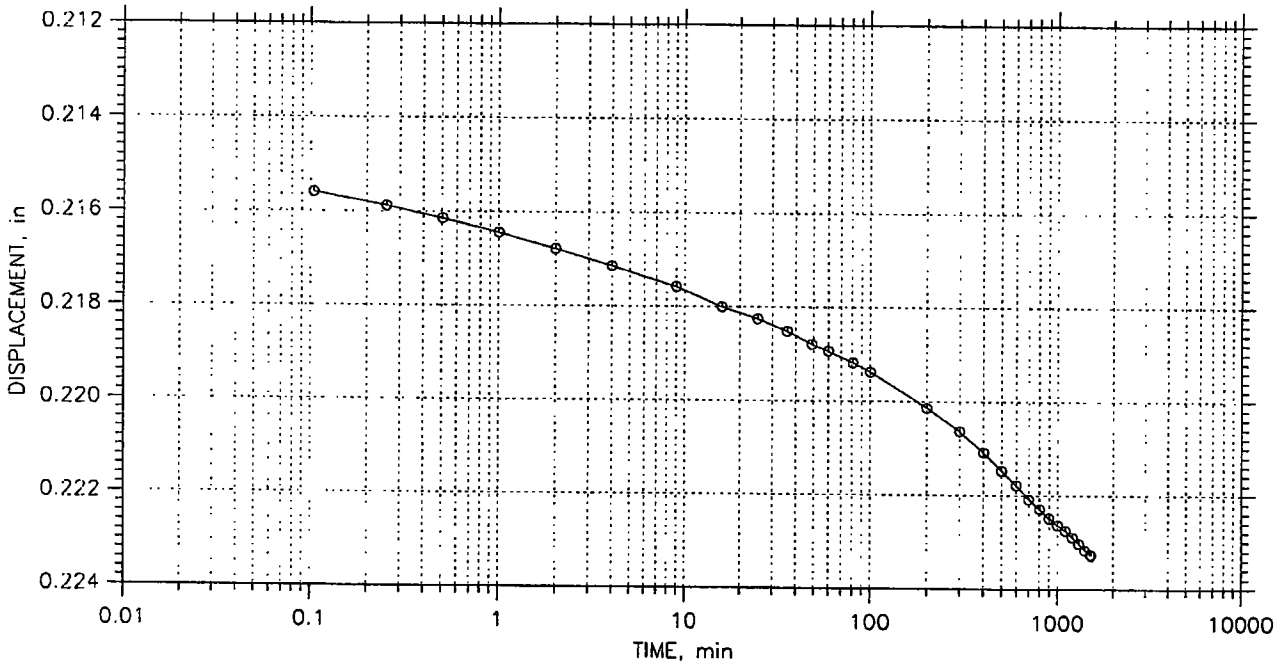
Fri, 14-JUL-2006 16:10:51

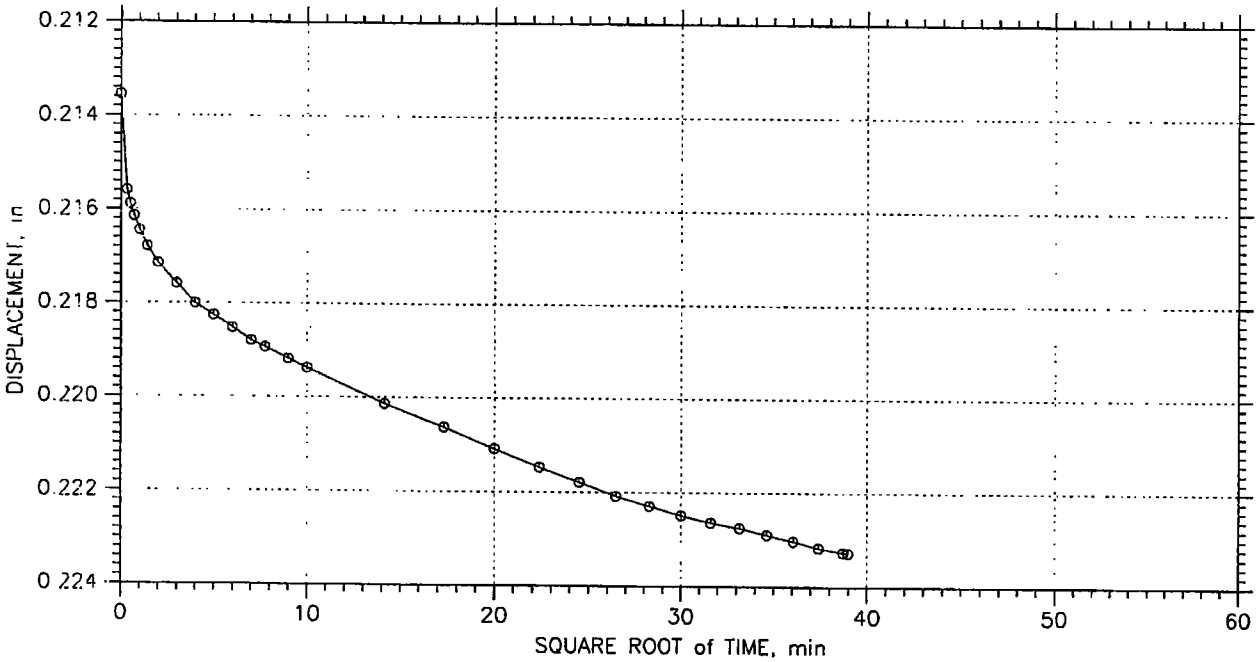
CONSOLIDATION TEST DATA

TIME CURVES

Step: 9 of 15

Stress: 2. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No.: RA06EA1DS	Test Date: 6/26/06	Depth:
Test No : 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks. Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

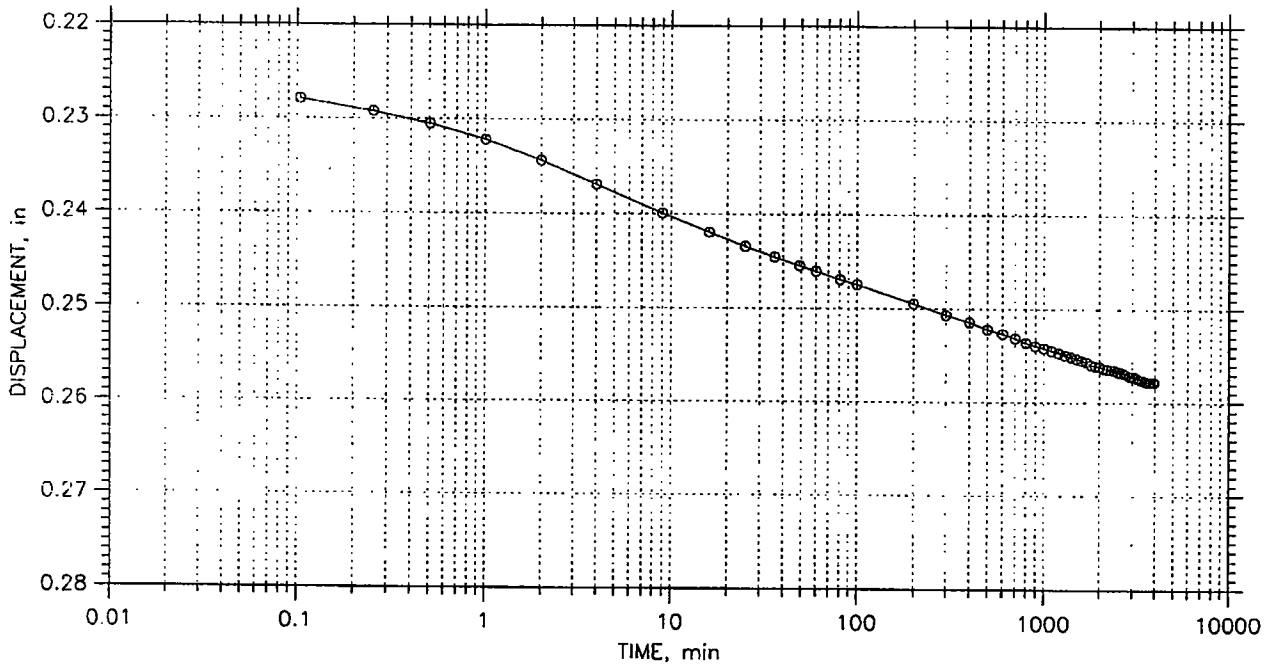
Fri, 14-JUL-2006 16:10:51

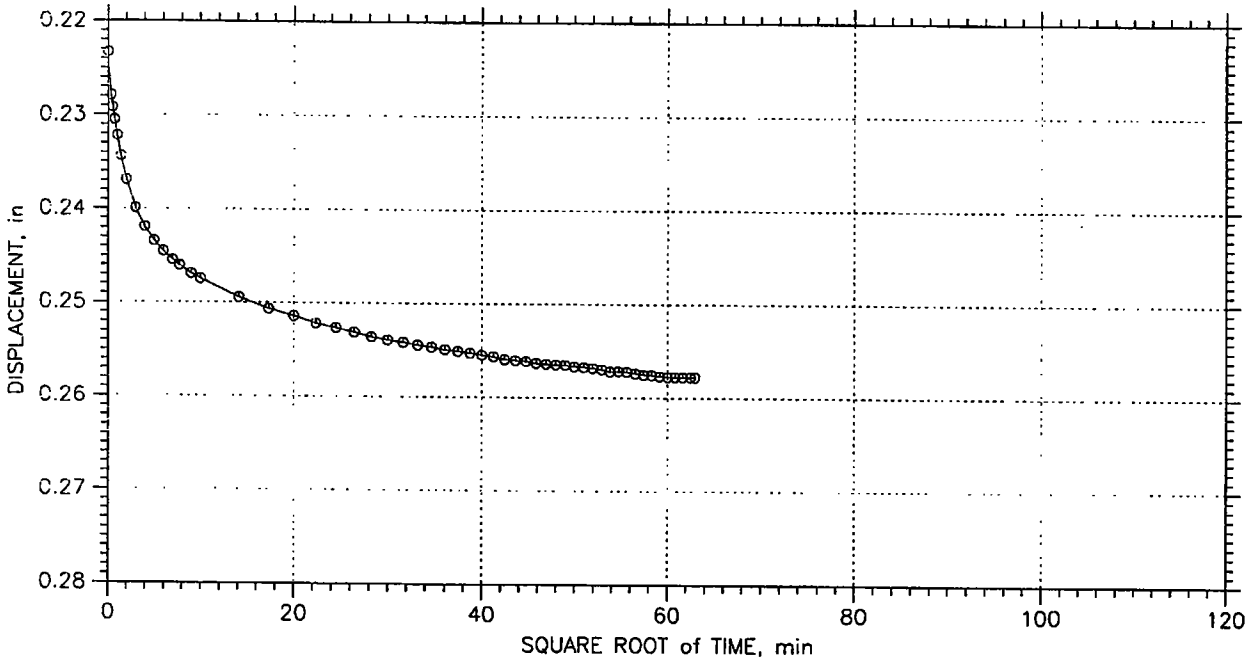
CONSOLIDATION TEST DATA

TIME CURVES

Step: 10 of 15

Stress: 4. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No.: RA06EA1DS	Test Date: 6/26/06	Depth:
Test No : 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks: Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

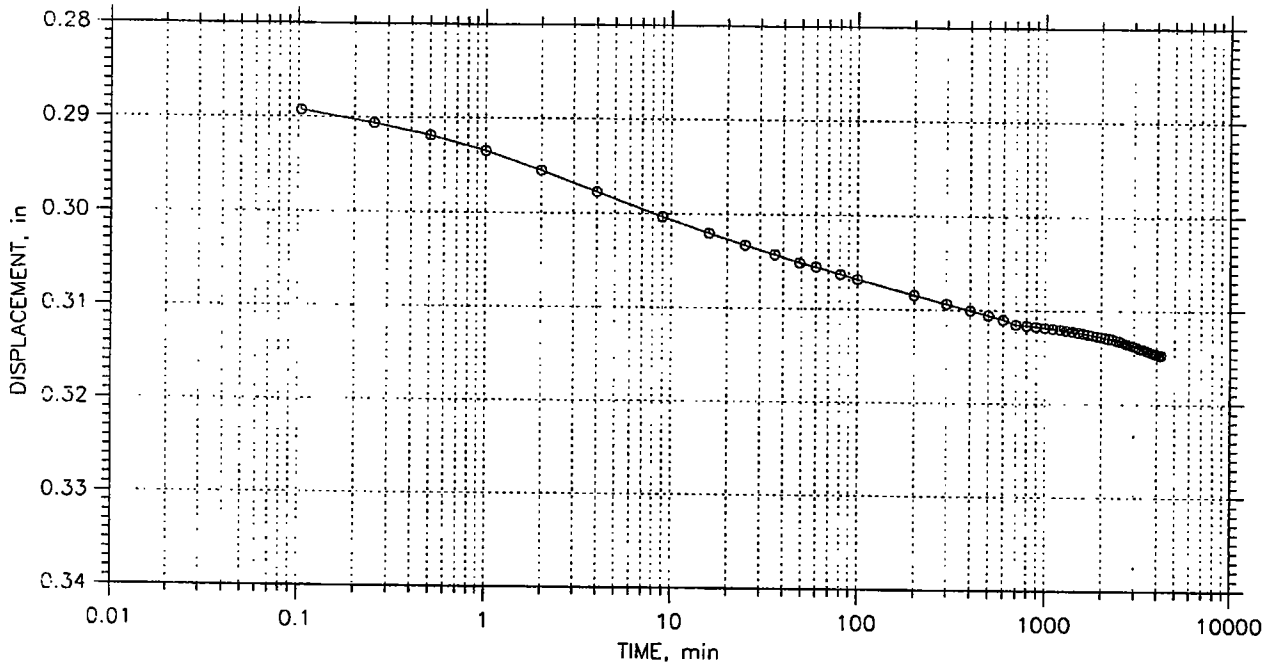
Fri, 14-JUL-2006 16:10:51

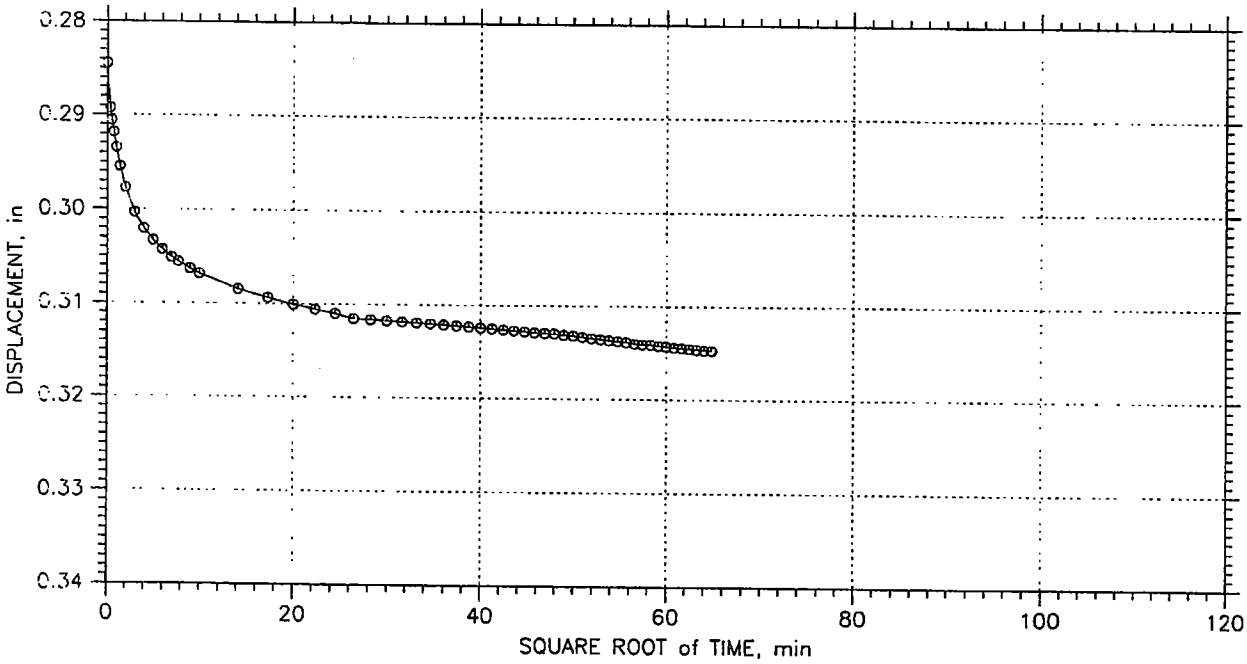
CONSOLIDATION TEST DATA

TIME CURVES

Step: 11 of 15

Stress: 8. tsf





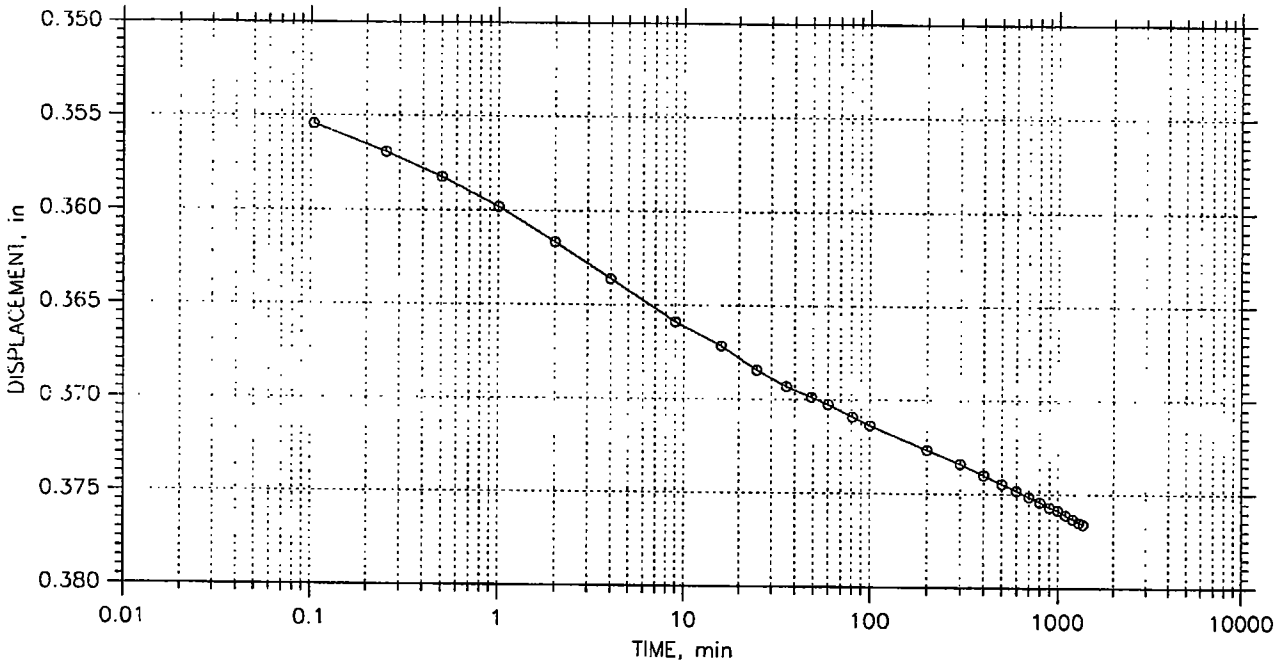
Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No.: RA06EA1DS	Test Date: 6/26/06	Depth:
Test No.: 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks: Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

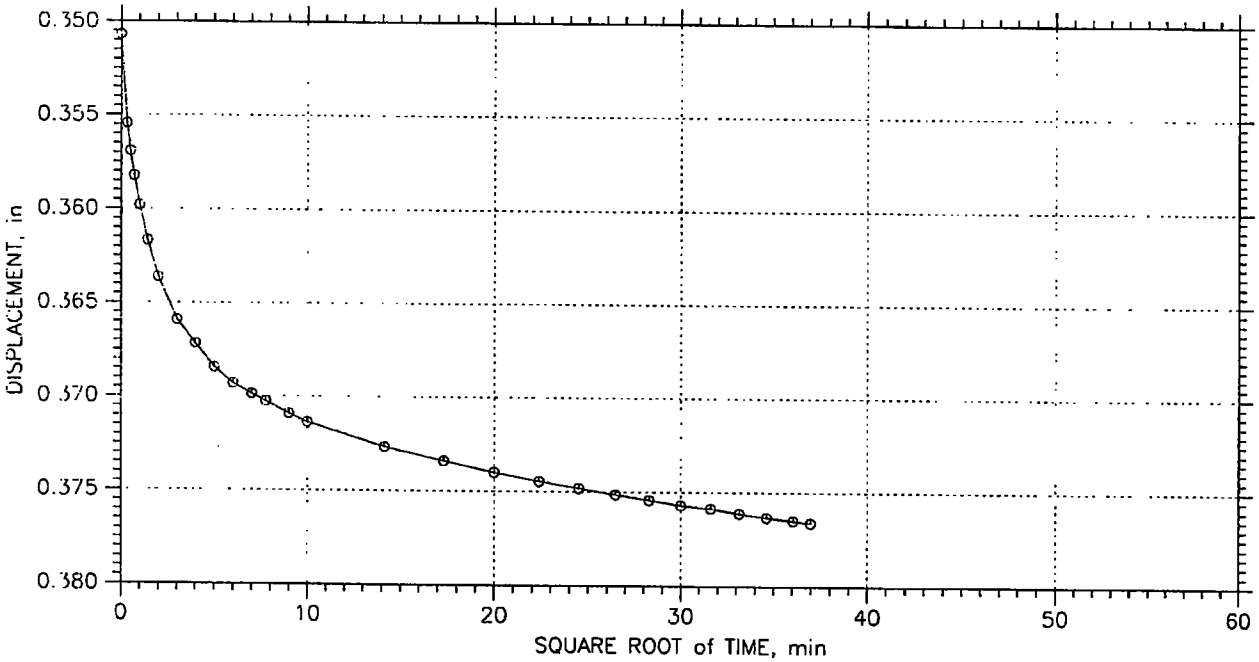
CONSOLIDATION TEST DATA

TIME CURVES

Step: 12 of 15

Stress: 16. tsf





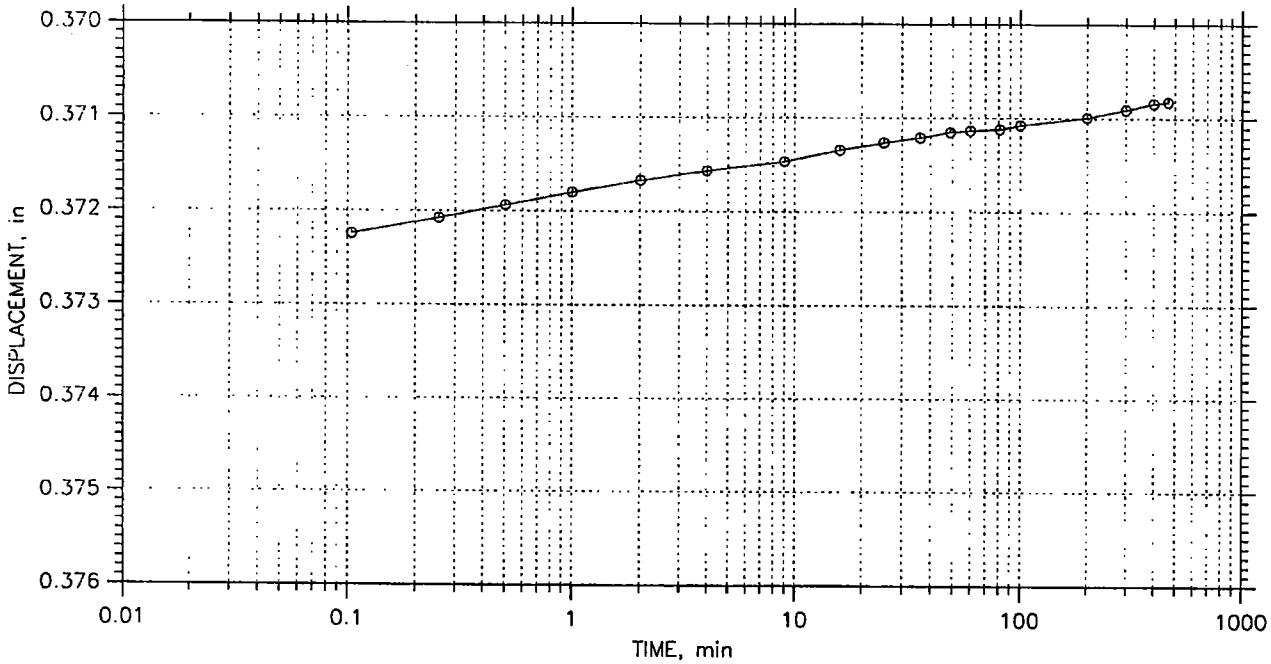
Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No.: RA06EA1DS	Test Date: 6/26/06	Depth:
Test No.: 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks: Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

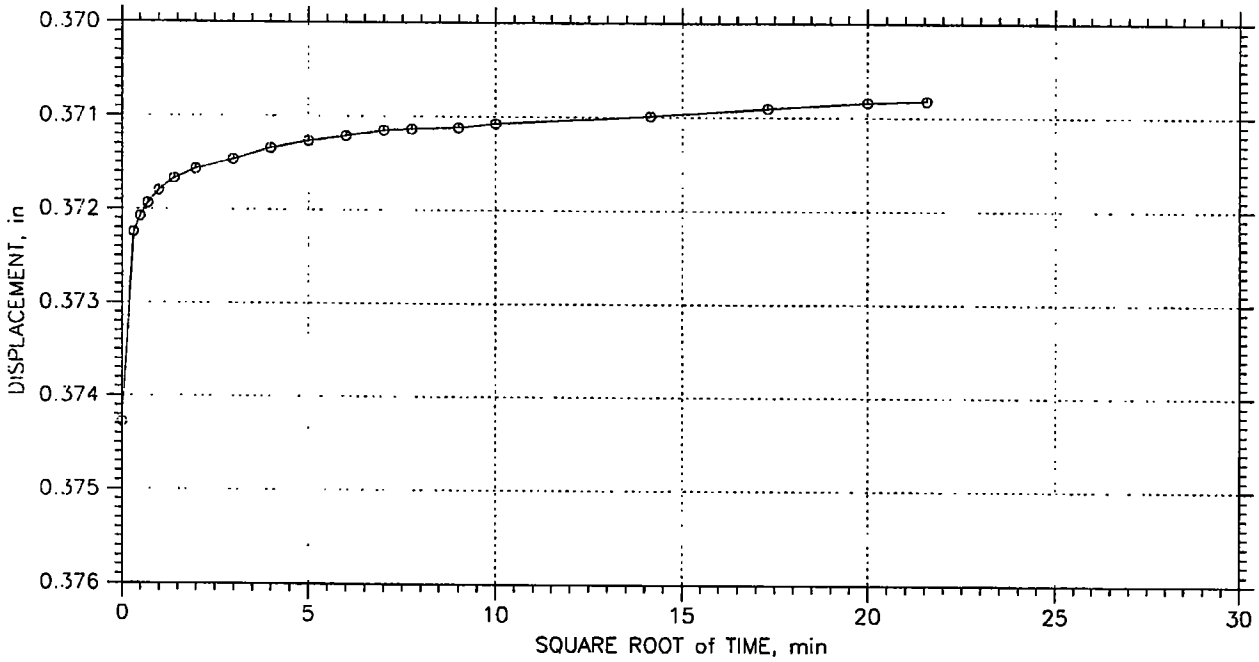
CONSOLIDATION TEST DATA

TIME CURVES

Step: 13 of 15

Stress: 4. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No : RA06EA1DS	Test Date: 6/26/06	Depth:
Test No : 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks: Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

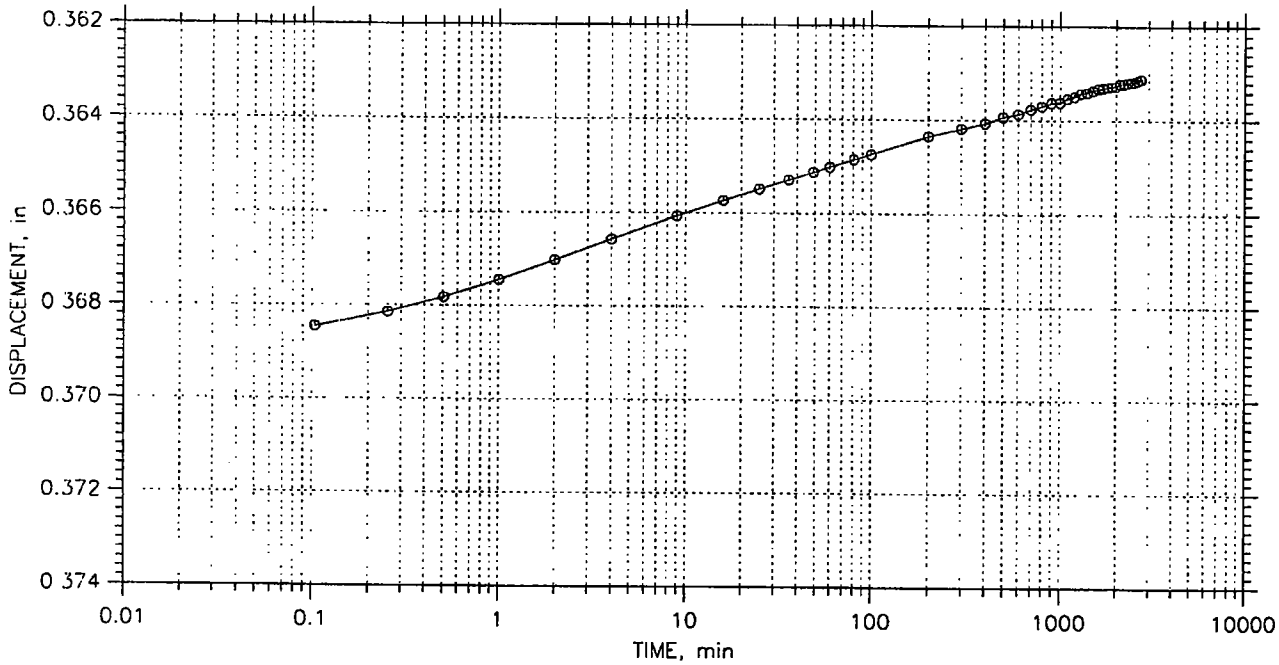
Fri, 14-JUL-2006 16:10:51

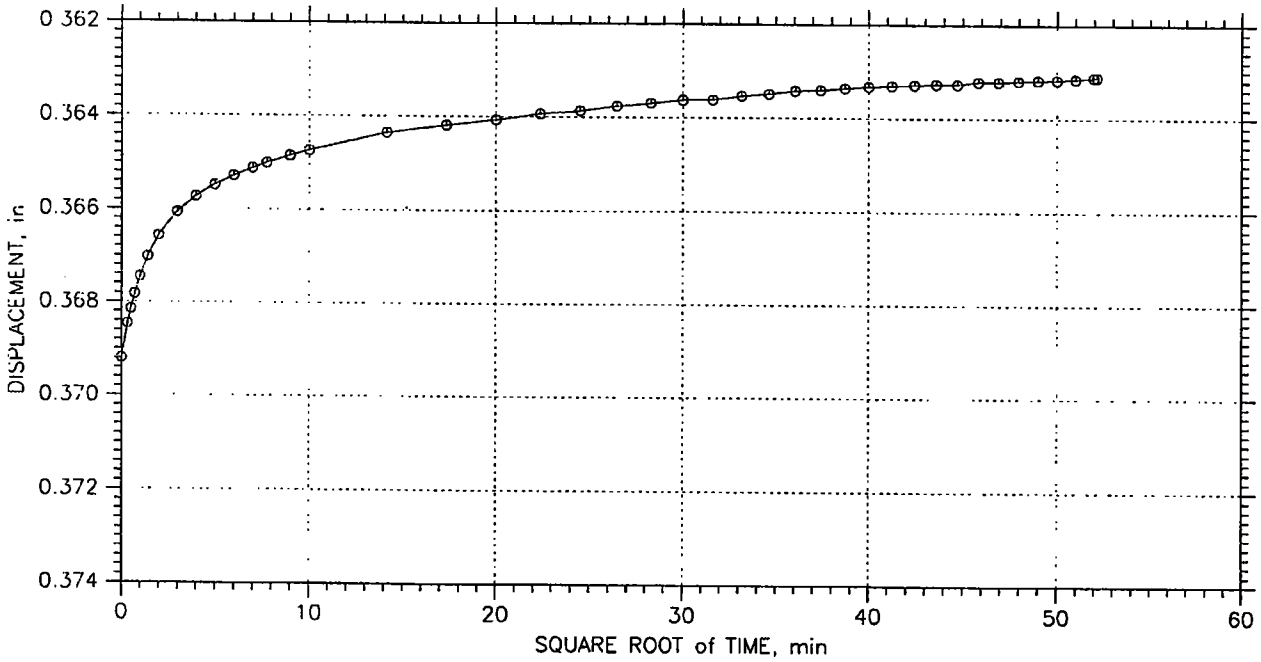
CONSOLIDATION TEST DATA

TIME CURVES

Step: 14 of 15

Stress: 1. tsf





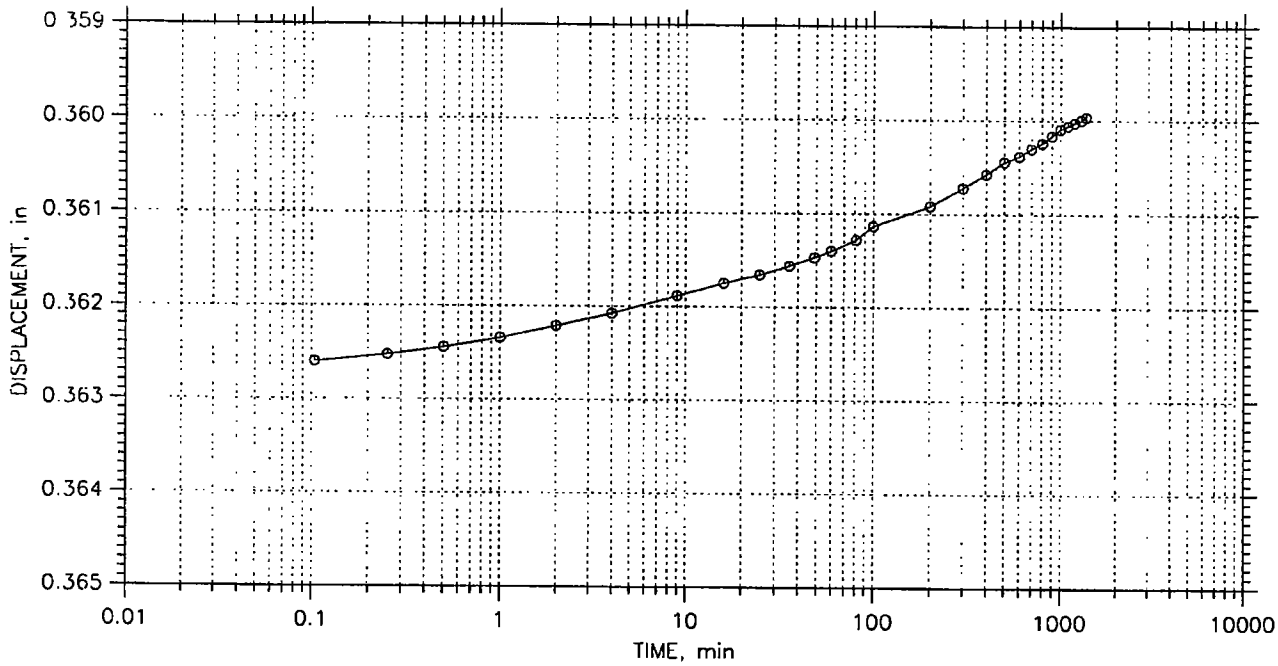
Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No.: RA06EA1DS	Test Date: 6/26/06	Depth:
Test No.: 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks: Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

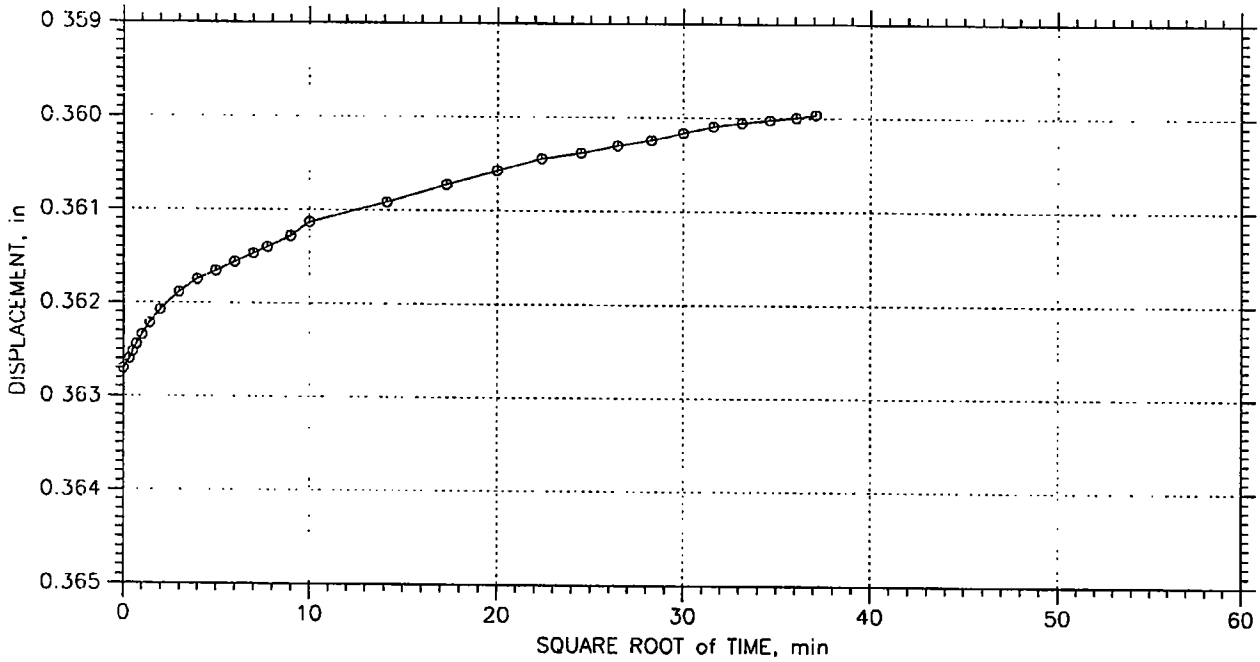
CONSOLIDATION TEST DATA

TIME CURVES

Step: 15 of 15

Stress: 0.5 tsf



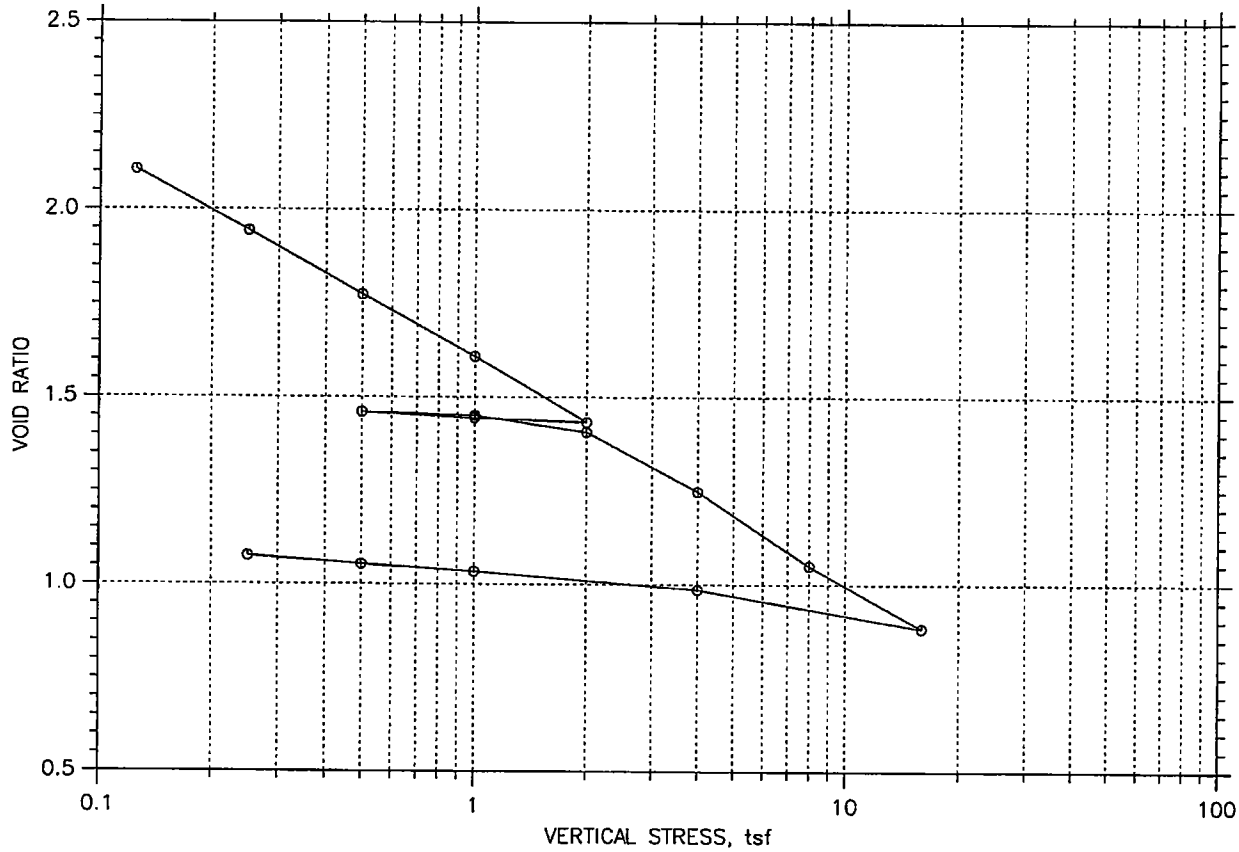


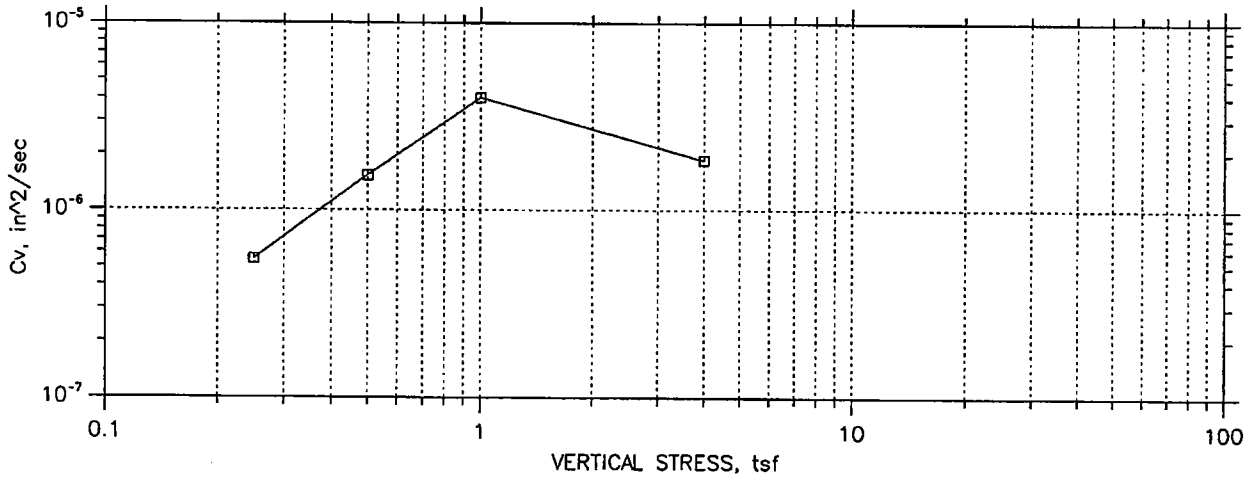
Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.: 1-RA-06-EA1	Tested By: MJS	Checked By: WPQ
Sample No.: RA06EA1DS	Test Date: 6/26/06	Depth:
Test No.: 17RA06EA1DS	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT SEDIMENT LITTLE F-C SAND TRACE F GRAVEL - DK BROWN (MH) SHELLS NOTED		
Remarks: Cc = 0.70 Ccr = 0.05 TEST PERFORMED AS PER ASTM D 2435 SPECIMEN WAS REMOLDED		

Fri, 14-JUL-2006 16:10:51

CONSOLIDATION TEST DATA

SUMMARY REPORT





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

Wed, 30-AUG-2006 15:06:42

CONSOLIDATION TEST DATA

Project: LOWER FOX RIVER
Boring No.:
Sample No.: ED-1
Test No.: 18ED1

Location:
Tested By: MJS
Test Date: 8/11/06
Sample Type: BULK/REMOLD

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435

Estimated Specific Gravity: 2.60
Initial Void Ratio: 2.20
Final Void Ratio: 0.84

Liquid Limit: 0
Plastic Limit: 0
Plasticity Index: 0

Initial Height: 0.75 in
Specimen Diameter: 2.50 in

	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
Container ID	X-16	RING	RING	RING
Wt. Container + Wet Soil, gm	158.77	164.42	139.19	139.19
Wt. Container + Dry Soil, gm	109.8	123.4	123.4	123.4
Wt. Container, gm	44.82	74.37	74.37	74.37
Wt. Dry Soil, gm	64.98	49.03	49.03	49.03
Water Content, %	75.36	83.66	32.20	32.20
Void Ratio	---	2.20	0.84	---
Degree of Saturation, %	---	98.91	99.41	---
Dry Unit Weight, pcf	---	50.735	88.103	---

CONSOLIDATION TEST DATA

Project: LOWER FOX RIVER
Boring No.:
Sample No.: ED-1
Test No.: 18ED1

Location:
Tested By: MJS
Test Date: 8/11/06
Sample Type: BULK/REMOLD

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435

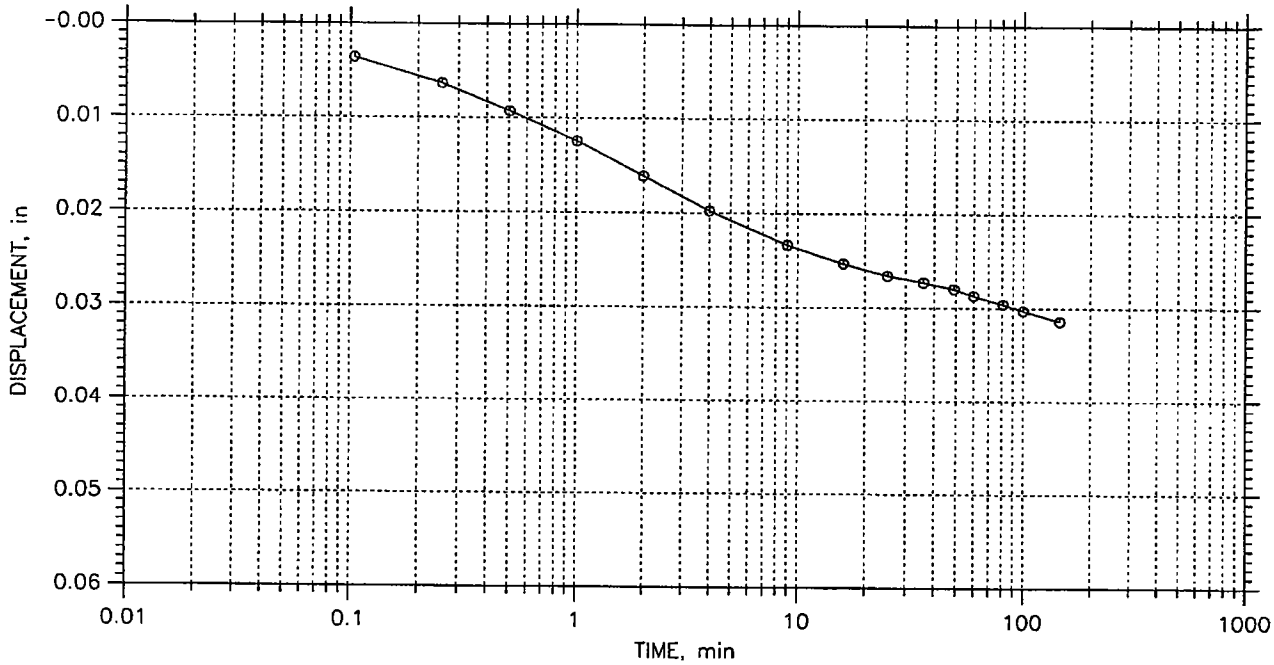
	Applied Stress tsf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting Sq.Rt. min	T50 Fitting Log min	Coefficient of Consolidation Sq.Rt. in^2/sec	Coefficient of Consolidation Log in^2/sec	Coefficient of Consolidation Ave. in^2/sec
1	0.125	0.02192	2.106	2.92	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
2	0.25	0.05993	1.944	7.99	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
3	0.5	0.09962	1.774	13.28	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
4	1	0.1383	1.609	18.44	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
5	2	0.1796	1.433	23.95	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
6	1	0.177	1.444	23.60	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
7	0.5	0.1734	1.460	23.12	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
8	1	0.1756	1.450	23.41	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
9	2	0.1859	1.406	24.78	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
10	4	0.2231	1.248	29.74	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
11	8	0.2694	1.050	35.92	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
12	16	0.3086	0.883	41.15	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
13	4	0.2844	0.986	37.92	94.4	0.0	1.79e-006	0.00e+000	1.79e-006
14	1	0.2733	1.034	36.44	45.7	0.0	3.99e-006	0.00e+000	3.99e-006
15	0.5	0.2688	1.053	35.83	123.3	0.0	1.53e-006	0.00e+000	1.53e-006
16	0.25	0.2635	1.075	35.13	351.7	0.0	5.47e-007	0.00e+000	5.47e-007

