CONSULTING ENGINEERS & GEOLOGISTS, INC.

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Reference: 609031.150

September 14, 2010

Mr. Jim Hossley, Director of Public Works
City of Coos Bay
500 Central Ave.
Coos Bay, OR 97420

Subject: Egyptian Theatre Geotechnical Evaluation

Dear Mr. Hossley:

SHN Consulting Engineers & Geologists, Inc., (SHN) is pleased to submit the results of our focused geotechnical investigation at the Egyptian Theatre in Coos Bay. The scope of work is defined by our proposal dated January 19, 2010, which is attached to City of Coos Bay Work Order No. G2. The objective of our study was to evaluate soil conditions and how they may relate to the damage in three areas of the theatre:

1. Rear wall settlement and side wall cracking
2. Back stage settlement
3. Cracks in the under-stage retaining wall and seepage through the wall.

Background

We understand that the original structure at the site was an automotive garage constructed in 1922. It was converted to a theatre in 1925. Since that time, there have been improvements and alterations made to the building, including an extended elevation fly loft above the stage, relocation of structural support elements, and a retaining structure beneath the stage.

Construction details, specifically regarding the foundation support system are unknown. We expect that the building is supported on driven timber piles, which was a typical practice at that time for heavy structures in Coos Bay, due to soft soil and high groundwater. The depth and number of piles is unknown. We initially assumed that the timber piles were driven to refusal in a sandy bearing layer at least 30 feet deep or adequate frictional resistance was developed, considering the limitations of the pile driving equipment in the early 1920s.

The theatre has experienced noticeable distress in the form of cracking of the side walls from near the seating level to the roof. Cracks appear to widen with increasing elevation and appear to be more numerous toward the rear of the theatre. The back wall appears to tilt outward.

Previous Studies

SHN previously accompanied ZCS Engineering in December 2009 in conducting an initial examination of the interior of the theatre. We documented our observations and cracks in the concrete walls. We suggested possible mechanisms to explain the observed distress to the theatre and made recommendations for further study in a report dated January 11, 2010.

We understand that a Geotechnical Study of the theatre was performed by Pinnacle Western, Inc. (Pinnacle). The copy of the Pinnacle report that we reviewed is undated but assumed to be from work performed in 2008. A single boring was drilled at the rear of the theatre to a depth of 30 feet.

Field and Laboratory Investigation

SHN conducted a field investigation in May 2010. Two Cone Penetration Test (CPT) borings were advanced in the alley behind the theatre to provide a continuous record of the subsurface conditions as close to the back wall as was practicable (Figure 1). The purpose of the CPT borings was to obtain specific engineering properties of the subsurface soil while measuring both tip and side friction resistance as the CPT probe was advanced. From CPT data, it is possible to determine the shear strength of the foundation soils. A secondary purpose was to identify a potential sandy bearing layer that could have provided end-bearing foundation support during pile driving in the 1920s. The CPT probes were advanced to 72 and 86 feet below existing grade.

SHN also performed a single rotary wash boring within 5 feet of the Pinnacle 2008 boring to a depth of 52 feet. The purpose of this boring was to obtain relatively undisturbed samples to perform laboratory tests to determine the shear strength and compressibility of the soft soils that were encountered.

Saw cuts had been made in the stage close to the back wall and mid-stage within 5 feet of the underlying retaining structure that appeared to support the stage. Shallow hand-auger borings were performed at those locations.

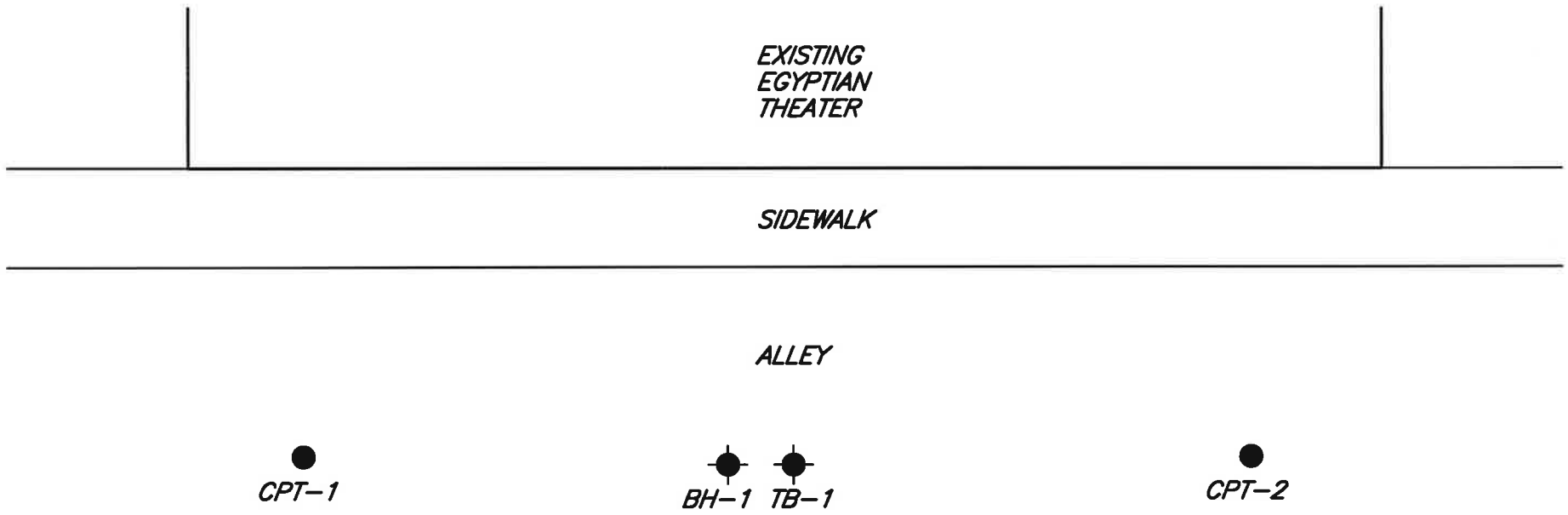
In addition to performing index tests on the representative soil samples, we also conducted triaxial shear and one-dimensional consolidation tests on samples obtained from pushing Shelby tubes through the soft soil. The objective was to: 1) identify soil shear strength with depth to determine empirical driven pile capacity; 2) evaluate compressibility and consolidation characteristics of the soils adjacent to the back wall, simulating loading conditions as the theatre was constructed and subsequently modified.

Logs of the borings, CPT probes, and hand-auger borings are included in Attachment 1. Laboratory test results are indicated on the appropriate boring log or are included in Attachment 2.

Subsurface Conditions

The focus of our investigation for the back wall was on the soils encountered below a depth of 30 feet, measured from the alley surface. This is based on our assumption that existing piles are at least 30 feet deep, which is the depth of the Pinnacle boring. In that boring, no soil layer was encountered that could provide end-bearing resistance.

In general, the subsurface soil is highly plastic silt to a depth of at least 70 feet, identified as MH according to the Unified Soil Classification System. This silt is highly compressible, having high moisture content and low dry density. The average soil data and engineering properties are summarized in Table 1.



EXPLANATION

BH–1 — MECHANICAL BORING LOCATION AND DESIGNATION

CPT–1 — CONE PENETRATION TESTING BORING LOCATION AND DESIGNATION

N

0 10

1"=10'

NOTE: ALL LOCATIONS APPROXIMATE

SHN Consulting Engineers & Geologists, Inc.	City of Coos Bay Egyptian Theater Coos Bay, Oregon		Site Map with Boring Locations SHN 609031.150
	September 2010	609031-150-SITE	Figure 1

Table 1 Average Soil Engineering Properties, below 30 feet depth		
Property	Symbol	Value
Moisture Content	w	86 %
Dry Density	γ_{dry}	50 pcf (pounds per cubic foot)
Angle of Internal Friction (triaxial)	φ	18^o
Cohesion	c	500 psf (pounds per square foot)
Coefficient of Consolidation	c'_v	0.032

The CPT borings were about 60 feet apart. Little variation between the two CPT data plots was observed. CPT-1 on the north indicated slightly more stiff silt than CPT-2 to the south, based on normalized SPT N_{60} values. Correlation between CPT and the Standard Penetration Test (SPT) is commonly performed. The SPT is universally accepted as the "standard" in the industry for measuring soil consistency. The SPT "N" value is the number of blows recorded to advance a standard 2-inch ID sampler 12 inches using a 140-pound hammer, following a drop of 30 inches. Automatic hammers have eliminated much of the error in early manual SPT measurements. Corrections for depth, rod length, and energy imparted are referred to as the N_{60} normalized value, which is correlated from CPT values. Table 2 reports the comparison between the CPTs behind the theatre.

Table 2 Normalized Average N_{60} SPT values for both CPT Borings		
Depth, feet	CPT-1	CPT-2
10 – 20	3	2
20 – 30	4	2
30 – 40	5	3
40 – 50	4	3
50 – 60	5	4
60 – 70	5[1]	4
70 – 80	5	4[2]
80 - 86	5	---

1. N_{60} = 30 from 68 – 70 feet
2. to 72 feet

In the hand-augered borings, we encountered very soft soil and debris beneath the stage close to the back wall. Mid-stage, we encountered a gap of about 18 inches between the bottom of the stage support and the soft ground and debris. It was possible to shine a light from the void and observe light through the vertical cracks in the retaining wall toward the front of the stage. Soils beneath the stage are very soft, nearly saturated, and contain debris, likely previously placed fill. Evidence of water and fine soil particles seeping through these cracks is apparent, a contribution to the voids that we observed.

Discussion

Initially, we presumed that the Egyptian Theatre pile foundations were driven to a sandy layer, 30 to 35 feet below grade. This is similar to what was found underlying the Chandler Building to the north. We had postulated that this layer was thin and underlain by soft, compressible soil. Had this been the case, the increased load imposed by the addition of the fly loft above the stage, may have been sufficient to "punch" the pile tip through the sand and into the softer soil. This was the mechanism suggested by Pinnacle. However, we did not encounter a sandy, more resistant layer in any of the three explorations behind the theatre. The only trace of increased (N_{60}) resistance occurs in CPT-1 at a depth of 68 to 70 feet.

Based on the field and laboratory data, a more likely situation occurred in the early 1920s in which refusal was believed to have been achieved during initial pile driving, regardless of whether a resistant layer was encountered. Adequate friction between the soil and the pile was believed to have been developed, based on the limitations of the equipment at that time.

Early pile foundation problems (prior to 1950) were experienced, mostly on the Eastern US coast, when a pile reached what appeared to a hard layer underlain by soft materials. Apparent high blows were recorded but when the load was applied, the hard layer was punctured or the soft layer below might consolidate, causing settlement. After about 1950, pile driving formulas were developed to estimate friction pile capacity, which were often only a guess.

The mode of failure of a pile depends on the shear strength of the surrounding soil and pile type. Settlement of pile foundations occurs because of shear failure of the supporting soils. General shear failure is the most common mode. In more competent materials where piles have "failed," the loads are applied quickly so that undrained conditions prevail (pore pressures within the soil take longer to dissipate). The failure surface is typically well-defined, and occurs suddenly, in a well defined bulge.

Punching failure is just the opposite, occurring in loose sand or silt that is loaded under slow, drained conditions. Punching failure may occur where only a lateral compression of the surrounding soil occurs and shear stresses do not yet mobilize the shear strength of the soil. Failure develops gradually by an ever-increasing load-settlement relationship until equilibrium is achieved. If the soil is highly compressible, large settlement can occur and vertical shear surfaces between the soil and pile are poorly defined.

Analysis

Along the back wall, there are four equally spaced vertical support pilasters, two on the corners and two in the center. ZCS provided estimated loading conditions for the back wall, based on the original construction and after the fly loft was added. These values are reported in Table 3.

Table 3 Estimated Theatre Back Wall Dead Plus Live Loads		
	Before Fly Loft	After Fly Loft
Middle (2) pilasters	147.2 kips	207.2 kips
Corner (2) pilasters	119.2 kips	176.2 kips

The above indicates a 43 to 58 percent increase in the dead load conditions by the addition of the fly loft. Our analysis of the estimated pile capacity is based on the loads provided in Table 3. Based on the laboratory tests, soil shear strength was found to be uniform, with a slight increase with increasing depth. This finding made analysis of pile capacity for various pile lengths and diameters a straight-forward process.

According to ZCS Engineering, the back wall of the theatre has settled approximately 6 to 9 inches and is leaning away from the theatre 5 to 7 inches. The front wall has also apparently settled 3 to 5 inches. The values were compared to settlement estimates for piles and pile groups of various sizes, capacity and depth, based on laboratory consolidation test data.

Based on the relatively uniform shear strength of the soil, we analyzed various pile supporting conditions. Piles are typically analyzed on a single pile basis. Piles may be combined together to constitute a pile group. Unless the piles are too close together, the total individual pile capacities are summed to represent the total ultimate pile group capacity. For our analysis, we considered 2-pile to 6-pile groups to determine the depth at which the ultimate capacity (Table 4) could be predicted, with no factor of safety included. Only the middle pilasters of the back wall were evaluated.

Table 4 Predicted Depth of Ultimate Pile Capacity to Support Design Loads		
Pile Grouping	Depth to Resist DL + LL[1], 147.2 kips, Before Fly Loft	Depth to Resist DL + LL[1], 207.2 kips, After Fly Loft
2-pile group	175 feet[2]	-
3-pile group	103 feet[2]	160 feet[2]
4-pile group	67 feet	112 feet[2]
5-pile group	43 feet	80 feet
6-pile group	28 feet	60 feet

1. Dead Load + Live Load (DL + LL)
2. Beyond the depth limits of this exploration

Table 4 shows that increasing the number of piles in a group allows shallower depths at which total pile ultimate capacity can be achieved. By applying a factor of safety, such as 2.0, the number of piles in a group should increase. This was a common practice in 1920 and is applicable today. Increasing the load that the pile groups must support requires significantly increased embedment depths. Since the original pile depths were achieved in the early 1920s, the pile capacity has probably been exceeded.

Another way of expressing this is to compare the combined ultimate pile capacities at a fixed depth, as shown in Table 5.

Table 5
Ultimate Pile Capacity as a function of Depth

Pile Grouping	40 feet	60 feet	80 feet
Single pile	28 kips	34 kips	39 kips
2-pile group	57 kips	69 kips	82 kips
3-pile group	84 kips	104 kips	124 kips
4-pile group	113 kips	175 kips	164 kips
5-pile group	142 kips	208 kips	245 kips
6-pile group	228 kips	280 kips	---

From Table 5, it can be seen that to achieve the ultimate pile capacity of 147.2 kips before the fly loft addition, at a depth of 40 feet, nearly the 5-pile group would be required to support the middle pilaster column loads. However to achieve the ultimate pile capacity of 207.2 kips (after fly loft), the same 5-pile group would have to be about 60 feet deep, a 50 percent increase in embedment depth. Conversely, a 6-pile group would be required to provide the fly loft support at a depth of 40 feet.

Conclusions

Without knowledge of the foundation system (type, diameter, depth, number of piles in a group) our analysis is empirical and theoretical. We believe that we have reliable soil data from the laboratory tests that we performed. It seems likely that whatever foundation system that was initially installed in the early 1920s, it reached some refusal capacity for the driving hammer, at an unknown depth. It also seems likely that some settlement occurred during or shortly after initial construction of the garage. This is evident from the settlement that was measured at the front and back of the theatre and was estimated in our analysis. The soils are compressible and have limited shear strength. Throughout downtown Coos Bay, there is ample evidence of distress and settlement of other heavy buildings. Given the nature of the soft native sediment and filled lands that underlie most of the downtown area, such total and differential settlement should be expected. Other contributing factors include historic seismic events, tidal influence, and groundwater fluctuation that can result in pile deterioration, as has been the case at the nearby Chandler Building.

It seems likely that once the settlement was essentially completed after construction of the theatre, the foundation system achieved a state of equilibrium where no additional settlement would have occurred, if no additional loads had been applied. But when the fly loft was constructed, the new loading exceeded the shear strength of the soil, and the bond between the timber piles and surrounding soil was significantly reduced. This resulted in a slow and gradual punching failure. The result was about 6 inches of additional settlement. With no additional loading, it is likely that the pile systems have once again achieved a state of equilibrium. Unless there are other outside factors, in the absence of additional loading, we expect that settlement is effectively complete.

It is our opinion that the settlement of the back wall of the theatre is attributed to a gradual punching failure of soil surrounding the piles, from excessive loads that were applied with construction of the fly loft. The additional weight of the added structure simply exceeded the shear strength of the soil surrounding and immediately below the driven piles.

The amount of settlement both measured and estimated is excessive for most structures. The tilt of the back wall is problematic from a structural and safety perspective. We expect that there are three options available for consideration:

1. Shore up the existing back wall by tying the side walls and the back wall together, and installing pin- or micro-piles to provide additional foundation support to the existing foundations system;
2. Demolish the back wall, observe the condition of the existing foundation systems and provide either supplemental or replacement piles as needed;
3. Leave the existing structure as is, depending on the structural engineering analysis and acceptable risk.

From a geotechnical perspective, the second option is the most desirable, if there is little cost difference between shoring the wall and replacing the back wall. Option 2 allows observation of the type and condition of the existing foundations, aside from depth determination. That information is valuable in determining a replacement or supplemental foundation system.

Option 1 does not allow observation of the condition of the piles and will inhibit design of additional foundation support. It is possible to install additional piling along the perimeter of the pile caps, especially if the masonry infill of former garage doors is removed, allowing access to all four sides of the middle pilasters. It is unlikely that any geotechnical construction procedures can jack or restore the back wall to its original configuration.

The presence of very soft fill beneath the stage at the back of the theatre suggests that as the back wall settled, the stage settled also. It is unclear if the stage is structurally connected to the back wall. If the structure was initially used as a garage, it is possible that the access ramps were tied to the structure. This could explain the settlement of the back stage that we observed. After the ramps were removed to convert the structure to the theatre, the stage was free to "float" and probably settled as the fill settled. Groundwater fluctuations have contributed to this settlement.

The retaining wall appears to separate the orchestra pit and seating area from the back of the stage. This wall appears to be the most recent concrete in the theatre. The numerous vertical cracks, which are wider at the bottom, appear to be the result of bending of the retaining wall, which spans most of the width of the stage. Based on the void beneath the stage and the very soft soils that could be probed and sampled, it seems likely that the retaining wall settled due to inadequate support of the foundation soil / fill.

Summary

In our opinion, the distress that we observed in three areas within theatre is attributed to the following:

1. The back wall of the theatre has settled 6 to 9 inches, likely due to a punching shear failure and resulting consolidation of the soil that supports the (probable) timber pile foundations, regardless of the depth of embedment. The wall tilt to the outside may be explained by higher loads on the four pilasters that support the back wall, compared to interior support. It is unlikely that the back wall tilt can be remediated by geotechnical construction techniques. A more practical solution is to demolish the back wall, observe the condition of the existing foundation system, and install supplemental or replacement micropiles or pin piles.
2. Back stage settlement is due to poor fill and soft soil that underlies the stage. In some areas, it is likely that there are voids between the stage support grid, which we partially observed, and the surface soil, which is nearly saturated. There are techniques available to fill the voids with lightweight material, but it is unlikely that the stage can be successfully raised to its original elevation. It may be more practical to remove the worst parts of the distressed stage and unsuitable underlying fill and soft soil, and place a suitable new foundation system to support the stage.
3. The retaining wall that spans the width of the stage appears to have settled due to inadequate support of the underlying soft soil, expected to extend to a depth of at least 10 feet, based on outside CPT probes. The widest vertical cracks in the retaining wall are toward the center of the stage. Fluctuating groundwater has caused mud and water to flow through the cracks, further deepening the void behind the wall. It may be feasible to underpin the retaining wall, possibly jacking the wall back into place, and seal the cracks.

Limitations

This report has been prepared for the specific application to the geotechnical analysis of the Egyptian Theatre as discussed herein. SHN prepared the findings, conclusions, and recommendations presented herein in accordance with generally accepted geotechnical engineering practices at the time and location that this report was prepared. No other warranty, express or implied, is made.

Soil materials are typically not homogeneous in type, strength, and other geotechnical properties, and can vary between points of observation and exploration. In addition, groundwater and soil moisture conditions can vary seasonally and for other reasons. SHN does not and cannot have a complete knowledge of the subsurface conditions underlying a site. The conclusions and recommendations presented in this report are based upon the findings at the points of exploration, interpolation, and extrapolation of information between and beyond the points of observation, and are subject to confirmation of the conditions revealed by construction. The opinions and

recommendations provided in this report are based on the assumption that an adequate program of tests and observations will be conducted by our firm during the construction phase, if the project advances to that stage, so that we may evaluate compliance with our recommendations.

Findings of this report are valid as of the date of issuance; however, changes in condition of a property can and will occur with the passage of time. Furthermore, changes in applicable or appropriate standards occur whether they result from legislation or advancement in technology. Accordingly, findings of this report may be invalidated wholly or partially by changes outside of SHN's control. This report is subject to SHN's review and remains valid for a period of two years, unless SHN issues a written opinion of its continued applicability thereafter. If the scope of the proposed construction, including the proposed loads, grades, or structural locations, changes from that described in this report, our recommendations should also be reviewed.

The scope of SHN's geotechnical services did not include any assessment for the presence or absence of any hazardous/toxic substances in the soil, ground water, surface water, or atmosphere, or the presence of any environmentally sensitive habitats or culturally significant areas.

Thank you for the opportunity to assist you with this project. If you have any questions, please feel free to contact us at 707-441-8855.

Sincerely,

SHN Consulting Engineers & Geologists

Richard W. Hanford, P.E., G.E.
Senior Geotechnical Engineer

RWH:jlr

Attachments: 1. Borings and Probes Logs
2. Laboratory Test Results

c. w/Attach.: Sy Allen, P.E., ZCS Engineering

Attachment 1

Borings and Probes Log

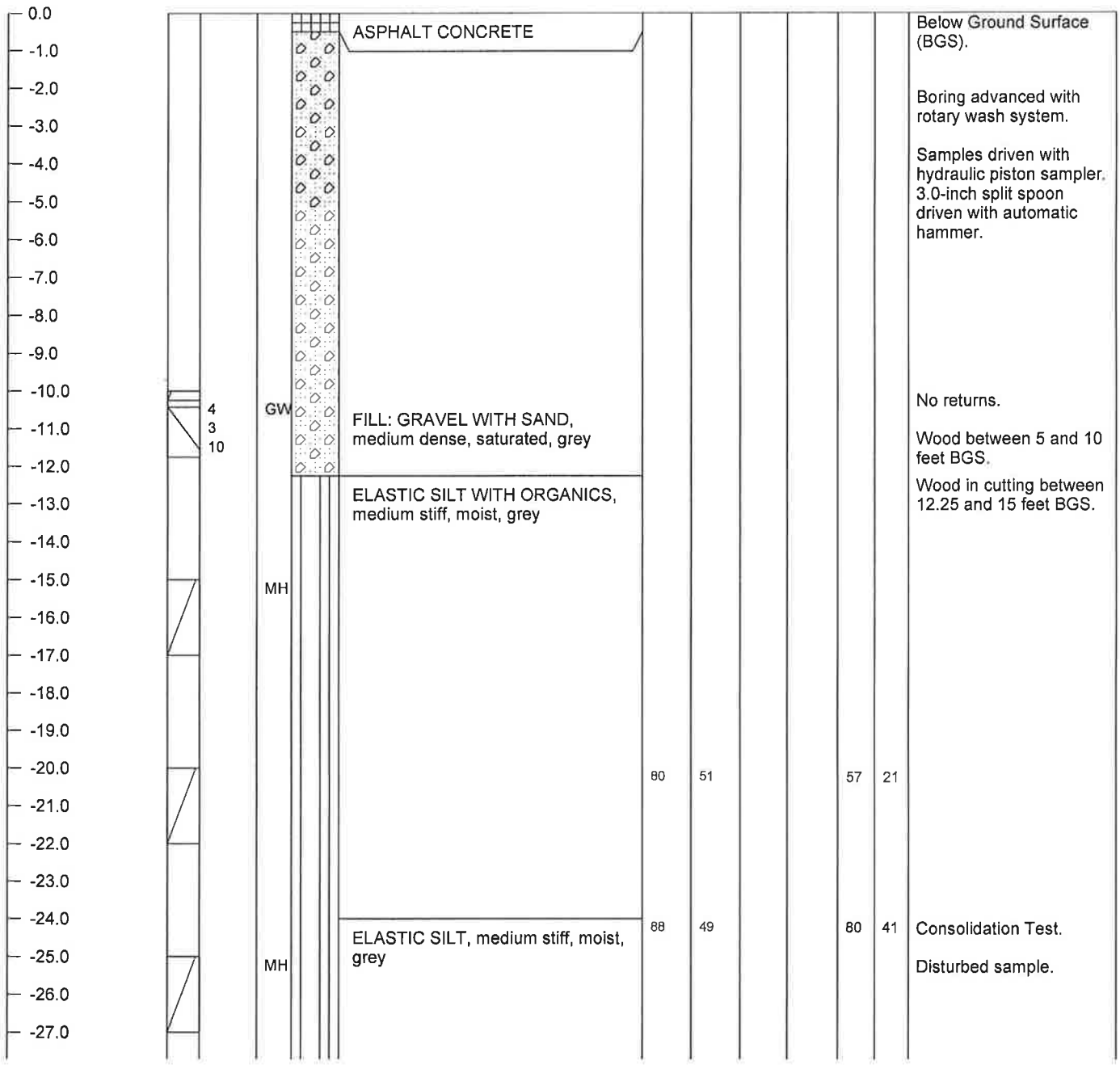
Consulting Engineers & Geologists, Inc.

812 West Wabash, Eureka, CA 95501 ph. (707) 441-8855 fax. (707) 441-8877

PROJECT: Egyptian Theater
LOCATION: Back Alley
GROUND SURFACE ELEVATION: --
EXCAVATION METHOD: Truck Mounted Dietrick D-50
LOGGED BY: SMB

JOB NUMBER: 609031.150
DATE DRILLED: 6/24/10
TOTAL DEPTH OF BORING: 52 feet
SAMPLER TYPE: 3.0-inch (O.D.) Split Spoon & Shelby Tube

BORING NUMBER BH-1



The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

FIELD LOG

Consulting Engineers & Geologists, Inc.

812 West Wabash, Eureka, CA 95501 ph. (707) 441-8855 fax. (707) 441-8877

PROJECT: Egyptian Theater
LOCATION: Back Alley
GROUND SURFACE ELEVATION: --
EXCAVATION METHOD: Truck Mounted Dietrick D-50
LOGGED BY: SMB

JOB NUMBER: 609031.150
DATE DRILLED: 6/24/10
TOTAL DEPTH OF BORING: 52 feet
SAMPLER TYPE: 3.0-inch (O.D.) Split Spoon & Shelby Tube

BORING NUMBER BH-1

DEPTH (FT)	SAMPLE TYPE	BLOWS PER 0.5'	USCS	PROFILE	DESCRIPTION	% Moisture	Dry Density (pcf)	Unc. Com. (psf)	% Passing 200	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Index	REMARKS
-28.0												
-29.0												
-30.0			MH		Becomes blue grey in color							
-31.0						48	72			63	26	Direct Shear Test.
-32.0												
-33.0												
-34.0												
-35.0			MH			89	51			66	31	Consolidation Test.
-36.0												
-37.0					Limited wood in cutting between 37 and 40 feet BGS							
-38.0												
-39.0												
-40.0			MH			82	53			53	19	Direct Shear Test.
-41.0												
-42.0												
-43.0												
-44.0												
-45.0			MH									
-46.0						87	53			75	36	Consolidation Test.
-47.0												
-48.0												
-49.0												
-50.0			MH									
-51.0						87	59			79	39	Direct Shear Test.
-52.0					Halted boring at 52 feet BGS							Backfilled with bentonite chips and cap with cold patch asphalt concrete.
-53.0												
-54.0												
-55.0												

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

FIELD LOG

Consulting Engineers & Geologists, Inc.

812 West Wabash, Eureka, CA 95501 ph. (707) 441-8855 fax. (707) 441-8877

PROJECT: Egyptian Theater
LOCATION: Center Stage
GROUND SURFACE ELEVATION: --
EXCAVATION METHOD: 3.25-inch diameter Hand Auger
LOGGED BY: SMB

JOB NUMBER: 609031.150
DATE DRILLED: 6/17/10
TOTAL DEPTH OF BORING: 5.4 feet
SAMPLER TYPE: 3.0-inch (O.D.) Shelby

BORING NUMBER HA-1

DEPTH (FT)	SAMPLE TYPE	BLOWS PER 0.5'	USCS	PROFILE	DESCRIPTION	% Moisture	Dry Density (pcf)	Unc. Com. (psf)	% Passing 200	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Index	REMARKS
0.0					CONCRETE SLAB							Below Ground Surface (BGS) Void betwen slab and existing ground surface
-1.0			GW		FILL: GRAVEL WITH SAND, dense, moist, light grey							
-2.0			SP-SM		FILL: SAND WITH SILT, loose, moist, yellowish brown							
-3.0			MH		FILL: ELASTIC SILT, soft, wet, brown							
-4.0			SC		FILL: CLAYEY SAND, medium dense, wet, yellowish brown to grey							
-5.0			ML-OL		FILL: SILT WITH ORGANICS, medium dense, soft, saturated, brown							
-6.0					Refusal on wood at 5.4 feet BGS							

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

FIELD LOG

Consulting Engineers & Geologists, Inc.

812 West Wabash, Eureka, CA 95501 ph. (707) 441-8855 fax. (707) 441-8877

PROJECT: Egyptian Theater
LOCATION: Center Stage
GROUND SURFACE ELEVATION: --
EXCAVATION METHOD: 3.25-inch diameter Hand Auger
LOGGED BY: SMB

JOB NUMBER: 609031.150
DATE DRILLED: 6/17/10
TOTAL DEPTH OF BORING: 5.0 feet
SAMPLER TYPE: 3.0-inch (O.D.) Shelby

BORING NUMBER HA-2

DEPTH (FT)	SAMPLE TYPE	BLOWS PER 0.5'	USCS	PROFILE	DESCRIPTION	% Moisture	Dry Density (pcf)	Unc. Com. (psf)	% Passing 200	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Index	REMARKS
0.0					CONCRETE SLAB							Below Ground Surface (BGS) Void betwen slab and existing ground surface
-1.0			GW		FILL: GRAVEL WITH SAND, dense, moist, light grey							
-2.0			SP-SM		FILL: SAND WITH SILT, loose, moist, yellowish brown							
			MH		FILL: ELASTIC SILT, soft, wet, brown							
-3.0												
-4.0			SC		FILL: CLAYEY SAND, medium dense, wet, yellowish brown to grey							
			ML-OL		FILL: SILT WITH ORGANICS, medium dense, soft, saturated, brown							
-5.0					Refusal on wood at 5.0 feet BGS							
-6.0												

▽

The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

FIELD LOG

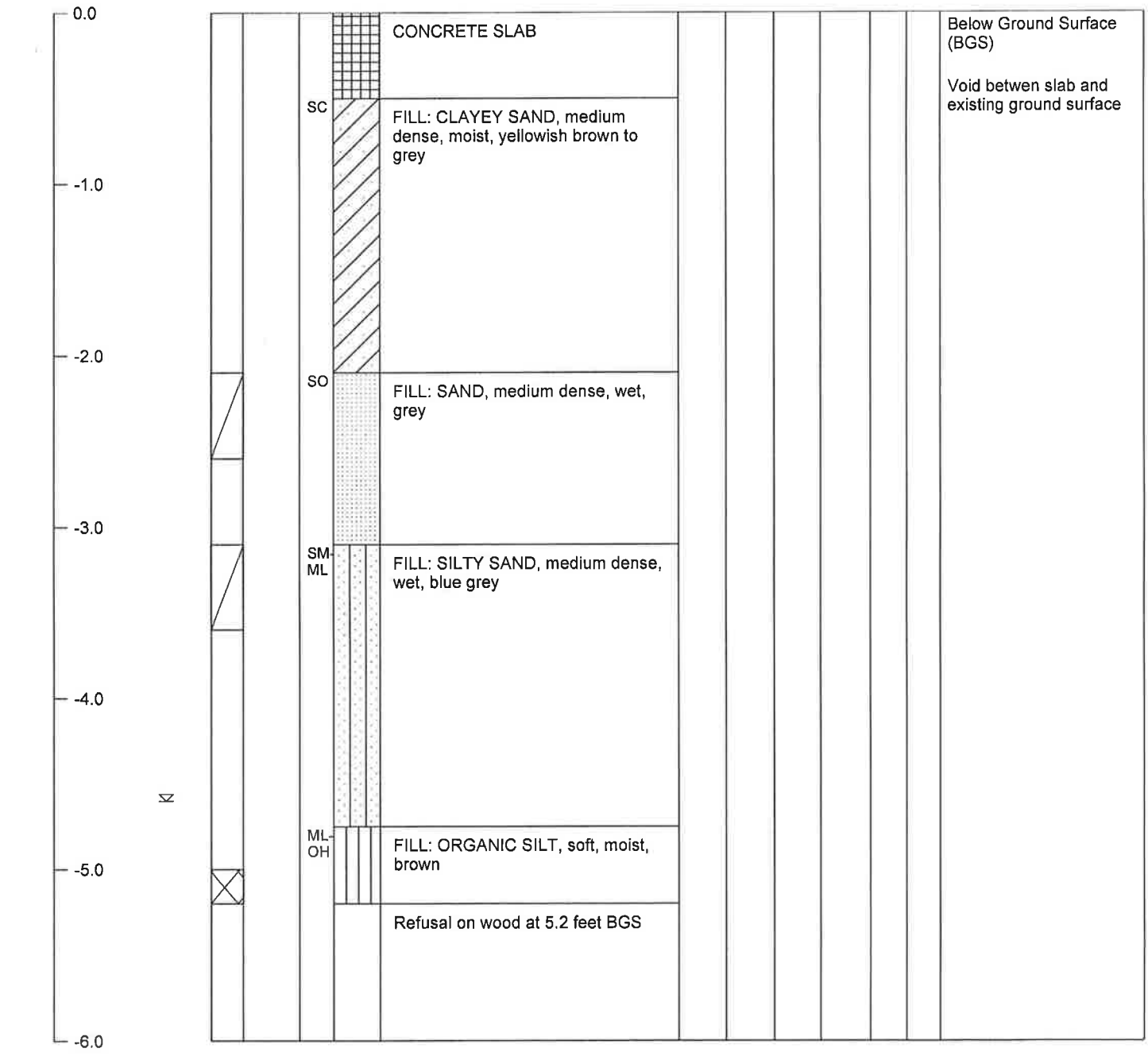
Consulting Engineers & Geologists, Inc.

812 West Wabash, Eureka, CA 95501 ph. (707) 441-8855 fax. (707) 441-8877

PROJECT: Egyptian Theater
LOCATION: Northwest Corner
GROUND SURFACE ELEVATION: --
EXCAVATION METHOD: 3.25-inch diameter Hand Auger
LOGGED BY: SMB

JOB NUMBER: 609031.150
DATE DRILLED: 6/17/10
TOTAL DEPTH OF BORING: 5.2 feet
SAMPLER TYPE: 3.0-inch (O.D.) Shelby & Bulk

BORING NUMBER HA-3



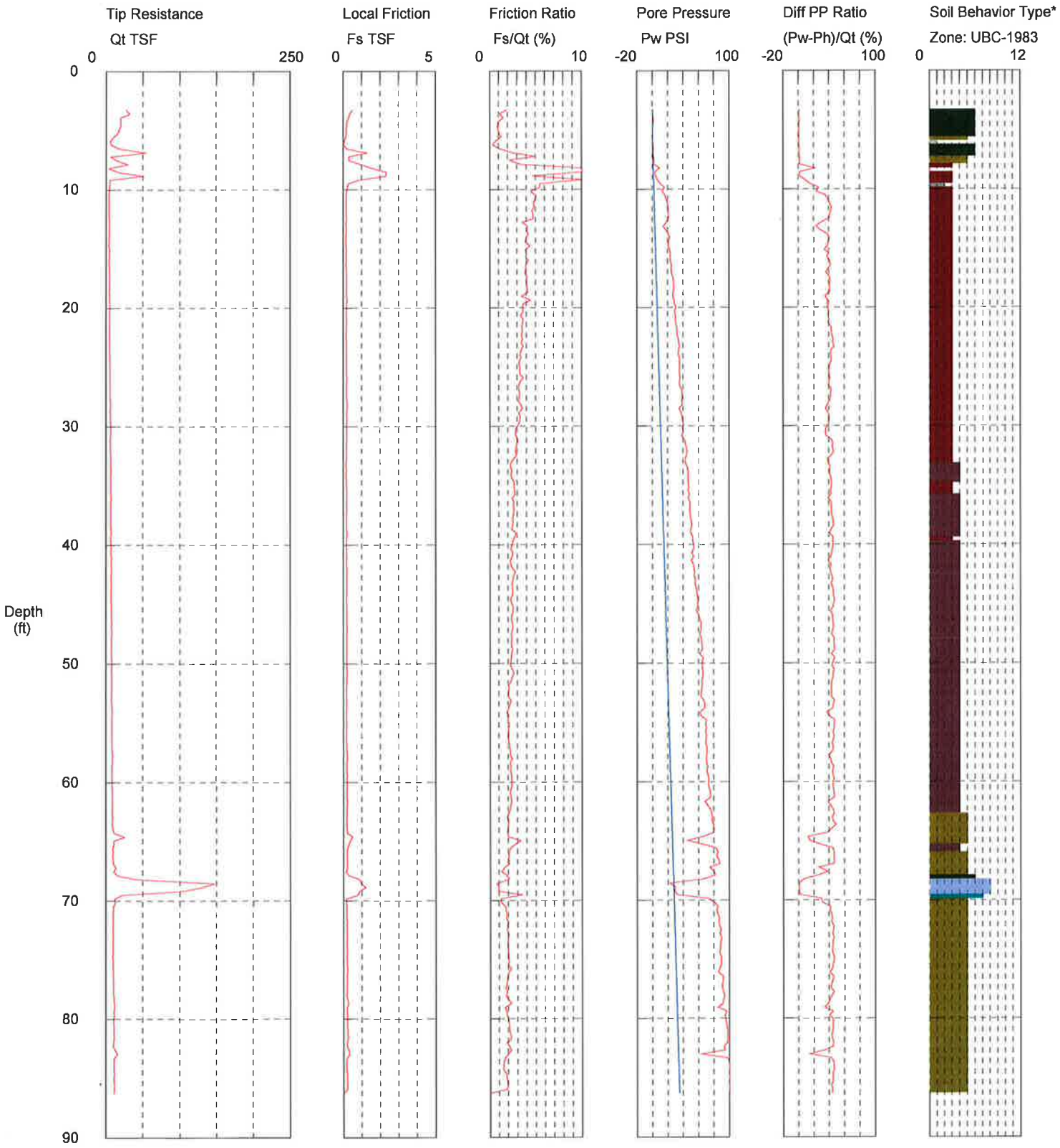
The log and data presented are a simplification of actual conditions encountered at the time of drilling at the drilled location. Subsurface conditions may differ at other locations and with the passage of time.

FIELD LOG

Subsurface Technologies

Operator: Burt
Sounding: P-1
Cone Used: DSG1021

CPT Date/Time: 6/24/2010 1:44:56 PM
Location: EGYPTIAN THEATER
Job Number: 609031.150



Maximum Depth = 86.29 feet

Depth Increment = 0.328 feet

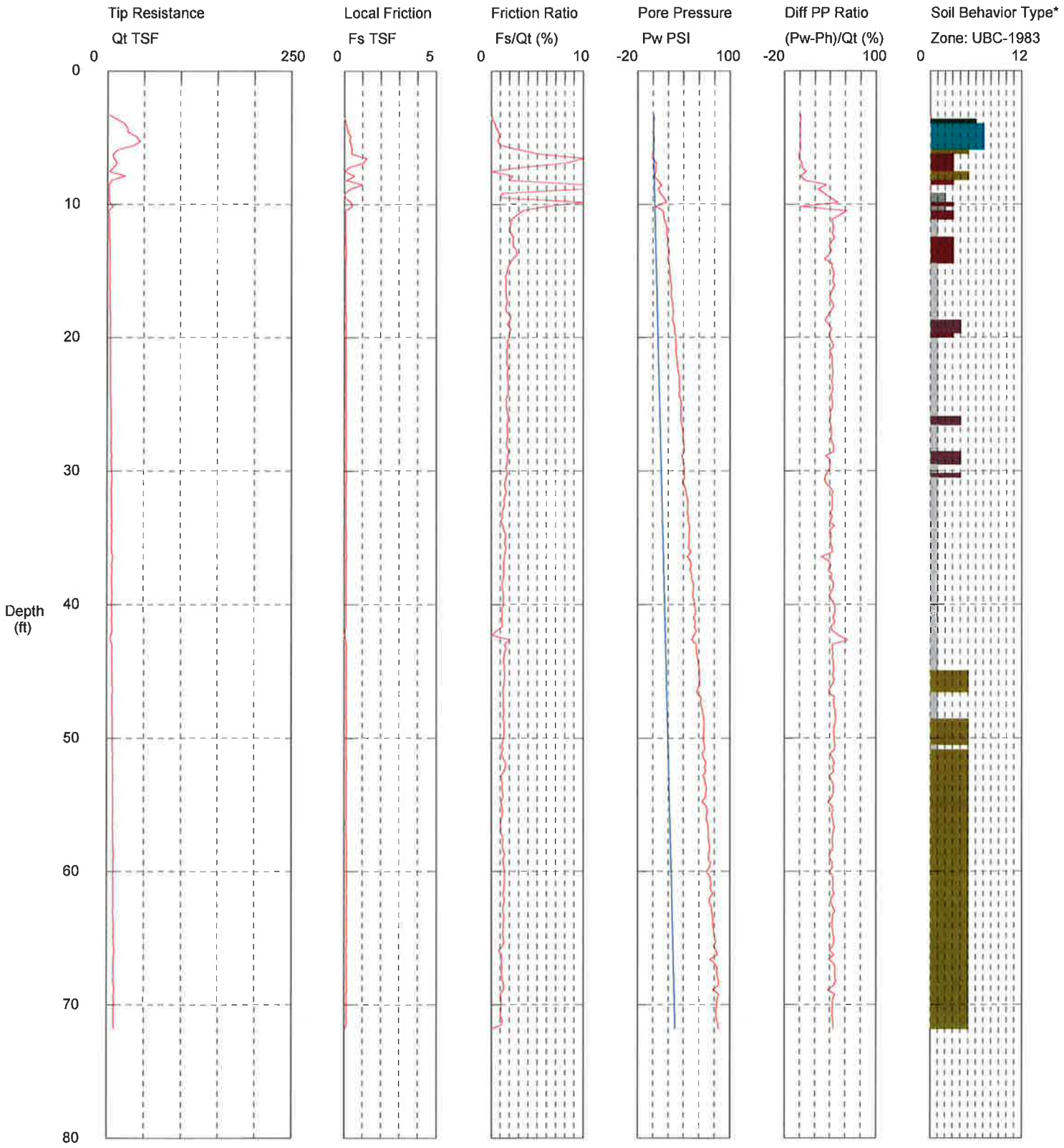
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

Subsurface Technologies

Operator: Burt
Sounding: P-2
Cone Used: DSG1021

CPT Date/Time: 6/24/2010 3:46:25 PM
Location: EGYPTIAN THEATER
Job Number: 609031.150



Maximum Depth = 71.85 feet

Depth Increment = 0.328 feet

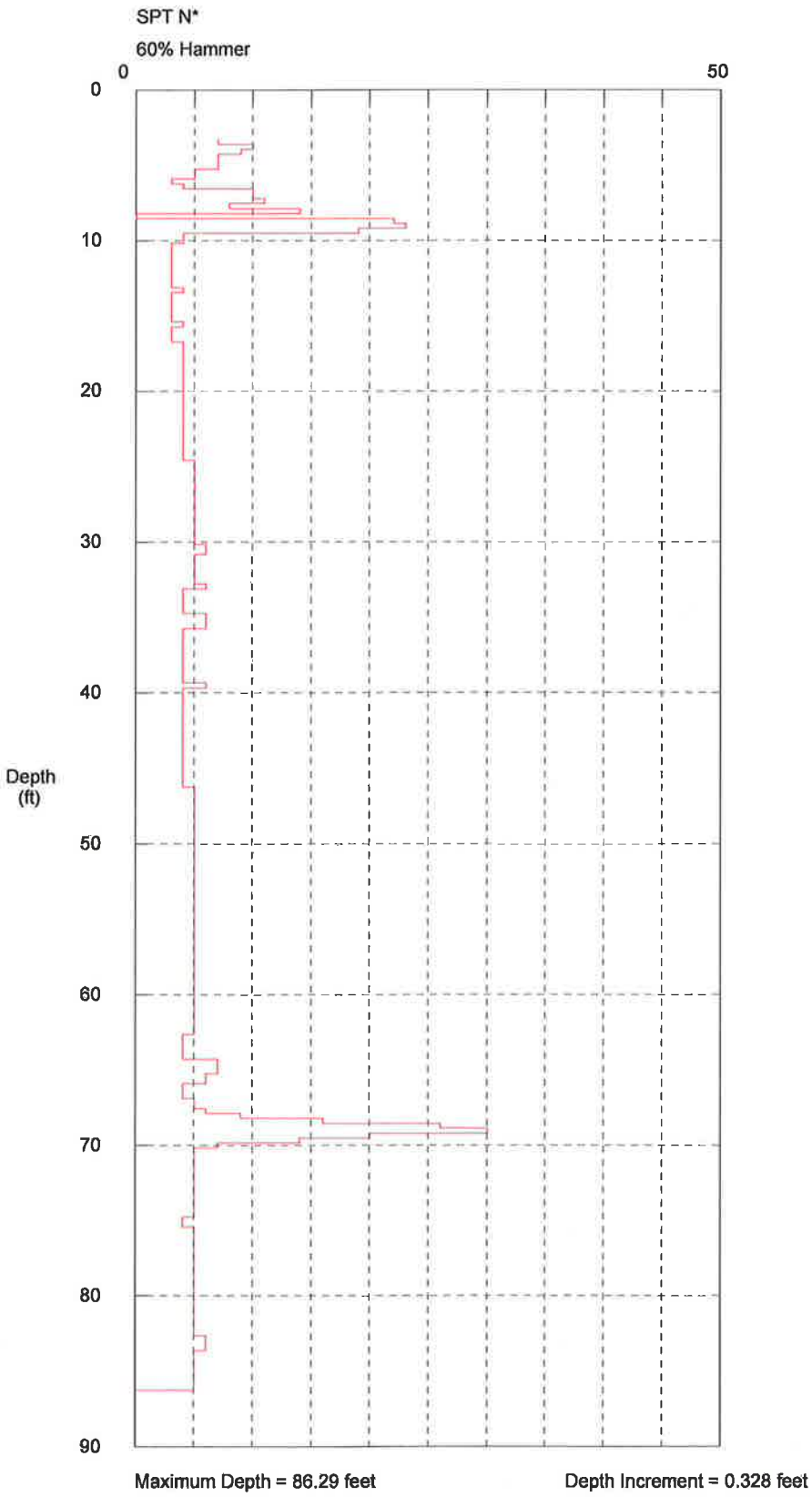
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

Subsurface Technologies

Operator: Burt
Sounding: P-1
Cone Used: DSG1021

CPT Date/Time: 6/24/2010 1:44:56 PM
Location: EGYPTIAN THEATER
Job Number: 609031.150

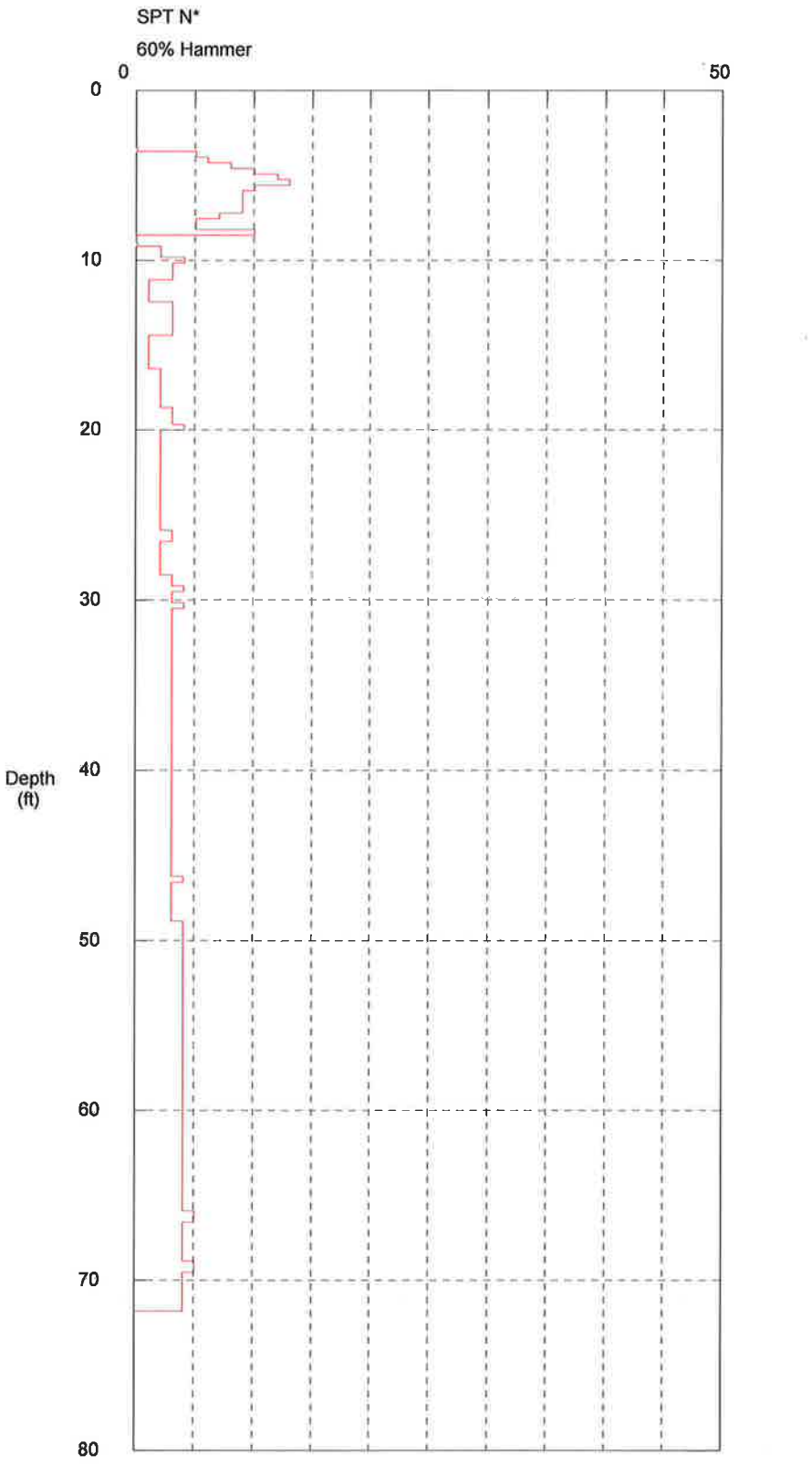


*Soil behavior type and SPT based on data from UBC-1983

Subsurface Technologies

Operator: Burt
Sounding: P-2
Cone Used: DSG1021

CPT Date/Time: 6/24/2010 3:46:25 PM
Location: EGYPTIAN THEATER
Job Number: 609031.150



Maximum Depth = 71.85 feet

Depth Increment = 0.328 feet

*Soil behavior type and SPT based on data from UBC-1983

Attachment 2

Laboratory Test Results

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DENSITY BY DRIVE- CYLINDER METHOD (ASTM D2937)

Project Name:	Egyptian Theater	**Project Number:**	609013.150
Performed By:	JMA	**Date:**	7/7/2010
Checked By:	SB	**Date:**	8/9/10
Project Manager:	GSW		

Lab Sample Number	10-557				
Boring Label	BH1				
Sample Depth (ft)	20-22				
Diameter of Cylinder, in	2.84				
Total Length of Cylinder, in.	5.20				
Length of Empty Cylinder A, in.	0.00				
Length of Empty Cylinder B, in.	0.00				
Length of Cylinder Filled, in	5.20				
Volume of Sample, in^3	32.94				
Volume of Sample, cc.	539.80				

