Geotechnical Engineering Services

LA-16 Non-Rock Alternatives
to Shoreline Protection Demonstration Project
Lafourche, Jefferson and Iberia Parish, Louisiana

for

US Department of Agriculture
Natural Resources Conservation Service

July 7, 2011

GeoEngineers
Earth Science + Technology

Geotechnical Engineering Services

LA-16 Non-Rock Alternatives to Shoreline Protection Demonstration Project

Lafourche, Jefferson and Iberia Parish, Louisiana

File No. 10883-011-00

July 7, 2011

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INTRODUCTION

This report presents the results of our geotechnical engineering services for the LA-16 Non-Rock Alternatives to Shoreline Protection Demonstration Project (Non-Rock Demo Project) located in Lafourche, Jefferson and Iberia Parishes, in Louisiana.

Our services have been completed under the United States Department of Agriculture - Natural Resources Conservation Service (NRCS) contract number AG-7217-C-10-0003. Our site visits were completed under NRCS order number AG-7217-D-11-0015, dated February 9, 2011, and our field investigation, laboratory testing program and reporting were completed under NRCS order number AG-7217-D-11-0056, dated April 19, 2011.

PROJECT UNDERSTANDING

Our understanding of the project is based on the March 3, 2011 NRCS Scope of Services for Geotechnical Investigation, our conversations with representatives of the NRCS and site visits/meetings with NRCS representatives at each project location.

We understand the purpose of this project is to collect geotechnical soil samples and laboratory data to evaluate the potential performance and effectiveness of several non-rock alternatives for shoreline protection. The project consists of three test plots in coastal Louisiana along the shorelines of Bayou Perot, Lake Salvador and Vermilion Bay and are identified as West Bayou Perot, Southeast Lake Salvador and Shark Island as shown in Figure 1.

SCOPE OF SERVICES

Our specific scope of services included the following:

1. Visited the sites to observe field conditions and better understand the project conditions.
2. Contacted the “Louisiana One-Call” to clear the boring locations of potential underground utilities.
3. Performed a field investigation that included:
    a. Four soil borings were drilled at each test site including one soil boring to 50 feet below the mudline (bml) and three soil borings to 30 feet bml with a pontoon-mounted drill rig, and
    b. Two borehole vane shear tests at each soil boring location.
4. Performed laboratory testing on select undisturbed specimens. Selected samples were lab classified and subjected to strength, unit weight, moisture content, Atterberg limit, sieve, hydrometer, organic content, specific gravity, and consolidation testing.
5. Prepared soil cross sections based on the field and laboratory investigation.
6. Prepared a report of findings.

The work scope was completed as proposed with the following exception.

- At the Shark Island location, GeoEngineers drilled the 50-foot deep soil boring at the location of BHSP-SI1-30, instead of BHSP-SI3-50. The completed soil boring labels were changed to reflect the actual depth drilled consistent with the NRCS soil boring designations.

SITE CONDITIONS

Project Vicinity

The project sites are located along the shorelines of Bayou Perot, Lake Salvador and Vermilion Bay in Lafourche, Jefferson and Iberia Parishes, Louisiana, respectively. The surrounding areas of each project site are largely undeveloped marsh land and large bodies of open water. Bayou Perot, Lake Salvador and Vermilion Bay are susceptible to rough water conditions when high winds are present.

Site Conditions

On February 14 and 15, 2011, representatives of GeoEngineers and NRCS toured each project site by boat. All boring locations were accessible with the boat at the time of the site visits. Site conditions for all project sites are described below:

- Water depths at each project site are generally shallow (2-3 feet) within 200 feet of the shoreline;
- Mobilization to these sites require traversing large bodies of water which can be difficult in rough water conditions;
- Several marked pipelines are in the vicinity of each project site; and
- Ground surface along the shoreline was typically no more than 1 to 2 feet above the water level at the time of the site visits. Land is vegetated predominantly with grasses; however, some small trees and brush were sparsely growing along the shoreline.

Subsurface Conditions

Site specific information including a site map, soil boring location plan, boring logs, subsurface profile and laboratory test results for the West Bayou Perot, Southeast Lake Salvador and Shark Island project sites are provided in Appendices A, B and C, respectively.

The field exploration and laboratory testing program performed by GeoEngineers to support this project along with site specific stratigraphy details are described in the following paragraphs.

Field Exploration

Soil conditions were evaluated in each project area by advancing 3 soil borings to 30 feet bml and one soil boring to 50 feet bml. Two field vane shear tests were conducted at each soil boring location. All soil borings were sampled continuously for the top 20 feet, then on 5-foot centers thereafter.

The soil borings were completed between April 29, 2011 – May 7, 2011 using a pontoon-mounted drill rig. A representative from GeoEngineers managed the drilling on a full time basis, examined

and classified the soils encountered, obtained representative samples, and prepared a log of each borehole.

Borehole sampling was conducted in general accordance with applicable ASTM International (ASTM) specifications. High-quality, undisturbed, cohesive and semi-cohesive soil (clay/clayey silt) specimens suitable for laboratory strength testing were obtained using a 30-inch-long, 3-inch outside diameter (O.D.), thin-walled steel Shelby tube sampler. The sampler was hydraulically pushed into the ground a distance not exceeding 24 inches per specimen.

Immediately upon recovery, each sample was classified in the field based on soil exposed on the end of the Shelby tube. Each Shelby tube was then sealed and transported in a vertical position (bottom down) to our Baton Rouge laboratory to minimize sample disturbance.

Upon completion of sampling, boreholes were backfilled in accordance with state requirements. The pontoon-mounted drill rig was then repositioned adjacent (± 5 feet) to the previously completed soil boring where a GEONOR H-10 Vane Borer Instrument was used to perform two field shear vane tests at various depths in general accordance with ASTM D 2573. The test consisted of placing a four-blade vane (65 mm wide and 130 mm long) in the in-situ soil and rotating it from aboard the pontoon-mounted drill rig to determine the torque required to shear a cylindrical surface with the vane. The resulting torque was used to determine the in-situ undrained shear strength.

Field vane readings in peat for these three project sites typically indicate lower strengths than other test methods, based on field vane data evaluations recommended in published literature. The field vane data evaluation for each site is included in the respective appendix (Appendices A, B and C). For these investigations, GeoEngineers recommends placing more emphasis on the laboratory compression and minivane test results when developing a soil strength profile for design. Results of each field shear vane test are presented on the soil boring logs at their respective depths in the appendices.

Laboratory Testing

Each soft semi-cohesive and cohesive sample was subjected to a laboratory minivane test prior to extrusion. Upon extrusion, each sample was classified visually in general accordance with ASTM D 2488. Undisturbed samples were subjected to laboratory testing consisting of moisture content, dry unit weight and unconsolidated undrained compression testing. Representative samples were selected for laboratory testing consisting of organic content, consolidation testing and Atterberg limits. The test results are presented on the boring logs at their respective depths. Laboratory test results are also presented in figures and summary tables in Appendices A, B and C.

Soil Stratigraphy

The soil stratigraphy descriptions presented below are general. Soil conditions can vary outside of the borings. For details, refer to the boring logs in Appendices A, B, and C.

- West Bayou Perot. Subsurface soils encountered at the West Bayou Perot project site were predomently very soft peat in the top 10 to 15 feet bml underlain by by very soft organic clay

and clay. In the one deeper 50-foot soil boring (BHSP-BP3-50) a layer of firm sand was encountered at approximately 40 feet bml.

- Southeast Lake Salvador. Subsurface soils encountered at the Southeast Lake Salvador project consisted of both very soft peat and organic clay in the upper 15 feet of the soil profile bml. Below this depth the profile consisted of predominantly very soft organic clay; however, layers of very soft clay were also present, and in in soil boring BHSP-LS3-50 a 3-foot thick layer of firm sand was present at approximately 19 feet bml.
- Shark Island. Subsurface soils encountered at the Shark Island project site were generally very soft peat to approximately 15 feet bml, underlain by very soft clay and organic clay to approximately 20 feet bml. Beneath 20 feet bml the soil type varied between organic clay to clay, to clay with silt, and the soil consistency varied from very soft to medium.

CONCLUSIONS

The West Bayou Perot, Southeast Lake Salvador and Shark Island project sites have very similar site conditions. Each site is located along the shoreline of a large body of water susceptible to rough water conditions. Mobilization to these sites by boat could be difficult depending on the weather conditions. At the time of our site visits and investigations, water depths within 200 feet of the shoreline were generally 2 to 3 feet deep. However, water depths at each site can vary substantually depending on the tide/weather conditions.

While all three of the sites indicate very soft organic soil in the upper 20 feet or so of the soil profile, the soil encountered at the West Bayou Perot and Shark Island sites appeared to have more peat in this zone than the Southeast Lake Salvador site. Each site is unique and only a limited number of soil borings were comleted for this investigation, so with respect to demonstration projects, each site should be considered separately. Other factors such as prevailing winds and water depth, in addition to each site's unique soil characteristics may influence how alternative shoreline protection projects perform.

The organic soils encountered at these three sites will typically settle significantly when loaded, and will also shrink substantially if removed from water and allowed to dry. Settlement of non-rock shoreline protection systems is expected as a result of the soft organic soils present at all project sites.

LIMITATIONS

We have prepared this report for the exclusive use of the NRCS in support of LA-16 Non-Rock Alternatives to Shoreline Protection Demonstration Project located in Lafourche, Jefferson and Iberia Parishes, Louisiana.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted practices in the field of geotechnical engineering in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

Please refer to Appendix D titled "Report Limitations and Guidelines for Use" for additional information pertaining to use of this report.

FIGURES

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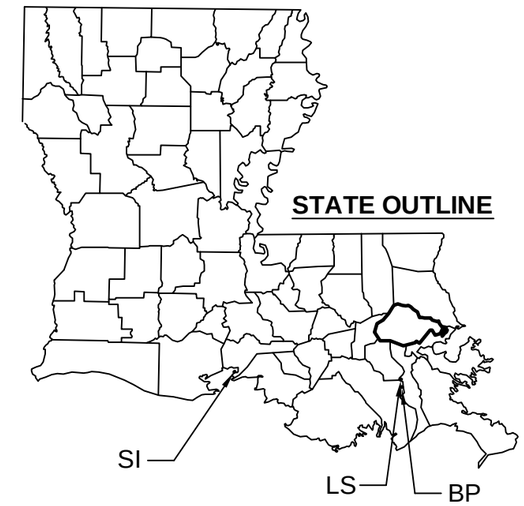

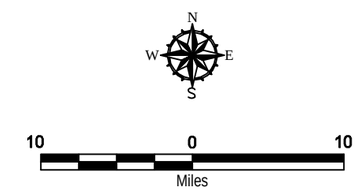

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Topographic image taken from USGS, USGS Digital Raster Graphics - 1:250,000 - Zone 15, Dated 1/21/1997

PROJECT VICINITY MAP

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Lafourche, Iberia & Jefferson Parishes, Louisiana

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Figure 1

JPV : KMC

P:\10\108830111\00\CAD\Overall vicinity map.dwg\TAB:Layout1 modified on Jun 06, 2011 - 4:10pm

APPENDICES

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APPENDIX A
West Bayou Perot Project Site

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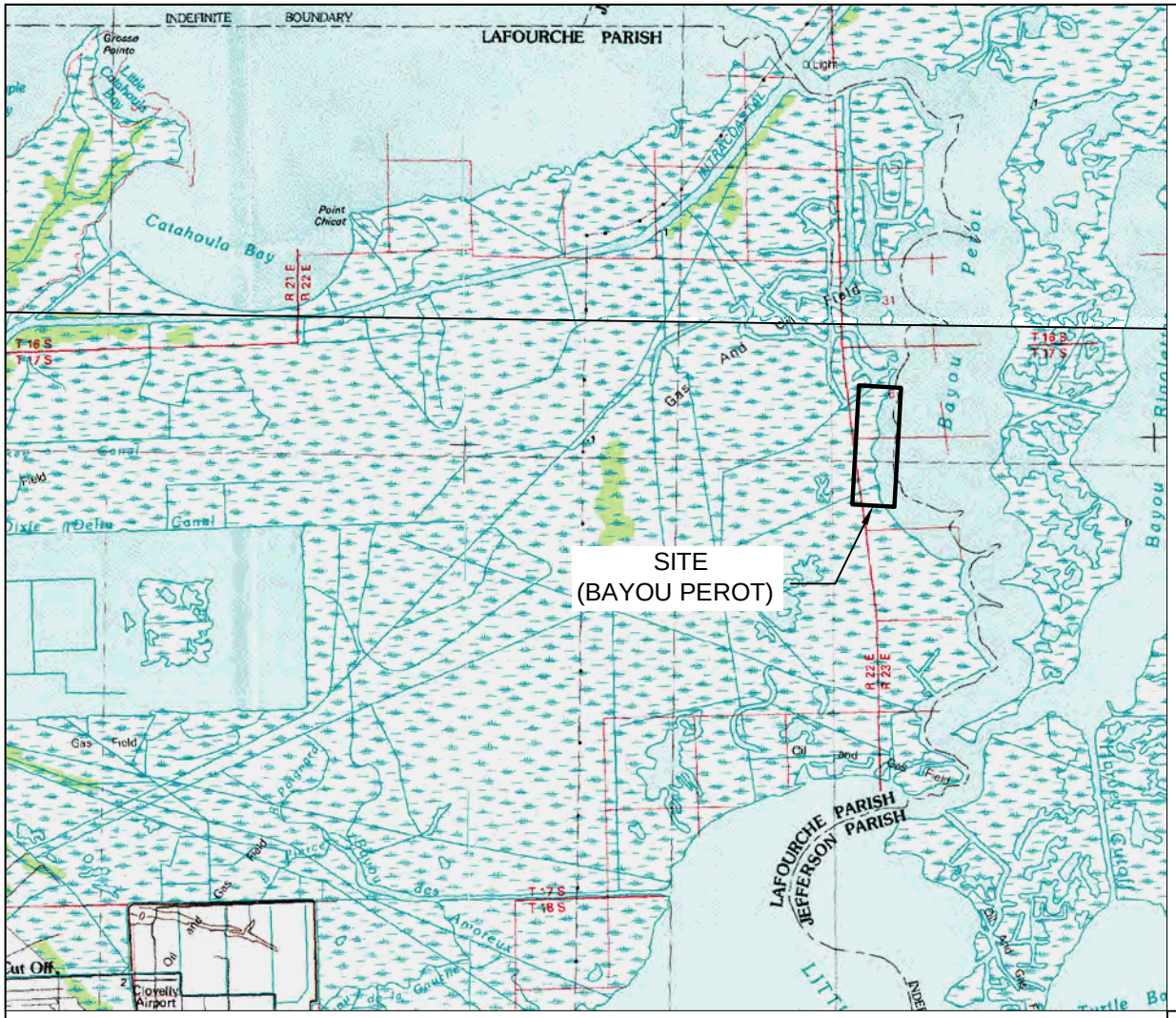
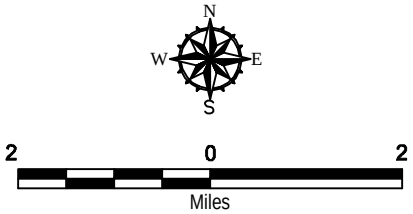
JPV : KMC





Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Topographic image taken from USGS, USGS Digital Raster Graphics - 1:100,000 - Zone 15, Dated 1/21/1997

WEST BAYOU PEROT
SITE MAP

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Lafourche Parish, Louisiana

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Figure A-1

P:\10\10883011\00\CAD\Boring Location Plan.dwg\TAB:Layout1 modified on Jun 06, 2011 - 2:47pm

JPV : KMC

BORING #	LATITUDE	LONGITUDE
SOUTH TERMINUS	N 29° 37' 02.7"	W 90° 10' 42.3"
BHSP-BP1-30	N 29° 37' 06.8"	W 90° 10' 46.4"
BHSP-BP2-30	N 29° 37' 16.2"	W 90° 10' 50.4"
BHSP-BP3-50	N 29° 37' 26.1"	W 90° 10' 50.4"
BHSP-BP4-30	N 29° 37' 37.4"	W 90° 10' 49.0"
NORTH TERMINUS	N 29° 37' 43.6"	W 90° 10' 47.2"

Legend

BHSP-BP4-30 Soil Boring Location

N
W E
S

2000 0 2000
Feet

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Aerial image taken from USGS, USGS High Resolution State Orthoimagery for the Louisiana Coastal Area, Dated: 10/18/2008

WEST BAYOU PEROT
SOIL BORING LOCATION PLAN

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Lafourche Parish, Louisiana

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Figure A-2

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS MORE THAN 50% RETAINED ON NO. 200 SIEVE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS
				SP	POORLY-GRADED SANDS, GRAVELLY SAND
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

ADDITIONAL MATERIAL SYMBOLS

SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
	CC	Cement Concrete
	AC	Asphalt Concrete
	CR	Crushed Rock/ Quarry Spalls
	TS	Topsoil/ Forest Duff/Sod

Measured groundwater level in exploration, well, or piezometer

Groundwater observed at time of exploration

Perched water observed at time of exploration

Graphic Log Contact

Distinct contact between soil strata or geologic units

Approximate location of soil strata change within a geologic soil unit

Material Description Contact

Distinct contact between soil strata or geologic units

Approximate location of soil strata change within a geologic soil unit

Sampler Symbol Descriptions

Standard Penetration Test (SPT)

Shelby tube

Piston

Direct-Push

Bulk or grab

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

A "P" indicates sampler pushed using the weight of the drill rig.

Laboratory / Field Tests

%F	Percent fines
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture content and dry density
OC	Organic content
PM	Permeability or hydraulic conductivity
PP	Pocket penetrometer
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
VS	Vane shear

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

KEY TO EXPLORATION LOGS

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FIGURE A-3

Drilled	Start 5/5/2011	End 5/5/2011	Total Depth (ft) 34	Logged By TJS / Checked By JPV	Driller Specialized Environmental Resources, LLC	Drilling Method Wet Rotary
Top of Deck Elevation (ft) Vertical Datum	2.6		Hammer Data	Safety Hammer/Cathead 140 (lbs) / 30 (in) Drop	Drilling Equipment	Pontoon-Mounted Drill Rig
Latitude / Longitude	N29° 37' 06.8" / W90° 10' 42.3"		System Datum	Geographic NAVD88 (feet)	Water Depth	
Notes: See Figure A-1 for explanation of symbols. Cement-bentonite grout backfill top 25 feet.					Date Measured: 5/5/2011	Depth (ft): 2.0 / Elevation (ft): 0.6

Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Group Classification	MATERIAL DESCRIPTION	Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
0							Top of deck									
					▽		Water line									
							Mudline									
	8			1		PT	Very soft black peat	936	6.7	0.07	0.06	14			0.06	
5	12			2			Very soft black peat	610	10.2	0.03	0.17	11			0.09	47
	15			3			Very soft black peat	406	13.9	0.11	0.29	11	413	347	0.09	35
10	12			4			Very soft black peat	648	10	0.07	0.40	10			0.12	52
	12			5			Very soft black peat (field vane - 0.02 KSF)	627	9.1	0.09	0.52	9			0.07	34
	5			6			Very soft dark brown peat	512							0.08	41
15	15			7			Very soft dark brown peat (field vane - 0.03 KSF)	712	8.6	0.04	0.75	14			0.06	49
	12			8		OH	Very soft gray organic clay	113	34	0.06	0.86	13				
20	4			9			Gray organic clay	195							0.06	15
	11			10			Very soft gray slightly organic clay	139	41.6	0.06	1.09	13				
25						CH										
	12			11			Very soft gray clay with organic matter	43	65.4	0.12	1.32	7	99	75	0.08	
30																
	19			12			Very soft gray clay with silt traces	37	74.2	0.19	1.67	11	98	75		

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-BP1-30

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Project: LA-16 Non-Rock Demo Project

Project Location: Lafourche Parish, Louisiana

Project Number: 10883-011-00

Figure A-4

Sheet 1 of 1

Baton Rouge: Date:6/9/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GE18_GEOTECH_LAB

Drilled	Start 5/5/2011	End 5/5/2011	Total Depth (ft) 34	Logged By TJS / Checked By JPV	Driller Specialized Environmental Resources, LLC	Drilling Method Wet Rotary
Top of Deck Elevation (ft) Vertical Datum	2.4		Hammer Data	Safety Hammer/Cathead 140 (lbs) / 30 (in) Drop	Drilling Equipment	Pontoon-Mounted Drill Rig
Latitude / Longitude	N29° 37' 16.2" / W90° 10' 50.4"		System Datum	Geographic NAVD88 (feet)	Water Depth	
Notes: See Figure A-1 for explanation of symbols. Cement-bentonite grout backfill top 25 feet.					Date Measured: 5/5/2011	Depth (ft): 2.0 / Elevation (ft): 0.4

Elevation (feet)	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
	0									Top of deck									
										Water line									
0										Mudline									
						1				No sample recovered									
	5		8			2			PT	Very soft dark brown peat	478	12.6	0.1	0.17	13			0.12	
5			6			3				Very soft dark brown peat	600	9.9	0.08	0.29	15			0.11	64
	10		7			4				Very soft dark brown peat	423	13.2	0.57	0.40	12			0.05	
10			7			5				Very soft dark brown peat (field vane - 0.08 KSF)	469	12.7	0.04	0.52	13				42
			5			6				Very soft dark brown peat	503								31
	15		12			7				Very soft dark brown peat	322	17.4	0.04	0.75	13			0.05	44
15			15			8				Very soft dark brown peat (field vane - 0.04 KSF)	262	17.2	0.05	0.86	14			0.1	27
	20		16			9				Very soft dark brown peat	349	15.8	0.05	0.98	14	284	215	0.07	
20			15			10			OH	Very soft dark gray organic clay	75	42.8	0.09	1.09	12			0.05	56
	25																		
25			14			11				Very soft dark gray organic clay	90	48.7	0.05	1.38	14	65	47	0.07	
	30																		
30			16			12				Very soft dark gray organic clay	108	47.1	0.08	1.67	10				

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-BP2-30

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Project: LA-16 Non-Rock Demo Project

Project Location: Lafourche Parish, Louisiana

Project Number: 10883-011-00

Figure A-5

Sheet 1 of 1

Baton Rouge: Date:6/9/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GE18_GEOTECH_LAB

Drilled	Start 5/5/2011	End 5/5/2011	Total Depth (ft) 54	Logged By TJS / Checked By JPV	Driller Specialized Environmental Resources, LLC	Drilling Method Wet Rotary
Top of Deck Elevation (ft) Vertical Datum	1.4		Hammer Data	Safety Hammer/Cathead 140 (lbs) / 30 (in) Drop	Drilling Equipment	Pontoon-Mounted Drill Rig
Latitude / Longitude	N29° 37' 26.1" / W90° 10' 50.4"		System Datum	Geographic NAVD88 (feet)	Water Depth	
Notes: See Figure A-1 for explanation of symbols. Cement-bentonite grout backfill top 25 feet.					Date Measured: 5/5/2011	Depth (ft): 2.0 / Elevation (ft): -0.7

Elevation (feet)	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
	0									Top of deck									
0							▽			Water line									
										Mudline									
			10			1			PT	Very soft black peat with clay traces	655	9	0.12	0.06	8			0.08	46
	5																		
-5			13			2				Very soft black peat	502	12.2	0.07	0.17	13				
			10			3				Very soft black peat	412	13.3	0.08	0.29	13			0.08	49
	10		12			4				Very soft brown peat	582	10.6	0.09	0.40	12			0.07	
-10			10			5				Very soft black peat	707	8.5	0.07	0.52	15			0.13	46
			12			6				Very soft dark brown peat with 1½" organic clay layer	842	8	0.06	0.63	10			0.08	
	15																		
-15			6			7				Very soft brown peat with 2" organic clay layer (field vane - 0.04 KSF)	330	17.6	0.07	0.75	15			0.09	
			12			8			OH	Very soft brown slightly organic clay with organic matter	103	49.2	0.07	0.86	14	102	78	0.06	
	20		13			9			PT	Very soft brown peat (field vane - 0.08 KSF)	775	7.9	0.08	0.98	6	728	493	0.07	
-20			8			10			OH	Very soft brown organic clay	77	47.2	0.13	1.09	5			0.11	
	25																		
-25			11			11				Very soft gray clay with organic matter						86	64	0.16	
	30																		
-30			14			12				Very soft gray clay with organic matter	83	53.6	0.1	1.67	15				
	35																		

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-BP3-50

GEOENGINEERS

Project: LA-16 Non-Rock Demo Project

Project Location: Lafourche Parish, Louisiana

Project Number: 10883-011-00

Figure A-6

Sheet 1 of 2

Baton Rouge: Date:6/9/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GE18_GEOTECH_LAB

Elevation (feet)	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
	35																	
35		12			13				Very soft gray slightly organic clay with 3½" clayey silt layer	83	55.7	0.12	1.96	10	81	60	0.19	
	40							SP										
40		6			14				Firm gray fine sand with clay traces	39	87.7	1.74	2.25	12				
	45																	
45		7			15				Firm gray fine sand with clay traces	24	98.5	2.37	2.53	15	24	1		
	50							OH										
50		12			16				Very soft gray organic clay with 3" fine sand layer	152	39	0.12	2.82	10				

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-BP3-50 (continued)

GEOENGINEERS

Project: LA-16 Non-Rock Demo Project

Project Location: Lafourche Parish, Louisiana

Project Number: 10883-011-00

Figure A-6

Sheet 2 of 2

Baton Rouge: Date:6/9/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GE18_GEOTECH_LAB

Drilled	Start 5/6/2011	End 5/6/2011	Total Depth (ft) 34	Logged By TJS / Checked By JPV	Driller Specialized Environmental Resources, LLC	Drilling Method Wet Rotary
Top of Deck Elevation (ft) Vertical Datum	2.4		Hammer Data	Safety Hammer/Cathead 140 (lbs) / 30 (in) Drop	Drilling Equipment	Pontoon-Mounted Drill Rig
Latitude / Longitude	N29° 37' 37.4" / W90° 10' 49.0"		System Datum	Geographic NAVD88 (feet)	Water Depth	
Notes: See Figure A-1 for explanation of symbols. Cement-bentonite grout backfill top 25 feet.					Date Measured 5/6/2011	Depth (ft) 2.0 / Elevation (ft) 0.4

Elevation (feet)	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
	0									Top of deck									
							▽			Water line									
0										Mudline									
						1			PT	Very soft brown peat	783								64
	5		4			2				Very soft dark brown peat	1056								33
-5			5			3				Very soft dark brown peat	509							0.02	35
	10		8			4				Very soft dark brown peat with 1½" organic clay layer (field vane - 0.01 KSF)	381	15.6	0.07	0.46	13			0.05	
-10			5			5				Very soft dark brown peat	684								46
			6			6				Very soft dark brown peat (field vane - 0.04 KSF)	312	14.7	0.06	0.69	13			0.05	
	15		5			7			OH	Very soft gray organic clay	122	42.6	0.06	0.75	11			0.06	35
-15			12			8				Very soft gray organic clay	301	25.2	0.11	0.86	11			0.12	
	20		10			9			CH	Very soft gray clay with silt traces (field vane - 0.06 KSF)	48	70.5	0.15	0.98	15	63	44	0.19	
-20			15			10				Very soft gray clay with silt streaks	70	61.5	0.12	1.09	15			0.19	
	25																		
-25			13			11				Very soft gray clay with silt streaks	41	74.7	0.13	1.34	15	56	36		
	30																		
-30			12			12				Very soft gray clay with silt traces	54	65.8	0.08	1.67	14				

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-BP4-30

GEOENGINEERS

Project: LA-16 Non-Rock Demo Project

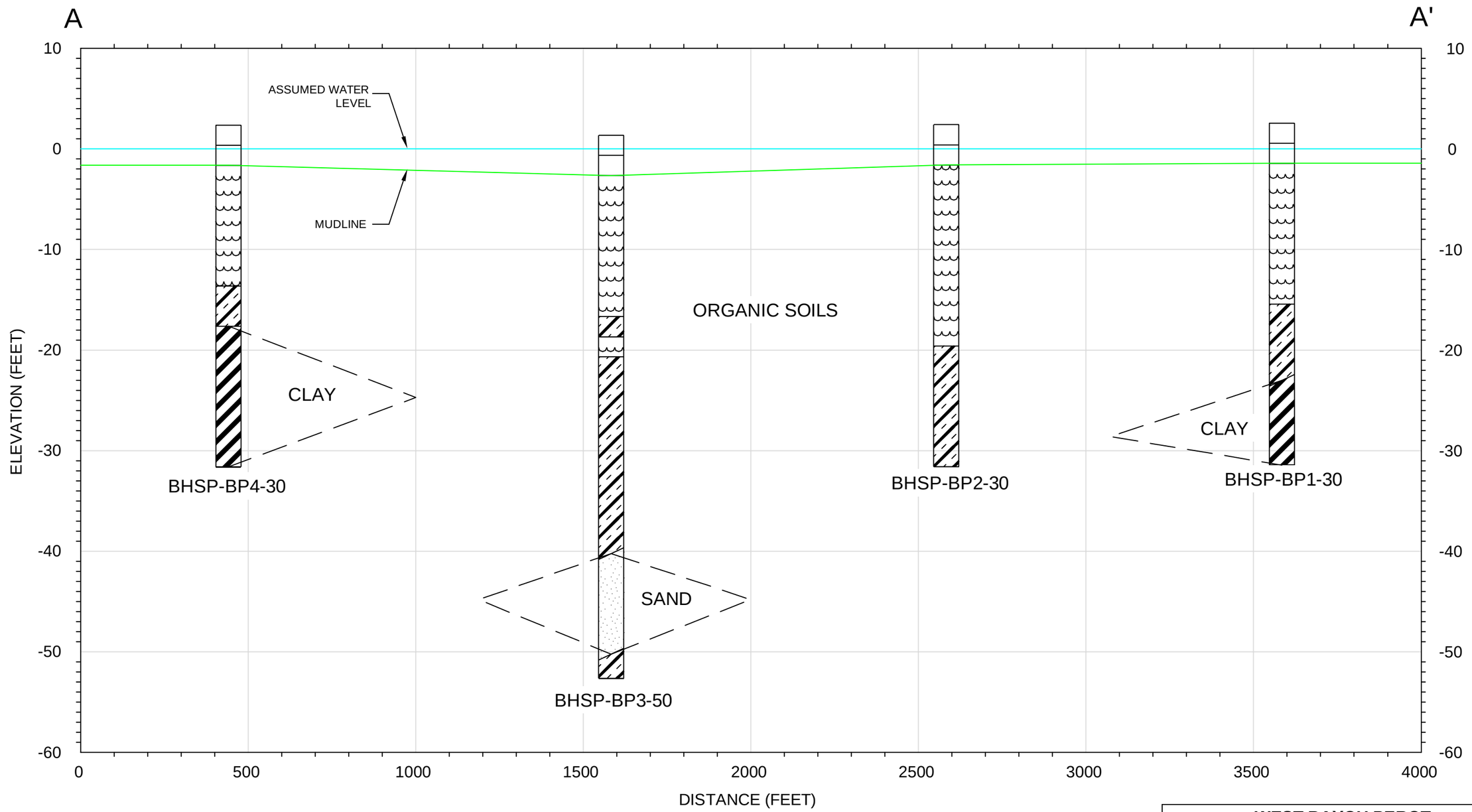
Project Location: Lafourche Parish, Louisiana

Project Number: 10883-011-00

Figure A-7

Sheet 1 of 1

Baton Rouge: Date:6/9/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GE18_GEOTECH_LAB



Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

WEST BAYOU PEROT
SUBSURFACE PROFILE

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Lafourche Parish, Louisiana

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Figure A-8

JPV : KMC

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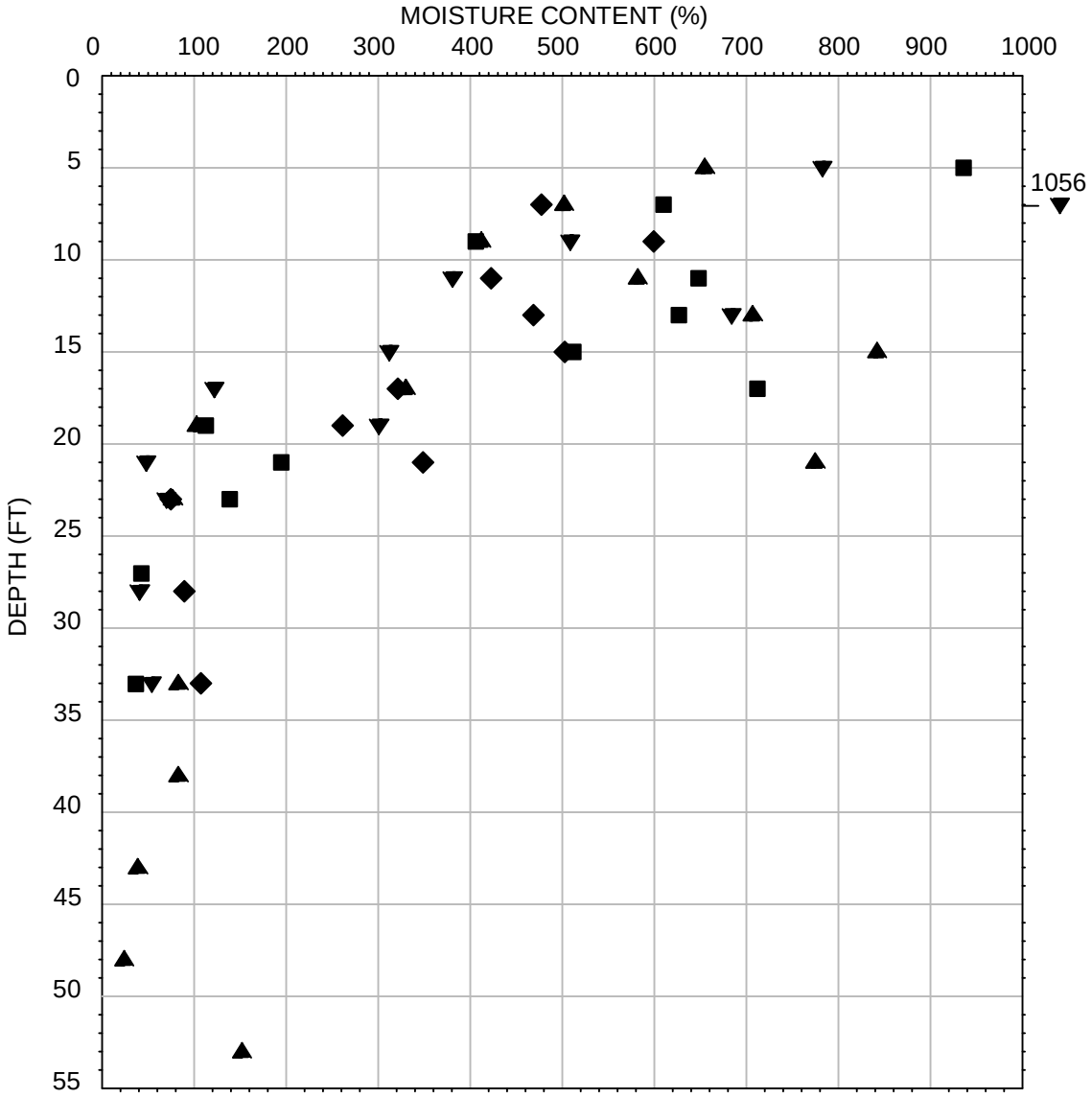

LEGEND

- ■ BHSP-BP1-30
- ◆ BHSP-BP2-30
- ▲ BHSP-BP3-50
- ▼ BHSP-BP4-30

WEST BAYOU PEROT
MOISTURE CONTENT VS DEPTH

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Lafourche Parish, Louisiana

GEOENGINEERS

FIGURE A-9

JPV : KMC

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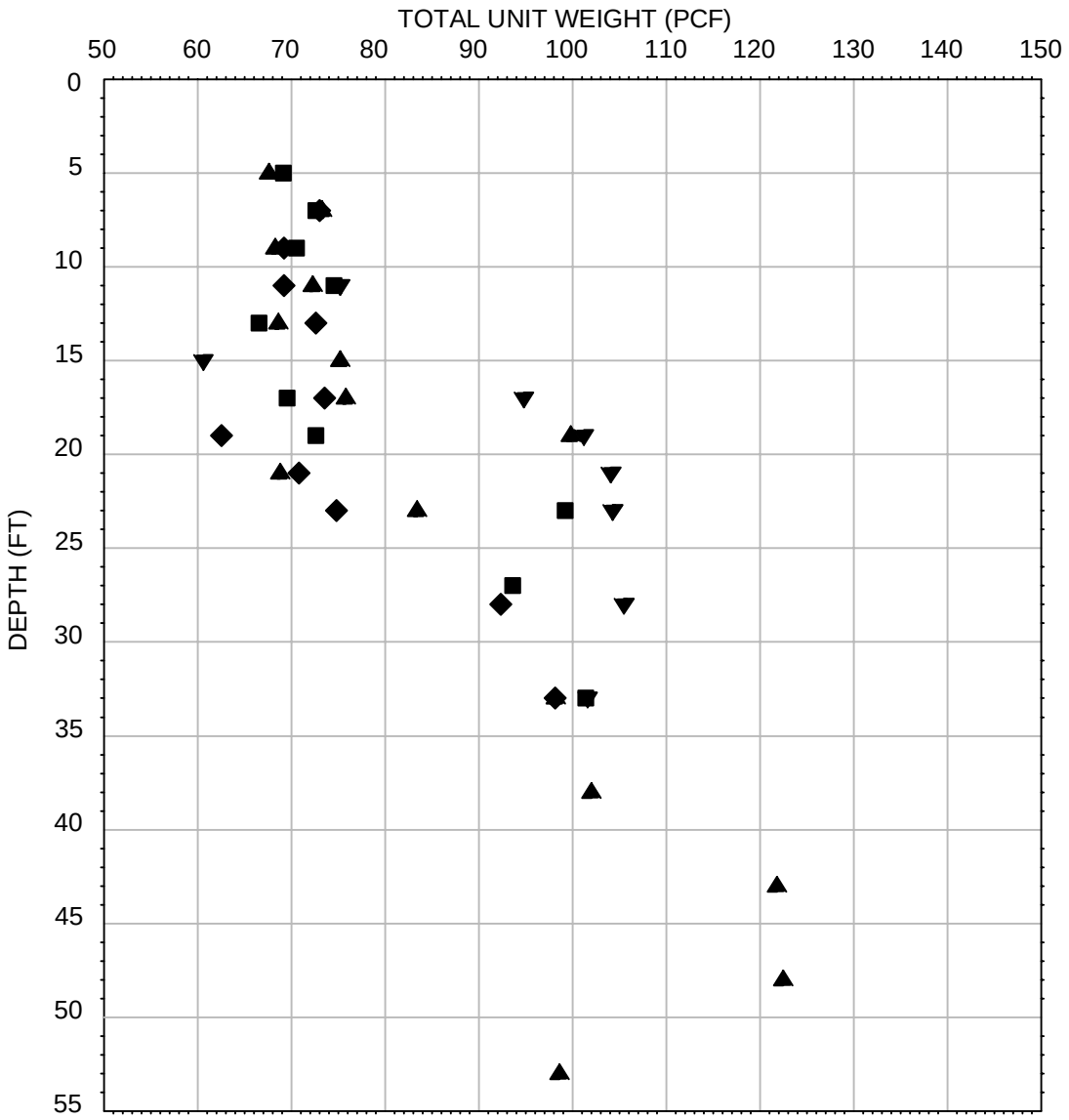

LEGEND

- ■ BHSP-BP1-30
- ◆ BHSP-BP2-30
- ▲ BHSP-BP3-50
- ▼ BHSP-BP4-30

WEST BAYOU PEROT
TOTAL UNIT WEIGHT VS DEPTH

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Lafourche Parish, Louisiana

GEOENGINEERS

FIGURE A-10

JPV : KMC

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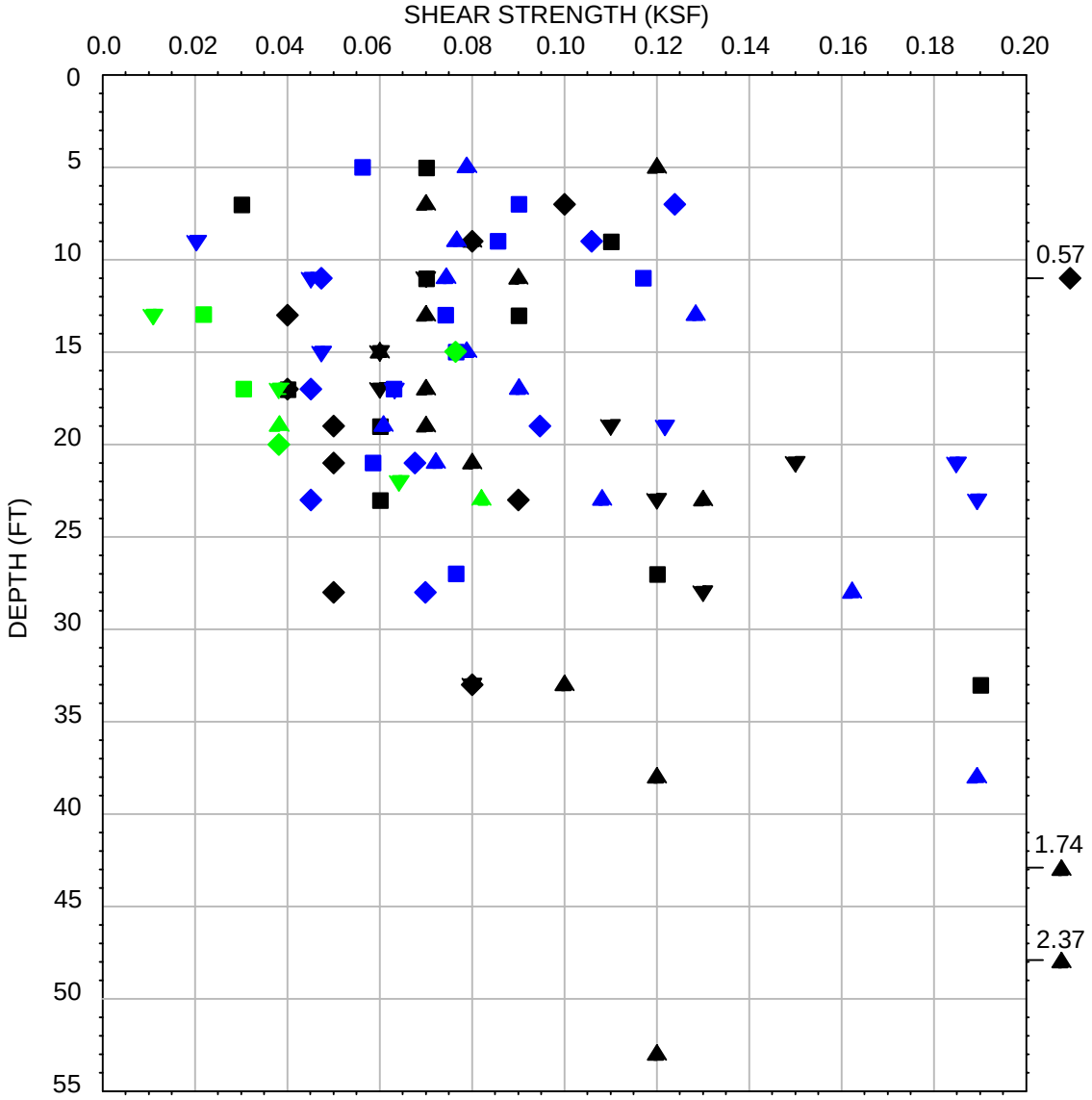

LEGEND

STRENGTH TEST ■

MINIVANE ■

FIELD VANE ■

■ BHSP-BP1-30

◆ BHSP-BP2-30

▲ BHSP-BP3-50

▼ BHSP-BP4-30

WEST BAYOU PEROT
SHEAR STRENGTH VS DEPTH

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Lafourche Parish, Louisiana

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FIGURE A-11

JPV : KMC

P:\10\108830111\00\CAD\GRAPH-MC.dwg\TAB:Chart 3 modified on Jun 07, 2011 - 8:59am

GeoEngineers

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Lafourche Parish, Louisiana

PROJECT NUMBER 10883-011-00

NOTES West Bayou Perot

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
BHSP-BP1-30		Top of deck															
BHSP-BP1-30		Water line															
BHSP-BP1-30																	
BHSP-BP1-30		Mudline															
BHSP-BP1-30	4	Very soft black peat	936	69.1	6.7				0.07	14	0.06	Slump	UU		0.06		
BHSP-BP1-30	4		936	69.1	6.7				0.07	14	0.06	Slump	UU		0.06		
BHSP-BP1-30	6	Very soft black peat	610	72.6	10.2				0.03	11	0.17	Slump	UU	47	0.09		
BHSP-BP1-30	8	Very soft black peat	406	70.5	13.9	413	66	347	0.11	11	0.29	Bulge	UU	35	0.09		
BHSP-BP1-30	10	Very soft black peat	648	74.5	10.0				0.07	10	0.40	Slump	UU	52	0.12		
BHSP-BP1-30	12	Very soft black peat (field vane - 0.02 KSF)	627	66.5	9.1				0.09	9	0.52	Bulge	UU	34	0.07		
BHSP-BP1-30	14	Very soft dark brown peat	512											41	0.08		
BHSP-BP1-30	16	Very soft dark brown peat (field vane - 0.03 KSF)	712	69.5	8.6				0.04	14	0.75	Bulge	UU	49	0.06		
BHSP-BP1-30	18		113	72.6	34.0				0.06	13	0.86	MS	UU				
BHSP-BP1-30	18	Very soft gray organic clay	113	72.6	34.0				0.06	13	0.86	MS	UU				
BHSP-BP1-30	20	Gray organic clay	195											15	0.06		
BHSP-BP1-30	22	Very soft gray slightly organic clay	139	99.2	41.6				0.06	13	1.09	Slump	UU				
BHSP-BP1-30																	
BHSP-BP1-30	27	Very soft gray clay with organic matter	43	93.6	65.4	99	24	75	0.12	7	1.32	MS	UU		0.08		
BHSP-BP1-30	32	Very soft gray clay with silt traces	37	101.4	74.2	98	23	75	0.19	11	1.67	Bulge	UU				
BHSP-BP2-30		Top of deck															
BHSP-BP2-30		Water line															
BHSP-BP2-30																	
BHSP-BP2-30		Mudline															
BHSP-BP2-30	4	No sample recovered															

GeoEngineers

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Lafourche Parish, Louisiana

PROJECT NUMBER 10883-011-00

NOTES West Bayou Perot

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
BHSP-BP2-30	4																
BHSP-BP2-30	6	Very soft dark brown peat	478	73.0	12.6				0.10	13	0.17	Bulge	UU		0.12		
BHSP-BP2-30	6		478	73.0	12.6				0.10	13	0.17	Bulge	UU		0.12		
BHSP-BP2-30	8	Very soft dark brown peat	600	69.2	9.9				0.08	15	0.29	Yield	UU	64	0.11		
BHSP-BP2-30	10	Very soft dark brown peat	423	69.2	13.2				0.57	12	0.40	Bulge	UU		0.05		
BHSP-BP2-30	12	Very soft dark brown peat (field vane - 0.08 KSF)	469	72.6	12.7				0.04	13	0.52	Bulge	UU	42			
BHSP-BP2-30	14	Very soft dark brown peat	503											31			
BHSP-BP2-30	16	Very soft dark brown peat	322	73.5	17.4				0.04	13	0.75	Bulge	UU	44	0.05		
BHSP-BP2-30	18	Very soft dark brown peat (field vane - 0.04 KSF)	262	62.5	17.2				0.05	14	0.86	MS	UU	27	0.10		
BHSP-BP2-30	20	Very soft dark brown peat	349	70.8	15.8	284	69	215	0.05	14	0.98	MS	UU		0.07		
BHSP-BP2-30	22	Very soft dark gray organic clay	75	74.8	42.8				0.09	12	1.09	Bulge	UU	56	0.05		
BHSP-BP2-30	22		75	74.8	42.8				0.09	12	1.09	Bulge	UU	56	0.05		
BHSP-BP2-30	27	Very soft dark gray organic clay	90	92.3	48.7	65	18	47	0.05	14	1.38	Bulge	UU		0.07		
BHSP-BP2-30	32	Very soft dark gray organic clay	108	98.1	47.1				0.08	10	1.67	Bulge	UU				
BHSP-BP3-50		Top of deck															
BHSP-BP3-50		Water line															
BHSP-BP3-50																	
BHSP-BP3-50		Mudline															
BHSP-BP3-50	4	Very soft black peat with clay traces	655	67.6	9.0				0.12	8	0.06	Bulge	UU	46	0.08		
BHSP-BP3-50	4		655	67.6	9.0				0.12	8	0.06	Bulge	UU	46	0.08		
BHSP-BP3-50	6	Very soft black peat	502	73.3	12.2				0.07	13	0.17	Bulge	UU				
BHSP-BP3-50	8	Very soft black peat	412	68.3	13.3				0.08	13	0.29	Bulge	UU	49	0.08		
BHSP-BP3-50	10	Very soft brown peat	582	72.3	10.6				0.09	12	0.40	Bulge	UU		0.07		
BHSP-BP3-50	12	Very soft black peat	707	68.6	8.5				0.07	15	0.52	Bulge	UU	46	0.13		

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Lafourche Parish, Louisiana

PROJECT NUMBER 10883-011-00

NOTES West Bayou Perot

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
BHSP-BP3-50	14	Very soft dark brown peat with 1½" organic clay layer	842	75.2	8.0				0.06	10	0.63	Bulge	UU		0.08		
BHSP-BP3-50	16	Very soft brown peat with 2" organic clay layer (field vane - 0.04 KSF)	330	75.8	17.6				0.07	15	0.75	Bulge	UU		0.09		
BHSP-BP3-50	18	Very soft brown slightly organic clay with organic matter	103	99.8	49.2	102	24	78	0.07	14	0.86	Bulge	UU		0.06		
BHSP-BP3-50	18		103	99.8	49.2	102	24	78	0.07	14	0.86	Bulge	UU		0.06		
BHSP-BP3-50	20		775	68.8	7.9	728	235	493	0.08	6	0.98	Bulge	UU		0.07		
BHSP-BP3-50	20	Very soft brown peat (field vane - 0.08 KSF)	775	68.8	7.9	728	235	493	0.08	6	0.98	Bulge	UU		0.07		
BHSP-BP3-50	22	Very soft brown organic clay	77	83.4	47.2				0.13	5	1.09	Bulge	UU		0.11		
BHSP-BP3-50	22		77	83.4	47.2				0.13	5	1.09	Bulge	UU		0.11		
BHSP-BP3-50	27	Very soft gray clay with organic matter				86	22	64							0.16		
BHSP-BP3-50	32	Very soft gray clay with organic matter	83	98.2	53.6				0.10	15	1.67	Bulge	UU				
BHSP-BP3-50	37	Very soft gray slightly organic clay with 3½" clayey silt layer	83	102.0	55.7	81	21	60	0.12	10	1.96		UU		0.19		
BHSP-BP3-50																	
BHSP-BP3-50	42	Firm gray fine sand with clay traces	39	121.8	87.7				1.74	12	2.25	Bulge	UU				
BHSP-BP3-50	47	Firm gray fine sand with clay traces	24	122.5	98.5	24	23	1	2.37	15	2.53	Bulge	UU				
BHSP-BP3-50																	
BHSP-BP3-50	52	Very soft gray organic	152	98.6	39.0				0.12	10	2.82	Bulge	UU				

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Lafourche Parish, Louisiana

PROJECT NUMBER 10883-011-00

NOTES West Bayou Perot

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
		clay with 3" fine sand layer															
BHSP-BP4-30		Top of deck															
BHSP-BP4-30		Water line															
BHSP-BP4-30																	
BHSP-BP4-30		Mudline															
BHSP-BP4-30	4		783											64			
BHSP-BP4-30	4	Very soft brown peat	783											64			
BHSP-BP4-30	6	Very soft dark brown peat	1056											33			
BHSP-BP4-30	8	Very soft dark brown peat	509											35	0.02		
BHSP-BP4-30	10	Very soft dark brown peat with 1½" organic clay layer (field vane - 0.01 KSF)	381	75.2	15.6				0.07	13	0.46	Bulge	UU		0.05		
BHSP-BP4-30	12	Very soft dark brown peat	684											46			
BHSP-BP4-30	14	Very soft dark brown peat (field vane - 0.04 KSF)	312	60.6	14.7				0.06	13	0.69	Bulge	UU		0.05		
BHSP-BP4-30	16	Very soft gray organic clay	122	94.8	42.6				0.06	11	0.75	Bulge	UU	35	0.06		
BHSP-BP4-30	16		122	94.8	42.6				0.06	11	0.75	Bulge	UU	35	0.06		
BHSP-BP4-30	18	Very soft gray organic clay	301	101.2	25.2				0.11	11	0.86	Bulge	UU		0.12		
BHSP-BP4-30	20		48	104.1	70.5	63	19	44	0.15	15	0.98	Yield	UU		0.19		
BHSP-BP4-30	20	Very soft gray clay with silt traces (field vane - 0.06 KSF)	48	104.1	70.5	63	19	44	0.15	15	0.98	Yield	UU		0.19		
BHSP-BP4-30	22	Very soft gray clay with silt streaks	70	104.3	61.5				0.12	15	1.09	Yield	UU		0.19		
BHSP-BP4-30	27	Very soft gray clay with silt streaks	41	105.5	74.7	56	20	36	0.13	15	1.34	Yield	UU				

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Lafourche Parish, Louisiana

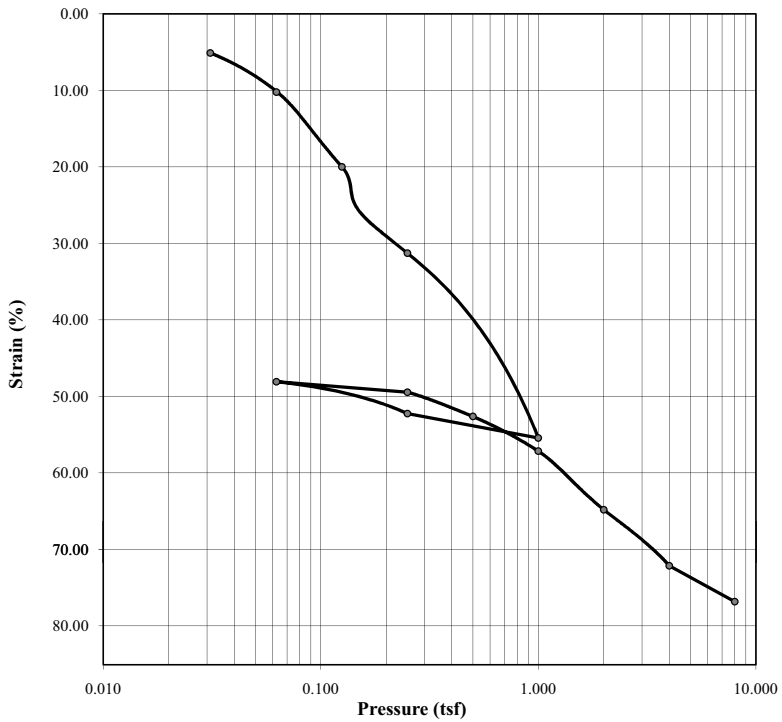
PROJECT NUMBER 10883-011-00

NOTES West Bayou Perot

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
BHSP-BP4-30	32	Very soft gray clay with silt traces	54	101.6	65.8				0.08	14	1.67	Bulge	UU				

GeoEngineers

Consolidation Test
Test Results

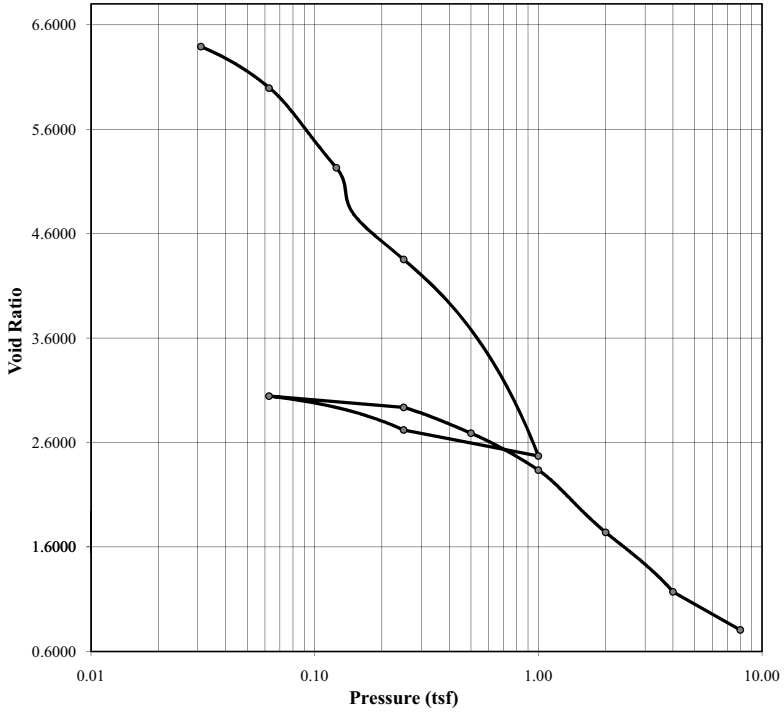


	Before	After				
			Liquid Limits:	413	**Test Date:**	24 May 11
Moisture (%):	323.77	179.34	**Plastic Limits:**	66		
Dry Density (pcf):	15.44	28.98	**Plasticity Index (%):**	347		
Saturation (%):	91.86	109.63				
Void Ratio:	6.7951	0.8064	**Specific Gravity:**	1.930	Measured	

Sample Description: Peat (PT)
Project Number: 10883-011-00 **Depth:** 8 - 10 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-BP1-3
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Test Results

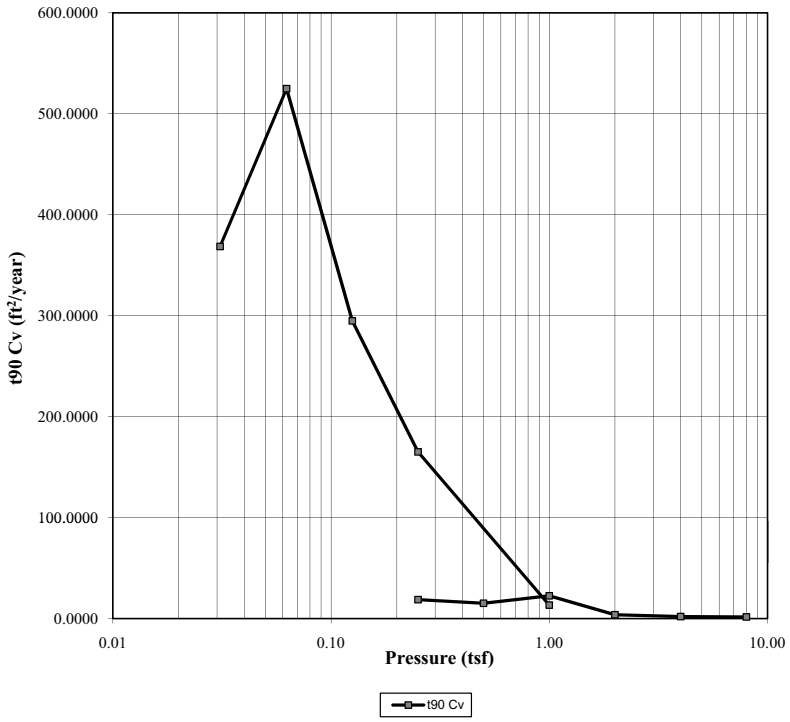


	Before	After				
			Liquid Limits:	413	**Test Date:**	24 May 11
Moisture (%):	323.77	179.34	**Plastic Limits:**	66		
Dry Density (pcf):	15.44	28.98	**Plasticity Index (%):**	347		
Saturation (%):	91.86	109.63				
Void Ratio:	6.7951	0.8064	**Specific Gravity:**	1.930	Measured	

Soil Description: Peat (PT)
Project Number: 10883-011-00 **Depth:** 8 - 10 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-BP1-3
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	413	**Test Date:**	24 May 11
Moisture (%):	323.77	179.34	**Plastic Limits:**	66		
Dry Density (pcf):	15.44	28.98	**Plasticity Index (%):**	347		
Saturation (%):	91.86	109.63				
Void Ratio:	6.7951	0.8064	**Specific Gravity:**	1.930	Measured	

Soil Description: Peat (PT)

Project Number: 10883-011-00 **Depth:** 8 - 10 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-BP1-3

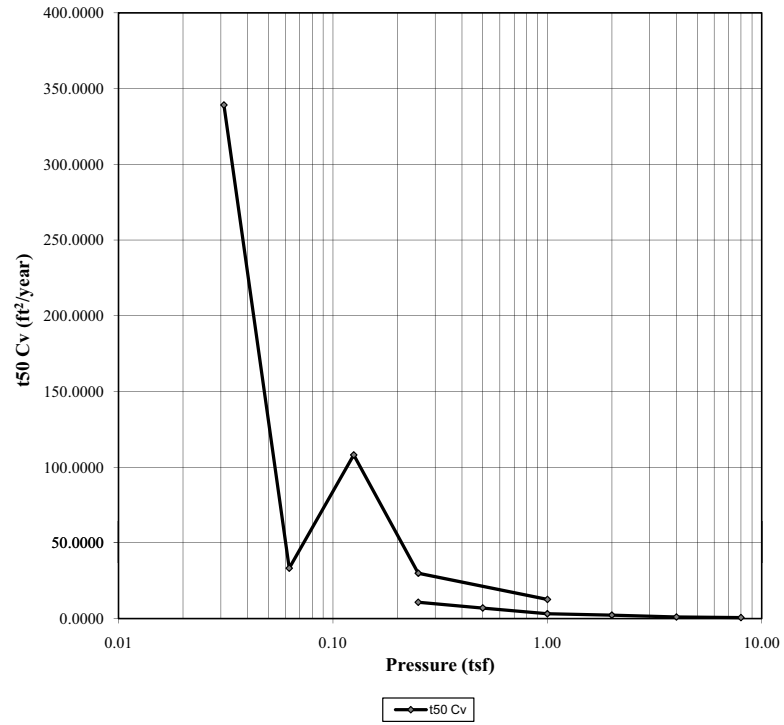
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	413	**Test Date:**	24 May 11
Moisture (%):	323.77	179.34	**Plastic Limits:**	66		
Dry Density (pcf):	15.44	28.98	**Plasticity Index (%):**	347		
Saturation (%):	91.86	109.63				
Void Ratio:	6.7951	0.8064	**Specific Gravity:**	1.930	Measured	

Soil Description: Peat (PT)

Project Number: 10883-011-00 **Depth:** 8 - 10 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-BP1-3

Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test Results
Summary

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00

Sample Number:
Boring Number: BHSP-BP1-30
Depth: 8 - 10 feet
Sample Type: Undisturbed

Sample Description:
Peat (PT)
Remarks:

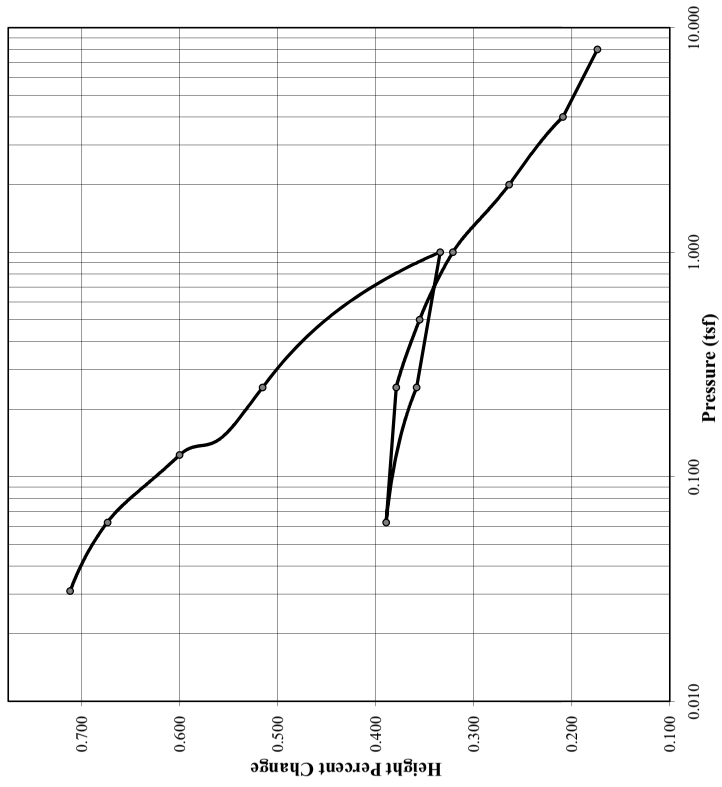
Test Number:
Test Date: 24 May 11

Index	Load Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Void (in)	Vertical Strain (%)	Void Ratio	t90 Fitting Time (min)	t50 Fitting Time (min)	t90 Cv (ft2/year)	t50 Cv (ft2/year)
0	0.000	0.0000	0.7500	0.6537	0.00	6.7885	0.000	0.000	0.000	0.000
1	0.031	0.0382	0.7118	0.6155	5.09	6.3918	1.064	0.269	368.504	339.138
2	0.063	0.0765	0.6735	0.5772	10.20	5.9941	0.669	2.452	524.875	33.262
3	0.125	0.1499	0.6001	0.5038	19.99	5.2319	0.945	0.599	294.779	108.131
4	0.250	0.2345	0.5155	0.4192	31.27	4.3533	1.246	1.593	165.046	29.985
5	1.000	0.4158	0.3342	0.2379	55.44	2.4706	6.418	1.584	13.466	12.673
6	0.250	0.3918	0.3582	0.2619	52.24	2.7198	0.000	0.000	0.000	0.000
7	0.063	0.3606	0.3894	0.2931	48.08	3.0438	0.000	0.000	0.000	0.000
8	0.250	0.3709	0.3791	0.2828	49.45	2.9368	5.903	2.407	18.840	10.736
9	0.500	0.3947	0.3553	0.2590	52.63	2.6897	6.439	3.243	15.171	6.997
10	1.000	0.4287	0.3213	0.2250	57.16	2.3366	3.527	5.763	22.648	3.220
11	2.000	0.4861	0.2639	0.1676	64.81	1.7405	14.389	5.539	3.745	2.260
12	4.000	0.5410	0.2090	0.1127	72.13	1.1704	16.641	7.474	2.031	1.051
13	8.000	0.5762	0.1738	0.0775	76.83	0.8049	14.360	7.750	1.628	0.701

Predicted value indicated with *

GeoEngineers

Consolidation Test
Test Results



	Before	After			
Moisture (%):	323.77	179.34	**Liquid Limits:**	413	**Test Date:** 24 May 11
Dry Density (pcf):	15.44	28.98	**Plastic Limits:**	66	
Saturation (%):	91.86	109.63	**Plasticity Index (%):**	347	
Void Ratio:	6.7951	0.8064	**Specific Gravity:**	1.930	Measured

Soil Description: Peat (PT)
Project Number: 10883-011-00
Depth: 8 - 10 feet
Remarks:
Sample Number:
Boring Number: BHSP-BP1-3
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Consolidation Specimen Information

Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 24 May 11

Sample Number: **Sample Description:**
Boring Number: BHSP-BP1-30 Peat (PT)
Depth: 8 - 10 feet **Remarks:**
Sample Type: Undisturbed

Test Number:
Liquid Limit: 413.0000 **Initial Void Ratio:** 6.7951 **Initial Height (in):** 0.7500
Plastic Limit: 66.0000 **Plasticity Index (%):** 347.0000 **Initial Diameter (in):** 2.5000
Specific Gravity: 1.9300 **Weight of Ring (g):** 107.0000
Measured

Parameters	Initial Specimen	Final Specimen
Moist Weight + Container (g)	130.97	40.40
Dry Soil + Container (g)	48.15	28.94
Weight of Container (g)	22.57	22.55
Moisture Content (%)	323.77	179.34
Void Ratio	6.7951	0.8064
Saturation (%)	91.86	109.63
Dry Density (pcf)	15.44	28.98

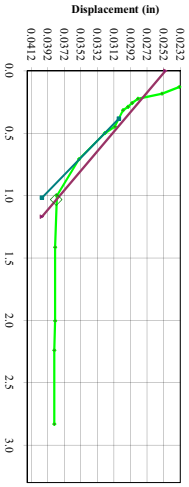
Consolidation Test Results
(Sequence 1) Load 0.031 tsf

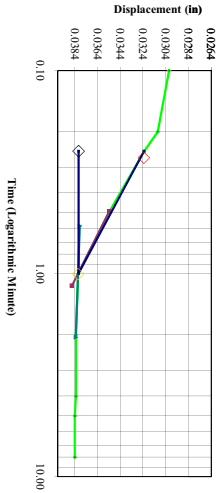
Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 24 May 11
Test Number:

Sample Number: **Soil Description:**
Boring Number: BHSP-BP1-30 Peat (PT)
Depth: 8 - 10 feet **Remarks:**
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0402	0.0000	0.0000	6.7951
1	00:00:01	0.0233	0.0231	3.0800	6.5550
2	00:00:02	0.0254	0.0252	3.3600	6.5352
3	00:00:03	0.0283	0.0281	3.7467	6.5031
4	00:00:04	0.0290	0.0288	3.8400	6.4958
5	00:00:05	0.0295	0.0293	3.9067	6.4906
6	00:00:06	0.0301	0.0299	3.9867	6.4844
7	00:00:12	0.0311	0.0309	4.1200	6.4740
8	00:00:15	0.0323	0.0321	4.2800	6.4615
9	00:00:30	0.0354	0.0352	4.6933	6.4293
10	00:01:00	0.0381	0.0379	5.0533	6.4012
11	00:02:00	0.0383	0.0381	5.0800	6.3991
12	00:04:01	0.0383	0.0381	5.0800	6.3991
13	00:05:01	0.0384	0.0382	5.0933	6.3981
14	00:08:01	0.0384	0.0382	5.0933	6.3981

Tested By: **Checked By:**





Consolidation Test Results
(Sequence 2) Load 0.063 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

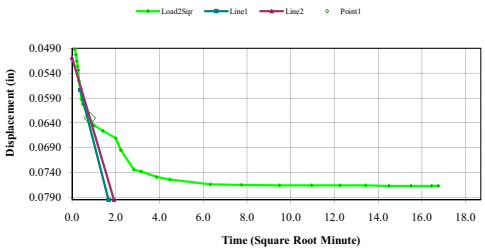
Sample Number:
Soil Description:
Boring Number: BHSP-BP1-30
Peat (PT)
Depth: 8 - 10 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0767	0.0765	10.2000	6.0000
1	00:00:01	0.0492	0.0490	6.5333	6.2858
2	00:00:02	0.0503	0.0501	6.6800	6.2744
3	00:00:03	0.0516	0.0514	6.8533	6.2609
4	00:00:04	0.0526	0.0524	6.9867	6.2505
5	00:00:05	0.0534	0.0532	7.0933	6.2422
6	00:00:06	0.0555	0.0553	7.3733	6.2204
7	00:00:12	0.0593	0.0591	7.8800	6.1809
8	00:00:15	0.0602	0.0600	8.0000	6.1715
9	00:00:30	0.0622	0.0620	8.2667	6.1507
10	00:01:00	0.0645	0.0643	8.5733	6.1268
11	00:02:00	0.0656	0.0654	8.7200	6.1154
12	00:04:00	0.0671	0.0669	8.9200	6.0998
13	00:05:00	0.0695	0.0693	9.2400	6.0749
14	00:08:01	0.0734	0.0732	9.7600	6.0343
15	00:10:01	0.0738	0.0736	9.8133	6.0302
16	00:15:01	0.0749	0.0747	9.9600	6.0187
17	00:20:01	0.0754	0.0752	10.0267	6.0135
18	00:40:03	0.0764	0.0762	10.1600	6.0031
19	01:00:05	0.0765	0.0763	10.1733	6.0021
20	01:30:07	0.0766	0.0764	10.1867	6.0011
21	02:00:09	0.0766	0.0764	10.1867	6.0011
22	02:30:11	0.0766	0.0764	10.1867	6.0011
23	03:00:14	0.0766	0.0764	10.1867	6.0011
24	03:30:16	0.0767	0.0765	10.2000	6.0000
25	04:00:18	0.0767	0.0765	10.2000	6.0000
26	04:30:20	0.0767	0.0765	10.2000	6.0000
27	04:40:26	0.0767	0.0765	10.2000	6.0000

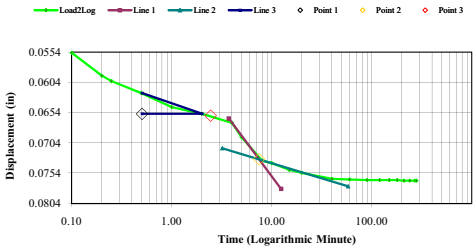
Tested By:
Checked By:

Consolidation Test Results
(Sequence 2) Load 0.063 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

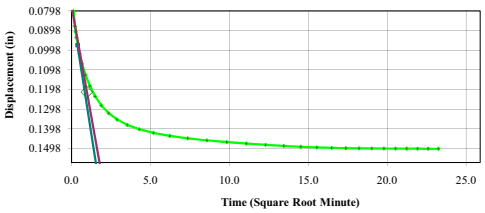
Sample Number:
Soil Description:
Boring Number: BHSP-BP1-30
Peat (PT)
Depth: 8 - 10 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0767	0.0765	10.2000	6.0000
1	00:00:01	0.0799	0.0797	10.6267	5.9668
2	00:00:02	0.0853	0.0851	11.3467	5.9106
3	00:00:03	0.0886	0.0884	11.7867	5.8763
4	00:00:04	0.0909	0.0907	12.0933	5.8524
5	00:00:05	0.0926	0.0924	12.3200	5.8348
6	00:00:06	0.0942	0.0940	12.5333	5.8181
7	00:00:12	0.1002	0.1000	13.3333	5.7558
8	00:00:15	0.1032	0.1030	13.7333	5.7246
9	00:00:30	0.1141	0.1139	15.1867	5.6113
10	00:01:00	0.1229	0.1227	16.3600	5.5198
11	00:02:00	0.1298	0.1296	17.2800	5.4481
12	00:04:00	0.1342	0.1340	17.8667	5.4024
13	00:05:01	0.1352	0.1350	18.0000	5.3920
14	00:08:01	0.1383	0.1381	18.4133	5.3598
15	00:10:01	0.1395	0.1393	18.5733	5.3473
16	00:15:01	0.1427	0.1425	19.0000	5.3141
17	00:20:01	0.1439	0.1437	19.1600	5.3016
18	00:40:00	0.1459	0.1457	19.4267	5.2808
19	01:00:02	0.1463	0.1461	19.4800	5.2766
20	01:30:04	0.1465	0.1463	19.5067	5.2746
21	02:00:06	0.1467	0.1465	19.5333	5.2725
22	02:30:09	0.1477	0.1475	19.6667	5.2621
23	03:00:11	0.1495	0.1493	19.9067	5.2434
24	03:30:13	0.1496	0.1494	19.9200	5.2423
25	04:00:15	0.1496	0.1494	19.9200	5.2423
26	04:30:18	0.1497	0.1495	19.9333	5.2413
27	05:00:20	0.1498	0.1496	19.9467	5.2403
28	05:30:22	0.1498	0.1496	19.9467	5.2403
29	06:00:25	0.1499	0.1497	19.9600	5.2392
30	06:30:27	0.1499	0.1497	19.9600	5.2392
31	07:00:29	0.1499	0.1497	19.9600	5.2392
32	07:30:31	0.1499	0.1497	19.9600	5.2392
33	08:00:34	0.1500	0.1498	19.9733	5.2382
34	08:30:36	0.1500	0.1498	19.9733	5.2382
35	09:00:38	0.1500	0.1498	19.9733	5.2382

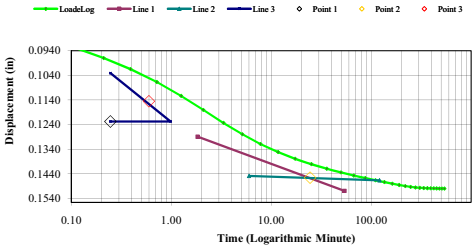
Tested By:
Checked By:

Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 4) Load 0.250 tsf

Consolidation Test Results
(Sequence 4) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

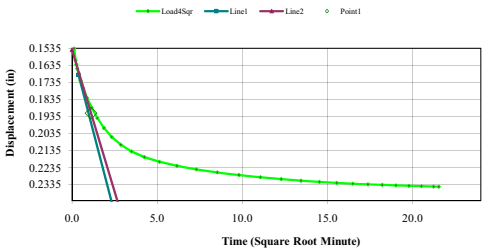
Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP1-30
Depth: 8 - 10 feet
Sample Type: Undisturbed

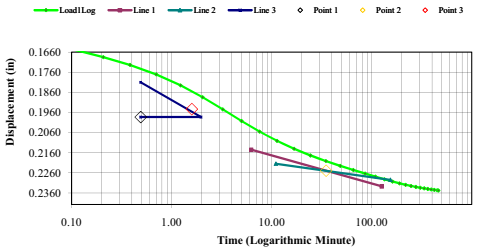
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1500	0.1498	19.9733	5.2382
1	00:00:01	0.1536	0.1534	20.4533	5.2008
2	00:00:02	0.1589	0.1587	21.1600	5.1457
3	00:00:03	0.1613	0.1611	21.4800	5.1207
4	00:00:04	0.1633	0.1631	21.7467	5.0999
5	00:00:05	0.1649	0.1647	21.9600	5.0833
6	00:00:06	0.1662	0.1660	22.1333	5.0698
7	00:00:12	0.1718	0.1716	22.8800	5.0116
8	00:00:15	0.1739	0.1737	23.1600	4.9898
9	00:00:30	0.1811	0.1809	24.1200	4.9149
10	00:01:00	0.1894	0.1892	25.2267	4.8287
11	00:02:00	0.1981	0.1979	26.3867	4.7383
12	00:04:00	0.2076	0.2074	27.6533	4.6395
13	00:05:00	0.2109	0.2107	28.0933	4.6052
14	00:08:01	0.2157	0.2155	28.7333	4.5553
15	00:10:01	0.2174	0.2172	28.9600	4.5377
16	00:15:01	0.2201	0.2199	29.3200	4.5096
17	00:20:02	0.2220	0.2218	29.5733	4.4899
18	00:40:03	0.2253	0.2251	30.0133	4.4556
19	01:00:05	0.2268	0.2266	30.2133	4.4400
20	01:30:07	0.2280	0.2278	30.3733	4.4275
21	02:00:09	0.2288	0.2286	30.4800	4.4192
22	02:30:12	0.2311	0.2309	30.7867	4.3953
23	03:00:14	0.2318	0.2316	30.8800	4.3880
24	03:30:16	0.2323	0.2321	30.9467	4.3828
25	04:00:18	0.2326	0.2324	30.9867	4.3797
26	04:30:21	0.2330	0.2328	31.0400	4.3755
27	05:00:23	0.2333	0.2331	31.0800	4.3724
28	05:30:25	0.2336	0.2334	31.1200	4.3693
29	06:00:27	0.2340	0.2338	31.1733	4.3651
30	06:30:30	0.2342	0.2340	31.2000	4.3630
31	07:00:32	0.2344	0.2342	31.2267	4.3610
32	07:30:34	0.2346	0.2344	31.2533	4.3589
33	07:43:49	0.2347	0.2345	31.2667	4.3579

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 5) Load 1.000 tsf

Consolidation Test Results
(Sequence 5) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

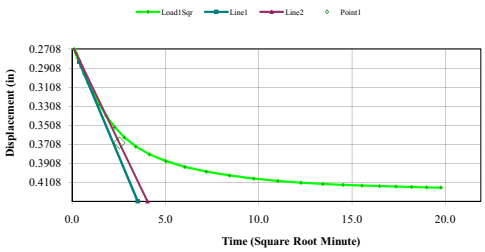
Sample Number:
Boring Number: BHSP-BP1-30
Depth: 8 - 10 feet
Sample Type: Undisturbed

Soil Description: Peat (PT)
Remarks:

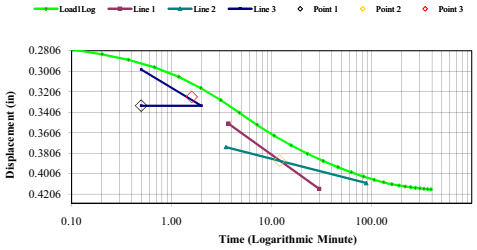
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0767	0.0765	10.2000	6.0000
1	00:00:01	0.2710	0.2708	36.1067	3.9806
2	00:00:02	0.2727	0.2725	36.3333	3.9629
3	00:00:03	0.2747	0.2745	36.6000	3.9421
4	00:00:04	0.2779	0.2777	37.0267	3.9089
5	00:00:05	0.2796	0.2794	37.2533	3.8912
6	00:00:06	0.2808	0.2806	37.4133	3.8787
7	00:00:12	0.2875	0.2873	38.3067	3.8091
8	00:00:15	0.2898	0.2896	38.6133	3.7852
9	00:00:30	0.2992	0.2990	39.8667	3.6875
10	00:01:00	0.3143	0.3141	41.8800	3.5305
11	00:02:00	0.3348	0.3346	44.6133	3.3175
12	00:04:00	0.3549	0.3547	47.2933	3.1086
13	00:05:00	0.3623	0.3621	48.2800	3.0316
14	00:08:00	0.3759	0.3757	50.0933	2.8903
15	00:10:00	0.3810	0.3808	50.7733	2.8373
16	00:15:00	0.3892	0.3890	51.8667	2.7521
17	00:20:01	0.3934	0.3932	52.4267	2.7084
18	00:40:05	0.4022	0.4020	53.6000	2.6169
19	01:00:09	0.4054	0.4052	54.0267	2.5837
20	01:30:13	0.4087	0.4085	54.4667	2.5494
21	02:00:15	0.4106	0.4104	54.7200	2.5296
22	02:30:17	0.4118	0.4116	54.8800	2.5172
23	03:00:19	0.4127	0.4125	55.0000	2.5078
24	03:30:22	0.4134	0.4132	55.0933	2.5005
25	04:00:24	0.4140	0.4138	55.1733	2.4943
26	04:30:26	0.4145	0.4143	55.2400	2.4891
27	05:00:28	0.4150	0.4148	55.3067	2.4839
28	05:30:31	0.4153	0.4151	55.3467	2.4808
29	06:00:33	0.4158	0.4156	55.4133	2.4756
30	06:30:08	0.4160	0.4158	55.4400	2.4735

Tested By: **Checked By:**

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 6) Rebound 0.250 tsf

Consolidation Test Results
(Sequence 6) Rebound 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

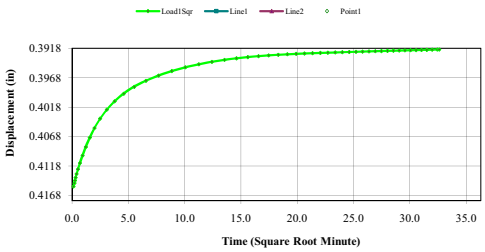
Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP1-30
Depth: 8 - 10 feet
Sample Type: Undisturbed

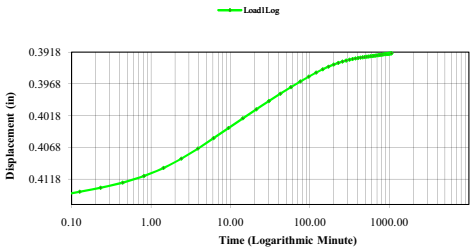
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.4160	0.4158	55.4400	2.4735
1	00:00:01	0.4153	0.4151	55.3467	2.4808
2	00:00:02	0.4151	0.4149	55.3200	2.4829
3	00:00:03	0.4150	0.4148	55.3067	2.4839
4	00:00:04	0.4141	0.4139	55.1867	2.4933
5	00:00:05	0.4138	0.4136	55.1467	2.4964
6	00:00:06	0.4136	0.4134	55.1200	2.4985
7	00:00:12	0.4127	0.4125	55.0000	2.5078
8	00:00:15	0.4124	0.4122	54.9600	2.5109
9	00:00:30	0.4111	0.4109	54.7867	2.5244
10	00:01:00	0.4093	0.4091	54.5467	2.5431
11	00:02:00	0.4068	0.4066	54.2133	2.5691
12	00:04:00	0.4039	0.4037	53.8267	2.5993
13	00:05:00	0.4030	0.4028	53.7067	2.6086
14	00:08:00	0.4008	0.4006	53.4133	2.6315
15	00:10:01	0.3999	0.3997	53.2933	2.6408
16	00:15:01	0.3985	0.3983	53.1067	2.6554
17	00:20:01	0.3976	0.3974	52.9867	2.6648
18	00:40:03	0.3959	0.3957	52.7600	2.6824
19	01:00:04	0.3951	0.3949	52.6533	2.6907
20	01:30:07	0.3944	0.3942	52.5600	2.6980
21	02:00:09	0.3940	0.3938	52.5067	2.7022
22	02:30:11	0.3936	0.3934	52.4533	2.7063
23	03:00:14	0.3935	0.3933	52.4400	2.7074
24	03:30:16	0.3934	0.3932	52.4267	2.7084
25	04:00:18	0.3932	0.3930	52.4000	2.7105
26	04:30:20	0.3930	0.3928	52.3733	2.7126
27	05:00:23	0.3929	0.3927	52.3600	2.7136
28	05:30:25	0.3928	0.3926	52.3467	2.7146
29	06:00:27	0.3927	0.3925	52.3333	2.7157
30	06:30:30	0.3927	0.3925	52.3333	2.7157
31	07:00:32	0.3927	0.3925	52.3333	2.7157
32	07:30:34	0.3926	0.3924	52.3200	2.7167
33	08:00:36	0.3926	0.3924	52.3200	2.7167
34	08:30:39	0.3925	0.3923	52.3067	2.7178
35	09:00:41	0.3925	0.3923	52.3067	2.7178
36	09:30:43	0.3925	0.3923	52.3067	2.7178

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.3924	0.3922	52.2933	2.7188
38	10:30:48	0.3924	0.3922	52.2933	2.7188
39	11:00:50	0.3924	0.3922	52.2933	2.7188
40	11:30:52	0.3923	0.3921	52.2800	2.7198
41	12:00:55	0.3923	0.3921	52.2800	2.7198
42	12:30:57	0.3923	0.3921	52.2800	2.7198
43	13:00:59	0.3922	0.3920	52.2667	2.7209
44	13:31:01	0.3922	0.3920	52.2667	2.7209
45	14:01:04	0.3922	0.3920	52.2667	2.7209
46	14:31:06	0.3921	0.3919	52.2533	2.7219
47	15:01:08	0.3921	0.3919	52.2533	2.7219
48	15:31:11	0.3921	0.3919	52.2533	2.7219
49	16:01:13	0.3921	0.3919	52.2533	2.7219
50	16:31:15	0.3921	0.3919	52.2533	2.7219
51	17:01:17	0.3920	0.3918	52.2400	2.7230
52	17:31:20	0.3920	0.3918	52.2400	2.7230
53	17:42:27	0.3920	0.3918	52.2400	2.7230

Consolidation Test Results
(Sequence 7) Rebound 0.063 tsf

Consolidation Test Results
(Sequence 7) Rebound 0.063 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

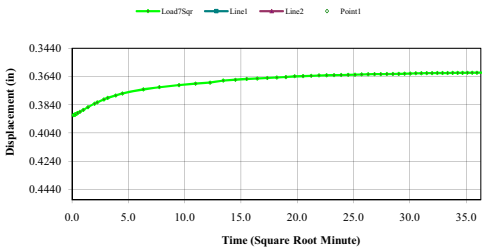
Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP1-30
Depth: 8 - 10 feet
Sample Type: Undisturbed

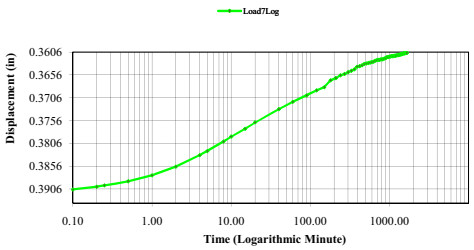
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3920	0.3918	52.2400	2.7230
1	00:00:01	0.3913	0.3911	52.1467	2.7302
2	00:00:02	0.3911	0.3909	52.1200	2.7323
3	00:00:03	0.3910	0.3908	52.1067	2.7333
4	00:00:04	0.3909	0.3907	52.0933	2.7344
5	00:00:05	0.3908	0.3906	52.0800	2.7354
6	00:00:06	0.3907	0.3905	52.0667	2.7365
7	00:00:12	0.3901	0.3899	51.9867	2.7427
8	00:00:15	0.3898	0.3896	51.9467	2.7458
9	00:00:30	0.3889	0.3887	51.8267	2.7552
10	00:01:00	0.3876	0.3874	51.6533	2.7687
11	00:02:00	0.3857	0.3855	51.4000	2.7884
12	00:04:00	0.3832	0.3830	51.0667	2.8144
13	00:05:00	0.3823	0.3821	50.9467	2.8238
14	00:08:00	0.3802	0.3800	50.6667	2.8456
15	00:10:01	0.3791	0.3789	50.5200	2.8570
16	00:15:01	0.3774	0.3772	50.2933	2.8747
17	00:20:01	0.3760	0.3758	50.1067	2.8892
18	00:40:03	0.3731	0.3729	49.7200	2.9194
19	01:00:04	0.3715	0.3713	49.5067	2.9360
20	01:30:07	0.3701	0.3699	49.3200	2.9506
21	02:00:09	0.3690	0.3688	49.1733	2.9620
22	02:30:11	0.3683	0.3681	49.0800	2.9693
23	03:00:13	0.3668	0.3666	48.8800	2.9849
24	03:30:16	0.3663	0.3661	48.8133	2.9901
25	04:00:18	0.3657	0.3655	48.7333	2.9963
26	04:30:20	0.3654	0.3652	48.6933	2.9994
27	05:00:23	0.3650	0.3648	48.6400	3.0036
28	05:30:25	0.3647	0.3645	48.6000	3.0067
29	06:00:27	0.3644	0.3642	48.5600	3.0098
30	06:30:29	0.3638	0.3636	48.4800	3.0161
31	07:00:31	0.3637	0.3635	48.4667	3.0171
32	07:30:34	0.3635	0.3633	48.4400	3.0192
33	08:00:36	0.3632	0.3630	48.4000	3.0223
34	08:30:38	0.3631	0.3629	48.3867	3.0233
35	09:00:41	0.3630	0.3628	48.3733	3.0244
36	09:30:43	0.3629	0.3627	48.3600	3.0254

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.3628	0.3626	48.3467	3.0264
38	10:30:47	0.3627	0.3625	48.3333	3.0275
39	11:00:50	0.3625	0.3623	48.3067	3.0296
40	11:30:52	0.3624	0.3622	48.2933	3.0306
41	12:00:54	0.3623	0.3621	48.2800	3.0316
42	12:30:57	0.3623	0.3621	48.2800	3.0316
43	13:00:59	0.3622	0.3620	48.2667	3.0327
44	13:31:01	0.3622	0.3620	48.2667	3.0327
45	14:01:04	0.3621	0.3619	48.2533	3.0337
46	14:31:06	0.3620	0.3618	48.2400	3.0348
47	15:01:08	0.3619	0.3617	48.2267	3.0358
48	15:31:10	0.3617	0.3615	48.2000	3.0379
49	16:01:13	0.3617	0.3615	48.2000	3.0379
50	16:31:15	0.3616	0.3614	48.1867	3.0389
51	17:01:17	0.3616	0.3614	48.1867	3.0389
52	17:31:19	0.3615	0.3613	48.1733	3.0400
53	18:01:22	0.3615	0.3613	48.1733	3.0400
54	18:31:24	0.3615	0.3613	48.1733	3.0400
55	19:01:26	0.3614	0.3612	48.1600	3.0410
56	19:31:29	0.3614	0.3612	48.1600	3.0410
57	20:01:31	0.3614	0.3612	48.1600	3.0410
58	20:31:33	0.3613	0.3611	48.1467	3.0420
59	21:01:35	0.3613	0.3611	48.1467	3.0420
60	21:31:38	0.3613	0.3611	48.1467	3.0420
61	22:01:40	0.3612	0.3610	48.1333	3.0431
62	22:31:42	0.3612	0.3610	48.1333	3.0431
63	23:01:44	0.3611	0.3609	48.1200	3.0441
64	23:31:47	0.3611	0.3609	48.1200	3.0441
65	24:01:49	0.3610	0.3608	48.1067	3.0452
66	24:31:51	0.3610	0.3608	48.1067	3.0452
67	25:01:54	0.3609	0.3607	48.0933	3.0462
68	25:31:56	0.3609	0.3607	48.0933	3.0462
69	26:01:58	0.3609	0.3607	48.0933	3.0462
70	26:32:00	0.3608	0.3606	48.0800	3.0472
71	27:02:03	0.3608	0.3606	48.0800	3.0472
72	27:32:05	0.3608	0.3606	48.0800	3.0472
73	27:33:56	0.3608	0.3606	48.0800	3.0472