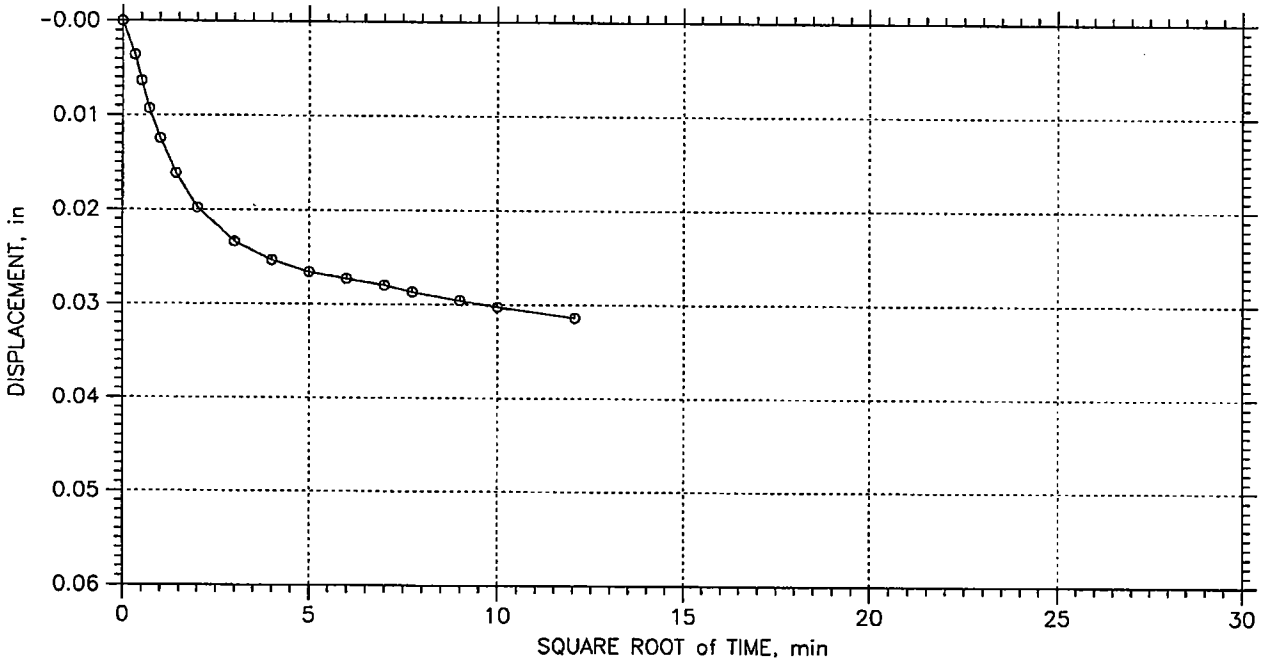
CONSOLIDATION TEST DATA

TIME CURVES

Step: 1 of 12

Stress: 0.125 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

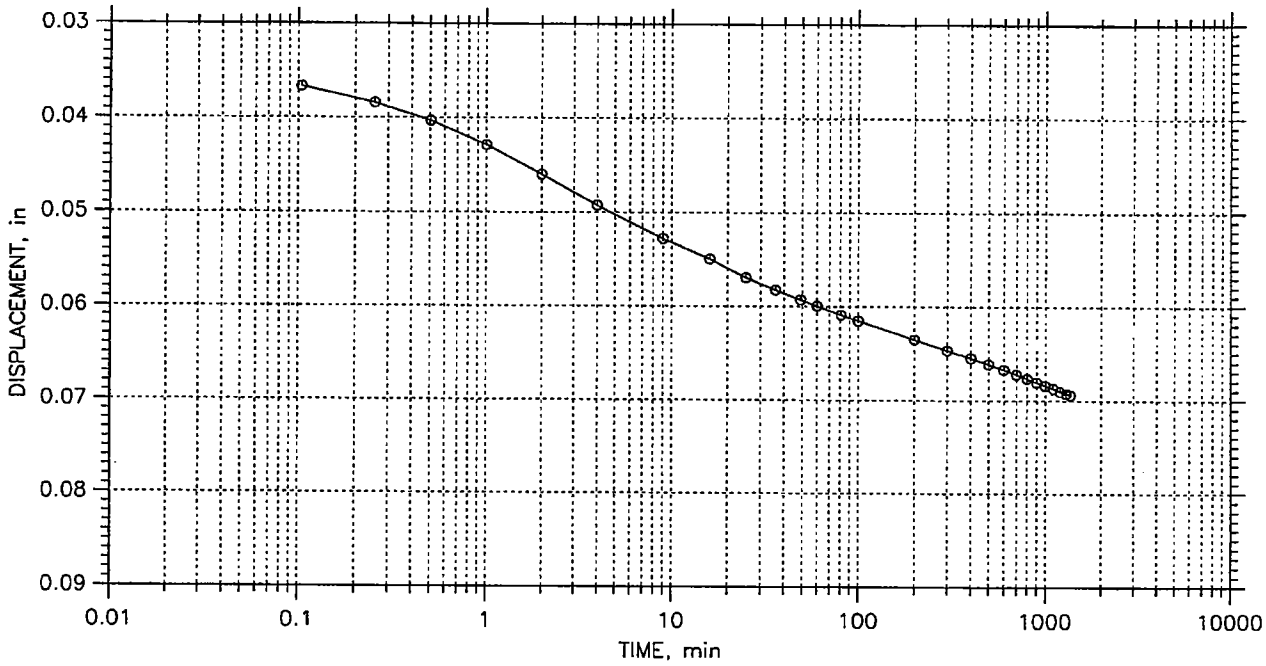
Wed, 30-AUG-2006 15:10:52

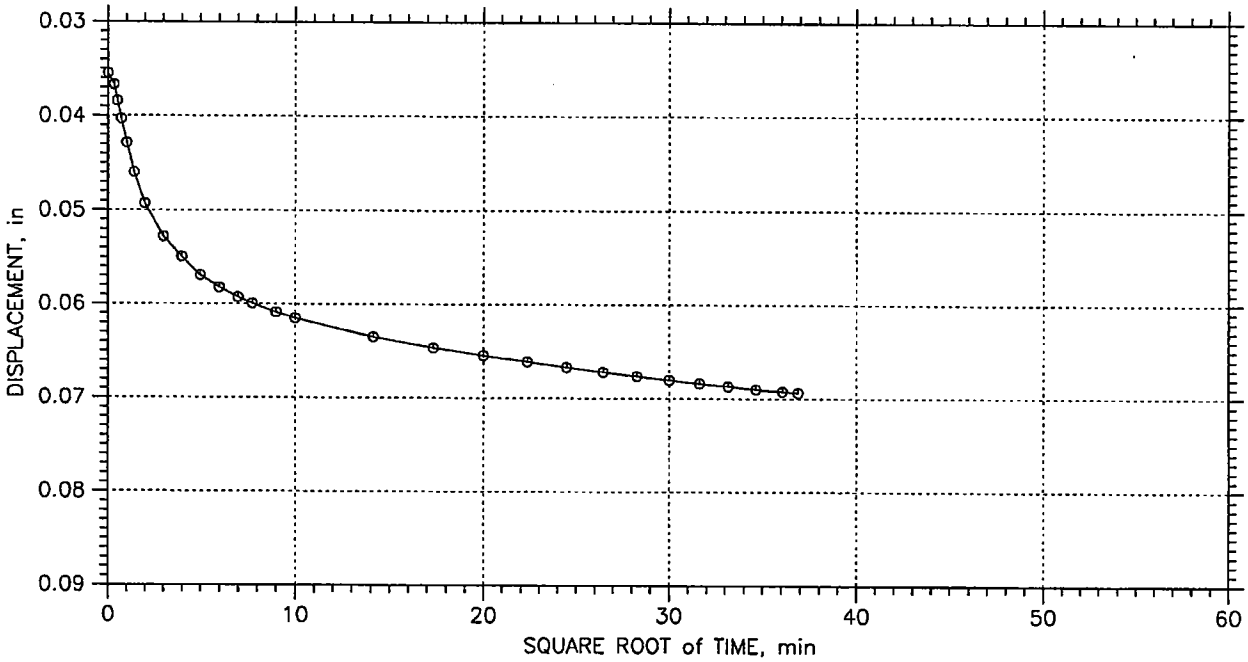
CONSOLIDATION TEST DATA

TIME CURVES

Step: 2 of 12

Stress: 0.25 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

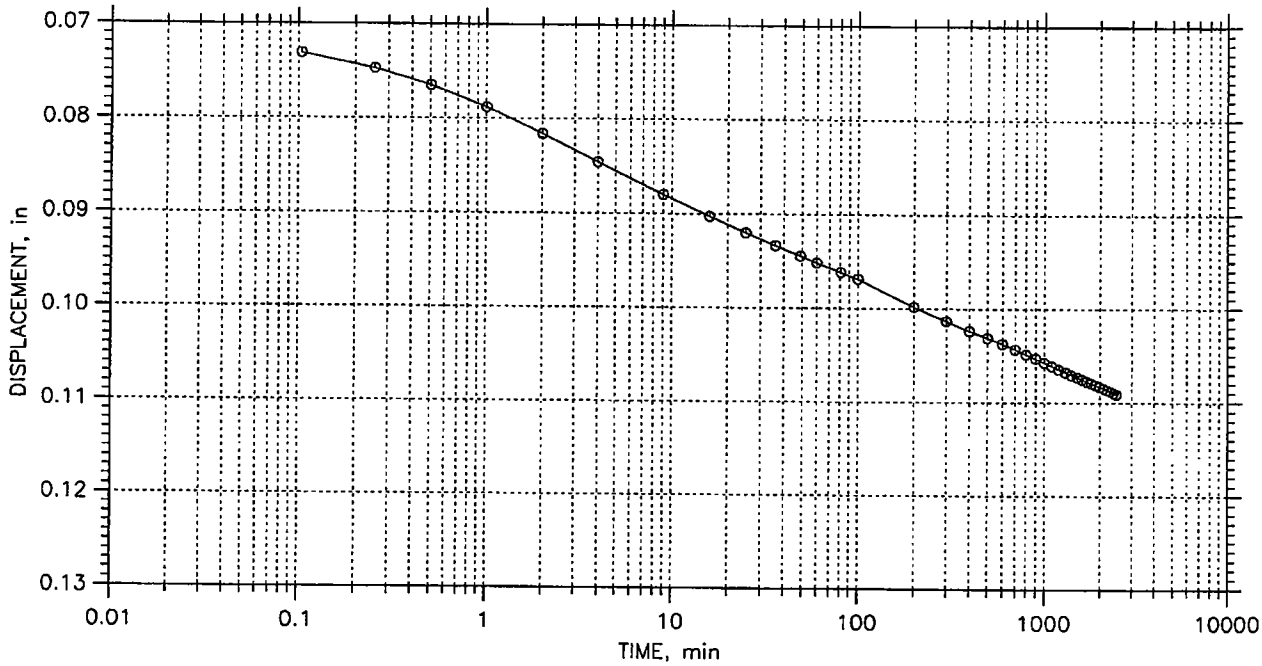
Wed, 30-AUG-2006 15:10:52

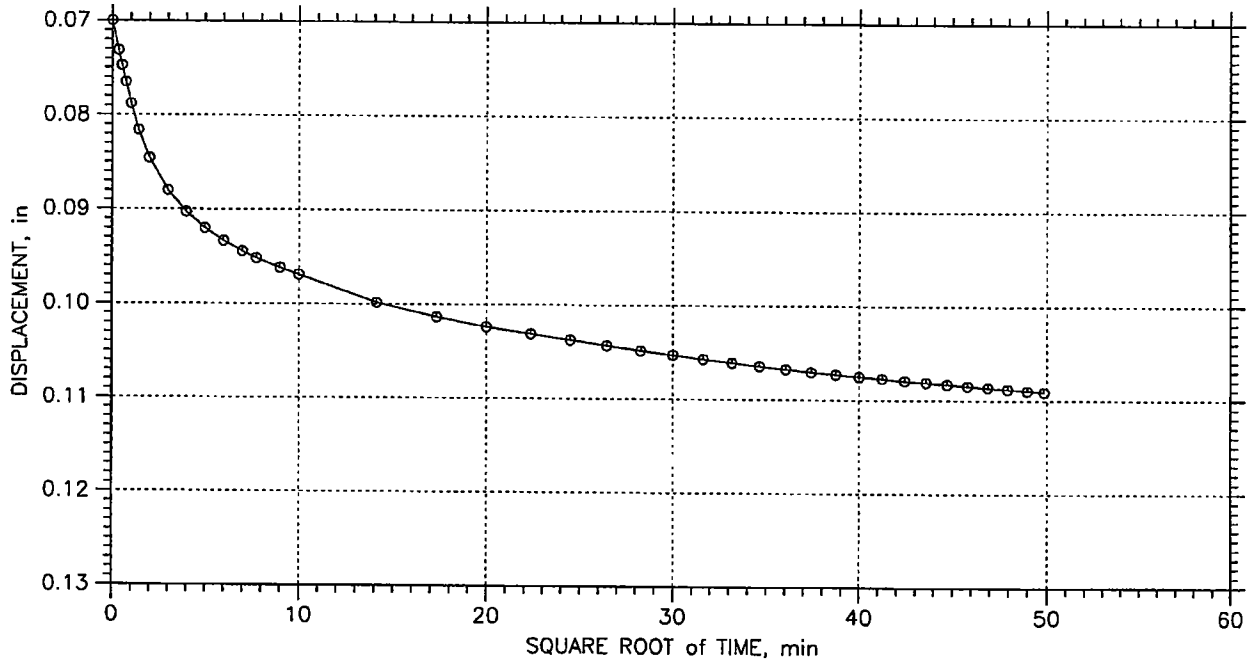
CONSOLIDATION TEST DATA

TIME CURVES

Step: 3 of 12

Stress: 0.5 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

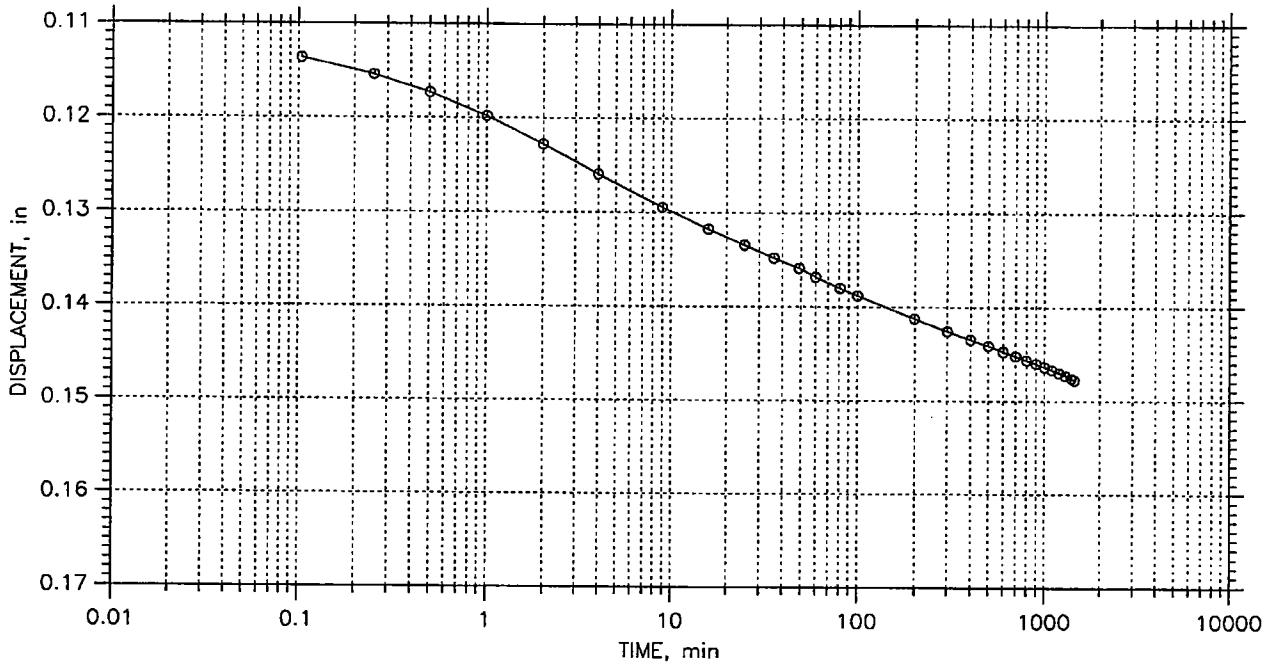
Wed, 30-AUG-2006 15:10:52

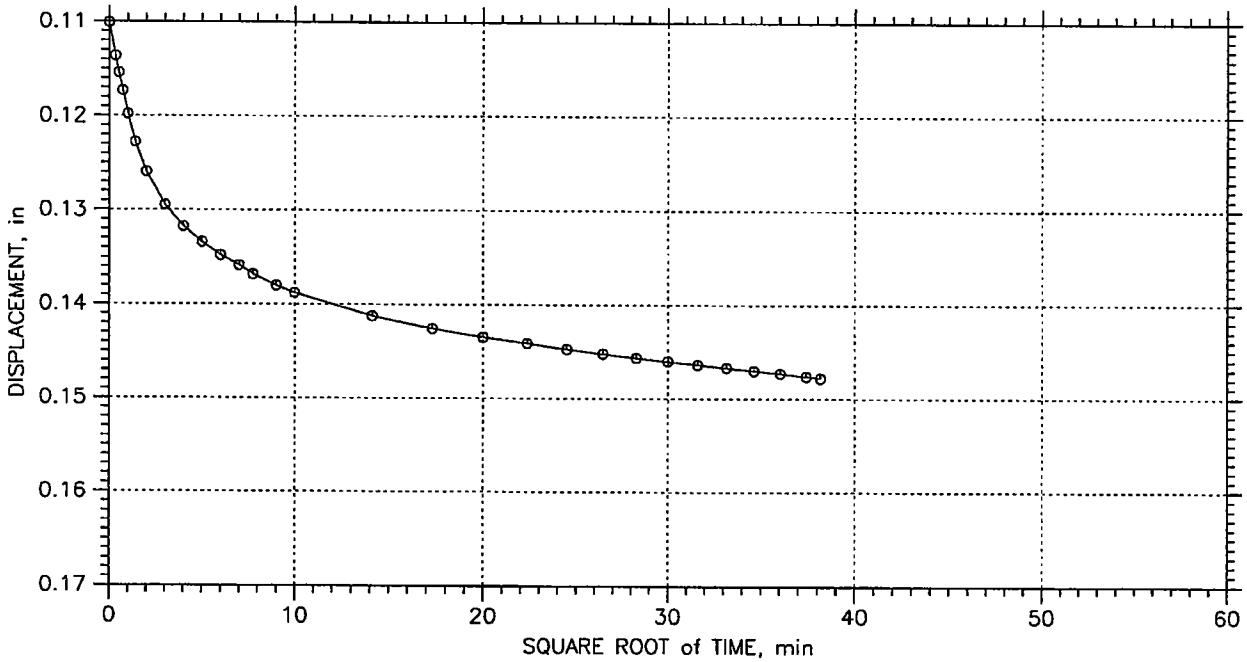
CONSOLIDATION TEST DATA

TIME CURVES

Step: 4 of 12

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

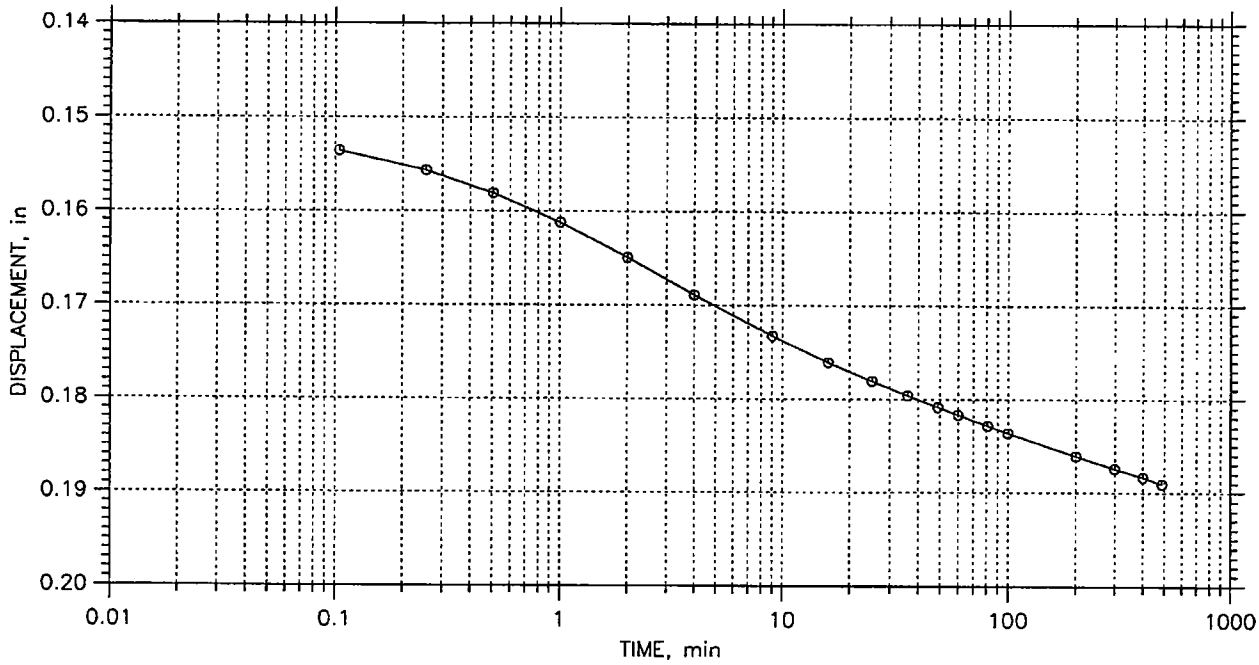
Wed, 30-AUG-2006 15:10:52

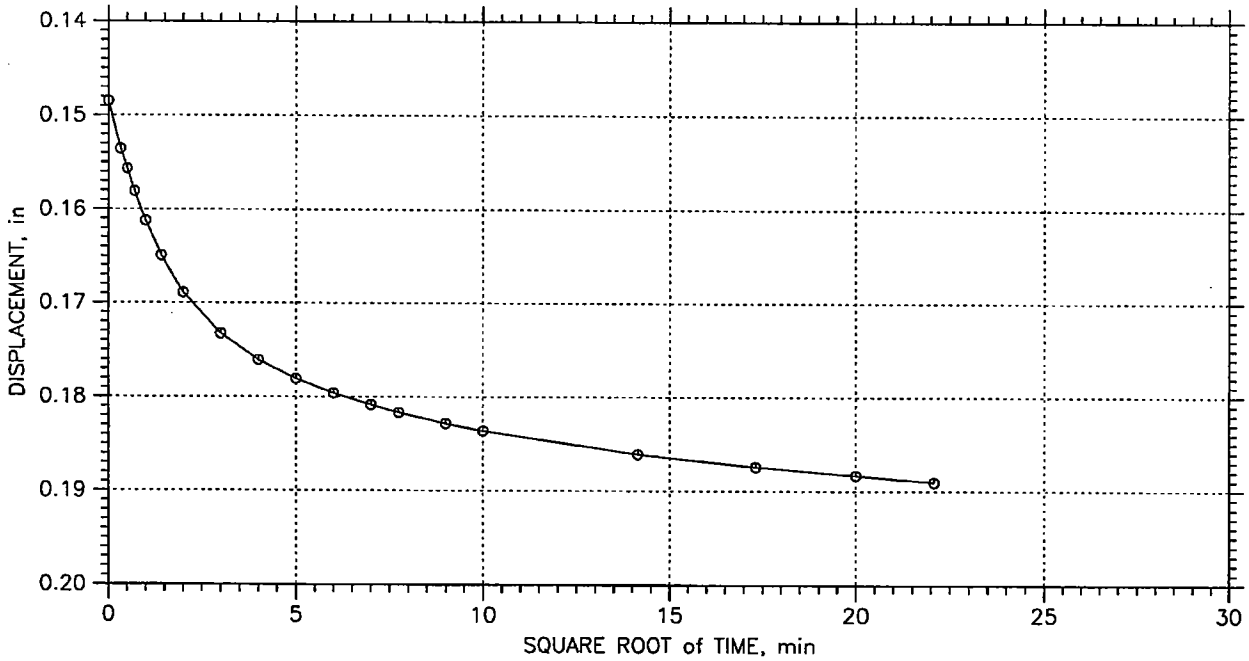
CONSOLIDATION TEST DATA

TIME CURVES

Step: 5 of 12

Stress: 2. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

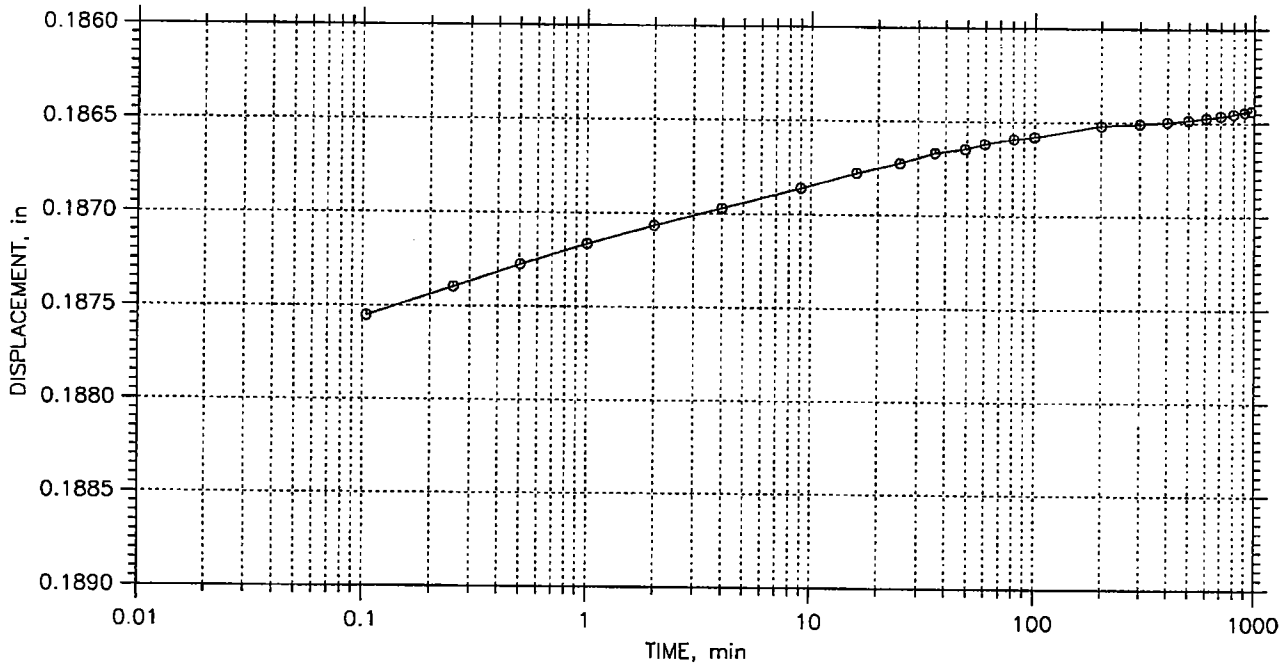
Wed, 30-AUG-2006 15:10:52

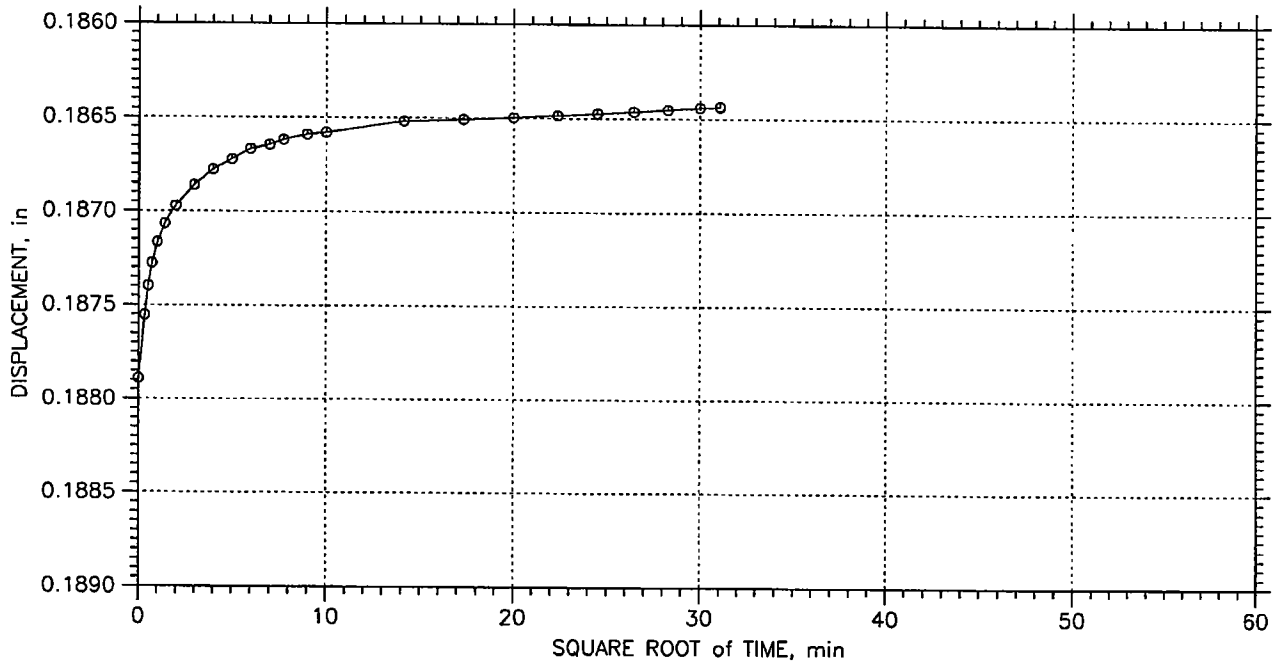
CONSOLIDATION TEST DATA

TIME CURVES

Step: 6 of 12

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

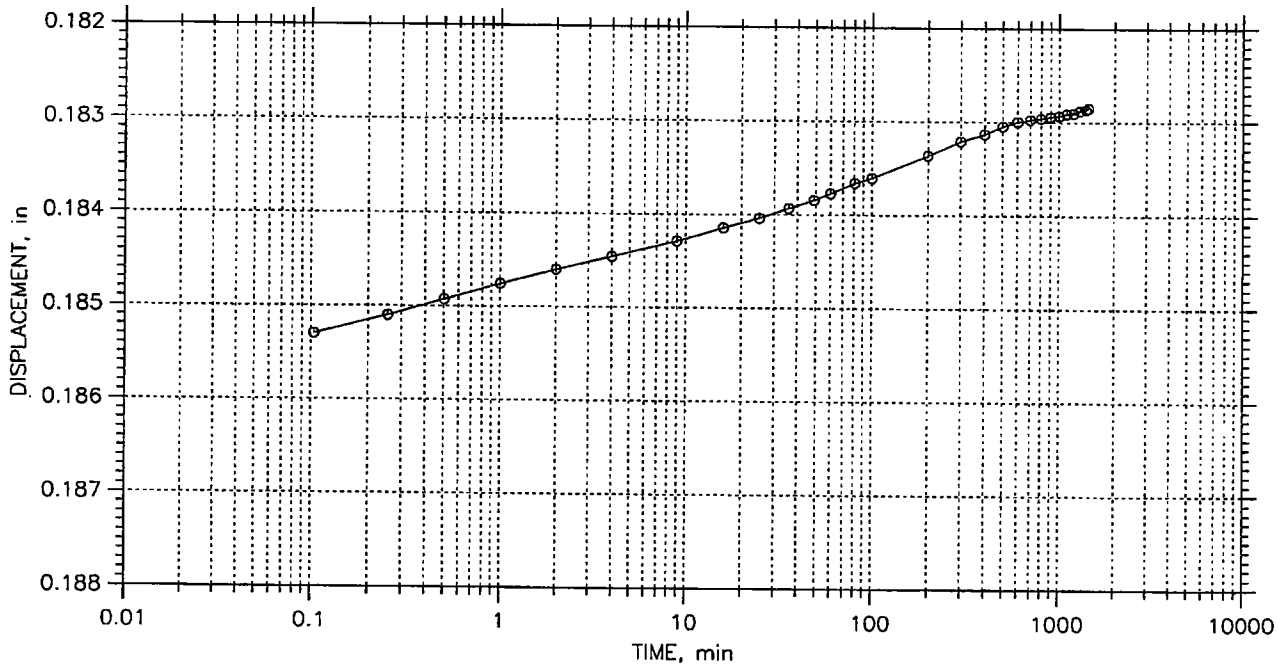
Wed, 30-AUG-2006 15:10:52

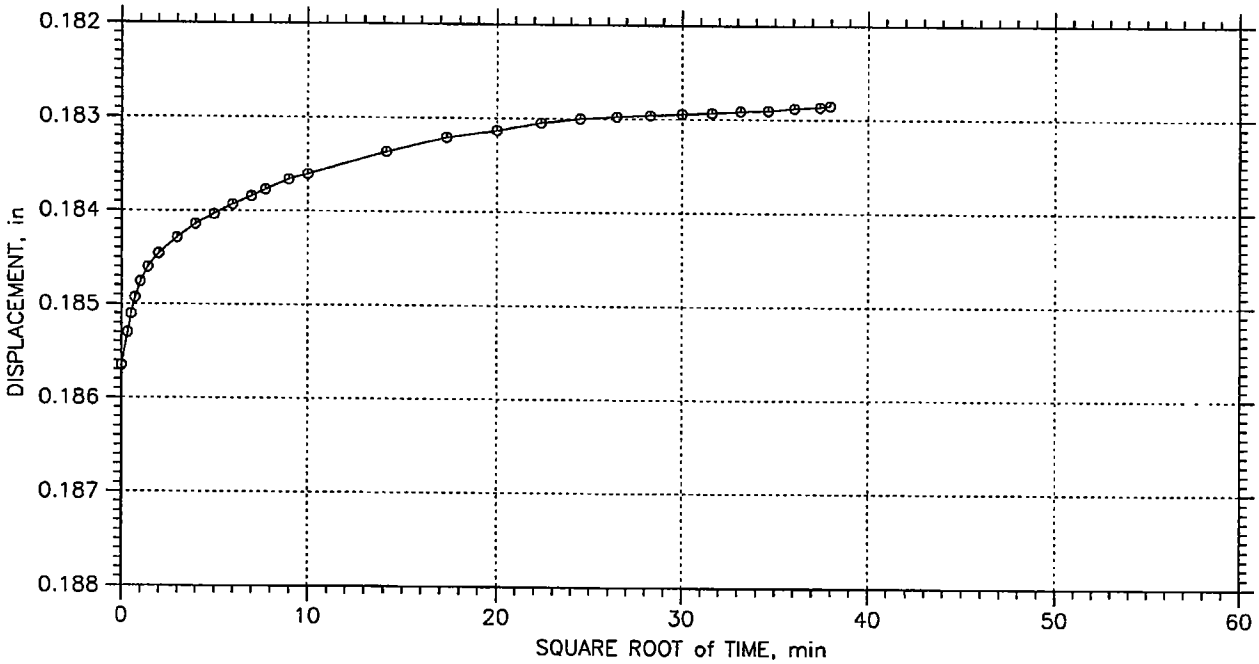
CONSOLIDATION TEST DATA

TIME CURVES

Step: 7 of 12

Stress: 0.5 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

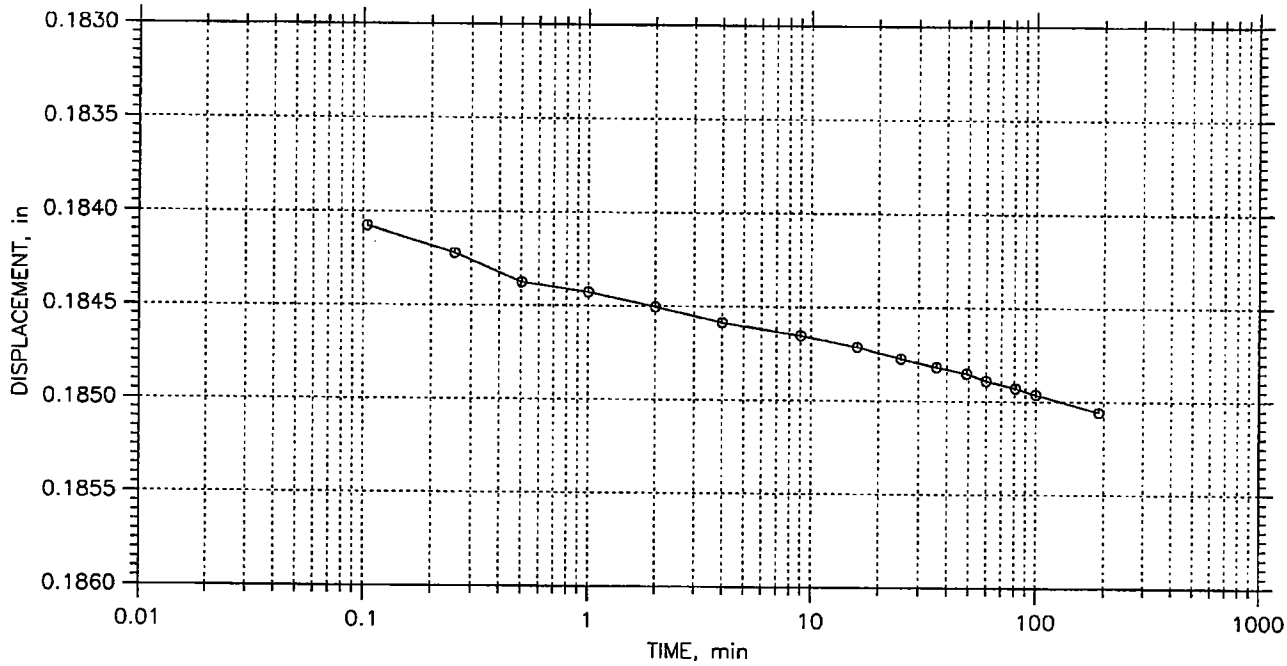
Wed, 30-AUG-2006 15:10:52

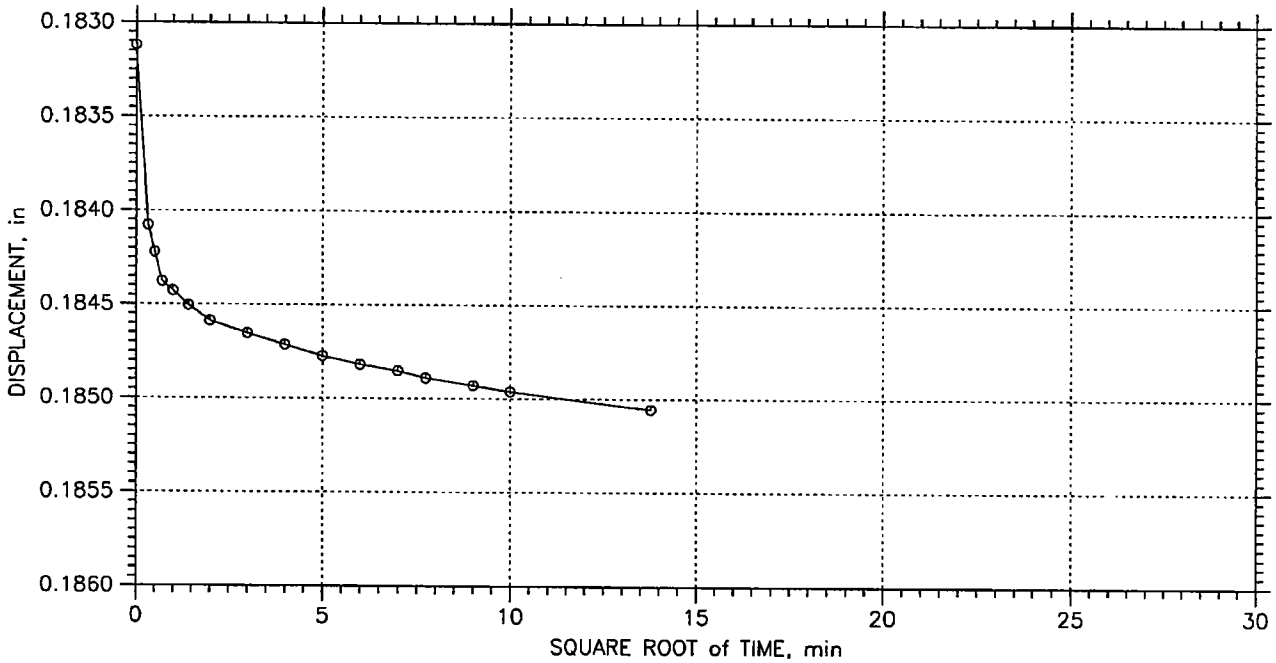
CONSOLIDATION TEST DATA

TIME CURVES

Step: 8 of 12

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

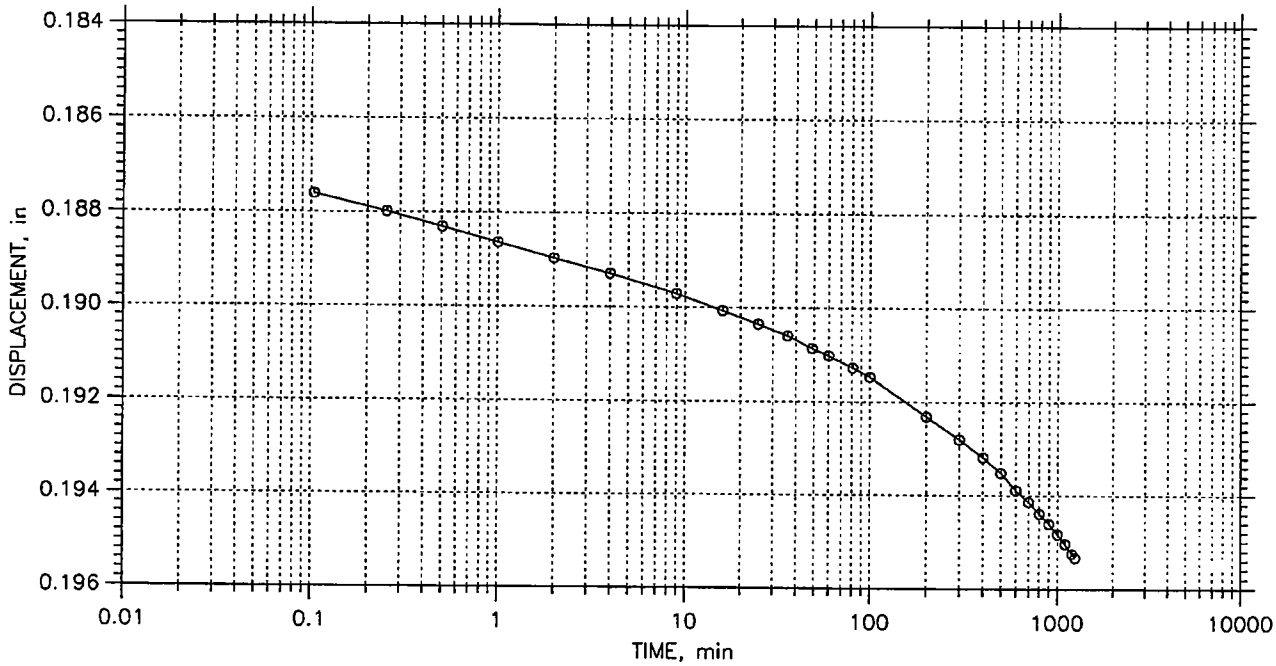
Wed, 30-AUG-2006 15:10:53

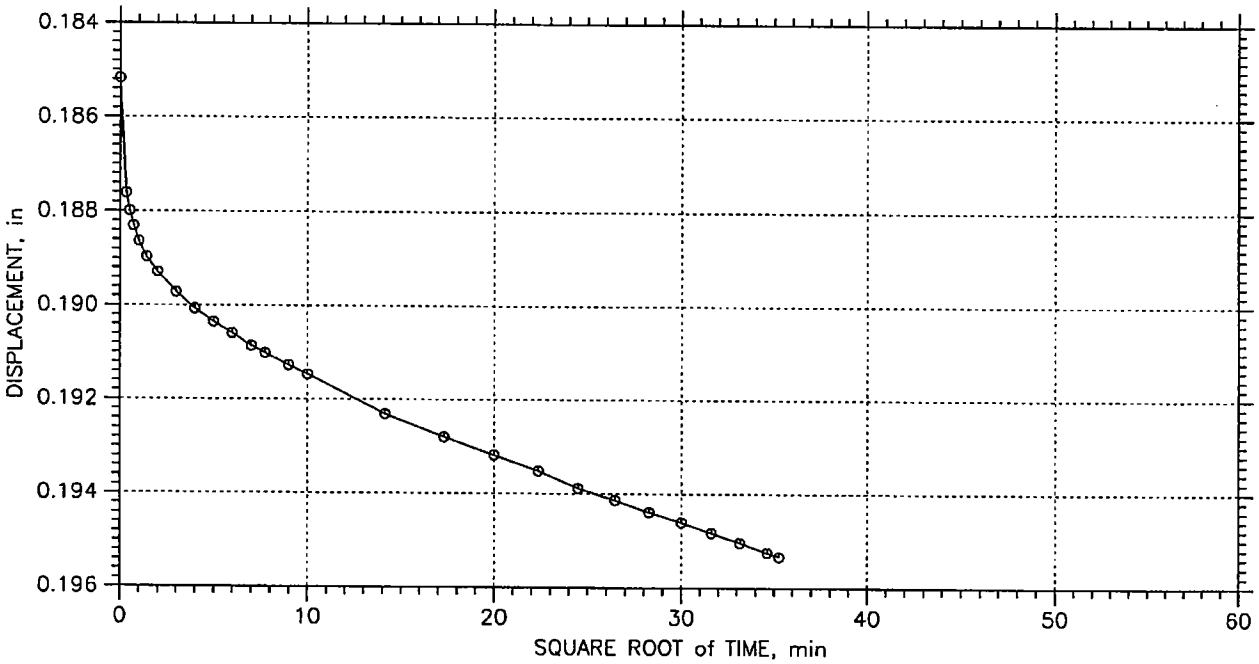
CONSOLIDATION TEST DATA

TIME CURVES

Step: 9 of 12

Stress: 2. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

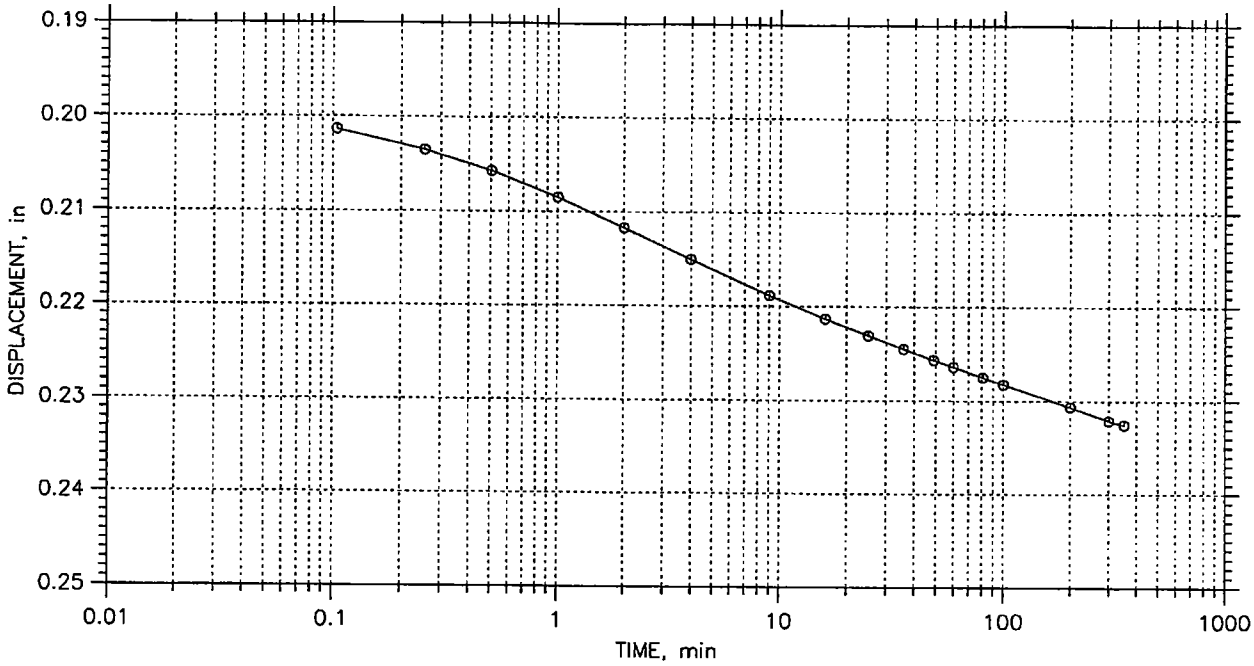
Wed, 30-AUG-2006 15:10:53

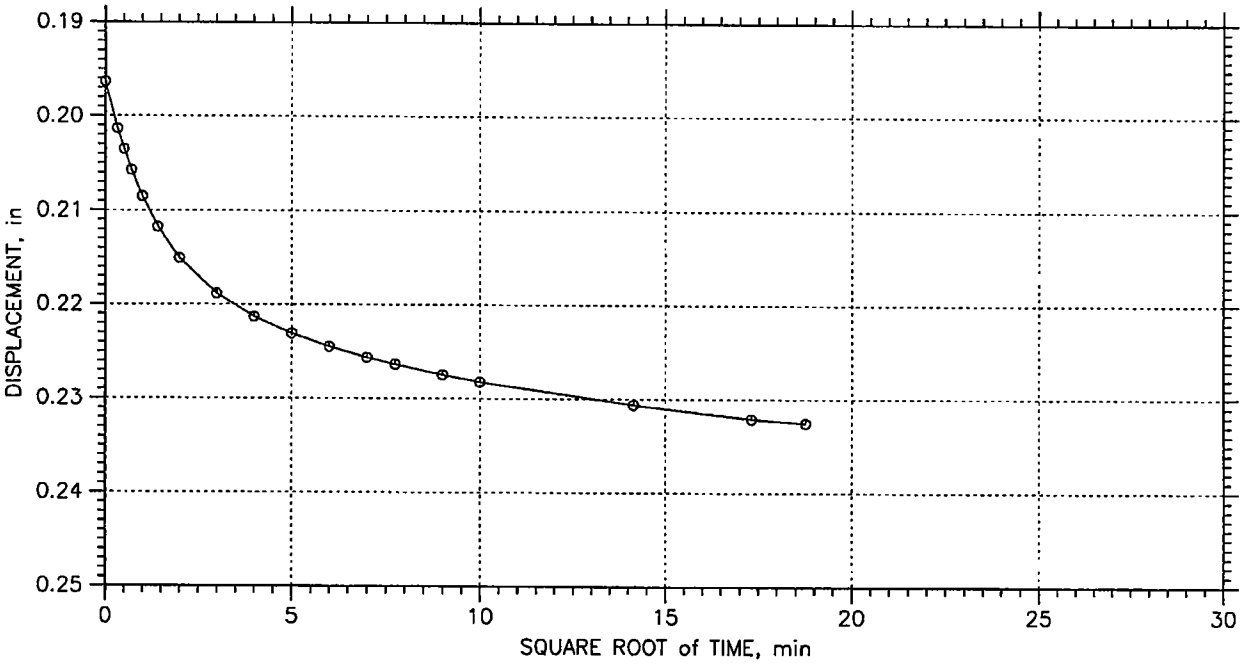
CONSOLIDATION TEST DATA

TIME CURVES

Step: 10 of 12

Stress: 4. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

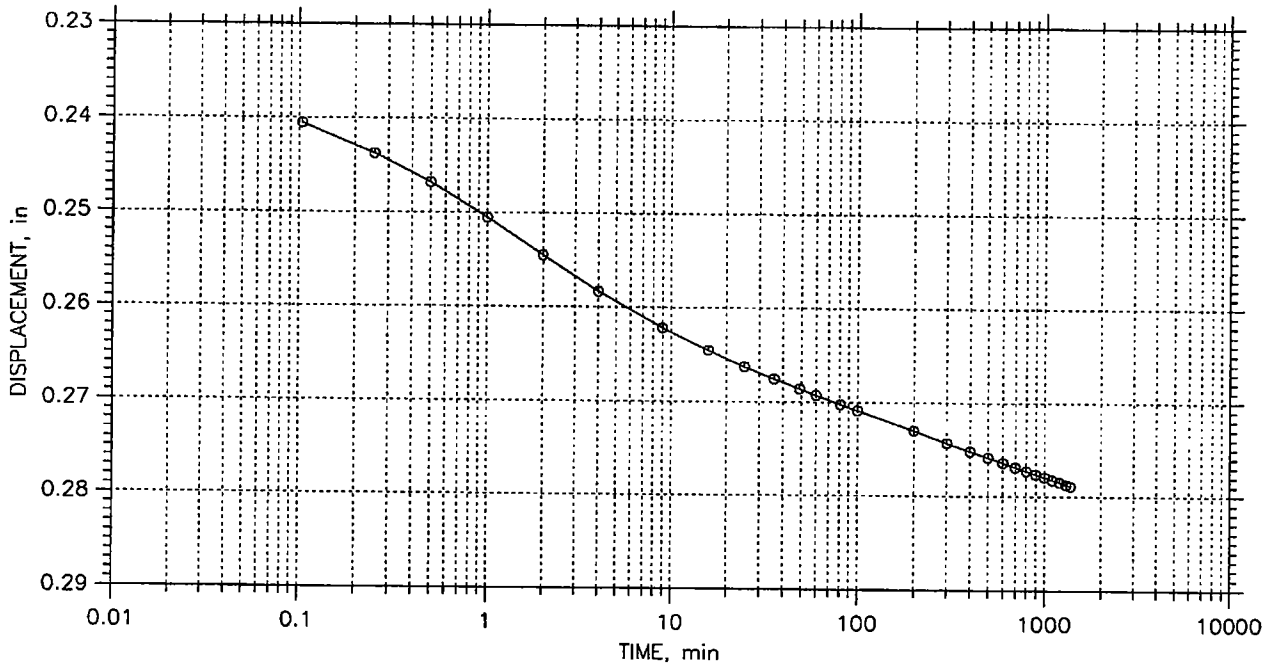
Wed, 30-AUG-2006 15:10:53

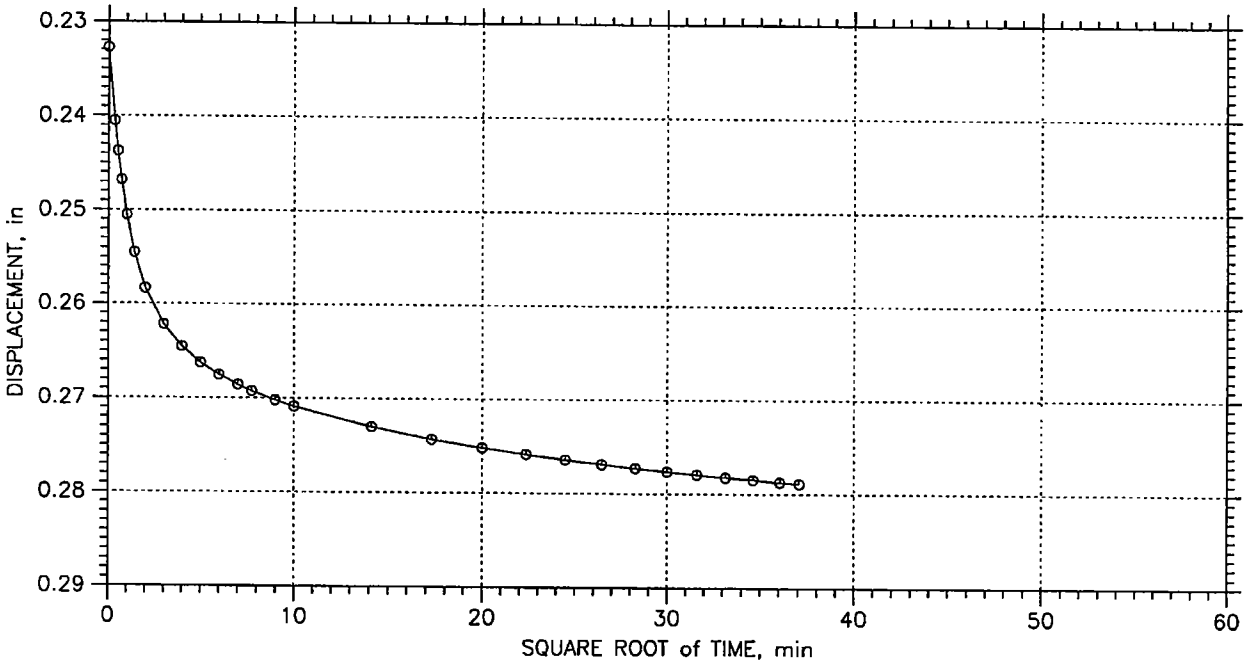
CONSOLIDATION TEST DATA

TIME CURVES

Step: 11 of 12

Stress: 8. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

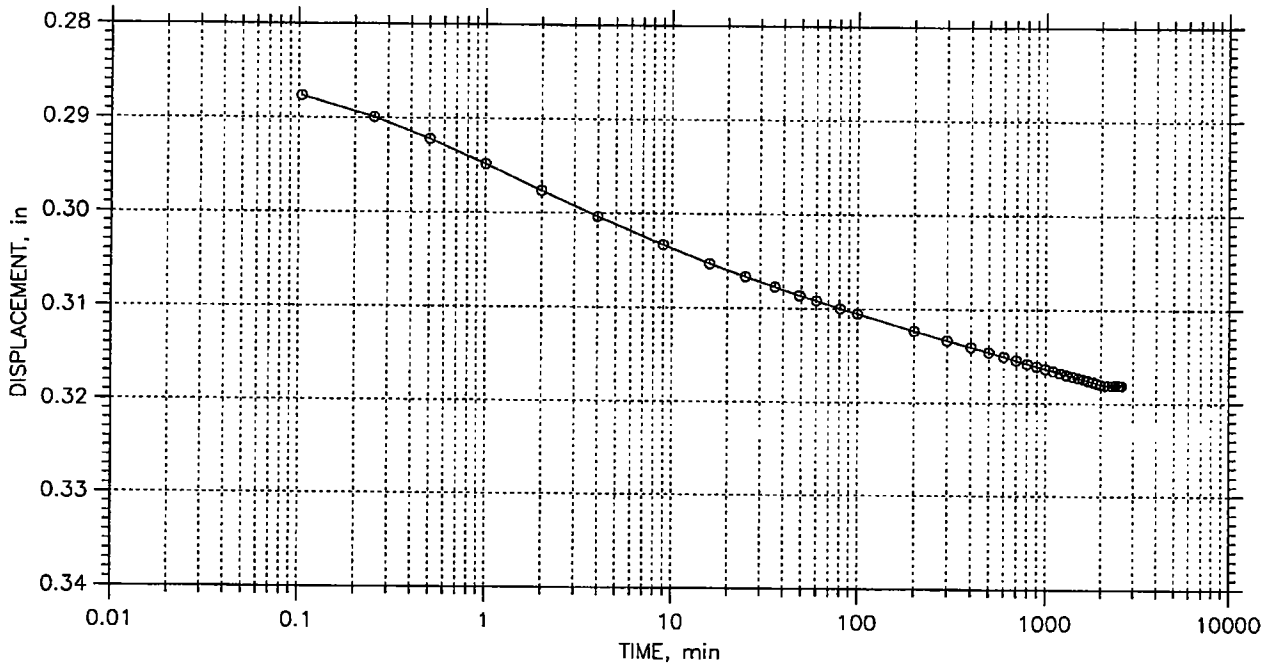
Wed, 30-AUG-2006 15:10:53

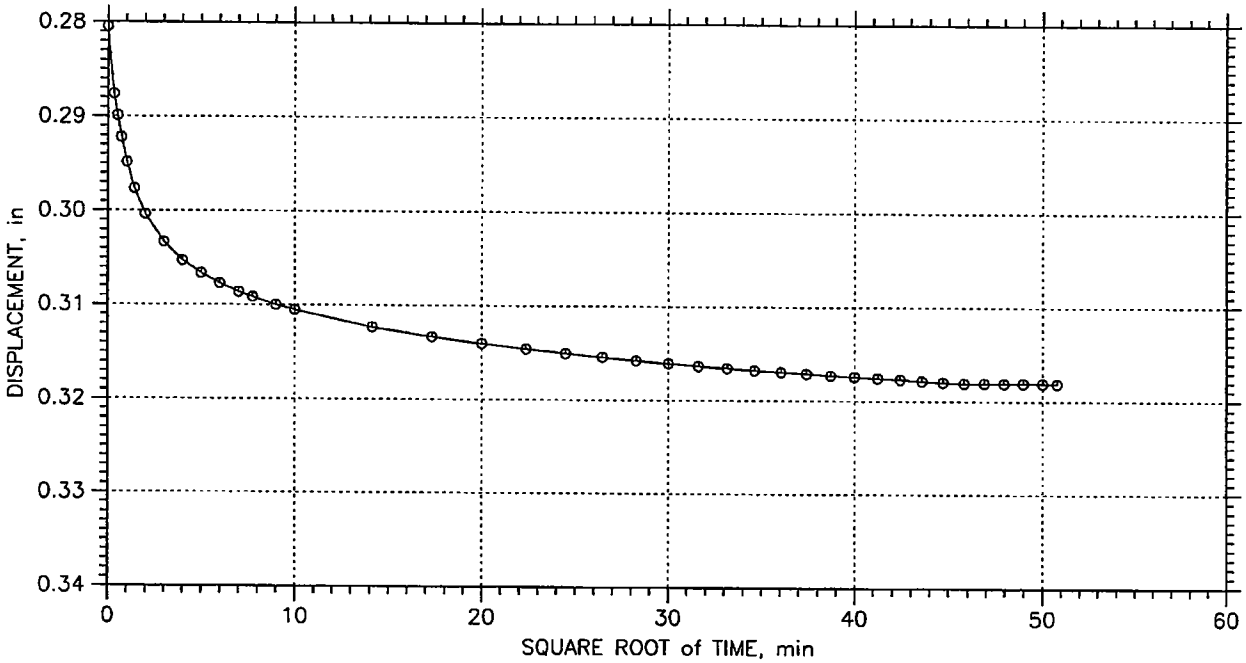
CONSOLIDATION TEST DATA

TIME CURVES

Step: 12 of 12

Stress: 16. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

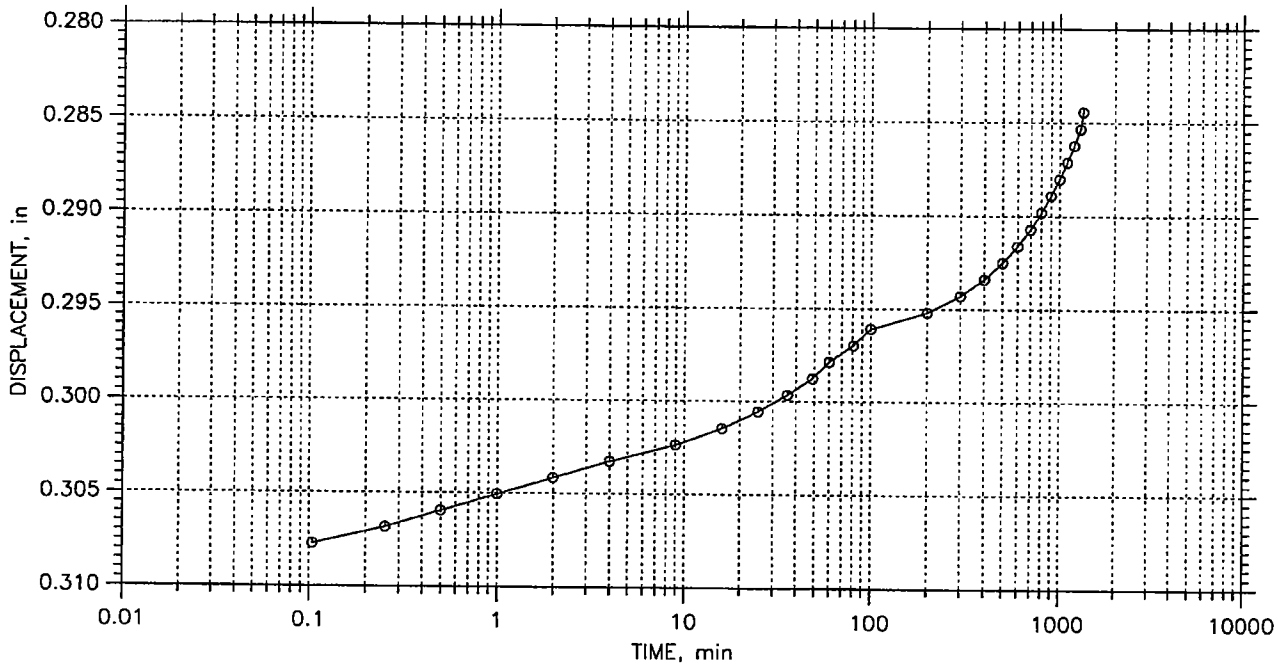
Wed, 30-AUG-2006 15:10:53

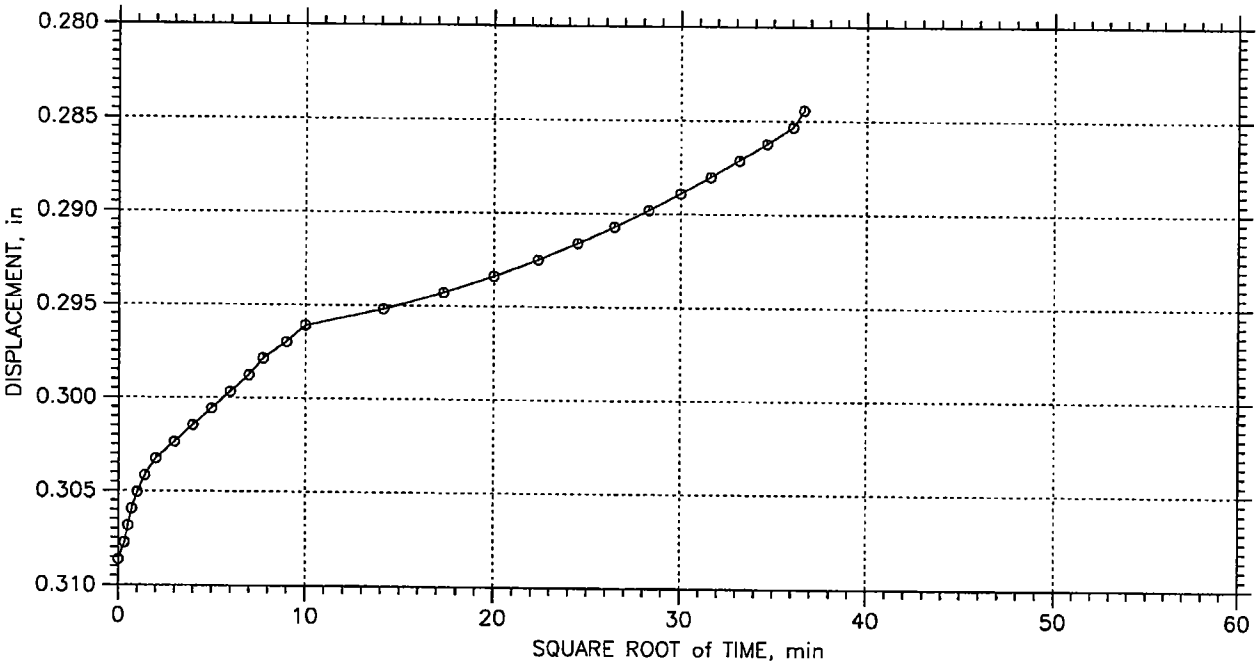
CONSOLIDATION TEST DATA

TIME CURVES

Step: 13 of 16

Stress: 4. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

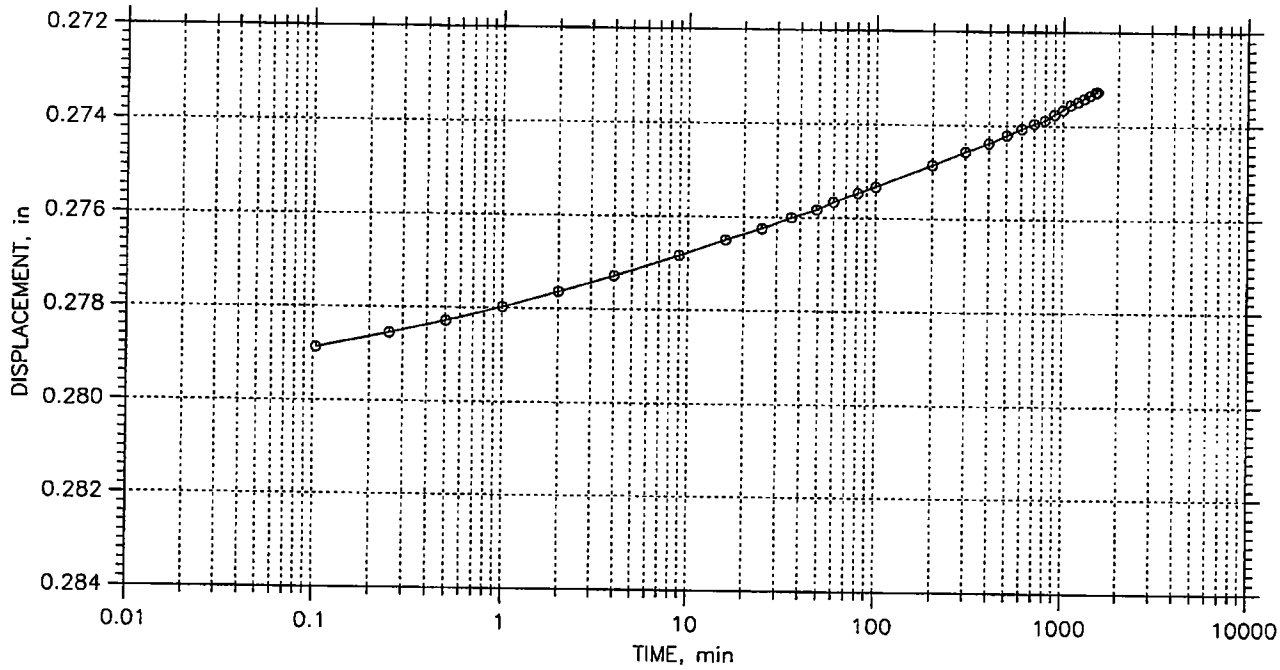
Wed, 30-AUG-2006 15:08:22

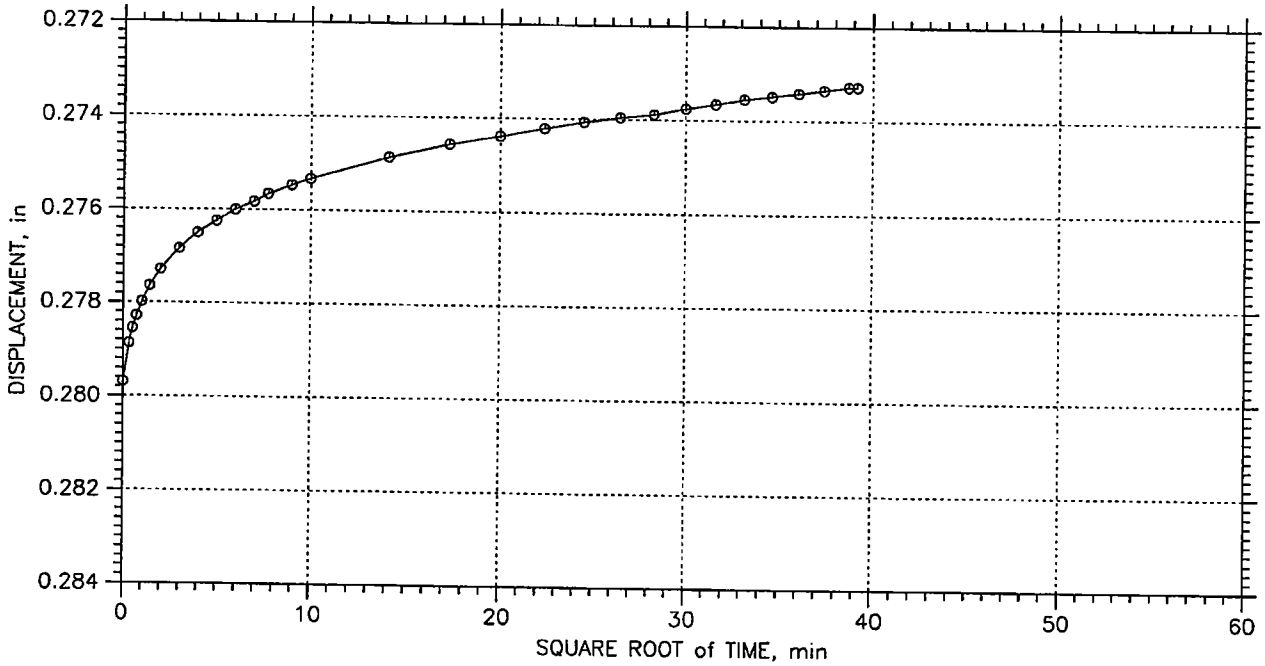
CONSOLIDATION TEST DATA

TIME CURVES

Step: 14 of 16

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

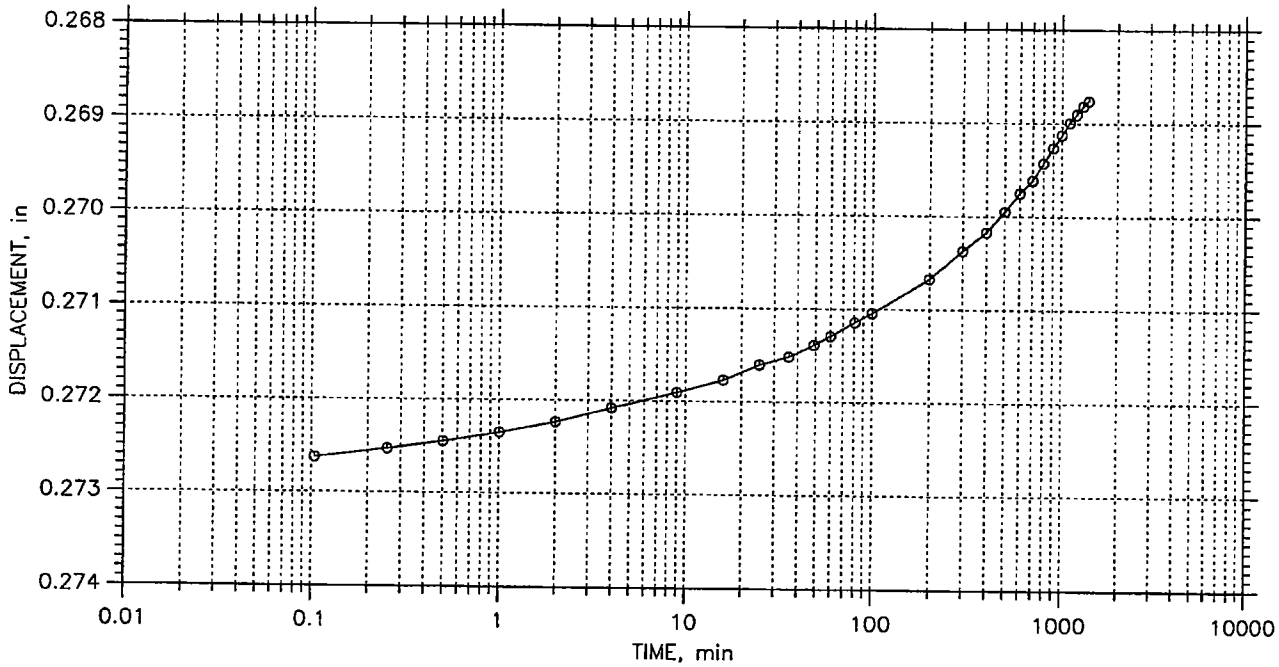
Wed, 30-AUG-2006 15:08:23

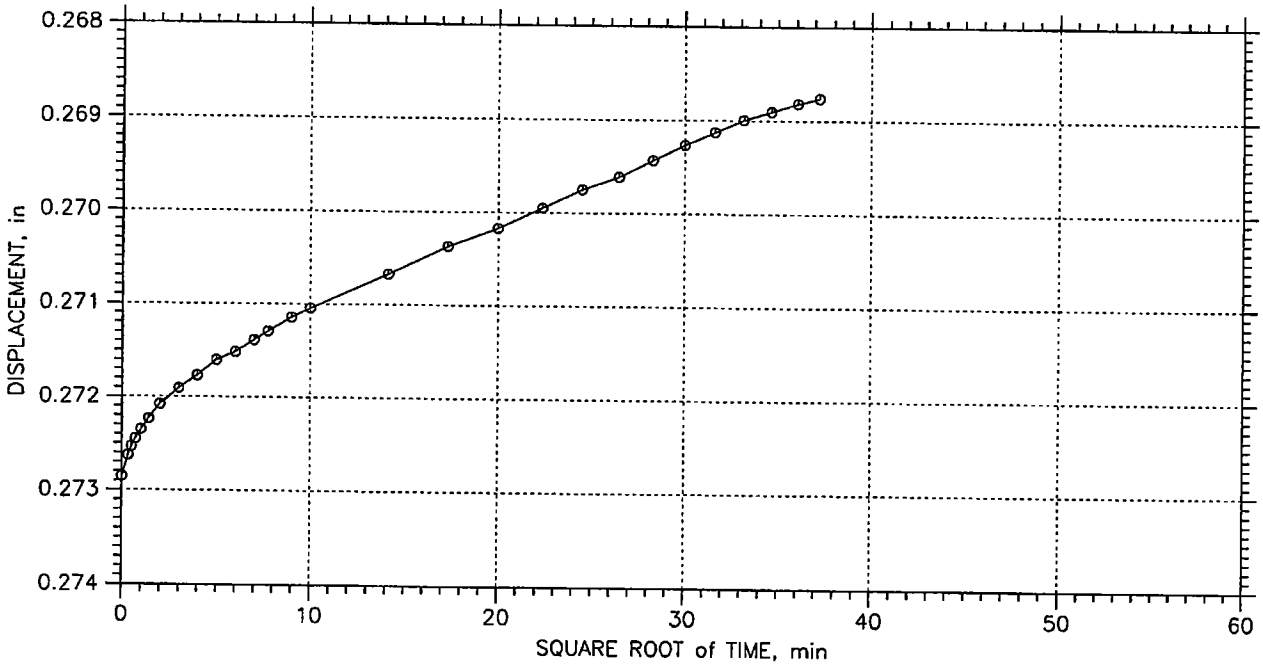
CONSOLIDATION TEST DATA

TIME CURVES

Step: 15 of 16

Stress: 0.5 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

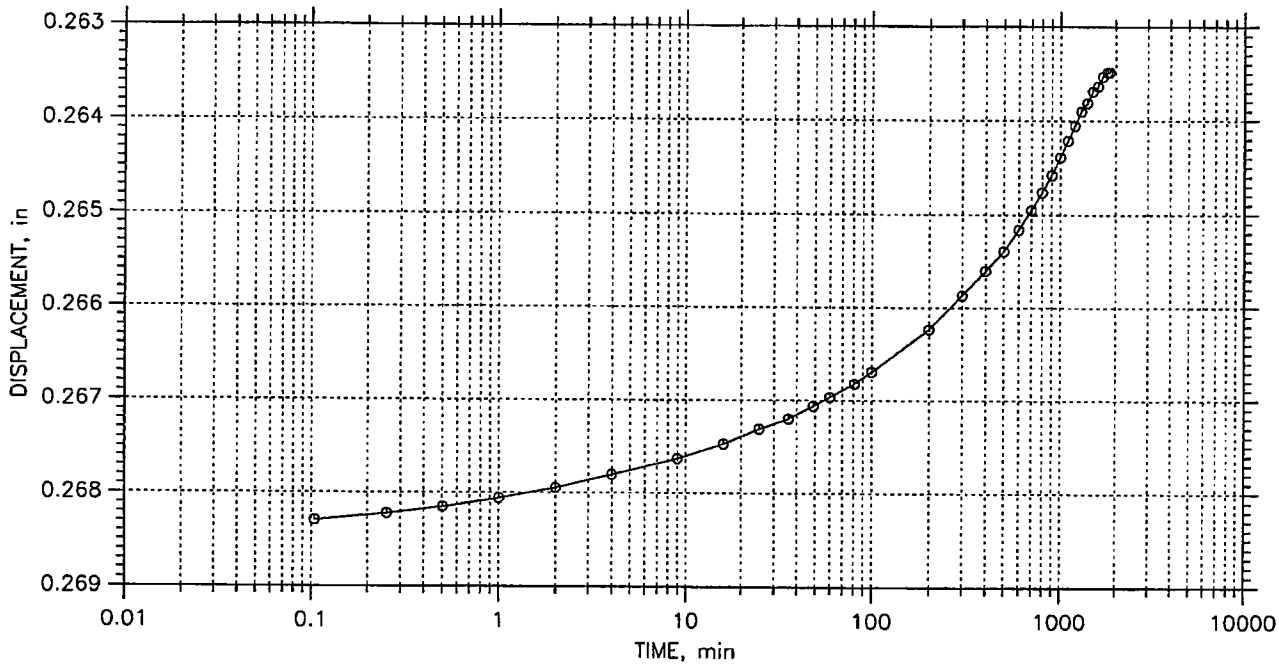
Wed, 30-AUG-2006 15:08:23

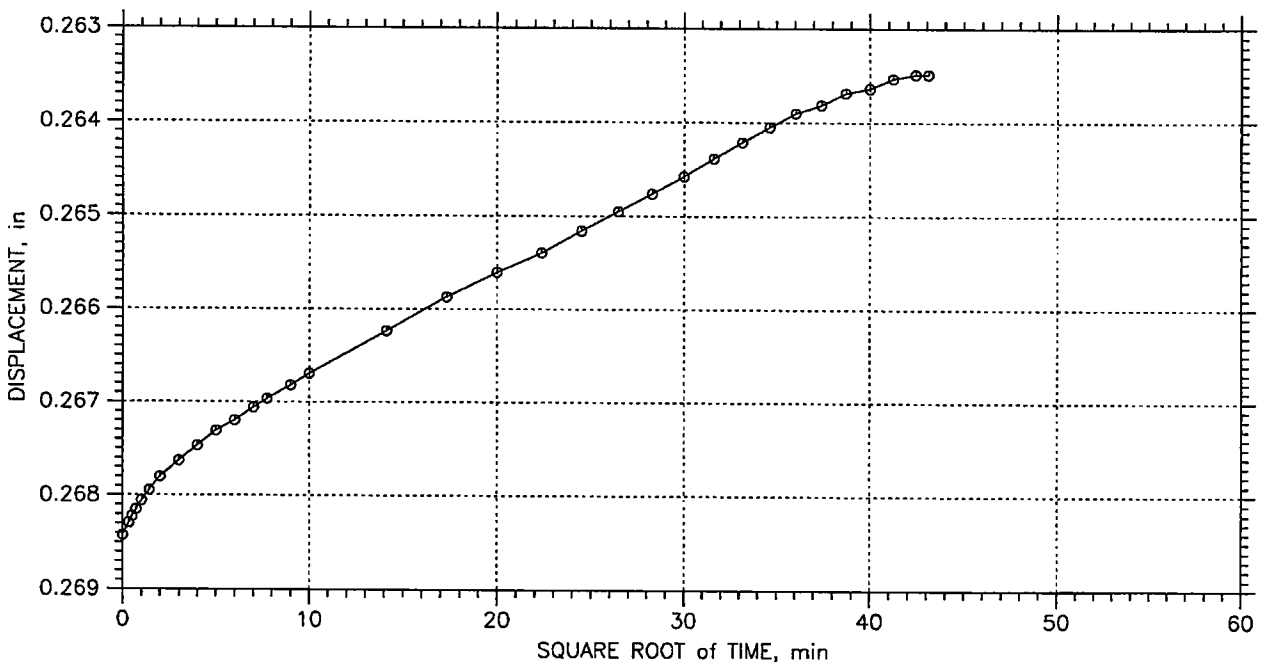
CONSOLIDATION TEST DATA

TIME CURVES

Step: 16 of 16

Stress: 0.25 tsf



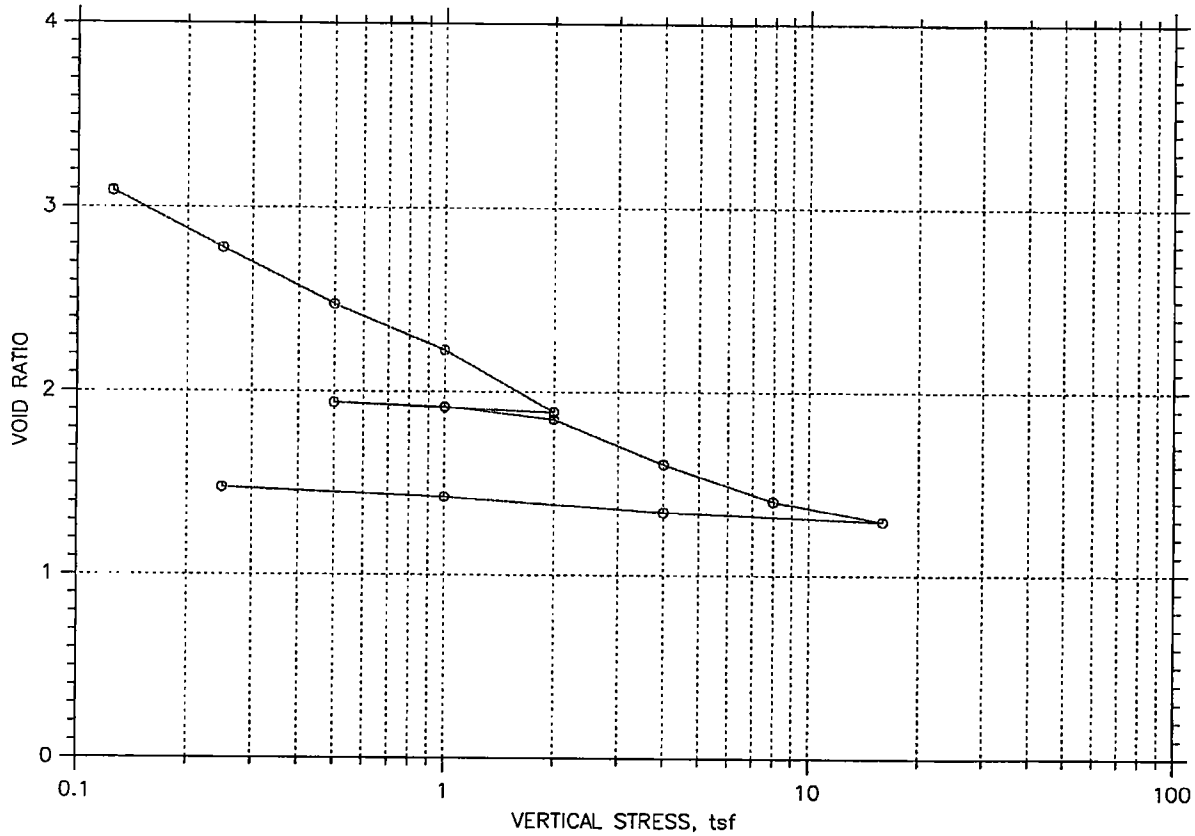


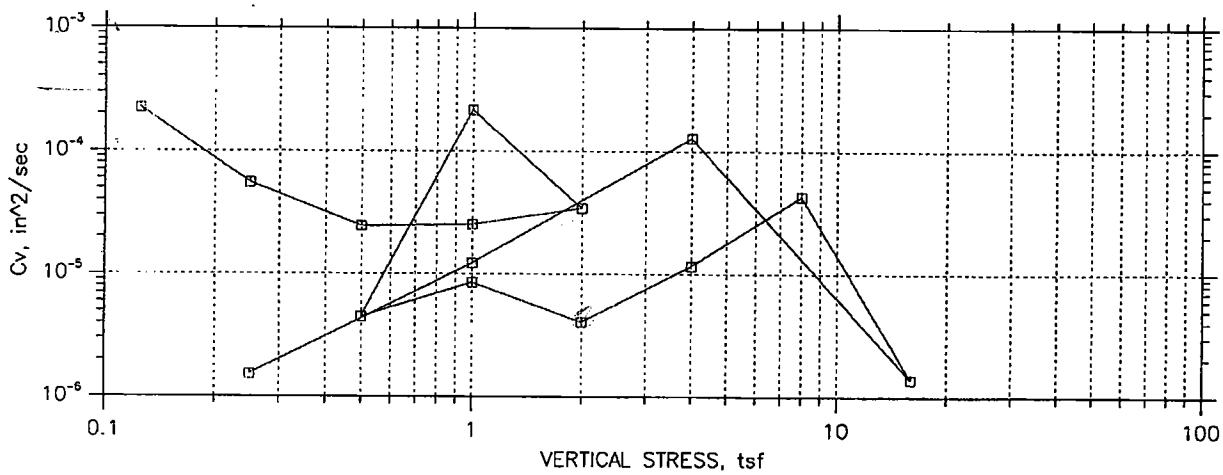
Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-1	Test Date: 8/11/06	Depth:
Test No.: 18ED1	Sample Type: BULK/REMOLD	Elevation:
Description: CLAYEY SAND TRACE SILT TRACE ORGANICS - BROWN (SC)		
Remarks: Cc = 0.59 Ccr = 0.04 TEST PERFORMED AS PER ASTM D 2435		

Wed, 30-AUG-2006 15:08:23

CONSOLIDATION TEST DATA

SUMMARY REPORT





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6 DS-11	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT TRACE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

Thu, 30-NOV-2006 16:53:51

CONSOLIDATION TEST DATA

Project: LOWER FOX RIVER
Boring No.:
Sample No.: ED-6
Test No.: 18ED6

Location:
Tested By: MJS
Test Date: 10/24/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT RIVER SEDIMENT TRACE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435

Estimated Specific Gravity: 2.50
Initial Void Ratio: 3.54
Final Void Ratio: 1.48

Liquid Limit: 0
Plastic Limit: 0
Plasticity Index: 0

Initial Height: 19.05 mm
Specimen Diameter: 63.50 mm

	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
Container ID	A-6	RING	RING	RING
Wt. Container + Wet Soil, gm	115.48	153.43	127.28	127.28
Wt. Container + Dry Soil, gm	66.88	107.62	107.62	107.62
Wt. Container, gm	31.3	74.38	74.38	74.38
Wt. Dry Soil, gm	35.58	33.24	33.24	33.24
Water Content, %	136.59	137.82	59.15	59.15
Void Ratio	---	3.54	1.48	---
Degree of Saturation, %	---	97.40	100.14	---
Dry Unit Weight, pcf	---	34.396	63.017	---

CONSOLIDATION TEST DATA

Project: LOWER FOX RIVER
Boring No.:
Sample No.: ED-6
Test No.: 18ED6

Location:
Tested By: MJS
Test Date: 10/24/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT RIVER SEDIMENT TRACE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435