Pan #	s28				
Weight of Wet Soil and Pan	948.6				
Weight of Dry Soil and Pan	593.0				
Weight of Water	355.6				
Weight of Pan	150.1				
Weight of Dry Soil	442.9				
Percent Moisture	80.3				
Dry Density, g/cc	0.82				
Dry Density, lb/ft^3	51.2				

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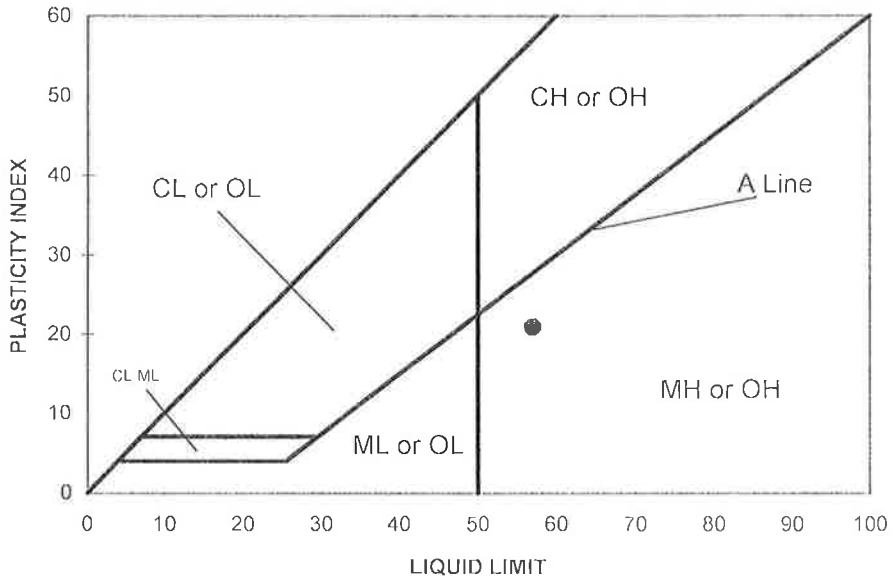
LIQUID LIMIT, PLASTIC LIMIT, and PLASTICITY INDEX (ASTM-D4318)

JOB NAME:	Egyptian Theater	JOB #:	609013.150	LAB SAMPLE #:	10-557
SAMPLE ID:	BH1 @ 20-22'	PERFORMED BY:	JMA	DATE:	8/2/10
PROJECT MANGER:	SMB	CHECKED BY:	JS	DATE:	8/9/10

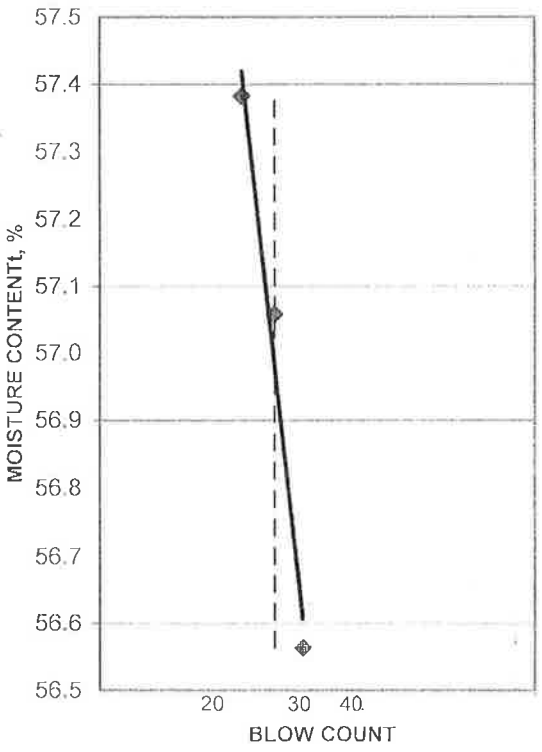
LINE NO.		TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 3
A	PAN #	13	14	7	8	9
B	PAN WT. (g)	22.232	20.000	29.032	29.137	28.737
C	WT. WET SOIL & PAN (g)	28.600	26.242	40.624	40.230	39.738
D	WT. DRY SOIL & PAN (g)	26.907	24.593	36.436	36.200	35.727
E	WT. WATER (C-D)	1.693	1.649	4.188	4.030	4.011
F	WT. DRY SOIL (D-B)	4.675	4.593	7.404	7.063	6.990
G	BLOW COUNT	--	--	29	25	21
H	MOISTURE CONTENT (E/F*100	36.2	35.9	56.6	57.1	57.4

LIQUID LIMIT	PLASTIC INDEX	PLASTIC LIMIT
57	21	36

PLASTICITY CHART



LIQUID LIMIT DETERMINATION



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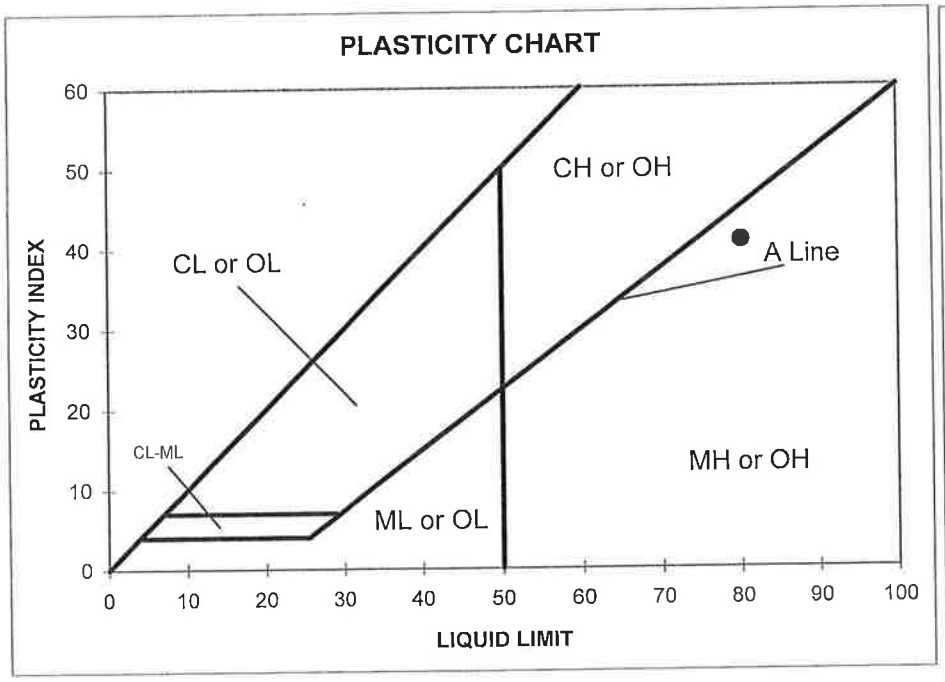
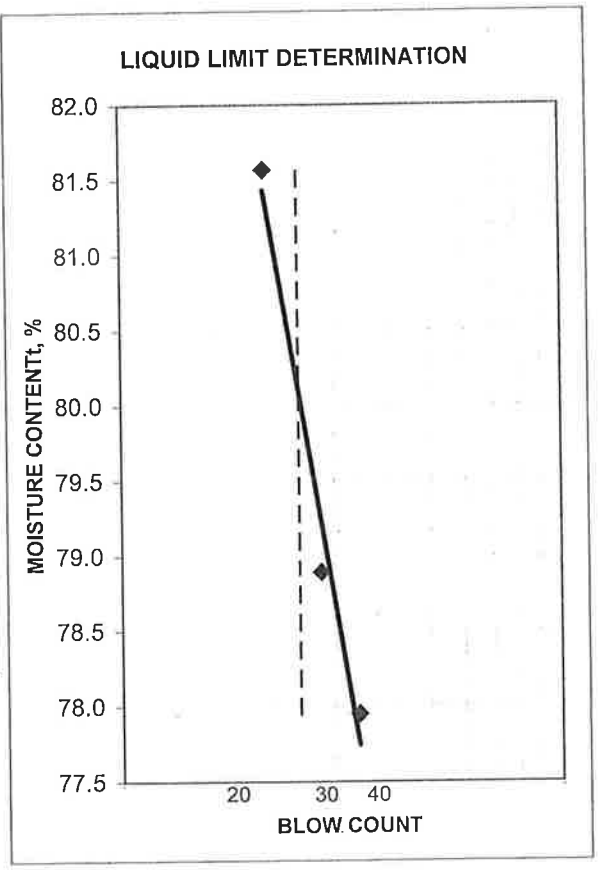
LIQUID LIMIT, PLASTIC LIMIT, and PLASTICITY INDEX (ASTM-D4318)

JOB NAME: **Egyptian Theater** JOB #: **609013.150** LAB SAMPLE #: **10-558**
SAMPLE ID: **BH1 @ 25-27** PERFORMED BY: **JMA** DATE: 8/2/2010
PROJECT MANGER: **SMB** CHECKED BY: SB DATE: 8/7/14

LINE NO.		TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 3
A	PAN #	17	18	1	2	3
B	PAN WT. (g)	20.335	20.284	29.799	29.153	29.283
C	WT. WET SOIL & PAN (g)	26.424	26.635	39.337	40.407	40.286
D	WT. DRY SOIL & PAN (g)	24.708	24.844	35.159	35.444	35.343
E	WT. WATER (C-D)	1.716	1.791	4.178	4.963	4.943
F	WT. DRY SOIL (D-B)	4.373	4.560	5.360	6.291	6.060
G	BLOW COUNT	--	--	34	28	21
H	MOISTURE CONTENT (E/F*100)	39.2	39.3	77.9	78.9	81.6

LIQUID LIMIT	**PLASTIC INDEX**	PLASTIC LIMIT
80	**41**	39





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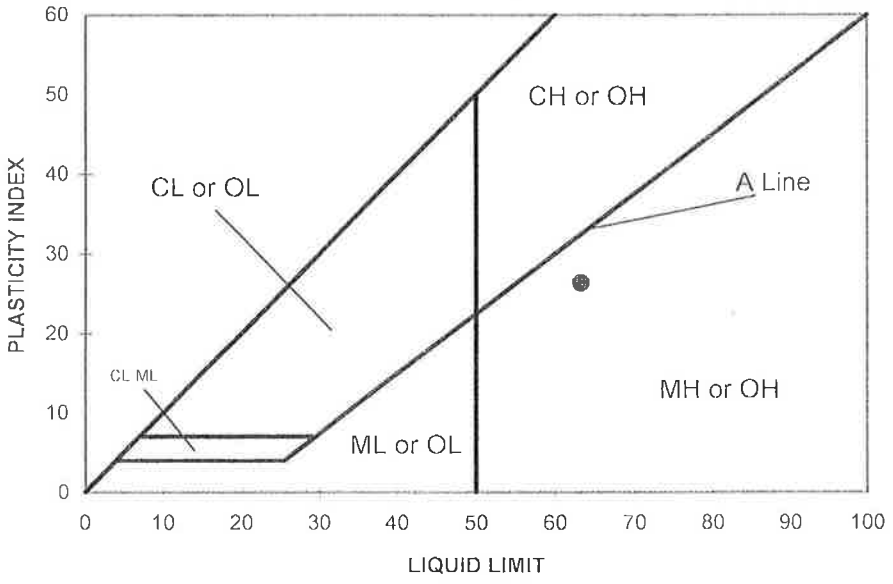
LIQUID LIMIT, PLASTIC LIMIT, and PLASTICITY INDEX (ASTM-D4318)

JOB NAME:	Egyptian Theater	JOB #:	609013.150	LAB SAMPLE #:	10559
SAMPLE ID:	10-BH1 @ 30-32'	PERFORMED BY:	JMA	DATE:	7/30/10
PROJECT MANGER:	SMB	CHECKED BY:	SB	DATE:	8/9/14

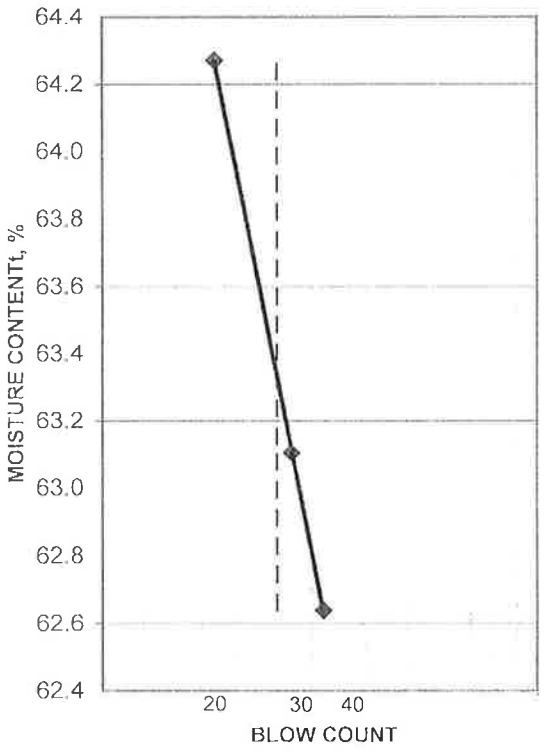
LINE NO.		TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 3
A	PAN #	13	14	7	8	9
B	PAN WT. (g)	22.237	20.003	29.035	29.147	28.737
C	WT. WET SOIL & PAN (g)	28.415	26.566	36.139	35.358	35.615
D	WT. DRY SOIL & PAN (g)	26.754	24.791	33.403	32.955	32.924
E	WT. WATER (C-D)	1.661	1.775	2.736	2.403	2.691
F	WT. DRY SOIL (D-B)	4.517	4.788	4.368	3.808	4.187
G	BLOW COUNT	--	--	32	27	18
H	MOISTURE CONTENT (E/F*100	36.8	37.1	62.6	63.1	64.3

LIQUID LIMIT	PLASTIC INDEX	PLASTIC LIMIT
63	26	37

PLASTICITY CHART



LIQUID LIMIT DETERMINATION



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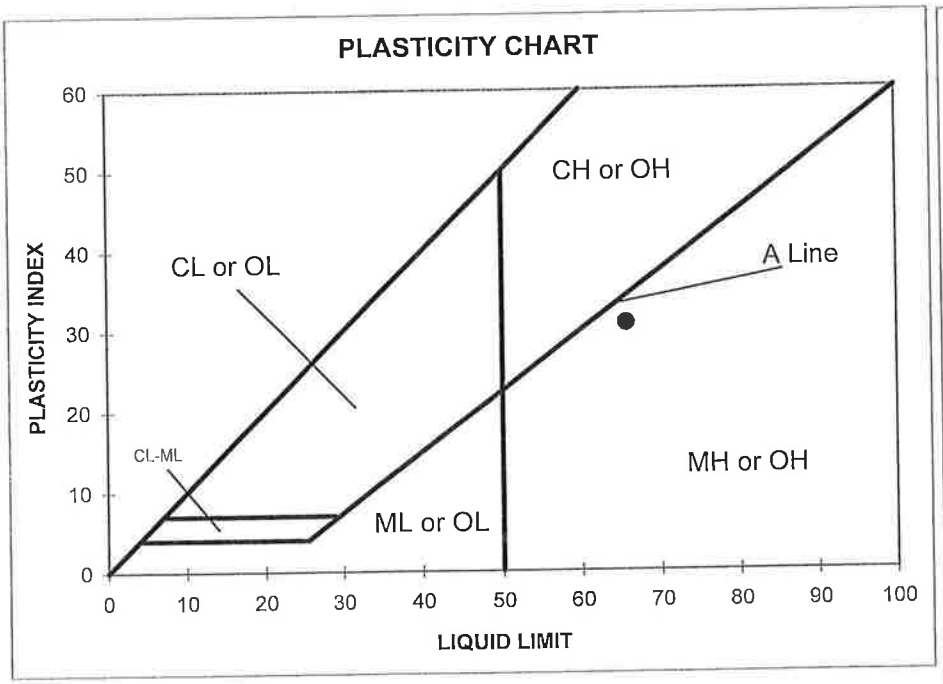
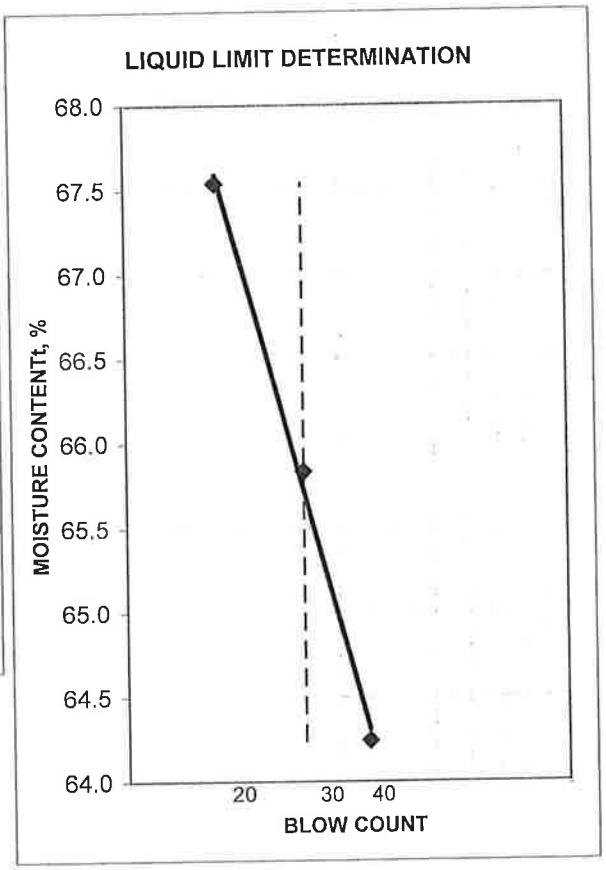
LIQUID LIMIT, PLASTIC LIMIT, and PLASTICITY INDEX (ASTM-D4318)

JOB NAME: **Egyptian Theater** JOB #: **609012.150** LAB SAMPLE #: **10-560**
SAMPLE ID: **BH1 @ 35-37'** PERFORMED BY: **JMA** DATE: 8/3/2010
PROJECT MANGER: **SMB** CHECKED BY: DATE: 8/9/10

LINE NO.		TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 3
A	PAN #	22	23	A	B	C
B	PAN WT. (g)	17.238	16.960	29.381	29.619	28.713
C	WT. WET SOIL & PAN (g)	24.772	23.419	41.157	40.657	39.908
D	WT. DRY SOIL & PAN (g)	22.824	21.752	36.551	36.275	35.395
E	WT. WATER (C-D)	1.948	1.667	4.606	4.382	4.513
F	WT. DRY SOIL (D-B)	5.586	4.792	7.170	6.656	6.682
G	BLOW COUNT	--	--	35	25	16
H	MOISTURE CONTENT (E/F*100)	34.9	34.8	64.2	65.8	67.5

LIQUID LIMIT	**PLASTIC INDEX**	PLASTIC LIMIT
66	**31**	35





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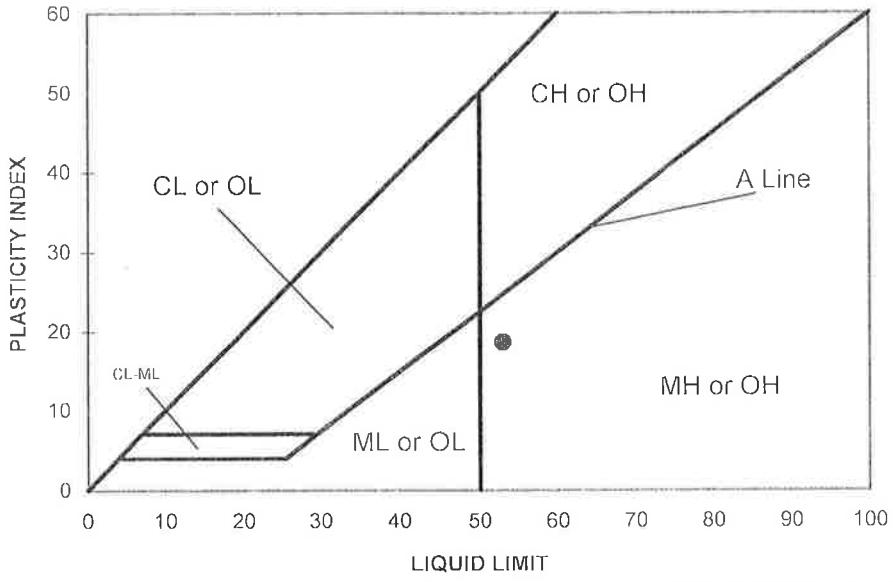
LIQUID LIMIT, PLASTIC LIMIT, and PLASTICITY INDEX (ASTM-D4318)

JOB NAME:	Egyptian Theater	JOB #:	609013.150	LAB SAMPLE #:	10-561
SAMPLE ID:	BH1 @ 40-42'	PERFORMED BY:	JMA	DATE:	8/2/10
PROJECT MANGER:	SMB	CHECKED BY:		DATE:	8/9/10

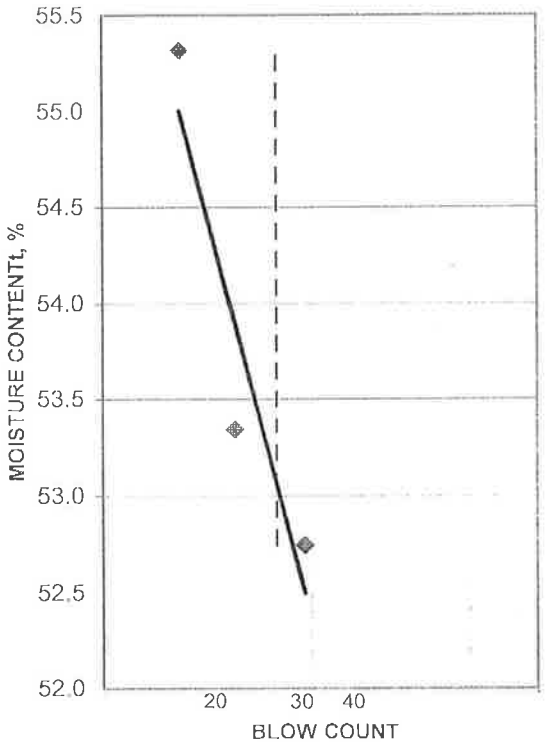
LINE NO.		TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 3
A	PAN #	15	16	4	5	6
B	PAN WT. (g)	20.620	21.017	29.371	28.814	29.683
C	WT. WET SOIL & PAN (g)	27.518	27.634	35.797	36.702	37.264
D	WT. DRY SOIL & PAN (g)	25.742	25.954	33.578	33.958	34.564
E	WT. WATER (C-D)	1.776	1.680	2.219	2.744	2.700
F	WT. DRY SOIL (D-B)	5.122	4.937	4.207	5.144	4.881
G	BLOW COUNT	--	--	29	20	15
H	MOISTURE CONTENT (E/F*100)	34.7	34.0	52.7	53.3	55.3

LIQUID LIMIT	PLASTIC INDEX	PLASTIC LIMIT
53	19	34

PLASTICITY CHART



LIQUID LIMIT DETERMINATION



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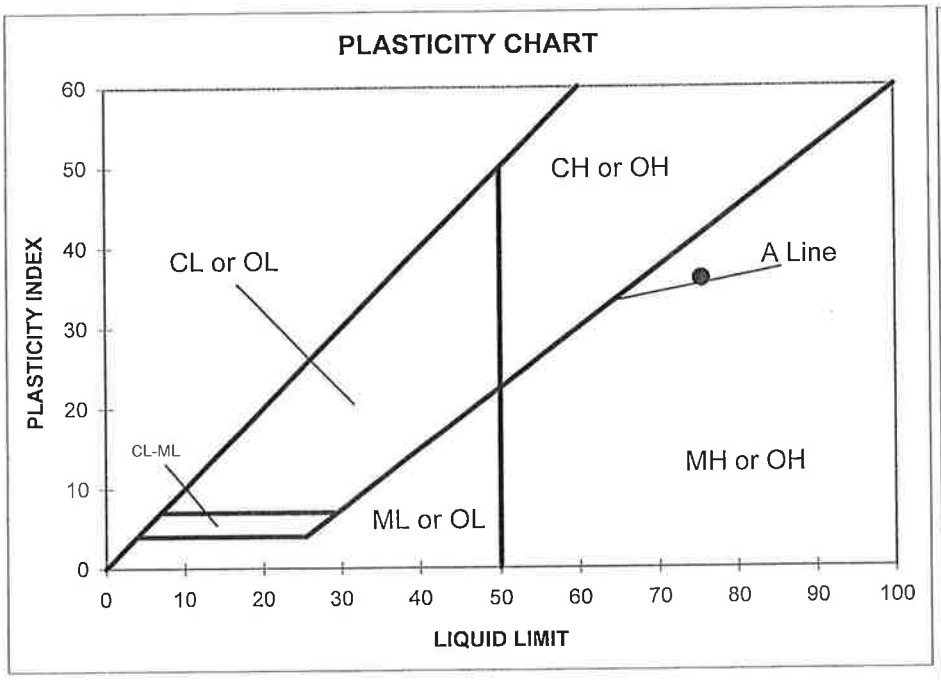
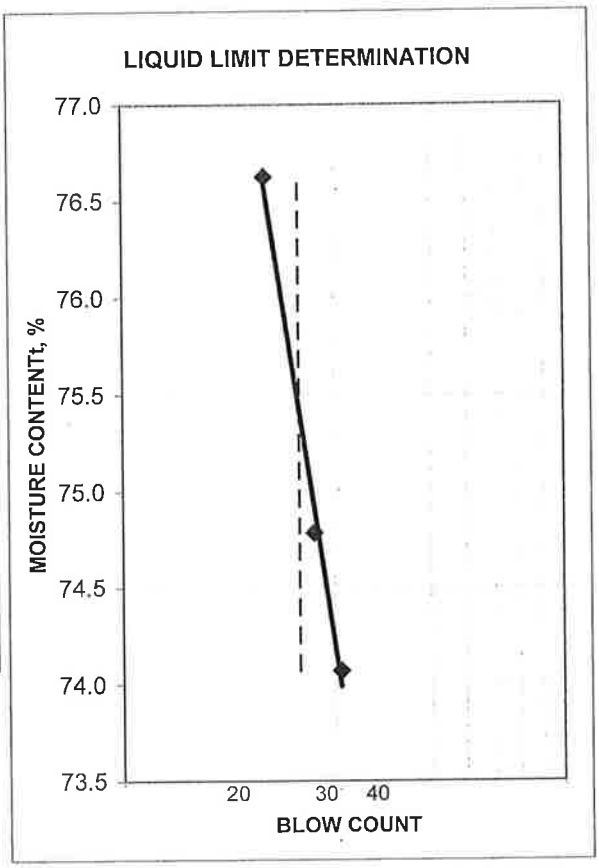
LIQUID LIMIT, PLASTIC LIMIT, and PLASTICITY INDEX (ASTM-D4318)

JOB NAME:	Egyptian Theater	JOB #:	609013.150	LAB SAMPLE #:	10-562
SAMPLE ID:	BH1 @ 45-47'	PERFORMED BY:	JMA	DATE:	8/4/2010
PROJECT MANGER:	SMB	CHECKED BY:	JB	DATE:	8/9/10

LINE NO.		TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 3
A	PAN #	15	16	4	5	6
B	PAN WT. (g)	20.646	21.015	29.383	28.830	29.680
C	WT. WET SOIL & PAN (g)	26.990	27.498	39.103	39.934	39.919
D	WT. DRY SOIL & PAN (g)	25.133	25.643	34.967	35.183	35.477
E	WT. WATER (C-D)	1.857	1.855	4.136	4.751	4.442
F	WT. DRY SOIL (D-B)	4.487	4.628	5.584	6.353	5.797
G	BLOW COUNT	--	--	31	27	21
H	MOISTURE CONTENT (E/F*100)	41.4	40.1	74.1	74.8	76.6

LIQUID LIMIT	**PLASTIC INDEX**	PLASTIC LIMIT
75	**36**	41





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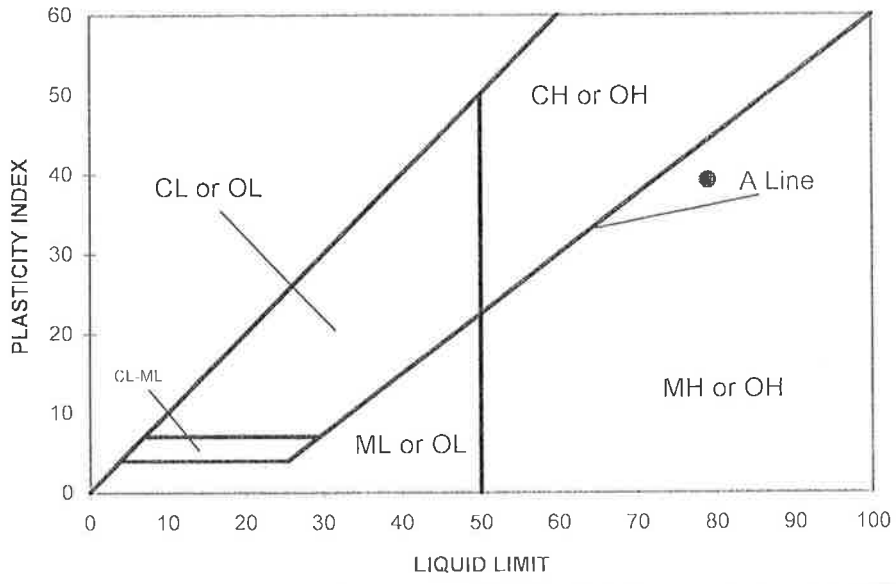
LIQUID LIMIT, PLASTIC LIMIT, and PLASTICITY INDEX (ASTM-D4318)

JOB NAME: Egyptian Theater | JOB #: 609013.150 | LAB SAMPLE #: 10-563
SAMPLE ID: BH1 @ 50-52' | PERFORMED BY: JMA | DATE: 8/3/10
PROJECT MANGER: SMB | CHECKED BY: JS | DATE: 8/9/10

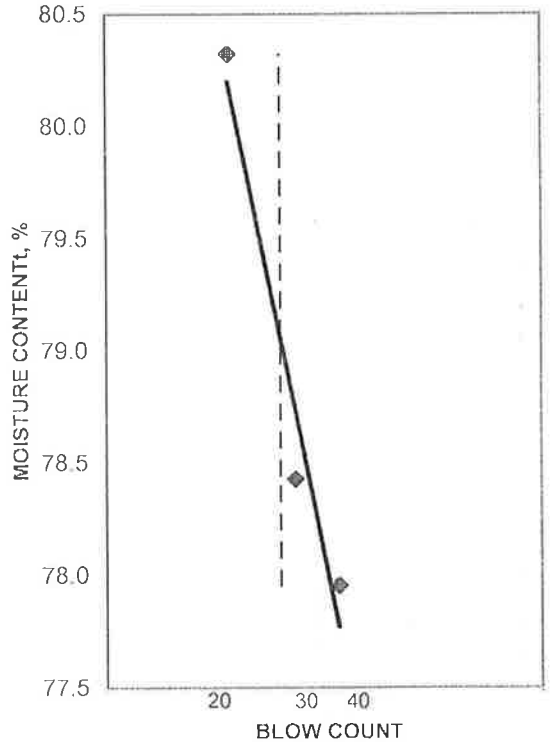
LINE NO.		TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 1	TRIAL NO. 2	TRIAL NO. 3
A	PAN #	17	18	1	2	3
B	PAN WT. (g)	20.321	20.259	29.796	29.138	29.223
C	WT. WET SOIL & PAN (g)	27.026	26.426	39.838	38.823	39.916
D	WT. DRY SOIL & PAN (g)	25.118	24.667	35.439	34.566	35.153
E	WT. WATER (C-D)	1.908	1.759	4.399	4.257	4.763
F	WT. DRY SOIL (D-B)	4.797	4.408	5.643	5.428	5.930
G	BLOW COUNT	--	--	34	27	19
H	MOISTURE CONTENT (E/F*100	39.8	39.9	78.0	78.4	80.3

LIQUID LIMIT	PLASTIC INDEX	PLASTIC LIMIT
79	39	40

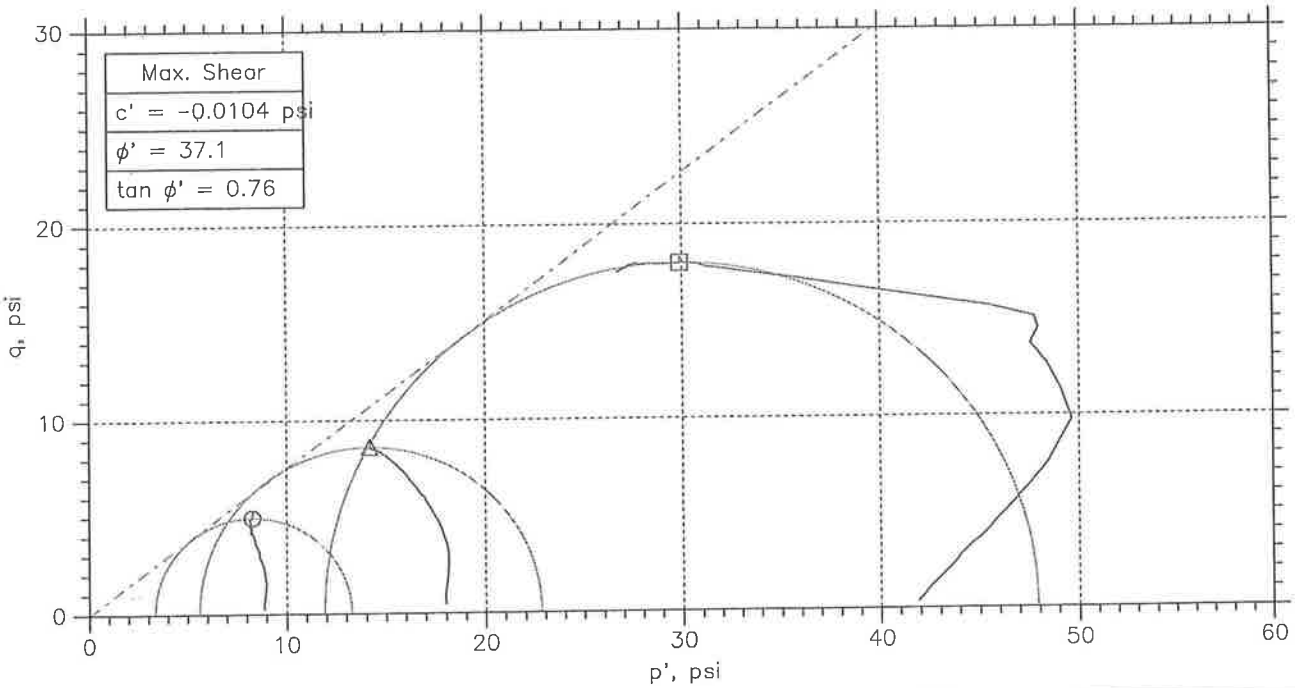
PLASTICITY CHART

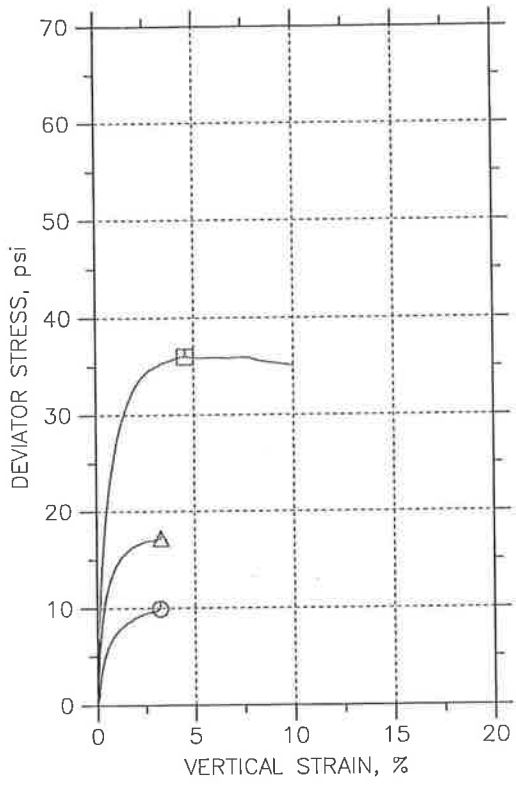


LIQUID LIMIT DETERMINATION



CONSOLIDATED UNDRAINED TRIAXIAL TEST by ASTM D4767





Symbol		⏲	△	⊡	
Sample No.		10-559	10-559	10-559	
Test No.		10-559A	10-559B	10-559C	
Depth		30-32'	30-32'	30-32'	
Initial	Diameter, in	2.81	2.81	2.81	
	Height, in	6.13	6.13	6.13	
	Water Content, %	67.9	67.9	67.9	
	Dry Density, pcf	60.95	60.95	60.95	
	Saturation, %	104.5	104.5	104.5	
	Void Ratio	1.73	1.73	1.73	
Before Shear	Water Content, %	48.3	48.4	48.4	
	Dry Density, pcf	72.76	72.72	72.72	
	Saturation*, %	100.0	100.0	100.0	
	Void Ratio	1.29	1.29	1.29	
	Back Press., psi	29.98	43.85	.4321	
Ver. Eff. Cons. Stress, psi		10.41	20.8	41.58	
Shear Strength, psi		4.958	8.6	18.	
Strain at Failure, %		3.23	3.28	4.56	
Strain Rate, %/min		0.032	0.02	0.1	
B-Value		0.97	---	---	
Estimated Specific Gravity		2.67	2.67	2.67	
Liquid Limit		---	---	---	
Plastic Limit		---	---	---	

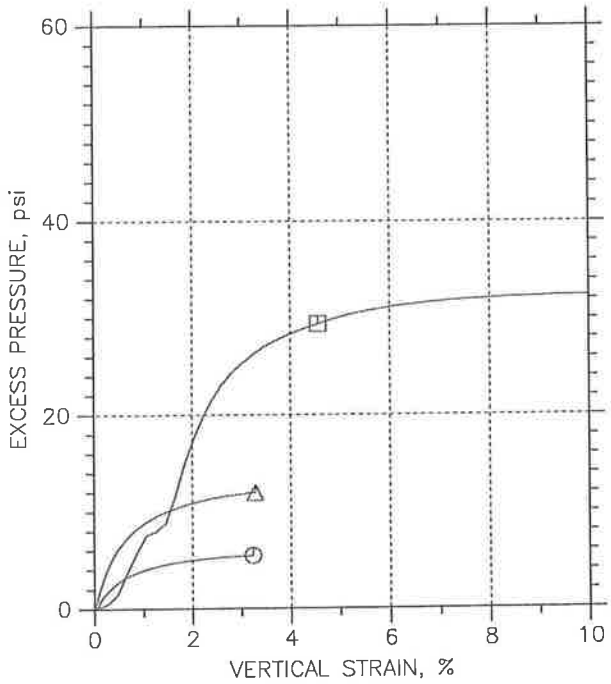
Project: Egyptian Theater
Location: Coos Bay
Project No.: 609013.150
Boring No.: BH1@ 30-32
Sample Type: 3" shelby
Description: Dark Gray SILT
Remarks: Consolidated Undrained

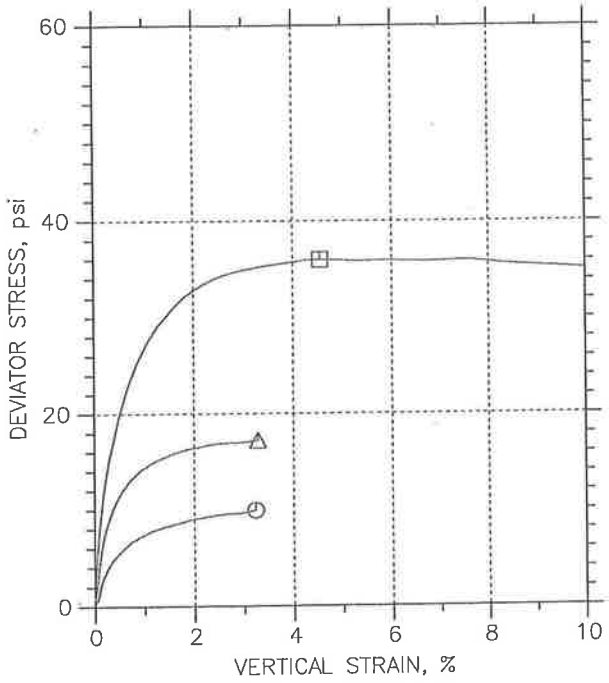
Phase calculations based on start and end of test.

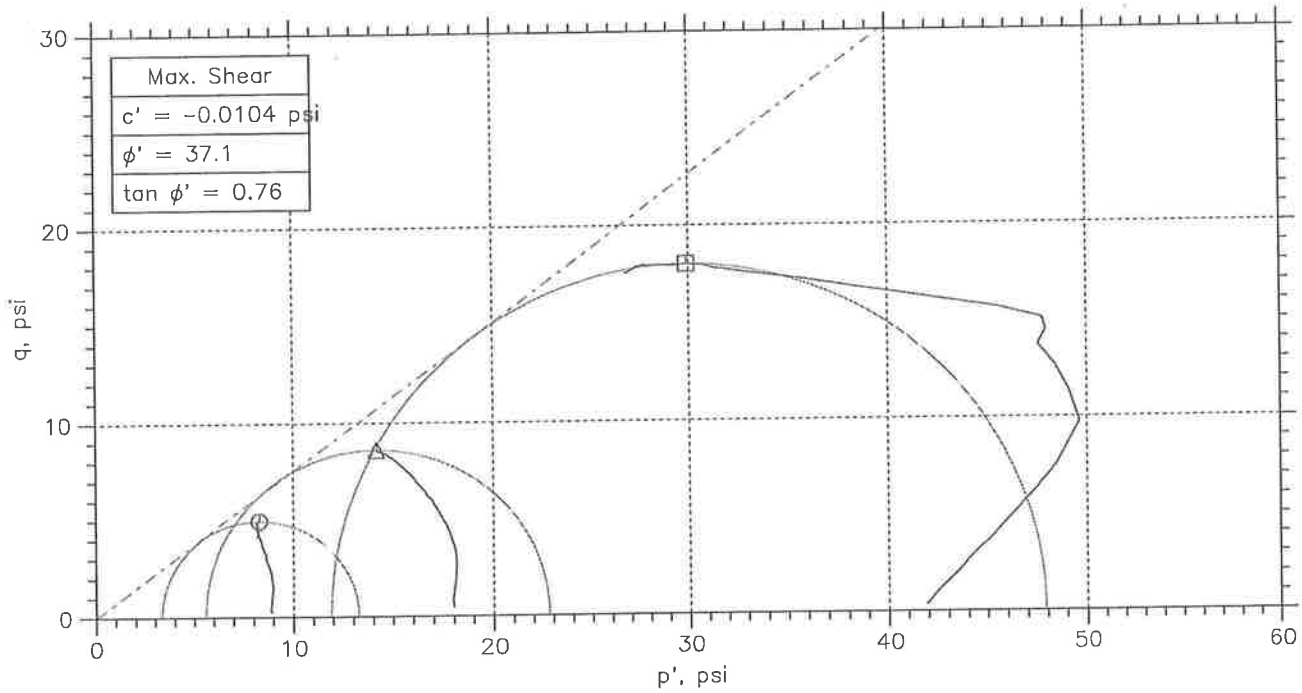
Fri, 30-JUL-2010 14:38:48

* Saturation is set to 100% for phase calculations.

CONSOLIDATED UNDRAINED TRIAXIAL TEST by ASTM D4767





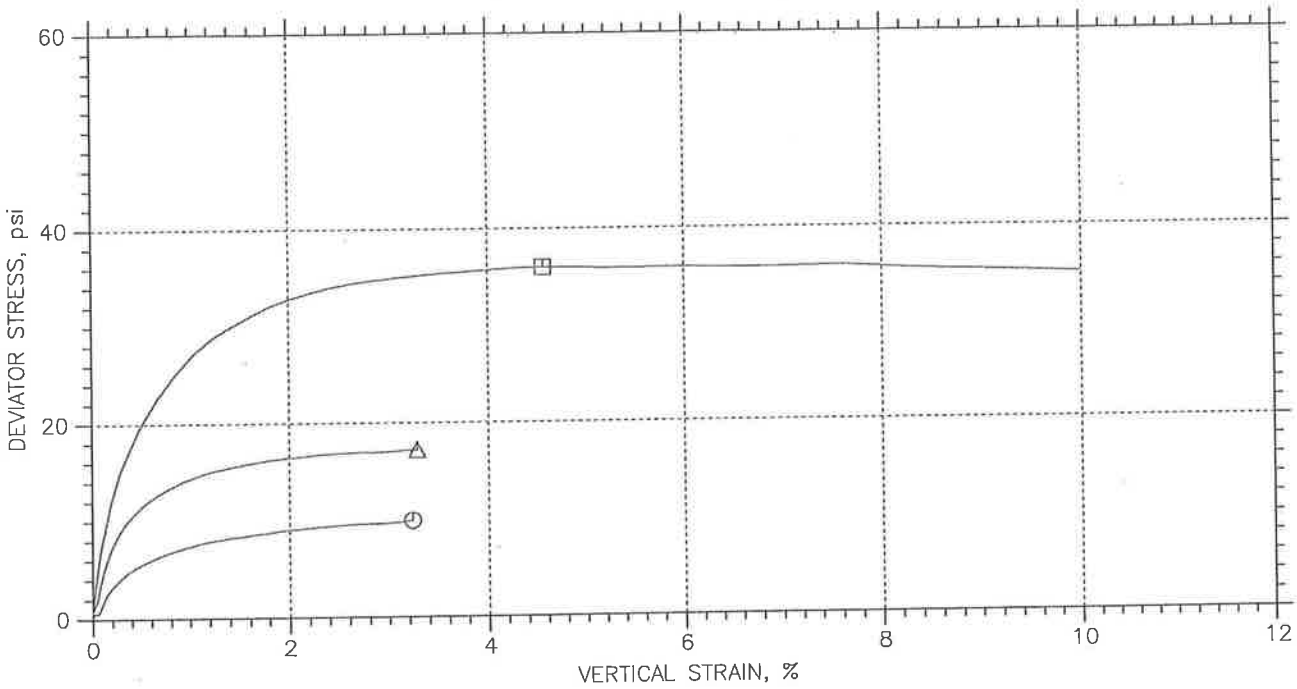


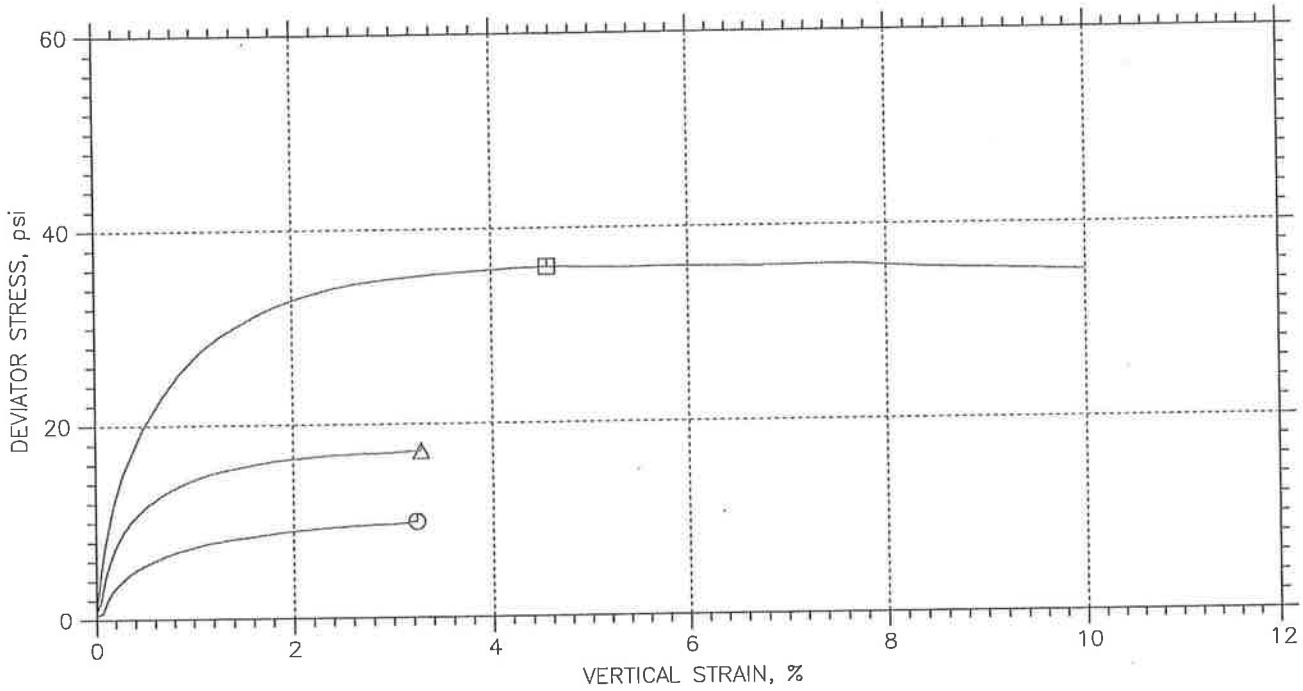
	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
⊙	10-559	10-559A	30-32'	JMA	7/7/10	JB	8/9/10	10-559A2 Egypt.dat
△	10-559	10-559B	30-32'	JMA	7/9/10			10-559B Egypt.dat
⊡	10-559	10-559C	30-32'	JMA	7/10/10			10-559C Egypt.dat

Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1@ 30-32	Sample Type: 3" shelby	
Description: Dark Gray SILT		
Remarks: Consolidated Undrained		

Fri, 30-JUL-2010 14:38:51

CONSOLIDATED UNDRAINED TRIAXIAL TEST by ASTM D4767





	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
⏲	10-559	10-559A	30-32'	JMA	7/7/10		8/9/10	10-559A2 Egypt.dat
△	10-559	10-559B	30-32'	JMA	7/9/10			10-559B Egypt.dat
⊡	10-559	10-559C	30-32'	JMA	7/10/10			10-559C Egypt.dat

Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1@ 30-32	Sample Type: 3" shelby	
Description: Dark Gray SILT		
Remarks: Consolidated Undrained		

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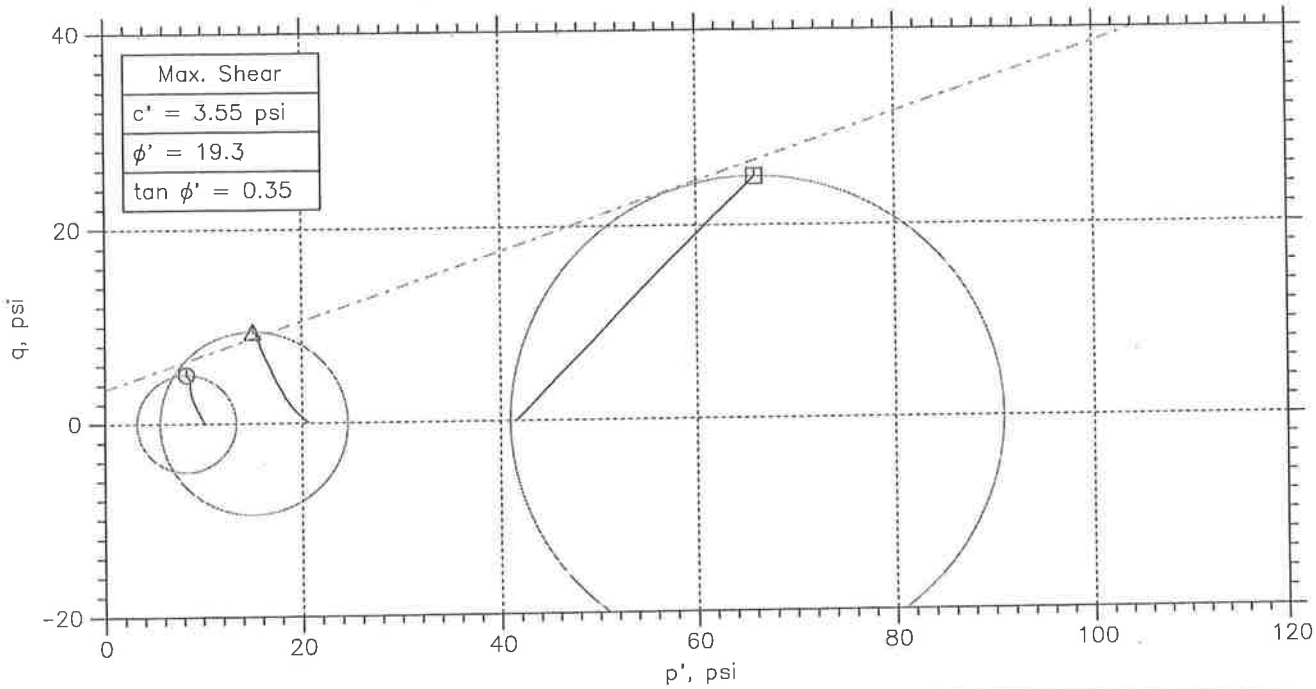
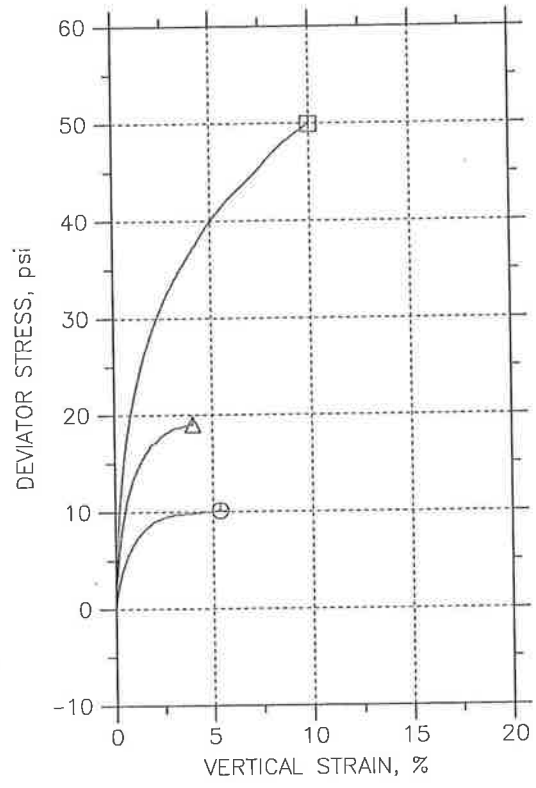
CONSOLIDATED UNDRAINED TRIAXIAL TEST by ASTM D4767





Symbol		⊙	△	⊡	
Sample No.		10-561	10-561	10-561	
Test No.		10-561A	10-561B	10-561C	
Depth		40-42	40-42	40-42	
Initial	Diameter, in	2.84	2.84	2.84	
	Height, in	6.05	6.05	6.05	
	Water Content, %	82.2	82.2	82.2	
	Dry Density, pcf	53.48	53.48	53.48	
	Saturation, %	103.8	103.8	103.8	
	Void Ratio	2.12	2.12	2.12	
Before Shear	Water Content, %	48.8	48.8	48.8	
	Dry Density, pcf	72.34	72.34	72.34	
	Saturation*, %	100.0	100.0	100.0	
	Void Ratio	1.3	1.3	1.3	
	Back Press., psi	30.	51.88	.4321	
Ver. Eff. Cons. Stress, psi		10.39	20.79	41.58	
Shear Strength, psi		5.057	9.496	24.96	
Strain at Failure, %		5.35	4	10	
Strain Rate, %/min		0.032	0.032	0.032	
B-Value		0.98	---	---	
Estimated Specific Gravity		2.67	2.67	2.67	
Liquid Limit		---	---	---	
Plastic Limit		---	---	---	

Project: Egyptian Theater

Location: Coos Bay

Project No.: 609013.150

Boring No.: BH1

Sample Type: 3"shelby

Description: Dark Gray SILT with fine sand

Remarks:

Phase calculations based on start and end of test.