Consolidation Test Results
(Sequence 8) Load 0.250 tsf

Consolidation Test Results
(Sequence 8) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

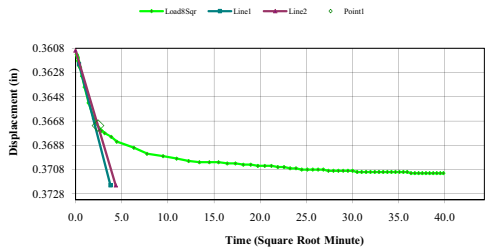
Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP1-30
Depth: 8 - 10 feet
Sample Type: Undisturbed

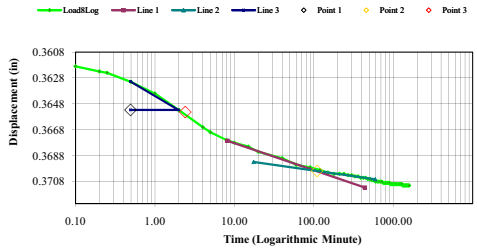
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3608	0.3606	48.0800	3.0472
1	00:00:01	0.3613	0.3611	48.1467	3.0420
2	00:00:02	0.3614	0.3612	48.1600	3.0410
3	00:00:03	0.3615	0.3613	48.1733	3.0400
4	00:00:04	0.3616	0.3614	48.1867	3.0389
5	00:00:05	0.3618	0.3616	48.2133	3.0368
6	00:00:06	0.3619	0.3617	48.2267	3.0358
7	00:00:12	0.3623	0.3621	48.2800	3.0316
8	00:00:15	0.3624	0.3622	48.2933	3.0306
9	00:00:30	0.3631	0.3629	48.3867	3.0233
10	00:01:00	0.3640	0.3638	48.5067	3.0140
11	00:02:01	0.3653	0.3651	48.6800	3.0005
12	00:04:01	0.3666	0.3664	48.8533	2.9869
13	00:05:01	0.3670	0.3668	48.9067	2.9828
14	00:08:01	0.3676	0.3674	48.9867	2.9766
15	00:10:01	0.3678	0.3676	49.0133	2.9745
16	00:15:01	0.3681	0.3679	49.0533	2.9714
17	00:20:02	0.3685	0.3683	49.1067	2.9672
18	00:40:03	0.3690	0.3688	49.1733	2.9620
19	01:00:05	0.3695	0.3693	49.2400	2.9568
20	01:30:07	0.3697	0.3695	49.2667	2.9547
21	02:00:09	0.3699	0.3697	49.2933	2.9527
22	02:30:12	0.3701	0.3699	49.3200	2.9506
23	03:00:14	0.3702	0.3700	49.3333	2.9495
24	03:30:16	0.3702	0.3700	49.3333	2.9495
25	04:00:19	0.3702	0.3700	49.3333	2.9495
26	04:30:21	0.3703	0.3701	49.3467	2.9485
27	05:00:23	0.3703	0.3701	49.3467	2.9485
28	05:30:26	0.3704	0.3702	49.3600	2.9475
29	06:00:28	0.3704	0.3702	49.3600	2.9475
30	06:30:30	0.3705	0.3703	49.3733	2.9464
31	07:00:32	0.3705	0.3703	49.3733	2.9464
32	07:30:35	0.3705	0.3703	49.3733	2.9464
33	08:00:37	0.3706	0.3704	49.3867	2.9454
34	08:30:39	0.3706	0.3704	49.3867	2.9454
35	09:00:41	0.3707	0.3705	49.4000	2.9443
36	09:30:44	0.3707	0.3705	49.4000	2.9443

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.3708	0.3706	49.4133	2.9433
38	10:30:48	0.3708	0.3706	49.4133	2.9433
39	11:00:50	0.3708	0.3706	49.4133	2.9433
40	11:30:52	0.3708	0.3706	49.4133	2.9433
41	12:00:55	0.3708	0.3706	49.4133	2.9433
42	12:30:57	0.3709	0.3707	49.4267	2.9423
43	13:00:59	0.3709	0.3707	49.4267	2.9423
44	13:31:01	0.3709	0.3707	49.4267	2.9423
45	14:01:04	0.3709	0.3707	49.4267	2.9423
46	14:31:06	0.3709	0.3707	49.4267	2.9423
47	15:01:08	0.3709	0.3707	49.4267	2.9423
48	15:31:11	0.3710	0.3708	49.4400	2.9412
49	16:01:13	0.3710	0.3708	49.4400	2.9412
50	16:31:15	0.3710	0.3708	49.4400	2.9412
51	17:01:18	0.3710	0.3708	49.4400	2.9412
52	17:31:20	0.3710	0.3708	49.4400	2.9412
53	18:01:22	0.3710	0.3708	49.4400	2.9412
54	18:31:24	0.3710	0.3708	49.4400	2.9412
55	19:01:27	0.3710	0.3708	49.4400	2.9412
56	19:31:29	0.3710	0.3708	49.4400	2.9412
57	20:01:31	0.3710	0.3708	49.4400	2.9412
58	20:31:34	0.3710	0.3708	49.4400	2.9412
59	21:01:36	0.3710	0.3708	49.4400	2.9412
60	21:31:38	0.3710	0.3708	49.4400	2.9412
61	22:01:40	0.3711	0.3709	49.4533	2.9402
62	22:31:43	0.3711	0.3709	49.4533	2.9402
63	23:01:45	0.3711	0.3709	49.4533	2.9402
64	23:31:47	0.3711	0.3709	49.4533	2.9402
65	24:01:49	0.3711	0.3709	49.4533	2.9402
66	24:31:52	0.3711	0.3709	49.4533	2.9402
67	25:01:54	0.3711	0.3709	49.4533	2.9402
68	25:31:56	0.3711	0.3709	49.4533	2.9402
69	26:01:59	0.3711	0.3709	49.4533	2.9402
70	26:28:37	0.3711	0.3709	49.4533	2.9402

Consolidation Test Results
(Sequence 9) Load 0.500 tsf

Consolidation Test Results
(Sequence 9) Load 0.500 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

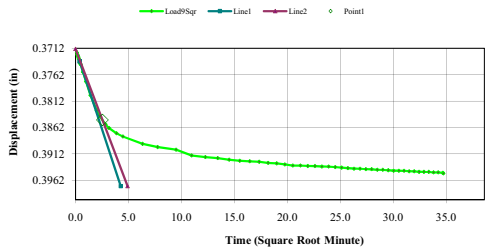
Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP1-30
Depth: 8 - 10 feet
Sample Type: Undisturbed

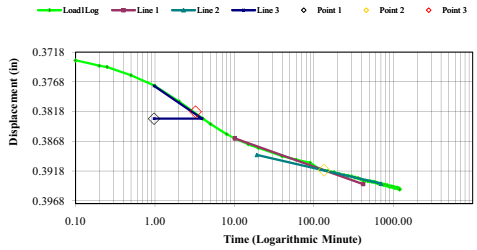
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3711	0.3709	49.4533	2.9402
1	00:00:01	0.3720	0.3718	49.5733	2.9308
2	00:00:02	0.3724	0.3722	49.6267	2.9267
3	00:00:03	0.3726	0.3724	49.6533	2.9246
4	00:00:04	0.3728	0.3726	49.6800	2.9225
5	00:00:05	0.3730	0.3728	49.7067	2.9204
6	00:00:06	0.3732	0.3730	49.7333	2.9184
7	00:00:12	0.3741	0.3739	49.8533	2.9090
8	00:00:15	0.3743	0.3741	49.8800	2.9069
9	00:00:30	0.3757	0.3755	50.0667	2.8924
10	00:01:00	0.3775	0.3773	50.3067	2.8737
11	00:02:01	0.3801	0.3799	50.6533	2.8466
12	00:04:01	0.3830	0.3828	51.0400	2.8165
13	00:05:01	0.3839	0.3837	51.1600	2.8071
14	00:08:01	0.3856	0.3854	51.3867	2.7895
15	00:10:01	0.3863	0.3861	51.4800	2.7822
16	00:15:02	0.3873	0.3871	51.6133	2.7718
17	00:20:02	0.3879	0.3877	51.6933	2.7656
18	00:40:03	0.3893	0.3891	51.8800	2.7510
19	01:00:05	0.3899	0.3897	51.9600	2.7448
20	01:30:07	0.3904	0.3902	52.0267	2.7396
21	02:00:09	0.3915	0.3913	52.1733	2.7282
22	02:30:12	0.3918	0.3916	52.2133	2.7250
23	03:00:14	0.3920	0.3918	52.2400	2.7230
24	03:30:16	0.3923	0.3921	52.2800	2.7198
25	04:00:19	0.3925	0.3923	52.3067	2.7178
26	04:30:21	0.3926	0.3924	52.3200	2.7167
27	05:00:23	0.3927	0.3925	52.3333	2.7157
28	05:30:25	0.3929	0.3927	52.3600	2.7136
29	06:00:28	0.3930	0.3928	52.3733	2.7126
30	06:30:30	0.3932	0.3930	52.4000	2.7105
31	07:00:32	0.3934	0.3932	52.4267	2.7084
32	07:30:34	0.3934	0.3932	52.4267	2.7084
33	08:00:37	0.3935	0.3933	52.4400	2.7074
34	08:30:39	0.3935	0.3933	52.4400	2.7074
35	09:00:41	0.3936	0.3934	52.4533	2.7063
36	09:30:43	0.3936	0.3934	52.4533	2.7063

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.3937	0.3935	52.4667	2.7053
38	10:30:48	0.3938	0.3936	52.4800	2.7042
39	11:00:50	0.3939	0.3937	52.4933	2.7032
40	11:30:53	0.3940	0.3938	52.5067	2.7022
41	12:00:55	0.3940	0.3938	52.5067	2.7022
42	12:30:57	0.3941	0.3939	52.5200	2.7011
43	13:01:00	0.3941	0.3939	52.5200	2.7011
44	13:31:02	0.3942	0.3940	52.5333	2.7001
45	14:01:04	0.3942	0.3940	52.5333	2.7001
46	14:31:06	0.3943	0.3941	52.5467	2.6990
47	15:01:09	0.3944	0.3942	52.5600	2.6980
48	15:31:11	0.3944	0.3942	52.5600	2.6980
49	16:01:13	0.3944	0.3942	52.5600	2.6980
50	16:31:15	0.3945	0.3943	52.5733	2.6970
51	17:01:18	0.3945	0.3943	52.5733	2.6970
52	17:31:20	0.3946	0.3944	52.5867	2.6959
53	18:01:22	0.3946	0.3944	52.5867	2.6959
54	18:31:25	0.3946	0.3944	52.5867	2.6959
55	19:01:27	0.3947	0.3945	52.6000	2.6949
56	19:31:29	0.3947	0.3945	52.6000	2.6949
57	20:01:31	0.3948	0.3946	52.6133	2.6939
58	20:05:19	0.3949	0.3947	52.6267	2.6928

Consolidation Test Results
(Sequence 10) Load 1.000 tsf

Consolidation Test Results
(Sequence 10) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

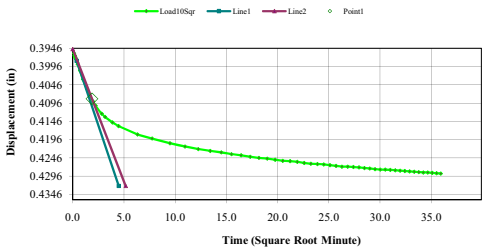
Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP1-30
Depth: 8 - 10 feet
Sample Type: Undisturbed

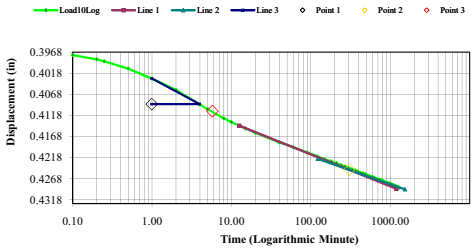
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3949	0.3947	52.6267	2.6928
1	00:00:01	0.3960	0.3958	52.7733	2.6814
2	00:00:02	0.3966	0.3964	52.8533	2.6751
3	00:00:03	0.3968	0.3966	52.8800	2.6731
4	00:00:04	0.3972	0.3970	52.9333	2.6689
5	00:00:05	0.3974	0.3972	52.9600	2.6668
6	00:00:06	0.3975	0.3973	52.9733	2.6658
7	00:00:12	0.3985	0.3983	53.1067	2.6554
8	00:00:15	0.3990	0.3988	53.1733	2.6502
9	00:00:30	0.4007	0.4005	53.4000	2.6325
10	00:01:00	0.4031	0.4029	53.7200	2.6076
11	00:02:00	0.4058	0.4056	54.0800	2.5795
12	00:04:00	0.4092	0.4090	54.5333	2.5442
13	00:05:00	0.4103	0.4101	54.6800	2.5328
14	00:08:00	0.4125	0.4123	54.9733	2.5099
15	00:10:01	0.4134	0.4132	55.0933	2.5005
16	00:15:01	0.4149	0.4147	55.2933	2.4849
17	00:20:01	0.4159	0.4157	55.4267	2.4745
18	00:40:03	0.4182	0.4180	55.7333	2.4506
19	01:00:04	0.4193	0.4191	55.8800	2.4392
20	01:30:07	0.4206	0.4204	56.0533	2.4257
21	02:00:09	0.4215	0.4213	56.1733	2.4163
22	02:30:11	0.4222	0.4220	56.2667	2.4091
23	03:00:13	0.4227	0.4225	56.3333	2.4039
24	03:30:16	0.4231	0.4229	56.3867	2.3997
25	04:00:18	0.4236	0.4234	56.4533	2.3945
26	04:30:20	0.4239	0.4237	56.4933	2.3914
27	05:00:22	0.4243	0.4241	56.5467	2.3872
28	05:30:25	0.4246	0.4244	56.5867	2.3841
29	06:00:27	0.4248	0.4246	56.6133	2.3820
30	06:30:29	0.4251	0.4249	56.6533	2.3789
31	07:00:32	0.4254	0.4252	56.6933	2.3758
32	07:30:34	0.4255	0.4253	56.7067	2.3748
33	08:00:36	0.4257	0.4255	56.7333	2.3727
34	08:30:39	0.4260	0.4258	56.7733	2.3696
35	09:00:41	0.4262	0.4260	56.8000	2.3675
36	09:30:43	0.4263	0.4261	56.8133	2.3665

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.4264	0.4262	56.8267	2.3654
38	10:30:48	0.4266	0.4264	56.8533	2.3633
39	11:00:50	0.4268	0.4266	56.8800	2.3613
40	11:30:52	0.4270	0.4268	56.9067	2.3592
41	12:00:55	0.4270	0.4268	56.9067	2.3592
42	12:30:57	0.4271	0.4269	56.9200	2.3581
43	13:00:59	0.4272	0.4270	56.9333	2.3571
44	13:31:02	0.4274	0.4272	56.9600	2.3550
45	14:01:04	0.4275	0.4273	56.9733	2.3540
46	14:31:06	0.4277	0.4275	57.0000	2.3519
47	15:01:08	0.4278	0.4276	57.0133	2.3509
48	15:31:11	0.4278	0.4276	57.0133	2.3509
49	16:01:13	0.4279	0.4277	57.0267	2.3498
50	16:31:15	0.4280	0.4278	57.0400	2.3488
51	17:01:18	0.4281	0.4279	57.0533	2.3477
52	17:31:20	0.4282	0.4280	57.0667	2.3467
53	18:01:22	0.4283	0.4281	57.0800	2.3457
54	18:31:24	0.4284	0.4282	57.0933	2.3446
55	19:01:27	0.4285	0.4283	57.1067	2.3436
56	19:31:29	0.4286	0.4284	57.1200	2.3426
57	20:01:31	0.4286	0.4284	57.1200	2.3426
58	20:31:34	0.4287	0.4285	57.1333	2.3415
59	21:01:36	0.4288	0.4286	57.1467	2.3405
60	21:31:13	0.4289	0.4287	57.1600	2.3394

Consolidation Test Results
(Sequence 11) Load 2.000 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 24 May 11
Test Number:

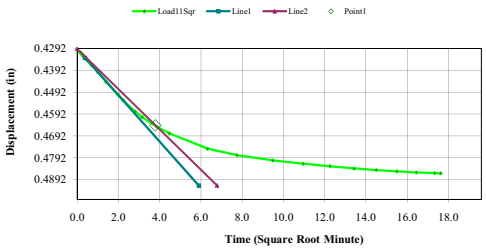
Sample Number:
Soil Description:
Boring Number: BHSP-BP1-30
Peat (PT)
Depth: 8 - 10 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.4289	0.4287	57.1600	2.3394
1	00:00:01	0.4308	0.4306	57.4133	2.3197
2	00:00:02	0.4313	0.4311	57.4800	2.3145
3	00:00:03	0.4318	0.4316	57.5467	2.3093
4	00:00:04	0.4321	0.4319	57.5867	2.3062
5	00:00:05	0.4325	0.4323	57.6400	2.3020
6	00:00:06	0.4327	0.4325	57.6667	2.2999
7	00:00:12	0.4342	0.4340	57.8667	2.2843
8	00:00:15	0.4347	0.4345	57.9333	2.2792
9	00:00:30	0.4369	0.4367	58.2267	2.2563
10	00:01:00	0.4400	0.4398	58.6400	2.2241
11	00:02:00	0.4445	0.4443	59.2400	2.1773
12	00:04:00	0.4504	0.4502	60.0267	2.1160
13	00:05:00	0.4528	0.4526	60.3467	2.0910
14	00:08:00	0.4581	0.4579	61.0533	2.0359
15	00:10:00	0.4606	0.4604	61.3867	2.0100
16	00:15:01	0.4650	0.4648	61.9733	1.9642
17	00:20:01	0.4680	0.4678	62.3733	1.9330
18	00:40:03	0.4750	0.4748	63.3067	1.8603
19	01:00:04	0.4780	0.4778	63.7067	1.8291
20	01:30:06	0.4804	0.4802	64.0267	1.8042
21	02:00:09	0.4819	0.4817	64.2267	1.7886
22	02:30:11	0.4830	0.4828	64.3733	1.7771
23	03:00:13	0.4841	0.4839	64.5200	1.7657
24	03:30:16	0.4848	0.4846	64.6133	1.7584
25	04:00:18	0.4854	0.4852	64.6933	1.7522
26	04:30:20	0.4859	0.4857	64.7600	1.7470
27	05:00:22	0.4862	0.4860	64.8000	1.7439
28	05:10:26	0.4863	0.4861	64.8133	1.7428

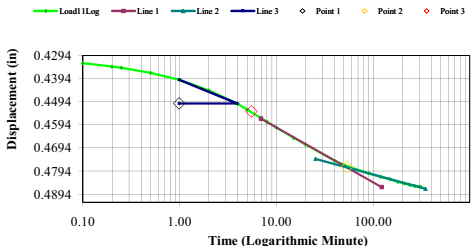
Tested By:
Checked By:

Consolidation Test Results
(Sequence 11) Load 2.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 12) Load 4.000 tsf

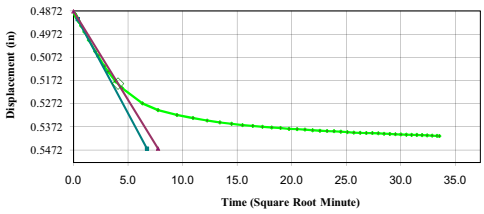
Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 24 May 11
Test Number:

Sample Number:
Soil Description:
Boring Number: BHSP-BP1-30
Peat (PT)
Depth: 8 - 10 feet
Remarks:
Sample Type: Undisturbed

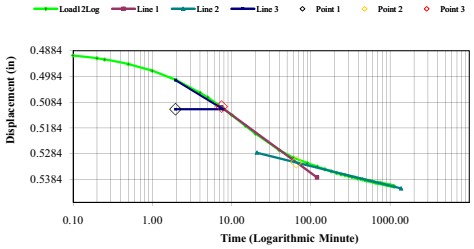
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.4863	0.4861	64.8133	1.7428
1	00:00:01	0.4884	0.4882	65.0933	1.7210
2	00:00:02	0.4889	0.4887	65.1600	1.7158
3	00:00:03	0.4894	0.4892	65.2267	1.7106
4	00:00:04	0.4896	0.4894	65.2533	1.7085
5	00:00:05	0.4900	0.4898	65.3067	1.7044
6	00:00:06	0.4902	0.4900	65.3333	1.7023
7	00:00:12	0.4913	0.4911	65.4800	1.6909
8	00:00:15	0.4918	0.4916	65.5467	1.6857
9	00:00:30	0.4936	0.4934	65.7867	1.6670
10	00:01:00	0.4962	0.4960	66.1333	1.6400
11	00:02:00	0.4998	0.4996	66.6133	1.6025
12	00:04:00	0.5047	0.5045	67.2667	1.5516
13	00:05:00	0.5065	0.5063	67.5067	1.5329
14	00:08:01	0.5111	0.5109	68.1200	1.4851
15	00:10:01	0.5134	0.5132	68.4267	1.4612
16	00:15:01	0.5176	0.5174	68.9867	1.4175
17	00:20:01	0.5206	0.5204	69.3867	1.3863
18	00:40:03	0.5271	0.5269	70.2533	1.3188
19	01:00:05	0.5300	0.5298	70.6400	1.2886
20	01:30:07	0.5321	0.5319	70.9200	1.2668
21	02:00:09	0.5334	0.5332	71.0933	1.2533
22	02:30:11	0.5345	0.5343	71.2400	1.2419
23	03:00:14	0.5353	0.5351	71.3467	1.2336
24	03:30:16	0.5359	0.5357	71.4267	1.2273
25	04:00:18	0.5365	0.5363	71.5067	1.2211
26	04:30:21	0.5368	0.5366	71.5467	1.2180
27	05:00:23	0.5372	0.5370	71.6000	1.2138
28	05:30:25	0.5375	0.5373	71.6400	1.2107
29	06:00:27	0.5377	0.5375	71.6667	1.2086
30	06:30:30	0.5381	0.5379	71.7200	1.2045
31	07:00:32	0.5382	0.5380	71.7333	1.2034
32	07:30:34	0.5384	0.5382	71.7600	1.2013
33	08:00:36	0.5387	0.5385	71.8000	1.1982
34	08:30:39	0.5389	0.5387	71.8267	1.1961
35	09:00:41	0.5390	0.5388	71.8400	1.1951
36	09:30:43	0.5391	0.5389	71.8533	1.1941

Consolidation Test Results
(Sequence 12) Load 4.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.5393	0.5391	71.8800	1.1920
38	10:30:48	0.5395	0.5393	71.9067	1.1899
39	11:00:50	0.5397	0.5395	71.9333	1.1878
40	11:30:53	0.5398	0.5396	71.9467	1.1868
41	12:00:55	0.5399	0.5397	71.9600	1.1858
42	12:30:57	0.5399	0.5397	71.9600	1.1858
43	13:00:59	0.5400	0.5398	71.9733	1.1847
44	13:31:02	0.5402	0.5400	72.0000	1.1826
45	14:01:04	0.5403	0.5401	72.0133	1.1816
46	14:31:06	0.5404	0.5402	72.0267	1.1806
47	15:01:09	0.5405	0.5403	72.0400	1.1795
48	15:31:11	0.5406	0.5404	72.0533	1.1785
49	16:01:13	0.5407	0.5405	72.0667	1.1774
50	16:31:15	0.5407	0.5405	72.0667	1.1774
51	17:01:18	0.5408	0.5406	72.0800	1.1764
52	17:31:20	0.5409	0.5407	72.0933	1.1754
53	18:01:22	0.5410	0.5408	72.1067	1.1743
54	18:31:24	0.5411	0.5409	72.1200	1.1733
55	18:45:31	0.5412	0.5410	72.1333	1.1722

Tested By: **Checked By:**

Consolidation Test Results
(Sequence 13) Load 8.000 tsf

Consolidation Test Results
(Sequence 13) Load 8.000 tsf

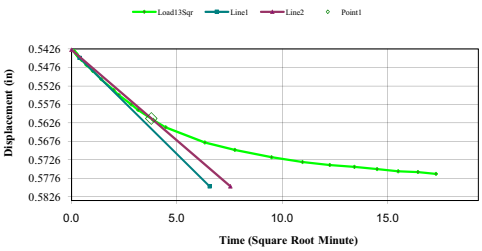
Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 24 May 11
Test Number:

Sample Number:
Soil Description:
Boring Number: BHSP-BP1-30
Peat (PT)
Depth: 8 - 10 feet
Remarks:
Sample Type: Undisturbed

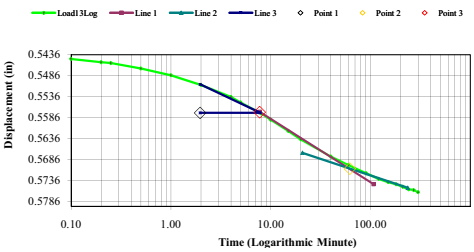
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.5412	0.5410	72.1333	1.1722
1	00:00:01	0.5432	0.5430	72.4000	1.1515
2	00:00:02	0.5436	0.5434	72.4533	1.1473
3	00:00:03	0.5439	0.5437	72.4933	1.1442
4	00:00:04	0.5441	0.5439	72.5200	1.1421
5	00:00:05	0.5444	0.5442	72.5600	1.1390
6	00:00:06	0.5446	0.5444	72.5867	1.1369
7	00:00:12	0.5454	0.5452	72.6933	1.1286
8	00:00:15	0.5456	0.5454	72.7200	1.1265
9	00:00:30	0.5469	0.5467	72.8933	1.1130
10	00:01:00	0.5485	0.5483	73.1067	1.0964
11	00:02:00	0.5508	0.5506	73.4133	1.0725
12	00:04:00	0.5537	0.5535	73.8000	1.0423
13	00:05:00	0.5550	0.5548	73.9733	1.0288
14	00:08:01	0.5576	0.5574	74.3200	1.0018
15	00:10:01	0.5591	0.5589	74.5200	0.9862
16	00:15:01	0.5618	0.5616	74.8800	0.9581
17	00:20:01	0.5638	0.5636	75.1467	0.9373
18	00:40:03	0.5679	0.5677	75.6933	0.8947
19	01:00:04	0.5699	0.5697	75.9600	0.8739
20	01:30:07	0.5719	0.5717	76.2267	0.8532
21	02:00:09	0.5732	0.5730	76.4000	0.8397
22	02:30:11	0.5740	0.5738	76.5067	0.8313
23	03:00:14	0.5745	0.5743	76.5733	0.8261
24	03:30:16	0.5751	0.5749	76.6533	0.8199
25	04:00:18	0.5757	0.5755	76.7333	0.8137
26	04:30:20	0.5759	0.5757	76.7600	0.8116
27	04:59:10	0.5764	0.5762	76.8267	0.8064

Tested By: **Checked By:**

Consolidation Graph (Squareroot Time)

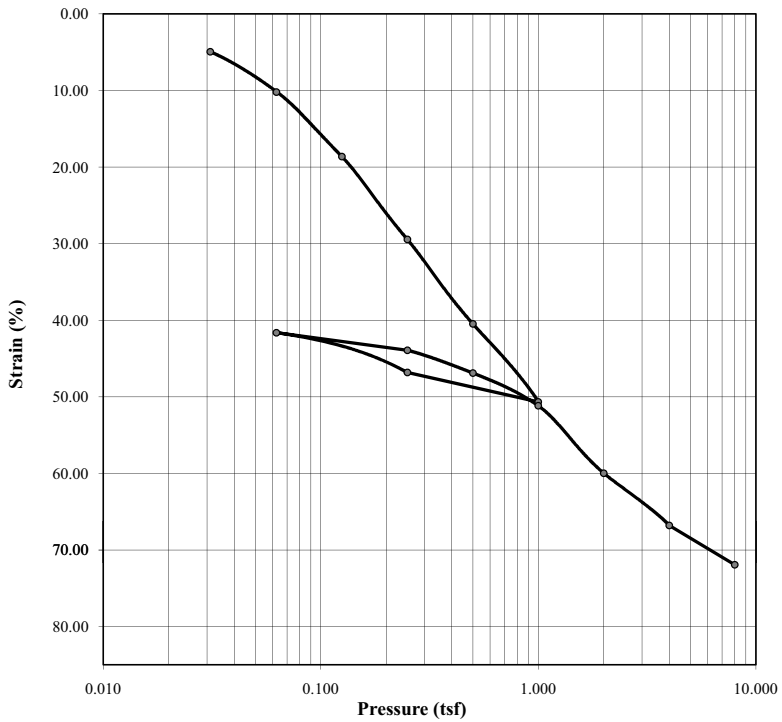


Consolidation Graph (Logarithmic Time)



GeoEngineers

Consolidation Test
Test Results

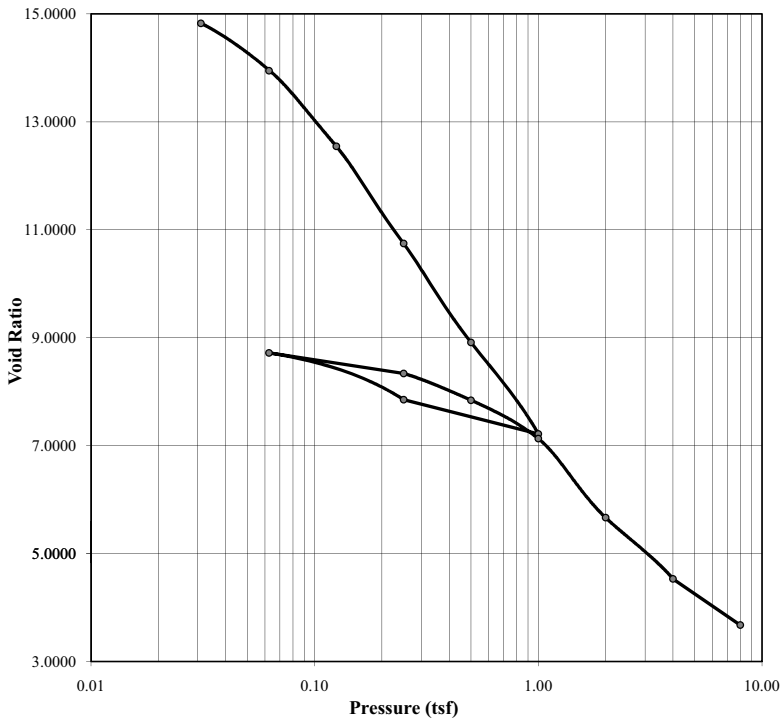


	Before	After				
			Liquid Limits:	284	**Test Date:**	26 May 11
Moisture (%):	768.87	144.25	**Plastic Limits:**	69		
Dry Density (pcf):	7.44	27.85	**Plasticity Index (%):**	215		
Saturation (%):	97.44	82.98				
Void Ratio:	15.6786	3.6811	**Specific Gravity:**	1.987	Measured	

Sample Description: Peat (PT)
Project Number: 10883-011-00 **Depth:** 20 - 22 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-BP2-3
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Test Results

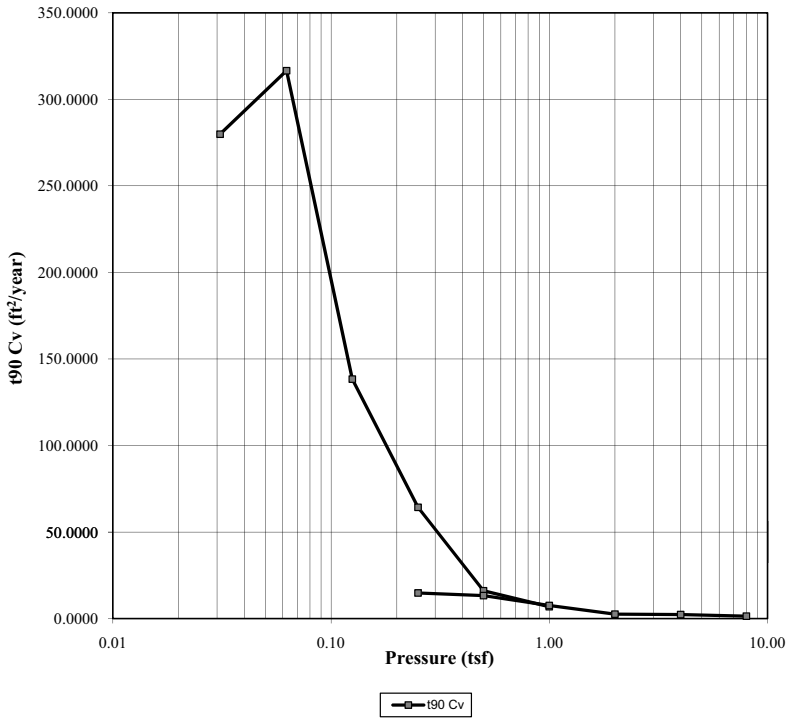


	Before	After				
			Liquid Limits:	284	**Test Date:**	26 May 11
Moisture (%):	768.87	144.25	**Plastic Limits:**	69		
Dry Density (pcf):	7.44	27.85	**Plasticity Index (%):**	215		
Saturation (%):	97.44	82.98				
Void Ratio:	15.6786	3.6811	**Specific Gravity:**	1.987	Measured	

Soil Description: Peat (PT)
Project Number: 10883-011-00 **Depth:** 20 - 22 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-BP2-3
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	284	**Test Date:**	26 May 11
Moisture (%):	768.87	144.25	**Plastic Limits:**	69		
Dry Density (pcf):	7.44	27.85	**Plasticity Index (%):**	215		
Saturation (%):	97.44	82.98				
Void Ratio:	15.6786	3.6811	**Specific Gravity:**	1.987	Measured	

Soil Description: Peat (PT)

Project Number: 10883-011-00 **Depth:** 20 - 22 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-BP2-3

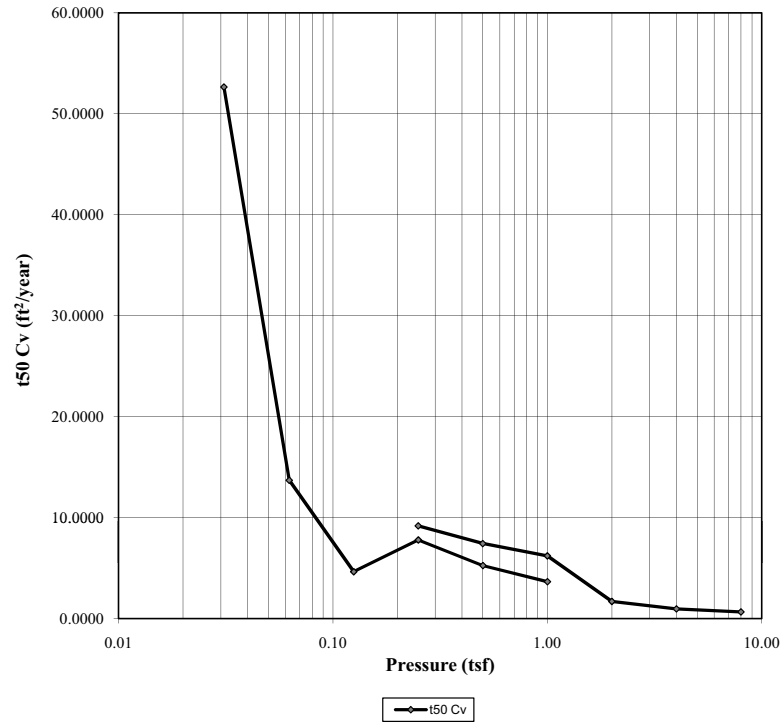
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	284	**Test Date:**	26 May 11
Moisture (%):	768.87	144.25	**Plastic Limits:**	69		
Dry Density (pcf):	7.44	27.85	**Plasticity Index (%):**	215		
Saturation (%):	97.44	82.98				
Void Ratio:	15.6786	3.6811	**Specific Gravity:**	1.987	Measured	

Soil Description: Peat (PT)

Project Number: 10883-011-00 **Depth:** 20 - 22 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-BP2-3

Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test Results
Summary

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00

Sample Number:
Boring Number: BHSP-BP2-30
Depth: 20 - 22 feet
Sample Type: Undisturbed

Sample Description:
Peat (PT)
Remarks:

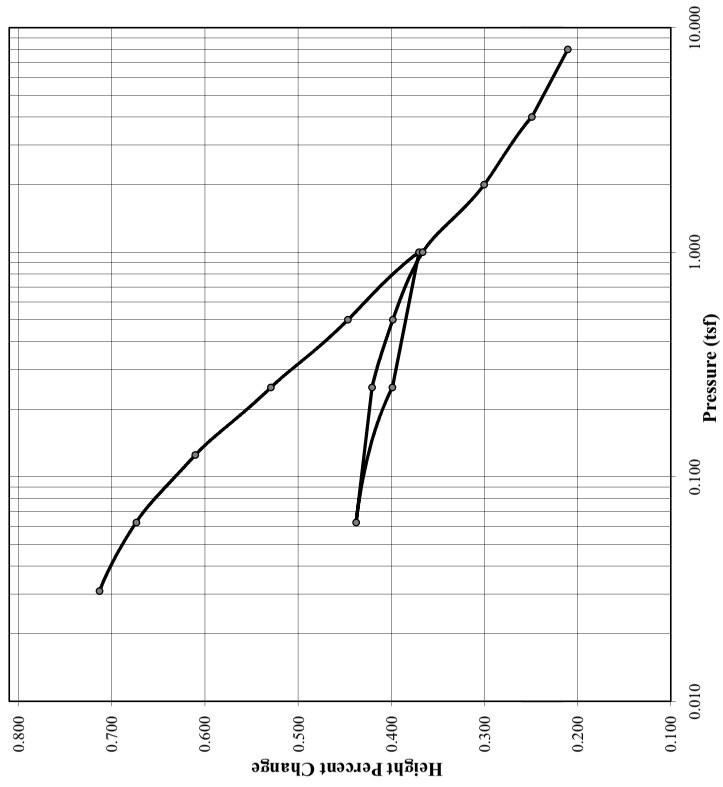
Test Number:
Test Date: 26 May 11

Index	Load Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Void (in)	Vertical Strain (%)	Void Ratio	t90 Fitting Time (min)	t50 Fitting Time (min)	t90 Cv (ft2/year)	t50 Cv (ft2/year)
0	0.000	0.0000	0.7500	0.7050	0.00	15.6487	0.000	0.000	0.000	0.000
1	0.031	0.0370	0.7130	0.6680	4.93	14.8273	1.406	1.736	279.881	52.642
2	0.063	0.0766	0.6734	0.6284	10.21	13.9483	1.109	5.947	316.490	13.708
3	0.125	0.1397	0.6103	0.5653	18.63	12.5476	2.083	14.399	138.376	4.650
4	0.250	0.2209	0.5291	0.4841	29.45	10.7451	3.368	6.457	64.314	7.794
5	0.500	0.3035	0.4465	0.4015	40.47	8.9115	9.627	6.821	16.024	5.254
6	1.000	0.3799	0.3701	0.3251	50.65	7.2156	15.446	6.720	6.862	3.664
7	0.250	0.3512	0.3988	0.3538	46.83	7.8527	0.000	0.000	0.000	0.000
8	0.063	0.3123	0.4377	0.3927	41.64	8.7162	0.000	0.000	0.000	0.000
9	0.250	0.3294	0.4206	0.3756	43.92	8.3366	9.280	3.459	14.751	9.193
10	0.500	0.3517	0.3983	0.3533	46.89	7.8416	9.280	3.833	13.228	7.439
11	1.000	0.3838	0.3662	0.3212	51.17	7.1290	13.680	3.881	7.585	6.211
12	2.000	0.4498	0.3002	0.2552	59.97	5.6639	27.668	9.565	2.520	1.694
13	4.000	0.5009	0.2491	0.2041	66.79	4.5296	20.909	11.639	2.296	0.958
14	8.000	0.5395	0.2105	0.1655	71.93	3.6727	24.568	12.041	1.396	0.662

Predicted value indicated with *

GeoEngineers

Consolidation Test
Test Results



	Before	After				
Moisture (%):	768.87	144.25	**Liquid Limits:**	284	**Test Date:**	26 May 11
Dry Density (pcf):	7.44	27.85	**Plastic Limits:**	69		
Saturation (%):	97.44	82.98	**Plasticity Index (%):**	215		
Void Ratio:	15.6786	3.6811	**Specific Gravity:**	1.987	Measured	

Soil Description: Peat (PT)
Project Number: 10883-011-00
Depth: 20 - 22 feet
Remarks:
Sample Number:
Boring Number: BHSP-BP2-3
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GEOENGINEERS

Consolidation Test
Consolidation Specimen Information

Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 26 May 11

Sample Number: **Sample Description:**
Boring Number: BHSP-BP2-30 Peat (PT)
Depth: 20 - 22 feet **Remarks:**
Sample Type: Undisturbed

Test Number:
Liquid Limit: 284.0000 **Initial Void Ratio:** 15.6786 **Initial Height (in):** 0.7500
Plastic Limit: 69.0000 **Plasticity Index (%):** 215.0000 **Initial Diameter (in):** 2.5000
Specific Gravity: 1.9870 **Weight of Ring (g):** 106.7000
Measured

Parameters	Initial Specimen	Final Specimen
Moist Weight + Container (g)	116.91	37.44
Dry Soil + Container (g)	37.64	26.78
Weight of Container (g)	27.33	19.39
Moisture Content (%)	768.87	144.25
Void Ratio	15.6786	3.6811
Saturation (%)	97.44	82.98
Dry Density (pcf)	7.44	27.85

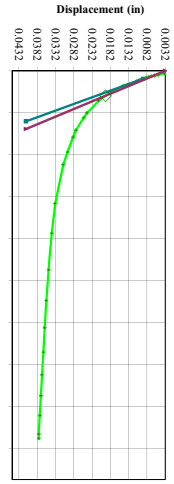
Consolidation Test Results
(Sequence 1) Load 0.031 tsf

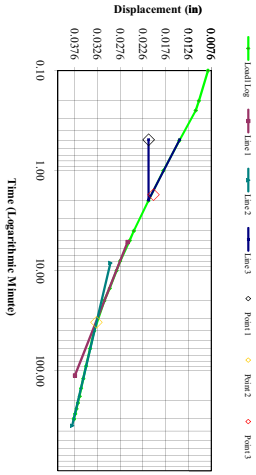
Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 26 May 11
Test Number:

Sample Number: **Soil Description:**
Boring Number: BHSP-BP2-30 Peat (PT)
Depth: 20 - 22 feet **Remarks:**
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0008	0.0000	0.0000	15.6786
1	00:00:01	0.0034	0.0026	0.3467	15.6208
2	00:00:02	0.0051	0.0043	0.5733	15.5830
3	00:00:03	0.0061	0.0053	0.7067	15.5607
4	00:00:04	0.0070	0.0062	0.8267	15.5407
5	00:00:05	0.0077	0.0069	0.9200	15.5251
6	00:00:06	0.0083	0.0075	1.0000	15.5118
7	00:00:12	0.0103	0.0095	1.2667	15.4673
8	00:00:15	0.0110	0.0102	1.3600	15.4517
9	00:00:30	0.0146	0.0138	1.8400	15.3717
10	00:01:00	0.0181	0.0173	2.3067	15.2939
11	00:02:00	0.0214	0.0206	2.7467	15.2205
12	00:04:00	0.0246	0.0238	3.1733	15.1493
13	00:05:00	0.0255	0.0247	3.2933	15.1293
14	00:08:00	0.0276	0.0268	3.5733	15.0826
15	00:10:00	0.0284	0.0276	3.6800	15.0648
16	00:15:00	0.0299	0.0291	3.8800	15.0114
17	00:20:00	0.0311	0.0303	4.0400	15.0048
18	00:40:02	0.0333	0.0325	4.3333	14.9558
19	01:00:03	0.0342	0.0334	4.4533	14.9358
20	01:30:06	0.0351	0.0343	4.5733	14.9158
21	02:00:08	0.0357	0.0349	4.6533	14.9025
22	02:30:10	0.0362	0.0354	4.7200	14.8913
23	03:00:12	0.0365	0.0357	4.7600	14.8847
24	03:30:15	0.0369	0.0361	4.8133	14.8758
25	04:00:17	0.0372	0.0364	4.8533	14.8691
26	04:30:19	0.0375	0.0367	4.8933	14.8624
27	05:00:22	0.0378	0.0370	4.9333	14.8558
28	05:07:29	0.0378	0.0370	4.9333	14.8558

Tested By: **Checked By:**





Consolidation Test Results
(Sequence 2) Load 0.063 tsf

Consolidation Test Results
(Sequence 2) Load 0.063 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

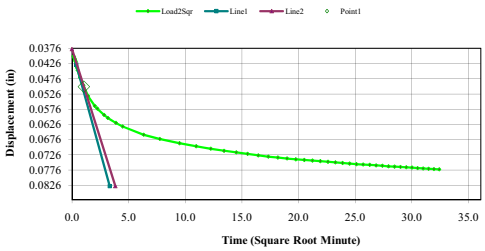
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP2-30
Depth: 20 - 22 feet
Sample Type: Undisturbed

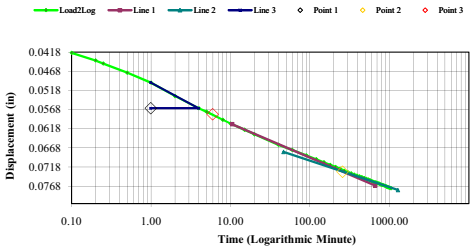
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0378	0.0370	4.9333	14.8558
1	00:00:01	0.0402	0.0394	5.2533	14.8024
2	00:00:02	0.0405	0.0397	5.2933	14.7957
3	00:00:03	0.0410	0.0402	5.3600	14.7846
4	00:00:04	0.0413	0.0405	5.4000	14.7779
5	00:00:05	0.0417	0.0409	5.4533	14.7690
6	00:00:06	0.0420	0.0412	5.4933	14.7624
7	00:00:12	0.0440	0.0432	5.7600	14.7179
8	00:00:15	0.0448	0.0440	5.8667	14.7001
9	00:00:30	0.0472	0.0464	6.1867	14.6467
10	00:01:00	0.0498	0.0490	6.5333	14.5889
11	00:02:00	0.0533	0.0525	7.0000	14.5111
12	00:04:00	0.0565	0.0557	7.4267	14.4399
13	00:05:00	0.0574	0.0566	7.5467	14.4199
14	00:08:00	0.0595	0.0587	7.8267	14.3732
15	00:10:01	0.0605	0.0597	7.9600	14.3510
16	00:15:01	0.0621	0.0613	8.1733	14.3154
17	00:20:01	0.0633	0.0625	8.3333	14.2887
18	00:40:03	0.0660	0.0652	8.6933	14.2287
19	01:00:04	0.0674	0.0666	8.8800	14.1975
20	01:30:07	0.0688	0.0680	9.0667	14.1664
21	02:00:09	0.0698	0.0690	9.2000	14.1441
22	02:30:11	0.0706	0.0698	9.3067	14.1264
23	03:00:14	0.0713	0.0705	9.4000	14.1108
24	03:30:16	0.0718	0.0710	9.4667	14.0997
25	04:00:18	0.0723	0.0715	9.5333	14.0886
26	04:30:20	0.0728	0.0720	9.6000	14.0774
27	05:00:23	0.0732	0.0724	9.6533	14.0685
28	05:30:25	0.0735	0.0727	9.6933	14.0619
29	06:00:27	0.0738	0.0730	9.7333	14.0552
30	06:30:30	0.0741	0.0733	9.7733	14.0485
31	07:00:32	0.0743	0.0735	9.8000	14.0441
32	07:30:34	0.0745	0.0737	9.8267	14.0396
33	08:00:36	0.0747	0.0739	9.8533	14.0352
34	08:30:39	0.0749	0.0741	9.8800	14.0307
35	09:00:41	0.0751	0.0743	9.9067	14.0263
36	09:30:43	0.0753	0.0745	9.9333	14.0218

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.0755	0.0747	9.9600	14.0174
38	10:30:48	0.0757	0.0749	9.9867	14.0129
39	11:00:50	0.0758	0.0750	10.0000	14.0107
40	11:30:52	0.0759	0.0751	10.0133	14.0085
41	12:00:55	0.0761	0.0753	10.0400	14.0040
42	12:30:57	0.0762	0.0754	10.0533	14.0018
43	13:00:59	0.0764	0.0756	10.0800	13.9974
44	13:31:02	0.0765	0.0757	10.0933	13.9952
45	14:01:04	0.0766	0.0758	10.1067	13.9929
46	14:31:06	0.0767	0.0759	10.1200	13.9907
47	15:01:08	0.0768	0.0760	10.1333	13.9885
48	15:31:11	0.0770	0.0762	10.1600	13.9840
49	16:01:13	0.0771	0.0763	10.1733	13.9818
50	16:31:15	0.0772	0.0764	10.1867	13.9796
51	17:01:17	0.0773	0.0765	10.2000	13.9774
52	17:31:20	0.0774	0.0766	10.2133	13.9751

Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

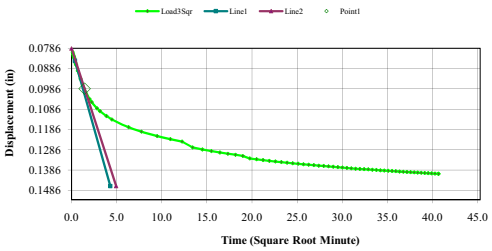
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP2-30
Depth: 20 - 22 feet
Sample Type: Undisturbed

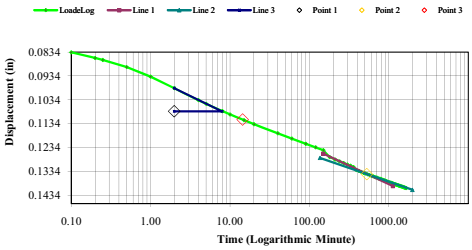
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0774	0.0766	10.2133	13.9751
1	00:00:01	0.0805	0.0797	10.6267	13.9062
2	00:00:02	0.0815	0.0807	10.7600	13.8840
3	00:00:03	0.0821	0.0813	10.8400	13.8706
4	00:00:04	0.0827	0.0819	10.9200	13.8573
5	00:00:05	0.0831	0.0823	10.9733	13.8484
6	00:00:06	0.0835	0.0827	11.0267	13.8395
7	00:00:12	0.0859	0.0851	11.3467	13.7861
8	00:00:15	0.0867	0.0859	11.4533	13.7683
9	00:00:30	0.0897	0.0889	11.8533	13.7016
10	00:01:00	0.0937	0.0929	12.3867	13.6127
11	00:02:00	0.0986	0.0978	13.0400	13.5037
12	00:04:01	0.1036	0.1028	13.7067	13.3925
13	00:05:01	0.1051	0.1043	13.9067	13.3591
14	00:08:01	0.1082	0.1074	14.3200	13.2902
15	00:10:01	0.1096	0.1088	14.5067	13.2591
16	00:15:01	0.1120	0.1112	14.8267	13.2057
17	00:20:02	0.1137	0.1129	15.0533	13.1679
18	00:40:03	0.1175	0.1167	15.5600	13.0834
19	01:00:05	0.1197	0.1189	15.8533	13.0345
20	01:30:07	0.1219	0.1211	16.1467	12.9855
21	02:00:09	0.1234	0.1226	16.3467	12.9522
22	02:30:12	0.1246	0.1238	16.5067	12.9255
23	03:00:14	0.1275	0.1267	16.8933	12.8610
24	03:30:16	0.1285	0.1277	17.0267	12.8388
25	04:00:18	0.1293	0.1285	17.1333	12.8210
26	04:30:21	0.1300	0.1292	17.2267	12.8054
27	05:00:23	0.1306	0.1298	17.3067	12.7921
28	05:30:25	0.1311	0.1303	17.3733	12.7810
29	06:00:27	0.1317	0.1309	17.4533	12.7676
30	06:30:30	0.1329	0.1321	17.6133	12.7409
31	07:00:32	0.1333	0.1325	17.6667	12.7320
32	07:30:34	0.1337	0.1329	17.7200	12.7231
33	08:00:36	0.1341	0.1333	17.7733	12.7142
34	08:30:39	0.1344	0.1336	17.8133	12.7076
35	09:00:41	0.1347	0.1339	17.8533	12.7009
36	09:30:43	0.1350	0.1342	17.8933	12.6942

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1353	0.1345	17.9333	12.6876
38	10:30:48	0.1355	0.1347	17.9600	12.6831
39	11:00:50	0.1358	0.1350	18.0000	12.6764
40	11:30:52	0.1360	0.1352	18.0267	12.6720
41	12:00:55	0.1362	0.1354	18.0533	12.6675
42	12:30:57	0.1365	0.1357	18.0933	12.6609
43	13:00:59	0.1366	0.1358	18.1067	12.6586
44	13:31:02	0.1368	0.1360	18.1333	12.6542
45	14:01:04	0.1370	0.1362	18.1600	12.6497
46	14:31:06	0.1372	0.1364	18.1867	12.6453
47	15:01:09	0.1374	0.1366	18.2133	12.6409
48	15:31:11	0.1376	0.1368	18.2400	12.6364
49	16:01:13	0.1378	0.1370	18.2667	12.6320
50	16:31:15	0.1380	0.1372	18.2933	12.6275
51	17:01:18	0.1381	0.1373	18.3067	12.6253
52	17:31:20	0.1382	0.1374	18.3200	12.6231
53	18:01:22	0.1383	0.1375	18.3333	12.6208
54	18:31:24	0.1385	0.1377	18.3600	12.6164
55	19:01:27	0.1386	0.1378	18.3733	12.6142
56	19:31:29	0.1388	0.1380	18.4000	12.6097
57	20:01:31	0.1389	0.1381	18.4133	12.6075
58	20:31:33	0.1390	0.1382	18.4267	12.6053
59	21:01:36	0.1391	0.1383	18.4400	12.6030
60	21:31:38	0.1392	0.1384	18.4533	12.6008
61	22:01:40	0.1394	0.1386	18.4800	12.5964
62	22:31:43	0.1395	0.1387	18.4933	12.5942
63	23:01:45	0.1396	0.1388	18.5067	12.5919
64	23:31:47	0.1397	0.1389	18.5200	12.5897
65	24:01:49	0.1398	0.1390	18.5333	12.5875
66	24:31:52	0.1399	0.1391	18.5467	12.5853
67	25:01:54	0.1400	0.1392	18.5600	12.5830
68	25:31:56	0.1401	0.1393	18.5733	12.5808
69	26:01:58	0.1402	0.1394	18.5867	12.5786
70	26:32:01	0.1403	0.1395	18.6000	12.5764
71	27:02:03	0.1404	0.1396	18.6133	12.5741
72	27:32:05	0.1405	0.1397	18.6267	12.5719
73	27:34:46	0.1405	0.1397	18.6267	12.5719

Consolidation Test Results
(Sequence 4) Load 0.250 tsf

Consolidation Test Results
(Sequence 4) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

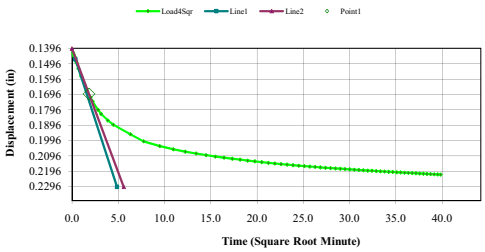
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP2-30
Depth: 20 - 22 feet
Sample Type: Undisturbed

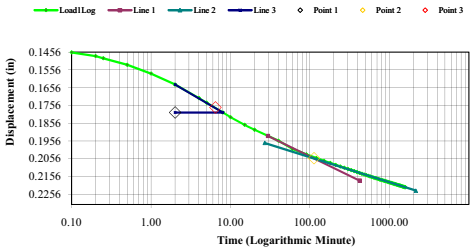
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1405	0.1397	18.6267	12.5719
1	00:00:01	0.1424	0.1416	18.8800	12.5297
2	00:00:02	0.1435	0.1427	19.0267	12.5052
3	00:00:03	0.1442	0.1434	19.1200	12.4896
4	00:00:04	0.1448	0.1440	19.2000	12.4763
5	00:00:05	0.1453	0.1445	19.2667	12.4652
6	00:00:06	0.1458	0.1450	19.3333	12.4541
7	00:00:12	0.1479	0.1471	19.6133	12.4074
8	00:00:15	0.1491	0.1483	19.7733	12.3807
9	00:00:30	0.1528	0.1520	20.2667	12.2984
10	00:01:00	0.1577	0.1569	20.9200	12.1894
11	00:02:00	0.1639	0.1631	21.7467	12.0515
12	00:04:00	0.1715	0.1707	22.7600	11.8825
13	00:05:00	0.1741	0.1733	23.1067	11.8247
14	00:08:00	0.1796	0.1788	23.8400	11.7024
15	00:10:01	0.1823	0.1815	24.2000	11.6424
16	00:15:01	0.1865	0.1857	24.7600	11.5490
17	00:20:01	0.1893	0.1885	25.1333	11.4867
18	00:40:03	0.1955	0.1947	25.9600	11.3488
19	01:00:04	0.2001	0.1993	26.5733	11.2465
20	01:30:07	0.2032	0.2024	26.9867	11.1776
21	02:00:09	0.2053	0.2045	27.2667	11.1309
22	02:30:11	0.2068	0.2060	27.4667	11.0975
23	03:00:14	0.2080	0.2072	27.6267	11.0708
24	03:30:16	0.2091	0.2083	27.7733	11.0464
25	04:00:18	0.2100	0.2092	27.8933	11.0264
26	04:30:20	0.2107	0.2099	27.9867	11.0108
27	05:00:23	0.2114	0.2106	28.0800	10.9952
28	05:30:25	0.2120	0.2112	28.1600	10.9819
29	06:00:27	0.2126	0.2118	28.2400	10.9685
30	06:30:30	0.2131	0.2123	28.3067	10.9574
31	07:00:32	0.2136	0.2128	28.3733	10.9463
32	07:30:34	0.2141	0.2133	28.4400	10.9352
33	08:00:36	0.2145	0.2137	28.4933	10.9263
34	08:30:39	0.2149	0.2141	28.5467	10.9174
35	09:00:41	0.2152	0.2144	28.5867	10.9107
36	09:30:43	0.2156	0.2148	28.6400	10.9018

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.2159	0.2151	28.6800	10.8952
38	10:30:47	0.2162	0.2154	28.7200	10.8885
39	11:00:49	0.2165	0.2157	28.7600	10.8818
40	11:30:52	0.2167	0.2159	28.7867	10.8774
41	12:00:54	0.2170	0.2162	28.8267	10.8707
42	12:30:56	0.2173	0.2165	28.8667	10.8640
43	13:00:59	0.2175	0.2167	28.8933	10.8596
44	13:31:01	0.2177	0.2169	28.9200	10.8551
45	14:01:03	0.2179	0.2171	28.9467	10.8507
46	14:31:06	0.2181	0.2173	28.9733	10.8462
47	15:01:08	0.2183	0.2175	29.0000	10.8418
48	15:31:10	0.2185	0.2177	29.0267	10.8373
49	16:01:12	0.2187	0.2179	29.0533	10.8329
50	16:31:15	0.2189	0.2181	29.0800	10.8284
51	17:01:17	0.2191	0.2183	29.1067	10.8240
52	17:31:19	0.2192	0.2184	29.1200	10.8218
53	18:01:22	0.2194	0.2186	29.1467	10.8173
54	18:31:24	0.2196	0.2188	29.1733	10.8129
55	19:01:26	0.2197	0.2189	29.1867	10.8107
56	19:31:28	0.2199	0.2191	29.2133	10.8062
57	20:01:31	0.2200	0.2192	29.2267	10.8040
58	20:31:33	0.2202	0.2194	29.2533	10.7995
59	21:01:35	0.2203	0.2195	29.2667	10.7973
60	21:31:38	0.2205	0.2197	29.2933	10.7929
61	22:01:40	0.2206	0.2198	29.3067	10.7906
62	22:31:42	0.2207	0.2199	29.3200	10.7884
63	23:01:44	0.2208	0.2200	29.3333	10.7862
64	23:31:47	0.2210	0.2202	29.3600	10.7817
65	24:01:49	0.2211	0.2203	29.3733	10.7795
66	24:31:51	0.2213	0.2205	29.4000	10.7751
67	25:01:54	0.2214	0.2206	29.4133	10.7729
68	25:31:56	0.2215	0.2207	29.4267	10.7706
69	26:01:58	0.2216	0.2208	29.4400	10.7684
70	26:27:29	0.2217	0.2209	29.4533	10.7662

Consolidation Test Results
(Sequence 5) Load 0.500 tsf

Consolidation Test Results
(Sequence 5) Load 0.500 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

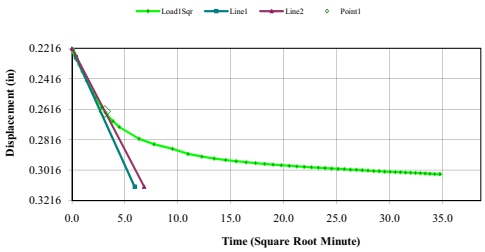
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP2-30
Depth: 20 - 22 feet
Sample Type: Undisturbed

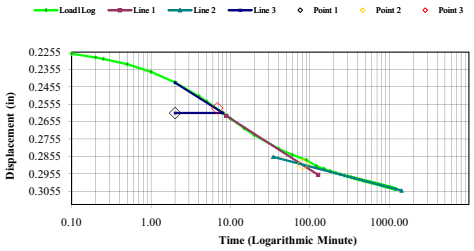
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2217	0.2209	29.4533	10.7662
1	00:00:01	0.2225	0.2217	29.5600	10.7484
2	00:00:02	0.2242	0.2234	29.7867	10.7106
3	00:00:03	0.2249	0.2241	29.8800	10.6950
4	00:00:04	0.2255	0.2247	29.9600	10.6817
5	00:00:05	0.2260	0.2252	30.0267	10.6706
6	00:00:06	0.2265	0.2257	30.0933	10.6594
7	00:00:12	0.2286	0.2278	30.3733	10.6127
8	00:00:15	0.2294	0.2286	30.4800	10.5949
9	00:00:30	0.2325	0.2317	30.8933	10.5260
10	00:01:00	0.2369	0.2361	31.4800	10.4282
11	00:02:00	0.2430	0.2422	32.2933	10.2925
12	00:04:00	0.2509	0.2501	33.3467	10.1168
13	00:05:00	0.2539	0.2531	33.7467	10.0501
14	00:08:01	0.2605	0.2597	34.6267	9.9033
15	00:10:01	0.2638	0.2630	35.0667	9.8300
16	00:15:01	0.2695	0.2687	35.8267	9.7032
17	00:20:02	0.2733	0.2725	36.3333	9.6187
18	00:40:03	0.2810	0.2802	37.3600	9.4475
19	01:00:05	0.2846	0.2838	37.8400	9.3674
20	01:30:07	0.2876	0.2868	38.2400	9.3007
21	02:00:09	0.2910	0.2902	38.6933	9.2251
22	02:30:11	0.2927	0.2919	38.9200	9.1873
23	03:00:14	0.2940	0.2932	39.0933	9.1584
24	03:30:16	0.2950	0.2942	39.2267	9.1361
25	04:00:18	0.2958	0.2950	39.3333	9.1183
26	04:30:20	0.2965	0.2957	39.4267	9.1028
27	05:00:23	0.2970	0.2962	39.4933	9.0917
28	05:30:25	0.2975	0.2967	39.5600	9.0805
29	06:00:27	0.2980	0.2972	39.6267	9.0694
30	06:30:30	0.2984	0.2976	39.6800	9.0605
31	07:00:32	0.2988	0.2980	39.7333	9.0516
32	07:30:34	0.2992	0.2984	39.7867	9.0427
33	08:00:36	0.2995	0.2987	39.8267	9.0361
34	08:30:39	0.2998	0.2990	39.8667	9.0294
35	09:00:41	0.3000	0.2992	39.8933	9.0249
36	09:30:43	0.3003	0.2995	39.9333	9.0183

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.3006	0.2998	39.9733	9.0116
38	10:30:48	0.3008	0.3000	40.0000	9.0071
39	11:00:50	0.3010	0.3002	40.0267	9.0027
40	11:30:52	0.3013	0.3005	40.0667	8.9960
41	12:00:55	0.3014	0.3006	40.0800	8.9938
42	12:30:57	0.3017	0.3009	40.1200	8.9871
43	13:00:59	0.3019	0.3011	40.1467	8.9827
44	13:31:01	0.3022	0.3014	40.1867	8.9760
45	14:01:04	0.3023	0.3015	40.2000	8.9738
46	14:31:06	0.3026	0.3018	40.2400	8.9671
47	15:01:08	0.3027	0.3019	40.2533	8.9649
48	15:31:11	0.3029	0.3021	40.2800	8.9604
49	16:01:13	0.3030	0.3022	40.2933	8.9582
50	16:31:15	0.3032	0.3024	40.3200	8.9538
51	17:01:17	0.3033	0.3025	40.3333	8.9516
52	17:31:20	0.3035	0.3027	40.3600	8.9471
53	18:01:22	0.3036	0.3028	40.3733	8.9449
54	18:31:24	0.3038	0.3030	40.4000	8.9404
55	19:01:27	0.3040	0.3032	40.4267	8.9360
56	19:31:29	0.3042	0.3034	40.4533	8.9315
57	20:01:31	0.3043	0.3035	40.4667	8.9293
58	20:06:58	0.3043	0.3035	40.4667	8.9293

Consolidation Test Results
(Sequence 6) Load 1.000 tsf

Consolidation Test Results
(Sequence 6) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

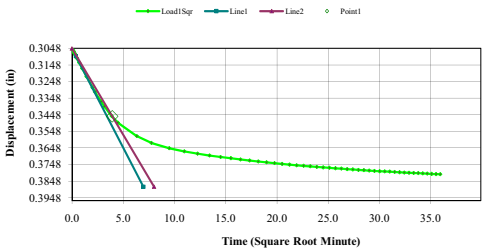
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP2-30
Depth: 20 - 22 feet
Sample Type: Undisturbed

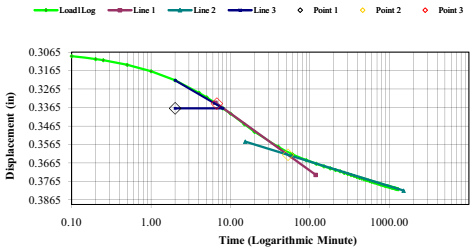
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3043	0.3035	40.4667	8.9293
1	00:00:01	0.3060	0.3052	40.6933	8.8915
2	00:00:02	0.3069	0.3061	40.8133	8.8715
3	00:00:03	0.3075	0.3067	40.8933	8.8582
4	00:00:04	0.3079	0.3071	40.9467	8.8493
5	00:00:05	0.3083	0.3075	41.0000	8.8404
6	00:00:06	0.3087	0.3079	41.0533	8.8315
7	00:00:12	0.3103	0.3095	41.2667	8.7959
8	00:00:15	0.3109	0.3101	41.3467	8.7825
9	00:00:30	0.3134	0.3126	41.6800	8.7269
10	00:01:00	0.3169	0.3161	42.1467	8.6491
11	00:02:01	0.3218	0.3210	42.8000	8.5401
12	00:04:01	0.3285	0.3277	43.6933	8.3912
13	00:05:01	0.3310	0.3302	44.0267	8.3356
14	00:08:01	0.3369	0.3361	44.8133	8.2044
15	00:10:01	0.3398	0.3390	45.2000	8.1399
16	00:15:01	0.3456	0.3448	45.9733	8.0109
17	00:20:02	0.3496	0.3488	46.5067	7.9219
18	00:40:03	0.3577	0.3569	47.5867	7.7418
19	01:00:05	0.3618	0.3610	48.1333	7.6506
20	01:30:07	0.3650	0.3642	48.5600	7.5795
21	02:00:09	0.3669	0.3661	48.8133	7.5372
22	02:30:12	0.3683	0.3675	49.0000	7.5061
23	03:00:14	0.3694	0.3686	49.1467	7.4816
24	03:30:16	0.3703	0.3695	49.2667	7.4616
25	04:00:18	0.3710	0.3702	49.3600	7.4460
26	04:30:21	0.3718	0.3710	49.4667	7.4282
27	05:00:23	0.3724	0.3716	49.5467	7.4149
28	05:30:25	0.3730	0.3722	49.6267	7.4016
29	06:00:28	0.3735	0.3727	49.6933	7.3904
30	06:30:30	0.3740	0.3732	49.7600	7.3793
31	07:00:32	0.3745	0.3737	49.8267	7.3682
32	07:30:34	0.3749	0.3741	49.8800	7.3593
33	08:00:37	0.3753	0.3745	49.9333	7.3504
34	08:30:39	0.3756	0.3748	49.9733	7.3437
35	09:00:41	0.3759	0.3751	50.0133	7.3371
36	09:30:44	0.3763	0.3755	50.0667	7.3282

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.3766	0.3758	50.1067	7.3215
38	10:30:48	0.3768	0.3760	50.1333	7.3171
39	11:00:51	0.3771	0.3763	50.1733	7.3104
40	11:30:53	0.3773	0.3765	50.2000	7.3059
41	12:00:55	0.3776	0.3768	50.2400	7.2993
42	12:30:58	0.3778	0.3770	50.2667	7.2948
43	13:01:00	0.3781	0.3773	50.3067	7.2881
44	13:31:02	0.3782	0.3774	50.3200	7.2859
45	14:01:04	0.3785	0.3777	50.3600	7.2792
46	14:31:07	0.3787	0.3779	50.3867	7.2748
47	15:01:09	0.3789	0.3781	50.4133	7.2704
48	15:31:11	0.3790	0.3782	50.4267	7.2681
49	16:01:14	0.3791	0.3783	50.4400	7.2659
50	16:31:16	0.3793	0.3785	50.4667	7.2615
51	17:01:18	0.3795	0.3787	50.4933	7.2570
52	17:31:20	0.3797	0.3789	50.5200	7.2526
53	18:01:23	0.3798	0.3790	50.5333	7.2503
54	18:31:25	0.3799	0.3791	50.5467	7.2481
55	19:01:27	0.3800	0.3792	50.5600	7.2459
56	19:31:30	0.3802	0.3794	50.5867	7.2414
57	20:01:32	0.3803	0.3795	50.6000	7.2392
58	20:31:34	0.3805	0.3797	50.6267	7.2348
59	21:01:36	0.3806	0.3798	50.6400	7.2325
60	21:31:10	0.3807	0.3799	50.6533	7.2303

Consolidation Test Results
(Sequence 7) Rebound 0.250 tsf

Consolidation Test Results
(Sequence 7) Rebound 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

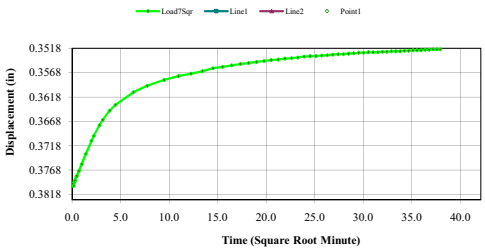
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP2-30
Depth: 20 - 22 feet
Sample Type: Undisturbed

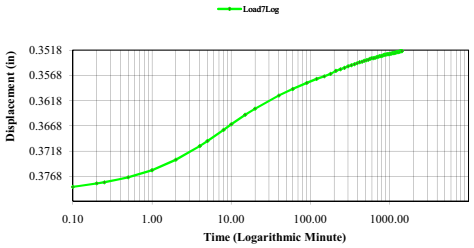
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3807	0.3799	50.6533	7.2303
1	00:00:01	0.3801	0.3793	50.5733	7.2437
2	00:00:02	0.3800	0.3792	50.5600	7.2459
3	00:00:03	0.3794	0.3786	50.4800	7.2592
4	00:00:04	0.3792	0.3784	50.4533	7.2637
5	00:00:05	0.3790	0.3782	50.4267	7.2681
6	00:00:06	0.3789	0.3781	50.4133	7.2704
7	00:00:12	0.3782	0.3774	50.3200	7.2859
8	00:00:15	0.3780	0.3772	50.2933	7.2904
9	00:00:30	0.3770	0.3762	50.1600	7.3126
10	00:01:00	0.3756	0.3748	49.9733	7.3437
11	00:02:00	0.3735	0.3727	49.6933	7.3904
12	00:04:01	0.3708	0.3700	49.3333	7.4505
13	00:05:01	0.3698	0.3690	49.2000	7.4727
14	00:08:01	0.3676	0.3668	48.9067	7.5216
15	00:10:01	0.3665	0.3657	48.7600	7.5461
16	00:15:01	0.3646	0.3638	48.5067	7.5884
17	00:20:02	0.3634	0.3626	48.3467	7.6150
18	00:40:03	0.3608	0.3600	48.0000	7.6729
19	01:00:05	0.3595	0.3587	47.8267	7.7018
20	01:30:07	0.3583	0.3575	47.6667	7.7285
21	02:00:09	0.3575	0.3567	47.5600	7.7462
22	02:30:12	0.3570	0.3562	47.4933	7.7574
23	03:00:14	0.3565	0.3557	47.4267	7.7685
24	03:30:16	0.3559	0.3551	47.3467	7.7818
25	04:00:19	0.3556	0.3548	47.3067	7.7885
26	04:30:21	0.3553	0.3545	47.2667	7.7952
27	05:00:23	0.3550	0.3542	47.2267	7.8018
28	05:30:25	0.3548	0.3540	47.2000	7.8063
29	06:00:28	0.3546	0.3538	47.1733	7.8107
30	06:30:30	0.3544	0.3536	47.1467	7.8152
31	07:00:32	0.3542	0.3534	47.1200	7.8196
32	07:30:34	0.3541	0.3533	47.1067	7.8219
33	08:00:37	0.3539	0.3531	47.0800	7.8263
34	08:30:39	0.3538	0.3530	47.0667	7.8285
35	09:00:41	0.3537	0.3529	47.0533	7.8308
36	09:30:44	0.3535	0.3527	47.0267	7.8352

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.3534	0.3526	47.0133	7.8374
38	10:30:48	0.3534	0.3526	47.0133	7.8374
39	11:00:51	0.3533	0.3525	47.0000	7.8396
40	11:30:53	0.3532	0.3524	46.9867	7.8419
41	12:00:55	0.3531	0.3523	46.9733	7.8441
42	12:30:57	0.3530	0.3522	46.9600	7.8463
43	13:01:00	0.3530	0.3522	46.9600	7.8463
44	13:31:02	0.3529	0.3521	46.9467	7.8485
45	14:01:04	0.3528	0.3520	46.9333	7.8508
46	14:31:06	0.3527	0.3519	46.9200	7.8530
47	15:01:09	0.3527	0.3519	46.9200	7.8530
48	15:31:11	0.3526	0.3518	46.9067	7.8552
49	16:01:13	0.3526	0.3518	46.9067	7.8552
50	16:31:16	0.3526	0.3518	46.9067	7.8552
51	17:01:18	0.3525	0.3517	46.8933	7.8574
52	17:31:20	0.3525	0.3517	46.8933	7.8574
53	18:01:23	0.3524	0.3516	46.8800	7.8597
54	18:31:25	0.3524	0.3516	46.8800	7.8597
55	19:01:27	0.3524	0.3516	46.8800	7.8597
56	19:31:29	0.3523	0.3515	46.8667	7.8619
57	20:01:32	0.3523	0.3515	46.8667	7.8619
58	20:31:34	0.3522	0.3514	46.8533	7.8641
59	21:01:36	0.3522	0.3514	46.8533	7.8641
60	21:31:38	0.3522	0.3514	46.8533	7.8641
61	22:01:41	0.3521	0.3513	46.8400	7.8663
62	22:31:43	0.3521	0.3513	46.8400	7.8663
63	23:01:45	0.3520	0.3512	46.8267	7.8686
64	23:31:48	0.3520	0.3512	46.8267	7.8686
65	23:57:27	0.3520	0.3512	46.8267	7.8686

Consolidation Test Results
(Sequence 8) Rebound 0.063 tsf

Consolidation Test Results
(Sequence 8) Rebound 0.063 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

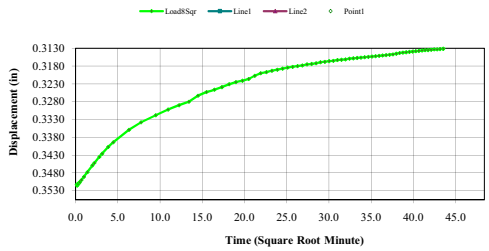
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP2-30
Depth: 20 - 22 feet
Sample Type: Undisturbed

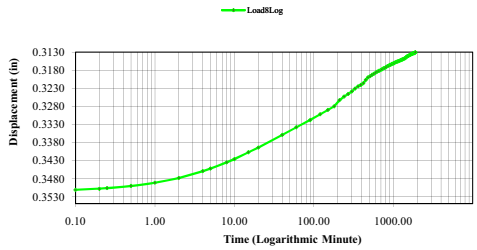
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3520	0.3512	46.8267	7.8686
1	00:00:01	0.3513	0.3505	46.7333	7.8841
2	00:00:02	0.3516	0.3508	46.7733	7.8775
3	00:00:03	0.3514	0.3506	46.7467	7.8819
4	00:00:04	0.3512	0.3504	46.7200	7.8863
5	00:00:05	0.3511	0.3503	46.7067	7.8886
6	00:00:06	0.3511	0.3503	46.7067	7.8886
7	00:00:12	0.3508	0.3500	46.6667	7.8952
8	00:00:15	0.3506	0.3498	46.6400	7.8997
9	00:00:30	0.3500	0.3492	46.5600	7.9130
10	00:01:00	0.3491	0.3483	46.4400	7.9330
11	00:02:00	0.3478	0.3470	46.2667	7.9620
12	00:04:00	0.3459	0.3451	46.0133	8.0042
13	00:05:00	0.3452	0.3444	45.9200	8.0198
14	00:08:00	0.3435	0.3427	45.6933	8.0576
15	00:10:00	0.3426	0.3418	45.5733	8.0776
16	00:15:01	0.3407	0.3399	45.3200	8.1198
17	00:20:01	0.3394	0.3386	45.1467	8.1488
18	00:40:03	0.3359	0.3351	44.6800	8.2266
19	01:00:04	0.3338	0.3330	44.4000	8.2733
20	01:30:06	0.3318	0.3310	44.1333	8.3178
21	02:00:09	0.3302	0.3294	43.9200	8.3533
22	02:30:11	0.3290	0.3282	43.7600	8.3800
23	03:00:13	0.3280	0.3272	43.6267	8.4023
24	03:30:16	0.3263	0.3255	43.4000	8.4401
25	04:00:18	0.3253	0.3245	43.2667	8.4623
26	04:30:20	0.3246	0.3238	43.1733	8.4779
27	05:00:22	0.3239	0.3231	43.0800	8.4934
28	05:30:24	0.3231	0.3223	42.9733	8.5112
29	06:00:24	0.3225	0.3217	42.8933	8.5246
30	06:30:24	0.3221	0.3213	42.8400	8.5335
31	07:00:23	0.3216	0.3208	42.7733	8.5446
32	07:30:26	0.3207	0.3199	42.6533	8.5646
33	08:00:28	0.3200	0.3192	42.5600	8.5802
34	08:30:30	0.3197	0.3189	42.5200	8.5868
35	09:00:32	0.3193	0.3185	42.4667	8.5957
36	09:30:35	0.3190	0.3182	42.4267	8.6024

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:37	0.3187	0.3179	42.3867	8.6091
38	10:30:39	0.3184	0.3176	42.3467	8.6158
39	11:00:42	0.3182	0.3174	42.3200	8.6202
40	11:30:44	0.3180	0.3172	42.2933	8.6247
41	12:00:46	0.3178	0.3170	42.2667	8.6291
42	12:30:48	0.3175	0.3167	42.2267	8.6358
43	13:00:51	0.3174	0.3166	42.2133	8.6380
44	13:30:53	0.3172	0.3164	42.1867	8.6424
45	14:00:55	0.3169	0.3161	42.1467	8.6491
46	14:30:57	0.3168	0.3160	42.1333	8.6513
47	15:01:00	0.3166	0.3158	42.1067	8.6558
48	15:31:02	0.3165	0.3157	42.0933	8.6580
49	16:01:04	0.3163	0.3155	42.0667	8.6625
50	16:31:07	0.3162	0.3154	42.0533	8.6647
51	17:01:09	0.3161	0.3153	42.0400	8.6669
52	17:31:11	0.3159	0.3151	42.0133	8.6714
53	18:01:13	0.3158	0.3150	42.0000	8.6736
54	18:31:16	0.3157	0.3149	41.9867	8.6758
55	19:01:18	0.3156	0.3148	41.9733	8.6780
56	19:31:20	0.3155	0.3147	41.9600	8.6802
57	20:01:23	0.3154	0.3146	41.9467	8.6825
58	20:31:25	0.3153	0.3145	41.9333	8.6847
59	21:01:27	0.3152	0.3144	41.9200	8.6869
60	21:31:29	0.3151	0.3143	41.9067	8.6891
61	22:01:32	0.3150	0.3142	41.8933	8.6914
62	22:31:34	0.3149	0.3141	41.8800	8.6936
63	23:01:36	0.3148	0.3140	41.8667	8.6958
64	23:31:38	0.3147	0.3139	41.8533	8.6980
65	24:01:41	0.3145	0.3137	41.8267	8.7025
66	24:31:42	0.3143	0.3135	41.8000	8.7069
67	25:01:43	0.3142	0.3134	41.7867	8.7092
68	25:31:45	0.3141	0.3133	41.7733	8.7114
69	26:01:48	0.3140	0.3132	41.7600	8.7136
70	26:31:50	0.3139	0.3131	41.7467	8.7158
71	27:01:52	0.3138	0.3130	41.7333	8.7181
72	27:31:54	0.3137	0.3129	41.7200	8.7203
73	28:01:57	0.3136	0.3128	41.7067	8.7225
74	28:31:59	0.3135	0.3127	41.6933	8.7247
75	29:02:01	0.3135	0.3127	41.6933	8.7247
76	29:32:04	0.3134	0.3126	41.6800	8.7269
77	30:02:06	0.3133	0.3125	41.6667	8.7292
78	30:32:08	0.3133	0.3125	41.6667	8.7292
79	31:02:10	0.3132	0.3124	41.6533	8.7314
80	31:32:13	0.3131	0.3123	41.6400	8.7336
81	31:36:07	0.3131	0.3123	41.6400	8.7336

Consolidation Test Results
(Sequence 9) Load 0.250 tsf

Consolidation Test Results
(Sequence 9) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

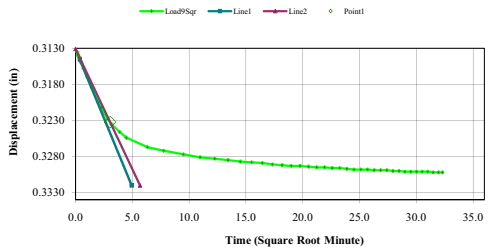
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP2-30
Depth: 20 - 22 feet
Sample Type: Undisturbed

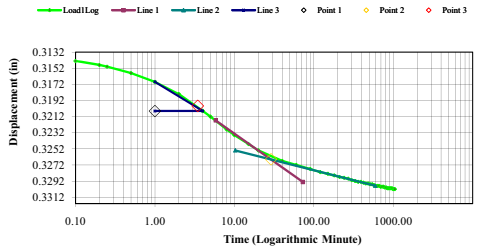
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3131	0.3123	41.6400	8.7336
1	00:00:01	0.3135	0.3127	41.6933	8.7247
2	00:00:02	0.3138	0.3130	41.7333	8.7181
3	00:00:03	0.3140	0.3132	41.7600	8.7136
4	00:00:04	0.3141	0.3133	41.7733	8.7114
5	00:00:05	0.3142	0.3134	41.7867	8.7092
6	00:00:06	0.3143	0.3135	41.8000	8.7069
7	00:00:12	0.3148	0.3140	41.8667	8.6958
8	00:00:15	0.3150	0.3142	41.8933	8.6914
9	00:00:30	0.3158	0.3150	42.0000	8.6736
10	00:01:00	0.3169	0.3161	42.1467	8.6491
11	00:02:00	0.3184	0.3176	42.3467	8.6158
12	00:04:00	0.3205	0.3197	42.6267	8.5691
13	00:05:00	0.3212	0.3204	42.7200	8.5535
14	00:08:00	0.3228	0.3220	42.9333	8.5179
15	00:10:00	0.3235	0.3227	43.0267	8.5023
16	00:15:01	0.3246	0.3238	43.1733	8.4779
17	00:20:01	0.3254	0.3246	43.2800	8.4601
18	00:40:03	0.3267	0.3259	43.4533	8.4312
19	01:00:04	0.3272	0.3264	43.5200	8.4201
20	01:30:06	0.3277	0.3269	43.5867	8.4089
21	02:00:09	0.3281	0.3273	43.6400	8.4000
22	02:30:11	0.3283	0.3275	43.6667	8.3956
23	03:00:13	0.3285	0.3277	43.6933	8.3912
24	03:30:16	0.3287	0.3279	43.7200	8.3867
25	04:00:18	0.3288	0.3280	43.7333	8.3845
26	04:30:20	0.3289	0.3281	43.7467	8.3823
27	05:00:22	0.3291	0.3283	43.7733	8.3778
28	05:30:25	0.3292	0.3284	43.7867	8.3756
29	06:00:27	0.3293	0.3285	43.8000	8.3734
30	06:30:29	0.3293	0.3285	43.8000	8.3734
31	07:00:32	0.3294	0.3286	43.8133	8.3711
32	07:30:34	0.3295	0.3287	43.8267	8.3689
33	08:00:36	0.3295	0.3287	43.8267	8.3689
34	08:30:38	0.3296	0.3288	43.8400	8.3667
35	09:00:41	0.3296	0.3288	43.8400	8.3667
36	09:30:43	0.3297	0.3289	43.8533	8.3645

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.3298	0.3290	43.8667	8.3622
38	10:30:48	0.3298	0.3290	43.8667	8.3622
39	11:00:50	0.3298	0.3290	43.8667	8.3622
40	11:30:52	0.3299	0.3291	43.8800	8.3600
41	12:00:55	0.3299	0.3291	43.8800	8.3600
42	12:30:57	0.3299	0.3291	43.8800	8.3600
43	13:00:59	0.3300	0.3292	43.8933	8.3578
44	13:31:01	0.3300	0.3292	43.8933	8.3578
45	14:01:04	0.3301	0.3293	43.9067	8.3556
46	14:31:06	0.3301	0.3293	43.9067	8.3556
47	15:01:08	0.3301	0.3293	43.9067	8.3556
48	15:31:11	0.3301	0.3293	43.9067	8.3556
49	16:01:13	0.3301	0.3293	43.9067	8.3556
50	16:31:15	0.3302	0.3294	43.9200	8.3533
51	17:01:17	0.3302	0.3294	43.9200	8.3533
52	17:23:16	0.3302	0.3294	43.9200	8.3533

Consolidation Test Results
(Sequence 10) Load 0.500 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 26 May 11
Test Number:

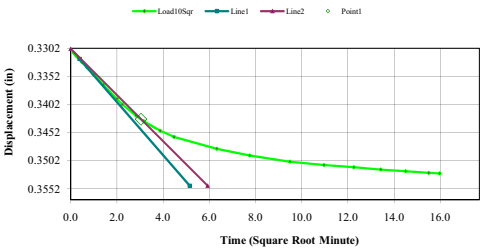
Sample Number:
Soil Description:
Boring Number: BHSP-BP2-30
Peat (PT)
Depth: 20 - 22 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3302	0.3294	43.9200	8.3533
1	00:00:01	0.3310	0.3302	44.0267	8.3356
2	00:00:02	0.3312	0.3304	44.0533	8.3311
3	00:00:03	0.3314	0.3306	44.0800	8.3267
4	00:00:04	0.3316	0.3308	44.1067	8.3222
5	00:00:05	0.3317	0.3309	44.1200	8.3200
6	00:00:06	0.3318	0.3310	44.1333	8.3178
7	00:00:12	0.3324	0.3316	44.2133	8.3044
8	00:00:15	0.3327	0.3319	44.2533	8.2978
9	00:00:30	0.3336	0.3328	44.3733	8.2777
10	00:01:00	0.3349	0.3341	44.5467	8.2488
11	00:02:00	0.3367	0.3359	44.7867	8.2088
12	00:04:00	0.3392	0.3384	45.1200	8.1532
13	00:05:00	0.3402	0.3394	45.2533	8.1310
14	00:08:00	0.3422	0.3414	45.5200	8.0865
15	00:10:00	0.3432	0.3424	45.6533	8.0643
16	00:15:01	0.3449	0.3441	45.8800	8.0264
17	00:20:01	0.3460	0.3452	46.0267	8.0020
18	00:40:03	0.3481	0.3473	46.3067	7.9553
19	01:00:04	0.3493	0.3485	46.4667	7.9286
20	01:30:06	0.3504	0.3496	46.6133	7.9041
21	02:00:09	0.3510	0.3502	46.6933	7.8908
22	02:30:11	0.3514	0.3506	46.7467	7.8819
23	03:00:13	0.3518	0.3510	46.8000	7.8730
24	03:30:15	0.3521	0.3513	46.8400	7.8663
25	04:00:18	0.3524	0.3516	46.8800	7.8597
26	04:15:07	0.3525	0.3517	46.8933	7.8574

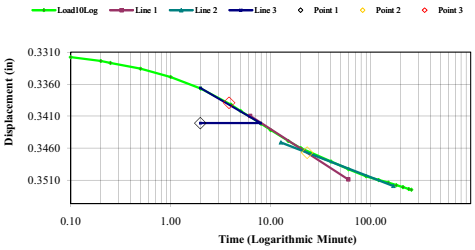
Tested By:
Checked By:

Consolidation Test Results
(Sequence 10) Load 0.500 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 11) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 26 May 11
Test Number:

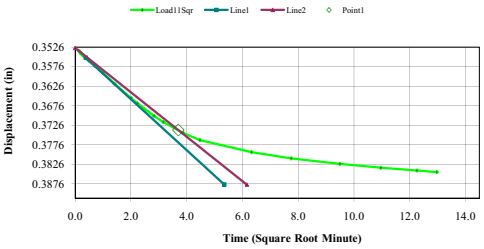
Sample Number:
Soil Description:
Boring Number: BHSP-BP2-30
Peat (PT)
Depth: 20 - 22 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3525	0.3517	46.8933	7.8574
1	00:00:01	0.3535	0.3527	47.0267	7.8352
2	00:00:02	0.3540	0.3532	47.0933	7.8241
3	00:00:03	0.3543	0.3535	47.1333	7.8174
4	00:00:04	0.3545	0.3537	47.1600	7.8130
5	00:00:05	0.3547	0.3539	47.1867	7.8085
6	00:00:06	0.3549	0.3541	47.2133	7.8041
7	00:00:12	0.3557	0.3549	47.3200	7.7863
8	00:00:15	0.3561	0.3553	47.3733	7.7774
9	00:00:30	0.3574	0.3566	47.5467	7.7485
10	00:01:00	0.3592	0.3584	47.7867	7.7084
11	00:02:00	0.3620	0.3612	48.1600	7.6462
12	00:04:00	0.3656	0.3648	48.6400	7.5661
13	00:05:00	0.3670	0.3662	48.8267	7.5350
14	00:08:00	0.3702	0.3694	49.2533	7.4638
15	00:10:01	0.3718	0.3710	49.4667	7.4282
16	00:15:01	0.3746	0.3738	49.8400	7.3660
17	00:20:01	0.3764	0.3756	50.0800	7.3259
18	00:40:03	0.3795	0.3787	50.4933	7.2570
19	01:00:04	0.3811	0.3803	50.7067	7.2214
20	01:30:07	0.3825	0.3817	50.8933	7.1903
21	02:00:09	0.3835	0.3827	51.0267	7.1681
22	02:30:11	0.3842	0.3834	51.1200	7.1525
23	02:48:10	0.3846	0.3838	51.1733	7.1436