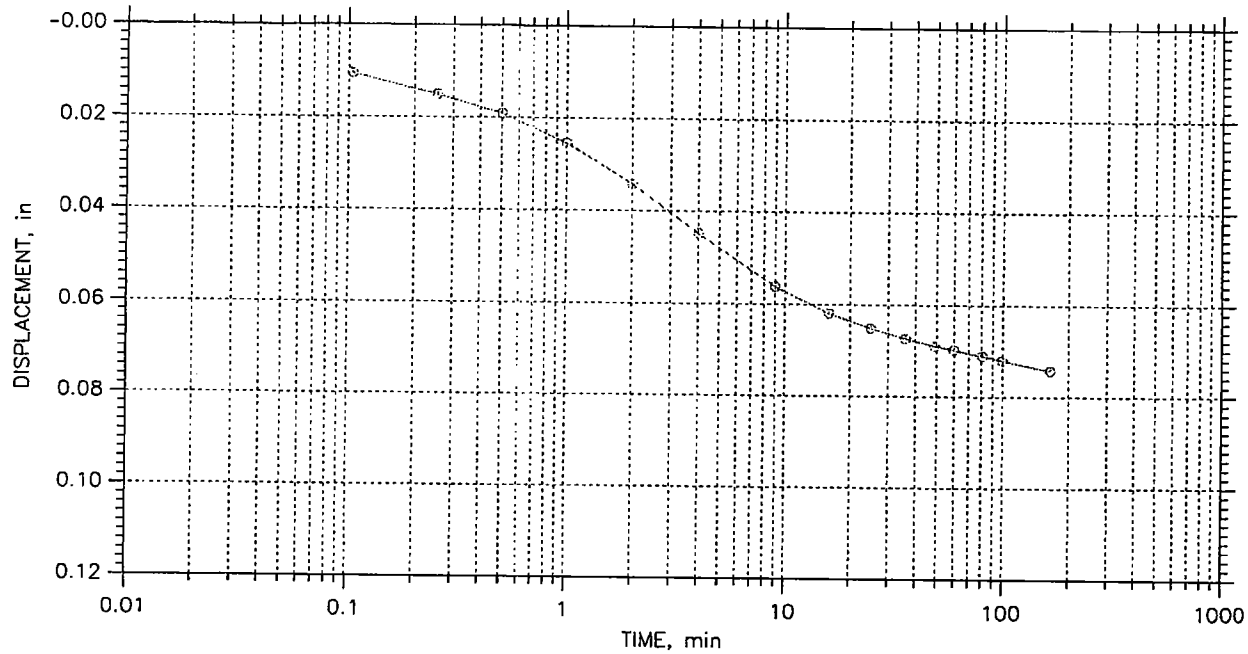
	Applied Stress tsf	Final Displacement mm	Void Ratio	Strain at End %	T50 Fitting Sq.Rt. min	T50 Fitting Log min	Coefficient of Consolidation Sq.Rt. in^2/sec	Coefficient of Consolidation Log in^2/sec	Coefficient of Consolidation Ave. in^2/sec
1	0.125	1.888	3.088	9.91	2.1	1.7	1.99e-004	2.50e-004	2.22e-004
2	0.25	3.182	2.780	16.70	7.7	4.9	4.53e-005	7.05e-005	5.52e-005
3	0.5	4.465	2.474	23.44	19.1	5.1	1.54e-005	5.78e-005	2.44e-005
4	1	5.513	2.224	28.94	14.5	5.5	1.74e-005	4.59e-005	2.52e-005
5	2	6.927	1.888	36.36	7.6	4.6	2.74e-005	4.52e-005	3.41e-005
6	1	6.832	1.910	35.86	1.4	0.4	1.36e-004	4.96e-004	2.14e-004
7	0.5	6.713	1.938	35.24	43.1	0.0	4.46e-006	0.00e+000	4.46e-006
8	1	6.801	1.918	35.70	22.7	0.0	8.49e-006	0.00e+000	8.49e-006
9	2	7.086	1.850	37.19	46.2	0.0	4.04e-006	0.00e+000	4.04e-006
10	4	8.11	1.606	42.57	22.8	6.3	7.35e-006	2.66e-005	1.15e-005
11	8	8.956	1.404	47.01	3.8	2.8	3.70e-005	5.03e-005	4.27e-005
12	16	9.408	1.297	49.38	90.3	0.0	1.37e-006	0.00e+000	1.37e-006
13	4	9.208	1.344	48.33	0.9	0.0	1.27e-004	0.00e+000	1.27e-004
14	1	8.864	1.426	46.53	15.2	5.9	8.40e-006	2.17e-005	1.21e-005
15	0.25	8.652	1.477	45.42	89.0	0.0	1.52e-006	0.00e+000	1.52e-006

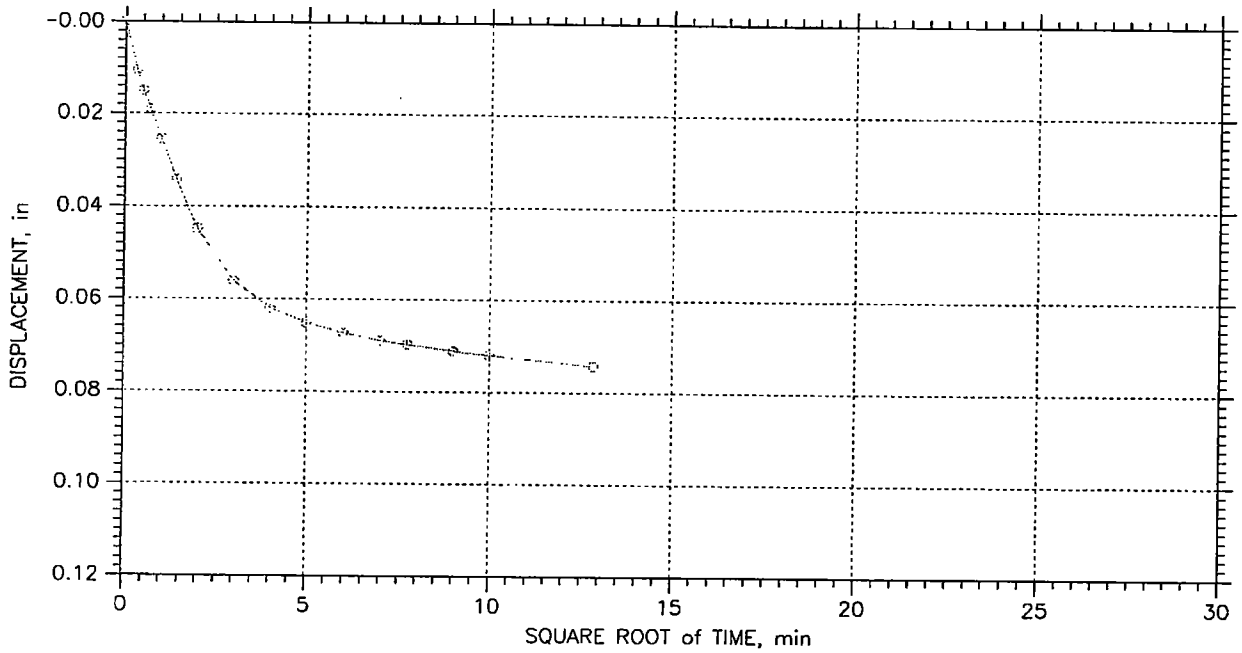
CONSOLIDATION TEST DATA

TIME CURVES

Step: 1 of 12

Stress: 0.125 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

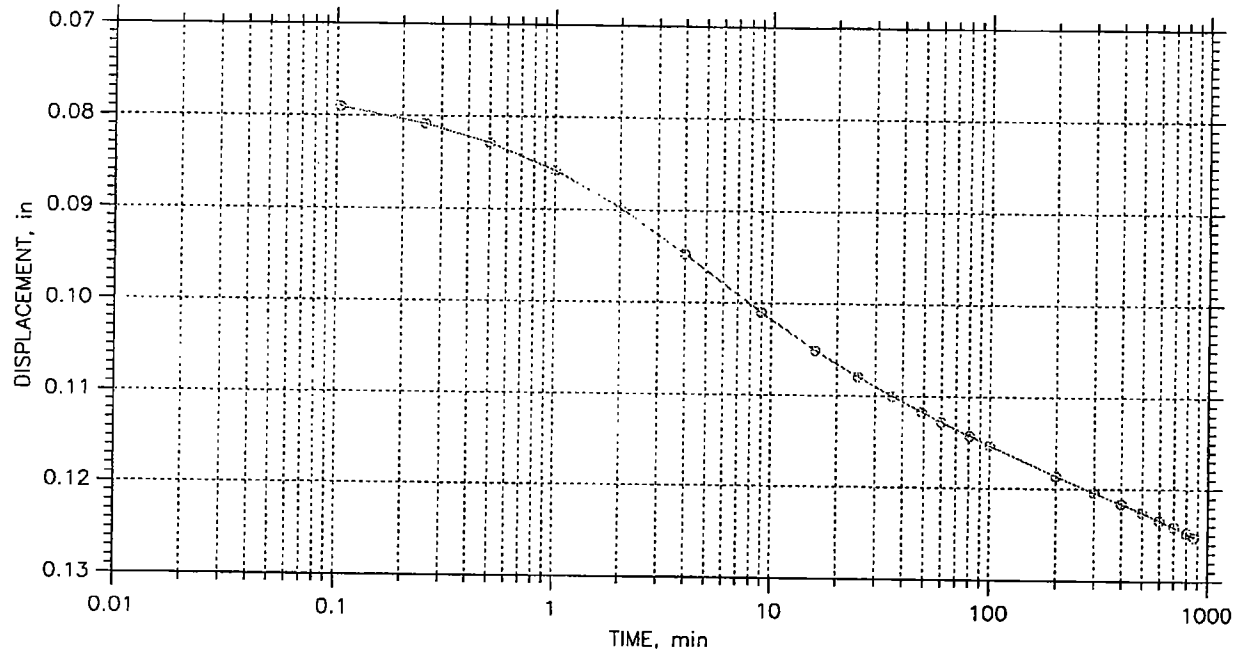
Thu, 30-NOV-2006 17:00:42

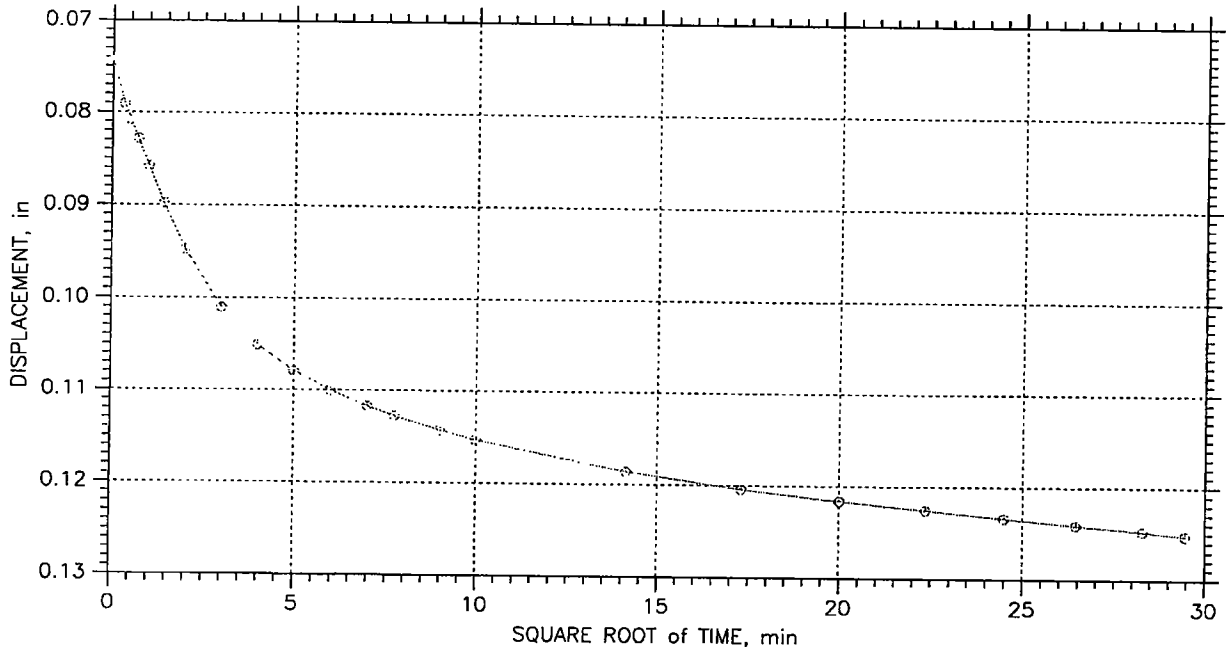
CONSOLIDATION TEST DATA

TIME CURVES

Step: 2 of 12

Stress: 0.25 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

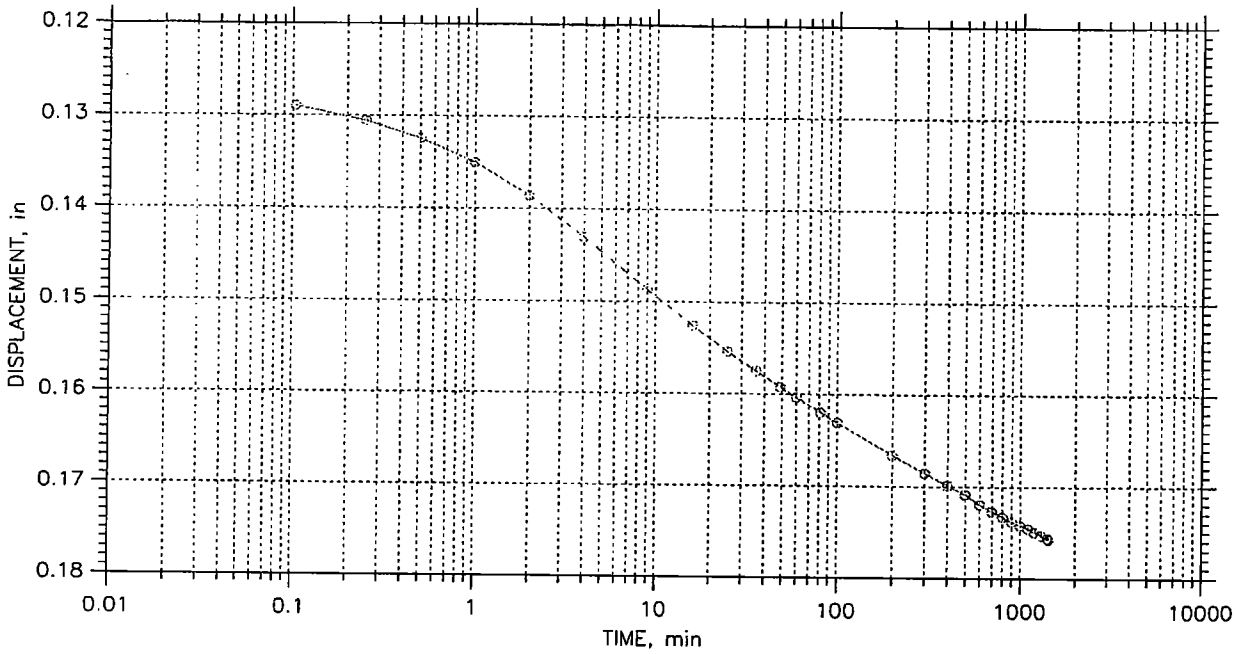
Thu, 30-NOV-2006 17:00:42

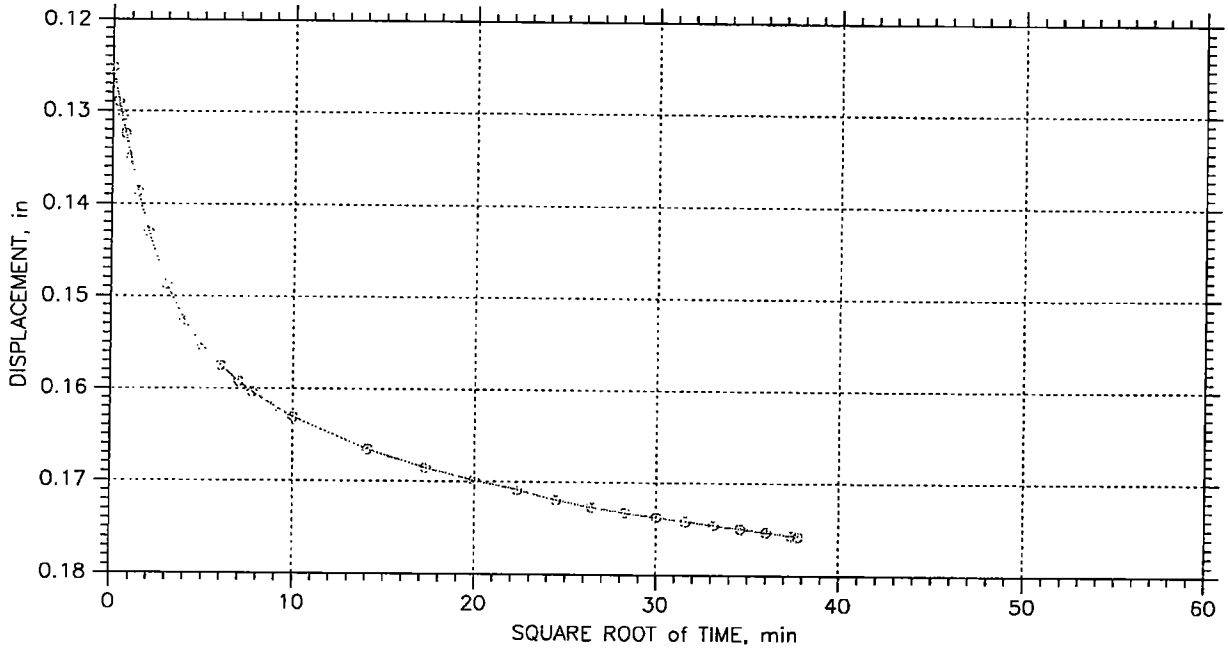
CONSOLIDATION TEST DATA

TIME CURVES

Step: 3 of 12

Stress: 0.5 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

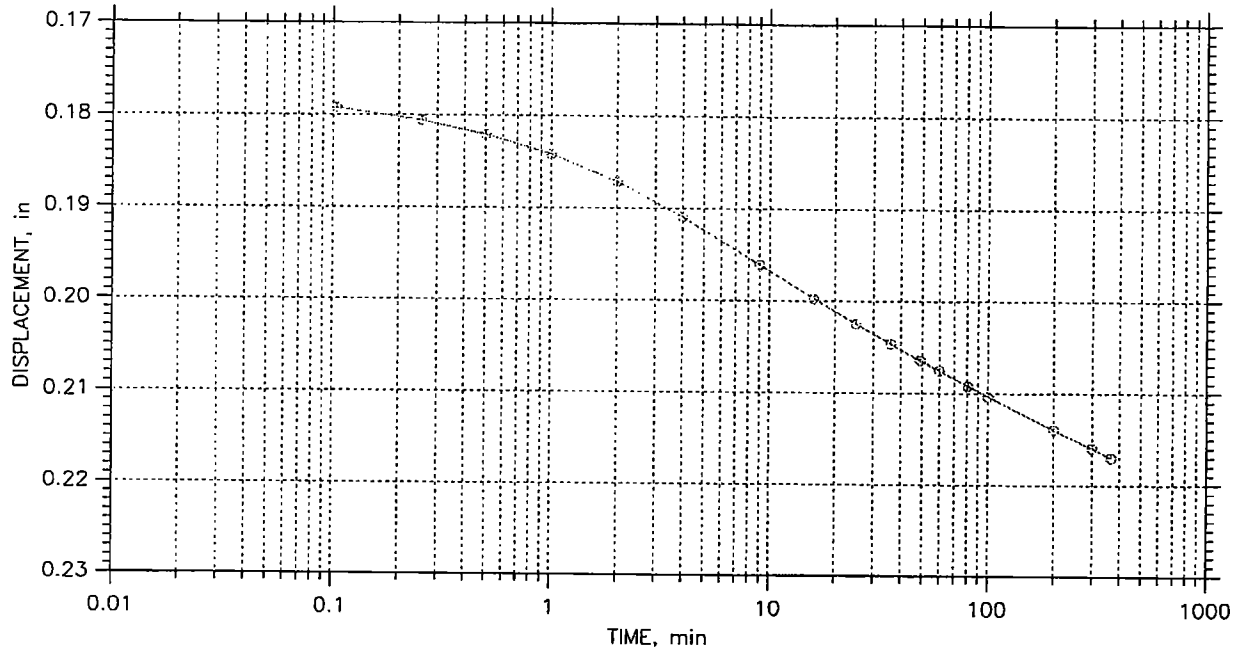
Thu, 30-NOV-2006 17:00:42

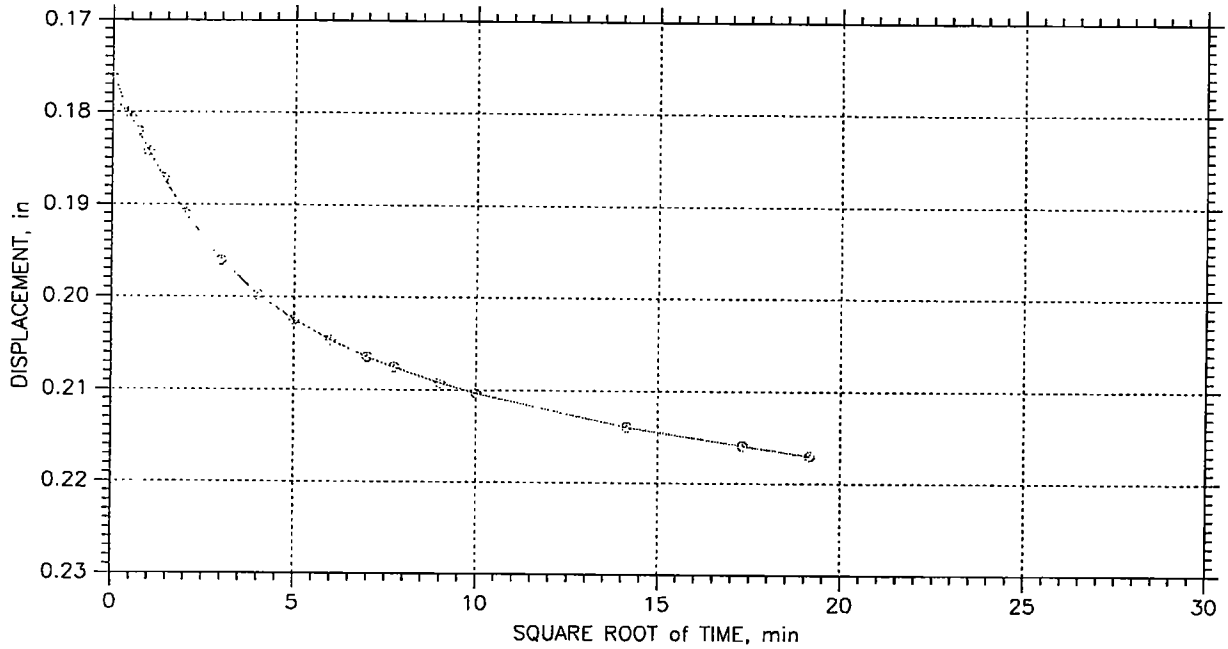
CONSOLIDATION TEST DATA

TIME CURVES

Step: 4 of 12

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

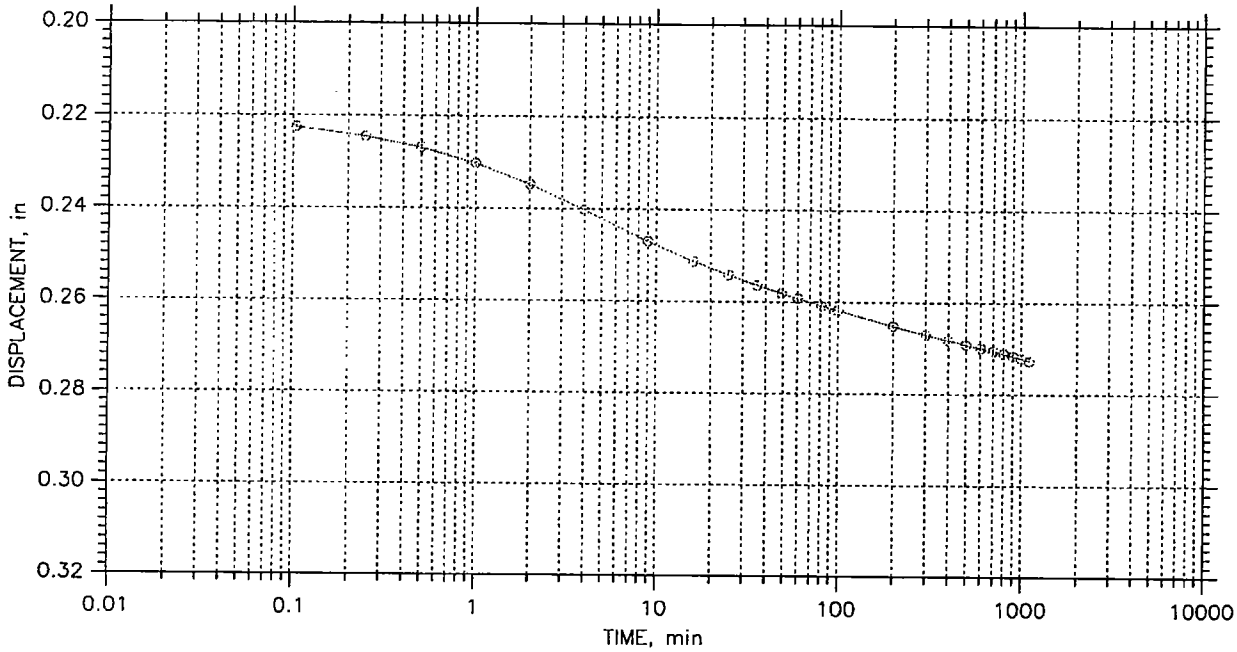
Thu, 30-NOV-2006 17:00:42

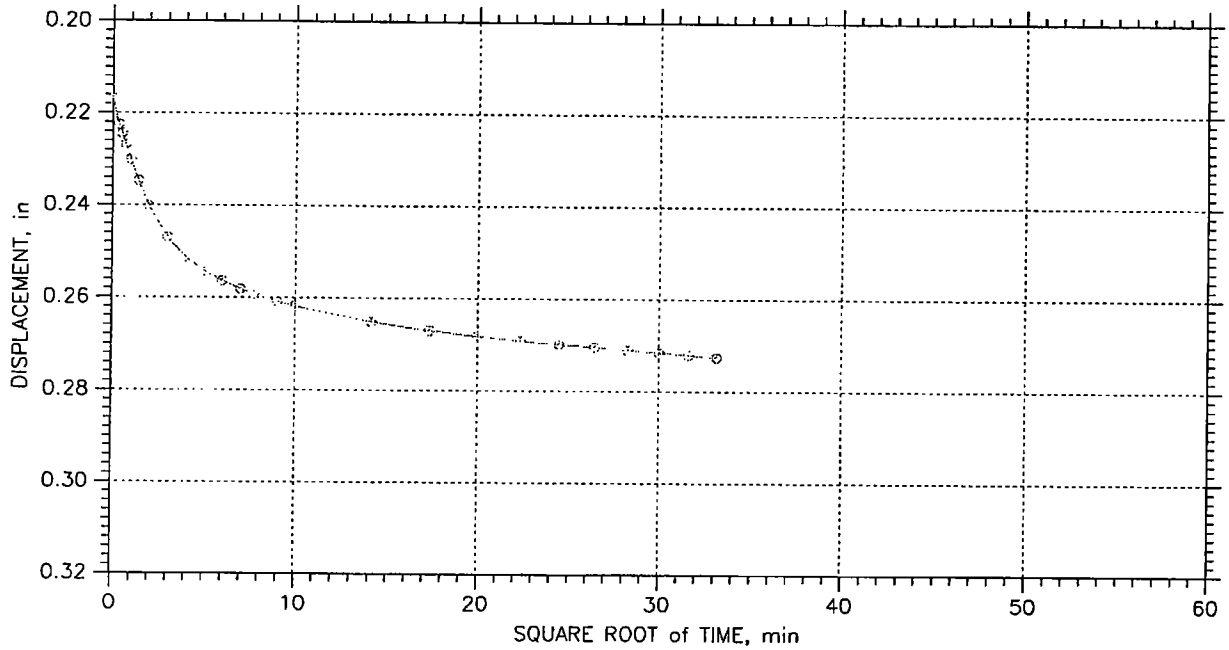
CONSOLIDATION TEST DATA

TIME CURVES

Step: 5 of 12

Stress: 2. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

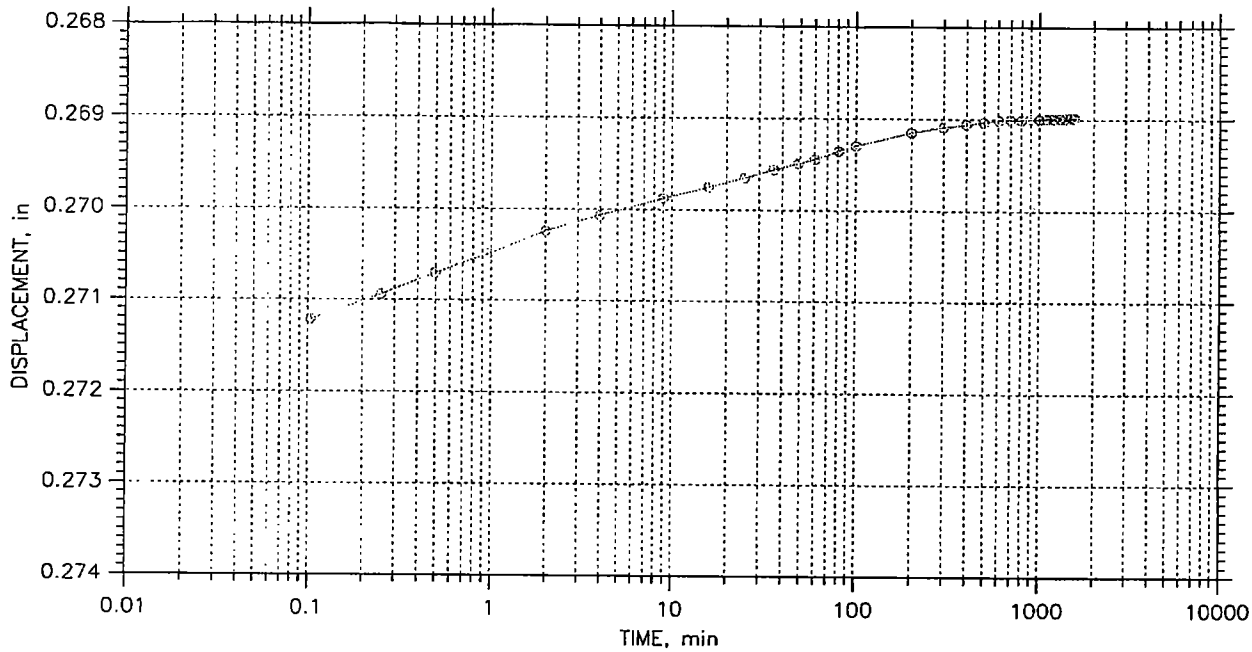
Thu, 30-NOV-2006 17:00:42

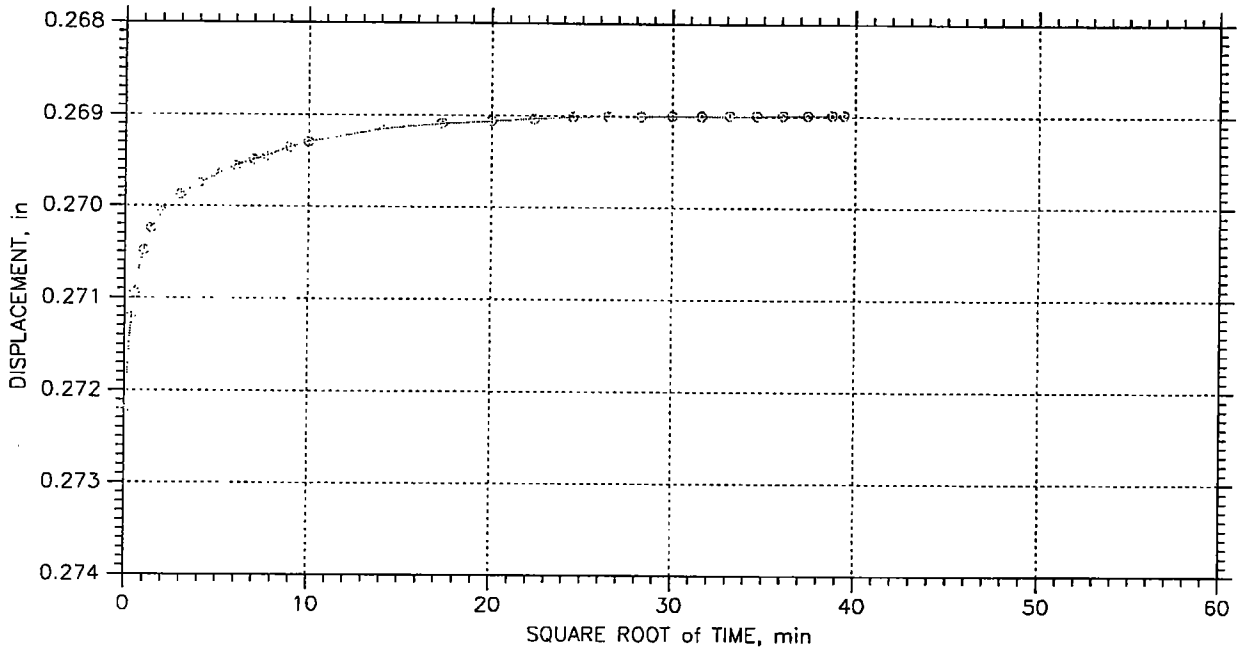
CONSOLIDATION TEST DATA

TIME CURVES

Step: 6 of 12

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

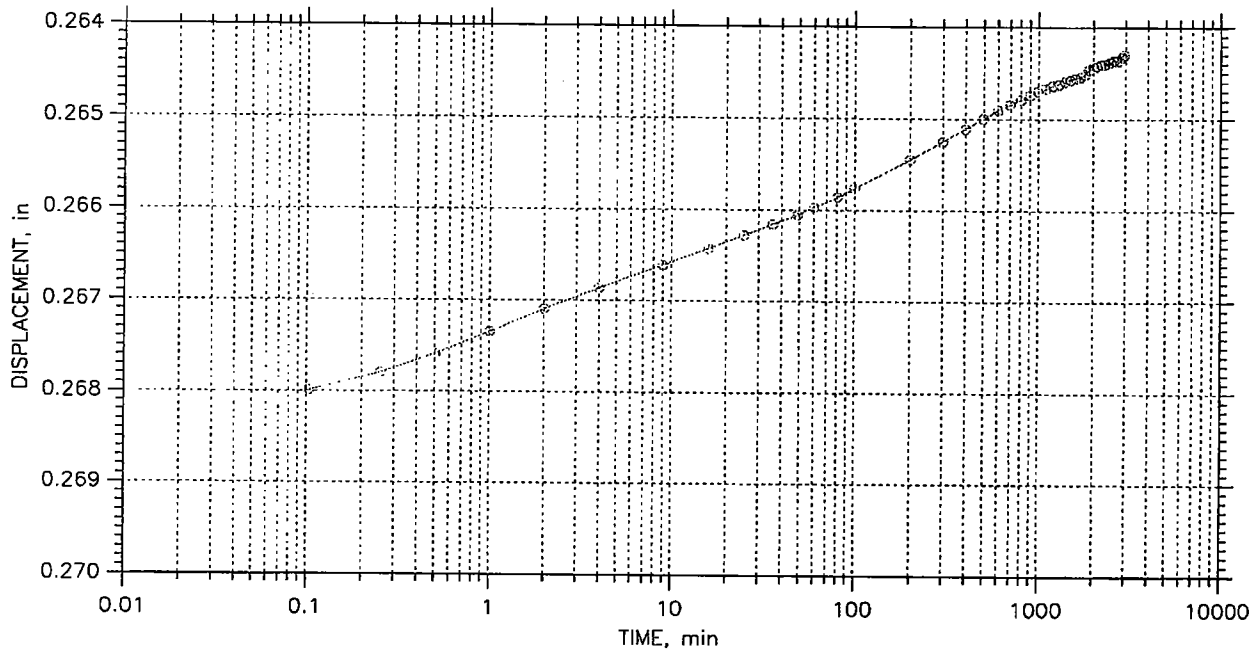
Thu, 30-NOV-2006 17:00:42

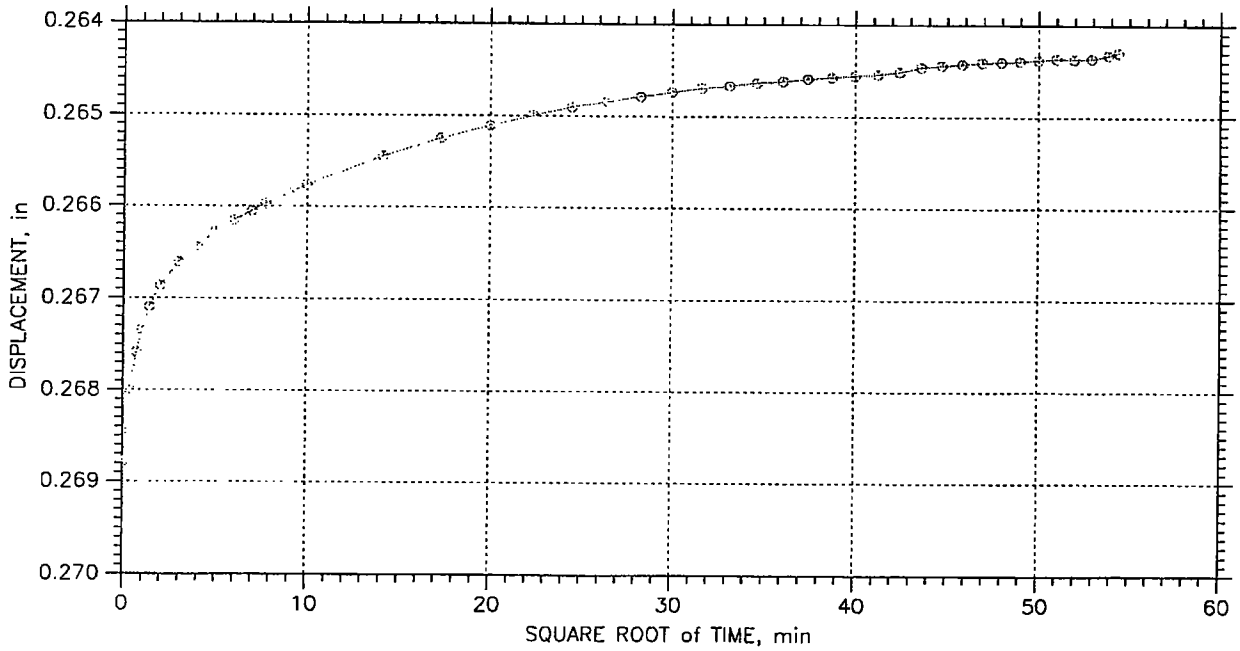
CONSOLIDATION TEST DATA

TIME CURVES

Step: 7 of 12

Stress: 0.5 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

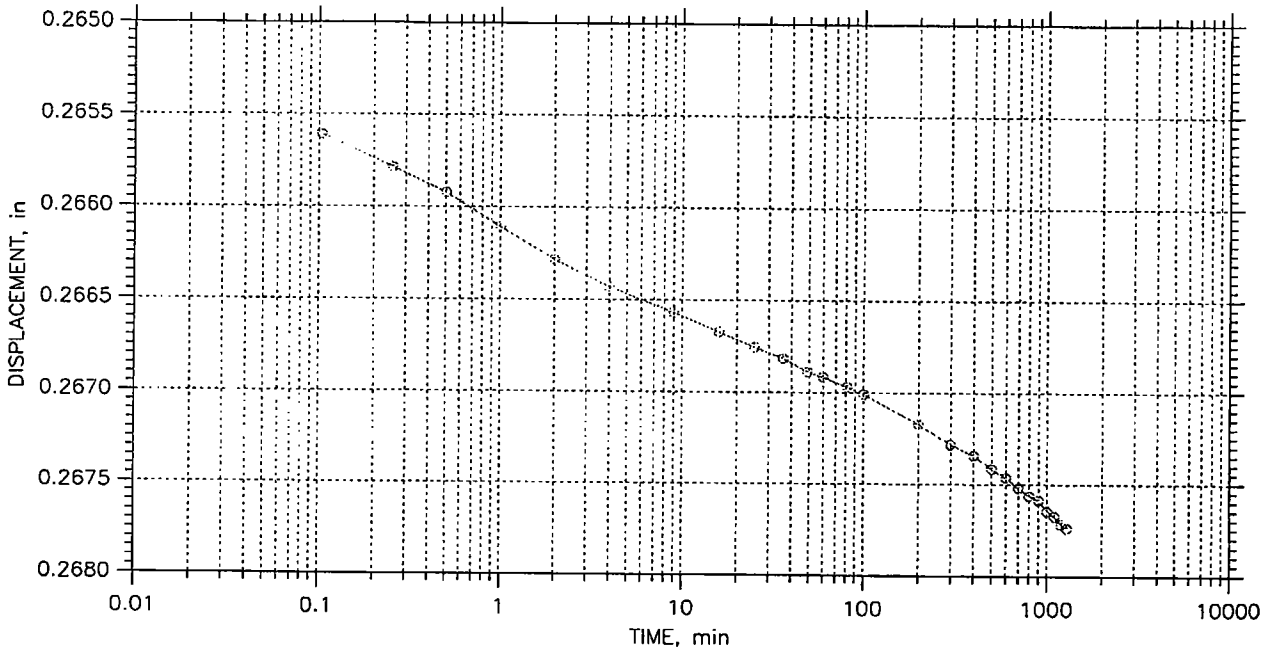
Thu, 30-NOV-2006 17:00:42

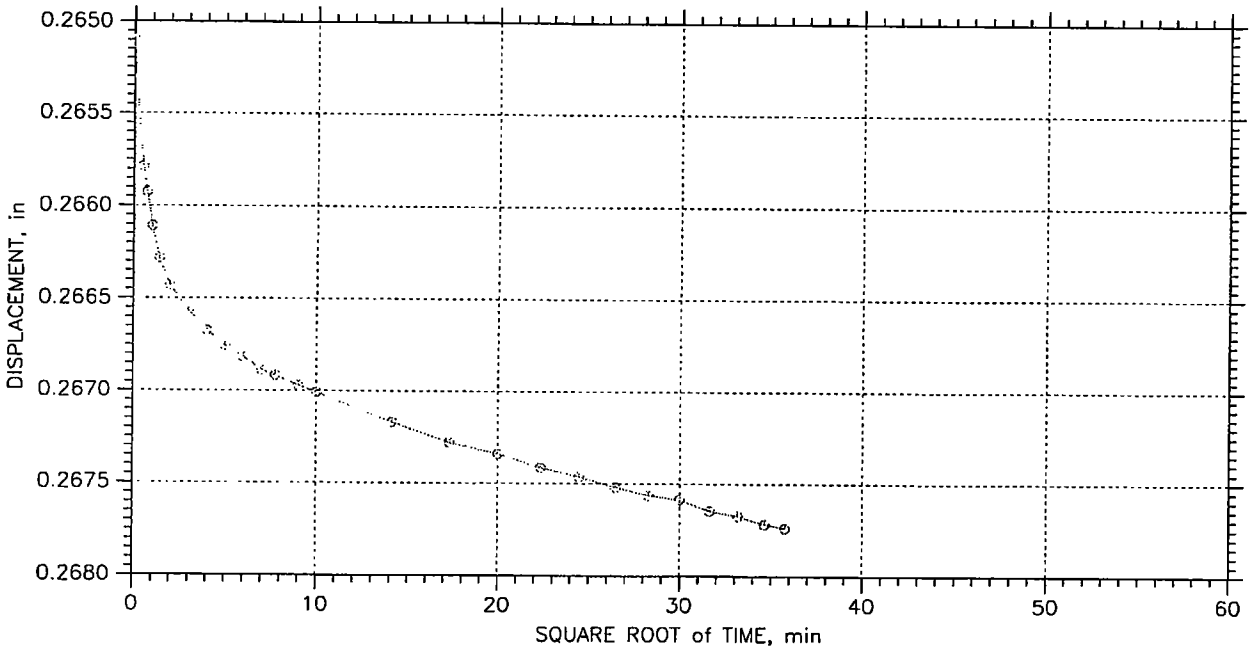
CONSOLIDATION TEST DATA

TIME CURVES

Step: 8 of 12

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

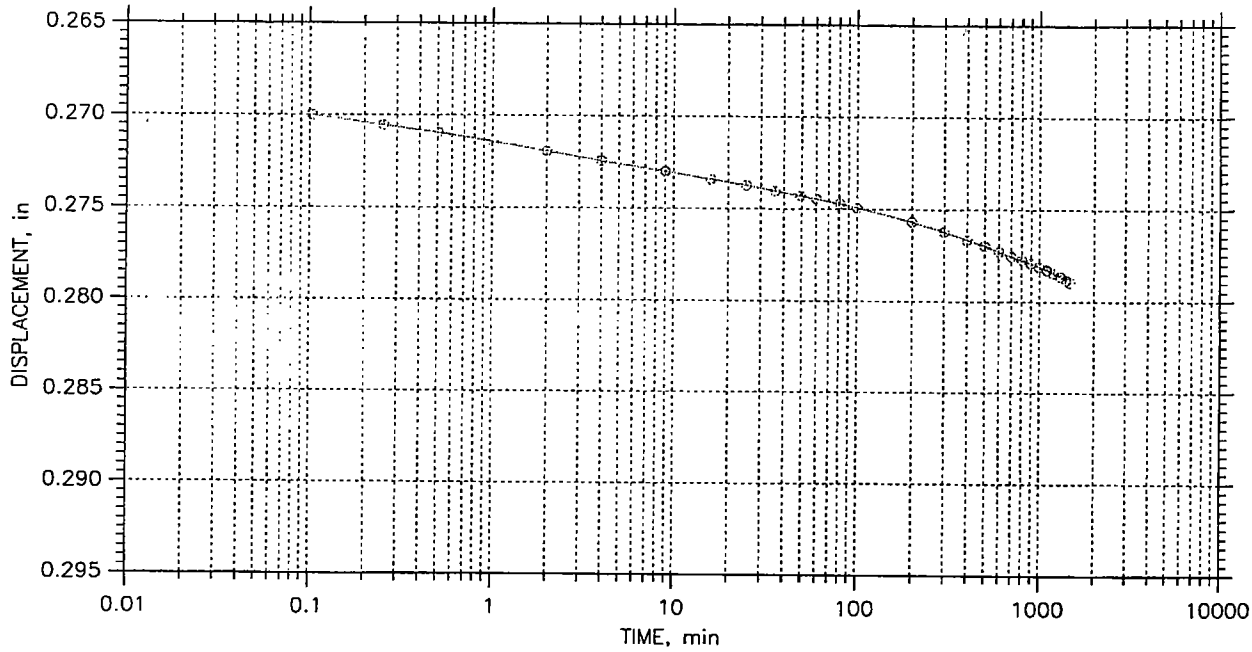
Thu, 30-NOV-2006 17:00:42

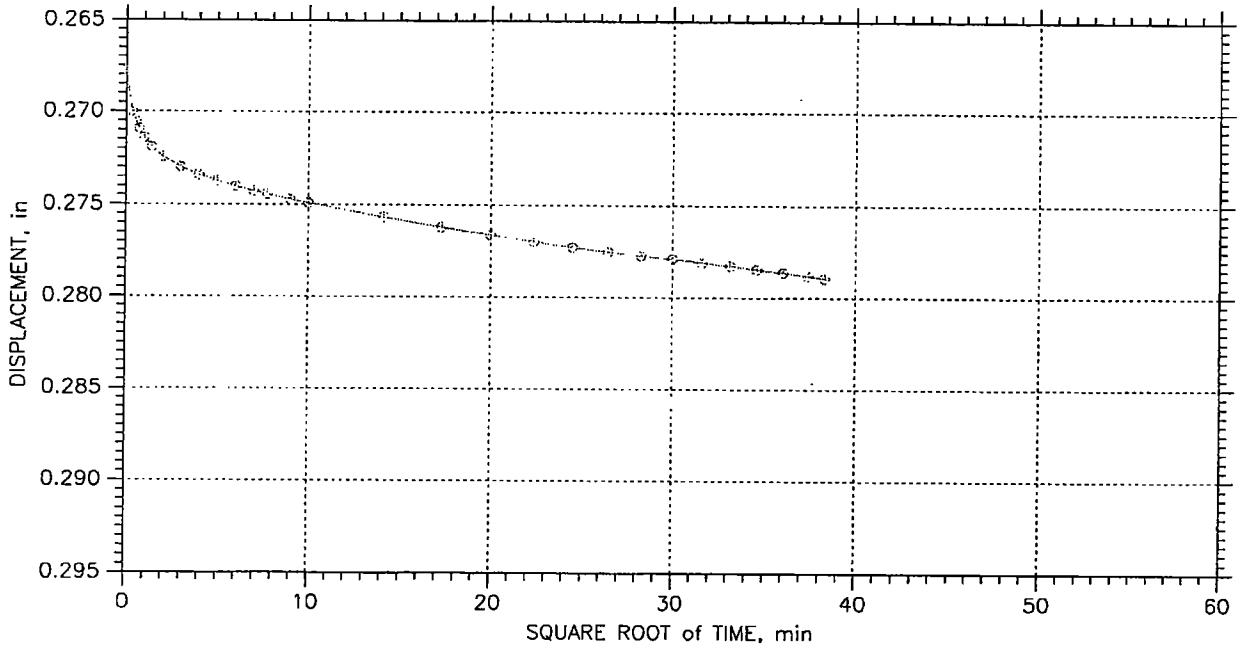
CONSOLIDATION TEST DATA

TIME CURVES

Step: 9 of 12

Stress: 2. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

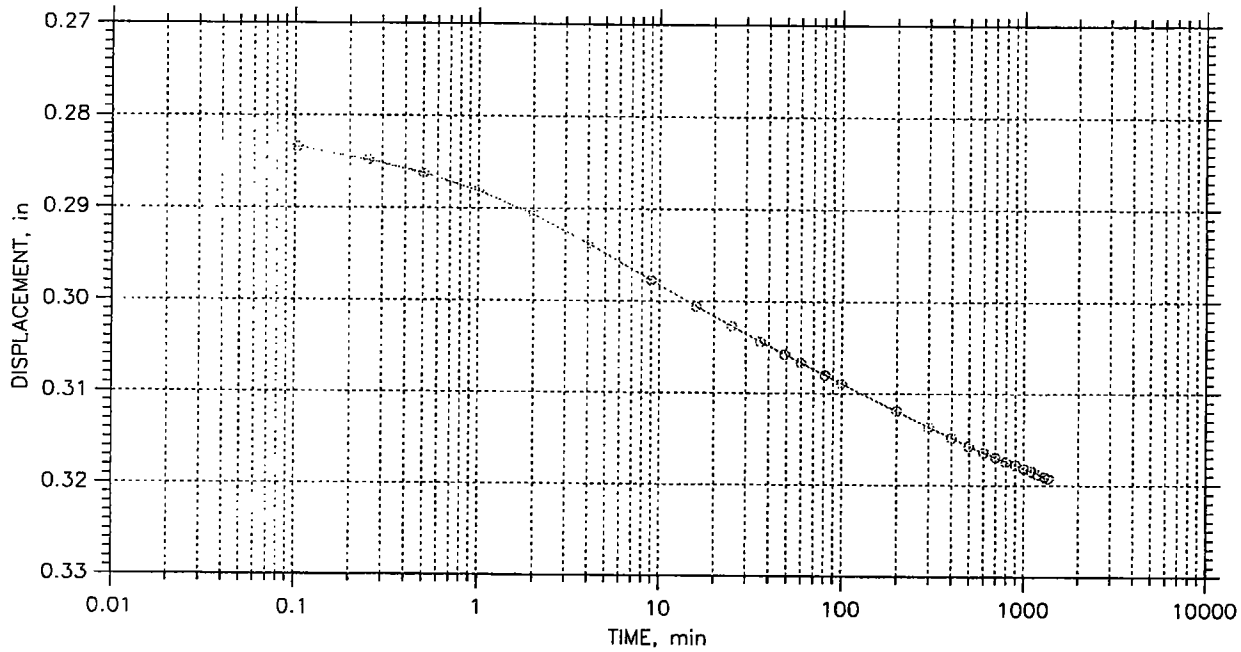
Thu, 30-NOV-2006 17:00:42

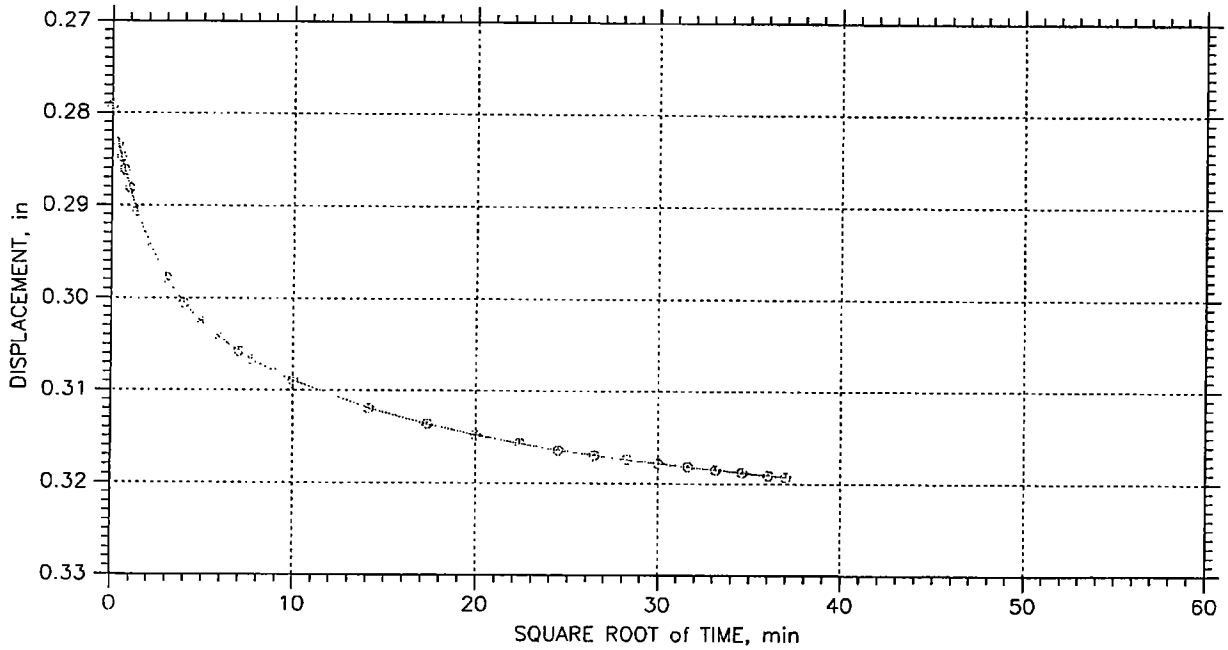
CONSOLIDATION TEST DATA

TIME CURVES

Step: 10 of 12

Stress: 4. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

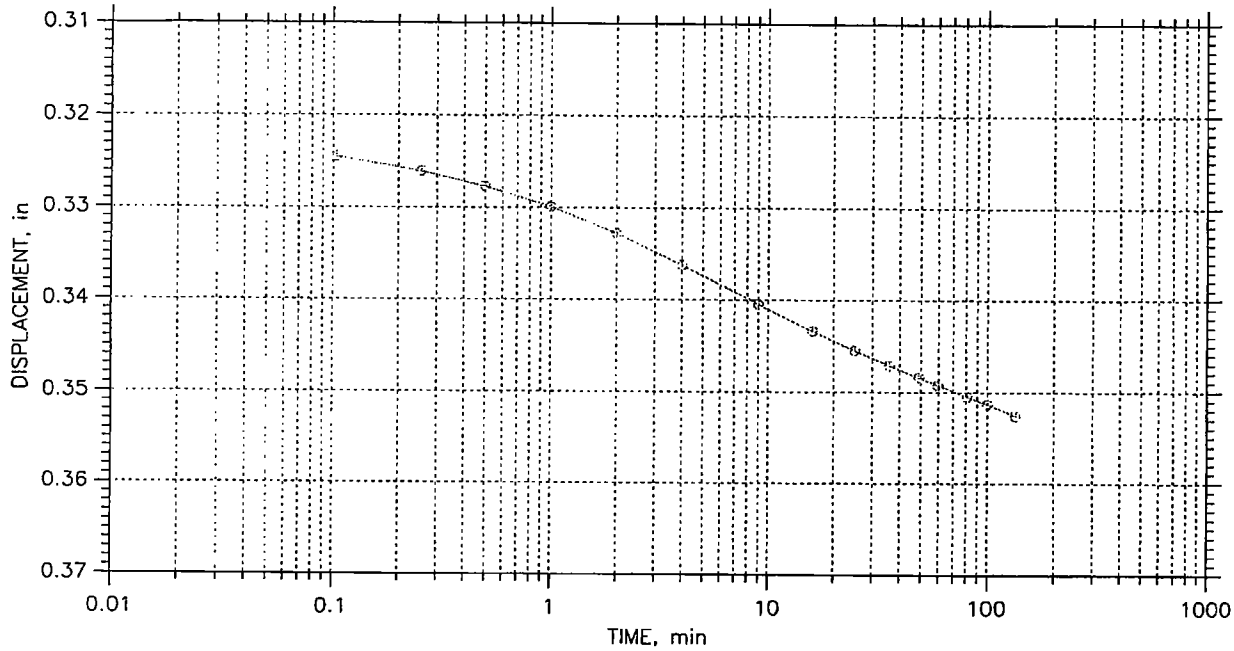
Thu, 30-NOV-2006 17:00:42

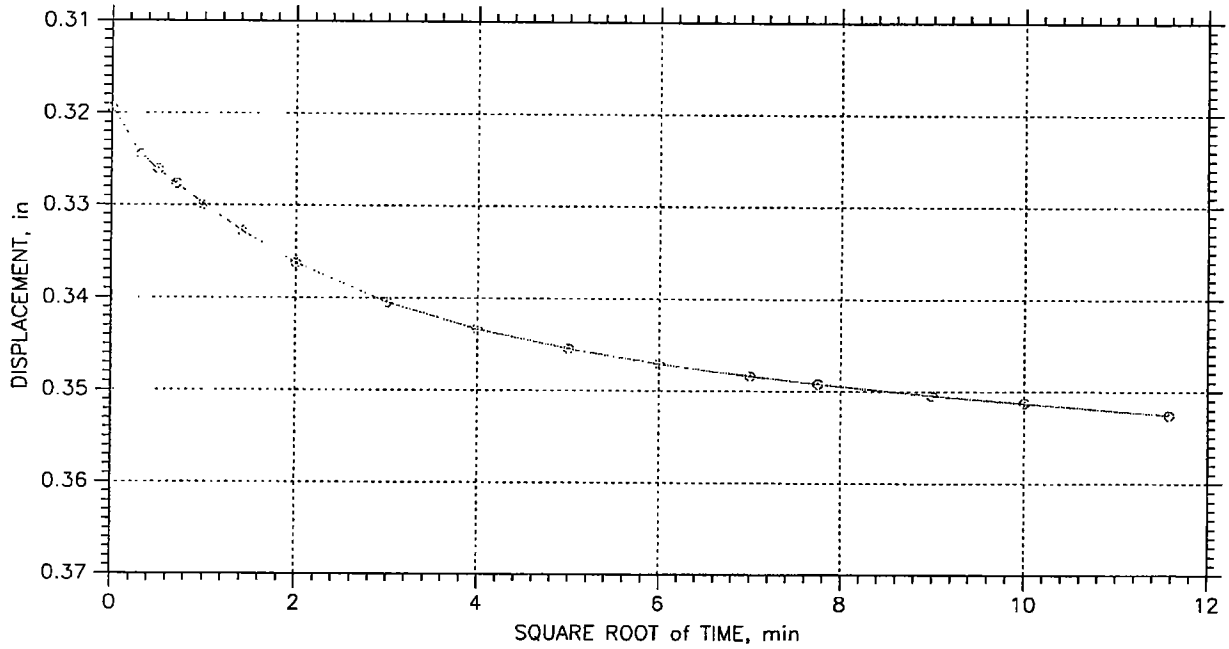
CONSOLIDATION TEST DATA

TIME CURVES

Step: 11 of 12

Stress: 8. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

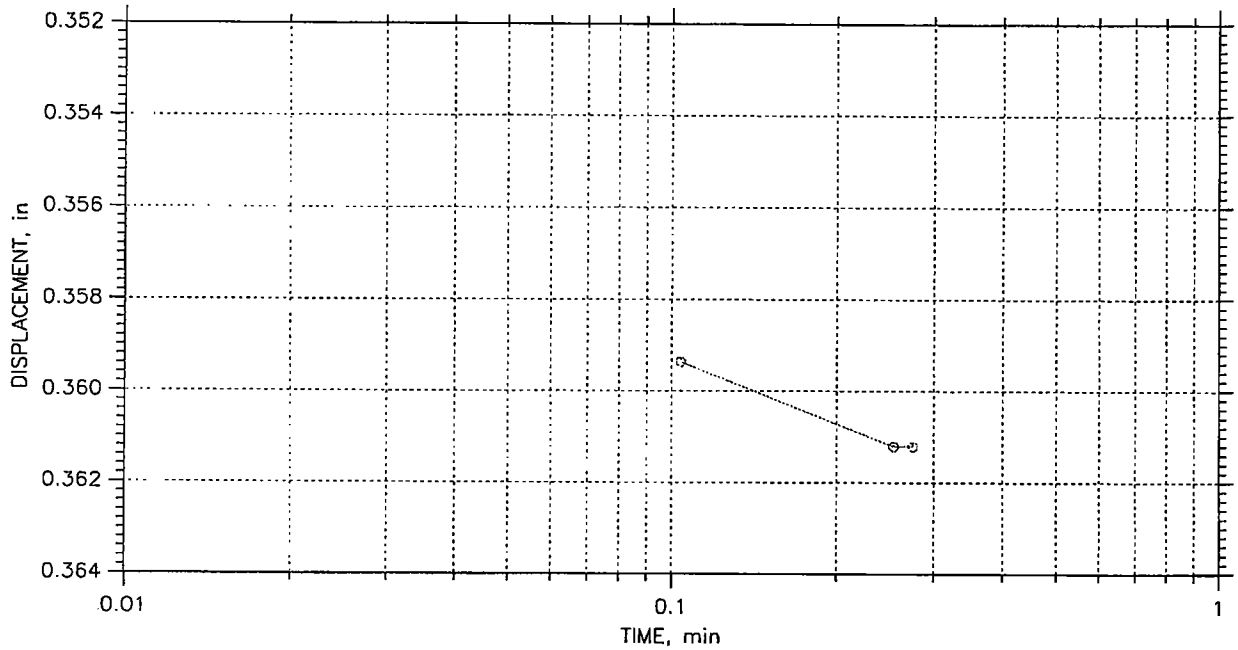
Thu, 30-NOV-2006 17:00:42

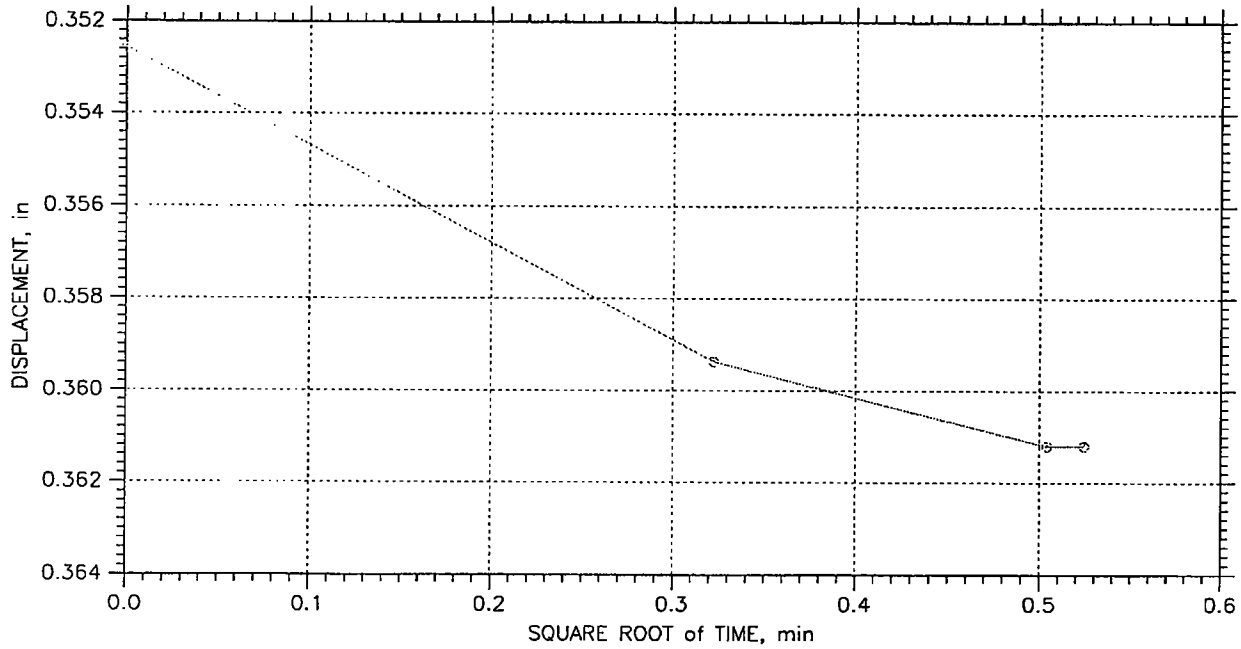
CONSOLIDATION TEST DATA

TIME CURVES

Step: 12 of 12

Stress: 16. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: ELASTIC SILT RIVER SEDIMENT TRACE CLAY TRACE ORGANICS - DARK BROWN (MH)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

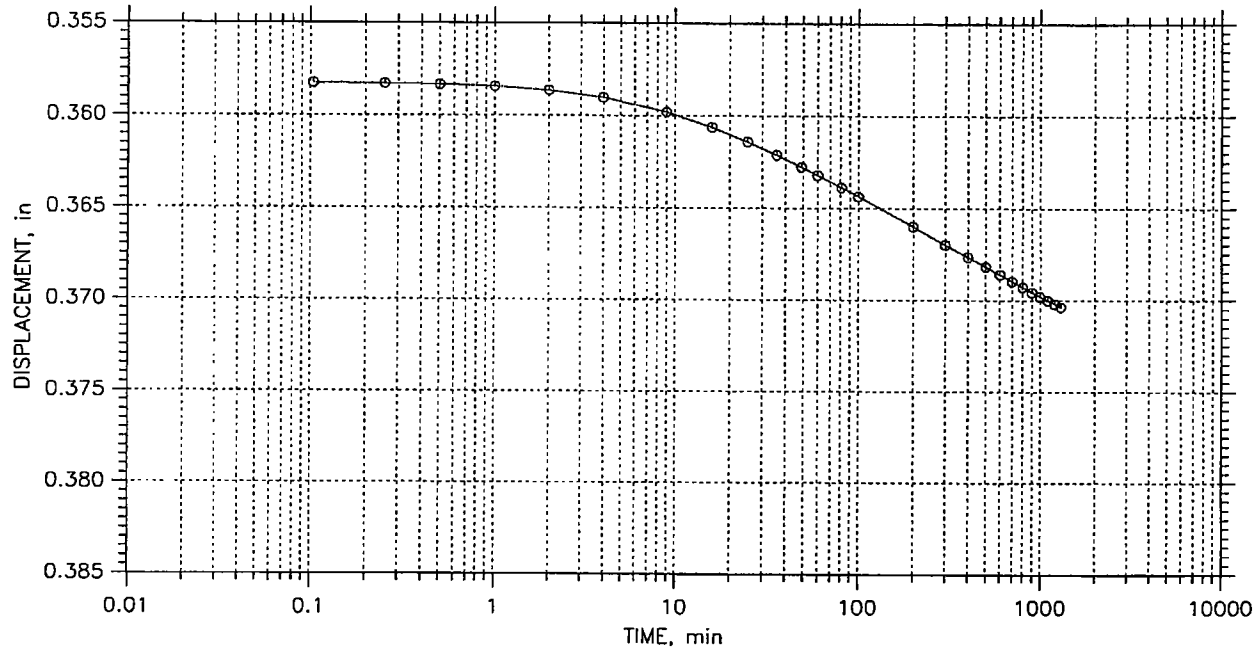
Thu, 30-NOV-2006 17:00:42

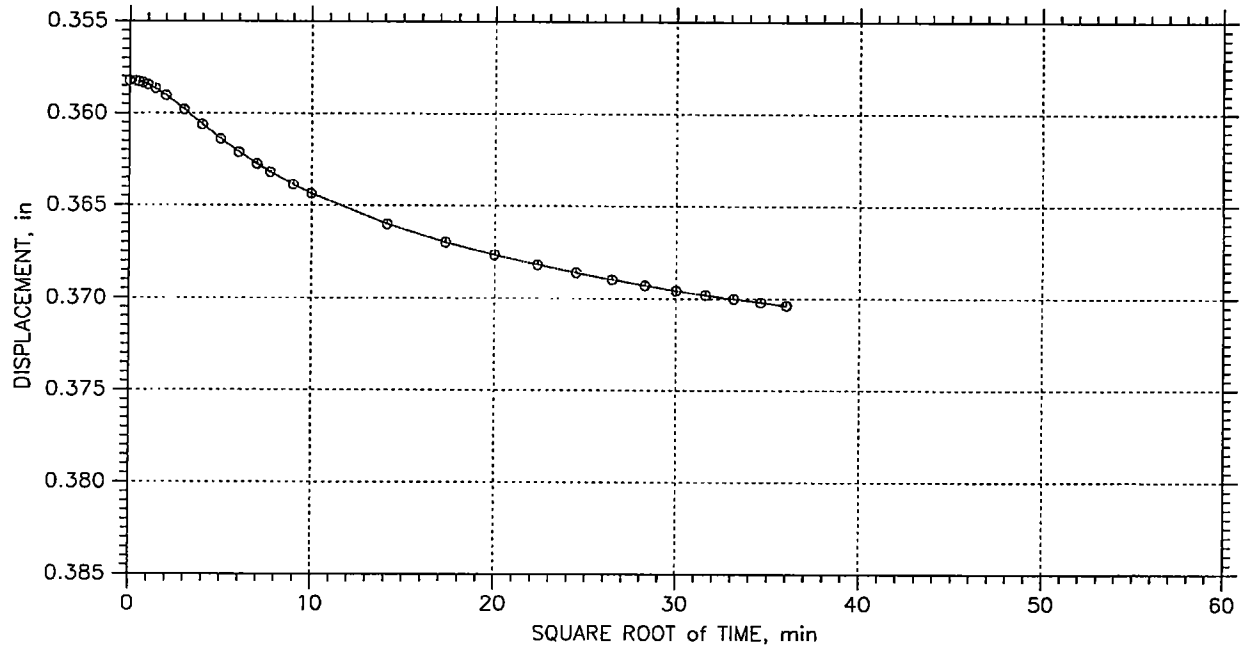
CONSOLIDATION TEST DATA

TIME CURVES

Step: 12 of 15

Stress: 16. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT TRACE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