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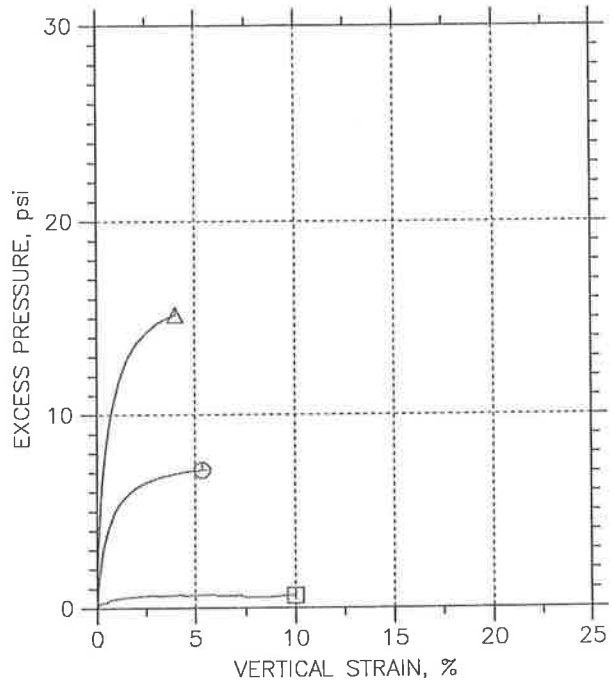
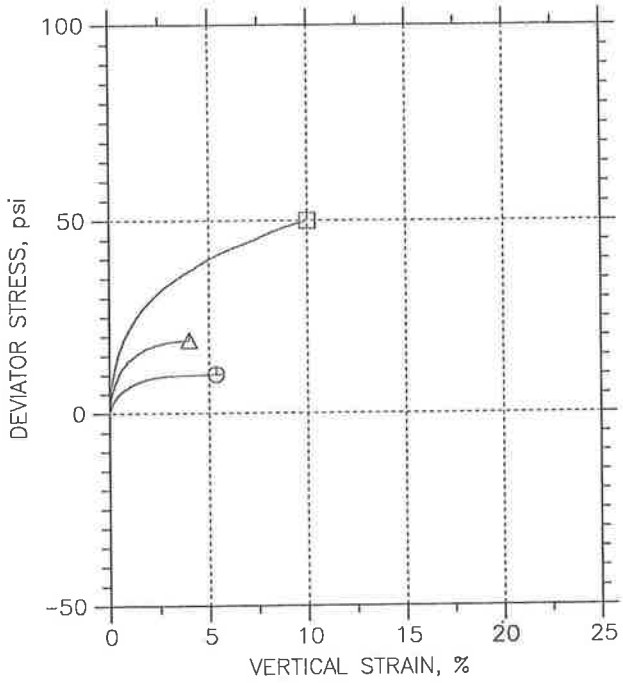
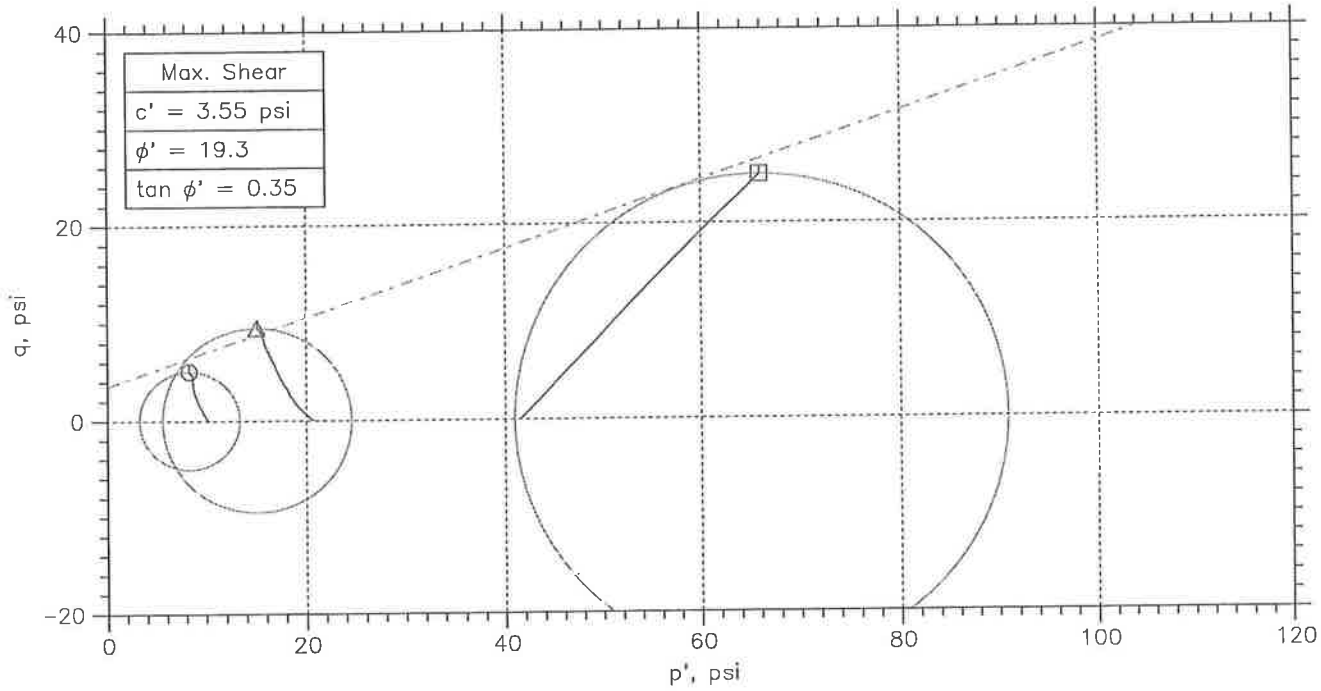
* Saturation is set to 100% for phase calculations.

CONSOLIDATED UNDRAINED TRIAXIAL TEST by ASTM D4767







	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
○	10-561	10-561A	40-42	jma	7/12/10	JB	5/9/14	10-561A1 Egypt.dat
△	10-561	10-561B	40-42	jma	7/12/10			10-561B Egypt.dat
□	10-561	10-561C	40-42	jma	7/12/10			10-561C Egypt.dat

Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Sample Type: 3"shelby	
Description: Dark Gray SILT with fine sand		
Remarks:		

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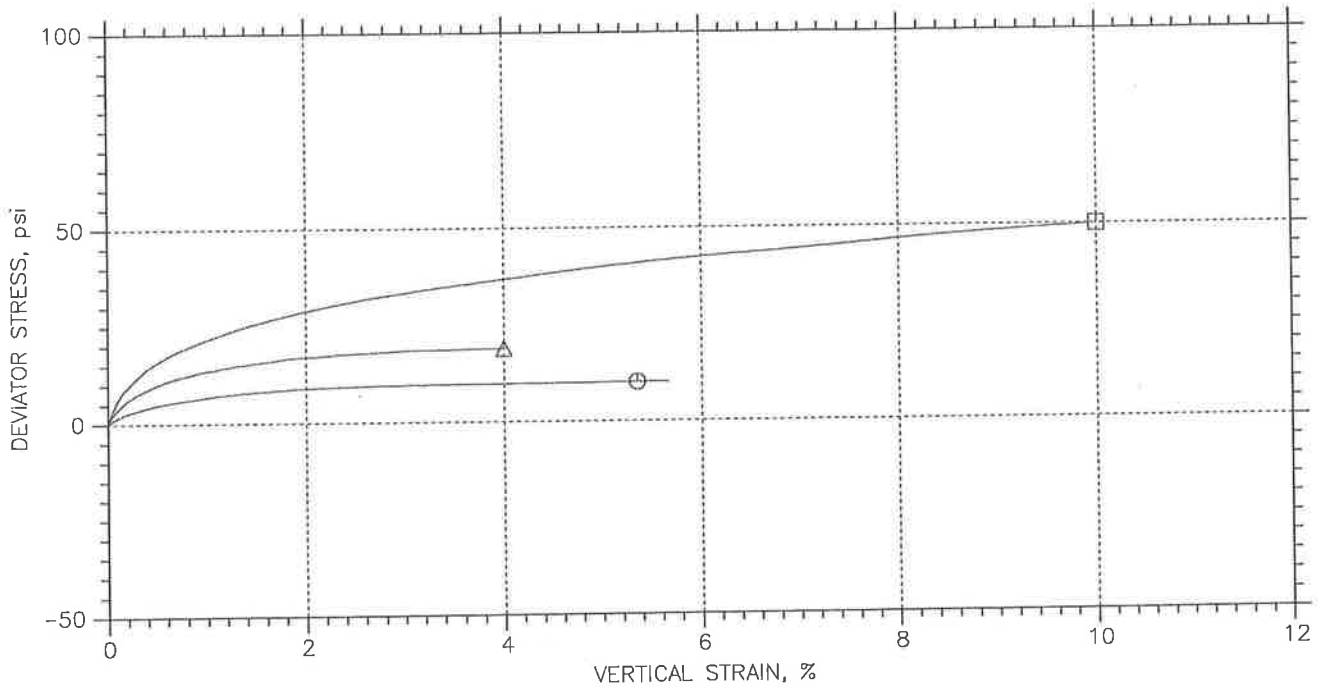
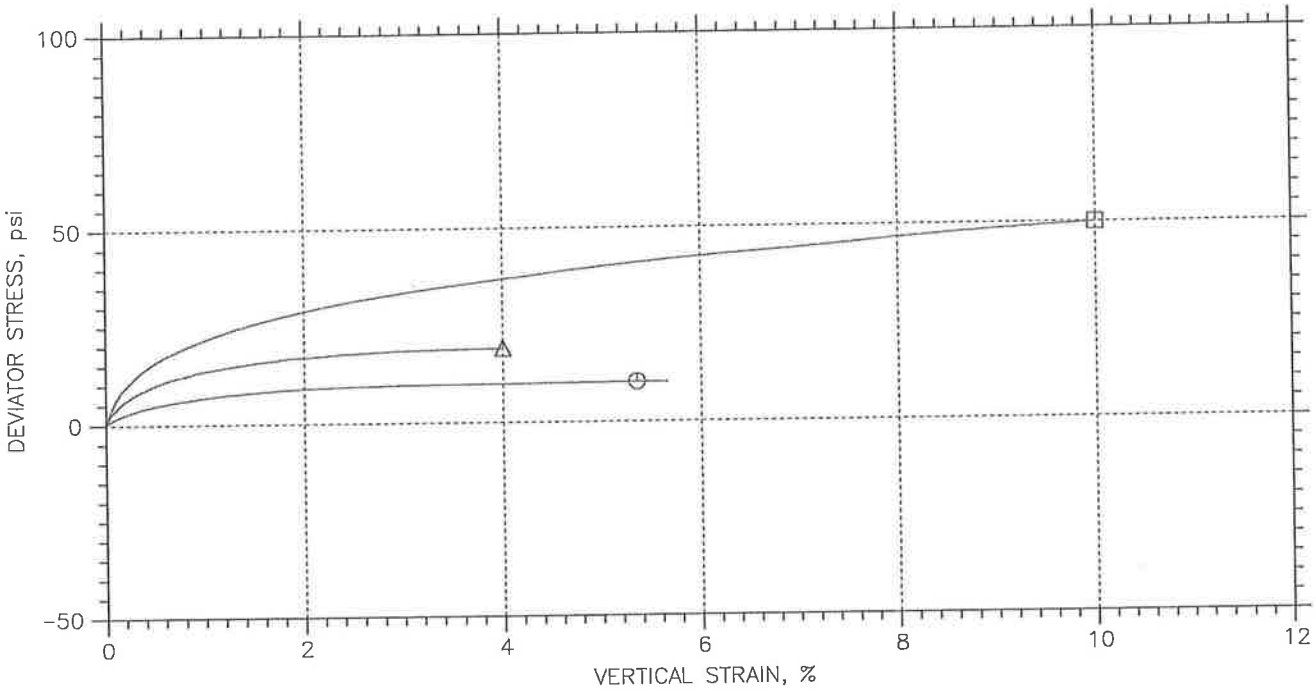
CONSOLIDATED UNDRAINED TRIAXIAL TEST by ASTM D4767





	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
⏲	10-561	10-561A	40-42	jma	7/12/10	JB	9/9/10	10-561A1 Egypt.dat
△	10-561	10-561B	40-42	jma	7/12/10	"	"	10-561B Egypt.dat
⊡	10-561	10-561C	40-42	jma	7/12/10	"	"	10-561C Egypt.dat

Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Sample Type: 3"shelby	
Description: Dark Gray SILT with fine sand		
Remarks:		

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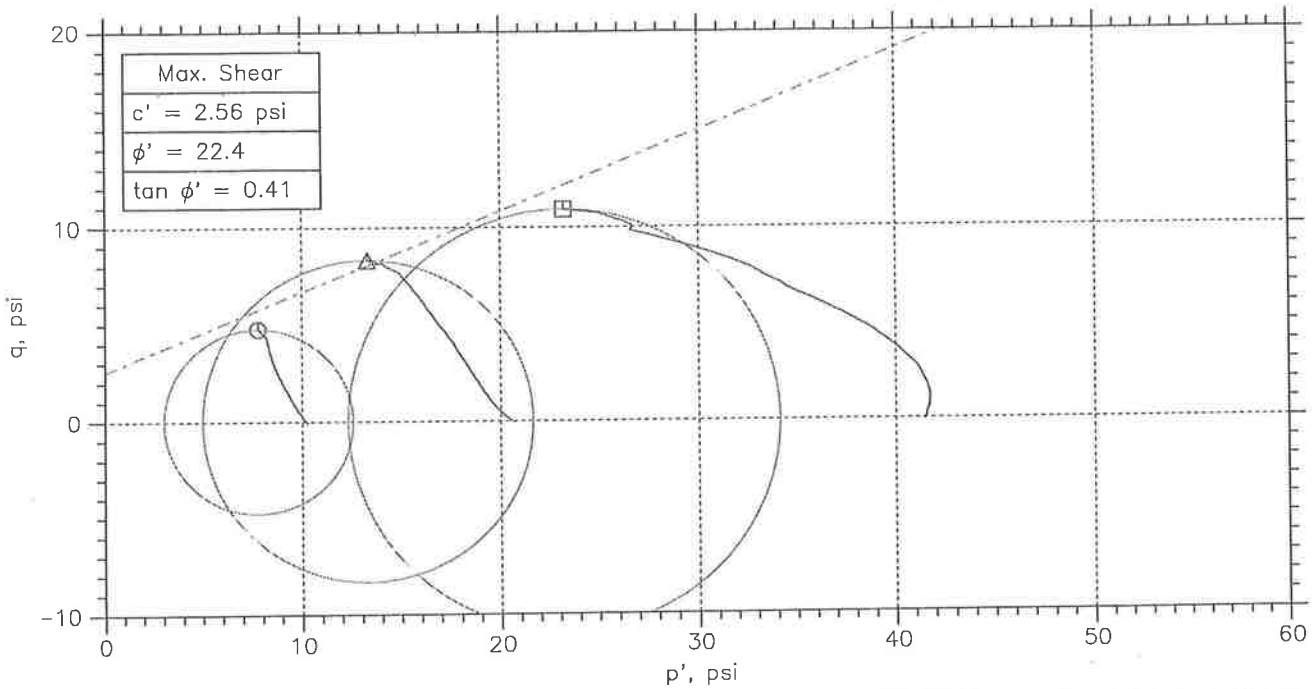
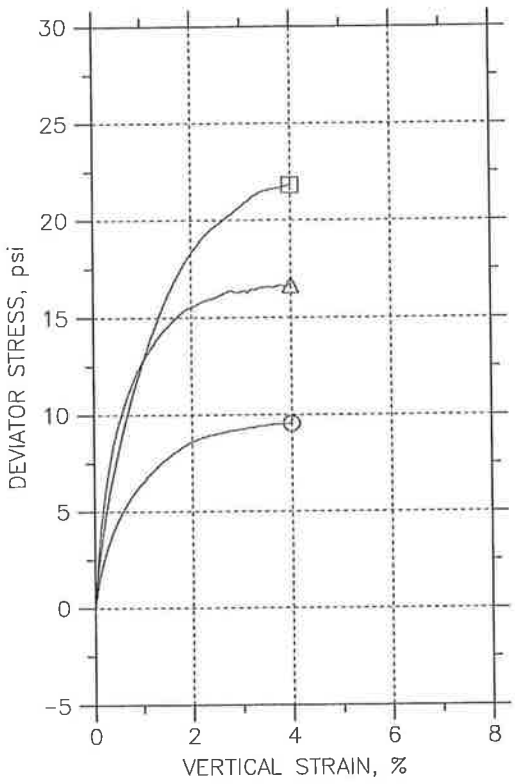
CONSOLIDATED UNDRAINED TRIAXIAL TEST by ASTM D4767





Symbol		⊙	△	⊡	
Sample No.		10-563	10-563	10-563	
Test No.		10-563A	10-563B	10-563C	
Depth		50-52'	50-52'	50-52'	
Initial	Diameter, in	2.84	2.84	2.84	
	Height, in	6.05	6.05	6.05	
	Water Content, %	87.1	87.1	87.1	
	Dry Density, pcf	50.12	50.12	50.12	
	Saturation, %	100.0	100.0	100.0	
	Void Ratio	2.33	2.33	2.33	
Before Shear	Water Content, %	69.0	69.0	69.0	
	Dry Density, pcf	58.66	58.66	58.66	
	Saturation*, %	100.0	100.0	100.0	
	Void Ratio	1.84	1.84	1.84	
	Back Press., psi	36.	32.07	3.024	
Ver. Eff. Cons. Stress, psi		10.38	20.77	41.55	
Shear Strength, psi		4.768	8.326	10.9	
Strain at Failure, %		4	4	4	
Strain Rate, %/min		0.02	0.02	0.02	
B-Value		0.95	---	---	
Estimated Specific Gravity		2.67	2.67	2.67	
Liquid Limit		---	---	---	
Plastic Limit		---	---	---	

Project: Egyptian Theater
Location: Coos Bay
Project No.: 609013.150
Boring No.: BH1
Sample Type: 3"shelby
Description: Dark Gray SILT with fine sand
Remarks:

Phase calculations based on start and end of test.

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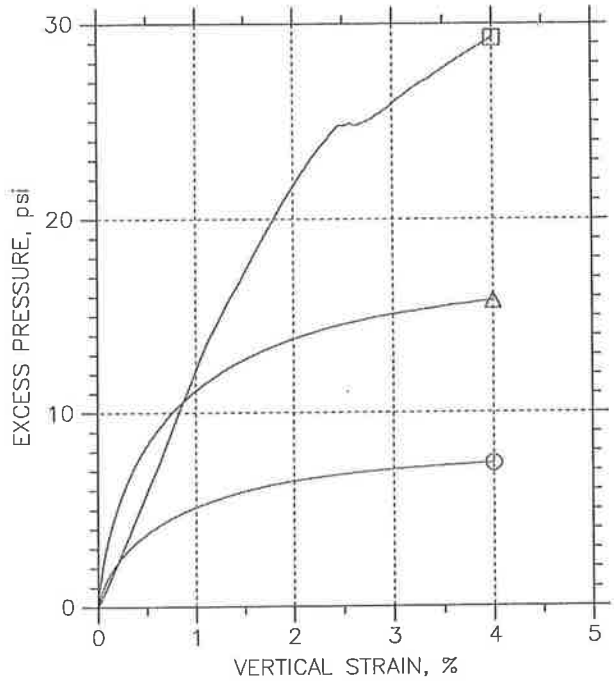
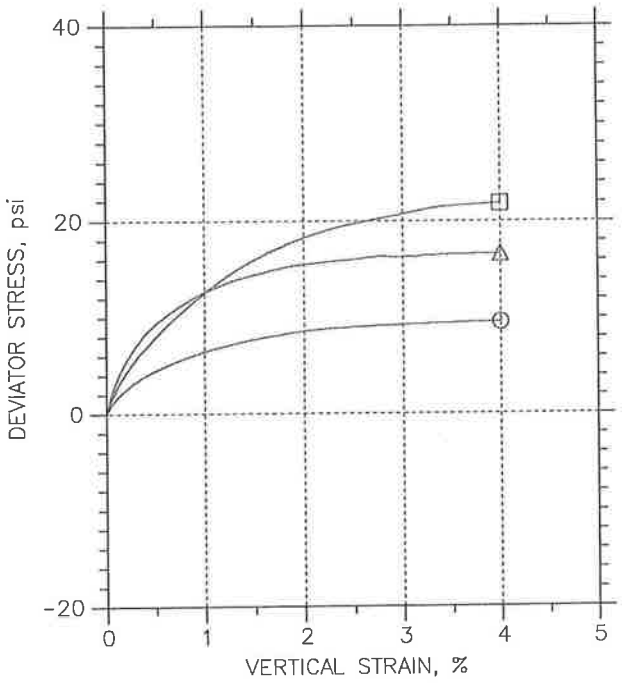
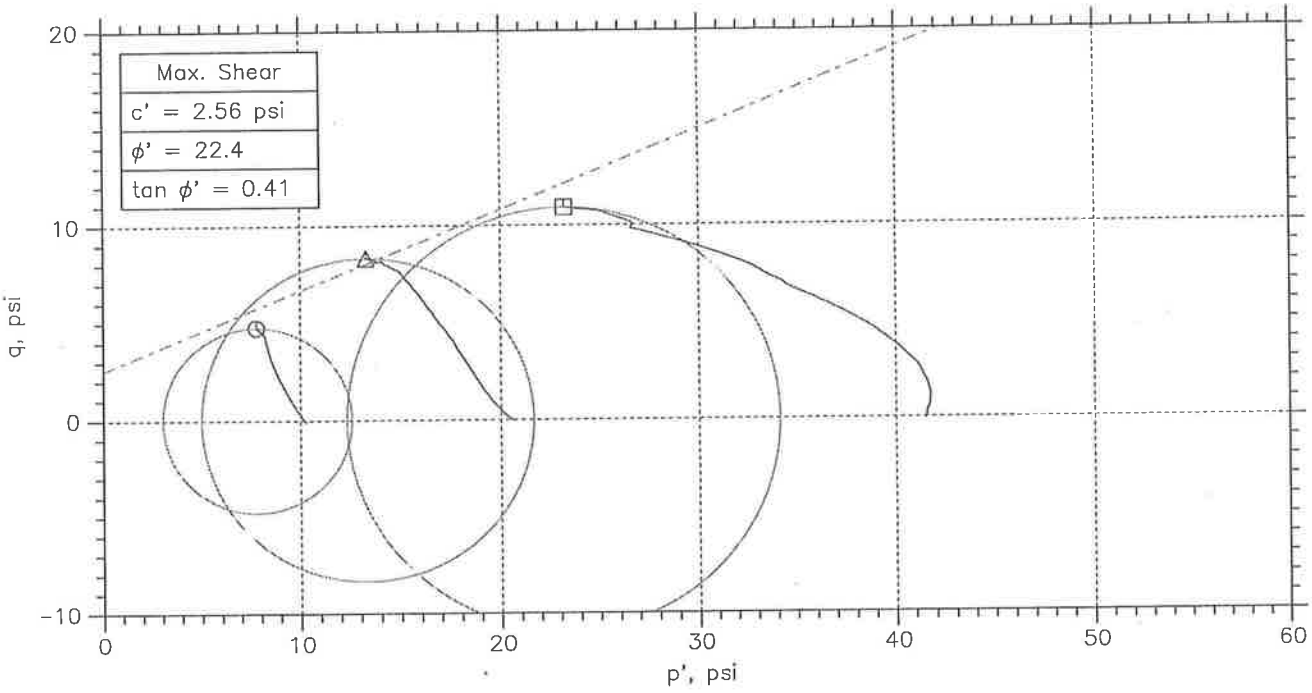
* Saturation is set to 100% for phase calculations.

CONSOLIDATED UNDRAINED TRIAXIAL TEST by ASTM D4767







	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
⊙	10-563	10-563A	50-52'	jma	7/14/10	JB	8/9/10	10-563A Egypt.dat
△	10-563	10-563B	50-52'	jma	7/15/10	"	"	10-563B1 Egypt.dat
□	10-563	10-563C	50-52'	jma	7/15/10	"	"	10-563C Egypt.dat

Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Sample Type: 3"shelby	
Description: Dark Gray SILT with fine sand		
Remarks:		

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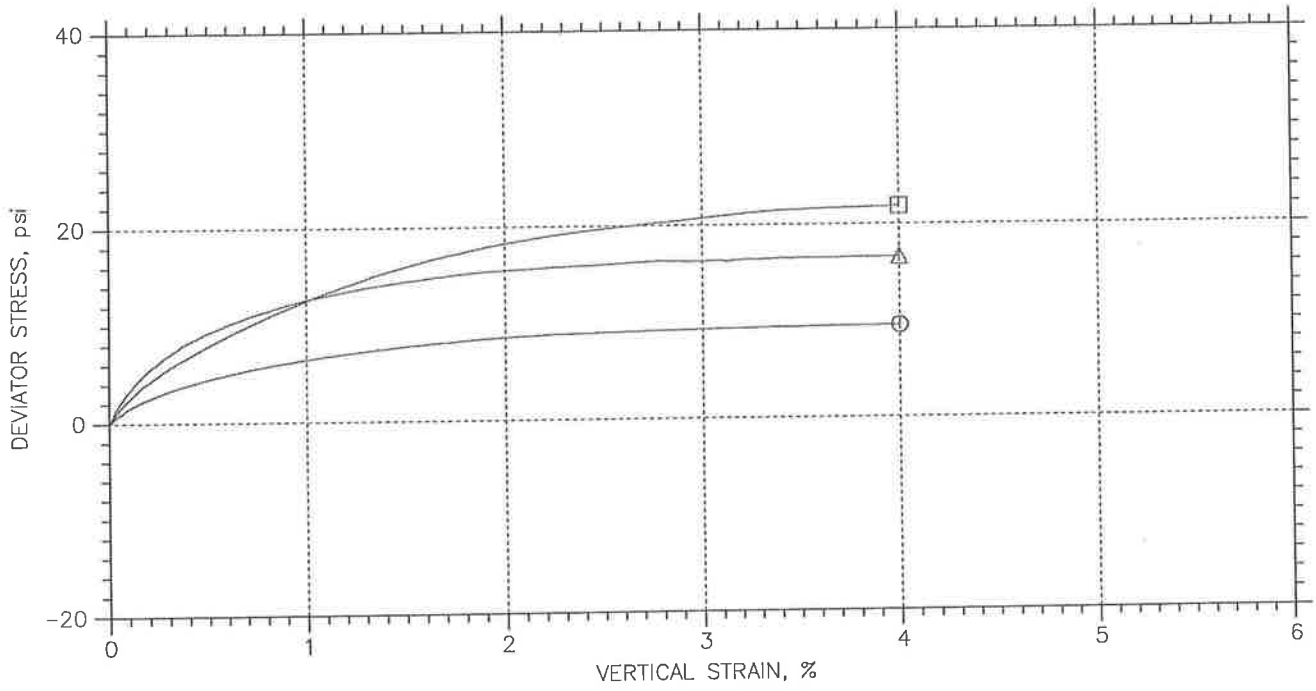
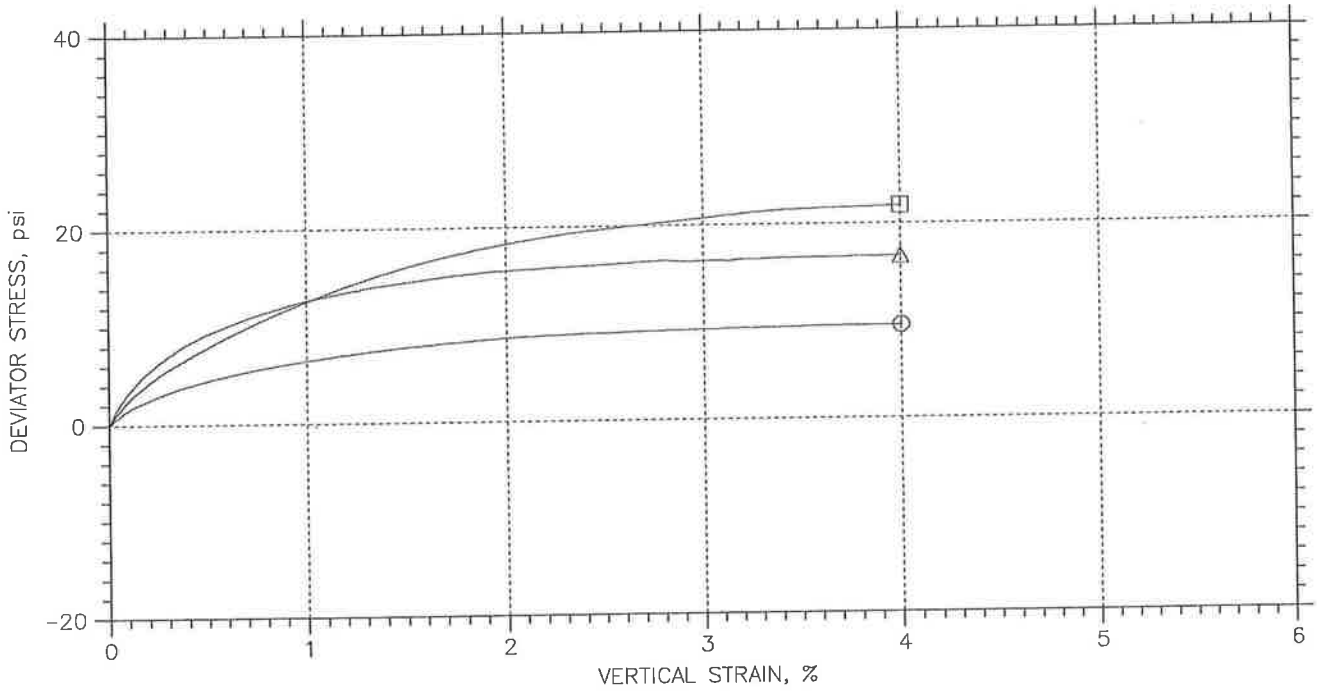
CONSOLIDATED UNDRAINED TRIAXIAL TEST by ASTM D4767





	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
○	10-563	10-563A	50-52'	jma	7/14/10	JB	8/9/10	10-563A Egypt.dat
△	10-563	10-563B	50-52'	jma	7/15/10	"	"	10-563B1 Egypt.dat
□	10-563	10-563C	50-52'	jma	7/15/10	"	"	10-563C Egypt.dat

Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Sample Type: 3"shelby	
Description: Dark Gray SILT with fine sand		
Remarks:		

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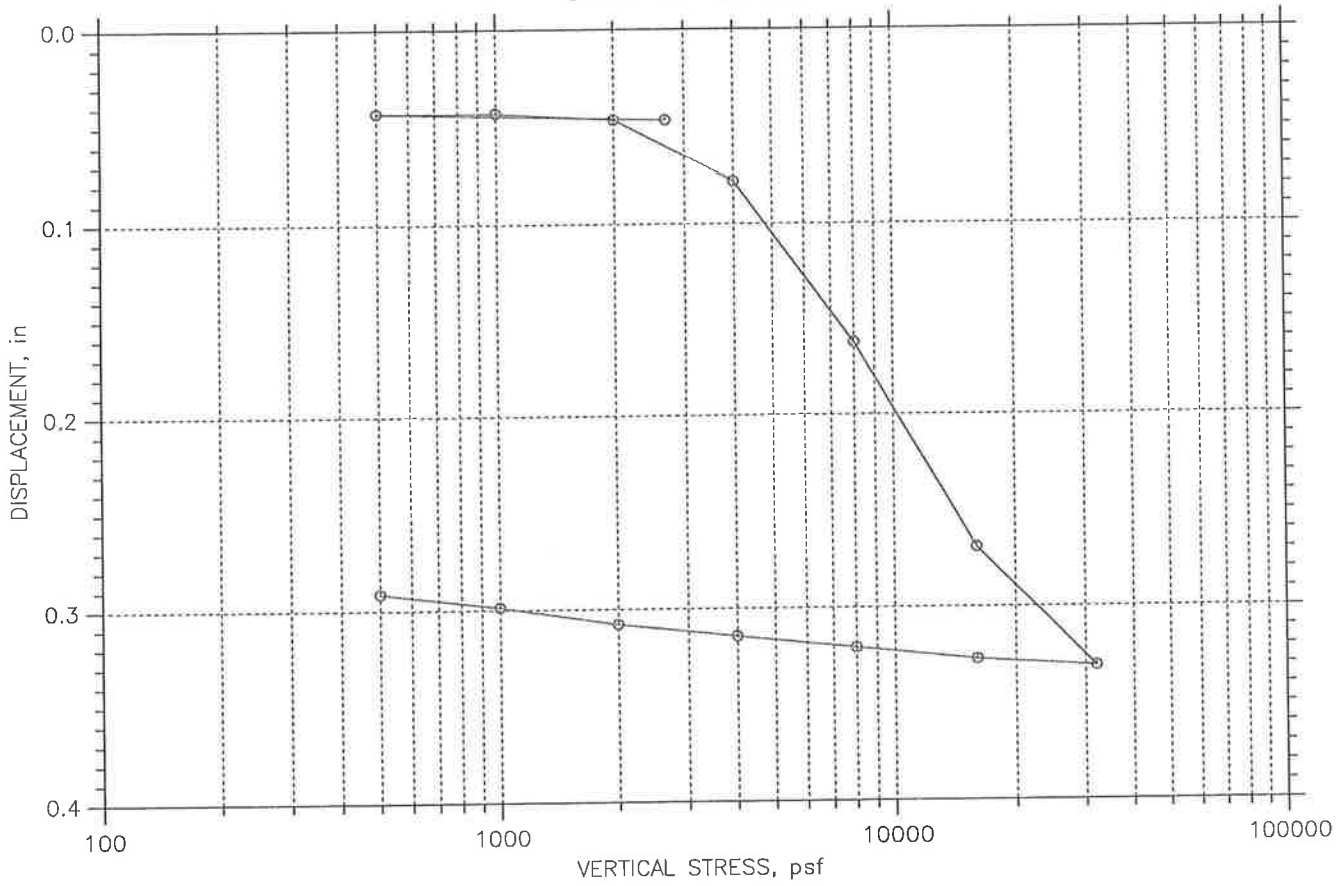
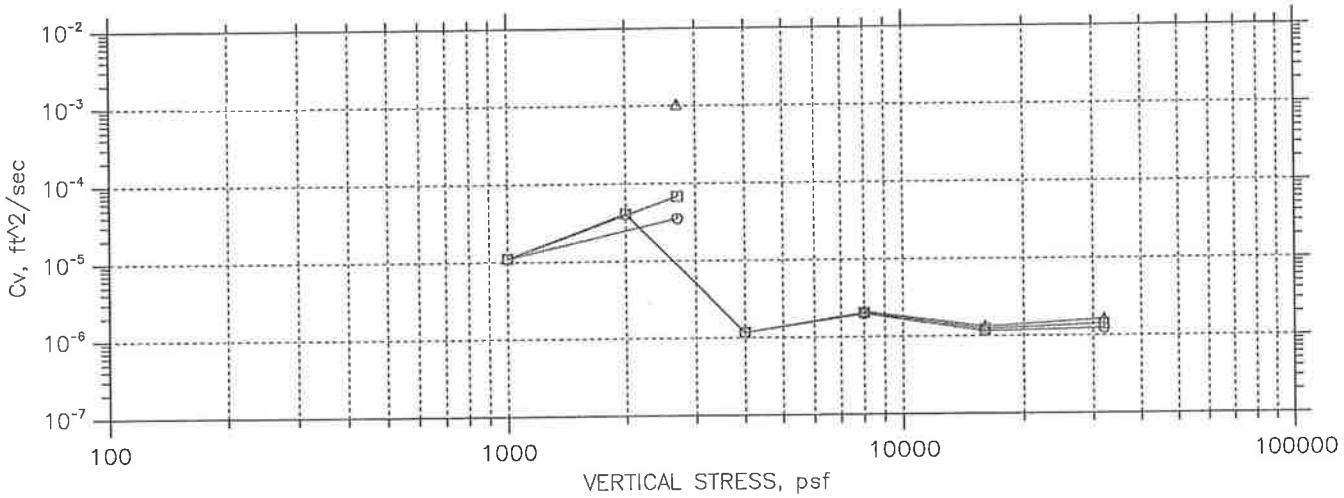
CONSOLIDATION TEST DATA

SUMMARY REPORT



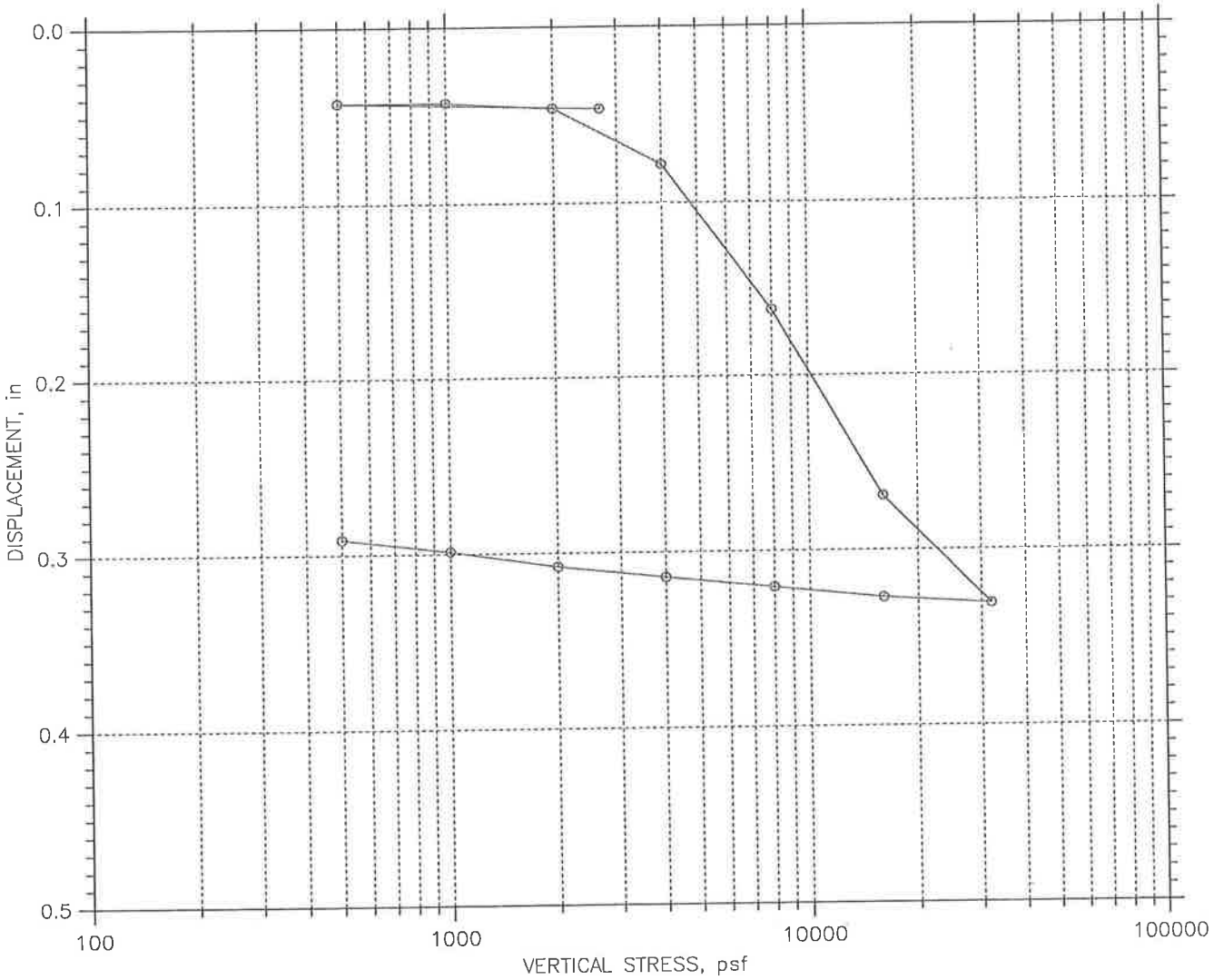


Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: CB
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

Mon, 09-AUG-2010 11:56:15

CONSOLIDATION TEST DATA

SUMMARY REPORT



					Before Test	After Test
Overburden Pressure, psf:				Water Content, %	87.50	53.25
Preconsolidation Pressure, psf:				Dry Unit Weight, pcf	48.854	68.944
Compression Index:				Saturation, %	97.17	100.82
Diameter: 2.5 in		Height: 1 in		Void Ratio	2.39	1.40
LL: 0	PL: 0	PI: 0	GS: 2.65			

Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JS
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

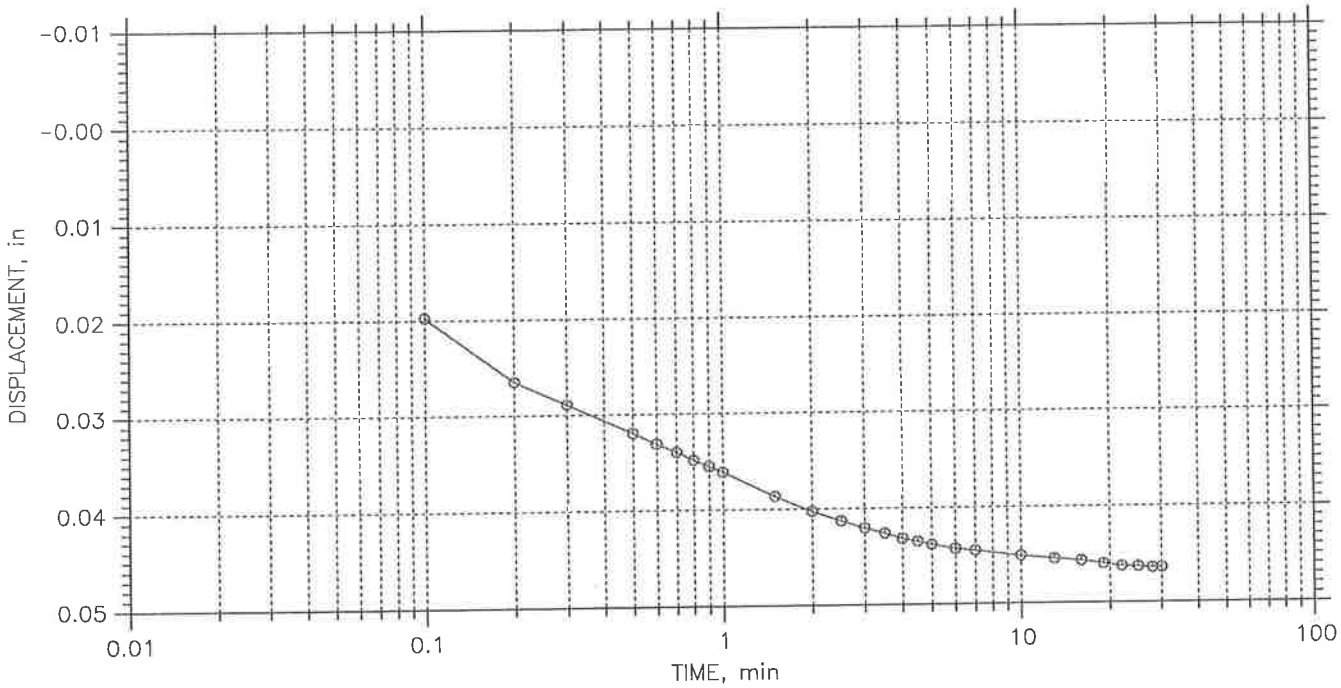
Mon, 09-AUG-2010 11:56:16

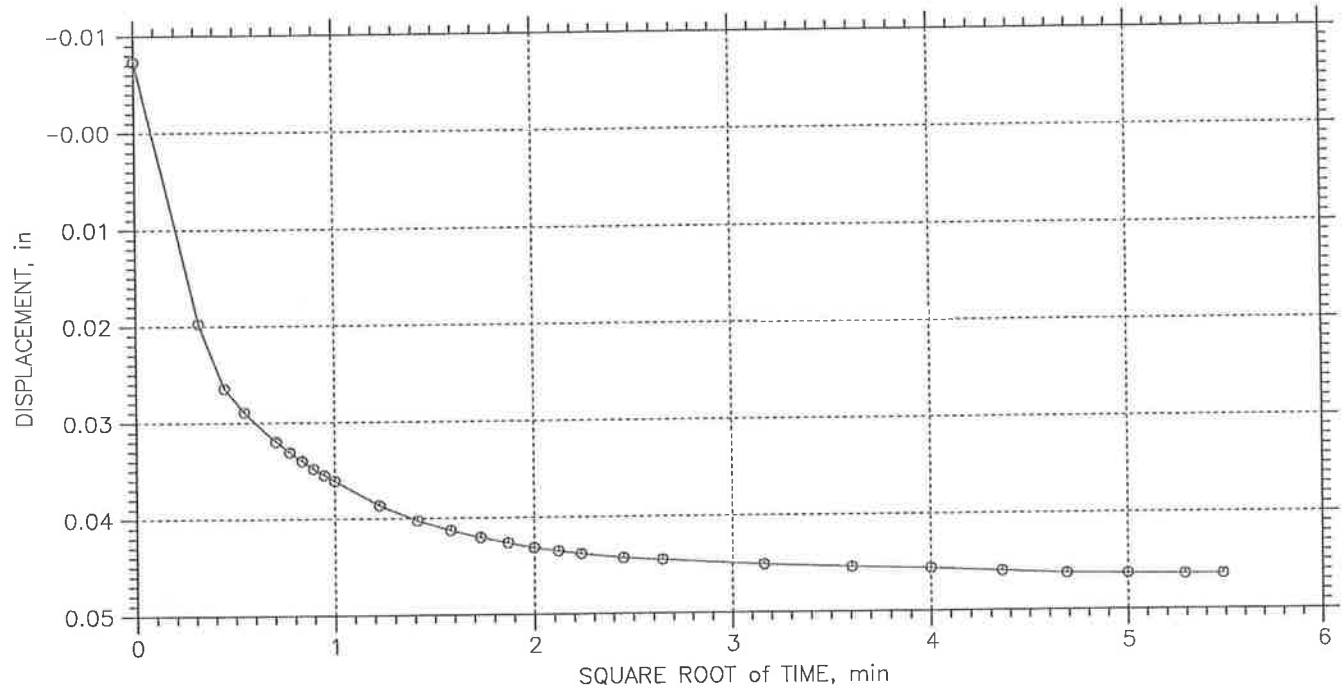
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 1 of 14

Stress: 2700. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: SB
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