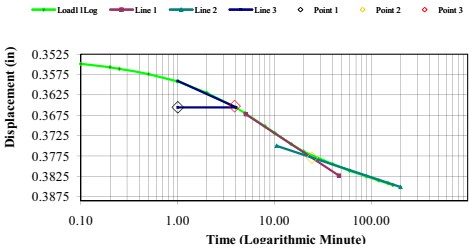
Tested By:
Checked By:

Consolidation Test Results
(Sequence 11) Load 1.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 12) Load 2.000 tsf

Consolidation Test Results
(Sequence 12) Load 2.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

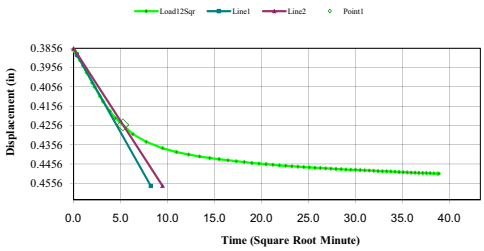
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP2-30
Depth: 20 - 22 feet
Sample Type: Undisturbed

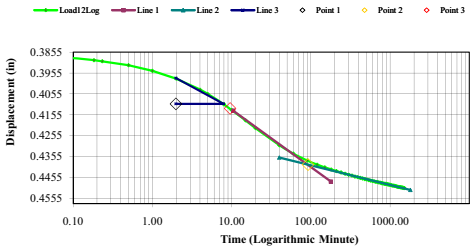
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3846	0.3838	51.1733	7.1436
1	00:00:00	0.3864	0.3856	51.4133	7.1036
2	00:00:01	0.3869	0.3861	51.4800	7.0924
3	00:00:02	0.3873	0.3865	51.5333	7.0836
4	00:00:03	0.3877	0.3869	51.5867	7.0747
5	00:00:04	0.3879	0.3871	51.6133	7.0702
6	00:00:05	0.3882	0.3874	51.6533	7.0635
7	00:00:11	0.3894	0.3886	51.8133	7.0369
8	00:00:14	0.3899	0.3891	51.8800	7.0257
9	00:00:30	0.3918	0.3910	52.1333	6.9835
10	00:01:00	0.3945	0.3937	52.4933	6.9234
11	00:02:00	0.3982	0.3974	52.9867	6.8412
12	00:04:00	0.4035	0.4027	53.6933	6.7233
13	00:05:00	0.4056	0.4048	53.9733	6.6766
14	00:08:00	0.4105	0.4097	54.6267	6.5676
15	00:10:00	0.4132	0.4124	54.9867	6.5076
16	00:15:01	0.4182	0.4174	55.6533	6.3964
17	00:20:01	0.4219	0.4211	56.1467	6.3141
18	00:40:02	0.4301	0.4293	57.2400	6.1318
19	01:00:04	0.4341	0.4333	57.7733	6.0428
20	01:30:06	0.4374	0.4366	58.2133	5.9694
21	02:00:09	0.4394	0.4386	58.4800	5.9249
22	02:30:11	0.4407	0.4399	58.6533	5.8960
23	03:00:13	0.4417	0.4409	58.7867	5.8738
24	03:30:15	0.4425	0.4417	58.8933	5.8560
25	04:00:18	0.4431	0.4423	58.9733	5.8427
26	04:30:20	0.4437	0.4429	59.0533	5.8293
27	05:00:22	0.4442	0.4434	59.1200	5.8182
28	05:30:25	0.4446	0.4438	59.1733	5.8093
29	06:00:27	0.4451	0.4443	59.2400	5.7982
30	06:30:29	0.4454	0.4446	59.2800	5.7915
31	07:00:31	0.4457	0.4449	59.3200	5.7848
32	07:30:34	0.4460	0.4452	59.3600	5.7782
33	08:00:36	0.4463	0.4455	59.4000	5.7715
34	08:30:38	0.4465	0.4457	59.4267	5.7671
35	09:00:41	0.4468	0.4460	59.4667	5.7604
36	09:30:43	0.4470	0.4462	59.4933	5.7559

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.4472	0.4464	59.5200	5.7515
38	10:30:47	0.4474	0.4466	59.5467	5.7470
39	11:00:50	0.4476	0.4468	59.5733	5.7426
40	11:30:52	0.4477	0.4469	59.5867	5.7404
41	12:00:54	0.4479	0.4471	59.6133	5.7359
42	12:30:57	0.4480	0.4472	59.6267	5.7337
43	13:00:59	0.4482	0.4474	59.6533	5.7292
44	13:31:01	0.4483	0.4475	59.6667	5.7270
45	14:01:03	0.4485	0.4477	59.6933	5.7226
46	14:31:06	0.4486	0.4478	59.7067	5.7204
47	15:01:08	0.4486	0.4478	59.7067	5.7204
48	15:31:10	0.4488	0.4480	59.7333	5.7159
49	16:01:13	0.4489	0.4481	59.7467	5.7137
50	16:31:15	0.4490	0.4482	59.7600	5.7115
51	17:01:17	0.4491	0.4483	59.7733	5.7092
52	17:31:19	0.4493	0.4485	59.8000	5.7048
53	18:01:22	0.4494	0.4486	59.8133	5.7026
54	18:31:24	0.4494	0.4486	59.8133	5.7026
55	19:01:26	0.4495	0.4487	59.8267	5.7003
56	19:31:29	0.4496	0.4488	59.8400	5.6981
57	20:01:31	0.4498	0.4490	59.8667	5.6937
58	20:31:33	0.4499	0.4491	59.8800	5.6914
59	21:01:35	0.4500	0.4492	59.8933	5.6892
60	21:31:38	0.4501	0.4493	59.9067	5.6870
61	22:01:40	0.4501	0.4493	59.9067	5.6870
62	22:31:42	0.4502	0.4494	59.9200	5.6848
63	23:01:44	0.4503	0.4495	59.9333	5.6826
64	23:31:47	0.4503	0.4495	59.9333	5.6826
65	24:01:49	0.4504	0.4496	59.9467	5.6803
66	24:31:51	0.4505	0.4497	59.9600	5.6781
67	25:01:54	0.4506	0.4498	59.9733	5.6759
68	25:12:01	0.4506	0.4498	59.9733	5.6759

Consolidation Test Results
(Sequence 13) Load 4.000 tsf

Consolidation Test Results
(Sequence 13) Load 4.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

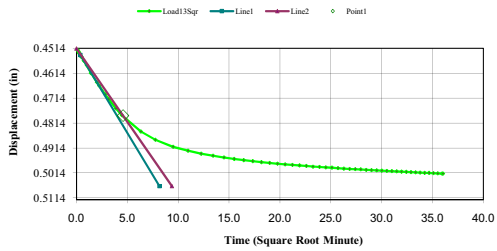
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP2-30
Depth: 20 - 22 feet
Sample Type: Undisturbed

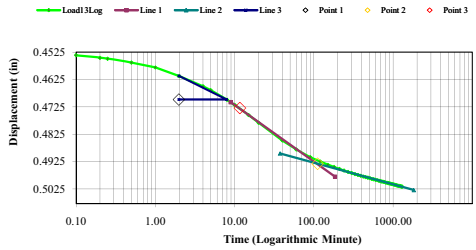
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.4506	0.4498	59.9733	5.6759
1	00:00:01	0.4521	0.4513	60.1733	5.6425
2	00:00:02	0.4526	0.4518	60.2400	5.6314
3	00:00:03	0.4530	0.4522	60.2933	5.6225
4	00:00:04	0.4533	0.4525	60.3333	5.6158
5	00:00:05	0.4534	0.4526	60.3467	5.6136
6	00:00:06	0.4536	0.4528	60.3733	5.6092
7	00:00:12	0.4546	0.4538	60.5067	5.5869
8	00:00:15	0.4549	0.4541	60.5467	5.5803
9	00:00:30	0.4563	0.4555	60.7333	5.5491
10	00:01:00	0.4581	0.4573	60.9733	5.5091
11	00:02:00	0.4613	0.4605	61.4000	5.4379
12	00:04:00	0.4650	0.4642	61.8933	5.3557
13	00:05:00	0.4664	0.4656	62.0800	5.3245
14	00:08:01	0.4699	0.4691	62.5467	5.2467
15	00:10:01	0.4718	0.4710	62.8000	5.2044
16	00:15:01	0.4755	0.4747	63.2933	5.1221
17	00:20:02	0.4783	0.4775	63.6667	5.0599
18	00:40:03	0.4848	0.4840	64.5333	4.9153
19	01:00:05	0.4881	0.4873	64.9733	4.8419
20	01:30:07	0.4909	0.4901	65.3467	4.7797
21	02:00:09	0.4925	0.4917	65.5600	4.7441
22	02:30:11	0.4937	0.4929	65.7200	4.7174
23	03:00:13	0.4945	0.4937	65.8267	4.6996
24	03:30:16	0.4952	0.4944	65.9200	4.6841
25	04:00:18	0.4958	0.4950	66.0000	4.6707
26	04:30:20	0.4963	0.4955	66.0667	4.6596
27	05:00:22	0.4967	0.4959	66.1200	4.6507
28	05:30:25	0.4971	0.4963	66.1733	4.6418
29	06:00:27	0.4974	0.4966	66.2133	4.6351
30	06:30:29	0.4977	0.4969	66.2533	4.6285
31	07:00:32	0.4980	0.4972	66.2933	4.6218
32	07:30:34	0.4982	0.4974	66.3200	4.6173
33	08:00:36	0.4984	0.4976	66.3467	4.6129
34	08:30:38	0.4986	0.4978	66.3733	4.6084
35	09:00:41	0.4989	0.4981	66.4133	4.6018
36	09:30:43	0.4990	0.4982	66.4267	4.5996

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.4992	0.4984	66.4533	4.5951
38	10:30:48	0.4993	0.4985	66.4667	4.5929
39	11:00:50	0.4995	0.4987	66.4933	4.5884
40	11:30:52	0.4997	0.4989	66.5200	4.5840
41	12:00:54	0.4998	0.4990	66.5333	4.5818
42	12:30:57	0.4999	0.4991	66.5467	4.5795
43	13:00:59	0.5000	0.4992	66.5600	4.5773
44	13:31:01	0.5002	0.4994	66.5867	4.5729
45	14:01:04	0.5003	0.4995	66.6000	4.5706
46	14:31:06	0.5004	0.4996	66.6133	4.5684
47	15:01:08	0.5005	0.4997	66.6267	4.5662
48	15:31:10	0.5006	0.4998	66.6400	4.5640
49	16:01:13	0.5007	0.4999	66.6533	4.5617
50	16:31:15	0.5008	0.5000	66.6667	4.5595
51	17:01:17	0.5009	0.5001	66.6800	4.5573
52	17:31:20	0.5010	0.5002	66.6933	4.5551
53	18:01:22	0.5011	0.5003	66.7067	4.5529
54	18:31:24	0.5012	0.5004	66.7200	4.5506
55	19:01:26	0.5013	0.5005	66.7333	4.5484
56	19:31:29	0.5014	0.5006	66.7467	4.5462
57	20:01:31	0.5014	0.5006	66.7467	4.5462
58	20:31:33	0.5015	0.5007	66.7600	4.5440
59	21:01:36	0.5016	0.5008	66.7733	4.5417
60	21:31:38	0.5017	0.5009	66.7867	4.5395
61	21:38:15	0.5017	0.5009	66.7867	4.5395

Consolidation Test Results
(Sequence 14) Load 8.000 tsf

Consolidation Test Results
(Sequence 14) Load 8.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

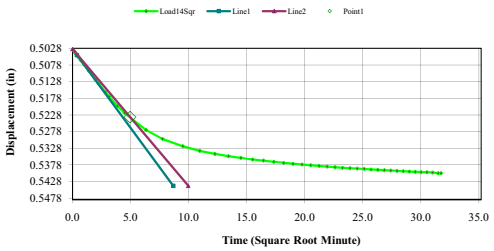
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP2-30
Depth: 20 - 22 feet
Sample Type: Undisturbed

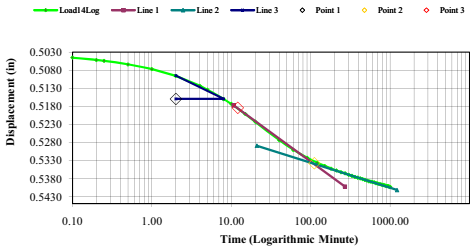
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.5017	0.5009	66.7867	4.5395
1	00:00:01	0.5036	0.5028	67.0400	4.4973
2	00:00:02	0.5038	0.5030	67.0667	4.4928
3	00:00:03	0.5041	0.5033	67.1067	4.4861
4	00:00:04	0.5043	0.5035	67.1333	4.4817
5	00:00:05	0.5044	0.5036	67.1467	4.4795
6	00:00:06	0.5045	0.5037	67.1600	4.4772
7	00:00:12	0.5052	0.5044	67.2533	4.4617
8	00:00:15	0.5054	0.5046	67.2800	4.4572
9	00:00:30	0.5064	0.5056	67.4133	4.4350
10	00:01:00	0.5077	0.5069	67.5867	4.4061
11	00:02:00	0.5096	0.5088	67.8400	4.3638
12	00:04:00	0.5123	0.5115	68.2000	4.3038
13	00:05:00	0.5134	0.5126	68.3467	4.2793
14	00:08:00	0.5160	0.5152	68.6933	4.2215
15	00:10:01	0.5173	0.5165	68.8667	4.1926
16	00:15:01	0.5201	0.5193	69.2400	4.1303
17	00:20:01	0.5222	0.5214	69.5200	4.0836
18	00:40:03	0.5273	0.5265	70.2000	3.9702
19	01:00:04	0.5300	0.5292	70.5600	3.9102
20	01:30:07	0.5322	0.5314	70.8533	3.8612
21	02:00:09	0.5336	0.5328	71.0400	3.8301
22	02:30:11	0.5345	0.5337	71.1600	3.8101
23	03:00:14	0.5352	0.5344	71.2533	3.7945
24	03:30:16	0.5357	0.5349	71.3200	3.7834
25	04:00:18	0.5362	0.5354	71.3867	3.7723
26	04:30:20	0.5365	0.5357	71.4267	3.7656
27	05:00:23	0.5369	0.5361	71.4800	3.7567
28	05:30:25	0.5372	0.5364	71.5200	3.7501
29	06:00:27	0.5375	0.5367	71.5600	3.7434
30	06:30:29	0.5377	0.5369	71.5867	3.7389
31	07:00:32	0.5379	0.5371	71.6133	3.7345
32	07:30:34	0.5381	0.5373	71.6400	3.7300
33	08:00:36	0.5383	0.5375	71.6667	3.7256
34	08:30:38	0.5385	0.5377	71.6933	3.7211
35	09:00:41	0.5387	0.5379	71.7200	3.7167
36	09:30:43	0.5388	0.5380	71.7333	3.7145

Consolidation Graph (Squareroot Time)



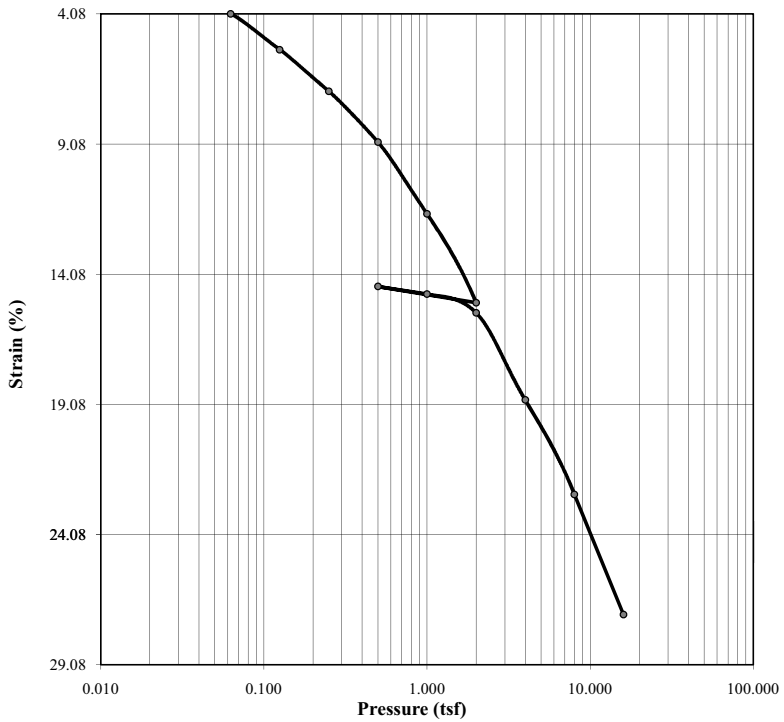
Consolidation Graph (Logarithmic Time)



37	10:00:45	0.5389	0.5381	71.7467	3.7123
38	10:30:48	0.5390	0.5382	71.7600	3.7100
39	11:00:50	0.5392	0.5384	71.7867	3.7056
40	11:30:52	0.5393	0.5385	71.8000	3.7034
41	12:00:55	0.5394	0.5386	71.8133	3.7011
42	12:30:57	0.5395	0.5387	71.8267	3.6989
43	13:00:59	0.5396	0.5388	71.8400	3.6967
44	13:31:01	0.5397	0.5389	71.8533	3.6945
45	14:01:04	0.5398	0.5390	71.8667	3.6922
46	14:31:06	0.5399	0.5391	71.8800	3.6900
47	15:01:08	0.5400	0.5392	71.8933	3.6878
48	15:31:10	0.5400	0.5392	71.8933	3.6878
49	16:01:13	0.5401	0.5393	71.9067	3.6856
50	16:31:15	0.5403	0.5395	71.9333	3.6811
51	16:46:45	0.5403	0.5395	71.9333	3.6811

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	48	**Test Date:**	26 May 11
Moisture (%):	42.31	29.20	**Plastic Limits:**	25		
Dry Density (pcf):	78.41	110.69	**Plasticity Index (%):**	23		
Saturation (%):	102.12	160.31				
Void Ratio:	1.0834	0.5179	**Specific Gravity:**	2.619	Measured	

Sample Description: Clay with silt (CL)

Project Number: 10883-011-00 **Depth:** 27 - 29 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-BP4-3

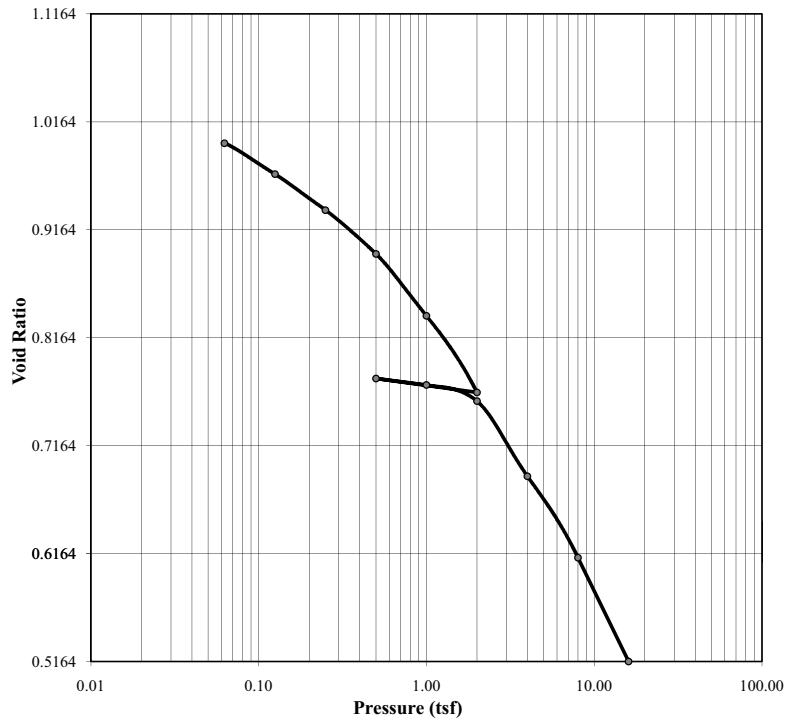
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	48	**Test Date:**	26 May 11
Moisture (%):	42.31	29.20	**Plastic Limits:**	25		
Dry Density (pcf):	78.41	110.69	**Plasticity Index (%):**	23		
Saturation (%):	102.12	160.31				
Void Ratio:	1.0834	0.5179	**Specific Gravity:**	2.619	Measured	

Soil Description: Clay with silt (CL)

Project Number: 10883-011-00 **Depth:** 27 - 29 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-BP4-3

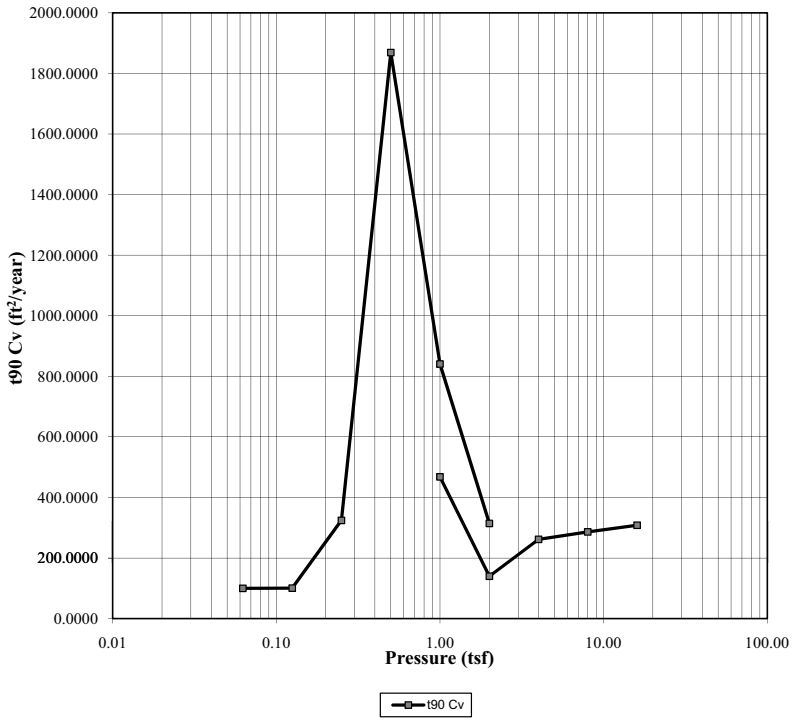
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	48	**Test Date:**	26 May 11
Moisture (%):	42.31	29.20	**Plastic Limits:**	25		
Dry Density (pcf):	78.41	110.69	**Plasticity Index (%):**	23		
Saturation (%):	102.12	160.31				
Void Ratio:	1.0834	0.5179	**Specific Gravity:**	2.619	Measured	

Soil Description: Clay with silt (CL)

Project Number: 10883-011-00 **Depth:** 27 - 29 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-BP4-3

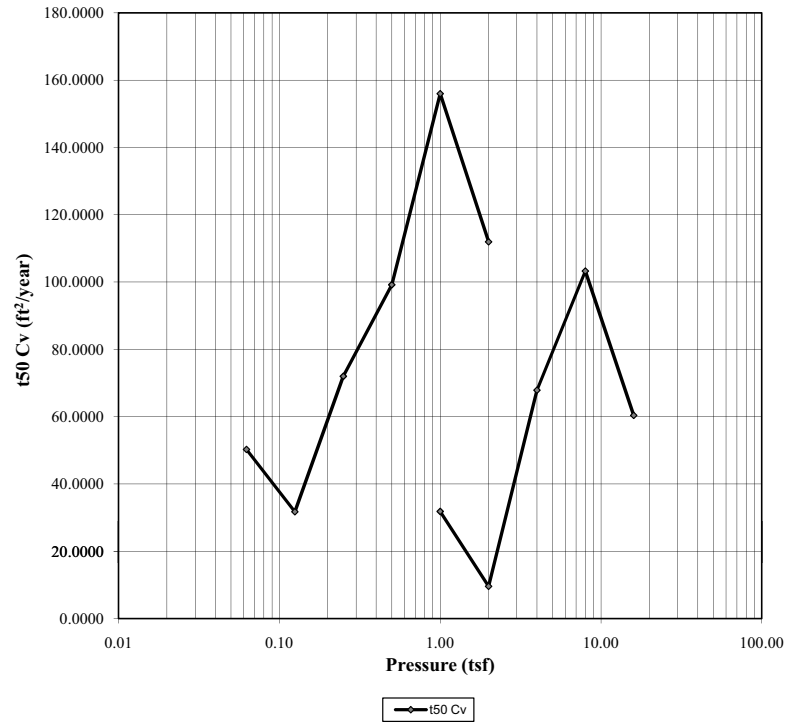
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	48	**Test Date:**	26 May 11
Moisture (%):	42.31	29.20	**Plastic Limits:**	25		
Dry Density (pcf):	78.41	110.69	**Plasticity Index (%):**	23		
Saturation (%):	102.12	160.31				
Void Ratio:	1.0834	0.5179	**Specific Gravity:**	2.619	Measured	

Soil Description: Clay with silt (CL)

Project Number: 10883-011-00 **Depth:** 27 - 29 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-BP4-3

Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test Results
Summary

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00

Sample Number:
Boring Number: BHSP-BP4-30
Depth: 27 - 29 feet
Sample Type: Undisturbed

Sample Description:
Clay with silt (CL)
Remarks:

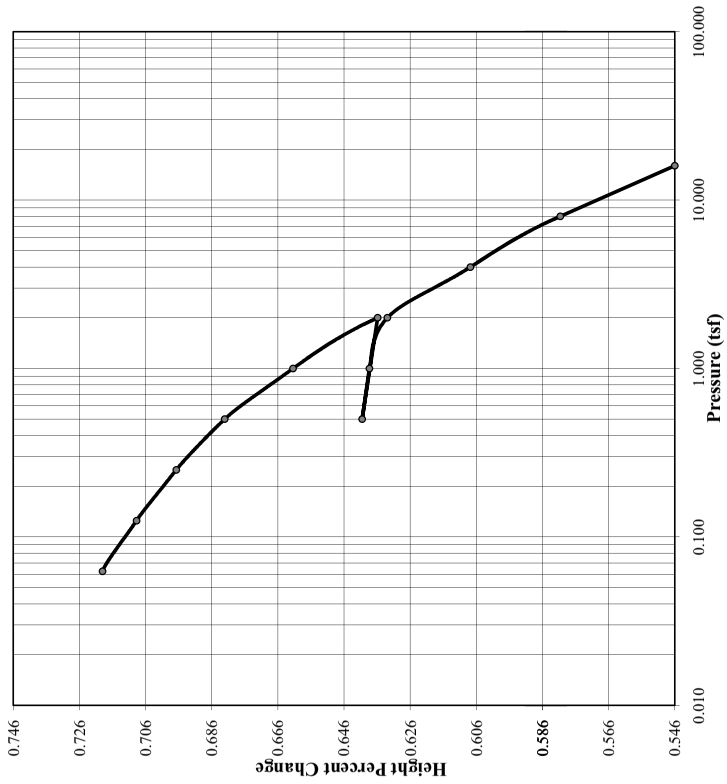
Test Number:
Test Date: 26 May 11

Index	Load Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Void (in)	Vertical Strain (%)	Void Ratio	t90 Fitting Time (min)	t50 Fitting Time (min)	t90 Cv (ft2/year)	t50 Cv (ft2/year)
0	0.000	0.0000	0.7500	0.3897	0.00	1.0814	0.000	0.000	0.000	0.000
1	0.063	0.0306	0.7194	0.3591	4.08	0.9965	4.020	1.851	99.616	50.251
2	0.125	0.0409	0.7091	0.3488	5.45	0.9679	3.866	2.848	100.634	31.733
3	0.250	0.0529	0.6971	0.3368	7.05	0.9346	1.161	1.213	323.863	71.996
4	0.500	0.0675	0.6825	0.3222	9.00	0.8941	0.193	0.844	1868.604	99.192
5	1.000	0.0882	0.6618	0.3015	11.76	0.8366	0.403	0.505	840.561	155.987
6	2.000	0.1138	0.6362	0.2759	15.17	0.7656	0.997	0.650	314.051	111.973
7	0.500	0.1091	0.6409	0.2806	14.55	0.7786	0.000	0.000	0.000	0.000
8	1.000	0.1113	0.6387	0.2784	14.84	0.7725	0.675	2.304	467.998	31.831
9	2.000	0.1167	0.6333	0.2730	15.56	0.7575	2.219	7.524	139.845	9.583
10	4.000	0.1418	0.6082	0.2479	18.91	0.6879	1.095	0.980	261.414	67.881
11	8.000	0.1690	0.5810	0.2207	22.53	0.6124	0.913	0.588	285.995	103.276
12	16.000	0.2036	0.5464	0.1861	27.15	0.5164	0.750	0.889	307.910	60.374

Predicted value indicated with *

GeoEngineers

Consolidation Test
Test Results



	Before	After			
Moisture (%):	42.31	29.20	Liquid Limits:	48	Test Date: 26 May 11
Dry Density (pcf):	78.41	110.69	Plastic Limits:	25	
Saturation (%):	102.12	160.31	Plasticity Index (%):	23	
Void Ratio:	1.0834	0.5179	Specific Gravity:	2.619	Measured

Soil Description: Clay with silt (CL)
Project Number: 10883-011-00 **Depth:** 27 - 29 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-BP4-3
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GEOENGINEERS

Consolidation Test
Consolidation Specimen Information

Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 26 May 11

Sample Number: **Sample Description:**
Boring Number: BHSP-BP4-30 Clay with silt (CL)
Depth: 27 - 29 feet **Remarks:**
Sample Type: Undisturbed

Test Number:
Liquid Limit: 48.0000 **Initial Void Ratio:** 1.0834 **Initial Height (in):** 0.7500
Plastic Limit: 25.0000 **Plasticity Index (%):** 23.0000 **Initial Diameter (in):** 2.5000
Specific Gravity: 2.6190 Measured **Weight of Ring (g):** 234.8400

Parameters	Initial Specimen	Final Specimen
Moist Weight + Container (g)	139.35	107.59
Dry Soil + Container (g)	104.62	88.37
Weight of Container (g)	22.53	22.55
Moisture Content (%)	42.31	29.20
Void Ratio	1.0834	0.5179
Saturation (%)	102.12	160.31
Dry Density (pcf)	78.41	110.69

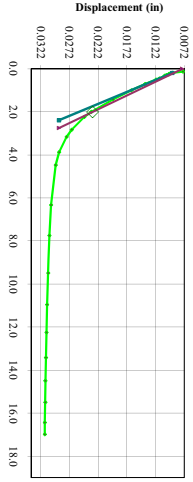
Consolidation Test Results
(Sequence 1) Load 0.063 tsf

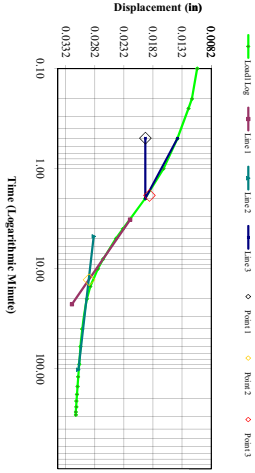
Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 26 May 11
Test Number:

Sample Number: **Soil Description:**
Boring Number: BHSP-BP4-30 Clay with silt (CL)
Depth: 27 - 29 feet **Remarks:**
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0000	0.0000	0.0000	1.0834
1	00:00:01	0.0074	0.0065	0.8667	1.0654
2	00:00:02	0.0092	0.0083	1.1067	1.0604
3	00:00:03	0.0098	0.0089	1.1867	1.0587
4	00:00:04	0.0099	0.0090	1.2000	1.0584
5	00:00:05	0.0103	0.0094	1.2533	1.0573
6	00:00:06	0.0106	0.0097	1.2933	1.0565
7	00:00:12	0.0115	0.0106	1.4133	1.0540
8	00:00:15	0.0121	0.0112	1.4933	1.0523
9	00:00:30	0.0140	0.0131	1.7467	1.0471
10	00:01:00	0.0164	0.0155	2.0667	1.0404
11	00:02:00	0.0196	0.0187	2.4933	1.0315
12	00:04:00	0.0234	0.0225	3.0000	1.0209
13	00:05:00	0.0246	0.0237	3.1600	1.0176
14	00:08:00	0.0268	0.0259	3.4533	1.0115
15	00:10:01	0.0277	0.0268	3.5733	1.0090
16	00:15:01	0.0290	0.0281	3.7467	1.0054
17	00:20:01	0.0296	0.0287	3.8267	1.0037
18	00:40:03	0.0304	0.0295	3.9333	1.0015
19	01:00:04	0.0307	0.0298	3.9733	1.0007
20	01:30:07	0.0309	0.0300	4.0000	1.0001
21	02:00:09	0.0311	0.0302	4.0267	0.9995
22	02:30:11	0.0312	0.0303	4.0400	0.9993
23	03:00:13	0.0313	0.0304	4.0533	0.9990
24	03:30:16	0.0314	0.0305	4.0667	0.9987
25	04:00:18	0.0314	0.0305	4.0667	0.9987
26	04:30:20	0.0315	0.0306	4.0800	0.9984
27	04:48:42	0.0315	0.0306	4.0800	0.9984

Tested By: **Checked By:**





Consolidation Test Results
(Sequence 2) Load 0.125 tsf

Consolidation Test Results
(Sequence 2) Load 0.125 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

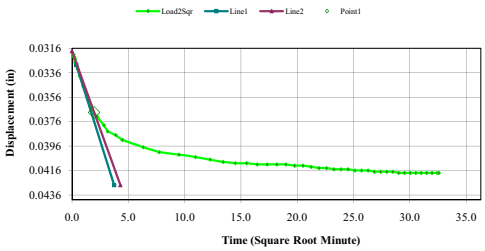
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP4-30
Depth: 27 - 29 feet
Sample Type: Undisturbed

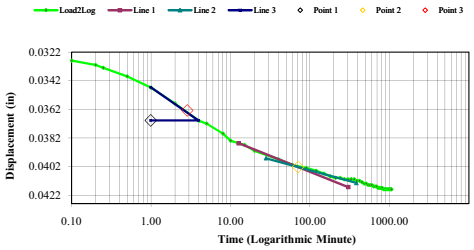
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0315	0.0306	4.0800	0.9984
1	00:00:01	0.0321	0.0312	4.1600	0.9968
2	00:00:02	0.0323	0.0314	4.1867	0.9962
3	00:00:03	0.0324	0.0315	4.2000	0.9959
4	00:00:04	0.0325	0.0316	4.2133	0.9957
5	00:00:05	0.0327	0.0318	4.2400	0.9951
6	00:00:06	0.0328	0.0319	4.2533	0.9948
7	00:00:12	0.0331	0.0322	4.2933	0.9940
8	00:00:15	0.0333	0.0324	4.3200	0.9934
9	00:00:30	0.0339	0.0330	4.4000	0.9918
10	00:01:00	0.0347	0.0338	4.5067	0.9895
11	00:02:00	0.0358	0.0349	4.6533	0.9865
12	00:04:00	0.0370	0.0361	4.8133	0.9832
13	00:05:00	0.0372	0.0363	4.8400	0.9826
14	00:08:01	0.0379	0.0370	4.9333	0.9807
15	00:10:01	0.0384	0.0375	5.0000	0.9793
16	00:15:01	0.0387	0.0378	5.0400	0.9784
17	00:20:02	0.0391	0.0382	5.0933	0.9773
18	00:40:03	0.0397	0.0388	5.1733	0.9757
19	01:00:05	0.0401	0.0392	5.2267	0.9745
20	01:30:07	0.0403	0.0394	5.2533	0.9740
21	02:00:09	0.0405	0.0396	5.2800	0.9734
22	02:30:12	0.0407	0.0398	5.3067	0.9729
23	03:00:14	0.0409	0.0400	5.3333	0.9723
24	03:30:16	0.0410	0.0401	5.3467	0.9720
25	04:00:18	0.0410	0.0401	5.3467	0.9720
26	04:30:21	0.0411	0.0402	5.3600	0.9718
27	05:00:23	0.0411	0.0402	5.3600	0.9718
28	05:30:25	0.0411	0.0402	5.3600	0.9718
29	06:00:27	0.0411	0.0402	5.3600	0.9718
30	06:30:30	0.0412	0.0403	5.3733	0.9715
31	07:00:32	0.0412	0.0403	5.3733	0.9715
32	07:30:34	0.0413	0.0404	5.3867	0.9712
33	08:00:37	0.0414	0.0405	5.4000	0.9709
34	08:30:39	0.0414	0.0405	5.4000	0.9709
35	09:00:41	0.0415	0.0406	5.4133	0.9707
36	09:30:43	0.0415	0.0406	5.4133	0.9707

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.0415	0.0406	5.4133	0.9707
38	10:30:48	0.0416	0.0407	5.4267	0.9704
39	11:00:50	0.0416	0.0407	5.4267	0.9704
40	11:30:53	0.0416	0.0407	5.4267	0.9704
41	12:00:55	0.0417	0.0408	5.4400	0.9701
42	12:30:57	0.0417	0.0408	5.4400	0.9701
43	13:00:59	0.0417	0.0408	5.4400	0.9701
44	13:31:02	0.0417	0.0408	5.4400	0.9701
45	14:01:04	0.0418	0.0409	5.4533	0.9698
46	14:31:06	0.0418	0.0409	5.4533	0.9698
47	15:01:09	0.0418	0.0409	5.4533	0.9698
48	15:31:11	0.0418	0.0409	5.4533	0.9698
49	16:01:13	0.0418	0.0409	5.4533	0.9698
50	16:31:15	0.0418	0.0409	5.4533	0.9698
51	17:01:18	0.0418	0.0409	5.4533	0.9698
52	17:31:20	0.0418	0.0409	5.4533	0.9698
53	17:40:37	0.0418	0.0409	5.4533	0.9698

Consolidation Test Results
(Sequence 3) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

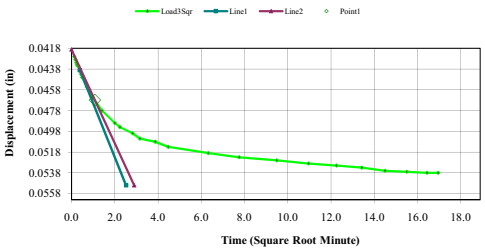
Sample Number:
Soil Description:
Boring Number: BHSP-BP4-30
Clay with silt (CL)
Depth: 27 - 29 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0418	0.0409	5.4533	0.9698
1	00:00:01	0.0426	0.0417	5.5600	0.9676
2	00:00:02	0.0429	0.0420	5.6000	0.9668
3	00:00:03	0.0432	0.0423	5.6400	0.9659
4	00:00:04	0.0434	0.0425	5.6667	0.9654
5	00:00:05	0.0435	0.0426	5.6800	0.9651
6	00:00:06	0.0435	0.0426	5.6800	0.9651
7	00:00:12	0.0443	0.0434	5.7867	0.9629
8	00:00:15	0.0446	0.0437	5.8267	0.9620
9	00:00:30	0.0455	0.0446	5.9467	0.9595
10	00:01:00	0.0466	0.0457	6.0933	0.9565
11	00:02:00	0.0478	0.0469	6.2533	0.9532
12	00:04:01	0.0490	0.0481	6.4133	0.9498
13	00:05:01	0.0494	0.0485	6.4667	0.9487
14	00:08:01	0.0500	0.0491	6.5467	0.9470
15	00:10:01	0.0505	0.0496	6.6133	0.9457
16	00:15:01	0.0508	0.0499	6.6533	0.9448
17	00:20:02	0.0513	0.0504	6.7200	0.9434
18	00:40:03	0.0519	0.0510	6.8000	0.9418
19	01:00:05	0.0523	0.0514	6.8533	0.9407
20	01:30:07	0.0526	0.0517	6.8933	0.9398
21	02:00:09	0.0529	0.0520	6.9333	0.9390
22	02:30:12	0.0531	0.0522	6.9600	0.9384
23	03:00:14	0.0533	0.0524	6.9867	0.9379
24	03:30:16	0.0536	0.0527	7.0267	0.9370
25	04:00:19	0.0537	0.0528	7.0400	0.9368
26	04:30:21	0.0538	0.0529	7.0533	0.9365
27	04:47:33	0.0538	0.0529	7.0533	0.9365

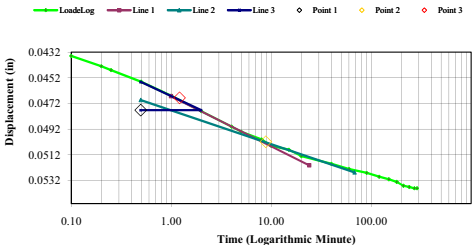
Tested By:
Checked By:

Consolidation Test Results
(Sequence 3) Load 0.250 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 4) Load 0.500 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

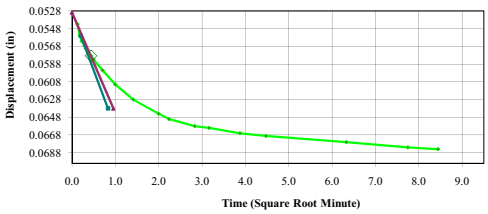
Sample Number:
Soil Description:
Boring Number: BHSP-BP4-30
Clay with silt (CL)
Depth: 27 - 29 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0538	0.0529	7.0533	0.9365
1	00:00:01	0.0543	0.0534	7.1200	0.9351
2	00:00:02	0.0556	0.0547	7.2933	0.9315
3	00:00:03	0.0562	0.0553	7.3733	0.9298
4	00:00:04	0.0563	0.0554	7.3867	0.9295
5	00:00:05	0.0567	0.0558	7.4400	0.9284
6	00:00:06	0.0570	0.0561	7.4800	0.9276
7	00:00:12	0.0579	0.0570	7.6000	0.9251
8	00:00:15	0.0583	0.0574	7.6533	0.9240
9	00:00:30	0.0595	0.0586	7.8133	0.9207
10	00:01:00	0.0611	0.0602	8.0267	0.9162
11	00:02:00	0.0628	0.0619	8.2533	0.9115
12	00:04:00	0.0644	0.0635	8.4667	0.9070
13	00:05:01	0.0650	0.0641	8.5467	0.9054
14	00:08:01	0.0658	0.0649	8.6533	0.9032
15	00:10:01	0.0660	0.0651	8.6800	0.9026
16	00:15:01	0.0666	0.0657	8.7600	0.9009
17	00:20:01	0.0669	0.0660	8.8000	0.9001
18	00:40:03	0.0676	0.0667	8.8933	0.8982
19	01:00:04	0.0682	0.0673	8.9733	0.8965
20	01:11:19	0.0684	0.0675	9.0000	0.8959

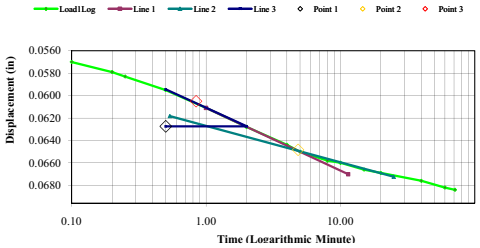
Tested By:
Checked By:

Consolidation Test Results
(Sequence 4) Load 0.500 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 5) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP4-30
Depth: 27 - 29 feet
Sample Type: Undisturbed

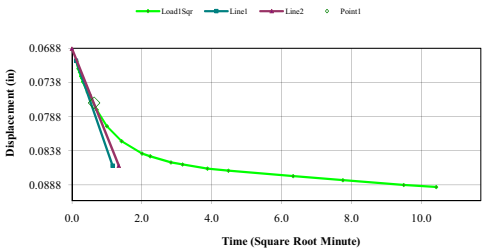
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0684	0.0675	9.0000	0.8959
1	00:00:01	0.0707	0.0698	9.3067	0.8895
2	00:00:02	0.0718	0.0709	9.4533	0.8865
3	00:00:03	0.0723	0.0714	9.5200	0.8851
4	00:00:04	0.0729	0.0720	9.6000	0.8834
5	00:00:05	0.0732	0.0723	9.6400	0.8826
6	00:00:06	0.0737	0.0728	9.7067	0.8812
7	00:00:12	0.0752	0.0743	9.9067	0.8770
8	00:00:15	0.0756	0.0747	9.9600	0.8759
9	00:00:30	0.0778	0.0769	10.2533	0.8698
10	00:01:00	0.0802	0.0793	10.5733	0.8632
11	00:02:01	0.0824	0.0815	10.8667	0.8570
12	00:04:01	0.0842	0.0833	11.1067	0.8520
13	00:05:01	0.0846	0.0837	11.1600	0.8509
14	00:08:01	0.0855	0.0846	11.2800	0.8484
15	00:10:01	0.0858	0.0849	11.3200	0.8476
16	00:15:01	0.0864	0.0855	11.4000	0.8459
17	00:20:02	0.0867	0.0858	11.4400	0.8451
18	00:40:03	0.0875	0.0866	11.5467	0.8429
19	01:00:05	0.0881	0.0872	11.6267	0.8412
20	01:30:07	0.0888	0.0879	11.7200	0.8393
21	01:48:38	0.0891	0.0882	11.7600	0.8384

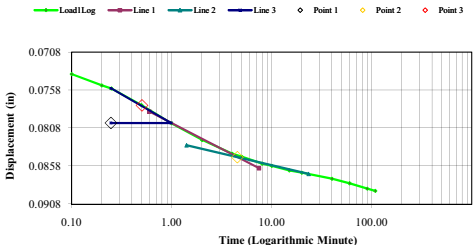
Tested By:
Checked By:

Consolidation Test Results
(Sequence 5) Load 1.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 6) Load 2.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

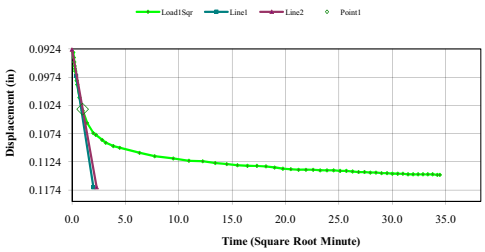
Sample Number:
Boring Number: BHSP-BP4-30
Depth: 27 - 29 feet
Sample Type: Undisturbed

Soil Description: Clay with silt (CL)
Remarks:

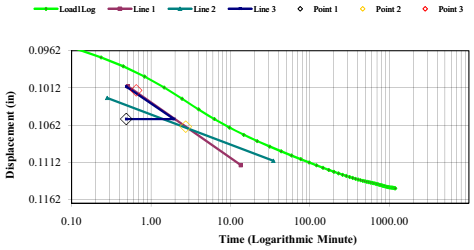
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0891	0.0882	11.7600	0.8384
1	00:00:01	0.0930	0.0921	12.2800	0.8276
2	00:00:02	0.0939	0.0930	12.4000	0.8251
3	00:00:03	0.0947	0.0938	12.5067	0.8229
4	00:00:04	0.0954	0.0945	12.6000	0.8209
5	00:00:05	0.0959	0.0950	12.6667	0.8195
6	00:00:06	0.0963	0.0954	12.7200	0.8184
7	00:00:12	0.0980	0.0971	12.9467	0.8137
8	00:00:15	0.0987	0.0978	13.0400	0.8118
9	00:00:30	0.1010	0.1001	13.3467	0.8054
10	00:01:00	0.1033	0.1024	13.6533	0.7990
11	00:02:00	0.1055	0.1046	13.9467	0.7929
12	00:04:00	0.1073	0.1064	14.1867	0.7879
13	00:05:00	0.1076	0.1067	14.2267	0.7870
14	00:08:01	0.1085	0.1076	14.3467	0.7845
15	00:10:01	0.1090	0.1081	14.4133	0.7831
16	00:15:01	0.1096	0.1087	14.4933	0.7815
17	00:20:02	0.1099	0.1090	14.5333	0.7806
18	00:40:03	0.1108	0.1099	14.6533	0.7781
19	01:00:05	0.1114	0.1105	14.7333	0.7765
20	01:30:07	0.1118	0.1109	14.7867	0.7754
21	02:00:09	0.1122	0.1113	14.8400	0.7743
22	02:30:11	0.1123	0.1114	14.8533	0.7740
23	03:00:14	0.1126	0.1117	14.8933	0.7731
24	03:30:16	0.1128	0.1119	14.9200	0.7726
25	04:00:18	0.1130	0.1121	14.9467	0.7720
26	04:30:21	0.1131	0.1122	14.9600	0.7718
27	05:00:23	0.1131	0.1122	14.9600	0.7718
28	05:30:25	0.1132	0.1123	14.9733	0.7715
29	06:00:28	0.1134	0.1125	15.0000	0.7709
30	06:30:30	0.1136	0.1127	15.0267	0.7704
31	07:00:32	0.1137	0.1128	15.0400	0.7701
32	07:30:34	0.1138	0.1129	15.0533	0.7698
33	08:00:37	0.1138	0.1129	15.0533	0.7698
34	08:30:39	0.1138	0.1129	15.0533	0.7698
35	09:00:41	0.1139	0.1130	15.0667	0.7695
36	09:30:43	0.1139	0.1130	15.0667	0.7695

Consolidation Test Results
(Sequence 6) Load 2.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1139	0.1130	15.0667	0.7695
38	10:30:48	0.1140	0.1131	15.0800	0.7693
39	11:00:50	0.1140	0.1131	15.0800	0.7693
40	11:30:53	0.1141	0.1132	15.0933	0.7690
41	12:00:55	0.1142	0.1133	15.1067	0.7687
42	12:30:57	0.1142	0.1133	15.1067	0.7687
43	13:00:59	0.1143	0.1134	15.1200	0.7684
44	13:31:02	0.1143	0.1134	15.1200	0.7684
45	14:01:04	0.1144	0.1135	15.1333	0.7681
46	14:31:06	0.1144	0.1135	15.1333	0.7681
47	15:01:08	0.1145	0.1136	15.1467	0.7679
48	15:31:11	0.1145	0.1136	15.1467	0.7679
49	16:01:13	0.1145	0.1136	15.1467	0.7679
50	16:31:15	0.1146	0.1137	15.1600	0.7676
51	17:01:18	0.1146	0.1137	15.1600	0.7676
52	17:31:20	0.1146	0.1137	15.1600	0.7676
53	18:01:22	0.1146	0.1137	15.1600	0.7676
54	18:31:24	0.1146	0.1137	15.1600	0.7676
55	19:01:27	0.1146	0.1137	15.1600	0.7676
56	19:31:29	0.1147	0.1138	15.1733	0.7673
57	19:47:40	0.1147	0.1138	15.1733	0.7673

Consolidation Test Results
(Sequence 7) Rebound 0.500 tsf

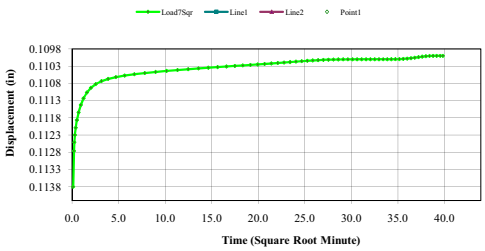
Consolidation Test Results
(Sequence 7) Rebound 0.500 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 26 May 11
Test Number:

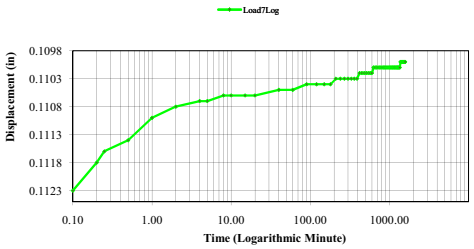
Sample Number:
Soil Description:
Boring Number: BHSP-BP4-30
Clay with silt (CL)
Depth: 27 - 29 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1147	0.1138	15.1733	0.7673
1	00:00:01	0.1138	0.1129	15.0533	0.7698
2	00:00:02	0.1129	0.1120	14.9333	0.7723
3	00:00:03	0.1126	0.1117	14.8933	0.7731
4	00:00:04	0.1124	0.1115	14.8667	0.7737
5	00:00:05	0.1123	0.1114	14.8533	0.7740
6	00:00:06	0.1123	0.1114	14.8533	0.7740
7	00:00:12	0.1118	0.1109	14.7867	0.7754
8	00:00:15	0.1116	0.1107	14.7600	0.7759
9	00:00:30	0.1114	0.1105	14.7333	0.7765
10	00:01:00	0.1110	0.1101	14.6800	0.7776
11	00:02:00	0.1108	0.1099	14.6533	0.7781
12	00:04:00	0.1107	0.1098	14.6400	0.7784
13	00:05:00	0.1107	0.1098	14.6400	0.7784
14	00:08:00	0.1106	0.1097	14.6267	0.7787
15	00:10:01	0.1106	0.1097	14.6267	0.7787
16	00:15:01	0.1106	0.1097	14.6267	0.7787
17	00:20:01	0.1106	0.1097	14.6267	0.7787
18	00:40:03	0.1105	0.1096	14.6133	0.7790
19	01:00:04	0.1105	0.1096	14.6133	0.7790
20	01:30:07	0.1104	0.1095	14.6000	0.7793
21	02:00:09	0.1104	0.1095	14.6000	0.7793
22	02:30:11	0.1104	0.1095	14.6000	0.7793
23	03:00:14	0.1104	0.1095	14.6000	0.7793
24	03:30:16	0.1103	0.1094	14.5867	0.7795
25	04:00:18	0.1103	0.1094	14.5867	0.7795
26	04:30:21	0.1103	0.1094	14.5867	0.7795
27	05:00:23	0.1103	0.1094	14.5867	0.7795
28	05:30:25	0.1103	0.1094	14.5867	0.7795
29	06:00:27	0.1103	0.1094	14.5867	0.7795
30	06:30:30	0.1103	0.1094	14.5867	0.7795
31	07:00:32	0.1102	0.1093	14.5733	0.7798
32	07:30:34	0.1102	0.1093	14.5733	0.7798
33	08:00:37	0.1102	0.1093	14.5733	0.7798
34	08:30:39	0.1102	0.1093	14.5733	0.7798
35	09:00:41	0.1102	0.1093	14.5733	0.7798
36	09:30:43	0.1102	0.1093	14.5733	0.7798

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.1102	0.1093	14.5733	0.7798
38	10:30:47	0.1101	0.1092	14.5600	0.7801
39	11:00:50	0.1101	0.1092	14.5600	0.7801
40	11:30:52	0.1101	0.1092	14.5600	0.7801
41	12:00:54	0.1101	0.1092	14.5600	0.7801
42	12:30:56	0.1101	0.1092	14.5600	0.7801
43	13:00:59	0.1101	0.1092	14.5600	0.7801
44	13:31:01	0.1101	0.1092	14.5600	0.7801
45	14:01:03	0.1101	0.1092	14.5600	0.7801
46	14:31:06	0.1101	0.1092	14.5600	0.7801
47	15:01:08	0.1101	0.1092	14.5600	0.7801
48	15:31:10	0.1101	0.1092	14.5600	0.7801
49	16:01:13	0.1101	0.1092	14.5600	0.7801
50	16:31:15	0.1101	0.1092	14.5600	0.7801
51	17:01:17	0.1101	0.1092	14.5600	0.7801
52	17:31:19	0.1101	0.1092	14.5600	0.7801
53	18:01:22	0.1101	0.1092	14.5600	0.7801
54	18:31:24	0.1101	0.1092	14.5600	0.7801
55	19:01:26	0.1101	0.1092	14.5600	0.7801
56	19:31:29	0.1101	0.1092	14.5600	0.7801
57	20:01:31	0.1101	0.1092	14.5600	0.7801
58	20:31:33	0.1101	0.1092	14.5600	0.7801
59	21:01:35	0.1101	0.1092	14.5600	0.7801
60	21:31:38	0.1101	0.1092	14.5600	0.7801
61	22:01:40	0.1101	0.1092	14.5600	0.7801
62	22:31:42	0.1101	0.1092	14.5600	0.7801
63	23:01:44	0.1100	0.1091	14.5467	0.7804
64	23:31:47	0.1100	0.1091	14.5467	0.7804
65	24:01:49	0.1100	0.1091	14.5467	0.7804
66	24:31:51	0.1100	0.1091	14.5467	0.7804
67	25:01:54	0.1100	0.1091	14.5467	0.7804
68	25:31:56	0.1100	0.1091	14.5467	0.7804
69	26:01:58	0.1100	0.1091	14.5467	0.7804
70	26:24:45	0.1100	0.1091	14.5467	0.7804

Consolidation Test Results
(Sequence 8) Load 1.000 tsf

Consolidation Test Results
(Sequence 8) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

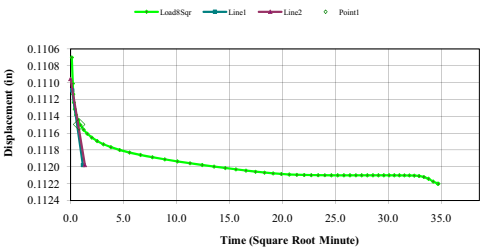
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP4-30
Depth: 27 - 29 feet
Sample Type: Undisturbed

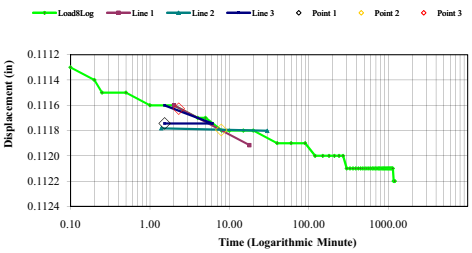
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1100	0.1091	14.5467	0.7804
1	00:00:01	0.1107	0.1098	14.6400	0.7784
2	00:00:02	0.1108	0.1099	14.6533	0.7781
3	00:00:03	0.1111	0.1102	14.6933	0.7773
4	00:00:04	0.1112	0.1103	14.7067	0.7770
5	00:00:05	0.1113	0.1104	14.7200	0.7768
6	00:00:06	0.1113	0.1104	14.7200	0.7768
7	00:00:12	0.1114	0.1105	14.7333	0.7765
8	00:00:15	0.1115	0.1106	14.7467	0.7762
9	00:00:30	0.1115	0.1106	14.7467	0.7762
10	00:01:00	0.1116	0.1107	14.7600	0.7759
11	00:02:00	0.1116	0.1107	14.7600	0.7759
12	00:04:00	0.1117	0.1108	14.7733	0.7756
13	00:05:01	0.1117	0.1108	14.7733	0.7756
14	00:08:01	0.1118	0.1109	14.7867	0.7754
15	00:10:01	0.1118	0.1109	14.7867	0.7754
16	00:15:01	0.1118	0.1109	14.7867	0.7754
17	00:20:02	0.1118	0.1109	14.7867	0.7754
18	00:40:03	0.1119	0.1110	14.8000	0.7751
19	01:00:05	0.1119	0.1110	14.8000	0.7751
20	01:30:07	0.1119	0.1110	14.8000	0.7751
21	02:00:09	0.1120	0.1111	14.8133	0.7748
22	02:30:12	0.1120	0.1111	14.8133	0.7748
23	03:00:14	0.1120	0.1111	14.8133	0.7748
24	03:30:16	0.1120	0.1111	14.8133	0.7748
25	04:00:18	0.1120	0.1111	14.8133	0.7748
26	04:30:21	0.1120	0.1111	14.8133	0.7748
27	05:00:23	0.1121	0.1112	14.8267	0.7745
28	05:30:25	0.1121	0.1112	14.8267	0.7745
29	06:00:27	0.1121	0.1112	14.8267	0.7745
30	06:30:30	0.1121	0.1112	14.8267	0.7745
31	07:00:32	0.1121	0.1112	14.8267	0.7745
32	07:30:34	0.1121	0.1112	14.8267	0.7745
33	08:00:36	0.1121	0.1112	14.8267	0.7745
34	08:30:39	0.1121	0.1112	14.8267	0.7745
35	09:00:41	0.1121	0.1112	14.8267	0.7745
36	09:30:43	0.1121	0.1112	14.8267	0.7745

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1121	0.1112	14.8267	0.7745
38	10:30:48	0.1121	0.1112	14.8267	0.7745
39	11:00:50	0.1121	0.1112	14.8267	0.7745
40	11:30:52	0.1121	0.1112	14.8267	0.7745
41	12:00:55	0.1121	0.1112	14.8267	0.7745
42	12:30:57	0.1121	0.1112	14.8267	0.7745
43	13:00:59	0.1121	0.1112	14.8267	0.7745
44	13:31:02	0.1121	0.1112	14.8267	0.7745
45	14:01:04	0.1121	0.1112	14.8267	0.7745
46	14:31:06	0.1121	0.1112	14.8267	0.7745
47	15:01:08	0.1121	0.1112	14.8267	0.7745
48	15:31:11	0.1121	0.1112	14.8267	0.7745
49	16:01:13	0.1121	0.1112	14.8267	0.7745
50	16:31:15	0.1121	0.1112	14.8267	0.7745
51	17:01:18	0.1121	0.1112	14.8267	0.7745
52	17:31:20	0.1121	0.1112	14.8267	0.7745
53	18:01:22	0.1121	0.1112	14.8267	0.7745
54	18:31:24	0.1121	0.1112	14.8267	0.7745
55	19:01:27	0.1121	0.1112	14.8267	0.7745
56	19:31:29	0.1122	0.1113	14.8400	0.7743
57	20:01:31	0.1122	0.1113	14.8400	0.7743
58	20:06:00	0.1122	0.1113	14.8400	0.7743

Consolidation Test Results
(Sequence 9) Load 2.000 tsf

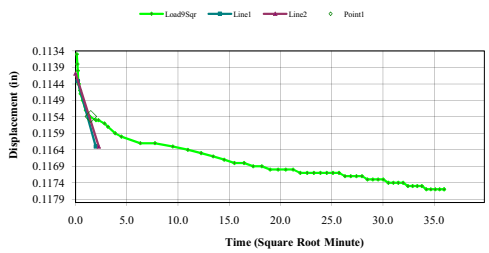
Consolidation Test Results
(Sequence 9) Load 2.000 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 26 May 11
Test Number:

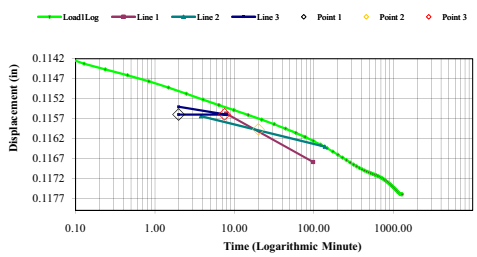
Sample Number:
Soil Description:
Boring Number: BHSP-BP4-30
Clay with silt (CL)
Depth: 27 - 29 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1122	0.1113	14.8400	0.7743
1	00:00:01	0.1135	0.1126	15.0133	0.7706
2	00:00:02	0.1138	0.1129	15.0533	0.7698
3	00:00:03	0.1140	0.1131	15.0800	0.7693
4	00:00:04	0.1143	0.1134	15.1200	0.7684
5	00:00:05	0.1144	0.1135	15.1333	0.7681
6	00:00:06	0.1144	0.1135	15.1333	0.7681
7	00:00:12	0.1146	0.1137	15.1600	0.7676
8	00:00:15	0.1147	0.1138	15.1733	0.7673
9	00:00:30	0.1149	0.1140	15.2000	0.7668
10	00:01:00	0.1152	0.1143	15.2400	0.7659
11	00:02:00	0.1154	0.1145	15.2667	0.7654
12	00:04:00	0.1155	0.1146	15.2800	0.7651
13	00:05:00	0.1155	0.1146	15.2800	0.7651
14	00:08:00	0.1156	0.1147	15.2933	0.7648
15	00:10:00	0.1157	0.1148	15.3067	0.7645
16	00:15:01	0.1159	0.1150	15.3333	0.7640
17	00:20:01	0.1160	0.1151	15.3467	0.7637
18	00:40:03	0.1162	0.1153	15.3733	0.7631
19	01:00:04	0.1162	0.1153	15.3733	0.7631
20	01:30:06	0.1163	0.1154	15.3867	0.7629
21	02:00:09	0.1164	0.1155	15.4000	0.7626
22	02:30:11	0.1165	0.1156	15.4133	0.7623
23	03:00:13	0.1166	0.1157	15.4267	0.7620
24	03:30:15	0.1167	0.1158	15.4400	0.7618
25	04:00:18	0.1168	0.1159	15.4533	0.7615
26	04:30:20	0.1168	0.1159	15.4533	0.7615
27	05:00:22	0.1169	0.1160	15.4667	0.7612
28	05:30:25	0.1169	0.1160	15.4667	0.7612
29	06:00:27	0.1170	0.1161	15.4800	0.7609
30	06:30:29	0.1170	0.1161	15.4800	0.7609
31	07:00:31	0.1170	0.1161	15.4800	0.7609
32	07:30:34	0.1170	0.1161	15.4800	0.7609
33	08:00:36	0.1171	0.1162	15.4933	0.7606
34	08:30:38	0.1171	0.1162	15.4933	0.7606
35	09:00:41	0.1171	0.1162	15.4933	0.7606
36	09:30:43	0.1171	0.1162	15.4933	0.7606

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.1171	0.1162	15.4933	0.7606
38	10:30:48	0.1171	0.1162	15.4933	0.7606
39	11:00:50	0.1171	0.1162	15.4933	0.7606
40	11:30:52	0.1172	0.1163	15.5067	0.7604
41	12:00:55	0.1172	0.1163	15.5067	0.7604
42	12:30:57	0.1172	0.1163	15.5067	0.7604
43	13:00:59	0.1172	0.1163	15.5067	0.7604
44	13:31:01	0.1173	0.1164	15.5200	0.7601
45	14:01:04	0.1173	0.1164	15.5200	0.7601
46	14:31:06	0.1173	0.1164	15.5200	0.7601
47	15:01:08	0.1173	0.1164	15.5200	0.7601
48	15:31:11	0.1174	0.1165	15.5333	0.7598
49	16:01:13	0.1174	0.1165	15.5333	0.7598
50	16:31:15	0.1174	0.1165	15.5333	0.7598
51	17:01:17	0.1174	0.1165	15.5333	0.7598
52	17:31:20	0.1175	0.1166	15.5467	0.7595
53	18:01:22	0.1175	0.1166	15.5467	0.7595
54	18:31:24	0.1175	0.1166	15.5467	0.7595
55	19:01:27	0.1175	0.1166	15.5467	0.7595
56	19:31:29	0.1176	0.1167	15.5600	0.7593
57	20:01:31	0.1176	0.1167	15.5600	0.7593
58	20:31:33	0.1176	0.1167	15.5600	0.7593
59	21:01:36	0.1176	0.1167	15.5600	0.7593
60	21:31:38	0.1176	0.1167	15.5600	0.7593
61	21:33:26	0.1176	0.1167	15.5600	0.7593

Consolidation Test Results
(Sequence 10) Load 4.000 tsf

Consolidation Test Results
(Sequence 10) Load 4.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

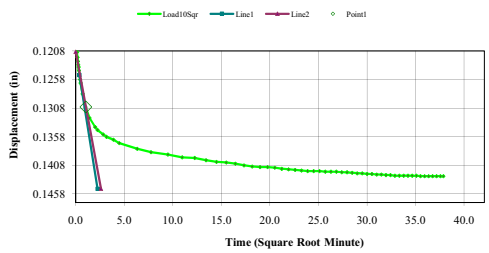
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP4-30
Depth: 27 - 29 feet
Sample Type: Undisturbed

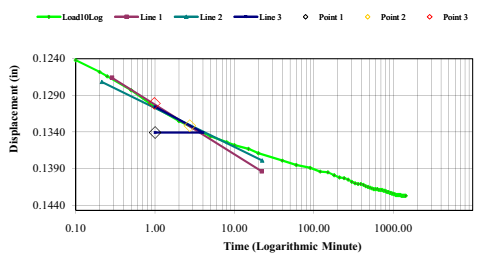
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1176	0.1167	15.5600	0.7593
1	00:00:01	0.1210	0.1201	16.0133	0.7498
2	00:00:02	0.1219	0.1210	16.1333	0.7473
3	00:00:03	0.1226	0.1217	16.2267	0.7454
4	00:00:04	0.1232	0.1223	16.3067	0.7437
5	00:00:05	0.1236	0.1227	16.3600	0.7426
6	00:00:06	0.1242	0.1233	16.4400	0.7409
7	00:00:12	0.1258	0.1249	16.6533	0.7365
8	00:00:15	0.1264	0.1255	16.7333	0.7348
9	00:00:30	0.1283	0.1274	16.9867	0.7295
10	00:01:00	0.1306	0.1297	17.2933	0.7231
11	00:02:00	0.1325	0.1316	17.5467	0.7179
12	00:04:00	0.1341	0.1332	17.7600	0.7134
13	00:05:00	0.1346	0.1337	17.8267	0.7120
14	00:08:00	0.1354	0.1345	17.9333	0.7098
15	00:10:01	0.1358	0.1349	17.9867	0.7087
16	00:15:01	0.1363	0.1354	18.0533	0.7073
17	00:20:01	0.1369	0.1360	18.1333	0.7056
18	00:40:03	0.1379	0.1370	18.2667	0.7029
19	01:00:04	0.1385	0.1376	18.3467	0.7012
20	01:30:07	0.1389	0.1380	18.4000	0.7001
21	02:00:09	0.1394	0.1385	18.4667	0.6987
22	02:30:11	0.1395	0.1386	18.4800	0.6984
23	03:00:13	0.1399	0.1390	18.5333	0.6973
24	03:30:16	0.1402	0.1393	18.5733	0.6965
25	04:00:18	0.1403	0.1394	18.5867	0.6962
26	04:30:20	0.1405	0.1396	18.6133	0.6956
27	05:00:22	0.1408	0.1399	18.6533	0.6948
28	05:30:25	0.1410	0.1401	18.6800	0.6943
29	06:00:27	0.1411	0.1402	18.6933	0.6940
30	06:30:29	0.1411	0.1402	18.6933	0.6940
31	07:00:32	0.1412	0.1403	18.7067	0.6937
32	07:30:34	0.1414	0.1405	18.7333	0.6931
33	08:00:36	0.1415	0.1406	18.7467	0.6929
34	08:30:38	0.1416	0.1407	18.7600	0.6926
35	09:00:41	0.1417	0.1408	18.7733	0.6923
36	09:30:43	0.1418	0.1409	18.7867	0.6920

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.1418	0.1409	18.7867	0.6920
38	10:30:48	0.1418	0.1409	18.7867	0.6920
39	11:00:50	0.1419	0.1410	18.8000	0.6918
40	11:30:52	0.1419	0.1410	18.8000	0.6918
41	12:00:54	0.1419	0.1410	18.8000	0.6918
42	12:30:57	0.1420	0.1411	18.8133	0.6915
43	13:00:59	0.1420	0.1411	18.8133	0.6915
44	13:31:01	0.1421	0.1412	18.8267	0.6912
45	14:01:04	0.1422	0.1413	18.8400	0.6909
46	14:31:06	0.1422	0.1413	18.8400	0.6909
47	15:01:08	0.1423	0.1414	18.8533	0.6906
48	15:31:10	0.1423	0.1414	18.8533	0.6906
49	16:01:13	0.1424	0.1415	18.8667	0.6904
50	16:31:15	0.1424	0.1415	18.8667	0.6904
51	17:01:17	0.1425	0.1416	18.8800	0.6901
52	17:31:20	0.1425	0.1416	18.8800	0.6901
53	18:01:22	0.1426	0.1417	18.8933	0.6898
54	18:31:24	0.1426	0.1417	18.8933	0.6898
55	19:01:26	0.1426	0.1417	18.8933	0.6898
56	19:31:29	0.1426	0.1417	18.8933	0.6898
57	20:01:31	0.1426	0.1417	18.8933	0.6898
58	20:31:33	0.1426	0.1417	18.8933	0.6898
59	21:01:36	0.1427	0.1418	18.9067	0.6895
60	21:31:38	0.1427	0.1418	18.9067	0.6895
61	22:01:40	0.1427	0.1418	18.9067	0.6895
62	22:31:42	0.1427	0.1418	18.9067	0.6895
63	23:01:45	0.1427	0.1418	18.9067	0.6895
64	23:31:47	0.1427	0.1418	18.9067	0.6895
65	23:54:37	0.1427	0.1418	18.9067	0.6895

Consolidation Test Results
(Sequence 11) Load 8.000 tsf

Consolidation Test Results
(Sequence 11) Load 8.000 tsf

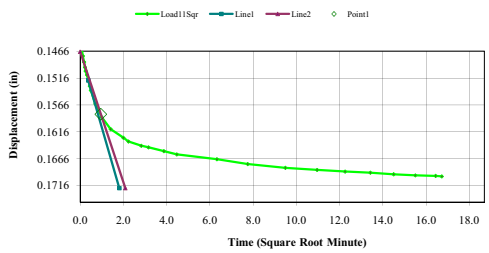
Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 26 May 11
Test Number:

Sample Number:
Soil Description:
Boring Number: BHSP-BP4-30
Clay with silt (CL)
Depth: 27 - 29 feet
Remarks:
Sample Type: Undisturbed

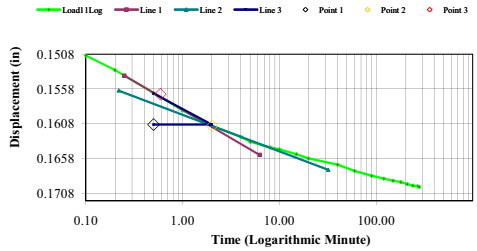
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1427	0.1418	18.9067	0.6895
1	00:00:00	0.1442	0.1433	19.1067	0.6854
2	00:00:01	0.1475	0.1466	19.5467	0.6762
3	00:00:02	0.1486	0.1477	19.6933	0.6731
4	00:00:03	0.1496	0.1487	19.8267	0.6704
5	00:00:04	0.1503	0.1494	19.9200	0.6684
6	00:00:06	0.1510	0.1501	20.0133	0.6665
7	00:00:12	0.1531	0.1522	20.2933	0.6606
8	00:00:15	0.1539	0.1530	20.4000	0.6584
9	00:00:30	0.1564	0.1555	20.7333	0.6515
10	00:01:00	0.1589	0.1580	21.0667	0.6445
11	00:02:00	0.1611	0.1602	21.3600	0.6384
12	00:04:00	0.1627	0.1618	21.5733	0.6340
13	00:05:00	0.1634	0.1625	21.6667	0.6320
14	00:08:00	0.1642	0.1633	21.7733	0.6298
15	00:10:00	0.1645	0.1636	21.8133	0.6290
16	00:15:01	0.1652	0.1643	21.9067	0.6270
17	00:20:01	0.1658	0.1649	21.9867	0.6254
18	00:40:03	0.1667	0.1658	22.1067	0.6229
19	01:00:04	0.1676	0.1667	22.2267	0.6204
20	01:30:06	0.1683	0.1674	22.3200	0.6184
21	02:00:09	0.1687	0.1678	22.3733	0.6173
22	02:30:11	0.1690	0.1681	22.4133	0.6165
23	03:00:13	0.1692	0.1683	22.4400	0.6159
24	03:30:15	0.1695	0.1686	22.4800	0.6151
25	04:00:18	0.1697	0.1688	22.5067	0.6145
26	04:30:20	0.1698	0.1689	22.5200	0.6143
27	04:39:45	0.1699	0.1690	22.5333	0.6140

Tested By:
Checked By:

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 12) Load 16.000 tsf

Consolidation Test Results
(Sequence 12) Load 16.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

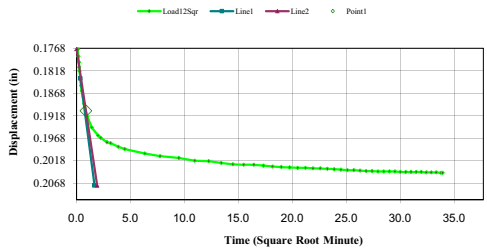
Project Number: 10883-011-00
Test Date: 26 May 11
Test Number:

Sample Number:
Boring Number: BHSP-BP4-30
Depth: 27 - 29 feet
Sample Type: Undisturbed

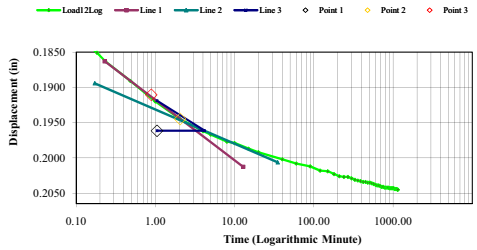
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1699	0.1690	22.5333	0.6140
1	00:00:00	0.1727	0.1718	22.9067	0.6062
2	00:00:01	0.1770	0.1761	23.4800	0.5943
3	00:00:02	0.1786	0.1777	23.6933	0.5898
4	00:00:03	0.1799	0.1790	23.8667	0.5862
5	00:00:04	0.1810	0.1801	24.0133	0.5831
6	00:00:05	0.1819	0.1810	24.1333	0.5806
7	00:00:11	0.1851	0.1842	24.5600	0.5717
8	00:00:14	0.1863	0.1854	24.7200	0.5684
9	00:00:29	0.1891	0.1882	25.0933	0.5606
10	00:01:00	0.1920	0.1911	25.4800	0.5526
11	00:02:00	0.1944	0.1935	25.8000	0.5459
12	00:04:00	0.1962	0.1953	26.0400	0.5409
13	00:05:00	0.1967	0.1958	26.1067	0.5395
14	00:08:00	0.1977	0.1968	26.2400	0.5367
15	00:10:00	0.1979	0.1970	26.2667	0.5362
16	00:15:01	0.1987	0.1978	26.3733	0.5340
17	00:20:01	0.1992	0.1983	26.4400	0.5326
18	00:40:02	0.2002	0.1993	26.5733	0.5298
19	01:00:02	0.2008	0.1999	26.6533	0.5281
20	01:30:02	0.2012	0.2003	26.7067	0.5270
21	02:00:02	0.2018	0.2009	26.7867	0.5254
22	02:30:03	0.2019	0.2010	26.8000	0.5251
23	03:00:05	0.2023	0.2014	26.8533	0.5240
24	03:30:07	0.2026	0.2017	26.8933	0.5231
25	04:00:09	0.2027	0.2018	26.9067	0.5229
26	04:30:12	0.2027	0.2018	26.9067	0.5229
27	05:00:14	0.2029	0.2020	26.9333	0.5223
28	05:30:16	0.2031	0.2022	26.9600	0.5217
29	06:00:19	0.2032	0.2023	26.9733	0.5215
30	06:30:21	0.2033	0.2024	26.9867	0.5212
31	07:00:23	0.2034	0.2025	27.0000	0.5209
32	07:30:25	0.2034	0.2025	27.0000	0.5209
33	08:00:28	0.2035	0.2026	27.0133	0.5206
34	08:30:30	0.2035	0.2026	27.0133	0.5206
35	09:00:32	0.2036	0.2027	27.0267	0.5204
36	09:30:35	0.2037	0.2028	27.0400	0.5201

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:37	0.2038	0.2029	27.0533	0.5198
38	10:30:39	0.2039	0.2030	27.0667	0.5195
39	11:00:41	0.2039	0.2030	27.0667	0.5195
40	11:30:44	0.2040	0.2031	27.0800	0.5192
41	12:00:46	0.2041	0.2032	27.0933	0.5190
42	12:30:48	0.2041	0.2032	27.0933	0.5190
43	13:00:51	0.2042	0.2033	27.1067	0.5187
44	13:30:53	0.2042	0.2033	27.1067	0.5187
45	14:00:55	0.2042	0.2033	27.1067	0.5187
46	14:30:57	0.2042	0.2033	27.1067	0.5187
47	15:01:00	0.2043	0.2034	27.1200	0.5184
48	15:31:02	0.2043	0.2034	27.1200	0.5184
49	16:01:04	0.2043	0.2034	27.1200	0.5184
50	16:31:06	0.2043	0.2034	27.1200	0.5184
51	17:01:09	0.2043	0.2034	27.1200	0.5184
52	17:31:11	0.2044	0.2035	27.1333	0.5181
53	18:01:13	0.2044	0.2035	27.1333	0.5181
54	18:31:16	0.2044	0.2035	27.1333	0.5181
55	19:01:18	0.2045	0.2036	27.1467	0.5179
56	19:11:20	0.2045	0.2036	27.1467	0.5179

Project: Non-Rock Alternatives to Shoreline Protection Demonstration (LA-16)
Project Location: West Bank of Bayou Perot, LaFourche Parish, Louisiana
Project No.: 10883-011-00

Boring No.	Field Vane Test		Field Vane Instrument Used	Field Vane Dimensions (mm)	Instrument Reading	Shear Stress Interpolated from Geonor H-10 Vane Borer Calibration Curves			Plasticity Index	Correction Factor	PI Corrected Shear Stress	
	Depth Below Barge Deck (feet)	Depth Below Mudline (feet)				kN/m^2	psf	ksf	%		psf	ksf
BHSP-BP1-30	12	8	2555	65/130	4	2.09	44	0.044	PT	0.5	22	0.022
BHSP-BP1-30	16	12	2555	65/130	4	2.09	44	0.044	OH	0.7	31	0.031
BHSP-BP2-30	14	10	2555	65/130	14	7.33	153	0.153	PT	0.5	77	0.077
BHSP-BP2-30	19	15	2555	65/130	7	3.66	76	0.076	215	0.5	38	0.038
BHSP-BP3-50	18	14	2555	65/130	7	3.66	76	0.076	PT	0.5	38	0.038
BHSP-BP3-50	22	18	2555	65/130	15	7.86	164	0.164	493	0.5	82	0.082
BHSP-BP4-30	12	8	2555	65/130	2	1.05	22	0.022	PT	0.5	11	0.011
BHSP-BP4-30	16	12	2555	65/130	7	3.66	76	0.076	PT	0.5	38	0.038
BHSP-BP4-30	21	17	2555	65/130	7	3.66	76	0.076	44	0.84	64	0.064

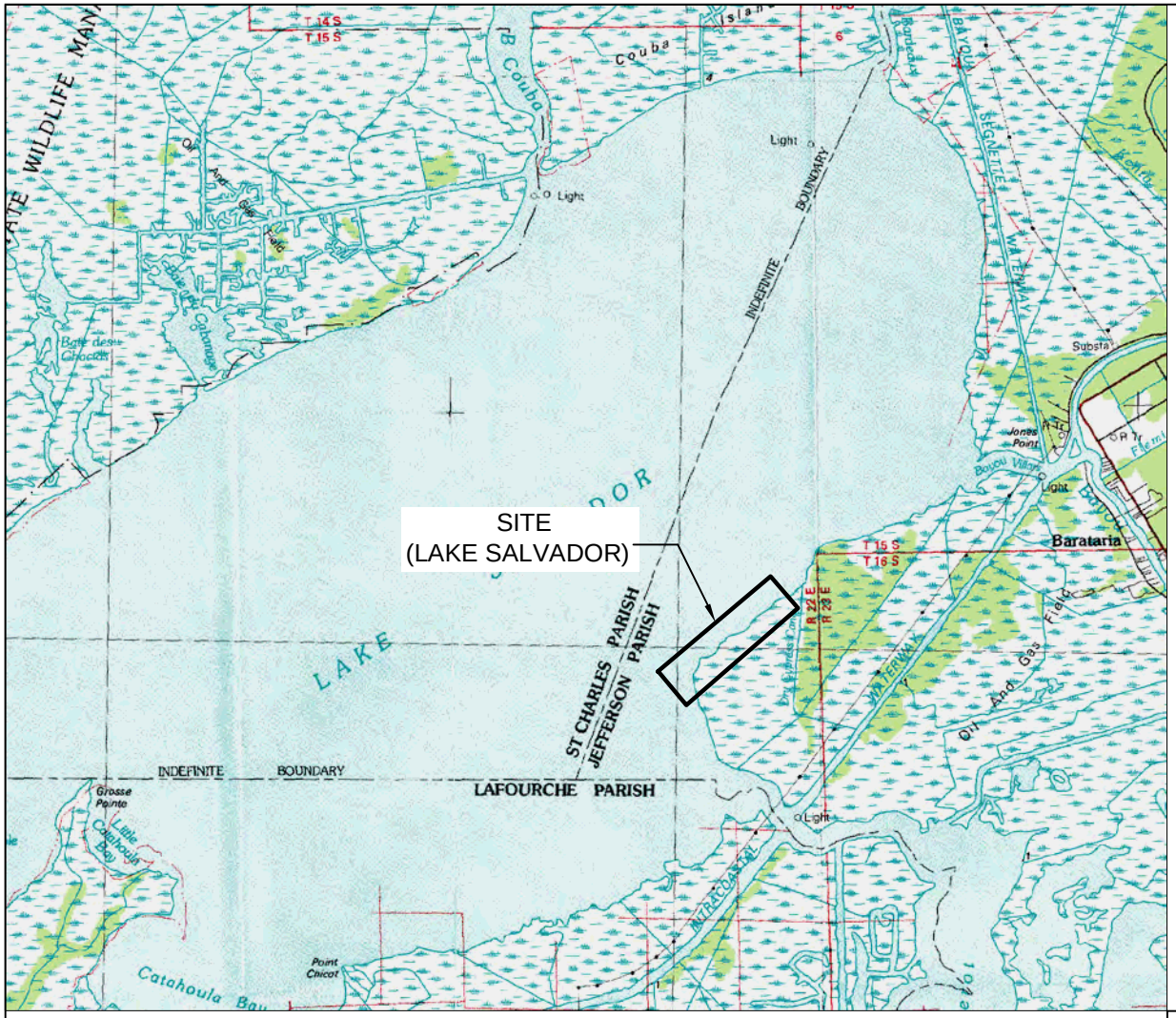
Notes:

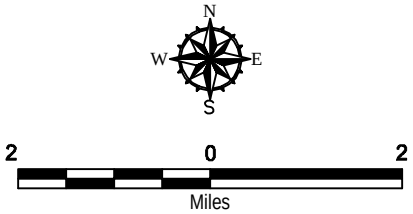
1. Field Vane testing was performed prior to sample extrusion/classification and soil type was not known. Peat is highly permeable and is poorly suited to the Field Vane Shear test.
2. Correction factors were selected based on Bjerrum's (1972) Recommended curve, as found in Figure 5.1 of "Recommended Practice for Soft Ground Site Characterization: Arthur Casagrande Lecture" by Ladd and Degroot (2003). Figure 5.1 correlates correction factors to the Plasticity Index of the material.
3. Correction factors for peat were assumed to be 0.5 based on "Engineering Properties of Fibrous Peats" by Mesri and Anjlouni. A review of miniature vane shear testing and triaxial compression testing shows good agreement between the two test types, suggesting that miniature vane and triaxial tests are better suited to these materials.
4. "OH" clays without a PI test were assigned a correction factor of 0.7 based on a review of OH materials from this project.
5. "CH" clays without a PI test were assigned a correction factor of 0.8 based on a review of CH materials from this project.

APPENDIX B
Southeast Lake Salvador Project Site

P:\10\10883011\00\CAD\vicinity map.dwg\TAB:Layout2 (2) modified on Jun 06, 2011 - 2:43pm

JPV : KMC





Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Topographic image taken from USGS, USGS Digital Raster Graphics - 1:100,000 - Zone 15, Dated 1/21/1997

SOUTHEAST LAKE SALVADOR SITE MAP

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Jefferson Parish, Louisiana

GEOENGINEERS

Figure B-1

P:\10\10883011\00\CAD\Boring Location Plan.dwg\TAB:Layout1 (2) modified on Jun 06, 2011 - 2:48pm

JPV : KMC

BORING #	LATITUDE	LONGITUDE
SOUTH TERMINUS	N 29° 42' 28.7"	W 90° 12' 06.7"
BHSP-LS1-30	N 29° 42' 32.8"	W 90° 12' 01.5"
BHSP-LS2-30	N 29° 42' 39.6"	W 90° 11' 53.3"
BHSP-LS3-50	N 29° 42' 44.5"	W 90° 11' 43.8"
BHSP-LS4-30	N 29° 42' 50.4"	W 90° 11' 34.5"
NORTH TERMINUS	N 29° 42' 54.9"	W 90° 11' 30.3"

Legend

BHSP-LS4-30 Soil Borehole Location

N
W E
S

2000 0 2000
Feet

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Aerial image taken from USGS, USGS High Resolution State Orthoimagery for the Louisiana Coastal Area, Dated: 10/18/2008

SOUTHEAST LAKE SALVADOR
SOIL BORING LOCATION PLAN

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Jefferson Parish, Louisiana

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Figure B-2

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS MORE THAN 50% RETAINED ON NO. 200 SIEVE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS
				SP	POORLY-GRADED SANDS, GRAVELLY SAND
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

ADDITIONAL MATERIAL SYMBOLS

SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
	CC	Cement Concrete
	AC	Asphalt Concrete
	CR	Crushed Rock/ Quarry Spalls
	TS	Topsoil/ Forest Duff/Sod

Measured groundwater level in exploration, well, or piezometer

Groundwater observed at time of exploration

Perched water observed at time of exploration

Graphic Log Contact

Distinct contact between soil strata or geologic units

Approximate location of soil strata change within a geologic soil unit

Material Description Contact

Distinct contact between soil strata or geologic units

Approximate location of soil strata change within a geologic soil unit

Sampler Symbol Descriptions

Standard Penetration Test (SPT)

Shelby tube

Piston

Direct-Push

Bulk or grab

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

A "P" indicates sampler pushed using the weight of the drill rig.

Laboratory / Field Tests

%F	Percent fines
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture content and dry density
OC	Organic content
PM	Permeability or hydraulic conductivity
PP	Pocket penetrometer
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
VS	Vane shear

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

KEY TO EXPLORATION LOGS

GEOENGINEERS

FIGURE B-3

Drilled	Start 5/7/2011	End 5/7/2011	Total Depth (ft)	34	Logged By / Checked By	TJS / JPV	Driller	Specialized Environmental Resources, LLC	Drilling Method	Wet Rotary
Top of Deck Elevation (ft) Vertical Datum			2.5		Hammer Data	Safety Hammer/Cathead 140 (lbs) / 30 (in) Drop	Drilling Equipment	Pontoon-Mounted Drill Rig		
Latitude / Longitude			N29° 42' 32.8" / W90° 12' 01.5"		System Datum	Geographic NAVD88 (feet)	Water Depth	Date Measured: 5/7/2011	Depth (ft): 2.0	Elevation (ft): 0.5

Notes: See Figure A-1 for explanation of symbols.
Cement-bentonite grout backfill top 25 feet.