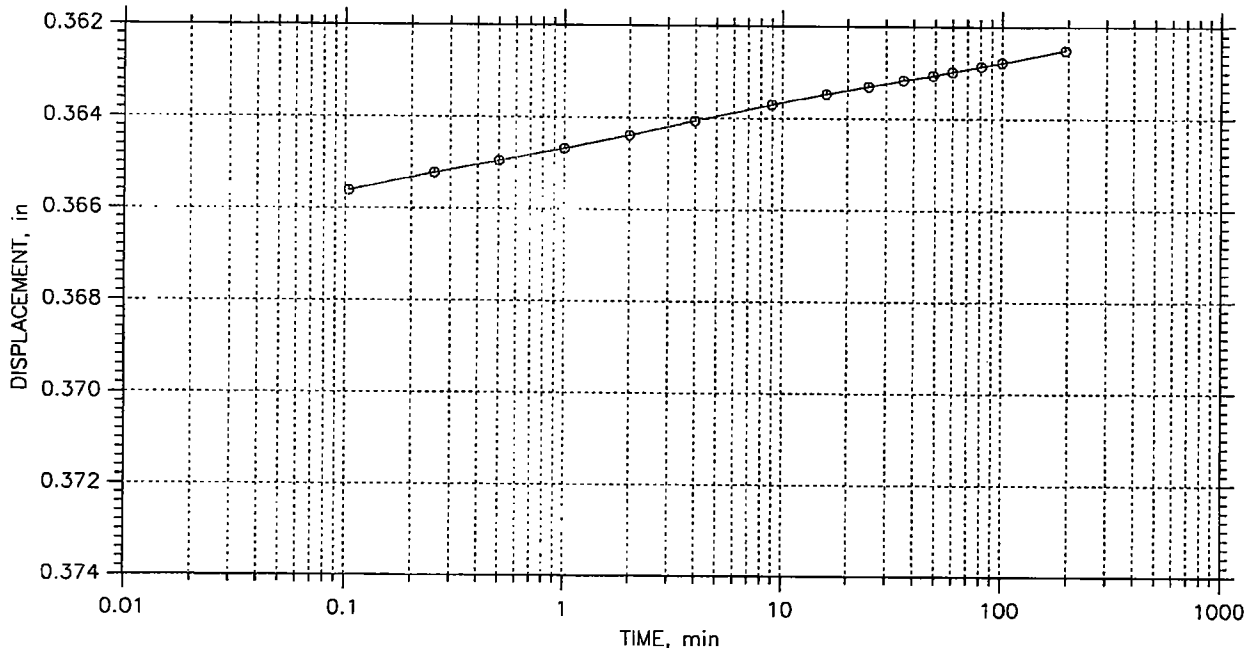
Thu, 30-NOV-2006 16:55:20

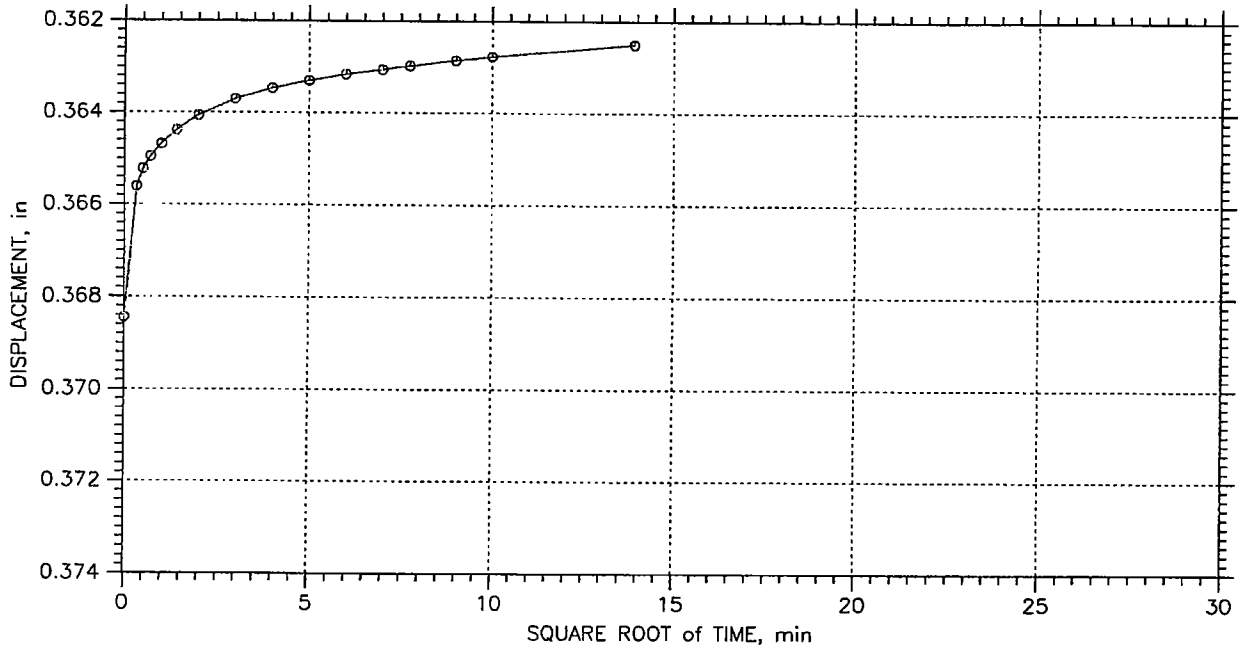
CONSOLIDATION TEST DATA

TIME CURVES

Step: 13 of 15

Stress: 4. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT TRACE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

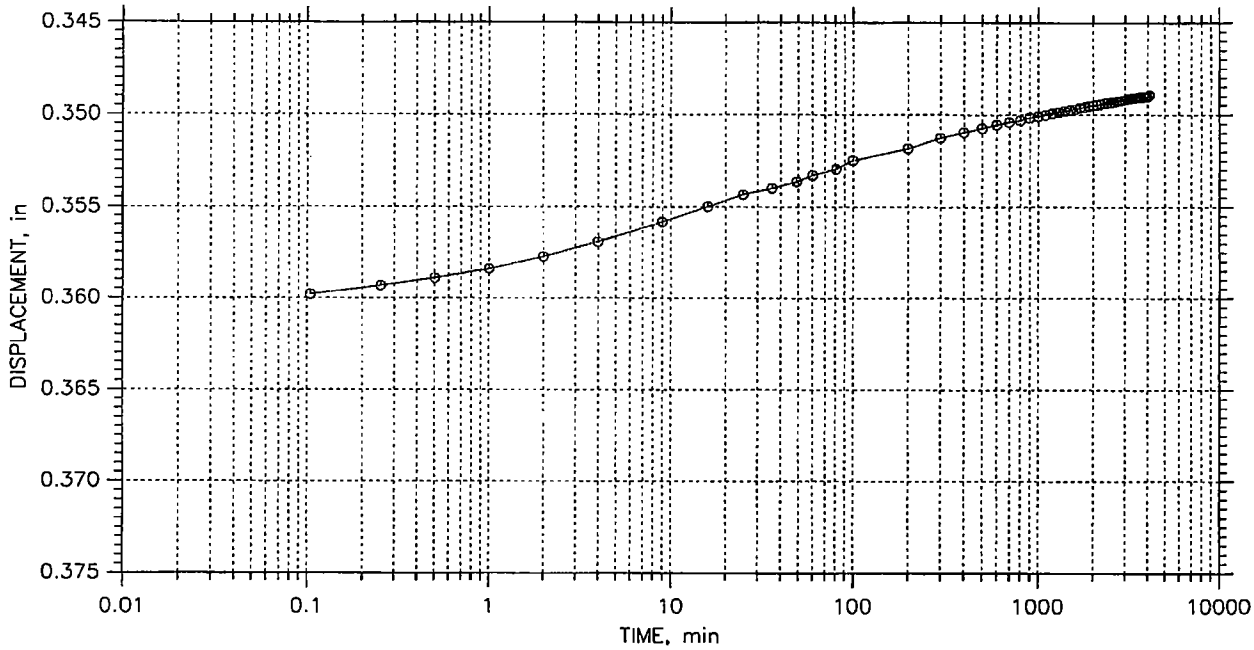
Thu. 30-NOV-2006 16:55:20

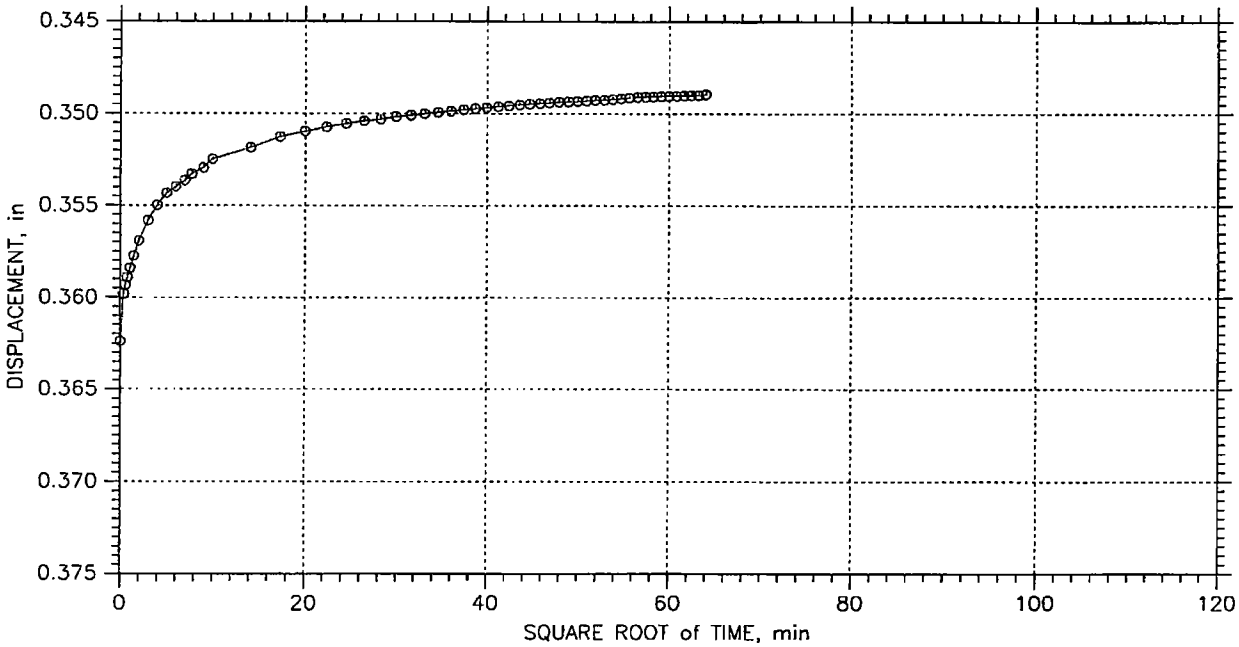
CONSOLIDATION TEST DATA

TIME CURVES

Step: 14 of 15

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT TRACE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

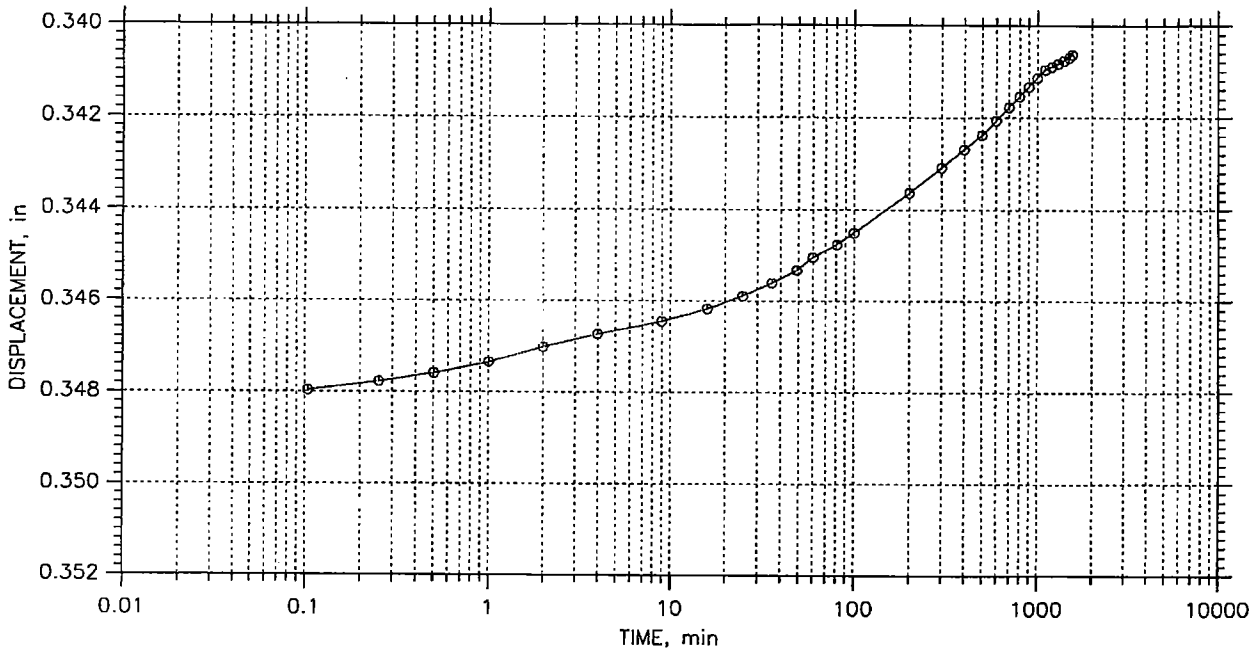
Thu, 30-NOV-2006 16:55:20

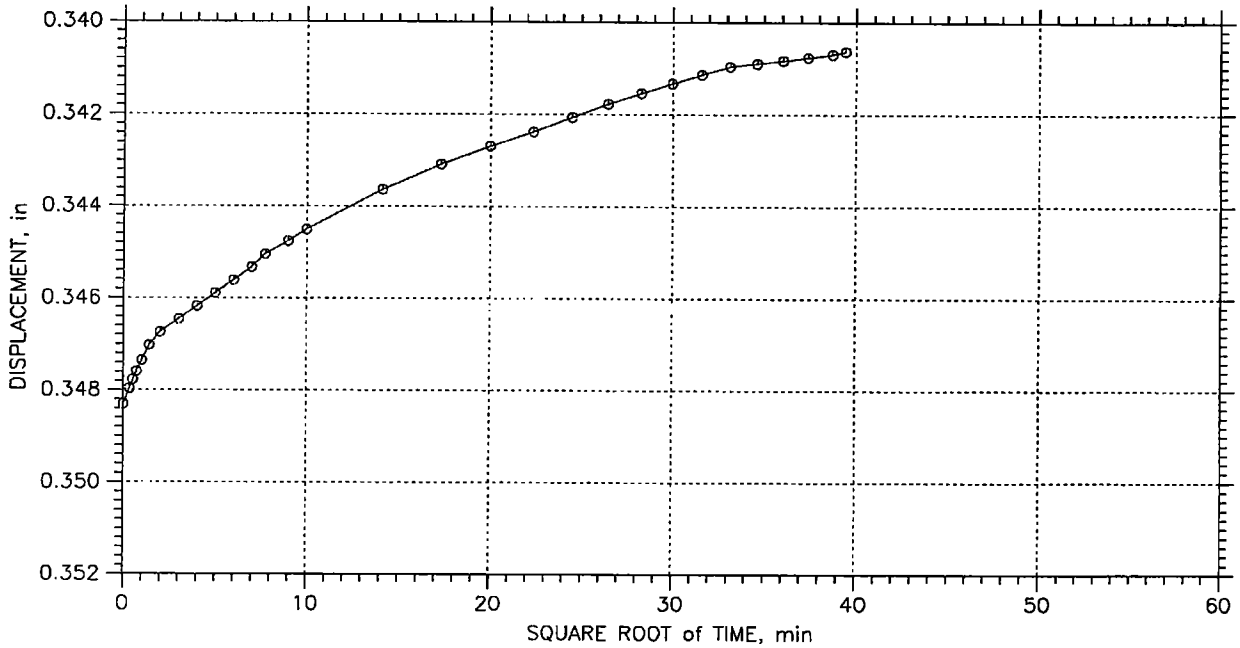
CONSOLIDATION TEST DATA

TIME CURVES

Step: 15 of 15

Stress: 0.25 tsf



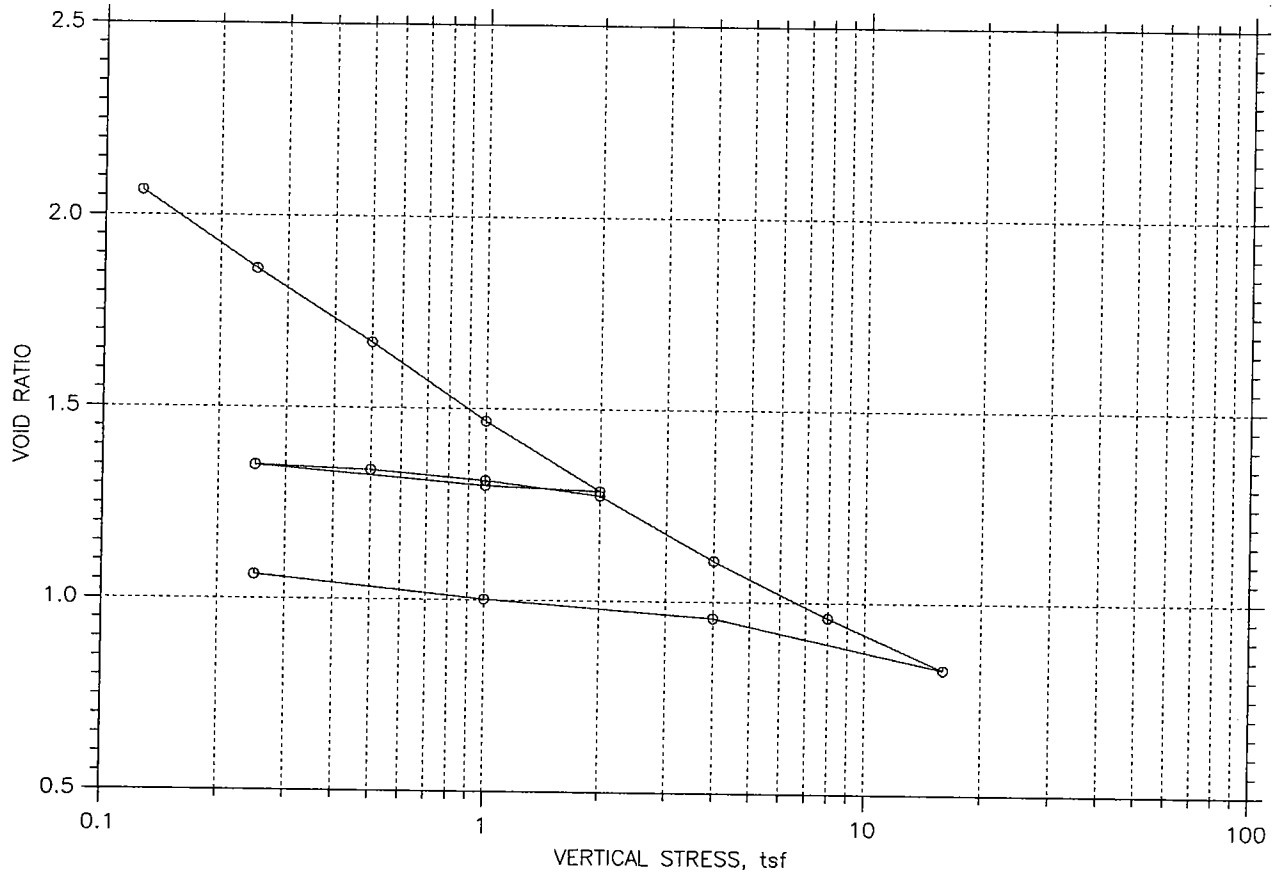


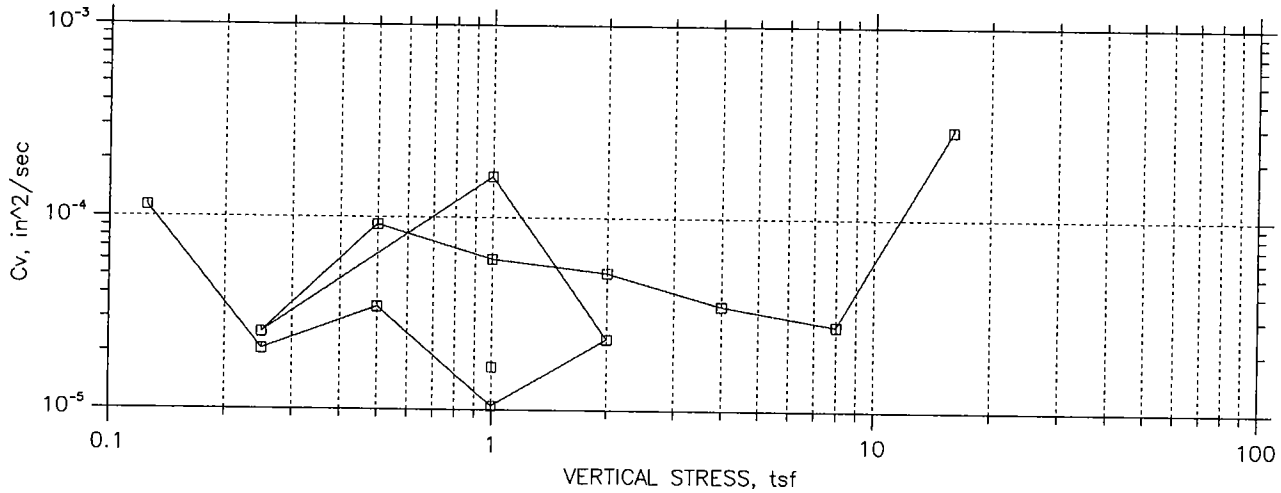
Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-6	Test Date: 10/24/06	Depth:
Test No.: 18ED6	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT TRACE F-C SAND TRACE ORGANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.98 Ccr = 0.09 TEST PERFORMED AS PER ASTM D 2435		

Thu, 30-NOV-2006 16:55:20

CONSOLIDATION TEST DATA

SUMMARY REPORT





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

Wed, 06-DEC-2006 11:39:54

CONSOLIDATION TEST DATA

Project: LOWER FOX RIVER
Boring No.:
Sample No.: ED-8
Test No.: 17ED8

Location:
Tested By: MJS
Test Date: 10/26/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435

Estimated Specific Gravity: 2.50
Initial Void Ratio: 2.51
Final Void Ratio: 1.06

Liquid Limit: 0
Plastic Limit: 0
Plasticity Index: 0

Initial Height: 0.75 in
Specimen Diameter: 2.50 in

	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
Container ID	122	RING	RING	RING
Wt. Container + Wet Soil, gm	102.36	162.42	136.83	136.83
Wt. Container + Dry Soil, gm	62.7	117.93	117.93	117.93
Wt. Container, gm	24.99	74.97	74.97	74.97
Wt. Dry Soil, gm	37.71	42.96	42.96	42.96
Water Content, %	105.17	103.56	43.99	43.99
Void Ratio	---	2.51	1.06	---
Degree of Saturation, %	---	103.12	103.56	---
Dry Unit Weight, pcf	---	44.454	75.688	---

CONSOLIDATION TEST DATA

Project: LOWER FOX RIVER
Boring No.:
Sample No.: ED-8
Test No.: 17ED8

Location:
Tested By: MJS
Test Date: 10/26/06
Sample Type: REMOLDED

Project No.: 29316-A
Checked By: WPQ
Depth:
Elevation:

Soil Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435

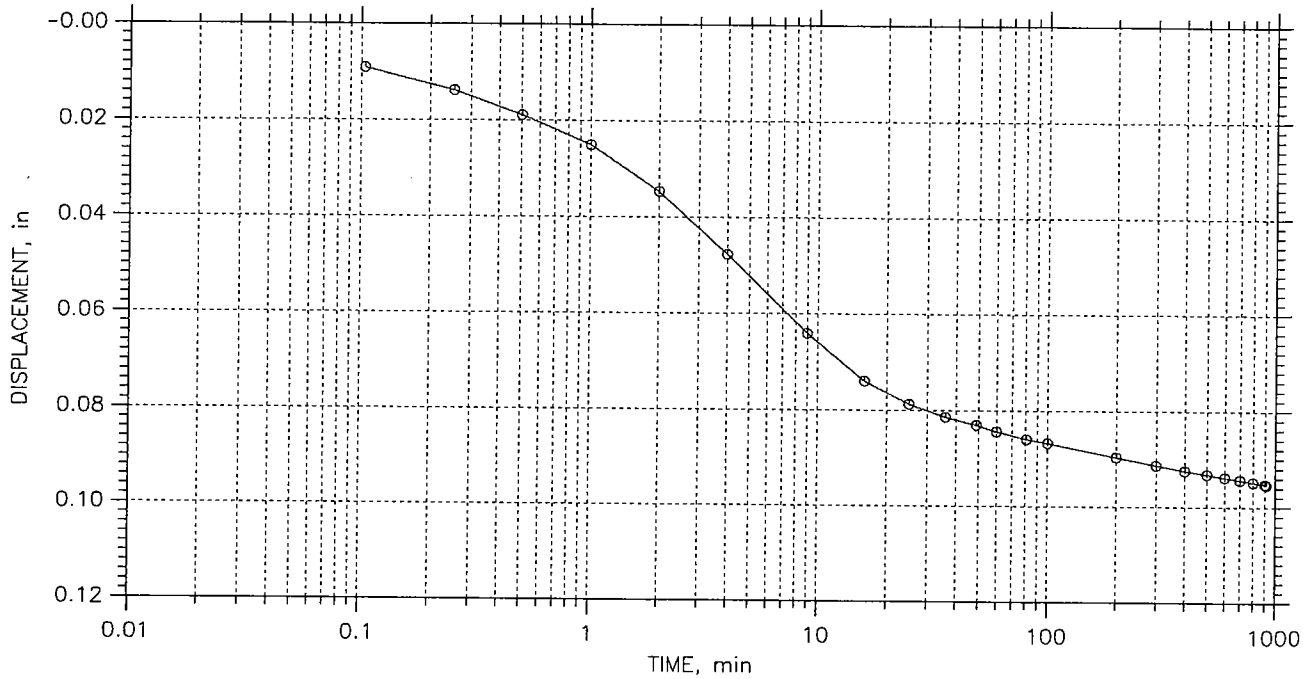
	Applied Stress tsf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting Sq.Rt. min	T50 Fitting Log min	Coefficient of Consolidation Sq.Rt. in^2/sec	Coefficient of Consolidation Log in^2/sec	Coefficient of Consolidation Ave. in^2/sec
1	0.125	0.09542	2.064	12.72	3.5	3.6	1.15e-004	1.12e-004	1.14e-004
2	0.25	0.1387	1.861	18.50	24.4	7.6	1.35e-005	4.31e-005	2.05e-005
3	0.5	0.1796	1.670	23.95	11.6	5.2	2.47e-005	5.48e-005	3.41e-005
4	1	0.2231	1.466	29.75	40.4	7.1	6.12e-006	3.49e-005	1.04e-005
5	2	0.2616	1.286	34.89	13.5	4.7	1.57e-005	4.52e-005	2.33e-005
6	1	0.2589	1.299	34.52	2.1	0.3	9.38e-005	6.03e-004	1.62e-004
7	0.25	0.2482	1.349	33.10	13.5	2.6	1.50e-005	7.77e-005	2.51e-005
8	0.5	0.2507	1.337	33.42	3.9	0.6	5.33e-005	3.17e-004	9.12e-005
9	1	0.256	1.312	34.13	3.4	0.0	6.05e-005	0.00e+000	6.05e-005
10	2	0.2641	1.274	35.22	3.8	0.0	5.14e-005	0.00e+000	5.14e-005
11	4	0.3	1.107	40.00	7.6	2.7	2.36e-005	6.64e-005	3.48e-005
12	8	0.3315	0.959	44.20	8.6	2.7	1.80e-005	5.85e-005	2.75e-005
13	16	0.3599	0.826	47.99	0.5	0.0	2.87e-004	0.00e+000	2.87e-004
14	4	0.332	0.957	44.27	0.0	0.0	0.00e+000	0.00e+000	0.00e+000
15	1	0.3225	1.001	43.00	13.7	4.0	1.08e-005	3.65e-005	1.66e-005
16	0.25	0.3095	1.062	41.27	0.0	0.0	0.00e+000	0.00e+000	0.00e+000