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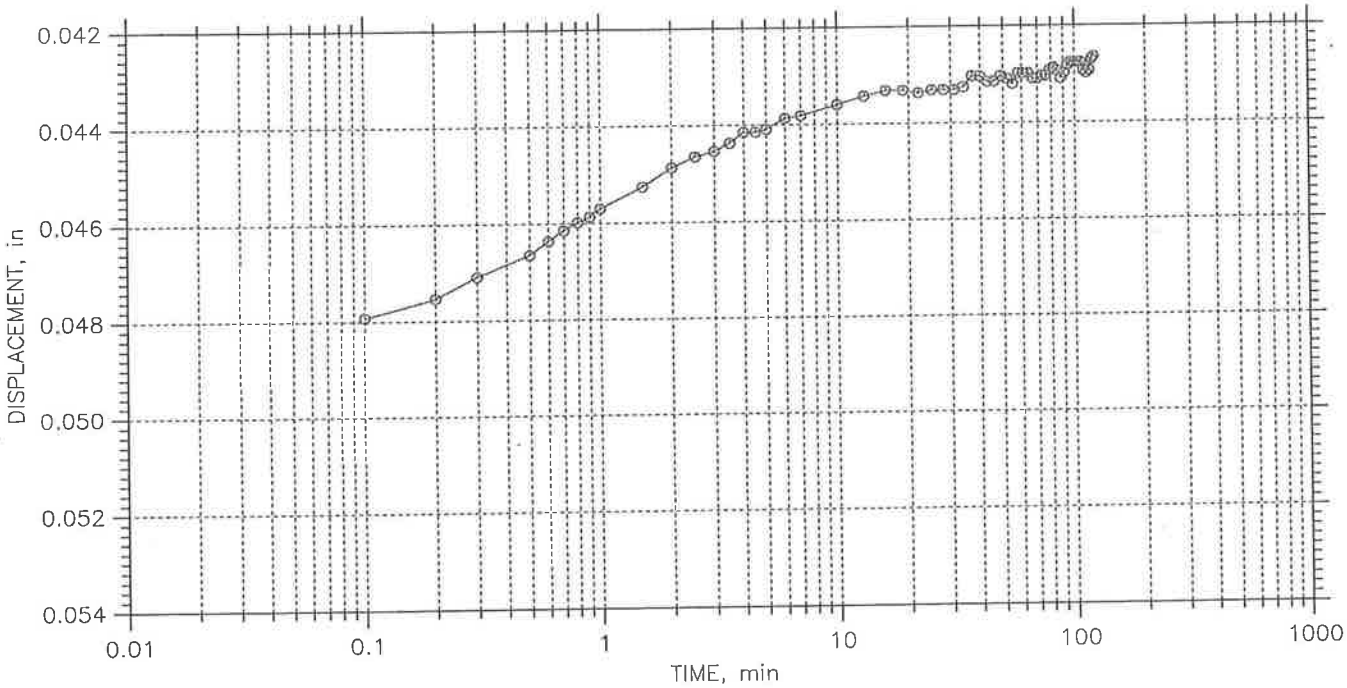
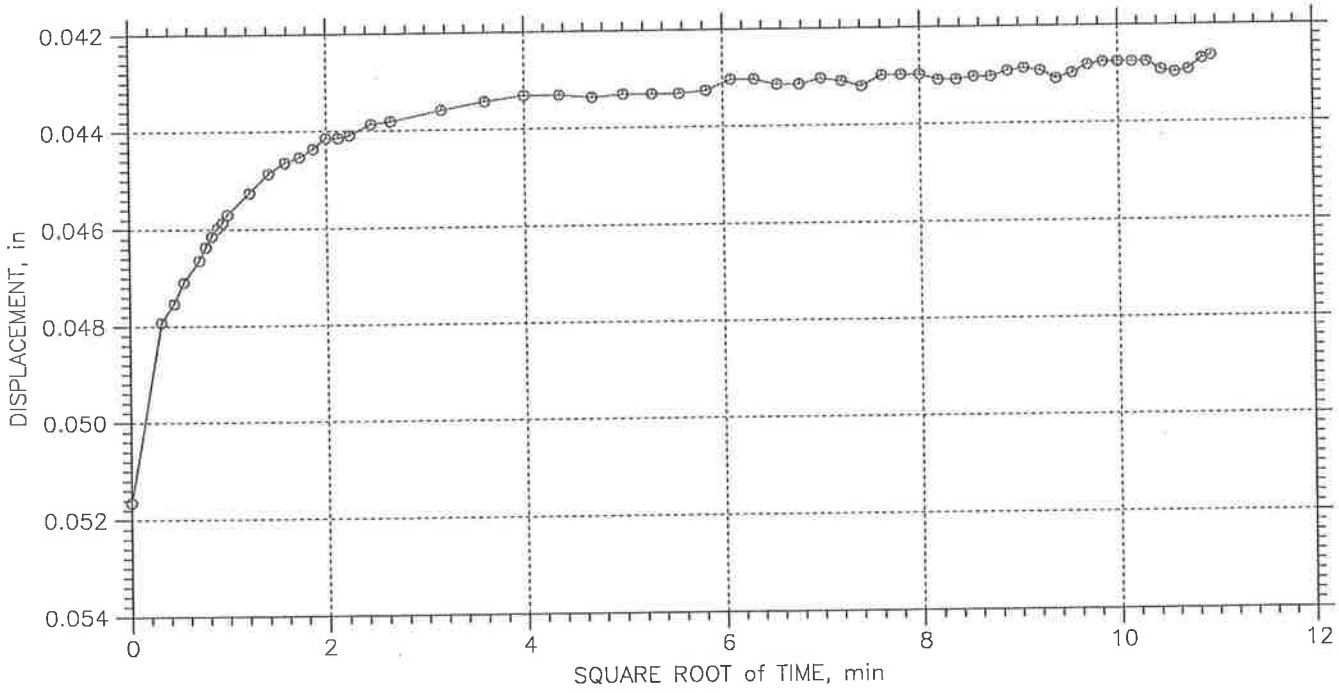
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 2 of 14

Stress: 500. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JB
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

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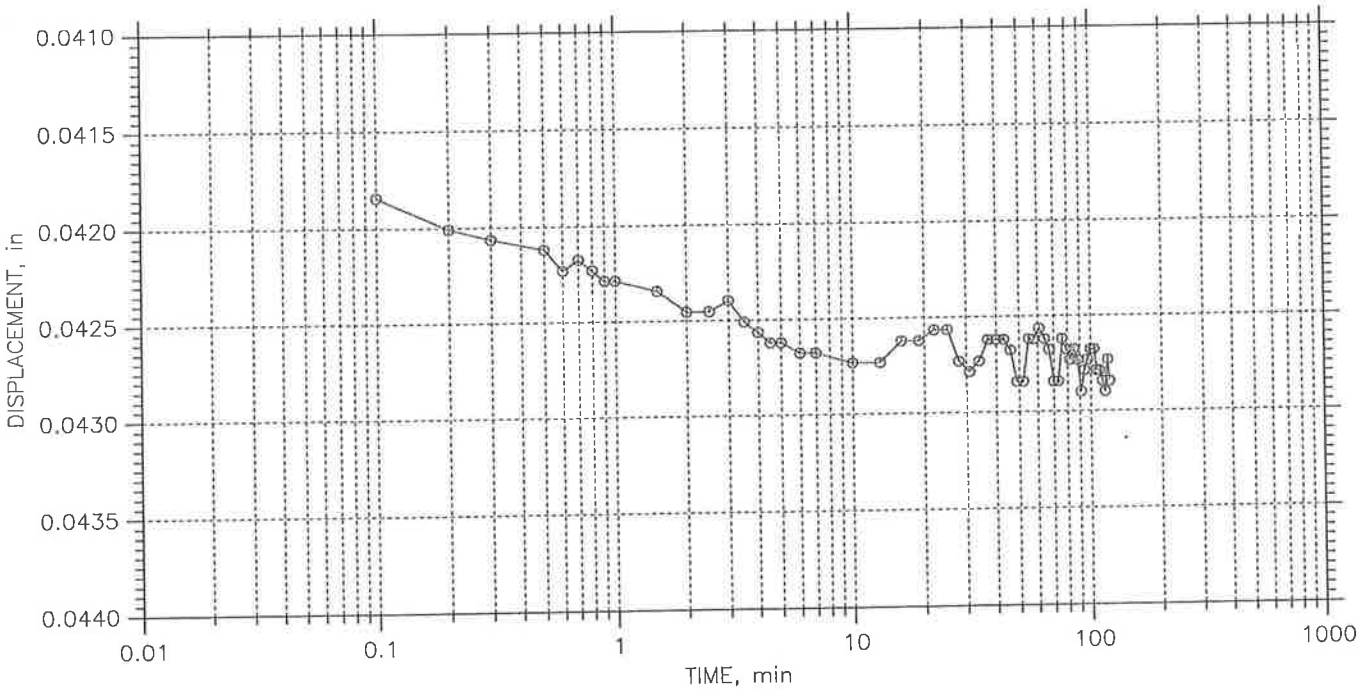
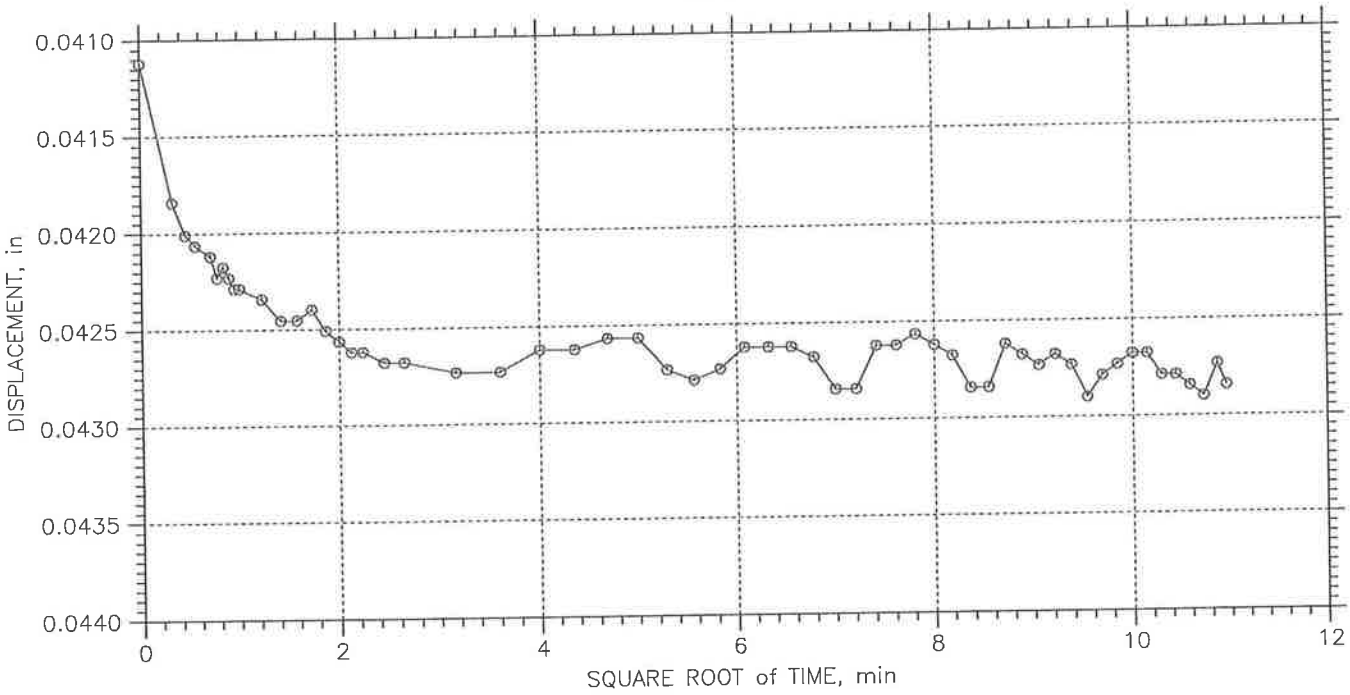
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 14

Stress: 1000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JB
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

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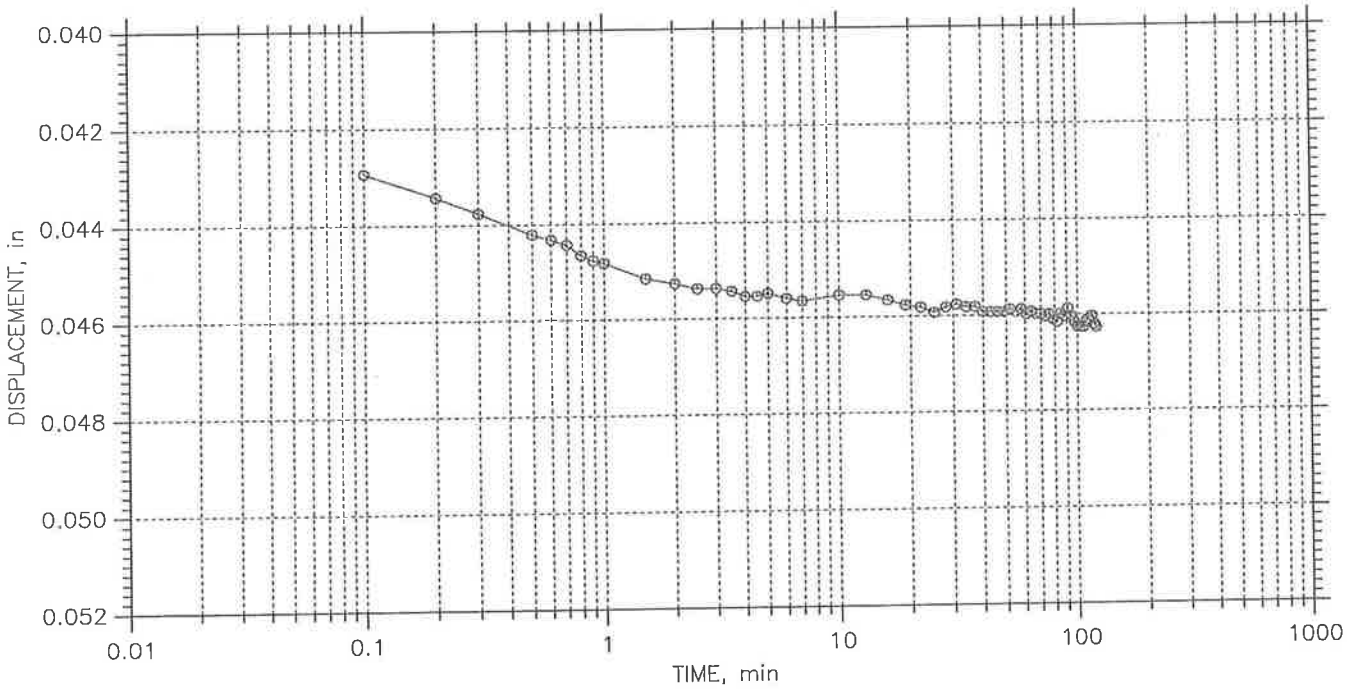
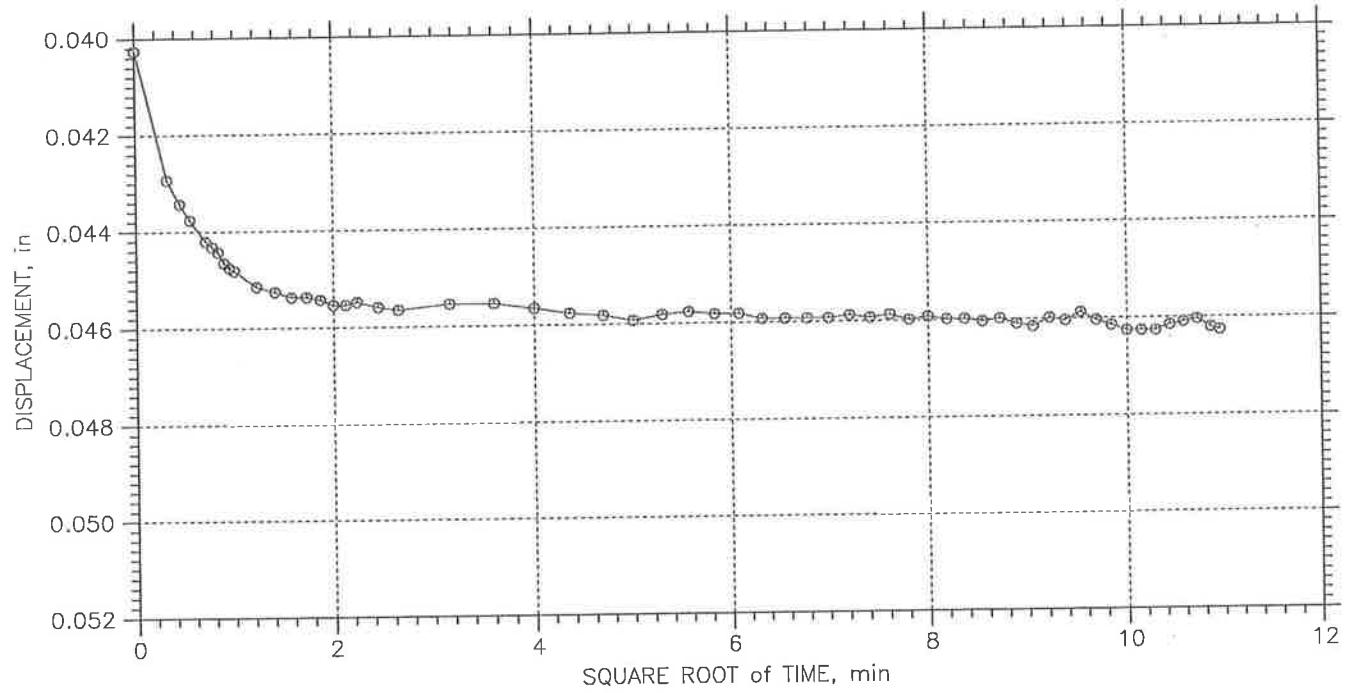
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 14

Stress: 2000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: SB
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

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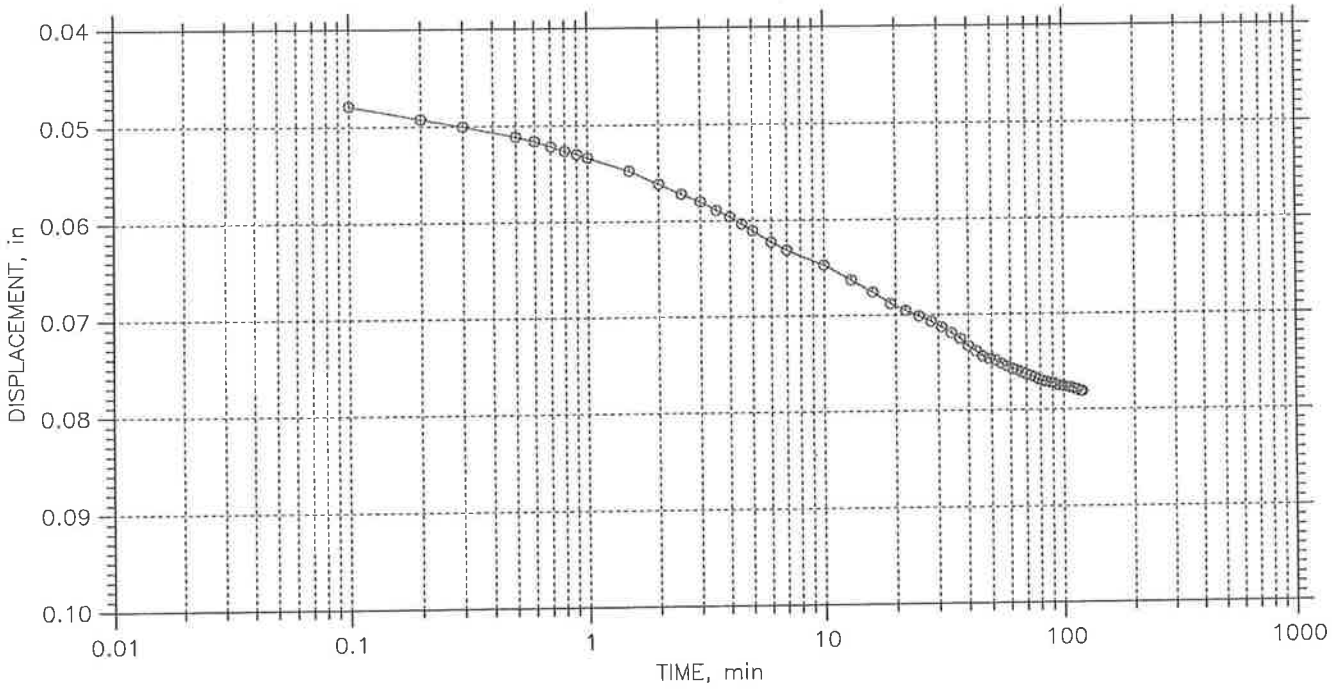
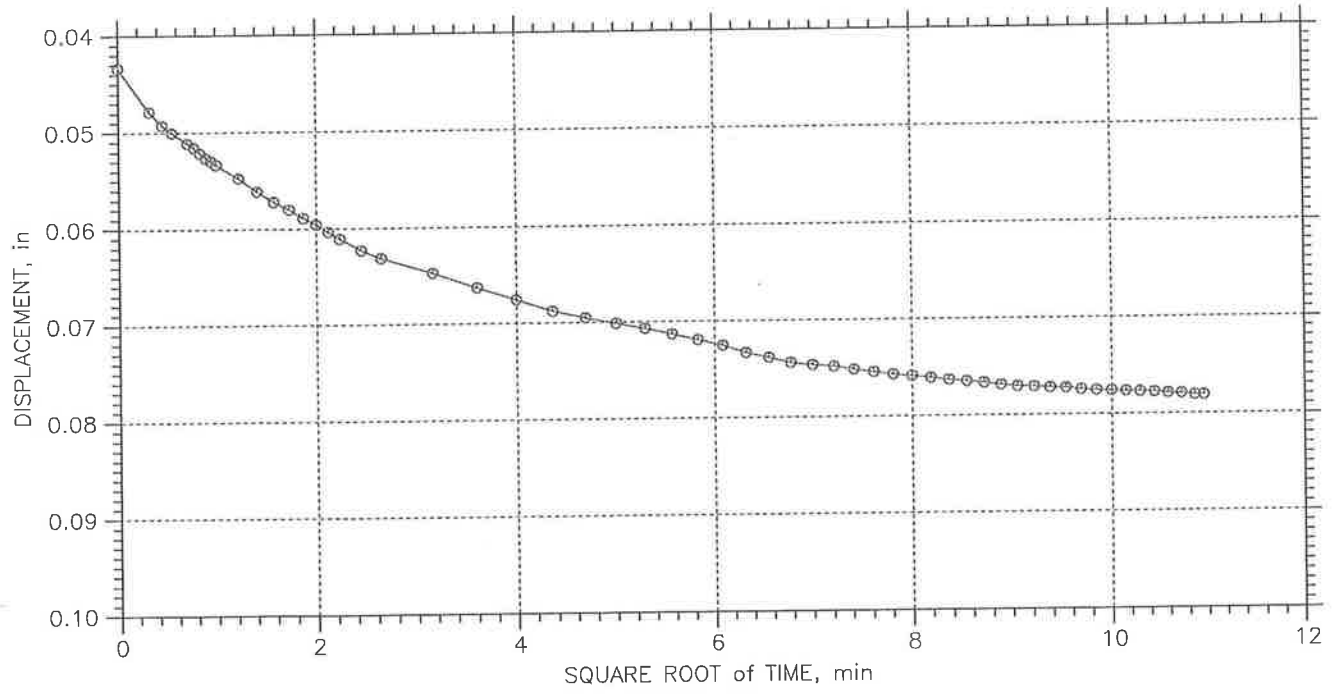
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 14

Stress: 4000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JSB
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

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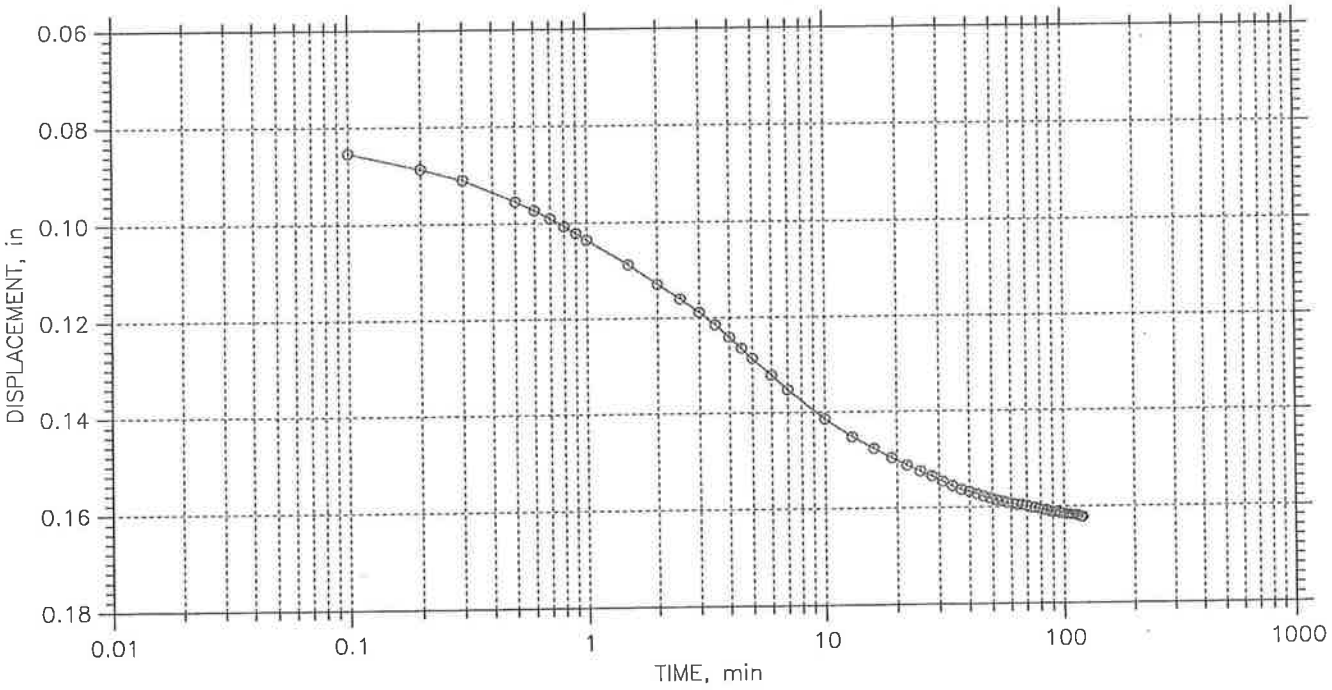
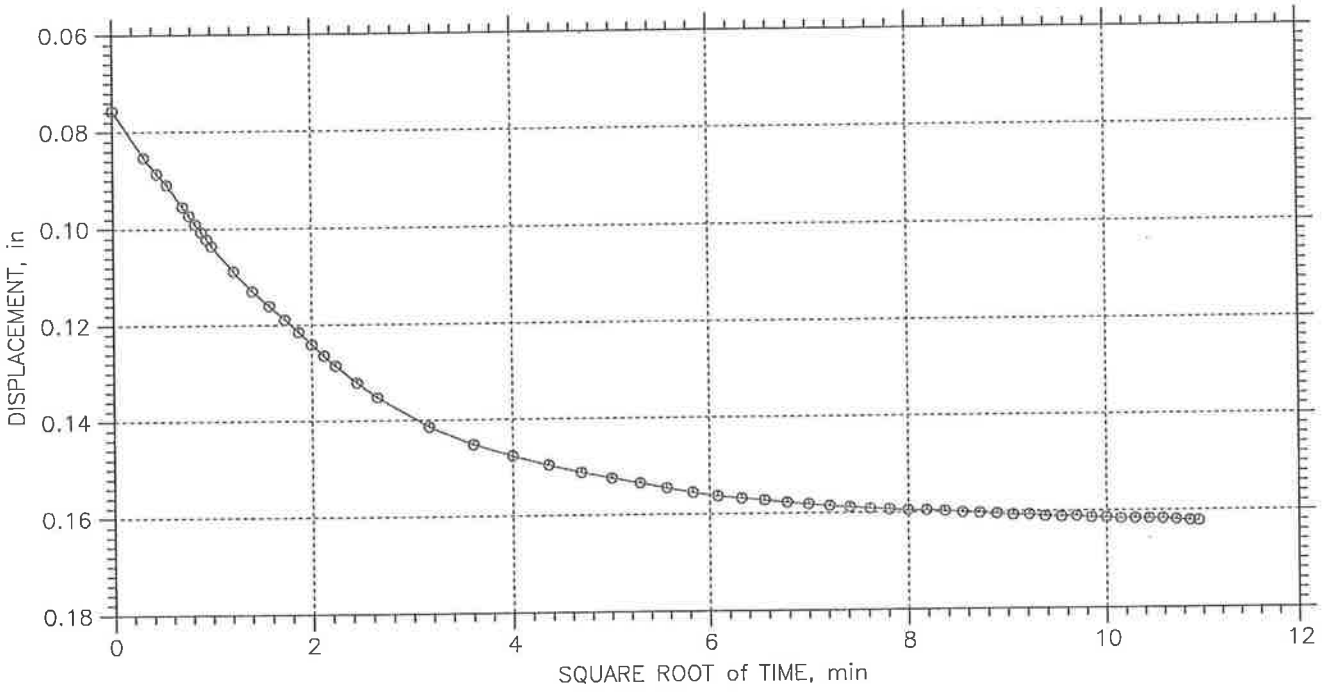
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 14

Stress: 8000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JB
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

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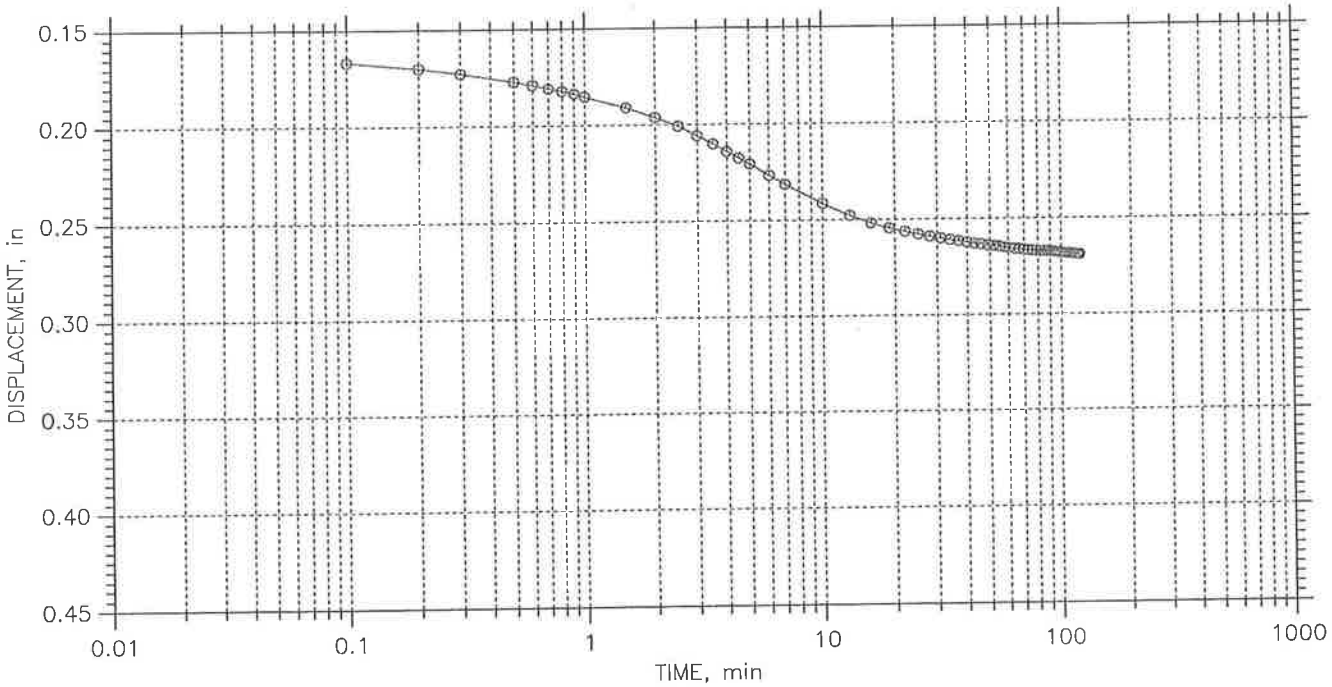
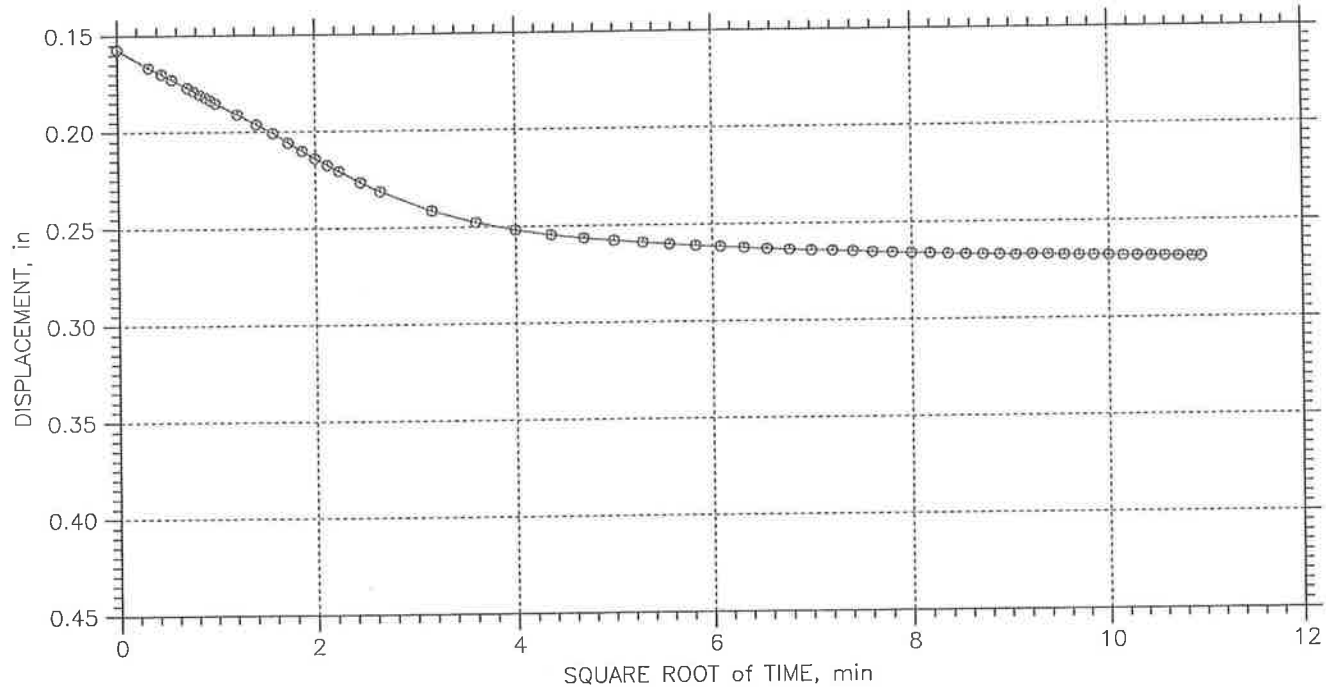
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 14

Stress: 16000 psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: SB
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

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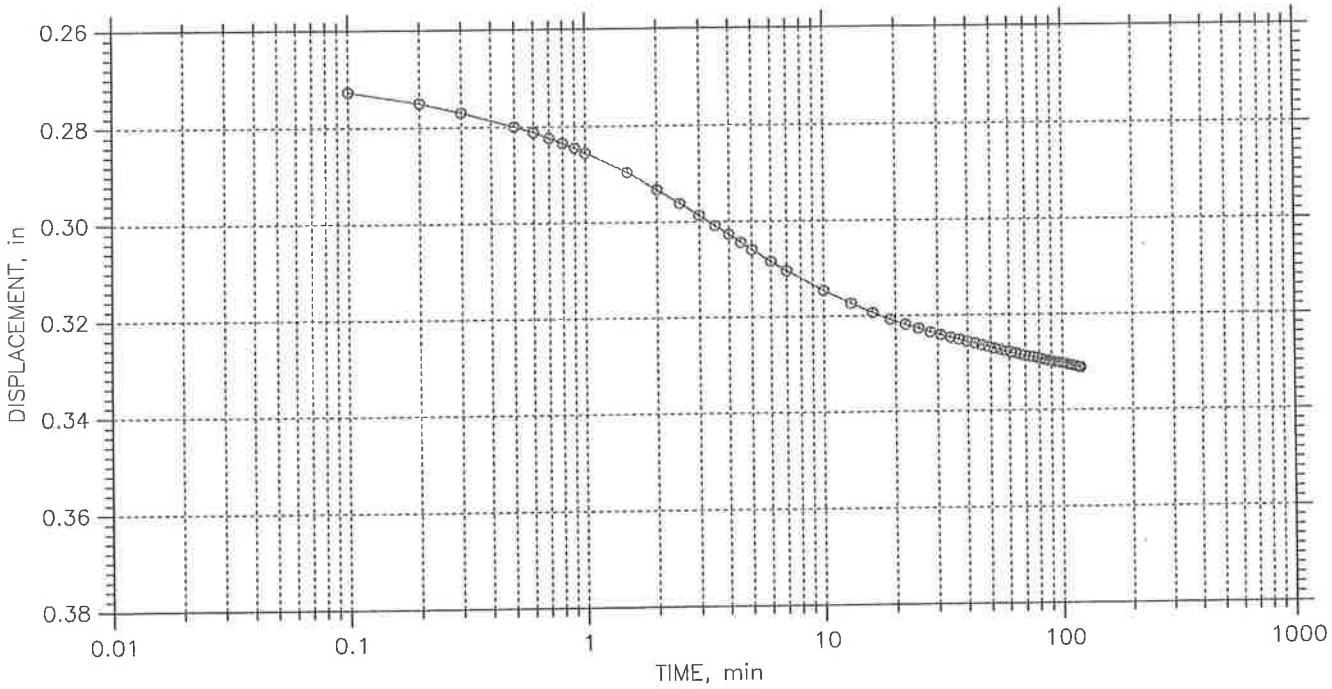
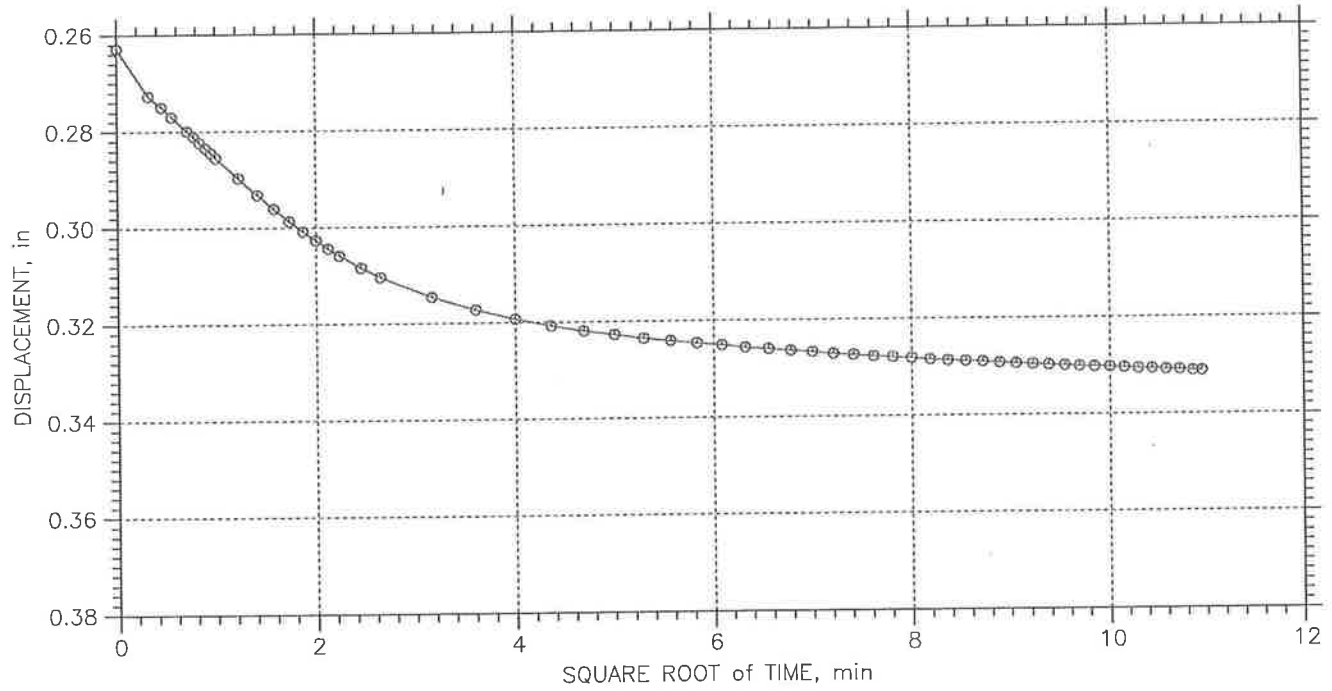
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 14

Stress: 32000 psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JB
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

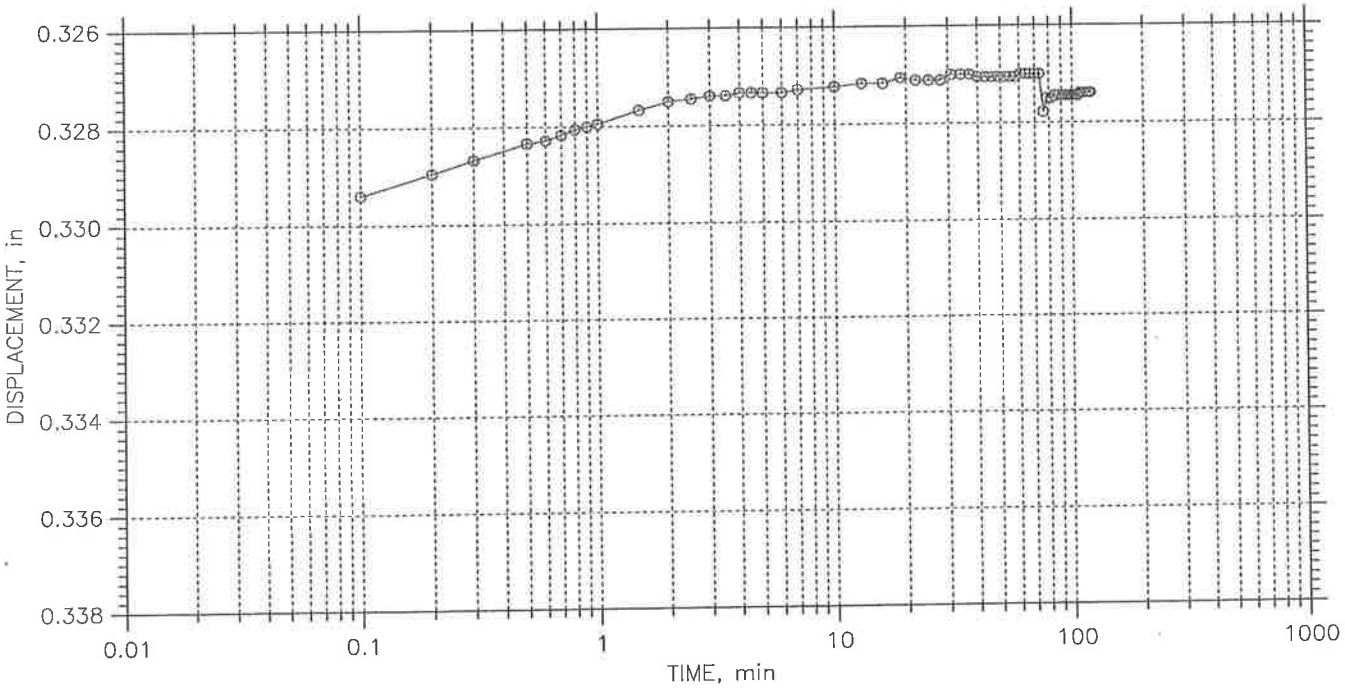
Mon, 09-AUG-2010 11:56:32

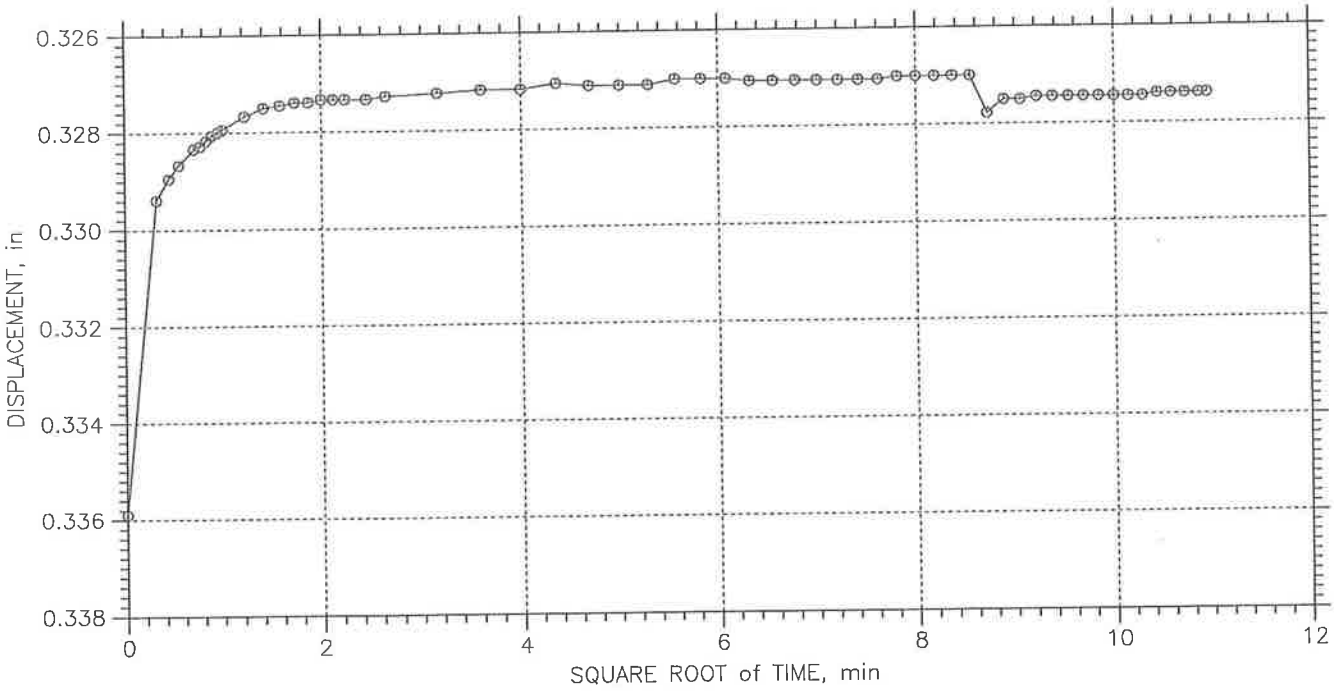
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 14

Stress: 16000 psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: SB
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

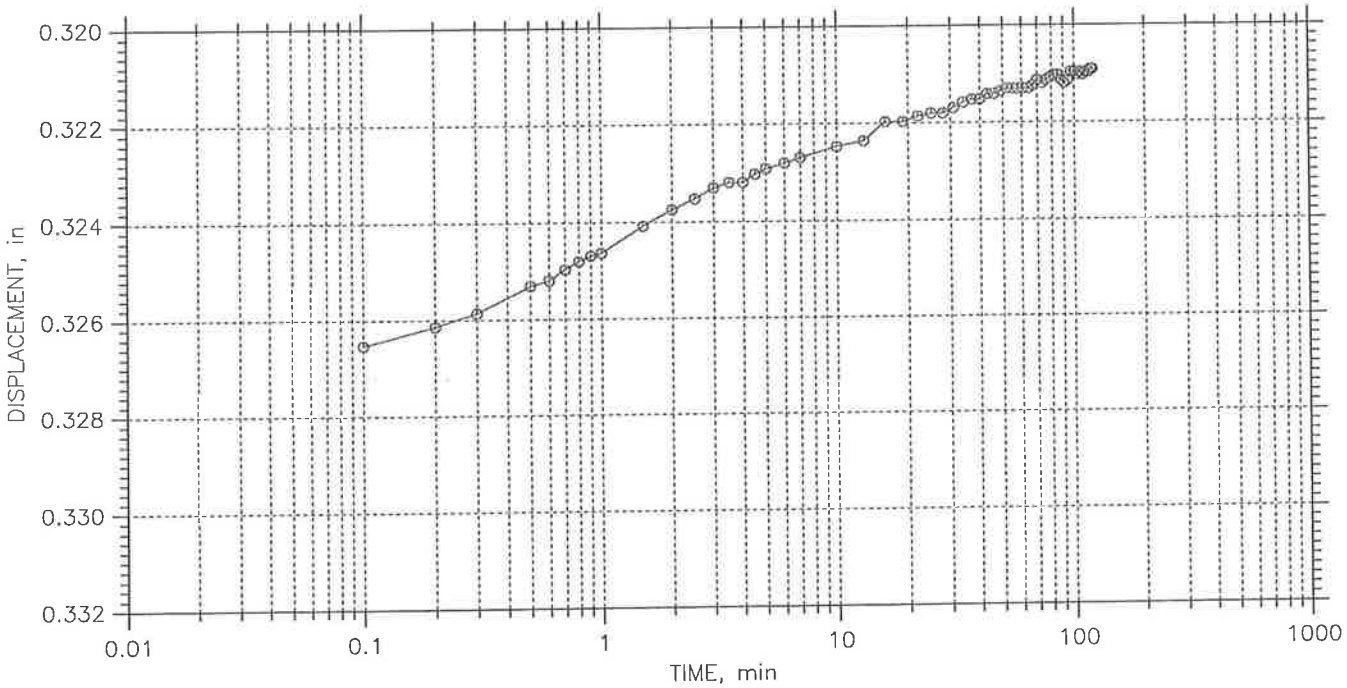
Mon, 09-AUG-2010 11:56:34

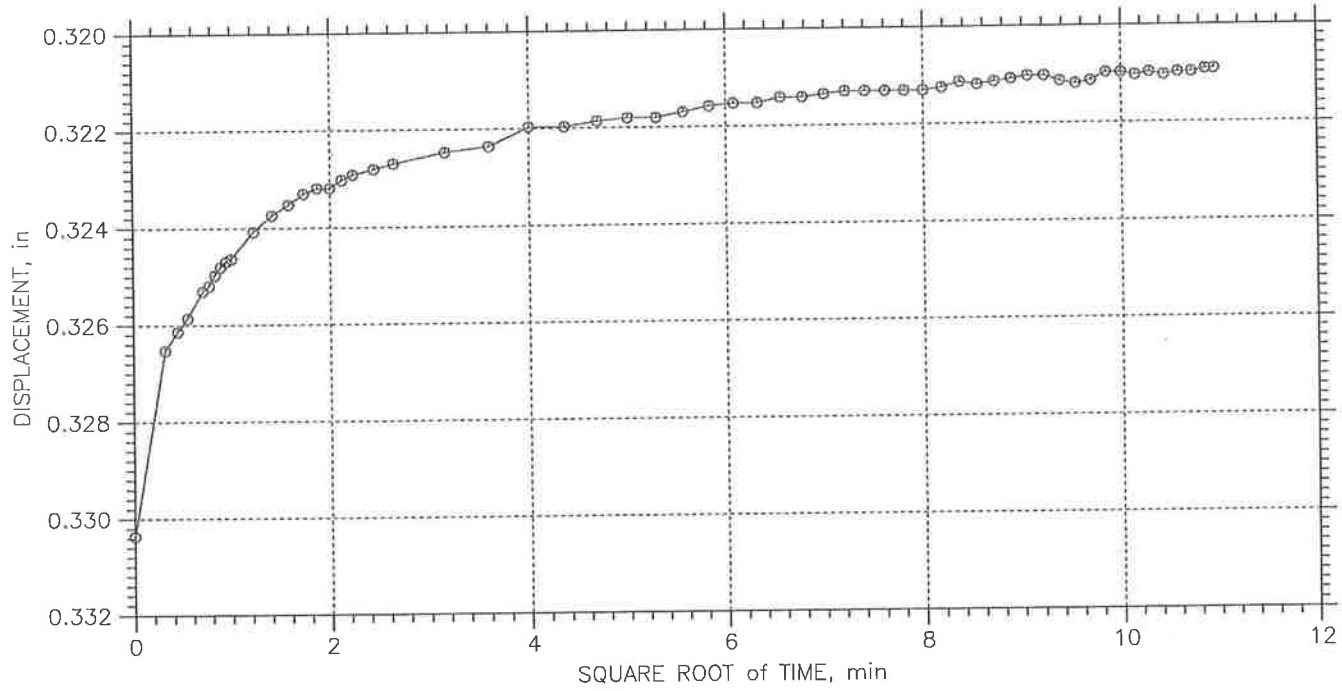
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 14

Stress: 8000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By:
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