Depth (feet)	Interval Recovered (in)	Sample Name	Group Classification	MATERIAL DESCRIPTION	Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
0				Top of deck									
				Water line									
				Mudline									
5	8	1	PT	Very soft black peat	998	5.7	0.07	0.06	15				72
	11	2		Very soft black peat	898	7.1	0.07	0.17	15			0.11	
	14	3		Very soft dark gray peat	665	8.8	0.08	0.29	10			0.12	25
10	15	4	OH	Very soft dark gray organic clay	195	22.5	0.08	0.40	9			0.19	
	11	5		Very soft dark gray organic clay	161	33.4	0.07	0.52	5			0.11	55
15	10	6	PT	Very soft dark gray peat (field vane - 0.06 KSF)	515	11.7	0.05	0.69	15			0.12	
	21	7		Very soft dark gray peat	317	16.7	0.06	0.75	9			0.18	38
	19	8		Very soft dark gray peat with organic matter	645	9.1	0.08	0.86	10			0.11	
20	18	9		Very soft dark gray peat (field vane - 0.06 KSF)	599	10.7	0.08	0.98	10			0.11	76
	22	10		Very soft dark gray peat	731	10.2	0.03	1.04	12	527	386	0.06	47
25			CH										
	9	11		Very soft gray clay with organic matter traces	70	67.1	0.07	1.38	14			0.3	
30	11	12		Very soft gray clay with organic matter traces	69	65.1	0.08	1.67	11				3

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-LS1-30

GEOENGINEERS

Project: LA-16 Non-Rock Demo Project
Project Location: Jefferson Parish, Louisiana
Project Number: 10883-011-00

Figure B-4
Sheet 1 of 1

Baton Rouge: Date:6/9/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GE8_GEOTECH_LAB

Drilled	Start 5/7/2011	End 5/7/2011	Total Depth (ft) 34	Logged By TJS / Checked By JPV	Driller Specialized Environmental Resources, LLC	Drilling Method Wet Rotary
Top of Deck Elevation (ft) Vertical Datum	2.0		Hammer Data	Safety Hammer/Cathead 140 (lbs) / 30 (in) Drop	Drilling Equipment	Pontoon-Mounted Drill Rig
Latitude / Longitude	N29° 42' 39.6" / W90° 11' 53.3"		System Datum	Geographic NAVD88 (feet)	Water Depth	
Notes: See Figure A-1 for explanation of symbols. Cement-bentonite grout backfill top 25 feet.					Date Measured: 5/7/2011	Depth (ft): 2.0 / Elevation (ft): 0.0

Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
0								Top of deck									
					▽			Water line									
								Mudline									
	10			1			OH	Very soft gray organic clay with organic matter	199	26.1	0.1	0.06	8			0.19	40
5	9			2				Very soft gray organic clay	190	26.1	0.08	0.17	10	167	116		
	5			3				Very soft gray organic clay (field vane - 0.07 KSF)	174	27.2	0.08	0.29	10			0.1	10
10	14			4				Very soft gray organic clay	210	24.3	0.08	0.40	12			0.14	
	10			5				Very soft gray organic clay (field vane - 0.08 KSF)	189	29	0.08	0.52	11			0.12	
	16			6				Very soft gray organic clay	181	29.2	0.12	0.66	11	192	142	0.11	
15	12			7				Very soft gray organic clay	190	26.7	0.09	0.75	11			0.15	
	11			8				Very soft gray organic clay	285	21.5	0.08	0.86	10			0.14	16
20	12			9				Very soft gray organic clay	194	26.2	0.07	0.98	12			0.2	
	8			10				Very soft gray slightly organic clay	70	55	0.08	1.09	15			0.12	18
25																	
	17			11				Very soft gray organic clay	93	40.9	0.07	1.38	10			0.12	
30																	
	15			12				Very soft gray organic clay	198	25.7	0.07	1.67	8	194	141		

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-LS2-30

GEOENGINEERS

Project: LA-16 Non-Rock Demo Project

Project Location: Jefferson Parish, Louisiana

Project Number: 10883-011-00

Figure B-5

Sheet 1 of 1

Baton Rouge: Date:6/9/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GE18_GEOTECH_LAB

Drilled	Start 5/6/2011	End 5/6/2011	Total Depth (ft) 54	Logged By TJS / Checked By JPV	Driller Specialized Environmental Resources, LLC	Drilling Method Wet Rotary
Top of Deck Elevation (ft) Vertical Datum	2.5		Hammer Data	Safety Hammer/Cathead 140 (lbs) / 30 (in) Drop	Drilling Equipment	Pontoon-Mounted Drill Rig
Latitude	N29° 42' 44.5"		System Datum	Geographic NAVD88 (feet)	Water Depth	
Longitude	W90° 11' 43.8"				Date Measured / Depth (ft) / Elevation (ft)	

Notes: See Figure A-1 for explanation of symbols.
Cement-bentonite grout backfill top 25 feet.

Elevation (feet)	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
	0									Top of deck									
										Water line									
0										Mudline									
			8			1			PT	Very soft black peat	755	7.1	0.1	0.06	14			0.19	32
	5		7			2				Very soft black peat	570	9	0.11	0.17	12				
-5			5			3			OH	Very soft gray organic clay	495							0.08	36
	10		10			4				Very soft gray organic clay with 1½" peat layer	127	38.3	0.05	0.40	14			0.1	
-10			4.5			5				Very soft gray organic clay with 1½" peat layer	135	34.4	0.1	0.52	15			0.11	17
			10			6			PT	Very soft dark gray peat (field vane - 0.02 KSF)	320	18	0.09	0.63	13			0.14	
	15		9			7			OH	Very soft gray organic clay with 2" peat layer	228	23	0.1	0.75	12			0.16	11
-15			7			8				Very soft black organic clay	210	25.4	0.07	0.86	15			0.14	
	20		12			9			CH	Very soft gray clay with 2" sand layer and organic matter traces (field vane - 0.04 KSF)	42	61.4	0.14	0.98	8				10
-20			16			10				Very soft gray clay	30	76.7	0.1	1.04	13				
						11			SP	Firm gray sand with 3" clay layer	25	97.6	2.29	1.09	12				
	25								OH										
-25			14			12				Very soft dark gray organic clay with 7" sand layer	206	30.6	0.09	1.38	14				11
	30																		
-30			12			13				Very soft gray slightly organic clay with 6" sand layer	70	53.5	0.13	1.67	14				
	35																		

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-LS3-50

GEOENGINEERS

Project: LA-16 Non-Rock Demo Project
Project Location: Jefferson Parish, Louisiana
Project Number: 10883-011-00

Figure B-6
Sheet 1 of 2

Baton Rouge: Date:6/9/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GE8_GEOTECH_LAB

Elevation (feet)	Depth (feet)	FIELD DATA: Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	LABORATORY DATA: Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
	35																	
-35		15			14				Very soft gray organic clay with sand lenses and 6" sand layer	195	31.1	0.05	1.96	12				
	40							CH										
-40		3			15				Very soft gray clay with sand pockets						73	53	0.12	
	45																	
-45		13			16				Very soft gray clay	65	61.3	0.21	2.53	12	76	43	0.16	
	50																	
-50		17			17				Very soft gray clay	49	64.5	0.16	2.82	14	69	50	0.19	

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-LS3-50 (continued)

GEOENGINEERS

Project: LA-16 Non-Rock Demo Project

Project Location: Jefferson Parish, Louisiana

Project Number: 10883-011-00

Figure B-6

Sheet 2 of 2

Baton Rouge: Date:6/9/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GE18_GEOTECH_LAB

Drilled	Start 5/7/2011	End 5/7/2011	Total Depth (ft) 34	Logged By TJS / Checked By JPV	Driller Specialized Environmental Resources, LLC	Drilling Method Wet Rotary
Top of Deck Elevation (ft) Vertical Datum	2.6		Hammer Data	Safety Hammer/Cathead 140 (lbs) / 30 (in) Drop	Drilling Equipment	Pontoon-Mounted Drill Rig
Latitude / Longitude	N29° 42' 50.4" / W90° 11' 34.5"		System Datum	Geographic NAVD88 (feet)	Water Depth	
Notes: See Figure A-1 for explanation of symbols. Cement-bentonite grout backfill top 25 feet.					Date Measured: 5/7/2011	Depth (ft): 2.0 / Elevation (ft): 0.6

Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
0								Top of deck									
					▽			Water line									
								Mudline									
	6			1			PT	Very soft dark gray peat	458	12.1	0.09	0.06	11			0.12	73
5	8			2				Very soft dark gray peat	589	10.1	0.08	0.17	15			0.17	
	8			3				Very soft dark gray peat	654	8.8	0.3	0.29	1			0.19	33
10	8			4				Very soft dark gray peat	574	10.9	0.08	0.40	13			0.17	
	7			5			OH	Very soft gray organic clay with organic matter	102	45.3	0.1	0.52	11			0.13	40
15	10			6				Very soft gray organic clay with organic matter (field vane - 0.10 KSF)	168	34.1	0.12	0.63	13	107	74	0.17	
	12			7			PT	Very soft dark gray peat	674	10.8	0.36	0.75	11			0.17	44
	13			8			OH	Very soft gray organic clay with organic matter	289	21.8	0.08	0.86	12			0.22	
20	7			9				Very soft gray organic clay (field vane - 0.09 KSF)	136	30.4	0.11	0.98	13	161	127	0.12	
	8			10				Soft gray slightly organic clay with sand traces	77	46.1	0.49	1.09	1			0.09	
25																	
	9			11				Very soft gray organic clay with organic matter and ½" sand layer	228	30	0.14	1.38	13	452	315		
30																	
	18			12				Very soft gray clay with organic matter	106	36.2	0.11	1.67	12				

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-LS4-30

GEOENGINEERS

Project: LA-16 Non-Rock Demo Project

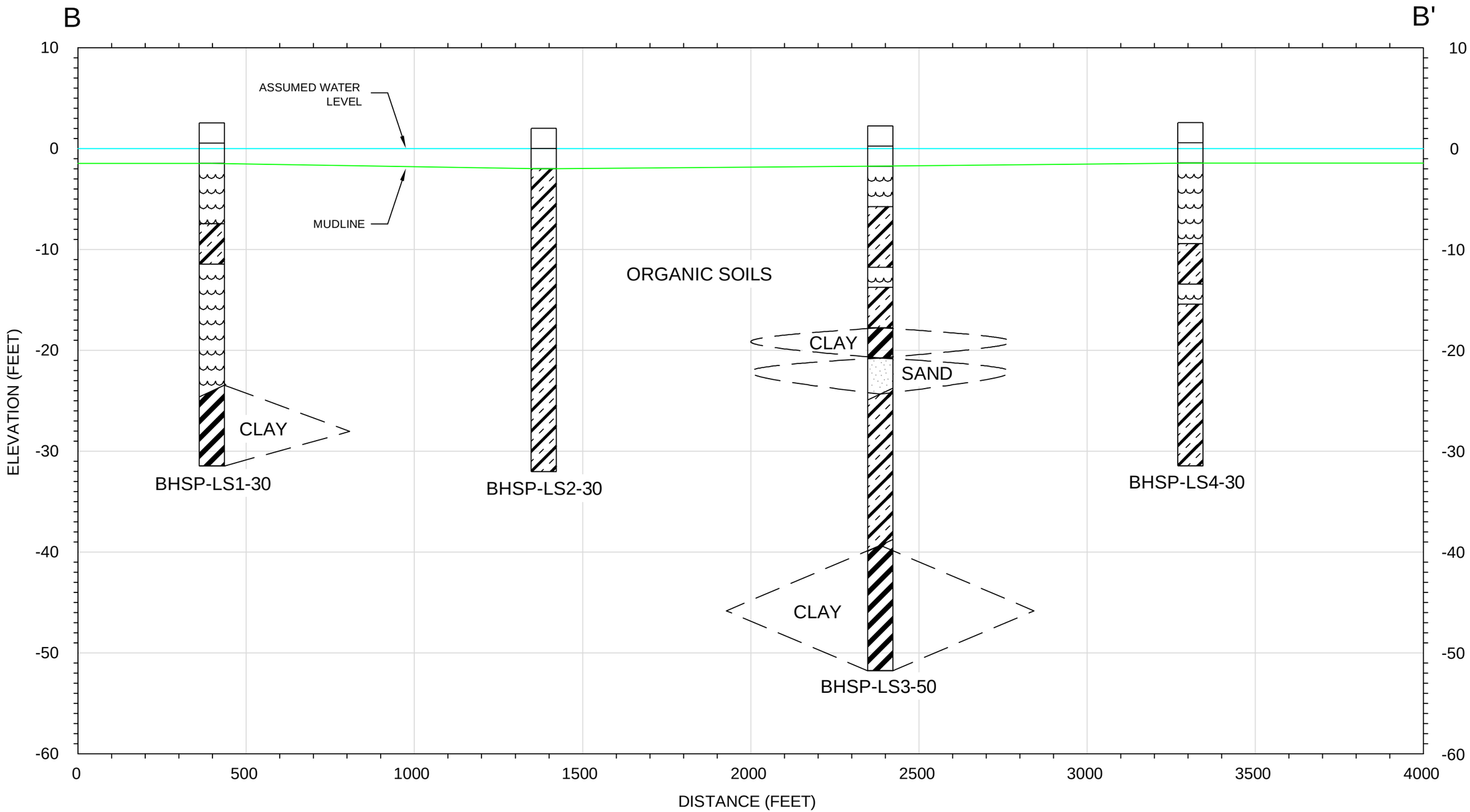
Project Location: Jefferson Parish, Louisiana

Project Number: 10883-011-00

Figure B-7

Sheet 1 of 1

Baton Rouge: Date:6/9/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GE18_GEOTECH_LAB



SOUTHEAST LAKE SALVADOR
SUBSURFACE PROFILE

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Jefferson Parish, Louisiana

GEOENGINEERS

Figure B-8

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

JPV : KMC
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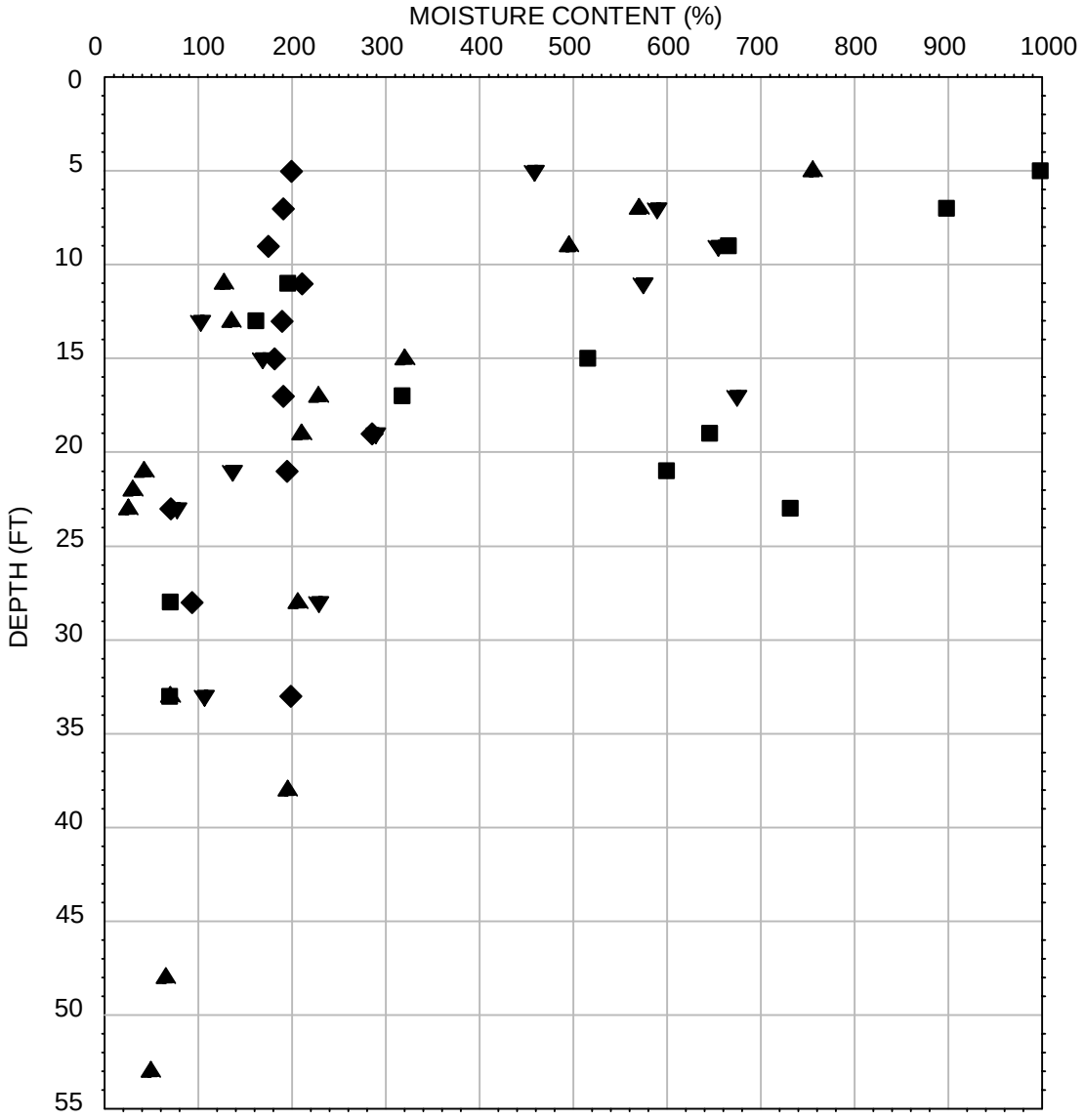


LEGEND

- ■ BHSP-LS1-30
- ◆ BHSP-LS2-30
- ▲ BHSP-LS3-50
- ▼ BHSP-LS4-30

SOUTHEAST LAKE SALVADOR
MOISTURE CONTENT VS DEPTH

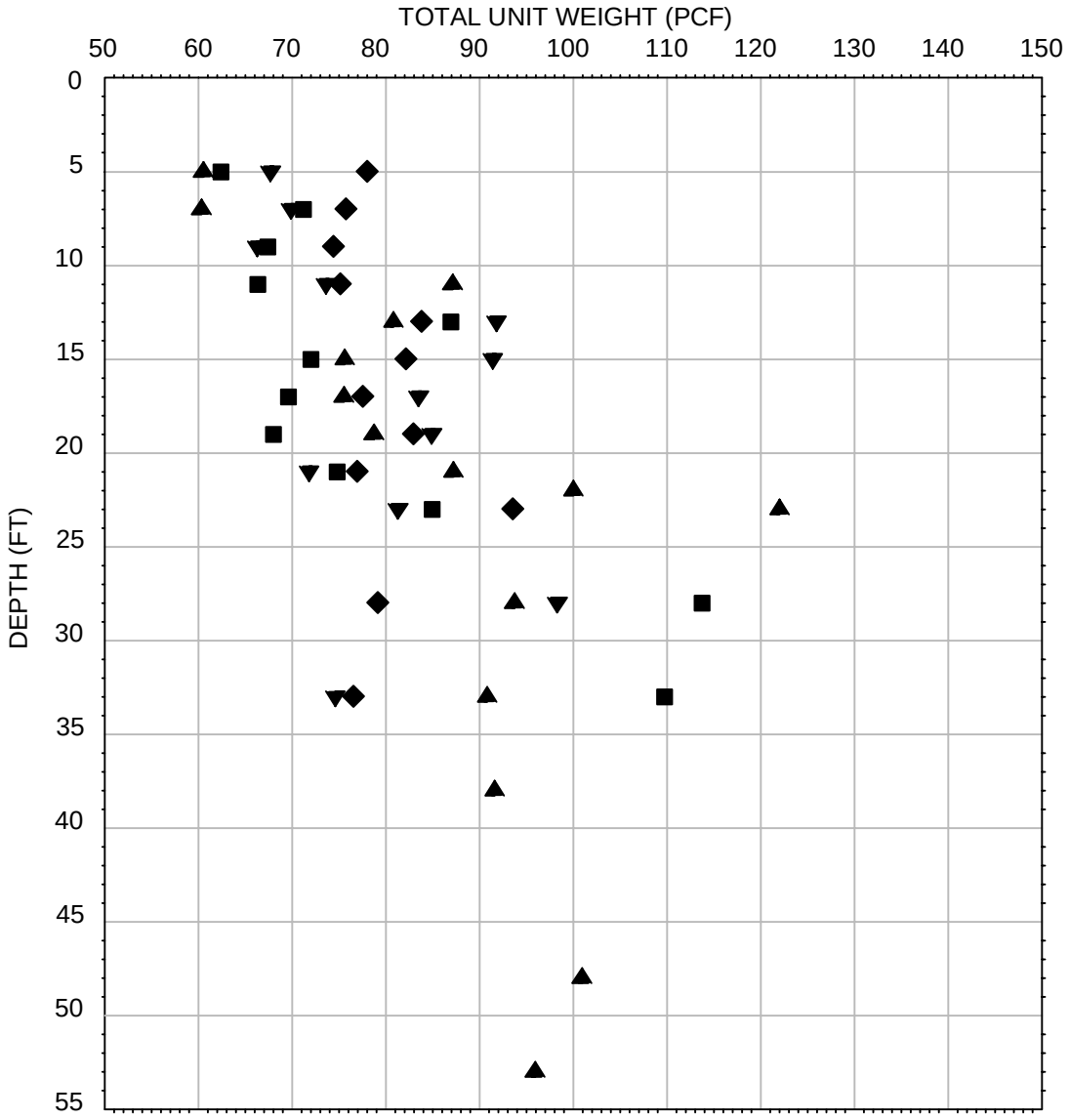
Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Jefferson Parish, Louisiana

GEOENGINEERS

FIGURE B-9

JPV : KMC

P:\10\10883011\00\CAD\GRAPH-MC.dwg\TAB:Chart 1 (2) modified on Jun 07, 2011 - 9:00am



LEGEND

- ■ BHSP-LS1-30
- ◆ BHSP-LS2-30
- ▲ BHSP-LS3-50
- ▼ BHSP-LS4-30

SOUTHEAST LAKE SALVADOR
TOTAL UNIT WEIGHT VS DEPTH

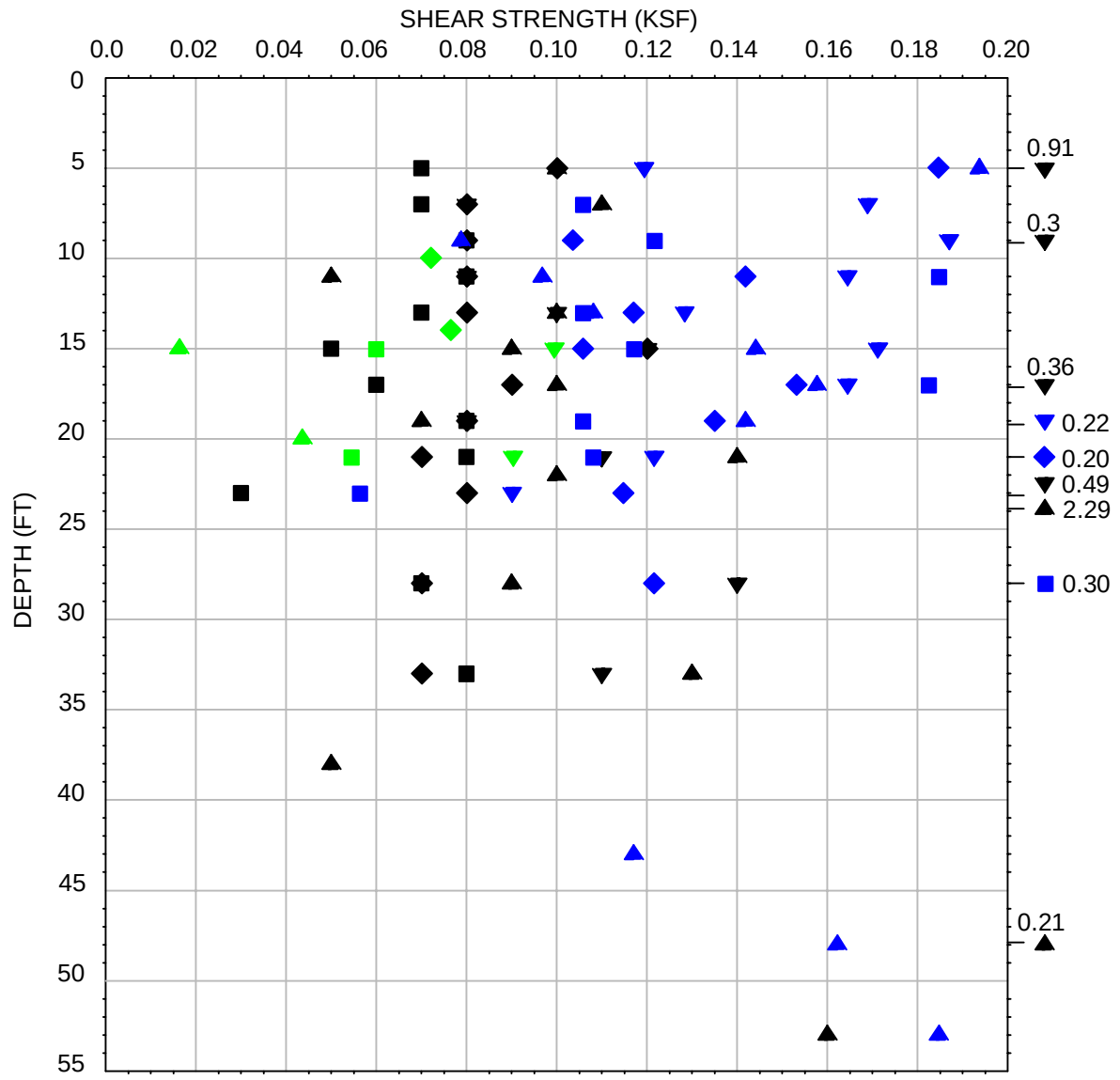
Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Jefferson Parish, Louisiana

GEOENGINEERS

FIGURE B-10

JPV : KMC

P:\10\10883011\00\CAD\GRAPH-MC.dwg\TAB:Chart 2 (2) modified on Jun 07, 2011 - 9:01am



LEGEND

STRENGTH TEST ■

MINIVANE ■

FIELD VANE ■

■ BHSP-LS1-30

◆ BHSP-LS2-30

▲ BHSP-LS3-50

▼ BHSP-LS4-30

SOUTHEAST LAKE SALVADOR
SHEAR STRENGTH VS DEPTH

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Jefferson Parish, Louisiana

GEOENGINEERS

FIGURE B-11

JPV : KMC

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GeoEngineers

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Jefferson Parish, Louisiana

PROJECT NUMBER 10883-011-00

NOTES Southeast Lake Salvador

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
BHSP-LS1-30		Top of deck															
BHSP-LS1-30		Water line															
BHSP-LS1-30																	
BHSP-LS1-30		Mudline															
BHSP-LS1-30	4	Very soft black peat	998	62.4	5.7				0.07	15	0.06	Yield	UU	72			
BHSP-LS1-30	4		998	62.4	5.7				0.07	15	0.06	Yield	UU	72			
BHSP-LS1-30	6	Very soft black peat	898	71.2	7.1				0.07	15	0.17	Yield	UU		0.11		
BHSP-LS1-30	8	Very soft dark gray peat	665	67.4	8.8				0.08	10	0.29	Bulge	UU	25	0.12		
BHSP-LS1-30	10		195	66.3	22.5				0.08	9	0.40	Bulge	UU		0.19		
BHSP-LS1-30	10	Very soft dark gray organic clay	195	66.3	22.5				0.08	9	0.40	Bulge	UU		0.19		
BHSP-LS1-30	12	Very soft dark gray organic clay	161	86.9	33.4				0.07	5	0.52	Slump	UU	55	0.11		
BHSP-LS1-30	14		515	72.0	11.7				0.05	15	0.69	Yield	UU		0.12		
BHSP-LS1-30	14	Very soft dark gray peat (field vane - 0.06 KSF)	515	72.0	11.7				0.05	15	0.69	Yield	UU		0.12		
BHSP-LS1-30	16	Very soft dark gray peat	317	69.6	16.7				0.06	9	0.75	Slump	UU	38	0.18		
BHSP-LS1-30	18	Very soft dark gray peat with organic matter	645	68.0	9.1				0.08	10	0.86	Bulge	UU		0.11		
BHSP-LS1-30	20	Very soft dark gray peat (field vane - 0.06 KSF)	599	74.8	10.7				0.08	10	0.98	Slump	UU	76	0.11		
BHSP-LS1-30	22	Very soft dark gray peat	731	84.9	10.2	527	141	386	0.03	12	1.04	Slump	UU	47	0.06		
BHSP-LS1-30																	
BHSP-LS1-30	27	Very soft gray clay with organic matter traces	70	113.7	67.1				0.07	14	1.38	Slump	UU		0.30		
BHSP-LS1-30	32	Very soft gray clay with organic matter traces	69	109.7	65.1				0.08	11	1.67	Slump	UU	3			
BHSP-LS2-30		Top of deck															
BHSP-LS2-30		Water line															
BHSP-LS2-30																	

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Jefferson Parish, Louisiana

PROJECT NUMBER 10883-011-00

NOTES Southeast Lake Salvador

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
BHSP-LS2-30		Mudline															
BHSP-LS2-30	4		199	78.0	26.1				0.10	8	0.06	Bulge	UU	40	0.19		
BHSP-LS2-30	4	Very soft gray organic clay with organic matter	199	78.0	26.1				0.10	8	0.06	Bulge	UU	40	0.19		
BHSP-LS2-30	6	Very soft gray organic clay	190	75.7	26.1	167	51	116	0.08	10	0.17	MS	UU				
BHSP-LS2-30	8	Very soft gray organic clay (field vane - 0.07 KSF)	174	74.4	27.2				0.08	10	0.29	Bulge	UU	10	0.10		
BHSP-LS2-30	10	Very soft gray organic clay	210	745.1	24.3				0.08	12	0.40	MS	UU		0.14		
BHSP-LS2-30	12	Very soft gray organic clay (field vane - 0.08 KSF)	189	83.8	29.0				0.08	11	0.52	Slump	UU		0.12		
BHSP-LS2-30	14	Very soft gray organic clay	181	82.1	29.2	192	50	142	0.12	11	0.66	Slump	UU		0.11		
BHSP-LS2-30	16	Very soft gray organic clay	190	77.5	26.7				0.09	11	0.75	Slump	UU		0.15		
BHSP-LS2-30	18	Very soft gray organic clay	285	82.9	21.5				0.08	10	0.86	Slump	UU	16	0.14		
BHSP-LS2-30	20	Very soft gray organic clay	194	76.9	26.2				0.07	12	0.98	Slump	UU		0.20		
BHSP-LS2-30	22	Very soft gray slightly organic clay	70	93.5	55.0				0.08	15	1.09	Yield	UU	18	0.12		
BHSP-LS2-30	27	Very soft gray organic clay	93	79.1	40.9				0.07	10	1.38	MS	UU		0.12		
BHSP-LS2-30	32	Very soft gray organic clay	198	76.5	25.7	194	53	141	0.07	8	1.67	MS	UU				
BHSP-LS3-50		Top of deck															
BHSP-LS3-50		Water line															

GeoEngineers

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Jefferson Parish, Louisiana

PROJECT NUMBER 10883-011-00

NOTES Southeast Lake Salvador

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
BHSP-LS3-50																	
BHSP-LS3-50		Mudline															
BHSP-LS3-50	4	Very soft black peat	755	60.5	7.1				0.10	14	0.06	MS	UU	32	0.19		
BHSP-LS3-50	4		755	60.5	7.1				0.10	14	0.06	MS	UU	32	0.19		
BHSP-LS3-50	6	Very soft black peat	570	60.3	9.0				0.11	12	0.17	Bulge	UU				
BHSP-LS3-50	8	Very soft gray organic clay	495											36	0.08		
BHSP-LS3-50	8		495											36	0.08		
BHSP-LS3-50	10	Very soft gray organic clay with 1½" peat layer	127	87.1	38.3				0.05	14	0.40	Bulge	UU		0.10		
BHSP-LS3-50	12	Very soft gray organic clay with 1½" peat layer	135	80.8	34.4				0.10	15	0.52	Yield	UU	17	0.11		
BHSP-LS3-50	14		320	75.6	18.0				0.09	13	0.63	Slump	UU		0.14		
BHSP-LS3-50	14	Very soft dark gray peat (field vane - 0.02 KSF)	320	75.6	18.0				0.09	13	0.63	Slump	UU		0.14		
BHSP-LS3-50	16	Very soft gray organic clay with 2" peat layer	228	75.5	23.0				0.10	12	0.75	Slump	UU	11	0.16		
BHSP-LS3-50	16		228	75.5	23.0				0.10	12	0.75	Slump	UU	11	0.16		
BHSP-LS3-50	18	Very soft black organic clay	210	78.7	25.4				0.07	15	0.86	Yield	UU		0.14		
BHSP-LS3-50	20	Very soft gray clay with 2" sand layer and organic matter traces (field vane - 0.04 KSF)	42	87.2	61.4				0.14	8	0.98	Bulge	UU	10			
BHSP-LS3-50	20		42	87.2	61.4				0.14	8	0.98	Bulge	UU	10			
BHSP-LS3-50	22	Very soft gray clay	30	0.0	76.7				0.10	13	1.04	Slump	UU				
BHSP-LS3-50	23	Firm gray sand with 3" clay layer	25	122.0	97.6				2.29	12	1.09	Slump	UU				
BHSP-LS3-50	23		25	122.0	97.6				2.29	12	1.09	Slump	UU				
BHSP-LS3-50																	

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Jefferson Parish, Louisiana

PROJECT NUMBER 10883-011-00

NOTES Southeast Lake Salvador

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
BHSP-LS3-50	27	Very soft dark gray organic clay with 7" sand layer	206	93.7	30.6				0.09	14	1.38	Slump	UU	11			
BHSP-LS3-50	32	Very soft gray slightly organic clay with 6" sand layer	70	90.8	53.5				0.13	14	1.67	Bulge	UU				
BHSP-LS3-50	37	Very soft gray organic clay with sand lenses and 6" sand layer	195	91.6	31.1				0.05	12	1.96	Slump	UU				
BHSP-LS3-50																	
BHSP-LS3-50	42	Very soft gray clay with sand pockets				73	20	53							0.12		
BHSP-LS3-50	47	Very soft gray clay	65	100.9	61.3	76	33	43	0.21	12	2.53	Bulge	UU		0.16		
BHSP-LS3-50	52	Very soft gray clay	49	95.9	64.5	69	19	50	0.16	14	2.82	Bulge	UU		0.19		
BHSP-LS4-30		Top of deck															
BHSP-LS4-30		Water line															
BHSP-LS4-30																	
BHSP-LS4-30		Mudline															
BHSP-LS4-30	4	Very soft dark gray peat	458	67.7	12.1				0.09	11	0.06	Bulge	UU	73	0.12		
BHSP-LS4-30	4		458	67.7	12.1				0.09	11	0.06	Bulge	UU	73	0.12		
BHSP-LS4-30	6	Very soft dark gray peat	589	69.9	10.1				0.08	15	0.17	Yield	UU		0.17		
BHSP-LS4-30	8	Very soft dark gray peat	654	66.3	8.8				0.30	1	0.29	Slump	UU	33	0.19		
BHSP-LS4-30	10	Very soft dark gray peat	574	73.6	10.9				0.08	13	0.40	MS	UU		0.17		
BHSP-LS4-30	12	Very soft gray organic clay with organic matter	102	91.8	45.3				0.10	11	0.52	Slump	UU	40	0.13		
BHSP-LS4-30	12		102	91.8	45.3				0.10	11	0.52	Slump	UU	40	0.13		
BHSP-LS4-30	14	Very soft gray organic clay with organic matter (field vane - 0.10 KSF)	168	91.4	34.1	107	33	74	0.12	13	0.63	MS	UU		0.17		
BHSP-LS4-30	16		674	83.5	10.8				0.36	11	0.75	Slump	UU	44	0.17		

Table B-1
Page 5 of 5

GEOENGINEERS

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Jefferson Parish, Louisiana

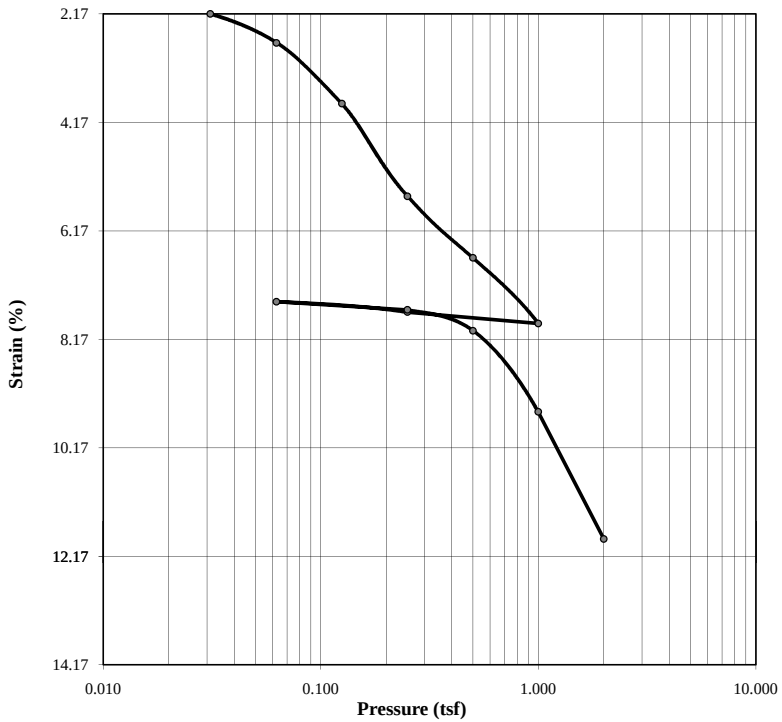
PROJECT NUMBER 10883-011-00

NOTES Southeast Lake Salvador

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
BHSP-LS4-30	16	Very soft dark gray peat	674	83.5	10.8				0.36	11	0.75	Slump	UU	44	0.17		
BHSP-LS4-30	18		289	84.9	21.8				0.08	12	0.86	Slump	UU		0.22		
BHSP-LS4-30	18	Very soft gray organic clay with organic matter	289	84.9	21.8				0.08	12	0.86	Slump	UU		0.22		
BHSP-LS4-30	20	Very soft gray organic clay (field vane - 0.09 KSF)	136	71.8	30.4	161	34	127	0.11	13	0.98	Slump	UU		0.12		
BHSP-LS4-30	22	Soft gray slightly organic clay with sand traces	77	81.3	46.1				0.49	1	1.09	Slump	UU		0.09		
BHSP-LS4-30	27	Very soft gray organic clay with organic matter and ½" sand layer	228	98.3	30.0	452	137	315	0.14	13	1.38	Slump	UU				
BHSP-LS4-30	32	Very soft gray clay with organic matter	106	74.6	36.2				0.11	12	1.67	Slump	UU				

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	527	**Test Date:**	16 May 2011
Moisture (%):	729.14	99.52	**Plastic Limits:**	141		
Dry Density (pcf):	8.56	17.33	**Plasticity Index (%):**	386		
Saturation (%):	107.04	31.88				
Void Ratio:	14.1563	12.3598	**Specific Gravity:**	2.083	Assumed	

Sample Description: Peat (PT)

Project Number: 10883-011-00 **Depth:** 22 - 24 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-LS1-3

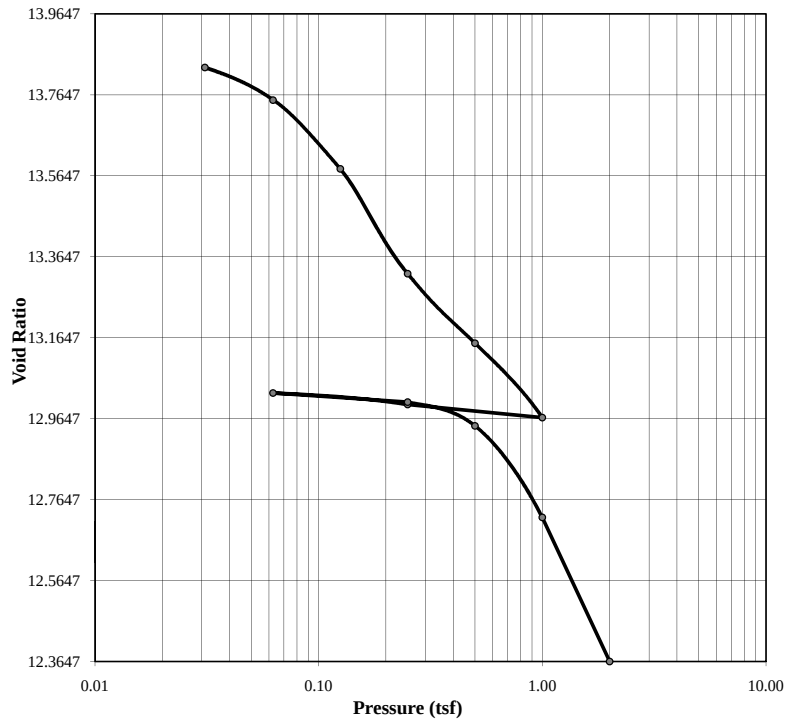
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	527	**Test Date:**	16 May 2011
Moisture (%):	729.14	99.52	**Plastic Limits:**	141		
Dry Density (pcf):	8.56	17.33	**Plasticity Index (%):**	386		
Saturation (%):	107.04	31.88				
Void Ratio:	14.1563	12.3598	**Specific Gravity:**	2.083	Assumed	

Soil Description: Peat (PT)

Project Number: 10883-011-00 **Depth:** 22 - 24 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-LS1-3

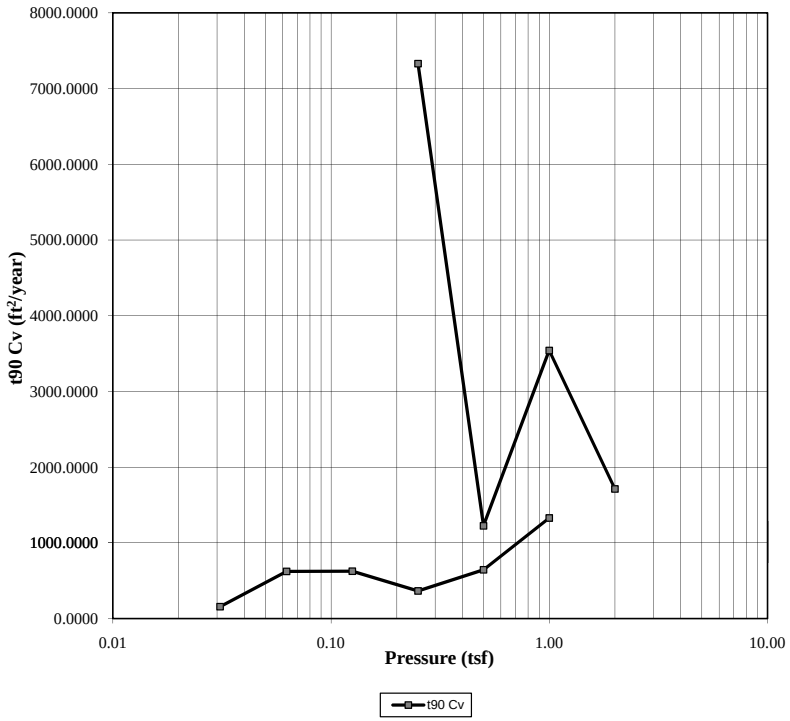
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	527	**Test Date:**	16 May 2011
Moisture (%):	729.14	99.52	**Plastic Limits:**	141		
Dry Density (pcf):	8.56	17.33	**Plasticity Index (%):**	386		
Saturation (%):	107.04	31.88				
Void Ratio:	14.1563	12.3598	**Specific Gravity:**	2.083	Assumed	

Soil Description: Peat (PT)

Project Number: 10883-011-00 **Depth:** 22 - 24 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-LS1-3

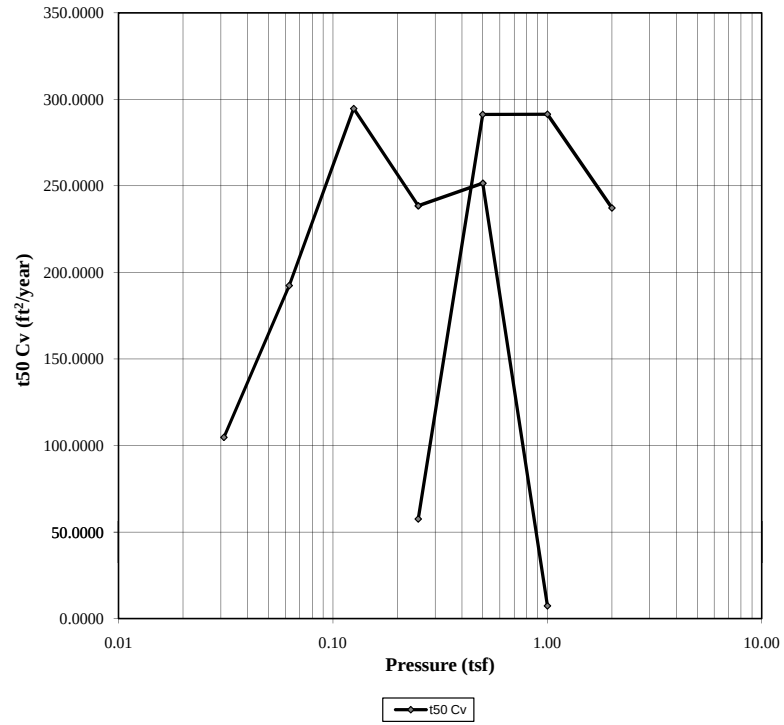
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	527	**Test Date:**	16 May 2011
Moisture (%):	729.14	99.52	**Plastic Limits:**	141		
Dry Density (pcf):	8.56	17.33	**Plasticity Index (%):**	386		
Saturation (%):	107.04	31.88				
Void Ratio:	14.1563	12.3598	**Specific Gravity:**	2.083	Assumed	

Soil Description: Peat (PT)

Project Number: 10883-011-00 **Depth:** 22 - 24 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-LS1-3

Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test Results
Summary

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00

Sample Number:
Boring Number: BHSP-LS1-30
Depth: 22 - 24 feet
Sample Type: Undisturbed

Sample Description:
Peat (PT)
Remarks:

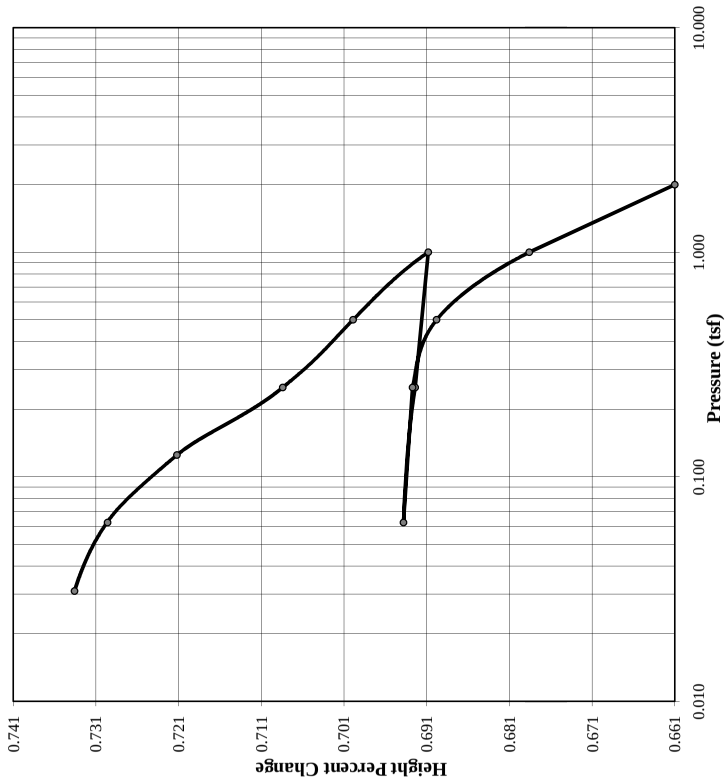
Test Number:
Test Date: 16 May 2011

Index	Load Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Void (in)	Vertical Strain (%)	Void Ratio	t90 Fitting Time (min)	t50 Fitting Time (min)	t90 Cv (ft2/year)	t50 Cv (ft2/year)
0	0.000	0.0000	0.7500	0.7005	0.00	14.1619	0.000	0.000	0.000	0.000
1	0.031	0.0163	0.7337	0.6842	2.17	13.8323	2.671	0.924	155.936	104.718
2	0.063	0.0203	0.7297	0.6802	2.71	13.7515	0.660	0.497	623.985	192.432
3	0.125	0.0287	0.7213	0.6718	3.83	13.5817	0.644	0.317	625.612	294.642
4	0.250	0.0415	0.7085	0.6590	5.53	13.3229	1.063	0.378	365.290	238.469
5	0.500	0.0500	0.7000	0.6505	6.67	13.1511	0.588	0.350	644.351	251.513
6	1.000	0.0591	0.6909	0.6414	7.88	12.9671	0.278	11.602	1327.754	7.396
7	0.250	0.0575	0.6925	0.6430	7.67	12.9995	0.000	0.000	0.000	0.000
8	0.063	0.0561	0.6939	0.6444	7.48	13.0278	0.000	0.000	0.000	0.000
9	0.250	0.0572	0.6928	0.6433	7.63	13.0055	0.051	1.498	7328.154	57.592
10	0.500	0.0601	0.6899	0.6404	8.01	12.9469	0.301	0.294	1224.954	291.241
11	1.000	0.0713	0.6787	0.6292	9.51	12.7205	0.101	0.284	3540.636	291.383
12	2.000	0.0889	0.6611	0.6116	11.85	12.3647	0.198	0.331	1710.720	237.210

Predicted value indicated with *

GeoEngineers

Consolidation Test
Test Results



	Before	After				
Moisture (%):	729.14	99.52	**Liquid Limits:**	527	**Test Date:**	16 May 2011
Dry Density (pcf):	8.56	17.33	**Plastic Limits:**	141		
Saturation (%):	107.04	31.88	**Plasticity Index (%):**	386		
Void Ratio:	14.1563	12.3598	**Specific Gravity:**	2.083	Assumed	

Soil Description: Peat (PT)
Project Number: 10883-011-00
Depth: 22 - 24 feet
Remarks:
Sample Number:
Boring Number: BHSP-LS1-3
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GEOENGINEERS

Consolidation Test
Consolidation Specimen Information

Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 16 May 2011

Sample Number: **Sample Description:**
Boring Number: BHSP-LS1-30 Peat (PT)
Depth: 22 - 24 feet **Remarks:**
Sample Type: Undisturbed

Test Number:

Liquid Limit:	527.0000	**Initial Void Ratio:**	14.1563	**Initial Height (in):**	0.7500
Plastic Limit:	141.0000	**Plasticity Index (%):**	386.0000	**Initial Diameter (in):**	2.5000
Specific Gravity:	2.0830 Assumed	**Weight of Ring (g):**	220.0600		

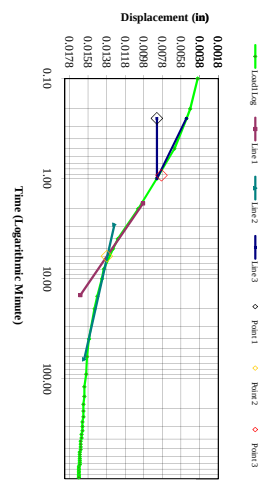
Parameters	Initial Specimen	Final Specimen
Moist Weight + Container (g)	97.76	56.69
Dry Soil + Container (g)	31.70	42.06
Weight of Container (g)	22.64	27.36
Moisture Content (%)	729.14	99.52
Void Ratio	14.1563	12.3598
Saturation (%)	107.04	31.88
Dry Density (pcf)	8.56	17.33

Consolidation Test Results
(Sequence 1) Load 0.031 tsf

Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 16 May 2011
Test Number:

Sample Number: **Soil Description:**
Boring Number: BHSP-LS1-30 Peat (PT)
Depth: 22 - 24 feet **Remarks:**
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0005	0.0000	0.0000	14.1563
1	00:00:01	0.0022	0.0017	0.2267	14.1219
2	00:00:02	0.0031	0.0026	0.3467	14.1037
3	00:00:03	0.0033	0.0028	0.3733	14.0997
4	00:00:04	0.0036	0.0031	0.4133	14.0936
5	00:00:05	0.0039	0.0034	0.4533	14.0876
6	00:00:06	0.0040	0.0035	0.4667	14.0856
7	00:00:12	0.0048	0.0043	0.5733	14.0694
8	00:00:15	0.0052	0.0047	0.6267	14.0613
9	00:00:30	0.0065	0.0060	0.8000	14.0350
10	00:01:00	0.0084	0.0079	1.0533	13.9966
11	00:02:00	0.0104	0.0099	1.3200	13.9662
12	00:04:00	0.0126	0.0121	1.6133	13.9118
13	00:05:00	0.0131	0.0126	1.6800	13.9017
14	00:08:00	0.0141	0.0136	1.8133	13.8814
15	00:10:00	0.0143	0.0138	1.8400	13.8774
16	00:15:01	0.0148	0.0143	1.9067	13.8673
17	00:20:01	0.0151	0.0146	1.9467	13.8612
18	00:40:03	0.0157	0.0152	2.0267	13.8491
19	01:00:04	0.0159	0.0154	2.0533	13.8451
20	01:30:06	0.0160	0.0155	2.0667	13.8431
21	02:00:09	0.0162	0.0157	2.0933	13.8390
22	02:30:11	0.0162	0.0157	2.0933	13.8390
23	03:00:13	0.0163	0.0158	2.1067	13.8370
24	03:30:16	0.0163	0.0158	2.1067	13.8370
25	04:00:18	0.0163	0.0158	2.1067	13.8370
26	04:30:20	0.0164	0.0159	2.1200	13.8350
27	05:00:22	0.0164	0.0159	2.1200	13.8350
28	05:30:25	0.0164	0.0159	2.1200	13.8350
29	06:00:27	0.0165	0.0160	2.1333	13.8329
30	06:30:29	0.0165	0.0160	2.1333	13.8329
31	07:00:31	0.0166	0.0161	2.1467	13.8309
32	07:30:34	0.0166	0.0161	2.1467	13.8309
33	08:00:36	0.0166	0.0161	2.1467	13.8309
34	08:30:38	0.0166	0.0161	2.1467	13.8309
35	09:00:41	0.0167	0.0162	2.1600	13.8289
36	09:30:43	0.0167	0.0162	2.1600	13.8289



37	10:00:45	0.0167	0.0162	2.1600	13.8289
38	10:30:47	0.0167	0.0162	2.1600	13.8289
39	11:00:50	0.0167	0.0162	2.1600	13.8289
40	11:30:52	0.0167	0.0162	2.1600	13.8289
41	12:00:54	0.0167	0.0162	2.1600	13.8289
42	12:30:56	0.0168	0.0163	2.1733	13.8269
43	13:00:59	0.0168	0.0163	2.1733	13.8269
44	13:31:01	0.0168	0.0163	2.1733	13.8269
45	14:01:03	0.0168	0.0163	2.1733	13.8269
46	14:31:05	0.0168	0.0163	2.1733	13.8269
47	15:01:08	0.0168	0.0163	2.1733	13.8269
48	15:31:10	0.0168	0.0163	2.1733	13.8269
49	16:01:12	0.0168	0.0163	2.1733	13.8269
50	16:05:28	0.0168	0.0163	2.1733	13.8269

Consolidation Test Results
(Sequence 2) Load 0.063 tsf

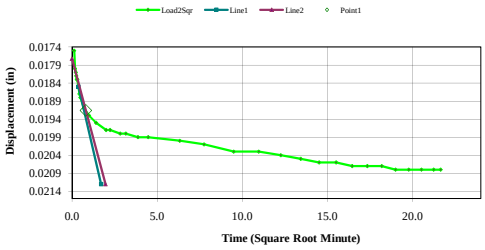
Consolidation Test Results
(Sequence 2) Load 0.063 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 16 May 2011
Test Number:

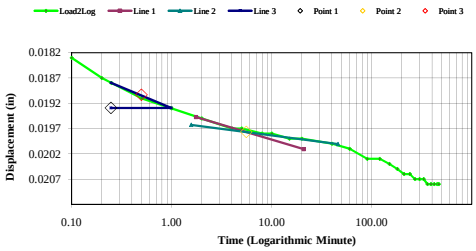
Sample Number:
Soil Description:
Boring Number: BHSP-LS1-30
Peat (PT)
Depth: 22 - 24 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0168	0.0163	2.1733	13.8269
1	00:00:01	0.0175	0.0170	2.2667	13.8127
2	00:00:02	0.0180	0.0175	2.3333	13.8026
3	00:00:03	0.0181	0.0176	2.3467	13.8006
4	00:00:04	0.0182	0.0177	2.3600	13.7986
5	00:00:05	0.0183	0.0178	2.3733	13.7966
6	00:00:06	0.0183	0.0178	2.3733	13.7966
7	00:00:12	0.0187	0.0182	2.4267	13.7885
8	00:00:15	0.0188	0.0183	2.4400	13.7865
9	00:00:30	0.0191	0.0186	2.4800	13.7804
10	00:01:00	0.0193	0.0188	2.5067	13.7764
11	00:02:00	0.0195	0.0190	2.5333	13.7723
12	00:04:01	0.0197	0.0192	2.5600	13.7683
13	00:05:01	0.0197	0.0192	2.5600	13.7683
14	00:08:01	0.0198	0.0193	2.5733	13.7663
15	00:10:01	0.0198	0.0193	2.5733	13.7663
16	00:15:01	0.0199	0.0194	2.5867	13.7642
17	00:20:02	0.0199	0.0194	2.5867	13.7642
18	00:40:03	0.0200	0.0195	2.6000	13.7622
19	01:00:05	0.0201	0.0196	2.6133	13.7602
20	01:30:07	0.0203	0.0198	2.6400	13.7562
21	02:00:10	0.0203	0.0198	2.6400	13.7562
22	02:30:12	0.0204	0.0199	2.6533	13.7541
23	03:00:14	0.0205	0.0200	2.6667	13.7521
24	03:30:16	0.0206	0.0201	2.6800	13.7501
25	04:00:19	0.0206	0.0201	2.6800	13.7501
26	04:30:21	0.0207	0.0202	2.6933	13.7481
27	05:00:23	0.0207	0.0202	2.6933	13.7481
28	05:30:25	0.0207	0.0202	2.6933	13.7481
29	06:00:28	0.0208	0.0203	2.7067	13.7461
30	06:30:30	0.0208	0.0203	2.7067	13.7461
31	07:00:32	0.0208	0.0203	2.7067	13.7461
32	07:30:34	0.0208	0.0203	2.7067	13.7461
33	07:47:58	0.0208	0.0203	2.7067	13.7461

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

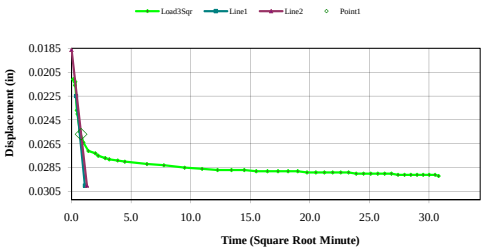
Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-LS1-30
Depth: 22 - 24 feet
Sample Type: Undisturbed

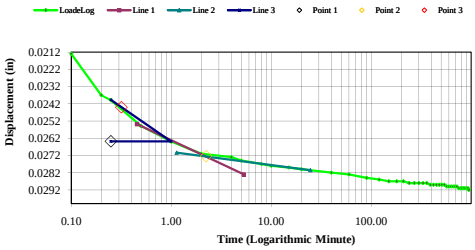
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0208	0.0203	2.7067	13.7461
1	00:00:01	0.0211	0.0206	2.7467	13.7400
2	00:00:02	0.0211	0.0206	2.7467	13.7400
3	00:00:03	0.0211	0.0206	2.7467	13.7400
4	00:00:04	0.0213	0.0208	2.7733	13.7359
5	00:00:05	0.0216	0.0211	2.8133	13.7299
6	00:00:06	0.0213	0.0208	2.7733	13.7359
7	00:00:12	0.0237	0.0232	3.0933	13.6874
8	00:00:15	0.0240	0.0235	3.1333	13.6814
9	00:00:30	0.0255	0.0250	3.3333	13.6511
10	00:01:00	0.0264	0.0259	3.4533	13.6329
11	00:02:00	0.0271	0.0266	3.5467	13.6187
12	00:04:00	0.0273	0.0268	3.5733	13.6147
13	00:05:01	0.0275	0.0270	3.6000	13.6107
14	00:08:01	0.0277	0.0272	3.6267	13.6066
15	00:10:01	0.0278	0.0273	3.6400	13.6046
16	00:15:01	0.0279	0.0274	3.6533	13.6026
17	00:20:02	0.0280	0.0275	3.6667	13.6006
18	00:40:03	0.0282	0.0277	3.6933	13.5965
19	01:00:05	0.0283	0.0278	3.7067	13.5945
20	01:30:07	0.0285	0.0280	3.7333	13.5904
21	02:00:09	0.0286	0.0281	3.7467	13.5884
22	02:30:12	0.0287	0.0282	3.7600	13.5864
23	03:00:14	0.0287	0.0282	3.7600	13.5864
24	03:30:16	0.0287	0.0282	3.7600	13.5864
25	04:00:18	0.0288	0.0283	3.7733	13.5844
26	04:30:21	0.0288	0.0283	3.7733	13.5844
27	05:00:23	0.0288	0.0283	3.7733	13.5844
28	05:30:25	0.0288	0.0283	3.7733	13.5844
29	06:00:27	0.0288	0.0283	3.7733	13.5844
30	06:30:30	0.0289	0.0284	3.7867	13.5824
31	07:00:32	0.0289	0.0284	3.7867	13.5824
32	07:30:34	0.0289	0.0284	3.7867	13.5824
33	08:00:36	0.0289	0.0284	3.7867	13.5824
34	08:30:39	0.0289	0.0284	3.7867	13.5824
35	09:00:41	0.0289	0.0284	3.7867	13.5824
36	09:30:43	0.0290	0.0285	3.8000	13.5803

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.0290	0.0285	3.8000	13.5803
38	10:30:48	0.0290	0.0285	3.8000	13.5803
39	11:00:50	0.0290	0.0285	3.8000	13.5803
40	11:30:52	0.0290	0.0285	3.8000	13.5803
41	12:00:55	0.0290	0.0285	3.8000	13.5803
42	12:30:57	0.0291	0.0286	3.8133	13.5783
43	13:00:59	0.0291	0.0286	3.8133	13.5783
44	13:31:02	0.0291	0.0286	3.8133	13.5783
45	14:01:04	0.0291	0.0286	3.8133	13.5783
46	14:31:06	0.0291	0.0286	3.8133	13.5783
47	15:01:09	0.0291	0.0286	3.8133	13.5783
48	15:31:11	0.0291	0.0286	3.8133	13.5783
49	15:49:04	0.0292	0.0287	3.8267	13.5763

Consolidation Test Results
(Sequence 4) Load 0.250 tsf

Consolidation Test Results
(Sequence 4) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

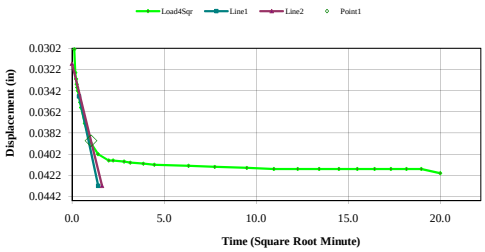
Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-LS1-30
Depth: 22 - 24 feet
Sample Type: Undisturbed

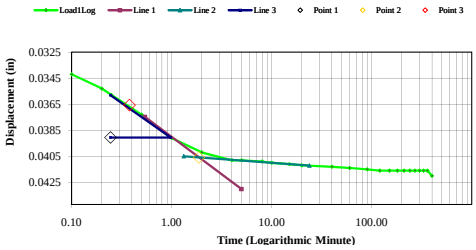
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0292	0.0287	3.8267	13.5763
1	00:00:01	0.0303	0.0298	3.9733	13.5541
2	00:00:02	0.0325	0.0320	4.2667	13.5096
3	00:00:03	0.0331	0.0326	4.3467	13.4975
4	00:00:04	0.0336	0.0331	4.4133	13.4874
5	00:00:05	0.0339	0.0334	4.4533	13.4813
6	00:00:06	0.0342	0.0337	4.4933	13.4753
7	00:00:12	0.0353	0.0348	4.6400	13.4530
8	00:00:15	0.0358	0.0353	4.7067	13.4429
9	00:00:30	0.0373	0.0368	4.9067	13.4126
10	00:01:00	0.0391	0.0386	5.1467	13.3762
11	00:02:00	0.0402	0.0397	5.2933	13.3540
12	00:04:00	0.0408	0.0403	5.3733	13.3419
13	00:05:00	0.0408	0.0403	5.3733	13.3419
14	00:08:01	0.0409	0.0404	5.3867	13.3399
15	00:10:01	0.0410	0.0405	5.4000	13.3378
16	00:15:01	0.0411	0.0406	5.4133	13.3358
17	00:20:01	0.0412	0.0407	5.4267	13.3338
18	00:40:03	0.0413	0.0408	5.4400	13.3318
19	01:00:04	0.0414	0.0409	5.4533	13.3298
20	01:30:07	0.0415	0.0410	5.4667	13.3277
21	02:00:09	0.0416	0.0411	5.4800	13.3257
22	02:30:09	0.0416	0.0411	5.4800	13.3257
23	03:00:04	0.0416	0.0411	5.4800	13.3257
24	03:30:00	0.0416	0.0411	5.4800	13.3257
25	03:59:55	0.0416	0.0411	5.4800	13.3257
26	04:29:51	0.0416	0.0411	5.4800	13.3257
27	04:59:46	0.0416	0.0411	5.4800	13.3257
28	05:29:42	0.0416	0.0411	5.4800	13.3257
29	05:59:37	0.0416	0.0411	5.4800	13.3257
30	06:39:40	0.0420	0.0415	5.5333	13.3176

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 5) Load 0.500 tsf

Consolidation Test Results
(Sequence 5) Load 0.500 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

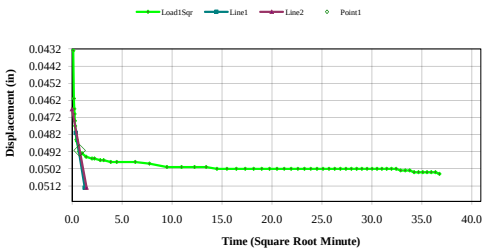
Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-LS1-30
Depth: 22 - 24 feet
Sample Type: Undisturbed

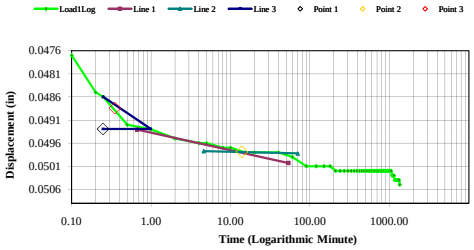
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0420	0.0415	5.5333	13.3176
1	00:00:01	0.0433	0.0428	5.7067	13.2914
2	00:00:02	0.0461	0.0456	6.0800	13.2348
3	00:00:03	0.0467	0.0462	6.1600	13.2227
4	00:00:04	0.0470	0.0465	6.2000	13.2166
5	00:00:05	0.0474	0.0469	6.2533	13.2085
6	00:00:06	0.0477	0.0472	6.2933	13.2024
7	00:00:12	0.0485	0.0480	6.4000	13.1863
8	00:00:15	0.0486	0.0481	6.4133	13.1843
9	00:00:30	0.0492	0.0487	6.4933	13.1721
10	00:01:00	0.0493	0.0488	6.5067	13.1701
11	00:02:00	0.0495	0.0490	6.5333	13.1661
12	00:04:01	0.0496	0.0491	6.5467	13.1641
13	00:05:01	0.0496	0.0491	6.5467	13.1641
14	00:08:01	0.0497	0.0492	6.5600	13.1620
15	00:10:01	0.0497	0.0492	6.5600	13.1620
16	00:15:01	0.0498	0.0493	6.5733	13.1600
17	00:20:02	0.0498	0.0493	6.5733	13.1600
18	00:40:03	0.0498	0.0493	6.5733	13.1600
19	01:00:05	0.0499	0.0494	6.5867	13.1580
20	01:30:07	0.0501	0.0496	6.6133	13.1539
21	02:00:09	0.0501	0.0496	6.6133	13.1539
22	02:30:12	0.0501	0.0496	6.6133	13.1539
23	03:00:14	0.0501	0.0496	6.6133	13.1539
24	03:30:16	0.0502	0.0497	6.6267	13.1519
25	04:00:19	0.0502	0.0497	6.6267	13.1519
26	04:30:21	0.0502	0.0497	6.6267	13.1519
27	05:00:23	0.0502	0.0497	6.6267	13.1519
28	05:30:25	0.0502	0.0497	6.6267	13.1519
29	06:00:28	0.0502	0.0497	6.6267	13.1519
30	06:30:30	0.0502	0.0497	6.6267	13.1519
31	07:00:32	0.0502	0.0497	6.6267	13.1519
32	07:30:35	0.0502	0.0497	6.6267	13.1519
33	08:00:37	0.0502	0.0497	6.6267	13.1519
34	08:30:39	0.0502	0.0497	6.6267	13.1519
35	09:00:41	0.0502	0.0497	6.6267	13.1519
36	09:30:44	0.0502	0.0497	6.6267	13.1519

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.0502	0.0497	6.6267	13.1519
38	10:30:48	0.0502	0.0497	6.6267	13.1519
39	11:00:51	0.0502	0.0497	6.6267	13.1519
40	11:30:53	0.0502	0.0497	6.6267	13.1519
41	12:00:55	0.0502	0.0497	6.6267	13.1519
42	12:30:57	0.0502	0.0497	6.6267	13.1519
43	13:01:00	0.0502	0.0497	6.6267	13.1519
44	13:31:02	0.0502	0.0497	6.6267	13.1519
45	14:01:04	0.0502	0.0497	6.6267	13.1519
46	14:31:06	0.0502	0.0497	6.6267	13.1519
47	15:01:09	0.0502	0.0497	6.6267	13.1519
48	15:31:11	0.0502	0.0497	6.6267	13.1519
49	16:01:13	0.0502	0.0497	6.6267	13.1519
50	16:31:16	0.0502	0.0497	6.6267	13.1519
51	17:01:18	0.0502	0.0497	6.6267	13.1519
52	17:31:20	0.0502	0.0497	6.6267	13.1519
53	18:01:23	0.0503	0.0498	6.6400	13.1499
54	18:31:25	0.0503	0.0498	6.6400	13.1499
55	19:01:27	0.0503	0.0498	6.6400	13.1499
56	19:31:29	0.0504	0.0499	6.6533	13.1479
57	20:01:32	0.0504	0.0499	6.6533	13.1479
58	20:31:34	0.0504	0.0499	6.6533	13.1479
59	21:01:36	0.0504	0.0499	6.6533	13.1479
60	21:31:39	0.0504	0.0499	6.6533	13.1479
61	22:01:41	0.0504	0.0499	6.6533	13.1479
62	22:31:18	0.0505	0.0500	6.6667	13.1459

Consolidation Test Results
(Sequence 6) Load 1.000 tsf

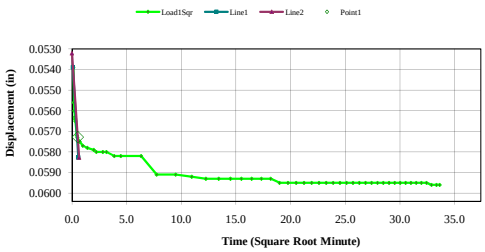
Consolidation Test Results
(Sequence 6) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 16 May 2011
Test Number:

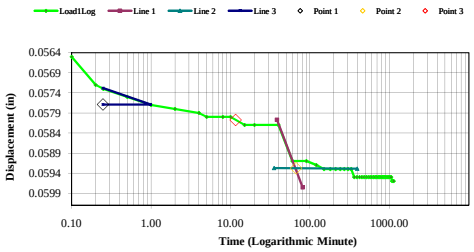
Sample Number:
Soil Description:
Boring Number: BHSP-LS1-30
Peat (PT)
Depth: 22 - 24 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0505	0.0500	6.6667	13.1459
1	00:00:01	0.0539	0.0534	7.1200	13.0772
2	00:00:02	0.0556	0.0551	7.3467	13.0428
3	00:00:03	0.0560	0.0555	7.4000	13.0347
4	00:00:04	0.0563	0.0558	7.4400	13.0287
5	00:00:05	0.0564	0.0559	7.4533	13.0266
6	00:00:06	0.0565	0.0560	7.4667	13.0246
7	00:00:12	0.0572	0.0567	7.5600	13.0105
8	00:00:15	0.0573	0.0568	7.5733	13.0084
9	00:00:30	0.0575	0.0570	7.6000	13.0044
10	00:01:00	0.0577	0.0572	7.6267	13.0004
11	00:02:00	0.0578	0.0573	7.6400	12.9983
12	00:04:00	0.0579	0.0574	7.6533	12.9963
13	00:05:00	0.0580	0.0575	7.6667	12.9943
14	00:08:00	0.0580	0.0575	7.6667	12.9943
15	00:10:00	0.0580	0.0575	7.6667	12.9943
16	00:15:01	0.0582	0.0577	7.6933	12.9903
17	00:20:01	0.0582	0.0577	7.6933	12.9903
18	00:40:03	0.0582	0.0577	7.6933	12.9903
19	01:00:04	0.0591	0.0586	7.8133	12.9721
20	01:30:06	0.0591	0.0586	7.8133	12.9721
21	02:00:09	0.0592	0.0587	7.8267	12.9700
22	02:30:11	0.0593	0.0588	7.8400	12.9680
23	03:00:13	0.0593	0.0588	7.8400	12.9680
24	03:30:16	0.0593	0.0588	7.8400	12.9680
25	04:00:18	0.0593	0.0588	7.8400	12.9680
26	04:30:20	0.0593	0.0588	7.8400	12.9680
27	05:00:22	0.0593	0.0588	7.8400	12.9680
28	05:30:25	0.0593	0.0588	7.8400	12.9680
29	06:00:27	0.0595	0.0590	7.8667	12.9640
30	06:30:29	0.0595	0.0590	7.8667	12.9640
31	07:00:32	0.0595	0.0590	7.8667	12.9640
32	07:30:34	0.0595	0.0590	7.8667	12.9640
33	08:00:36	0.0595	0.0590	7.8667	12.9640
34	08:30:39	0.0595	0.0590	7.8667	12.9640
35	09:00:41	0.0595	0.0590	7.8667	12.9640
36	09:30:43	0.0595	0.0590	7.8667	12.9640

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.0595	0.0590	7.8667	12.9640
38	10:30:48	0.0595	0.0590	7.8667	12.9640
39	11:00:50	0.0595	0.0590	7.8667	12.9640
40	11:30:52	0.0595	0.0590	7.8667	12.9640
41	12:00:55	0.0595	0.0590	7.8667	12.9640
42	12:30:57	0.0595	0.0590	7.8667	12.9640
43	13:00:59	0.0595	0.0590	7.8667	12.9640
44	13:31:02	0.0595	0.0590	7.8667	12.9640
45	14:01:04	0.0595	0.0590	7.8667	12.9640
46	14:31:06	0.0595	0.0590	7.8667	12.9640
47	15:01:08	0.0595	0.0590	7.8667	12.9640
48	15:31:11	0.0595	0.0590	7.8667	12.9640
49	16:01:13	0.0595	0.0590	7.8667	12.9640
50	16:31:15	0.0595	0.0590	7.8667	12.9640
51	17:01:18	0.0595	0.0590	7.8667	12.9640
52	17:31:20	0.0595	0.0590	7.8667	12.9640
53	18:01:22	0.0596	0.0591	7.8800	12.9620
54	18:31:24	0.0596	0.0591	7.8800	12.9620
55	18:50:46	0.0596	0.0591	7.8800	12.9620

Consolidation Test Results
(Sequence 7) Rebound 0.250 tsf

Consolidation Test Results
(Sequence 7) Rebound 0.250 tsf

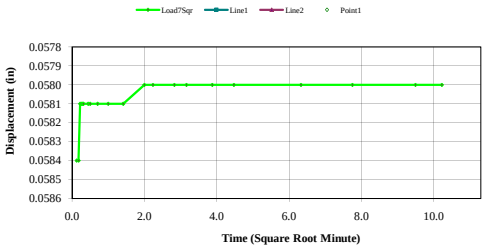
Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 16 May 2011
Test Number:

Sample Number:
Soil Description:
Boring Number: BHSP-LS1-30
Peat (PT)
Depth: 22 - 24 feet
Remarks:
Sample Type: Undisturbed

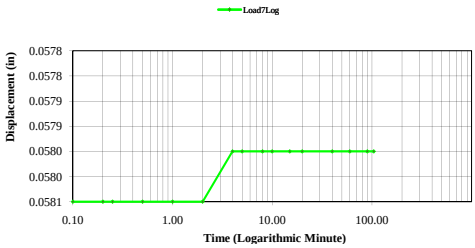
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0596	0.0591	7.8800	12.9620
1	00:00:01	0.0584	0.0579	7.7200	12.9862
2	00:00:02	0.0584	0.0579	7.7200	12.9862
3	00:00:03	0.0581	0.0576	7.6800	12.9923
4	00:00:04	0.0581	0.0576	7.6800	12.9923
5	00:00:05	0.0581	0.0576	7.6800	12.9923
6	00:00:06	0.0581	0.0576	7.6800	12.9923
7	00:00:12	0.0581	0.0576	7.6800	12.9923
8	00:00:15	0.0581	0.0576	7.6800	12.9923
9	00:00:30	0.0581	0.0576	7.6800	12.9923
10	00:01:00	0.0581	0.0576	7.6800	12.9923
11	00:02:00	0.0581	0.0576	7.6800	12.9923
12	00:04:00	0.0580	0.0575	7.6667	12.9943
13	00:05:00	0.0580	0.0575	7.6667	12.9943
14	00:08:00	0.0580	0.0575	7.6667	12.9943
15	00:10:00	0.0580	0.0575	7.6667	12.9943
16	00:15:01	0.0580	0.0575	7.6667	12.9943
17	00:20:01	0.0580	0.0575	7.6667	12.9943
18	00:40:03	0.0580	0.0575	7.6667	12.9943
19	01:00:04	0.0580	0.0575	7.6667	12.9943
20	01:30:06	0.0580	0.0575	7.6667	12.9943
21	01:44:29	0.0580	0.0575	7.6667	12.9943

Tested By:
Checked By:

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 8) Rebound 0.063 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-LS1-30
Depth: 22 - 24 feet
Sample Type: Undisturbed

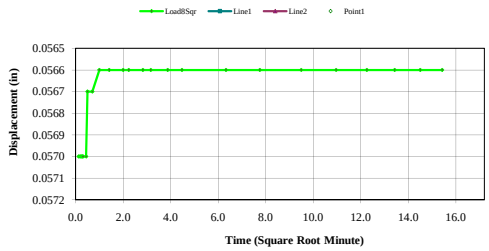
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0580	0.0575	7.6667	12.9943
1	00:00:01	0.0570	0.0565	7.5333	13.0145
2	00:00:02	0.0570	0.0565	7.5333	13.0145
3	00:00:03	0.0570	0.0565	7.5333	13.0145
4	00:00:04	0.0570	0.0565	7.5333	13.0145
5	00:00:05	0.0570	0.0565	7.5333	13.0145
6	00:00:06	0.0570	0.0565	7.5333	13.0145
7	00:00:12	0.0570	0.0565	7.5333	13.0145
8	00:00:15	0.0567	0.0562	7.4933	13.0206
9	00:00:30	0.0567	0.0562	7.4933	13.0206
10	00:01:00	0.0566	0.0561	7.4800	13.0226
11	00:02:00	0.0566	0.0561	7.4800	13.0226
12	00:04:00	0.0566	0.0561	7.4800	13.0226
13	00:05:00	0.0566	0.0561	7.4800	13.0226
14	00:08:01	0.0566	0.0561	7.4800	13.0226
15	00:10:01	0.0566	0.0561	7.4800	13.0226
16	00:15:01	0.0566	0.0561	7.4800	13.0226
17	00:20:01	0.0566	0.0561	7.4800	13.0226
18	00:40:03	0.0566	0.0561	7.4800	13.0226
19	01:00:05	0.0566	0.0561	7.4800	13.0226
20	01:30:07	0.0566	0.0561	7.4800	13.0226
21	02:00:09	0.0566	0.0561	7.4800	13.0226
22	02:30:11	0.0566	0.0561	7.4800	13.0226
23	03:00:14	0.0566	0.0561	7.4800	13.0226
24	03:30:16	0.0566	0.0561	7.4800	13.0226
25	03:57:53	0.0566	0.0561	7.4800	13.0226

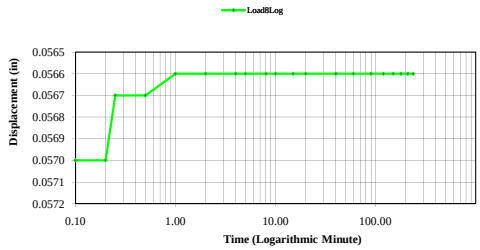
Tested By:
Checked By:

Consolidation Test Results
(Sequence 8) Rebound 0.063 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 9) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

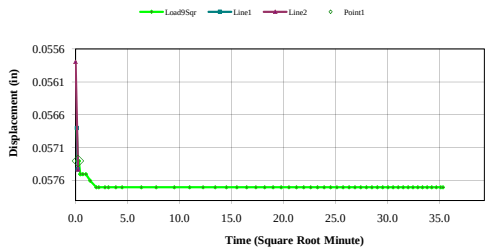
Sample Number:
Boring Number: BHSP-LS1-30
Depth: 22 - 24 feet
Sample Type: Undisturbed

Soil Description: Peat (PT)
Remarks:

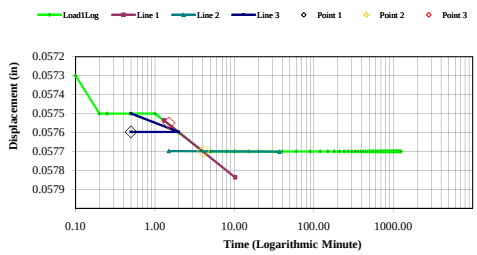
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0566	0.0561	7.4800	13.0226
1	00:00:01	0.0568	0.0563	7.5067	13.0186
2	00:00:02	0.0573	0.0568	7.5733	13.0084
3	00:00:03	0.0573	0.0568	7.5733	13.0084
4	00:00:04	0.0573	0.0568	7.5733	13.0084
5	00:00:05	0.0573	0.0568	7.5733	13.0084
6	00:00:06	0.0573	0.0568	7.5733	13.0084
7	00:00:12	0.0575	0.0570	7.6000	13.0044
8	00:00:15	0.0575	0.0570	7.6000	13.0044
9	00:00:30	0.0575	0.0570	7.6000	13.0044
10	00:01:00	0.0575	0.0570	7.6000	13.0044
11	00:02:00	0.0576	0.0571	7.6133	13.0024
12	00:04:01	0.0577	0.0572	7.6267	13.0004
13	00:05:01	0.0577	0.0572	7.6267	13.0004
14	00:08:01	0.0577	0.0572	7.6267	13.0004
15	00:10:01	0.0577	0.0572	7.6267	13.0004
16	00:15:01	0.0577	0.0572	7.6267	13.0004
17	00:20:02	0.0577	0.0572	7.6267	13.0004
18	00:40:03	0.0577	0.0572	7.6267	13.0004
19	01:00:05	0.0577	0.0572	7.6267	13.0004
20	01:30:07	0.0577	0.0572	7.6267	13.0004
21	02:00:09	0.0577	0.0572	7.6267	13.0004
22	02:30:12	0.0577	0.0572	7.6267	13.0004
23	03:00:14	0.0577	0.0572	7.6267	13.0004
24	03:30:16	0.0577	0.0572	7.6267	13.0004
25	04:00:18	0.0577	0.0572	7.6267	13.0004
26	04:30:21	0.0577	0.0572	7.6267	13.0004
27	05:00:23	0.0577	0.0572	7.6267	13.0004
28	05:30:25	0.0577	0.0572	7.6267	13.0004
29	06:00:28	0.0577	0.0572	7.6267	13.0004
30	06:30:30	0.0577	0.0572	7.6267	13.0004
31	07:00:32	0.0577	0.0572	7.6267	13.0004
32	07:30:34	0.0577	0.0572	7.6267	13.0004
33	08:00:37	0.0577	0.0572	7.6267	13.0004
34	08:30:39	0.0577	0.0572	7.6267	13.0004
35	09:00:41	0.0577	0.0572	7.6267	13.0004
36	09:30:43	0.0577	0.0572	7.6267	13.0004

Consolidation Test Results
(Sequence 9) Load 0.250 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.0577	0.0572	7.6267	13.0004
38	10:30:48	0.0577	0.0572	7.6267	13.0004
39	11:00:50	0.0577	0.0572	7.6267	13.0004
40	11:30:53	0.0577	0.0572	7.6267	13.0004
41	12:00:55	0.0577	0.0572	7.6267	13.0004
42	12:30:57	0.0577	0.0572	7.6267	13.0004
43	13:00:59	0.0577	0.0572	7.6267	13.0004
44	13:31:02	0.0577	0.0572	7.6267	13.0004
45	14:01:04	0.0577	0.0572	7.6267	13.0004
46	14:31:06	0.0577	0.0572	7.6267	13.0004
47	15:01:09	0.0577	0.0572	7.6267	13.0004
48	15:31:11	0.0577	0.0572	7.6267	13.0004
49	16:01:13	0.0577	0.0572	7.6267	13.0004
50	16:31:15	0.0577	0.0572	7.6267	13.0004
51	17:01:18	0.0577	0.0572	7.6267	13.0004
52	17:31:20	0.0577	0.0572	7.6267	13.0004
53	18:01:22	0.0577	0.0572	7.6267	13.0004
54	18:31:25	0.0577	0.0572	7.6267	13.0004
55	19:01:27	0.0577	0.0572	7.6267	13.0004
56	19:31:29	0.0577	0.0572	7.6267	13.0004
57	20:01:31	0.0577	0.0572	7.6267	13.0004
58	20:31:34	0.0577	0.0572	7.6267	13.0004
59	20:46:32	0.0577	0.0572	7.6267	13.0004

Consolidation Test Results
(Sequence 10) Load 0.500 tsf

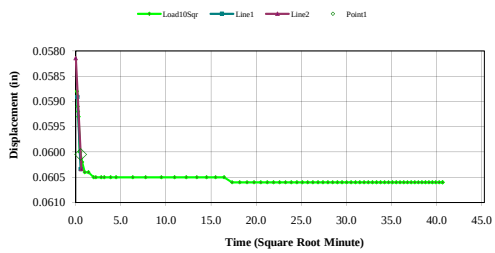
Consolidation Test Results
(Sequence 10) Load 0.500 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 16 May 2011
Test Number:

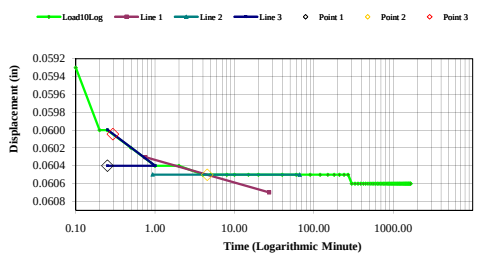
Sample Number:
Soil Description:
Boring Number: BHSP-LS1-30
Peat (PT)
Depth: 22 - 24 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0577	0.0572	7.6267	13.0004
1	00:00:01	0.0588	0.0583	7.7733	12.9781
2	00:00:02	0.0589	0.0584	7.7867	12.9761
3	00:00:03	0.0591	0.0586	7.8133	12.9721
4	00:00:04	0.0592	0.0587	7.8267	12.9700
5	00:00:05	0.0593	0.0588	7.8400	12.9680
6	00:00:06	0.0593	0.0588	7.8400	12.9680
7	00:00:12	0.0600	0.0595	7.9333	12.9539
8	00:00:15	0.0600	0.0595	7.9333	12.9539
9	00:00:30	0.0602	0.0597	7.9600	12.9498
10	00:01:00	0.0604	0.0599	7.9867	12.9458
11	00:02:00	0.0604	0.0599	7.9867	12.9458
12	00:04:00	0.0605	0.0600	8.0000	12.9438
13	00:05:00	0.0605	0.0600	8.0000	12.9438
14	00:08:01	0.0605	0.0600	8.0000	12.9438
15	00:10:01	0.0605	0.0600	8.0000	12.9438
16	00:15:01	0.0605	0.0600	8.0000	12.9438
17	00:20:02	0.0605	0.0600	8.0000	12.9438
18	00:40:03	0.0605	0.0600	8.0000	12.9438
19	01:00:05	0.0605	0.0600	8.0000	12.9438
20	01:30:07	0.0605	0.0600	8.0000	12.9438
21	02:00:09	0.0605	0.0600	8.0000	12.9438
22	02:30:11	0.0605	0.0600	8.0000	12.9438
23	03:00:14	0.0605	0.0600	8.0000	12.9438
24	03:30:16	0.0605	0.0600	8.0000	12.9438
25	04:00:18	0.0605	0.0600	8.0000	12.9438
26	04:30:21	0.0605	0.0600	8.0000	12.9438
27	05:00:23	0.0606	0.0601	8.0133	12.9418
28	05:30:25	0.0606	0.0601	8.0133	12.9418
29	06:00:27	0.0606	0.0601	8.0133	12.9418
30	06:30:30	0.0606	0.0601	8.0133	12.9418
31	07:00:32	0.0606	0.0601	8.0133	12.9418
32	07:30:34	0.0606	0.0601	8.0133	12.9418
33	08:00:37	0.0606	0.0601	8.0133	12.9418
34	08:30:39	0.0606	0.0601	8.0133	12.9418
35	09:00:41	0.0606	0.0601	8.0133	12.9418
36	09:30:43	0.0606	0.0601	8.0133	12.9418

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.0606	0.0601	8.0133	12.9418
38	10:30:48	0.0606	0.0601	8.0133	12.9418
39	11:00:50	0.0606	0.0601	8.0133	12.9418
40	11:30:53	0.0606	0.0601	8.0133	12.9418
41	12:00:55	0.0606	0.0601	8.0133	12.9418
42	12:30:57	0.0606	0.0601	8.0133	12.9418
43	13:00:59	0.0606	0.0601	8.0133	12.9418
44	13:31:02	0.0606	0.0601	8.0133	12.9418
45	14:01:04	0.0606	0.0601	8.0133	12.9418
46	14:31:06	0.0606	0.0601	8.0133	12.9418
47	15:01:09	0.0606	0.0601	8.0133	12.9418
48	15:31:11	0.0606	0.0601	8.0133	12.9418
49	16:01:13	0.0606	0.0601	8.0133	12.9418
50	16:31:15	0.0606	0.0601	8.0133	12.9418
51	17:01:18	0.0606	0.0601	8.0133	12.9418
52	17:31:20	0.0606	0.0601	8.0133	12.9418
53	18:01:22	0.0606	0.0601	8.0133	12.9418
54	18:31:24	0.0606	0.0601	8.0133	12.9418
55	19:01:27	0.0606	0.0601	8.0133	12.9418
56	19:31:29	0.0606	0.0601	8.0133	12.9418
57	20:01:31	0.0606	0.0601	8.0133	12.9418
58	20:31:33	0.0606	0.0601	8.0133	12.9418
59	21:01:36	0.0606	0.0601	8.0133	12.9418
60	21:31:38	0.0606	0.0601	8.0133	12.9418
61	22:01:40	0.0606	0.0601	8.0133	12.9418
62	22:31:43	0.0606	0.0601	8.0133	12.9418
63	23:01:45	0.0606	0.0601	8.0133	12.9418
64	23:31:47	0.0606	0.0601	8.0133	12.9418
65	24:01:50	0.0606	0.0601	8.0133	12.9418
66	24:31:52	0.0606	0.0601	8.0133	12.9418
67	25:01:54	0.0606	0.0601	8.0133	12.9418
68	25:31:56	0.0606	0.0601	8.0133	12.9418
69	26:01:59	0.0606	0.0601	8.0133	12.9418
70	26:32:01	0.0606	0.0601	8.0133	12.9418
71	27:02:03	0.0606	0.0601	8.0133	12.9418
72	27:32:06	0.0606	0.0601	8.0133	12.9418
73	27:32:52	0.0606	0.0601	8.0133	12.9418

Consolidation Test Results
(Sequence 11) Load 1.000 tsf

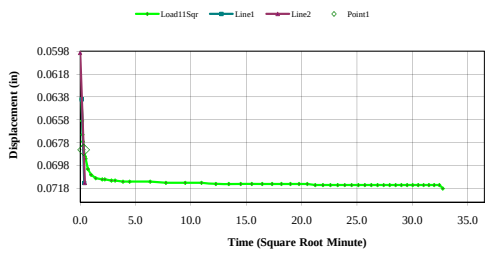
Consolidation Test Results
(Sequence 11) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 16 May 2011
Test Number:

