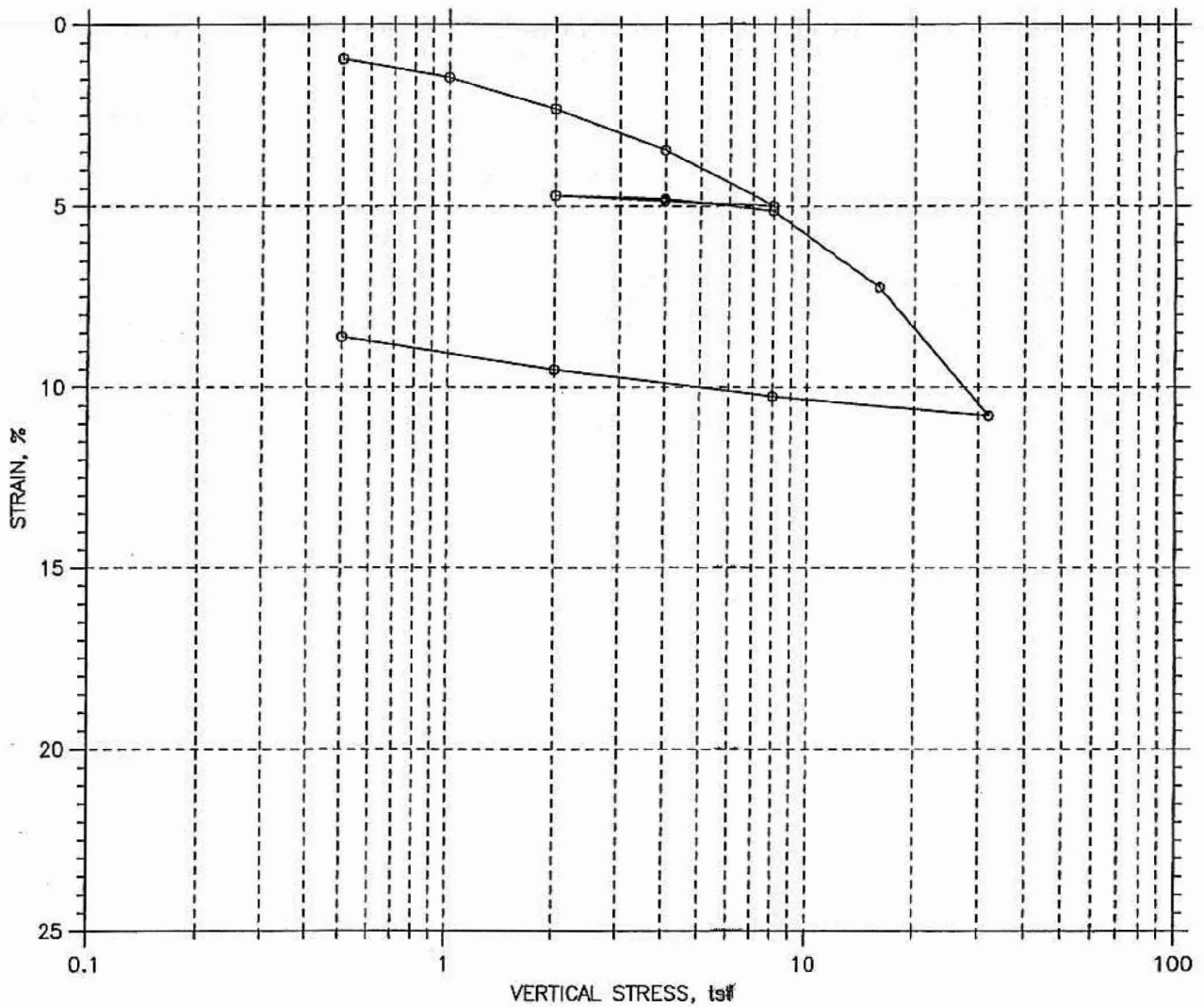


CONSOLIDATION TEST DATA SUMMARY REPORT



				Before Test	After Test	
Overburden Pressure: ---				Water Content, %	28.80	25.45
Preconsolidation Pressure: 10.5 tsf				Dry Unit Weight, pcf	92.1	100.8
Compression Index: ---				Saturation, %	92.05	99.99
Diameter: 2.5 in		Height: 1 in		Void Ratio	0.86	0.70
LL: 54	PL: 11	PI: 43	GS: 2.74			

GeoTesting express <small>a subsidiary of Geocomp Corporation</small>	Project: Calvert Cliffs Nuclear PP	Location: Calvert County, MD	Project No.: GTX-6880
	Boring No.: B-314	Tested By: jdt	Checked By: njh
	Sample No.: S-6	Test Date: 08/24/06	Depth: 13.5-14.5ft
	Test No.: C1	Sample Type: tube	Elevation: ---
	Description: Moist, dark olive gray clayey sand (SC), 35% passing #200 sieve, inundated @ 0.5 tsf		
	Remarks: System G - Compression Ratio: 0.11, Recompression Ratio: 0.01		

CONSOLIDATION TEST DATA

Project: Calvert Cliffs Nuclear PP
 Boring No.: B-314
 Sample No.: S-6
 Test No.: C1

Location: Calvert County, MD
 Tested By: jdt
 Test Date: 08/24/06
 Sample Type: tube

Project No.: GTX-6880
 Checked By: njh
 Depth: 13.5-14.5ft
 Elevation: ---

Soil Description: Moist, dark olive gray clayey sand (SC), 35% passing #200 sieve, inundated @ 0.5 tsf
 Remarks: System G - Compression Ratio: 0.11, Recompression Ratio: 0.01

Measured Specific Gravity: 2.74
 Initial Void Ratio: 0.86
 Final Void Ratio: 0.70

Liquid Limit: 54
 Plastic Limit: 11
 Plasticity Index: 43

Initial Height: 1.00 in
 Specimen Diameter: 2.50 in

	Before Consolidation		After Consolidation	
	Trimming	Specimen+Ring	Specimen+Ring	Trimming
Container ID	2047	RING		986
Wt. Container + Wet Soil, gm	101.15	360.51	356.54	158.24
Wt. Container + Dry Soil, gm	81.92	326.33	326.33	127.75
Wt. Container, gm	8.12	207.66	207.66	7.96
Wt. Dry Soil, gm	73.8	118.67	118.67	119.79
Water Content, %	26.06	28.80	25.45	25.45
Void Ratio	---	0.86	0.70	---
Degree of Saturation, %	---	92.05	99.99	---
Dry Unit Weight, pcf	---	92.101	100.77	---

CONSOLIDATION TEST DATA

Project: Calvert Cliffs Nuclear PP
 Boring No.: B-314
 Sample No.: S-6
 Test No.: C1