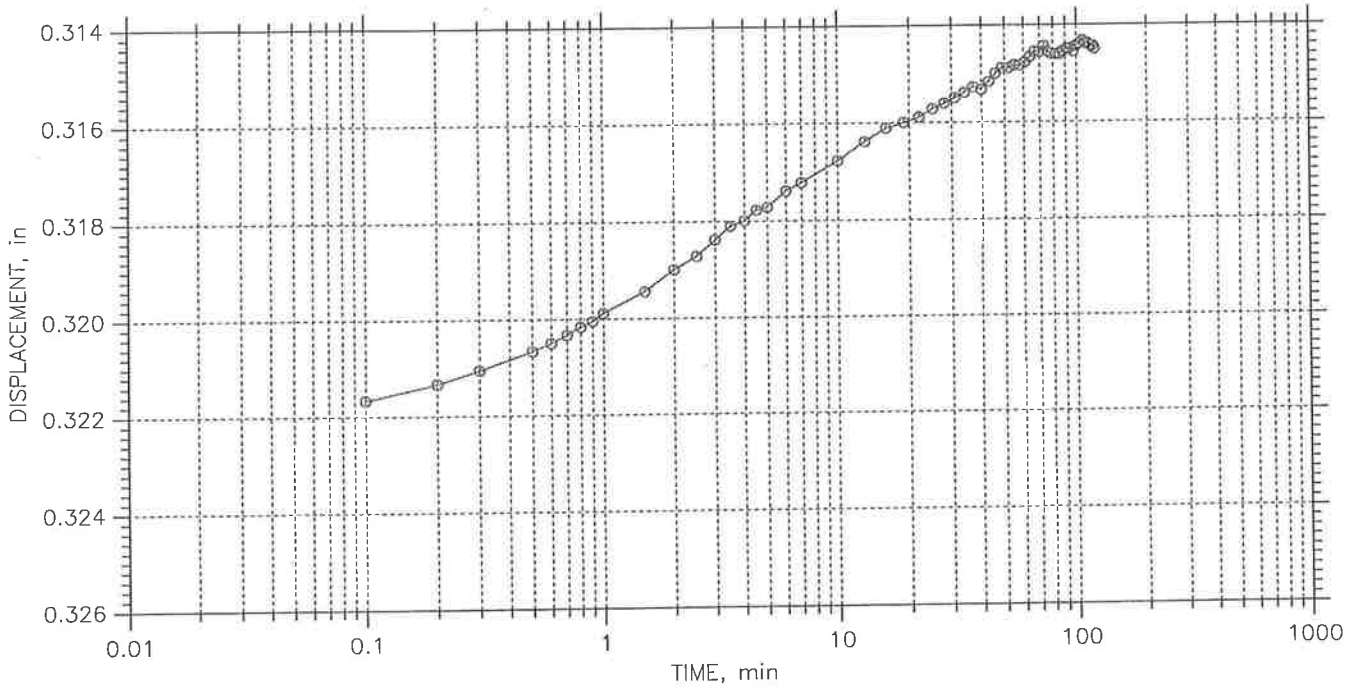
Mon, 09-AUG-2010 11:56:36

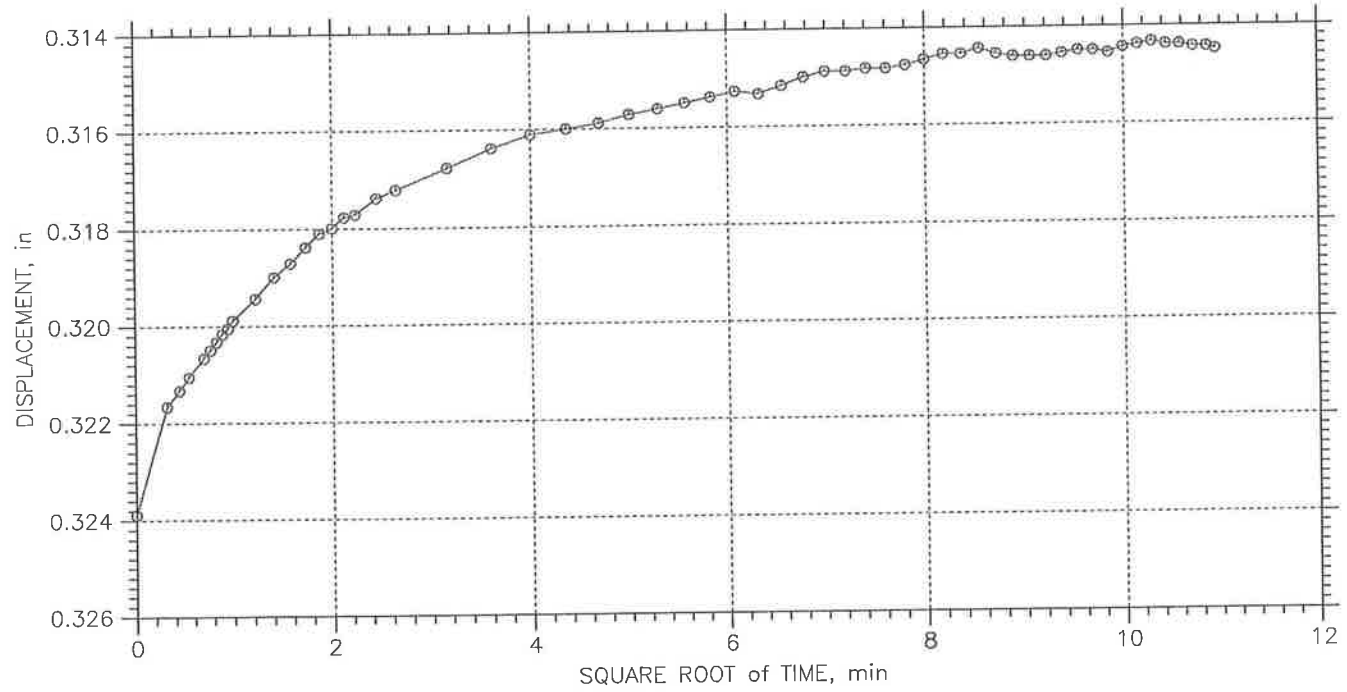
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 11 of 14

Stress: 4000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: SB
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

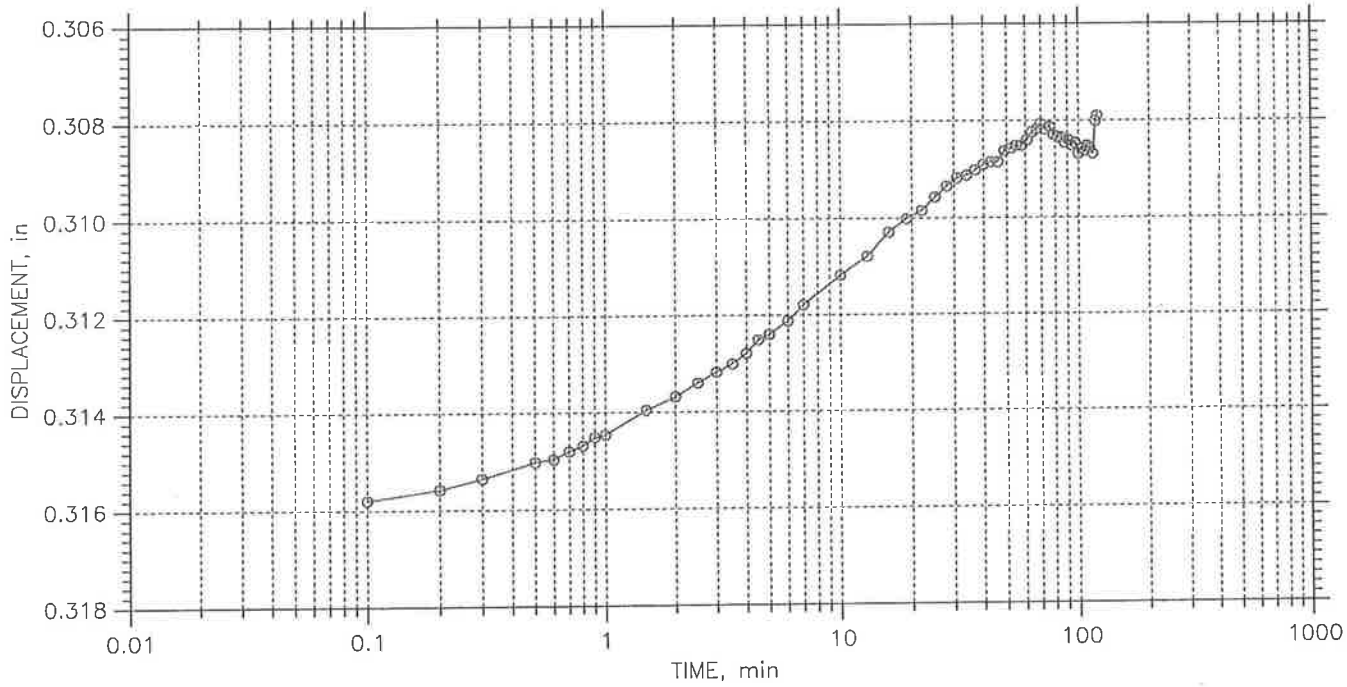
Mon, 09-AUG-2010 11:56:38

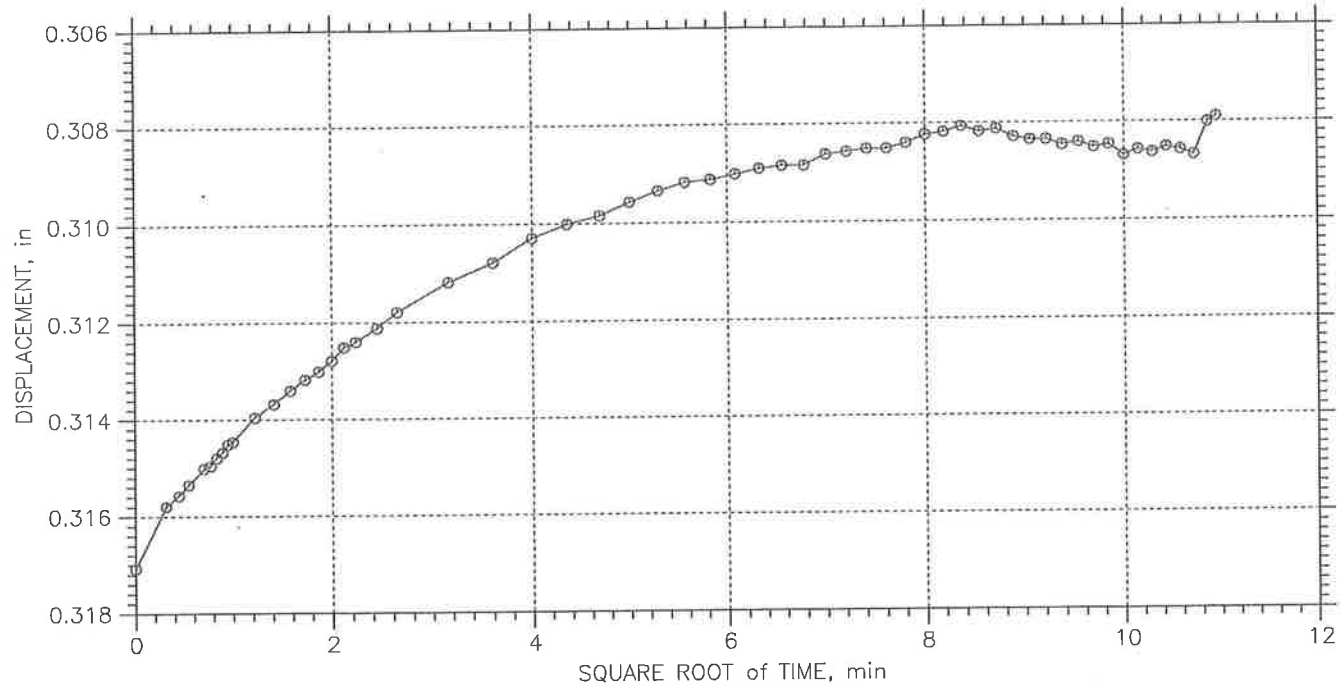
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 12 of 14

Stress: 2000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: SB
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

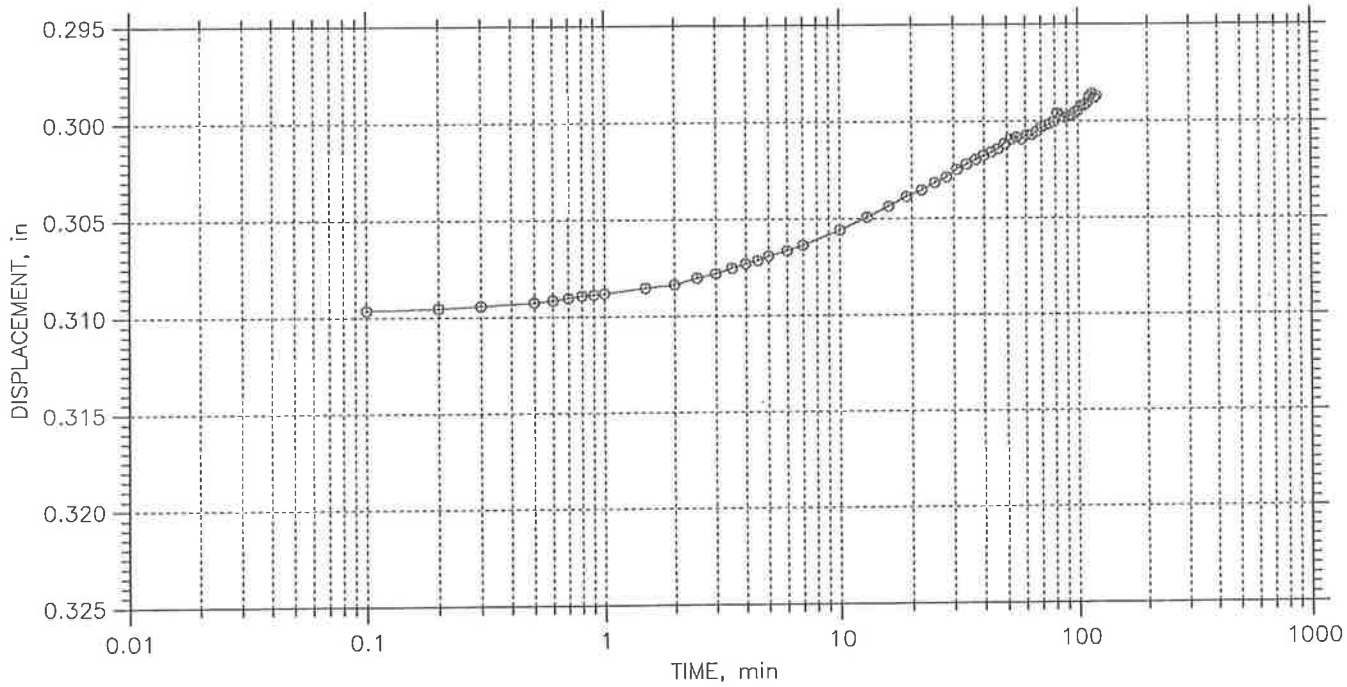
Mon, 09-AUG-2010 11:56:40

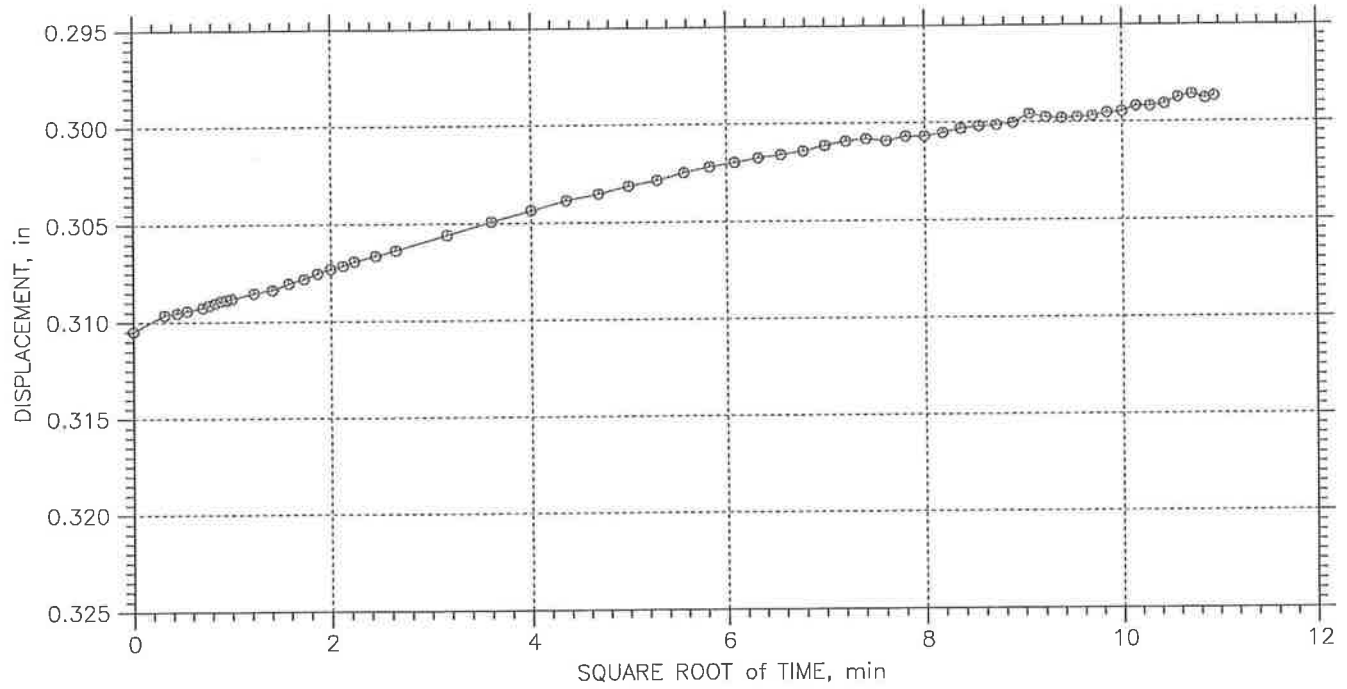
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 13 of 14

Stress: 1000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: SB
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

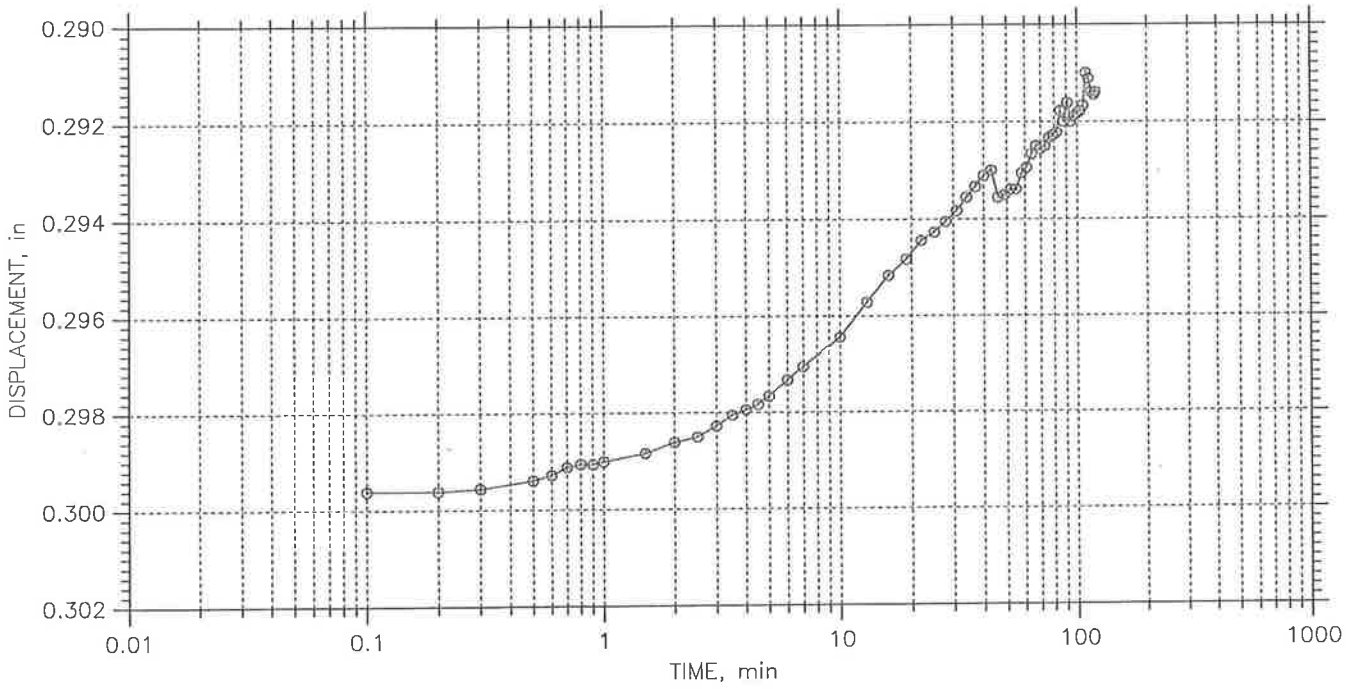
Mon, 09-AUG-2010 11:56:42

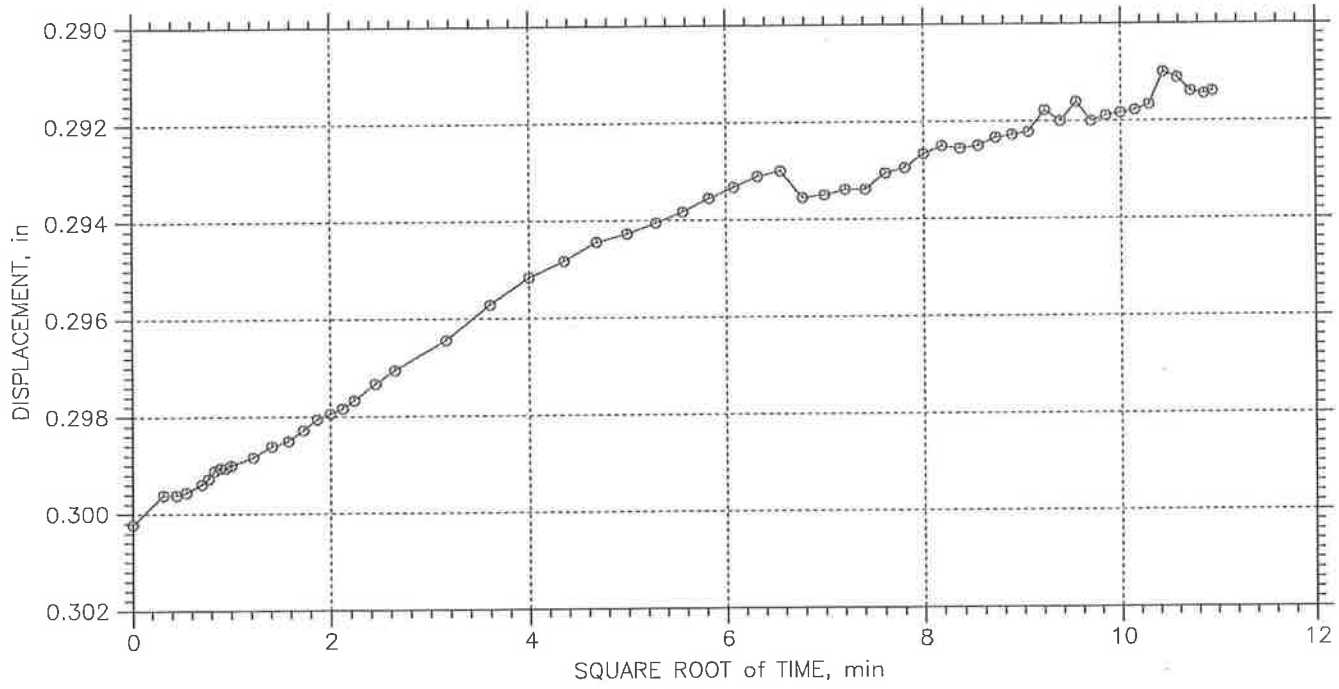
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 14 of 14

Stress: 500. psf



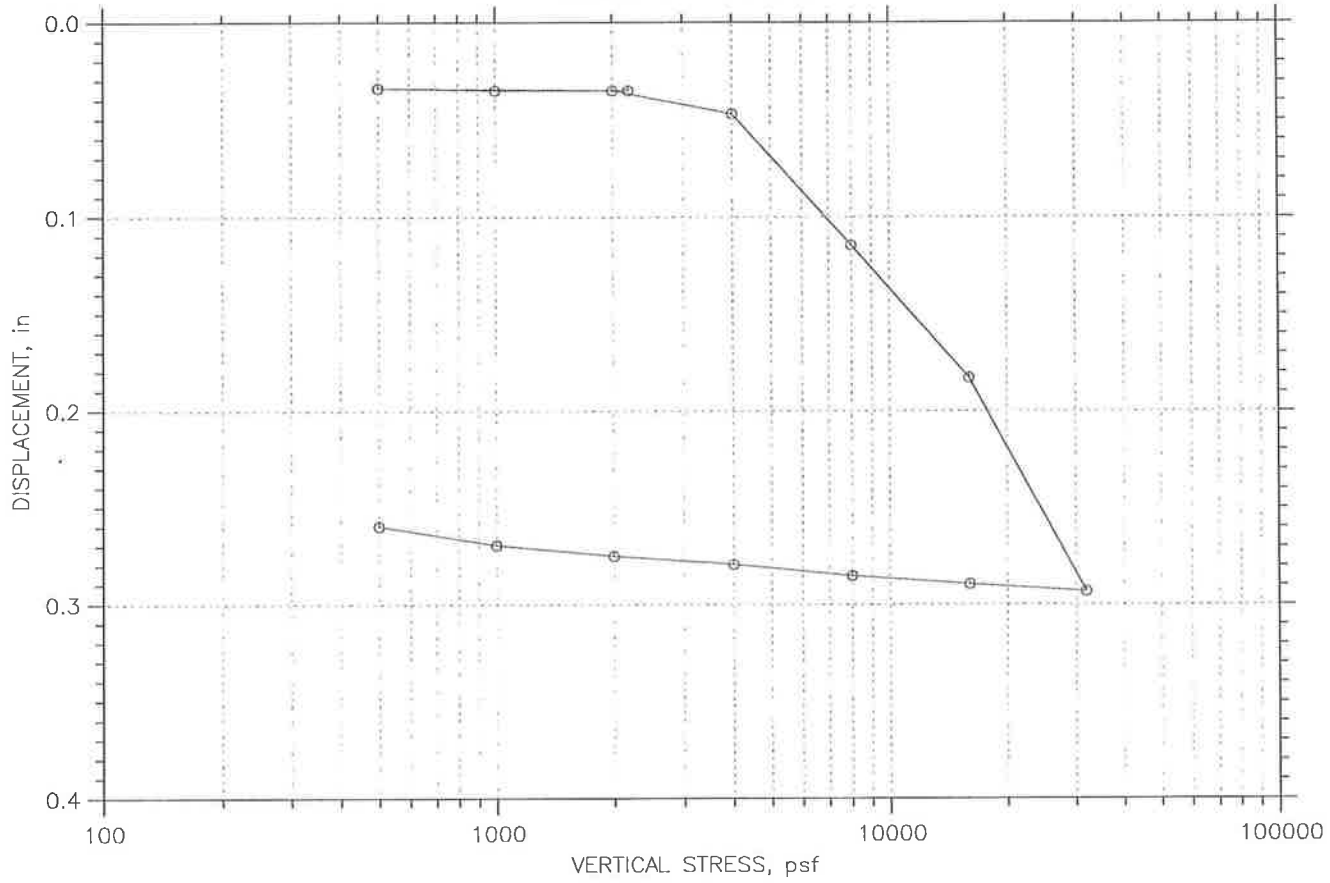


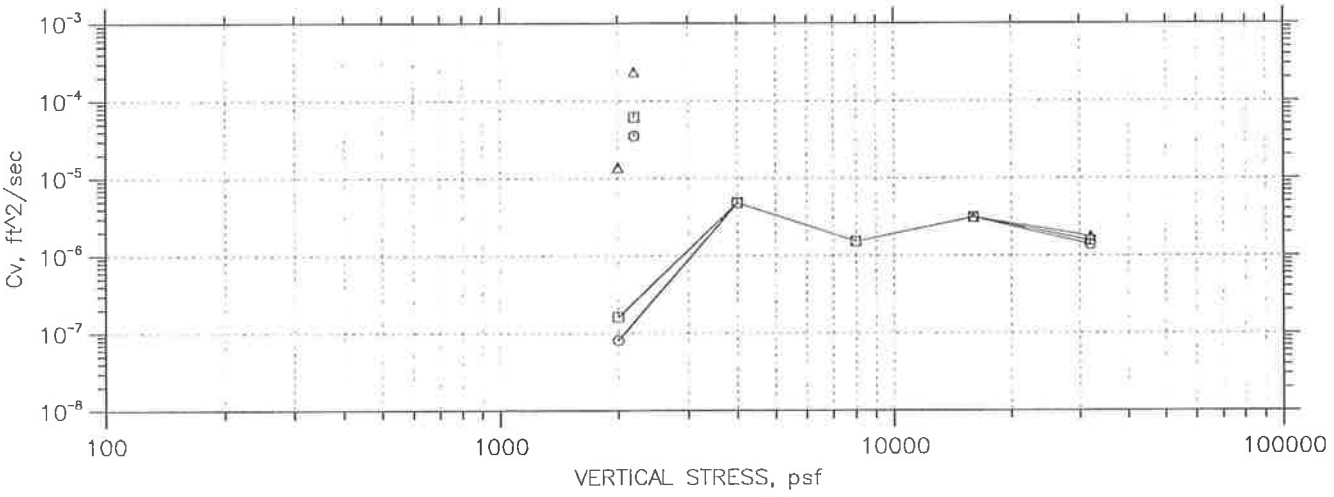
Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By:
Sample No.: 10-562	Test Date: 7/5/10	Depth: 45-47'
Test No.: 10-562	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2700 PSF Preload		

Mon, 09-AUG-2010 11:56:44

CONSOLIDATION TEST DATA

SUMMARY REPORT



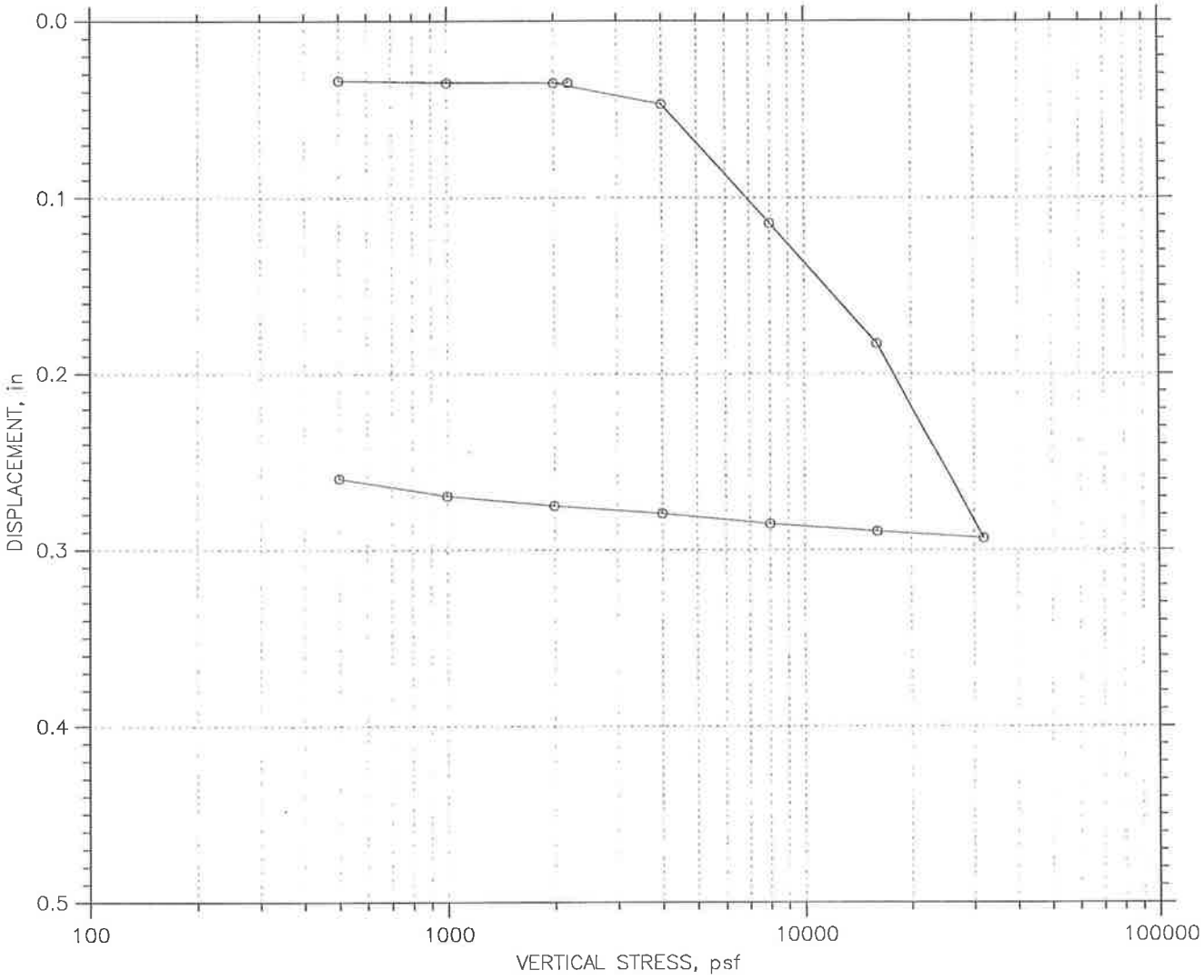


Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: SB
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

Wed, 15-SEP-2010 15:41:03

CONSOLIDATION TEST DATA

SUMMARY REPORT



					Before Test	After Test
Overburden Pressure, psf:				Water Content, %	88.91	44.64
Preconsolidation Pressure, psf:				Dry Unit Weight, pcf	51.354	69.353
Compression Index:				Saturation, %	106.06	85.39
Diameter: 2.5 in		Height: 1 in		Void Ratio	2.22	1.39
LL: 0	PL: 0	PI: 0	GS: 2.65			

Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By:
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

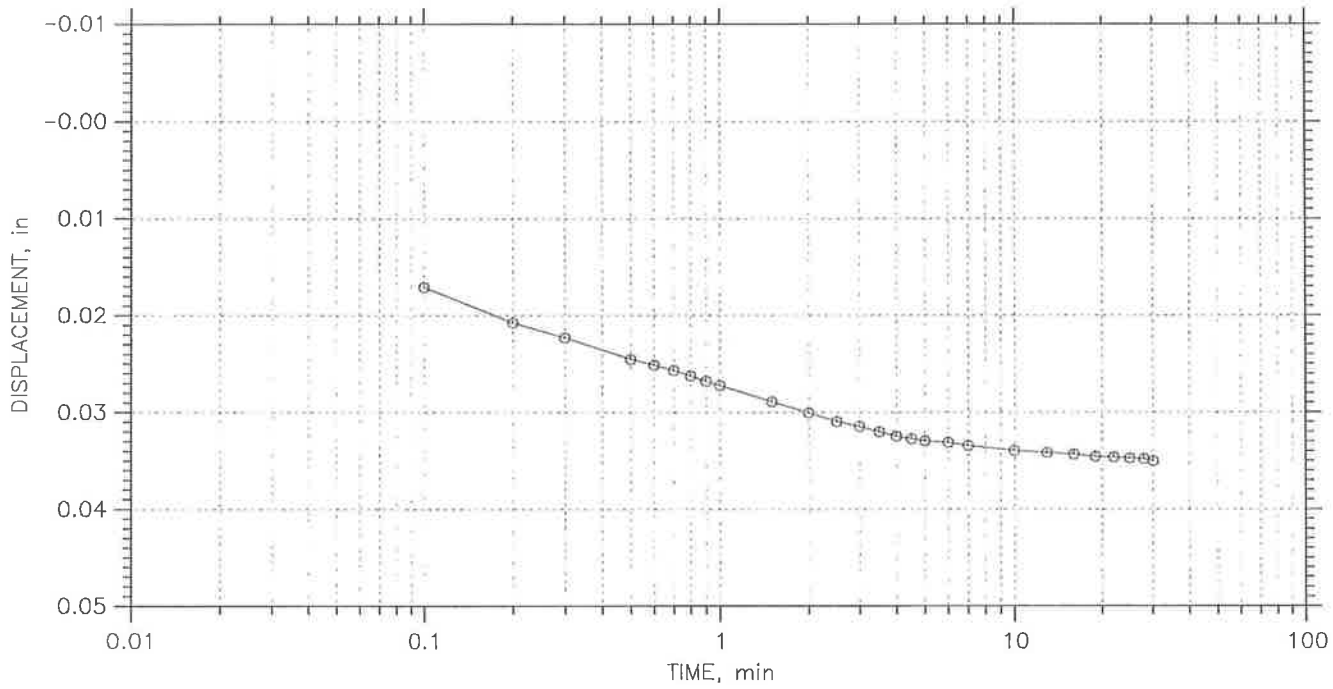
Wed, 15-SEP-2010 15:41:04

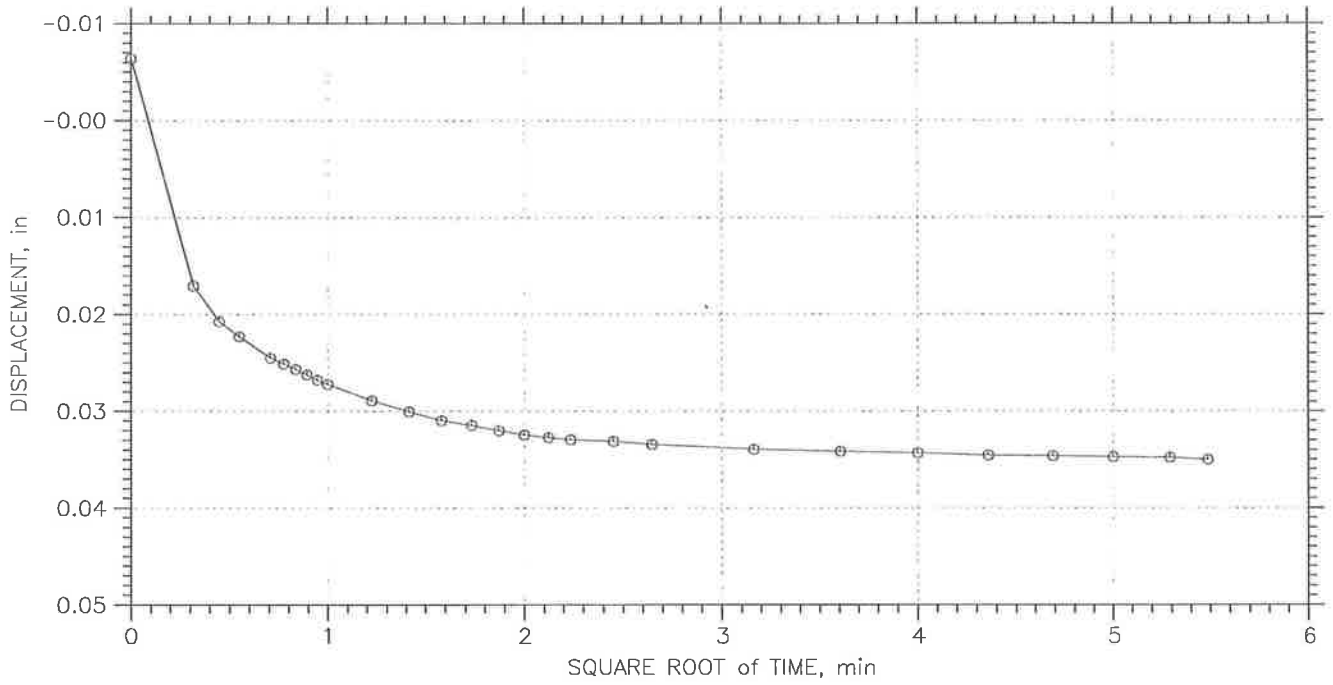
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 1 of 14

Stress: 2200. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By:
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

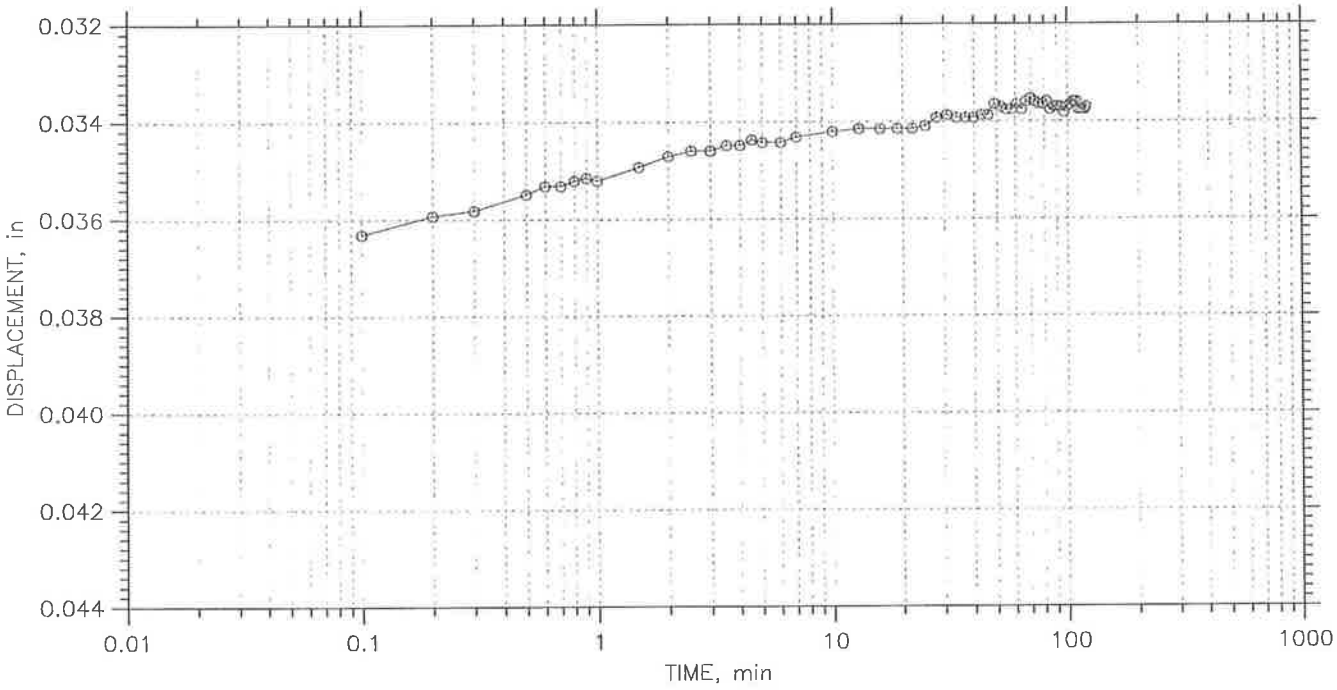
Wed, 15-SEP-2010 15:41:04

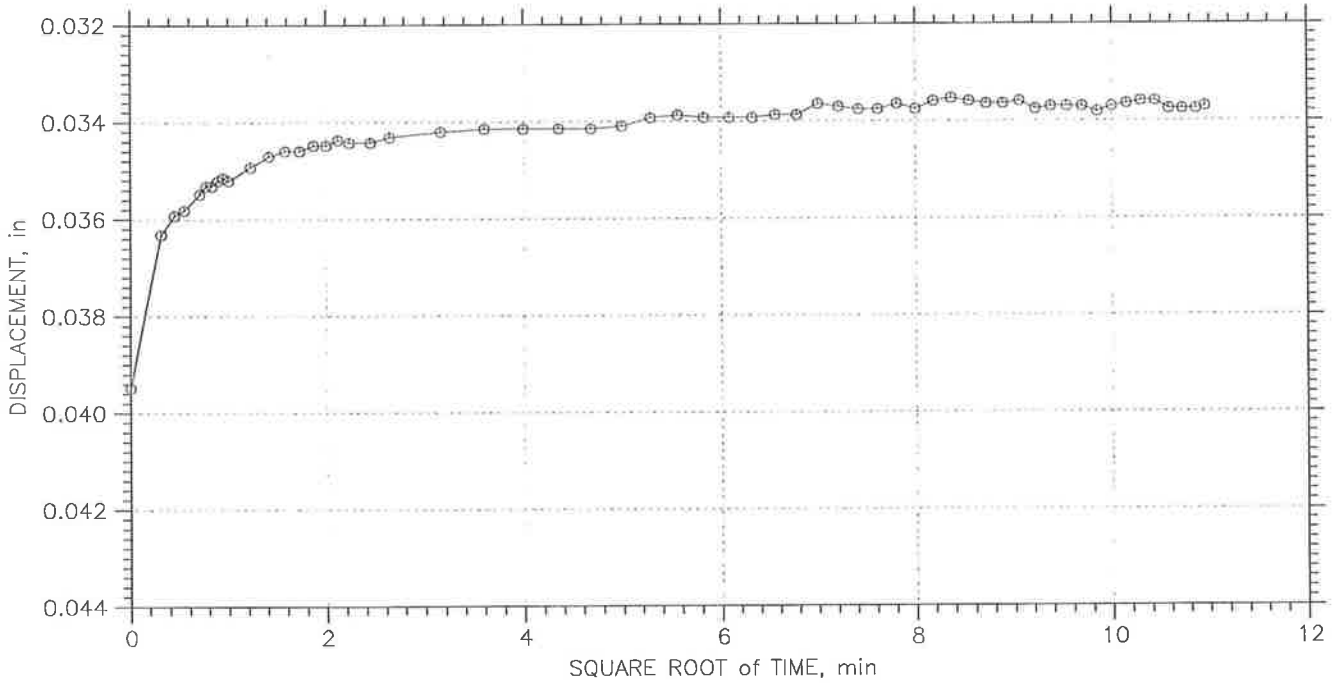
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 2 of 14

Stress: 500. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: TS
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

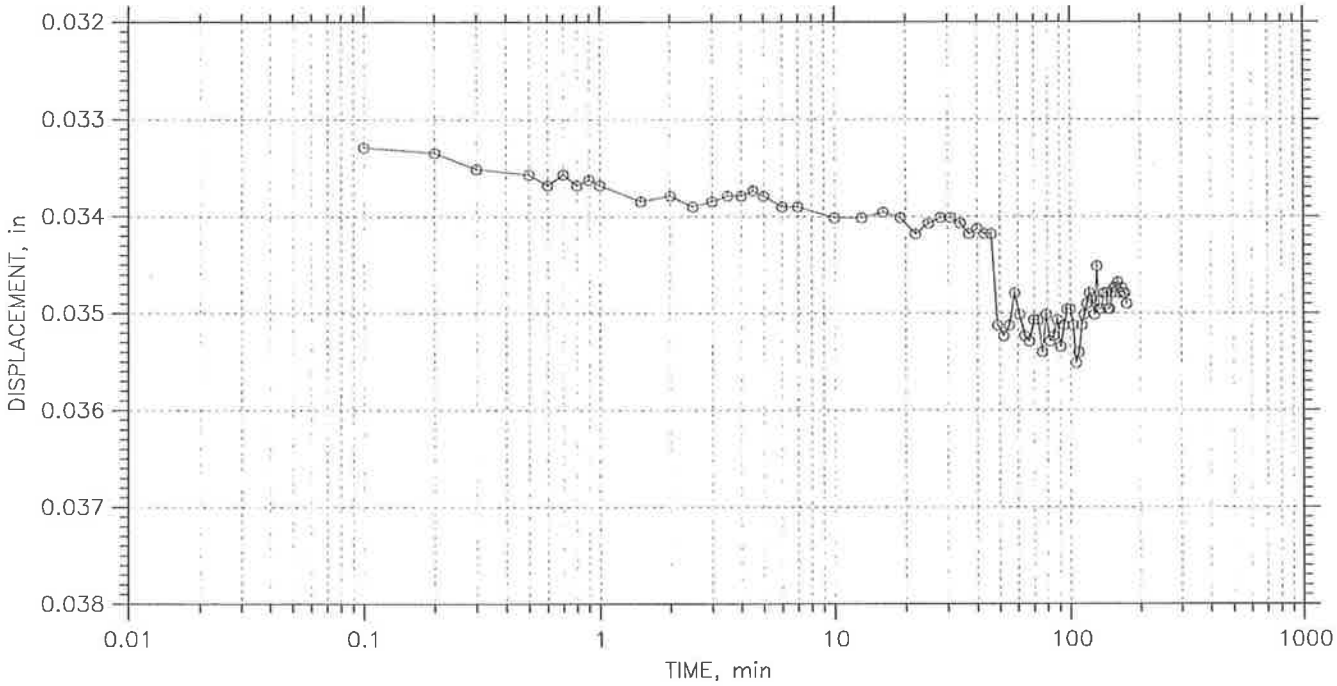
Wed, 15-SEP-2010 15:41:05

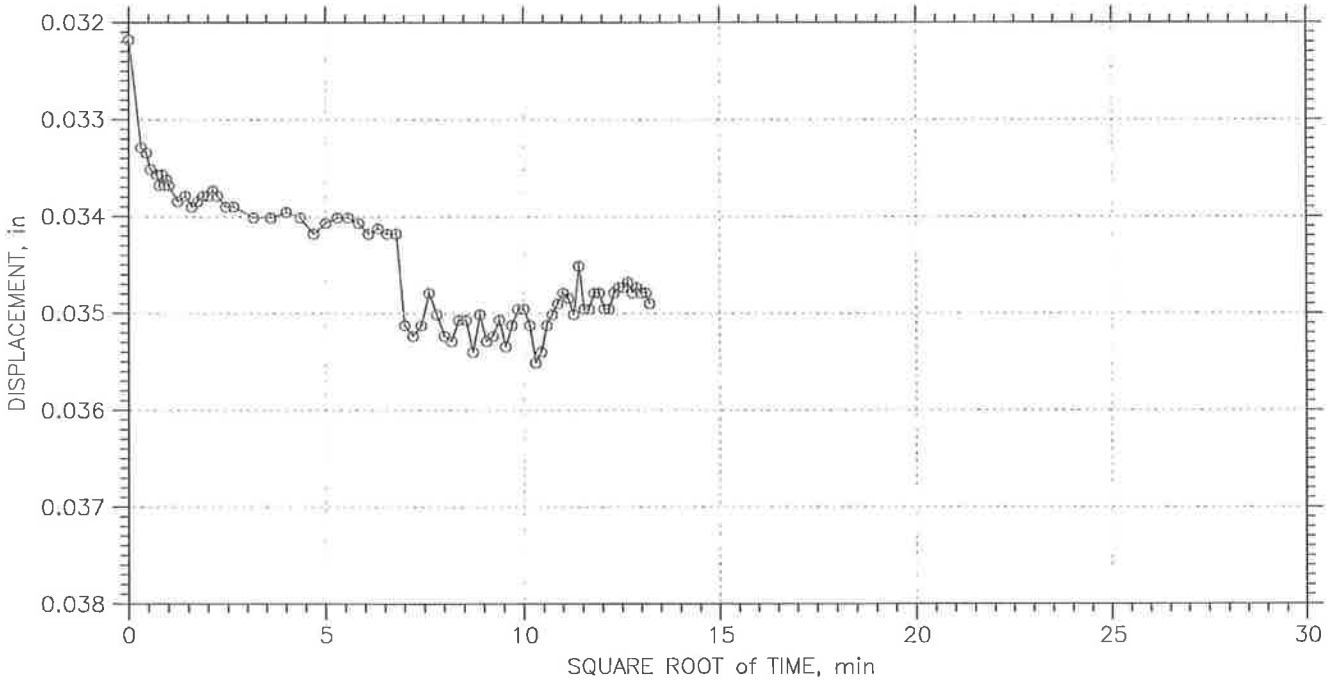
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 14

Stress: 1000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JB
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