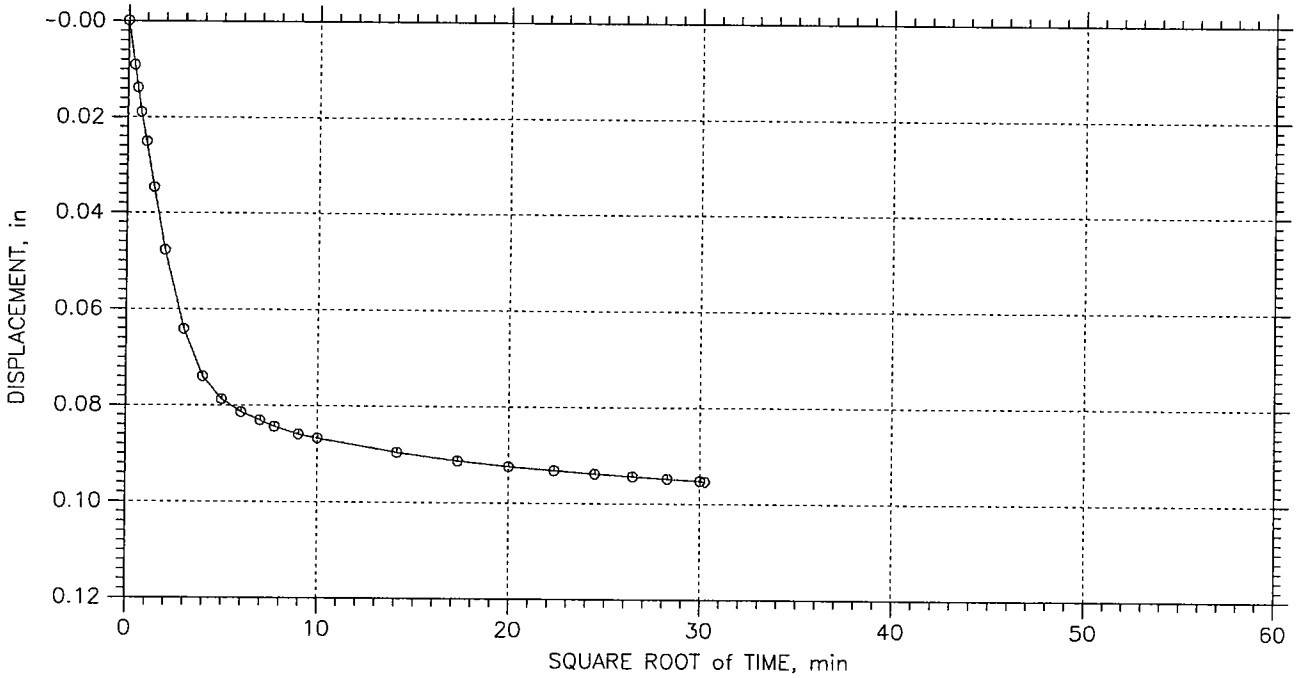
CONSOLIDATION TEST DATA

TIME CURVES

Step: 1 of 13

Stress: 0.125 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

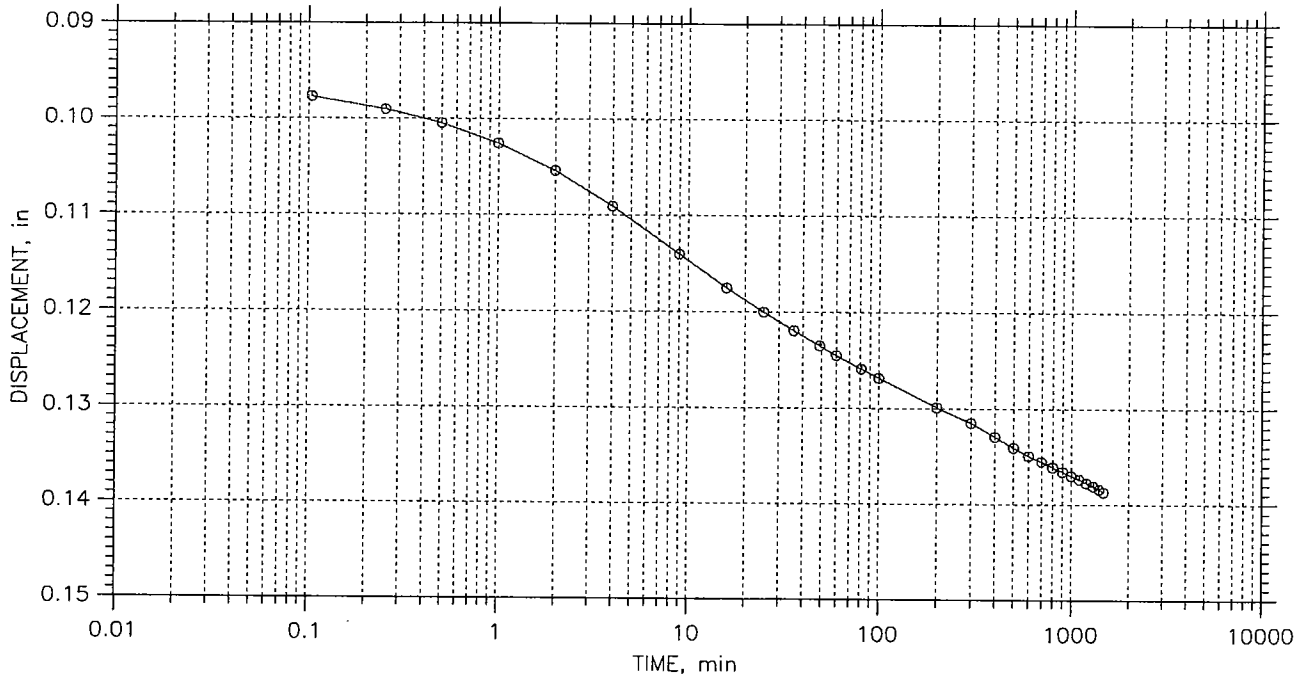
Wed, 06-DEC-2006 14:14:27

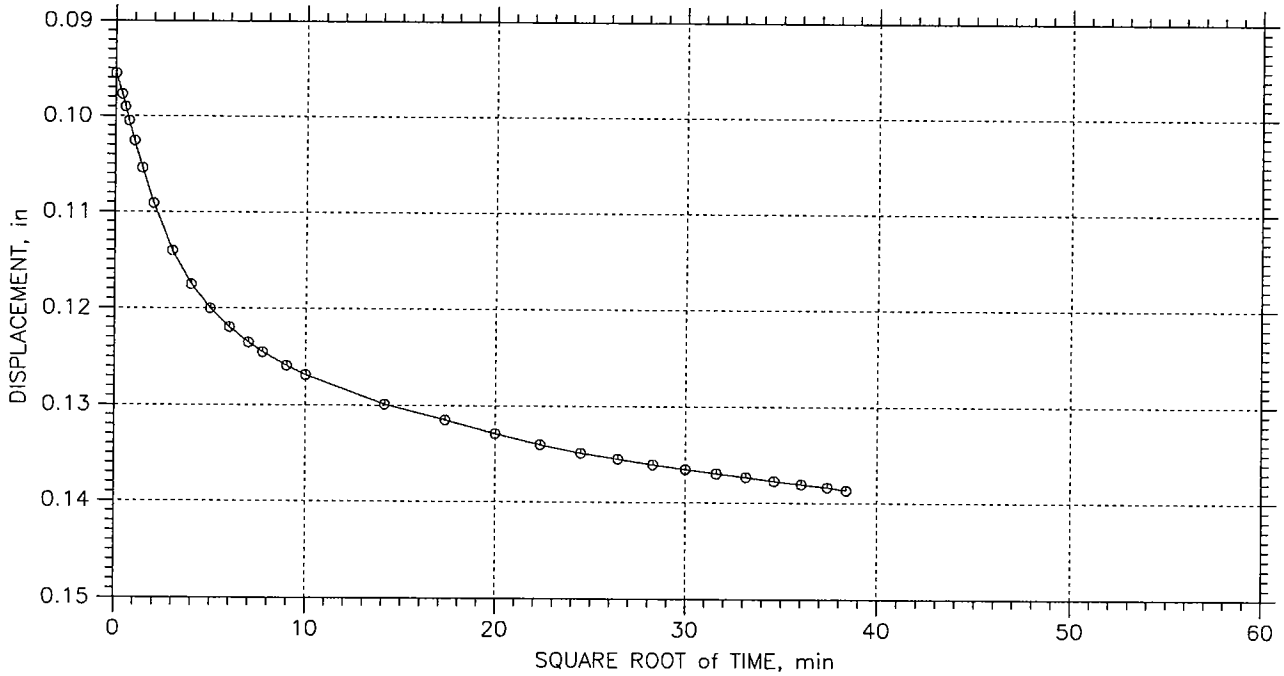
CONSOLIDATION TEST DATA

TIME CURVES

Step: 2 of 13

Stress: 0.25 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

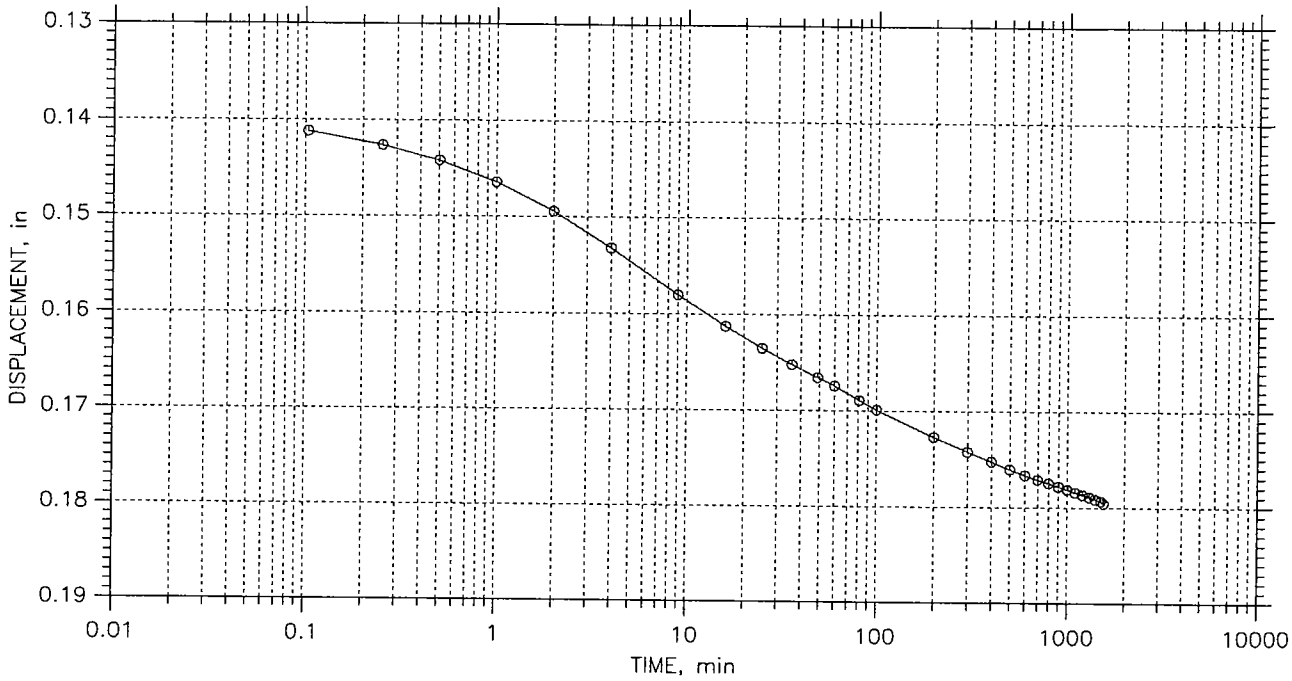
Wed, 06-DEC-2006 14:14:27

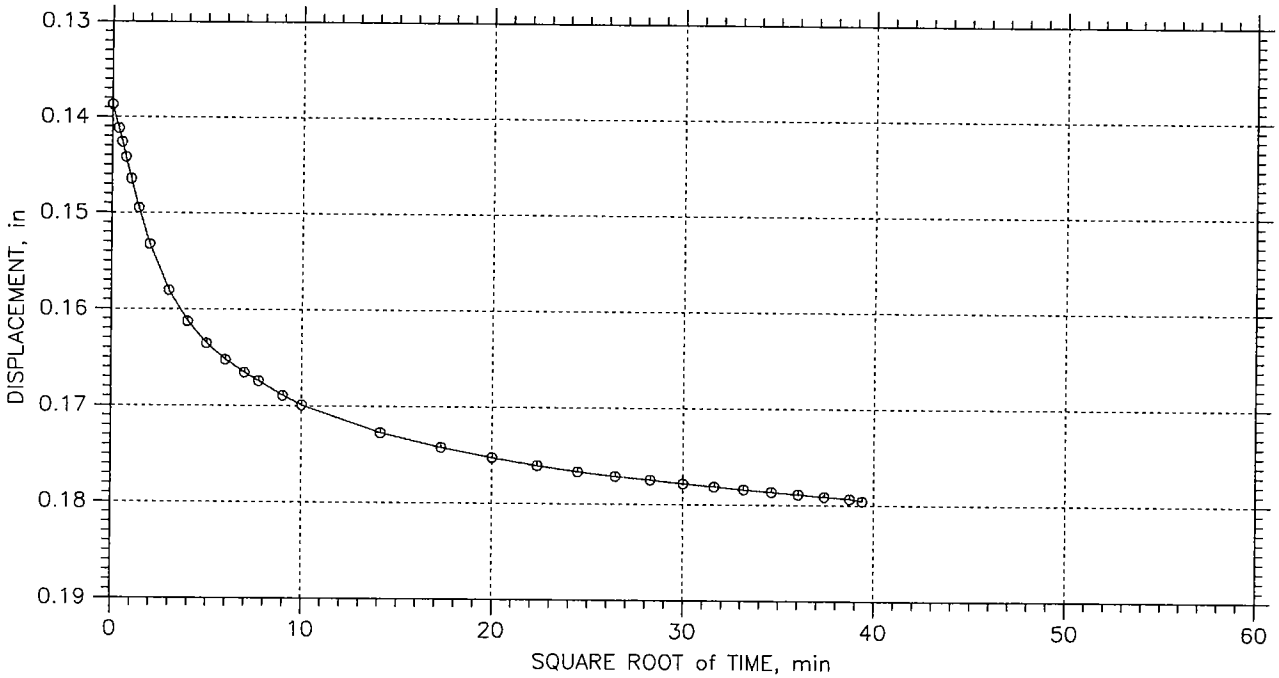
CONSOLIDATION TEST DATA

TIME CURVES

Step: 3 of 13

Stress: 0.5 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

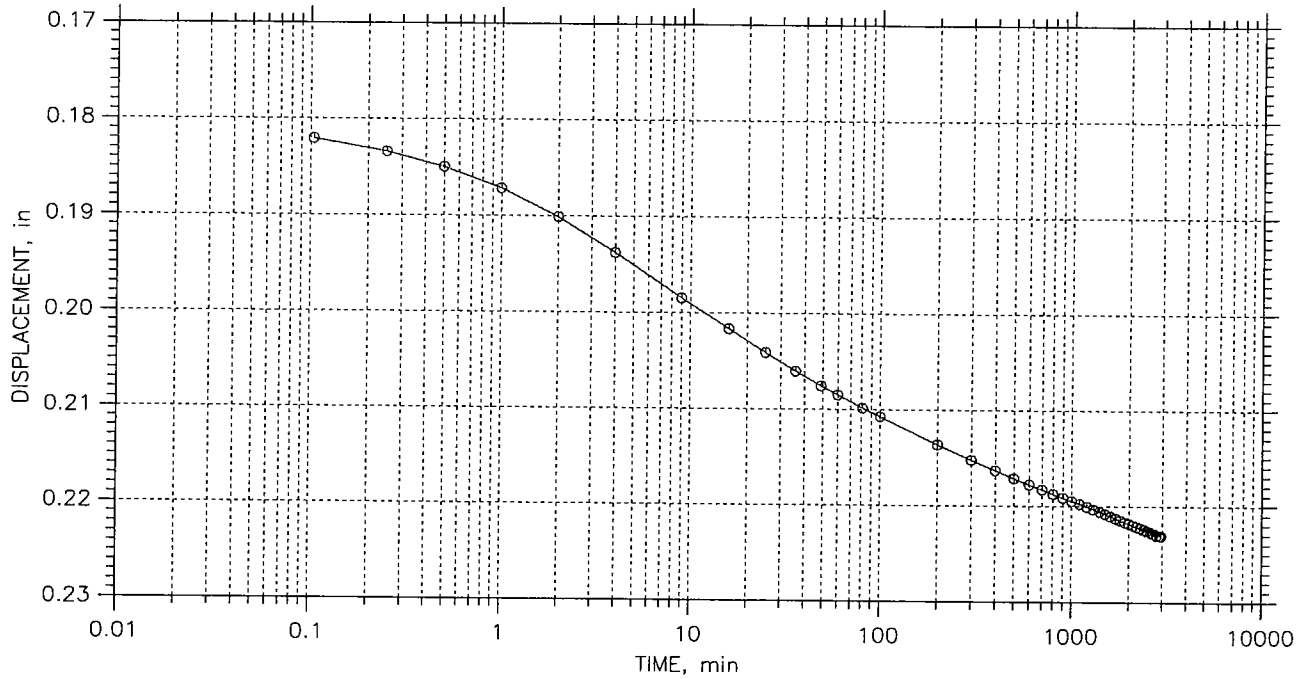
Wed, 06-DEC-2006 14:14:27

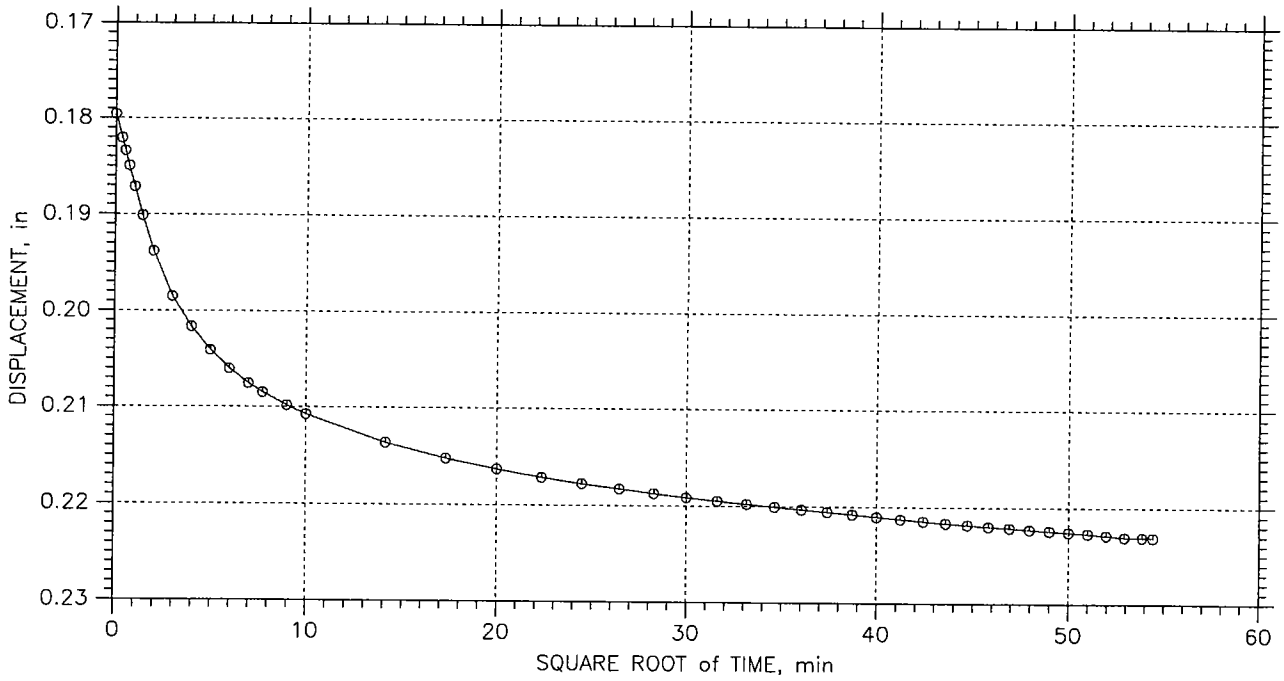
CONSOLIDATION TEST DATA

TIME CURVES

Step: 4 of 13

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

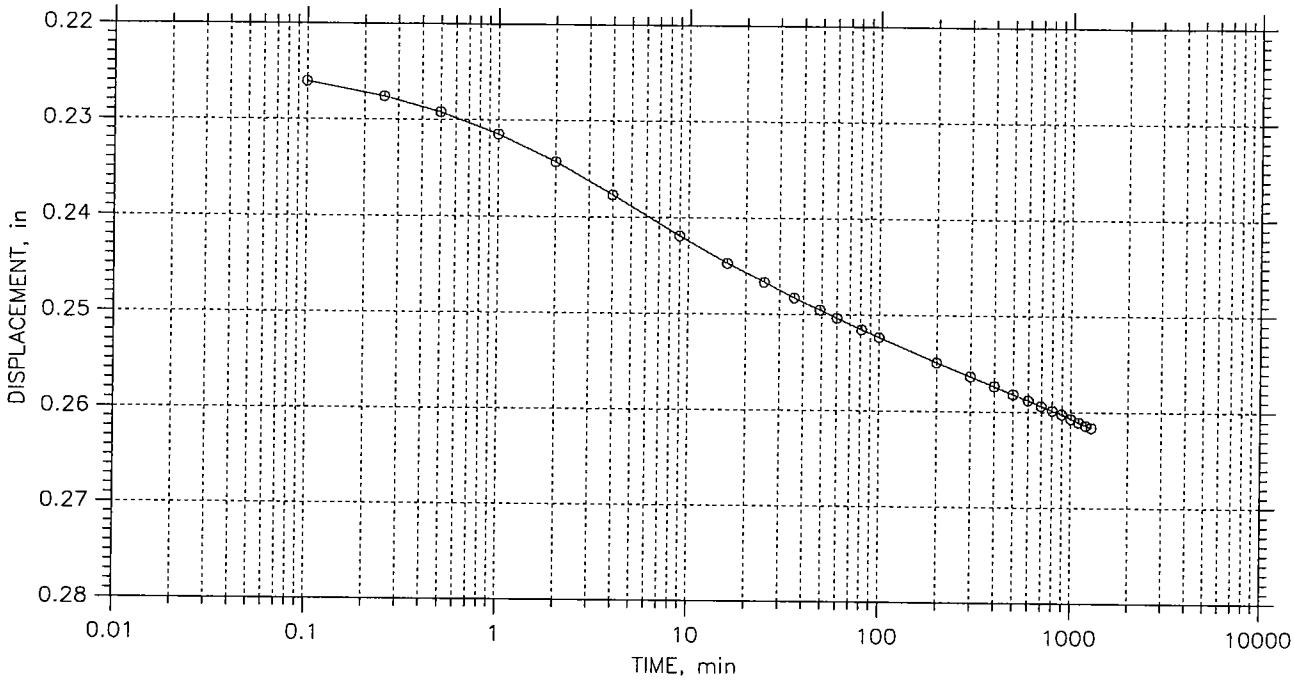
Wed, 06-DEC-2006 14:14:27

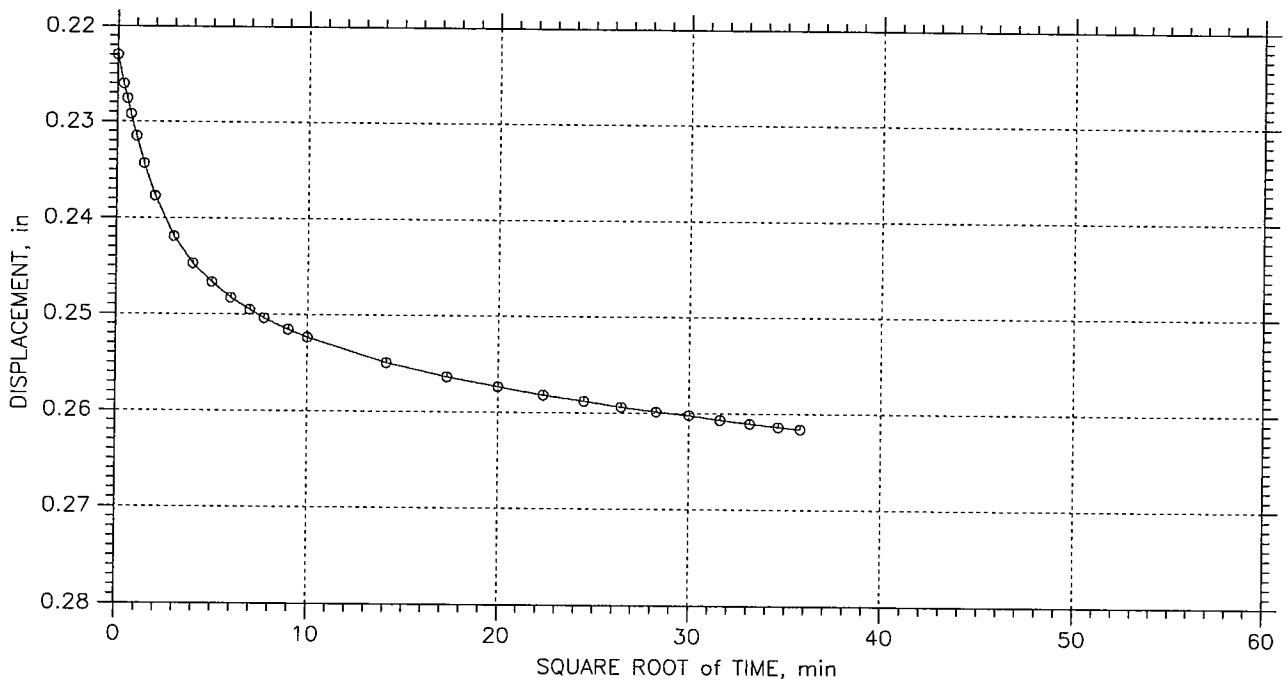
CONSOLIDATION TEST DATA

TIME CURVES

Step: 5 of 13

Stress: 2. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

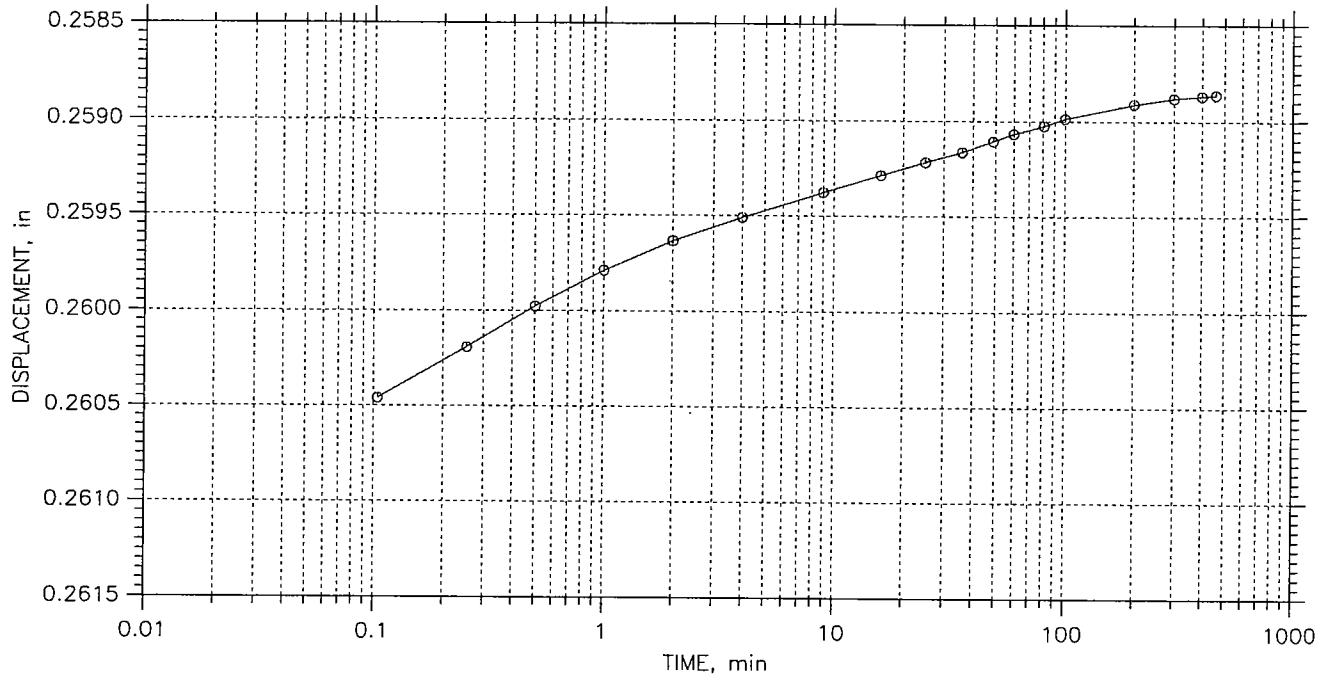
Wed, 06-DEC-2006 14:14:27

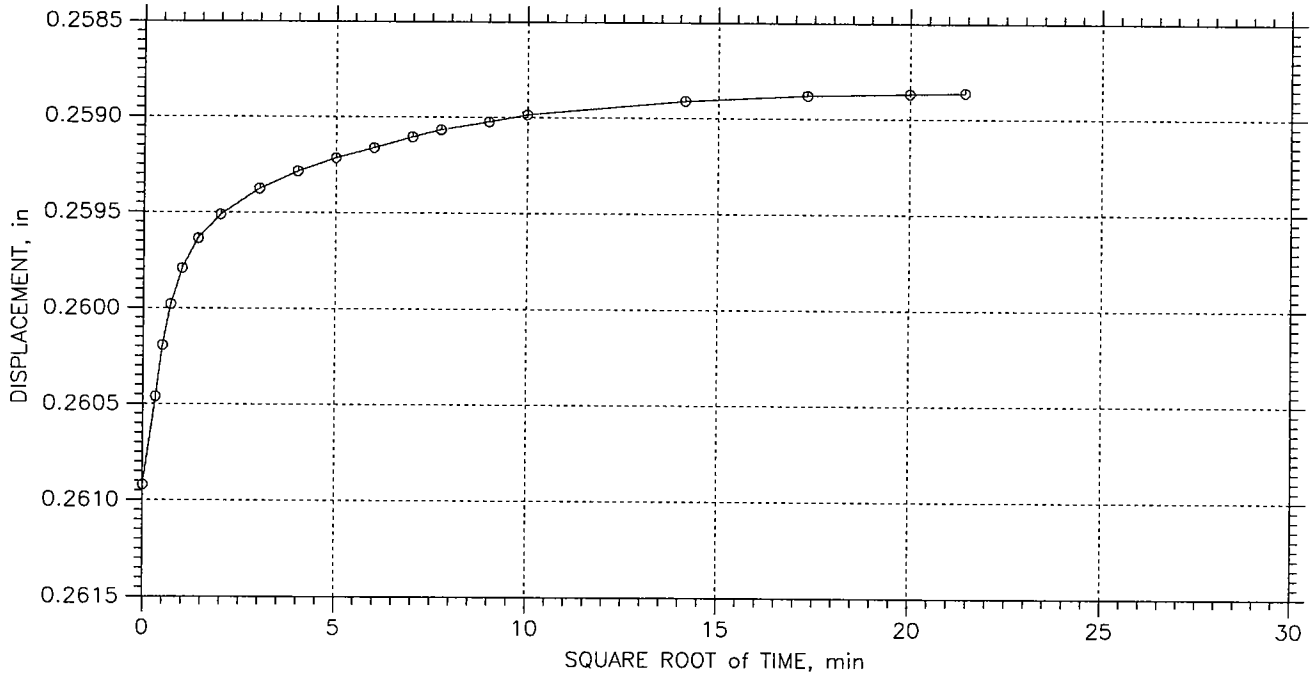
CONSOLIDATION TEST DATA

TIME CURVES

Step: 6 of 13

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

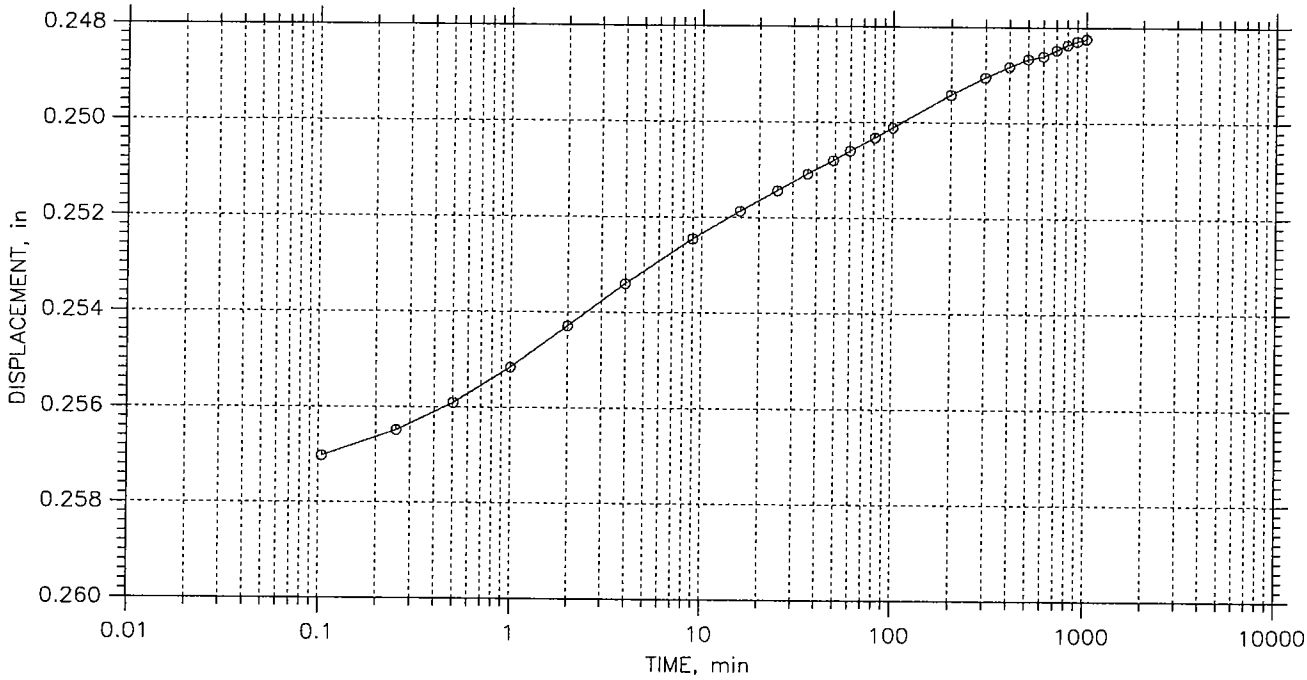
Wed, 06-DEC-2006 14:14:27

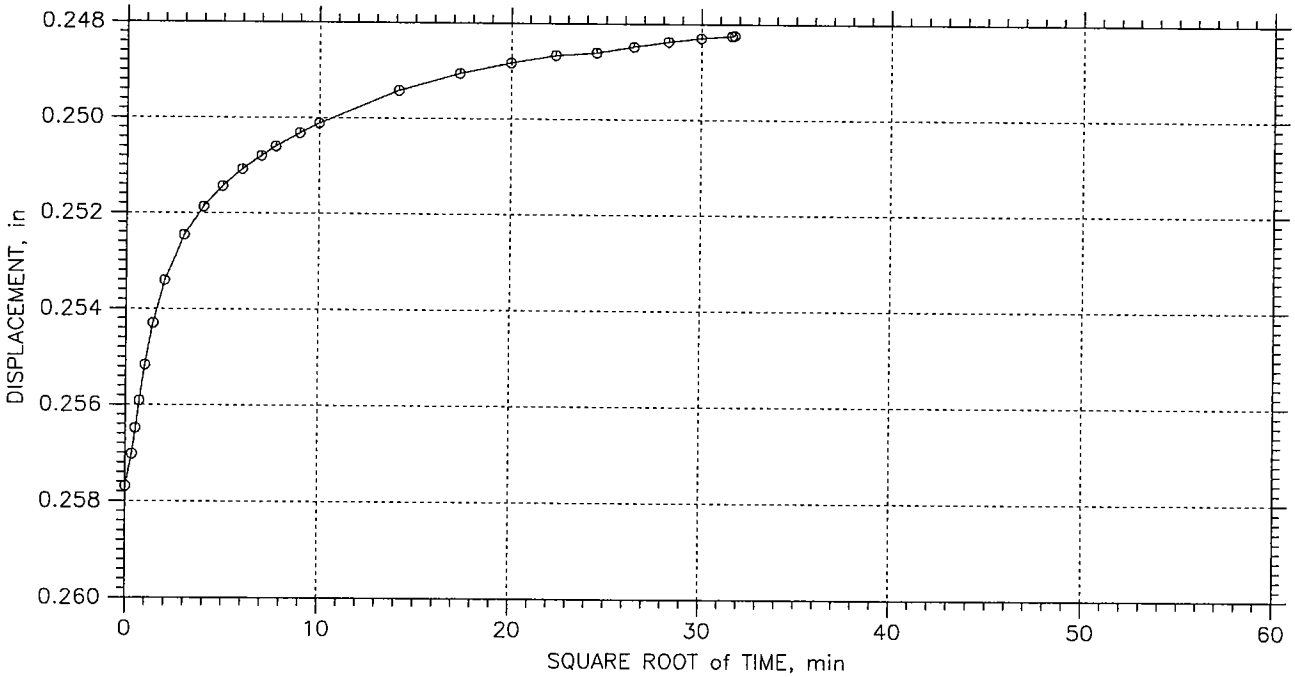
CONSOLIDATION TEST DATA

TIME CURVES

Step: 7 of 13

Stress: 0.25 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

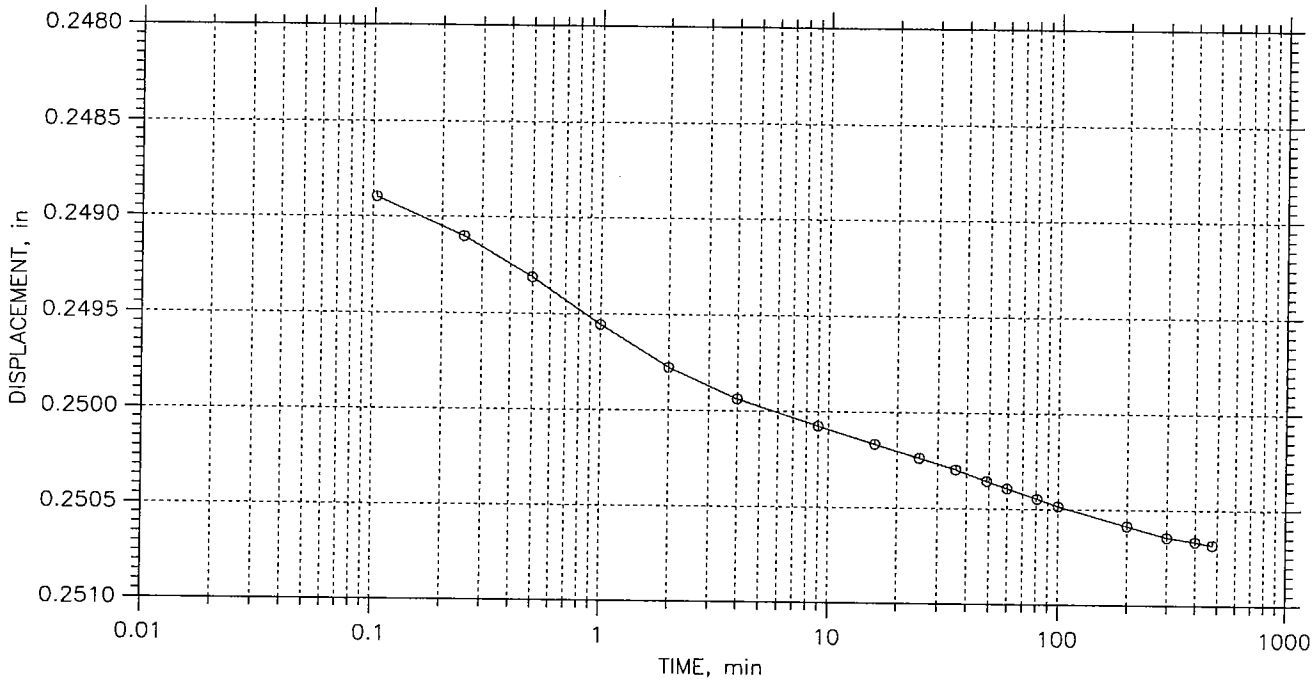
Wed, 06-DEC-2006 14:14:27

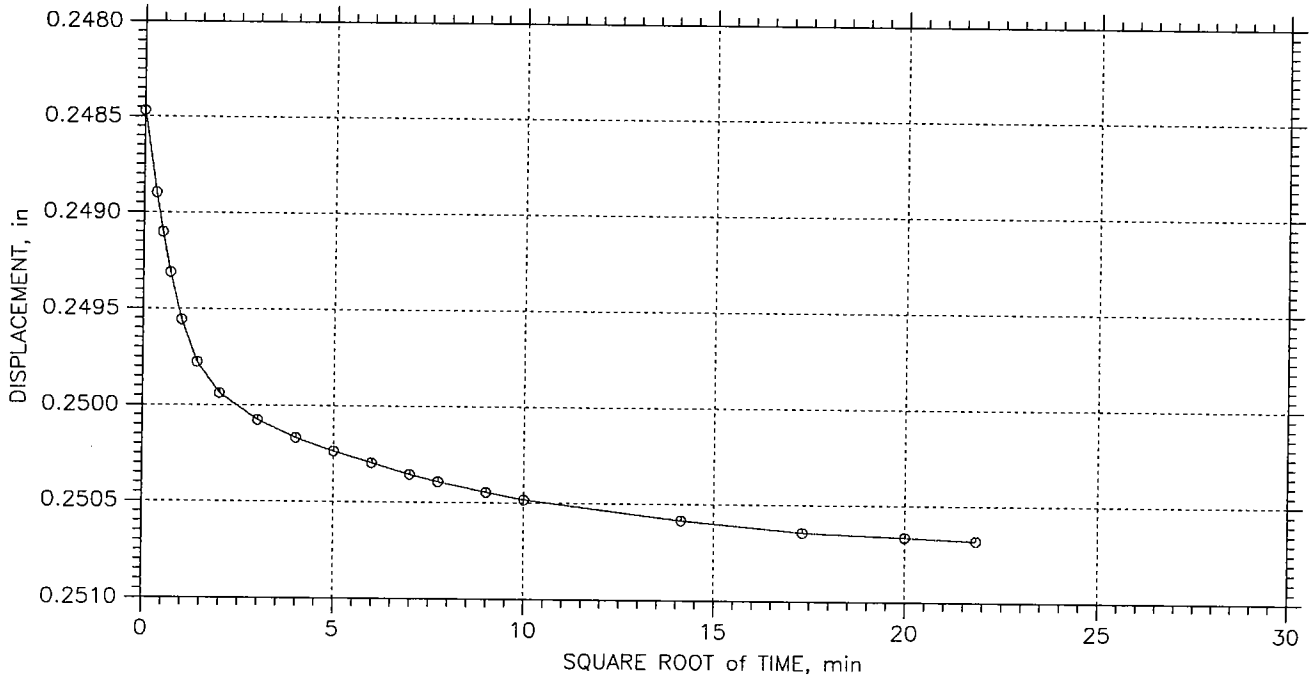
CONSOLIDATION TEST DATA

TIME CURVES

Step: 8 of 13

Stress: 0.5 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

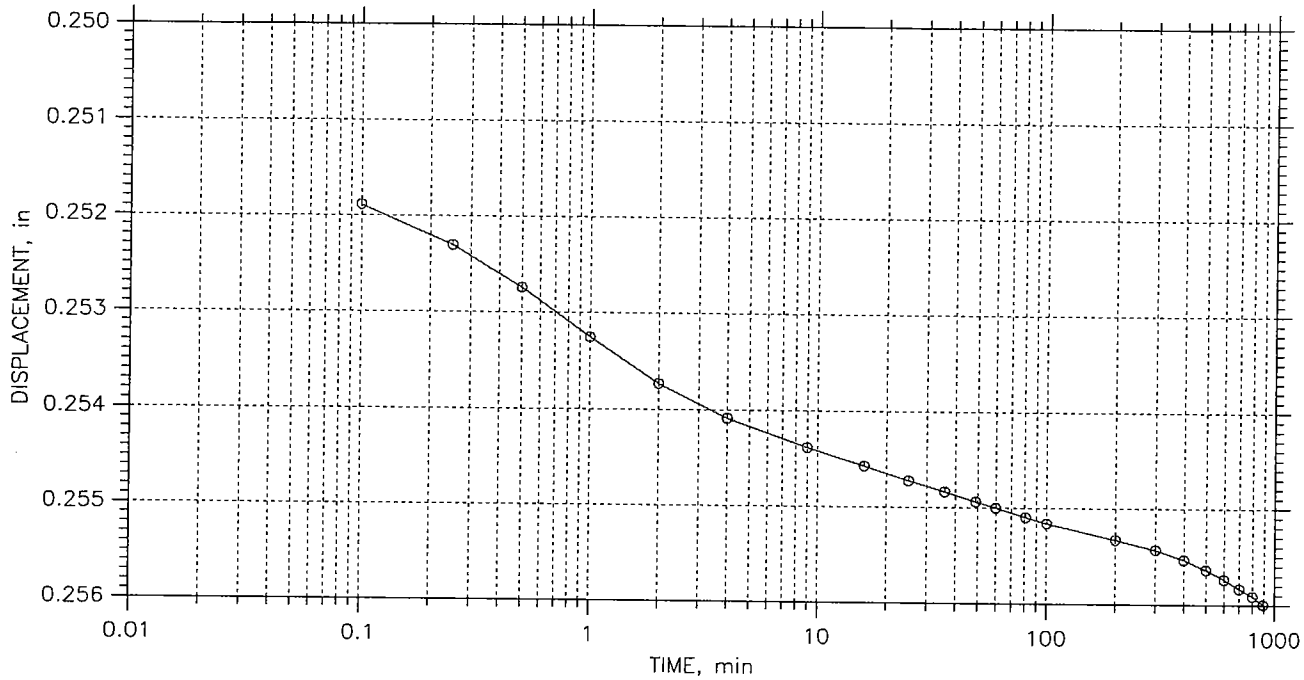
Wed, 06-DEC-2006 14:14:27

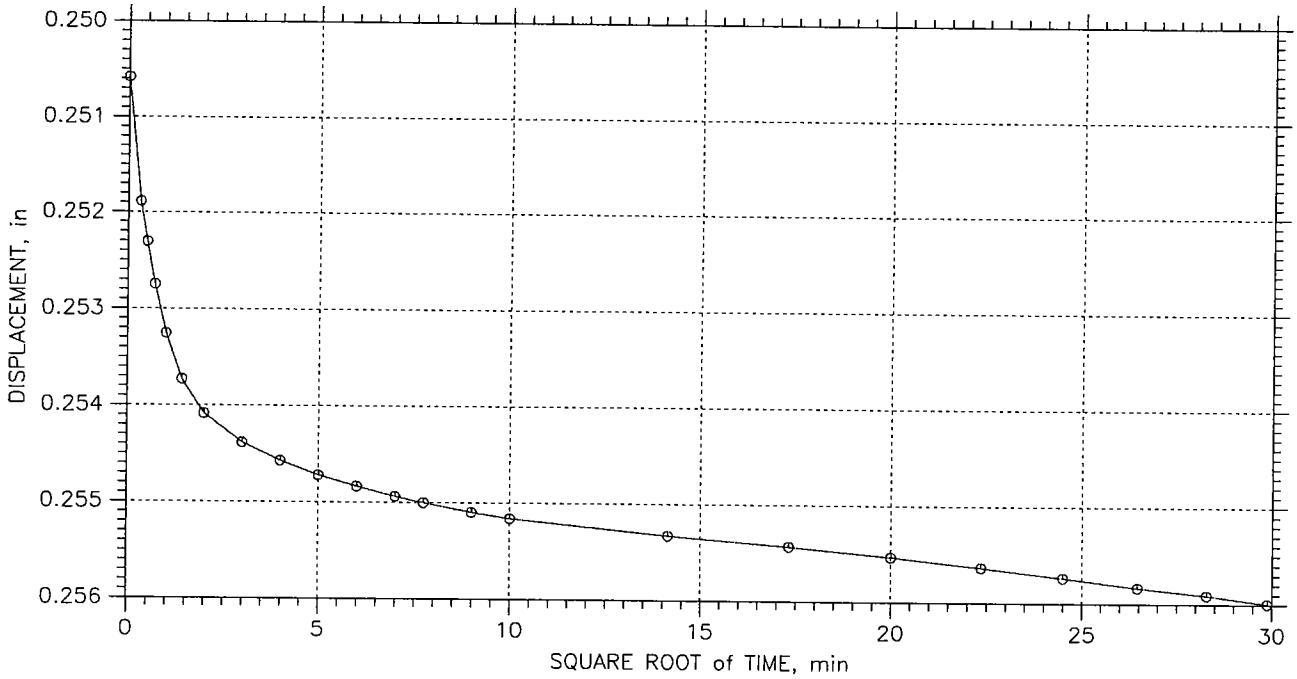
CONSOLIDATION TEST DATA

TIME CURVES

Step: 9 of 13

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

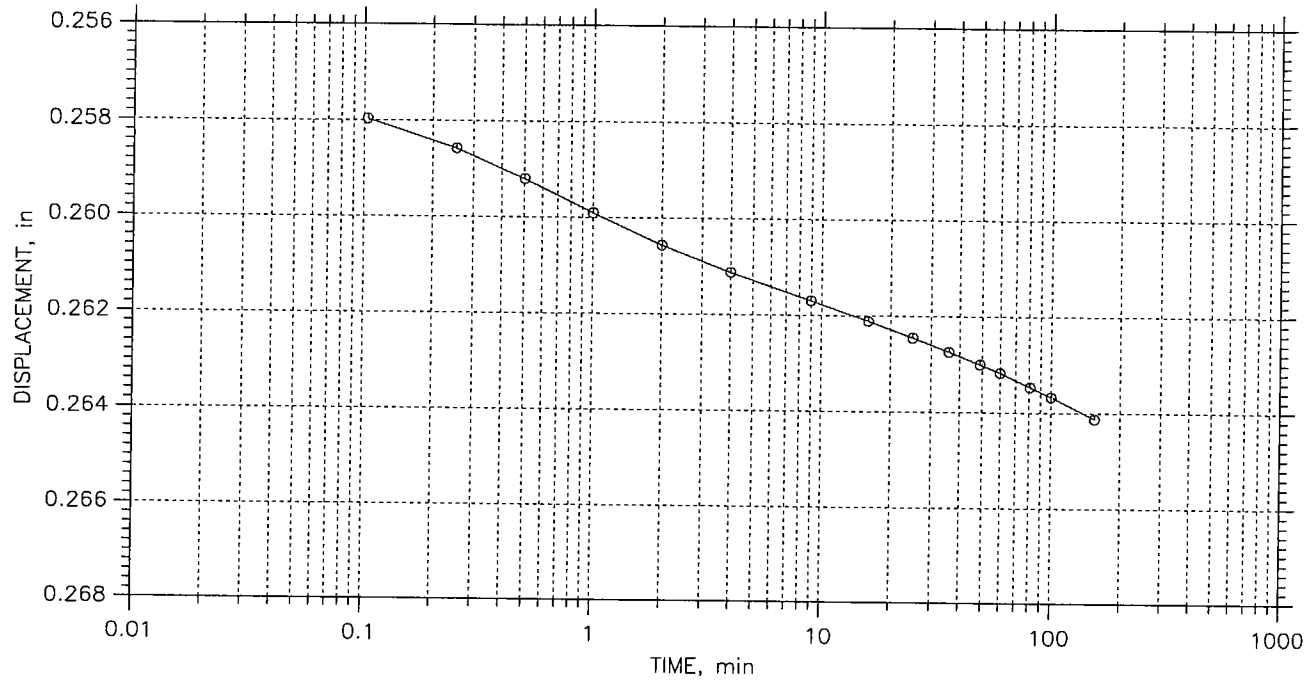
Wed, 06-DEC-2006 14:14:28

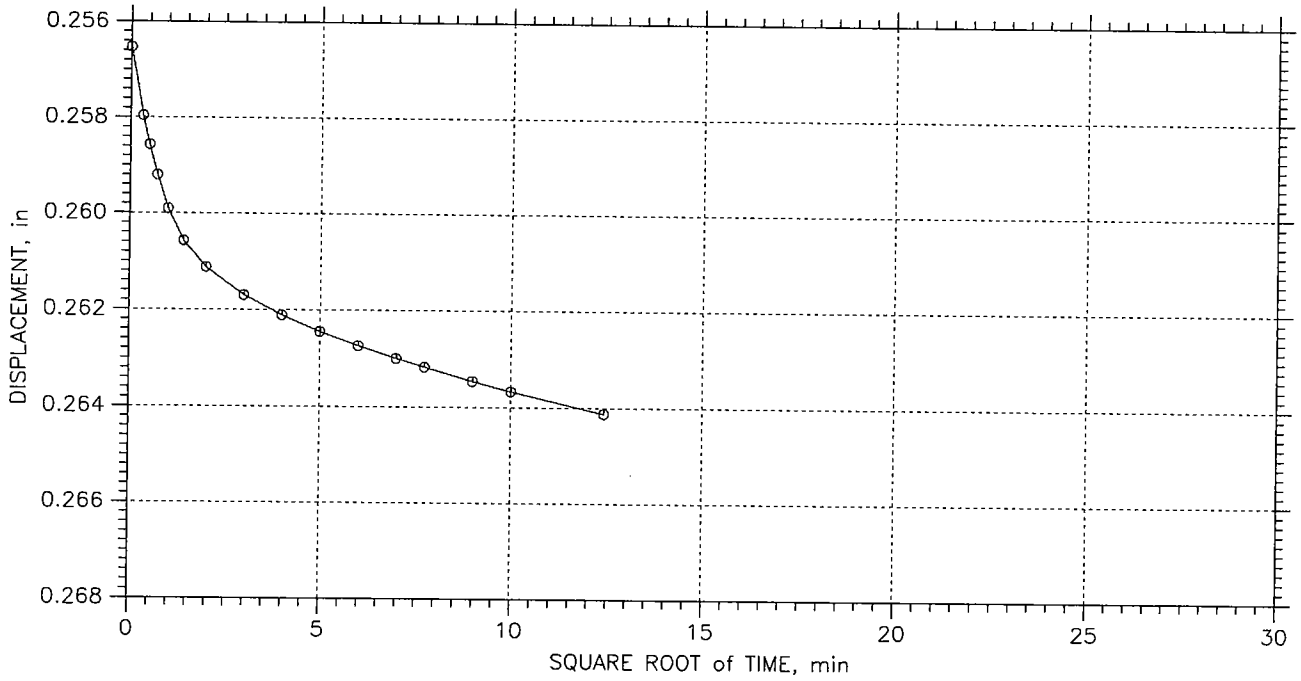
CONSOLIDATION TEST DATA

TIME CURVES

Step: 10 of 13

Stress: 2. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

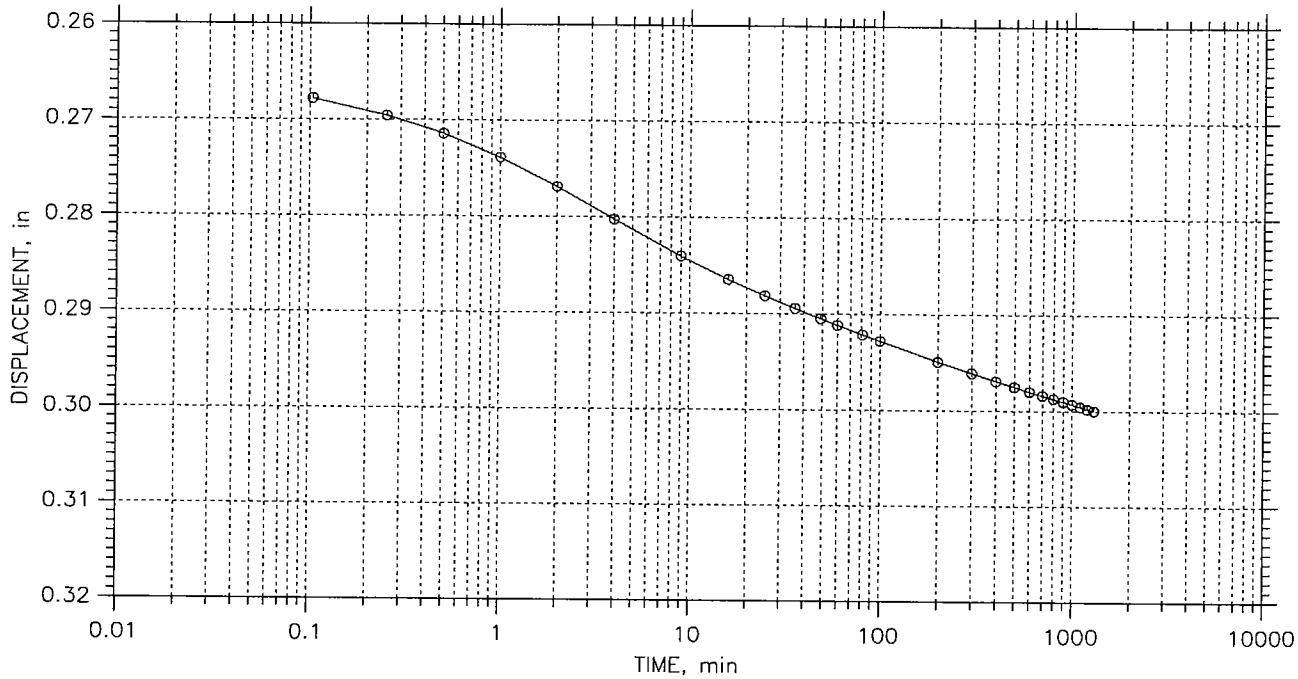
Wed, 06-DEC-2006 14:14:28

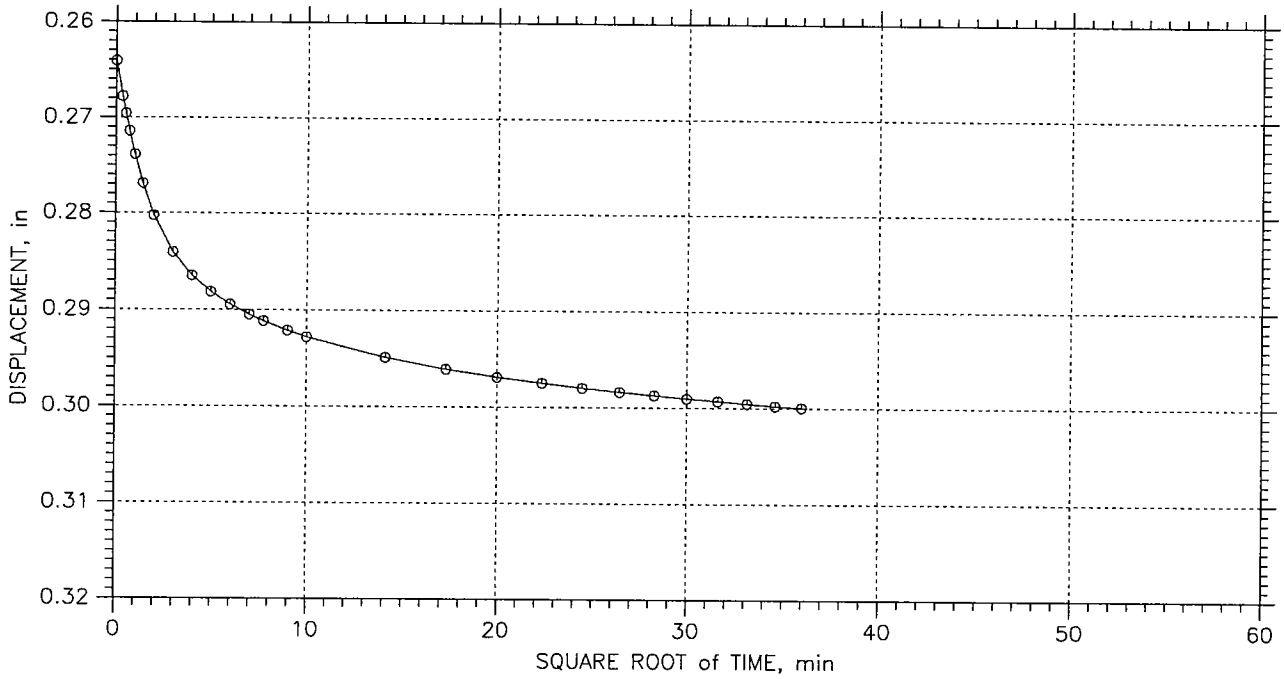
CONSOLIDATION TEST DATA

TIME CURVES

Step: 11 of 13

Stress: 4. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

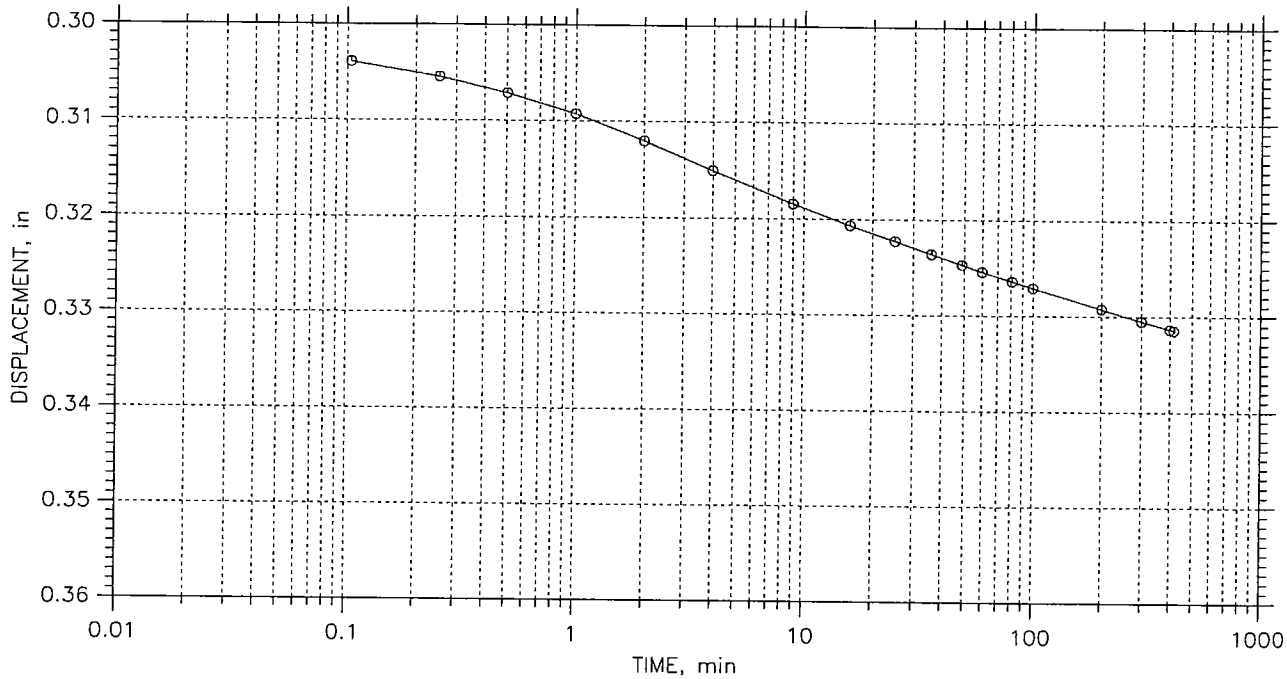
Wed, 06-DEC-2006 14:14:28

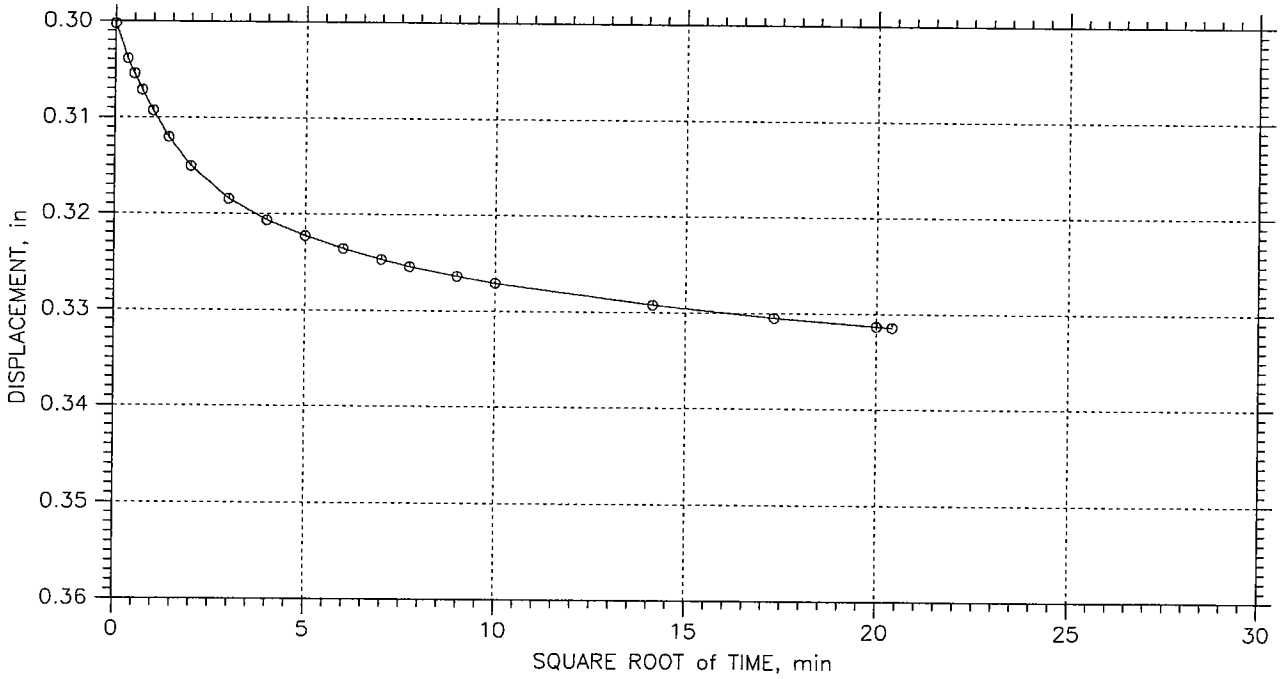
CONSOLIDATION TEST DATA

TIME CURVES

Step: 12 of 13

Stress: 8. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

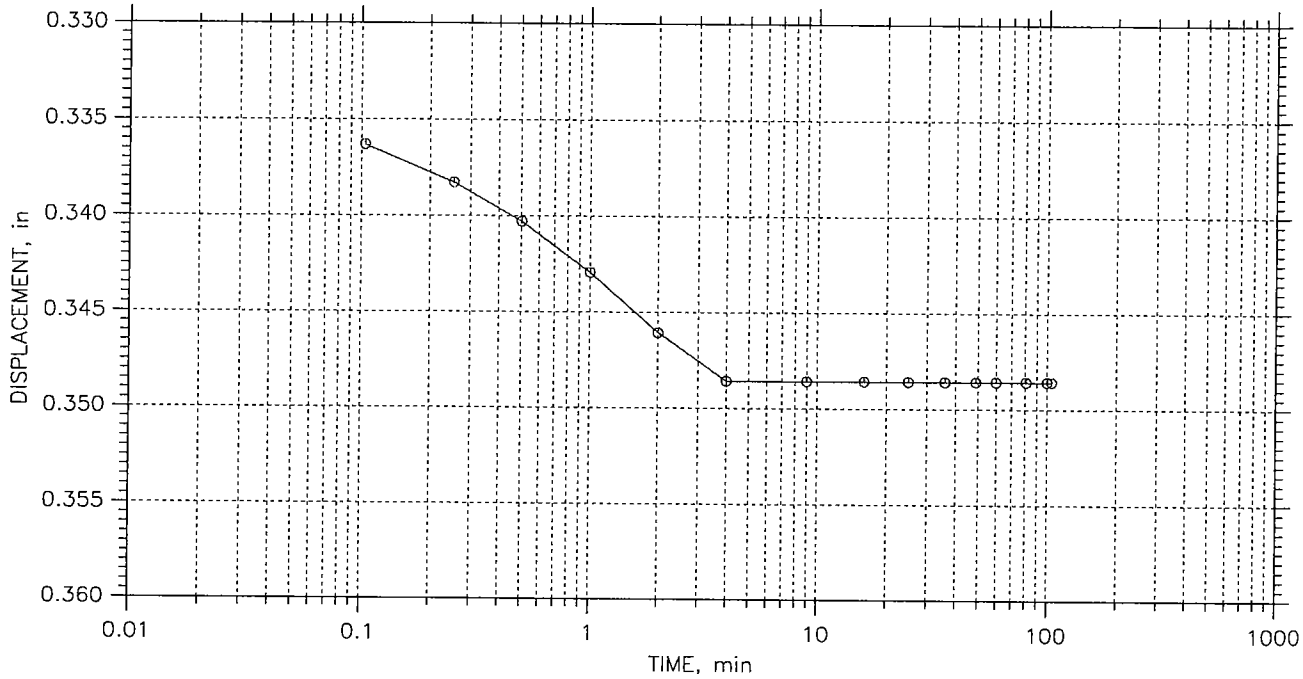
Wed, 06-DEC-2006 14:14:28

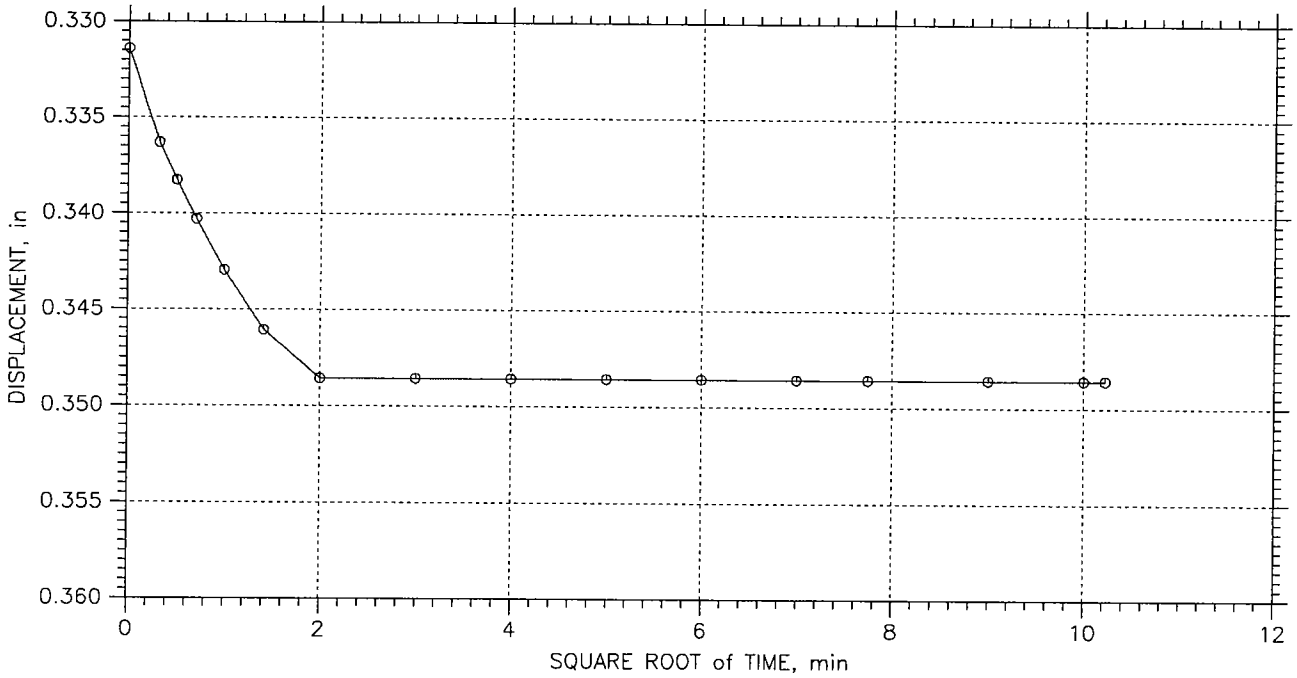
CONSOLIDATION TEST DATA

TIME CURVES

Step: 13 of 13

Stress: 16. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

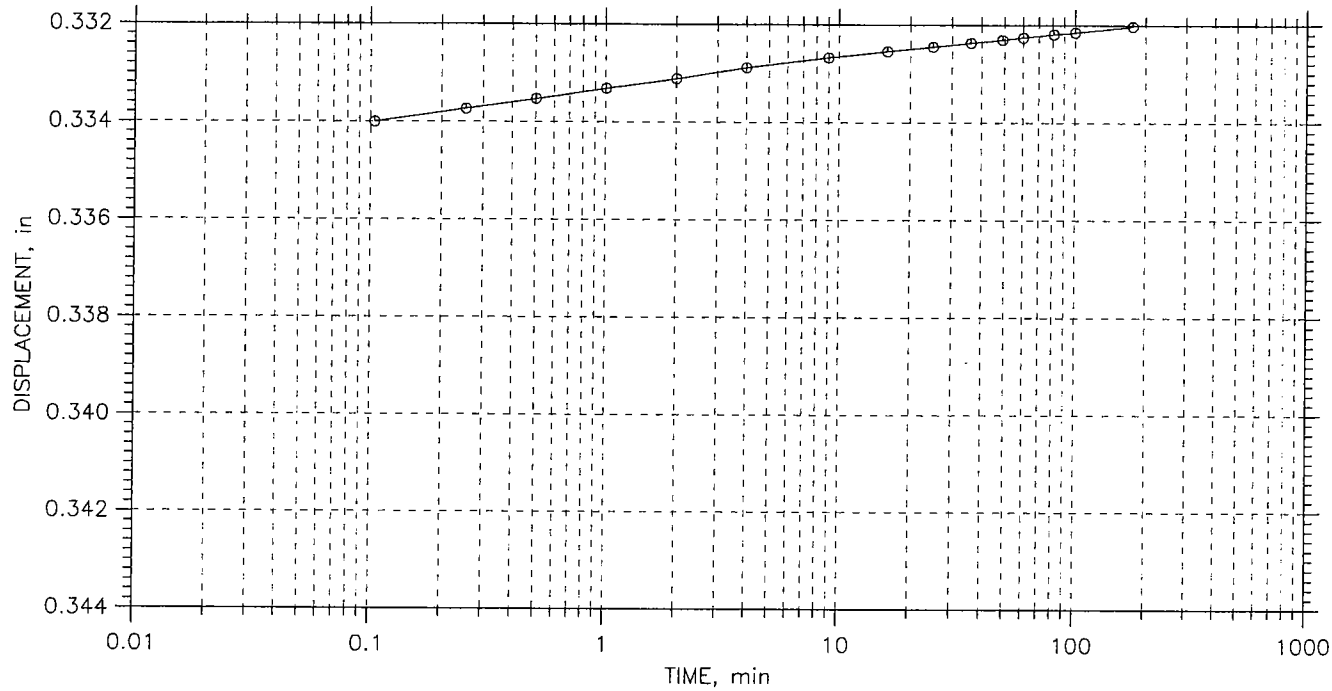
Wed, 06-DEC-2006 14:14:28

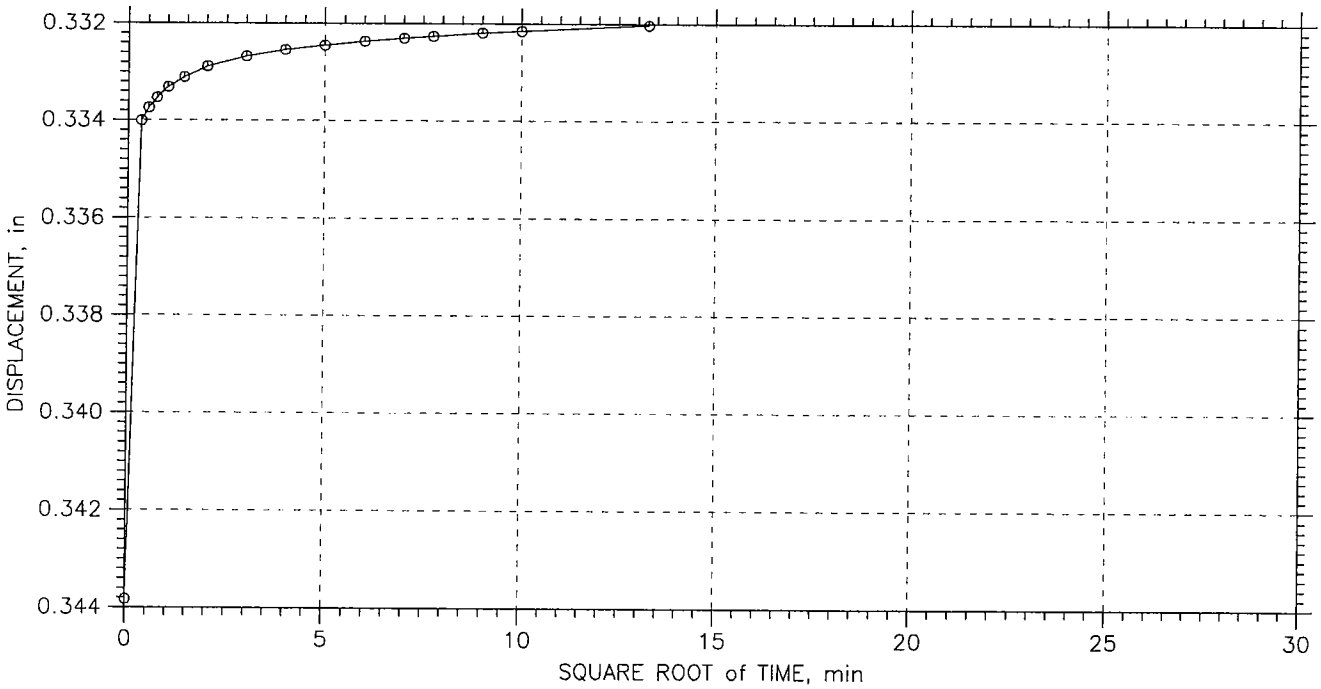
CONSOLIDATION TEST DATA

TIME CURVES

Step: 14 of 16

Stress: 4. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

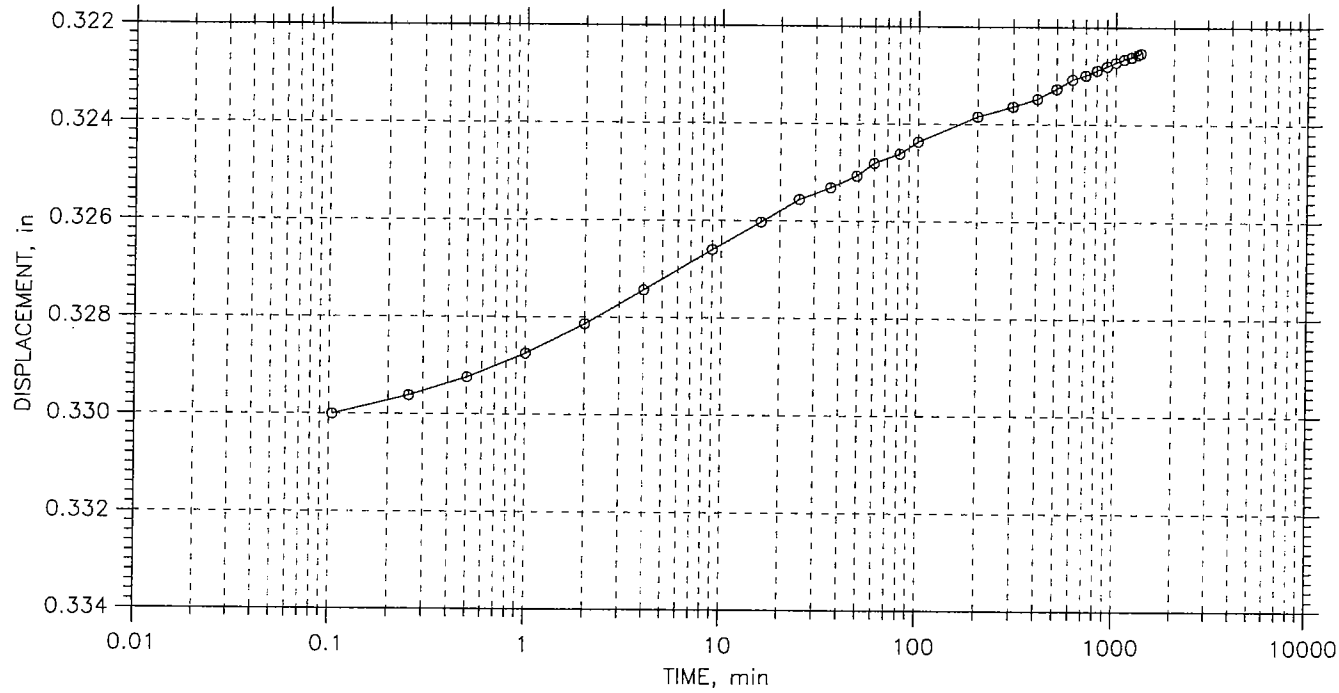
Tue, 05-DEC-2006 14:41:25

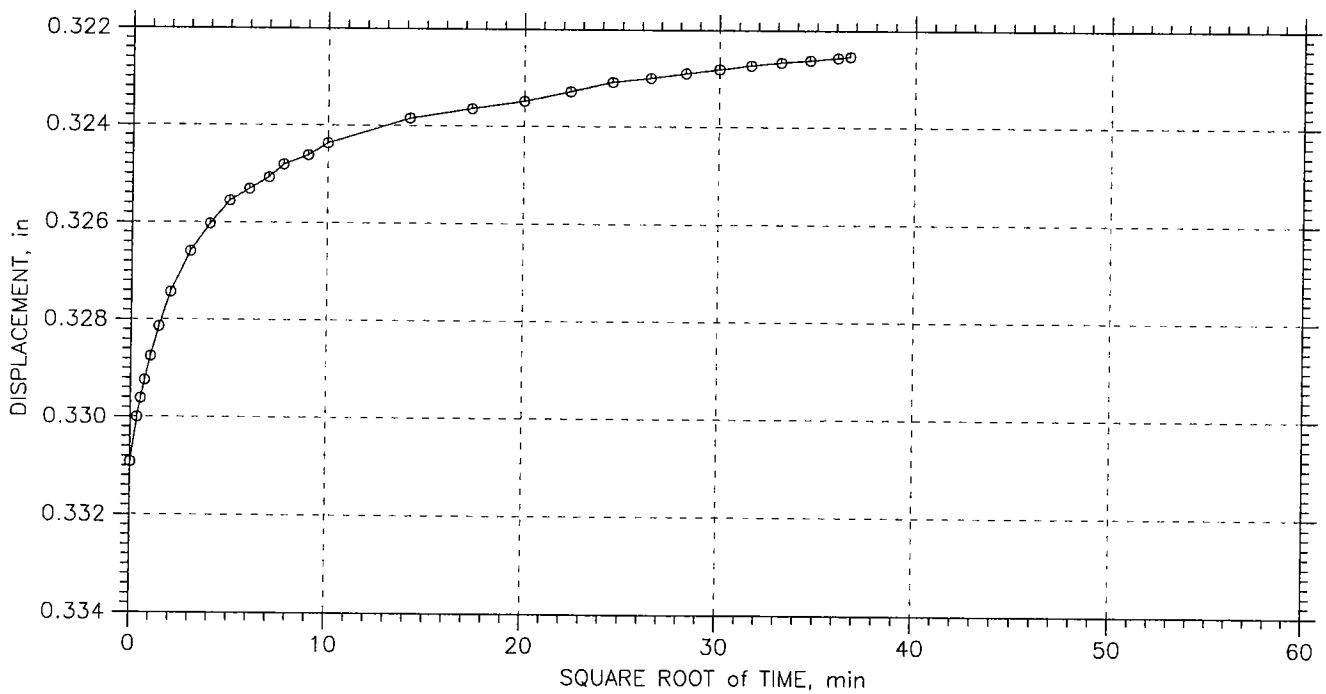
CONSOLIDATION TEST DATA

TIME CURVES

Step: 15 of 16

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		

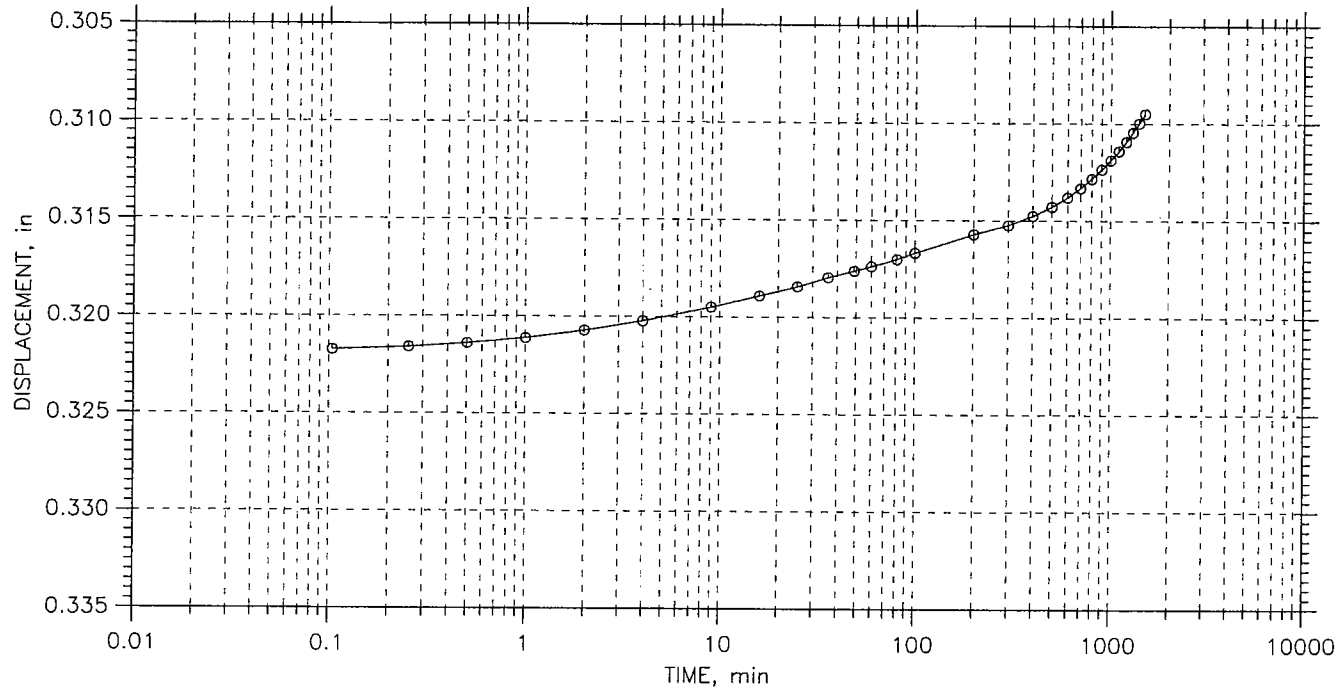
ue, 05-DEC-2006 14:41:33

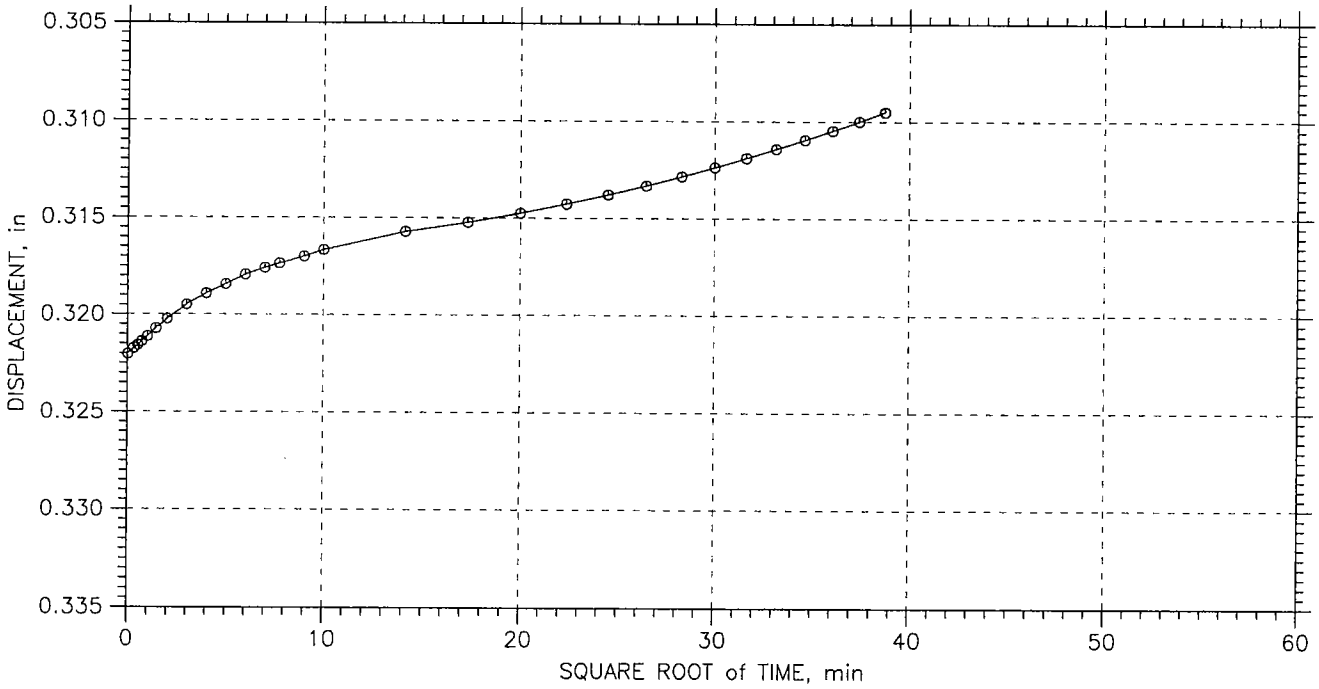
CONSOLIDATION TEST DATA

TIME CURVES

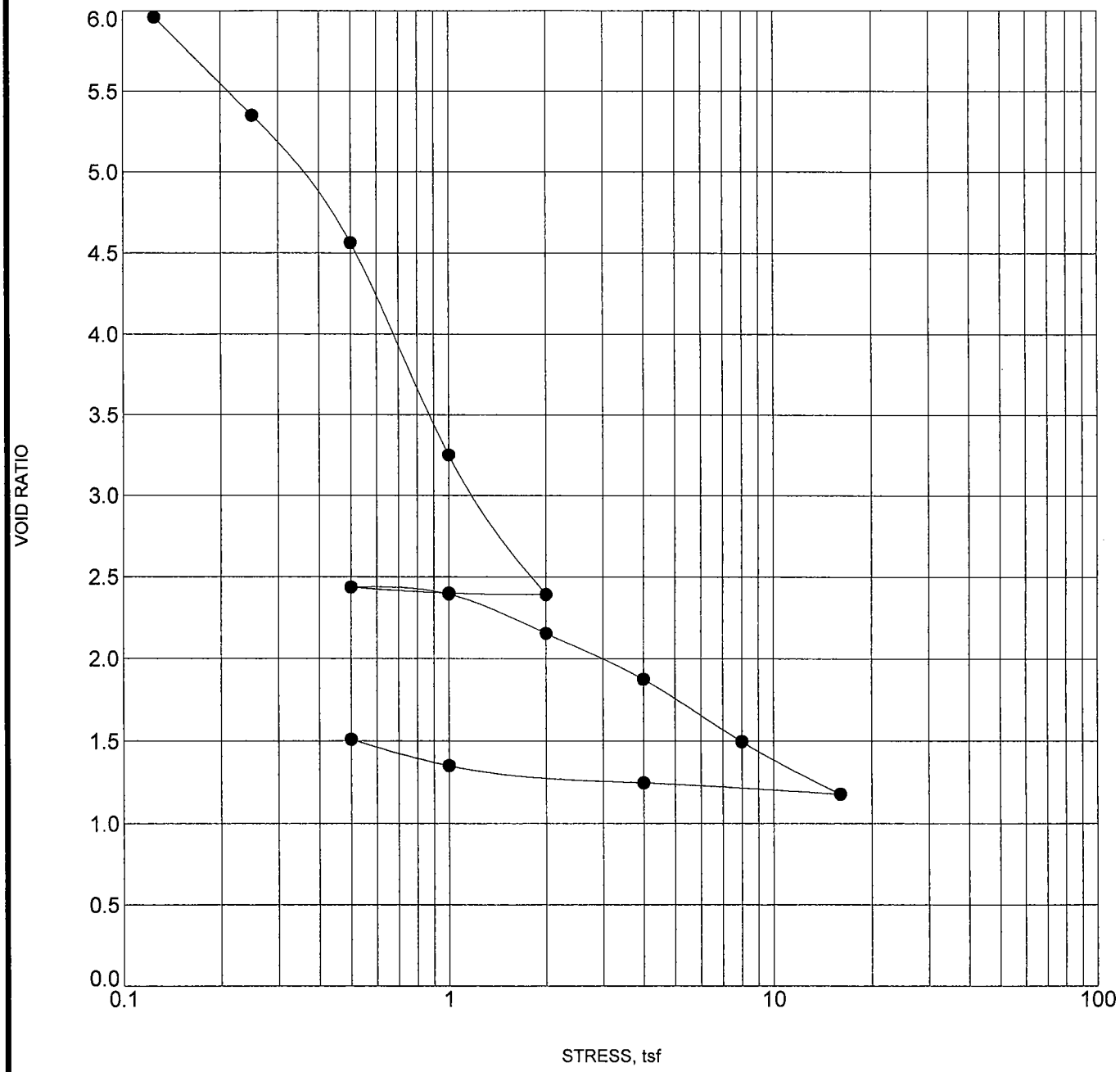
Step: 16 of 16

Stress: 0.25 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: ED-8	Test Date: 10/26/06	Depth:
Test No.: 17ED8	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT, LITTLE F-C SAND, TRACE OGRANICS - DARK BROWN (CL-ML)		
Remarks: Cc = 0.58 Ccr = 0.070 TEST PERFORMED AS PER ASTM D 2435		



	Boring No.	Depth	Classification	γ_d	MC%
●	**DS-26-COMP**	**6.0**		**19.6**	**275.5**

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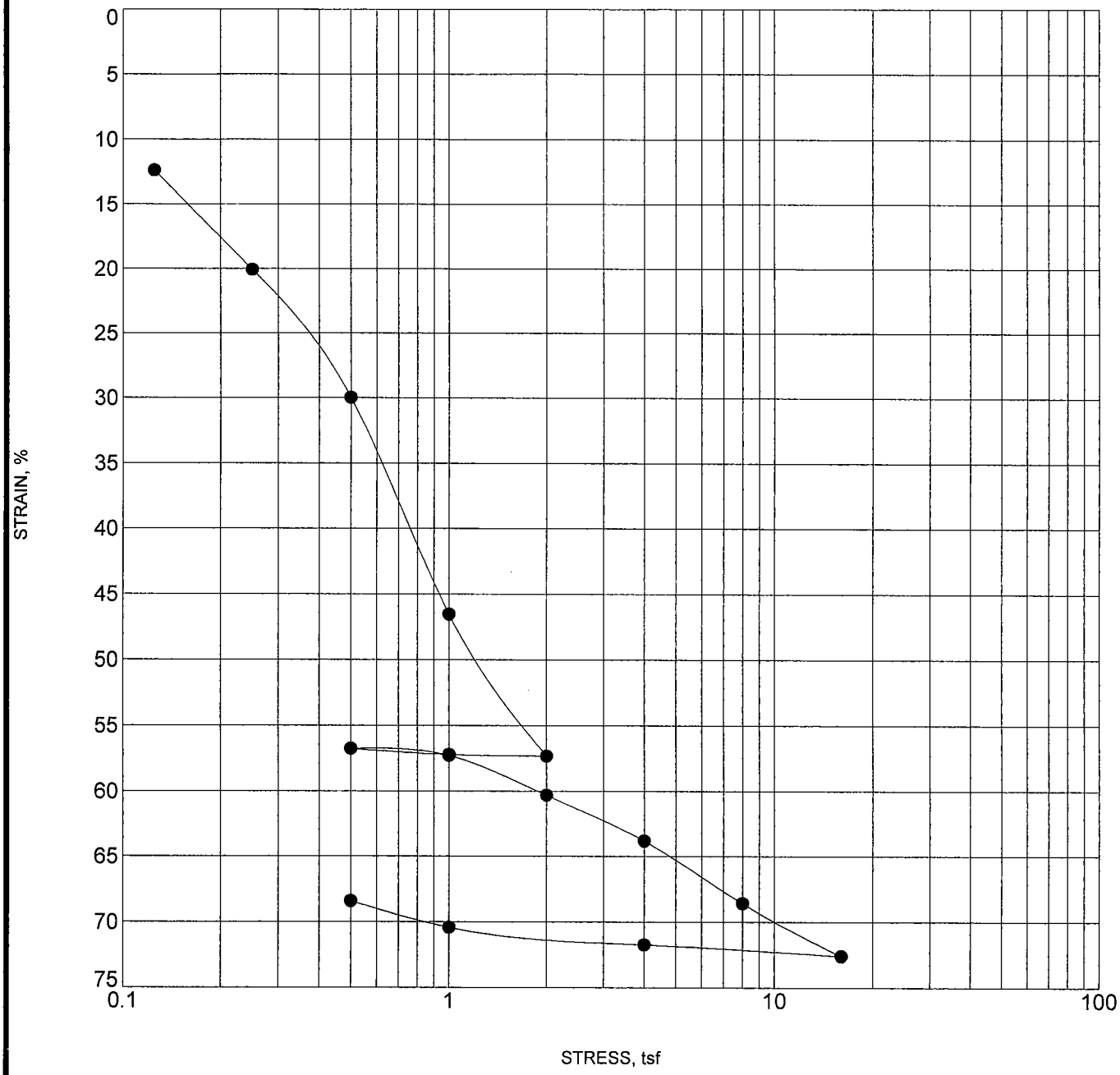
CONSOLIDATION TEST

Project Name: OU-1 2006 Remedial Action

Site Location:

STS Job No.: 29316A



	Boring No.	Depth	Classification	γ_d	MC%
●	**DS-26-COMP**	**6.0**		**19.6**	**275.5**

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CONSOLIDATION TEST

Project Name: OU-1 2006 Remedial Action

Site Location:

STS Job No.: 29316A

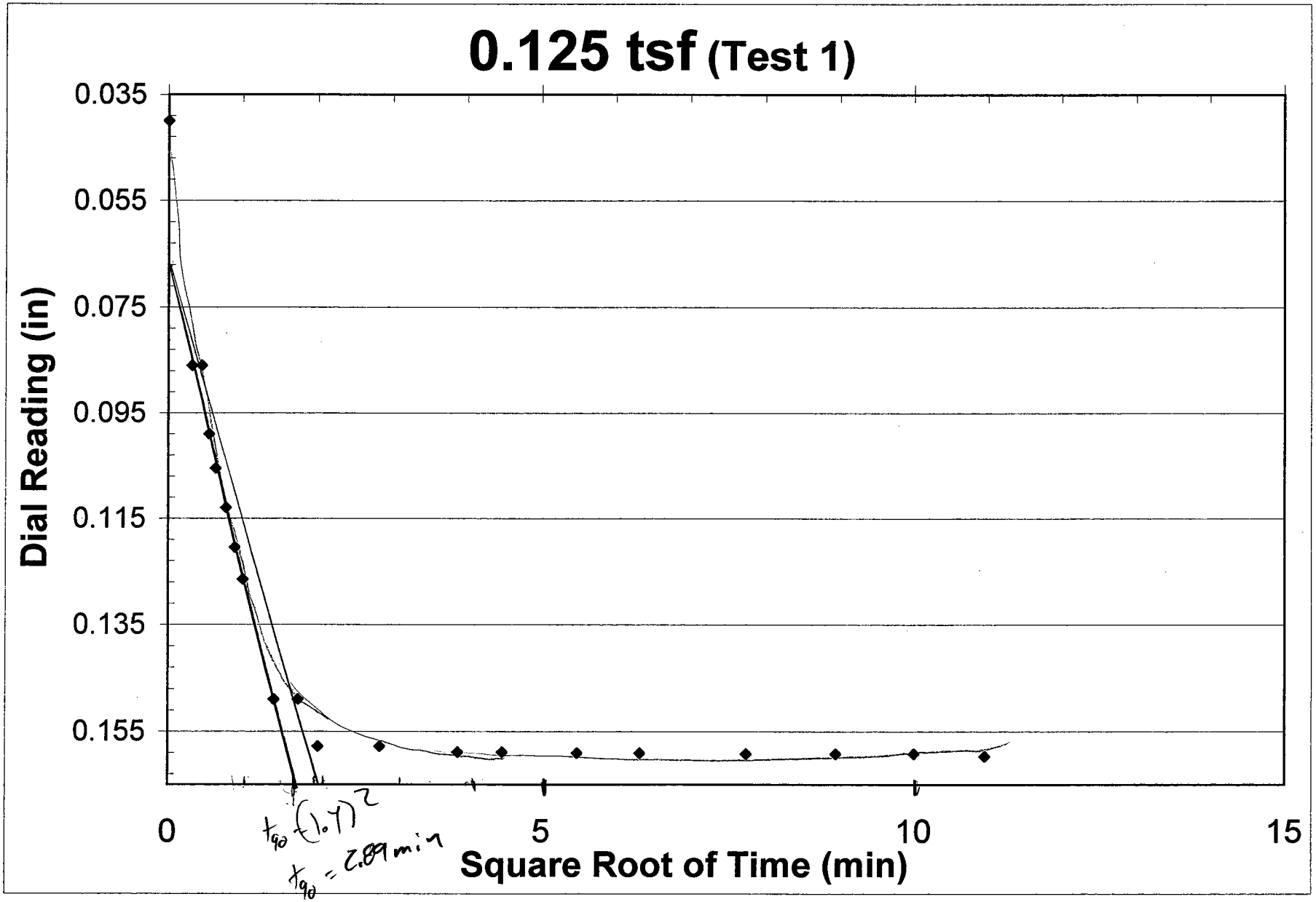
Fox River OU-1 2006 Remedial Action

Consolidation Test
Coefficient of Consolidation

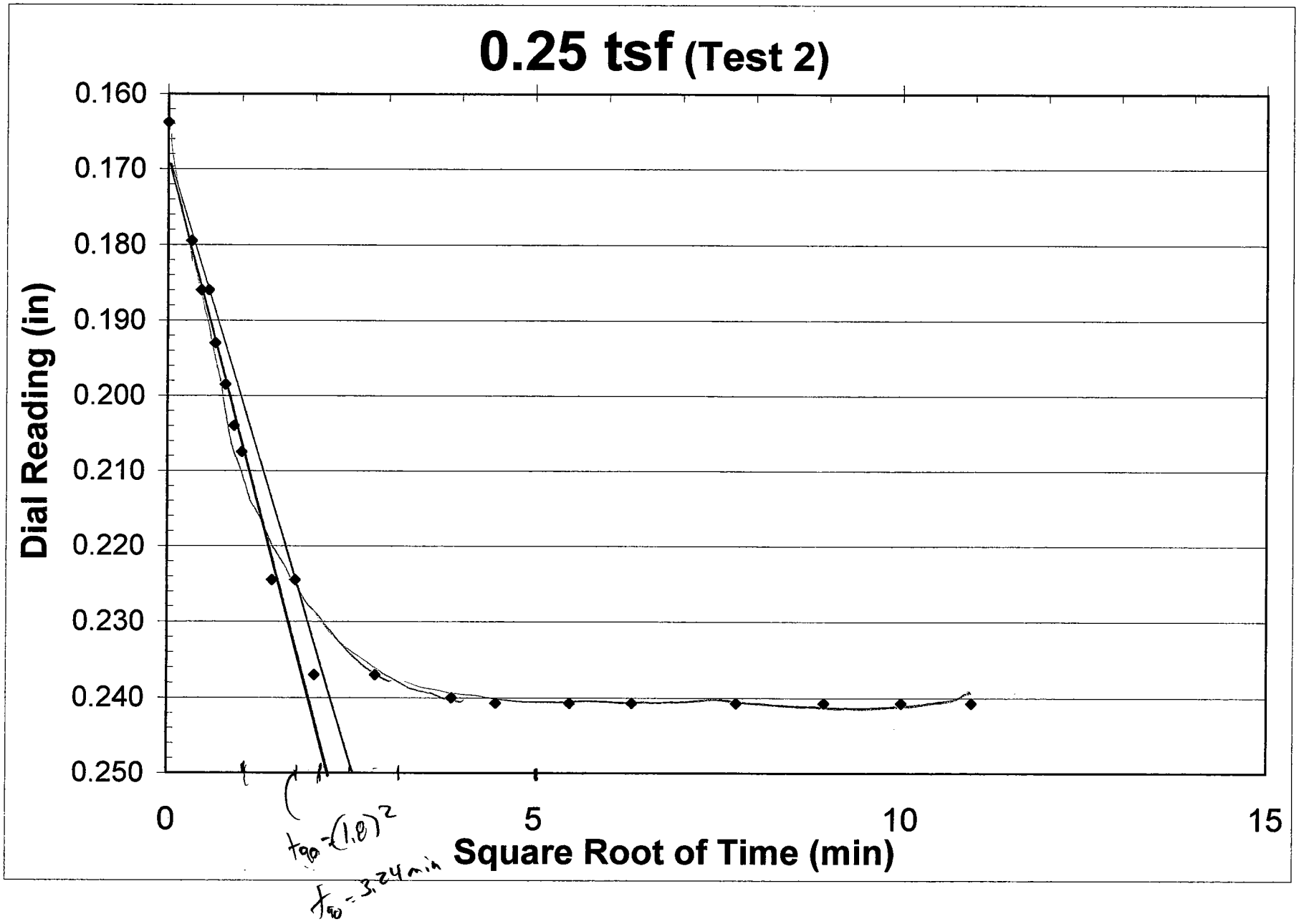
Test DS-26-comp

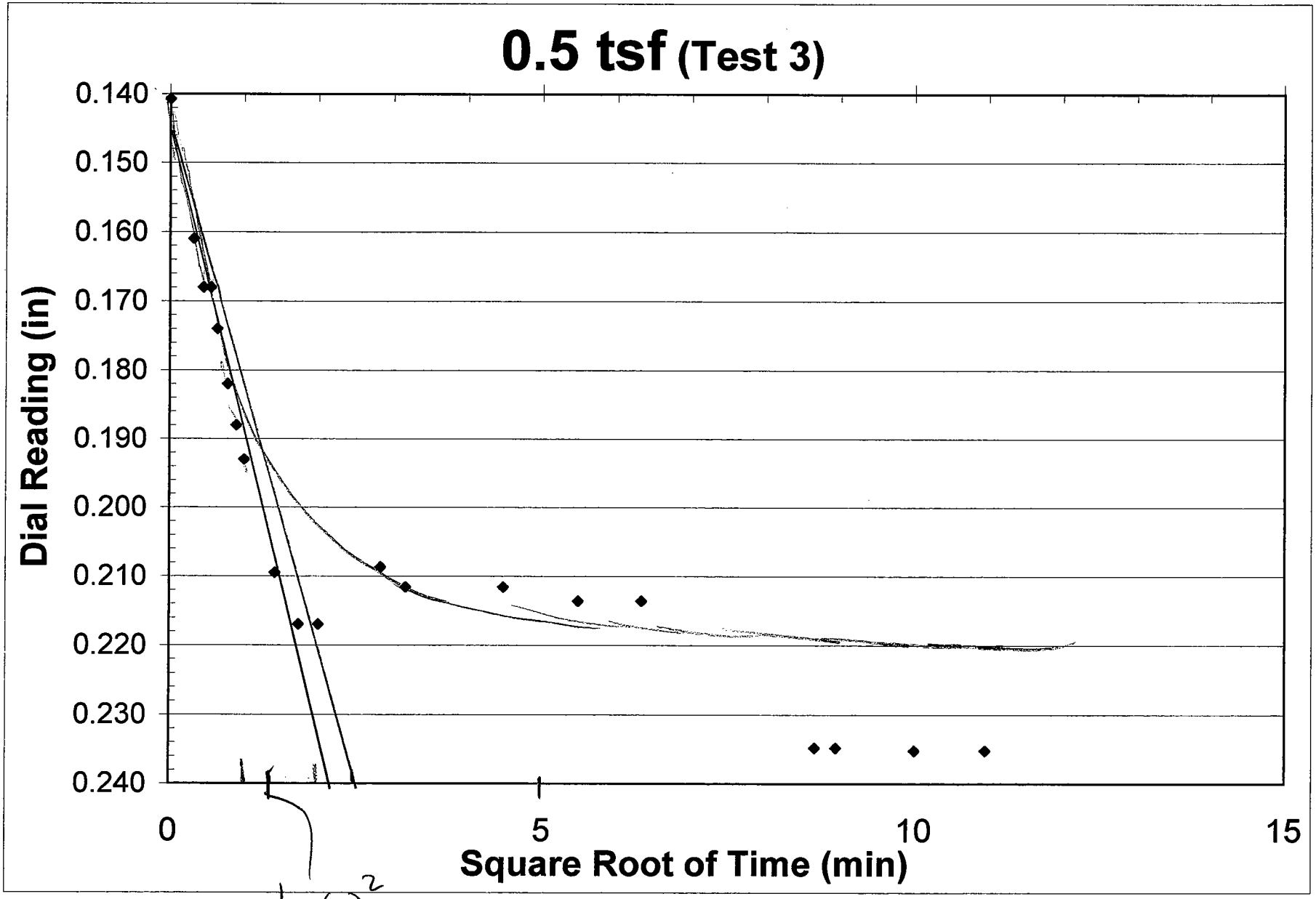
Loading		t_{90}	t_{90}	H_{dr}	H_{dr}^2	Cv
Starting	Ending	min	sec	cm	cm^2	cm2/sec
0.00	0.125	2.89	173.40	1.27	1.61	0.0079
0.125	0.25	3.24	194.40	1.27	1.61	0.0070
0.25	0.50	1.69	101.40	1.27	1.61	0.0135
0.50	1.00	9.00	540.00	1.27	1.61	0.0025
1.00	2.00	8.41	504.60	1.27	1.61	0.0027
0.50	1.00	4.41	264.60	1.27	1.61	0.0052
1.00	2.00	11.90	714.00	1.27	1.61	0.0019
2.00	4.00	16.00	960.00	1.27	1.61	0.0014
4.00	8.00	16.00	960.00	1.27	1.61	0.0014

Minimum Value	1.42E-03	**cm2/sec**
	2.21E-04	**in2/sec**
Maximum Value	1.35E-02	**cm2/sec**
	2.09E-03	**in2/sec**



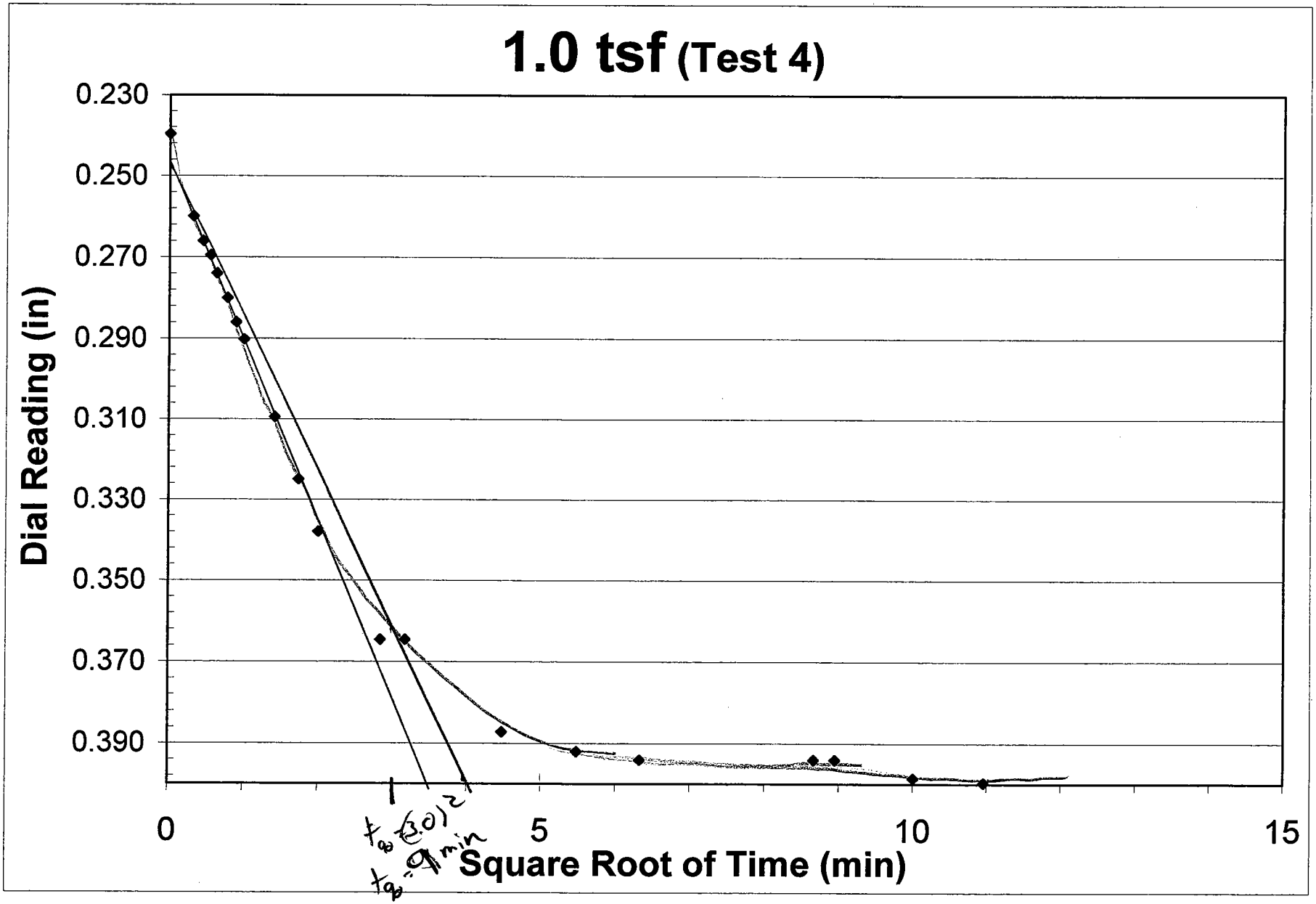
1-RA-06-E014-US-26


0.25 tsf (Test 2)
Dial Reading (in)
0.160
0.170
0.180
0.190
0.200
0.210
0.220
0.230
0.240
0.250
0
5
10
15
Square Root of Time (min)
$t_{90} = (1.8)^2$
$t_{50} = 3.24$ min