Location: Calvert County, MD
 Tested By: jdt
 Test Date: 08/24/06
 Sample Type: tube

Project No.: GTX-6880
 Checked By: njh
 Depth: 13.5-14.5ft
 Elevation: ---

Soil Description: Moist, dark olive gray clayey sand (SC), 35% passing #200 sieve, inundated @ 0.5 tsf
 Remarks: System G - Compression Ratio: 0.11, Recompression Ratio: 0.01

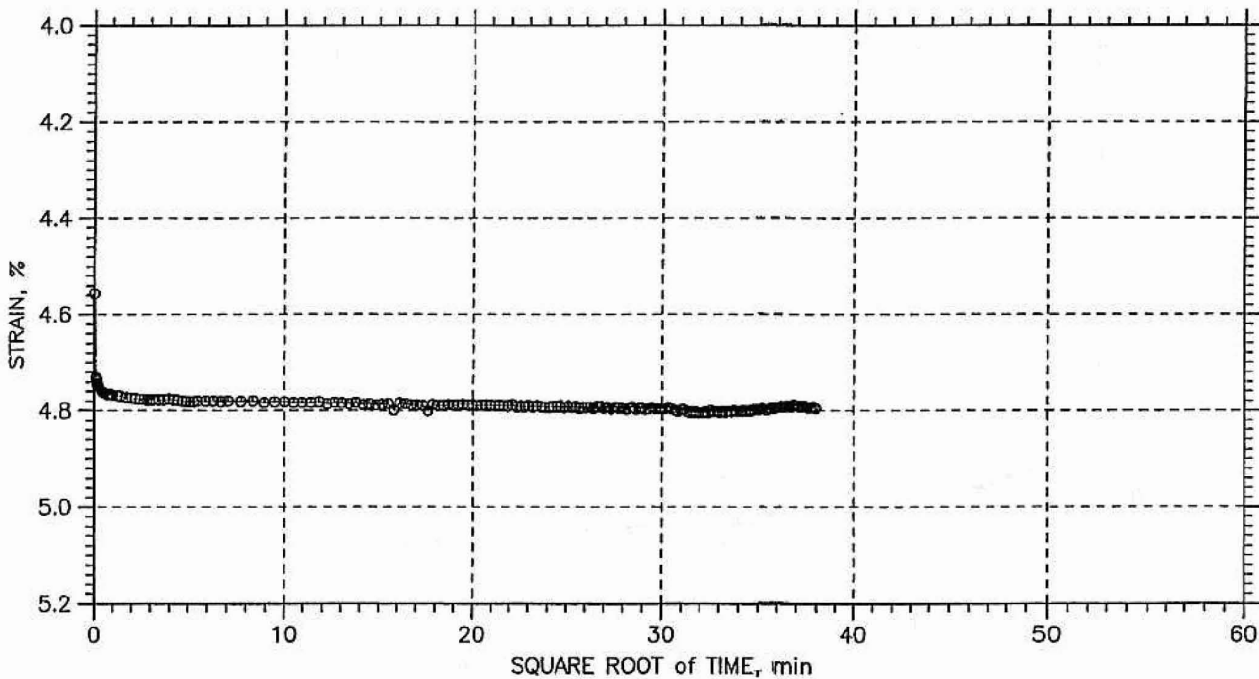
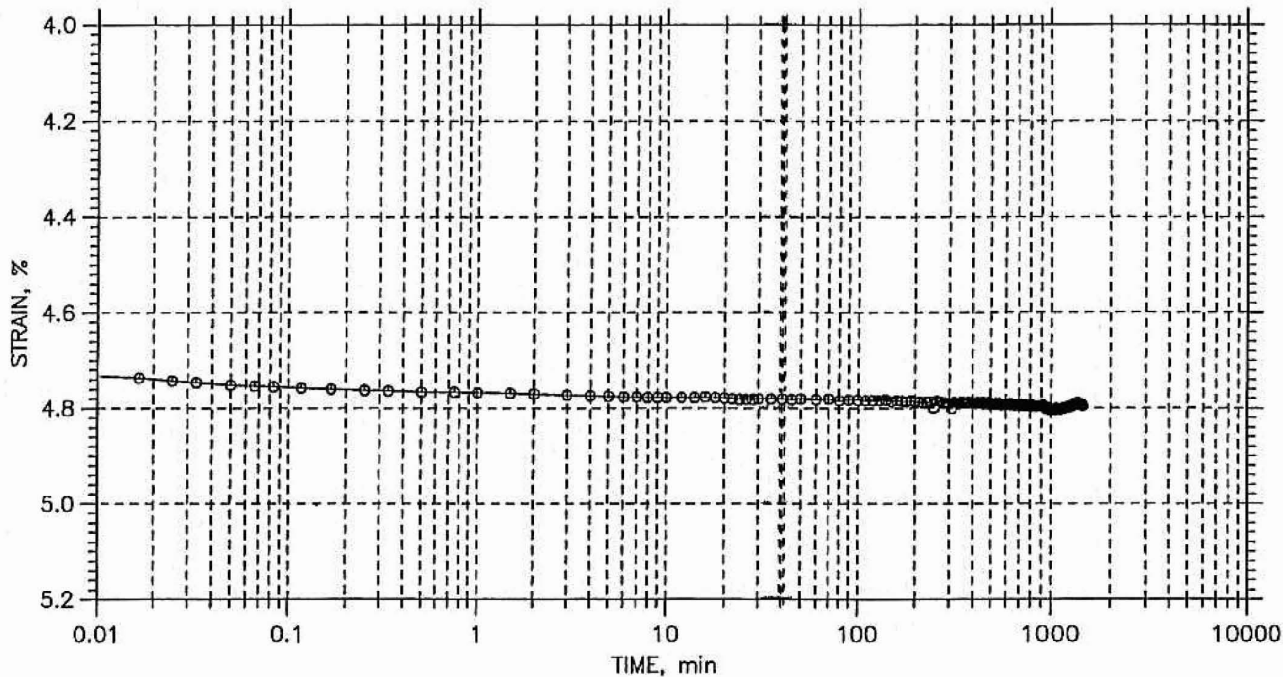
	Applied Stress tsf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting		Coefficient of Consolidation		
					Sq.Rt. min	Log min	Sq.Rt. in ² /sec	Log in ² /sec	Ave. in ² /sec
1	0.5	0.009464	0.840	0.95	0.1	0.0	9.85e-003	0.00e+000	9.85e-003
2	1	0.01458	0.830	1.46	0.3	0.0	2.45e-003	0.00e+000	2.45e-003
3	2	0.02315	0.814	2.32	0.3	0.0	2.47e-003	0.00e+000	2.47e-003
4	4	0.03457	0.793	3.46	0.3	0.0	2.38e-003	0.00e+000	2.38e-003
5	8	0.04982	0.765	4.98	0.4	0.0	1.93e-003	0.00e+000	1.93e-003
6	4	0.04863	0.767	4.86	0.6	0.0	1.34e-003	0.00e+000	1.34e-003
7	2	0.04696	0.770	4.70	0.8	0.0	9.72e-004	0.00e+000	9.72e-004
8	4	0.04795	0.768	4.79	2.7	0.0	2.81e-004	0.00e+000	2.81e-004
9	8	0.05121	0.762	5.12	0.4	0.0	1.86e-003	0.00e+000	1.86e-003
10	16	0.07236	0.723	7.24	0.4	0.0	1.76e-003	0.00e+000	1.76e-003
11	32	0.1079	0.657	10.79	0.5	0.0	1.34e-003	0.00e+000	1.34e-003
12	8	0.1025	0.667	10.25	0.3	0.0	2.16e-003	0.00e+000	2.16e-003
13	2	0.09503	0.681	9.50	0.9	0.0	7.24e-004	0.00e+000	7.24e-004
14	0.5	0.08603	0.697	8.60	1.9	0.0	3.65e-004	0.00e+000	3.65e-004

CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 14

Stress: 4. tsf



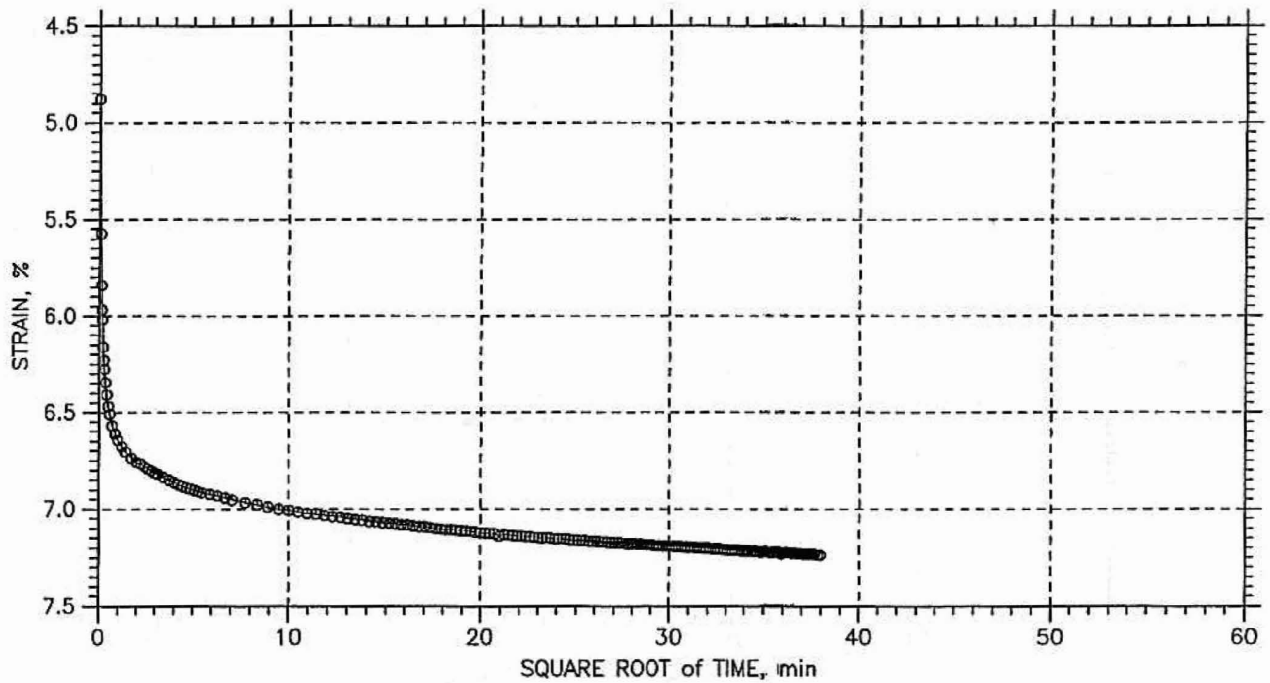
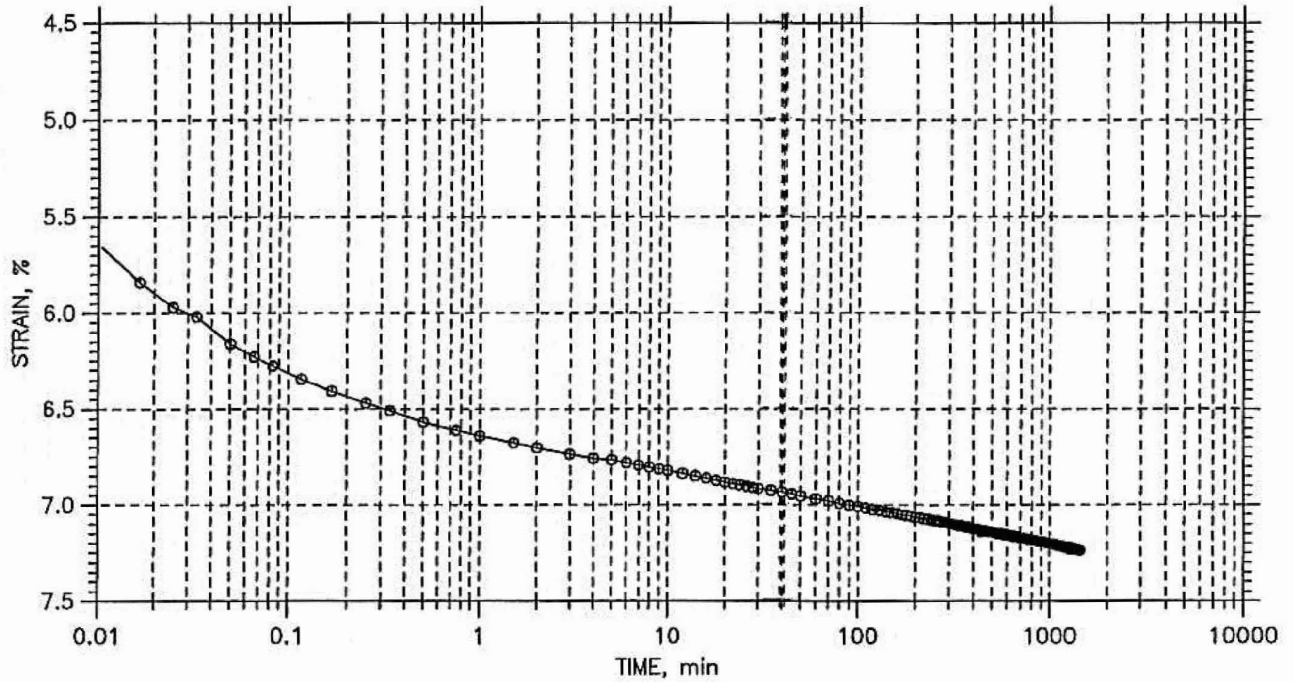
GeoTesting express <small>a subsidiary of Geocomp Corporation</small>	Project: Calvert Cliffs Nuclear PP	Location: Calvert County, MD	Project No.: GTX-6880
	Boring No.: B-314	Tested By: jdt	Checked By: njh
	Sample No.: S-6	Test Date: 08/24/06	Depth: 13.5-14.5ft
	Test No.: C1	Sample Type: tube	Elevation: ---
	Description: Moist, dark olive gray clayey sand (SC), 35% passing #200 sieve, inundated @ 0.5 tsf		
	Remarks: System G - Compression Ratio: 0.11, Recompression Ratio: 0.01		