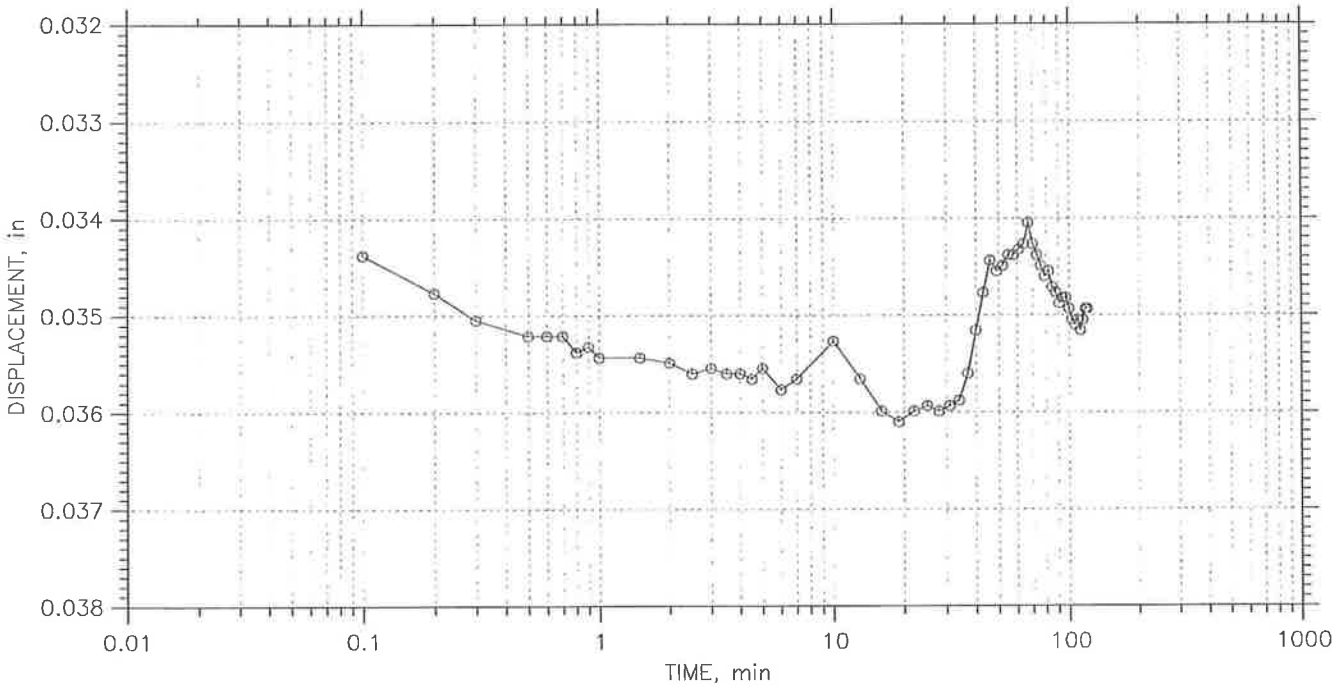
Wed, 15-SEP-2010 15:41:05

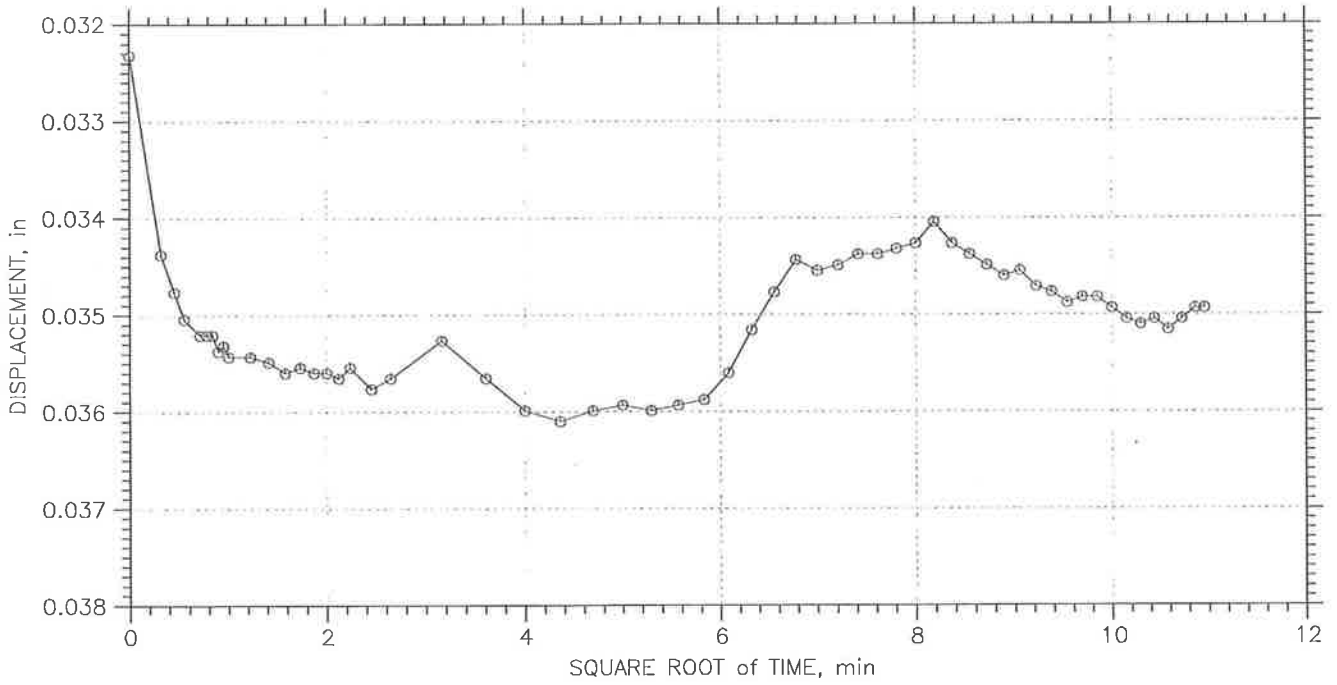
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 14

Stress: 2000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: [illegible]
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

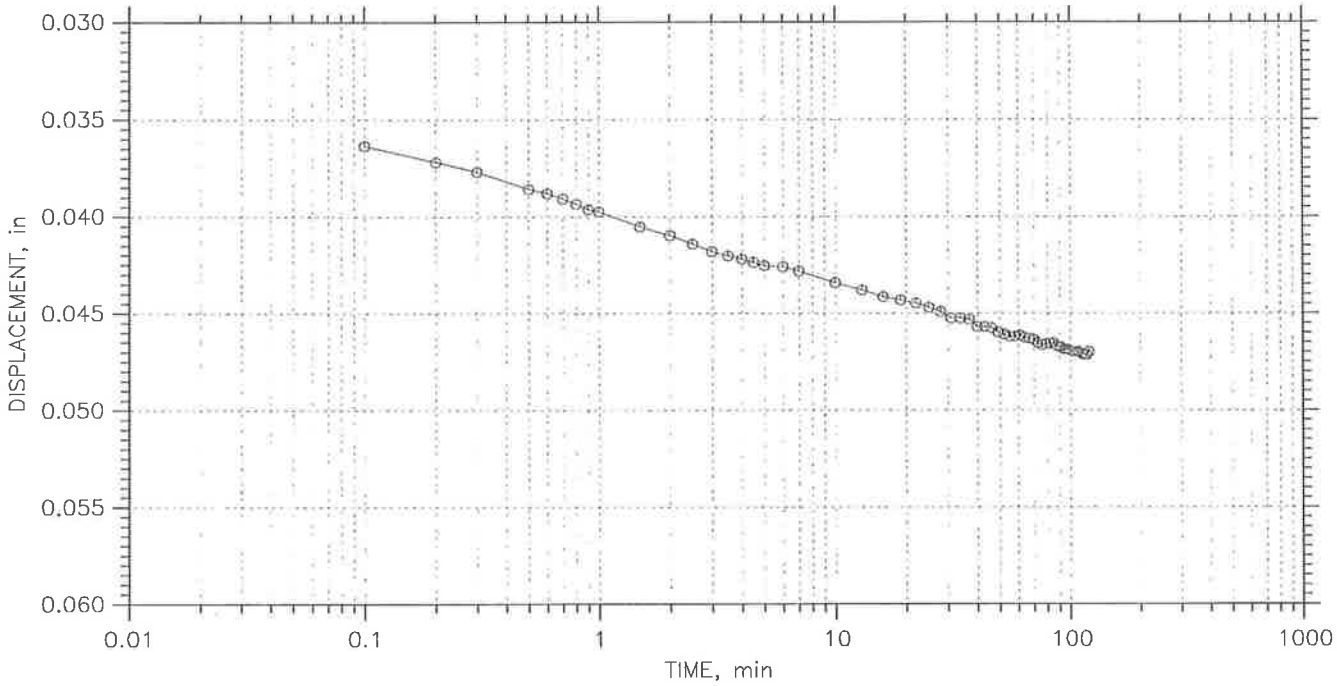
Wed, 15-SEP-2010 15:41:06

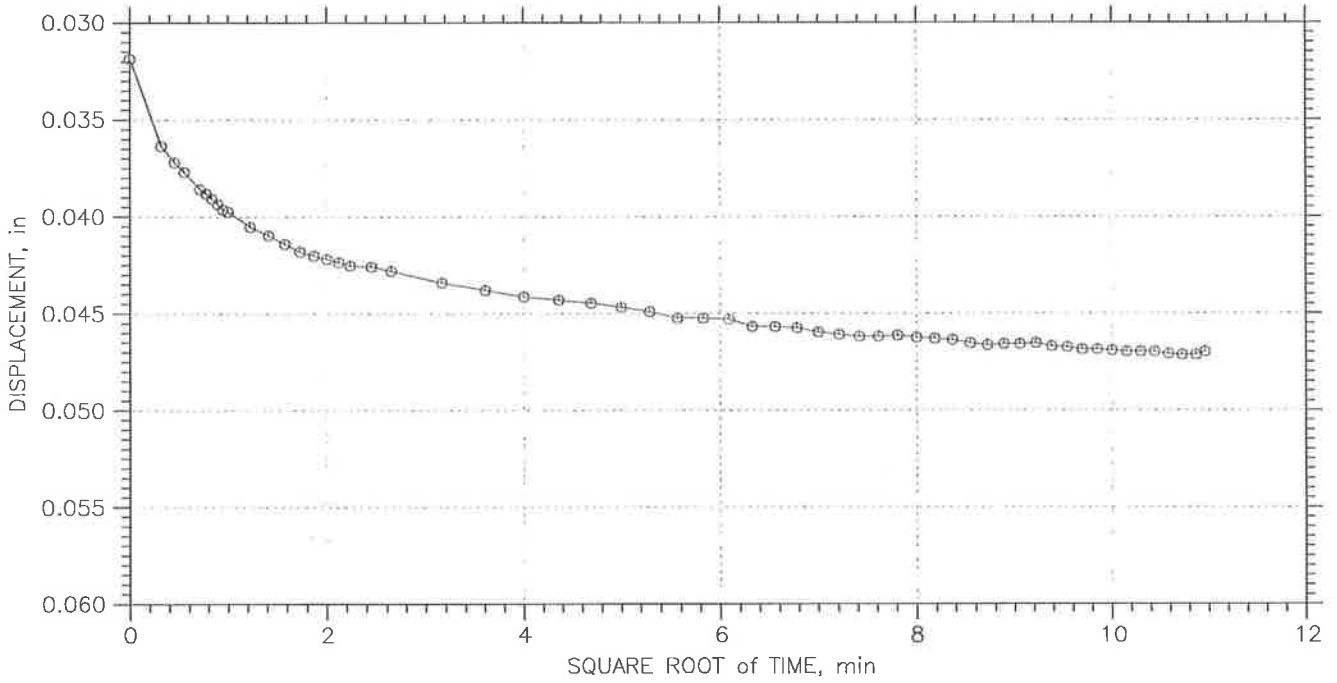
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 14

Stress: 4000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JB
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

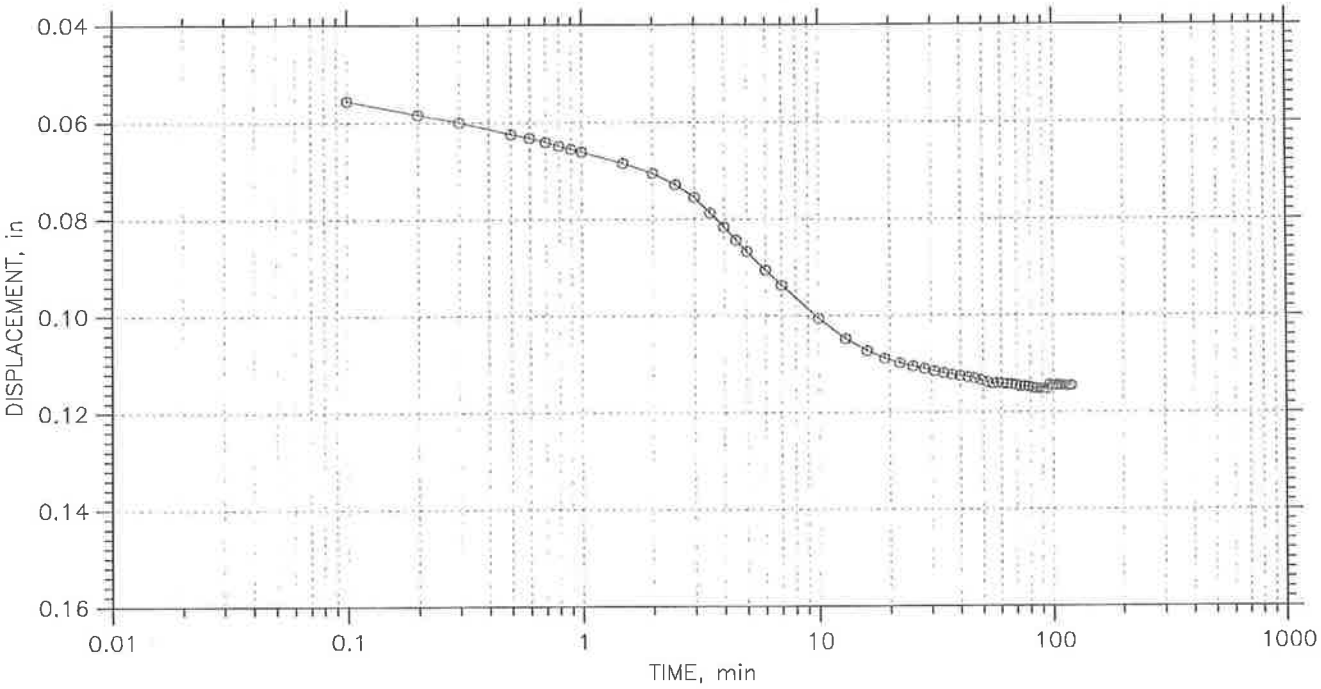
Wed, 15-SEP-2010 15:41:07

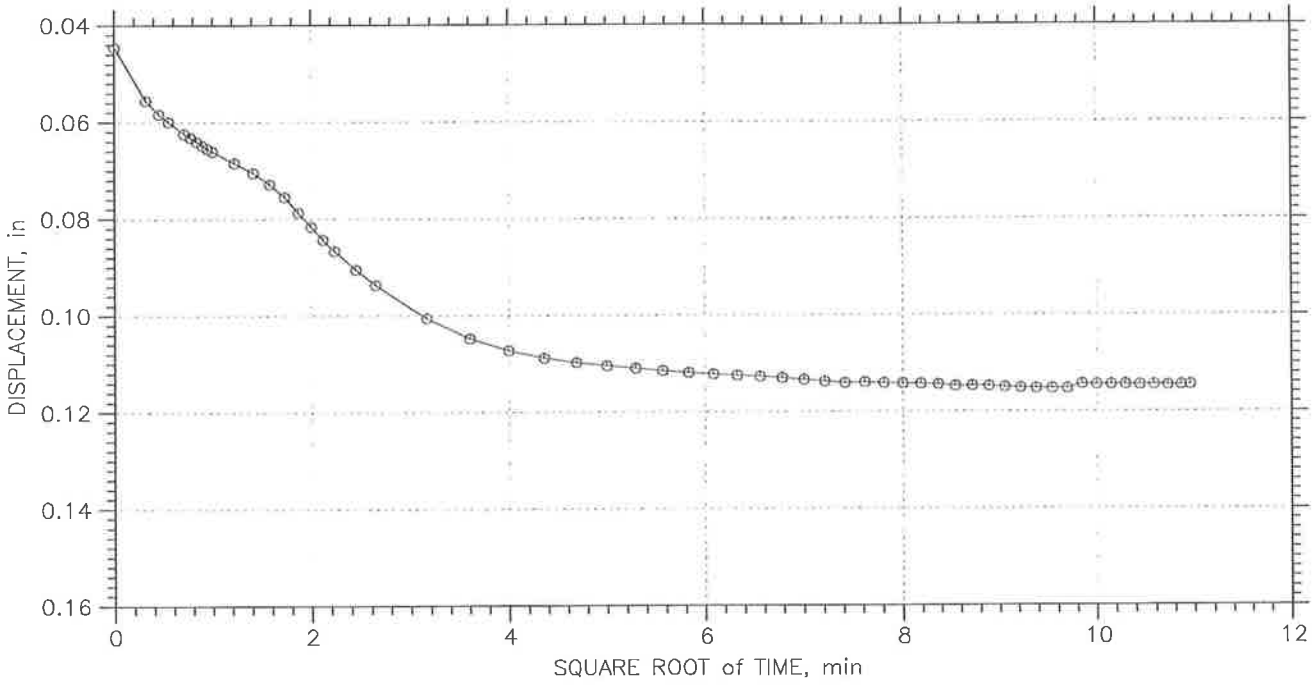
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 14

Stress: 8000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JS
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

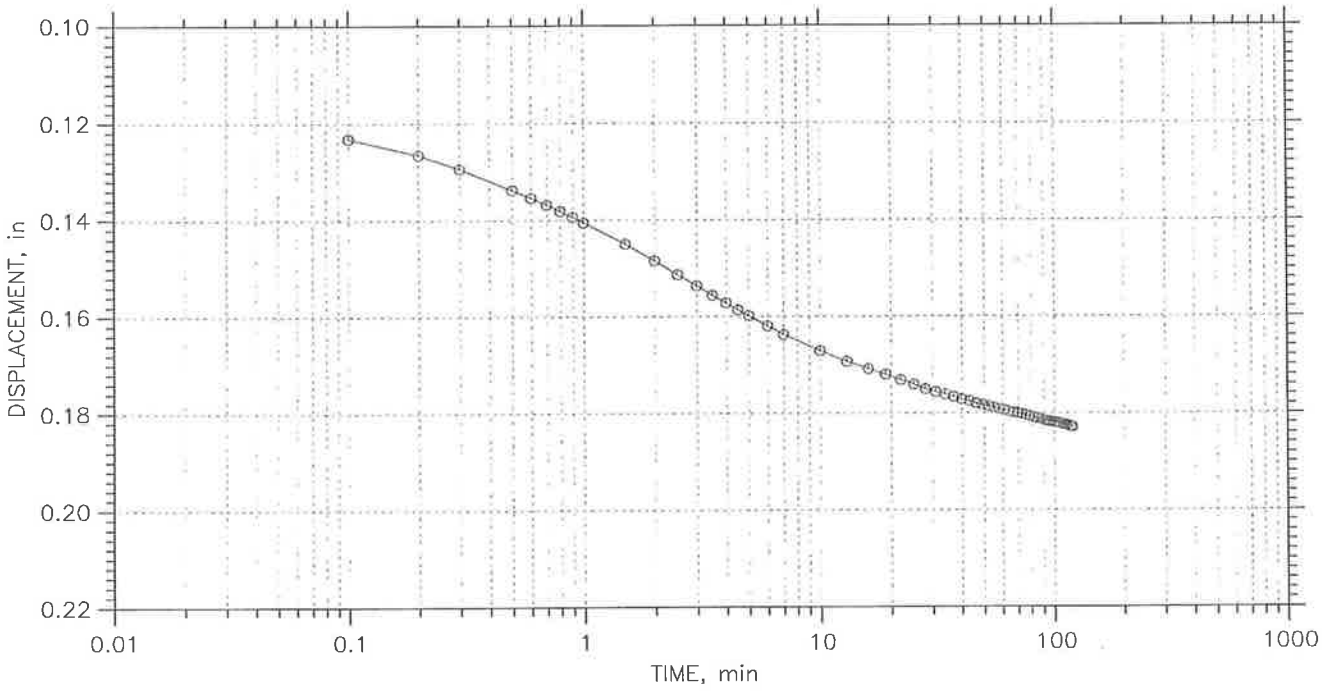
Wed, 15-SEP-2010 15:41:07

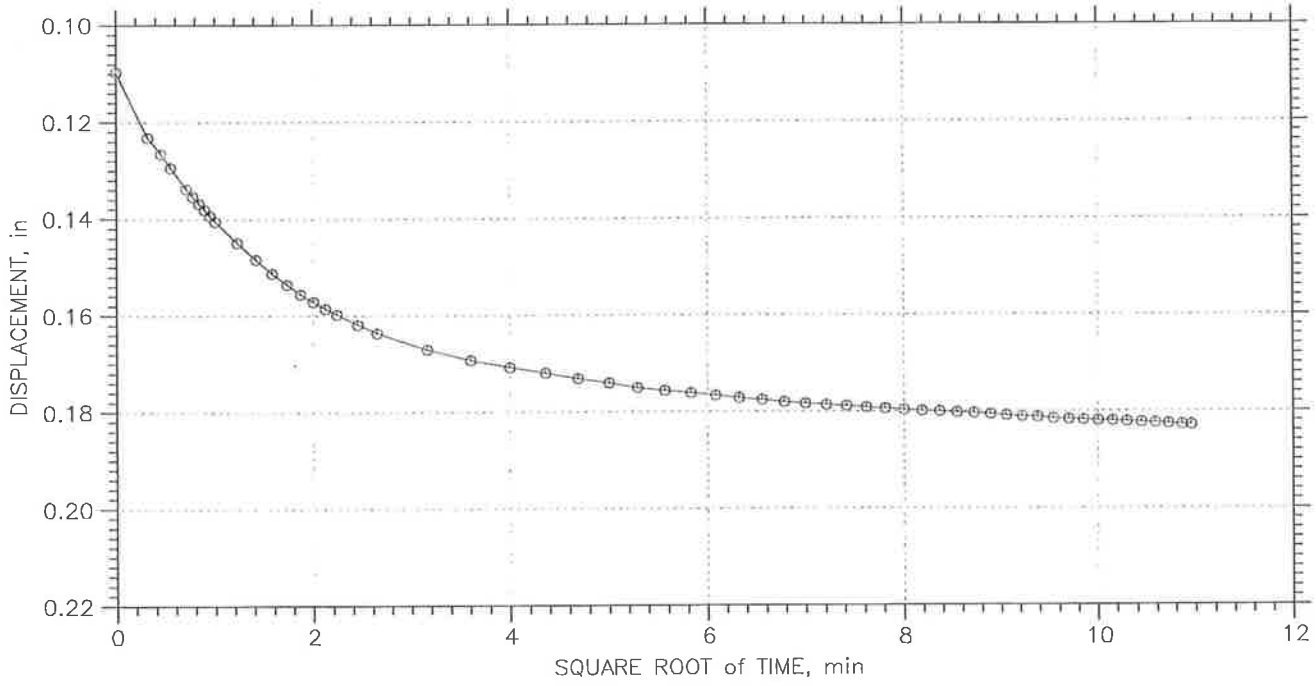
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 14

Stress: 16000 psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JB
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

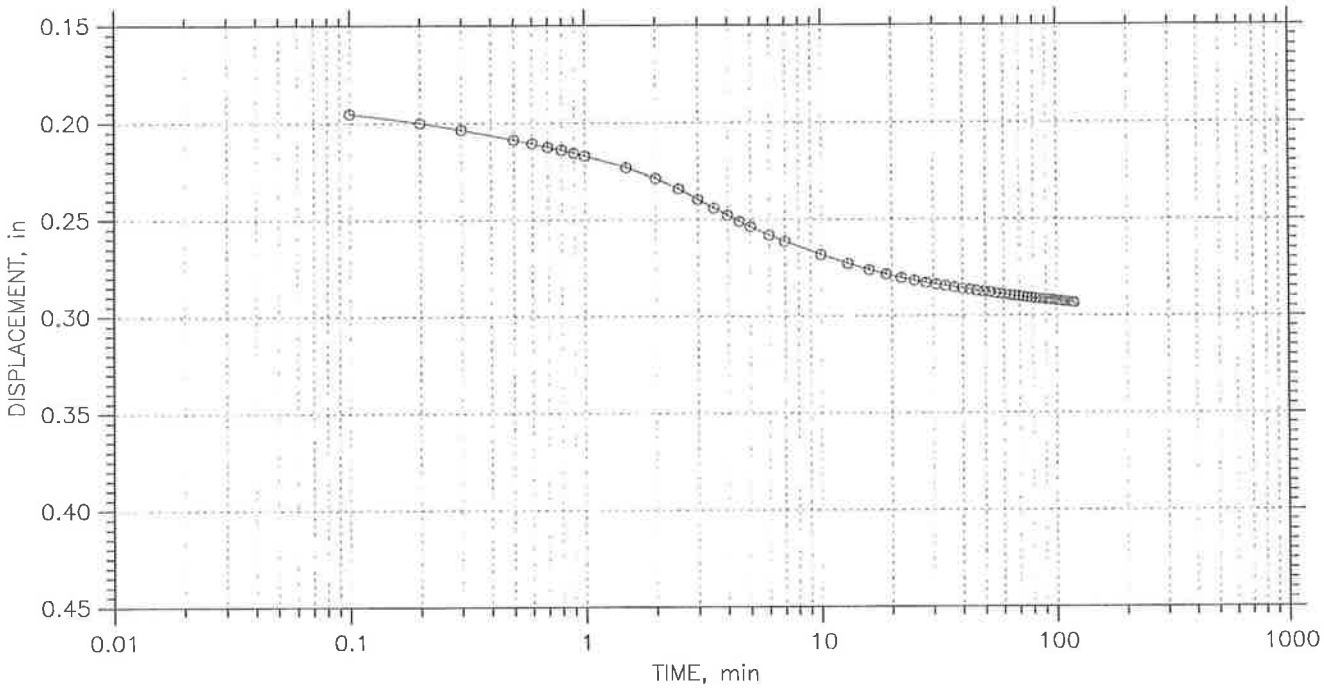
Wed, 15-SEP-2010 15:41:08

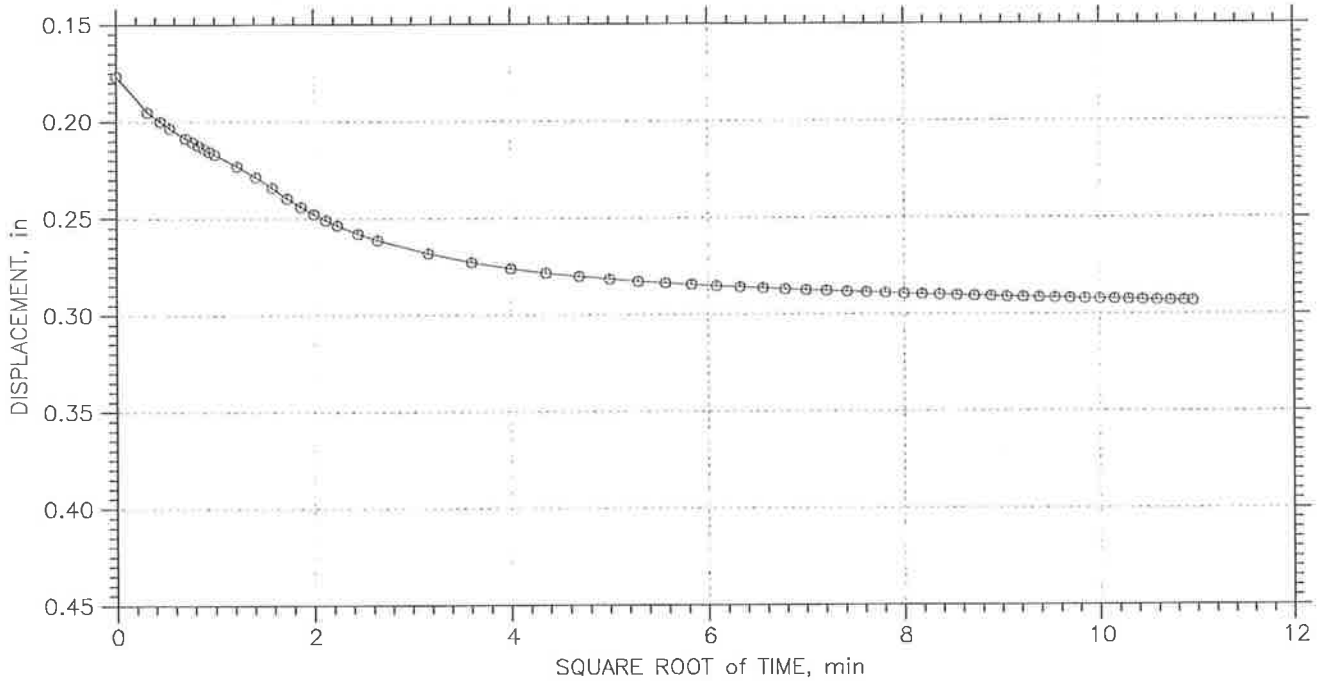
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 14

Stress: 32000 psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By:
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

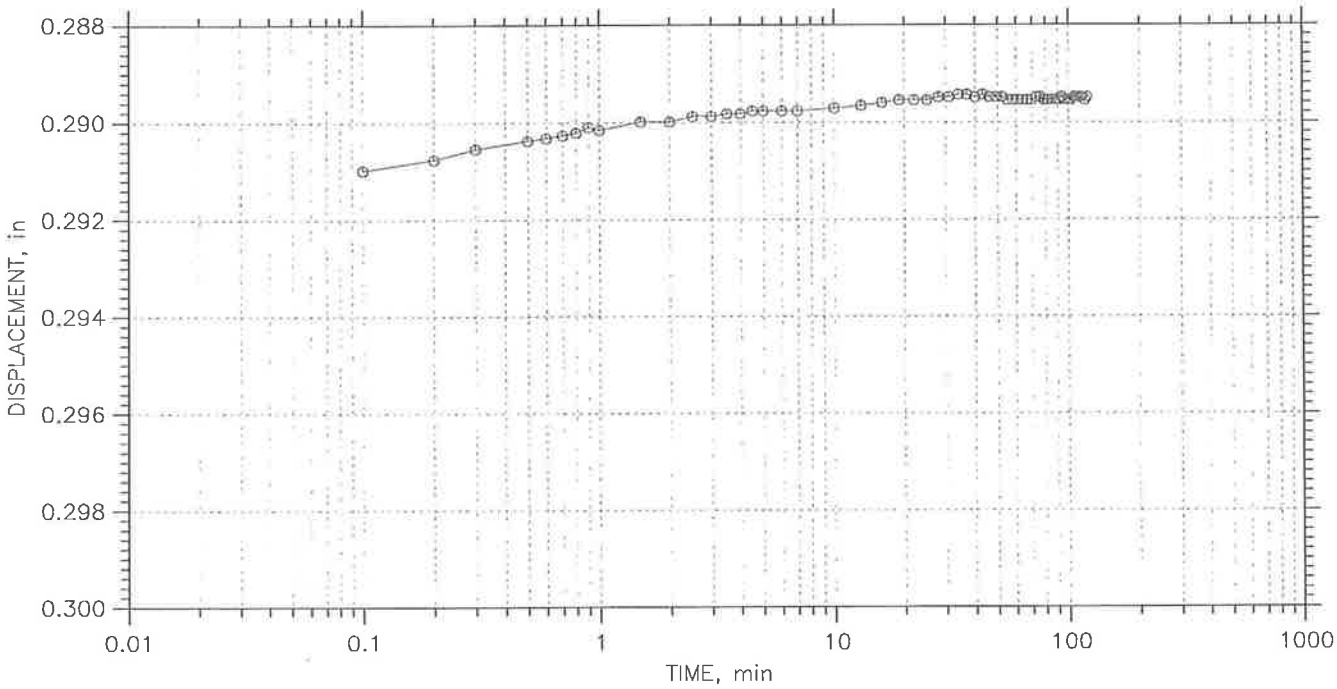
Wed, 15-SEP-2010 15:41:08

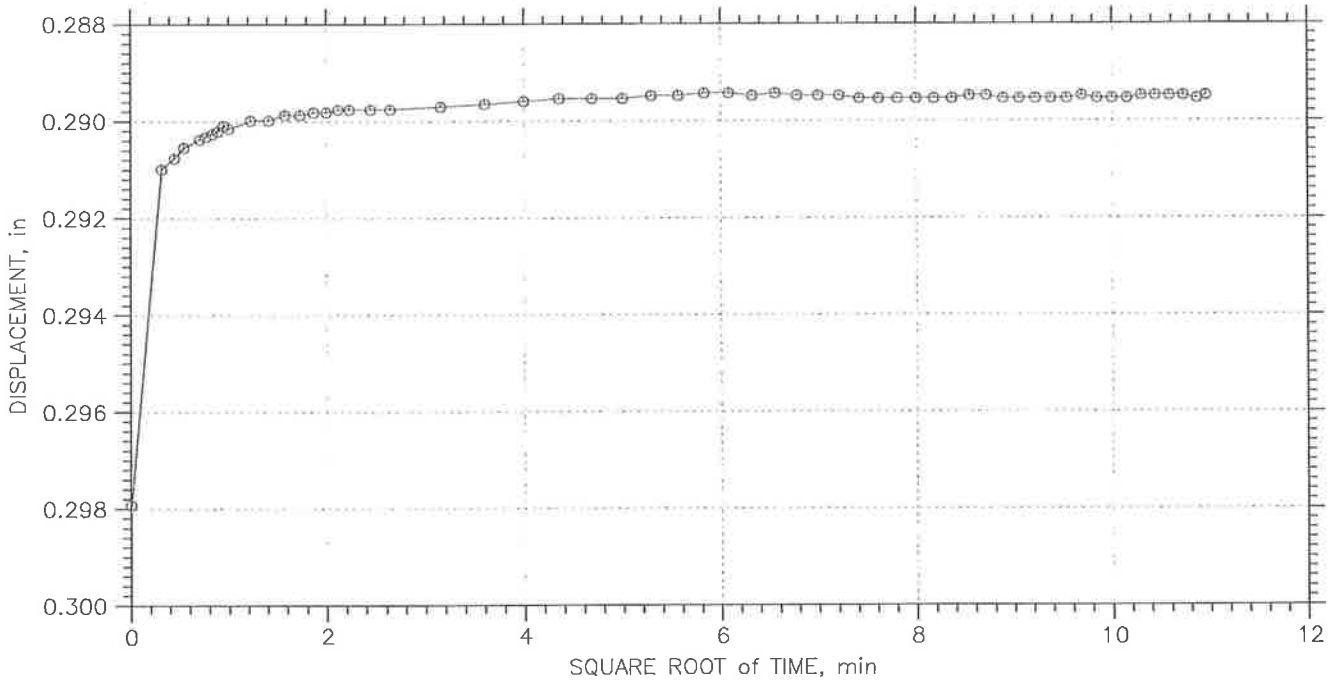
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 14

Stress: 16000 psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By:
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

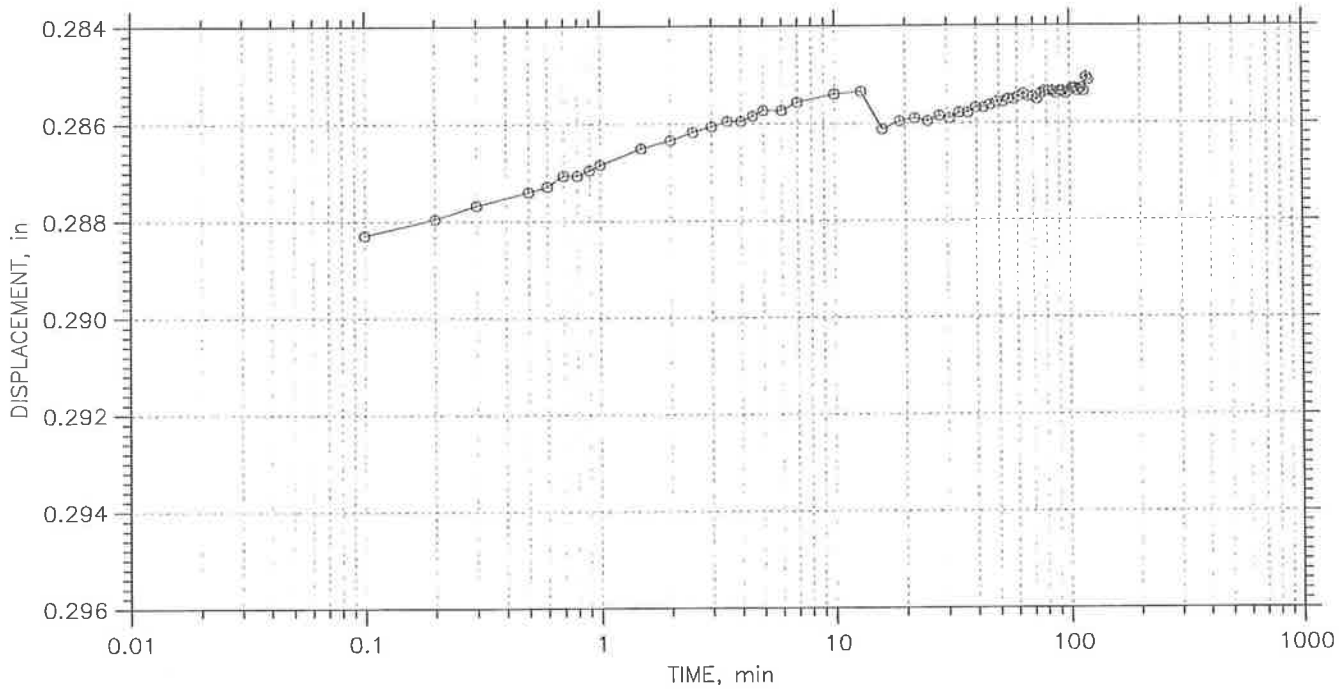
Wed, 15-SEP-2010 15:41:09

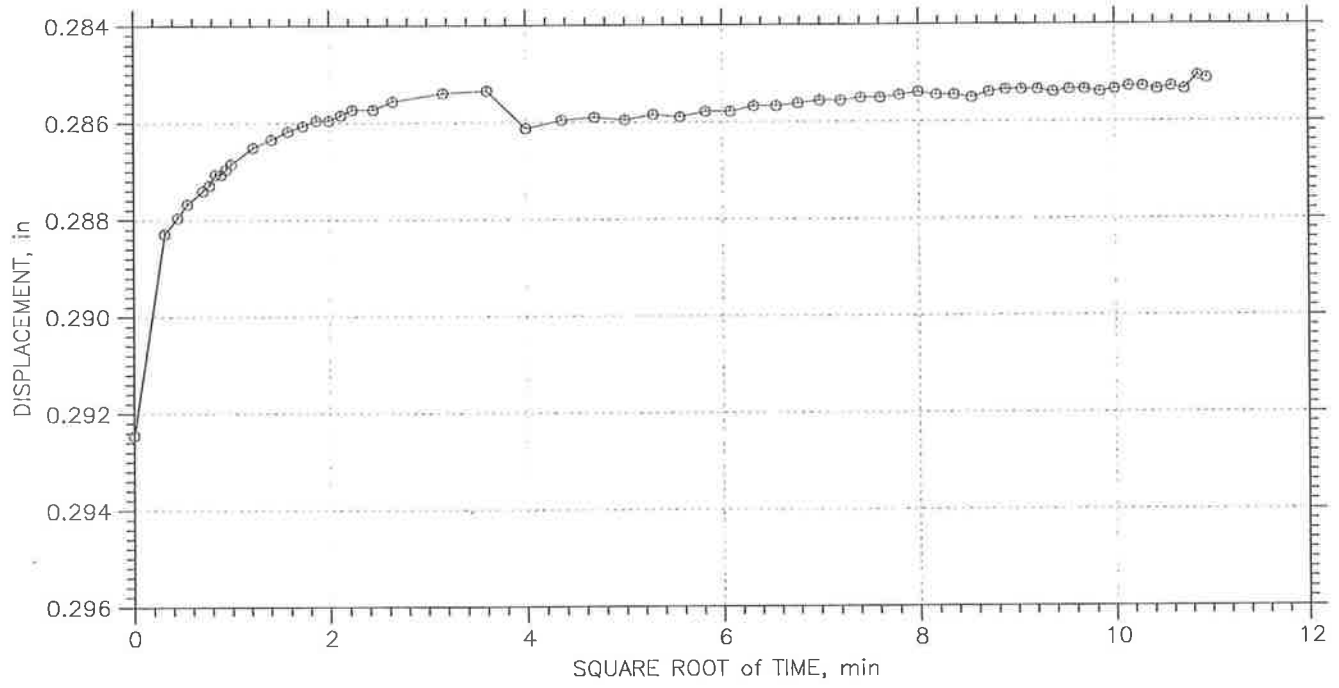
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 14

Stress: 8000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: SB
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

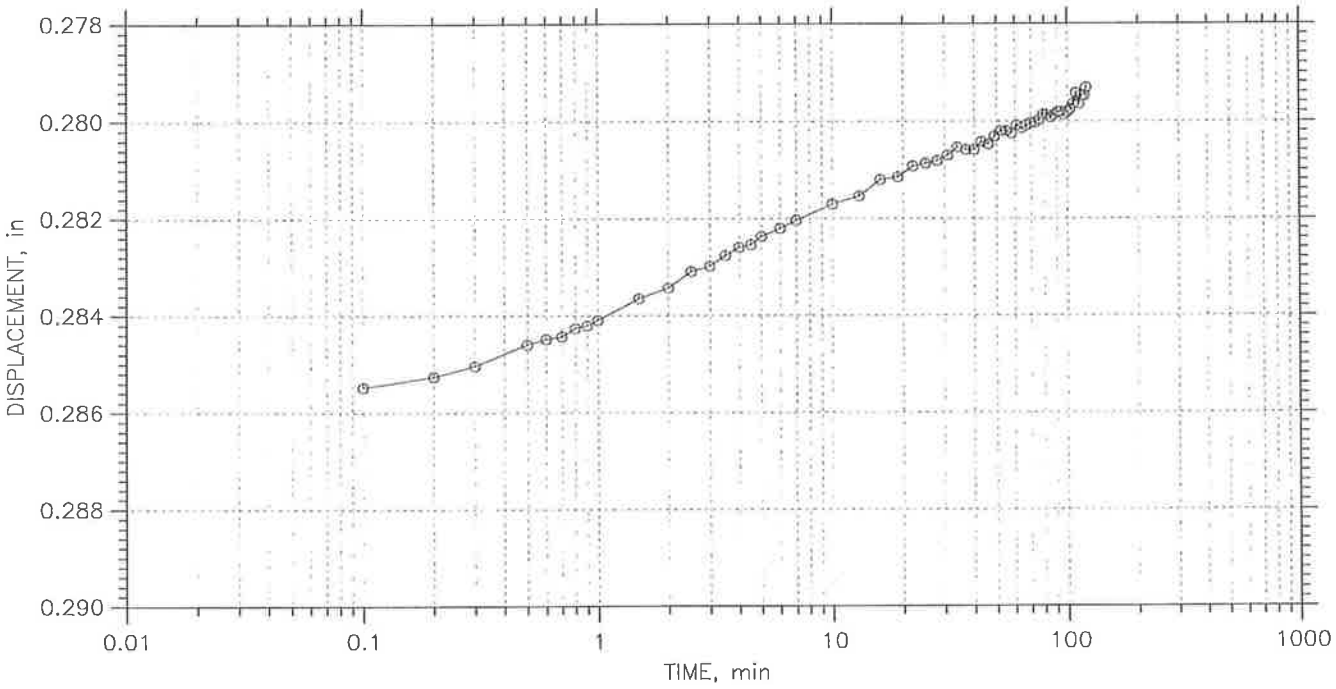
Wed, 15-SEP-2010 15:41:10

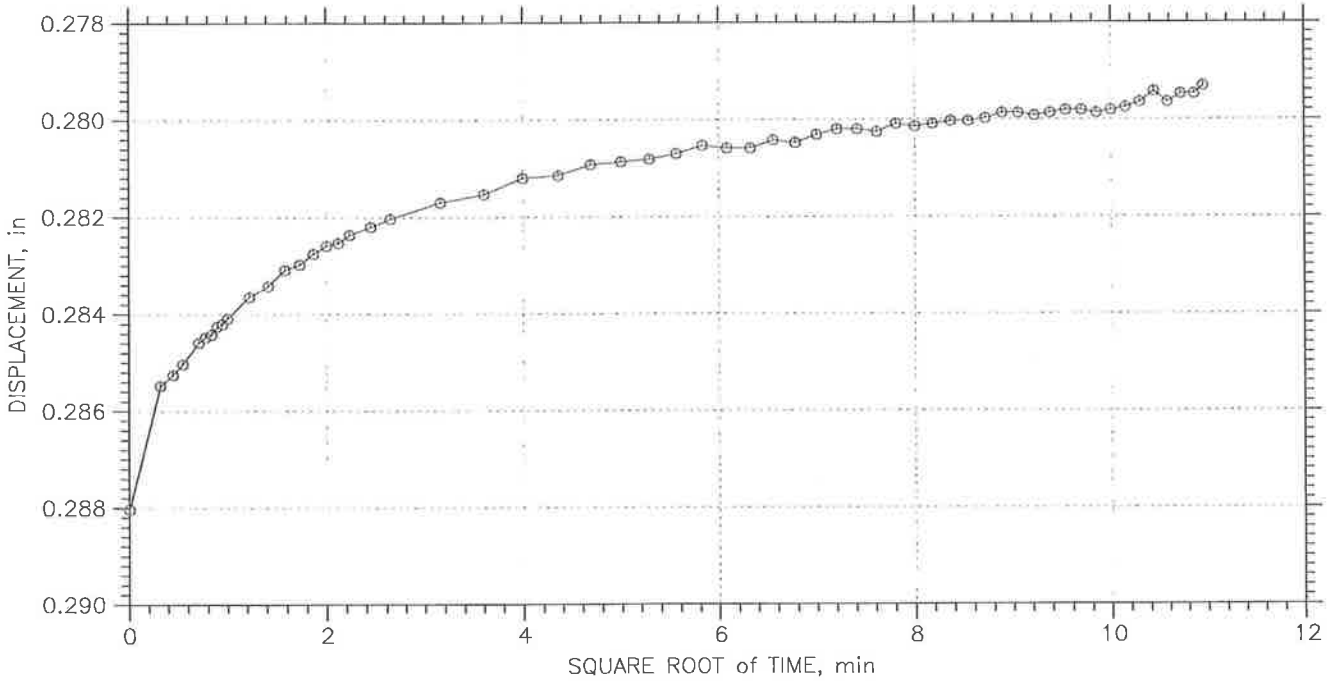
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 11 of 14

Stress: 4000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By:
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

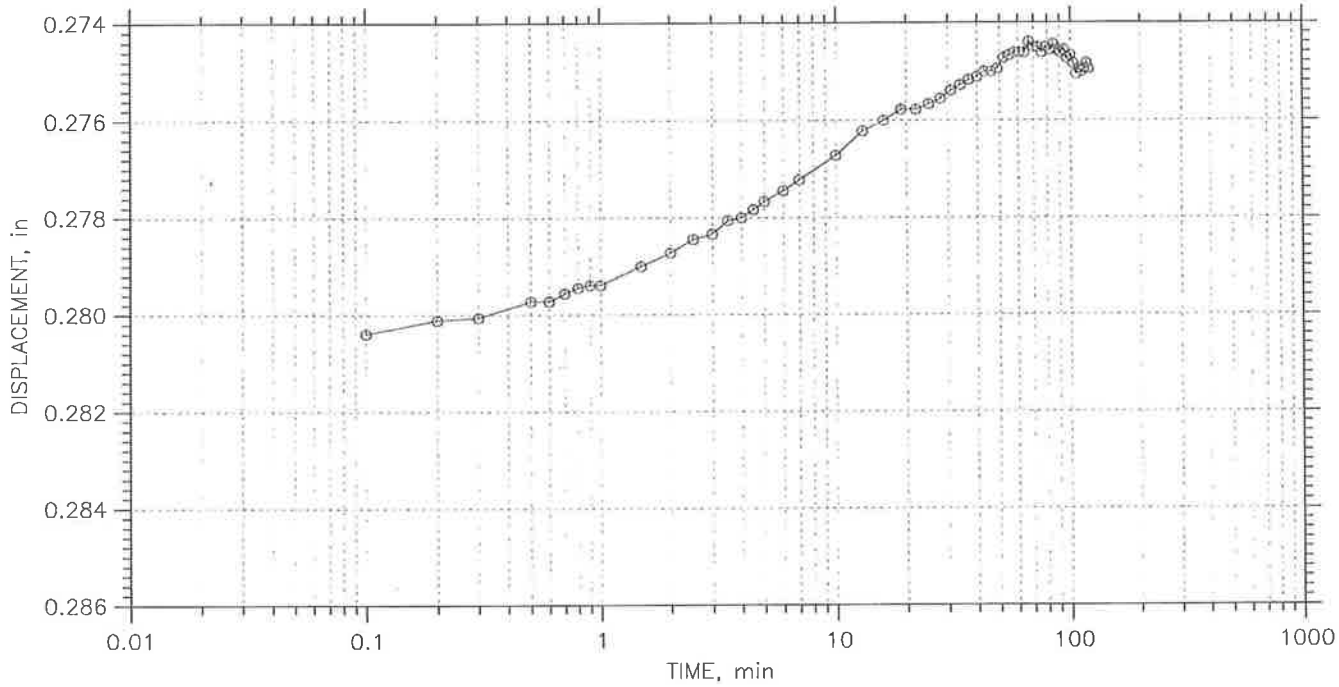
Wed, 15-SEP-2010 15:41:10

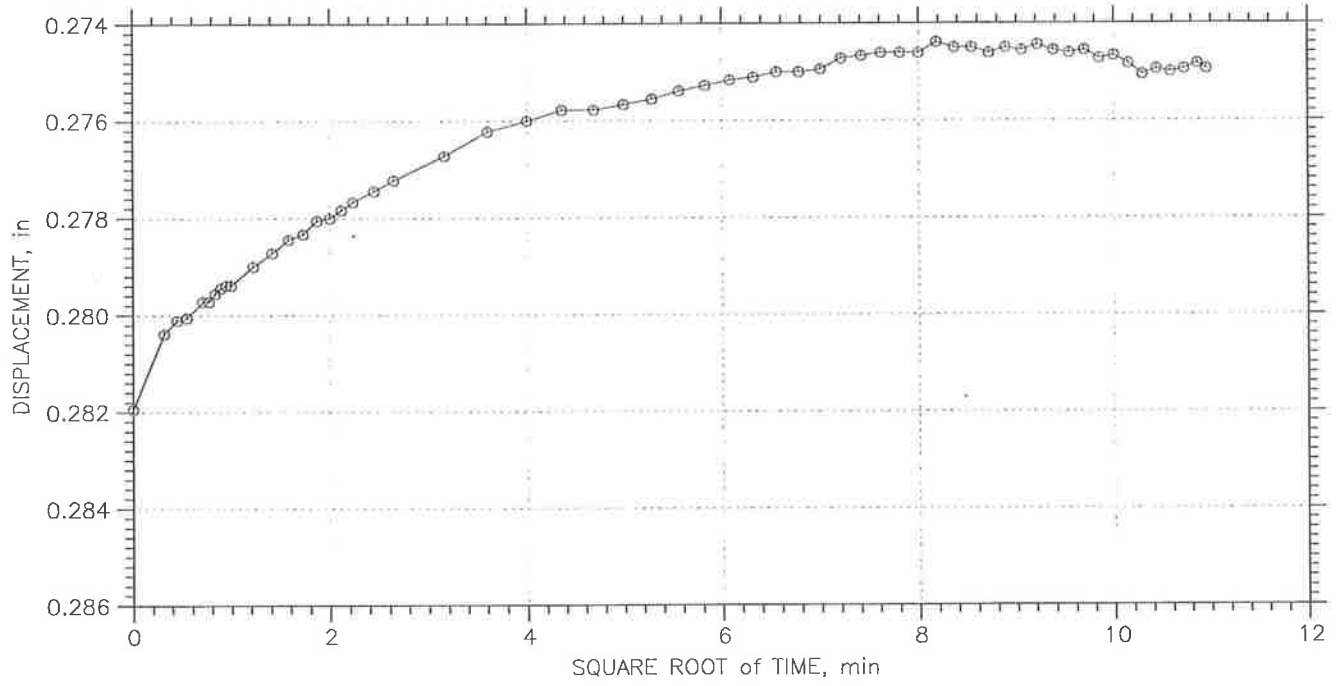
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 12 of 14

Stress: 2000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: SS
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