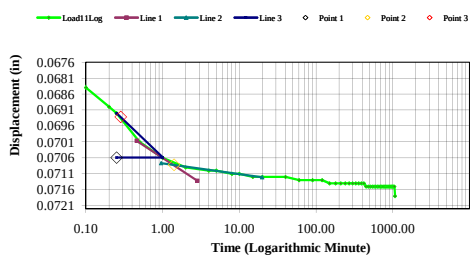
Sample Number:
Soil Description:
Boring Number: BHSP-LS1-30
Peat (PT)
Depth: 22 - 24 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0606	0.0601	8.0133	12.9418
1	00:00:01	0.0640	0.0635	8.4667	12.8731
2	00:00:02	0.0659	0.0654	8.7200	12.8347
3	00:00:03	0.0671	0.0666	8.8800	12.8104
4	00:00:04	0.0677	0.0672	8.9600	12.7983
5	00:00:05	0.0681	0.0676	9.0133	12.7902
6	00:00:06	0.0684	0.0679	9.0533	12.7841
7	00:00:12	0.0690	0.0685	9.1333	12.7720
8	00:00:15	0.0692	0.0687	9.1600	12.7680
9	00:00:30	0.0701	0.0696	9.2800	12.7498
10	00:01:00	0.0706	0.0701	9.3467	12.7397
11	00:02:00	0.0709	0.0704	9.3867	12.7336
12	00:04:00	0.0710	0.0705	9.4000	12.7316
13	00:05:01	0.0710	0.0705	9.4000	12.7316
14	00:08:01	0.0711	0.0706	9.4133	12.7296
15	00:10:01	0.0711	0.0706	9.4133	12.7296
16	00:15:01	0.0712	0.0707	9.4267	12.7275
17	00:20:02	0.0712	0.0707	9.4267	12.7275
18	00:40:03	0.0712	0.0707	9.4267	12.7275
19	01:00:05	0.0713	0.0708	9.4400	12.7255
20	01:30:07	0.0713	0.0708	9.4400	12.7255
21	02:00:09	0.0713	0.0708	9.4400	12.7255
22	02:30:12	0.0714	0.0709	9.4533	12.7235
23	03:00:14	0.0714	0.0709	9.4533	12.7235
24	03:30:16	0.0714	0.0709	9.4533	12.7235
25	04:00:18	0.0714	0.0709	9.4533	12.7235
26	04:30:21	0.0714	0.0709	9.4533	12.7235
27	05:00:23	0.0714	0.0709	9.4533	12.7235
28	05:30:25	0.0714	0.0709	9.4533	12.7235
29	06:00:28	0.0714	0.0709	9.4533	12.7235
30	06:30:30	0.0714	0.0709	9.4533	12.7235
31	07:00:32	0.0714	0.0709	9.4533	12.7235
32	07:30:34	0.0715	0.0710	9.4667	12.7215
33	08:00:37	0.0715	0.0710	9.4667	12.7215
34	08:30:39	0.0715	0.0710	9.4667	12.7215
35	09:00:41	0.0715	0.0710	9.4667	12.7215
36	09:30:43	0.0715	0.0710	9.4667	12.7215

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.0715	0.0710	9.4667	12.7215
38	10:30:48	0.0715	0.0710	9.4667	12.7215
39	11:00:50	0.0715	0.0710	9.4667	12.7215
40	11:30:53	0.0715	0.0710	9.4667	12.7215
41	12:00:55	0.0715	0.0710	9.4667	12.7215
42	12:30:57	0.0715	0.0710	9.4667	12.7215
43	13:00:59	0.0715	0.0710	9.4667	12.7215
44	13:31:02	0.0715	0.0710	9.4667	12.7215
45	14:01:04	0.0715	0.0710	9.4667	12.7215
46	14:31:06	0.0715	0.0710	9.4667	12.7215
47	15:01:09	0.0715	0.0710	9.4667	12.7215
48	15:31:11	0.0715	0.0710	9.4667	12.7215
49	16:01:13	0.0715	0.0710	9.4667	12.7215
50	16:31:16	0.0715	0.0710	9.4667	12.7215
51	17:01:18	0.0715	0.0710	9.4667	12.7215
52	17:31:20	0.0715	0.0710	9.4667	12.7215
53	17:51:40	0.0718	0.0713	9.5067	12.7154

Consolidation Test Results
(Sequence 12) Load 2.000 tsf

Consolidation Test Results
(Sequence 12) Load 2.000 tsf

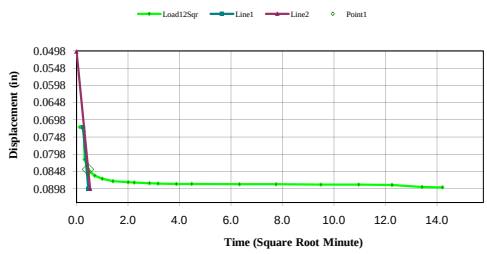
Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 16 May 2011
Test Number:

Sample Number:
Soil Description:
Boring Number: BHSP-LS1-30
Peat (PT)
Depth: 22 - 24 feet
Remarks:
Sample Type: Undisturbed

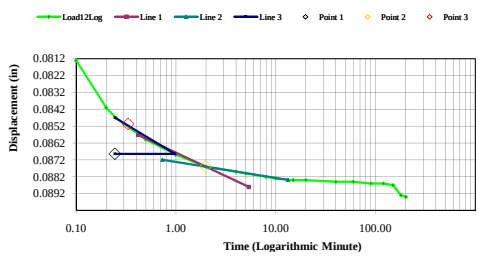
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0718	0.0713	9.5067	12.7154
1	00:00:01	0.0719	0.0714	9.5200	12.7134
2	00:00:02	0.0719	0.0714	9.5200	12.7134
3	00:00:03	0.0719	0.0714	9.5200	12.7134
4	00:00:04	0.0719	0.0714	9.5200	12.7134
5	00:00:05	0.0732	0.0727	9.6933	12.6871
6	00:00:06	0.0813	0.0808	10.7733	12.5234
7	00:00:12	0.0841	0.0836	11.1467	12.4669
8	00:00:15	0.0847	0.0842	11.2267	12.4547
9	00:00:30	0.0860	0.0855	11.4000	12.4285
10	00:01:00	0.0869	0.0864	11.5200	12.4103
11	00:02:00	0.0876	0.0871	11.6133	12.3961
12	00:04:01	0.0879	0.0874	11.6533	12.3901
13	00:05:01	0.0880	0.0875	11.6667	12.3880
14	00:08:01	0.0882	0.0877	11.6933	12.3840
15	00:10:01	0.0883	0.0878	11.7067	12.3820
16	00:15:01	0.0884	0.0879	11.7200	12.3800
17	00:20:02	0.0884	0.0879	11.7200	12.3800
18	00:40:03	0.0885	0.0880	11.7333	12.3779
19	01:00:05	0.0885	0.0880	11.7333	12.3779
20	01:30:07	0.0886	0.0881	11.7467	12.3759
21	02:00:09	0.0886	0.0881	11.7467	12.3759
22	02:30:12	0.0887	0.0882	11.7600	12.3739
23	03:00:14	0.0893	0.0888	11.8400	12.3618
24	03:22:00	0.0894	0.0889	11.8533	12.3598

Tested By:
Checked By:

Consolidation Graph (Squareroot Time)

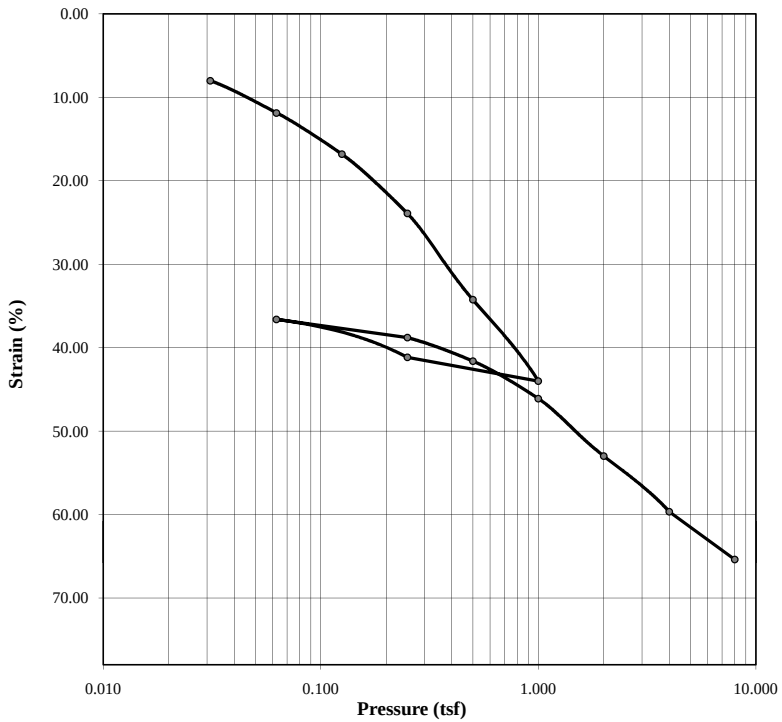


Consolidation Graph (Logarithmic Time)



GeoEngineers

Consolidation Test
Test Results

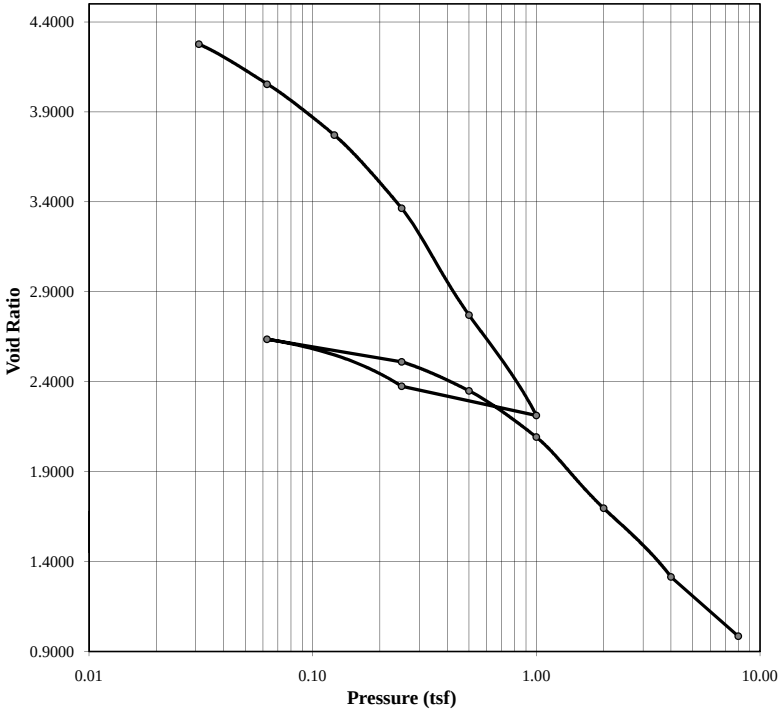


	Before	After				
			Liquid Limits:	167	**Test Date:**	24 May 11
Moisture (%):	184.13	49.07	**Plastic Limits:**	51		
Dry Density (pcf):	28.04	85.67	**Plasticity Index (%):**	116		
Saturation (%):	100.12	143.87				
Void Ratio:	4.7391	0.9865	**Specific Gravity:**	2.580	Measured	

Sample Description: Organic Clay (OH)
Project Number: 10883-011-00 **Depth:** 6 - 8 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-LS2-3
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Test Results

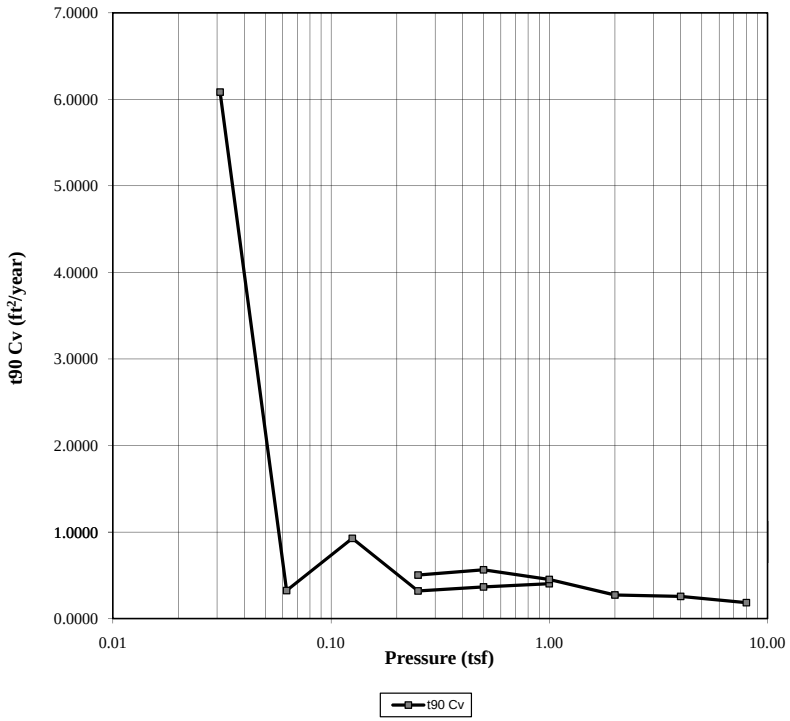


	Before	After				
			Liquid Limits:	167	**Test Date:**	24 May 11
Moisture (%):	184.13	49.07	**Plastic Limits:**	51		
Dry Density (pcf):	28.04	85.67	**Plasticity Index (%):**	116		
Saturation (%):	100.12	143.87				
Void Ratio:	4.7391	0.9865	**Specific Gravity:**	2.580	Measured	

Soil Description: Organic Clay (OH)
Project Number: 10883-011-00 **Depth:** 6 - 8 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-LS2-3
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
Moisture (%):	184.13	49.07	**Liquid Limits:**	167	**Test Date:**	24 May 11
Dry Density (pcf):	28.04	85.67	**Plastic Limits:**	51		
Saturation (%):	100.12	143.87	**Plasticity Index (%):**	116		
Void Ratio:	4.7391	0.9865	**Specific Gravity:**	2.580	Measured	

Soil Description: Organic Clay (OH)

Project Number: 10883-011-00 **Depth:** 6 - 8 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-LS2-3

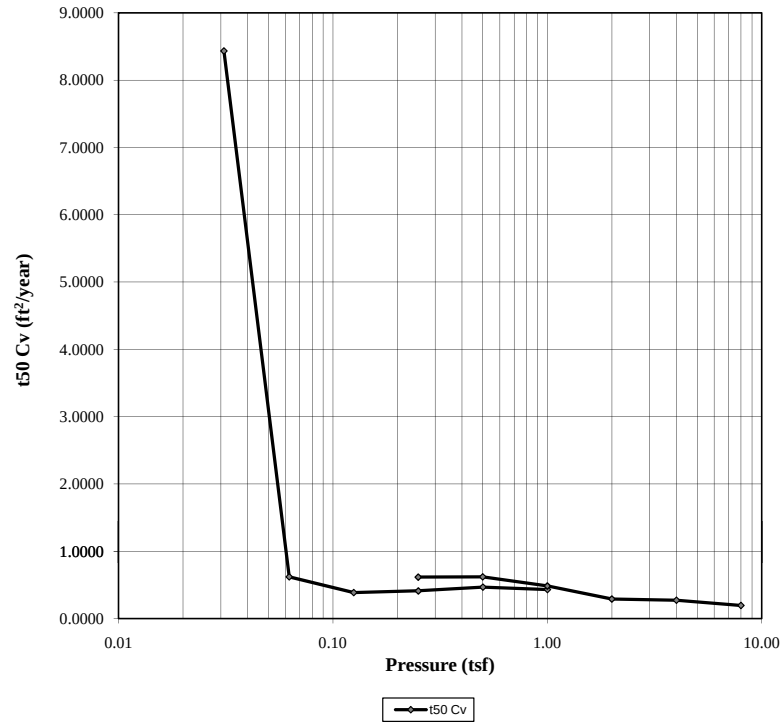
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
Moisture (%):	184.13	49.07	**Liquid Limits:**	167	**Test Date:**	24 May 11
Dry Density (pcf):	28.04	85.67	**Plastic Limits:**	51		
Saturation (%):	100.12	143.87	**Plasticity Index (%):**	116		
Void Ratio:	4.7391	0.9865	**Specific Gravity:**	2.580	Measured	

Soil Description: Organic Clay (OH)

Project Number: 10883-011-00 **Depth:** 6 - 8 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-LS2-3

Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test Results
Summary

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00

Sample Number:
Boring Number: BHSP-LS2-30
Depth: 6 - 8 feet
Sample Type: Undisturbed

Sample Description: Organic Clay (OH)
Remarks:

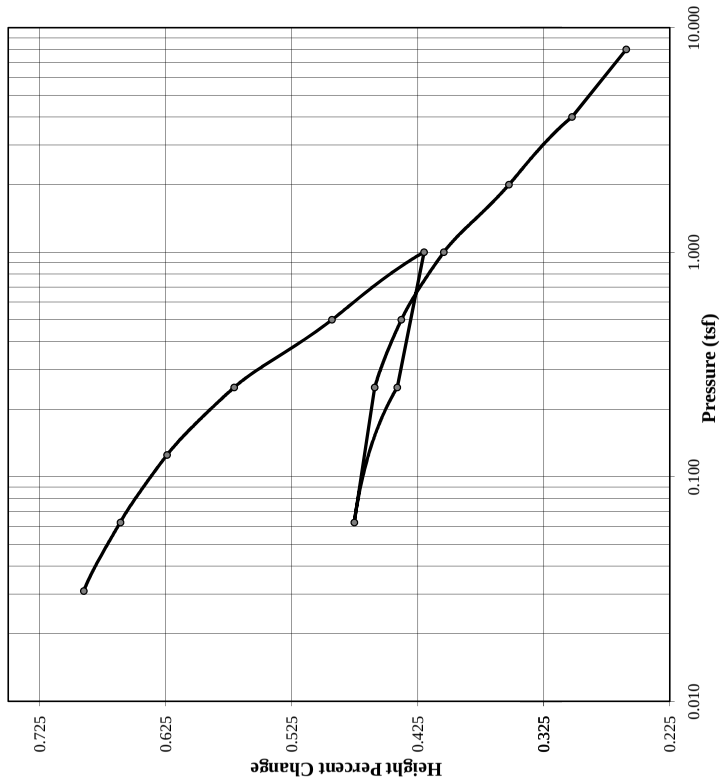
Test Number:
Test Date: 24 May 11

Index	Load Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Void (in)	Vertical Strain (%)	Void Ratio	t90 Fitting Time (min)	t50 Fitting Time (min)	t90 Cv (ft2/year)	t50 Cv (ft2/year)
0	0.000	0.0000	0.7500	0.6192	0.00	4.7348	0.000	0.000	0.000	0.000
1	0.031	0.0600	0.6900	0.5592	8.00	4.2760	60.553	10.148	6.084	8.434
2	0.063	0.0891	0.6609	0.5301	11.88	4.0535	1042.193	126.368	0.324	0.621
3	0.125	0.1260	0.6240	0.4932	16.80	3.7714	* 325.2712	180.706	0.926	0.387
4	0.250	0.1793	0.5707	0.4399	23.91	3.3638	791.933	142.094	0.318	0.412
5	0.500	0.2569	0.4931	0.3623	34.25	2.7704	513.414	93.432	0.366	0.468
6	1.000	0.3300	0.4200	0.2892	44.00	2.2115	337.859	73.353	0.404	0.432
7	0.250	0.3087	0.4413	0.3105	41.16	2.3744	0.000	0.000	0.000	0.000
8	0.063	0.2746	0.4754	0.3446	36.61	2.6351	0.000	0.000	0.000	0.000
9	0.250	0.2909	0.4591	0.3283	38.79	2.5105	324.652	61.462	0.502	0.616
10	0.500	0.3120	0.4380	0.3072	41.60	2.3491	263.614	55.520	0.563	0.621
11	1.000	0.3457	0.4043	0.2735	46.09	2.0914	280.352	60.631	0.451	0.485
12	2.000	0.3974	0.3526	0.2218	52.99	1.6961	353.183	76.561	0.272	0.292
13	4.000	0.4474	0.3026	0.1718	59.65	1.3138	275.506	60.030	0.257	0.274
14	8.000	0.4904	0.2596	0.1288	65.39	0.9850	281.586	61.947	0.185	0.196

Predicted value indicated with *

GeoEngineers

Consolidation Test
Test Results



	Before	After				
Moisture (%):	184.13	49.07	**Liquid Limits:**	167	**Test Date:**	24 May 11
Dry Density (pcf):	28.04	85.67	**Plastic Limits:**	51		
Saturation (%):	100.12	143.87	**Plasticity Index (%):**	116		
Void Ratio:	4.7391	0.9865	**Specific Gravity:**	2.580	Measured	

Soil Description: Organic Clay (OH)
Project Number: 10883-011-00
Sample Number:
Depth: 6 - 8 feet
Boring Number: BHSP-LS2-3
Remarks:

Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

Consolidation Test Results
(Sequence 1) Load 0.031 tsf

Consolidation Test Results
(Sequence 1) Load 0.031 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

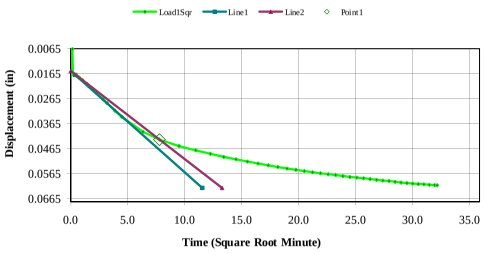
Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

Sample Number:
Boring Number: BHSP-LS2-30
Depth: 6 - 8 feet
Sample Type: Undisturbed

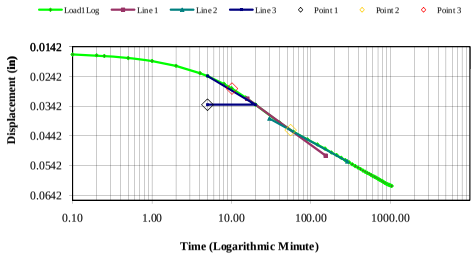
Soil Description: Organic Clay (OH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0011	0.0000	0.0000	4.7391
1	00:00:01	0.0066	0.0055	0.7333	4.6970
2	00:00:02	0.0168	0.0157	2.0933	4.6190
3	00:00:03	0.0165	0.0154	2.0533	4.6213
4	00:00:04	0.0166	0.0155	2.0667	4.6205
5	00:00:05	0.0167	0.0156	2.0800	4.6197
6	00:00:06	0.0168	0.0157	2.0933	4.6190
7	00:00:12	0.0171	0.0160	2.1333	4.6167
8	00:00:15	0.0173	0.0162	2.1600	4.6152
9	00:00:30	0.0180	0.0169	2.2533	4.6098
10	00:01:00	0.0190	0.0179	2.3867	4.6021
11	00:02:00	0.0206	0.0195	2.6000	4.5899
12	00:04:00	0.0231	0.0220	2.9333	4.5708
13	00:05:00	0.0241	0.0230	3.0667	4.5631
14	00:08:01	0.0267	0.0256	3.4133	4.5432
15	00:10:01	0.0282	0.0271	3.6133	4.5317
16	00:15:01	0.0313	0.0302	4.0267	4.5080
17	00:20:01	0.0337	0.0326	4.3467	4.4897
18	00:40:03	0.0397	0.0386	5.1467	4.4437
19	01:00:05	0.0428	0.0417	5.5600	4.4200
20	01:30:07	0.0454	0.0443	5.9067	4.4001
21	02:00:09	0.0471	0.0460	6.1333	4.3871
22	02:30:11	0.0485	0.0474	6.3200	4.3764
23	03:00:14	0.0498	0.0487	6.4933	4.3665
24	03:30:16	0.0507	0.0496	6.6133	4.3596
25	04:00:18	0.0516	0.0505	6.7333	4.3527
26	04:30:20	0.0524	0.0513	6.8400	4.3466
27	05:00:23	0.0531	0.0520	6.9333	4.3412
28	05:30:25	0.0538	0.0527	7.0267	4.3359
29	06:00:27	0.0544	0.0533	7.1067	4.3313
30	06:30:30	0.0549	0.0538	7.1733	4.3274
31	07:00:32	0.0554	0.0543	7.2400	4.3236
32	07:30:34	0.0559	0.0548	7.3067	4.3198
33	08:00:36	0.0563	0.0552	7.3600	4.3167
34	08:30:39	0.0567	0.0556	7.4133	4.3137
35	09:00:41	0.0570	0.0559	7.4533	4.3114
36	09:30:43	0.0574	0.0563	7.5067	4.3083

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



GEOENGINEERS

Consolidation Test
Consolidation Specimen Information

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 24 May 11

Sample Number:
Boring Number: BHSP-LS2-30
Depth: 6 - 8 feet
Sample Type: Undisturbed

Sample Description: Organic Clay (OH)
Remarks:

Test Number:
Liquid Limit: 167.0000
Plastic Limit: 51.0000
Specific Gravity: 2.5800 Measured

Initial Void Ratio: 4.7391
Plasticity Index (%): 116.0000
Weight of Ring (g): 220.0800

Initial Height (in): 0.7500
Initial Diameter (in): 2.5000

Parameters	Initial Specimen	Final Specimen
Moist Weight + Container (g)	103.13	59.00
Dry Soil + Container (g)	50.91	45.88
Weight of Container (g)	22.55	19.14
Moisture Content (%)	184.13	49.07
Void Ratio	4.7391	0.9865
Saturation (%)	100.12	143.87
Dry Density (pcf)	28.04	85.67

37	10:00:46	0.0578	0.0567	7.5600	4.3052
38	10:30:48	0.0580	0.0569	7.5867	4.3037
39	11:00:50	0.0583	0.0572	7.6267	4.3014
40	11:30:52	0.0586	0.0575	7.6667	4.2991
41	12:00:55	0.0589	0.0578	7.7067	4.2968
42	12:30:57	0.0592	0.0581	7.7467	4.2945
43	13:00:59	0.0594	0.0583	7.7733	4.2930
44	13:31:02	0.0597	0.0586	7.8133	4.2907
45	14:01:04	0.0600	0.0589	7.8533	4.2884
46	14:31:06	0.0602	0.0591	7.8800	4.2869
47	15:01:08	0.0604	0.0593	7.9067	4.2853
48	15:31:11	0.0606	0.0595	7.9333	4.2838
49	16:01:13	0.0607	0.0596	7.9467	4.2831
50	16:31:15	0.0609	0.0598	7.9733	4.2815
51	17:01:17	0.0610	0.0599	7.9867	4.2808
52	17:15:09	0.0611	0.0600	8.0000	4.2800

Consolidation Test Results
(Sequence 2) Load 0.063 tsf

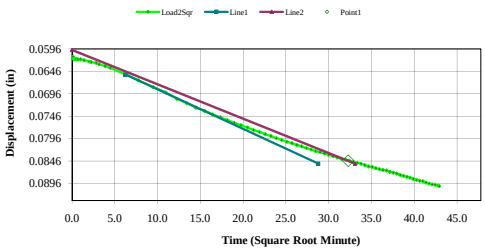
Consolidation Test Results
(Sequence 2) Load 0.063 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 24 May 11
Test Number:

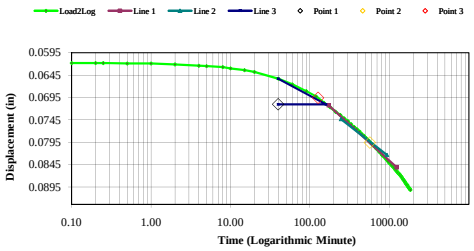
Sample Number:
Soil Description:
Boring Number: BHSP-LS2-30
Organic Clay (OH)
Depth: 6 - 8 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0611	0.0600	8.0000	4.2800
1	00:00:01	0.0613	0.0602	8.0267	4.2785
2	00:00:02	0.0618	0.0607	8.0933	4.2746
3	00:00:03	0.0618	0.0607	8.0933	4.2746
4	00:00:04	0.0618	0.0607	8.0933	4.2746
5	00:00:05	0.0618	0.0607	8.0933	4.2746
6	00:00:06	0.0618	0.0607	8.0933	4.2746
7	00:00:12	0.0618	0.0607	8.0933	4.2746
8	00:00:15	0.0618	0.0607	8.0933	4.2746
9	00:00:30	0.0619	0.0608	8.1067	4.2739
10	00:01:00	0.0619	0.0608	8.1067	4.2739
11	00:02:00	0.0621	0.0610	8.1333	4.2723
12	00:04:00	0.0624	0.0613	8.1733	4.2700
13	00:05:00	0.0625	0.0614	8.1867	4.2693
14	00:08:00	0.0627	0.0616	8.2133	4.2677
15	00:10:01	0.0630	0.0619	8.2533	4.2655
16	00:15:01	0.0634	0.0623	8.3067	4.2624
17	00:20:01	0.0638	0.0627	8.3600	4.2593
18	00:40:03	0.0653	0.0642	8.5600	4.2479
19	01:00:04	0.0666	0.0655	8.7333	4.2379
20	01:30:07	0.0681	0.0670	8.9333	4.2264
21	02:00:09	0.0693	0.0682	9.0933	4.2172
22	02:30:11	0.0707	0.0696	9.2800	4.2065
23	03:00:14	0.0717	0.0706	9.4133	4.1989
24	03:30:16	0.0727	0.0716	9.5467	4.1912
25	04:00:18	0.0734	0.0723	9.6400	4.1859
26	04:30:20	0.0742	0.0731	9.7467	4.1797
27	05:00:23	0.0748	0.0737	9.8267	4.1752
28	05:30:25	0.0755	0.0744	9.9200	4.1698
29	06:00:27	0.0761	0.0750	10.0000	4.1652
30	06:30:30	0.0766	0.0755	10.0667	4.1614
31	07:00:32	0.0771	0.0760	10.1333	4.1576
32	07:30:34	0.0777	0.0766	10.2133	4.1530
33	08:00:36	0.0781	0.0770	10.2667	4.1499
34	08:30:39	0.0786	0.0775	10.3333	4.1461
35	09:00:41	0.0790	0.0779	10.3867	4.1430
36	09:30:43	0.0795	0.0784	10.4533	4.1392

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.0799	0.0788	10.5067	4.1361
38	10:30:48	0.0803	0.0792	10.5600	4.1331
39	11:00:50	0.0806	0.0795	10.6000	4.1308
40	11:30:52	0.0810	0.0799	10.6533	4.1277
41	12:00:55	0.0813	0.0802	10.6933	4.1254
42	12:30:57	0.0817	0.0806	10.7467	4.1224
43	13:00:59	0.0820	0.0809	10.7867	4.1201
44	13:31:02	0.0824	0.0813	10.8400	4.1170
45	14:01:04	0.0826	0.0815	10.8667	4.1155
46	14:31:06	0.0829	0.0818	10.9067	4.1132
47	15:01:08	0.0832	0.0821	10.9467	4.1109
48	15:31:11	0.0835	0.0824	10.9867	4.1086
49	16:01:13	0.0838	0.0827	11.0267	4.1063
50	16:31:15	0.0841	0.0830	11.0667	4.1040
51	17:01:18	0.0843	0.0832	11.0933	4.1025
52	17:31:20	0.0845	0.0834	11.1200	4.1009
53	18:01:22	0.0848	0.0837	11.1600	4.0986
54	18:31:24	0.0850	0.0839	11.1867	4.0971
55	19:01:27	0.0852	0.0841	11.2133	4.0956
56	19:31:29	0.0855	0.0844	11.2533	4.0933
57	20:01:31	0.0858	0.0847	11.2933	4.0910
58	20:31:34	0.0859	0.0848	11.3067	4.0902
59	21:01:36	0.0862	0.0851	11.3467	4.0879
60	21:31:38	0.0864	0.0853	11.3733	4.0864
61	22:01:41	0.0866	0.0855	11.4000	4.0849
62	22:31:43	0.0867	0.0856	11.4133	4.0841
63	23:01:45	0.0870	0.0859	11.4533	4.0818
64	23:31:47	0.0872	0.0861	11.4800	4.0803
65	24:01:50	0.0874	0.0863	11.5067	4.0787
66	24:31:52	0.0877	0.0866	11.5467	4.0764
67	25:01:58	0.0879	0.0868	11.5733	4.0749
68	25:32:03	0.0881	0.0870	11.6000	4.0734
69	26:02:04	0.0883	0.0872	11.6267	4.0719
70	26:32:07	0.0886	0.0875	11.6667	4.0696
71	27:02:09	0.0888	0.0877	11.6933	4.0680
72	27:32:11	0.0890	0.0879	11.7200	4.0665
73	28:02:14	0.0891	0.0880	11.7333	4.0657
74	28:32:16	0.0894	0.0883	11.7733	4.0634
75	29:02:18	0.0896	0.0885	11.8000	4.0619
76	29:32:20	0.0898	0.0887	11.8267	4.0604
77	30:02:23	0.0899	0.0888	11.8400	4.0596
78	30:32:25	0.0901	0.0890	11.8667	4.0581
79	30:43:17	0.0902	0.0891	11.8800	4.0573

Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

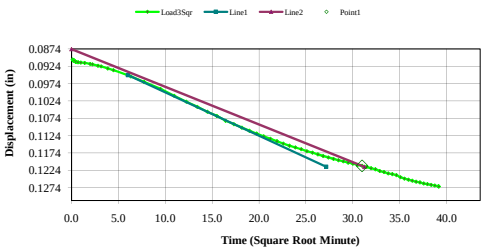
Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

Sample Number:
Boring Number: BHSP-LS2-30
Depth: 6 - 8 feet
Sample Type: Undisturbed

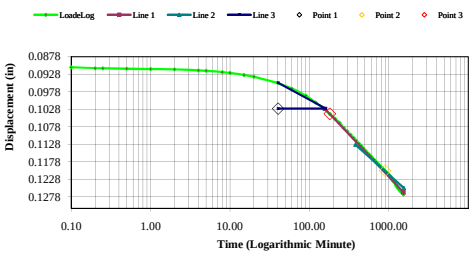
Soil Description: Organic Clay (OH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0902	0.0891	11.8800	4.0573
1	00:00:01	0.0904	0.0893	11.9067	4.0558
2	00:00:02	0.0907	0.0896	11.9467	4.0535
3	00:00:03	0.0907	0.0896	11.9467	4.0535
4	00:00:04	0.0907	0.0896	11.9467	4.0535
5	00:00:05	0.0907	0.0896	11.9467	4.0535
6	00:00:06	0.0908	0.0897	11.9600	4.0527
7	00:00:12	0.0911	0.0900	12.0000	4.0504
8	00:00:15	0.0911	0.0900	12.0000	4.0504
9	00:00:30	0.0912	0.0901	12.0133	4.0497
10	00:01:00	0.0913	0.0902	12.0267	4.0489
11	00:02:00	0.0914	0.0903	12.0400	4.0481
12	00:04:00	0.0917	0.0906	12.0800	4.0458
13	00:05:01	0.0918	0.0907	12.0933	4.0451
14	00:08:01	0.0922	0.0911	12.1467	4.0420
15	00:10:01	0.0924	0.0913	12.1733	4.0405
16	00:15:01	0.0930	0.0919	12.2533	4.0359
17	00:20:02	0.0935	0.0924	12.3200	4.0321
18	00:40:03	0.0953	0.0942	12.5600	4.0183
19	01:00:05	0.0969	0.0958	12.7733	4.0060
20	01:30:07	0.0989	0.0978	13.0400	3.9907
21	02:00:09	0.1009	0.0998	13.3067	3.9754
22	02:30:12	0.1026	0.1015	13.5333	3.9624
23	03:00:14	0.1041	0.1030	13.7333	3.9510
24	03:30:16	0.1055	0.1044	13.9200	3.9402
25	04:00:19	0.1067	0.1056	14.0800	3.9311
26	04:30:21	0.1081	0.1070	14.2667	3.9203
27	05:00:23	0.1091	0.1080	14.4000	3.9127
28	05:30:25	0.1101	0.1090	14.5333	3.9050
29	06:00:28	0.1110	0.1099	14.6533	3.8981
30	06:30:30	0.1118	0.1107	14.7600	3.8920
31	07:00:32	0.1126	0.1115	14.8667	3.8859
32	07:30:34	0.1133	0.1122	14.9600	3.8805
33	08:00:37	0.1140	0.1129	15.0533	3.8752
34	08:30:39	0.1147	0.1136	15.1467	3.8698
35	09:00:41	0.1153	0.1142	15.2267	3.8652
36	09:30:44	0.1158	0.1147	15.2933	3.8614

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1163	0.1152	15.3600	3.8576
38	10:30:48	0.1169	0.1158	15.4400	3.8530
39	11:00:50	0.1173	0.1162	15.4933	3.8499
40	11:30:53	0.1178	0.1167	15.5600	3.8461
41	12:00:55	0.1183	0.1172	15.6267	3.8423
42	12:30:57	0.1187	0.1176	15.6800	3.8392
43	13:01:00	0.1191	0.1180	15.7333	3.8362
44	13:31:02	0.1195	0.1184	15.7867	3.8331
45	14:01:04	0.1198	0.1187	15.8267	3.8308
46	14:31:06	0.1202	0.1191	15.8800	3.8278
47	15:01:09	0.1205	0.1194	15.9200	3.8255
48	15:31:11	0.1209	0.1198	15.9733	3.8224
49	16:01:13	0.1211	0.1200	16.0000	3.8209
50	16:31:16	0.1214	0.1203	16.0400	3.8186
51	17:01:18	0.1218	0.1207	16.0933	3.8155
52	17:31:20	0.1221	0.1210	16.1333	3.8132
53	18:01:22	0.1226	0.1215	16.2000	3.8094
54	18:31:25	0.1229	0.1218	16.2400	3.8071
55	19:01:27	0.1233	0.1222	16.2933	3.8040
56	19:31:29	0.1235	0.1224	16.3200	3.8025
57	20:01:31	0.1238	0.1227	16.3600	3.8002
58	20:31:34	0.1244	0.1233	16.4400	3.7956
59	21:01:36	0.1248	0.1237	16.4933	3.7926
60	21:31:38	0.1251	0.1240	16.5333	3.7903
61	22:01:41	0.1254	0.1243	16.5733	3.7880
62	22:31:43	0.1257	0.1246	16.6133	3.7857
63	23:01:45	0.1259	0.1248	16.6400	3.7841
64	23:31:47	0.1262	0.1251	16.6800	3.7818
65	24:01:49	0.1264	0.1253	16.7067	3.7803
66	24:31:52	0.1266	0.1255	16.7333	3.7788
67	25:01:54	0.1268	0.1257	16.7600	3.7772
68	25:31:56	0.1270	0.1259	16.7867	3.7757
69	**25:35:21**	**0.1271**	**0.1260**	**16.8000**	**3.7750**

Consolidation Test Results
(Sequence 4) Load 0.250 tsf

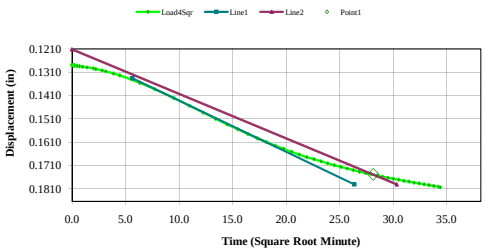
Consolidation Test Results
(Sequence 4) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 24 May 11
Test Number:

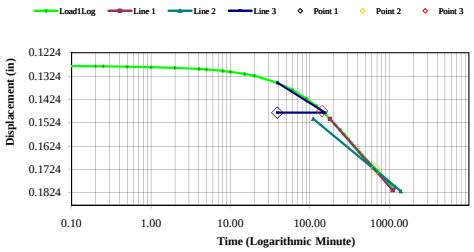
Sample Number:
Soil Description:
Boring Number: BHSP-LS2-30
Organic Clay (OH)
Depth: 6 - 8 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1271	0.1260	16.8000	3.7750
1	00:00:00	0.1279	0.1268	16.9067	3.7688
2	00:00:01	0.1279	0.1268	16.9067	3.7688
3	00:00:02	0.1280	0.1269	16.9200	3.7681
4	00:00:03	0.1280	0.1269	16.9200	3.7681
5	00:00:04	0.1281	0.1270	16.9333	3.7673
6	00:00:05	0.1281	0.1270	16.9333	3.7673
7	00:00:12	0.1282	0.1271	16.9467	3.7665
8	00:00:15	0.1282	0.1271	16.9467	3.7665
9	00:00:30	0.1284	0.1273	16.9733	3.7650
10	00:01:00	0.1286	0.1275	17.0000	3.7635
11	00:02:00	0.1289	0.1278	17.0400	3.7612
12	00:04:00	0.1293	0.1282	17.0933	3.7581
13	00:05:00	0.1296	0.1285	17.1333	3.7558
14	00:08:00	0.1302	0.1291	17.2133	3.7512
15	00:10:00	0.1306	0.1295	17.2667	3.7482
16	00:15:01	0.1315	0.1304	17.3867	3.7413
17	00:20:01	0.1323	0.1312	17.4933	3.7352
18	00:40:03	0.1355	0.1344	17.9200	3.7107
19	01:00:04	0.1383	0.1372	18.2933	3.6892
20	01:30:06	0.1420	0.1409	18.7867	3.6609
21	02:00:09	0.1453	0.1442	19.2267	3.6357
22	02:30:11	0.1483	0.1472	19.6267	3.6127
23	03:00:13	0.1510	0.1499	19.9867	3.5921
24	03:30:16	0.1534	0.1523	20.3067	3.5737
25	04:00:18	0.1555	0.1544	20.5867	3.5576
26	04:30:20	0.1575	0.1564	20.8533	3.5423
27	05:00:22	0.1594	0.1583	21.1067	3.5278
28	05:30:25	0.1610	0.1599	21.3200	3.5155
29	06:00:27	0.1625	0.1614	21.5200	3.5041
30	06:30:29	0.1638	0.1627	21.6933	3.4941
31	07:00:32	0.1651	0.1640	21.8667	3.4842
32	07:30:34	0.1663	0.1652	22.0267	3.4750
33	08:00:36	0.1674	0.1663	22.1733	3.4666
34	08:30:38	0.1683	0.1672	22.2933	3.4597
35	09:00:41	0.1692	0.1681	22.4133	3.4528
36	09:30:43	0.1701	0.1690	22.5333	3.4459

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.1709	0.1698	22.6400	3.4398
38	10:30:48	0.1716	0.1705	22.7333	3.4344
39	11:00:50	0.1723	0.1712	22.8267	3.4291
40	11:30:52	0.1730	0.1719	22.9200	3.4237
41	12:00:54	0.1737	0.1726	23.0133	3.4184
42	12:30:57	0.1742	0.1731	23.0800	3.4145
43	13:00:59	0.1747	0.1736	23.1467	3.4107
44	13:31:01	0.1753	0.1742	23.2267	3.4061
45	14:01:03	0.1758	0.1747	23.2933	3.4023
46	14:31:06	0.1763	0.1752	23.3600	3.3985
47	15:01:08	0.1767	0.1756	23.4133	3.3954
48	15:31:10	0.1771	0.1760	23.4667	3.3923
49	16:01:13	0.1776	0.1765	23.5333	3.3885
50	16:31:15	0.1779	0.1768	23.5733	3.3862
51	17:01:17	0.1784	0.1773	23.6400	3.3824
52	17:31:19	0.1787	0.1776	23.6800	3.3801
53	18:01:22	0.1791	0.1780	23.7333	3.3770
54	18:31:24	0.1794	0.1783	23.7733	3.3747
55	19:01:26	0.1798	0.1787	23.8267	3.3717
56	19:31:29	0.1801	0.1790	23.8667	3.3694
57	19:42:52	0.1804	0.1793	23.9067	3.3671

Consolidation Test Results
(Sequence 5) Load 0.500 tsf

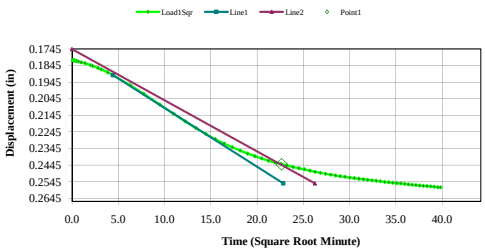
Consolidation Test Results
(Sequence 5) Load 0.500 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 24 May 11
Test Number:

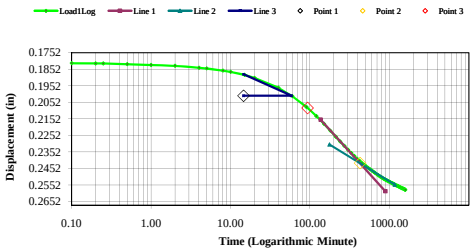
Sample Number:
Soil Description:
Boring Number: BHSP-LS2-30
Organic Clay (OH)
Depth: 6 - 8 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1804	0.1793	23.9067	3.3671
1	00:00:01	0.1812	0.1801	24.0133	3.3610
2	00:00:02	0.1813	0.1802	24.0267	3.3602
3	00:00:03	0.1814	0.1803	24.0400	3.3594
4	00:00:04	0.1814	0.1803	24.0400	3.3594
5	00:00:05	0.1815	0.1804	24.0533	3.3587
6	00:00:06	0.1815	0.1804	24.0533	3.3587
7	00:00:12	0.1817	0.1806	24.0800	3.3571
8	00:00:15	0.1817	0.1806	24.0800	3.3571
9	00:00:30	0.1821	0.1810	24.1333	3.3541
10	00:01:00	0.1826	0.1815	24.2000	3.3503
11	00:02:00	0.1831	0.1820	24.2667	3.3464
12	00:04:01	0.1843	0.1832	24.4267	3.3372
13	00:05:01	0.1847	0.1836	24.4800	3.3342
14	00:08:01	0.1860	0.1849	24.6533	3.3242
15	00:10:01	0.1868	0.1857	24.7600	3.3181
16	00:15:01	0.1886	0.1875	25.0000	3.3043
17	00:20:02	0.1904	0.1893	25.2400	3.2906
18	00:40:03	0.1964	0.1953	26.0400	3.2447
19	01:00:05	0.2015	0.2004	26.7200	3.2056
20	01:30:07	0.2080	0.2069	27.5867	3.1559
21	02:00:09	0.2135	0.2124	28.3200	3.1138
22	02:30:12	0.2182	0.2171	28.9467	3.0778
23	03:00:14	0.2223	0.2212	29.4933	3.0465
24	03:30:16	0.2259	0.2248	29.9733	3.0189
25	04:00:19	0.2289	0.2278	30.3733	2.9960
26	04:30:21	0.2315	0.2304	30.7200	2.9761
27	05:00:23	0.2338	0.2327	31.0267	2.9585
28	05:30:25	0.2358	0.2347	31.2933	2.9432
29	06:00:28	0.2376	0.2365	31.5333	2.9294
30	06:30:30	0.2392	0.2381	31.7467	2.9171
31	07:00:32	0.2405	0.2394	31.9200	2.9072
32	07:30:35	0.2419	0.2408	32.1067	2.8965
33	08:00:37	0.2429	0.2418	32.2400	2.8888
34	08:30:39	0.2439	0.2428	32.3733	2.8812
35	09:00:41	0.2448	0.2437	32.4933	2.8743
36	09:30:44	0.2457	0.2446	32.6133	2.8674

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.2464	0.2453	32.7067	2.8620
38	10:30:48	0.2471	0.2460	32.8000	2.8567
39	11:00:50	0.2479	0.2468	32.9067	2.8506
40	11:30:52	0.2486	0.2475	33.0000	2.8452
41	12:00:54	0.2492	0.2481	33.0800	2.8406
42	12:30:57	0.2498	0.2487	33.1600	2.8360
43	13:00:59	0.2503	0.2492	33.2267	2.8322
44	13:31:01	0.2508	0.2497	33.2933	2.8284
45	14:01:04	0.2513	0.2502	33.3600	2.8246
46	14:31:06	0.2516	0.2505	33.4000	2.8223
47	15:01:08	0.2521	0.2510	33.4667	2.8184
48	15:31:11	0.2524	0.2513	33.5067	2.8161
49	16:01:13	0.2528	0.2517	33.5600	2.8131
50	16:31:15	0.2531	0.2520	33.6000	2.8108
51	17:01:17	0.2534	0.2523	33.6400	2.8085
52	17:31:20	0.2538	0.2527	33.6933	2.8054
53	18:01:22	0.2540	0.2529	33.7200	2.8039
54	18:31:24	0.2543	0.2532	33.7600	2.8016
55	19:01:27	0.2547	0.2536	33.8133	2.7985
56	19:31:29	0.2549	0.2538	33.8400	2.7970
57	20:01:31	0.2552	0.2541	33.8800	2.7947
58	20:31:33	0.2555	0.2544	33.9200	2.7924
59	21:01:36	0.2556	0.2545	33.9333	2.7916
60	21:31:38	0.2559	0.2548	33.9733	2.7894
61	22:01:40	0.2562	0.2551	34.0133	2.7871
62	22:31:43	0.2564	0.2553	34.0400	2.7855
63	23:01:45	0.2566	0.2555	34.0667	2.7840
64	23:31:47	0.2569	0.2558	34.1067	2.7817
65	24:01:49	0.2571	0.2560	34.1333	2.7802
66	24:31:52	0.2572	0.2561	34.1467	2.7794
67	25:01:54	0.2574	0.2563	34.1733	2.7779
68	25:31:56	0.2576	0.2565	34.2000	2.7763
69	26:01:59	0.2579	0.2568	34.2400	2.7740
70	26:25:25	0.2580	0.2569	34.2533	2.7733

Consolidation Test Results
(Sequence 6) Load 1.000 tsf

Consolidation Test Results
(Sequence 6) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

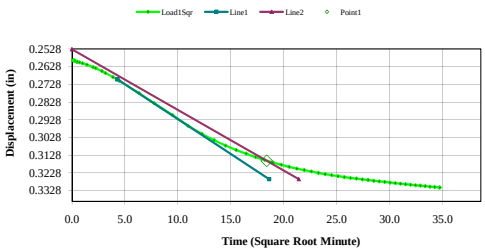
Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

Sample Number:
Boring Number: BHSP-LS2-30
Depth: 6 - 8 feet
Sample Type: Undisturbed

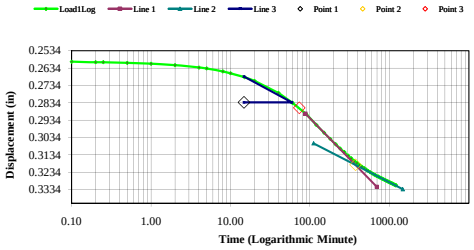
Soil Description: Organic Clay (OH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2580	0.2569	34.2533	2.7733
1	00:00:01	0.2592	0.2581	34.4133	2.7641
2	00:00:02	0.2593	0.2582	34.4267	2.7633
3	00:00:03	0.2595	0.2584	34.4533	2.7618
4	00:00:04	0.2595	0.2584	34.4533	2.7618
5	00:00:05	0.2596	0.2585	34.4667	2.7610
6	00:00:06	0.2597	0.2586	34.4800	2.7603
7	00:00:12	0.2600	0.2589	34.5200	2.7580
8	00:00:15	0.2600	0.2589	34.5200	2.7580
9	00:00:30	0.2604	0.2593	34.5733	2.7549
10	00:01:00	0.2609	0.2598	34.6400	2.7511
11	00:02:00	0.2617	0.2606	34.7467	2.7450
12	00:04:00	0.2631	0.2620	34.9333	2.7343
13	00:05:00	0.2636	0.2625	35.0000	2.7304
14	00:08:00	0.2653	0.2642	35.2267	2.7174
15	00:10:00	0.2664	0.2653	35.3733	2.7090
16	00:15:01	0.2687	0.2676	35.6800	2.6914
17	00:20:01	0.2708	0.2697	35.9600	2.6753
18	00:40:03	0.2777	0.2766	36.8800	2.6225
19	01:00:04	0.2834	0.2823	37.6400	2.5789
20	01:30:07	0.2901	0.2890	38.5333	2.5276
21	02:00:09	0.2962	0.2951	39.3467	2.4810
22	02:30:11	0.3007	0.2996	39.9467	2.4465
23	03:00:13	0.3043	0.3032	40.4267	2.4190
24	03:30:16	0.3074	0.3063	40.8400	2.3953
25	04:00:18	0.3099	0.3088	41.1733	2.3761
26	04:30:20	0.3119	0.3108	41.4400	2.3608
27	05:00:22	0.3139	0.3128	41.7067	2.3455
28	05:30:25	0.3155	0.3144	41.9200	2.3333
29	06:00:27	0.3170	0.3159	42.1200	2.3218
30	06:30:29	0.3182	0.3171	42.2800	2.3126
31	07:00:31	0.3194	0.3183	42.4400	2.3034
32	07:30:34	0.3204	0.3193	42.5733	2.2958
33	08:00:36	0.3212	0.3201	42.6800	2.2897
34	08:30:38	0.3220	0.3209	42.7867	2.2835
35	09:00:40	0.3228	0.3217	42.8933	2.2774
36	09:30:43	0.3235	0.3224	42.9867	2.2721

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.3241	0.3230	43.0667	2.2675
38	10:30:47	0.3247	0.3236	43.1467	2.2629
39	11:00:50	0.3252	0.3241	43.2133	2.2591
40	11:30:52	0.3257	0.3246	43.2800	2.2552
41	12:00:54	0.3260	0.3249	43.3200	2.2529
42	12:30:57	0.3265	0.3254	43.3867	2.2491
43	13:00:59	0.3268	0.3257	43.4267	2.2468
44	13:31:01	0.3273	0.3262	43.4933	2.2430
45	14:01:03	0.3276	0.3265	43.5333	2.2407
46	14:31:06	0.3279	0.3268	43.5733	2.2384
47	15:01:08	0.3283	0.3272	43.6267	2.2353
48	15:31:10	0.3286	0.3275	43.6667	2.2330
49	16:01:12	0.3289	0.3278	43.7067	2.2307
50	16:31:15	0.3292	0.3281	43.7467	2.2284
51	17:01:17	0.3295	0.3284	43.7867	2.2262
52	17:31:19	0.3298	0.3287	43.8267	2.2239
53	18:01:22	0.3300	0.3289	43.8533	2.2223
54	18:31:24	0.3303	0.3292	43.8933	2.2200
55	19:01:26	0.3306	0.3295	43.9333	2.2177
56	19:31:28	0.3308	0.3297	43.9600	2.2162
57	20:01:31	0.3310	0.3299	43.9867	2.2147
58	20:05:20	0.3311	0.3300	44.0000	2.2139

Consolidation Test Results
(Sequence 7) Rebound 0.250 tsf

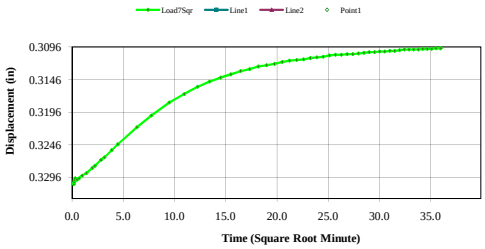
Consolidation Test Results
(Sequence 7) Rebound 0.250 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 24 May 11
Test Number:

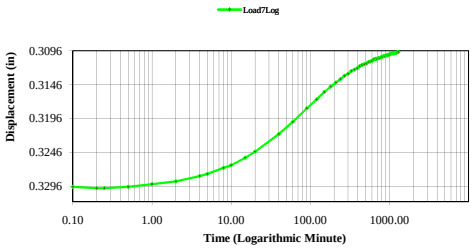
Sample Number:
Soil Description:
Boring Number: BHSP-LS2-30
Organic Clay (OH)
Depth: 6 - 8 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3311	0.3300	44.0000	2.2139
1	00:00:01	0.3305	0.3294	43.9200	2.2185
2	00:00:02	0.3306	0.3295	43.9333	2.2177
3	00:00:03	0.3303	0.3292	43.8933	2.2200
4	00:00:04	0.3300	0.3289	43.8533	2.2223
5	00:00:05	0.3300	0.3289	43.8533	2.2223
6	00:00:06	0.3297	0.3286	43.8133	2.2246
7	00:00:12	0.3299	0.3288	43.8400	2.2231
8	00:00:15	0.3299	0.3288	43.8400	2.2231
9	00:00:30	0.3297	0.3286	43.8133	2.2246
10	00:01:00	0.3293	0.3282	43.7600	2.2277
11	00:02:00	0.3289	0.3278	43.7067	2.2307
12	00:04:00	0.3281	0.3270	43.6000	2.2369
13	00:05:00	0.3278	0.3267	43.5600	2.2392
14	00:08:00	0.3269	0.3258	43.4400	2.2460
15	00:10:01	0.3265	0.3254	43.3867	2.2491
16	00:15:01	0.3254	0.3243	43.2400	2.2575
17	00:20:01	0.3245	0.3234	43.1200	2.2644
18	00:40:03	0.3219	0.3208	42.7733	2.2843
19	01:00:04	0.3201	0.3190	42.5333	2.2981
20	01:30:07	0.3181	0.3170	42.2667	2.3134
21	02:00:09	0.3168	0.3157	42.0933	2.3233
22	02:30:11	0.3157	0.3146	41.9467	2.3318
23	03:00:13	0.3149	0.3138	41.8400	2.3379
24	03:30:16	0.3143	0.3132	41.7600	2.3425
25	04:00:18	0.3138	0.3127	41.6933	2.3463
26	04:30:20	0.3133	0.3122	41.6267	2.3501
27	05:00:22	0.3130	0.3119	41.5867	2.3524
28	05:30:25	0.3126	0.3115	41.5333	2.3555
29	06:00:27	0.3124	0.3113	41.5067	2.3570
30	06:30:29	0.3122	0.3111	41.4800	2.3585
31	07:00:32	0.3119	0.3108	41.4400	2.3608
32	07:30:34	0.3117	0.3106	41.4133	2.3624
33	08:00:36	0.3116	0.3105	41.4000	2.3631
34	08:30:39	0.3115	0.3104	41.3867	2.3639
35	09:00:41	0.3113	0.3102	41.3600	2.3654
36	09:30:43	0.3112	0.3101	41.3467	2.3662

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.3111	0.3100	41.3333	2.3670
38	10:30:48	0.3109	0.3098	41.3067	2.3685
39	11:00:50	0.3108	0.3097	41.2933	2.3692
40	11:30:52	0.3108	0.3097	41.2933	2.3692
41	12:00:55	0.3107	0.3096	41.2800	2.3700
42	12:30:57	0.3107	0.3096	41.2800	2.3700
43	13:00:59	0.3106	0.3095	41.2667	2.3708
44	13:31:02	0.3105	0.3094	41.2533	2.3715
45	14:01:04	0.3104	0.3093	41.2400	2.3723
46	14:31:06	0.3104	0.3093	41.2400	2.3723
47	15:01:08	0.3103	0.3092	41.2267	2.3731
48	15:31:11	0.3103	0.3092	41.2267	2.3731
49	16:01:13	0.3102	0.3091	41.2133	2.3738
50	16:31:15	0.3102	0.3091	41.2133	2.3738
51	17:01:18	0.3101	0.3090	41.2000	2.3746
52	17:31:20	0.3100	0.3089	41.1867	2.3754
53	18:01:22	0.3100	0.3089	41.1867	2.3754
54	18:31:24	0.3100	0.3089	41.1867	2.3754
55	19:01:27	0.3100	0.3089	41.1867	2.3754
56	19:31:29	0.3099	0.3088	41.1733	2.3761
57	20:01:31	0.3099	0.3088	41.1733	2.3761
58	20:31:34	0.3099	0.3088	41.1733	2.3761
59	21:01:36	0.3098	0.3087	41.1600	2.3769
60	21:31:38	0.3098	0.3087	41.1600	2.3769
61	21:33:38	0.3098	0.3087	41.1600	2.3769

Consolidation Test Results
(Sequence 8) Rebound 0.063 tsf

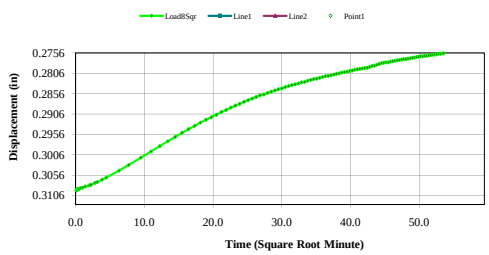
Consolidation Test Results
(Sequence 8) Rebound 0.063 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 24 May 11
Test Number:

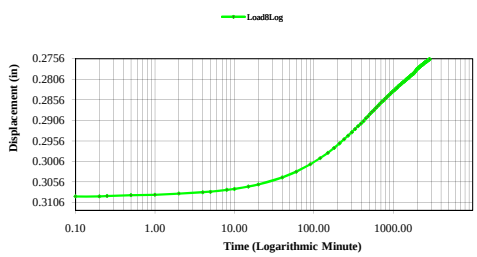
Sample Number:
Soil Description:
Boring Number: BHSP-LS2-30
Organic Clay (OH)
Depth: 6 - 8 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3098	0.3087	41.1600	2.3769
1	00:00:01	0.3094	0.3083	41.1067	2.3800
2	00:00:02	0.3091	0.3080	41.0667	2.3823
3	00:00:03	0.3091	0.3080	41.0667	2.3823
4	00:00:04	0.3091	0.3080	41.0667	2.3823
5	00:00:05	0.3091	0.3080	41.0667	2.3823
6	00:00:06	0.3091	0.3080	41.0667	2.3823
7	00:00:12	0.3091	0.3080	41.0667	2.3823
8	00:00:15	0.3090	0.3079	41.0533	2.3830
9	00:00:30	0.3088	0.3077	41.0267	2.3846
10	00:01:00	0.3087	0.3076	41.0133	2.3853
11	00:02:00	0.3084	0.3073	40.9733	2.3876
12	00:04:00	0.3081	0.3070	40.9333	2.3899
13	00:05:00	0.3080	0.3069	40.9200	2.3907
14	00:08:01	0.3075	0.3064	40.8533	2.3945
15	00:10:01	0.3073	0.3062	40.8267	2.3960
16	00:15:01	0.3067	0.3056	40.7467	2.4006
17	00:20:01	0.3062	0.3051	40.6800	2.4044
18	00:40:03	0.3045	0.3034	40.4533	2.4175
19	01:00:05	0.3031	0.3020	40.2667	2.4282
20	01:30:07	0.3013	0.3002	40.0267	2.4419
21	02:00:09	0.2998	0.2987	39.8267	2.4534
22	02:30:11	0.2985	0.2974	39.6533	2.4634
23	03:00:14	0.2973	0.2962	39.4933	2.4726
24	03:30:16	0.2962	0.2951	39.3467	2.4810
25	04:00:18	0.2952	0.2941	39.2133	2.4886
26	04:30:20	0.2943	0.2932	39.0933	2.4955
27	05:00:23	0.2935	0.2924	38.9867	2.5016
28	05:30:25	0.2927	0.2916	38.8800	2.5078
29	06:00:27	0.2920	0.2909	38.7867	2.5131
30	06:30:30	0.2914	0.2903	38.7067	2.5177
31	07:00:32	0.2908	0.2897	38.6267	2.5223
32	07:30:34	0.2901	0.2890	38.5333	2.5276
33	08:00:36	0.2896	0.2885	38.4667	2.5315
34	08:30:39	0.2890	0.2879	38.3867	2.5361
35	09:00:41	0.2885	0.2874	38.3200	2.5399
36	09:30:43	0.2881	0.2870	38.2667	2.5430

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.2876	0.2865	38.2000	2.5468
38	10:30:48	0.2872	0.2861	38.1467	2.5498
39	11:00:50	0.2868	0.2857	38.0933	2.5529
40	11:30:52	0.2864	0.2853	38.0400	2.5560
41	12:00:55	0.2860	0.2849	37.9867	2.5590
42	12:30:57	0.2858	0.2847	37.9600	2.5606
43	13:00:59	0.2854	0.2843	37.9067	2.5636
44	13:31:01	0.2851	0.2840	37.8667	2.5659
45	14:01:04	0.2848	0.2837	37.8267	2.5682
46	14:31:06	0.2845	0.2834	37.7867	2.5705
47	15:01:08	0.2843	0.2832	37.7600	2.5720
48	15:31:11	0.2840	0.2829	37.7200	2.5743
49	16:01:13	0.2837	0.2826	37.6800	2.5766
50	16:31:15	0.2835	0.2824	37.6533	2.5782
51	17:01:18	0.2833	0.2822	37.6267	2.5797
52	17:31:20	0.2831	0.2820	37.6000	2.5812
53	18:01:22	0.2828	0.2817	37.5600	2.5835
54	18:31:24	0.2827	0.2816	37.5467	2.5843
55	19:01:27	0.2824	0.2813	37.5067	2.5866
56	19:31:29	0.2822	0.2811	37.4800	2.5881
57	20:01:31	0.2820	0.2809	37.4533	2.5896
58	20:31:34	0.2819	0.2808	37.4400	2.5904
59	21:01:36	0.2817	0.2806	37.4133	2.5919
60	21:31:38	0.2815	0.2804	37.3867	2.5935
61	22:01:40	0.2813	0.2802	37.3600	2.5950
62	22:31:43	0.2812	0.2801	37.3467	2.5958
63	23:01:45	0.2811	0.2800	37.3333	2.5965
64	23:31:47	0.2809	0.2798	37.3067	2.5980
65	24:01:49	0.2807	0.2796	37.2800	2.5996
66	24:31:52	0.2806	0.2795	37.2667	2.6003
67	25:01:54	0.2804	0.2793	37.2400	2.6019
68	25:31:56	0.2803	0.2792	37.2267	2.6026
69	26:01:59	0.2802	0.2791	37.2133	2.6034
70	26:32:01	0.2800	0.2789	37.1867	2.6049
71	27:02:03	0.2799	0.2788	37.1733	2.6057
72	27:32:05	0.2797	0.2786	37.1467	2.6072
73	28:02:08	0.2796	0.2785	37.1333	2.6080
74	28:32:10	0.2795	0.2784	37.1200	2.6088
75	29:02:12	0.2794	0.2783	37.1067	2.6095
76	29:32:14	0.2793	0.2782	37.0933	2.6103
77	30:02:13	0.2792	0.2781	37.0800	2.6111
78	30:32:13	0.2790	0.2779	37.0533	2.6126
79	31:02:13	0.2788	0.2777	37.0267	2.6141
80	31:32:15	0.2787	0.2776	37.0133	2.6149
81	32:02:18	0.2785	0.2774	36.9867	2.6164
82	32:32:20	0.2783	0.2772	36.9600	2.6179
83	33:02:22	0.2781	0.2770	36.9333	2.6195
84	33:32:25	0.2780	0.2769	36.9200	2.6202
85	34:02:27	0.2779	0.2768	36.9067	2.6210
86	34:32:29	0.2779	0.2768	36.9067	2.6210
87	35:02:31	0.2777	0.2766	36.8800	2.6225
88	35:32:34	0.2776	0.2765	36.8667	2.6233
89	36:02:36	0.2775	0.2764	36.8533	2.6241

90	36:32:38	0.2774	0.2763	36.8400	2.6248
91	37:02:41	0.2773	0.2762	36.8267	2.6256
92	37:32:43	0.2772	0.2761	36.8133	2.6264
93	38:02:45	0.2771	0.2760	36.8000	2.6271
94	38:32:47	0.2771	0.2760	36.8000	2.6271
95	39:02:50	0.2770	0.2759	36.7867	2.6279
96	39:32:52	0.2769	0.2758	36.7733	2.6287
97	40:02:54	0.2768	0.2757	36.7600	2.6294
98	40:32:56	0.2767	0.2756	36.7467	2.6302
99	41:02:59	0.2766	0.2755	36.7333	2.6310
100	41:33:01	0.2765	0.2754	36.7200	2.6317
101	42:03:03	0.2764	0.2753	36.7067	2.6325
102	42:33:06	0.2764	0.2753	36.7067	2.6325
103	43:03:08	0.2763	0.2752	36.6933	2.6332
104	43:33:10	0.2763	0.2752	36.6933	2.6332
105	44:03:12	0.2762	0.2751	36.6800	2.6340
106	44:33:15	0.2761	0.2750	36.6667	2.6348
107	45:03:17	0.2760	0.2749	36.6533	2.6355
108	45:33:19	0.2760	0.2749	36.6533	2.6355
109	46:03:22	0.2759	0.2748	36.6400	2.6363
110	46:33:24	0.2758	0.2747	36.6267	2.6371
111	47:03:26	0.2758	0.2747	36.6267	2.6371
112	47:33:28	0.2757	0.2746	36.6133	2.6378
113	47:48:44	0.2757	0.2746	36.6133	2.6378

Consolidation Test Results
(Sequence 9) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

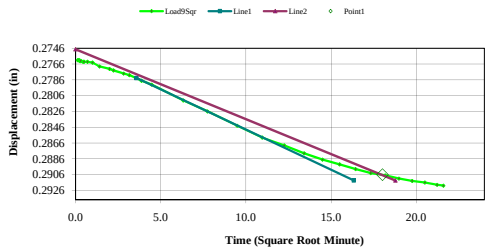
Sample Number:
Boring Number: BHSP-LS2-30
Depth: 6 - 8 feet
Sample Type: Undisturbed

Soil Description: Organic Clay (OH)
Remarks:

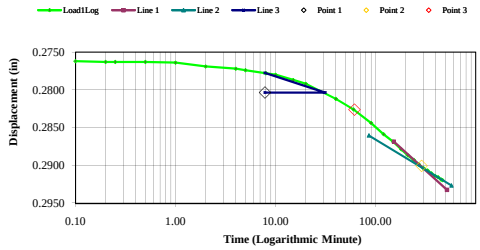
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2757	0.2746	36.6133	2.6378
1	00:00:01	0.2761	0.2750	36.6667	2.6348
2	00:00:02	0.2761	0.2750	36.6667	2.6348
3	00:00:03	0.2761	0.2750	36.6667	2.6348
4	00:00:04	0.2762	0.2751	36.6800	2.6340
5	00:00:05	0.2762	0.2751	36.6800	2.6340
6	00:00:06	0.2762	0.2751	36.6800	2.6340
7	00:00:12	0.2763	0.2752	36.6933	2.6332
8	00:00:15	0.2763	0.2752	36.6933	2.6332
9	00:00:30	0.2763	0.2752	36.6933	2.6332
10	00:01:00	0.2764	0.2753	36.7067	2.6325
11	00:02:00	0.2769	0.2758	36.7733	2.6287
12	00:04:00	0.2772	0.2761	36.8133	2.6264
13	00:05:00	0.2774	0.2763	36.8400	2.6248
14	00:08:00	0.2778	0.2767	36.8933	2.6218
15	00:10:00	0.2780	0.2769	36.9200	2.6202
16	00:15:00	0.2787	0.2776	37.0133	2.6149
17	00:20:01	0.2792	0.2781	37.0800	2.6111
18	00:40:02	0.2812	0.2801	37.3467	2.5958
19	01:00:02	0.2826	0.2815	37.5333	2.5850
20	01:30:04	0.2844	0.2833	37.7733	2.5713
21	02:00:07	0.2859	0.2848	37.9733	2.5598
22	02:30:09	0.2869	0.2858	38.1067	2.5521
23	03:00:11	0.2879	0.2868	38.2400	2.5445
24	03:30:13	0.2887	0.2876	38.3467	2.5384
25	04:00:16	0.2893	0.2882	38.4267	2.5338
26	04:30:18	0.2899	0.2888	38.5067	2.5292
27	05:00:20	0.2904	0.2893	38.5733	2.5254
28	05:30:22	0.2907	0.2896	38.6133	2.5231
29	06:00:25	0.2911	0.2900	38.6667	2.5200
30	06:30:27	0.2914	0.2903	38.7067	2.5177
31	07:00:29	0.2916	0.2905	38.7333	2.5162
32	07:30:32	0.2919	0.2908	38.7733	2.5139
33	07:46:20	0.2920	0.2909	38.7867	2.5131

Consolidation Test Results
(Sequence 9) Load 0.250 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 10) Load 0.500 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 24 May 11
Test Number:

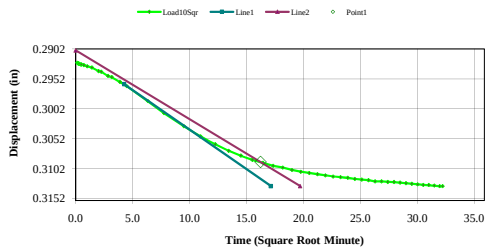
Sample Number:
Boring Number: BHSP-LS2-30
Depth: 6 - 8 feet
Sample Type: Undisturbed

Soil Description: Organic Clay (OH)
Remarks:

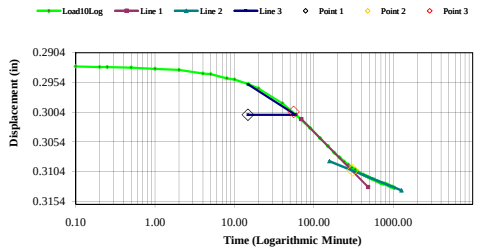
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2920	0.2909	38.7867	2.5131
1	00:00:01	0.2925	0.2914	38.8533	2.5093
2	00:00:02	0.2926	0.2915	38.8667	2.5085
3	00:00:03	0.2926	0.2915	38.8667	2.5085
4	00:00:04	0.2926	0.2915	38.8667	2.5085
5	00:00:05	0.2927	0.2916	38.8800	2.5078
6	00:00:06	0.2927	0.2916	38.8800	2.5078
7	00:00:12	0.2928	0.2917	38.8933	2.5070
8	00:00:15	0.2928	0.2917	38.8933	2.5070
9	00:00:30	0.2929	0.2918	38.9067	2.5062
10	00:01:00	0.2931	0.2920	38.9333	2.5047
11	00:02:00	0.2933	0.2922	38.9600	2.5032
12	00:04:00	0.2939	0.2928	39.0400	2.4986
13	00:05:00	0.2940	0.2929	39.0533	2.4978
14	00:08:00	0.2947	0.2936	39.1467	2.4924
15	00:10:01	0.2949	0.2938	39.1733	2.4909
16	00:15:01	0.2957	0.2946	39.2800	2.4848
17	00:20:01	0.2964	0.2953	39.3733	2.4794
18	00:40:03	0.2989	0.2978	39.7067	2.4603
19	01:00:04	0.3009	0.2998	39.9733	2.4450
20	01:30:07	0.3031	0.3020	40.2667	2.4282
21	02:00:09	0.3048	0.3037	40.4933	2.4152
22	02:30:11	0.3061	0.3050	40.6667	2.4052
23	03:00:14	0.3072	0.3061	40.8133	2.3968
24	03:30:16	0.3080	0.3069	40.9200	2.3907
25	04:00:18	0.3087	0.3076	41.0133	2.3853
26	04:30:20	0.3092	0.3081	41.0800	2.3815
27	05:00:23	0.3097	0.3086	41.1467	2.3777
28	05:30:25	0.3100	0.3089	41.1867	2.3754
29	06:00:27	0.3104	0.3093	41.2400	2.3723
30	06:30:30	0.3107	0.3096	41.2800	2.3700
31	07:00:32	0.3109	0.3098	41.3067	2.3685
32	07:30:34	0.3111	0.3100	41.3333	2.3670
33	08:00:37	0.3113	0.3102	41.3600	2.3654
34	08:30:39	0.3115	0.3104	41.3867	2.3639
35	09:00:41	0.3116	0.3105	41.4000	2.3631
36	09:30:43	0.3117	0.3106	41.4133	2.3624

Consolidation Test Results
(Sequence 10) Load 0.500 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.3119	0.3108	41.4400	2.3608
38	10:30:48	0.3120	0.3109	41.4533	2.3601
39	11:00:50	0.3121	0.3110	41.4667	2.3593
40	11:30:53	0.3123	0.3112	41.4933	2.3578
41	12:00:55	0.3123	0.3112	41.4933	2.3578
42	12:30:57	0.3124	0.3113	41.5067	2.3570
43	13:00:59	0.3124	0.3113	41.5067	2.3570
44	13:31:02	0.3125	0.3114	41.5200	2.3562
45	14:01:04	0.3126	0.3115	41.5333	2.3555
46	14:31:06	0.3127	0.3116	41.5467	2.3547
47	15:01:09	0.3128	0.3117	41.5600	2.3539
48	15:31:11	0.3129	0.3118	41.5733	2.3532
49	16:01:13	0.3129	0.3118	41.5733	2.3532
50	16:31:15	0.3130	0.3119	41.5867	2.3524
51	17:01:18	0.3131	0.3120	41.6000	2.3516
52	17:17:48	0.3131	0.3120	41.6000	2.3516

Consolidation Test Results
(Sequence 11) Load 1.000 tsf

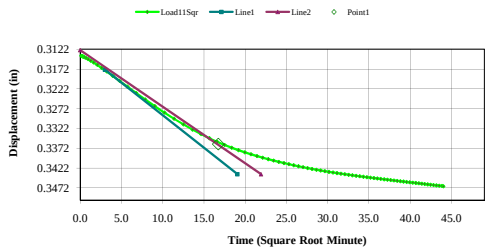
Consolidation Test Results
(Sequence 11) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 24 May 11
Test Number:

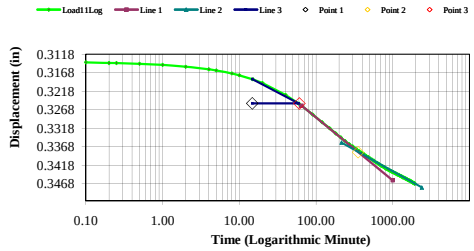
Sample Number:
Soil Description:
Boring Number: BHSP-LS2-30
Organic Clay (OH)
Depth: 6 - 8 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3131	0.3120	41.6000	2.3516
1	00:00:01	0.3139	0.3128	41.7067	2.3455
2	00:00:02	0.3139	0.3128	41.7067	2.3455
3	00:00:03	0.3140	0.3129	41.7200	2.3448
4	00:00:04	0.3140	0.3129	41.7200	2.3448
5	00:00:05	0.3140	0.3129	41.7200	2.3448
6	00:00:06	0.3140	0.3129	41.7200	2.3448
7	00:00:12	0.3142	0.3131	41.7467	2.3432
8	00:00:15	0.3142	0.3131	41.7467	2.3432
9	00:00:30	0.3144	0.3133	41.7733	2.3417
10	00:01:00	0.3147	0.3136	41.8133	2.3394
11	00:02:00	0.3152	0.3141	41.8800	2.3356
12	00:04:00	0.3159	0.3148	41.9733	2.3302
13	00:05:00	0.3162	0.3151	42.0133	2.3279
14	00:08:00	0.3170	0.3159	42.1200	2.3218
15	00:10:00	0.3175	0.3164	42.1867	2.3180
16	00:15:01	0.3186	0.3175	42.3333	2.3096
17	00:20:01	0.3196	0.3185	42.4667	2.3019
18	00:40:03	0.3228	0.3217	42.8933	2.2774
19	01:00:04	0.3252	0.3241	43.2133	2.2591
20	01:30:06	0.3281	0.3270	43.6000	2.2369
21	02:00:09	0.3302	0.3291	43.8800	2.2208
22	02:30:11	0.3318	0.3307	44.0933	2.2086
23	03:00:13	0.3332	0.3321	44.2800	2.1978
24	03:30:15	0.3343	0.3332	44.4267	2.1894
25	04:00:18	0.3353	0.3342	44.5600	2.1818
26	04:30:20	0.3361	0.3350	44.6667	2.1756
27	05:00:22	0.3367	0.3356	44.7467	2.1711
28	05:30:25	0.3373	0.3362	44.8267	2.1665
29	06:00:27	0.3379	0.3368	44.9067	2.1619
30	06:30:29	0.3384	0.3373	44.9733	2.1580
31	07:00:31	0.3388	0.3377	45.0267	2.1550
32	07:30:34	0.3393	0.3382	45.0933	2.1512
33	08:00:36	0.3396	0.3385	45.1333	2.1489
34	08:30:38	0.3400	0.3389	45.1867	2.1458
35	09:00:41	0.3403	0.3392	45.2267	2.1435
36	09:30:43	0.3406	0.3395	45.2667	2.1412

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.3410	0.3399	45.3200	2.1382
38	10:30:47	0.3412	0.3401	45.3467	2.1366
39	11:00:50	0.3415	0.3404	45.3867	2.1343
40	11:30:52	0.3418	0.3407	45.4267	2.1320
41	12:00:54	0.3420	0.3409	45.4533	2.1305
42	12:30:57	0.3422	0.3411	45.4800	2.1290
43	13:00:59	0.3424	0.3413	45.5067	2.1274
44	13:31:01	0.3427	0.3416	45.5467	2.1251
45	14:01:03	0.3428	0.3417	45.5600	2.1244
46	14:31:06	0.3430	0.3419	45.5867	2.1228
47	15:01:08	0.3432	0.3421	45.6133	2.1213
48	15:31:10	0.3433	0.3422	45.6267	2.1206
49	16:01:13	0.3435	0.3424	45.6533	2.1190
50	16:31:15	0.3436	0.3425	45.6667	2.1183
51	17:01:17	0.3437	0.3426	45.6800	2.1175
52	17:31:19	0.3439	0.3428	45.7067	2.1160
53	18:01:22	0.3440	0.3429	45.7200	2.1152
54	18:31:24	0.3441	0.3430	45.7333	2.1144
55	19:01:26	0.3443	0.3432	45.7600	2.1129
56	19:31:29	0.3444	0.3433	45.7733	2.1121
57	20:01:31	0.3444	0.3433	45.7733	2.1121
58	20:31:33	0.3446	0.3435	45.8000	2.1106
59	21:01:35	0.3447	0.3436	45.8133	2.1098
60	21:31:38	0.3448	0.3437	45.8267	2.1091
61	22:01:40	0.3449	0.3438	45.8400	2.1083
62	22:31:42	0.3451	0.3440	45.8667	2.1068
63	23:01:45	0.3451	0.3440	45.8667	2.1068
64	23:31:47	0.3452	0.3441	45.8800	2.1060
65	24:01:49	0.3453	0.3442	45.8933	2.1052
66	24:31:51	0.3454	0.3443	45.9067	2.1045
67	25:01:54	0.3455	0.3444	45.9200	2.1037
68	25:31:56	0.3456	0.3445	45.9333	2.1030
69	26:01:58	0.3457	0.3446	45.9467	2.1022
70	26:32:01	0.3458	0.3447	45.9600	2.1014
71	27:02:03	0.3459	0.3448	45.9733	2.1007
72	27:32:05	0.3459	0.3448	45.9733	2.1007
73	28:02:07	0.3460	0.3449	45.9867	2.0999
74	28:32:10	0.3461	0.3450	46.0000	2.0991
75	29:02:12	0.3462	0.3451	46.0133	2.0984
76	29:32:14	0.3463	0.3452	46.0267	2.0976
77	30:02:16	0.3464	0.3453	46.0400	2.0968
78	30:32:19	0.3465	0.3454	46.0533	2.0961
79	31:02:21	0.3466	0.3455	46.0667	2.0953
80	31:32:23	0.3466	0.3455	46.0667	2.0953
81	32:02:26	0.3467	0.3456	46.0800	2.0945
82	32:17:09	0.3468	0.3457	46.0933	2.0938

Consolidation Test Results
(Sequence 12) Load 2.000 tsf

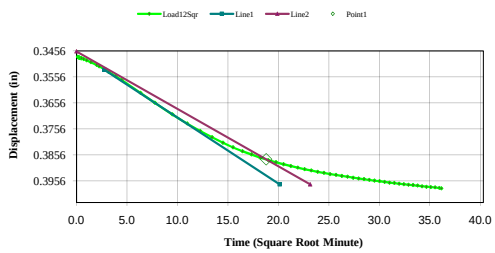
Consolidation Test Results
(Sequence 12) Load 2.000 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 24 May 11
Test Number:

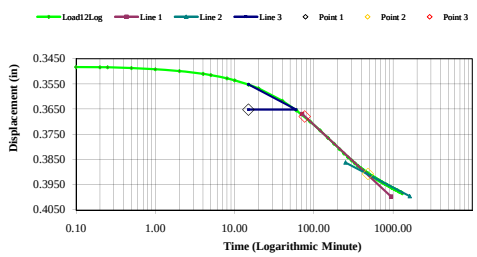
Sample Number:
Soil Description:
Boring Number: BHSP-LS2-30
Organic Clay (OH)
Depth: 6 - 8 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3468	0.3457	46.0933	2.0938
1	00:00:01	0.3478	0.3467	46.2267	2.0861
2	00:00:02	0.3480	0.3469	46.2533	2.0846
3	00:00:03	0.3481	0.3470	46.2667	2.0838
4	00:00:04	0.3482	0.3471	46.2800	2.0831
5	00:00:05	0.3482	0.3471	46.2800	2.0831
6	00:00:06	0.3483	0.3472	46.2933	2.0823
7	00:00:12	0.3484	0.3473	46.3067	2.0815
8	00:00:15	0.3484	0.3473	46.3067	2.0815
9	00:00:30	0.3487	0.3476	46.3467	2.0792
10	00:01:00	0.3492	0.3481	46.4133	2.0754
11	00:02:01	0.3499	0.3488	46.5067	2.0700
12	00:04:01	0.3510	0.3499	46.6533	2.0616
13	00:05:01	0.3515	0.3504	46.7200	2.0578
14	00:08:01	0.3528	0.3517	46.8933	2.0479
15	00:10:01	0.3536	0.3525	47.0000	2.0417
16	00:15:01	0.3553	0.3542	47.2267	2.0287
17	00:20:02	0.3568	0.3557	47.4267	2.0172
18	00:40:03	0.3617	0.3606	48.0800	1.9798
19	01:00:05	0.3655	0.3644	48.5867	1.9507
20	01:30:07	0.3700	0.3689	49.1867	1.9162
21	02:00:09	0.3735	0.3724	49.6533	1.8895
22	02:30:11	0.3764	0.3753	50.0400	1.8673
23	03:00:14	0.3788	0.3777	50.3600	1.8489
24	03:30:16	0.3809	0.3798	50.6400	1.8328
25	04:00:18	0.3827	0.3816	50.8800	1.8191
26	04:30:20	0.3842	0.3831	51.0800	1.8076
27	05:00:23	0.3854	0.3843	51.2400	1.7984
28	05:30:25	0.3866	0.3855	51.4000	1.7892
29	06:00:27	0.3876	0.3865	51.5333	1.7816
30	06:30:30	0.3884	0.3873	51.6400	1.7754
31	07:00:32	0.3892	0.3881	51.7467	1.7693
32	07:30:34	0.3899	0.3888	51.8400	1.7640
33	08:00:36	0.3905	0.3894	51.9200	1.7594
34	08:30:39	0.3911	0.3900	52.0000	1.7548
35	09:00:41	0.3916	0.3905	52.0667	1.7510
36	09:30:43	0.3921	0.3910	52.1333	1.7471

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.3925	0.3914	52.1867	1.7441
38	10:30:48	0.3930	0.3919	52.2533	1.7402
39	11:00:50	0.3933	0.3922	52.2933	1.7379
40	11:30:52	0.3937	0.3926	52.3467	1.7349
41	12:00:55	0.3940	0.3929	52.3867	1.7326
42	12:30:57	0.3944	0.3933	52.4400	1.7295
43	13:00:59	0.3947	0.3936	52.4800	1.7272
44	13:31:02	0.3949	0.3938	52.5067	1.7257
45	14:01:04	0.3952	0.3941	52.5467	1.7234
46	14:31:06	0.3955	0.3944	52.5867	1.7211
47	15:01:08	0.3957	0.3946	52.6133	1.7196
48	15:31:11	0.3960	0.3949	52.6533	1.7173
49	16:01:13	0.3963	0.3952	52.6933	1.7150
50	16:31:15	0.3964	0.3953	52.7067	1.7142
51	17:01:18	0.3967	0.3956	52.7467	1.7119
52	17:31:20	0.3969	0.3958	52.7733	1.7104
53	18:01:22	0.3971	0.3960	52.8000	1.7089
54	18:31:24	0.3972	0.3961	52.8133	1.7081
55	19:01:27	0.3974	0.3963	52.8400	1.7066
56	19:31:29	0.3977	0.3966	52.8800	1.7043
57	20:01:31	0.3979	0.3968	52.9067	1.7027
58	20:31:34	0.3980	0.3969	52.9200	1.7020
59	21:01:36	0.3981	0.3970	52.9333	1.7012
60	21:31:38	0.3983	0.3972	52.9600	1.6997
61	21:46:24	0.3985	0.3974	52.9867	1.6982

Consolidation Test Results
(Sequence 13) Load 4.000 tsf

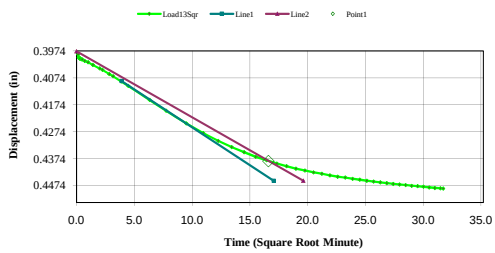
Consolidation Test Results
(Sequence 13) Load 4.000 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 24 May 11
Test Number:

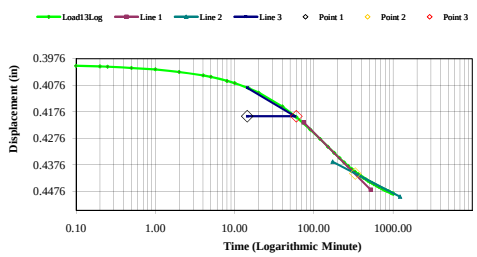
Sample Number:
Soil Description:
Boring Number: BHSP-LS2-30
Organic Clay (OH)
Depth: 6 - 8 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3985	0.3974	52.9867	1.6982
1	00:00:01	0.3987	0.3976	53.0133	1.6966
2	00:00:02	0.3998	0.3987	53.1600	1.6882
3	00:00:03	0.3999	0.3988	53.1733	1.6874
4	00:00:04	0.4001	0.3990	53.2000	1.6859
5	00:00:05	0.4002	0.3991	53.2133	1.6851
6	00:00:06	0.4003	0.3992	53.2267	1.6844
7	00:00:12	0.4005	0.3994	53.2533	1.6828
8	00:00:15	0.4006	0.3995	53.2667	1.6821
9	00:00:30	0.4011	0.4000	53.3333	1.6783
10	00:01:00	0.4016	0.4005	53.4000	1.6744
11	00:02:00	0.4026	0.4015	53.5333	1.6668
12	00:04:01	0.4039	0.4028	53.7067	1.6568
13	00:05:01	0.4044	0.4033	53.7733	1.6530
14	00:08:01	0.4060	0.4049	53.9867	1.6408
15	00:10:01	0.4068	0.4057	54.0933	1.6346
16	00:15:01	0.4087	0.4076	54.3467	1.6201
17	00:20:02	0.4104	0.4093	54.5733	1.6071
18	00:40:03	0.4156	0.4145	55.2667	1.5673
19	01:00:05	0.4196	0.4185	55.8000	1.5367
20	01:30:07	0.4243	0.4232	56.4267	1.5007
21	02:00:09	0.4279	0.4268	56.9067	1.4732
22	02:30:12	0.4308	0.4297	57.2933	1.4510
23	03:00:14	0.4331	0.4320	57.6000	1.4334
24	03:30:16	0.4350	0.4339	57.8533	1.4188
25	04:00:18	0.4367	0.4356	58.0800	1.4058
26	04:30:21	0.4380	0.4369	58.2533	1.3959
27	05:00:23	0.4392	0.4381	58.4133	1.3867
28	05:30:25	0.4402	0.4391	58.5467	1.3791
29	06:00:28	0.4411	0.4400	58.6667	1.3722
30	06:30:30	0.4418	0.4407	58.7600	1.3668
31	07:00:32	0.4425	0.4414	58.8533	1.3615
32	07:30:34	0.4430	0.4419	58.9200	1.3576
33	08:00:37	0.4436	0.4425	59.0000	1.3530
34	08:30:39	0.4441	0.4430	59.0667	1.3492
35	09:00:41	0.4444	0.4433	59.1067	1.3469
36	09:30:44	0.4449	0.4438	59.1733	1.3431