CONSOLIDATION TEST DATA

TIME CURVES

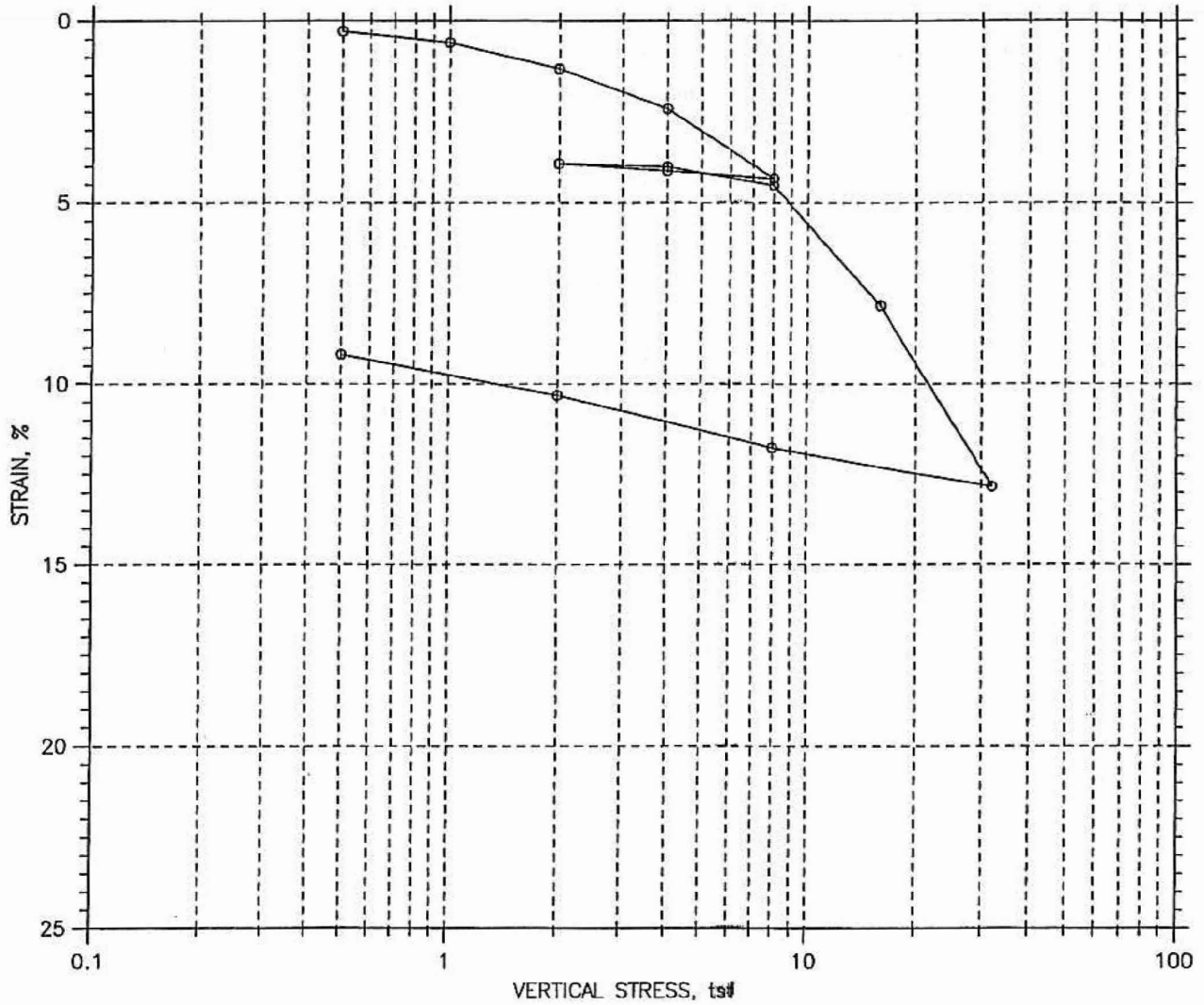
Constant Load Step: 10 of 14

Stress: 16. tsf



GeoTesting express <small>a subsidiary of Geocomp Corporation</small>	Project: Calvert Cliffs Nuclear PP	Location: Calvert County, MD	Project No.: GTX-6880
	Boring No.: B-314	Tested By: jdt	Checked By: njh
	Sample No.: S-6	Test Date: 08/24/06	Depth: 13.5-14.5ft
	Test No.: C1	Sample Type: tube	Elevation: ---
	Description: Moist, dark olive gray clayey sand (SC), 35% passing #200 sieve, inundated @ 0.5 tsf		
	Remarks: System G - Compression Ratio: 0.11, Recompression Ratio: 0.01		

CONSOLIDATION TEST DATA SUMMARY REPORT



				Before Test	After Test	
Overburden Pressure: ---				Water Content, %	27.82	27.12
Preconsolidation Pressure: 10.2 tsf				Dry Unit Weight, pcf	88.93	97.92
Compression Index: ---				Saturation, %	82.87	99.99
Diameter: 2.5 in		Height: 1 in		Void Ratio	0.92	0.74
LL: 41	PL: 11	PI: 30	GS: 2.73			

GeoTesting express <small>a subsidiary of Geocomp Corporation</small>	Project: Calvert Cliffs Nuclear PP		Location: Calvert County, MD		Project No.: GTX-6880	
	Boring No.: B-315		Tested By: jdt		Checked By: njh	
	Sample No.: S-8		Test Date: 08/25/06		Depth: 23.5-24.7'	
	Test No.: C2		Sample Type: tube		Elevation: ---	
	Description: Moist, dark olive gray clayey sand (SC), 35% passing #200 sieve, inundated @ 0.5 tsf					
	Remarks: System C - Compression Ratio: 0.17, Recompression Ratio: 0.02					