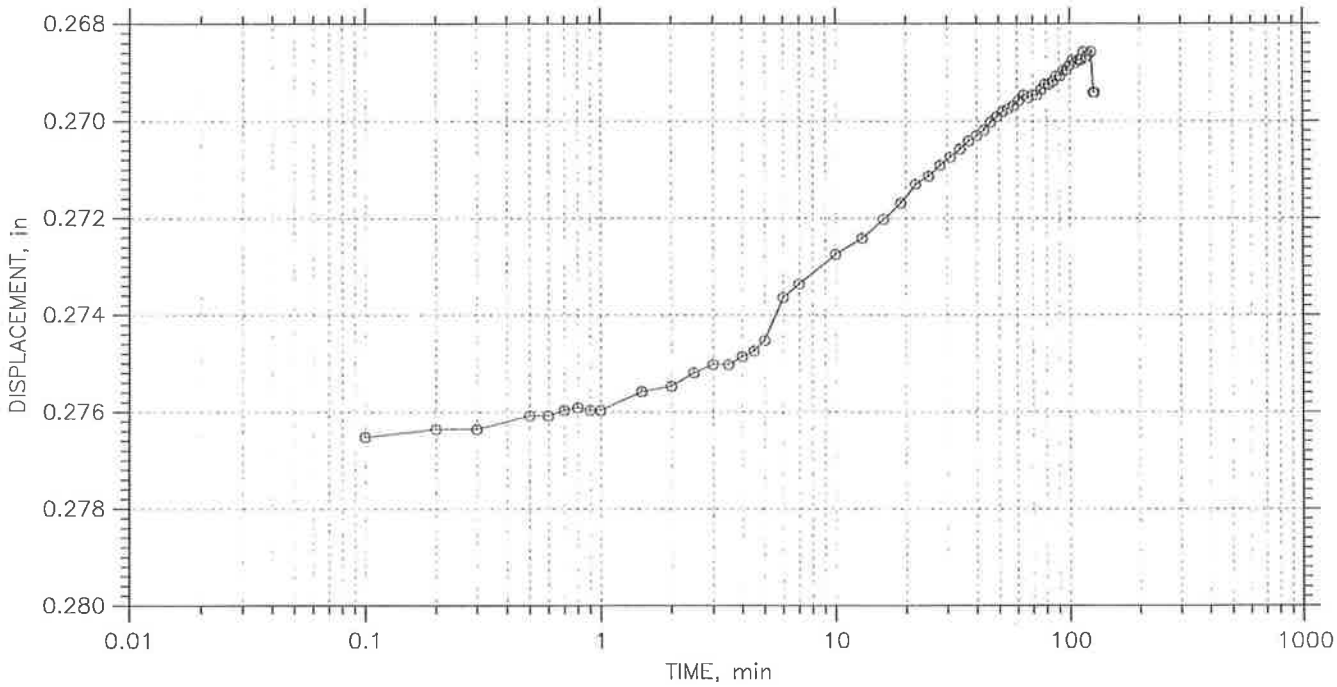
Wed, 15-SEP-2010 15:41:11

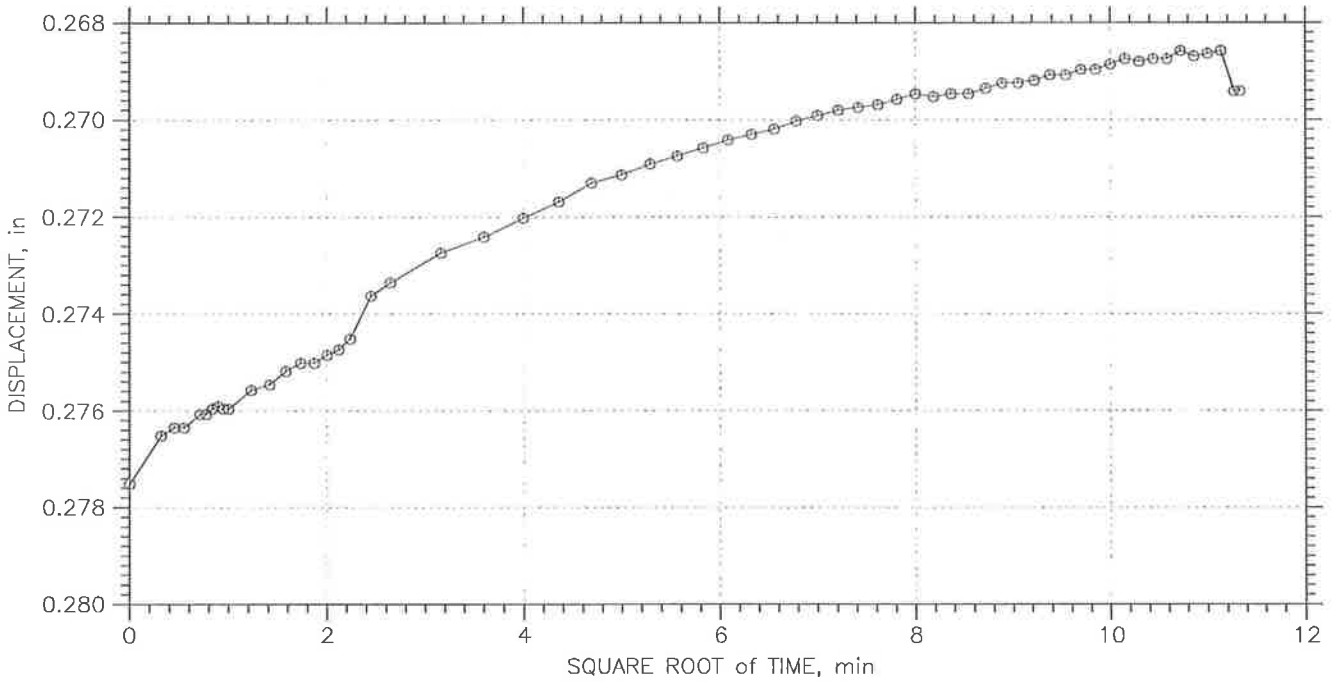
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 13 of 14

Stress: 1000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By:
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

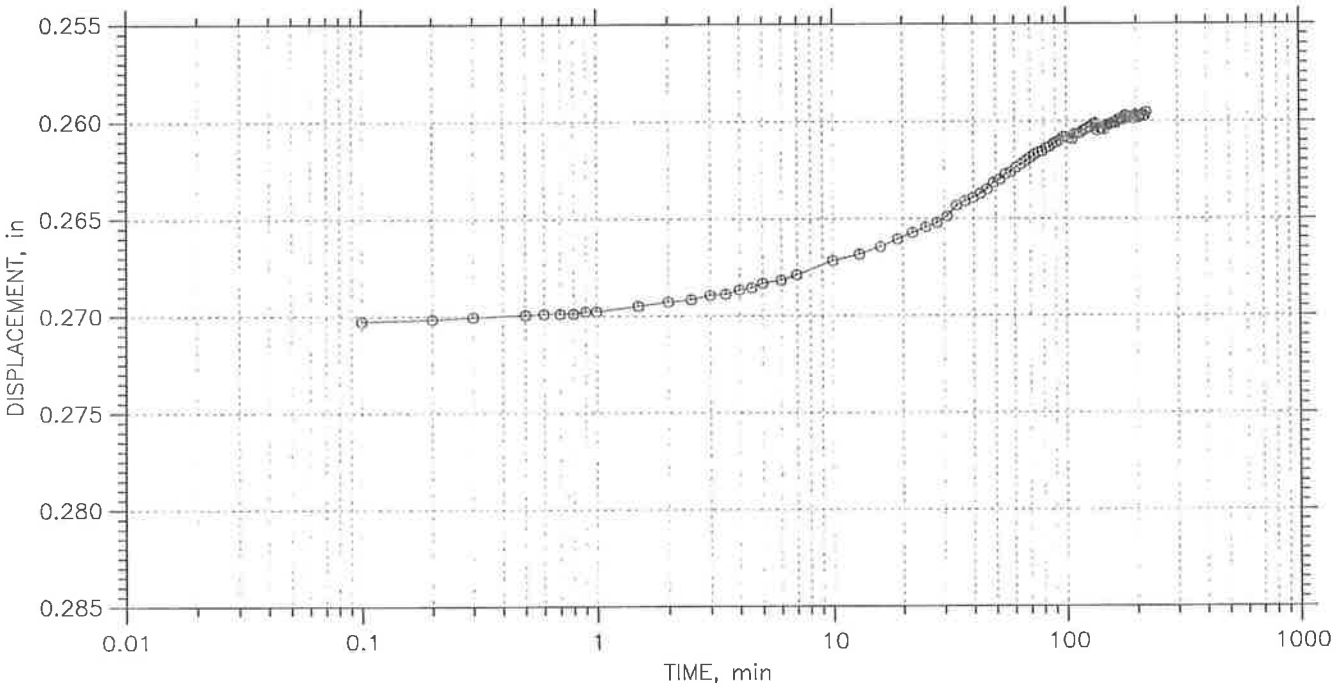
Wed, 15-SEP-2010 15:41:11

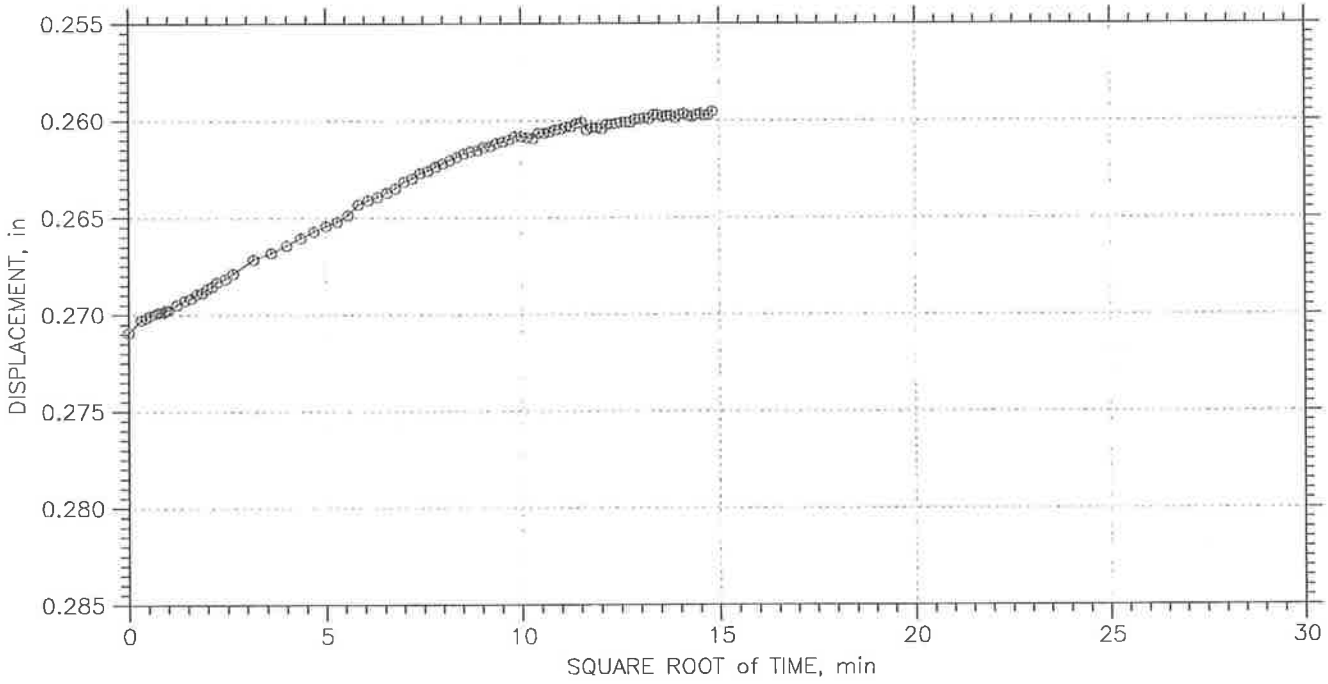
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 14 of 14

Stress: 500. psf



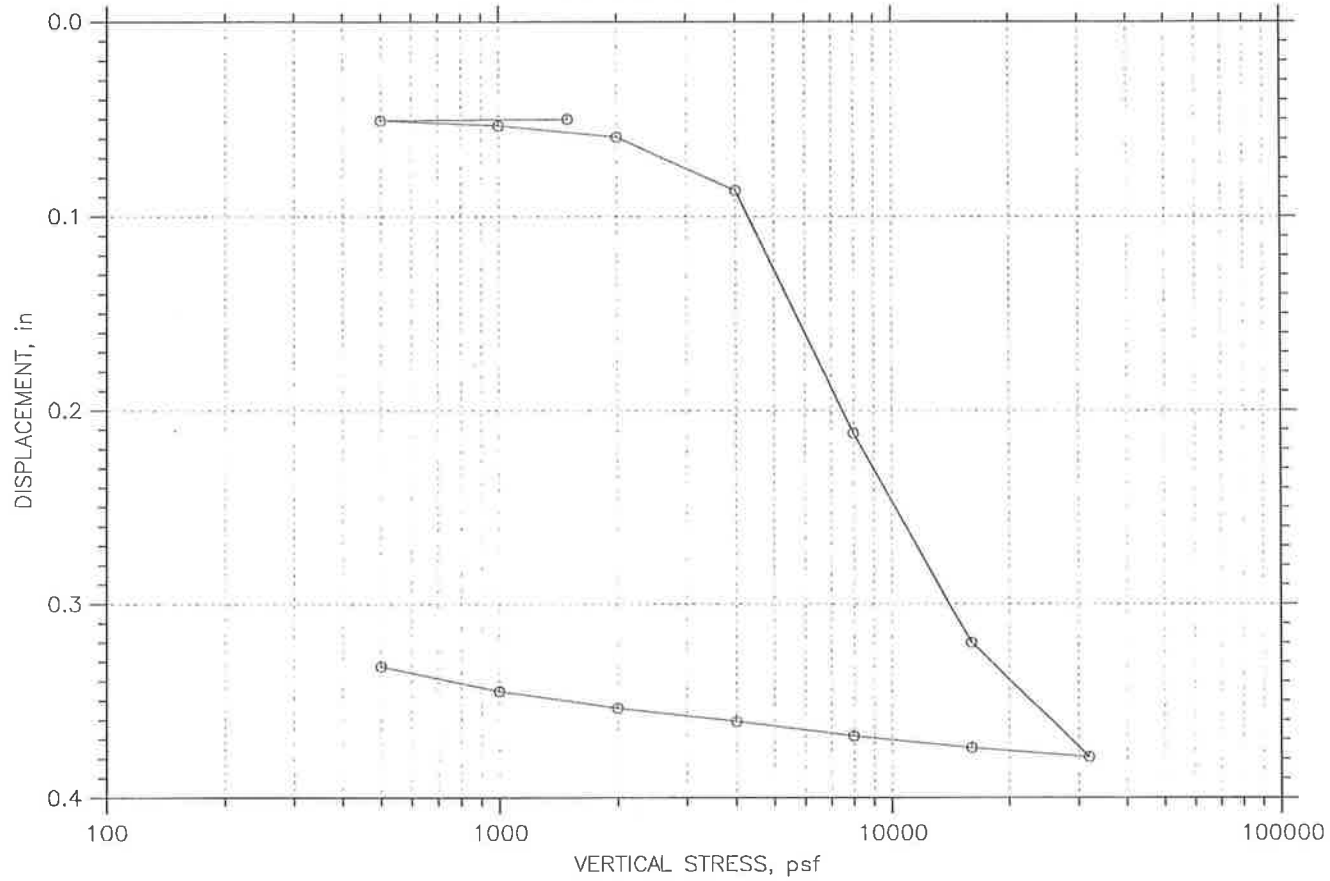


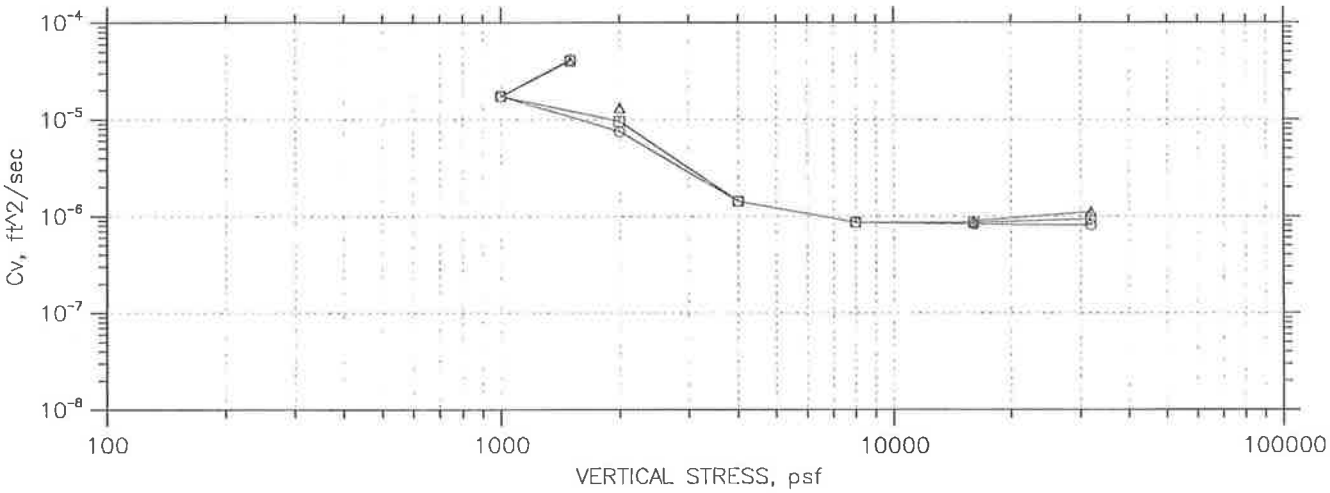
Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JB
Sample No.: 10-560	Test Date: 7/2/10	Depth: 35-37'
Test No.: 10-560	Sample Type: 3"shelby	Elevation:
Description: Dark Gray Clayey SILT		
Remarks: 2200 PSF Preload		

Wed, 15-SEP-2010 15:41:12

CONSOLIDATION TEST DATA

SUMMARY REPORT





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JS
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

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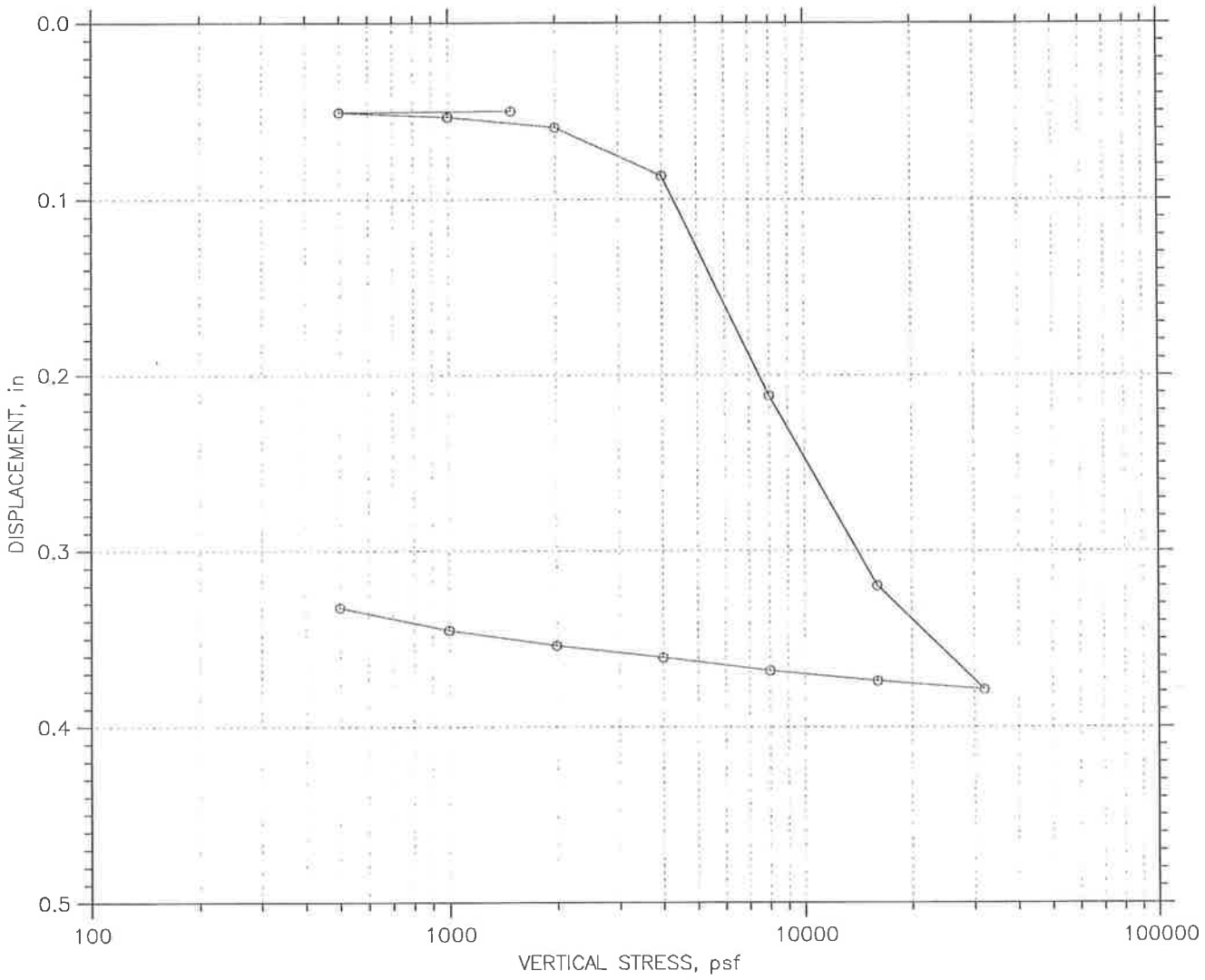
CONSOLIDATION TEST DATA

SUMMARY REPORT



					Before Test	After Test
Overburden Pressure, psf:				Water Content, %	88.01	49.87
Preconsolidation Pressure, psf:				Dry Unit Weight, pcf	49.118	73.551
Compression Index:				Saturation, %	98.48	105.78
Diameter: 2.5 in		Height: 1 in		Void Ratio	2.37	1.25
LL: 0	PL: 0	PI: 0	GS: 2.65			

Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: SB
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

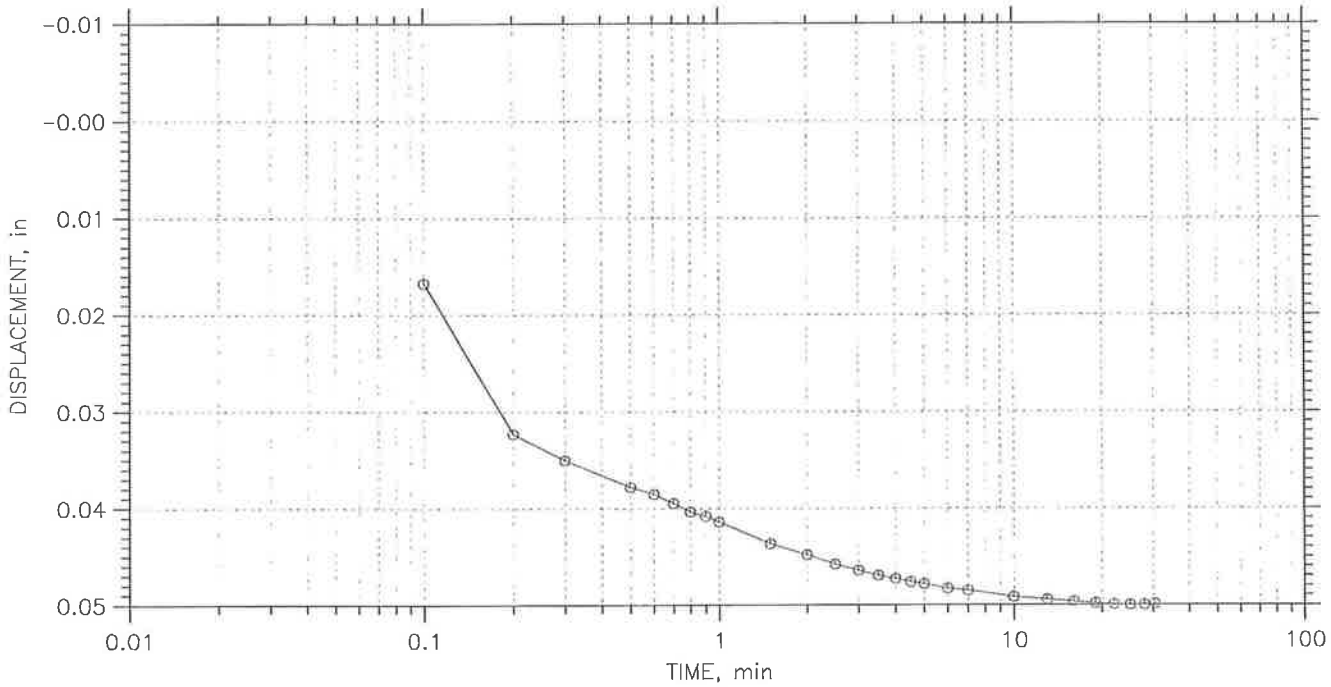
Wed, 15-SEP-2010 15:40:22

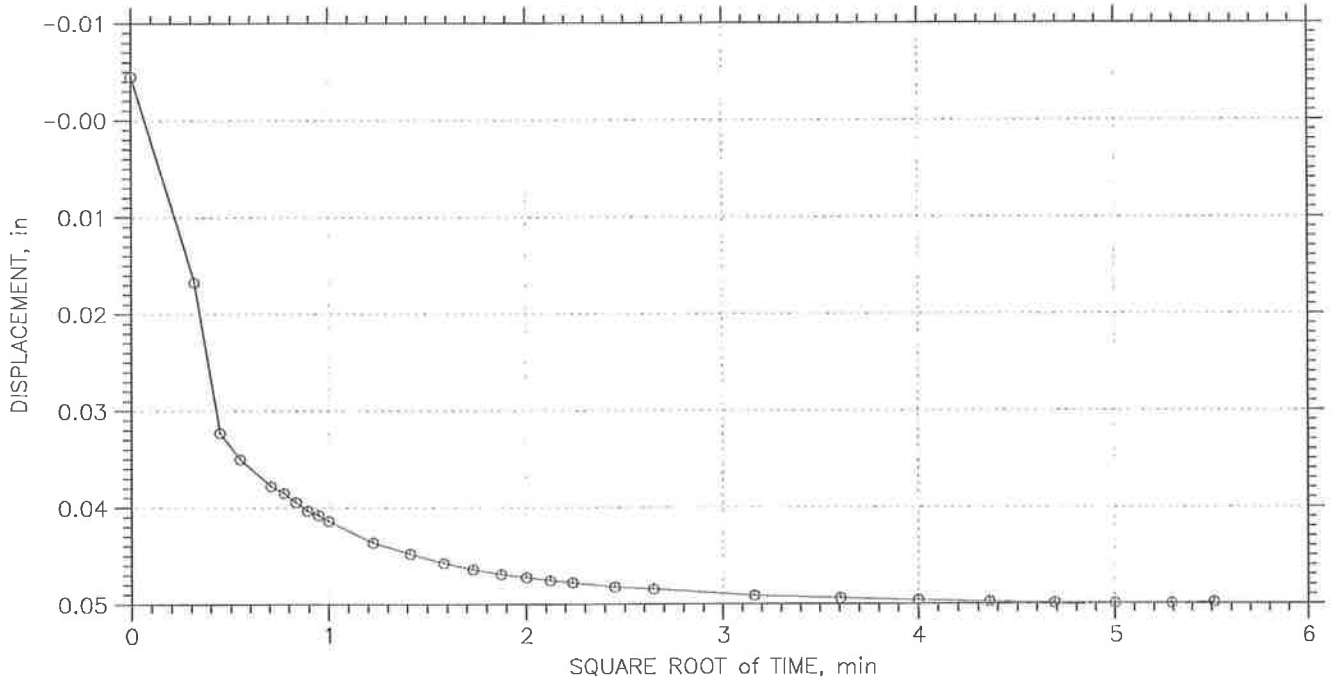
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 1 of 14

Stress: 1500. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: SS
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

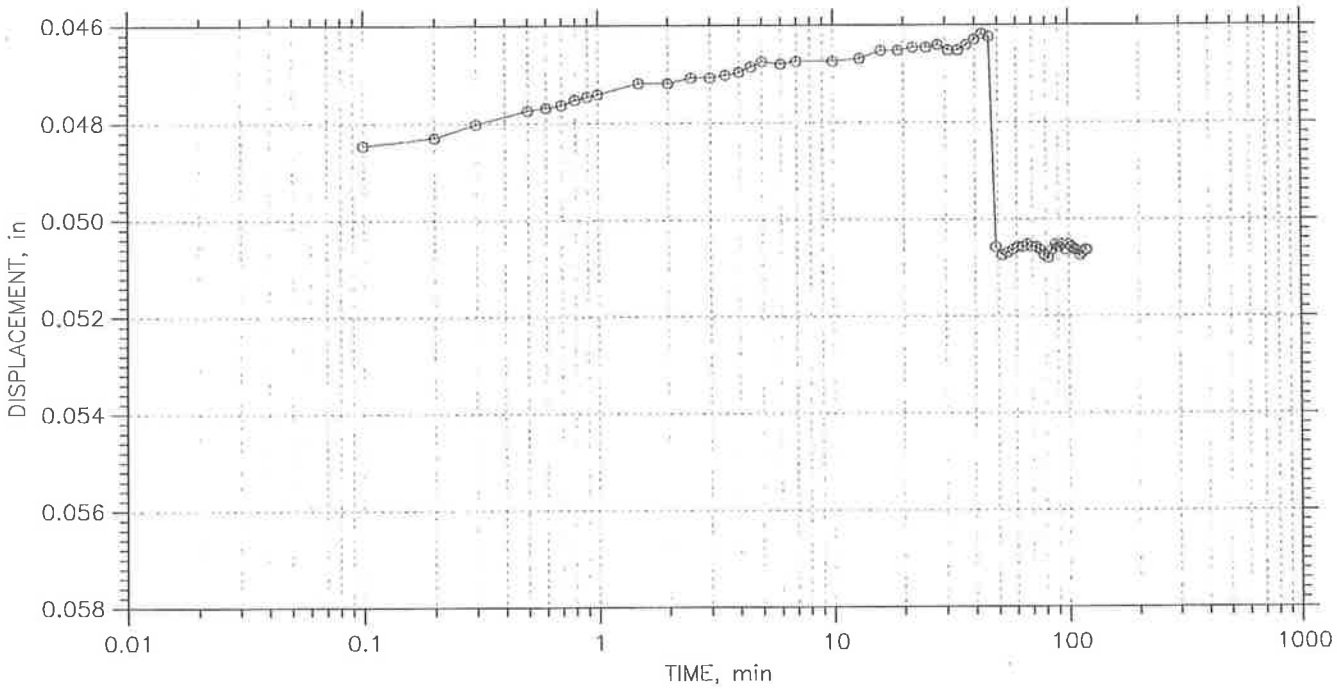
Wed, 15-SEP-2010 15:40:22

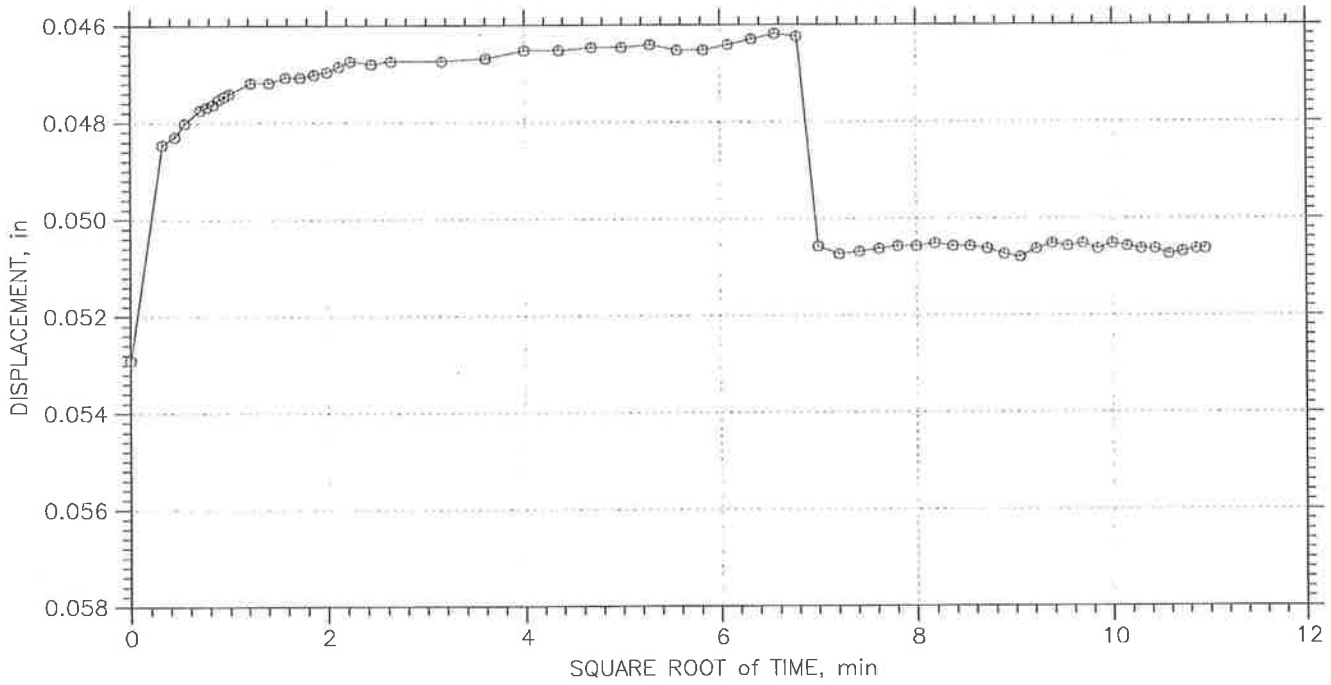
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 2 of 14

Stress: 500. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By:
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

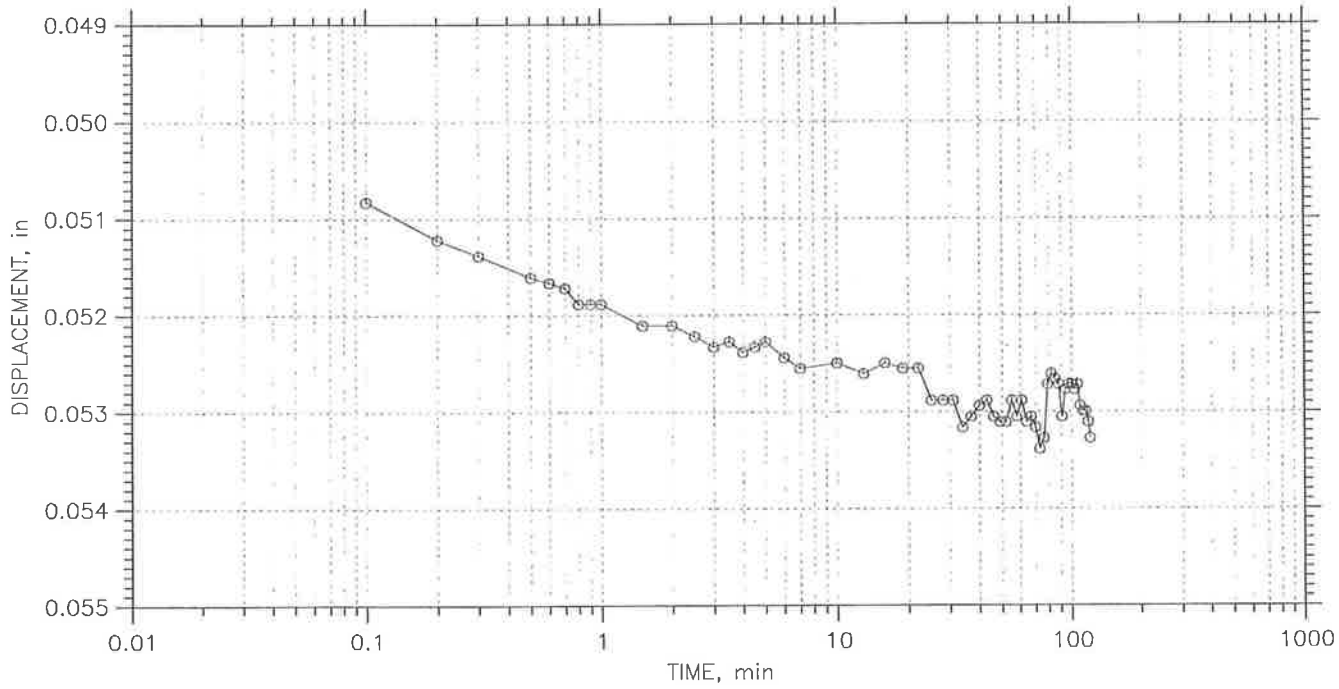
Wed, 15-SEP-2010 15:40:23

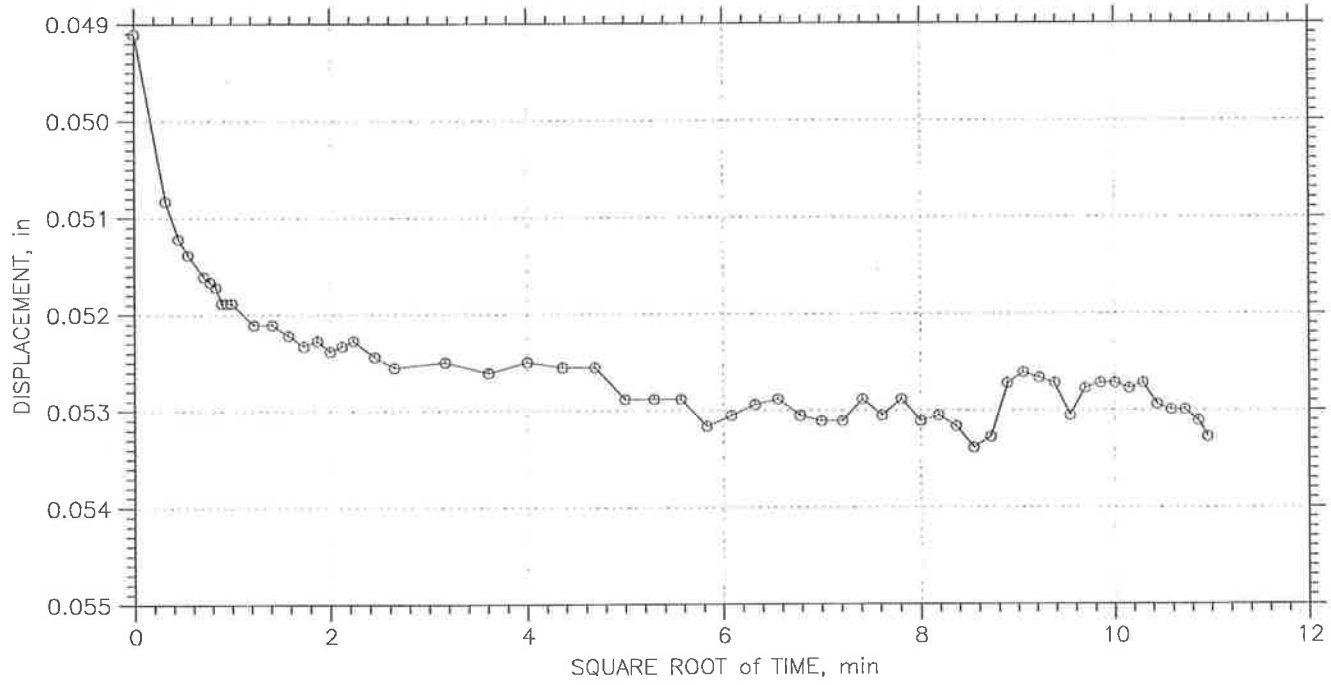
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 3 of 14

Stress: 1000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By:
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

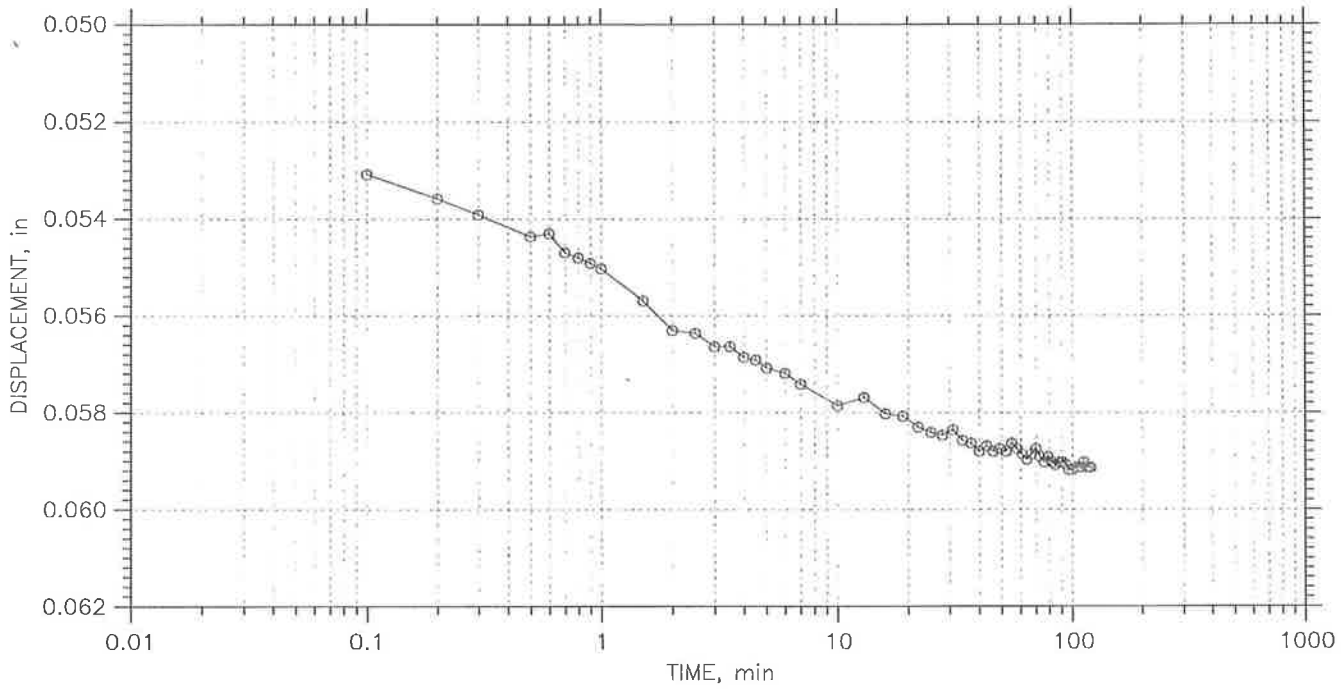
Wed, 15-SEP-2010 15:40:23

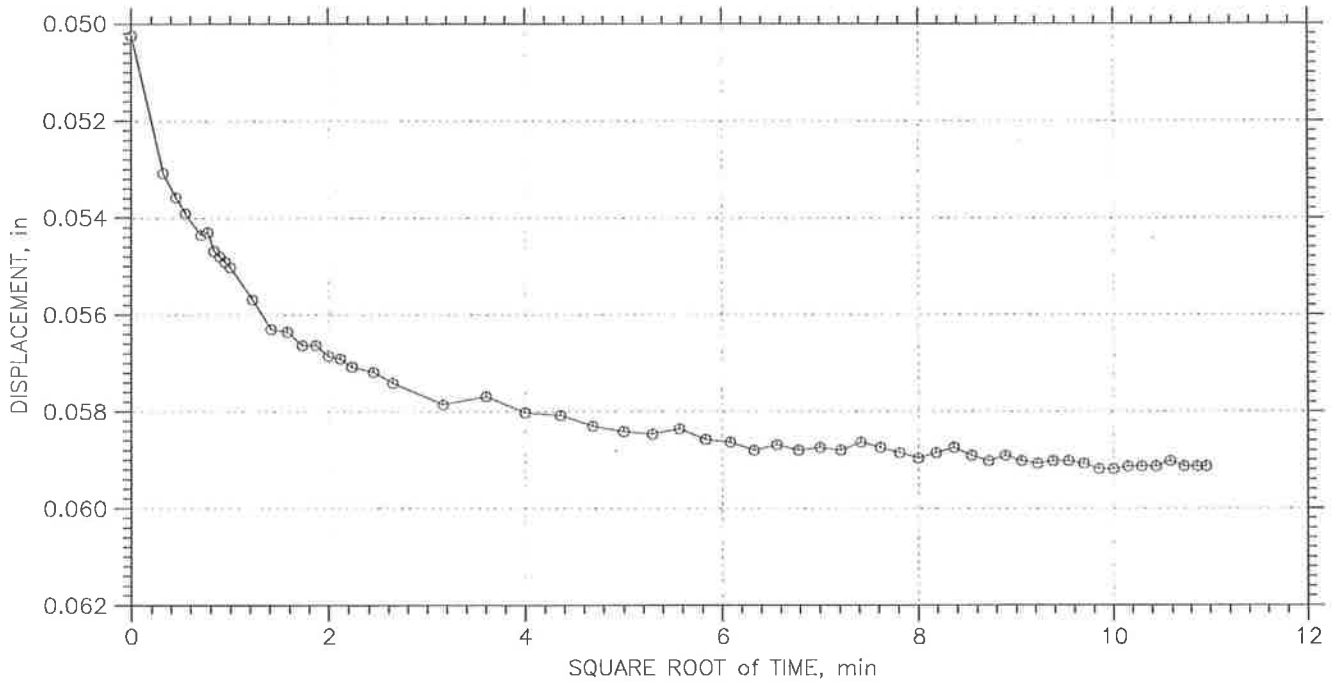
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 4 of 14

Stress: 2000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JS
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

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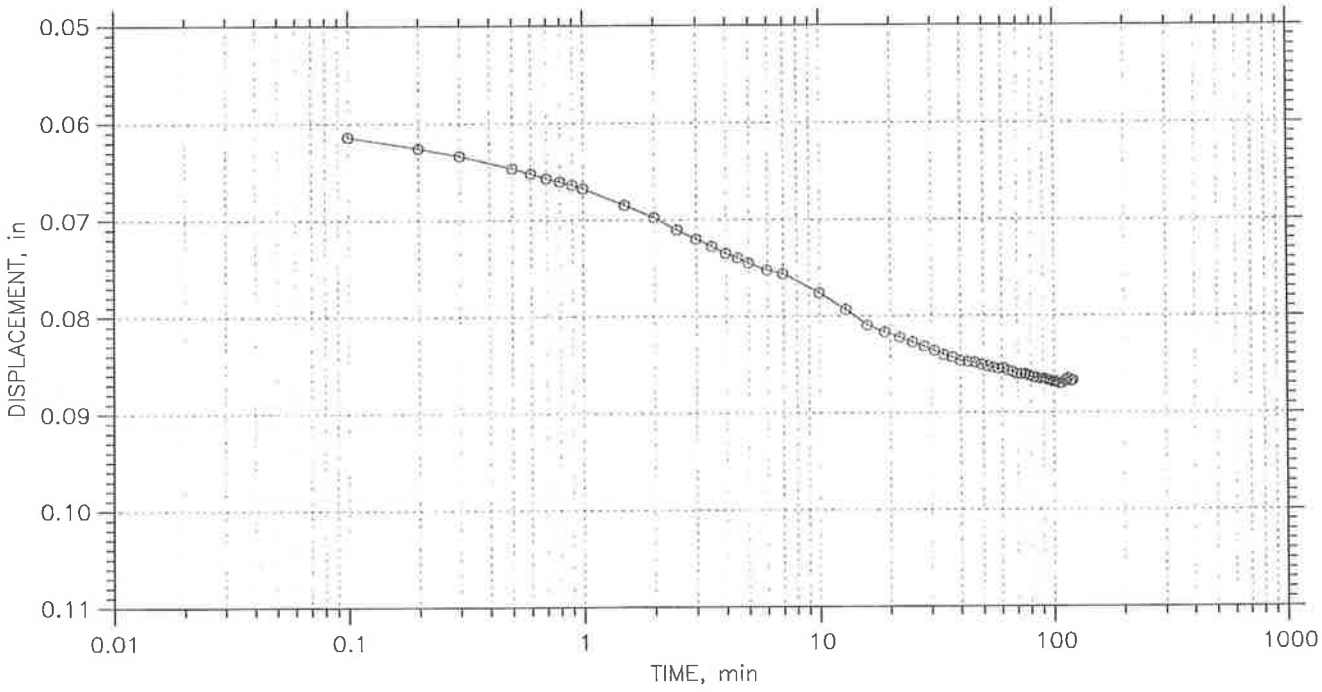
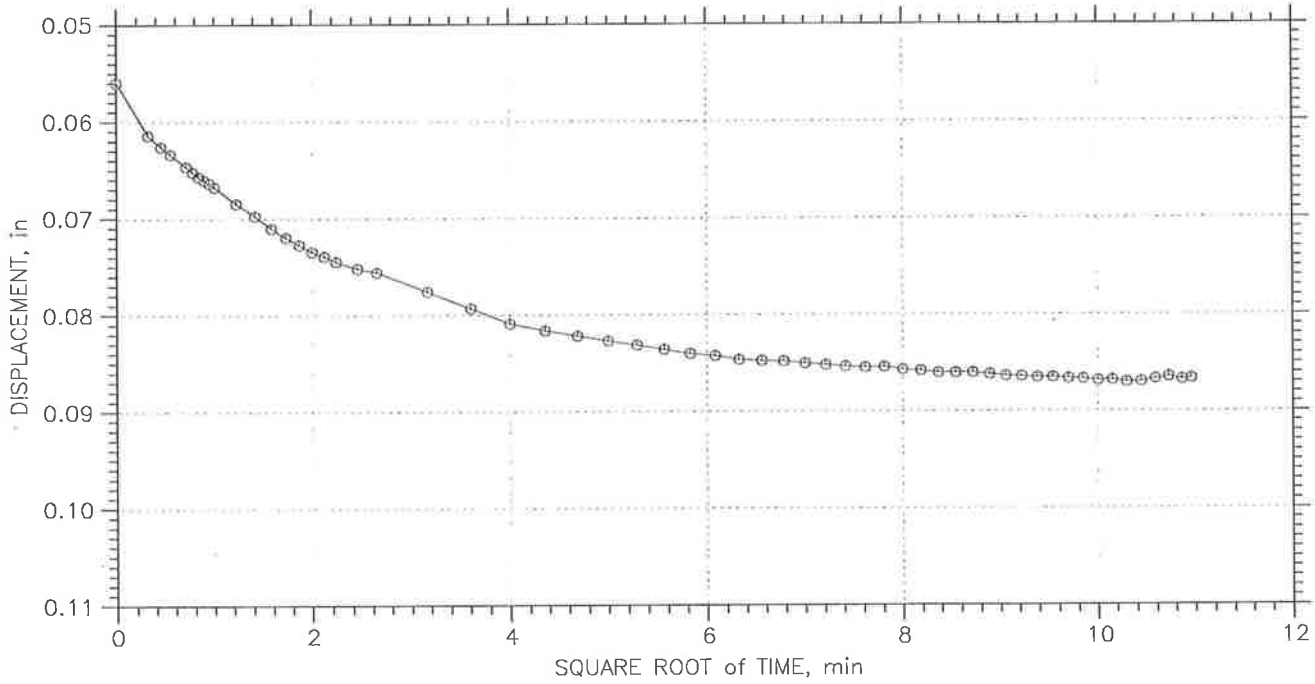
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 5 of 14

Stress: 4000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JG
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