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.4452	0.4441	59.2133	1.3408
38	10:30:48	0.4456	0.4445	59.2667	1.3377
39	11:00:50	0.4459	0.4448	59.3067	1.3354
40	11:30:53	0.4462	0.4451	59.3467	1.3331
41	12:00:55	0.4465	0.4454	59.3867	1.3308
42	12:30:57	0.4468	0.4457	59.4267	1.3286
43	13:01:00	0.4470	0.4459	59.4533	1.3270
44	13:31:02	0.4472	0.4461	59.4800	1.3255
45	14:01:04	0.4475	0.4464	59.5200	1.3232
46	14:31:06	0.4476	0.4465	59.5333	1.3224
47	15:01:09	0.4478	0.4467	59.5600	1.3209
48	15:31:11	0.4481	0.4470	59.6000	1.3186
49	16:01:13	0.4483	0.4472	59.6267	1.3171
50	16:31:15	0.4484	0.4473	59.6400	1.3163
51	16:46:38	0.4485	0.4474	59.6533	1.3155

Consolidation Test Results
(Sequence 14) Load 8.000 tsf

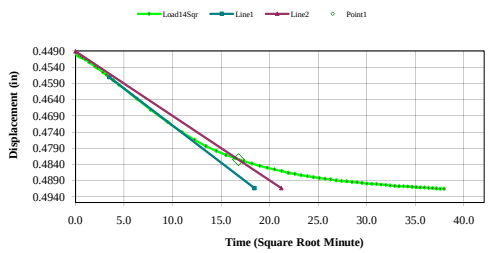
Consolidation Test Results
(Sequence 14) Load 8.000 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 24 May 11
Test Number:

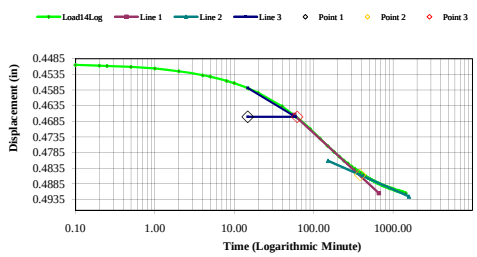
Sample Number:
Soil Description:
Boring Number: BHSP-LS2-30
Organic Clay (OH)
Depth: 6 - 8 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.4485	0.4474	59.6533	1.3155
1	00:00:01	0.4500	0.4489	59.8533	1.3041
2	00:00:02	0.4502	0.4491	59.8800	1.3025
3	00:00:03	0.4503	0.4492	59.8933	1.3018
4	00:00:04	0.4504	0.4493	59.9067	1.3010
5	00:00:05	0.4503	0.4492	59.8933	1.3018
6	00:00:06	0.4505	0.4494	59.9200	1.3002
7	00:00:12	0.4507	0.4496	59.9467	1.2987
8	00:00:15	0.4508	0.4497	59.9600	1.2979
9	00:00:30	0.4511	0.4500	60.0000	1.2956
10	00:01:00	0.4516	0.4505	60.0667	1.2918
11	00:02:00	0.4525	0.4514	60.1867	1.2849
12	00:04:00	0.4538	0.4527	60.3600	1.2750
13	00:05:00	0.4542	0.4531	60.4133	1.2719
14	00:08:00	0.4556	0.4545	60.6000	1.2612
15	00:10:00	0.4563	0.4552	60.6933	1.2559
16	00:15:00	0.4580	0.4569	60.9200	1.2428
17	00:20:00	0.4594	0.4583	61.1067	1.2321
18	00:40:00	0.4637	0.4626	61.6800	1.1992
19	00:59:59	0.4671	0.4660	62.1333	1.1732
20	01:29:59	0.4709	0.4698	62.6400	1.1441
21	02:00:01	0.4740	0.4729	63.0533	1.1204
22	02:30:03	0.4764	0.4753	63.3733	1.1020
23	03:00:05	0.4783	0.4772	63.6267	1.0875
24	03:30:08	0.4798	0.4787	63.8267	1.0760
25	04:00:10	0.4811	0.4800	64.0000	1.0661
26	04:30:12	0.4820	0.4809	64.1200	1.0592
27	05:00:14	0.4830	0.4819	64.2533	1.0515
28	05:30:17	0.4837	0.4826	64.3467	1.0462
29	06:00:19	0.4844	0.4833	64.4400	1.0408
30	06:30:21	0.4850	0.4839	64.5200	1.0362
31	07:00:23	0.4855	0.4844	64.5867	1.0324
32	07:30:26	0.4860	0.4849	64.6533	1.0286
33	08:00:28	0.4866	0.4855	64.7333	1.0240
34	08:30:30	0.4869	0.4858	64.7733	1.0217
35	09:00:33	0.4873	0.4862	64.8267	1.0186
36	09:30:35	0.4876	0.4865	64.8667	1.0163

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	1000:37	0.4879	0.4869	64.9667	1.0140
38	1030:39	0.4882	0.4871	64.9667	1.0118
39	1100:42	0.4884	0.4873	64.9733	1.0102
40	1130:44	0.4886	0.4875	65.0000	1.0087
41	1200:45	0.4889	0.4876	65.0400	1.0064
42	1230:46	0.4891	0.4878	65.0667	1.0049
43	1300:51	0.4892	0.4880	65.0800	1.0041
44	1330:53	0.4894	0.4883	65.1067	1.0026
45	1400:55	0.4895	0.4884	65.1200	1.0018
46	1430:58	0.4897	0.4886	65.1467	1.0003
47	1501:00	0.4899	0.4888	65.1733	0.9987
48	1531:02	0.4900	0.4889	65.1867	0.9980
49	1601:05	0.4900	0.4889	65.1867	0.9980
50	1631:07	0.4902	0.4891	65.2133	0.9964
51	1701:09	0.4903	0.4892	65.2267	0.9957
52	1731:11	0.4905	0.4894	65.2533	0.9942
53	1801:14	0.4906	0.4895	65.2667	0.9934
54	1831:16	0.4907	0.4896	65.2800	0.9926
55	1901:18	0.4907	0.4896	65.2800	0.9926
56	1931:21	0.4908	0.4897	65.2933	0.9919
57	2001:23	0.4909	0.4898	65.3067	0.9911
58	2031:25	0.4910	0.4899	65.3200	0.9903
59	2101:27	0.4911	0.4900	65.3333	0.9896
60	2131:30	0.4911	0.4900	65.3333	0.9896
61	2201:32	0.4912	0.4901	65.3467	0.9888
62	2231:34	0.4913	0.4902	65.3600	0.9880
63	2301:37	0.4914	0.4903	65.3733	0.9873
64	2331:39	0.4915	0.4904	65.3867	0.9865
65	2401:08	0.4915	0.4904	65.3867	0.9865

GeoEngineers

Consolidation Test

Test Results

	Before	After				
			Liquid Limits:	107	**Test Date:**	16 May 2011
Moisture (%):	146.40	44.54	**Plastic Limits:**	33		
Dry Density (pcf):	36.18	80.19	**Plasticity Index (%):**	74		
Saturation (%):	111.83	122.98				
Void Ratio:	3.1369	1.1683	**Specific Gravity:**	2.402	Measured	

Sample Description: Organic Clay (OH)

Project Number: 10883-011-00 **Depth:** 14 - 16 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-LS4-3

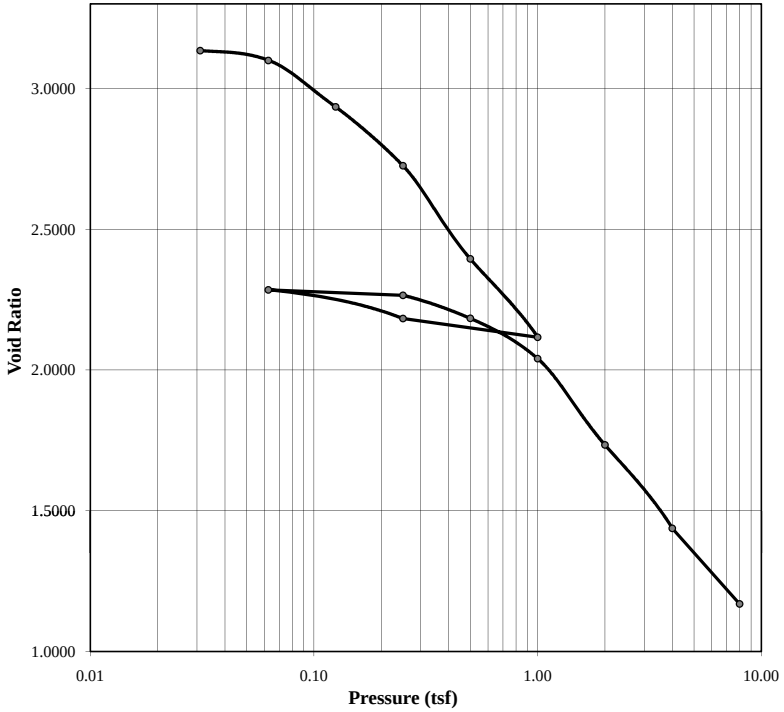
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	107	**Test Date:**	16 May 2011
Moisture (%):	146.40	44.54	**Plastic Limits:**	33		
Dry Density (pcf):	36.18	80.19	**Plasticity Index (%):**	74		
Saturation (%):	111.83	122.98				
Void Ratio:	3.1369	1.1683	**Specific Gravity:**	2.402	Measured	

Soil Description: Organic Clay (OH)

Project Number: 10883-011-00 **Depth:** 14 - 16 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-LS4-3

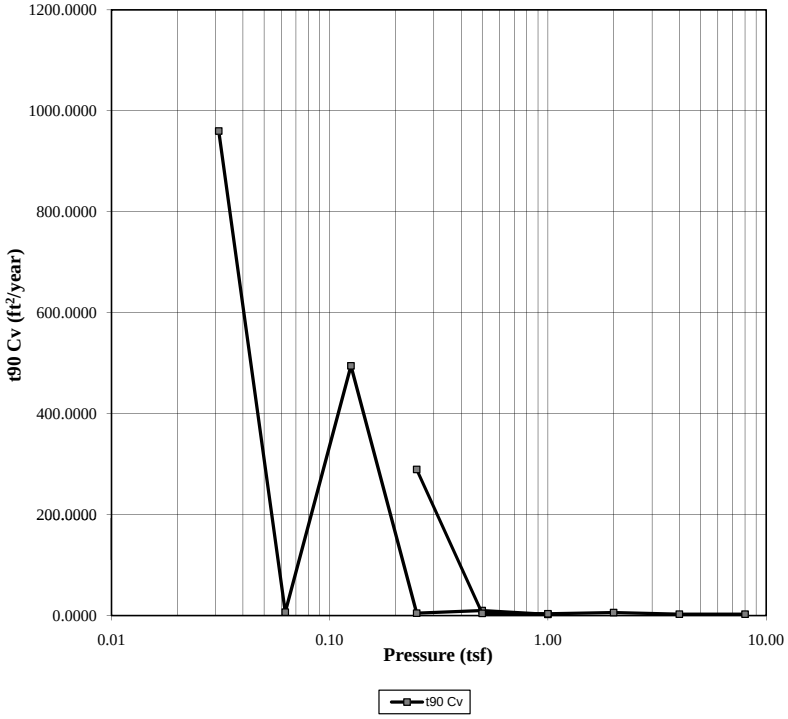
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	107	**Test Date:**	16 May 2011
Moisture (%):	146.40	44.54	**Plastic Limits:**	33		
Dry Density (pcf):	36.18	80.19	**Plasticity Index (%):**	74		
Saturation (%):	111.83	122.98				
Void Ratio:	3.1369	1.1683	**Specific Gravity:**	2.402	Measured	

Soil Description: Organic Clay (OH)

Project Number: 10883-011-00 **Depth:** 14 - 16 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-LS4-3

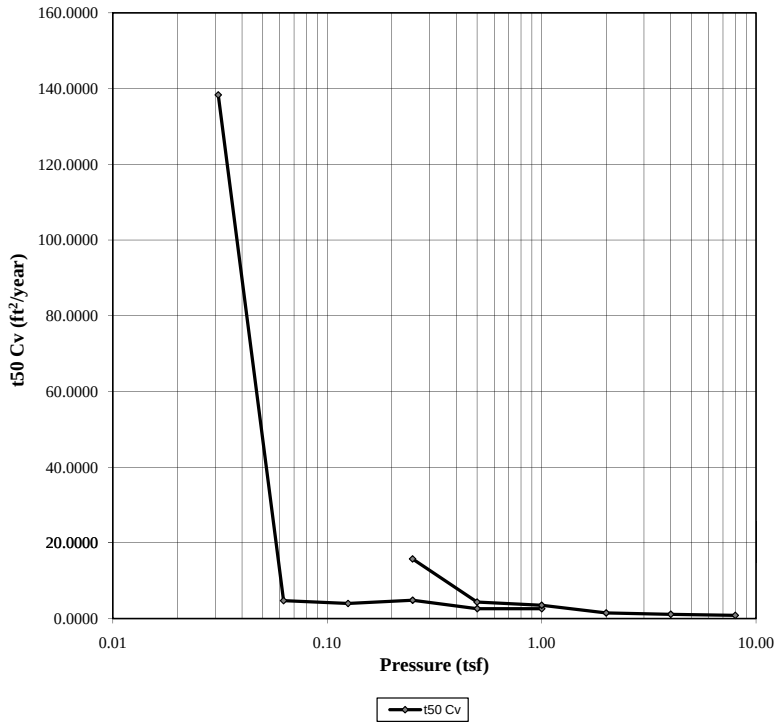
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	107	**Test Date:**	16 May 2011
Moisture (%):	146.40	44.54	**Plastic Limits:**	33		
Dry Density (pcf):	36.18	80.19	**Plasticity Index (%):**	74		
Saturation (%):	111.83	122.98				
Void Ratio:	3.1369	1.1683	**Specific Gravity:**	2.402	Measured	

Soil Description: Organic Clay (OH)

Project Number: 10883-011-00 **Depth:** 14 - 16 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-LS4-3

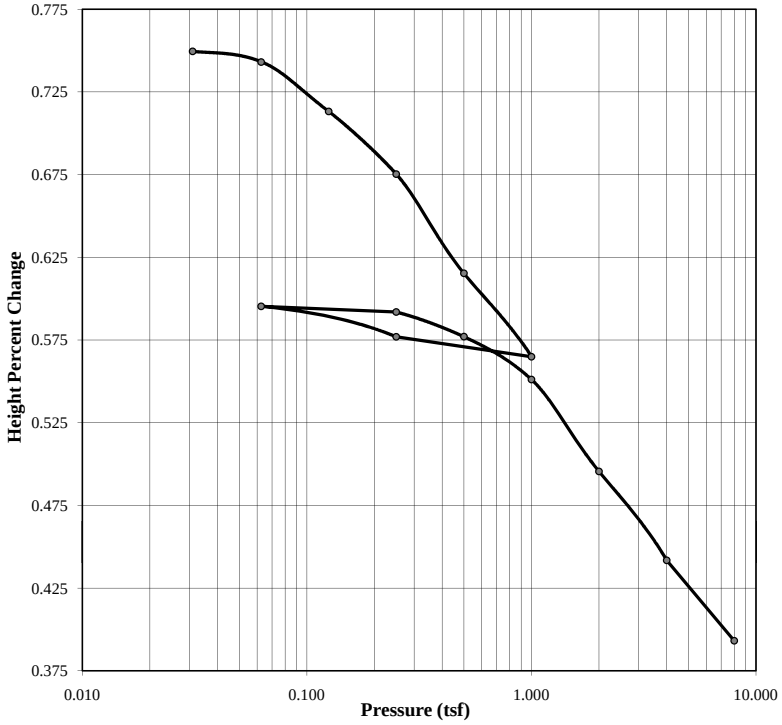
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	107	**Test Date:**	16 May 2011
Moisture (%):	146.40	44.54	**Plastic Limits:**	33		
Dry Density (pcf):	36.18	80.19	**Plasticity Index (%):**	74		
Saturation (%):	111.83	122.98				
Void Ratio:	3.1369	1.1683	**Specific Gravity:**	2.402	Measured	

Soil Description: Organic Clay (OH)

Project Number: 10883-011-00 **Depth:** 14 - 16 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-LS4-3

Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GEOENGINEERS

Consolidation Test

Consolidation Specimen Information

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 16 May 2011

Sample Number:
Sample Description: Organic Clay (OH)
Boring Number: BHSP-LS4-30
Depth: 14 - 16 feet
Remarks:
Sample Type: Undisturbed

Test Number:
Liquid Limit: 107.0000
Initial Void Ratio: 3.1369
Initial Height (in): 0.7500
Plastic Limit: 33.0000
Plasticity Index (%): 74.0000
Initial Diameter (in): 2.5000
Specific Gravity: 2.4020 Measured
Weight of Ring (g): 107.0200

Parameters	Initial Specimen	Final Specimen
Moist Weight + Container (g)	152.34	75.56
Dry Soil + Container (g)	73.30	57.93
Weight of Container (g)	19.31	18.35
Moisture Content (%)	146.40	44.54
Void Ratio	3.1369	1.1683
Saturation (%)	111.83	122.98
Dry Density (pcf)	36.18	80.19

GEOENGINEERS

Consolidation Test Results

Summary

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Number:
Test Date: 16 May 2011

Sample Number:
Sample Description: Organic Clay (OH)
Boring Number: BHSP-LS4-30
Remarks:
Depth: 14 - 16 feet
Sample Type: Undisturbed

Index	Load Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Void (in)	Vertical Strain (%)	Void Ratio	t90 Fitting Time (min)	t50 Fitting Time (min)	t90 Cv (ft2/year)	t50 Cv (ft2/year)
0	0.000	0.0000	0.7500	0.5687	0.00	3.1373	0.000	0.000	0.000	0.000
1	0.031	0.0005	0.7495	0.5682	0.07	3.1346	0.453	0.730	959.814	138.295
2	0.063	0.0069	0.7431	0.5618	0.92	3.0992	62.663	20.970	6.819	4.734
3	0.125	0.0368	0.7132	0.5319	4.91	2.9343	0.796	23.009	494.762	3.974
4	0.250	0.0747	0.6753	0.4940	9.96	2.7252	72.733	16.975	4.852	4.829
5	0.500	0.1347	0.6153	0.4340	17.96	2.3942	28.963	25.833	10.115	2.634
6	1.000	0.1851	0.5649	0.3836	24.68	2.1162	108.901	21.984	2.267	2.609
7	0.250	0.1731	0.5769	0.3956	23.08	2.1824	0.000	0.000	0.000	0.000
8	0.063	0.1546	0.5954	0.4141	20.61	2.2845	0.000	0.000	0.000	0.000
9	0.250	0.1581	0.5919	0.4106	21.08	2.2652	0.937	4.002	289.346	15.737
10	0.500	0.1730	0.5770	0.3957	23.07	2.1830	58.816	13.660	4.380	4.381
11	1.000	0.1989	0.5511	0.3698	26.52	2.0401	65.942	15.512	3.564	3.520
12	2.000	0.2545	0.4955	0.3142	33.93	1.7334	31.010	29.787	6.127	1.482
13	4.000	0.3082	0.4418	0.2605	41.09	1.4372	55.046	30.714	2.744	1.142
14	8.000	0.3569	0.3931	0.2118	47.59	1.1685	40.399	32.414	2.960	0.857

Predicted value indicated with *

Consolidation Test Results
(Sequence 2) Load 0.063 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-LS4-30
Depth: 14 - 16 feet
Sample Type: Undisturbed

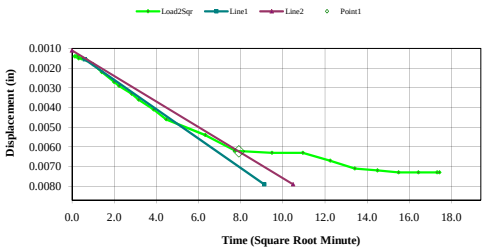
Soil Description: Organic Clay (OH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0009	0.0005	0.0667	3.1341
1	00:00:01	0.0014	0.0010	0.1333	3.1314
2	00:00:02	0.0014	0.0010	0.1333	3.1314
3	00:00:03	0.0014	0.0010	0.1333	3.1314
4	00:00:04	0.0014	0.0010	0.1333	3.1314
5	00:00:05	0.0014	0.0010	0.1333	3.1314
6	00:00:06	0.0015	0.0011	0.1467	3.1308
7	00:00:12	0.0015	0.0011	0.1467	3.1308
8	00:00:15	0.0015	0.0011	0.1467	3.1308
9	00:00:30	0.0016	0.0012	0.1600	3.1303
10	00:01:00	0.0018	0.0014	0.1867	3.1292
11	00:02:00	0.0022	0.0018	0.2400	3.1270
12	00:04:00	0.0027	0.0023	0.3067	3.1242
13	00:05:00	0.0029	0.0025	0.3333	3.1231
14	00:08:00	0.0033	0.0029	0.3867	3.1209
15	00:10:00	0.0036	0.0032	0.4267	3.1192
16	00:15:00	0.0041	0.0037	0.4933	3.1165
17	00:20:00	0.0046	0.0042	0.5600	3.1137
18	00:39:59	0.0054	0.0050	0.6667	3.1093
19	00:59:59	0.0062	0.0058	0.7733	3.1049
20	01:29:59	0.0063	0.0059	0.7867	3.1044
21	01:59:58	0.0063	0.0059	0.7867	3.1044
22	02:29:58	0.0067	0.0063	0.8400	3.1021
23	02:59:58	0.0071	0.0067	0.8933	3.0999
24	03:29:58	0.0072	0.0068	0.9067	3.0994
25	03:59:57	0.0073	0.0069	0.9200	3.0988
26	04:29:57	0.0073	0.0069	0.9200	3.0988
27	04:59:57	0.0073	0.0069	0.9200	3.0988
28	05:03:45	0.0073	0.0069	0.9200	3.0988

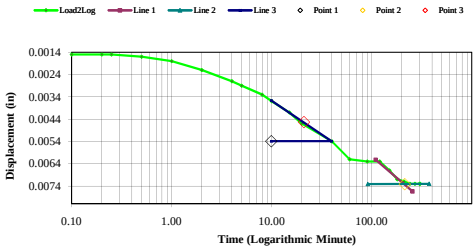
Tested By: **Checked By:**

Consolidation Test Results
(Sequence 2) Load 0.063 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 1) Load 0.031 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-LS4-30
Depth: 14 - 16 feet
Sample Type: Undisturbed

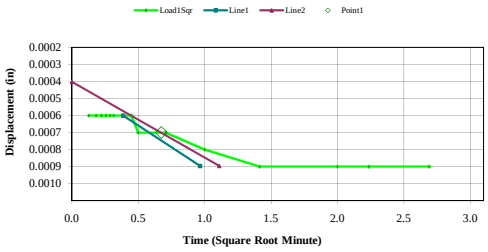
Soil Description: Organic Clay (OH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0004	0.0000	0.0000	3.1369
1	00:00:01	0.0006	0.0002	0.0267	3.1358
2	00:00:02	0.0006	0.0002	0.0267	3.1358
3	00:00:03	0.0006	0.0002	0.0267	3.1358
4	00:00:04	0.0006	0.0002	0.0267	3.1358
5	00:00:05	0.0006	0.0002	0.0267	3.1358
6	00:00:06	0.0006	0.0002	0.0267	3.1358
7	00:00:12	0.0006	0.0002	0.0267	3.1358
8	00:00:15	0.0007	0.0003	0.0400	3.1352
9	00:00:30	0.0007	0.0003	0.0400	3.1352
10	00:01:00	0.0008	0.0004	0.0533	3.1347
11	00:02:00	0.0009	0.0005	0.0667	3.1341
12	00:04:00	0.0009	0.0005	0.0667	3.1341
13	00:05:00	0.0009	0.0005	0.0667	3.1341
14	00:07:14	0.0009	0.0005	0.0667	3.1341

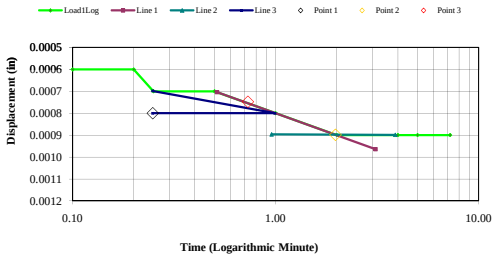
Tested By: **Checked By:**

Consolidation Test Results
(Sequence 1) Load 0.031 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

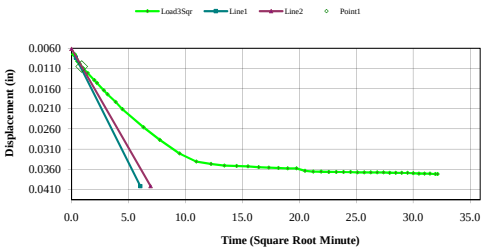
Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-LS4-30
Depth: 14 - 16 feet
Sample Type: Undisturbed

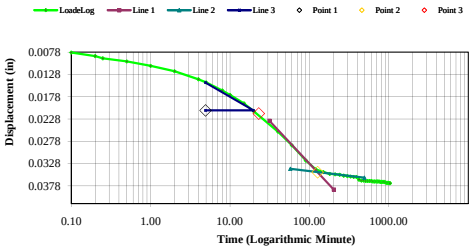
Soil Description: Organic Clay (OH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0073	0.0069	0.9200	3.0988
1	00:00:01	0.0075	0.0071	0.9467	3.0977
2	00:00:02	0.0075	0.0071	0.9467	3.0977
3	00:00:03	0.0075	0.0071	0.9467	3.0977
4	00:00:04	0.0075	0.0071	0.9467	3.0977
5	00:00:05	0.0075	0.0071	0.9467	3.0977
6	00:00:06	0.0079	0.0075	1.0000	3.0955
7	00:00:12	0.0087	0.0083	1.1067	3.0911
8	00:00:15	0.0092	0.0088	1.1733	3.0884
9	00:00:30	0.0099	0.0095	1.2667	3.0845
10	00:01:00	0.0109	0.0105	1.4000	3.0790
11	00:02:00	0.0121	0.0117	1.5600	3.0724
12	00:04:00	0.0139	0.0135	1.8000	3.0624
13	00:05:00	0.0146	0.0142	1.8933	3.0586
14	00:07:59	0.0164	0.0160	2.1333	3.0486
15	00:09:59	0.0174	0.0170	2.2667	3.0431
16	00:14:59	0.0193	0.0189	2.5200	3.0326
17	00:19:59	0.0211	0.0207	2.7600	3.0227
18	00:39:59	0.0256	0.0252	3.3600	2.9979
19	00:59:59	0.0287	0.0283	3.7733	2.9808
20	01:30:00	0.0321	0.0317	4.2267	2.9620
21	02:00:03	0.0341	0.0337	4.4933	2.9510
22	02:30:05	0.0347	0.0343	4.5733	2.9477
23	03:00:07	0.0351	0.0347	4.6267	2.9455
24	03:30:10	0.0352	0.0348	4.6400	2.9449
25	04:00:12	0.0353	0.0349	4.6533	2.9444
26	04:30:14	0.0355	0.0351	4.6800	2.9433
27	05:00:16	0.0356	0.0352	4.6933	2.9427
28	05:30:19	0.0357	0.0353	4.7067	2.9422
29	06:00:21	0.0358	0.0354	4.7200	2.9416
30	06:30:23	0.0358	0.0354	4.7200	2.9416
31	07:00:25	0.0364	0.0360	4.8000	2.9383
32	07:30:28	0.0366	0.0362	4.8267	2.9372
33	08:00:30	0.0366	0.0362	4.8267	2.9372
34	08:30:32	0.0367	0.0363	4.8400	2.9367
35	09:00:35	0.0367	0.0363	4.8400	2.9367
36	09:30:37	0.0367	0.0363	4.8400	2.9367

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:39	0.0367	0.0363	4.8400	2.9367
38	10:30:41	0.0368	0.0364	4.8533	2.9361
39	11:00:44	0.0368	0.0364	4.8533	2.9361
40	11:30:46	0.0368	0.0364	4.8533	2.9361
41	12:00:48	0.0368	0.0364	4.8533	2.9361
42	12:30:50	0.0368	0.0364	4.8533	2.9361
43	13:00:53	0.0369	0.0365	4.8667	2.9356
44	13:30:55	0.0369	0.0365	4.8667	2.9356
45	14:00:57	0.0369	0.0365	4.8667	2.9356
46	14:30:59	0.0369	0.0365	4.8667	2.9356
47	15:01:02	0.0370	0.0366	4.8800	2.9350
48	15:31:04	0.0371	0.0367	4.8933	2.9345
49	16:01:06	0.0371	0.0367	4.8933	2.9345
50	16:31:09	0.0371	0.0367	4.8933	2.9345
51	17:01:11	0.0372	0.0368	4.9067	2.9339
52	17:13:43	0.0372	0.0368	4.9067	2.9339

Consolidation Test Results
(Sequence 4) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-LS4-30
Depth: 14 - 16 feet
Sample Type: Undisturbed

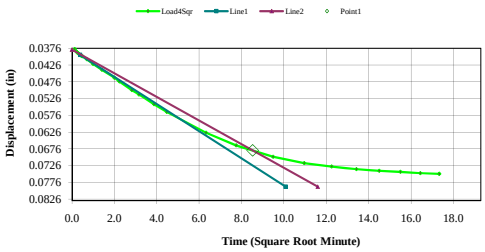
Soil Description: Organic Clay (OH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0372	0.0368	4.9067	2.9339
1	00:00:01	0.0378	0.0374	4.9867	2.9306
2	00:00:02	0.0384	0.0380	5.0667	2.9273
3	00:00:03	0.0387	0.0383	5.1067	2.9256
4	00:00:04	0.0389	0.0385	5.1333	2.9245
5	00:00:05	0.0391	0.0387	5.1600	2.9234
6	00:00:06	0.0392	0.0388	5.1733	2.9229
7	00:00:12	0.0399	0.0395	5.2667	2.9190
8	00:00:15	0.0400	0.0396	5.2800	2.9185
9	00:00:30	0.0409	0.0405	5.4000	2.9135
10	00:01:00	0.0423	0.0419	5.5867	2.9058
11	00:02:00	0.0440	0.0436	5.8133	2.8964
12	00:04:00	0.0464	0.0460	6.1333	2.8832
13	00:05:00	0.0475	0.0471	6.2800	2.8771
14	00:08:00	0.0501	0.0497	6.6267	2.8628
15	00:10:00	0.0514	0.0510	6.8000	2.8556
16	00:15:01	0.0543	0.0539	7.1867	2.8396
17	00:20:01	0.0566	0.0562	7.4933	2.8269
18	00:40:03	0.0628	0.0624	8.3200	2.7927
19	01:00:04	0.0666	0.0662	8.8267	2.7717
20	01:30:06	0.0700	0.0696	9.2800	2.7530
21	02:00:09	0.0719	0.0715	9.5333	2.7425
22	02:30:11	0.0729	0.0725	9.6667	2.7370
23	03:00:13	0.0737	0.0733	9.7733	2.7326
24	03:30:16	0.0742	0.0738	9.8400	2.7298
25	04:00:18	0.0745	0.0741	9.8800	2.7282
26	04:30:20	0.0749	0.0745	9.9333	2.7260
27	05:00:22	0.0751	0.0747	9.9600	2.7249
28	05:00:27	0.0751	0.0747	9.9600	2.7249

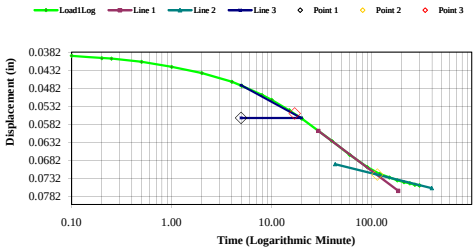
Tested By: **Checked By:**

Consolidation Test Results
(Sequence 4) Load 0.250 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 5) Load 0.500 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

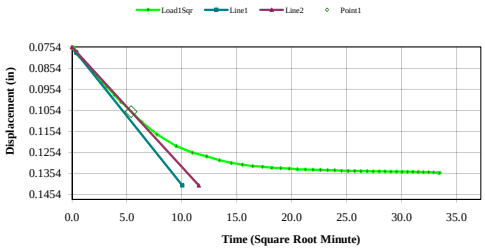
Sample Number:
Boring Number: BHSP-LS4-30
Depth: 14 - 16 feet
Sample Type: Undisturbed

Soil Description: Organic Clay (OH)
Remarks:

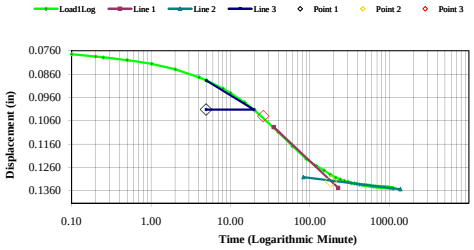
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0751	0.0747	9.9600	2.7249
1	00:00:01	0.0755	0.0751	10.0133	2.7227
2	00:00:02	0.0760	0.0756	10.0800	2.7199
3	00:00:03	0.0766	0.0762	10.1600	2.7166
4	00:00:04	0.0769	0.0765	10.2000	2.7149
5	00:00:05	0.0772	0.0768	10.2400	2.7133
6	00:00:06	0.0775	0.0771	10.2800	2.7116
7	00:00:12	0.0785	0.0781	10.4133	2.7061
8	00:00:15	0.0789	0.0785	10.4667	2.7039
9	00:00:30	0.0800	0.0796	10.6133	2.6978
10	00:01:01	0.0816	0.0812	10.8267	2.6890
11	00:02:01	0.0840	0.0836	11.1467	2.6758
12	00:04:01	0.0874	0.0870	11.6000	2.6570
13	00:05:01	0.0888	0.0884	11.7867	2.6493
14	00:08:01	0.0922	0.0918	12.2400	2.6305
15	00:10:01	0.0942	0.0938	12.5067	2.6195
16	00:15:02	0.0982	0.0978	13.0400	2.5974
17	00:20:02	0.1015	0.1011	13.4800	2.5792
18	00:40:03	0.1109	0.1105	14.7333	2.5274
19	01:00:05	0.1169	0.1165	15.5333	2.4943
20	01:30:07	0.1224	0.1220	16.2667	2.4640
21	02:00:10	0.1255	0.1251	16.6800	2.4469
22	02:30:12	0.1273	0.1269	16.9200	2.4369
23	03:00:14	0.1291	0.1287	17.1600	2.4270
24	03:30:16	0.1304	0.1300	17.3333	2.4198
25	04:00:19	0.1312	0.1308	17.4400	2.4154
26	04:30:21	0.1319	0.1315	17.5333	2.4116
27	05:00:23	0.1322	0.1318	17.5733	2.4099
28	05:30:25	0.1327	0.1323	17.6400	2.4071
29	06:00:28	0.1329	0.1325	17.6667	2.4060
30	06:30:30	0.1331	0.1327	17.6933	2.4049
31	07:00:32	0.1334	0.1330	17.7333	2.4033
32	07:30:35	0.1335	0.1331	17.7467	2.4027
33	08:00:37	0.1336	0.1332	17.7600	2.4022
34	08:30:39	0.1337	0.1333	17.7733	2.4016
35	09:00:41	0.1338	0.1334	17.7867	2.4011
36	09:30:43	0.1339	0.1335	17.8000	2.4005

Consolidation Test Results
(Sequence 5) Load 0.500 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1341	0.1337	17.8267	2.3994
38	10:30:48	0.1342	0.1338	17.8400	2.3989
39	11:00:50	0.1342	0.1338	17.8400	2.3989
40	11:30:53	0.1343	0.1339	17.8533	2.3983
41	12:00:55	0.1343	0.1339	17.8533	2.3983
42	12:30:57	0.1344	0.1340	17.8667	2.3978
43	13:01:00	0.1344	0.1340	17.8667	2.3978
44	13:31:02	0.1344	0.1340	17.8667	2.3978
45	14:01:04	0.1345	0.1341	17.8800	2.3972
46	14:31:06	0.1345	0.1341	17.8800	2.3972
47	15:01:09	0.1346	0.1342	17.8933	2.3967
48	15:31:11	0.1346	0.1342	17.8933	2.3967
49	16:01:13	0.1346	0.1342	17.8933	2.3967
50	16:31:16	0.1347	0.1343	17.9067	2.3961
51	17:01:18	0.1348	0.1344	17.9200	2.3956
52	17:31:20	0.1348	0.1344	17.9200	2.3956
53	18:01:22	0.1349	0.1345	17.9333	2.3950
54	18:31:25	0.1351	0.1347	17.9600	2.3939
55	18:38:08	0.1351	0.1347	17.9600	2.3939

Tested By: **Checked By:**

Consolidation Test Results
(Sequence 6) Load 1.000 tsf

Consolidation Test Results
(Sequence 6) Load 1.000 tsf

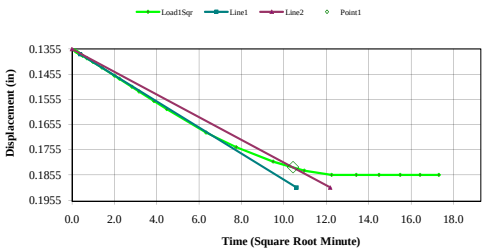
Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 16 May 2011
Test Number:

Sample Number:
Soil Description:
Boring Number: BHSP-LS4-30
Organic Clay (OH)
Depth: 14 - 16 feet
Remarks:
Sample Type: Undisturbed

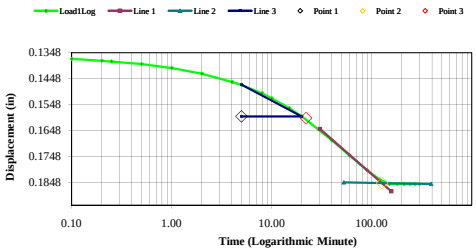
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1351	0.1347	17.9600	2.3939
1	00:00:01	0.1361	0.1357	18.0933	2.3884
2	00:00:02	0.1365	0.1361	18.1467	2.3862
3	00:00:03	0.1367	0.1363	18.1733	2.3851
4	00:00:04	0.1368	0.1364	18.1867	2.3845
5	00:00:05	0.1370	0.1366	18.2133	2.3834
6	00:00:06	0.1372	0.1368	18.2400	2.3823
7	00:00:12	0.1379	0.1375	18.3333	2.3785
8	00:00:15	0.1382	0.1378	18.3733	2.3768
9	00:00:30	0.1392	0.1388	18.5067	2.3713
10	00:01:00	0.1407	0.1403	18.7067	2.3630
11	00:02:00	0.1429	0.1425	19.0000	2.3509
12	00:04:00	0.1461	0.1457	19.4267	2.3332
13	00:05:00	0.1473	0.1469	19.5867	2.3266
14	00:08:01	0.1505	0.1501	20.0133	2.3090
15	00:10:01	0.1524	0.1520	20.2667	2.2985
16	00:15:01	0.1562	0.1558	20.7733	2.2775
17	00:20:02	0.1594	0.1590	21.2000	2.2599
18	00:40:03	0.1687	0.1683	22.4400	2.2086
19	01:00:05	0.1745	0.1741	23.2133	2.1766
20	01:30:07	0.1802	0.1798	23.9733	2.1451
21	02:00:09	0.1838	0.1834	24.4533	2.1253
22	02:30:09	0.1855	0.1851	24.6800	2.1159
23	03:00:05	0.1855	0.1851	24.6800	2.1159
24	03:30:00	0.1855	0.1851	24.6800	2.1159
25	03:59:56	0.1855	0.1851	24.6800	2.1159
26	04:29:51	0.1855	0.1851	24.6800	2.1159
27	04:59:47	0.1855	0.1851	24.6800	2.1159

Tested By: **Checked By:**

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 7) Rebound 0.250 tsf

Consolidation Test Results
(Sequence 7) Rebound 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

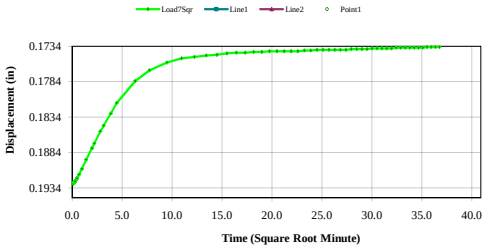
Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-LS4-30
Depth: 14 - 16 feet
Sample Type: Undisturbed

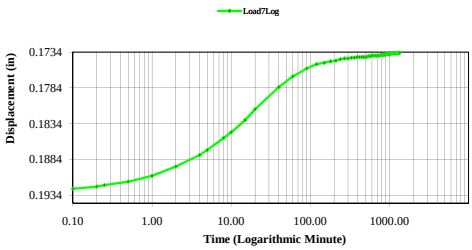
Soil Description: Organic Clay (OH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1855	0.1851	24.6800	2.1159
1	00:00:01	0.1928	0.1924	25.6533	2.0756
2	00:00:02	0.1926	0.1922	25.6267	2.0767
3	00:00:03	0.1926	0.1922	25.6267	2.0767
4	00:00:04	0.1926	0.1922	25.6267	2.0767
5	00:00:05	0.1925	0.1921	25.6133	2.0773
6	00:00:06	0.1925	0.1921	25.6133	2.0773
7	00:00:12	0.1922	0.1918	25.5733	2.0790
8	00:00:15	0.1920	0.1916	25.5467	2.0801
9	00:00:30	0.1915	0.1911	25.4800	2.0828
10	00:01:00	0.1907	0.1903	25.3733	2.0872
11	00:02:00	0.1894	0.1890	25.2000	2.0944
12	00:04:00	0.1878	0.1874	24.9867	2.1032
13	00:05:00	0.1871	0.1867	24.8933	2.1071
14	00:08:01	0.1854	0.1850	24.6667	2.1165
15	00:10:01	0.1846	0.1842	24.5600	2.1209
16	00:15:01	0.1829	0.1825	24.3333	2.1303
17	00:20:02	0.1814	0.1810	24.1333	2.1385
18	00:40:03	0.1783	0.1779	23.7200	2.1556
19	01:00:05	0.1768	0.1764	23.5200	2.1639
20	01:30:07	0.1757	0.1753	23.3733	2.1700
21	02:00:09	0.1751	0.1747	23.2933	2.1733
22	02:30:11	0.1749	0.1745	23.2667	2.1744
23	03:00:14	0.1747	0.1743	23.2400	2.1755
24	03:30:16	0.1746	0.1742	23.2267	2.1760
25	04:00:18	0.1744	0.1740	23.2000	2.1771
26	04:30:21	0.1743	0.1739	23.1867	2.1777
27	05:00:23	0.1743	0.1739	23.1867	2.1777
28	05:30:25	0.1742	0.1738	23.1733	2.1782
29	06:00:27	0.1742	0.1738	23.1733	2.1782
30	06:30:30	0.1741	0.1737	23.1600	2.1788
31	07:00:32	0.1741	0.1737	23.1600	2.1788
32	07:30:34	0.1741	0.1737	23.1600	2.1788
33	08:00:37	0.1741	0.1737	23.1600	2.1788
34	08:30:39	0.1741	0.1737	23.1600	2.1788
35	09:00:41	0.1740	0.1736	23.1467	2.1793
36	09:30:43	0.1740	0.1736	23.1467	2.1793

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1739	0.1735	23.1333	2.1799
38	10:30:48	0.1739	0.1735	23.1333	2.1799
39	11:00:50	0.1739	0.1735	23.1333	2.1799
40	11:30:53	0.1739	0.1735	23.1333	2.1799
41	12:00:55	0.1739	0.1735	23.1333	2.1799
42	12:30:57	0.1739	0.1735	23.1333	2.1799
43	13:00:59	0.1738	0.1734	23.1200	2.1804
44	13:31:02	0.1738	0.1734	23.1200	2.1804
45	14:01:04	0.1738	0.1734	23.1200	2.1804
46	14:31:06	0.1738	0.1734	23.1200	2.1804
47	15:01:09	0.1737	0.1733	23.1067	2.1810
48	15:31:11	0.1737	0.1733	23.1067	2.1810
49	16:01:13	0.1737	0.1733	23.1067	2.1810
50	16:31:15	0.1737	0.1733	23.1067	2.1810
51	17:01:18	0.1737	0.1733	23.1067	2.1810
52	17:31:20	0.1736	0.1732	23.0933	2.1815
53	18:01:22	0.1736	0.1732	23.0933	2.1815
54	18:31:25	0.1736	0.1732	23.0933	2.1815
55	19:01:27	0.1736	0.1732	23.0933	2.1815
56	19:31:29	0.1736	0.1732	23.0933	2.1815
57	20:01:31	0.1736	0.1732	23.0933	2.1815
58	20:31:34	0.1736	0.1732	23.0933	2.1815
59	21:01:36	0.1735	0.1731	23.0800	2.1821
60	21:31:38	0.1735	0.1731	23.0800	2.1821
61	22:01:41	0.1735	0.1731	23.0800	2.1821
62	22:31:12	0.1735	0.1731	23.0800	2.1821

Consolidation Test Results
(Sequence 8) Rebound 0.063 tsf

Consolidation Test Results
(Sequence 8) Rebound 0.063 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

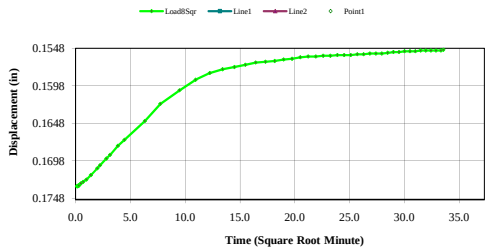
Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-LS4-30
Depth: 14 - 16 feet
Sample Type: Undisturbed

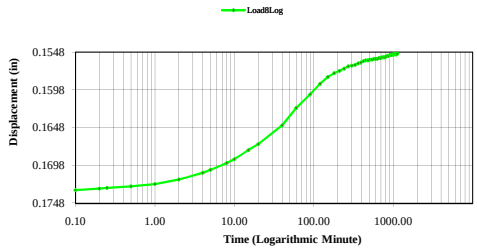
Soil Description: Organic Clay (OH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1735	0.1731	23.0800	2.1821
1	00:00:01	0.1732	0.1728	23.0400	2.1838
2	00:00:02	0.1732	0.1728	23.0400	2.1838
3	00:00:03	0.1732	0.1728	23.0400	2.1838
4	00:00:04	0.1731	0.1727	23.0267	2.1843
5	00:00:05	0.1731	0.1727	23.0267	2.1843
6	00:00:06	0.1731	0.1727	23.0267	2.1843
7	00:00:12	0.1729	0.1725	23.0000	2.1854
8	00:00:15	0.1728	0.1724	22.9867	2.1860
9	00:00:30	0.1726	0.1722	22.9600	2.1871
10	00:01:00	0.1723	0.1719	22.9200	2.1887
11	00:02:00	0.1717	0.1713	22.8400	2.1920
12	00:04:00	0.1708	0.1704	22.7200	2.1970
13	00:05:00	0.1704	0.1700	22.6667	2.1992
14	00:08:00	0.1695	0.1691	22.5467	2.2042
15	00:10:00	0.1690	0.1686	22.4800	2.2069
16	00:15:01	0.1678	0.1674	22.3200	2.2135
17	00:20:01	0.1670	0.1666	22.2133	2.2180
18	00:40:03	0.1645	0.1641	21.8800	2.2317
19	01:00:04	0.1622	0.1618	21.5733	2.2444
20	01:30:06	0.1604	0.1600	21.3333	2.2544
21	02:00:09	0.1590	0.1586	21.1467	2.2621
22	02:30:11	0.1581	0.1577	21.0267	2.2670
23	03:00:13	0.1576	0.1572	20.9600	2.2698
24	03:30:16	0.1573	0.1569	20.9200	2.2715
25	04:00:18	0.1570	0.1566	20.8800	2.2731
26	04:30:20	0.1567	0.1563	20.8400	2.2748
27	05:00:22	0.1566	0.1562	20.8267	2.2753
28	05:30:25	0.1565	0.1561	20.8133	2.2759
29	06:00:27	0.1563	0.1559	20.7867	2.2770
30	06:30:29	0.1562	0.1558	20.7733	2.2775
31	07:00:32	0.1560	0.1556	20.7467	2.2786
32	07:30:34	0.1559	0.1555	20.7333	2.2792
33	08:00:36	0.1559	0.1555	20.7333	2.2792
34	08:30:38	0.1558	0.1554	20.7200	2.2797
35	09:00:41	0.1558	0.1554	20.7200	2.2797
36	09:30:43	0.1557	0.1553	20.7067	2.2803

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.1557	0.1553	20.7067	2.2803
38	10:30:48	0.1557	0.1553	20.7067	2.2803
39	11:00:50	0.1556	0.1552	20.6933	2.2808
40	11:30:52	0.1556	0.1552	20.6933	2.2808
41	12:00:55	0.1555	0.1551	20.6800	2.2814
42	12:30:57	0.1555	0.1551	20.6800	2.2814
43	13:00:59	0.1555	0.1551	20.6800	2.2814
44	13:31:01	0.1554	0.1550	20.6667	2.2819
45	14:01:04	0.1553	0.1549	20.6533	2.2825
46	14:31:06	0.1553	0.1549	20.6533	2.2825
47	15:01:08	0.1552	0.1548	20.6400	2.2830
48	15:31:11	0.1552	0.1548	20.6400	2.2830
49	16:01:13	0.1552	0.1548	20.6400	2.2830
50	16:31:15	0.1551	0.1547	20.6267	2.2836
51	17:01:17	0.1551	0.1547	20.6267	2.2836
52	17:31:20	0.1551	0.1547	20.6267	2.2836
53	18:01:22	0.1551	0.1547	20.6267	2.2836
54	18:31:24	0.1551	0.1547	20.6267	2.2836
55	18:46:30	0.1550	0.1546	20.6133	2.2841

Consolidation Test Results
(Sequence 9) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-LS4-30
Depth: 14 - 16 feet
Sample Type: Undisturbed

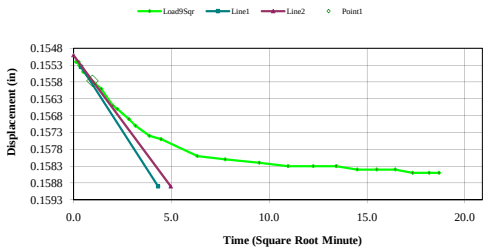
Soil Description: Organic Clay (OH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1550	0.1546	20.6133	2.2841
1	00:00:01	0.1552	0.1548	20.6400	2.2830
2	00:00:02	0.1552	0.1548	20.6400	2.2830
3	00:00:03	0.1552	0.1548	20.6400	2.2830
4	00:00:04	0.1552	0.1548	20.6400	2.2830
5	00:00:05	0.1553	0.1549	20.6533	2.2825
6	00:00:06	0.1553	0.1549	20.6533	2.2825
7	00:00:12	0.1554	0.1550	20.6667	2.2819
8	00:00:15	0.1555	0.1551	20.6800	2.2814
9	00:00:30	0.1556	0.1552	20.6933	2.2808
10	00:01:00	0.1558	0.1554	20.7200	2.2797
11	00:02:00	0.1560	0.1556	20.7467	2.2786
12	00:04:00	0.1565	0.1561	20.8133	2.2759
13	00:05:00	0.1566	0.1562	20.8267	2.2753
14	00:08:00	0.1569	0.1565	20.8667	2.2737
15	00:10:01	0.1571	0.1567	20.8933	2.2726
16	00:15:01	0.1574	0.1570	20.9333	2.2709
17	00:20:01	0.1575	0.1571	20.9467	2.2704
18	00:40:03	0.1580	0.1576	21.0133	2.2676
19	01:00:04	0.1581	0.1577	21.0267	2.2670
20	01:30:07	0.1582	0.1578	21.0400	2.2665
21	02:00:09	0.1583	0.1579	21.0533	2.2659
22	02:30:11	0.1583	0.1579	21.0533	2.2659
23	03:00:13	0.1583	0.1579	21.0533	2.2659
24	03:30:16	0.1584	0.1580	21.0667	2.2654
25	04:00:18	0.1584	0.1580	21.0667	2.2654
26	04:30:20	0.1584	0.1580	21.0667	2.2654
27	05:00:23	0.1585	0.1581	21.0800	2.2648
28	05:30:25	0.1585	0.1581	21.0800	2.2648
29	05:48:54	0.1585	0.1581	21.0800	2.2648

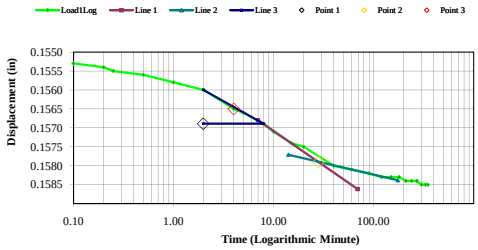
Tested By:
Checked By:

Consolidation Test Results
(Sequence 9) Load 0.250 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 10) Load 0.500 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

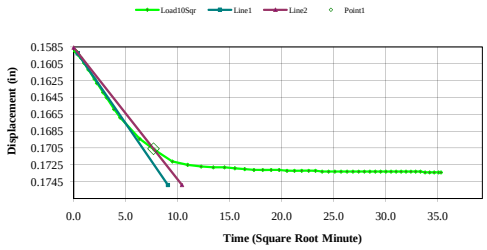
Sample Number:
Boring Number: BHSP-LS4-30
Depth: 14 - 16 feet
Sample Type: Undisturbed

Soil Description: Organic Clay (OH)
Remarks:

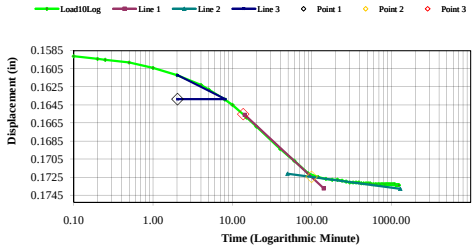
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1585	0.1581	21.0800	2.2648
1	00:00:01	0.1590	0.1586	21.1467	2.2621
2	00:00:02	0.1590	0.1586	21.1467	2.2621
3	00:00:03	0.1590	0.1586	21.1467	2.2621
4	00:00:04	0.1591	0.1587	21.1600	2.2615
5	00:00:05	0.1591	0.1587	21.1600	2.2615
6	00:00:06	0.1591	0.1587	21.1600	2.2615
7	00:00:12	0.1594	0.1590	21.2000	2.2599
8	00:00:15	0.1595	0.1591	21.2133	2.2593
9	00:00:30	0.1598	0.1594	21.2533	2.2577
10	00:01:00	0.1604	0.1600	21.3333	2.2544
11	00:02:00	0.1612	0.1608	21.4400	2.2499
12	00:04:01	0.1623	0.1619	21.5867	2.2439
13	00:05:01	0.1628	0.1624	21.6533	2.2411
14	00:08:01	0.1639	0.1635	21.8000	2.2351
15	00:10:01	0.1645	0.1641	21.8800	2.2317
16	00:15:01	0.1659	0.1655	22.0667	2.2240
17	00:20:02	0.1669	0.1665	22.2000	2.2185
18	00:40:03	0.1694	0.1690	22.5333	2.2047
19	01:00:05	0.1707	0.1703	22.7067	2.1975
20	01:30:07	0.1721	0.1717	22.8933	2.1898
21	02:00:09	0.1725	0.1721	22.9467	2.1876
22	02:30:12	0.1727	0.1723	22.9733	2.1865
23	03:00:14	0.1728	0.1724	22.9867	2.1860
24	03:30:16	0.1728	0.1724	22.9867	2.1860
25	04:00:18	0.1729	0.1725	23.0000	2.1854
26	04:30:21	0.1730	0.1726	23.0133	2.1849
27	05:00:23	0.1731	0.1727	23.0267	2.1843
28	05:30:25	0.1731	0.1727	23.0267	2.1843
29	06:00:28	0.1731	0.1727	23.0267	2.1843
30	06:30:30	0.1731	0.1727	23.0267	2.1843
31	07:00:32	0.1732	0.1728	23.0400	2.1838
32	07:30:34	0.1732	0.1728	23.0400	2.1838
33	08:00:37	0.1732	0.1728	23.0400	2.1838
34	08:30:39	0.1732	0.1728	23.0400	2.1838
35	09:00:41	0.1732	0.1728	23.0400	2.1838
36	09:30:43	0.1733	0.1729	23.0533	2.1832

Consolidation Test Results
(Sequence 10) Load 0.500 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1733	0.1729	23.0533	2.1832
38	10:30:48	0.1733	0.1729	23.0533	2.1832
39	11:00:50	0.1733	0.1729	23.0533	2.1832
40	11:30:53	0.1733	0.1729	23.0533	2.1832
41	12:00:55	0.1733	0.1729	23.0533	2.1832
42	12:30:57	0.1733	0.1729	23.0533	2.1832
43	13:00:59	0.1733	0.1729	23.0533	2.1832
44	13:31:02	0.1733	0.1729	23.0533	2.1832
45	14:01:04	0.1733	0.1729	23.0533	2.1832
46	14:31:06	0.1733	0.1729	23.0533	2.1832
47	15:01:09	0.1733	0.1729	23.0533	2.1832
48	15:31:11	0.1733	0.1729	23.0533	2.1832
49	16:01:13	0.1733	0.1729	23.0533	2.1832
50	16:31:15	0.1733	0.1729	23.0533	2.1832
51	17:01:18	0.1733	0.1729	23.0533	2.1832
52	17:31:20	0.1733	0.1729	23.0533	2.1832
53	18:01:22	0.1733	0.1729	23.0533	2.1832
54	18:31:25	0.1733	0.1729	23.0533	2.1832
55	19:01:27	0.1734	0.1730	23.0667	2.1827
56	19:31:29	0.1734	0.1730	23.0667	2.1827
57	20:01:31	0.1734	0.1730	23.0667	2.1827
58	20:31:34	0.1734	0.1730	23.0667	2.1827
59	20:47:19	0.1734	0.1730	23.0667	2.1827

Consolidation Test Results
(Sequence 11) Load 1.000 tsf

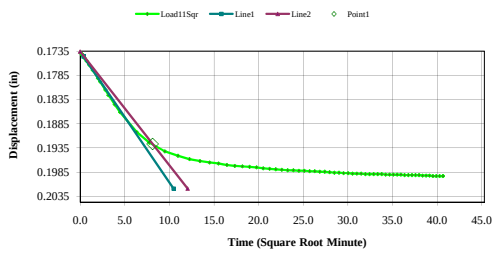
Consolidation Test Results
(Sequence 11) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 16 May 2011
Test Number:

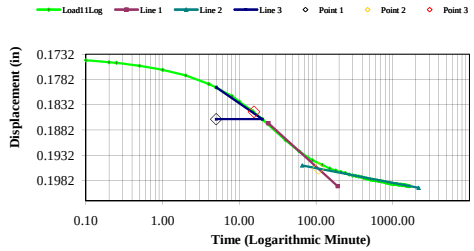
Sample Number:
Soil Description:
Boring Number: BHSP-LS4-30
Organic Clay (OH)
Depth: 14 - 16 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1734	0.1730	23.0667	2.1827
1	00:00:01	0.1740	0.1736	23.1467	2.1793
2	00:00:02	0.1741	0.1737	23.1600	2.1788
3	00:00:03	0.1742	0.1738	23.1733	2.1782
4	00:00:04	0.1743	0.1739	23.1867	2.1777
5	00:00:05	0.1743	0.1739	23.1867	2.1777
6	00:00:06	0.1744	0.1740	23.2000	2.1771
7	00:00:12	0.1748	0.1744	23.2533	2.1749
8	00:00:15	0.1749	0.1745	23.2667	2.1744
9	00:00:30	0.1755	0.1751	23.3467	2.1711
10	00:01:00	0.1763	0.1759	23.4533	2.1667
11	00:02:00	0.1774	0.1770	23.6000	2.1606
12	00:04:00	0.1791	0.1787	23.8267	2.1512
13	00:05:00	0.1798	0.1794	23.9200	2.1474
14	00:08:01	0.1815	0.1811	24.1467	2.1380
15	00:10:01	0.1826	0.1822	24.2933	2.1319
16	00:15:01	0.1845	0.1841	24.5467	2.1214
17	00:20:02	0.1861	0.1857	24.7600	2.1126
18	00:40:03	0.1902	0.1898	25.3067	2.0900
19	01:00:05	0.1924	0.1920	25.6000	2.0779
20	01:30:07	0.1942	0.1938	25.8400	2.0679
21	02:00:09	0.1951	0.1947	25.9600	2.0630
22	02:30:11	0.1958	0.1954	26.0533	2.0591
23	03:00:14	0.1962	0.1958	26.1067	2.0569
24	03:30:16	0.1965	0.1961	26.1467	2.0552
25	04:00:18	0.1967	0.1963	26.1733	2.0541
26	04:30:21	0.1970	0.1966	26.2133	2.0525
27	05:00:23	0.1972	0.1968	26.2400	2.0514
28	05:30:25	0.1973	0.1969	26.2533	2.0508
29	06:00:27	0.1974	0.1970	26.2667	2.0503
30	06:30:30	0.1975	0.1971	26.2800	2.0497
31	07:00:32	0.1977	0.1973	26.3067	2.0486
32	07:30:34	0.1978	0.1974	26.3200	2.0481
33	08:00:37	0.1979	0.1975	26.3333	2.0475
34	08:30:39	0.1980	0.1976	26.3467	2.0470
35	09:00:41	0.1981	0.1977	26.3600	2.0464
36	09:30:43	0.1981	0.1977	26.3600	2.0464

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1982	0.1978	26.3733	2.0459
38	10:30:48	0.1982	0.1978	26.3733	2.0459
39	11:00:50	0.1983	0.1979	26.3867	2.0453
40	11:30:53	0.1983	0.1979	26.3867	2.0453
41	12:00:55	0.1984	0.1980	26.4000	2.0448
42	12:30:57	0.1984	0.1980	26.4000	2.0448
43	13:00:59	0.1985	0.1981	26.4133	2.0442
44	13:31:02	0.1986	0.1982	26.4267	2.0437
45	14:01:04	0.1986	0.1982	26.4267	2.0437
46	14:31:06	0.1987	0.1983	26.4400	2.0431
47	15:01:09	0.1987	0.1983	26.4400	2.0431
48	15:31:11	0.1988	0.1984	26.4533	2.0425
49	16:01:13	0.1988	0.1984	26.4533	2.0425
50	16:31:15	0.1988	0.1984	26.4533	2.0425
51	17:01:18	0.1989	0.1985	26.4667	2.0420
52	17:31:20	0.1989	0.1985	26.4667	2.0420
53	18:01:22	0.1989	0.1985	26.4667	2.0420
54	18:31:24	0.1989	0.1985	26.4667	2.0420
55	19:01:27	0.1989	0.1985	26.4667	2.0420
56	19:31:29	0.1990	0.1986	26.4800	2.0414
57	20:01:31	0.1990	0.1986	26.4800	2.0414
58	20:31:33	0.1990	0.1986	26.4800	2.0414
59	21:01:36	0.1990	0.1986	26.4800	2.0414
60	21:31:38	0.1990	0.1986	26.4800	2.0414
61	22:01:40	0.1991	0.1987	26.4933	2.0409
62	22:31:43	0.1991	0.1987	26.4933	2.0409
63	23:01:45	0.1991	0.1987	26.4933	2.0409
64	23:31:47	0.1991	0.1987	26.4933	2.0409
65	24:01:49	0.1991	0.1987	26.4933	2.0409
66	24:31:52	0.1992	0.1988	26.5067	2.0403
67	25:01:54	0.1992	0.1988	26.5067	2.0403
68	25:31:56	0.1992	0.1988	26.5067	2.0403
69	26:01:59	0.1993	0.1989	26.5200	2.0398
70	26:32:01	0.1993	0.1989	26.5200	2.0398
71	27:02:03	0.1993	0.1989	26.5200	2.0398
72	27:32:05	0.1993	0.1989	26.5200	2.0398
73	27:32:39	0.1993	0.1989	26.5200	2.0398

Consolidation Test Results
(Sequence 12) Load 2.000 tsf

Consolidation Test Results
(Sequence 12) Load 2.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

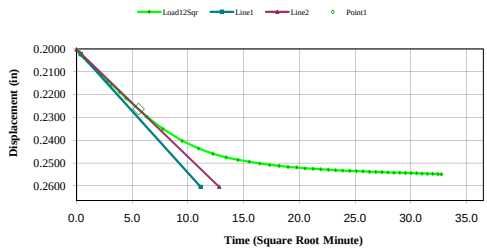
Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-LS4-30
Depth: 14 - 16 feet
Sample Type: Undisturbed

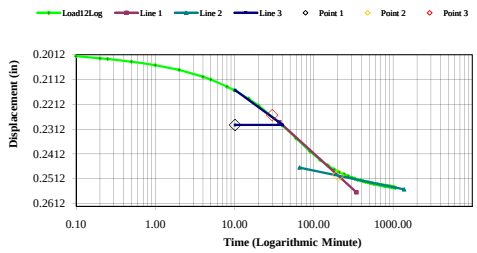
Soil Description: Organic Clay (OH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1993	0.1989	26.5200	2.0398
1	00:00:01	0.2005	0.2001	26.6800	2.0332
2	00:00:02	0.2008	0.2004	26.7200	2.0315
3	00:00:03	0.2012	0.2008	26.7733	2.0293
4	00:00:04	0.2014	0.2010	26.8000	2.0282
5	00:00:05	0.2016	0.2012	26.8267	2.0271
6	00:00:06	0.2018	0.2014	26.8533	2.0260
7	00:00:12	0.2027	0.2023	26.9733	2.0210
8	00:00:15	0.2029	0.2025	27.0000	2.0199
9	00:00:30	0.2040	0.2036	27.1467	2.0139
10	00:01:00	0.2054	0.2050	27.3333	2.0061
11	00:02:00	0.2073	0.2069	27.5867	1.9957
12	00:04:00	0.2101	0.2097	27.9600	1.9802
13	00:05:00	0.2112	0.2108	28.1067	1.9742
14	00:08:01	0.2141	0.2137	28.4933	1.9582
15	00:10:01	0.2156	0.2152	28.6933	1.9499
16	00:15:01	0.2189	0.2185	29.1333	1.9317
17	00:20:01	0.2217	0.2213	29.5067	1.9162
18	00:40:03	0.2297	0.2293	30.5733	1.8721
19	01:00:04	0.2350	0.2346	31.2800	1.8429
20	01:30:07	0.2403	0.2399	31.9867	1.8136
21	02:00:09	0.2436	0.2432	32.4267	1.7954
22	02:30:11	0.2459	0.2455	32.7333	1.7828
23	03:00:14	0.2475	0.2471	32.9467	1.7739
24	03:30:16	0.2486	0.2482	33.0933	1.7679
25	04:00:18	0.2494	0.2490	33.2000	1.7634
26	04:30:20	0.2502	0.2498	33.3067	1.7590
27	05:00:23	0.2508	0.2504	33.3867	1.7557
28	05:30:25	0.2512	0.2508	33.4400	1.7535
29	06:00:27	0.2517	0.2513	33.5067	1.7508
30	06:30:30	0.2519	0.2515	33.5333	1.7497
31	07:00:32	0.2523	0.2519	33.5867	1.7475
32	07:30:34	0.2525	0.2521	33.6133	1.7463
33	08:00:36	0.2527	0.2523	33.6400	1.7452
34	08:30:39	0.2529	0.2525	33.6667	1.7441
35	09:00:41	0.2531	0.2527	33.6933	1.7430
36	09:30:43	0.2533	0.2529	33.7200	1.7419

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.2534	0.2530	33.7333	1.7414
38	10:30:48	0.2535	0.2531	33.7467	1.7408
39	11:00:50	0.2536	0.2532	33.7600	1.7403
40	11:30:52	0.2538	0.2534	33.7867	1.7392
41	12:00:55	0.2539	0.2535	33.8000	1.7386
42	12:30:57	0.2540	0.2536	33.8133	1.7381
43	13:00:59	0.2541	0.2537	33.8267	1.7375
44	13:31:01	0.2542	0.2538	33.8400	1.7370
45	14:01:04	0.2542	0.2538	33.8400	1.7370
46	14:31:06	0.2543	0.2539	33.8533	1.7364
47	15:01:08	0.2544	0.2540	33.8667	1.7359
48	15:31:11	0.2544	0.2540	33.8667	1.7359
49	16:01:13	0.2546	0.2542	33.8933	1.7348
50	16:31:15	0.2547	0.2543	33.9067	1.7342
51	17:01:18	0.2547	0.2543	33.9067	1.7342
52	17:31:20	0.2548	0.2544	33.9200	1.7337
53	17:51:48	0.2549	0.2545	33.9333	1.7331

Consolidation Test Results
(Sequence 13) Load 4.000 tsf

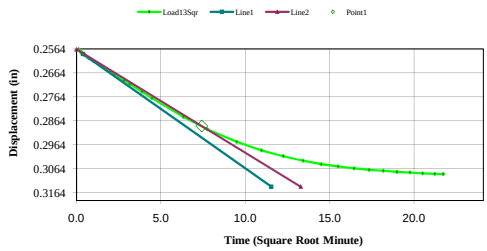
Consolidation Test Results
(Sequence 13) Load 4.000 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 16 May 2011
Test Number:

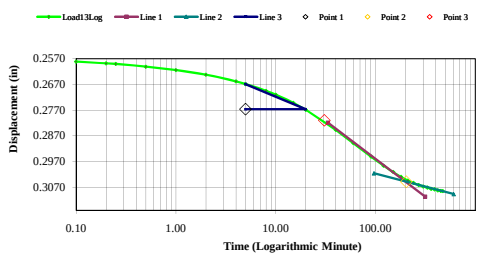
Sample Number:
Soil Description:
Boring Number: BHSP-LS4-30
Organic Clay (OH)
Depth: 14 - 16 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2549	0.2545	33.9333	1.7331
1	00:00:01	0.2565	0.2561	34.1467	1.7243
2	00:00:02	0.2570	0.2566	34.2133	1.7215
3	00:00:03	0.2573	0.2569	34.2533	1.7199
4	00:00:04	0.2576	0.2572	34.2933	1.7182
5	00:00:05	0.2579	0.2575	34.3333	1.7166
6	00:00:06	0.2581	0.2577	34.3600	1.7155
7	00:00:12	0.2588	0.2584	34.4533	1.7116
8	00:00:15	0.2590	0.2586	34.4800	1.7105
9	00:00:30	0.2601	0.2597	34.6267	1.7044
10	00:01:00	0.2614	0.2610	34.8000	1.6973
11	00:02:00	0.2632	0.2628	35.0400	1.6873
12	00:04:00	0.2658	0.2654	35.3867	1.6730
13	00:05:00	0.2669	0.2665	35.5333	1.6669
14	00:08:00	0.2695	0.2691	35.8800	1.6526
15	00:10:01	0.2710	0.2706	36.0800	1.6443
16	00:15:01	0.2742	0.2738	36.5067	1.6267
17	00:20:01	0.2769	0.2765	36.8667	1.6118
18	00:40:03	0.2847	0.2843	37.9067	1.5687
19	01:00:04	0.2899	0.2895	38.6000	1.5401
20	01:30:07	0.2951	0.2947	39.2933	1.5114
21	02:00:09	0.2987	0.2983	39.7733	1.4915
22	02:30:11	0.3011	0.3007	40.0933	1.4783
23	03:00:14	0.3030	0.3026	40.3467	1.4678
24	03:30:16	0.3045	0.3041	40.5467	1.4595
25	04:00:18	0.3054	0.3050	40.6667	1.4546
26	04:30:20	0.3062	0.3058	40.7733	1.4501
27	05:00:23	0.3068	0.3064	40.8533	1.4468
28	05:30:25	0.3072	0.3068	40.9067	1.4446
29	06:00:27	0.3077	0.3073	40.9733	1.4419
30	06:30:30	0.3079	0.3075	41.0000	1.4408
31	07:00:32	0.3083	0.3079	41.0533	1.4386
32	07:30:34	0.3085	0.3081	41.0800	1.4375
33	07:52:00	0.3086	0.3082	41.0933	1.4369

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 14) Load 8.000 tsf

Consolidation Test Results
(Sequence 14) Load 8.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

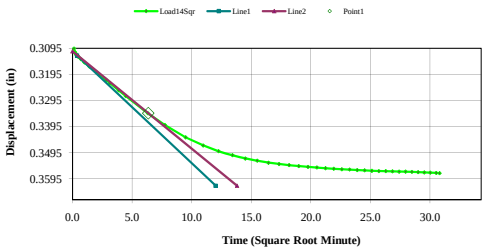
Project Number: 10883-011-00
Test Date: 16 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-LS4-30
Depth: 14 - 16 feet
Sample Type: Undisturbed

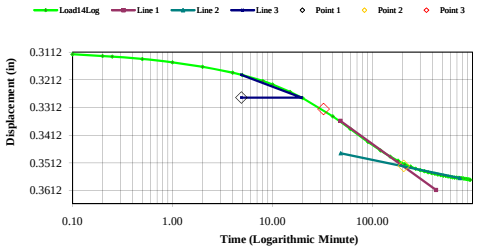
Soil Description: Organic Clay (OH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3086	0.3082	41.0933	1.4369
1	00:00:01	0.3096	0.3092	41.2267	1.4314
2	00:00:02	0.3109	0.3105	41.4000	1.4242
3	00:00:03	0.3112	0.3108	41.4400	1.4226
4	00:00:04	0.3115	0.3111	41.4800	1.4209
5	00:00:05	0.3118	0.3114	41.5200	1.4193
6	00:00:06	0.3120	0.3116	41.5467	1.4182
7	00:00:12	0.3126	0.3122	41.6267	1.4148
8	00:00:15	0.3128	0.3124	41.6533	1.4137
9	00:00:30	0.3137	0.3133	41.7733	1.4088
10	00:01:00	0.3149	0.3145	41.9333	1.4022
11	00:02:00	0.3165	0.3161	42.1467	1.3933
12	00:04:00	0.3186	0.3182	42.4267	1.3817
13	00:05:00	0.3195	0.3191	42.5467	1.3768
14	00:08:00	0.3216	0.3212	42.8267	1.3652
15	00:10:01	0.3229	0.3225	43.0000	1.3580
16	00:15:01	0.3256	0.3252	43.3600	1.3431
17	00:20:01	0.3278	0.3274	43.6533	1.3310
18	00:40:03	0.3344	0.3340	44.5333	1.2946
19	01:00:04	0.3389	0.3385	45.1333	1.2698
20	01:30:07	0.3436	0.3432	45.7600	1.2439
21	02:00:09	0.3467	0.3463	46.1733	1.2268
22	02:30:11	0.3489	0.3485	46.4667	1.2146
23	03:00:14	0.3504	0.3500	46.6667	1.2063
24	03:30:16	0.3517	0.3513	46.8400	1.1992
25	04:00:18	0.3525	0.3521	46.9467	1.1948
26	04:30:20	0.3533	0.3529	47.0533	1.1903
27	05:00:23	0.3538	0.3534	47.1200	1.1876
28	05:30:25	0.3542	0.3538	47.1733	1.1854
29	06:00:27	0.3546	0.3542	47.2267	1.1832
30	06:30:30	0.3549	0.3545	47.2667	1.1815
31	07:00:32	0.3551	0.3547	47.2933	1.1804
32	07:30:34	0.3554	0.3550	47.3333	1.1788
33	08:00:36	0.3556	0.3552	47.3600	1.1777
34	08:30:39	0.3558	0.3554	47.3867	1.1766
35	09:00:41	0.3559	0.3555	47.4000	1.1760
36	09:30:43	0.3561	0.3557	47.4267	1.1749

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.3562	0.3558	47.4400	1.1744
38	10:30:48	0.3564	0.3560	47.4667	1.1732
39	11:00:50	0.3565	0.3561	47.4800	1.1727
40	11:30:52	0.3565	0.3561	47.4800	1.1727
41	12:00:55	0.3566	0.3562	47.4933	1.1721
42	12:30:57	0.3567	0.3563	47.5067	1.1716
43	13:00:59	0.3567	0.3563	47.5067	1.1716
44	13:31:01	0.3568	0.3564	47.5200	1.1710
45	14:01:04	0.3569	0.3565	47.5333	1.1705
46	14:31:06	0.3570	0.3566	47.5467	1.1699
47	15:01:08	0.3571	0.3567	47.5600	1.1694
48	15:31:11	0.3572	0.3568	47.5733	1.1688
49	15:48:41	0.3573	0.3569	47.5867	1.1683

Project: Non-Rock Alternatives to Shoreline Protection Demonstration (LA-16)
Project Location: Southeast Shore of Lake Salvador, Jefferson Parish, Louisiana
Project No.: 10883-011-00

Boring No.	Field Vane Test		Field Vane Instrument Used	Field Vane Dimensions (mm)	Instrument Reading	Shear Stress Interpolated from Geonor H-10 Vane Borer Calibration Curves			Plasticity Index	Correction Factor	PI Corrected Shear Stress	
	Depth Below Barge Deck (feet)	Depth Below Mudline (feet)				kN/m^2	psf	ksf	%		psf	ksf
BHSP-LS1-30	14	10	2555	65/130	11	5.75	120	0.120	PT	0.5	60	0.060
BHSP-LS1-30	20	16	2555	65/130	10	5.23	109	0.109	PT	0.5	55	0.055
BHSP-LS2-30	9	5	2555	65/130	12	6.28	131	0.131	116	0.55	72	0.072
BHSP-LS2-30	13	9	2555	65/130	14	7.33	153	0.153	142	0.5	77	0.077
BHSP-LS3-50	14	10	2555	65/130	3	1.57	33	0.033	PT	0.5	16	0.016
BHSP-LS3-50	19	15	2555	65/130	5	2.62	55	0.055	CH	0.8	44	0.044
BHSP-LS4-30	14	10	2555	65/130	13	6.80	142	0.142	46	0.7	99	0.099
BHSP-LS4-30	20	16	2555	65/130	15	7.86	164	0.164	127	0.55	90	0.090

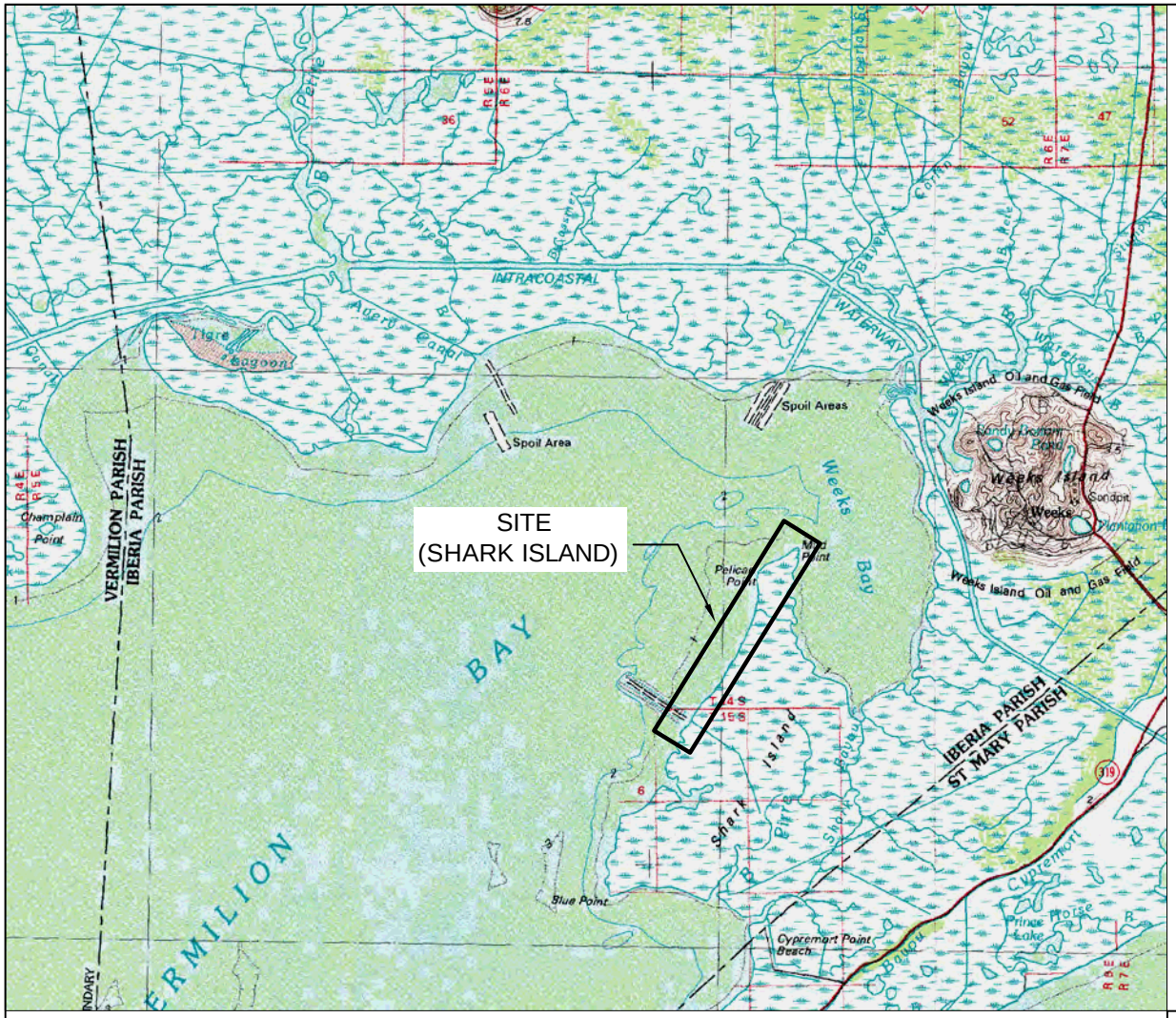
Notes:

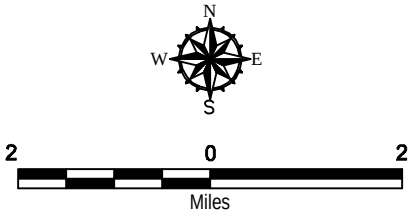
1. Field Vane testing was performed prior to sample extrusion/classification and soil type was not known. Peat is highly permeable and is poorly suited to the Field Vane Shear test.
2. Correction factors were selected based on Bjerrum's (1972) Recommended curve, as found in Figure 5.1 of "Recommended Practice for Soft Ground Site Characterization: Arthur Casagrande Lecture" by Ladd and Degroot (2003). Figure 5.1 correlates correction factors to the Plasticity Index of the material.
3. Correction factors for peat were assumed to be 0.5 based on "Engineering Properties of Fibrous Peats" by Mesri and Anjlouni. A review of miniature vane shear testing and triaxial compression testing shows good agreement between the two test types, suggesting that miniature vane and triaxial tests are better suited to these materials.
4. "OH" clays without a PI test were assigned a correction factor of 0.7 based on a review of OH materials from this project.
5. "CH" clays without a PI test were assigned a correction factor of 0.8 based on a review of CH materials from this project.

APPENDIX C
Shark Island Project Site

P:\10\10883011\00\CAD\vicinity map.dwg\TAB:Layout2 modified on Jun 06, 2011 - 2:44pm

JPV : KMC





Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Topographic image taken from USGS, USGS Digital Raster Graphics - 1:100,000 - Zone 15, Dated 1/21/1997

SHARK ISLAND
SITE MAP

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Iberia Parish, Louisiana

GEOENGINEERS

Figure C-1

P:\10\10883011\00\CAD\Boring Location Plan.dwg\TAB:Layout1 (3) modified on Jun 06, 2011 - 2:50pm

JPV : KMC

BORING #	LATITUDE	LONGITUDE
SOUTH TERMINUS	N 29° 46' 17.3"	W 91° 51' 49.7"
BHSP-SI1-50	N 29° 46' 34.1"	W 91° 51' 28.0"
BHSP-SI2-30	N 29° 46' 41.5"	W 91° 51' 20.1"
BHSP-SI3-30	N 29° 46' 49.6"	W 91° 51' 13.9"
BHSP-SI4-30	N 29° 46' 59.1"	W 91° 51' 10.5"
NORTH TERMINUS	N 29° 47' 09.4"	W 91° 51' 07.5"

Legend

BHSP-SI1-30 Soil Boring Location

N
W E
S

2000 0 2000
Feet

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Aerial image taken from USGS, USGS High Resolution State Orthoimagery for the Louisiana Coastal Area, Dated: 10/18/2008

SHARK ISLAND
SOIL BORING LOCATION PLAN

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Iberia Parish, Louisiana

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Figure C-2

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS MORE THAN 50% RETAINED ON NO. 200 SIEVE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS
				SP	POORLY-GRADED SANDS, GRAVELLY SAND
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

ADDITIONAL MATERIAL SYMBOLS

SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
	CC	Cement Concrete
	AC	Asphalt Concrete
	CR	Crushed Rock/ Quarry Spalls
	TS	Topsoil/ Forest Duff/Sod

Measured groundwater level in exploration, well, or piezometer

Groundwater observed at time of exploration

Perched water observed at time of exploration

Graphic Log Contact

Distinct contact between soil strata or geologic units

Approximate location of soil strata change within a geologic soil unit

Material Description Contact

Distinct contact between soil strata or geologic units

Approximate location of soil strata change within a geologic soil unit

Sampler Symbol Descriptions

Standard Penetration Test (SPT)

Shelby tube

Piston

Direct-Push

Bulk or grab

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

A "P" indicates sampler pushed using the weight of the drill rig.

Laboratory / Field Tests

%F	Percent fines
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture content and dry density
OC	Organic content
PM	Permeability or hydraulic conductivity
PP	Pocket penetrometer
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
VS	Vane shear

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

KEY TO EXPLORATION LOGS

GEOENGINEERS

FIGURE C-3

Drilled	Start 4/29/2011	End 4/29/2011	Total Depth (ft)	56	Logged By / Checked By	TJS / JPV	Driller	Specialized Environmental Resources, LLC	Drilling Method	Wet Rotary
Top of Deck Elevation (ft) Vertical Datum			2.2		Hammer Data	Safety Hammer/Cathead 140 (lbs) / 30 (in) Drop	Drilling Equipment	Pontoon-Mounted Drill Rig		
Latitude / Longitude			N29° 46' 34.1" / W91° 51' 28.0"		System Datum	Geographic NAVD88 (feet)	Water Depth	Date Measured: 4/29/2011	Depth (ft): 2.0	Elevation (ft): 0.2

Notes: See Figure A-1 for explanation of symbols.
Cement-bentonite grout backfill top 25 feet.

Elevation (feet)	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
	0									Top of deck									
										Water line									
0																			
	5									Mudline at El. -3.78 feet									
						1				No sample recovered									
-5			8			2			PT	Very soft dark gray peat	733	9.3	0.08	0.52	10			0.08	65
	10		9			3				Very soft dark gray peat	837	6.9	0.11	0.63	9			0.13	63
-10			9.5			4				Very soft dark gray peat	738	8.2	0.08	0.58	11			0.21	47
			10			5				Very soft dark gray peat	625	9	0.07	0.86	11			0.11	52
	15		10.5			6				Very soft dark gray peat	594	9.6	0.09	0.98	9			0.18	39
-15			7			7				Very soft dark gray peat	536	11	0.09	1.09	11			0.08	
	20		11			8			OH	Very soft gray slightly organic clay (field vane - 0.06 KSF)	118	48	0.08	1.21	12			0.09	4
-20			9.5			9				Very soft gray slightly organic clay	82	53.8	0.02	0.97	13			0.1	
			10.5			10			CH	Soft gray clay with 2" organic clay layer (field vane - 0.07 KSF)	88	70.2	0.09	1.09	13	51	33	0.25	
	25																		
-25									OH										
			12			11				Very soft gray organic clay	341	17.3	0.14	1.38	12	188	142	0.19	
	30																		
-30																			
			13			12				Very soft gray organic clay	205	22.8	0.13	1.67	12	249	187	0.21	
	35																		

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-SI1-50

GEOENGINEERS

Project: LA-16 Non-Rock Demo Project
Project Location: Iberia Parish, Louisiana
Project Number: 10883-011-00

Figure C-4
Sheet 1 of 2

Baton Rouge: Date:6/7/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GEI8_GEOTECH_LAB

Elevation (feet)	Depth (feet)	FIELD DATA: Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	LABORATORY DATA: Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
	35							CH										
-35																		
	40	9.5			13				Very soft gray clay with organic matter	32	70.1	0.09	1.90	12				
-40																		
	45	12			14				Medium gray clay with organic matter	29	93.2	0.88	2.25	13	50	31		
-45																		
	50	10			15				Medium gray clay with organic matter	32	92.8	0.72	2.53	11				
-50																		
	55	16			16				Soft gray clay	34	87.5	0.43	2.82	13	50	32		

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-SI1-50 (continued)

GEOENGINEERS

Project: LA-16 Non-Rock Demo Project

Project Location: Iberia Parish, Louisiana

Project Number: 10883-011-00

Figure C-4

Sheet 2 of 2

Baton Rouge: Date:6/7/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GE18_GEOTECH_LAB

Drilled	Start 4/29/2011	End 4/29/2011	Total Depth (ft)	35	Logged By / Checked By	TJS / JPV	Driller	Specialized Environmental Resources, LLC	Drilling Method	Wet Rotary
Top of Deck Elevation (ft) Vertical Datum			1.3		Hammer Data	Safety Hammer/Cathead 140 (lbs) / 30 (in) Drop	Drilling Equipment	Pontoon-Mounted Drill Rig		
Latitude / Longitude			N29° 46' 41.5" / W91° 51' 20.1"		System Datum	Geographic NAVD88 (feet)	Water Depth	Date Measured: 4/29/2011	Depth (ft): 2.0	Elevation (ft): -0.7

Notes: See Figure A-1 for explanation of symbols.
Cement-bentonite grout backfill top 25 feet.

Depth (feet)	Elevation (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
0	0									Top of deck									
							▽			Water line									
										Mudline at El. -3.73 feet									
5	-5					1				No sample recovered									
			1			2			PT	Brown peat (field vane - 0.02 KSF)								0.02	
			10			3				Very soft black peat	825	7.6	0.10	0.29	15			0.12	68
10	-10		12			4				Very soft black peat	721	8.2	0.14	0.40	14			0.16	65
			9.5			5				Very soft gray and black peat	699	8.8	0.11	0.52	10			0.09	
15	-15		14			6				Very soft gray and black peat (field vane - 0.05 KSF)	368	15.7	0.12	0.63	11	295	209	0.16	
			10.5			7				Very soft gray and dark gray peat	352	16.2	0.12	0.75	8			0.14	30
20	-20		9.5			8			OH	Very soft gray slightly organic clay with 3½" peat layer	101	44.9	0.13	0.75	7	106	78	0.09	
			10			9				Very soft gray slightly organic clay with 3½" peat layer	97	45.6	0.09	0.98	12			0.08	
						10				No sample recovered									
25	-25		12			11			CH	Very soft gray clay with organic matter	33	67	0.11	1.21	4	106	84	0.28	
									CL										
			8			12				Medium gray clay with silt and calcareous nodules	32	96.6	0.59	1.38	15	47	25		
30	-30																		
			9.5			13				Medium gray clay with silt streaks and pockets	33	90.8	0.54	1.67	14	47	30		
35																			

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-SI2-30

GEOENGINEERS

Project: LA-16 Non-Rock Demo Project
Project Location: Iberia Parish, Louisiana
Project Number: 10883-011-00

Figure C-5
Sheet 1 of 1

Baton Rouge: Date:6/7/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GE8_GEOTECH_LAB

Drilled	Start 4/29/2011	End 4/29/2011	Total Depth (ft)	34	Logged By / Checked By	TJS / JPV	Driller	Specialized Environmental Resources, LLC	Drilling Method	Wet Rotary
Top of Deck Elevation (ft) Vertical Datum			2.0		Hammer Data	Safety Hammer/Cathead 140 (lbs) / 30 (in) Drop	Drilling Equipment	Pontoon-Mounted Drill Rig		
Latitude / Longitude			N29° 46' 49.6" / W91° 51' 13.9"		System Datum	Geographic NAVD88 (feet)	Water Depth	Date Measured: 4/29/2011	Depth (ft): 3.0	Elevation (ft): -1.0

Notes: See Figure A-1 for explanation of symbols.
Cement-bentonite grout backfill top 25 feet.