CONSOLIDATION TEST DATA

Project: Calvert Cliffs Nuclear PP
 Boring No.: B-315
 Sample No.: S-8
 Test No.: C2

Location: Calvert County, MD
 Tested By: jdt
 Test Date: 08/25/06
 Sample Type: tube

Project No.: GTX-6880
 Checked By: njh
 Depth: 23.5-24.7'
 Elevation: ---

Soil Description: Moist, dark olive gray clayey sand (SC), 35% passing #200 sieve, inundated @ 0.5 tsf
 Remarks: System C - Compression Ratio: 0.17, Recompression Ratio: 0.02

Measured Specific Gravity: 2.73
 Initial Void Ratio: 0.92
 Final Void Ratio: 0.74

Liquid Limit: 41
 Plastic Limit: 11
 Plasticity Index: 30

Initial Height: 1.00 in
 Specimen Diameter: 2.50 in

Container ID	Before Consolidation		After Consolidation	
	Trimmings	Specimen+Ring	Specimen+Ring	Trimmings
	2040	RING		1866
Wt. Container + Wet Soil, gm	297.56	362.04	361.24	154.27
Wt. Container + Dry Soil, gm	233.52	330.16	330.16	123.08
Wt. Container, gm	8.13	215.58	215.58	8.08
Wt. Dry Soil, gm	225.39	114.58	114.58	115
Water Content, %	28.41	27.82	27.12	27.12
Void Ratio	---	0.92	0.74	---
Degree of Saturation, %	---	82.87	99.99	---
Dry Unit Weight, pcf	---	88.926	97.92	---

CONSOLIDATION TEST DATA

Project: Calvert Cliffs Nuclear PP
 Boring No.: B-315
 Sample No.: S-8
 Test No.: C2

Location: Calvert County, MD
 Tested By: jdt
 Test Date: 08/25/06
 Sample Type: tube

Project No.: GTX-6880
 Checked By: njh
 Depth: 23.5-24.7'
 Elevation: ---

Soil Description: Moist, dark olive gray clayey sand (SC), 35% passing #200 sieve, inundated @ 0.5 tsf
 Remarks: System C - Compression Ratio:0.17, Recompression Ratio: 0.02

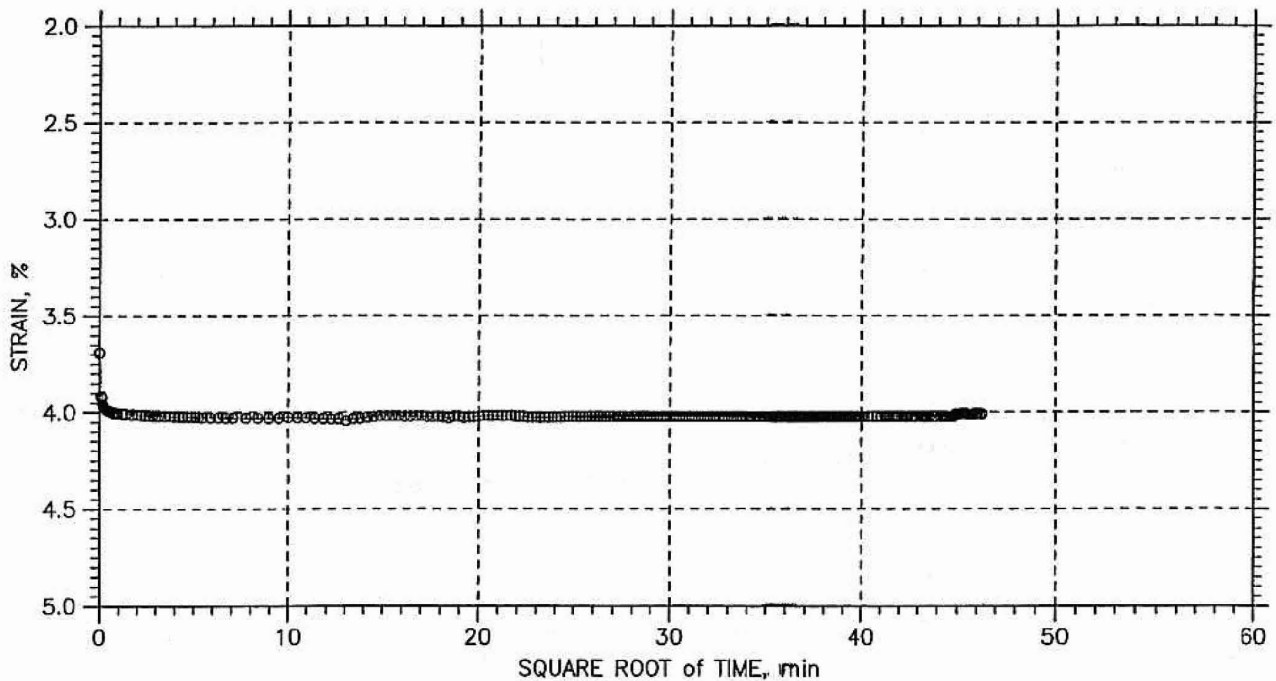
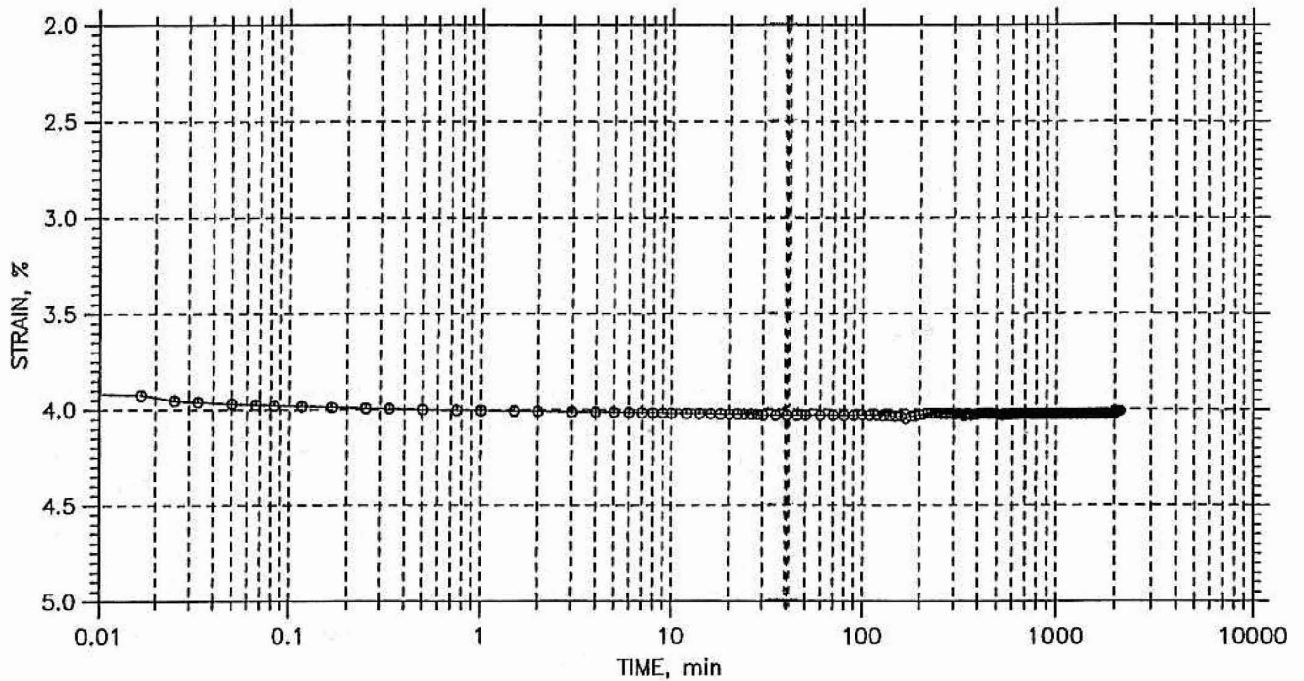
	Applied Stress tsf	Final Displacement in	Void Ratio	Strain at End %	T50 Fitting		Coefficient of Consolidation		
					Sq.Rt. min	Log min	Sq.Rt. in ² /sec	Log in ² /sec	Ave. in ² /sec
1	0.5	0.002849	0.911	0.28	0.0	0.0	2.75e-002	0.00e+000	2.75e-002
2	1	0.005975	0.905	0.60	0.0	0.0	1.95e-002	0.00e+000	1.95e-002
3	2	0.01319	0.891	1.32	0.3	0.0	2.31e-003	0.00e+000	2.31e-003
4	4	0.02414	0.870	2.41	0.4	0.0	2.21e-003	0.00e+000	2.21e-003
5	8	0.04329	0.834	4.33	0.4	0.0	1.82e-003	0.00e+000	1.82e-003
6	4	0.04126	0.837	4.13	0.2	0.0	3.14e-003	0.00e+000	3.14e-003
7	2	0.03924	0.841	3.92	0.0	0.0	3.08e-002	0.00e+000	3.08e-002
8	4	0.04009	0.840	4.01	0.7	0.0	1.14e-003	0.00e+000	1.14e-003
9	8	0.0452	0.830	4.52	0.3	0.0	2.86e-003	0.00e+000	2.86e-003
10	16	0.07833	0.766	7.83	0.4	0.0	1.61e-003	0.00e+000	1.61e-003
11	32	0.1284	0.670	12.84	0.9	0.0	7.29e-004	0.00e+000	7.29e-004
12	8	0.1176	0.691	11.76	0.9	0.0	7.21e-004	0.00e+000	7.21e-004
13	2	0.1031	0.719	10.31	2.8	0.0	2.31e-004	0.00e+000	2.31e-004
14	0.5	0.09185	0.740	9.18	4.5	5.3	1.49e-004	1.26e-004	1.36e-004

CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 14

Stress: 4. tsf



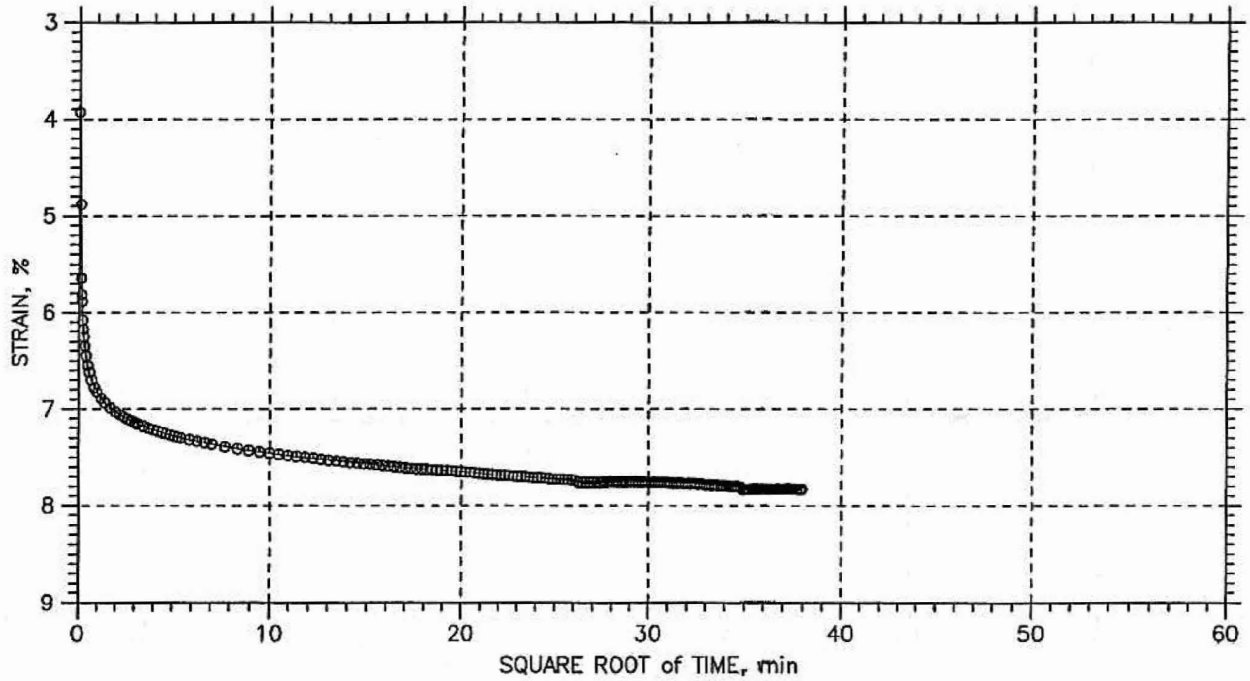
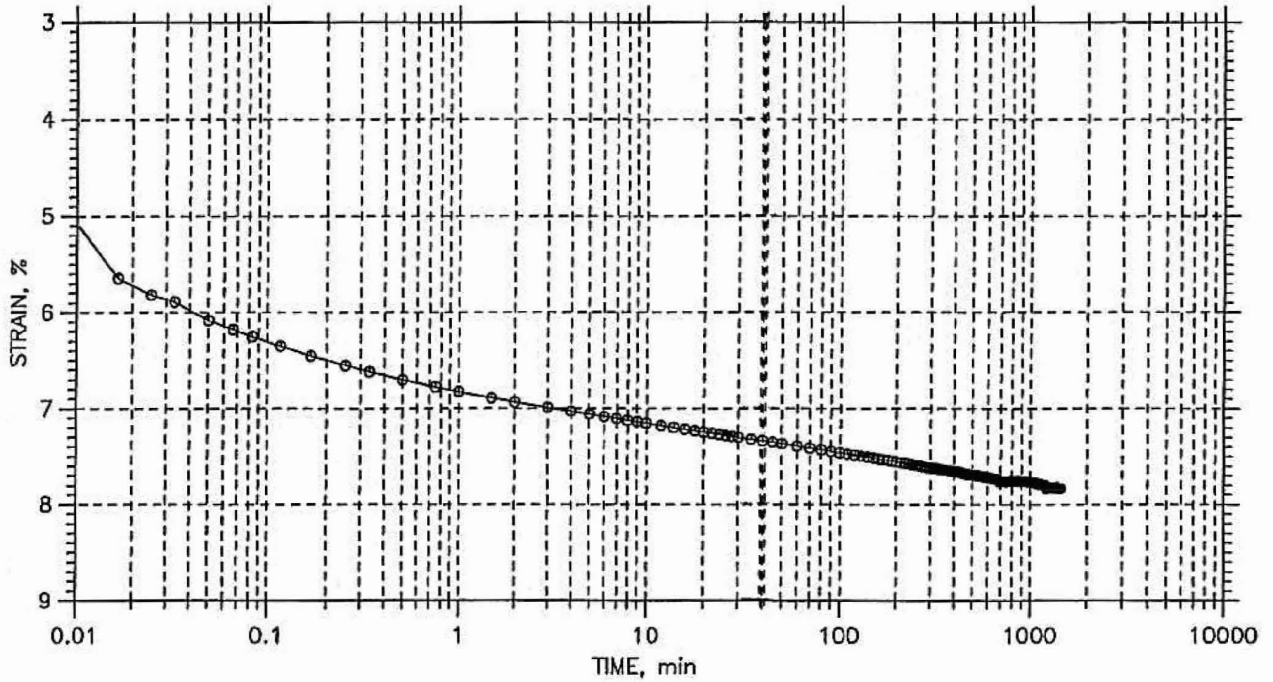
GeoTesting express <small>a subsidiary of Geocomp Corporation</small>	Project: Calvert Cliffs Nuclear PP	Location: Calvert County, MD	Project No.: GTX-6880
	Boring No.: B-315	Tested By: jdt	Checked By: njh
	Sample No.: S-8	Test Date: 08/25/06	Depth: 23.5-24.7'
	Test No.: C2	Sample Type: tube	Elevation: ---
	Description: Moist, dark olive gray clayey sand (SC), 35% passing #200 sieve, inundated @ 0.5 tsf		
	Remarks: System C - Compression Ratio: 0.17, Recompression Ratio: 0.02		