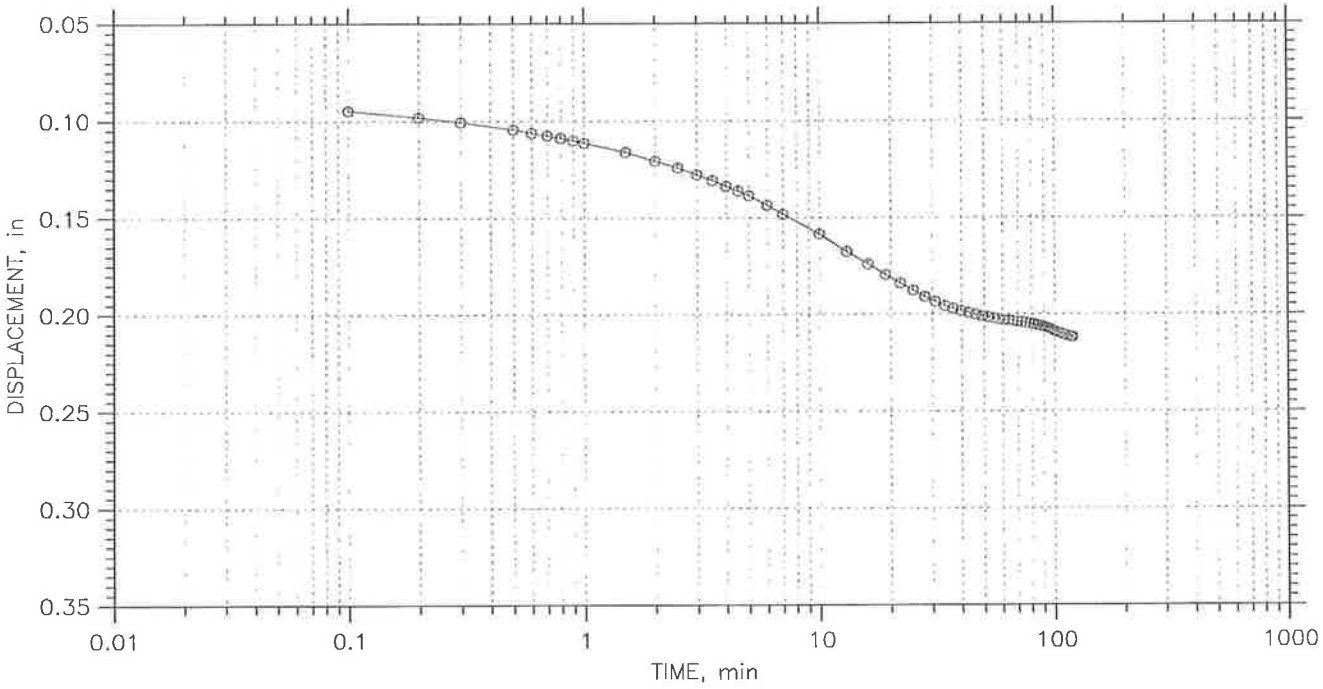
Wed, 15-SEP-2010 15:40:25

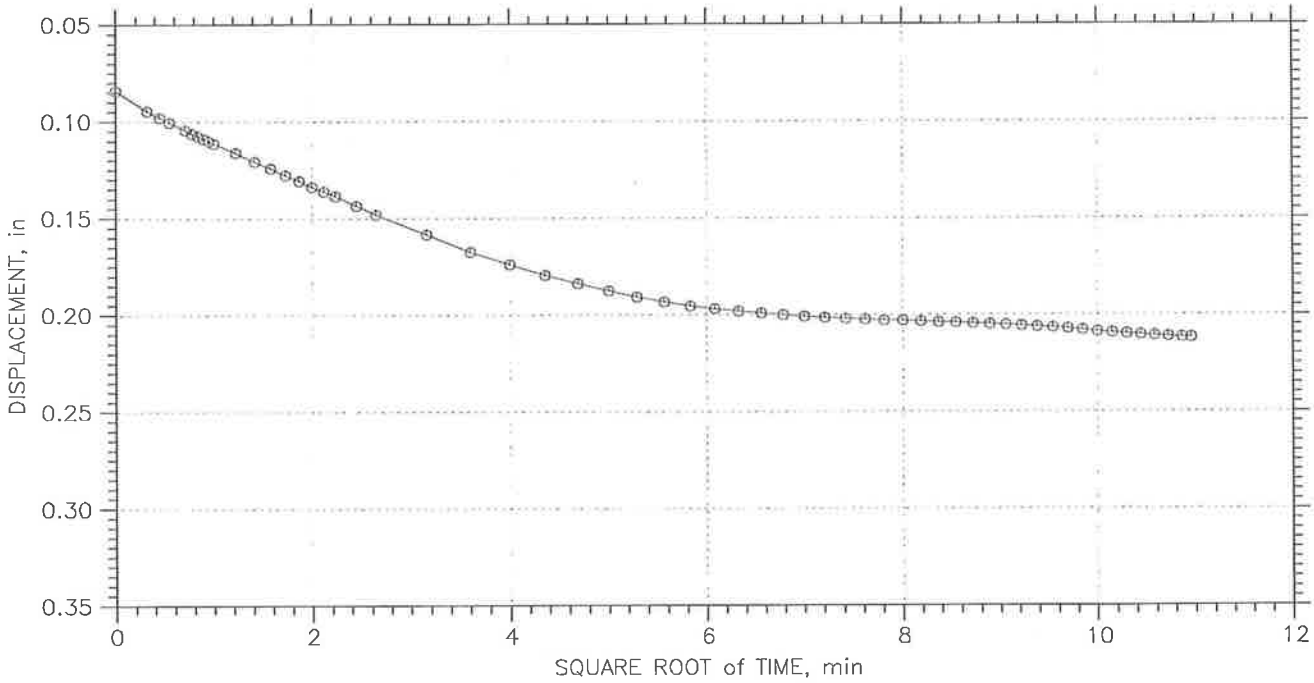
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 6 of 14

Stress: 8000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By:
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

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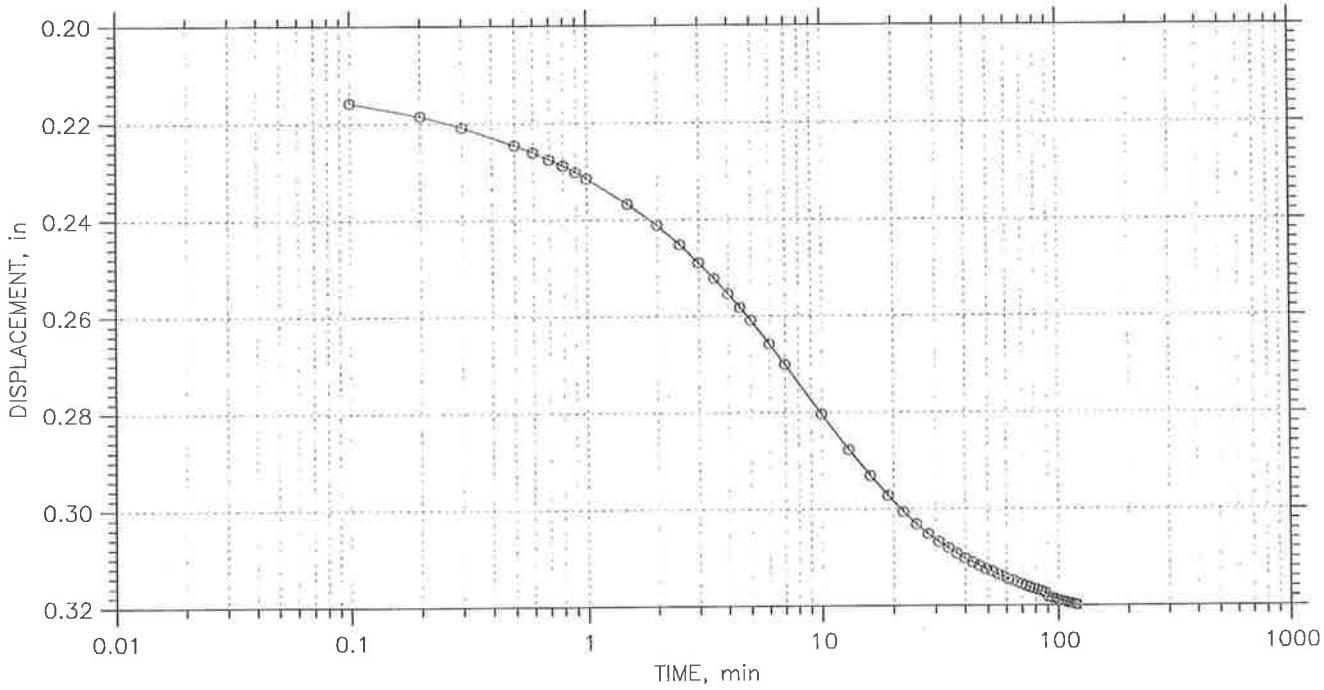
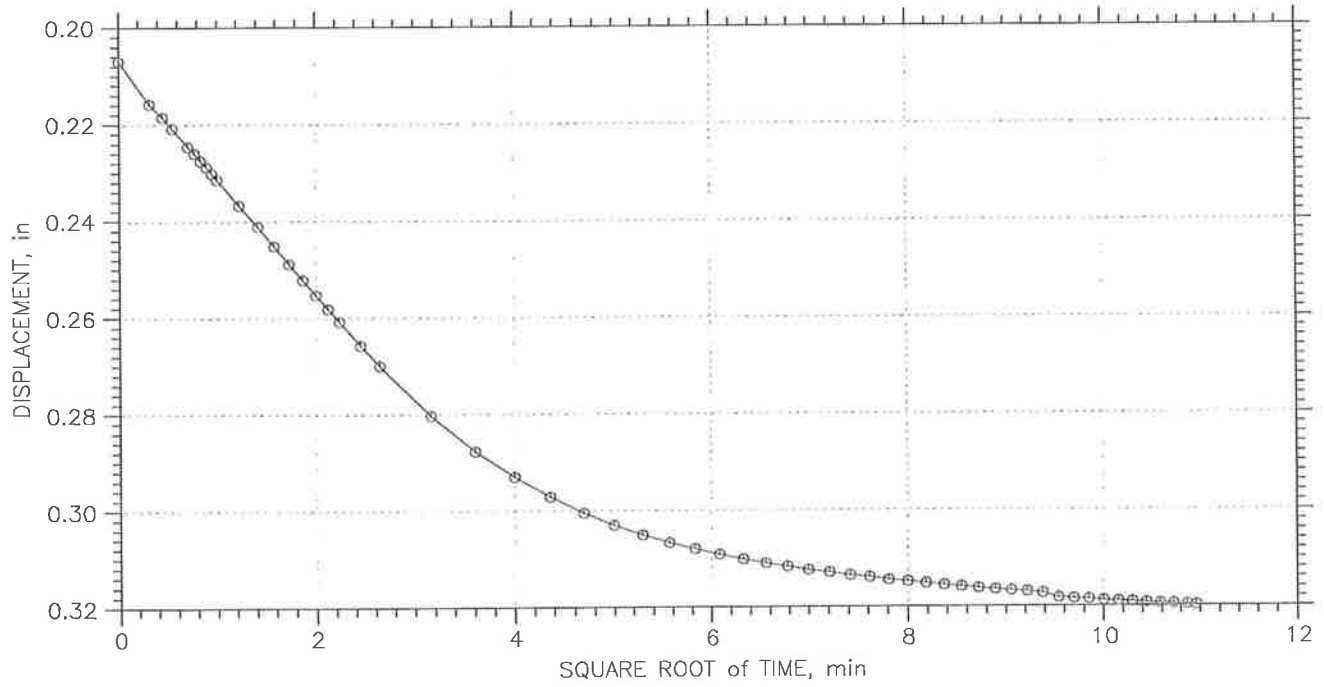
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 7 of 14

Stress: 16000 psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By:
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

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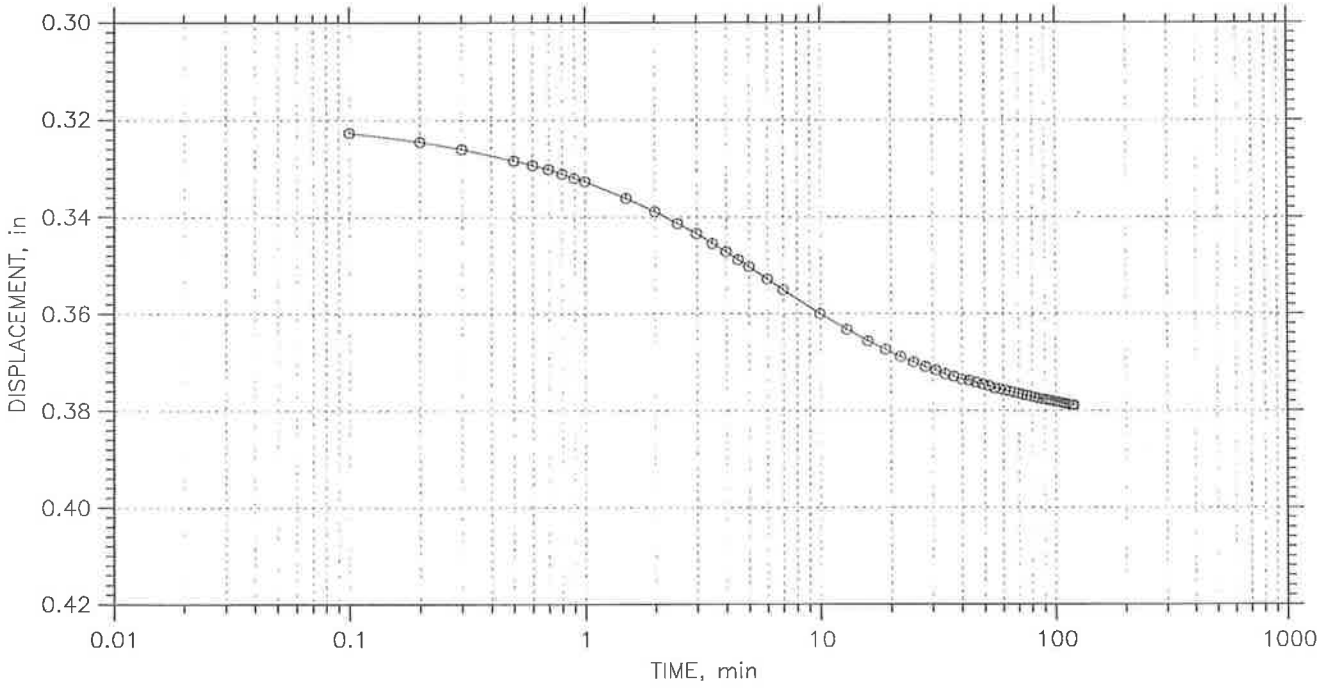
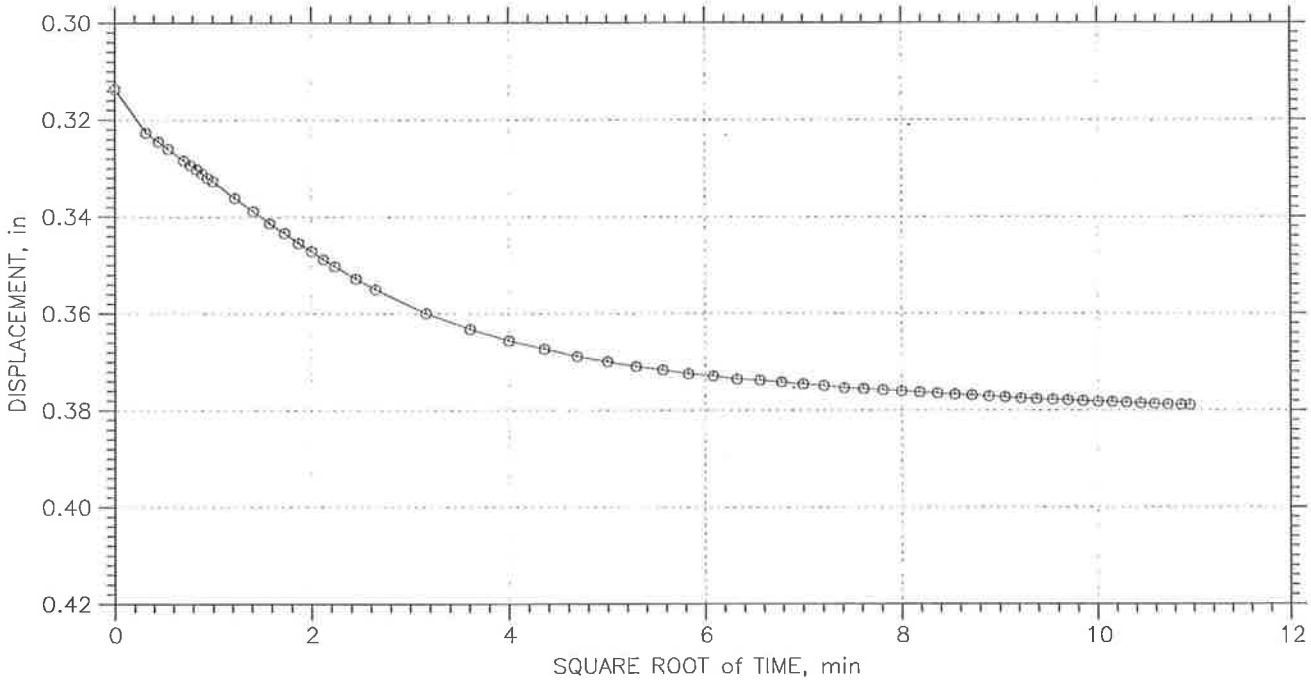
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 8 of 14

Stress: 32000 psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: SB
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

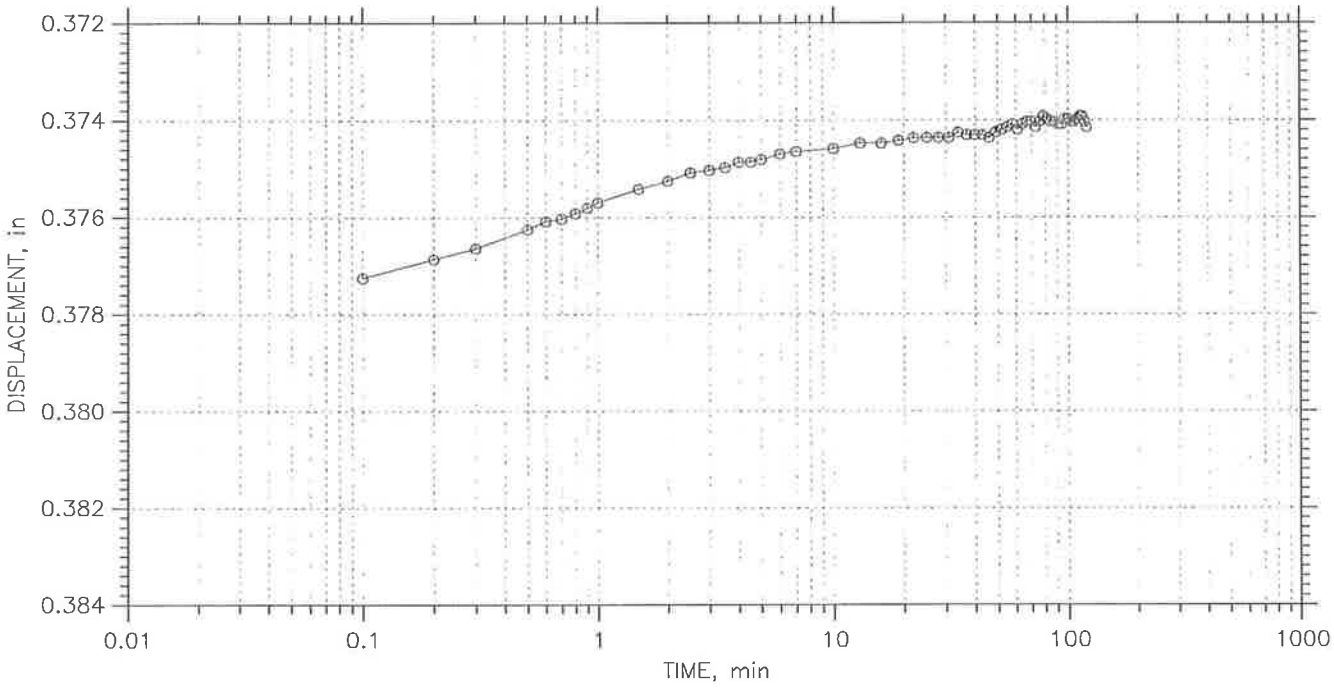
Wed, 15-SEP-2010 15:40:27

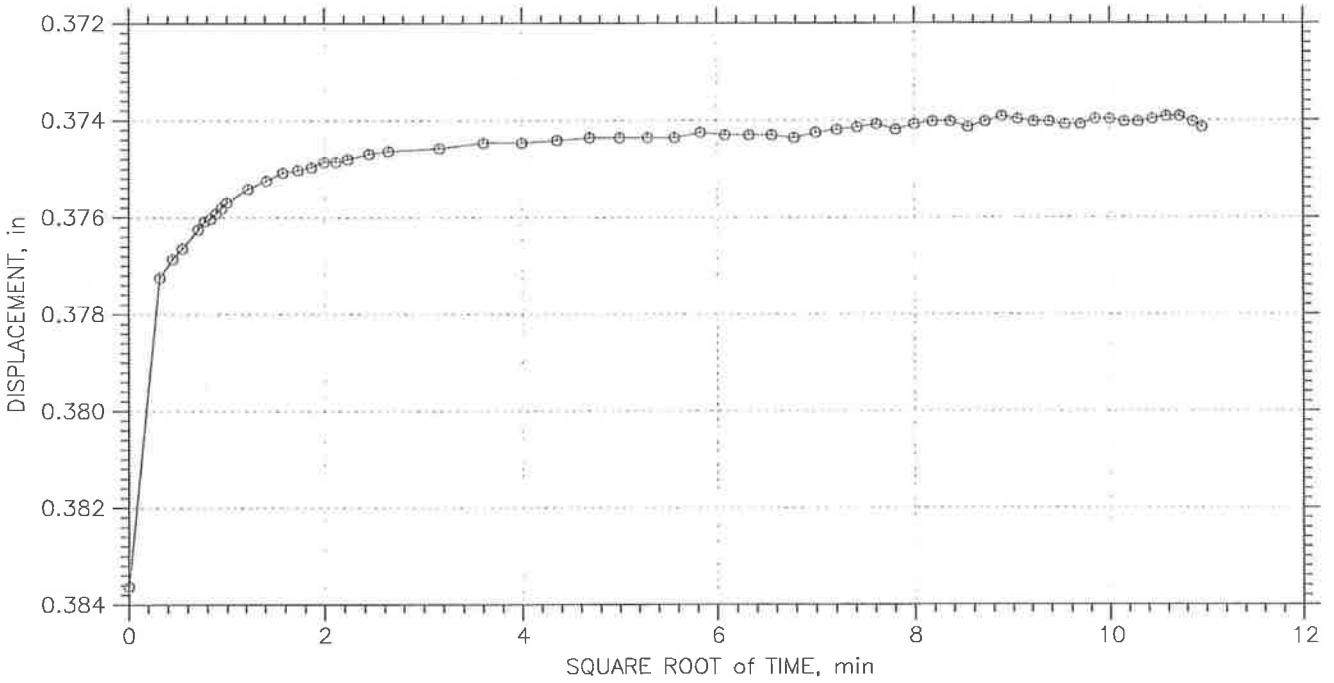
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 9 of 14

Stress: 16000 psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JB
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

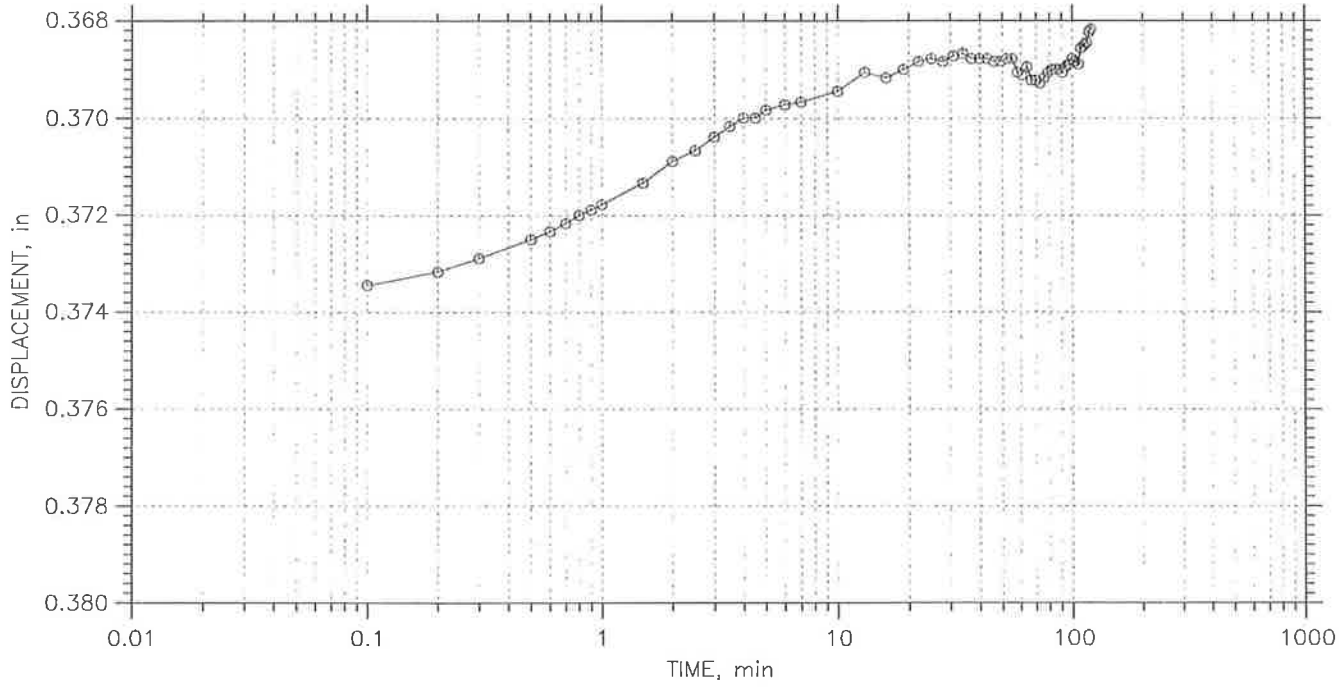
Wed, 15-SEP-2010 15:40:27

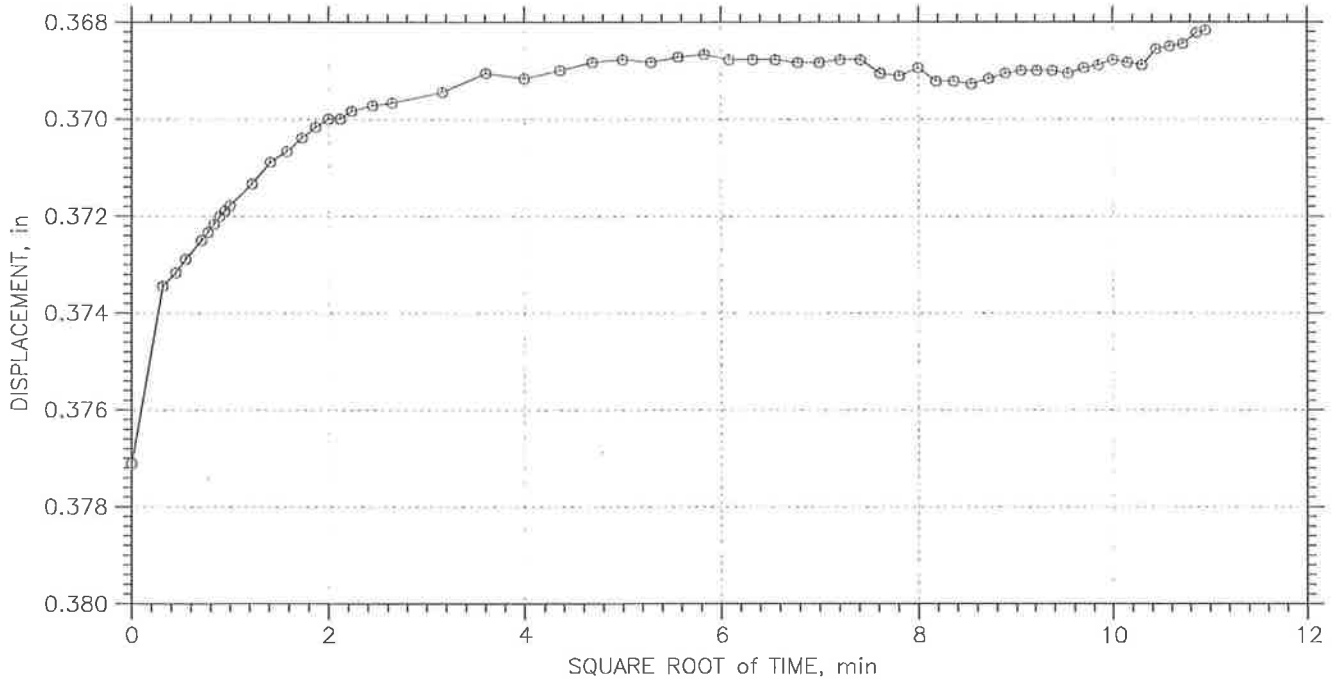
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 10 of 14

Stress: 8000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JS
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

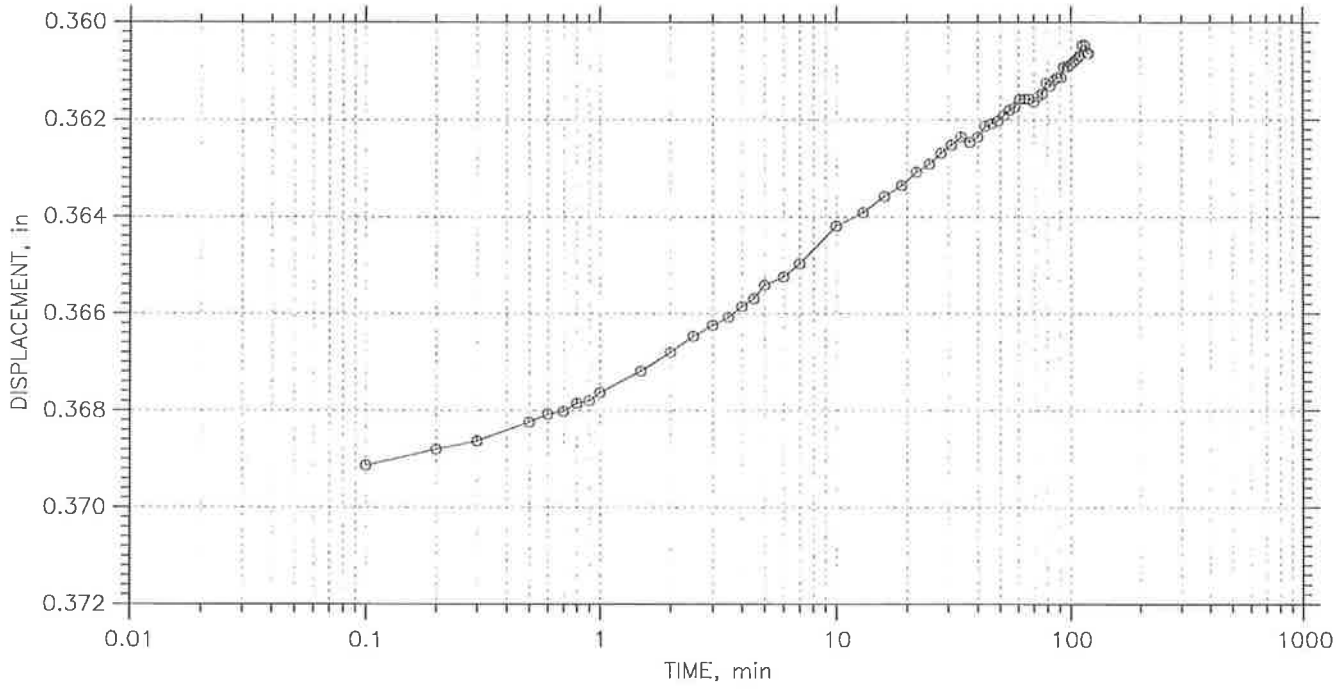
Wed, 15-SEP-2010 15:40:28

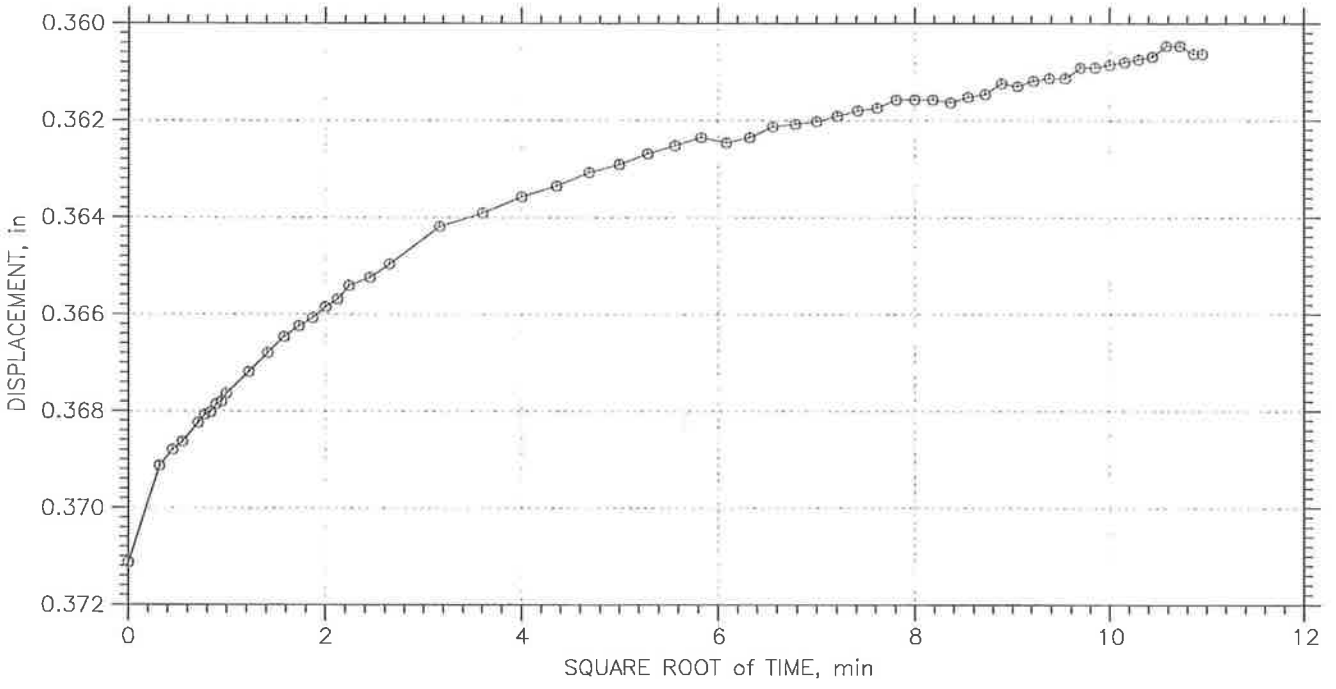
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 11 of 14

Stress: 4000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JB
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

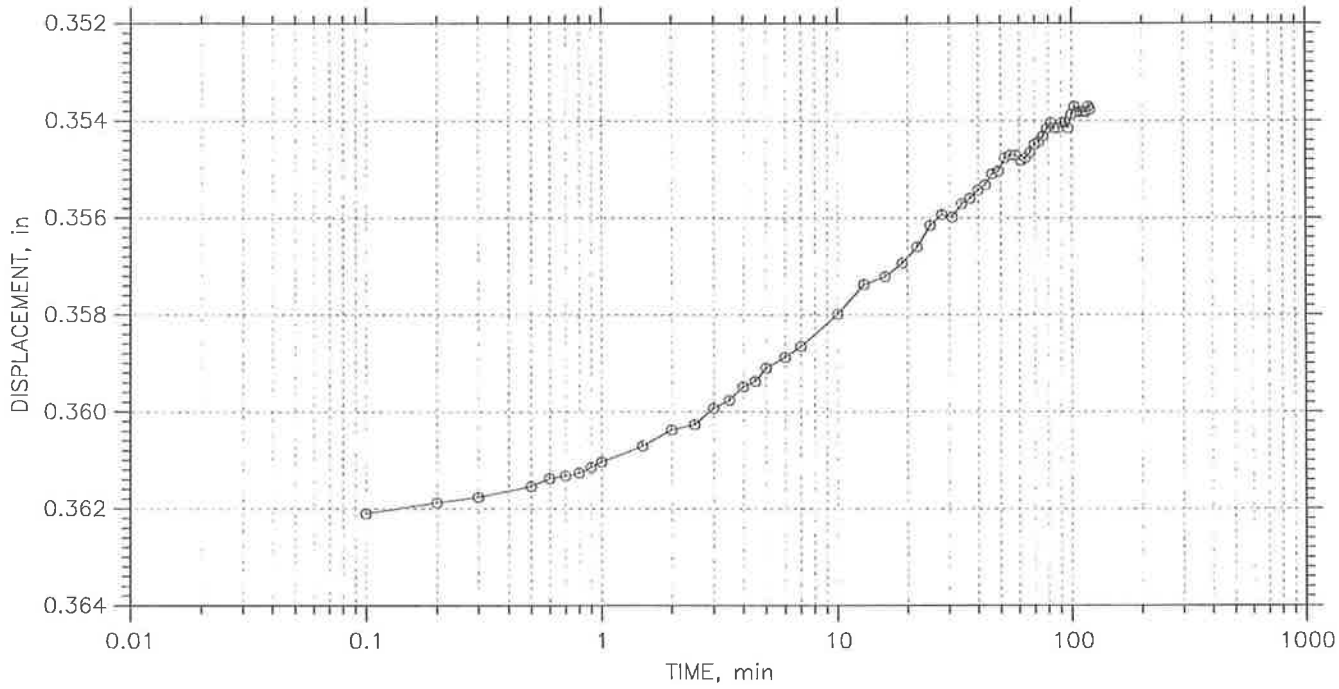
Wed, 15-SEP-2010 15:40:28

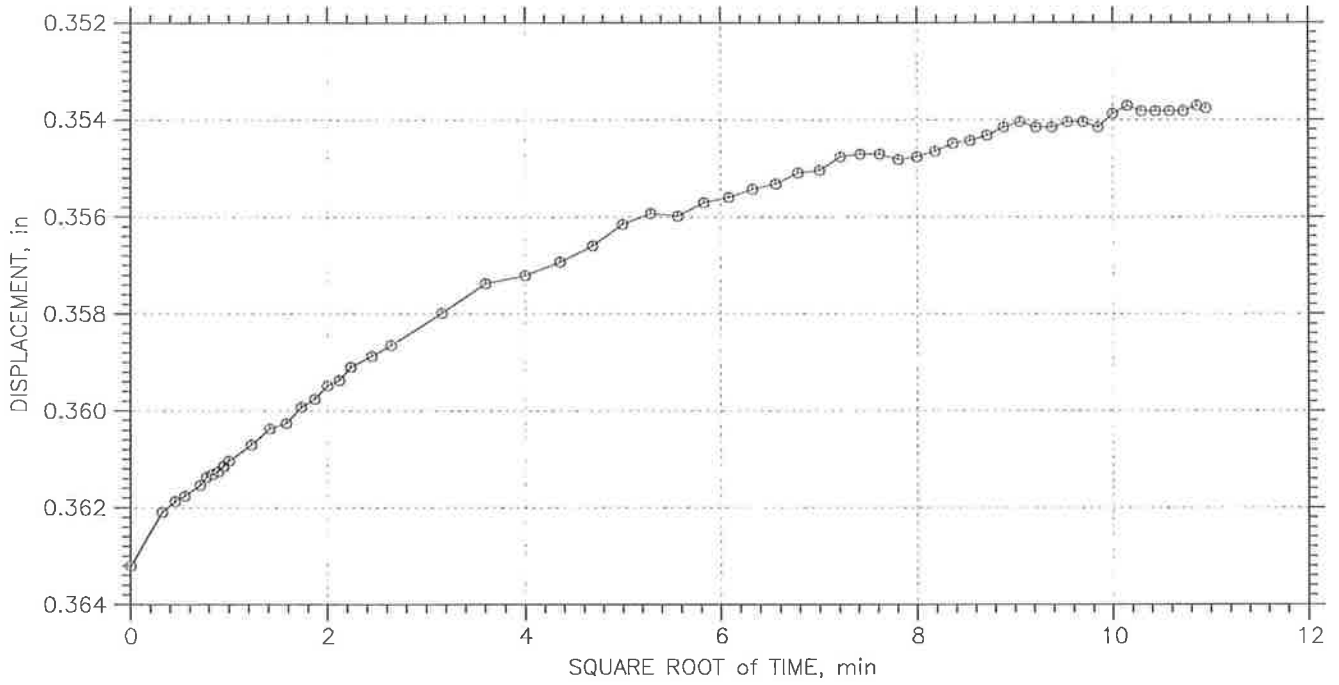
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 12 of 14

Stress: 2000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JSB
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

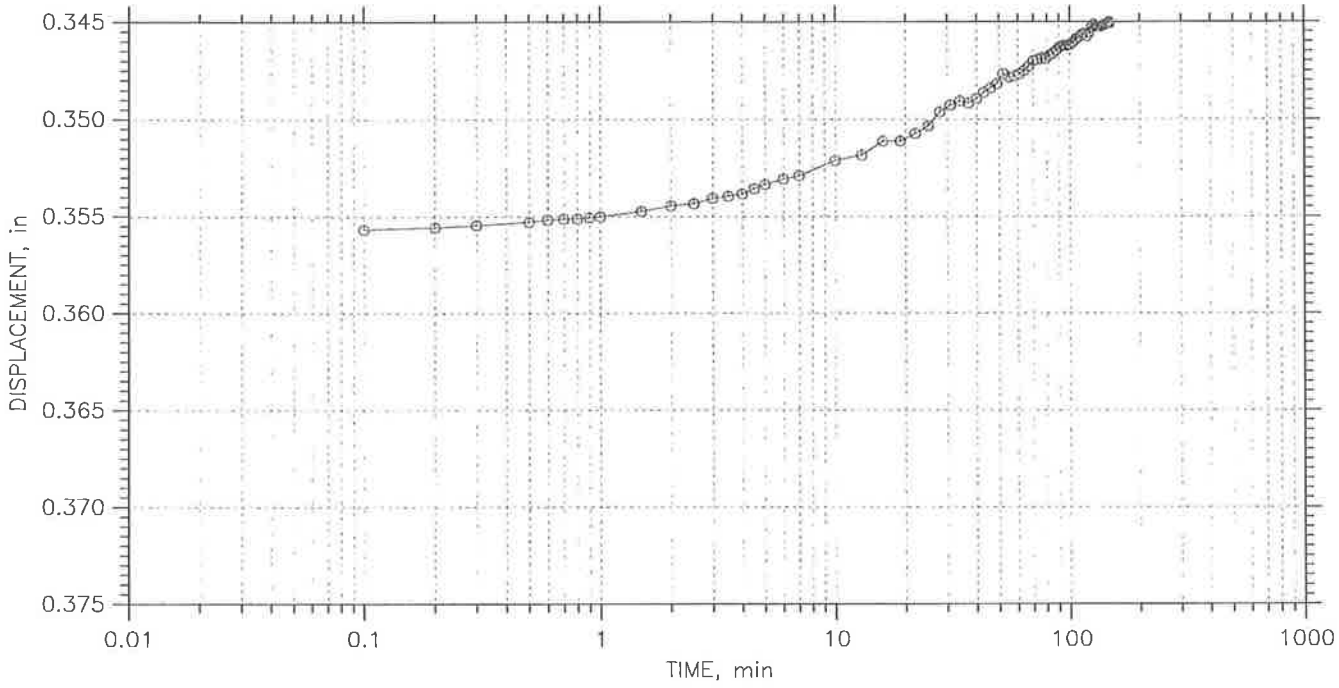
Wed, 15-SEP-2010 15:40:29

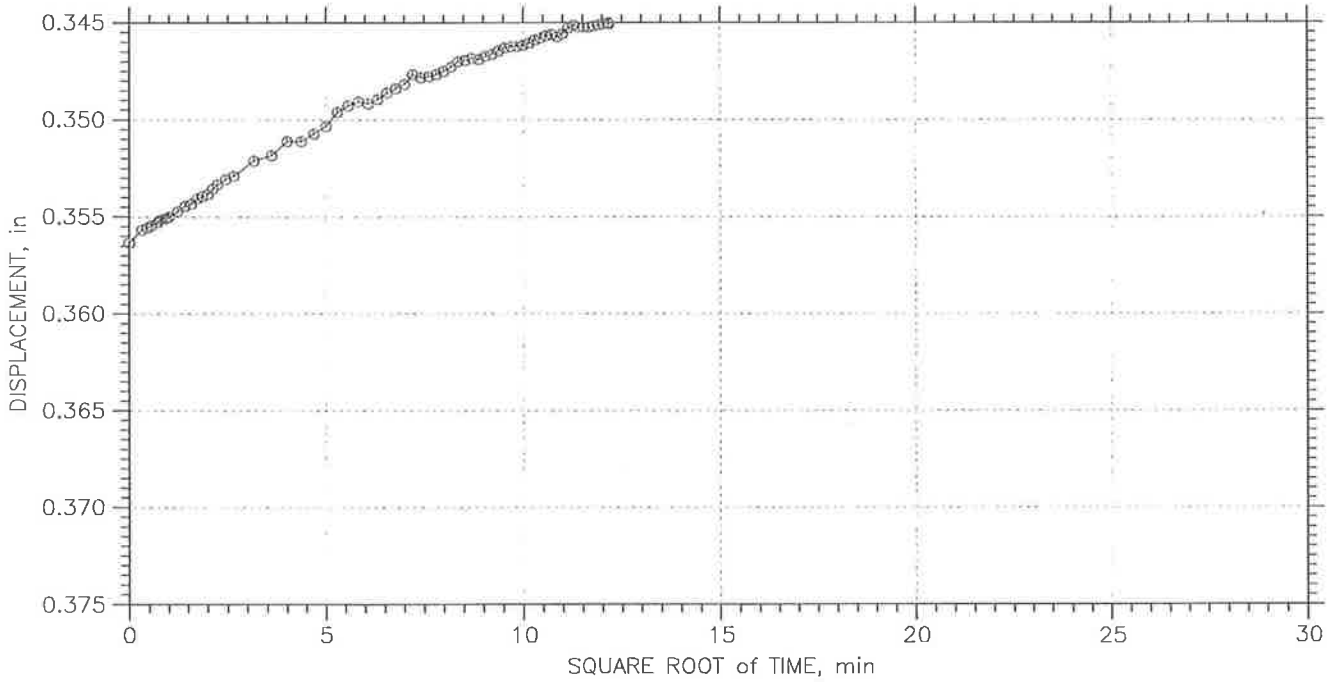
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 13 of 14

Stress: 1000. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By: JB
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

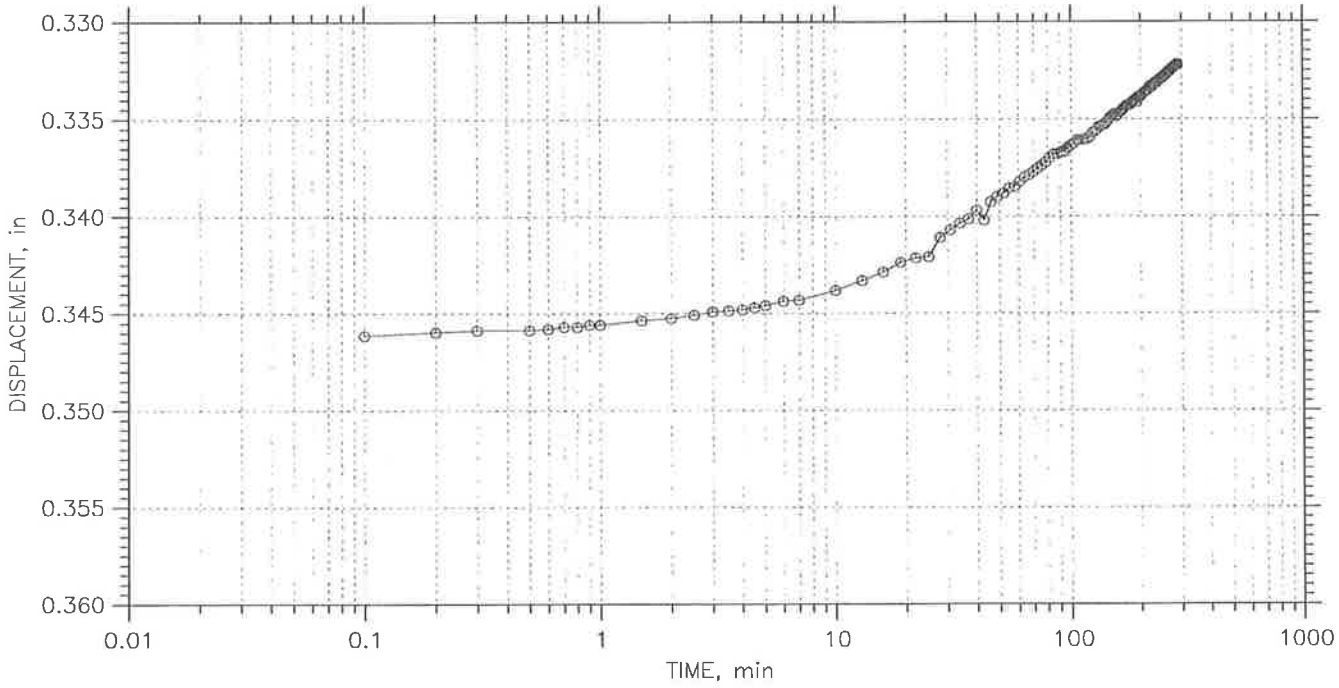
Wed, 15-SEP-2010 15:40:30

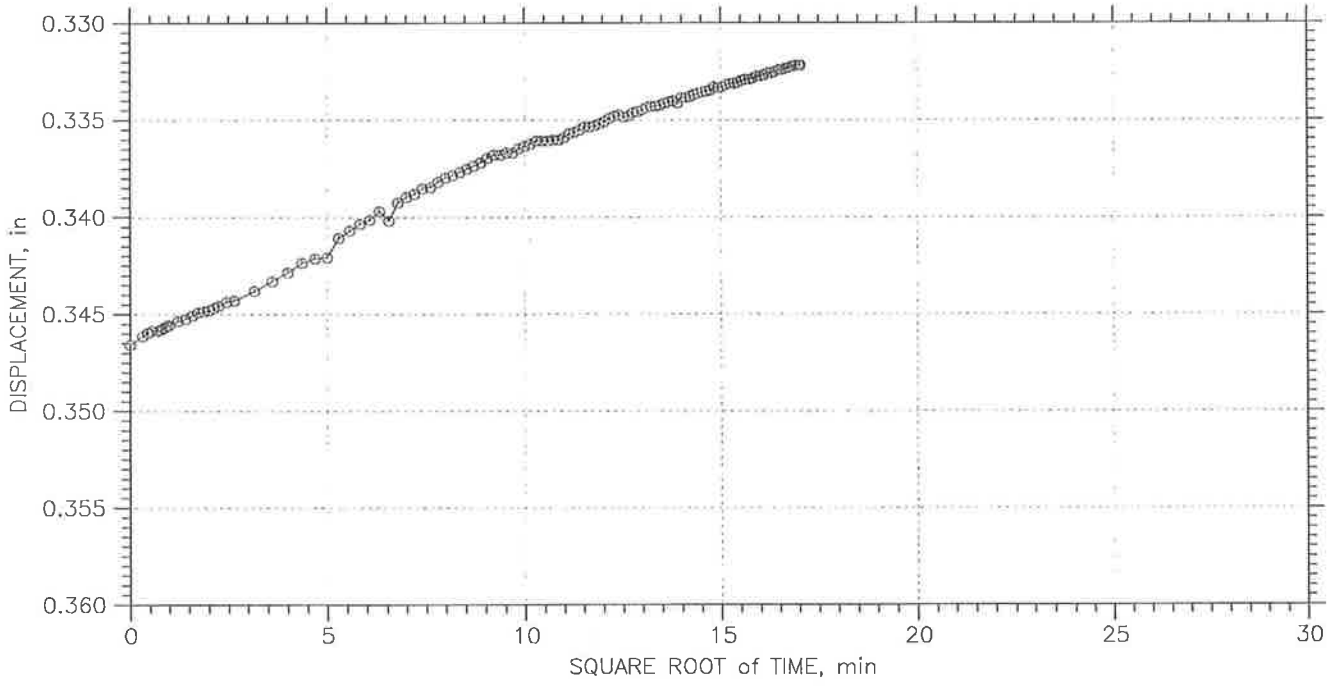
CONSOLIDATION TEST DATA

TIME CURVES

Constant Load Step: 14 of 14

Stress: 500. psf





Project: Egyptian Theater	Location: Coos Bay	Project No.: 609013.150
Boring No.: BH1	Tested By: JMA	Checked By:
Sample No.: 10-558	Test Date: 6/30/10	Depth: 25-27
Test No.: 10-558	Sample Type: 3"shelby	Elevation:
Description: Dark Brown Clayey SILT		
Remarks: 1500PSF Preload		

Wed, 15-SEP-2010 15:40:30