Elevation (feet)	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
	0									Top of deck									
										Water line									
0																			
			6			1			PT	Very soft black peat Mudline at El. -3.04 feet	913	6.1	0.06	0.06	10				54
	5																		
-5			5			2				Very soft black peat	750	7.3	0.07	0.17	13			0.07	
			7.5			3				Very soft black peat	629	8.4	0.12	0.29	10			0.07	75
	10		7			4				Very soft black peat (field vane - 0.04 KSF)	699	7.9	0.06	0.40	9			0.09	
-10			10			5				Very soft dark gray peat	784	7.7	0.05	0.81	13			0.02	73
			5			6				Very soft dark gray peat						527	312	0.11	
	15																		
-15			9.5			7				Very soft brown peat (field vane - 0.04 KSF)	243	19.1	0.08	0.75	12			0.07	30
			7.5			8			OH	Very soft gray organic clay	125	40.4	0.06	1.15	12			0.1	6
	20		9			9				Very soft gray organic clay	106	43.5	0.80	0.98	2			0.11	4
-20			10.5			10				Very soft gray slightly organic clay	73	53.2	0.06	1.09	12	87	67		
	25								CL										
-25			3			11				Gray clay with silt	29					42	23		
	30																		
-30			10.5			12				Medium gray silty clay	28	94.9	0.55	1.67	11	41	22		

[1]An Asterisk indicates a remold was used for strength testing.

Log of Boring BHSP-SI3-30

GEOENGINEERS

Project: LA-16 Non-Rock Demo Project
Project Location: Iberia Parish, Louisiana
Project Number: 10883-011-00

Figure C-6
Sheet 1 of 1

Baton Rouge: Date:6/7/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GE8_GEOTECH_LAB

Drilled	Start 4/29/2011	End 4/29/2011	Total Depth (ft)	35	Logged By / Checked By	TJS / JPV	Driller	Specialized Environmental Resources, LLC	Drilling Method	Wet Rotary
Top of Deck Elevation (ft) Vertical Datum			1.7		Hammer Data	Safety Hammer/Cathead 140 (lbs) / 30 (in) Drop	Drilling Equipment	Pontoon-Mounted Drill Rig		
Latitude / Longitude			N29° 46' 59.1" / W91° 51' 10.5"		System Datum	Geographic NAVD88 (feet)	Water Depth	Date Measured: 4/29/2011	Depth (ft): 2.0	Elevation (ft): -0.3

Notes: See Figure A-1 for explanation of symbols.
Cement-bentonite grout backfill top 25 feet.

Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name	Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Water Content, %	Dry Density, (pcf)	Compressive Strength (TSF)[1]	Confining Pressure (KSF)	Strain, %	Liquid Limit (LL), %	Plasticity Index (PI), %	MiniVane Shear Strength (KSF)	Organic Content, %
0									Top of deck									
						▽			Water line									
									Mudline at El. -3.32 feet									
5					1				No sample recovered									
		7.5			2			PT	Very soft black peat	676	8	0.14	0.17	12			0.06	54
		7			3				Very soft black peat (field vane - 0.04 KSF)	592	9.4	0.11	0.29	12			0.04	
10		9			4				Very soft black peat	629	8.7	0.14	0.40	15	641	376	0.11	
		9			5				Very soft black peat (field vane - 0.03 KSF)	753	7.8	0.08	0.52	14			0.08	73
15		10			6				Wood (semi-decayed) with 4½" peat layer	660							0.1	
		3			7				Black peat	458							0.07	47
		4.5			8				Brown peat with wood	432					390	269	0.08	
20		8.5			9			OH	Very soft gray slightly organic clay with organic matter, wood and 1" peat layer	112	41.8	0.16	0.98	14	106	80	0.07	
		7.5			10			CH	Very soft gray clay with organic matter	66	60.5	0.12	1.09	14	73	51	0.13	
25																		
					11				No sample recovered									
30								CL										
		9			12				Very soft gray clay, organic matter, wood and 1" peat layer	33	72.5	0.24	1.67	15	47	28		
35																		

[1]An Asterisk indicates a remold was used for strength testing.

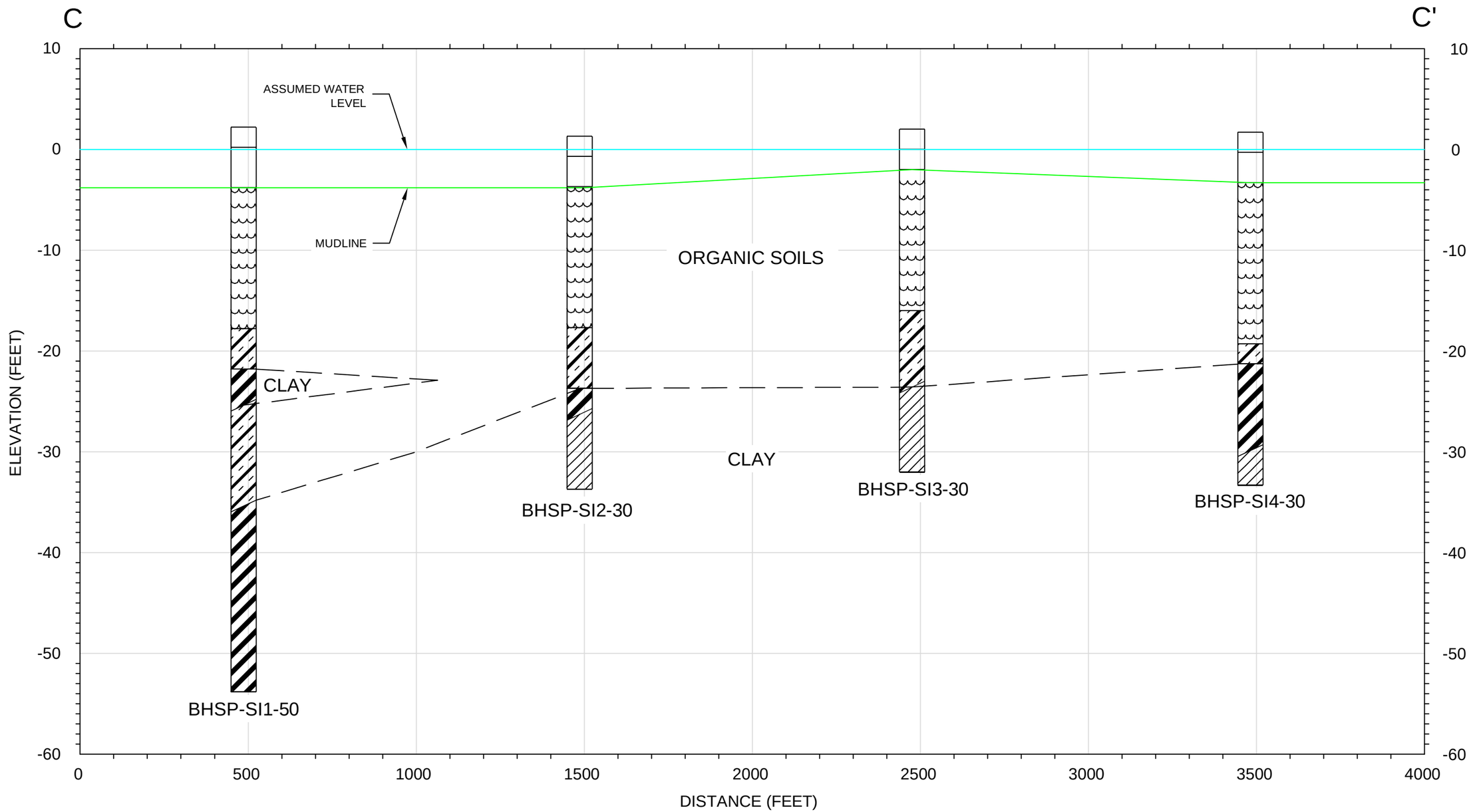
Log of Boring BHSP-SI4-30

GEOENGINEERS

Project: LA-16 Non-Rock Demo Project
Project Location: Iberia Parish, Louisiana
Project Number: 10883-011-00

Figure C-7
Sheet 1 of 1

Baton Rouge: Date:6/7/11 Path:P:\10\10883011\GINT\NON ROCK ALTERNATIVES TO SHORELINE PROTECTION.GPJ DBTemplate/LibTemplate:GEOENGINEERS8.GDT/GEI8_GEOTECH_LAB



Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Elevation data provided by NCRS, NAVD 88 Datum, Dated May 19, 2011

SHARK ISLAND
SUBSURFACE PROFILE

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Iberia Parish, Louisiana

GEOENGINEERS

Figure C-8

JPV : KMC

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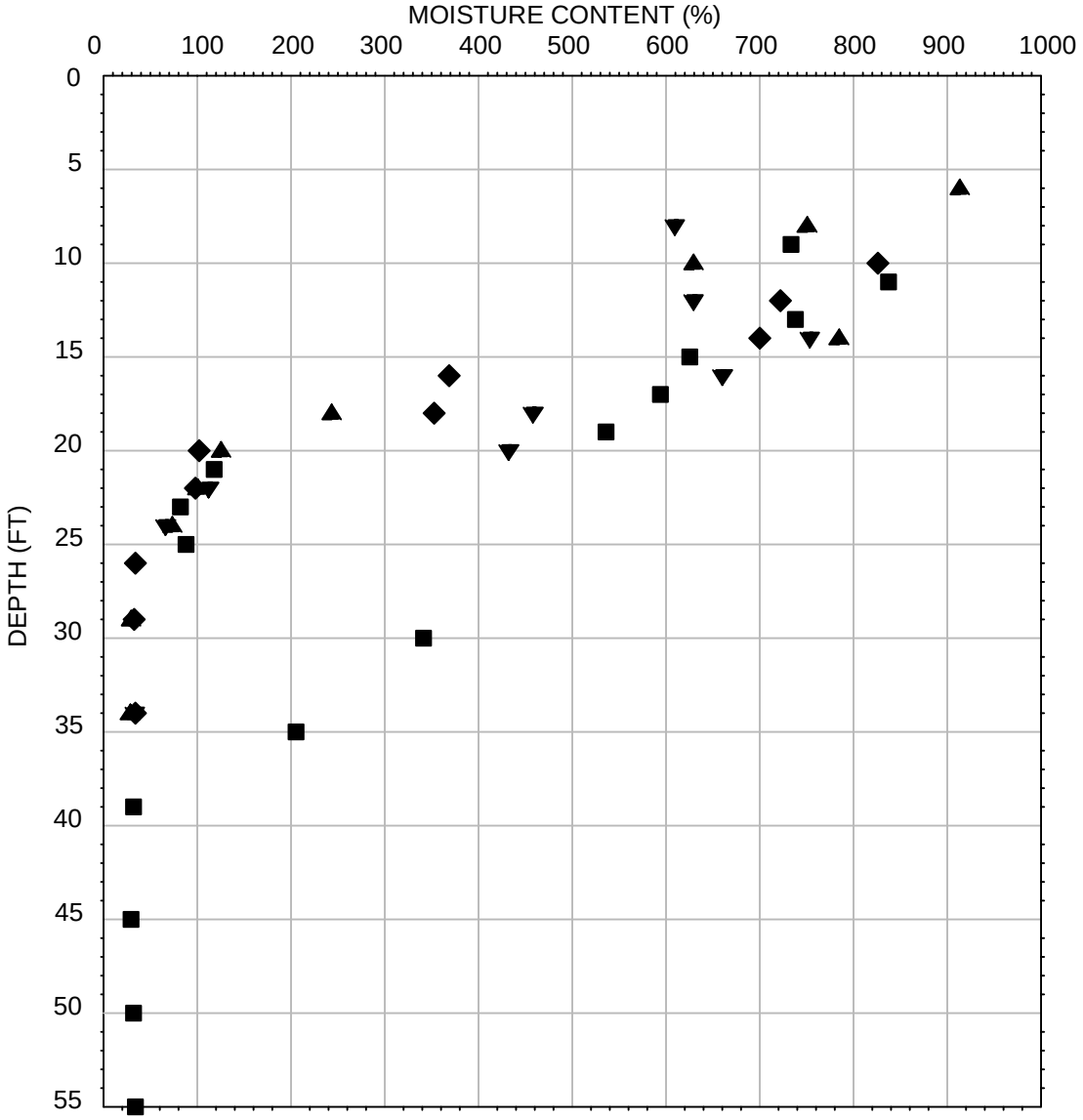


LEGEND

- ■ BHSP-SI1-30
- ◆ BHSP-SI2-30
- ▲ BHSP-SI3-50
- ▼ BHSP-SI4-30

SHARK ISLAND
MOISTURE CONTENT VS DEPTH

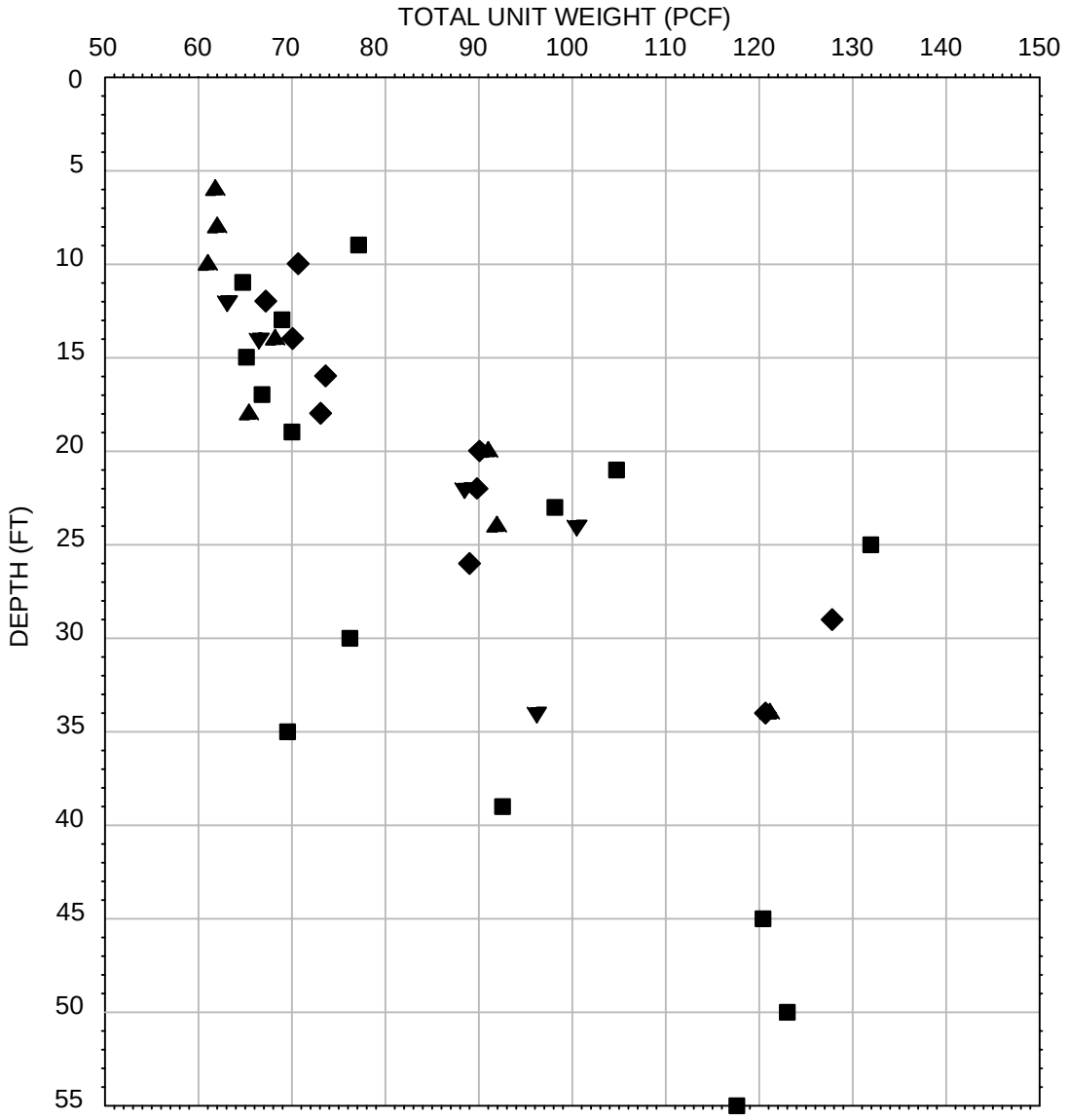
Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Iberia Parish, Louisiana

GEOENGINEERS

FIGURE C-9

JPV : KMC

P:\10\10883011\00\CAD\GRAPH-MC.dwg\TAB:Chart 1 (3) modified on Jun 07, 2011 - 9:02am



LEGEND

- ■ BHSP-SI1-30
- ◆ BHSP-SI2-30
- ▲ BHSP-SI3-50
- ▼ BHSP-SI4-30

SHARK ISLAND
TOTAL UNIT WEIGHT VS DEPTH

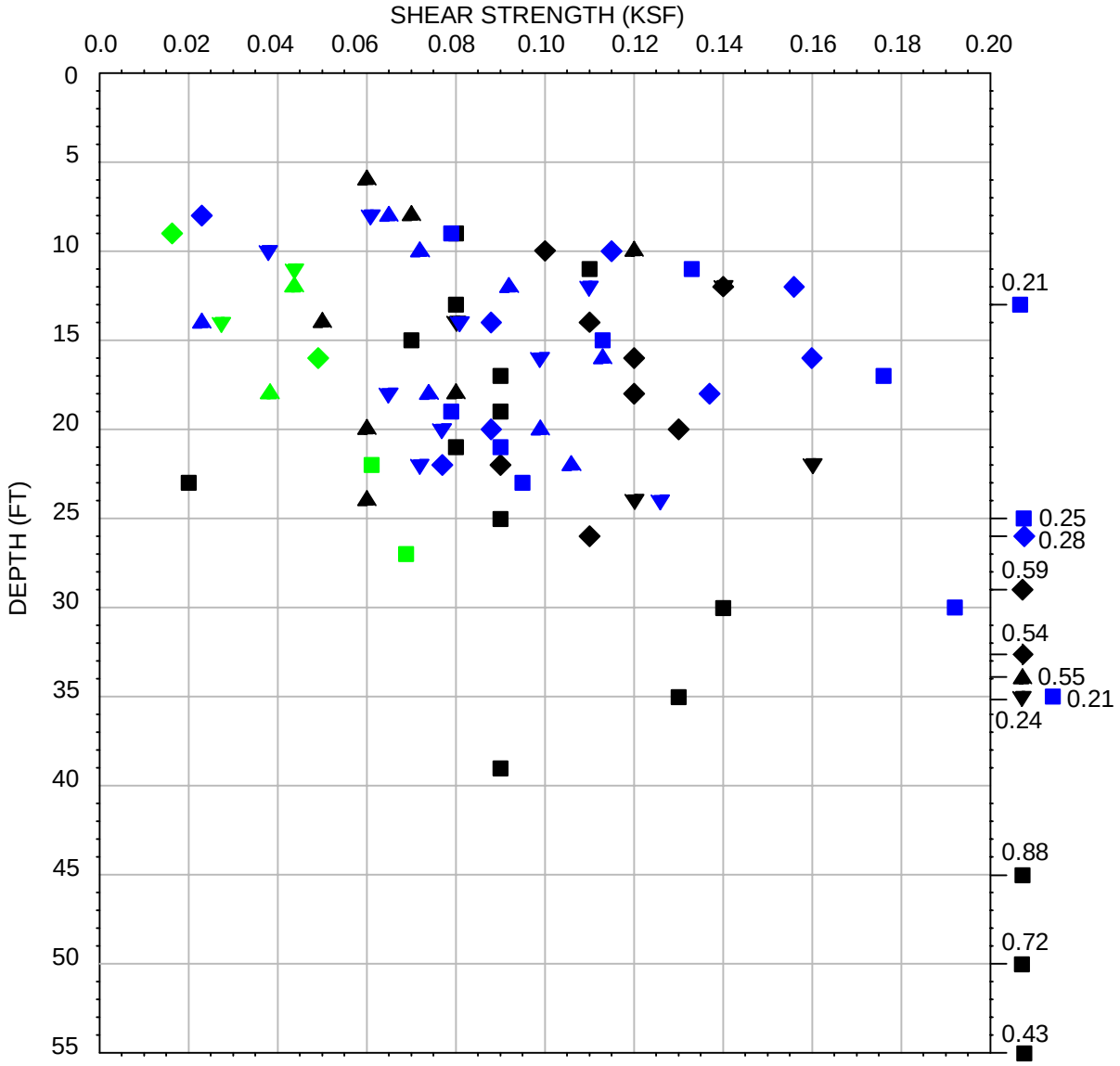
Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Iberia Parish, Louisiana

GEOENGINEERS

FIGURE C-10

JPV : KMC

P:\10\10883011\00\CAD\GRAPH-MC.dwg\TAB:Chart 2 (3) modified on Jun 07, 2011 - 9:02am



LEGEND

STRENGTH TEST

MINIVANE

FIELD VANE

- BHSP-SI1-30
- BHSP-SI2-30
- BHSP-SI3-50
- BHSP-SI4-30

SHARK ISLAND
SHEAR STRENGTH VS DEPTH

Non-Rock Alternatives to Shoreline Protection
Demonstration Project (LA-16)
Iberia Parish, Louisiana

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FIGURE C-11

JPV : KMC

P:\10\10883011\00\CAD\GRAPH-MC.dwg\TAB:Chart 3 (3) modified on Jun 07, 2011 - 9:02am

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Table C-1
Page 1 of 4

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Iberia Parish, Louisiana

PROJECT NUMBER 10883-011-00

NOTES Shark Island

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
BHSP-SI1-50		Top of deck															
BHSP-SI1-50		Water line															
BHSP-SI1-50																	
BHSP-SI1-50		Mudline at El. -3.78 feet															
BHSP-SI1-50	6	No sample recovered															
BHSP-SI1-50	8	Very soft dark gray peat	733	77.1	9.3				0.08	10	0.52	Bulge	UU	65	0.08		
BHSP-SI1-50	10	Very soft dark gray peat	837	64.7	6.9				0.11	9	0.63	Bulge	UU	63	0.13		
BHSP-SI1-50	12	Very soft dark gray peat	738	68.9	8.2				0.08	11	0.58	Slump	UU	47	0.21		
BHSP-SI1-50	14	Very soft dark gray peat	625	65.1	9.0				0.07	11	0.86	Slump	UU	52	0.11		
BHSP-SI1-50	16	Very soft dark gray peat	594	66.8	9.6				0.09	9	0.98	Slump	UU	39	0.18		
BHSP-SI1-50	18	Very soft dark gray peat	536	70.0	11.0				0.09	11	1.09	Slump	UU		0.08		
BHSP-SI1-50	20	Very soft gray slightly organic clay (field vane - 0.06 KSF)	118	104.7	48.0				0.08	12	1.21	Bulge	UU	4	0.09		
BHSP-SI1-50	22	Very soft gray slightly organic clay	82	98.1	53.8				0.02	13	0.97	Slump	UU		0.10		
BHSP-SI1-50	24	Soft gray clay with 2" organic clay layer (field vane - 0.07 KSF)	88	131.9	70.2	51		33	0.09	13	1.09	Slump	UU		0.25		
BHSP-SI1-50																	
BHSP-SI1-50	29	Very soft gray organic clay	341	76.2	17.3	188		142	0.14	12	1.38	Slump	UU		0.19		
BHSP-SI1-50	34	Very soft gray organic clay	205	69.5	22.8	249		187	0.13	12	1.67	Slump	UU		0.21		
BHSP-SI1-50																	
BHSP-SI1-50	39	Very soft gray clay with organic matter	32	92.5	70.1				0.09	12	1.90	Slump	UU				
BHSP-SI1-50	44	Medium gray clay with organic matter	29	120.4	93.2	50	19	31	0.88	13	2.25	Bulge	UU				
BHSP-SI1-50	49	Medium gray clay with	32	123.0	92.8				0.72	11	2.53	MS	UU				

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Table C-1
Page 2 of 4

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Iberia Parish, Louisiana

PROJECT NUMBER 10883-011-00

NOTES Shark Island

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
		organic matter															
BHSP-SI1-50	54	Soft gray clay	34	117.6	87.5	50		32	0.43	13	2.82	Bulge	UU				
BHSP-SI2-30		Top of deck															
BHSP-SI2-30		Water line															
BHSP-SI2-30																	
BHSP-SI2-30		Mudline at El. -3.73 feet															
BHSP-SI2-30	5	No sample recovered															
BHSP-SI2-30	7	Brown peat (field vane - 0.02 KSF)													0.02		
BHSP-SI2-30	9	Very soft black peat	825	70.7	7.6				0.10	15	0.29	Yield	UU	68	0.12		
BHSP-SI2-30	11	Very soft black peat	721	67.2	8.2				0.14	14	0.40	Bulge	UU	65	0.16		
BHSP-SI2-30	13	Very soft gray and black peat	699	70.1	8.8				0.11	10	0.52	Bulge	UU		0.09		
BHSP-SI2-30	15	Very soft gray and black peat (field vane - 0.05 KSF)	368	73.6	15.7	295	86	209	0.12	11	0.63	Bulge	UU		0.16		
BHSP-SI2-30	17	Very soft gray and dark gray peat	352	73.1	16.2				0.12	8	0.75	MS	UU	30	0.14		
BHSP-SI2-30	19	Very soft gray slightly organic clay with 3½" peat layer	101	90.1	44.9	106	28	78	0.13	7	0.75	Bulge	UU		0.09		
BHSP-SI2-30	21	Very soft gray slightly organic clay with 3½" peat layer	97	89.8	45.6				0.09	12	0.98	MS	UU		0.08		
BHSP-SI2-30	23	No sample recovered															
BHSP-SI2-30	25	Very soft gray clay with organic matter	33	89.0	67.0	106	22	84	0.11	4	1.21	Bulge	UU		0.28		
BHSP-SI2-30																	
BHSP-SI2-30	28	Medium gray clay with silt and calcareous nodules	32	127.8	96.6	47	22	25	0.59	15	1.38	Yield	UU				

Table C-1
Page 3 of 4

GeoEngineers

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Iberia Parish, Louisiana

PROJECT NUMBER 10883-011-00

NOTES Shark Island

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
BHSP-SI2-30	33	Medium gray clay with silt streaks and pockets	33	120.7	90.8	47	17	30	0.54	14	1.67	MS	UU				
BHSP-SI3-30		Top of deck															
BHSP-SI3-30		Water line															
BHSP-SI3-30																	
BHSP-SI3-30	4	Very soft black peat	913	61.8	6.1				0.06	10	0.06	Bulge	UU	54			
BHSP-SI3-30		Mudline at El. -3.04 feet															
BHSP-SI3-30	6	Very soft black peat	750	62.0	7.3				0.07	13	0.17	Bulge	UU		0.07		
BHSP-SI3-30	8	Very soft black peat	629	61.0	8.4				0.12	10	0.29	MS	UU	75	0.07		
BHSP-SI3-30	9																
BHSP-SI3-30	10	Very soft black peat (field vane - 0.04 KSF)	699		7.9				0.06	9	0.40				0.09		
BHSP-SI3-30	12	Very soft dark gray peat	784	68.2	7.7				0.05	13	0.81	Bulge	UU	73	0.02		
BHSP-SI3-30	14	Very soft dark gray peat				527	215	312							0.11		
BHSP-SI3-30	16	Very soft brown peat (field vane - 0.04 KSF)	243	65.4	19.1				0.08	12	0.75	MS	UU	30	0.07		
BHSP-SI3-30	18	Very soft gray organic clay	125	91.0	40.4				0.06	12	1.15	Bulge	UU	6	0.10		
BHSP-SI3-30	20	Very soft gray organic clay	106		43.5				0.80	2	0.98			4	0.11		
BHSP-SI3-30	22	Very soft gray slightly organic clay	73	91.9	53.2	87	20	67	0.06	12	1.09	Bulge	UU				
BHSP-SI3-30																	
BHSP-SI3-30	27	Gray clay with silt	29			42	19	23									
BHSP-SI3-30	32	Medium gray silty clay	28	121.1	94.9	41	19	22	0.55	11	1.67	Bulge	UU				
BHSP-SI4-30		Top of deck															
BHSP-SI4-30		Water line															
BHSP-SI4-30																	
BHSP-SI4-30		Mudline at El. -3.32 feet															
BHSP-SI4-30	5	No sample recovered															

Table C-1
Page 4 of 4

GeoEngineers

PROJECT NAME LA-16 Non-Rock Demo Project

LOCATION Iberia Parish, Louisiana

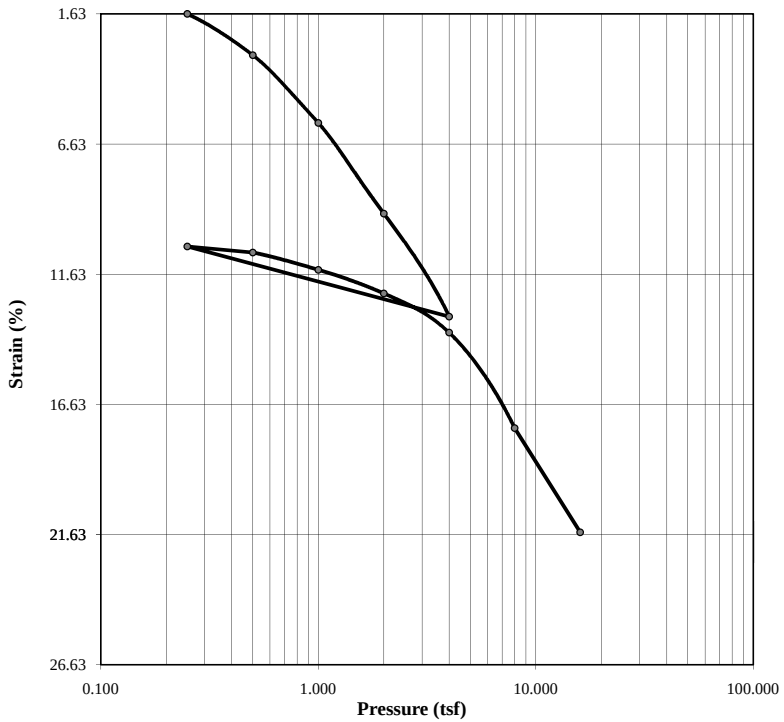
PROJECT NUMBER 10883-011-00

NOTES Shark Island

Borehole	Top Depth	Soil Description	Moisture Content (%)	Wet Density (pcf)	Dry Density (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Compressive Strength TSF	Strain %	Start Pressure (KSF)	Failure	Test Type	Organic Content	Minivane Shear Strength (KSF)	Alpha Angle	Comments
BHSP-SI4-30	7	Very soft black peat	676		8.0				0.14	12	0.17			54	0.06		
BHSP-SI4-30	9	Very soft black peat (field vane - 0.04 KSF)	592		9.4				0.11	12	0.29				0.04		
BHSP-SI4-30	11	Very soft black peat	629	63.1	8.7	641	264	376	0.14	15	0.40	Yield	UU		0.11		
BHSP-SI4-30	13	Very soft black peat (field vane - 0.03 KSF)	753	66.5	7.8				0.08	14	0.52	Bulge	UU	73	0.08		
BHSP-SI4-30	15	Wood (semi-decayed) with 4½" peat layer	660												0.10		
BHSP-SI4-30	17	Black peat	458											47	0.07		
BHSP-SI4-30	19	Brown peat with wood	432			390	121	269							0.08		
BHSP-SI4-30	21	Very soft gray slightly organic clay with organic matter, wood and 1" peat layer	112	88.5	41.8	106	26	80	0.16	14	0.98	Bulge	UU		0.07		
BHSP-SI4-30	23	Very soft gray clay with organic matter	66	100.5	60.5	73	22	51	0.12	14	1.09	Bulge	UU		0.13		
BHSP-SI4-30																	
BHSP-SI4-30	28	No sample recovered															
BHSP-SI4-30																	
BHSP-SI4-30	33	Very soft gray clay, organic matter, wood and 1" peat layer	33	96.2	72.5	47	19	28	0.24	15	1.67	Yield	UU				

GeoEngineers

Consolidation Test
Test Results

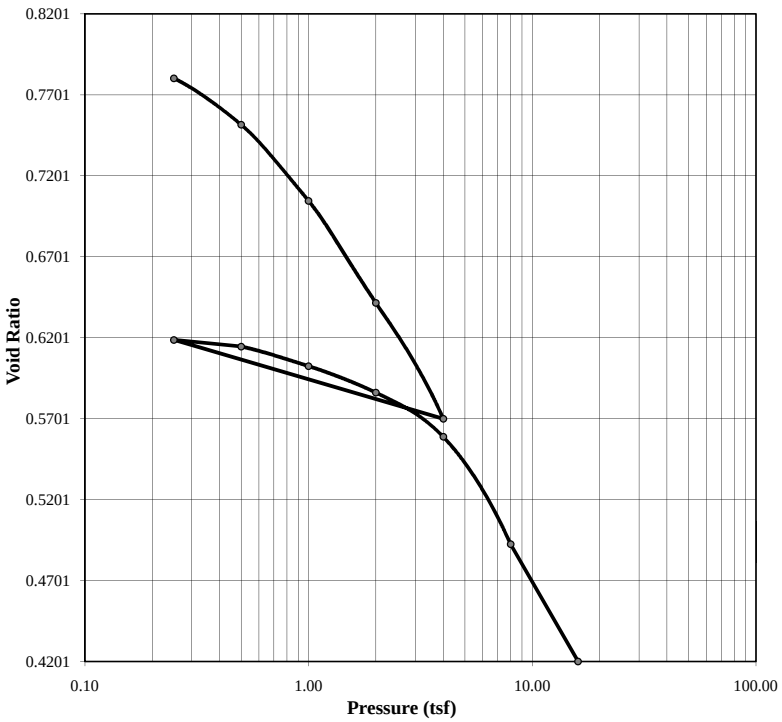


	Before	After				
			Liquid Limits:	50	**Test Date:**	11 May 2011
Moisture (%):	26.33	19.80	**Plastic Limits:**	19		
Dry Density (pcf):	92.59	110.11	**Plasticity Index (%):**	31		
Saturation (%):	87.09	101.51				
Void Ratio:	0.8116	0.4215	**Specific Gravity:**	2.689	Measured	

Sample Description: Clay (CH)
Project Number: 10883-011-00 **Depth:** 44 - 46 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-SI1-50
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Test Results

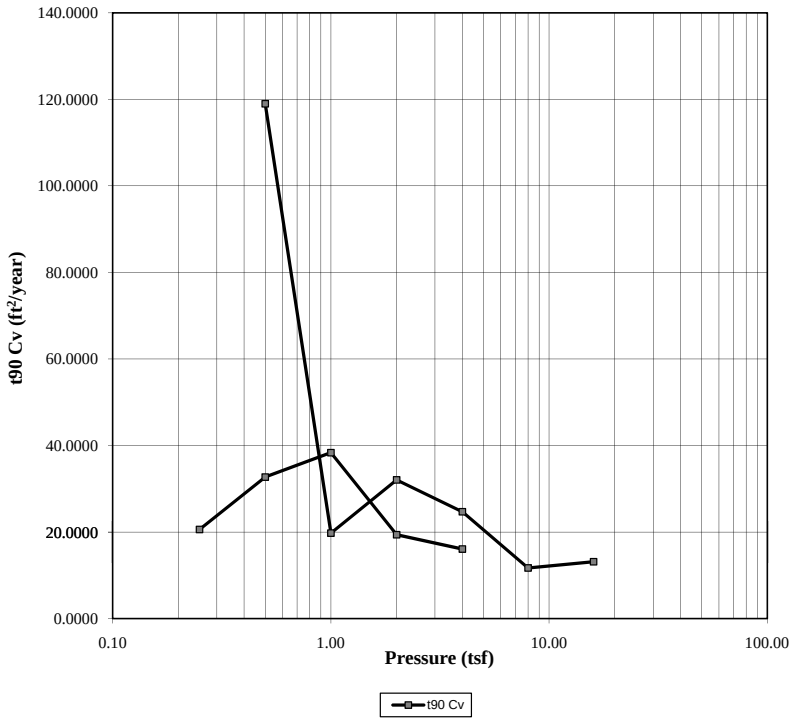


	Before	After				
			Liquid Limits:	50	**Test Date:**	11 May 2011
Moisture (%):	26.33	19.80	**Plastic Limits:**	19		
Dry Density (pcf):	92.59	110.11	**Plasticity Index (%):**	31		
Saturation (%):	87.09	101.51				
Void Ratio:	0.8116	0.4215	**Specific Gravity:**	2.689	Measured	

Soil Description: Clay (CH)
Project Number: 10883-011-00 **Depth:** 44 - 46 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-SI1-50
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	50	**Test Date:**	11 May 2011
Moisture (%):	26.33	19.80	**Plastic Limits:**	19		
Dry Density (pcf):	92.59	110.11	**Plasticity Index (%):**	31		
Saturation (%):	87.09	101.51				
Void Ratio:	0.8116	0.4215	**Specific Gravity:**	2.689	Measured	

Soil Description: Clay (CH)

Project Number: 10883-011-00 **Depth:** 44 - 46 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-SI1-50

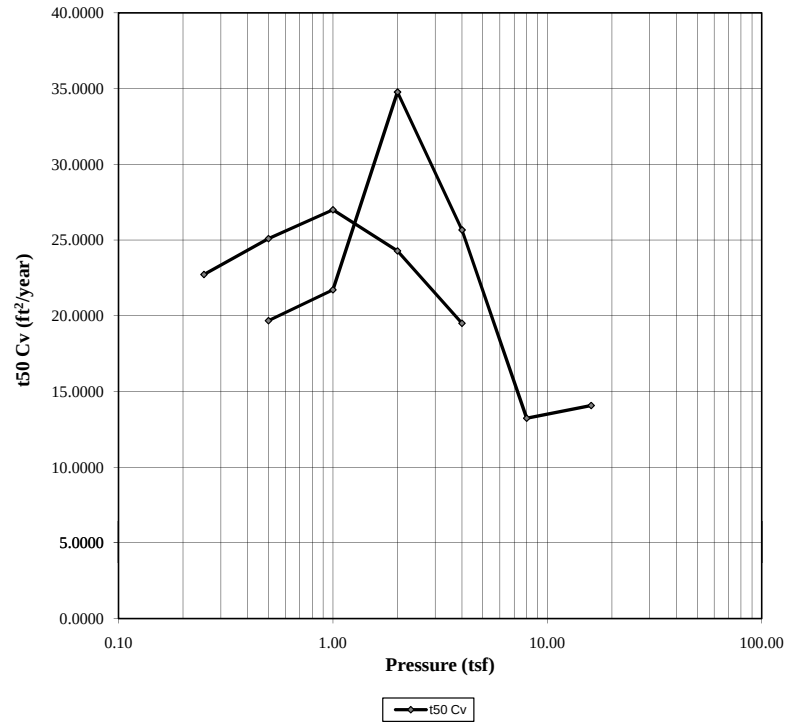
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	50	**Test Date:**	11 May 2011
Moisture (%):	26.33	19.80	**Plastic Limits:**	19		
Dry Density (pcf):	92.59	110.11	**Plasticity Index (%):**	31		
Saturation (%):	87.09	101.51				
Void Ratio:	0.8116	0.4215	**Specific Gravity:**	2.689	Measured	

Soil Description: Clay (CH)

Project Number: 10883-011-00 **Depth:** 44 - 46 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-SI1-50

Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test Results
Summary

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00

Sample Number:
Boring Number: BHSP-SI1-50
Depth: 44 - 46 feet
Sample Type: Undisturbed

Sample Description:
Clay (CH)
Remarks:

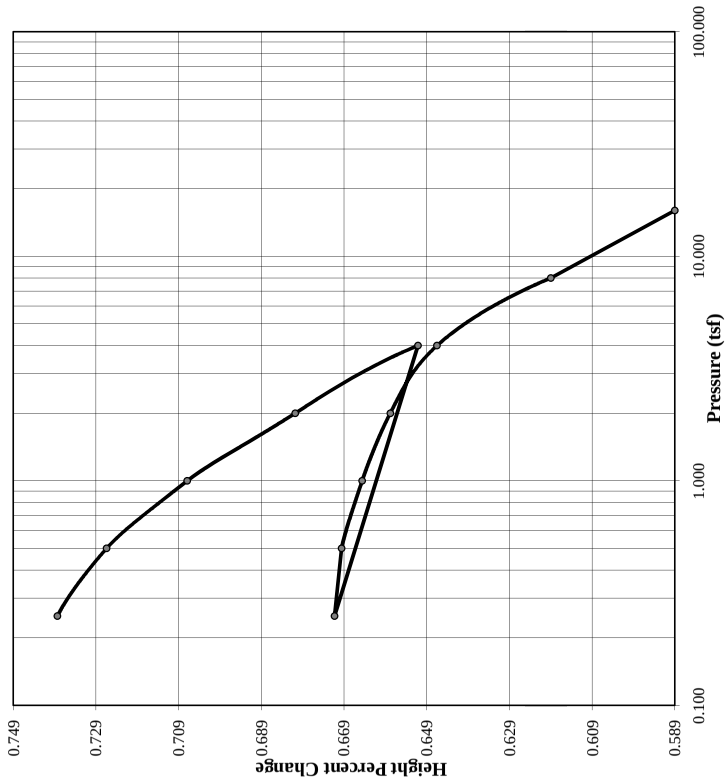
Test Number:
Test Date: 11 May 2011

Index	Load Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Void (in)	Vertical Strain (%)	Void Ratio	t90 Fitting Time (min)	t50 Fitting Time (min)	t90 Cv (ft2/year)	t50 Cv (ft2/year)
0	0.000	0.0000	0.7500	0.3356	0.00	0.8098	0.000	0.000	0.000	0.000
1	0.250	0.0122	0.7378	0.3234	1.63	0.7803	20.454	4.308	20.593	22.713
2	0.500	0.0241	0.7259	0.3115	3.21	0.7516	12.462	3.775	32.719	25.090
3	1.000	0.0436	0.7064	0.2920	5.81	0.7046	10.068	3.324	38.353	26.989
4	2.000	0.0697	0.6803	0.2659	9.29	0.6416	18.475	3.427	19.384	24.276
5	4.000	0.0994	0.6506	0.2362	13.25	0.5699	20.359	3.902	16.088	19.499
6	0.250	0.0792	0.6708	0.2564	10.56	0.6187	0.000	0.000	0.000	0.000
7	0.500	0.0809	0.6691	0.2547	10.79	0.6146	2.912	4.091	118.950	19.671
8	1.000	0.0859	0.6641	0.2497	11.45	0.6025	17.291	3.652	19.736	21.707
9	2.000	0.0927	0.6573	0.2429	12.36	0.5861	10.436	2.234	32.034	34.763
10	4.000	0.1040	0.6460	0.2316	13.87	0.5588	13.085	2.923	24.679	25.666
11	8.000	0.1315	0.6185	0.2041	17.53	0.4925	25.349	5.197	11.677	13.232
12	16.000	0.1615	0.5885	0.1741	21.53	0.4201	20.378	4.424	13.151	14.072

Predicted value indicated with *

GeoEngineers

Consolidation Test
Test Results



	Before	After				
Moisture (%):	26.33	19.80	**Liquid Limits:**	50	**Test Date:**	11 May 2011
Dry Density (pcf):	92.59	110.11	**Plastic Limits:**	19		
Saturation (%):	87.09	101.51	**Plasticity Index (%):**	31		
Void Ratio:	0.8116	0.4215	**Specific Gravity:**	2.689	Measured	

Soil Description: Clay (CH)
Project Number: 10883-011-00 **Depth:** 44 - 46 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-SI1-50
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Consolidation Specimen Information

Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 11 May 2011

Sample Number: **Sample Description:**
Boring Number: BHSP-SI1-50 Clay (CH)
Depth: 44 - 46 feet **Remarks:**
Sample Type: Undisturbed

Test Number:

Liquid Limit:	50.0000	**Initial Void Ratio:**	0.8116	**Initial Height (in):**	0.7500
Plastic Limit:	19.0000	**Plasticity Index (%):**	31.0000	**Initial Diameter (in):**	2.5000
Specific Gravity:	2.6890 Measured	**Weight of Ring (g):**	107.0300		

Parameters	Initial Specimen	Final Specimen
Moist Weight + Container (g)	143.12	118.33
Dry Soil + Container (g)	117.98	101.80
Weight of Container (g)	22.51	18.31
Moisture Content (%)	26.33	19.80
Void Ratio	0.8116	0.4215
Saturation (%)	87.09	101.51
Dry Density (pcf)	92.59	110.11

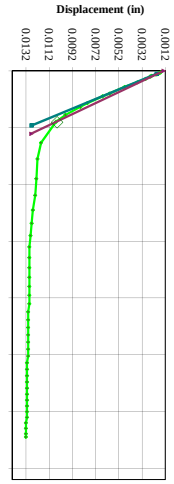
Consolidation Test Results
(Sequence 1) Load 0.250 tsf

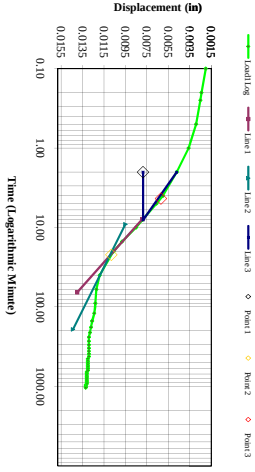
Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Sample Number: **Soil Description:**
Boring Number: BHSP-SI1-50 Clay (CH)
Depth: 44 - 46 feet **Remarks:**
Sample Type: Undisturbed

Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0000	0.0000	0.0000	0.8116
1	00:00:01	0.0016	0.0046	0.0800	0.8101
2	00:00:02	0.0017	0.0047	0.0933	0.8099
3	00:00:03	0.0018	0.0048	0.1067	0.8097
4	00:00:04	0.0018	0.0048	0.1067	0.8097
5	00:00:05	0.0019	0.0049	0.1200	0.8094
6	00:00:06	0.0020	0.0050	0.1333	0.8092
7	00:00:12	0.0024	0.0014	0.1867	0.8082
8	00:00:15	0.0025	0.0015	0.2000	0.8080
9	00:00:30	0.0029	0.0019	0.2533	0.8070
10	00:01:00	0.0036	0.0026	0.3467	0.8053
11	00:02:00	0.0047	0.0037	0.4933	0.8027
12	00:04:00	0.0060	0.0050	0.6667	0.7995
13	00:05:00	0.0066	0.0056	0.7467	0.7981
14	00:08:00	0.0079	0.0069	0.9200	0.7949
15	00:10:00	0.0085	0.0075	1.0000	0.7935
16	00:15:00	0.0098	0.0088	1.1733	0.7903
17	00:20:01	0.0106	0.0096	1.2800	0.7884
18	00:40:01	0.0119	0.0109	1.4533	0.7853
19	01:00:02	0.0122	0.0112	1.4933	0.7845
20	01:30:04	0.0123	0.0113	1.5067	0.7843
21	02:00:05	0.0124	0.0114	1.5200	0.7841
22	02:30:06	0.0126	0.0116	1.5467	0.7836
23	03:00:08	0.0127	0.0117	1.5600	0.7833
24	03:30:09	0.0128	0.0118	1.5733	0.7831
25	04:00:11	0.0129	0.0119	1.5867	0.7829
26	04:30:12	0.0129	0.0119	1.5867	0.7829
27	05:00:13	0.0129	0.0119	1.5867	0.7829
28	05:30:15	0.0129	0.0119	1.5867	0.7829
29	06:00:16	0.0129	0.0119	1.5867	0.7829
30	06:30:18	0.0129	0.0119	1.5867	0.7829
31	07:00:19	0.0129	0.0119	1.5867	0.7829
32	07:30:20	0.0130	0.0120	1.6000	0.7826
33	08:00:22	0.0130	0.0120	1.6000	0.7826
34	08:30:23	0.0130	0.0120	1.6000	0.7826
35	09:00:24	0.0130	0.0120	1.6000	0.7826
36	09:30:26	0.0130	0.0120	1.6000	0.7826





37	10:00:27	0.0130	0.0120	1.6000	0.7826
38	10:30:29	0.0130	0.0120	1.6000	0.7826
39	11:00:30	0.0131	0.0121	1.6133	0.7824
40	11:30:31	0.0131	0.0121	1.6133	0.7824
41	12:00:33	0.0131	0.0121	1.6133	0.7824
42	12:30:34	0.0131	0.0121	1.6133	0.7824
43	13:00:35	0.0131	0.0121	1.6133	0.7824
44	13:30:37	0.0131	0.0121	1.6133	0.7824
45	14:00:38	0.0131	0.0121	1.6133	0.7824
46	14:30:40	0.0131	0.0121	1.6133	0.7824
47	15:00:41	0.0131	0.0121	1.6133	0.7824
48	15:30:42	0.0131	0.0121	1.6133	0.7824
49	16:00:44	0.0132	0.0122	1.6267	0.7821
50	16:30:45	0.0132	0.0122	1.6267	0.7821
51	17:00:46	0.0132	0.0122	1.6267	0.7821
52	17:19:00	0.0132	0.0122	1.6267	0.7821

Consolidation Test Results
(Sequence 2) Load 0.500 tsf

Consolidation Test Results
(Sequence 2) Load 0.500 tsf

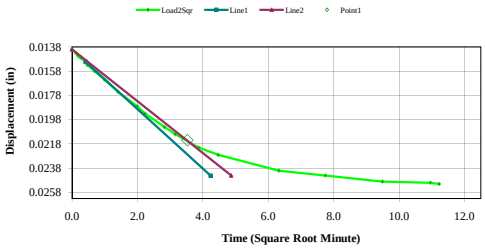
Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 11 May 2011
Test Number:

Sample Number:
Soil Description:
Boring Number: BHSP-SI1-50
Clay (CH)
Depth: 44 - 46 feet
Remarks:
Sample Type: Undisturbed

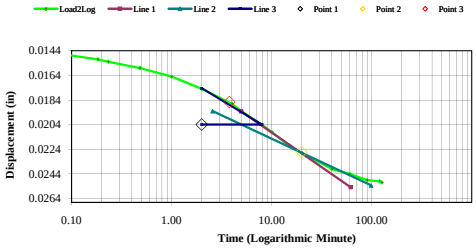
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0132	0.0122	1.6267	0.7821
1	00:00:00	0.0140	0.0130	1.7333	0.7802
2	00:00:01	0.0143	0.0133	1.7733	0.7795
3	00:00:02	0.0145	0.0135	1.8000	0.7790
4	00:00:03	0.0146	0.0136	1.8133	0.7787
5	00:00:04	0.0146	0.0136	1.8133	0.7787
6	00:00:05	0.0147	0.0137	1.8267	0.7785
7	00:00:11	0.0151	0.0141	1.8800	0.7775
8	00:00:14	0.0153	0.0143	1.9067	0.7771
9	00:00:29	0.0158	0.0148	1.9733	0.7758
10	00:01:00	0.0165	0.0155	2.0667	0.7742
11	00:02:00	0.0175	0.0165	2.2000	0.7717
12	00:04:00	0.0187	0.0177	2.3600	0.7688
13	00:05:00	0.0193	0.0183	2.4400	0.7674
14	00:08:00	0.0204	0.0194	2.5867	0.7647
15	00:10:00	0.0210	0.0200	2.6667	0.7633
16	00:15:00	0.0221	0.0211	2.8133	0.7606
17	00:20:00	0.0227	0.0217	2.8933	0.7592
18	00:40:01	0.0240	0.0230	3.0667	0.7560
19	01:00:02	0.0244	0.0234	3.1200	0.7551
20	01:30:04	0.0249	0.0239	3.1867	0.7539
21	02:00:05	0.0250	0.0240	3.2000	0.7536
22	02:05:55	0.0251	0.0241	3.2133	0.7534

Tested By:
Checked By:

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 3) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI1-50
Depth: 44 - 46 feet
Sample Type: Undisturbed

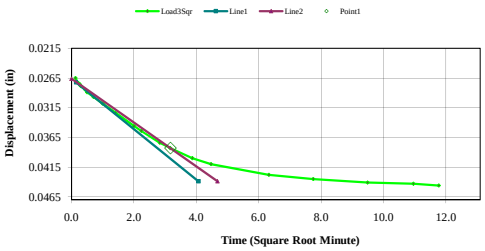
Soil Description: Clay (CH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0251	0.0241	3.2133	0.7534
1	00:00:01	0.0265	0.0255	3.4000	0.7500
2	00:00:02	0.0272	0.0262	3.4933	0.7483
3	00:00:03	0.0274	0.0264	3.5200	0.7478
4	00:00:04	0.0275	0.0265	3.5333	0.7476
5	00:00:05	0.0278	0.0268	3.5733	0.7469
6	00:00:06	0.0279	0.0269	3.5867	0.7466
7	00:00:12	0.0285	0.0275	3.6667	0.7452
8	00:00:15	0.0289	0.0279	3.7200	0.7442
9	00:00:30	0.0297	0.0287	3.8267	0.7423
10	00:01:00	0.0308	0.0298	3.9733	0.7396
11	00:02:00	0.0324	0.0314	4.1867	0.7357
12	00:04:01	0.0346	0.0336	4.4800	0.7304
13	00:05:01	0.0354	0.0344	4.5867	0.7285
14	00:08:01	0.0374	0.0364	4.8533	0.7237
15	00:10:01	0.0383	0.0373	4.9733	0.7215
16	00:15:01	0.0400	0.0390	5.2000	0.7174
17	00:20:01	0.0410	0.0400	5.3333	0.7150
18	00:40:02	0.0428	0.0418	5.5733	0.7106
19	01:00:03	0.0435	0.0425	5.6667	0.7089
20	01:30:05	0.0441	0.0431	5.7467	0.7075
21	02:00:06	0.0443	0.0433	5.7733	0.7070
22	02:18:36	0.0446	0.0436	5.8133	0.7063

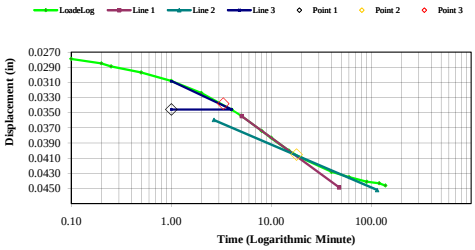
Tested By: **Checked By:**

Consolidation Test Results
(Sequence 3) Load 1.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 4) Load 2.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI1-50
Depth: 44 - 46 feet
Sample Type: Undisturbed

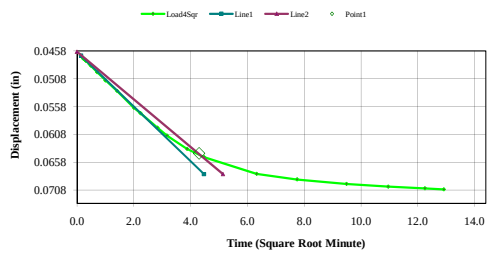
Soil Description: Clay (CH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0446	0.0436	5.8133	0.7063
1	00:00:01	0.0466	0.0456	6.0800	0.7015
2	00:00:02	0.0469	0.0459	6.1200	0.7007
3	00:00:03	0.0472	0.0462	6.1600	0.7000
4	00:00:04	0.0473	0.0463	6.1733	0.6998
5	00:00:05	0.0474	0.0464	6.1867	0.6995
6	00:00:06	0.0476	0.0466	6.2133	0.6990
7	00:00:12	0.0482	0.0472	6.2933	0.6976
8	00:00:15	0.0485	0.0475	6.3333	0.6969
9	00:00:30	0.0496	0.0486	6.4800	0.6942
10	00:01:00	0.0511	0.0501	6.6800	0.6906
11	00:02:00	0.0530	0.0520	6.9333	0.6860
12	00:04:00	0.0560	0.0550	7.3333	0.6787
13	00:05:00	0.0570	0.0560	7.4667	0.6763
14	00:08:01	0.0596	0.0586	7.8133	0.6700
15	00:10:01	0.0610	0.0600	8.0000	0.6667
16	00:15:01	0.0634	0.0624	8.3200	0.6609
17	00:20:01	0.0649	0.0639	8.5200	0.6572
18	00:40:02	0.0679	0.0669	8.9200	0.6500
19	01:00:03	0.0689	0.0679	9.0533	0.6476
20	01:30:04	0.0697	0.0687	9.1600	0.6457
21	02:00:06	0.0702	0.0692	9.2267	0.6444
22	02:30:07	0.0705	0.0695	9.2667	0.6437
23	02:46:53	0.0707	0.0697	9.2933	0.6432

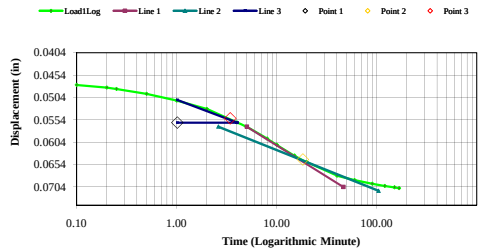
Tested By: **Checked By:**

Consolidation Test Results
(Sequence 4) Load 2.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 5) Load 4.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI1-50
Depth: 44 - 46 feet
Sample Type: Undisturbed

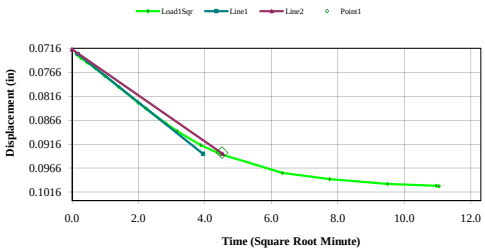
Soil Description: Clay (CH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0707	0.0697	9.2933	0.6432
1	00:00:01	0.0727	0.0717	9.5600	0.6384
2	00:00:02	0.0730	0.0720	9.6000	0.6377
3	00:00:03	0.0732	0.0722	9.6267	0.6372
4	00:00:04	0.0735	0.0725	9.6667	0.6365
5	00:00:05	0.0737	0.0727	9.6933	0.6360
6	00:00:06	0.0737	0.0727	9.6933	0.6360
7	00:00:12	0.0745	0.0735	9.8000	0.6341
8	00:00:15	0.0747	0.0737	9.8267	0.6336
9	00:00:30	0.0758	0.0748	9.9733	0.6309
10	00:01:00	0.0774	0.0764	10.1867	0.6271
11	00:02:00	0.0797	0.0787	10.4933	0.6215
12	00:04:00	0.0830	0.0820	10.9333	0.6135
13	00:05:00	0.0842	0.0832	11.0933	0.6106
14	00:08:00	0.0873	0.0863	11.5067	0.6031
15	00:10:00	0.0889	0.0879	11.7200	0.5993
16	00:15:00	0.0918	0.0908	12.1067	0.5923
17	00:20:01	0.0937	0.0927	12.3600	0.5877
18	00:40:02	0.0976	0.0966	12.8800	0.5783
19	01:00:02	0.0989	0.0979	13.0533	0.5751
20	01:30:04	0.0999	0.0989	13.1867	0.5727
21	02:00:05	0.1003	0.0993	13.2400	0.5717
22	02:01:48	0.1004	0.0994	13.2533	0.5715

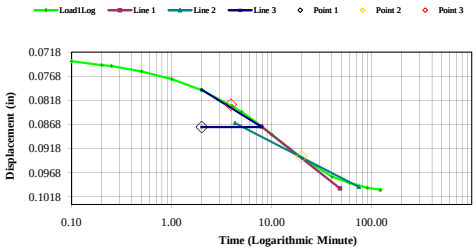
Tested By:
Checked By:

Consolidation Test Results
(Sequence 5) Load 4.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 6) Rebound 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

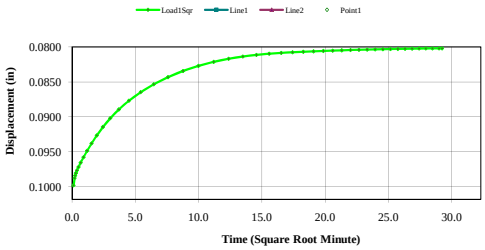
Sample Number:
Boring Number: BHSP-SI1-50
Depth: 44 - 46 feet
Sample Type: Undisturbed

Soil Description: Clay (CH)
Remarks:

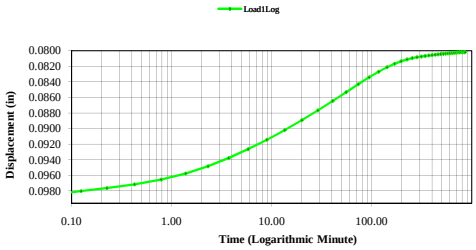
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1004	0.0994	13.2533	0.5715
1	00:00:01	0.0998	0.0988	13.1733	0.5729
2	00:00:02	0.0991	0.0981	13.0800	0.5746
3	00:00:03	0.0985	0.0975	13.0000	0.5761
4	00:00:04	0.0985	0.0975	13.0000	0.5761
5	00:00:05	0.0979	0.0969	12.9200	0.5775
6	00:00:06	0.0978	0.0968	12.9067	0.5778
7	00:00:12	0.0974	0.0964	12.8533	0.5787
8	00:00:15	0.0972	0.0962	12.8267	0.5792
9	00:00:30	0.0964	0.0954	12.7200	0.5812
10	00:01:00	0.0954	0.0944	12.5867	0.5836
11	00:02:00	0.0939	0.0929	12.3867	0.5872
12	00:04:00	0.0921	0.0911	12.1467	0.5915
13	00:05:00	0.0914	0.0904	12.0533	0.5932
14	00:08:00	0.0897	0.0887	11.8267	0.5973
15	00:10:00	0.0889	0.0879	11.7200	0.5993
16	00:15:00	0.0873	0.0863	11.5067	0.6031
17	00:20:00	0.0861	0.0851	11.3467	0.6060
18	00:40:01	0.0836	0.0826	11.0133	0.6121
19	01:00:02	0.0825	0.0815	10.8667	0.6147
20	01:30:04	0.0817	0.0807	10.7600	0.6167
21	02:00:05	0.0814	0.0804	10.7200	0.6174
22	02:30:06	0.0811	0.0801	10.6800	0.6181
23	03:00:08	0.0810	0.0800	10.6667	0.6184
24	03:30:09	0.0809	0.0799	10.6533	0.6186
25	04:00:11	0.0809	0.0799	10.6533	0.6186
26	04:30:12	0.0808	0.0798	10.6400	0.6188
27	05:00:13	0.0807	0.0797	10.6267	0.6191
28	05:30:15	0.0807	0.0797	10.6267	0.6191
29	06:00:16	0.0806	0.0796	10.6133	0.6193
30	06:30:17	0.0806	0.0796	10.6133	0.6193
31	07:00:19	0.0805	0.0795	10.6000	0.6196
32	07:30:20	0.0805	0.0795	10.6000	0.6196
33	08:00:22	0.0804	0.0794	10.5867	0.6198
34	08:30:23	0.0804	0.0794	10.5867	0.6198
35	09:00:24	0.0804	0.0794	10.5867	0.6198
36	09:30:26	0.0803	0.0793	10.5733	0.6200

Consolidation Test Results
(Sequence 6) Rebound 0.250 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:27	0.0803	0.0793	10.5733	0.6200
38	10:30:29	0.0803	0.0793	10.5733	0.6200
39	11:00:30	0.0803	0.0793	10.5733	0.6200
40	11:30:31	0.0803	0.0793	10.5733	0.6200
41	12:00:33	0.0802	0.0792	10.5600	0.6203
42	12:30:34	0.0802	0.0792	10.5600	0.6203
43	13:00:35	0.0802	0.0792	10.5600	0.6203
44	13:30:37	0.0802	0.0792	10.5600	0.6203
45	14:00:38	0.0802	0.0792	10.5600	0.6203
46	14:14:40	0.0802	0.0792	10.5600	0.6203

Consolidation Test Results
(Sequence 7) Load 0.500 tsf

Consolidation Test Results
(Sequence 7) Load 0.500 tsf

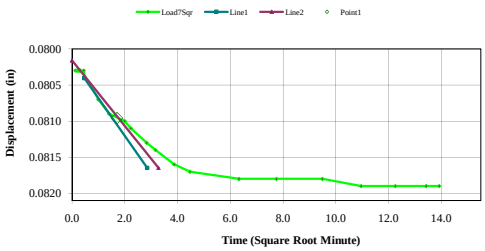
Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 11 May 2011
Test Number:

Sample Number:
Soil Description:
Boring Number: BHSP-SI1-50
Clay (CH)
Depth: 44 - 46 feet
Remarks:
Sample Type: Undisturbed

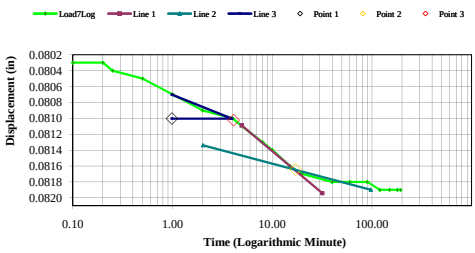
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0802	0.0792	10.5600	0.6203
1	00:00:01	0.0803	0.0793	10.5733	0.6200
2	00:00:02	0.0803	0.0793	10.5733	0.6200
3	00:00:03	0.0803	0.0793	10.5733	0.6200
4	00:00:04	0.0803	0.0793	10.5733	0.6200
5	00:00:05	0.0803	0.0793	10.5733	0.6200
6	00:00:06	0.0803	0.0793	10.5733	0.6200
7	00:00:12	0.0803	0.0793	10.5733	0.6200
8	00:00:15	0.0804	0.0794	10.5867	0.6198
9	00:00:30	0.0805	0.0795	10.6000	0.6196
10	00:01:00	0.0807	0.0797	10.6267	0.6191
11	00:02:00	0.0809	0.0799	10.6533	0.6186
12	00:04:00	0.0810	0.0800	10.6667	0.6184
13	00:05:00	0.0811	0.0801	10.6800	0.6181
14	00:08:00	0.0813	0.0803	10.7067	0.6176
15	00:10:01	0.0814	0.0804	10.7200	0.6174
16	00:15:01	0.0816	0.0806	10.7467	0.6169
17	00:20:01	0.0817	0.0807	10.7600	0.6167
18	00:40:02	0.0818	0.0808	10.7733	0.6164
19	01:00:04	0.0818	0.0808	10.7733	0.6164
20	01:30:06	0.0818	0.0808	10.7733	0.6164
21	02:00:08	0.0819	0.0809	10.7867	0.6162
22	02:30:11	0.0819	0.0809	10.7867	0.6162
23	03:00:13	0.0819	0.0809	10.7867	0.6162
24	03:13:44	0.0819	0.0809	10.7867	0.6162

Tested By:
Checked By:

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 8) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI1-50
Depth: 44 - 46 feet
Sample Type: Undisturbed

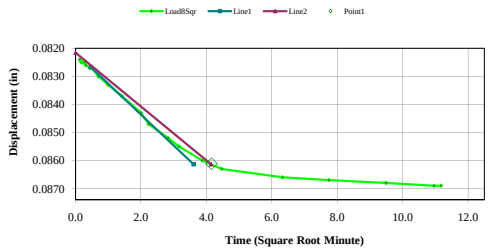
Soil Description: Clay (CH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0819	0.0809	10.7867	0.6162
1	00:00:01	0.0824	0.0814	10.8533	0.6150
2	00:00:02	0.0825	0.0815	10.8667	0.6147
3	00:00:03	0.0825	0.0815	10.8667	0.6147
4	00:00:04	0.0825	0.0815	10.8667	0.6147
5	00:00:05	0.0825	0.0815	10.8667	0.6147
6	00:00:06	0.0826	0.0816	10.8800	0.6145
7	00:00:12	0.0827	0.0817	10.8933	0.6143
8	00:00:15	0.0827	0.0817	10.8933	0.6143
9	00:00:30	0.0830	0.0820	10.9333	0.6135
10	00:01:00	0.0833	0.0823	10.9733	0.6128
11	00:02:00	0.0837	0.0827	11.0267	0.6118
12	00:04:00	0.0843	0.0833	11.1067	0.6104
13	00:05:01	0.0847	0.0837	11.1600	0.6094
14	00:08:01	0.0852	0.0842	11.2267	0.6082
15	00:10:01	0.0855	0.0845	11.2667	0.6075
16	00:15:01	0.0860	0.0850	11.3333	0.6063
17	00:20:02	0.0863	0.0853	11.3733	0.6056
18	00:40:03	0.0866	0.0856	11.4133	0.6048
19	01:00:05	0.0867	0.0857	11.4267	0.6046
20	01:30:07	0.0868	0.0858	11.4400	0.6043
21	02:00:09	0.0869	0.0859	11.4533	0.6041
22	02:04:49	0.0869	0.0859	11.4533	0.6041

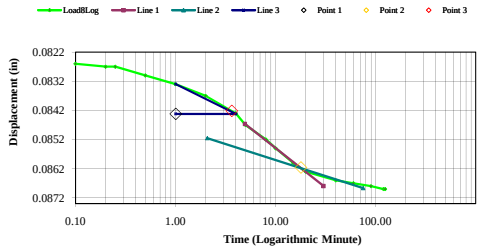
Tested By: **Checked By:**

Consolidation Test Results
(Sequence 8) Load 1.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 9) Load 2.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI1-50
Depth: 44 - 46 feet
Sample Type: Undisturbed

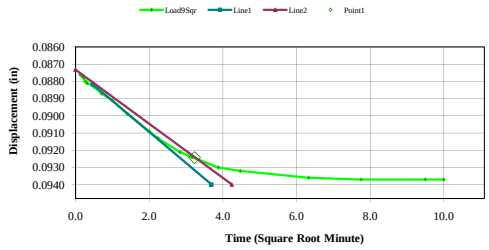
Soil Description: Clay (CH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0869	0.0859	11.4533	0.6041
1	00:00:01	0.0876	0.0866	11.5467	0.6024
2	00:00:02	0.0877	0.0867	11.5600	0.6022
3	00:00:03	0.0878	0.0868	11.5733	0.6019
4	00:00:04	0.0880	0.0870	11.6000	0.6015
5	00:00:05	0.0880	0.0870	11.6000	0.6015
6	00:00:06	0.0881	0.0871	11.6133	0.6012
7	00:00:12	0.0882	0.0872	11.6267	0.6010
8	00:00:15	0.0883	0.0873	11.6400	0.6007
9	00:00:30	0.0887	0.0877	11.6933	0.5998
10	00:01:00	0.0891	0.0881	11.7467	0.5988
11	00:02:00	0.0899	0.0889	11.8533	0.5969
12	00:04:00	0.0909	0.0899	11.9867	0.5944
13	00:05:00	0.0913	0.0903	12.0400	0.5935
14	00:08:01	0.0921	0.0911	12.1467	0.5915
15	00:10:01	0.0924	0.0914	12.1867	0.5908
16	00:15:01	0.0930	0.0920	12.2667	0.5894
17	00:20:01	0.0932	0.0922	12.2933	0.5889
18	00:40:03	0.0936	0.0926	12.3467	0.5879
19	01:00:05	0.0937	0.0927	12.3600	0.5877
20	01:30:07	0.0937	0.0927	12.3600	0.5877
21	01:39:51	0.0937	0.0927	12.3600	0.5877

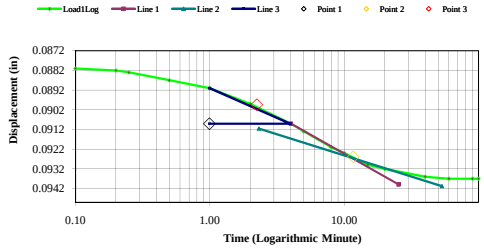
Tested By: **Checked By:**

Consolidation Test Results
(Sequence 9) Load 2.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 10) Load 4.000 tsf

Consolidation Test Results
(Sequence 10) Load 4.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

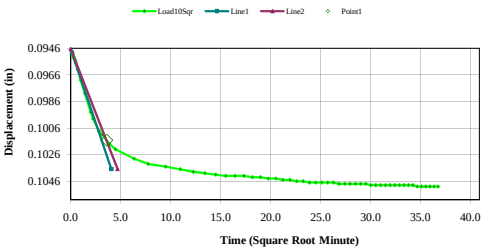
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI1-50
Depth: 44 - 46 feet
Sample Type: Undisturbed

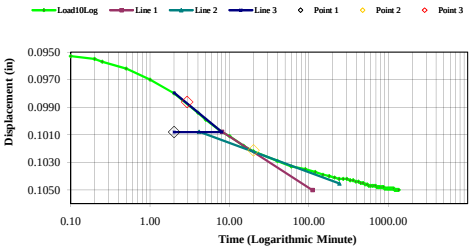
Soil Description: Clay (CH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0937	0.0927	12.3600	0.5877
1	00:00:01	0.0949	0.0939	12.5200	0.5848
2	00:00:02	0.0950	0.0940	12.5333	0.5845
3	00:00:03	0.0951	0.0941	12.5467	0.5843
4	00:00:04	0.0952	0.0942	12.5600	0.5841
5	00:00:05	0.0953	0.0943	12.5733	0.5838
6	00:00:06	0.0953	0.0943	12.5733	0.5838
7	00:00:12	0.0955	0.0945	12.6000	0.5833
8	00:00:15	0.0957	0.0947	12.6267	0.5829
9	00:00:30	0.0962	0.0952	12.6933	0.5816
10	00:01:00	0.0970	0.0960	12.8000	0.5797
11	00:02:01	0.0980	0.0970	12.9333	0.5773
12	00:04:01	0.0994	0.0984	13.1200	0.5739
13	00:05:01	0.0999	0.0989	13.1867	0.5727
14	00:08:01	0.1008	0.0998	13.3067	0.5705
15	00:10:01	0.1011	0.1001	13.3467	0.5698
16	00:15:02	0.1018	0.1008	13.4400	0.5681
17	00:20:02	0.1022	0.1012	13.4933	0.5672
18	00:40:04	0.1029	0.1019	13.5867	0.5655
19	01:00:05	0.1033	0.1023	13.6400	0.5645
20	01:30:07	0.1035	0.1025	13.6667	0.5640
21	02:00:10	0.1037	0.1027	13.6933	0.5635
22	02:30:12	0.1039	0.1029	13.7200	0.5630
23	03:00:14	0.1040	0.1030	13.7333	0.5628
24	03:30:17	0.1041	0.1031	13.7467	0.5626
25	04:00:19	0.1042	0.1032	13.7600	0.5623
26	04:30:21	0.1042	0.1032	13.7600	0.5623
27	05:00:23	0.1042	0.1032	13.7600	0.5623
28	05:30:26	0.1043	0.1033	13.7733	0.5621
29	06:00:28	0.1043	0.1033	13.7733	0.5621
30	06:30:30	0.1044	0.1034	13.7867	0.5618
31	07:00:33	0.1044	0.1034	13.7867	0.5618
32	07:30:35	0.1045	0.1035	13.8000	0.5616
33	08:00:37	0.1045	0.1035	13.8000	0.5616
34	08:30:39	0.1046	0.1036	13.8133	0.5614
35	09:00:42	0.1046	0.1036	13.8133	0.5614
36	09:30:44	0.1047	0.1037	13.8267	0.5611

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1047	0.1037	13.8267	0.5611
38	10:30:49	0.1047	0.1037	13.8267	0.5611
39	11:00:51	0.1047	0.1037	13.8267	0.5611
40	11:30:53	0.1047	0.1037	13.8267	0.5611
41	12:00:55	0.1048	0.1038	13.8400	0.5609
42	12:30:58	0.1048	0.1038	13.8400	0.5609
43	13:01:00	0.1048	0.1038	13.8400	0.5609
44	13:31:02	0.1048	0.1038	13.8400	0.5609
45	14:01:04	0.1048	0.1038	13.8400	0.5609
46	14:31:07	0.1048	0.1038	13.8400	0.5609
47	15:01:09	0.1049	0.1039	13.8533	0.5606
48	15:31:11	0.1049	0.1039	13.8533	0.5606
49	16:01:14	0.1049	0.1039	13.8533	0.5606
50	16:31:16	0.1049	0.1039	13.8533	0.5606
51	17:01:18	0.1049	0.1039	13.8533	0.5606
52	17:31:21	0.1049	0.1039	13.8533	0.5606
53	18:01:23	0.1049	0.1039	13.8533	0.5606
54	18:31:25	0.1049	0.1039	13.8533	0.5606
55	19:01:27	0.1049	0.1039	13.8533	0.5606
56	19:31:30	0.1049	0.1039	13.8533	0.5606
57	20:01:32	0.1050	0.1040	13.8667	0.5604
58	20:31:34	0.1050	0.1040	13.8667	0.5604
59	21:01:36	0.1050	0.1040	13.8667	0.5604
60	21:31:39	0.1050	0.1040	13.8667	0.5604
61	22:01:41	0.1050	0.1040	13.8667	0.5604
62	22:30:01	0.1050	0.1040	13.8667	0.5604

Consolidation Test Results
(Sequence 11) Load 8.000 tsf

Consolidation Test Results
(Sequence 11) Load 8.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

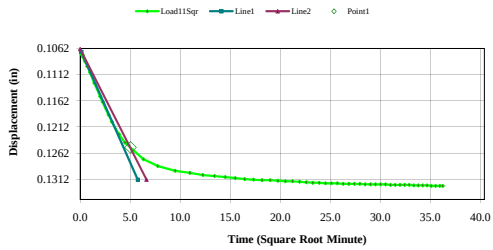
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI1-50
Depth: 44 - 46 feet
Sample Type: Undisturbed

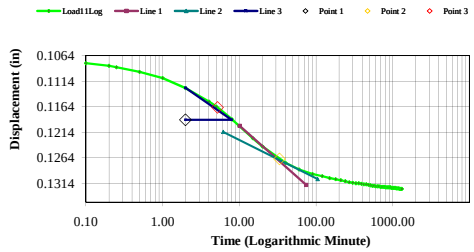
Soil Description: Clay (CH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1050	0.1040	13.8667	0.5604
1	00:00:01	0.1070	0.1060	14.1333	0.5556
2	00:00:02	0.1073	0.1063	14.1733	0.5548
3	00:00:03	0.1074	0.1064	14.1867	0.5546
4	00:00:04	0.1075	0.1065	14.2000	0.5543
5	00:00:05	0.1077	0.1067	14.2267	0.5539
6	00:00:06	0.1079	0.1069	14.2533	0.5534
7	00:00:12	0.1084	0.1074	14.3200	0.5522
8	00:00:15	0.1087	0.1077	14.3600	0.5515
9	00:00:30	0.1096	0.1086	14.4800	0.5493
10	00:01:00	0.1108	0.1098	14.6400	0.5464
11	00:02:00	0.1128	0.1118	14.9067	0.5415
12	00:04:01	0.1154	0.1144	15.2533	0.5353
13	00:05:01	0.1164	0.1154	15.3867	0.5329
14	00:08:01	0.1189	0.1179	15.7200	0.5268
15	00:10:01	0.1202	0.1192	15.8933	0.5237
16	00:15:01	0.1226	0.1216	16.2133	0.5179
17	00:20:02	0.1242	0.1232	16.4267	0.5140
18	00:40:03	0.1274	0.1264	16.8533	0.5063
19	01:00:05	0.1287	0.1277	17.0267	0.5031
20	01:30:07	0.1296	0.1286	17.1467	0.5010
21	02:00:09	0.1300	0.1290	17.2000	0.5000
22	02:30:12	0.1304	0.1294	17.2533	0.4990
23	03:00:14	0.1306	0.1296	17.2800	0.4986
24	03:30:16	0.1308	0.1298	17.3067	0.4981
25	04:00:18	0.1310	0.1300	17.3333	0.4976
26	04:30:21	0.1312	0.1302	17.3600	0.4971
27	05:00:23	0.1313	0.1303	17.3733	0.4969
28	05:30:25	0.1314	0.1304	17.3867	0.4966
29	06:00:28	0.1314	0.1304	17.3867	0.4966
30	06:30:30	0.1315	0.1305	17.4000	0.4964
31	07:00:32	0.1316	0.1306	17.4133	0.4961
32	07:30:34	0.1316	0.1306	17.4133	0.4961
33	08:00:37	0.1317	0.1307	17.4267	0.4959
34	08:30:39	0.1318	0.1308	17.4400	0.4957
35	09:00:41	0.1319	0.1309	17.4533	0.4954
36	09:30:44	0.1319	0.1309	17.4533	0.4954

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1320	0.1310	17.4667	0.4952
38	10:30:48	0.1320	0.1310	17.4667	0.4952
39	11:00:50	0.1320	0.1310	17.4667	0.4952
40	11:30:53	0.1321	0.1311	17.4800	0.4949
41	12:00:55	0.1321	0.1311	17.4800	0.4949
42	12:30:57	0.1321	0.1311	17.4800	0.4949
43	13:01:00	0.1321	0.1311	17.4800	0.4949
44	13:31:02	0.1322	0.1312	17.4933	0.4947
45	14:01:04	0.1322	0.1312	17.4933	0.4947
46	14:31:06	0.1322	0.1312	17.4933	0.4947
47	15:01:09	0.1322	0.1312	17.4933	0.4947
48	15:31:11	0.1322	0.1312	17.4933	0.4947
49	16:01:13	0.1323	0.1313	17.5067	0.4944
50	16:31:15	0.1323	0.1313	17.5067	0.4944
51	17:01:18	0.1323	0.1313	17.5067	0.4944
52	17:31:20	0.1323	0.1313	17.5067	0.4944
53	18:01:22	0.1323	0.1313	17.5067	0.4944
54	18:31:25	0.1324	0.1314	17.5200	0.4942
55	19:01:27	0.1324	0.1314	17.5200	0.4942
56	19:31:29	0.1324	0.1314	17.5200	0.4942
57	20:01:31	0.1324	0.1314	17.5200	0.4942
58	20:31:34	0.1325	0.1315	17.5333	0.4940
59	21:01:36	0.1325	0.1315	17.5333	0.4940
60	21:31:38	0.1325	0.1315	17.5333	0.4940
61	21:53:20	0.1325	0.1315	17.5333	0.4940

Consolidation Test Results
(Sequence 12) Load 16.000 tsf

Consolidation Test Results
(Sequence 12) Load 16.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

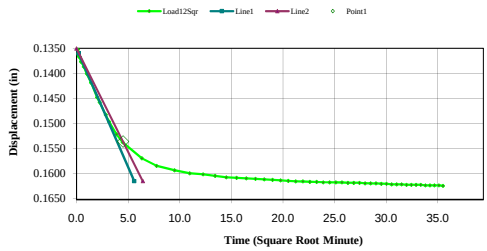
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI1-50
Depth: 44 - 46 feet
Sample Type: Undisturbed

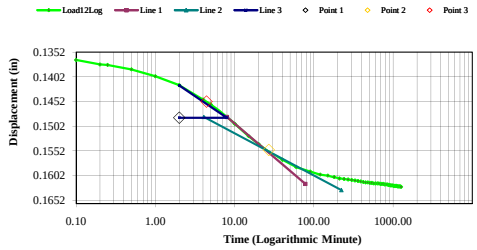
Soil Description: Clay (CH)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1325	0.1315	17.5333	0.4940
1	00:00:01	0.1353	0.1343	17.9067	0.4872
2	00:00:02	0.1361	0.1351	18.0133	0.4853
3	00:00:03	0.1364	0.1354	18.0533	0.4845
4	00:00:04	0.1367	0.1357	18.0933	0.4838
5	00:00:05	0.1367	0.1357	18.0933	0.4838
6	00:00:06	0.1368	0.1358	18.1067	0.4836
7	00:00:12	0.1377	0.1367	18.2267	0.4814
8	00:00:15	0.1378	0.1368	18.2400	0.4812
9	00:00:30	0.1387	0.1377	18.3600	0.4790
10	00:01:00	0.1401	0.1391	18.5467	0.4756
11	00:02:00	0.1419	0.1409	18.7867	0.4713
12	00:04:00	0.1448	0.1438	19.1733	0.4643
13	00:05:00	0.1458	0.1448	19.3067	0.4618
14	00:08:01	0.1483	0.1473	19.6400	0.4558
15	00:10:01	0.1497	0.1487	19.8267	0.4524
16	00:15:01	0.1522	0.1512	20.1600	0.4464
17	00:20:02	0.1538	0.1528	20.3733	0.4425
18	00:40:03	0.1570	0.1560	20.8000	0.4348
19	01:00:05	0.1585	0.1575	21.0000	0.4312
20	01:30:07	0.1594	0.1584	21.1200	0.4290
21	02:00:09	0.1600	0.1590	21.2000	0.4275
22	02:30:11	0.1602	0.1592	21.2267	0.4271
23	03:00:14	0.1605	0.1595	21.2667	0.4263
24	03:30:16	0.1608	0.1598	21.3067	0.4256
25	04:00:18	0.1609	0.1599	21.3200	0.4254
26	04:30:21	0.1610	0.1600	21.3333	0.4251
27	05:00:23	0.1611	0.1601	21.3467	0.4249
28	05:30:25	0.1612	0.1602	21.3600	0.4246
29	06:00:27	0.1613	0.1603	21.3733	0.4244
30	06:30:30	0.1614	0.1604	21.3867	0.4242
31	07:00:32	0.1615	0.1605	21.4000	0.4239
32	07:30:34	0.1616	0.1606	21.4133	0.4237
33	08:00:37	0.1616	0.1606	21.4133	0.4237
34	08:30:39	0.1617	0.1607	21.4267	0.4234
35	09:00:41	0.1617	0.1607	21.4267	0.4234
36	09:30:43	0.1618	0.1608	21.4400	0.4232

Consolidation Graph (Squareroot Time)



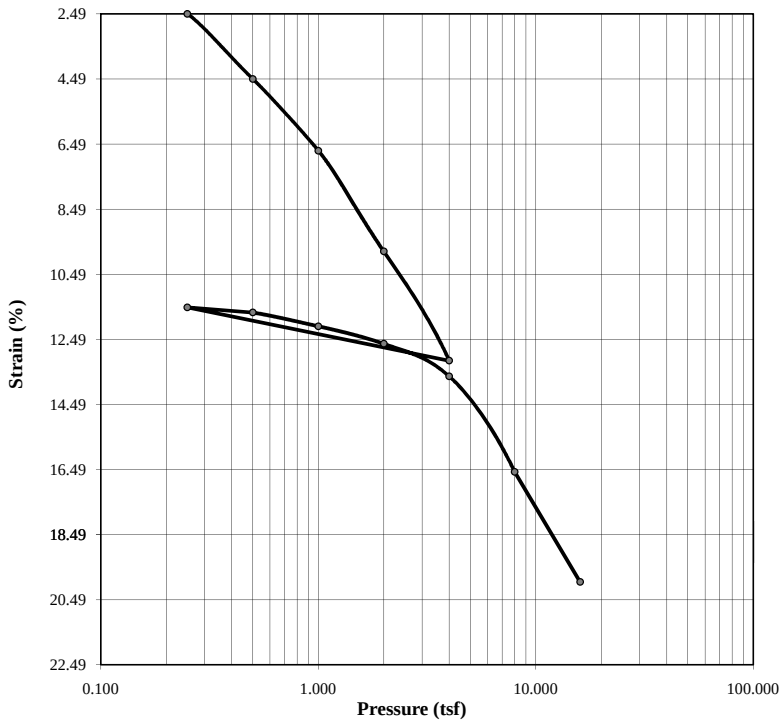
Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1618	0.1608	21.4400	0.4232
38	10:30:48	0.1618	0.1608	21.4400	0.4232
39	11:00:50	0.1618	0.1608	21.4400	0.4232
40	11:30:52	0.1619	0.1609	21.4533	0.4229
41	12:00:55	0.1619	0.1609	21.4533	0.4229
42	12:30:57	0.1619	0.1609	21.4533	0.4229
43	13:00:59	0.1620	0.1610	21.4667	0.4227
44	13:31:02	0.1620	0.1610	21.4667	0.4227
45	14:01:04	0.1620	0.1610	21.4667	0.4227
46	14:31:06	0.1621	0.1611	21.4800	0.4225
47	15:01:09	0.1621	0.1611	21.4800	0.4225
48	15:31:11	0.1622	0.1612	21.4933	0.4222
49	16:01:13	0.1622	0.1612	21.4933	0.4222
50	16:31:15	0.1622	0.1612	21.4933	0.4222
51	17:01:18	0.1623	0.1613	21.5067	0.4220
52	17:31:20	0.1623	0.1613	21.5067	0.4220
53	18:01:22	0.1623	0.1613	21.5067	0.4220
54	18:31:24	0.1623	0.1613	21.5067	0.4220
55	19:01:27	0.1624	0.1614	21.5200	0.4217
56	19:31:29	0.1624	0.1614	21.5200	0.4217
57	20:01:31	0.1624	0.1614	21.5200	0.4217
58	20:31:34	0.1624	0.1614	21.5200	0.4217
59	20:59:29	0.1625	0.1615	21.5333	0.4215

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	47	**Test Date:**	11 May 2011
Moisture (%):	35.40	20.17	**Plastic Limits:**	22		
Dry Density (pcf):	88.67	112.50	**Plasticity Index (%):**	25		
Saturation (%):	108.64	114.16				
Void Ratio:	0.8566	0.4862	**Specific Gravity:**	2.644	Measured	

Sample Description: Clay with silt (CL)

Project Number: 10883-011-00 **Depth:** 28-30 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-SI2-30

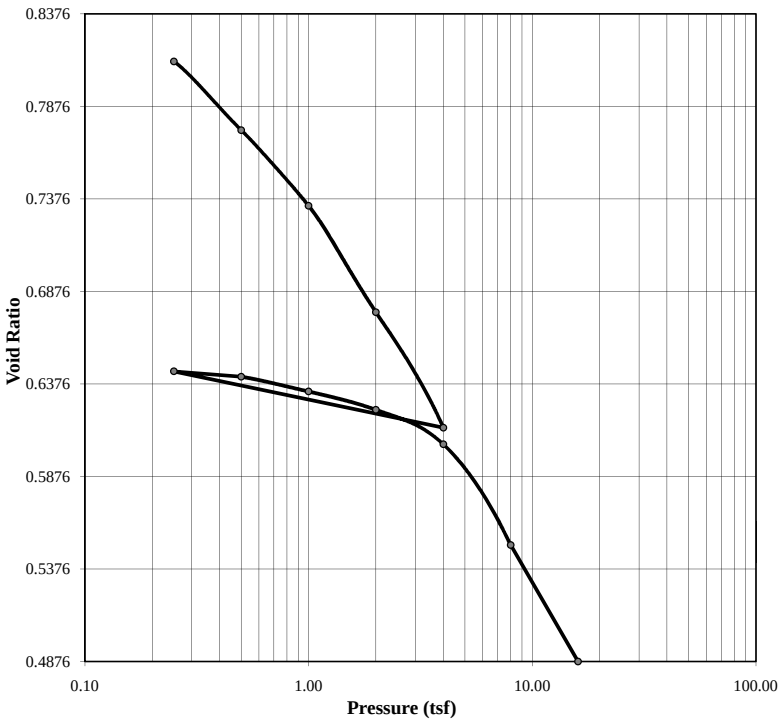
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	47	**Test Date:**	11 May 2011
Moisture (%):	35.40	20.17	**Plastic Limits:**	22		
Dry Density (pcf):	88.67	112.50	**Plasticity Index (%):**	25		
Saturation (%):	108.64	114.16				
Void Ratio:	0.8566	0.4862	**Specific Gravity:**	2.644	Measured	

Soil Description: Clay with silt (CL)

Project Number: 10883-011-00 **Depth:** 28-30 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-SI2-30

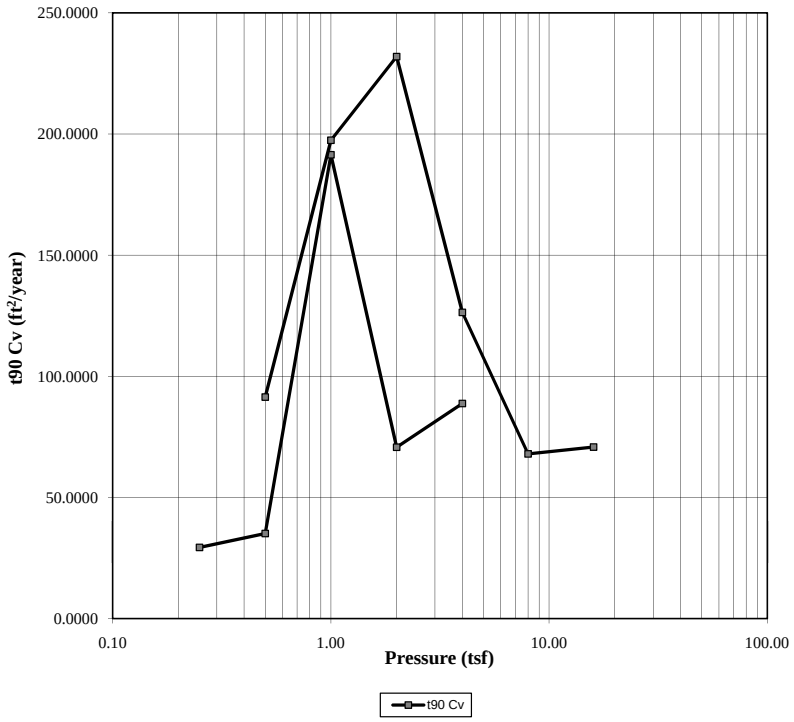
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	47	**Test Date:**	11 May 2011
Moisture (%):	35.40	20.17	**Plastic Limits:**	22		
Dry Density (pcf):	88.67	112.50	**Plasticity Index (%):**	25		
Saturation (%):	108.64	114.16				
Void Ratio:	0.8566	0.4862	**Specific Gravity:**	2.644	Measured	