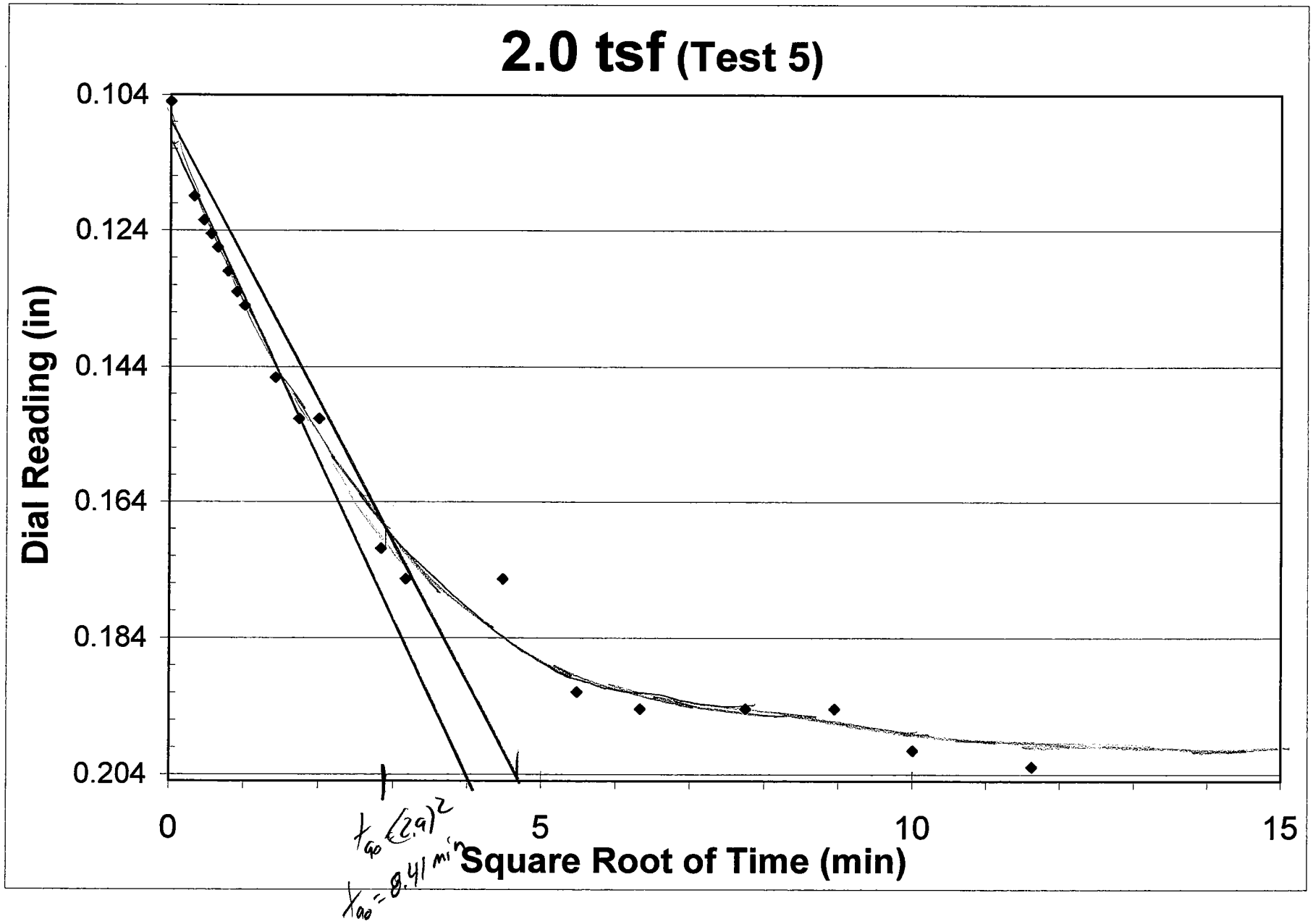


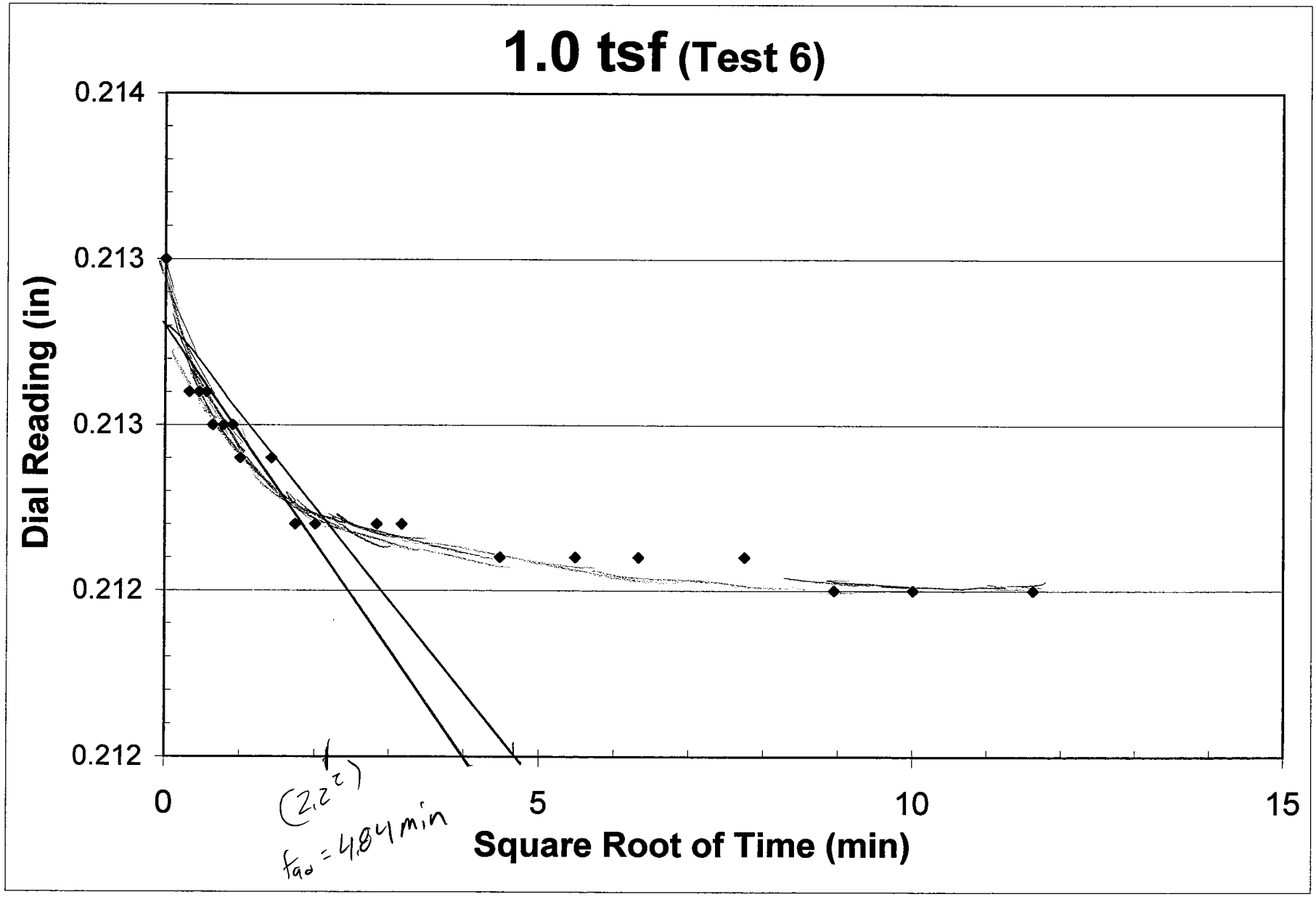
$t_{90} = (1.3)^2$

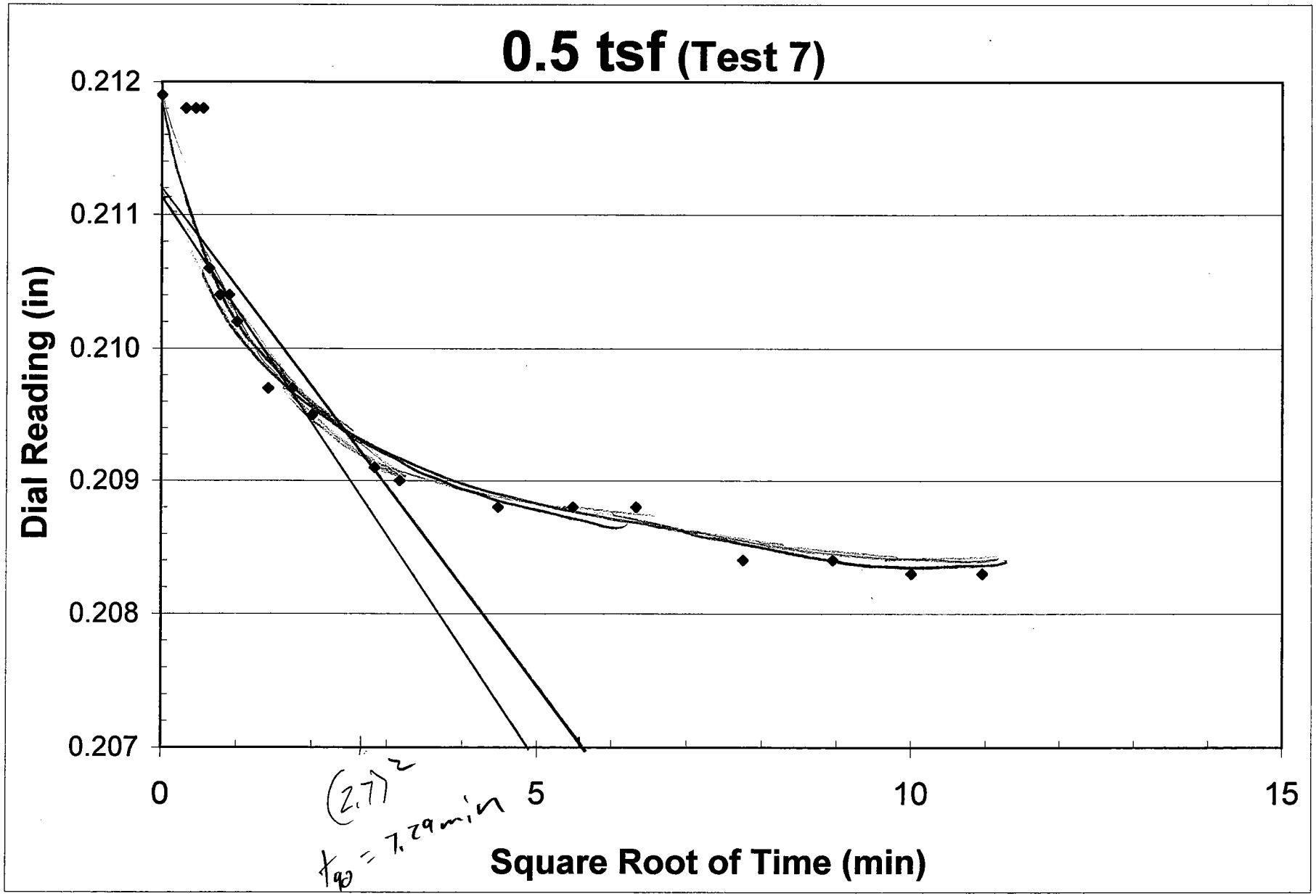
$t_{90} = 1.69 \text{ min}$

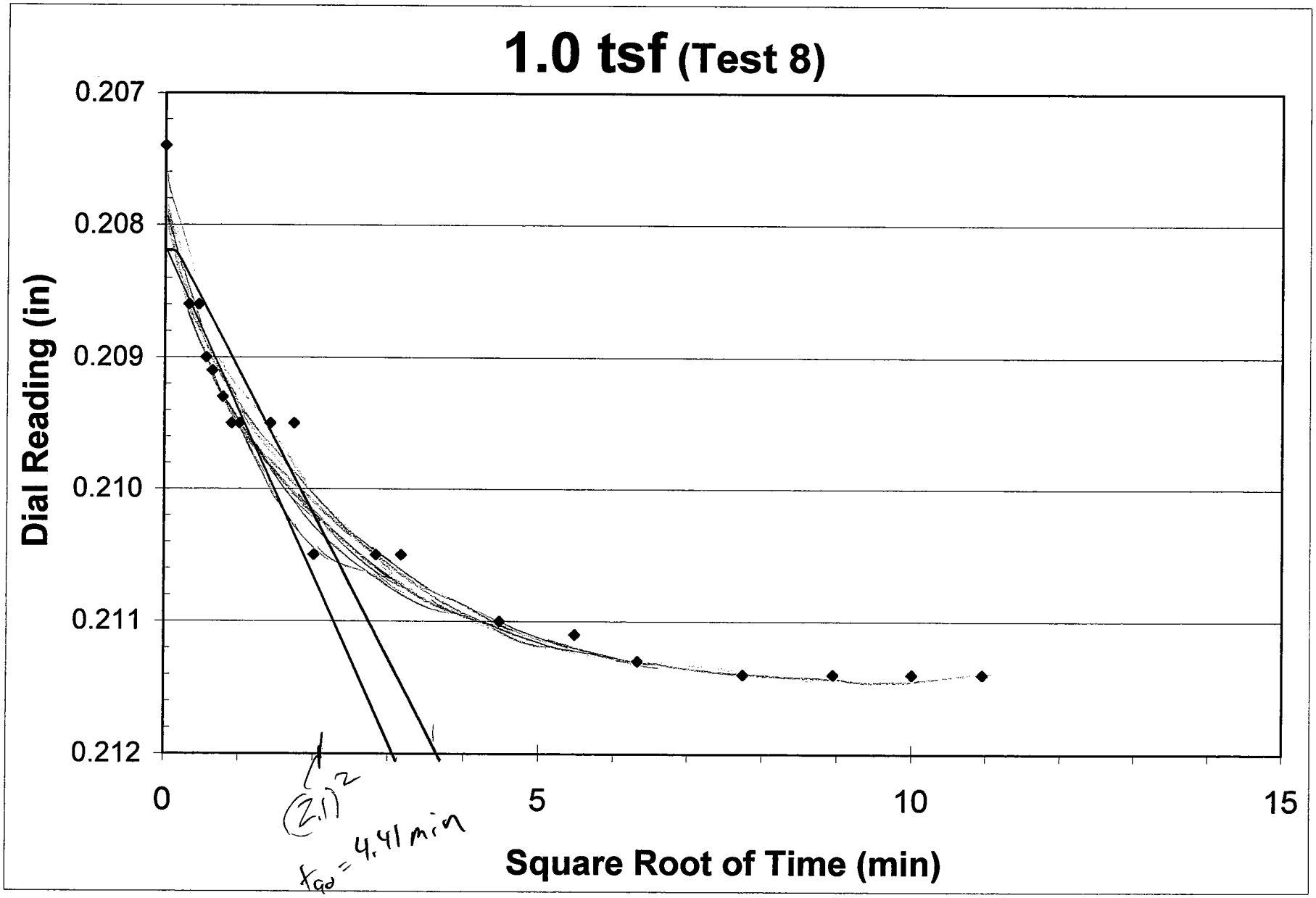


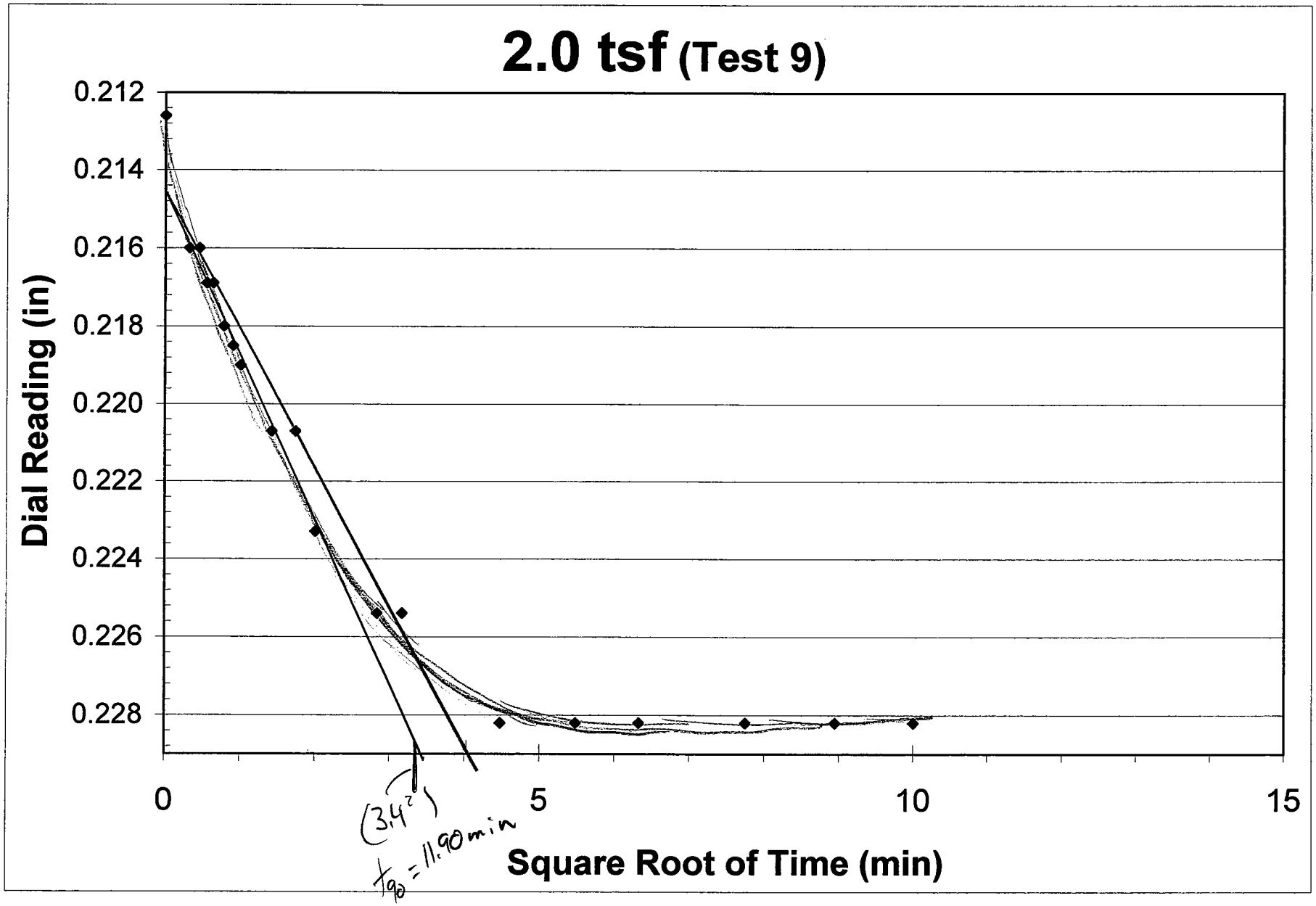
K:\PROJECTS\429316A\ENG\1-RA-06-E014-DS-26-COMP cv curves.xls

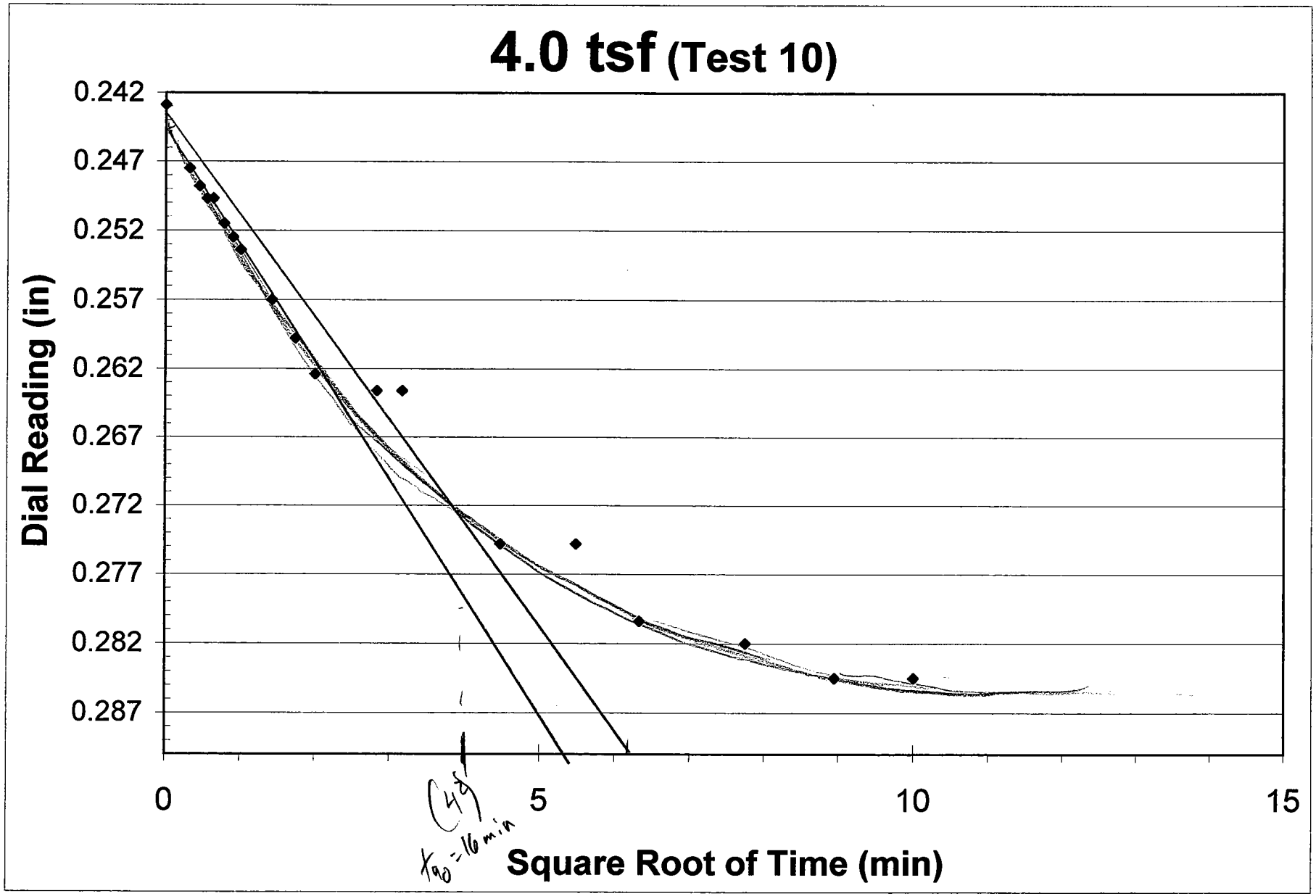

2.0 tsf (Test 5)
Dial Reading (in)
0.104
0.124
0.144
0.164
0.184
0.204
0
5
10
15
Square Root of Time (min)
t_{90} (2.9)^2
t_{90} = 8.41 min

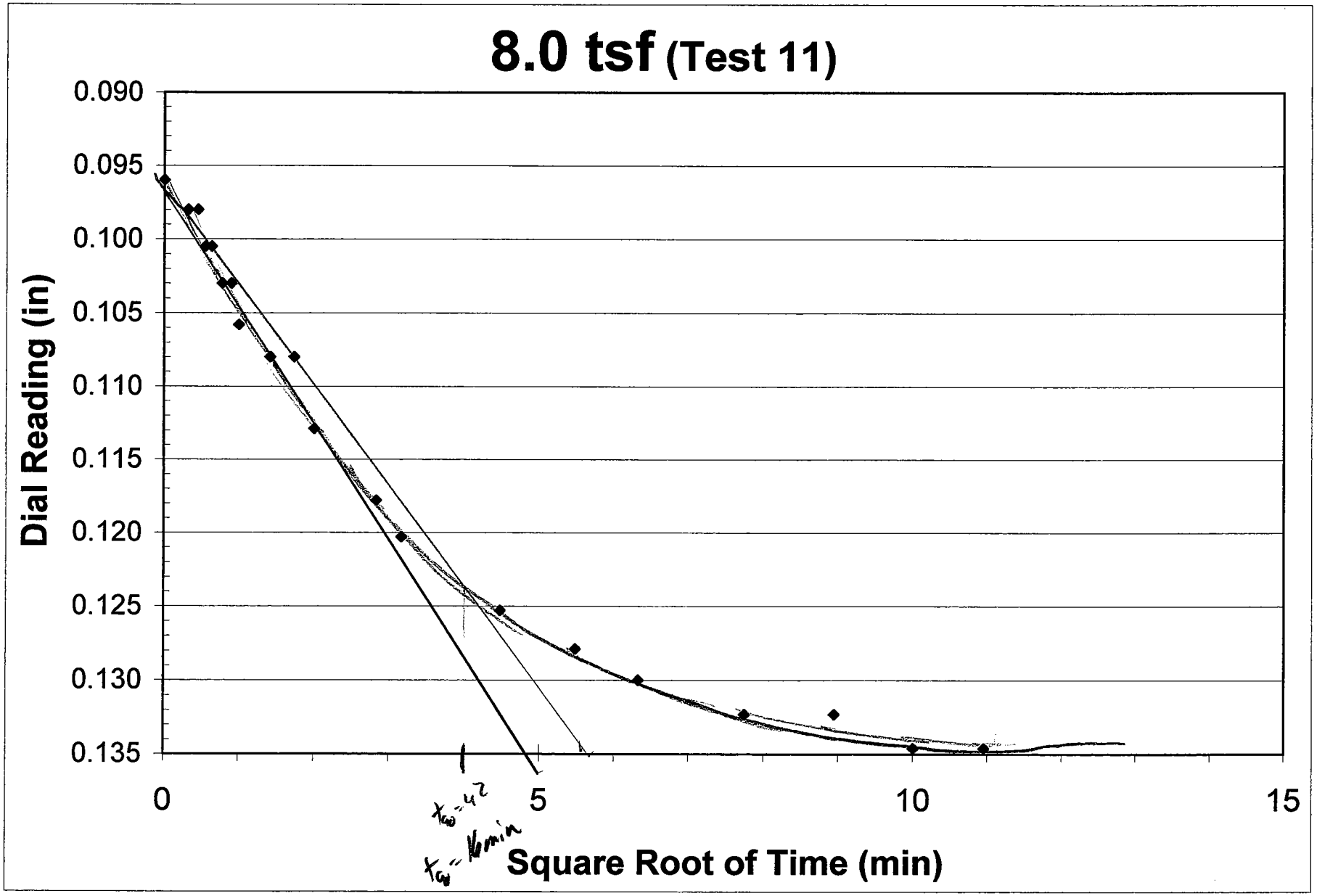

1.0 tsf (Test 6)
0.214
0.213
0.213
0.212
0.212
Dial Reading (in)
0
5
10
15
Square Root of Time (min)
(2.2²)
t50 = 4.84 min

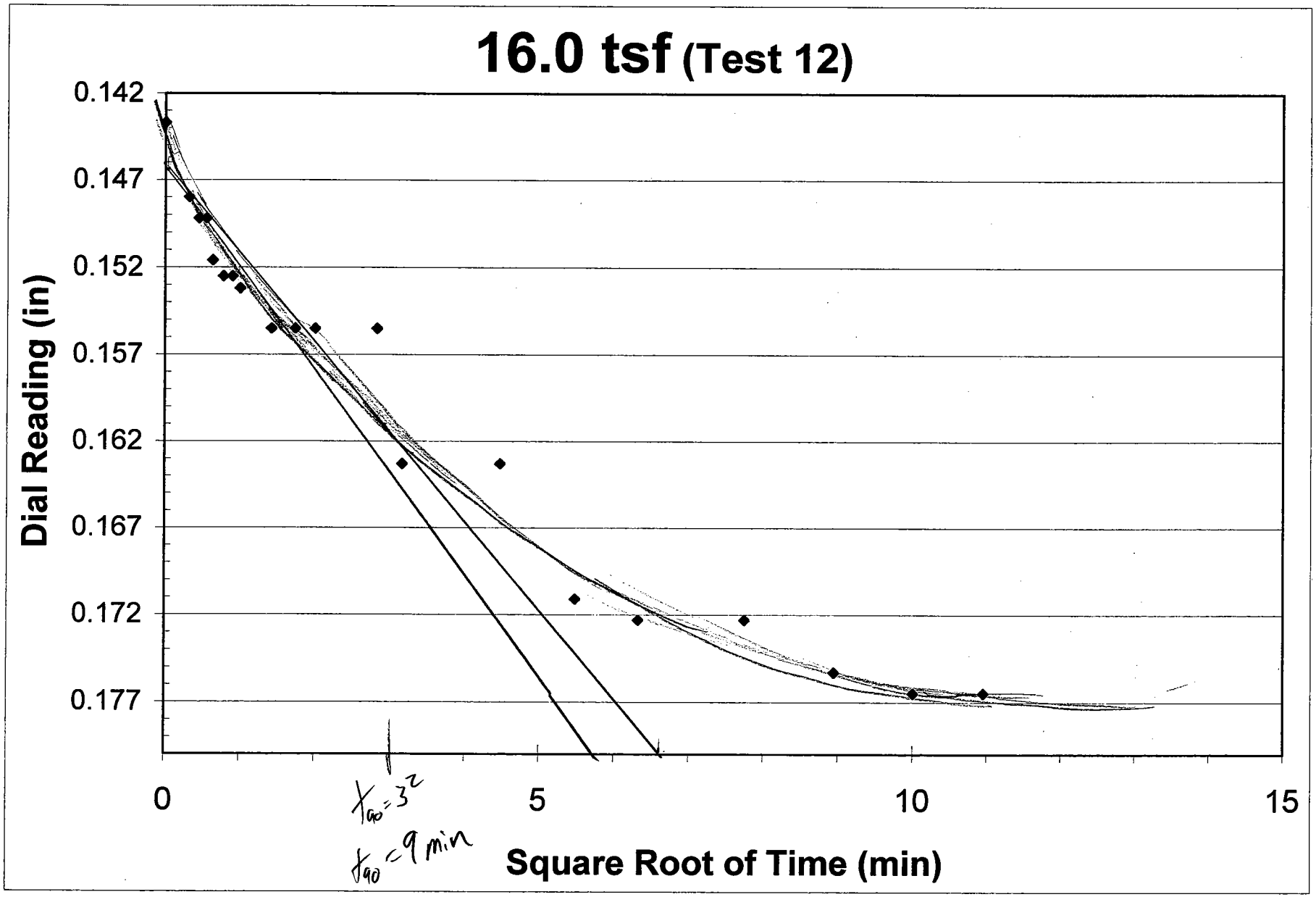

0.5 tsf (Test 7)
Dial Reading (in)
0.212
0.211
0.210
0.209
0.208
0.207
0
5
10
15
Square Root of Time (min)
(2.7)²
t90 = 7.29 min

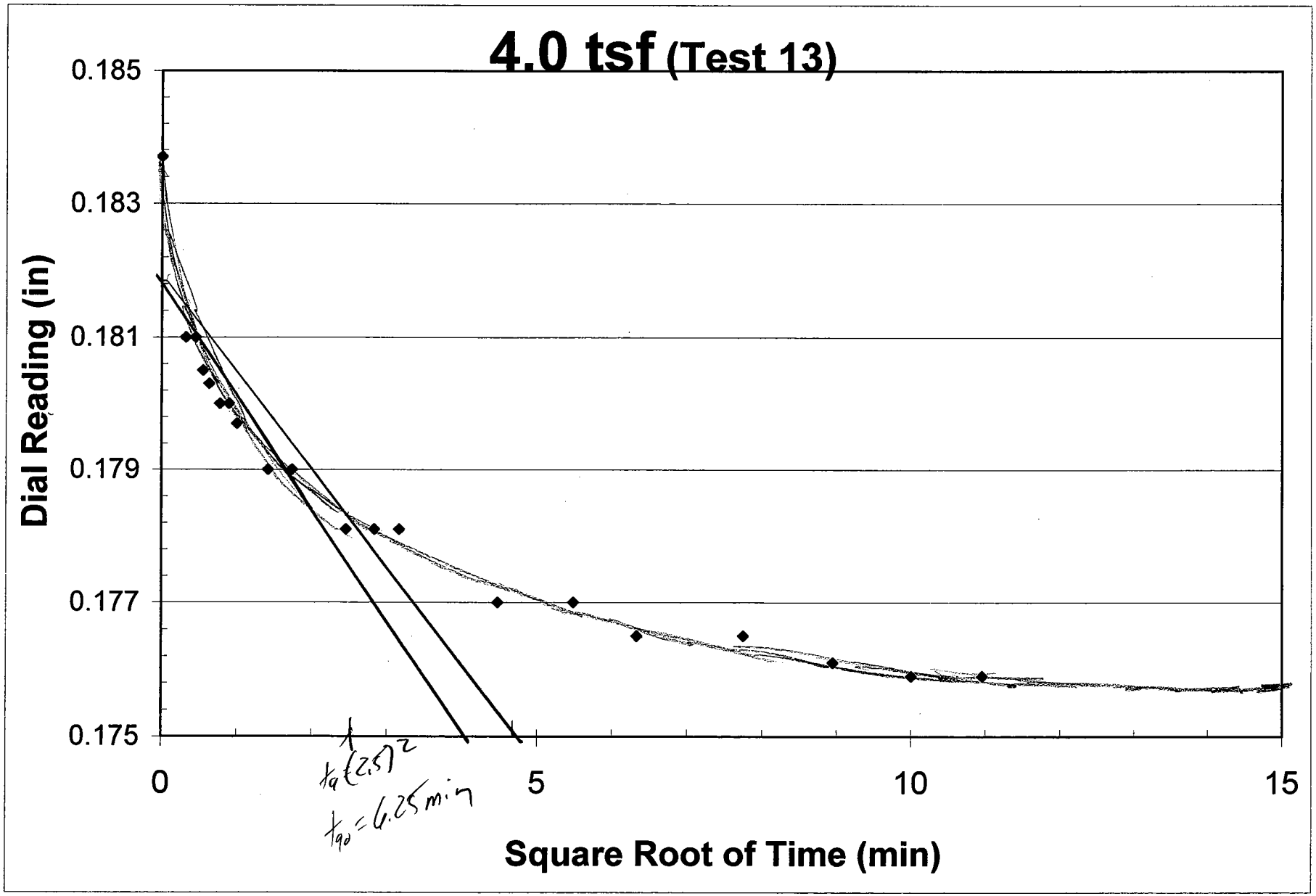

1.0 tsf (Test 8)
0.207
0.208
0.209
0.210
0.211
0.212
Dial Reading (in)
0
5
10
15
Square Root of Time (min)
(2.1)^2
t90 = 4.41 min

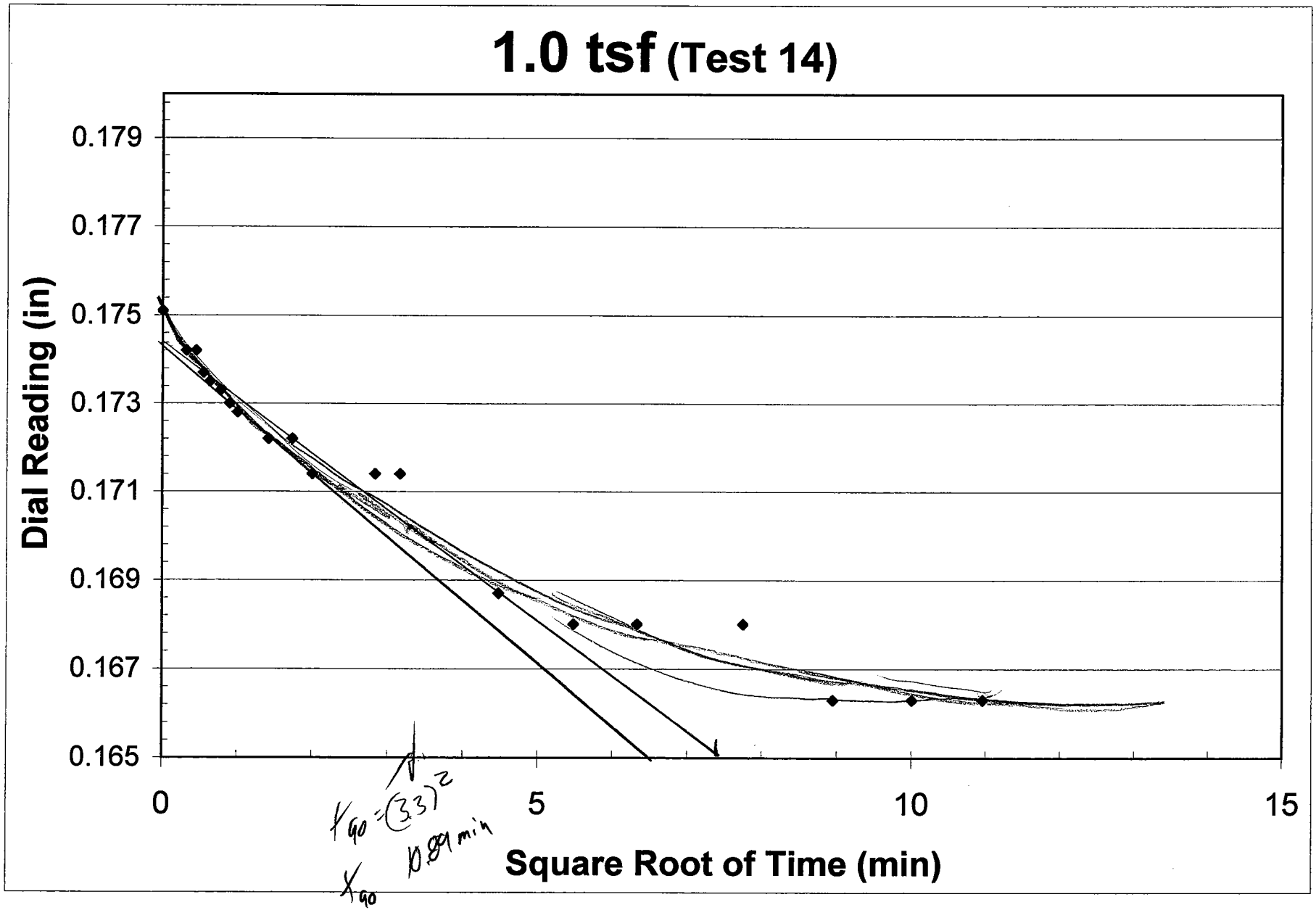

2.0 tsf (Test 9)
Dial Reading (in)
0.212
0.214
0.216
0.218
0.220
0.222
0.224
0.226
0.228
0
5
10
15
Square Root of Time (min)
(3.4²)
t90 = 11.90 min

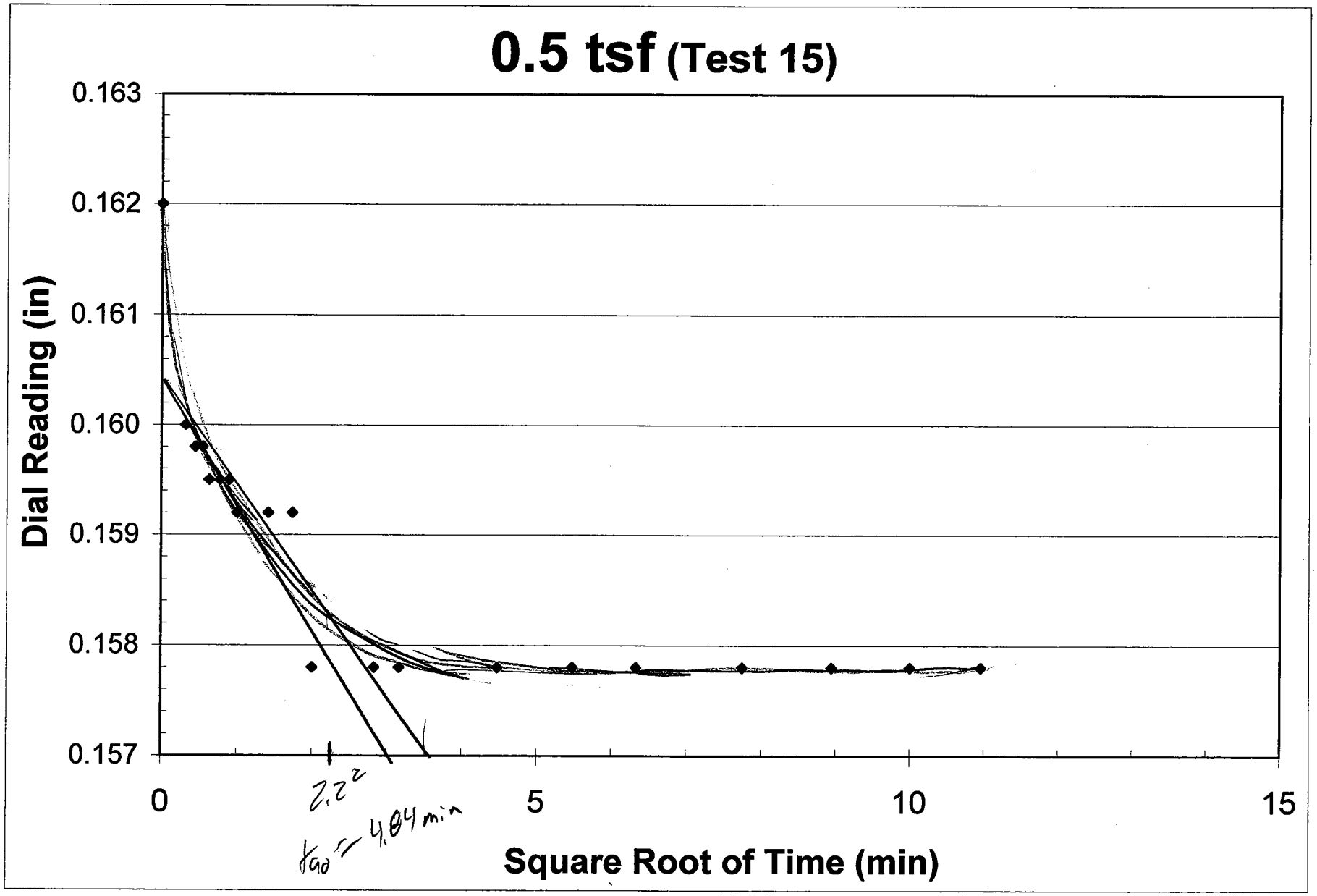

4.0 tsf (Test 10)
Dial Reading (in)
0.242
0.247
0.252
0.257
0.262
0.267
0.272
0.277
0.282
0.287
0
5
10
15
Square Root of Time (min)
(4.0)
t_{90} = 16 min

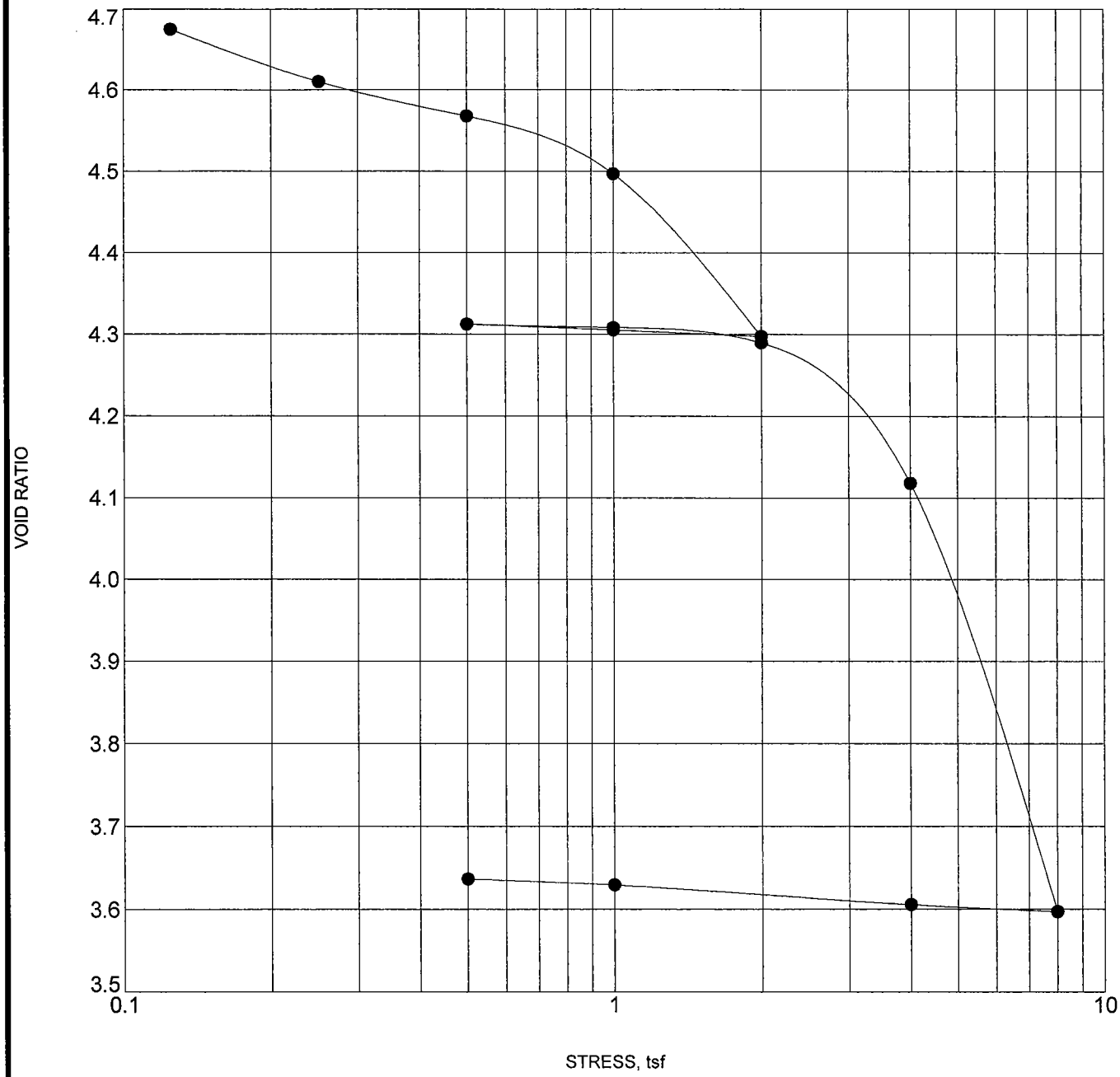

8.0 tsf (Test 11)
Dial Reading (in)
0.090
0.095
0.100
0.105
0.110
0.115
0.120
0.125
0.130
0.135
0
5
10
15
Square Root of Time (min)


16.0 tsf (Test 12)
Dial Reading (in)
0.142
0.147
0.152
0.157
0.162
0.167
0.172
0.177
0
5
10
15
Square Root of Time (min)
$t_{90} = 3^2$
$t_{90} = 9$ min


4.0 tsf (Test 13)
Dial Reading (in)
0.185
0.183
0.181
0.179
0.177
0.175
0
5
10
15
Square Root of Time (min)
$t_{90}(2.5)^2$
$t_{90} = 6.25$ min


1.0 tsf (Test 14)
Dial Reading (in)
0.179
0.177
0.175
0.173
0.171
0.169
0.167
0.165
0
5
10
15
Square Root of Time (min)
$t_{90} = (3.3)^2$
t_{90}
10.89 min


0.5 tsf (Test 15)
Dial Reading (in)
0.163
0.162
0.161
0.160
0.159
0.158
0.157
0
5
10
15
Square Root of Time (min)
2.2²
t90 = 4.84 min



	Boring No.	Depth	Classification	γ_d	MC%
●	**DS-29-COMP**	**6.0**		**26.2**	**192.5**

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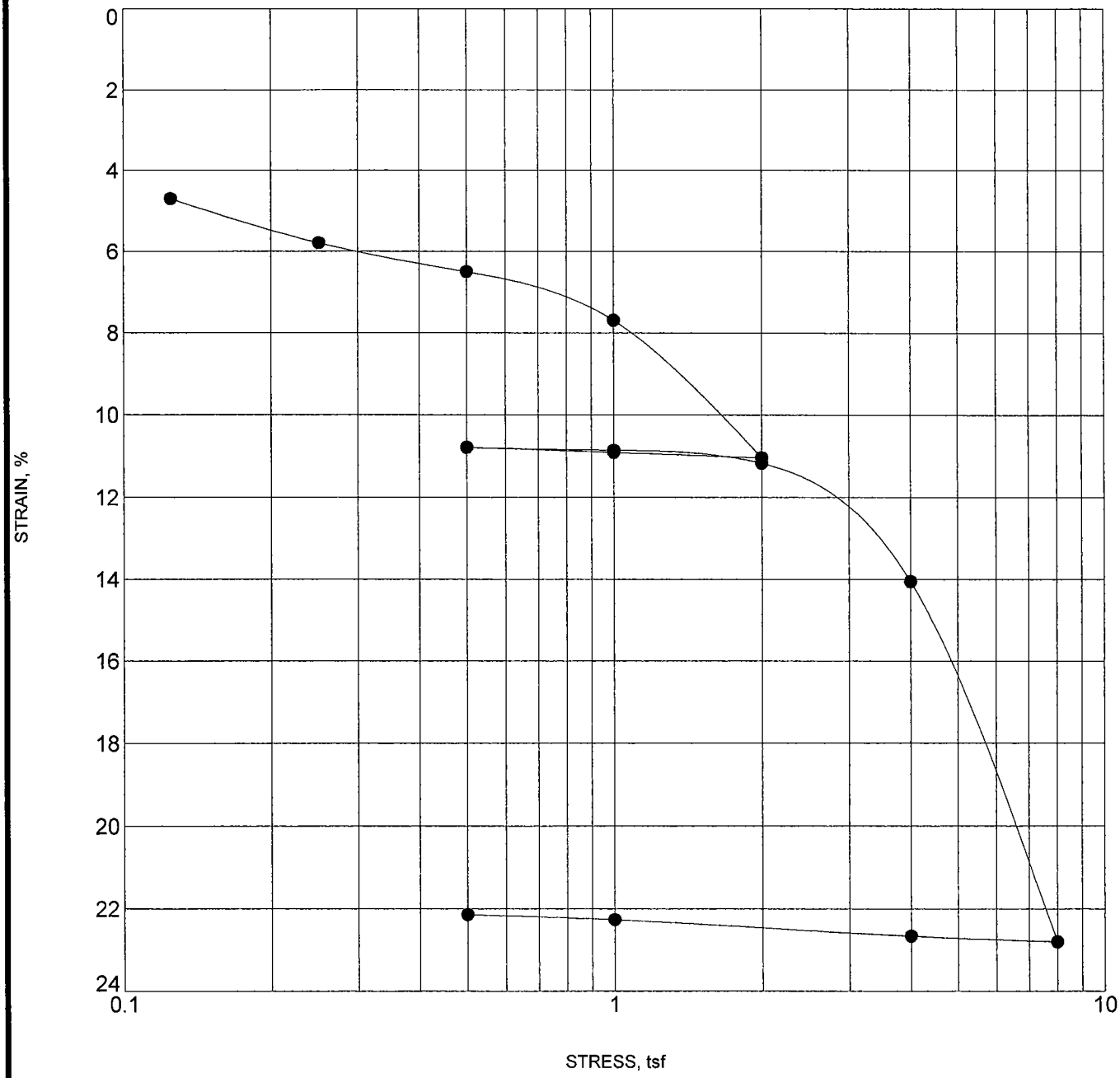
CONSOLIDATION TEST

Project Name: OU-1 2006 Remedial Action

Site Location:

STS Job No.: 29316A



	Boring No.	Depth	Classification	γ_d	MC%
●	**DS-29-COMP**	**6.0**		**26.2**	**192.5**

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CONSOLIDATION TEST

Project Name: OU-1 2006 Remedial Action

Site Location:

STS Job No.: 29316A

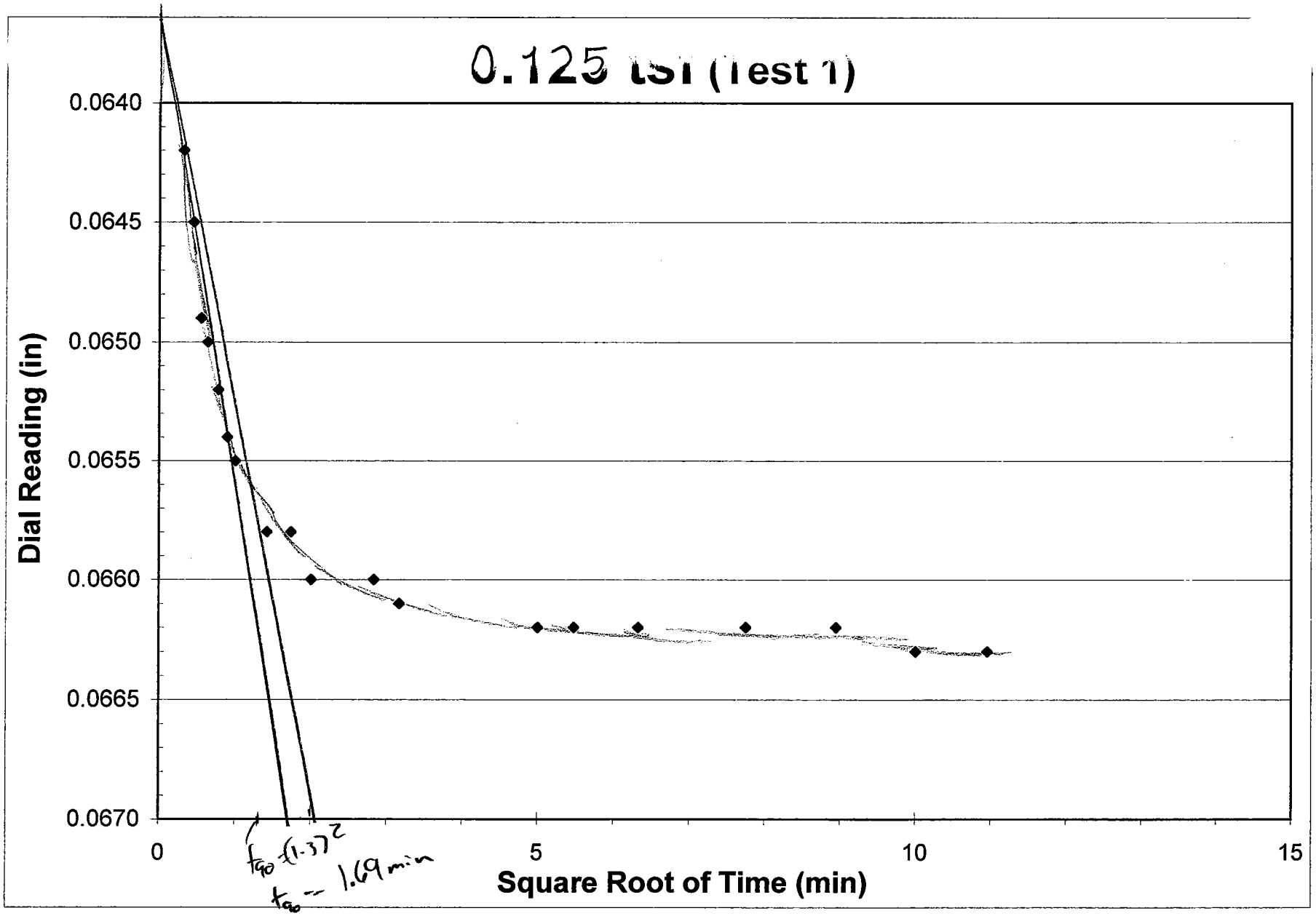
Fox River OU-1 2006 Remedial Action

Consolidation Test
Coefficient of Consolidation

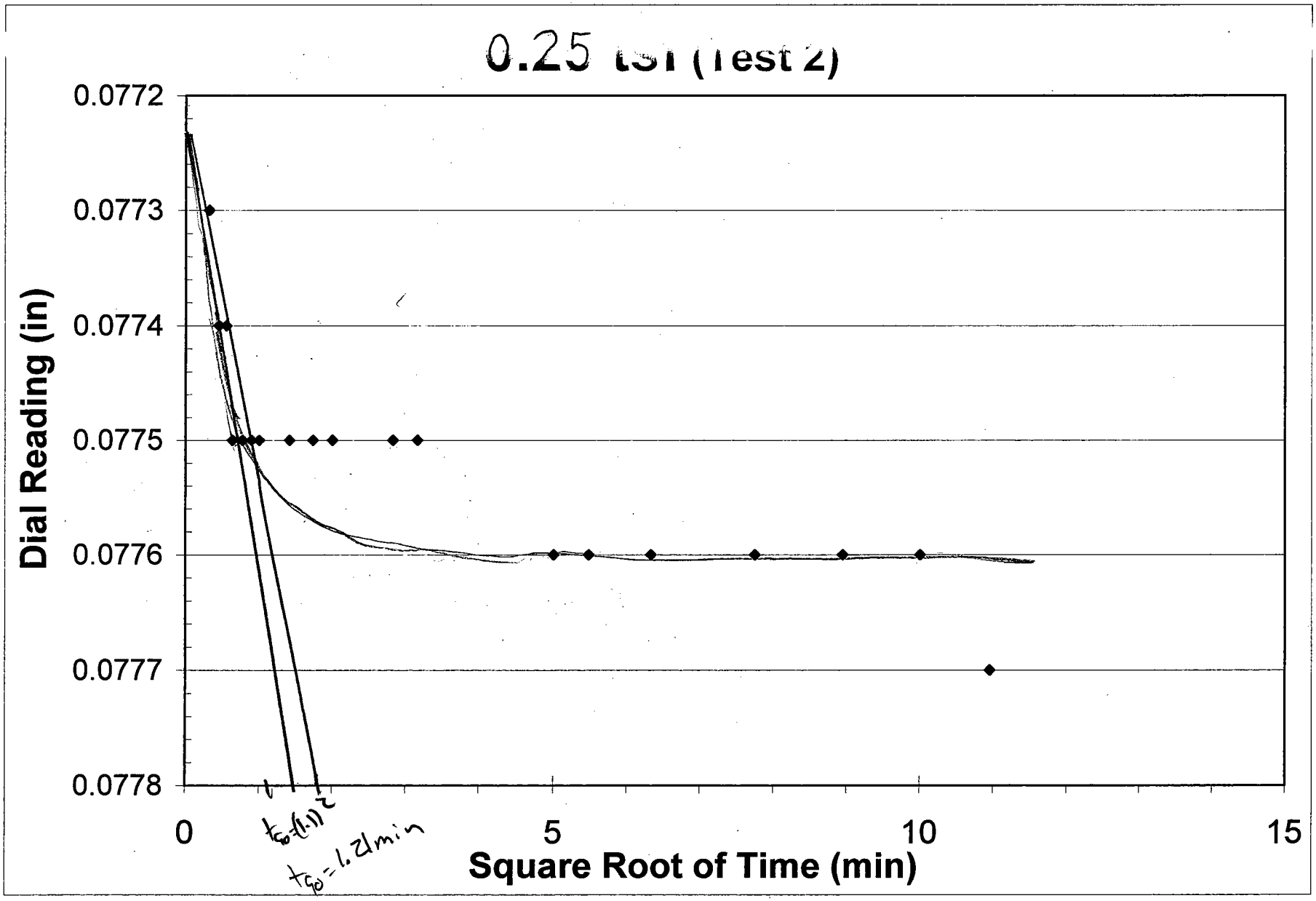
Test DS-29-comp

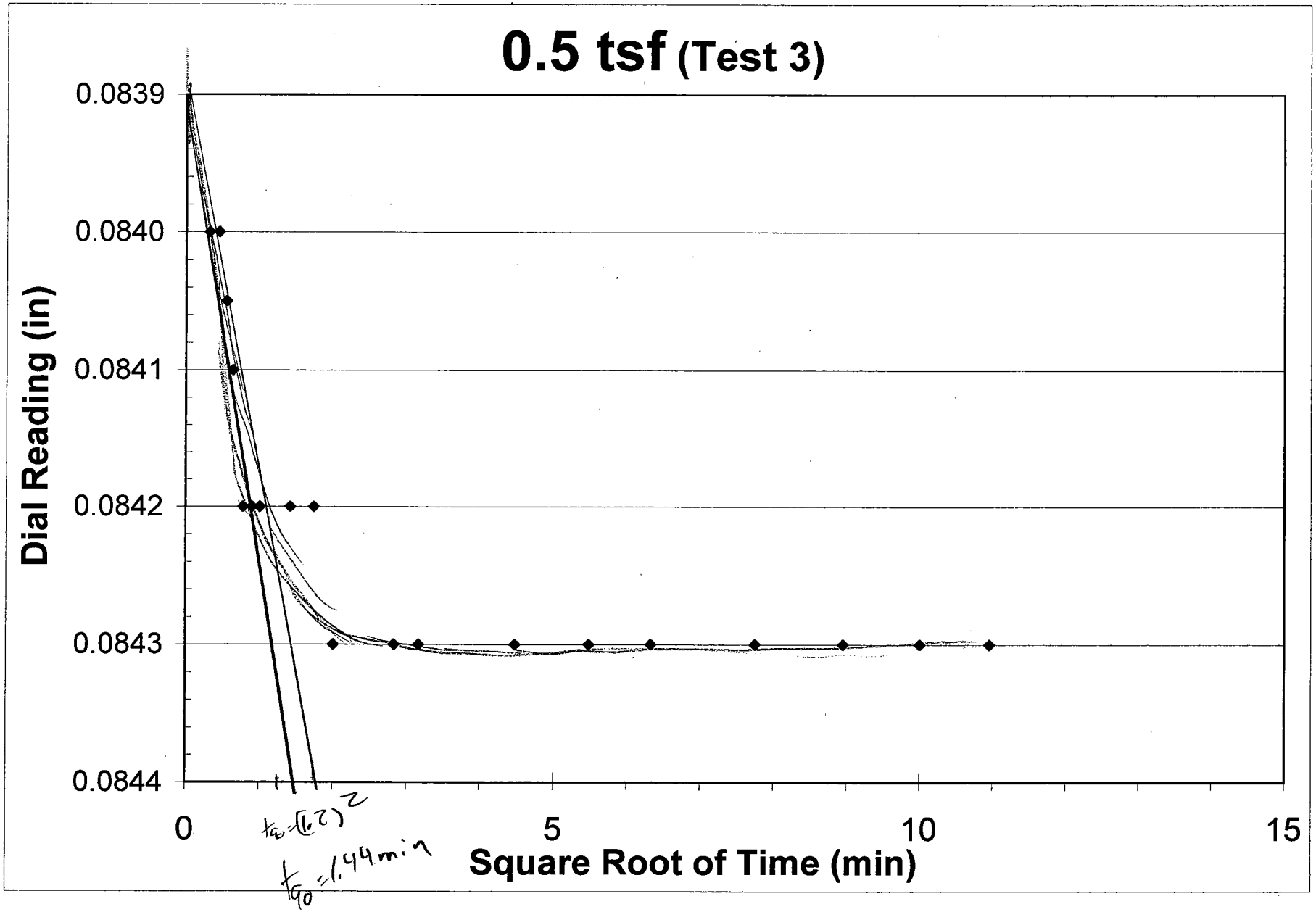
Loading		t_{90}	t_{90}	H_{dr}	H_{dr}^2	Cv
Starting	Ending	min	sec	cm	cm^2	cm2/sec
0.00	0.125	1.69	101.40	1.27	1.61	0.0135
1.25	0.25	1.21	72.60	1.27	1.61	0.0188
0.25	0.50	1.44	86.40	1.27	1.61	0.0158
0.50	1.00	4.00	240.00	1.27	1.61	0.0057
1.00	2.00	1.96	117.60	1.27	1.61	0.0116
1.00	2.00	1.00	60.00	1.27	1.61	0.0228
2.00	4.00	0.49	29.40	1.27	1.61	0.0465
4.00	8.00	1.69	101.40	1.27	1.61	0.0135

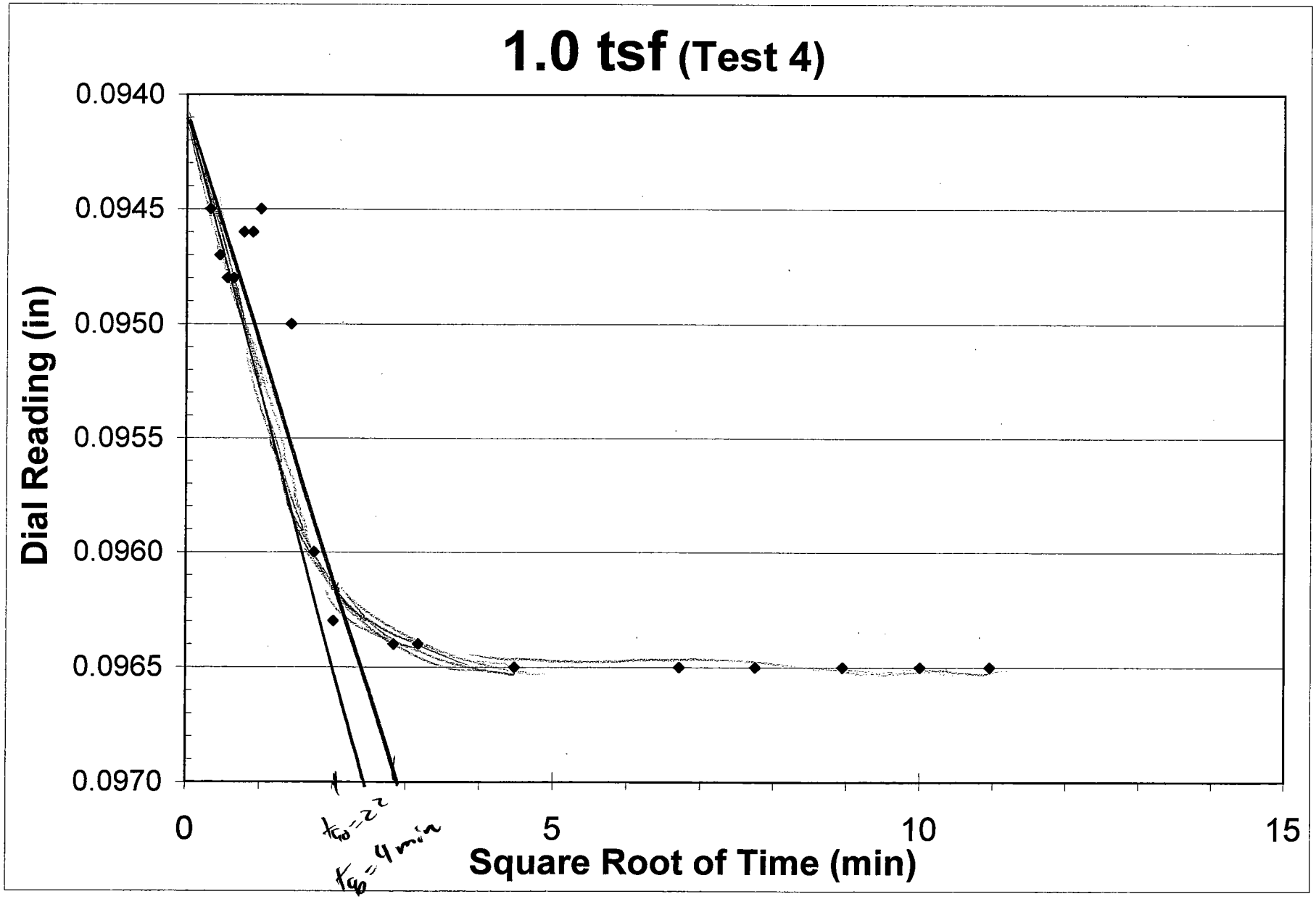
Minimum Value	5.70E-03	**cm2/sec**
	8.83E-04	**in2/sec**
Maximum Value	4.65E-02	**cm2/sec**
	7.21E-03	**in2/sec**

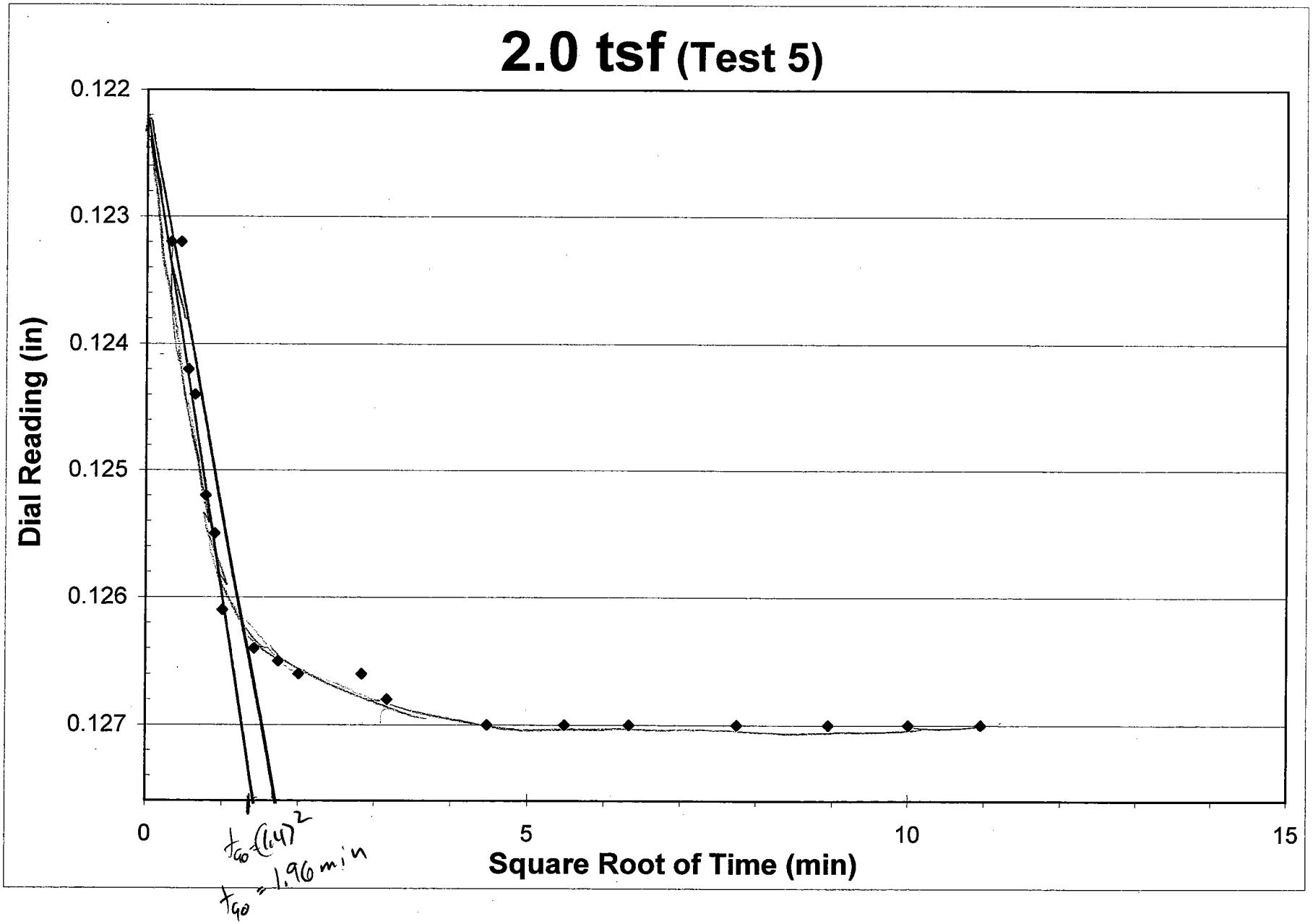


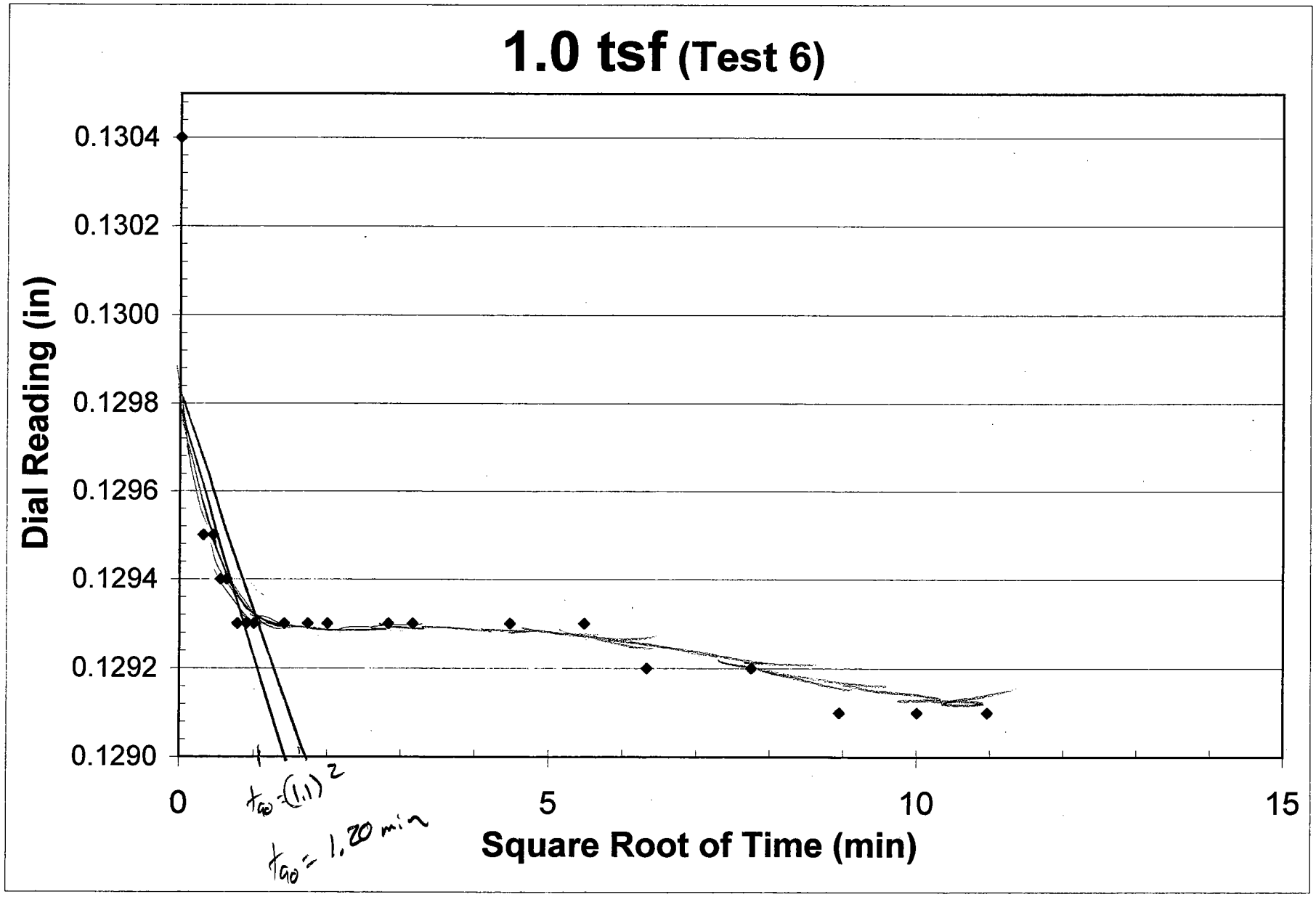
K:\PROJECTS\429316A\ENG\1-RA-06-NWB1-DS-29-COMP cv curves.xls