CONSOLIDATION TEST DATA

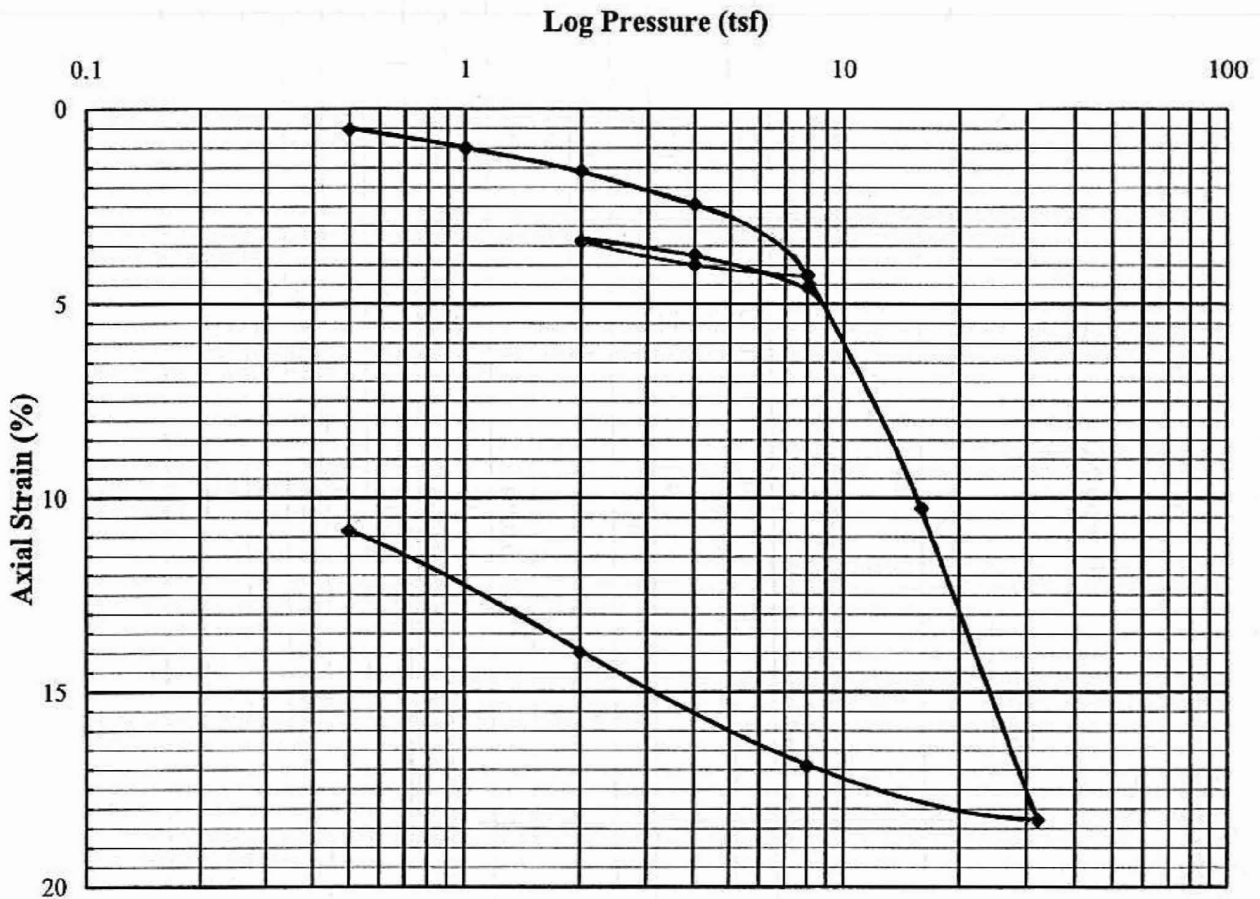
TIME CURVES

Constant Load Step: 10 of 14


Stress: 16. tsf



GeoTesting express <small>a subsidiary of Geocomp Corporation</small>	Project: Calvert Cliffs Nuclear PP	Location: Calvert County, MD	Project No.: GTX-6880
	Boring No.: B-315	Tested By: jdt	Checked By: njh
	Sample No.: S-8	Test Date: 08/25/08	Depth: 23.5-24.7'
	Test No.: C2	Sample Type: tube	Elevation: ---
	Description: Moist, dark olive gray clayey sand (SC), 35% passing #200 sieve, inundated @ 0.5 tsf		
	Remarks: System C - Compression Ratio:0.17, Recompression Ratio: 0.02		