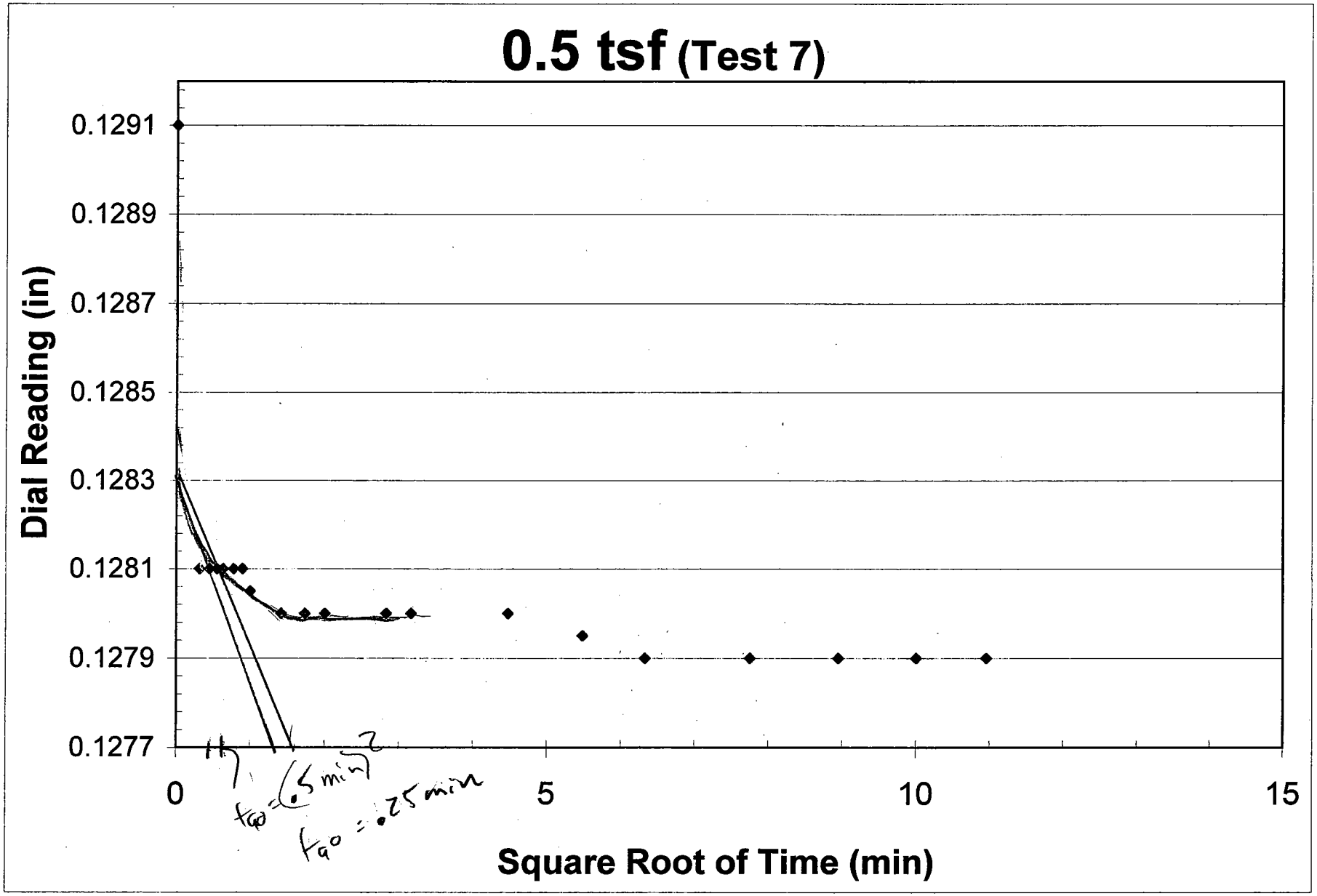

0.25 tsf (Test 2)
0.0772
0.0773
0.0774
0.0775
0.0776
0.0777
0.0778
Dial Reading (in)
0
5
10
15
Square Root of Time (min)
$t_{50}=(1.1)^2$
$t_{50}=1.21$ min

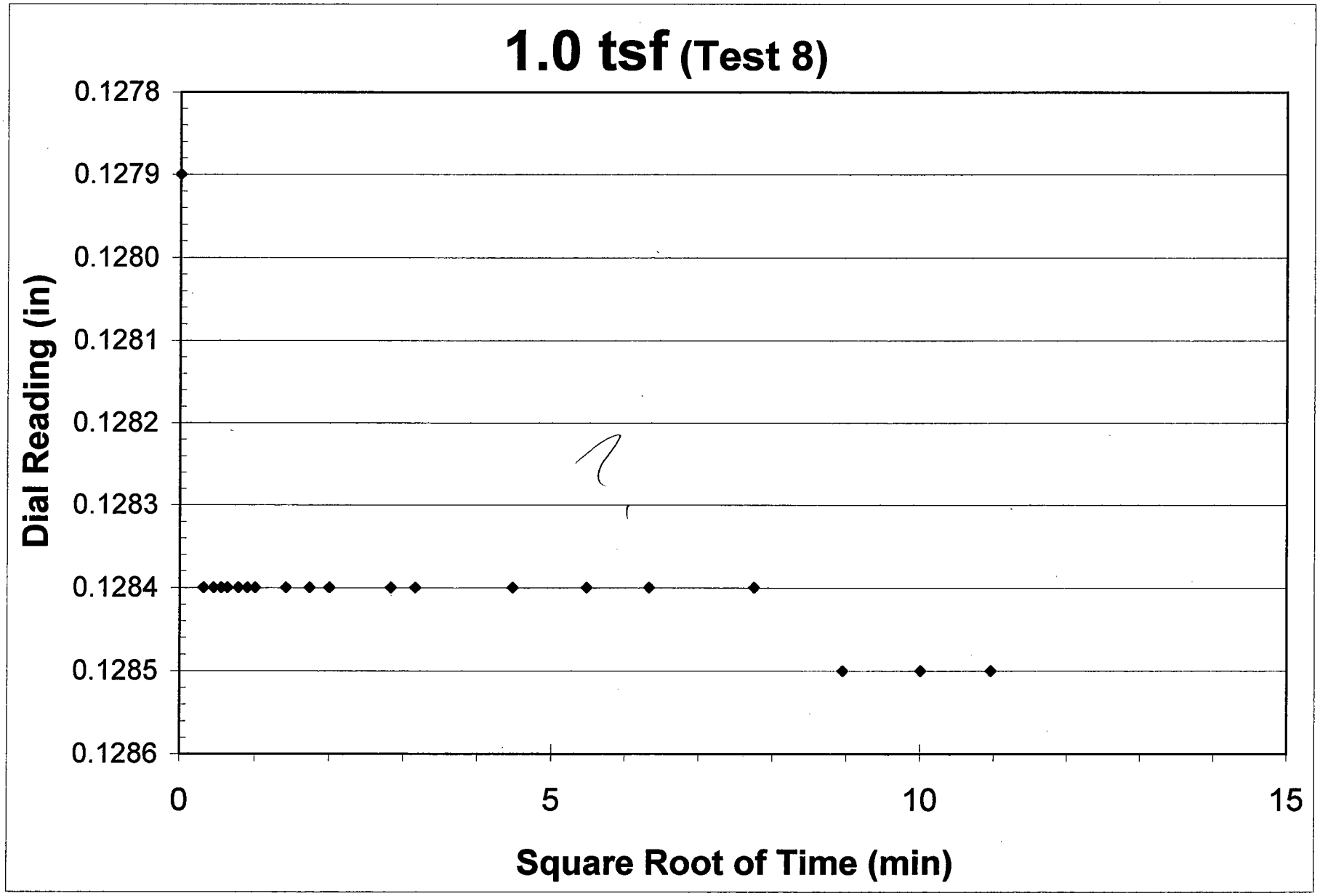

0.5 tsf (Test 3)
Dial Reading (in)
0.0839
0.0840
0.0841
0.0842
0.0843
0.0844
0
5
10
15
Square Root of Time (min)
$t_{50} = (1.2)^2$
$t_{90} = 1.44$ min

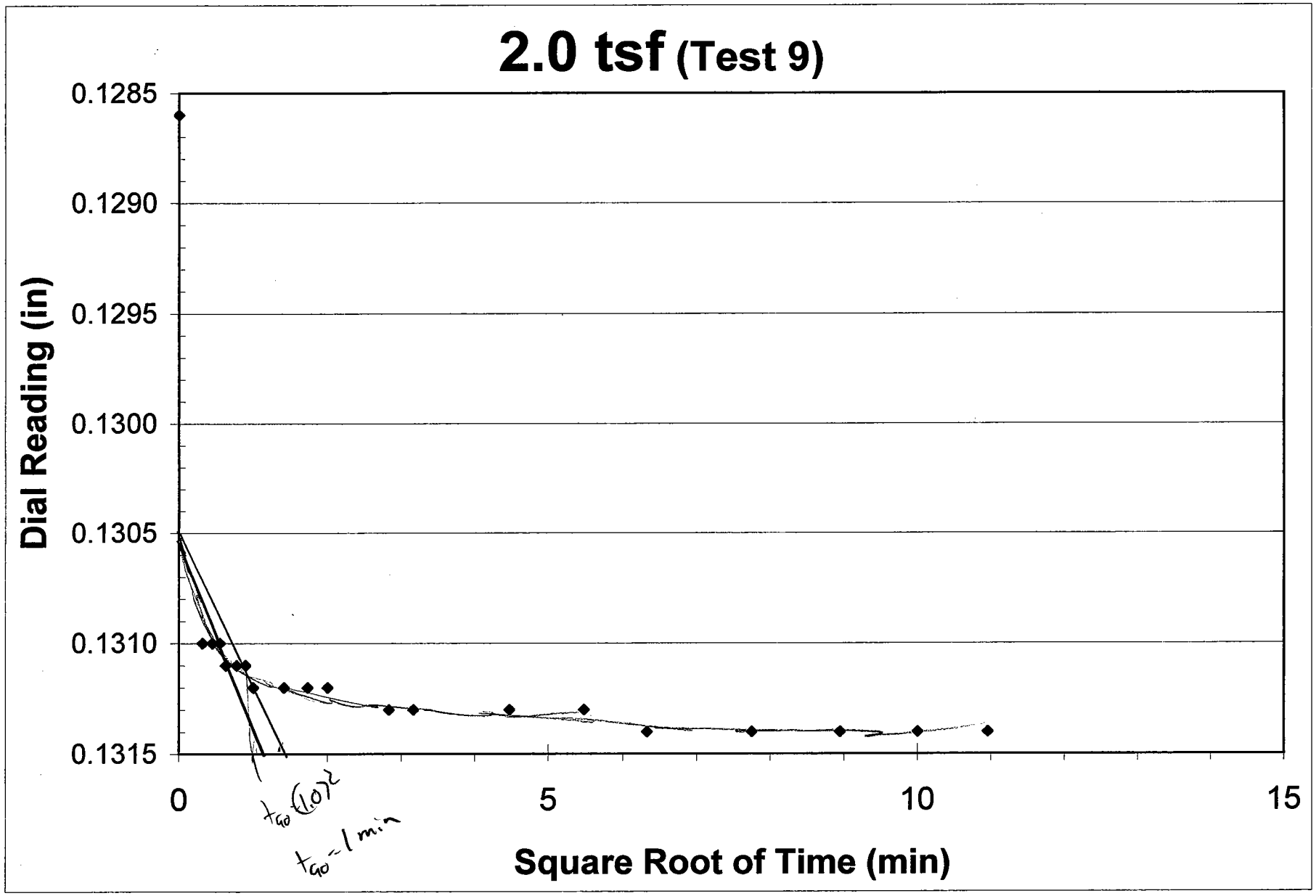

1.0 tsf (Test 4)
Dial Reading (in)
0.0940
0.0945
0.0950
0.0955
0.0960
0.0965
0.0970
0
5
10
15
Square Root of Time (min)
$t_{50} = 2^2$
$t_{90} = 4$ min


2.0 tsf (Test 5)
Dial Reading (in)
0.122
0.123
0.124
0.125
0.126
0.127
0
5
10
15
Square Root of Time (min)
$t_{90} = (1.4)^2$
$t_{90} = 1.96$ min

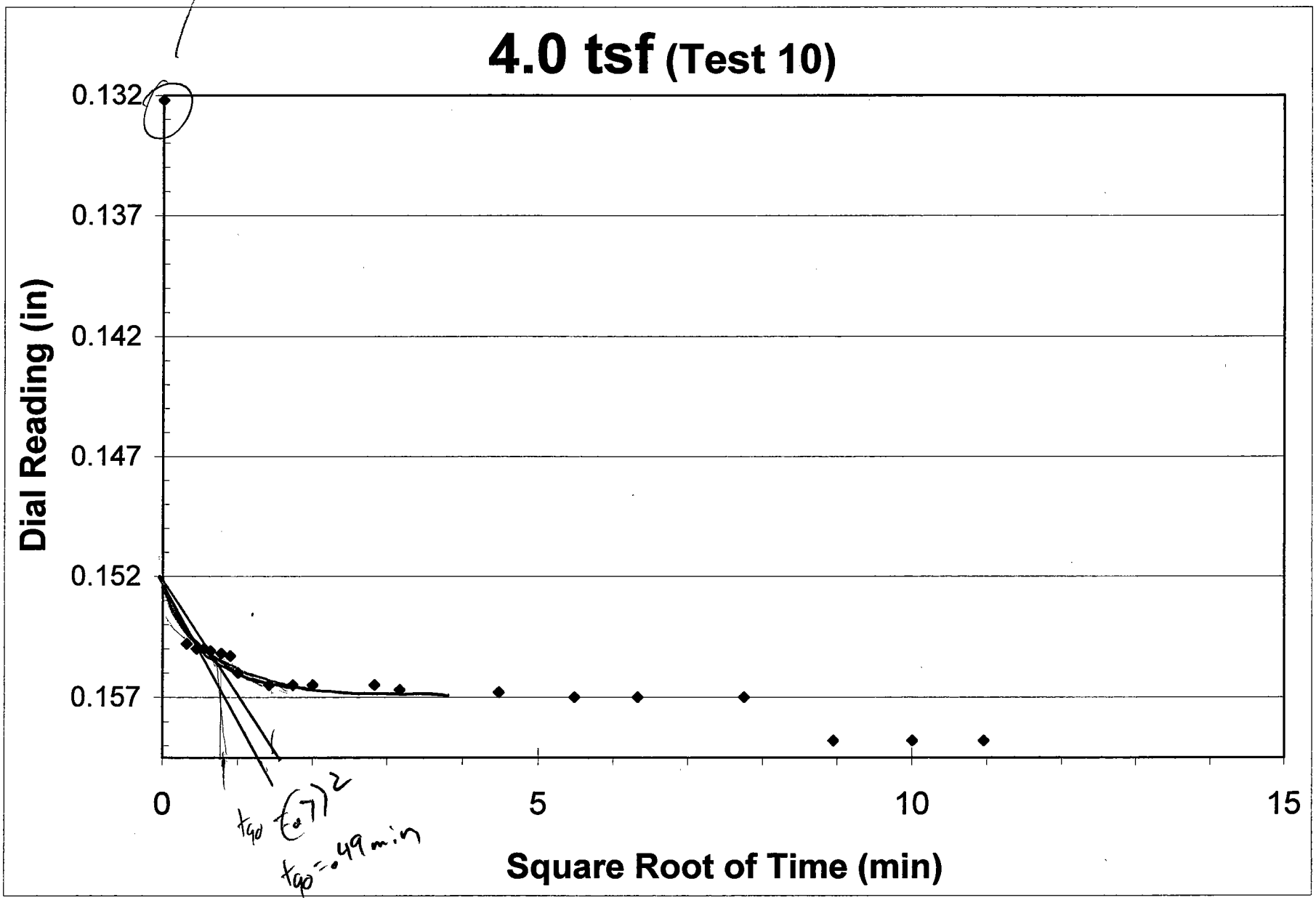

1.0 tsf (Test 6)
Dial Reading (in)
0.1304
0.1302
0.1300
0.1298
0.1296
0.1294
0.1292
0.1290
0
5
10
15
Square Root of Time (min)
$t_{90} = (1.1)^2$
$t_{90} = 1.20$ min

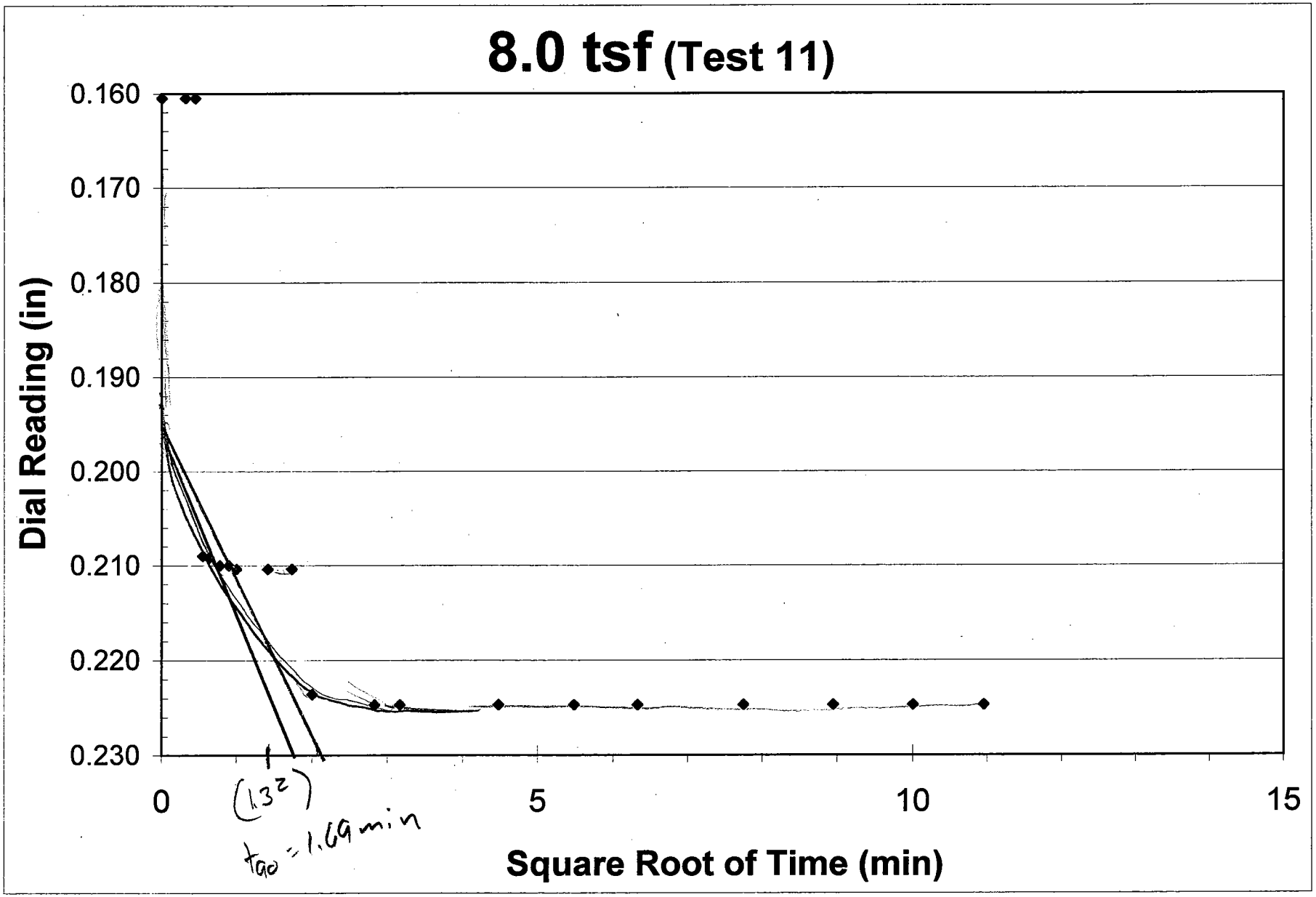

0.5 tsf (Test 7)
Dial Reading (in)
0.1291
0.1289
0.1287
0.1285
0.1283
0.1281
0.1279
0.1277
0
5
10
15
Square Root of Time (min)
$t_{90} = (.5\ min)^2$
$t_{90} = .25\ min$

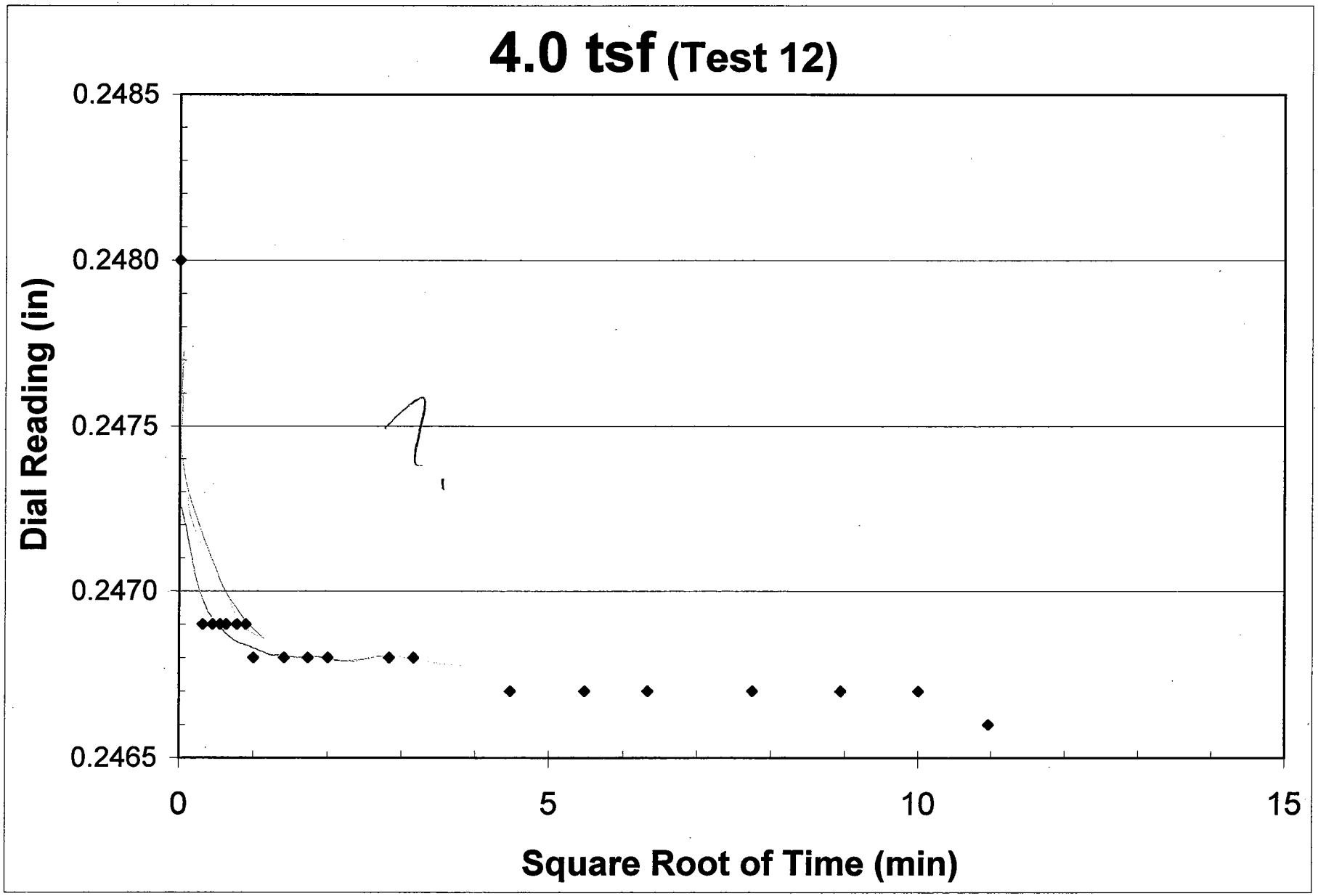

1.0 tsf (Test 8)
0.1278
0.1279
0.1280
0.1281
0.1282
0.1283
0.1284
0.1285
0.1286
Dial Reading (in)
0
5
10
15
Square Root of Time (min)

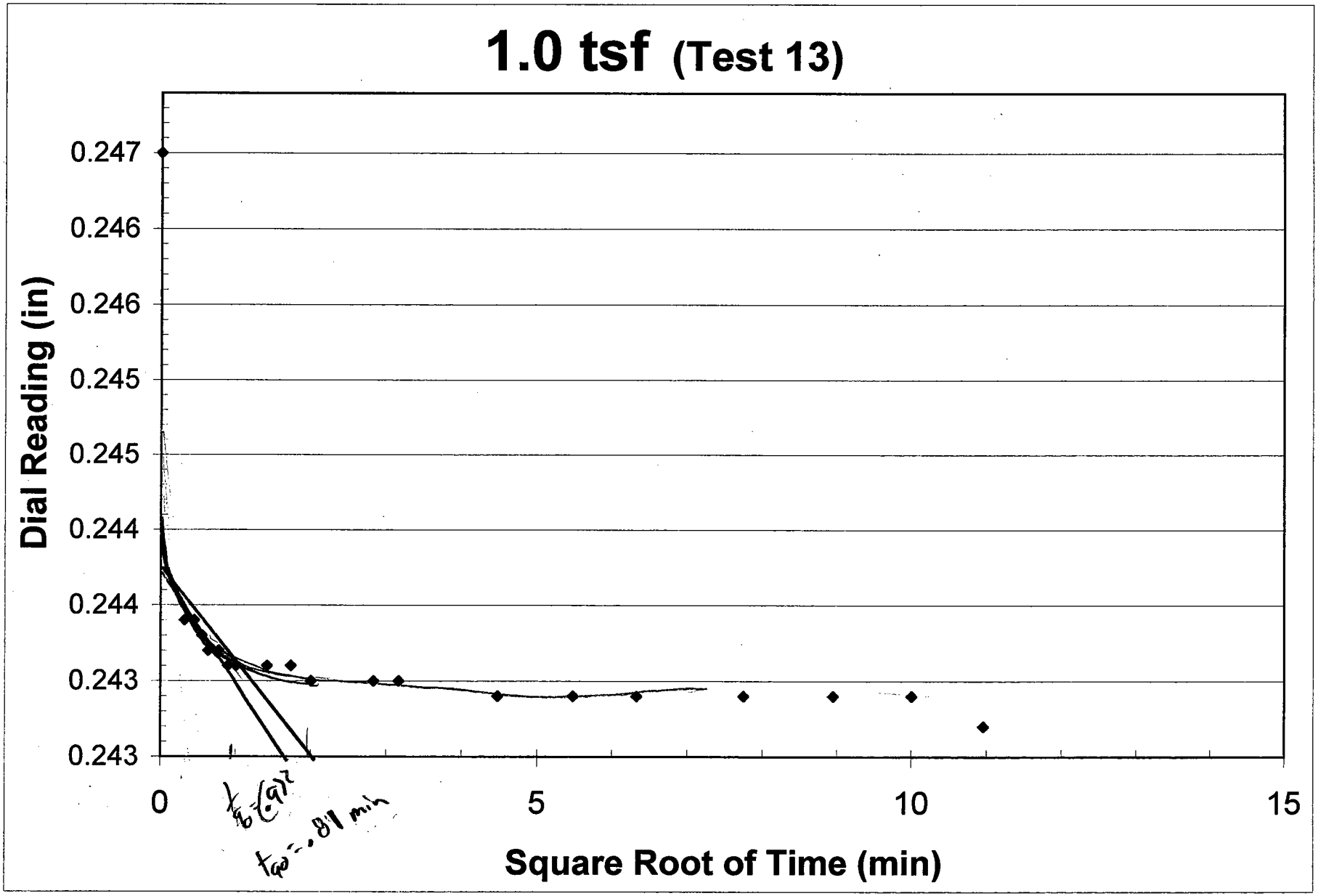

2.0 tsf (Test 9)
Dial Reading (in)
0.1285
0.1290
0.1295
0.1300
0.1305
0.1310
0.1315
0
5
10
15
Square Root of Time (min)
t_{90} (1.0)^2
t_{90} = 1 min

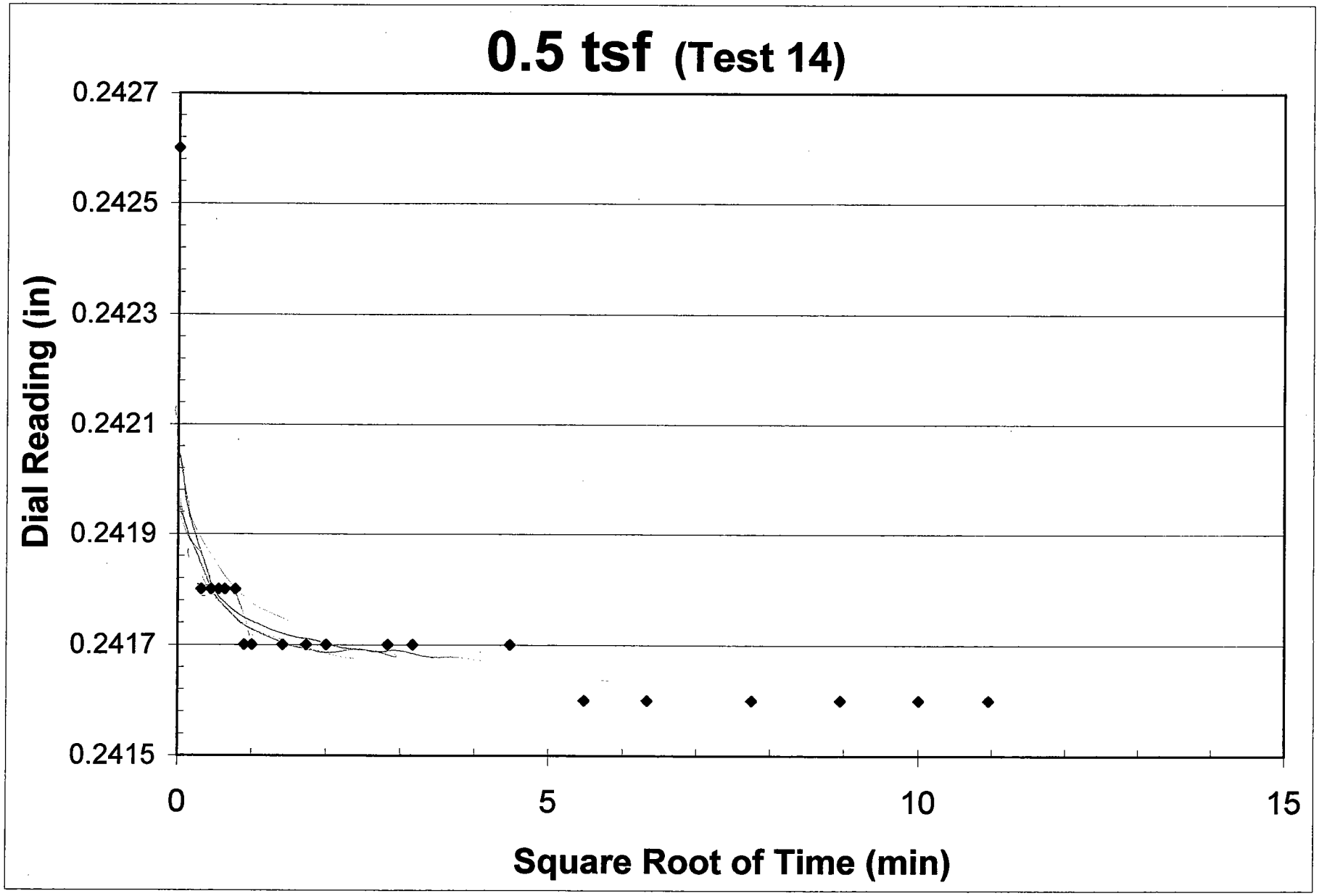
Takeout


4.0 tsf (Test 10)
Dial Reading (in)
0.132
0.137
0.142
0.147
0.152
0.157
0
5
10
15
Square Root of Time (min)
t_{90} $(.7)^2$
t_{90} = .49 min


8.0 tsf (Test 11)
Dial Reading (in)
0.160
0.170
0.180
0.190
0.200
0.210
0.220
0.230
0
5
10
15
Square Root of Time (min)
(1.3²)
t90 = 1.69 min

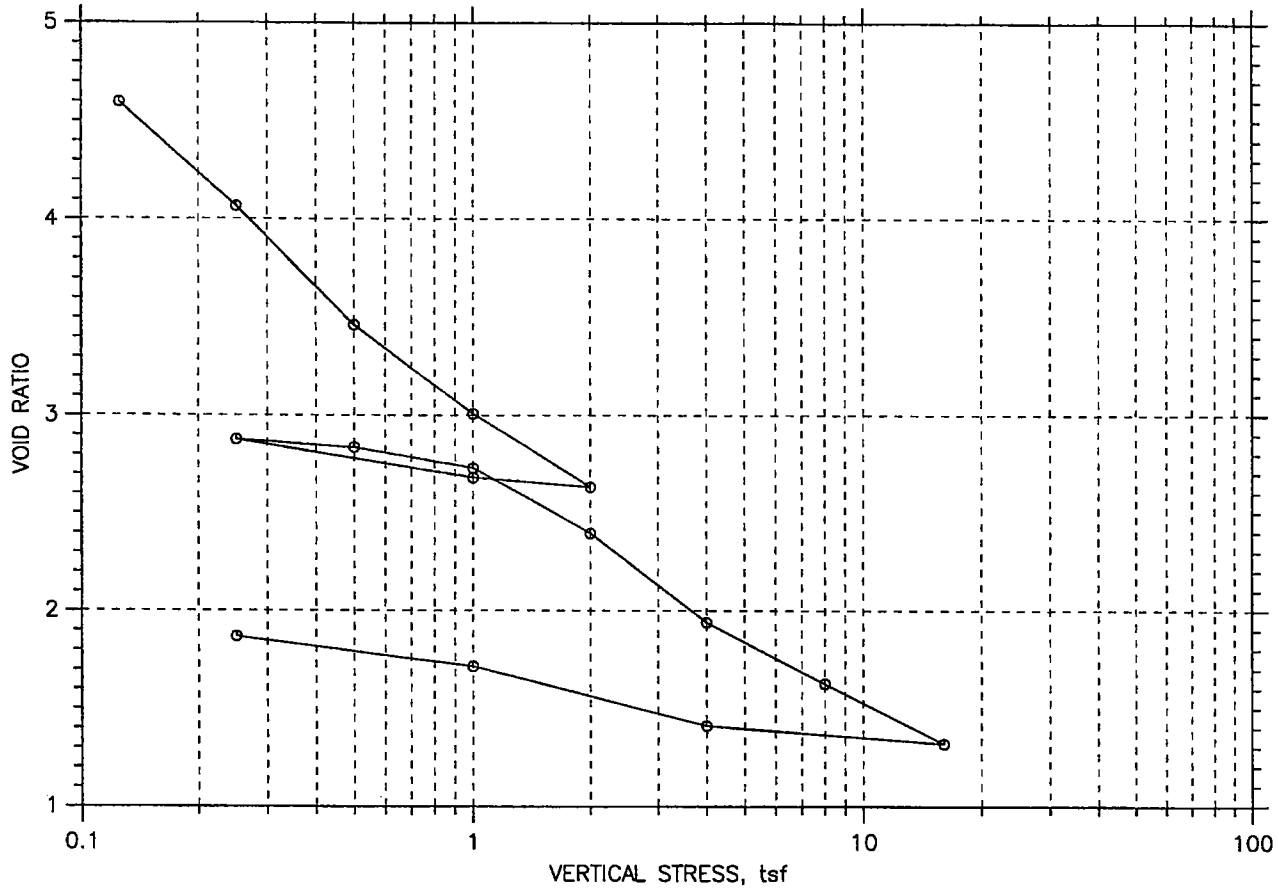

4.0 tsf (Test 12)
0.2485
0.2480
0.2475
0.2470
0.2465
Dial Reading (in)
0
5
10
15
Square Root of Time (min)

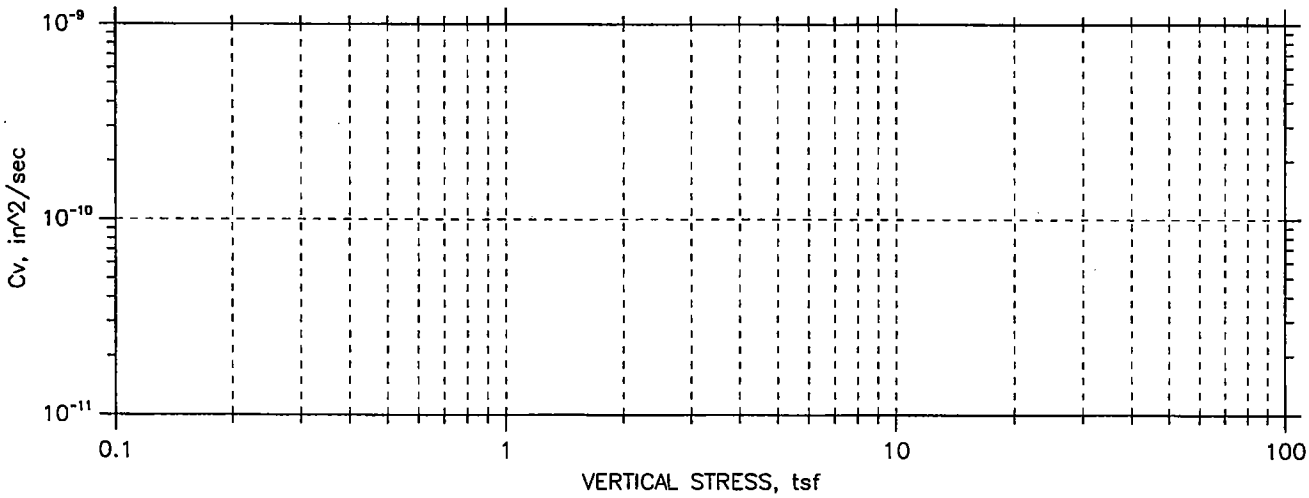

1.0 tsf (Test 13)
Dial Reading (in)
0.247
0.246
0.246
0.245
0.245
0.244
0.244
0.243
0.243
0
5
10
15
Square Root of Time (min)


0.5 tsf (Test 14)
0.2427
0.2425
0.2423
0.2421
0.2419
0.2417
0.2415
Dial Reading (in)
0
5
10
15
Square Root of Time (min)

CONSOLIDATION TEST DATA

SUMMARY REPORT





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06 SWC1-DS-43	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Cc = 1.17 Ccr = 0.26 TEST PERFORMED AS PER ASTM D 2435		