REVISED FORM FOR
NCR NO. 25237-NCR-028
2/12/07

Probable Preconsolidation Pressure (Pp), tsf: 9.3				Recompression Ratio (C_{er}): 0.017		
Type of Specimen: Tube Sample				Compression Ratio (C_{cc}): 0.266		
Description: LEAN CLAY with sand (CL) - gray					Initial	Final
				Water Content, %	33.0	26.8
LL: 44	PI: 28	Gs: 2.79	P_o' (tsf): 2.00	Void Ratio	0.94	0.73
% < No. 200: 71.0		Test Method: ASTM D2435 Method A		Saturation, %	98	100
Test Condition: Inundated @ 0.5 tsf				Dry Unit Weight, pcf	89.8	100.7
Remarks: Coefficient of Consolidation, C _v , equals 338 and 33 ft ² /yr at average pressures of 3 and 12 tsf (square root of time method).				Project: Calvert Cliffs Nuclear Power Plant		
Average Water Content of Trimmings, %: 32.5				Location: Calvert County, MD		
				Boring: B-316	Schnabel No.: 06120048	
				Depth: 43.5-45.5 ft	Elevation: 64.6 to 62.6	
				Date: 10/26/2006	Reviewed by: CJS	
				Consolidation Test Report		

Consolidation Test Data Sheet

Consolidometer ID: 2

10/26/06

REVISED FORM FOR
NCR NO. 25237-NCR-028
2/12/2007

Schnabel Contract: 06120048

Project: Calvert Cliffs Nuclear Power Plant

Test Method: ASTM D2435 Method A

Test Condition: Inundated @ 0.5 tsf

Initial Height of Specimen (H_o), in.: 0.7490

Boring No.: B-316

Height of Solids (H_s), in.: 0.3863

Depth: 43.5-45.5 ft

Seating Press. (tsf): 0.05

Initial Dial Gauge Reading (D_o), in.: -0.0001

Reviewed by: CJS

Pressure, P (tsf)	Time Readings Required	Date Load Applied	Time Load Applied	Load Applied By	A	B	C	D	Vertical Strain ⁵ , ϵ_1 (%)	Void Ratio ⁶ , e_1
					Final ¹ Dial Reading, D_n $\times 10^{-4}$ in.	Apparatus Correction ² , D_{ci} $\times 10^{-4}$ in.	Cumulative Change in Height ³ , ΔH_i in.	Height of Voids ⁴ , H_{vi} in.		
0.5		10/3/2006	9:05	DWC	50	11	0.0040	0.3587	0.53	0.929
1		10/4/2006	9:05	DWC	89	15	0.0075	0.3552	1.00	0.920
2		10/5/2006	9:05	DWC	139	21	0.0119	0.3508	1.59	0.908
4		10/6/2006	9:05	DWC	210	28	0.0183	0.3444	2.44	0.892
8		10/7/2006	9:05	DWC	355	36	0.0320	0.3307	4.27	0.856
4		10/9/2006	9:05	DWC	326	28	0.0299	0.3328	3.99	0.862
2		10/10/2006	9:05	DWC	274	21	0.0254	0.3373	3.39	0.873
4		10/11/2006	9:05	DWC	307	28	0.0280	0.3347	3.74	0.866
8		10/12/2006	9:05	DWC	377	36	0.0342	0.3285	4.57	0.850
16		10/13/2006	9:05	DWC	813	45	0.0769	0.2858	10.27	0.740
32		10/14/2006	9:05	CJS	1426	57	0.1370	0.2257	18.29	0.584
8		10/16/2006	9:05	DWC	1301	36	0.1266	0.2361	16.90	0.611
2		10/17/2006	9:05	DWC	1068	21	0.1048	0.2579	13.99	0.668
0.5		10/18/2006	9:05	DWC	823	11	0.0813	0.2814	10.86	0.728

- Notes:
- 1 "Final" based on test method; 24 hrs for Method A, end of primary for Method B.
 - 2 Correction value, for the current pressure, from the consolidometer's calibration curve.
 - 3 $\Delta H = D_n - D_o - D_{ci} = \text{Col. A} - D_o - \text{Col. B}$
 - 4 $H_{vi} = (H_o - H_s) - \Delta H$
 - 5 $\epsilon_1 = (\Delta H / H_o) \times 100 = (\text{Col. C} / H_o) \times 100$
 - 6 $e_1 = H_{vi} / H_s = \text{Col. D} / H_s$



Load Time Readings

10/26/06

Project: Calvert Cliffs Nuclear Power Plant

Schnabel Contract: 06120048

Boring No.: B-316

Depth: 43.5-45.5 ft

Consol. ID: 2

Reviewed by: CJS

Elapsed Time (min.)	Dial Guage Readings (inches)					
	4 tsf Reload	16 tsf Load	X tsf Load	X tsf Load	X tsf Load	X tsf Load
	10/11/2006	10/13/2006	Date	Date	Date	Date
0.1	0.0283	0.0415				
0.25	0.0287	0.0432				
0.5	0.0290	0.0450				
1	0.0294	0.0475				
2	0.0298	0.0510				
4	0.0301	0.0554				
8	0.0302	0.0605				
15	0.0303	0.0652				
30	0.0304	0.0695				
60	0.0305	0.0727				
120	0.0306	0.0751				
240	0.0307	0.0772				
480	0.0307	0.0792				
720	0.0307	0.0800				
960	0.0307	0.0805				
1200	0.0307	0.0810				
1440	0.0307	0.0813				
1680						
1920						
2160						
2400						
2640						
2880						



Consolidation Time Curves

10/26/06

Project: Calvert Cliffs Nuclear Power Plant

Schnabel Contract: 06120048

Boring No.: B-316

Depth: 43.5-45.5 ft

Reviewed by: CJS