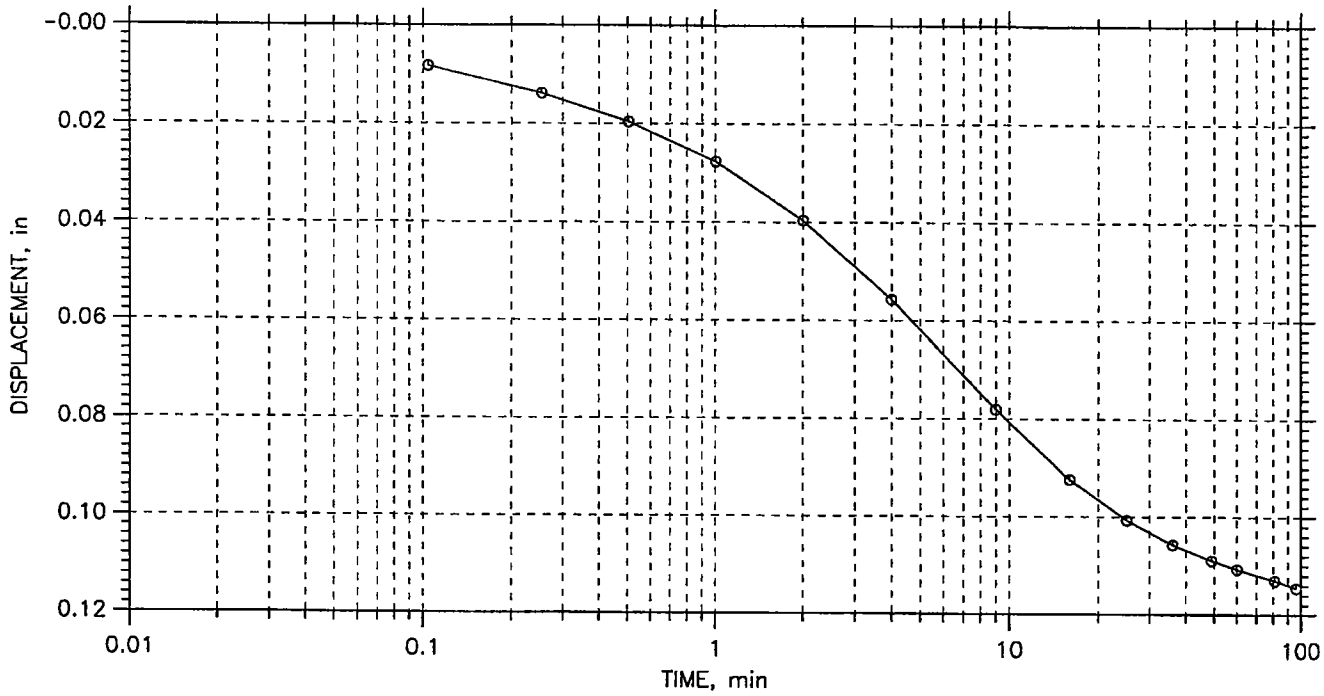
Wed, 17-JAN-2007 11:44:53

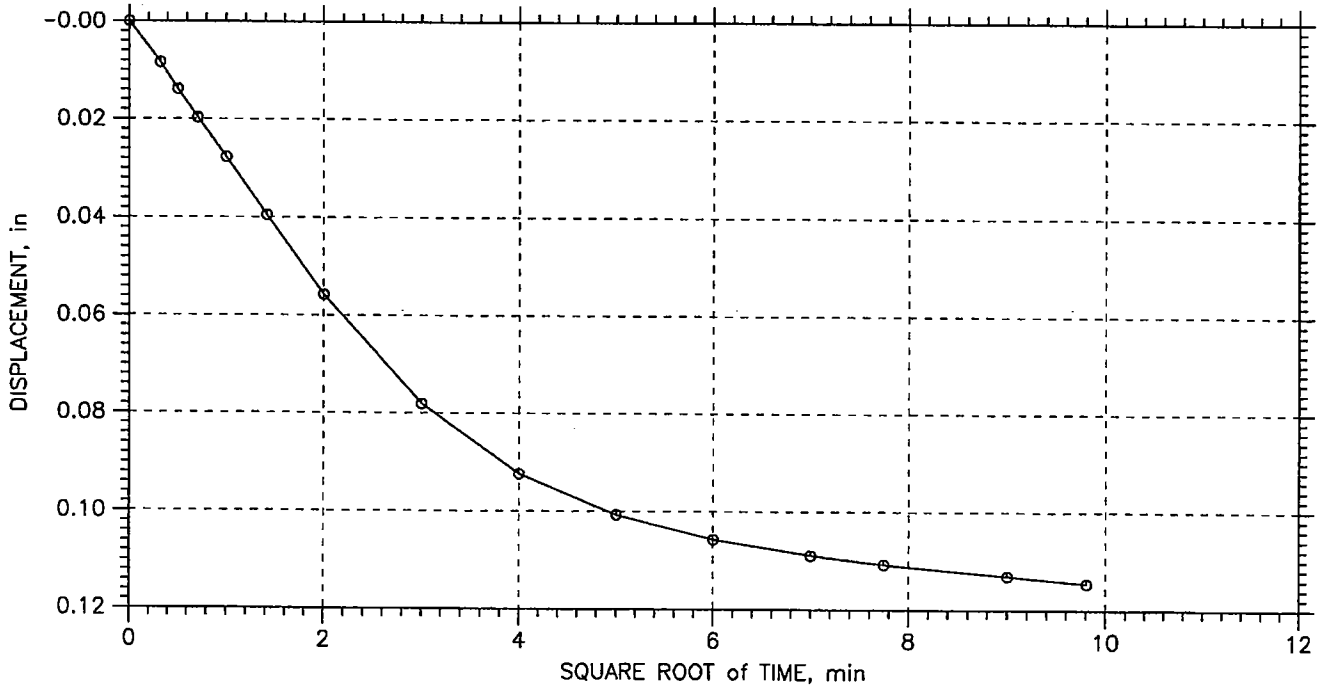
CONSOLIDATION TEST DATA

TIME CURVES

Step: 1 of 10

Stress: 0.125 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

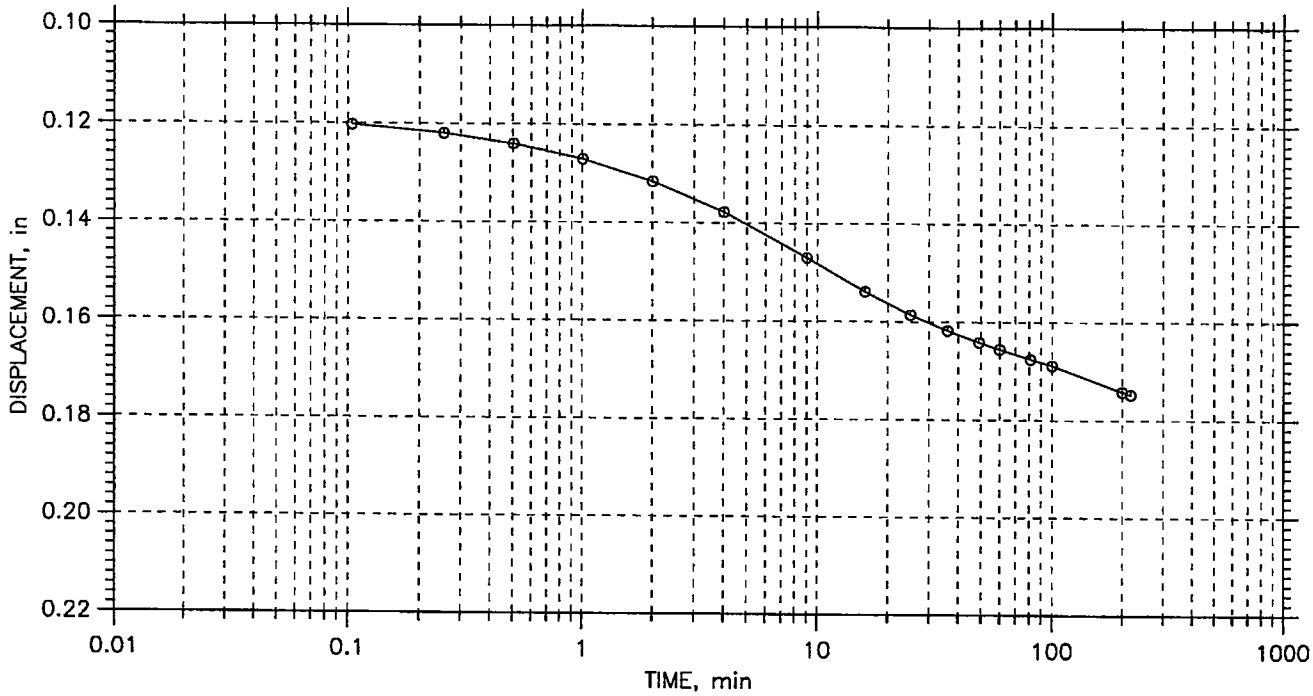
Wed, 17-JAN-2007 11:46:08

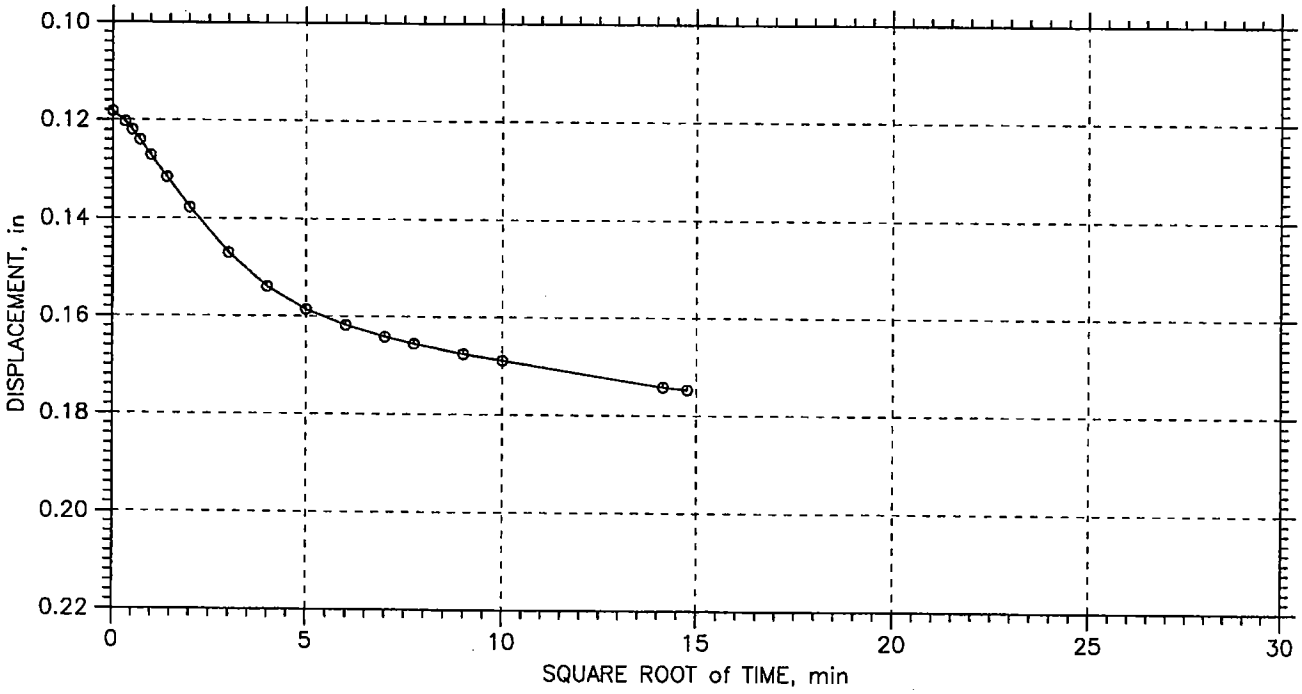
CONSOLIDATION TEST DATA

TIME CURVES

Step: 2 of 10

Stress: 0.25 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

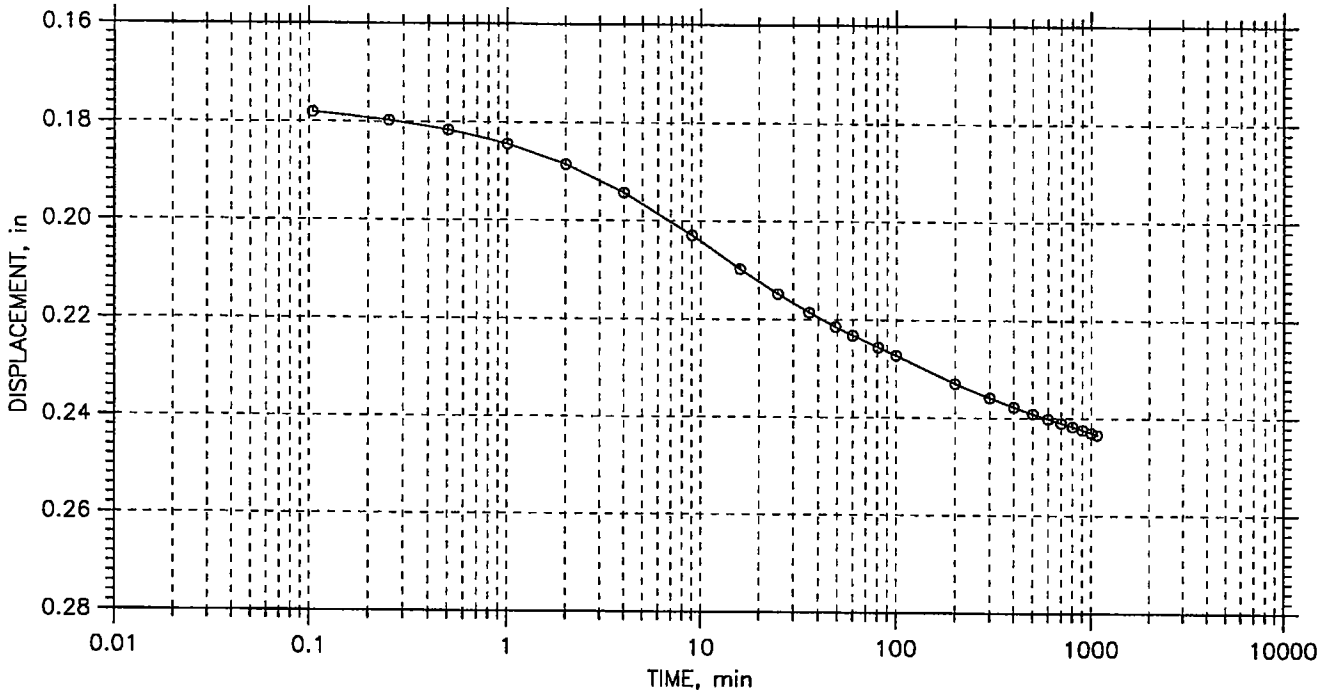
Wed, 17-JAN-2007 11:46:15

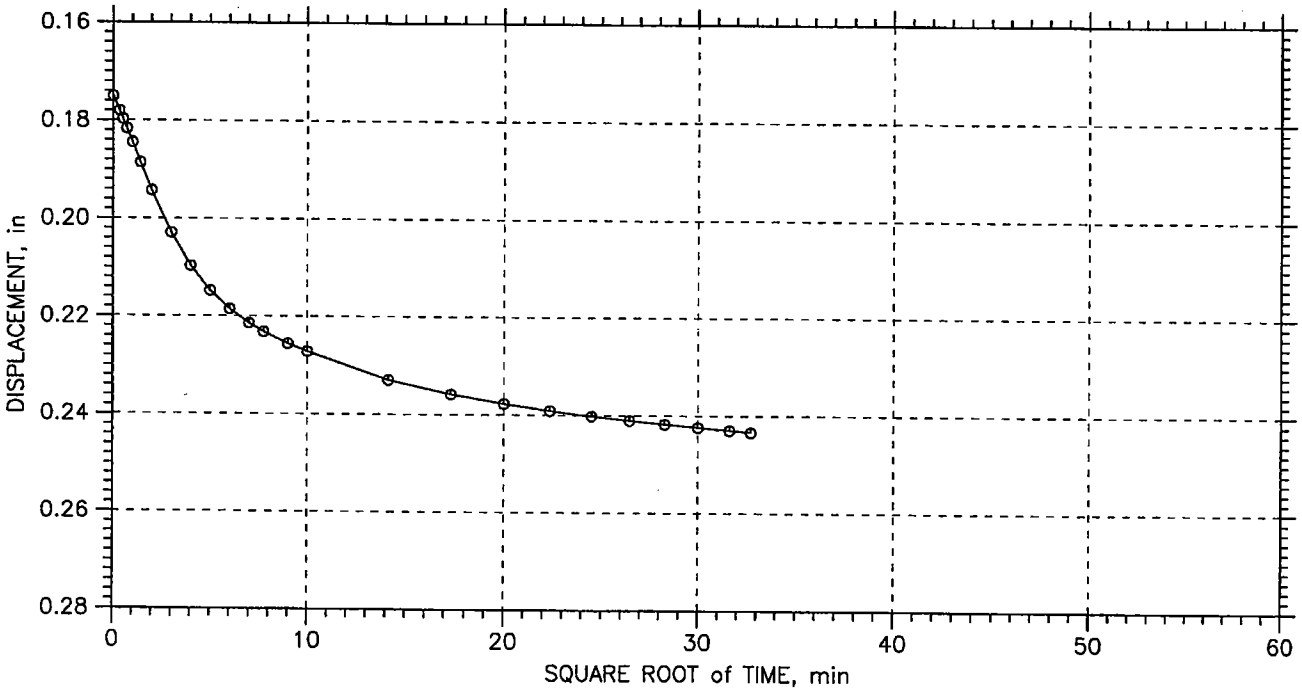
CONSOLIDATION TEST DATA

TIME CURVES

Step: 3 of 10

Stress: 0.5 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

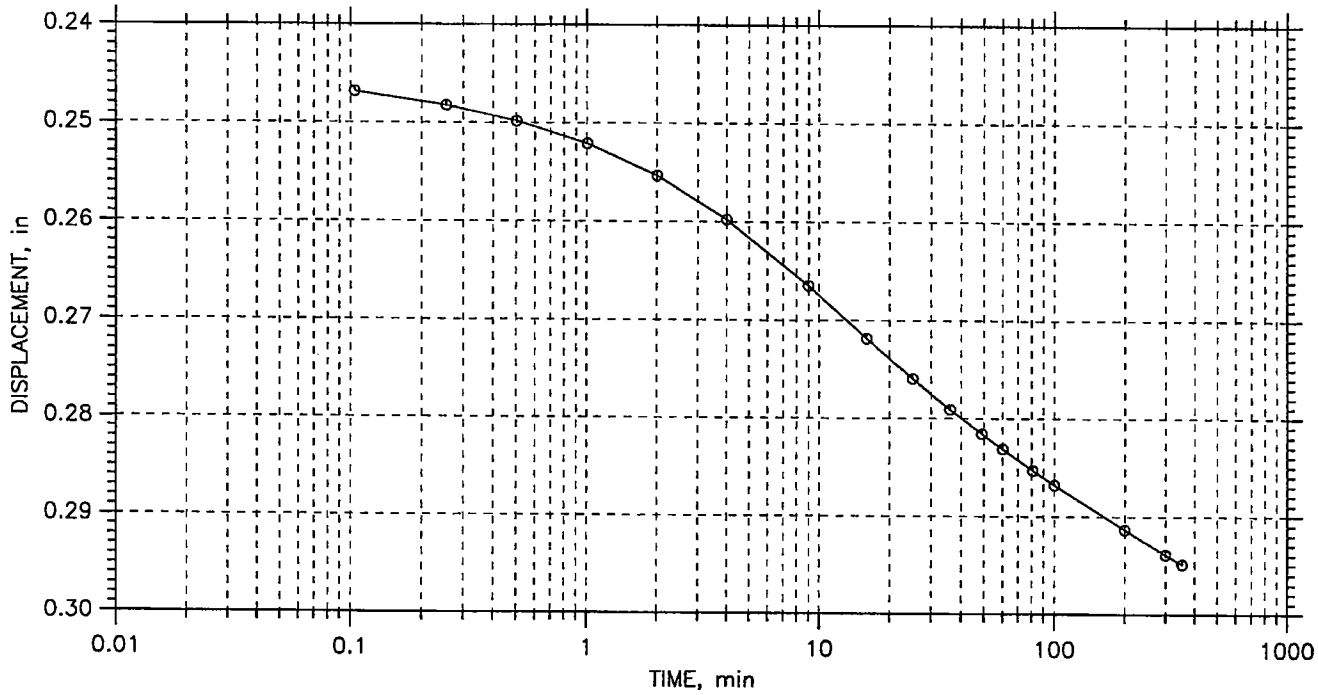
Wed, 17-JAN-2007 11:46:30

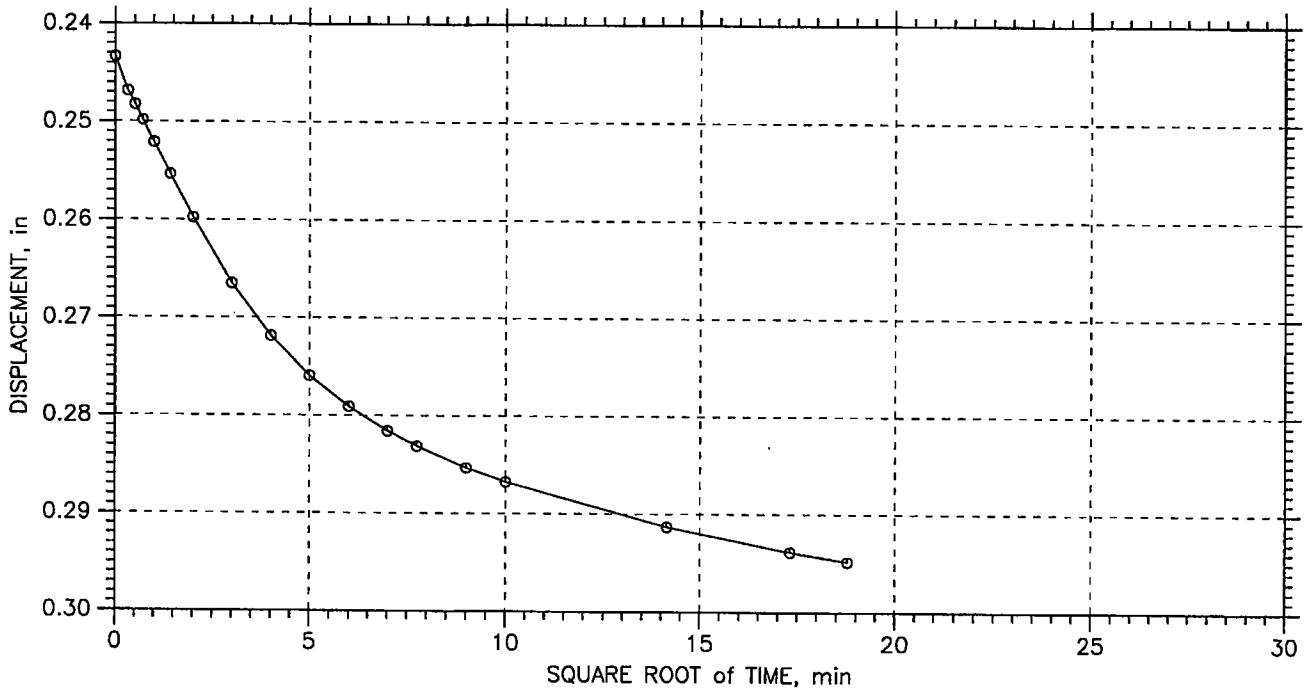
CONSOLIDATION TEST DATA

TIME CURVES

Step: 4 of 10

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

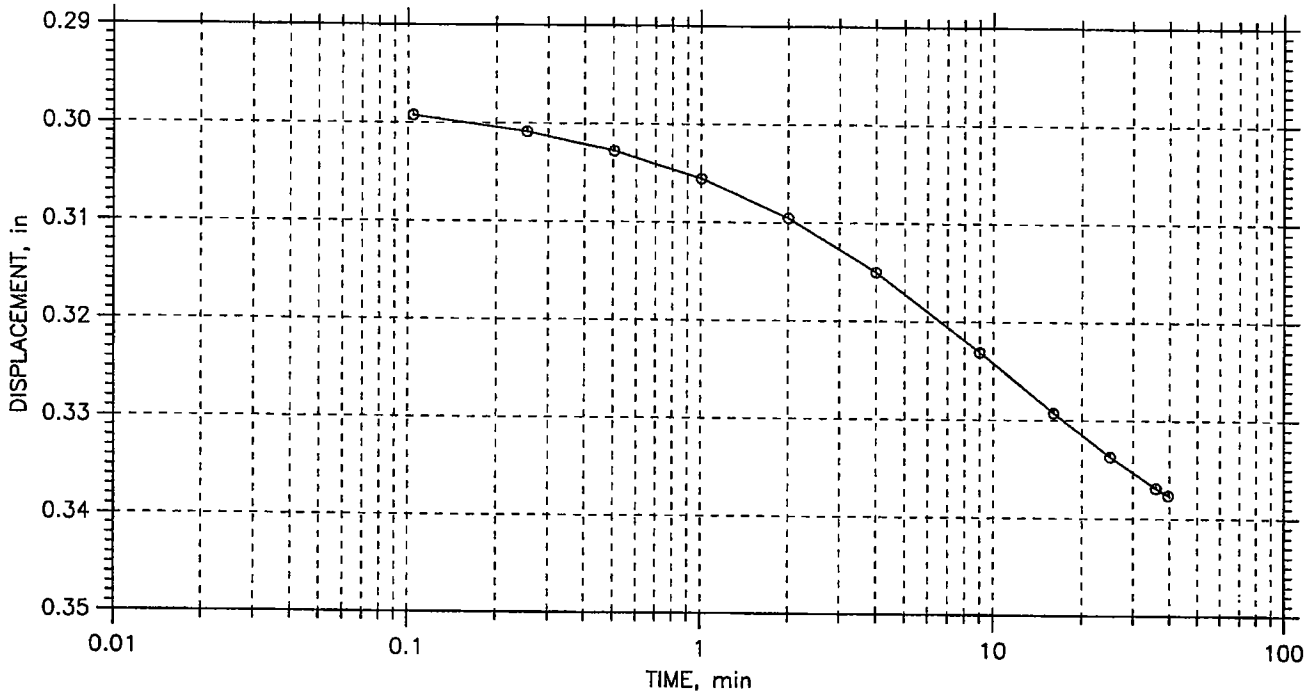
Wed, 17-JAN-2007 11:46:30

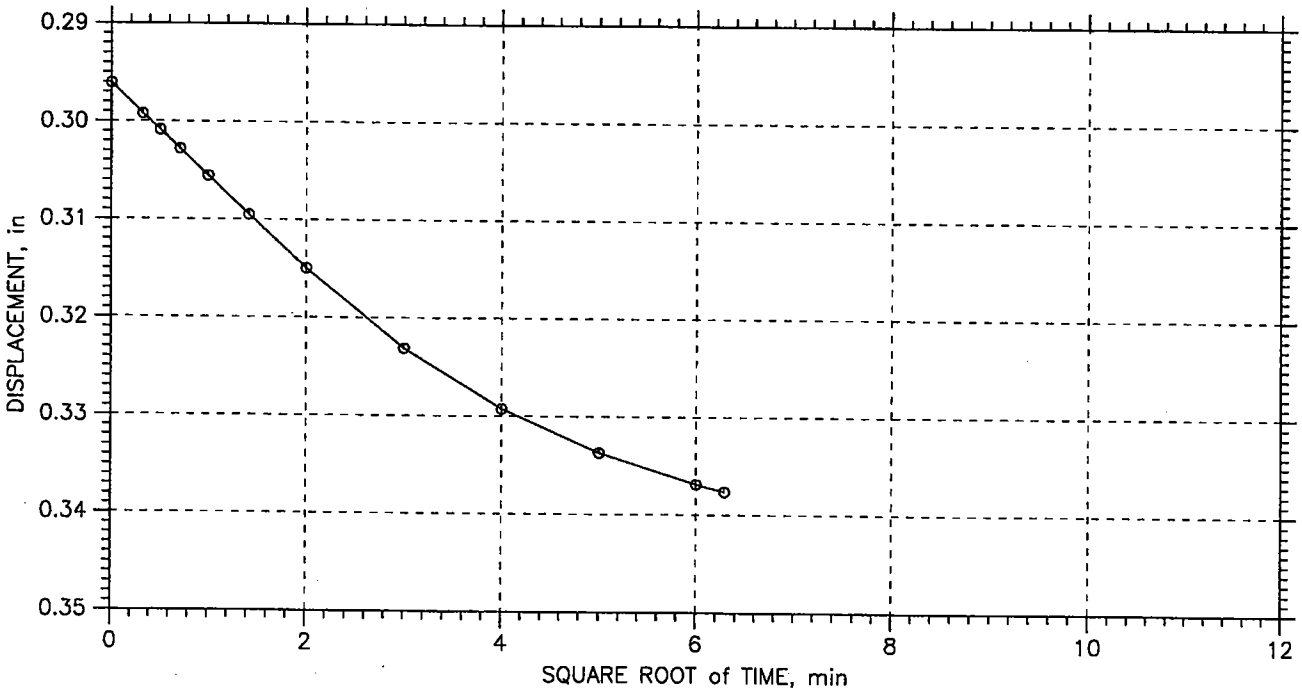
CONSOLIDATION TEST DATA

TIME CURVES

Step: 5 of 10

Stress: 2. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

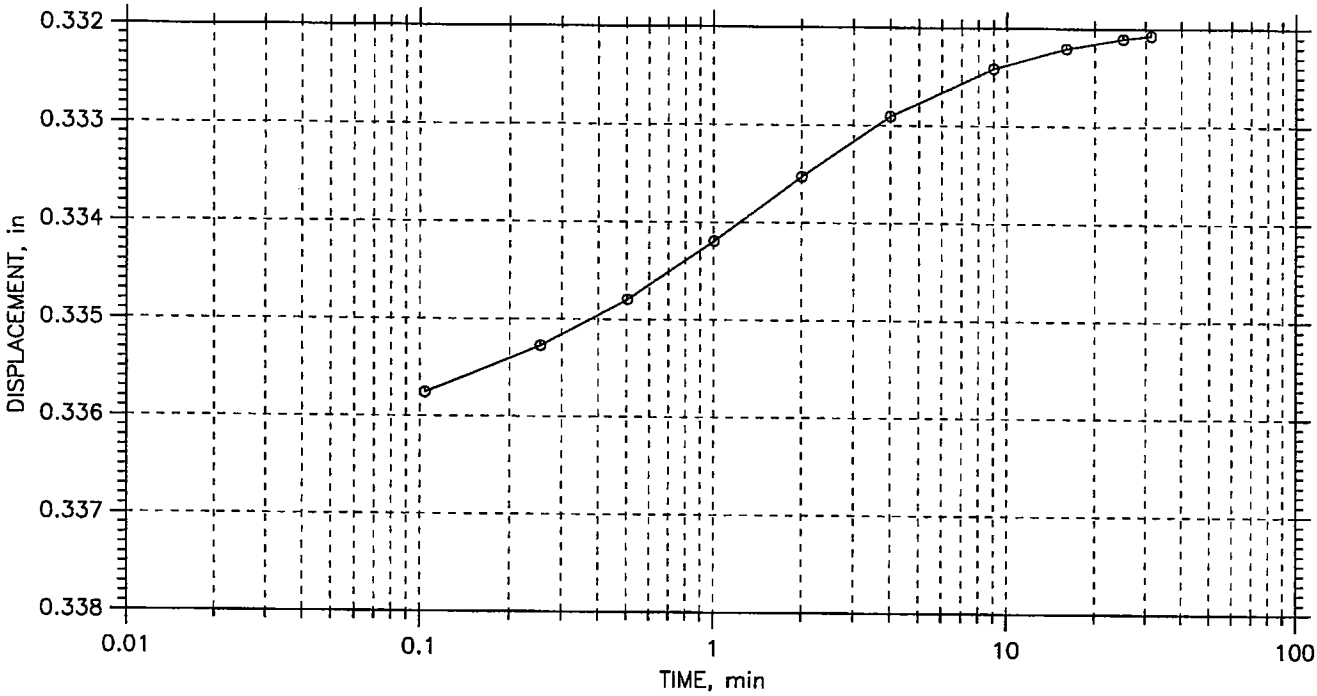
Wed, 17-JAN-2007 11:46:30

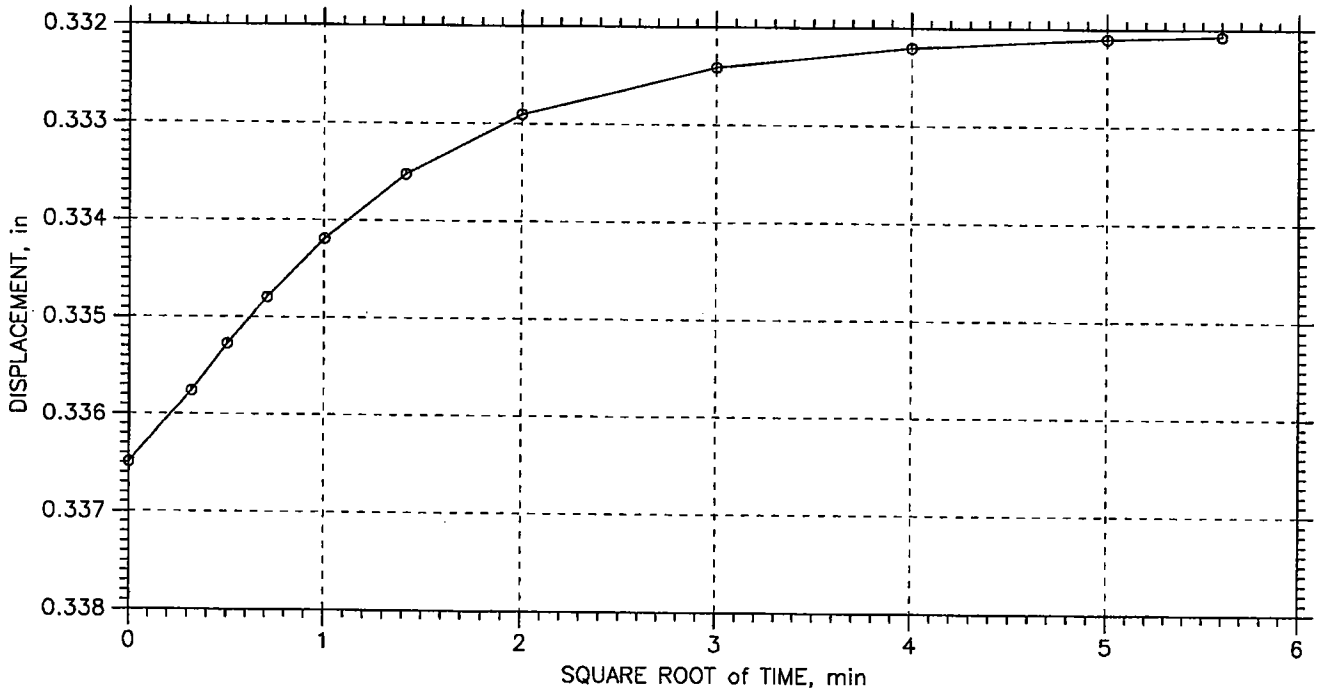
CONSOLIDATION TEST DATA

TIME CURVES

Step: 6 of 10

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

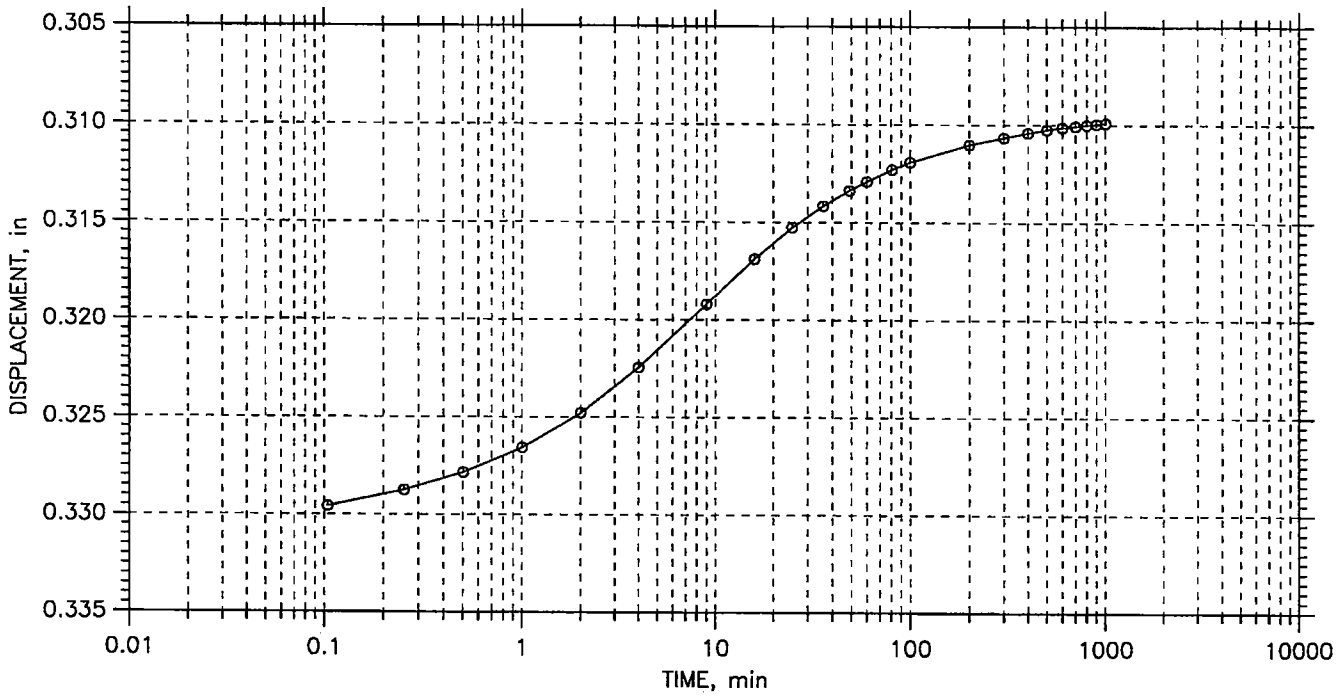
Wed, 17-JAN-2007 11:46:30

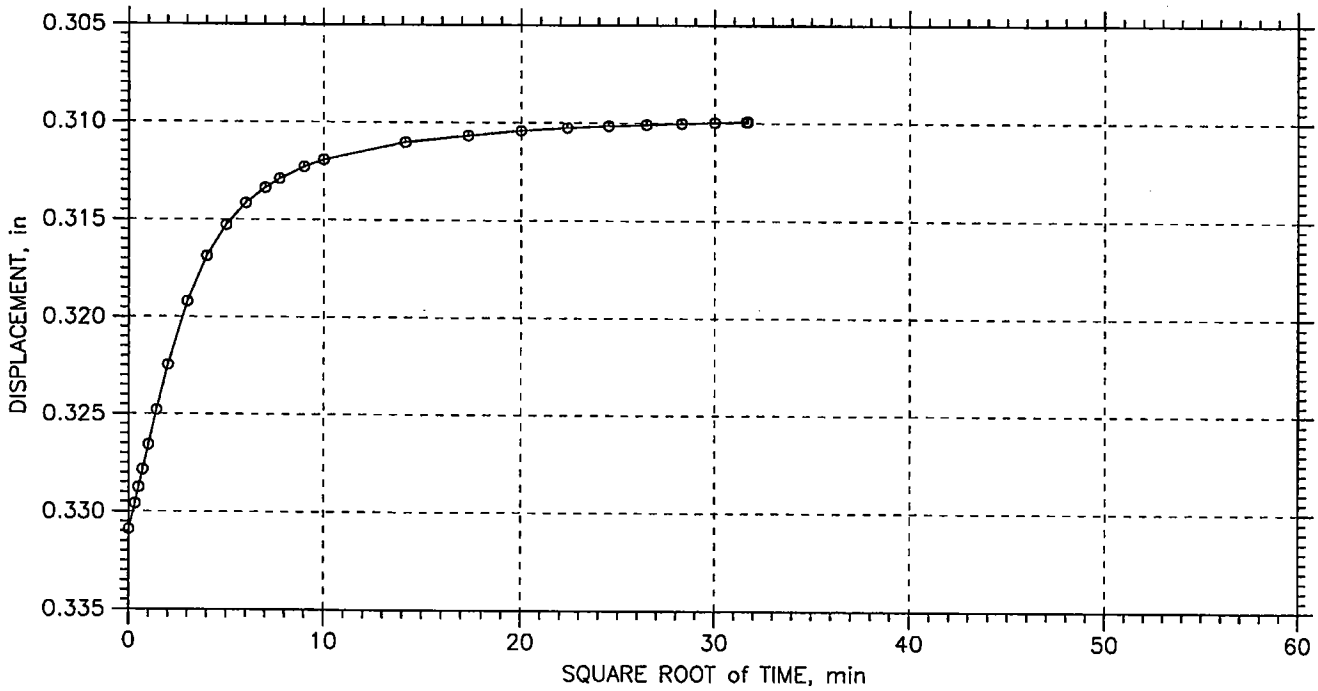
CONSOLIDATION TEST DATA

TIME CURVES

Step: 7 of 10

Stress: 0.25 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

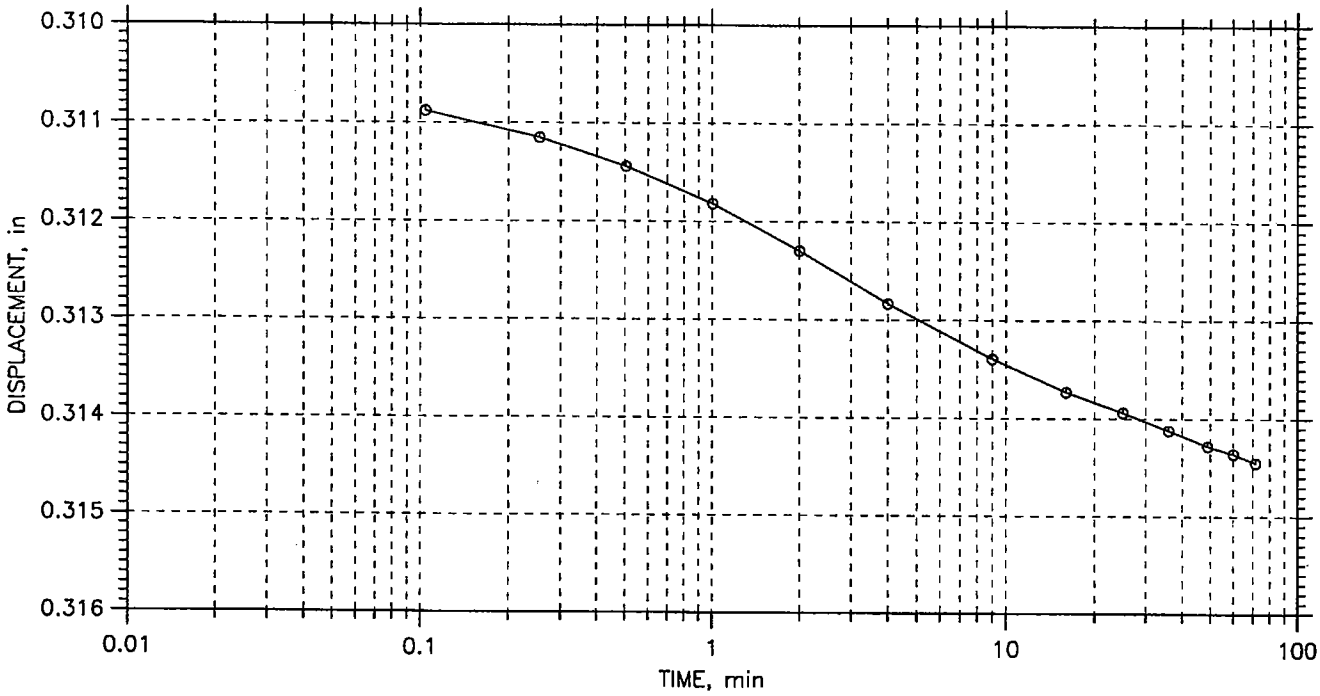
Wed, 17-JAN-2007 11:46:30

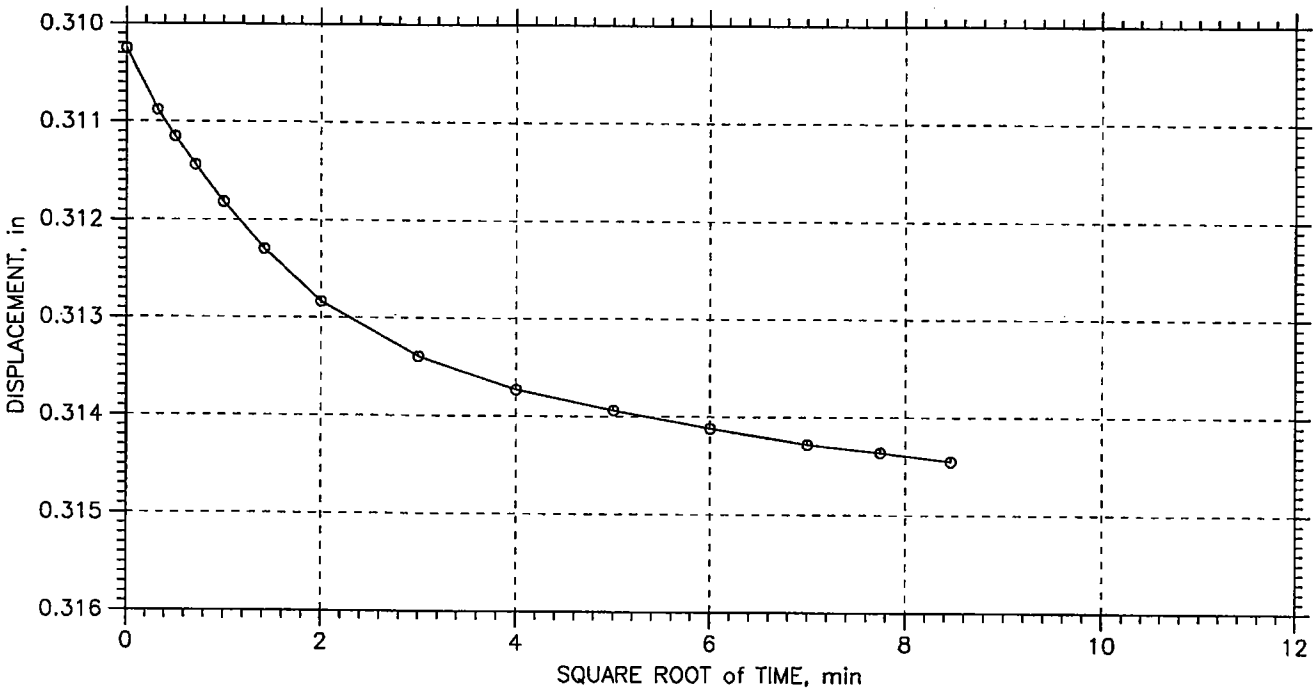
CONSOLIDATION TEST DATA

TIME CURVES

Step: 8 of 10

Stress: 0.5 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

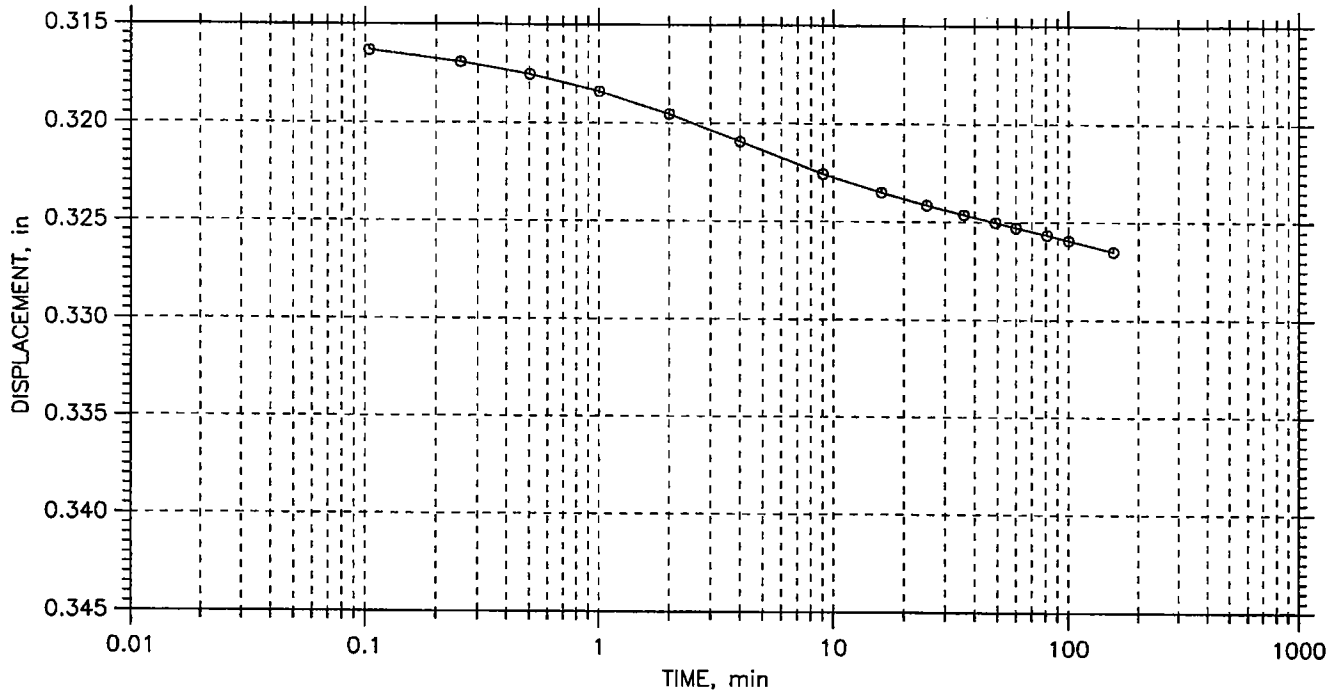
Wed, 17-JAN-2007 11:46:30

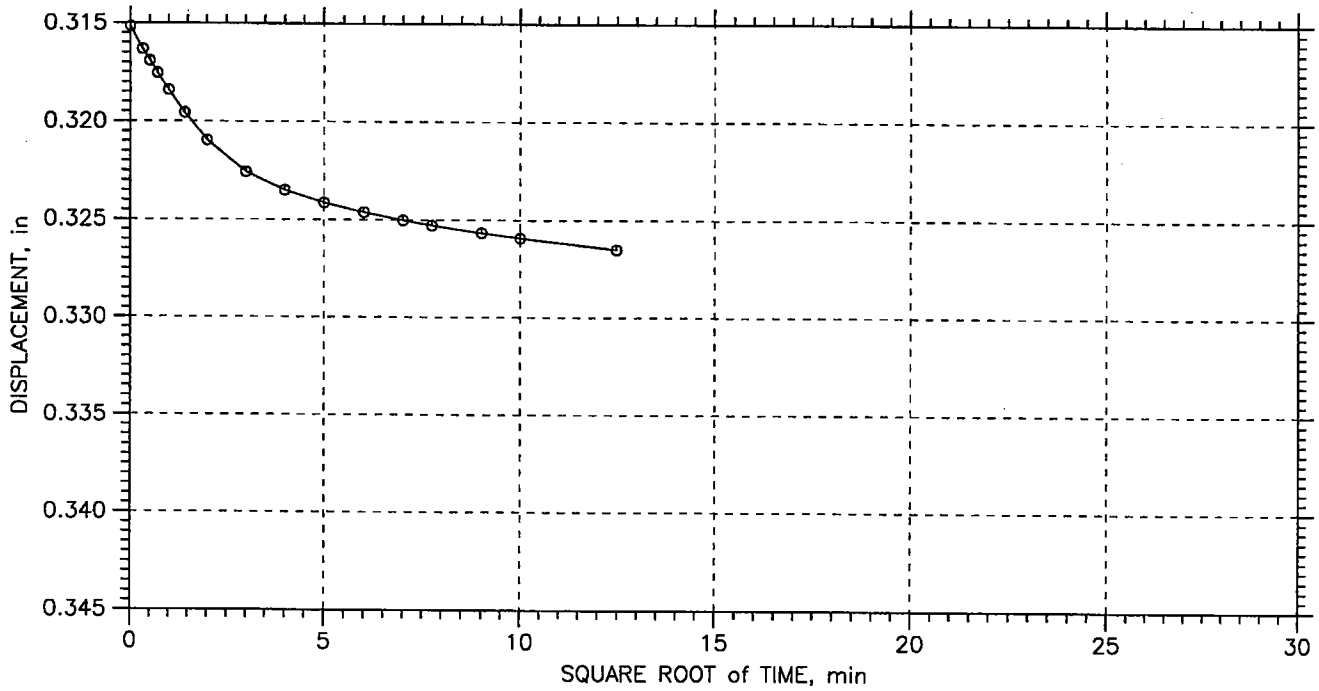
CONSOLIDATION TEST DATA

TIME CURVES

Step: 9 of 10

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

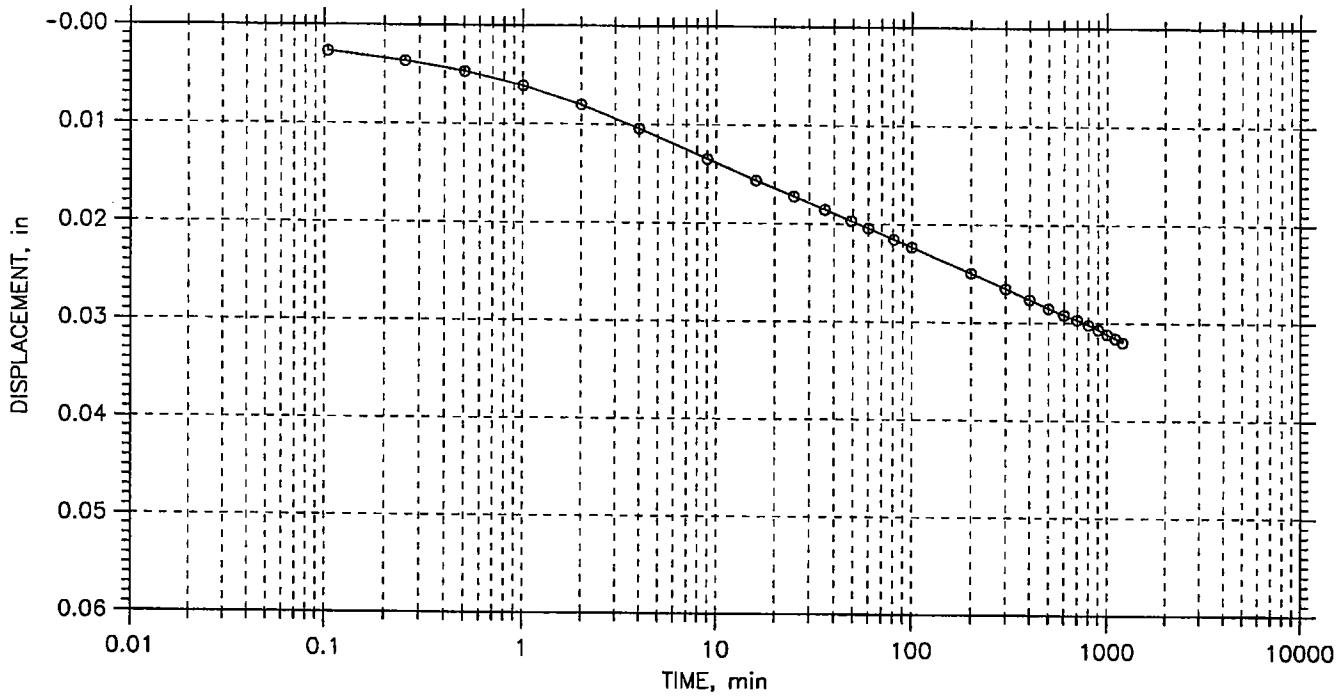
Wed, 17-JAN-2007 11:46:30

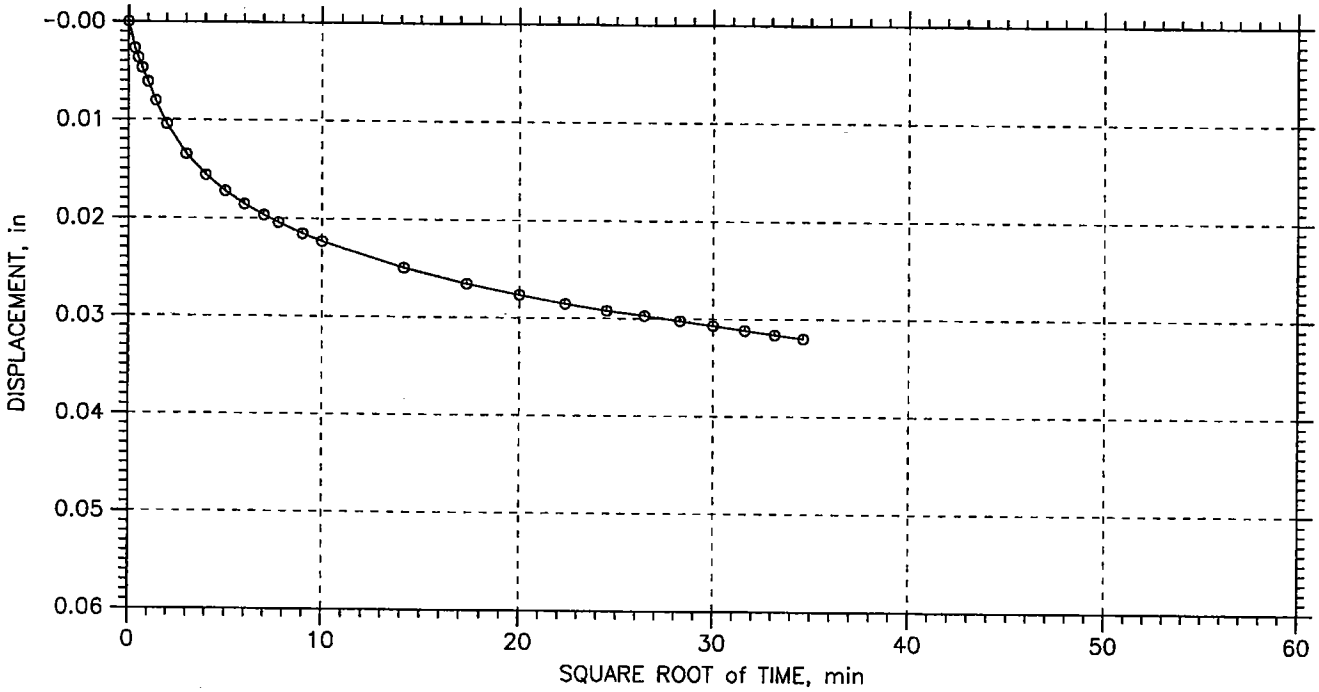
CONSOLIDATION TEST DATA

TIME CURVES

Step: 1 of 7

Stress: 2. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

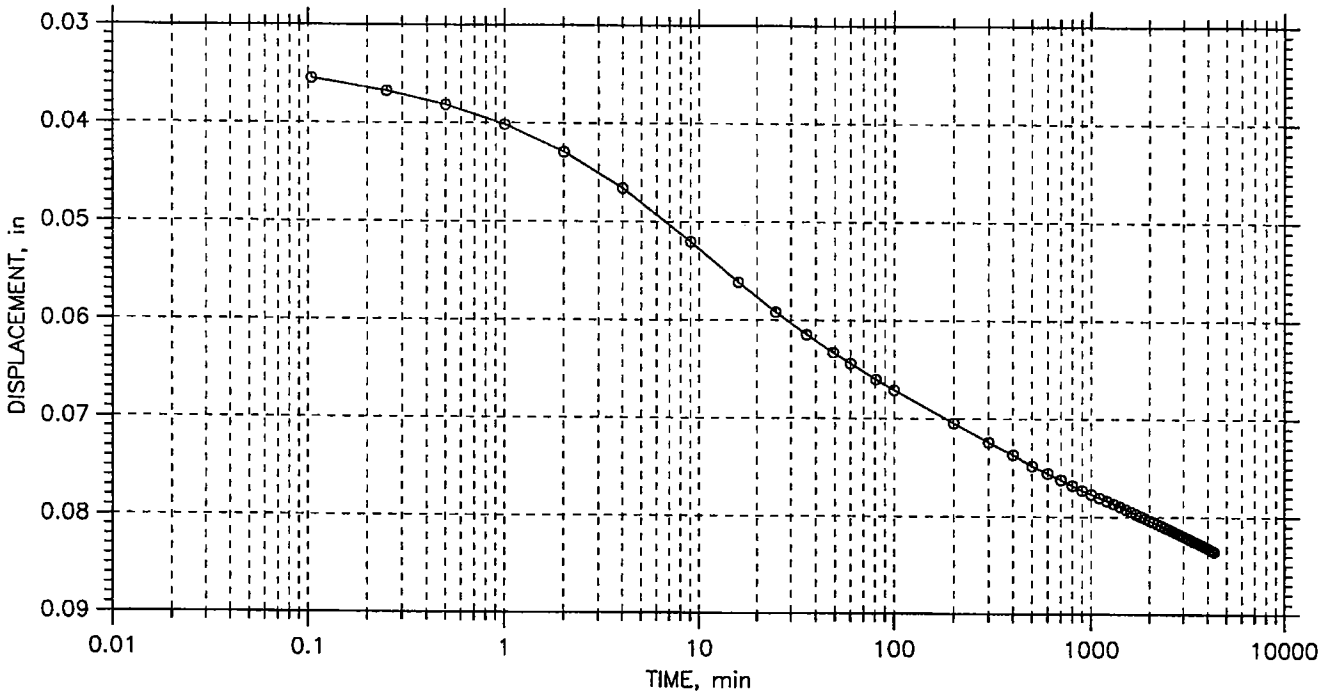
Wed, 17-JAN-2007 11:47:24

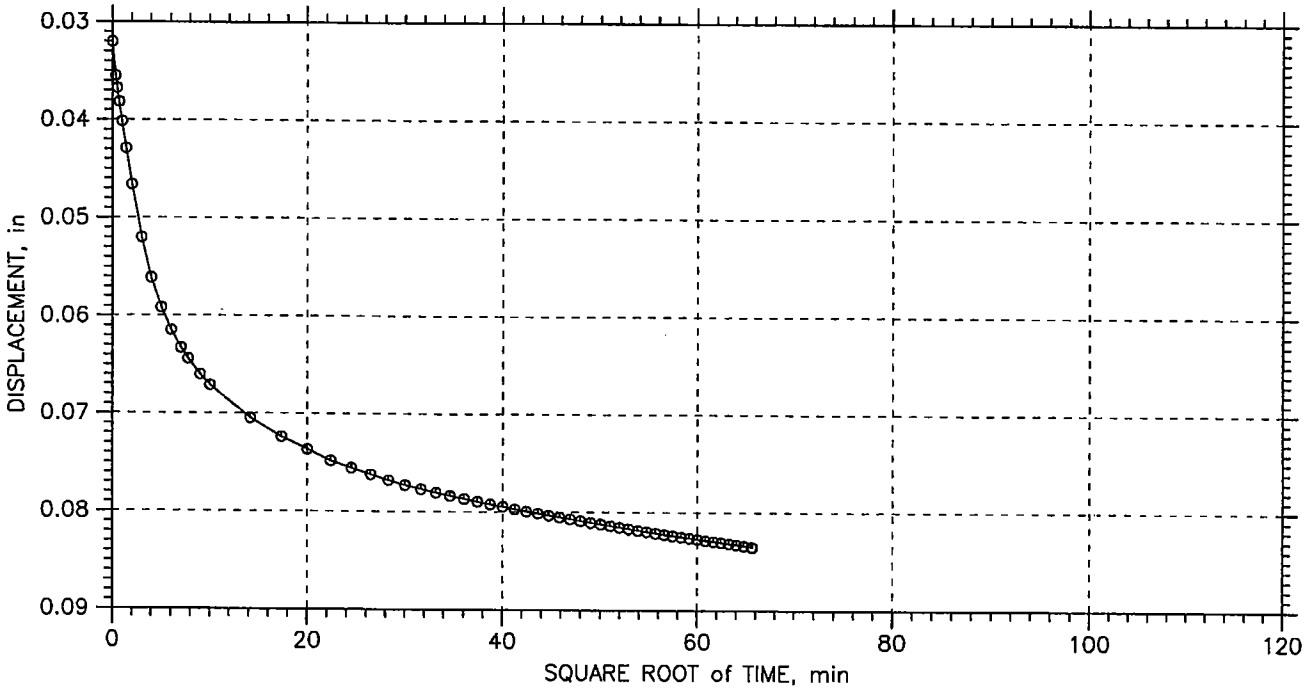
CONSOLIDATION TEST DATA

TIME CURVES

Step: 2 of 7

Stress: 4. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

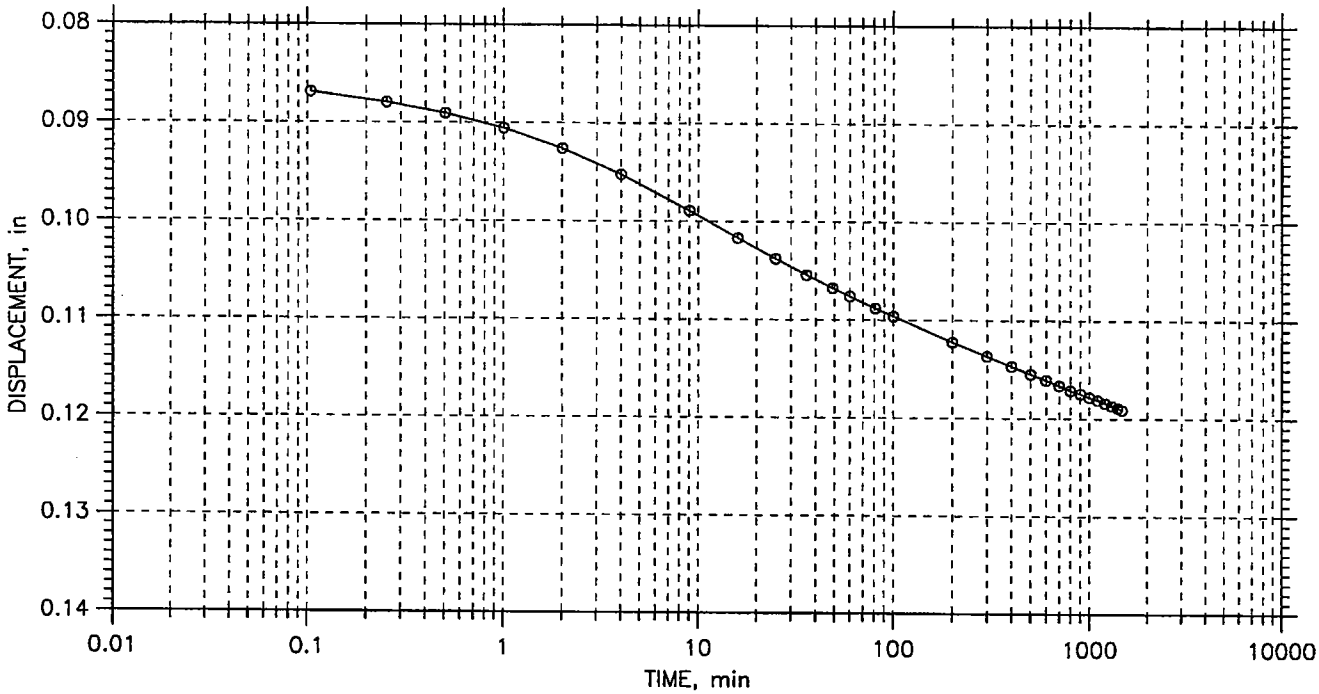
Wed, 17-JAN-2007 11:47:24

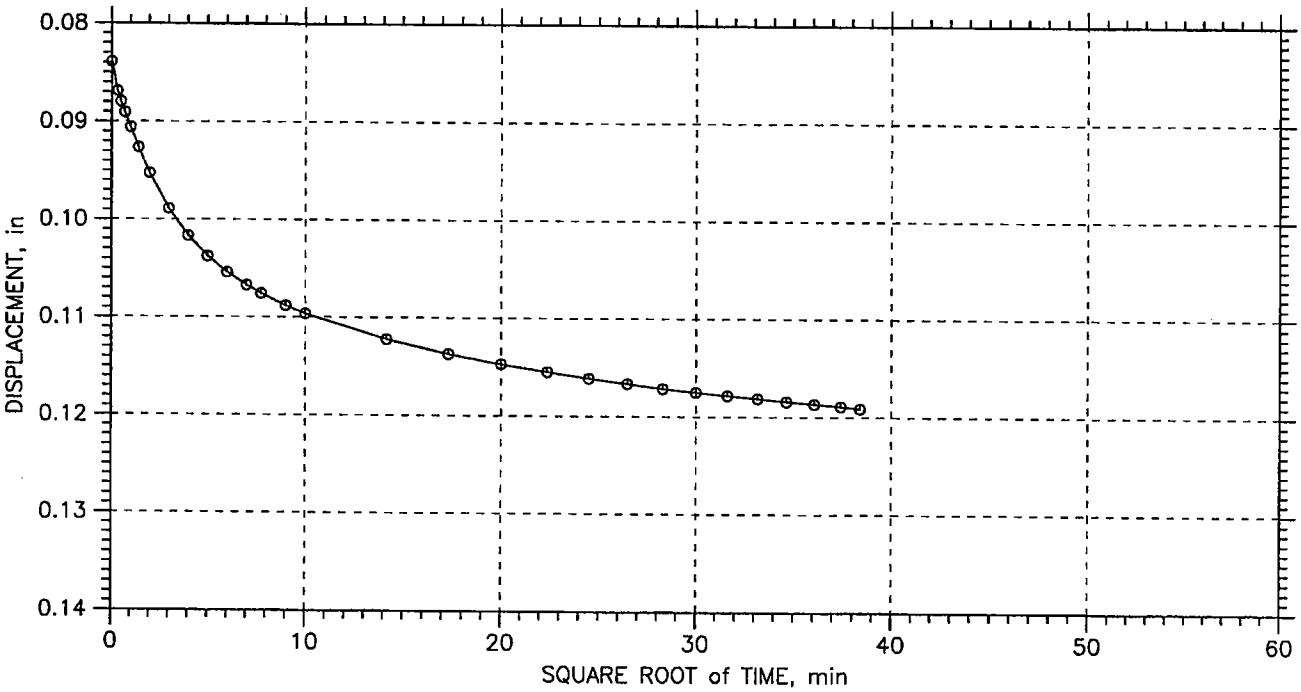
CONSOLIDATION TEST DATA

TIME CURVES

Step: 3 of 7

Stress: 8. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

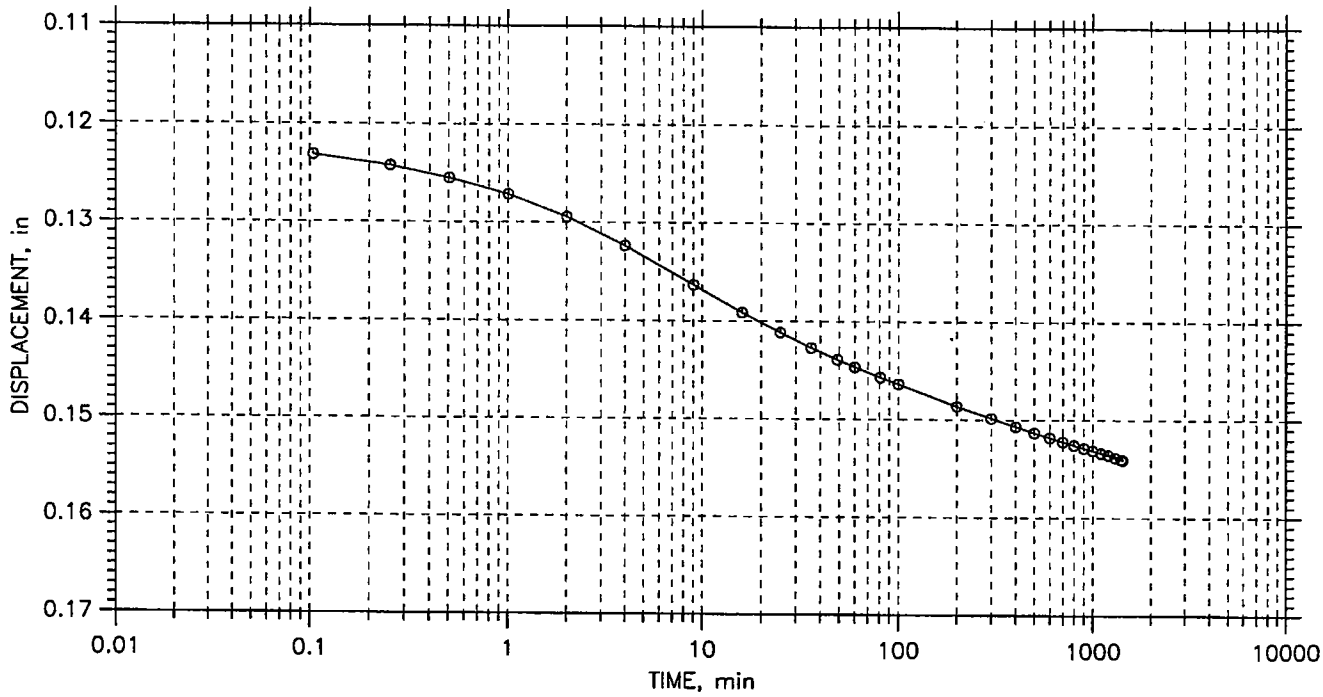
Wed, 17-JAN-2007 11:47:24

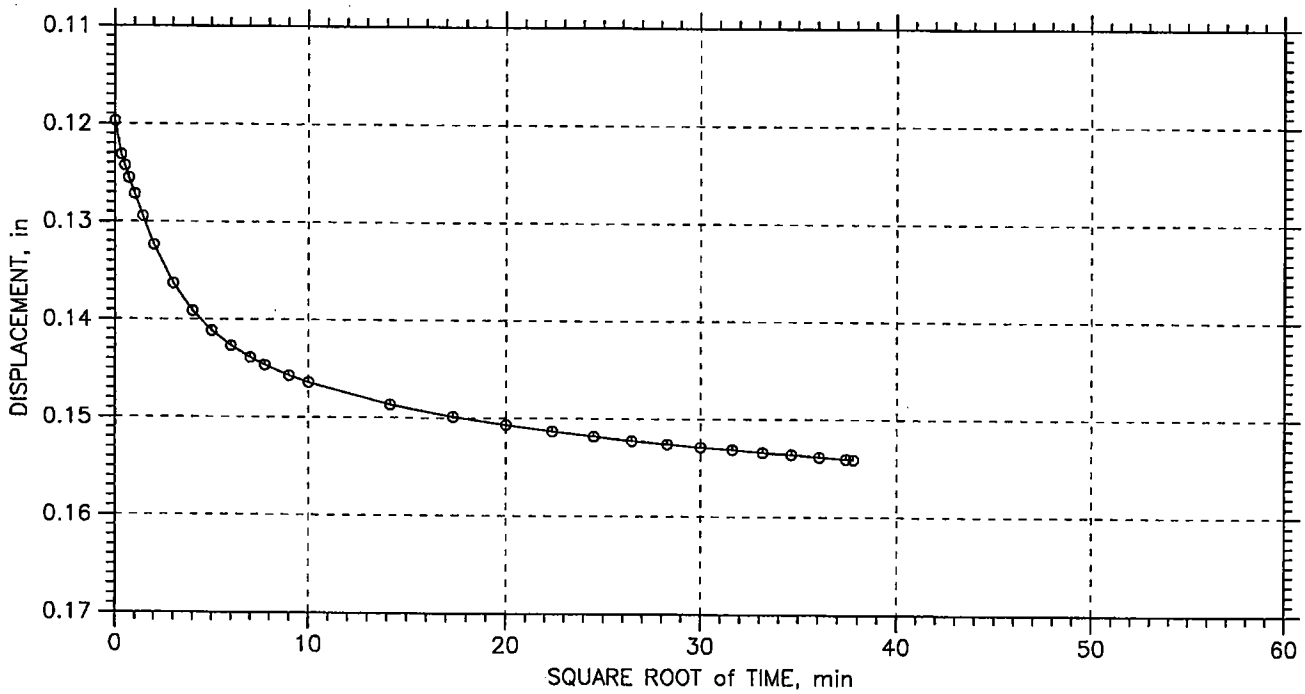
CONSOLIDATION TEST DATA

TIME CURVES

Step: 4 of 7

Stress: 16. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

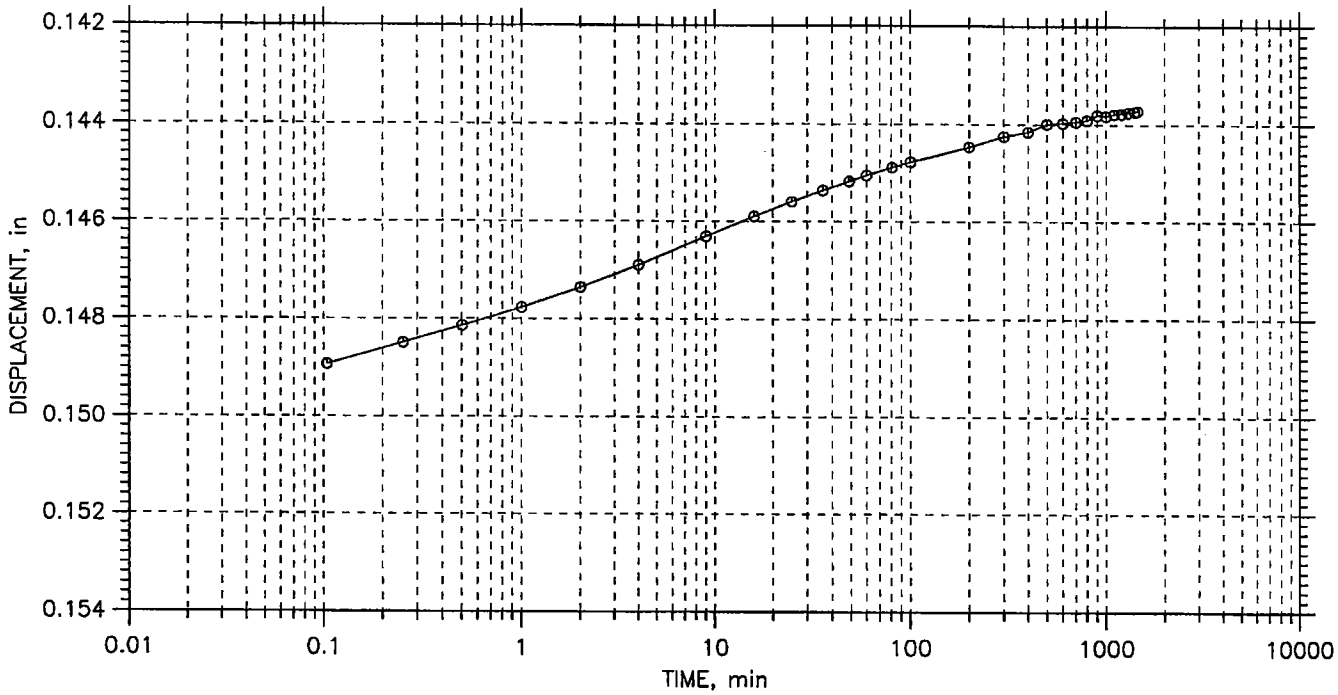
Wed, 17-JAN-2007 11:47:24

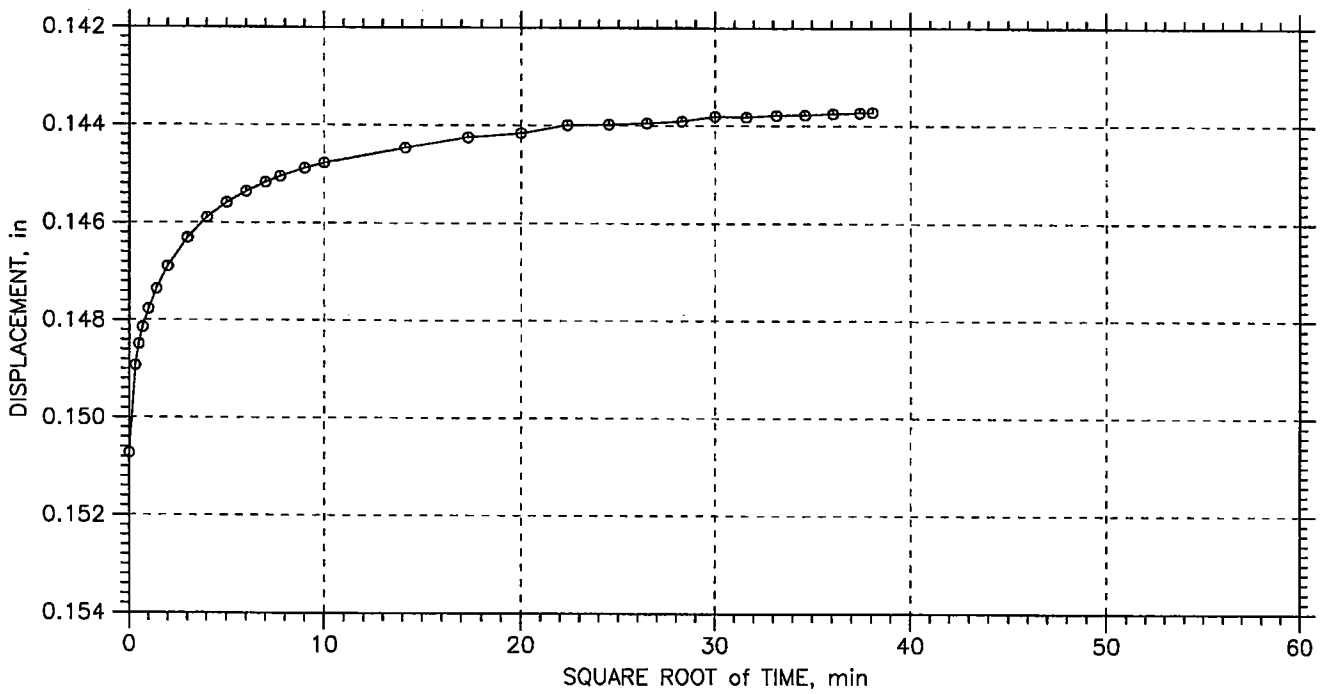
CONSOLIDATION TEST DATA

TIME CURVES

Step: 5 of 7

Stress: 4. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

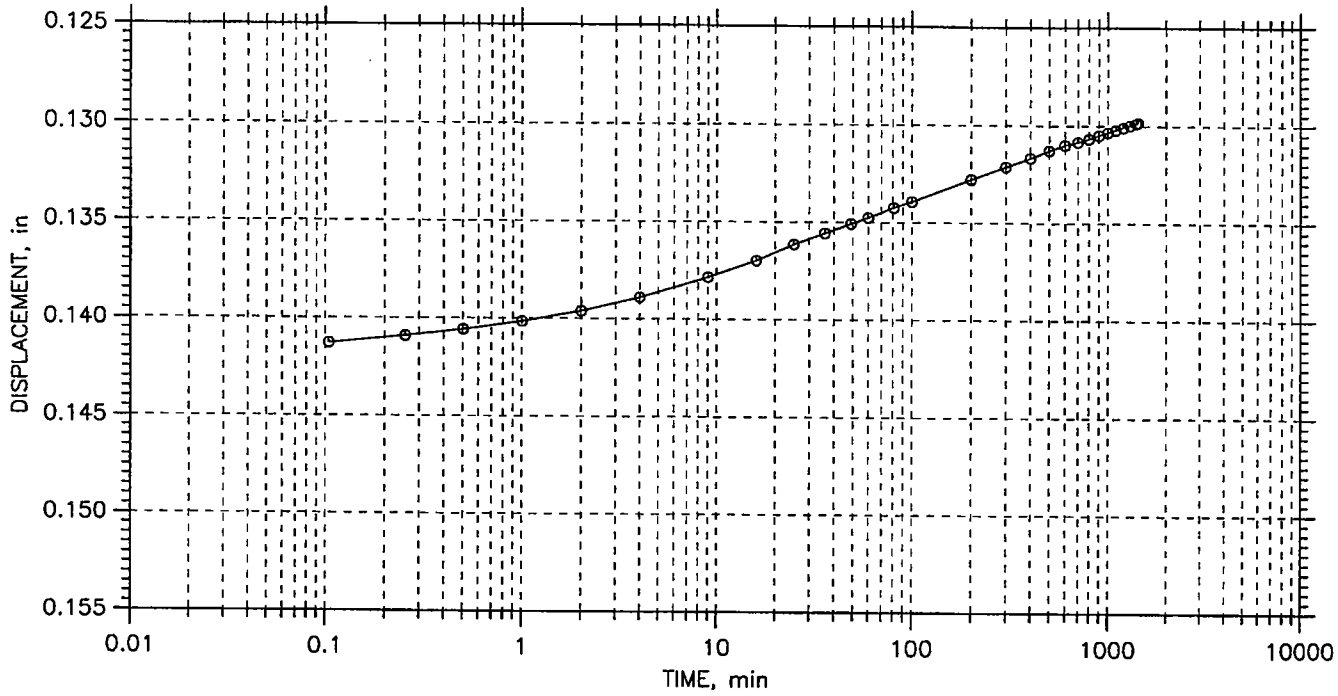
Wed, 17-JAN-2007 11:47:24

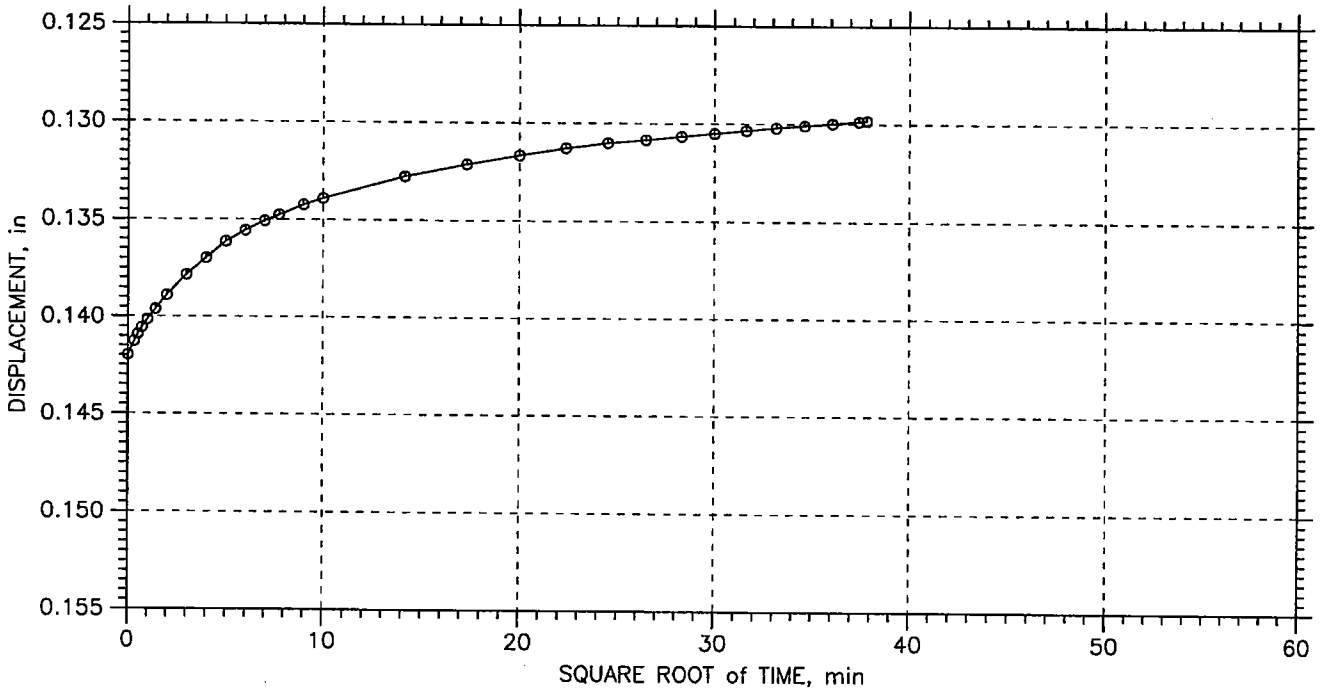
CONSOLIDATION TEST DATA

TIME CURVES

Step: 6 of 7

Stress: 1. tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = ____tsf Cc = ____ Ccr = ____ TEST PERFORMED AS PER ASTM D 2435		

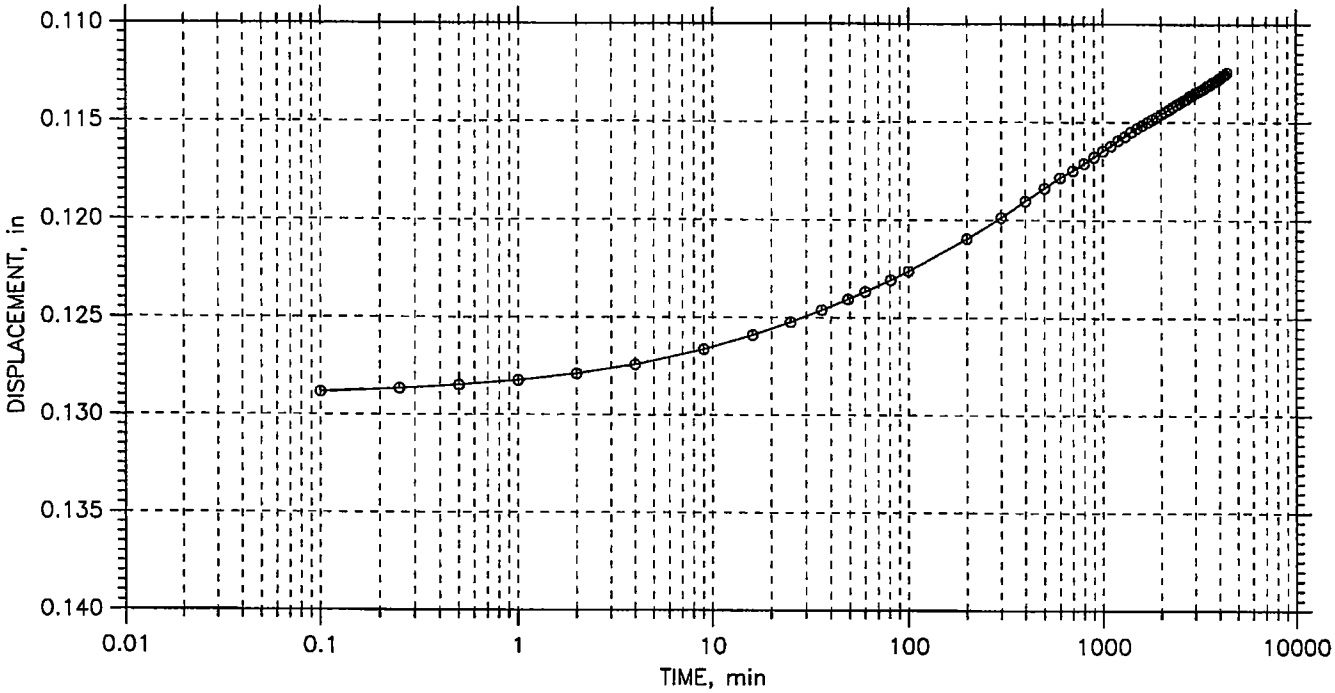
Wed, 17-JAN-2007 11:47:25

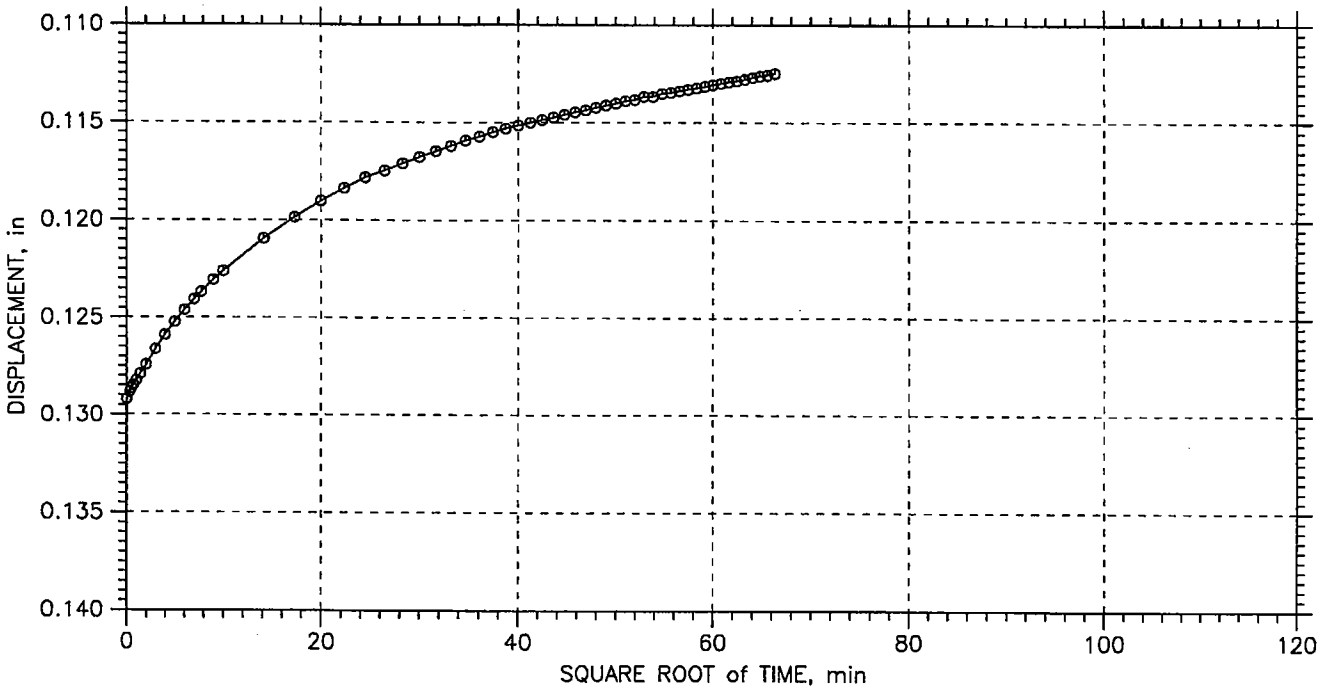
CONSOLIDATION TEST DATA

TIME CURVES

Step: 7 of 7

Stress: 0.25 tsf





Project: LOWER FOX RIVER	Location:	Project No.: 29316-A
Boring No.:	Tested By: MJS	Checked By: WPQ
Sample No.: RA06	Test Date: 12/26/06	Depth:
Test No.: 16RA06	Sample Type: REMOLDED	Elevation:
Description: CLAYEY SILT RIVER SEDIMENT - DARK BROWN (CL-ML)		
Remarks: Pc = _____tsf Cc = _____ Ccr = _____ TEST PERFORMED AS PER ASTM D 2435		

Wed, 17-JAN-2007 11:47:25

STS Consultants, Ltd.
Laboratory Services Group
750 Corporate Woods Parkway Vernon Hills, Illinois 60061
Phone:(847) 279-2500 Fax:(847) 279-2550

HYDRAULIC CONDUCTIVITY DETERMINATION
ASTM D 5084, METHOD C
RISING TAILWATER LEVEL

STS PROJECT NO.: **29316-A** **6/29/2006**
PROJECT NAME: **Lower Fox River**
CLIENT NAME: **Foth & Van Dyke**

SUMMARY OF TEST RESULTS

BORING NO. -

SAMPLE NO. 1RA06EA1DS01

SAMPLE DEPTH -

CLASSIFICATION Elastic Silt Sediment, Little F-C Sand, Trace Organics - Dark Brown (MH) Vegetation Noted

	INITIAL	FINAL
DRY UNIT WEIGHT (pcf)	79.4	77.0
WATER CONTENT (%)	68.5	44.5
DIAMETER (cm)	7.014	7.085
LENGTH (cm)	5.219	5.276

HYDRAULIC GRADIENT (MAXIMUM) 31.3

PERCENT SATURATION 104.879 (Percent saturation calculation is based on final measurements and an estimated specific gravity.)

HYDRAULIC CONDUCTIVITY k (cm/sec) 1.03E-07

Deaired tap water was used as the liquid permeant.

STS Consultants, Ltd.
Laboratory Services Group
750 Corporate Woods Parkway Vernon Hills, Illinois 60061
Phone:(847) 279-2500 Fax:(847) 279-2550

HYDRAULIC CONDUCTIVITY DETERMINATION
ASTM D 5084, METHOD C
RISING TAILWATER LEVEL

STS PROJECT NO.: **29316-A** **8/14/2006**
PROJECT NAME: **Lower Fox River**
CLIENT NAME: **Foth & Van Dyke**

SUMMARY OF TEST RESULTS

BORING NO. -

SAMPLE NO. ED-1 Comp

SAMPLE PREPARATION: Specimen remolded to achieve homogenious specimen

CLASSIFICATION Clayey F-C Sand, Trace Silt, Trace Organics - Brown (SC)
Vegetation Noted

	INITIAL	FINAL
DRY UNIT WEIGHT (pcf)	58.5	67.2
WATER CONTENT (%)	71.2	51.8
DIAMETER (cm)	7.160	7.322
LENGTH (cm)	6.699	5.692

HYDRAULIC GRADIENT (MAXIMUM) 14.1

PERCENT SATURATION 94.4 (Percent saturation calculation is based on final measurements and an estimated specific gravity.)

HYDRAULIC CONDUCTIVITY k (cm/sec) 8.79E-07

Deaired tap water was used as the liquid permeant.

STS Consultants, Ltd.
Laboratory Services Group
750 Corporate Woods Parkway Vernon Hills, Illinois 60061
Phone:(847) 279-2500 Fax:(847) 279-2550

HYDRAULIC CONDUCTIVITY DETERMINATION
ASTM D 5084, METHOD C
RISING TAILWATER LEVEL

STS PROJECT NO.: **29316A** **11/1/2006**
PROJECT NAME: **Lower Fox River**
CLIENT NAME: -

SUMMARY OF TEST RESULTS

BORING NO.	--
SAMPLE NO.	ED-6
SAMPLE DEPTH	--
CLASSIFICATION	Elastic Silt River Sediment - Dark Brown (MH) Specimen Remolded by Tamping Until Uniform

	INITIAL	FINAL
DRY UNIT WEIGHT (pcf)	35.3	39.2
WATER CONTENT (%)	136.5	123.2
DIAMETER (cm)	7.187	6.883
LENGTH (cm)	6.755	6.636

HYDRAULIC GRADIENT (MAXIMUM)	13.96	
PERCENT SATURATION	100.8	(Percent saturation calculation is based on final measurements and an estimated specific gravity.)
HYDRAULIC CONDUCTIVITY k (cm/sec)	3.54E-07	

Deaired tap water was used as the liquid permeant.

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HYDRAULIC CONDUCTIVITY DETERMINATION
ASTM D 5084, METHOD C
RISING TAILWATER LEVEL

STS PROJECT NO.: **29316-A** **11/7/2006**
PROJECT NAME: **Lower Fox River**
CLIENT NAME: **Foth & Van Dyke**

SUMMARY OF TEST RESULTS

BORING NO.	--
SAMPLE NO.	ED-8
SAMPLE DEPTH	--
CLASSIFICATION	Elastic Silt River Sediment Trace Clay Trace Organics - Dark Brown

	INITIAL	FINAL
DRY UNIT WEIGHT (pcf)	57.0	62.2
WATER CONTENT (%)	63.1	63.3
DIAMETER (cm)	7.090	7.024
LENGTH (cm)	3.779	3.029

HYDRAULIC GRADIENT (MAXIMUM)	24.95	
PERCENT SATURATION	102.8	(Percent saturation calculation is based on final measurements and an estimated specific gravity.)
HYDRAULIC CONDUCTIVITY k (cm/sec)	4.17E-07	

Deaired tap water was used as the liquid permeant.

STS Consultants, Ltd.

HYDRAULIC CONDUCTIVITY DETERMINATION
ASTM D 5084, METHOD C
RISING TAILWATER LEVEL

STS PROJECT NO.: 29316A

PROJECT: FOX RIVER OU-1 2006 RA

DATE: 11/14/2006

SUMMARY OF TEST RESULTS

SAMPLE NO. 1-RA-06-ED14-DS-26-COMP

LOCATION 0

CLASSIFICATION DARK GRAY BROWN ORGANIC CLAYEY SILTS

	INITIAL	FINAL
DRY UNIT WEIGHT (pcf)	21.6	34.4
WATER CONTENT (%)	254.8	138.8
DIAMETER (cm)	4.80	4.40
LENGTH (cm)	6.03	4.40
HYDRAULIC GRADIENT (MAXIMUM)		15.3
PERCENT SATURATION	102.57028	98.443163
HYDRAULIC CONDUCTIVITY k (cm/sec)		1.71E-07

STS Consultants, Ltd.

HYDRAULIC CONDUCTIVITY DETERMINATION
ASTM D 5084, METHOD C
RISING TAILWATER LEVEL

STS PROJECT NO.: 29316A

PROJECT: FOX RIVER OU-1 2006 RA

DATE: 11/14/2006

SUMMARY OF TEST RESULTS

SAMPLE NO. 1-RA-06-NWB-DS-29-COMP

LOCATION 0

CLASSIFICATION DARK GRAY BROWN ORGANIC CLAYEY SILTS

	INITIAL	FINAL
DRY UNIT WEIGHT (pcf)	27.7	50.5
WATER CONTENT (%)	183.3	83.8
DIAMETER (cm)	4.80	4.60
LENGTH (cm)	9.40	7.90
HYDRAULIC GRADIENT (MAXIMUM)		9.8
PERCENT SATURATION	99.162408	100.51043
HYDRAULIC CONDUCTIVITY k (cm/sec)		1.35E-07

STS Consultants, Ltd.

HYDRAULIC CONDUCTIVITY DETERMINATION
ASTM D 5084, METHOD C
RISING TAILWATER LEVEL

STS PROJECT NO.: 29316A

PROJECT: LOWER FOX RIVER OU-1

DATE: 12/22/2006

SUMMARY OF TEST RESULTS

SAMPLE NO. 1-RA-06-SWC1-DS-43-COMP.

LOCATION 0

CLASSIFICATION GRAY BROWN ORGANIC SANDY SILT

	INITIAL	FINAL
DRY UNIT WEIGHT (pcf)	20.0	33.3
WATER CONTENT (%)	257.4	139.9
DIAMETER (cm)	4.76	4.10
LENGTH (cm)	7.94	6.30
HYDRAULIC GRADIENT (MAXIMUM)		11.3
PERCENT SATURATION	93.657044	93.291683
HYDRAULIC CONDUCTIVITY k (cm/sec)		1.15E-07