Soil Description: Clay with silt (CL)

Project Number: 10883-011-00 **Depth:** 28-30 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-SI2-30

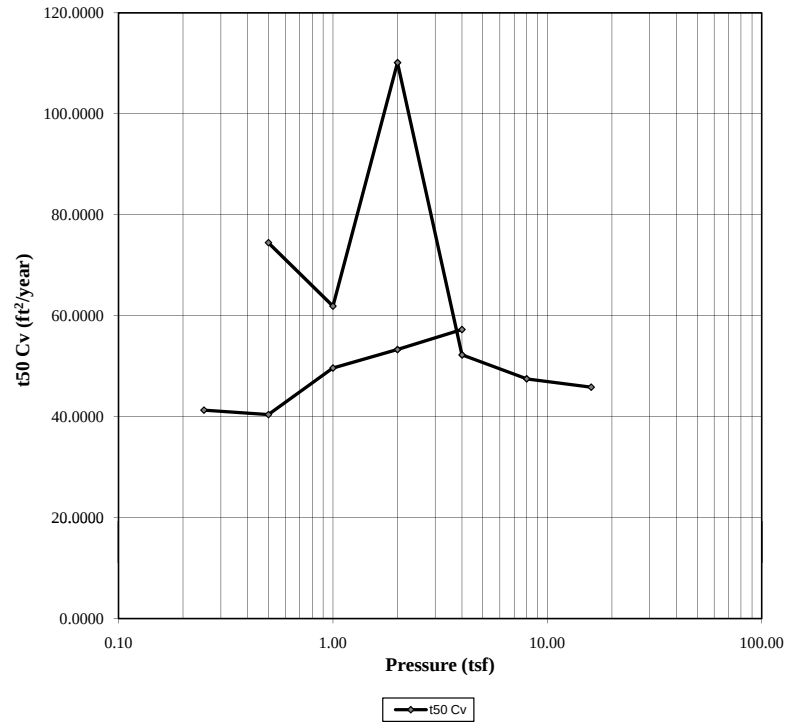
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	47	**Test Date:**	11 May 2011
Moisture (%):	35.40	20.17	**Plastic Limits:**	22		
Dry Density (pcf):	88.67	112.50	**Plasticity Index (%):**	25		
Saturation (%):	108.64	114.16				
Void Ratio:	0.8566	0.4862	**Specific Gravity:**	2.644	Measured	

Soil Description: Clay with silt (CL)

Project Number: 10883-011-00 **Depth:** 28-30 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-SI2-30

Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test Results
Summary

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00

Sample Number:
Boring Number: BHSP-SI2-30
Depth: 28-30 feet
Sample Type: Undisturbed

Sample Description: Clay with silt (CL)
Remarks:

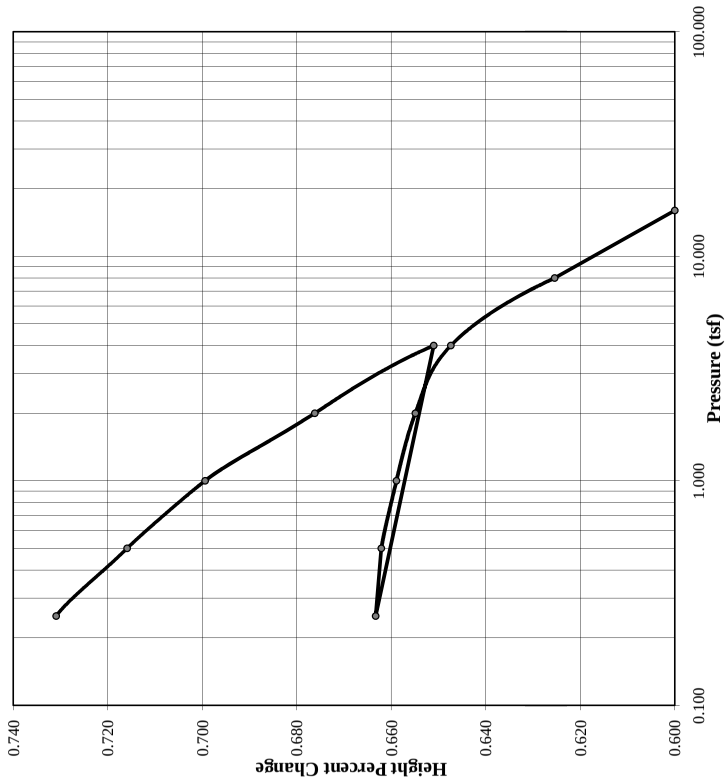
Test Number:
Test Date: 11 May 2011

Index	Load Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Void (in)	Vertical Strain (%)	Void Ratio	t90 Fitting Time (min)	t50 Fitting Time (min)	t90 Cv (ft2/year)	t50 Cv (ft2/year)
0	0.000	0.0000	0.7500	0.3464	0.00	0.8583	0.000	0.000	0.000	0.000
1	0.250	0.0187	0.7313	0.3277	2.49	0.8119	14.106	2.328	29.337	41.288
2	0.500	0.0337	0.7163	0.3127	4.49	0.7748	11.298	2.283	35.142	40.395
3	1.000	0.0502	0.6998	0.2962	6.69	0.7339	1.980	1.774	191.411	49.636
4	2.000	0.0734	0.6766	0.2730	9.79	0.6764	5.010	1.544	70.713	53.288
5	4.000	0.0986	0.6514	0.2478	13.15	0.6140	3.699	1.332	88.769	57.270
6	0.250	0.0863	0.6637	0.2601	11.51	0.6444	0.000	0.000	0.000	0.000
7	0.500	0.0875	0.6625	0.2589	11.67	0.6415	3.715	1.060	91.429	74.439
8	1.000	0.0907	0.6593	0.2557	12.09	0.6335	1.704	1.263	197.430	61.884
9	2.000	0.0947	0.6553	0.2517	12.63	0.6236	1.433	0.701	231.884	110.113
10	4.000	0.1022	0.6478	0.2442	13.63	0.6050	2.570	1.444	126.352	52.226
11	8.000	0.1242	0.6258	0.2222	16.56	0.5505	4.458	1.483	67.979	47.483
12	16.000	0.1496	0.6004	0.1968	19.95	0.4876	3.940	1.414	70.798	45.822

Predicted value indicated with *

GeoEngineers

Consolidation Test
Test Results



	Before	After			
Moisture (%):	35.40	20.17	**Liquid Limits:**	47	**Test Date:** 11 May 2011
Dry Density (pcf):	88.67	112.50	**Plastic Limits:**	22	
Saturation (%):	108.64	114.16	**Plasticity Index (%):**	25	
Void Ratio:	0.8566	0.4862	**Specific Gravity:**	2.644	Measured

Soil Description: Clay with silt (CL)
Project Number: 10883-011-00
Sample Number:
Boring Number: BHSP-SI2-30
Depth: 28-30 feet
Remarks:

Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Consolidation Specimen Information

Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 11 May 2011

Sample Number: **Sample Description:**
Boring Number: BHSP-SI2-30 Clay with silt (CL)
Depth: 28-30 feet **Remarks:**
Sample Type: Undisturbed

Test Number:

Liquid Limit:	47.0000	**Initial Void Ratio:**	0.8566	**Initial Height (in):**	0.7500
Plastic Limit:	22.0000	**Plasticity Index (%):**	25.0000	**Initial Diameter (in):**	2.5000
Specific Gravity:	2.6440 Measured	**Weight of Ring (g):**	220.0800		

Parameters	Initial Specimen	Final Specimen
Moist Weight + Container (g)	146.98	126.94
Dry Soil + Container (g)	115.69	109.41
Weight of Container (g)	27.30	22.51
Moisture Content (%)	35.40	20.17
Void Ratio	0.8566	0.4862
Saturation (%)	108.64	114.16
Dry Density (pcf)	88.67	112.50

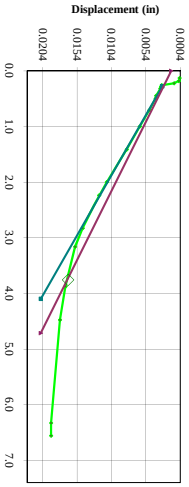
Consolidation Test Results
(Sequence 1) Load 0.250 tsf

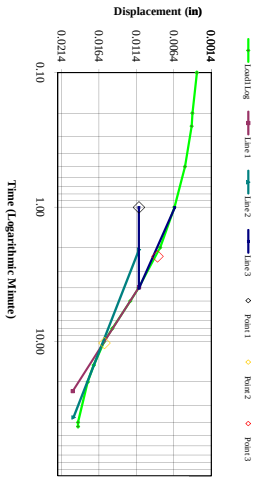
Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 11 May 2011
Test Number:

Sample Number: **Soil Description:**
Boring Number: BHSP-SI2-30 Clay with silt (CL)
Depth: 28-30 feet **Remarks:**
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0005	0.0000	0.0000	0.8566
1	00:00:01	0.0005	0.0000	0.0000	0.8566
2	00:00:02	0.0006	0.0001	0.0133	0.8563
3	00:00:03	0.0013	0.0008	0.1067	0.8546
4	00:00:04	0.0031	0.0026	0.3467	0.8501
5	00:00:05	0.0032	0.0027	0.3600	0.8499
6	00:00:06	0.0033	0.0028	0.3733	0.8496
7	00:00:12	0.0039	0.0034	0.4533	0.8481
8	00:00:15	0.0040	0.0035	0.4667	0.8479
9	00:00:30	0.0049	0.0044	0.5867	0.8457
10	00:01:00	0.0063	0.0058	0.7733	0.8422
11	00:02:00	0.0082	0.0077	1.0267	0.8375
12	00:04:00	0.0111	0.0106	1.4133	0.8303
13	00:05:00	0.0122	0.0117	1.5600	0.8276
14	00:08:00	0.0146	0.0141	1.8800	0.8217
15	00:10:00	0.0157	0.0152	2.0267	0.8189
16	00:15:01	0.0171	0.0166	2.2133	0.8155
17	00:20:02	0.0179	0.0174	2.3200	0.8135
18	00:40:03	0.0192	0.0187	2.4933	0.8103
19	00:43:00	0.0192	0.0187	2.4933	0.8103

Tested By: **Checked By:**





Consolidation Test Results
(Sequence 2) Load 0.500 tsf

Consolidation Test Results
(Sequence 2) Load 0.500 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

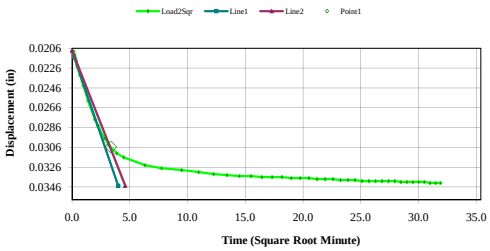
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI2-30
Depth: 28-30 feet
Sample Type: Undisturbed

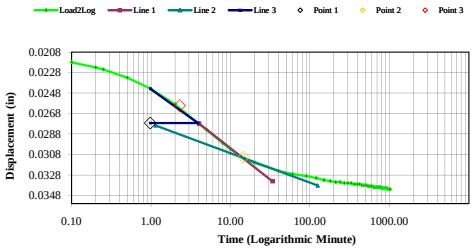
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0192	0.0187	2.4933	0.8103
1	00:00:01	0.0209	0.0204	2.7200	0.8061
2	00:00:02	0.0212	0.0207	2.7600	0.8053
3	00:00:03	0.0215	0.0210	2.8000	0.8046
4	00:00:04	0.0216	0.0211	2.8133	0.8043
5	00:00:05	0.0217	0.0212	2.8267	0.8041
6	00:00:06	0.0218	0.0213	2.8400	0.8038
7	00:00:12	0.0223	0.0218	2.9067	0.8026
8	00:00:15	0.0225	0.0220	2.9333	0.8021
9	00:00:30	0.0233	0.0228	3.0400	0.8001
10	00:01:00	0.0244	0.0239	3.1867	0.7974
11	00:02:00	0.0259	0.0254	3.3867	0.7937
12	00:04:00	0.0278	0.0273	3.6400	0.7890
13	00:05:00	0.0284	0.0279	3.7200	0.7875
14	00:08:01	0.0297	0.0292	3.8933	0.7843
15	00:10:01	0.0303	0.0298	3.9733	0.7828
16	00:15:01	0.0312	0.0307	4.0933	0.7806
17	00:20:01	0.0316	0.0311	4.1467	0.7796
18	00:40:02	0.0324	0.0319	4.2533	0.7776
19	01:00:03	0.0327	0.0322	4.2933	0.7769
20	01:30:04	0.0329	0.0324	4.3200	0.7764
21	02:00:06	0.0331	0.0326	4.3467	0.7759
22	02:30:07	0.0333	0.0328	4.3733	0.7754
23	03:00:08	0.0334	0.0329	4.3867	0.7751
24	03:30:10	0.0335	0.0330	4.4000	0.7749
25	04:00:11	0.0335	0.0330	4.4000	0.7749
26	04:30:13	0.0336	0.0331	4.4133	0.7746
27	05:00:14	0.0336	0.0331	4.4133	0.7746
28	05:30:15	0.0336	0.0331	4.4133	0.7746
29	06:00:17	0.0337	0.0332	4.4267	0.7744
30	06:30:18	0.0337	0.0332	4.4267	0.7744
31	07:00:20	0.0337	0.0332	4.4267	0.7744
32	07:30:21	0.0338	0.0333	4.4400	0.7741
33	08:00:22	0.0338	0.0333	4.4400	0.7741
34	08:30:24	0.0338	0.0333	4.4400	0.7741
35	09:00:25	0.0339	0.0334	4.4533	0.7739
36	09:30:26	0.0339	0.0334	4.4533	0.7739

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:28	0.0339	0.0334	4.4533	0.7739
38	10:30:29	0.0340	0.0335	4.4667	0.7736
39	11:00:30	0.0340	0.0335	4.4667	0.7736
40	11:30:32	0.0340	0.0335	4.4667	0.7736
41	12:00:33	0.0340	0.0335	4.4667	0.7736
42	12:30:35	0.0340	0.0335	4.4667	0.7736
43	13:00:36	0.0340	0.0335	4.4667	0.7736
44	13:30:37	0.0341	0.0336	4.4800	0.7734
45	14:00:39	0.0341	0.0336	4.4800	0.7734
46	14:30:40	0.0341	0.0336	4.4800	0.7734
47	15:00:42	0.0341	0.0336	4.4800	0.7734
48	15:30:43	0.0341	0.0336	4.4800	0.7734
49	16:00:44	0.0342	0.0337	4.4933	0.7731
50	16:30:46	0.0342	0.0337	4.4933	0.7731
51	16:57:25	0.0342	0.0337	4.4933	0.7731

Consolidation Test Results
(Sequence 3) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI2-30
Depth: 28-30 feet
Sample Type: Undisturbed

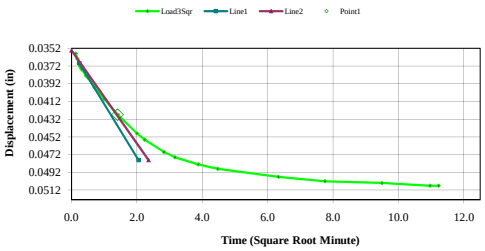
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0342	0.0337	4.4933	0.7731
1	00:00:01	0.0358	0.0353	4.7067	0.7692
2	00:00:02	0.0364	0.0359	4.7867	0.7677
3	00:00:03	0.0369	0.0364	4.8533	0.7665
4	00:00:04	0.0372	0.0367	4.8933	0.7657
5	00:00:05	0.0374	0.0369	4.9200	0.7652
6	00:00:06	0.0376	0.0371	4.9467	0.7647
7	00:00:12	0.0383	0.0378	5.0400	0.7630
8	00:00:15	0.0385	0.0380	5.0667	0.7625
9	00:00:30	0.0396	0.0391	5.2133	0.7598
10	00:01:00	0.0409	0.0404	5.3867	0.7566
11	00:02:00	0.0427	0.0422	5.6267	0.7521
12	00:04:00	0.0448	0.0443	5.9067	0.7469
13	00:05:00	0.0455	0.0450	6.0000	0.7452
14	00:08:00	0.0469	0.0464	6.1867	0.7417
15	00:10:01	0.0475	0.0470	6.2667	0.7402
16	00:15:01	0.0483	0.0478	6.3733	0.7382
17	00:20:01	0.0488	0.0483	6.4400	0.7370
18	00:40:02	0.0497	0.0492	6.5600	0.7348
19	01:00:03	0.0502	0.0497	6.6267	0.7335
20	01:30:04	0.0504	0.0499	6.6533	0.7330
21	02:00:06	0.0507	0.0502	6.6933	0.7323
22	02:05:59	0.0507	0.0502	6.6933	0.7323

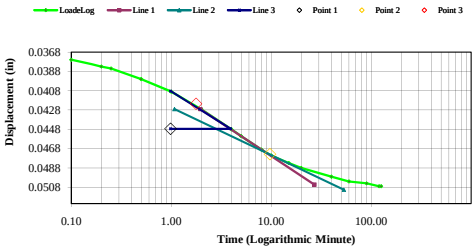
Tested By: **Checked By:**

Consolidation Test Results
(Sequence 3) Load 1.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 4) Load 2.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI2-30
Depth: 28-30 feet
Sample Type: Undisturbed

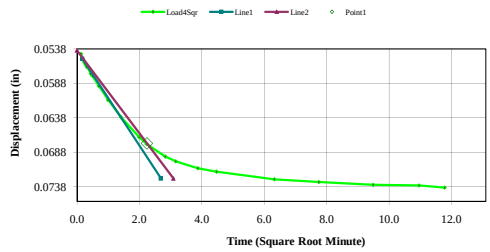
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0507	0.0502	6.6933	0.7323
1	00:00:01	0.0545	0.0540	7.2000	0.7229
2	00:00:02	0.0552	0.0547	7.2933	0.7212
3	00:00:03	0.0556	0.0551	7.3467	0.7202
4	00:00:04	0.0559	0.0554	7.3867	0.7194
5	00:00:05	0.0561	0.0556	7.4133	0.7189
6	00:00:06	0.0564	0.0559	7.4533	0.7182
7	00:00:12	0.0574	0.0569	7.5867	0.7157
8	00:00:15	0.0577	0.0572	7.6267	0.7150
9	00:00:30	0.0592	0.0587	7.8267	0.7113
10	00:01:00	0.0612	0.0607	8.0933	0.7063
11	00:02:00	0.0637	0.0632	8.4267	0.7001
12	00:04:00	0.0666	0.0661	8.8133	0.6929
13	00:05:00	0.0676	0.0671	8.9467	0.6905
14	00:08:01	0.0694	0.0689	9.1867	0.6860
15	00:10:01	0.0701	0.0696	9.2800	0.6843
16	00:15:01	0.0711	0.0706	9.4133	0.6818
17	00:20:01	0.0716	0.0711	9.4800	0.6806
18	00:40:02	0.0727	0.0722	9.6267	0.6778
19	01:00:03	0.0731	0.0726	9.6800	0.6768
20	01:30:04	0.0735	0.0730	9.7333	0.6759
21	02:00:06	0.0736	0.0731	9.7467	0.6756
22	02:18:46	0.0739	0.0734	9.7867	0.6749

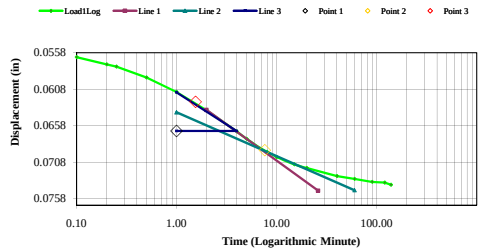
Tested By: **Checked By:**

Consolidation Test Results
(Sequence 4) Load 2.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 5) Load 4.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI2-30
Depth: 28-30 feet
Sample Type: Undisturbed

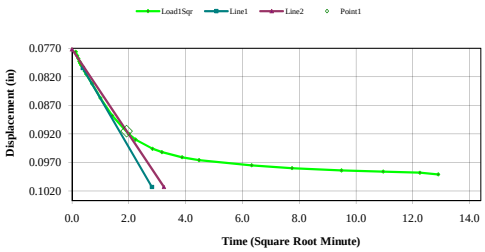
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0739	0.0734	9.7867	0.6749
1	00:00:01	0.0776	0.0771	10.2800	0.6657
2	00:00:02	0.0783	0.0778	10.3733	0.6640
3	00:00:03	0.0788	0.0783	10.4400	0.6627
4	00:00:04	0.0793	0.0788	10.5067	0.6615
5	00:00:05	0.0796	0.0791	10.5467	0.6608
6	00:00:06	0.0799	0.0794	10.5867	0.6600
7	00:00:12	0.0810	0.0805	10.7333	0.6573
8	00:00:15	0.0815	0.0810	10.8000	0.6561
9	00:00:30	0.0832	0.0827	11.0267	0.6518
10	00:01:00	0.0857	0.0852	11.3600	0.6457
11	00:02:00	0.0888	0.0883	11.7733	0.6380
12	00:04:00	0.0920	0.0915	12.2000	0.6301
13	00:05:00	0.0930	0.0925	12.3333	0.6276
14	00:08:01	0.0946	0.0941	12.5467	0.6236
15	00:10:01	0.0952	0.0947	12.6267	0.6221
16	00:15:01	0.0961	0.0956	12.7467	0.6199
17	00:20:01	0.0966	0.0961	12.8133	0.6187
18	00:40:02	0.0975	0.0970	12.9333	0.6164
19	01:00:03	0.0980	0.0975	13.0000	0.6152
20	01:30:04	0.0984	0.0979	13.0533	0.6142
21	02:00:06	0.0986	0.0981	13.0800	0.6137
22	02:30:07	0.0988	0.0983	13.1067	0.6132
23	02:46:22	0.0991	0.0986	13.1467	0.6125

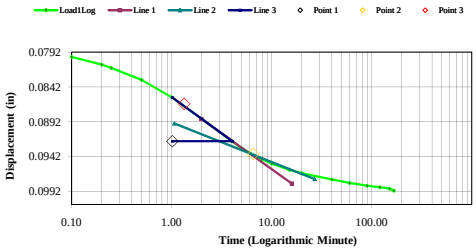
Tested By:
Checked By:

Consolidation Test Results
(Sequence 5) Load 4.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 6) Rebound 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

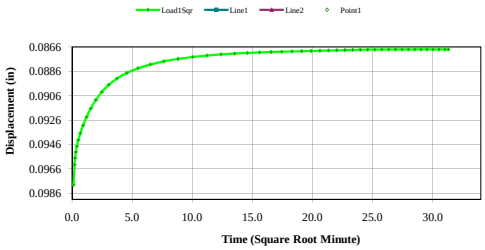
Sample Number:
Boring Number: BHSP-SI2-30
Depth: 28-30 feet
Sample Type: Undisturbed

Soil Description: Clay with silt (CL)
Remarks:

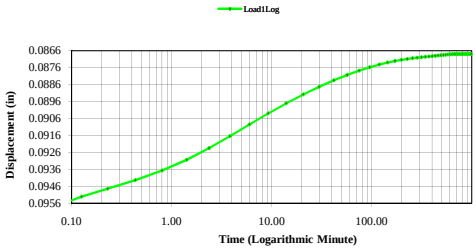
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0991	0.0986	13.1467	0.6125
1	00:00:01	0.0979	0.0974	12.9867	0.6155
2	00:00:02	0.0968	0.0963	12.8400	0.6182
3	00:00:03	0.0959	0.0954	12.7200	0.6204
4	00:00:04	0.0957	0.0952	12.6933	0.6209
5	00:00:05	0.0950	0.0945	12.6000	0.6226
6	00:00:06	0.0948	0.0943	12.5733	0.6231
7	00:00:12	0.0943	0.0938	12.5067	0.6244
8	00:00:15	0.0940	0.0935	12.4667	0.6251
9	00:00:30	0.0934	0.0929	12.3867	0.6266
10	00:01:00	0.0925	0.0920	12.2667	0.6288
11	00:02:00	0.0914	0.0909	12.1200	0.6315
12	00:04:00	0.0902	0.0897	11.9600	0.6345
13	00:05:00	0.0898	0.0893	11.9067	0.6355
14	00:08:00	0.0890	0.0885	11.8000	0.6375
15	00:10:01	0.0887	0.0882	11.7600	0.6382
16	00:15:01	0.0882	0.0877	11.6933	0.6395
17	00:20:01	0.0880	0.0875	11.6667	0.6400
18	00:40:02	0.0875	0.0870	11.6000	0.6412
19	01:00:03	0.0873	0.0868	11.5733	0.6417
20	01:30:04	0.0872	0.0867	11.5600	0.6419
21	02:00:06	0.0872	0.0867	11.5600	0.6419
22	02:30:07	0.0871	0.0866	11.5467	0.6422
23	03:00:08	0.0871	0.0866	11.5467	0.6422
24	03:30:10	0.0871	0.0866	11.5467	0.6422
25	04:00:11	0.0870	0.0865	11.5333	0.6424
26	04:30:12	0.0870	0.0865	11.5333	0.6424
27	05:00:14	0.0870	0.0865	11.5333	0.6424
28	05:30:15	0.0870	0.0865	11.5333	0.6424
29	06:00:17	0.0869	0.0864	11.5200	0.6427
30	06:30:18	0.0869	0.0864	11.5200	0.6427
31	07:00:19	0.0869	0.0864	11.5200	0.6427
32	07:30:21	0.0869	0.0864	11.5200	0.6427
33	08:00:22	0.0869	0.0864	11.5200	0.6427
34	08:30:23	0.0869	0.0864	11.5200	0.6427
35	09:00:25	0.0868	0.0863	11.5067	0.6429
36	09:30:26	0.0868	0.0863	11.5067	0.6429

Consolidation Test Results
(Sequence 6) Rebound 0.250 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:28	0.0868	0.0863	11.5067	0.6429
38	10:30:29	0.0868	0.0863	11.5067	0.6429
39	11:00:30	0.0868	0.0863	11.5067	0.6429
40	11:30:32	0.0868	0.0863	11.5067	0.6429
41	12:00:33	0.0868	0.0863	11.5067	0.6429
42	12:30:35	0.0868	0.0863	11.5067	0.6429
43	13:00:36	0.0868	0.0863	11.5067	0.6429
44	13:30:37	0.0868	0.0863	11.5067	0.6429
45	14:00:39	0.0868	0.0863	11.5067	0.6429
46	14:30:40	0.0868	0.0863	11.5067	0.6429
47	15:00:41	0.0868	0.0863	11.5067	0.6429
48	15:30:43	0.0868	0.0863	11.5067	0.6429
49	16:00:44	0.0868	0.0863	11.5067	0.6429
50	16:19:01	0.0868	0.0863	11.5067	0.6429

Consolidation Test Results
(Sequence 7) Load 0.500 tsf

Consolidation Test Results
(Sequence 7) Load 0.500 tsf

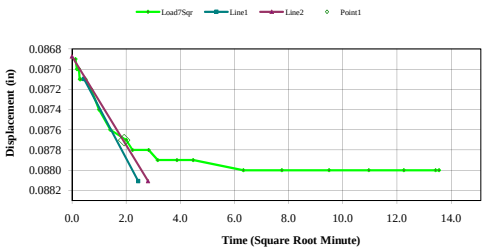
Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 11 May 2011
Test Number:

Sample Number:
Soil Description:
Boring Number: BHSP-SI2-30
Clay with silt (CL)
Depth: 28-30 feet
Remarks:
Sample Type: Undisturbed

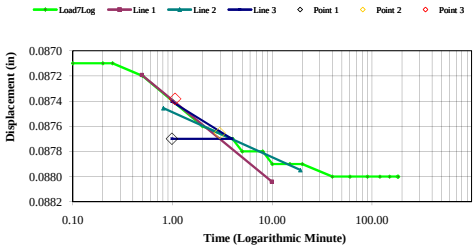
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0868	0.0863	11.5067	0.6429
1	00:00:01	0.0869	0.0864	11.5200	0.6427
2	00:00:02	0.0870	0.0865	11.5333	0.6424
3	00:00:03	0.0870	0.0865	11.5333	0.6424
4	00:00:04	0.0870	0.0865	11.5333	0.6424
5	00:00:05	0.0871	0.0866	11.5467	0.6422
6	00:00:06	0.0871	0.0866	11.5467	0.6422
7	00:00:12	0.0871	0.0866	11.5467	0.6422
8	00:00:15	0.0871	0.0866	11.5467	0.6422
9	00:00:30	0.0872	0.0867	11.5600	0.6419
10	00:01:00	0.0874	0.0869	11.5867	0.6414
11	00:02:00	0.0876	0.0871	11.6133	0.6410
12	00:04:00	0.0877	0.0872	11.6267	0.6407
13	00:05:00	0.0878	0.0873	11.6400	0.6405
14	00:08:01	0.0878	0.0873	11.6400	0.6405
15	00:10:01	0.0879	0.0874	11.6533	0.6402
16	00:15:01	0.0879	0.0874	11.6533	0.6402
17	00:20:01	0.0879	0.0874	11.6533	0.6402
18	00:40:03	0.0880	0.0875	11.6667	0.6400
19	01:00:04	0.0880	0.0875	11.6667	0.6400
20	01:30:07	0.0880	0.0875	11.6667	0.6400
21	02:00:09	0.0880	0.0875	11.6667	0.6400
22	02:30:11	0.0880	0.0875	11.6667	0.6400
23	03:00:13	0.0880	0.0875	11.6667	0.6400
24	03:03:41	0.0880	0.0875	11.6667	0.6400

Tested By:
Checked By:

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 8) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI2-30
Depth: 28-30 feet
Sample Type: Undisturbed

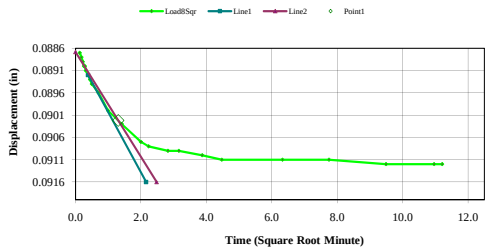
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0880	0.0875	11.6667	0.6400
1	00:00:01	0.0887	0.0882	11.7600	0.6382
2	00:00:02	0.0888	0.0883	11.7733	0.6380
3	00:00:03	0.0889	0.0884	11.7867	0.6377
4	00:00:04	0.0890	0.0885	11.8000	0.6375
5	00:00:05	0.0890	0.0885	11.8000	0.6375
6	00:00:06	0.0891	0.0886	11.8133	0.6372
7	00:00:12	0.0893	0.0888	11.8400	0.6367
8	00:00:15	0.0894	0.0889	11.8533	0.6365
9	00:00:30	0.0896	0.0891	11.8800	0.6360
10	00:01:00	0.0900	0.0895	11.9333	0.6350
11	00:02:00	0.0903	0.0898	11.9733	0.6343
12	00:04:00	0.0907	0.0902	12.0267	0.6333
13	00:05:00	0.0908	0.0903	12.0400	0.6330
14	00:08:00	0.0909	0.0904	12.0533	0.6328
15	00:10:00	0.0909	0.0904	12.0533	0.6328
16	00:15:01	0.0910	0.0905	12.0667	0.6325
17	00:20:01	0.0911	0.0906	12.0800	0.6323
18	00:40:03	0.0911	0.0906	12.0800	0.6323
19	01:00:04	0.0911	0.0906	12.0800	0.6323
20	01:30:07	0.0912	0.0907	12.0933	0.6320
21	02:00:09	0.0912	0.0907	12.0933	0.6320
22	02:05:39	0.0912	0.0907	12.0933	0.6320

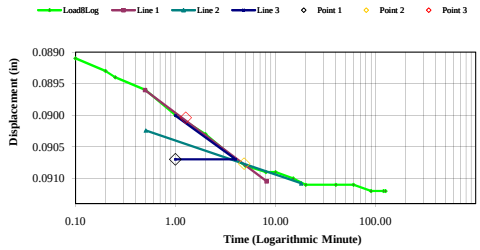
Tested By: **Checked By:**

Consolidation Test Results
(Sequence 8) Load 1.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 9) Load 2.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI2-30
Depth: 28-30 feet
Sample Type: Undisturbed

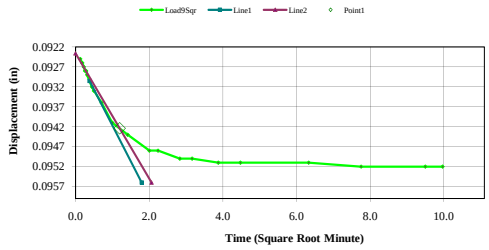
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0912	0.0907	12.0933	0.6320
1	00:00:01	0.0925	0.0920	12.2667	0.6288
2	00:00:02	0.0926	0.0921	12.2800	0.6286
3	00:00:03	0.0927	0.0922	12.2933	0.6283
4	00:00:04	0.0928	0.0923	12.3067	0.6281
5	00:00:05	0.0928	0.0923	12.3067	0.6281
6	00:00:06	0.0929	0.0924	12.3200	0.6278
7	00:00:12	0.0932	0.0927	12.3600	0.6271
8	00:00:15	0.0933	0.0928	12.3733	0.6268
9	00:00:30	0.0936	0.0931	12.4133	0.6261
10	00:01:00	0.0941	0.0936	12.4800	0.6249
11	00:02:00	0.0944	0.0939	12.5200	0.6241
12	00:04:01	0.0948	0.0943	12.5733	0.6231
13	00:05:01	0.0948	0.0943	12.5733	0.6231
14	00:08:01	0.0950	0.0945	12.6000	0.6226
15	00:10:01	0.0950	0.0945	12.6000	0.6226
16	00:15:01	0.0951	0.0946	12.6133	0.6224
17	00:20:02	0.0951	0.0946	12.6133	0.6224
18	00:40:03	0.0951	0.0946	12.6133	0.6224
19	01:00:05	0.0952	0.0947	12.6267	0.6221
20	01:30:07	0.0952	0.0947	12.6267	0.6221
21	01:39:15	0.0952	0.0947	12.6267	0.6221

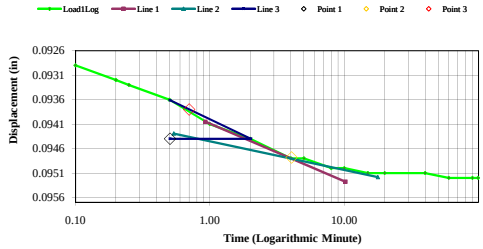
Tested By: **Checked By:**

Consolidation Test Results
(Sequence 9) Load 2.000 tsf

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 10) Load 4.000 tsf

Consolidation Test Results
(Sequence 10) Load 4.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

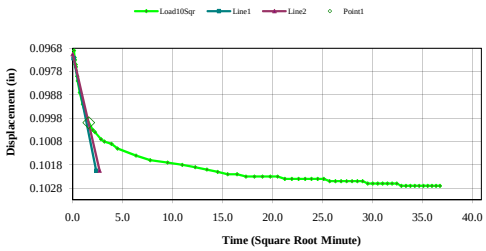
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI2-30
Depth: 28-30 feet
Sample Type: Undisturbed

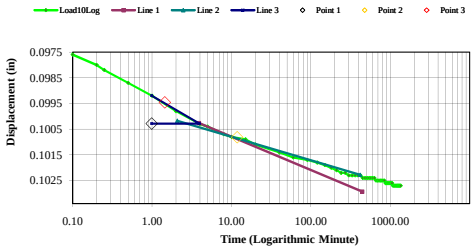
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0952	0.0947	12.6267	0.6221
1	00:00:01	0.0969	0.0964	12.8533	0.6179
2	00:00:02	0.0972	0.0967	12.8933	0.6172
3	00:00:03	0.0973	0.0968	12.9067	0.6169
4	00:00:04	0.0975	0.0970	12.9333	0.6164
5	00:00:05	0.0975	0.0970	12.9333	0.6164
6	00:00:06	0.0976	0.0971	12.9467	0.6162
7	00:00:12	0.0980	0.0975	13.0000	0.6152
8	00:00:15	0.0982	0.0977	13.0267	0.6147
9	00:00:30	0.0987	0.0982	13.0933	0.6135
10	00:01:00	0.0992	0.0987	13.1600	0.6122
11	00:02:00	0.0998	0.0993	13.2400	0.6108
12	00:04:00	0.1003	0.0998	13.3067	0.6095
13	00:05:00	0.1004	0.0999	13.3200	0.6093
14	00:08:01	0.1007	0.1002	13.3600	0.6085
15	00:10:01	0.1008	0.1003	13.3733	0.6083
16	00:15:01	0.1009	0.1004	13.3867	0.6080
17	00:20:02	0.1011	0.1006	13.4133	0.6075
18	00:40:03	0.1014	0.1009	13.4533	0.6068
19	01:00:05	0.1016	0.1011	13.4800	0.6063
20	01:30:07	0.1017	0.1012	13.4933	0.6060
21	02:00:09	0.1018	0.1013	13.5067	0.6058
22	02:30:12	0.1019	0.1014	13.5200	0.6056
23	03:00:14	0.1020	0.1015	13.5333	0.6053
24	03:30:16	0.1021	0.1016	13.5467	0.6051
25	04:00:18	0.1022	0.1017	13.5600	0.6048
26	04:30:21	0.1022	0.1017	13.5600	0.6048
27	05:00:23	0.1023	0.1018	13.5733	0.6046
28	05:30:25	0.1023	0.1018	13.5733	0.6046
29	06:00:28	0.1023	0.1018	13.5733	0.6046
30	06:30:30	0.1023	0.1018	13.5733	0.6046
31	07:00:32	0.1023	0.1018	13.5733	0.6046
32	07:30:34	0.1024	0.1019	13.5867	0.6043
33	08:00:37	0.1024	0.1019	13.5867	0.6043
34	08:30:39	0.1024	0.1019	13.5867	0.6043
35	09:00:41	0.1024	0.1019	13.5867	0.6043
36	09:30:44	0.1024	0.1019	13.5867	0.6043

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1024	0.1019	13.5867	0.6043
38	10:30:48	0.1024	0.1019	13.5867	0.6043
39	11:00:50	0.1025	0.1020	13.6000	0.6041
40	11:30:53	0.1025	0.1020	13.6000	0.6041
41	12:00:55	0.1025	0.1020	13.6000	0.6041
42	12:30:57	0.1025	0.1020	13.6000	0.6041
43	13:00:59	0.1025	0.1020	13.6000	0.6041
44	13:31:02	0.1025	0.1020	13.6000	0.6041
45	14:01:04	0.1025	0.1020	13.6000	0.6041
46	14:31:06	0.1026	0.1021	13.6133	0.6038
47	15:01:09	0.1026	0.1021	13.6133	0.6038
48	15:31:11	0.1026	0.1021	13.6133	0.6038
49	16:01:13	0.1026	0.1021	13.6133	0.6038
50	16:31:16	0.1026	0.1021	13.6133	0.6038
51	17:01:18	0.1026	0.1021	13.6133	0.6038
52	17:31:20	0.1026	0.1021	13.6133	0.6038
53	18:01:22	0.1027	0.1022	13.6267	0.6036
54	18:31:25	0.1027	0.1022	13.6267	0.6036
55	19:01:27	0.1027	0.1022	13.6267	0.6036
56	19:31:29	0.1027	0.1022	13.6267	0.6036
57	20:01:31	0.1027	0.1022	13.6267	0.6036
58	20:31:34	0.1027	0.1022	13.6267	0.6036
59	21:01:36	0.1027	0.1022	13.6267	0.6036
60	21:31:38	0.1027	0.1022	13.6267	0.6036
61	22:01:41	0.1027	0.1022	13.6267	0.6036
62	22:30:18	0.1027	0.1022	13.6267	0.6036

Consolidation Test Results
(Sequence 11) Load 8.000 tsf

Consolidation Test Results
(Sequence 11) Load 8.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

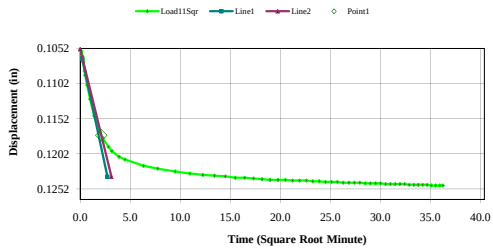
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI2-30
Depth: 28-30 feet
Sample Type: Undisturbed

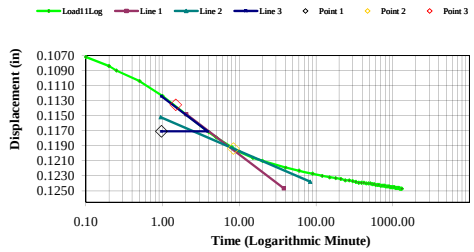
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1027	0.1022	13.6267	0.6036
1	00:00:01	0.1056	0.1051	14.0133	0.5964
2	00:00:02	0.1062	0.1057	14.0933	0.5949
3	00:00:03	0.1064	0.1059	14.1200	0.5944
4	00:00:04	0.1067	0.1062	14.1600	0.5937
5	00:00:05	0.1070	0.1065	14.2000	0.5929
6	00:00:06	0.1072	0.1067	14.2267	0.5924
7	00:00:12	0.1084	0.1079	14.3867	0.5895
8	00:00:15	0.1090	0.1085	14.4667	0.5880
9	00:00:30	0.1104	0.1099	14.6533	0.5845
10	00:01:00	0.1124	0.1119	14.9200	0.5796
11	00:02:00	0.1148	0.1143	15.2400	0.5736
12	00:04:01	0.1172	0.1167	15.5600	0.5677
13	00:05:01	0.1179	0.1174	15.6533	0.5659
14	00:08:01	0.1192	0.1187	15.8267	0.5627
15	00:10:01	0.1198	0.1193	15.9067	0.5612
16	00:15:01	0.1206	0.1201	16.0133	0.5593
17	00:20:02	0.1210	0.1205	16.0667	0.5583
18	00:40:03	0.1219	0.1214	16.1867	0.5560
19	01:00:05	0.1223	0.1218	16.2400	0.5551
20	01:30:07	0.1227	0.1222	16.2933	0.5541
21	02:00:09	0.1230	0.1225	16.3333	0.5533
22	02:30:12	0.1232	0.1227	16.3600	0.5528
23	03:00:14	0.1233	0.1228	16.3733	0.5526
24	03:30:16	0.1234	0.1229	16.3867	0.5523
25	04:00:18	0.1236	0.1231	16.4133	0.5518
26	04:30:21	0.1236	0.1231	16.4133	0.5518
27	05:00:23	0.1237	0.1232	16.4267	0.5516
28	05:30:25	0.1238	0.1233	16.4400	0.5513
29	06:00:28	0.1239	0.1234	16.4533	0.5511
30	06:30:30	0.1239	0.1234	16.4533	0.5511
31	07:00:32	0.1239	0.1234	16.4533	0.5511
32	07:30:35	0.1240	0.1235	16.4667	0.5508
33	08:00:37	0.1240	0.1235	16.4667	0.5508
34	08:30:39	0.1240	0.1235	16.4667	0.5508
35	09:00:41	0.1241	0.1236	16.4800	0.5506
36	09:30:44	0.1241	0.1236	16.4800	0.5506

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1242	0.1237	16.4933	0.5504
38	10:30:48	0.1242	0.1237	16.4933	0.5504
39	11:00:50	0.1242	0.1237	16.4933	0.5504
40	11:30:53	0.1243	0.1238	16.5067	0.5501
41	12:00:55	0.1243	0.1238	16.5067	0.5501
42	12:30:57	0.1243	0.1238	16.5067	0.5501
43	13:01:00	0.1243	0.1238	16.5067	0.5501
44	13:31:02	0.1244	0.1239	16.5200	0.5499
45	14:01:04	0.1244	0.1239	16.5200	0.5499
46	14:31:06	0.1244	0.1239	16.5200	0.5499
47	15:01:09	0.1244	0.1239	16.5200	0.5499
48	15:31:11	0.1245	0.1240	16.5333	0.5496
49	16:01:13	0.1245	0.1240	16.5333	0.5496
50	16:31:16	0.1245	0.1240	16.5333	0.5496
51	17:01:18	0.1245	0.1240	16.5333	0.5496
52	17:31:20	0.1245	0.1240	16.5333	0.5496
53	18:01:22	0.1246	0.1241	16.5467	0.5494
54	18:31:25	0.1246	0.1241	16.5467	0.5494
55	19:01:27	0.1246	0.1241	16.5467	0.5494
56	19:31:29	0.1246	0.1241	16.5467	0.5494
57	20:01:31	0.1246	0.1241	16.5467	0.5494
58	20:31:34	0.1247	0.1242	16.5600	0.5491
59	21:01:36	0.1247	0.1242	16.5600	0.5491
60	21:31:38	0.1247	0.1242	16.5600	0.5491
61	21:53:06	0.1247	0.1242	16.5600	0.5491

Consolidation Test Results
(Sequence 12) Load 16.000 tsf

Consolidation Test Results
(Sequence 12) Load 16.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

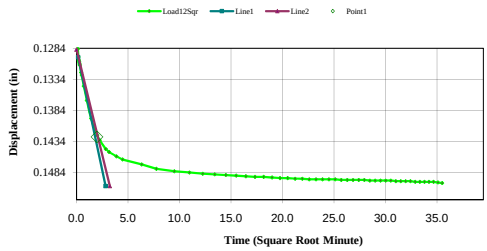
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI2-30
Depth: 28-30 feet
Sample Type: Undisturbed

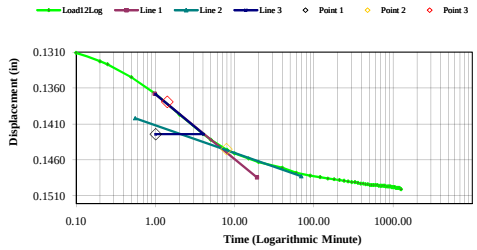
Soil Description: Clay with silt (CL)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1247	0.1242	16.5600	0.5491
1	00:00:01	0.1285	0.1280	17.0667	0.5397
2	00:00:02	0.1298	0.1293	17.2400	0.5365
3	00:00:03	0.1303	0.1298	17.3067	0.5353
4	00:00:04	0.1306	0.1301	17.3467	0.5345
5	00:00:05	0.1309	0.1304	17.3867	0.5338
6	00:00:06	0.1311	0.1306	17.4133	0.5333
7	00:00:12	0.1323	0.1318	17.5733	0.5303
8	00:00:15	0.1327	0.1322	17.6267	0.5293
9	00:00:30	0.1345	0.1340	17.8667	0.5249
10	00:01:00	0.1368	0.1363	18.1733	0.5192
11	00:02:01	0.1397	0.1392	18.5600	0.5120
12	00:04:01	0.1424	0.1419	18.9200	0.5053
13	00:05:01	0.1432	0.1427	19.0267	0.5033
14	00:08:01	0.1446	0.1441	19.2133	0.4999
15	00:10:01	0.1451	0.1446	19.2800	0.4986
16	00:15:02	0.1458	0.1453	19.3733	0.4969
17	00:20:02	0.1463	0.1458	19.4400	0.4956
18	00:40:03	0.1471	0.1466	19.5467	0.4937
19	01:00:05	0.1478	0.1473	19.6400	0.4919
20	01:30:07	0.1482	0.1477	19.6933	0.4909
21	02:00:10	0.1484	0.1479	19.7200	0.4904
22	02:30:12	0.1486	0.1481	19.7467	0.4900
23	03:00:14	0.1487	0.1482	19.7600	0.4897
24	03:30:16	0.1488	0.1483	19.7733	0.4895
25	04:00:19	0.1489	0.1484	19.7867	0.4892
26	04:30:21	0.1490	0.1485	19.8000	0.4890
27	05:00:23	0.1491	0.1486	19.8133	0.4887
28	05:30:25	0.1491	0.1486	19.8133	0.4887
29	06:00:28	0.1492	0.1487	19.8267	0.4885
30	06:30:30	0.1493	0.1488	19.8400	0.4882
31	07:00:32	0.1493	0.1488	19.8400	0.4882
32	07:30:35	0.1494	0.1489	19.8533	0.4880
33	08:00:37	0.1494	0.1489	19.8533	0.4880
34	08:30:39	0.1495	0.1490	19.8667	0.4877
35	09:00:41	0.1495	0.1490	19.8667	0.4877
36	09:30:44	0.1495	0.1490	19.8667	0.4877

Consolidation Graph (Squareroot Time)



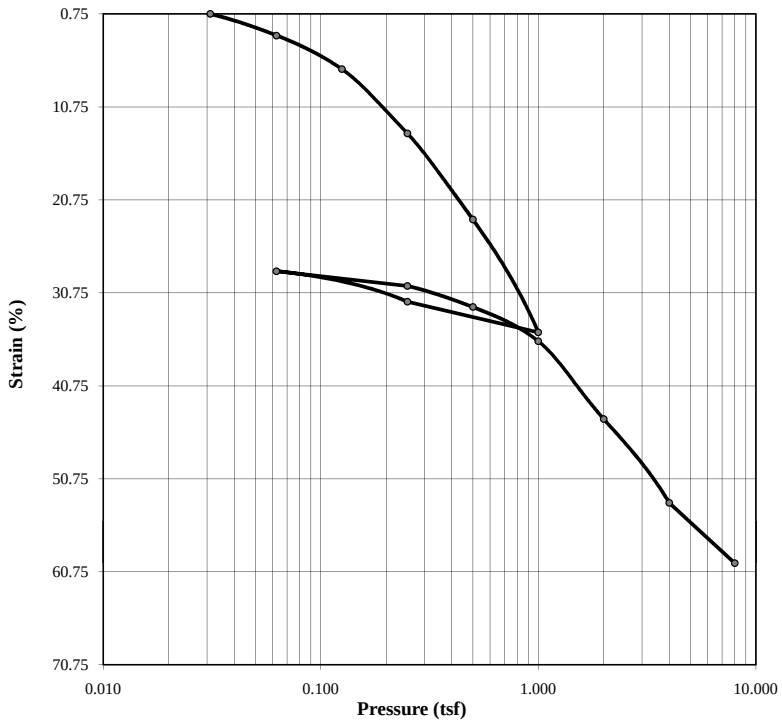
Consolidation Graph (Logarithmic Time)



37	10:00:46	0.1495	0.1490	19.8667	0.4877
38	10:30:48	0.1495	0.1490	19.8667	0.4877
39	11:00:50	0.1496	0.1491	19.8800	0.4875
40	11:30:53	0.1496	0.1491	19.8800	0.4875
41	12:00:55	0.1496	0.1491	19.8800	0.4875
42	12:30:57	0.1496	0.1491	19.8800	0.4875
43	13:01:00	0.1496	0.1491	19.8800	0.4875
44	13:31:02	0.1497	0.1492	19.8933	0.4872
45	14:01:04	0.1497	0.1492	19.8933	0.4872
46	14:31:06	0.1497	0.1492	19.8933	0.4872
47	15:01:09	0.1497	0.1492	19.8933	0.4872
48	15:31:11	0.1497	0.1492	19.8933	0.4872
49	16:01:13	0.1498	0.1493	19.9067	0.4870
50	16:31:16	0.1498	0.1493	19.9067	0.4870
51	17:01:18	0.1498	0.1493	19.9067	0.4870
52	17:31:20	0.1498	0.1493	19.9067	0.4870
53	18:01:22	0.1499	0.1494	19.9200	0.4867
54	18:31:25	0.1499	0.1494	19.9200	0.4867
55	19:01:27	0.1499	0.1494	19.9200	0.4867
56	19:31:29	0.1499	0.1494	19.9200	0.4867
57	20:01:32	0.1499	0.1494	19.9200	0.4867
58	20:31:34	0.1500	0.1495	19.9333	0.4865
59	21:00:39	0.1501	0.1496	19.9467	0.4862

GeoEngineers

Consolidation Test
Test Results

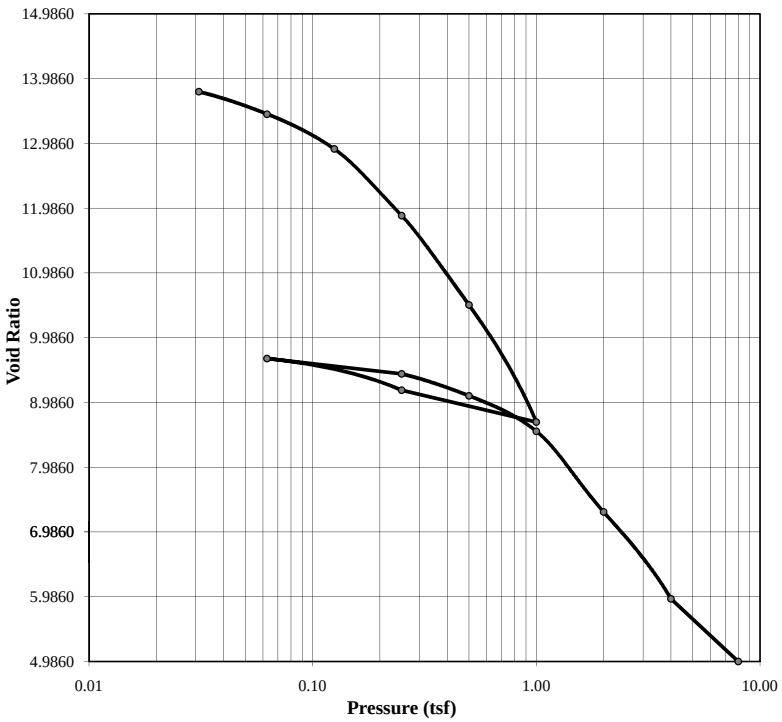


	Before	After				
			Liquid Limits:	527	**Test Date:**	11 May 2011
Moisture (%):	668.71	203.60	**Plastic Limits:**	215		
Dry Density (pcf):	8.38	19.66	**Plasticity Index (%):**	312		
Saturation (%):	96.16	76.09				
Void Ratio:	13.8976	4.9868	**Specific Gravity:**	2.002	Measured	

Sample Description: Peat (PT)
Project Number: 10883-011-00 **Depth:** 15 - 17 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-SI3-30
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Test Results

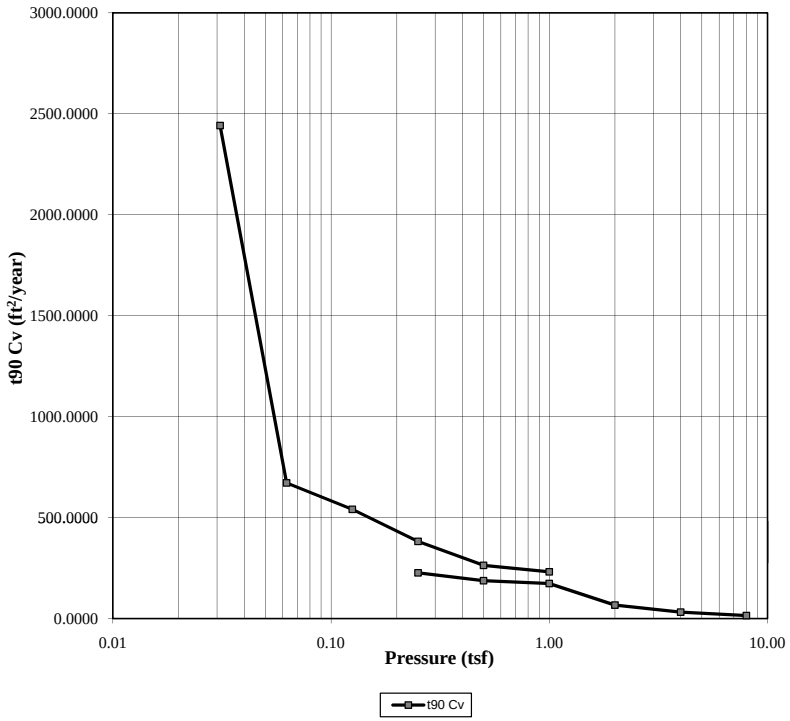


	Before	After				
			Liquid Limits:	527	**Test Date:**	11 May 2011
Moisture (%):	668.71	203.60	**Plastic Limits:**	215		
Dry Density (pcf):	8.38	19.66	**Plasticity Index (%):**	312		
Saturation (%):	96.16	76.09				
Void Ratio:	13.8976	4.9868	**Specific Gravity:**	2.002	Measured	

Soil Description: Peat (PT)
Project Number: 10883-011-00 **Depth:** 15 - 17 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-SI3-30
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	527	**Test Date:**	11 May 2011
Moisture (%):	668.71	203.60	**Plastic Limits:**	215		
Dry Density (pcf):	8.38	19.66	**Plasticity Index (%):**	312		
Saturation (%):	96.16	76.09				
Void Ratio:	13.8976	4.9868	**Specific Gravity:**	2.002	Measured	

Soil Description: Peat (PT)

Project Number: 10883-011-00 **Depth:** 15 - 17 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-SI3-30

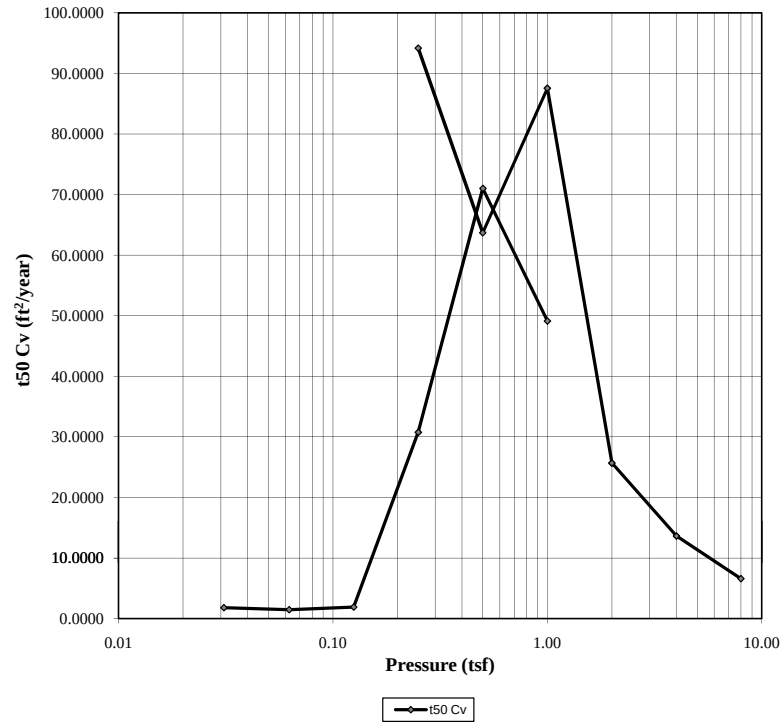
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	527	**Test Date:**	11 May 2011
Moisture (%):	668.71	203.60	**Plastic Limits:**	215		
Dry Density (pcf):	8.38	19.66	**Plasticity Index (%):**	312		
Saturation (%):	96.16	76.09				
Void Ratio:	13.8976	4.9868	**Specific Gravity:**	2.002	Measured	

Soil Description: Peat (PT)

Project Number: 10883-011-00 **Depth:** 15 - 17 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-SI3-30

Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test Results
Summary

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00

Sample Number:
Boring Number: BHSP-SI3-30
Depth: 15 - 17 feet
Sample Type: Undisturbed

Sample Description:
Peat (PT)
Remarks:

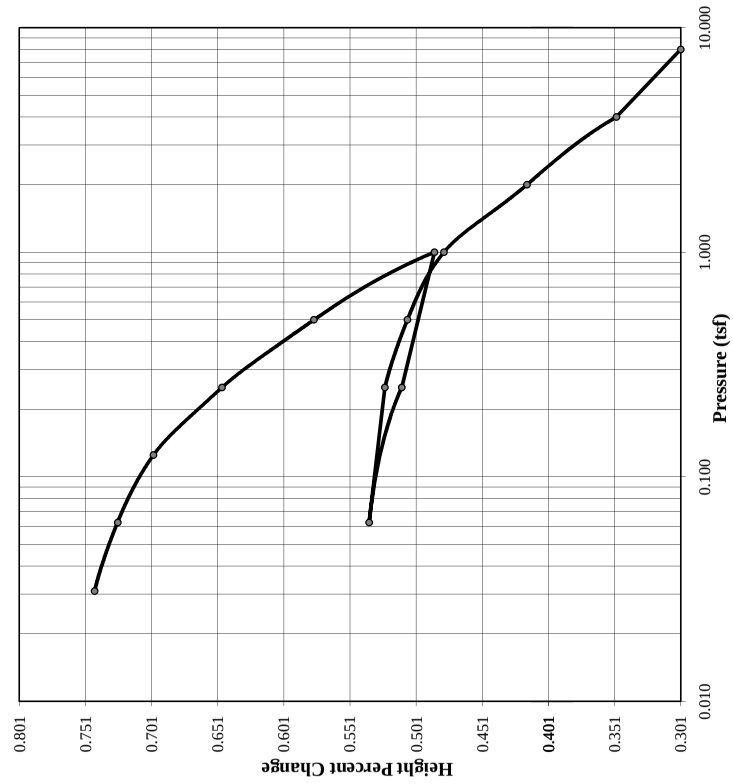
Test Number:
Test Date: 11 May 2011

Index	Load Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Void (in)	Vertical Strain (%)	Void Ratio	t90 Fitting Time (min)	t50 Fitting Time (min)	t90 Cv (ft2/year)	t50 Cv (ft2/year)
0	0.000	0.0000	0.7500	0.6996	0.00	13.8955	0.000	0.000	0.000	0.000
1	0.031	0.0056	0.7444	0.6940	0.75	13.7843	0.176	55.268	2441.826	1.802
2	0.063	0.0231	0.7269	0.6765	3.08	13.4368	0.609	64.734	671.365	1.467
3	0.125	0.0501	0.6999	0.6495	6.68	12.9005	0.701	46.210	541.012	1.906
4	0.250	0.1019	0.6481	0.5977	13.59	11.8717	0.850	2.455	382.382	30.752
5	0.500	0.1714	0.5786	0.5282	22.85	10.4914	0.983	0.848	263.616	70.996
6	1.000	0.2624	0.4876	0.4372	34.99	8.6841	0.794	0.870	231.728	49.102
7	0.250	0.2377	0.5123	0.4619	31.69	9.1746	0.000	0.000	0.000	0.000
8	0.063	0.2131	0.5369	0.4865	28.41	9.6632	0.000	0.000	0.000	0.000
9	0.250	0.2250	0.5250	0.4746	30.00	9.4269	0.940	0.526	226.941	94.174
10	0.500	0.2420	0.5080	0.4576	32.27	9.0892	1.065	0.728	187.518	63.690
11	1.000	0.2696	0.4804	0.4300	35.95	8.5411	1.025	0.474	174.257	87.558
12	2.000	0.3324	0.4176	0.3672	44.32	7.2938	2.017	1.221	66.894	25.678
13	4.000	0.4000	0.3500	0.2996	53.33	5.9513	3.002	1.615	31.578	13.633
14	8.000	0.4486	0.3014	0.2510	59.81	4.9860	4.620	2.475	15.214	6.599

Predicted value indicated with *

GeoEngineers

Consolidation Test
Test Results



	Before	After			
Moisture (%):	668.71	203.60	**Liquid Limits:**	527	**Test Date:** 11 May 2011
Dry Density (pcf):	8.38	19.66	**Plastic Limits:**	215	
Saturation (%):	96.16	76.09	**Plasticity Index (%):**	312	
Void Ratio:	13.8976	4.9868	**Specific Gravity:**	2.002	Measured

Soil Description: Peat (PT)
Project Number: 10883-011-00 **Depth:** 15 - 17 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-SI3-30
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GEOENGINEERS

Consolidation Test
Consolidation Specimen Information

Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 11 May 2011

Sample Number: **Sample Description:**
Boring Number: BHSP-SI3-30 Peat (PT)
Depth: 15 - 17 feet **Remarks:**
Sample Type: Undisturbed

Test Number:

Liquid Limit:	527.0000	**Initial Void Ratio:**	13.8976	**Initial Height (in):**	0.7500
Plastic Limit:	215.0000	**Plasticity Index (%):**	312.0000	**Initial Diameter (in):**	2.5000
Specific Gravity:	2.0020 Measured	**Weight of Ring (g):**	106.7200		

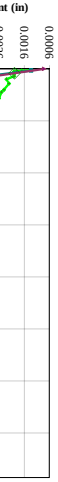
Parameters	Initial Specimen	Final Specimen
Moist Weight + Container (g)	120.26	41.19
Dry Soil + Container (g)	35.20	25.90
Weight of Container (g)	22.48	18.39
Moisture Content (%)	668.71	203.60
Void Ratio	13.8976	4.9868
Saturation (%)	96.16	76.09
Dry Density (pcf)	8.38	19.66

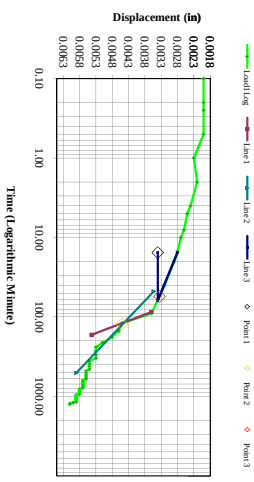
Consolidation Test Results
(Sequence 1) Load 0.031 tsf

Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 11 May 2011
Test Number:

Sample Number: **Soil Description:**
Boring Number: BHSP-SI3-30 Peat (PT)
Depth: 15 - 17 feet **Remarks:**
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0005	0.0000	0.0000	13.8976
1	00:00:01	0.0013	0.0008	0.1067	13.8917
2	00:00:02	0.0017	0.0012	0.1600	13.8738
3	00:00:03	0.0019	0.0014	0.1867	13.8698
4	00:00:04	0.0020	0.0015	0.2000	13.8678
5	00:00:05	0.0020	0.0015	0.2000	13.8678
6	00:00:06	0.0020	0.0015	0.2000	13.8678
7	00:00:12	0.0020	0.0015	0.2000	13.8678
8	00:00:15	0.0020	0.0015	0.2000	13.8678
9	00:00:30	0.0020	0.0015	0.2000	13.8678
10	00:01:00	0.0023	0.0018	0.2400	13.8618
11	00:02:00	0.0022	0.0017	0.2267	13.8638
12	00:04:01	0.0024	0.0019	0.2533	13.8599
13	00:05:01	0.0025	0.0020	0.2667	13.8579
14	00:08:01	0.0026	0.0021	0.2800	13.8559
15	00:10:01	0.0027	0.0022	0.2933	13.8539
16	00:15:01	0.0028	0.0023	0.3067	13.8519
17	00:20:02	0.0029	0.0024	0.3200	13.8499
18	00:40:04	0.0032	0.0027	0.3600	13.8440
19	01:00:05	0.0034	0.0029	0.3867	13.8400
20	01:30:08	0.0036	0.0031	0.4133	13.8360
21	02:00:12	0.0038	0.0040	0.5333	13.8181
22	02:30:15	0.0046	0.0041	0.5467	13.8162
23	03:00:19	0.0048	0.0043	0.5733	13.8122
24	03:30:22	0.0051	0.0046	0.6133	13.8062
25	04:00:24	0.0053	0.0048	0.6400	13.8023
26	04:30:25	0.0053	0.0048	0.6400	13.8023
27	05:00:27	0.0053	0.0048	0.6400	13.8023
28	05:30:28	0.0053	0.0048	0.6400	13.8023
29	06:00:30	0.0055	0.0050	0.6667	13.7983
30	06:30:31	0.0055	0.0050	0.6667	13.7983
31	07:00:32	0.0055	0.0050	0.6667	13.7983
32	07:30:34	0.0055	0.0050	0.6667	13.7983
33	08:00:35	0.0056	0.0051	0.6800	13.7963
34	08:30:36	0.0056	0.0051	0.6800	13.7963
35	09:00:38	0.0056	0.0051	0.6800	13.7963
36	09:30:39	0.0056	0.0051	0.6800	13.7963





37	10:00:41	0.0056	0.0051	0.6800	13.7963
38	10:30:42	0.0057	0.0052	0.6933	13.7943
39	11:00:43	0.0057	0.0052	0.6933	13.7943
40	11:30:45	0.0057	0.0052	0.6933	13.7943
41	12:00:46	0.0057	0.0052	0.6933	13.7943
42	12:30:47	0.0057	0.0052	0.6933	13.7943
43	13:00:49	0.0057	0.0052	0.6933	13.7943
44	13:30:50	0.0058	0.0053	0.7067	13.7923
45	14:00:52	0.0058	0.0053	0.7067	13.7923
46	14:30:53	0.0058	0.0053	0.7067	13.7923
47	15:00:54	0.0058	0.0053	0.7067	13.7923
48	15:30:56	0.0058	0.0053	0.7067	13.7923
49	16:00:57	0.0059	0.0054	0.7200	13.7903
50	16:30:58	0.0059	0.0054	0.7200	13.7903
51	17:01:00	0.0059	0.0054	0.7200	13.7903
52	17:31:01	0.0059	0.0054	0.7200	13.7903
53	18:01:03	0.0059	0.0054	0.7200	13.7903
54	18:31:04	0.0059	0.0054	0.7200	13.7903
55	19:01:05	0.0059	0.0054	0.7200	13.7903
56	19:31:07	0.0059	0.0054	0.7200	13.7903
57	20:01:08	0.0060	0.0055	0.7333	13.7884
58	20:31:09	0.0061	0.0056	0.7467	13.7864
59	20:51:45	0.0061	0.0056	0.7467	13.7864

Consolidation Test Results
(Sequence 2) Load 0.063 tsf

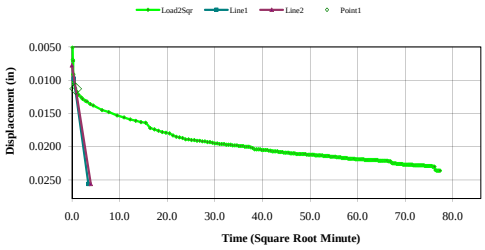
Consolidation Test Results
(Sequence 2) Load 0.063 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 11 May 2011
Test Number:

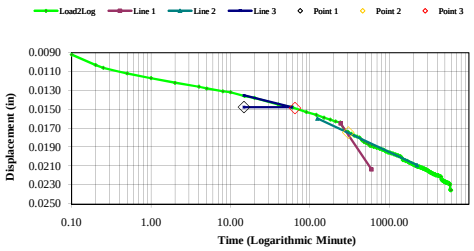
Sample Number:
Soil Description:
Boring Number: BHSP-SI3-30
Peat (PT)
Depth: 15 - 17 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0061	0.0056	0.7467	13.7864
1	00:00:01	0.0051	0.0046	0.6133	13.8062
2	00:00:02	0.0069	0.0064	0.8533	13.7705
3	00:00:03	0.0071	0.0066	0.8800	13.7665
4	00:00:04	0.0071	0.0066	0.8800	13.7665
5	00:00:05	0.0091	0.0086	1.1467	13.7268
6	00:00:06	0.0092	0.0087	1.1600	13.7248
7	00:00:12	0.0103	0.0098	1.3067	13.7029
8	00:00:15	0.0106	0.0101	1.3467	13.6970
9	00:00:30	0.0112	0.0107	1.4267	13.6851
10	00:01:00	0.0117	0.0112	1.4933	13.6751
11	00:02:00	0.0122	0.0117	1.5600	13.6652
12	00:04:00	0.0126	0.0121	1.6133	13.6573
13	00:05:00	0.0128	0.0123	1.6400	13.6533
14	00:08:00	0.0131	0.0126	1.6800	13.6473
15	00:10:00	0.0132	0.0127	1.6933	13.6453
16	00:15:01	0.0136	0.0131	1.7467	13.6374
17	00:20:01	0.0138	0.0133	1.7733	13.6334
18	00:40:02	0.0145	0.0140	1.8667	13.6195
19	01:00:03	0.0148	0.0143	1.9067	13.6136
20	01:30:04	0.0153	0.0148	1.9733	13.6036
21	02:00:05	0.0156	0.0151	2.0133	13.5977
22	02:30:07	0.0159	0.0154	2.0533	13.5917
23	03:00:08	0.0161	0.0156	2.0800	13.5877
24	03:30:09	0.0163	0.0158	2.1067	13.5838
25	04:00:11	0.0164	0.0159	2.1200	13.5818
26	04:30:12	0.0172	0.0167	2.2267	13.5659
27	05:00:14	0.0174	0.0169	2.2533	13.5619
28	05:30:15	0.0176	0.0171	2.2800	13.5579
29	06:00:16	0.0178	0.0173	2.3067	13.5540
30	06:30:18	0.0179	0.0174	2.3200	13.5520
31	07:00:19	0.0180	0.0175	2.3333	13.5500
32	07:30:20	0.0183	0.0178	2.3733	13.5440
33	08:00:22	0.0185	0.0180	2.4000	13.5401
34	08:30:23	0.0186	0.0181	2.4133	13.5381
35	09:00:25	0.0187	0.0182	2.4267	13.5361
36	09:30:26	0.0189	0.0184	2.4533	13.5321

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:27	0.0189	0.0184	2.4533	13.5321
38	10:30:29	0.0190	0.0185	2.4667	13.5301
39	11:00:30	0.0190	0.0185	2.4667	13.5301
40	11:30:31	0.0191	0.0186	2.4800	13.5281
41	12:00:33	0.0191	0.0186	2.4800	13.5281
42	12:30:34	0.0192	0.0187	2.4933	13.5262
43	13:00:36	0.0192	0.0187	2.4933	13.5262
44	13:30:37	0.0193	0.0188	2.5067	13.5242
45	14:00:38	0.0193	0.0188	2.5067	13.5242
46	14:30:40	0.0194	0.0189	2.5200	13.5222
47	15:00:41	0.0195	0.0190	2.5333	13.5202
48	15:30:42	0.0195	0.0190	2.5333	13.5202
49	16:00:44	0.0196	0.0191	2.5467	13.5182
50	16:30:45	0.0196	0.0191	2.5467	13.5182
51	17:00:47	0.0196	0.0191	2.5467	13.5182
52	17:30:48	0.0197	0.0192	2.5600	13.5162
53	18:00:49	0.0197	0.0192	2.5600	13.5162
54	18:30:51	0.0197	0.0192	2.5600	13.5162
55	19:00:52	0.0198	0.0193	2.5733	13.5142
56	19:30:54	0.0198	0.0193	2.5733	13.5142
57	20:00:55	0.0198	0.0193	2.5733	13.5142
58	20:30:56	0.0199	0.0194	2.5867	13.5122
59	21:00:58	0.0199	0.0194	2.5867	13.5122
60	21:30:59	0.0199	0.0194	2.5867	13.5122
61	22:01:00	0.0200	0.0195	2.6000	13.5103
62	22:31:02	0.0200	0.0195	2.6000	13.5103
63	23:01:03	0.0200	0.0195	2.6000	13.5103
64	23:31:05	0.0201	0.0196	2.6133	13.5083
65	24:01:06	0.0202	0.0197	2.6267	13.5063
66	24:31:08	0.0204	0.0199	2.6533	13.5023
67	25:01:10	0.0204	0.0199	2.6533	13.5023
68	25:31:13	0.0204	0.0199	2.6533	13.5023
69	26:01:15	0.0204	0.0199	2.6533	13.5023
70	26:31:17	0.0205	0.0200	2.6667	13.5003
71	27:01:19	0.0205	0.0200	2.6667	13.5003
72	27:31:22	0.0205	0.0200	2.6667	13.5003
73	28:01:24	0.0205	0.0200	2.6667	13.5003
74	28:31:26	0.0206	0.0201	2.6800	13.4983
75	29:01:29	0.0206	0.0201	2.6800	13.4983
76	29:31:31	0.0207	0.0202	2.6933	13.4964
77	30:01:33	0.0207	0.0202	2.6933	13.4964
78	30:31:35	0.0207	0.0202	2.6933	13.4964
79	31:01:37	0.0207	0.0202	2.6933	13.4964
80	31:31:39	0.0208	0.0203	2.7067	13.4944
81	32:01:41	0.0208	0.0203	2.7067	13.4944
82	32:31:44	0.0208	0.0203	2.7067	13.4944
83	33:01:46	0.0209	0.0204	2.7200	13.4924
84	33:31:48	0.0209	0.0204	2.7200	13.4924
85	34:01:50	0.0209	0.0204	2.7200	13.4924
86	34:31:53	0.0209	0.0204	2.7200	13.4924
87	35:01:55	0.0210	0.0205	2.7333	13.4904
88	35:31:57	0.0210	0.0205	2.7333	13.4904
89	36:02:00	0.0210	0.0205	2.7333	13.4904

90	36:32:02	0.0210	0.0205	2.7333	13.4904
91	37:02:04	0.0211	0.0206	2.7467	13.4884
92	37:32:06	0.0211	0.0206	2.7467	13.4884
93	38:02:09	0.0211	0.0206	2.7467	13.4884
94	38:32:11	0.0211	0.0206	2.7467	13.4884
95	39:02:13	0.0211	0.0206	2.7467	13.4884
96	39:32:16	0.0211	0.0206	2.7467	13.4884
97	40:02:18	0.0211	0.0206	2.7467	13.4884
98	40:32:20	0.0212	0.0207	2.7600	13.4864
99	41:02:22	0.0212	0.0207	2.7600	13.4864
100	41:32:25	0.0212	0.0207	2.7600	13.4864
101	42:02:27	0.0212	0.0207	2.7600	13.4864
102	42:32:29	0.0212	0.0207	2.7600	13.4864
103	43:02:32	0.0212	0.0207	2.7600	13.4864
104	43:32:34	0.0213	0.0208	2.7733	13.4844
105	44:02:36	0.0213	0.0208	2.7733	13.4844
106	44:32:38	0.0213	0.0208	2.7733	13.4844
107	45:02:41	0.0213	0.0208	2.7733	13.4844
108	45:32:43	0.0213	0.0208	2.7733	13.4844
109	46:02:45	0.0213	0.0208	2.7733	13.4844
110	46:32:48	0.0214	0.0209	2.7867	13.4825
111	47:02:50	0.0214	0.0209	2.7867	13.4825
112	47:32:52	0.0214	0.0209	2.7867	13.4825
113	48:02:54	0.0214	0.0209	2.7867	13.4825
114	48:32:57	0.0214	0.0209	2.7867	13.4825
115	49:02:59	0.0215	0.0210	2.8000	13.4805
116	49:33:01	0.0215	0.0210	2.8000	13.4805
117	50:03:03	0.0215	0.0210	2.8000	13.4805
118	50:33:06	0.0215	0.0210	2.8000	13.4805
119	51:03:08	0.0215	0.0210	2.8000	13.4805
120	51:33:10	0.0216	0.0211	2.8133	13.4785
121	52:03:13	0.0216	0.0211	2.8133	13.4785
122	52:33:15	0.0216	0.0211	2.8133	13.4785
123	53:03:17	0.0216	0.0211	2.8133	13.4785
124	53:33:19	0.0217	0.0212	2.8267	13.4765
125	54:03:22	0.0217	0.0212	2.8267	13.4765
126	54:33:24	0.0217	0.0212	2.8267	13.4765
127	55:03:26	0.0217	0.0212	2.8267	13.4765
128	55:33:28	0.0217	0.0212	2.8267	13.4765
129	56:03:31	0.0218	0.0213	2.8400	13.4745
130	56:33:33	0.0218	0.0213	2.8400	13.4745
131	57:03:35	0.0218	0.0213	2.8400	13.4745
132	57:33:38	0.0218	0.0213	2.8400	13.4745
133	58:03:40	0.0218	0.0213	2.8400	13.4745
134	58:33:42	0.0218	0.0213	2.8400	13.4745
135	59:03:44	0.0219	0.0214	2.8533	13.4725
136	59:33:47	0.0219	0.0214	2.8533	13.4725
137	60:03:49	0.0219	0.0214	2.8533	13.4725
138	60:33:51	0.0219	0.0214	2.8533	13.4725
139	61:03:54	0.0219	0.0214	2.8533	13.4725
140	61:33:56	0.0219	0.0214	2.8533	13.4725
141	62:03:58	0.0219	0.0214	2.8533	13.4725
142	62:34:00	0.0219	0.0214	2.8533	13.4725

143	63:04:03	0.0220	0.0215	2.8667	13.4705
144	63:34:05	0.0220	0.0215	2.8667	13.4705
145	64:04:07	0.0220	0.0215	2.8667	13.4705
146	64:34:10	0.0220	0.0215	2.8667	13.4705
147	65:04:12	0.0220	0.0215	2.8667	13.4705
148	65:34:14	0.0220	0.0215	2.8667	13.4705
149	66:04:16	0.0220	0.0215	2.8667	13.4705
150	66:34:19	0.0220	0.0215	2.8667	13.4705
151	67:04:21	0.0220	0.0215	2.8667	13.4705
152	67:34:23	0.0220	0.0215	2.8667	13.4705
153	68:04:25	0.0220	0.0215	2.8667	13.4705
154	68:34:28	0.0220	0.0215	2.8667	13.4705
155	69:04:30	0.0221	0.0216	2.8800	13.4685
156	69:34:32	0.0221	0.0216	2.8800	13.4685
157	70:04:35	0.0221	0.0216	2.8800	13.4685
158	70:34:37	0.0221	0.0216	2.8800	13.4685
159	71:04:39	0.0221	0.0216	2.8800	13.4685
160	71:34:41	0.0221	0.0216	2.8800	13.4685
161	72:04:44	0.0221	0.0216	2.8800	13.4685
162	72:34:46	0.0221	0.0216	2.8800	13.4685
163	73:04:48	0.0221	0.0216	2.8800	13.4685
164	73:34:50	0.0222	0.0217	2.8933	13.4666
165	74:04:53	0.0222	0.0217	2.8933	13.4666
166	74:34:55	0.0222	0.0217	2.8933	13.4666
167	75:04:57	0.0224	0.0219	2.9200	13.4626
168	75:35:00	0.0225	0.0220	2.9333	13.4606
169	76:05:02	0.0225	0.0220	2.9333	13.4606
170	76:35:04	0.0225	0.0220	2.9333	13.4606
171	77:05:07	0.0225	0.0220	2.9333	13.4606
172	77:35:09	0.0226	0.0221	2.9467	13.4586
173	78:05:11	0.0226	0.0221	2.9467	13.4586
174	78:35:13	0.0226	0.0221	2.9467	13.4586
175	79:05:16	0.0226	0.0221	2.9467	13.4586
176	79:35:18	0.0226	0.0221	2.9467	13.4586
177	80:05:20	0.0226	0.0221	2.9467	13.4586
178	80:35:22	0.0227	0.0222	2.9600	13.4566
179	81:05:25	0.0227	0.0222	2.9600	13.4566
180	81:35:27	0.0227	0.0222	2.9600	13.4566
181	82:05:29	0.0227	0.0222	2.9600	13.4566
182	82:35:32	0.0227	0.0222	2.9600	13.4566
183	83:05:34	0.0227	0.0222	2.9600	13.4566
184	83:35:36	0.0227	0.0222	2.9600	13.4566
185	84:05:38	0.0227	0.0222	2.9600	13.4566
186	84:35:41	0.0227	0.0222	2.9600	13.4566
187	85:05:43	0.0227	0.0222	2.9600	13.4566
188	85:35:45	0.0228	0.0223	2.9733	13.4546
189	86:05:47	0.0228	0.0223	2.9733	13.4546
190	86:35:50	0.0228	0.0223	2.9733	13.4546
191	87:05:52	0.0228	0.0223	2.9733	13.4546
192	87:35:54	0.0228	0.0223	2.9733	13.4546
193	88:05:57	0.0228	0.0223	2.9733	13.4546
194	88:35:59	0.0228	0.0223	2.9733	13.4546
195	89:06:01	0.0228	0.0223	2.9733	13.4546

196	89:36:03	0.0228	0.0223	2.9733	13.4546
197	90:06:06	0.0228	0.0223	2.9733	13.4546
198	90:36:08	0.0228	0.0223	2.9733	13.4546
199	91:06:10	0.0228	0.0223	2.9733	13.4546
200	91:36:13	0.0229	0.0224	2.9867	13.4527
201	92:06:15	0.0229	0.0224	2.9867	13.4527
202	92:36:17	0.0229	0.0224	2.9867	13.4527
203	93:06:19	0.0229	0.0224	2.9867	13.4527
204	93:36:22	0.0229	0.0224	2.9867	13.4527
205	94:06:24	0.0229	0.0224	2.9867	13.4527
206	94:36:26	0.0229	0.0224	2.9867	13.4527
207	95:06:29	0.0229	0.0224	2.9867	13.4527
208	95:36:31	0.0230	0.0225	3.0000	13.4507
209	96:06:33	0.0230	0.0225	3.0000	13.4507
210	96:36:35	0.0230	0.0225	3.0000	13.4507
211	97:06:36	0.0235	0.0230	3.0667	13.4407
212	97:36:37	0.0236	0.0231	3.0800	13.4388
213	98:06:37	0.0236	0.0231	3.0800	13.4388
214	98:36:36	0.0236	0.0231	3.0800	13.4388
215	99:06:36	0.0236	0.0231	3.0800	13.4388
216	99:35:22	0.0236	0.0231	3.0800	13.4388

Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

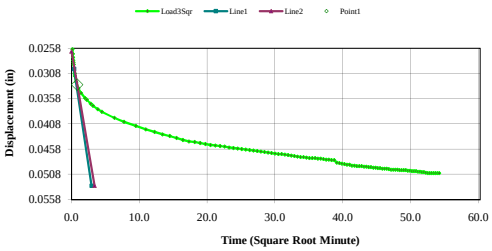
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI3-30
Depth: 15 - 17 feet
Sample Type: Undisturbed

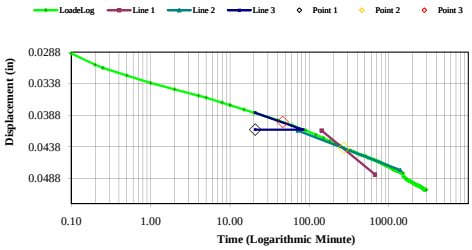
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0236	0.0231	3.0800	13.4388
1	00:00:01	0.0260	0.0255	3.4000	13.3911
2	00:00:02	0.0269	0.0264	3.5200	13.3732
3	00:00:03	0.0276	0.0271	3.6133	13.3593
4	00:00:04	0.0282	0.0277	3.6933	13.3474
5	00:00:05	0.0286	0.0281	3.7467	13.3394
6	00:00:06	0.0290	0.0285	3.8000	13.3315
7	00:00:12	0.0308	0.0303	4.0400	13.2957
8	00:00:15	0.0313	0.0308	4.1067	13.2858
9	00:00:30	0.0325	0.0320	4.2667	13.2620
10	00:01:00	0.0337	0.0332	4.4267	13.2381
11	00:02:00	0.0347	0.0342	4.5600	13.2183
12	00:04:00	0.0357	0.0352	4.6933	13.1984
13	00:05:00	0.0360	0.0355	4.7333	13.1924
14	00:07:59	0.0368	0.0363	4.8400	13.1766
15	00:09:59	0.0372	0.0367	4.8933	13.1686
16	00:14:59	0.0379	0.0374	4.9867	13.1547
17	00:19:59	0.0384	0.0379	5.0533	13.1448
18	00:39:59	0.0396	0.0391	5.2133	13.1209
19	00:59:59	0.0404	0.0399	5.3200	13.1050
20	01:29:59	0.0412	0.0407	5.4267	13.0892
21	01:59:58	0.0419	0.0414	5.5200	13.0753
22	02:29:58	0.0424	0.0419	5.5867	13.0653
23	02:59:58	0.0429	0.0424	5.6533	13.0554
24	03:29:57	0.0432	0.0427	5.6933	13.0494
25	03:59:57	0.0436	0.0431	5.7467	13.0415
26	04:29:59	0.0440	0.0435	5.8000	13.0335
27	05:00:01	0.0443	0.0438	5.8400	13.0276
28	05:30:03	0.0444	0.0439	5.8533	13.0256
29	06:00:06	0.0446	0.0441	5.8800	13.0216
30	06:30:08	0.0448	0.0443	5.9067	13.0176
31	07:00:10	0.0450	0.0445	5.9333	13.0137
32	07:30:12	0.0451	0.0446	5.9467	13.0117
33	08:00:15	0.0452	0.0447	5.9600	13.0097
34	08:30:17	0.0453	0.0448	5.9733	13.0077
35	09:00:19	0.0455	0.0450	6.0000	13.0037
36	09:30:21	0.0456	0.0451	6.0133	13.0018

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:24	0.0457	0.0452	6.0267	12.9998
38	10:30:26	0.0458	0.0453	6.0400	12.9978
39	11:00:28	0.0459	0.0454	6.0533	12.9958
40	11:30:30	0.0460	0.0455	6.0667	12.9938
41	12:00:33	0.0461	0.0456	6.0800	12.9918
42	12:30:35	0.0462	0.0457	6.0933	12.9898
43	13:00:37	0.0463	0.0458	6.1067	12.9879
44	13:30:40	0.0464	0.0459	6.1200	12.9859
45	14:00:42	0.0465	0.0460	6.1333	12.9839
46	14:30:44	0.0466	0.0461	6.1467	12.9819
47	15:00:46	0.0467	0.0462	6.1600	12.9799
48	15:30:49	0.0468	0.0463	6.1733	12.9779
49	16:00:51	0.0468	0.0463	6.1733	12.9779
50	16:30:53	0.0469	0.0464	6.1867	12.9759
51	17:00:55	0.0470	0.0465	6.2000	12.9739
52	17:30:58	0.0471	0.0466	6.2133	12.9720
53	18:01:00	0.0472	0.0467	6.2267	12.9700
54	18:31:02	0.0473	0.0468	6.2400	12.9680
55	19:01:04	0.0474	0.0469	6.2533	12.9660
56	19:31:07	0.0474	0.0469	6.2533	12.9660
57	20:01:09	0.0475	0.0470	6.2667	12.9640
58	20:31:11	0.0476	0.0471	6.2800	12.9620
59	21:01:14	0.0476	0.0471	6.2800	12.9620
60	21:31:16	0.0476	0.0471	6.2800	12.9620
61	22:01:18	0.0477	0.0472	6.2933	12.9600
62	22:31:21	0.0477	0.0472	6.2933	12.9600
63	23:01:23	0.0478	0.0473	6.3067	12.9581
64	23:31:25	0.0479	0.0474	6.3200	12.9561
65	24:01:27	0.0479	0.0474	6.3200	12.9561
66	24:31:30	0.0480	0.0475	6.3333	12.9541
67	25:01:32	0.0480	0.0475	6.3333	12.9541
68	25:31:34	0.0485	0.0480	6.4000	12.9442
69	26:01:36	0.0486	0.0481	6.4133	12.9422
70	26:31:39	0.0487	0.0482	6.4267	12.9402
71	27:01:41	0.0488	0.0483	6.4400	12.9382
72	27:31:43	0.0489	0.0484	6.4533	12.9362
73	28:01:46	0.0489	0.0484	6.4533	12.9362
74	28:31:48	0.0491	0.0486	6.4800	12.9322
75	29:01:50	0.0491	0.0486	6.4800	12.9322
76	29:31:52	0.0492	0.0487	6.4933	12.9302
77	30:01:55	0.0492	0.0487	6.4933	12.9302
78	30:31:57	0.0492	0.0487	6.4933	12.9302
79	31:01:59	0.0493	0.0488	6.5067	12.9283
80	31:32:01	0.0493	0.0488	6.5067	12.9283
81	32:02:04	0.0494	0.0489	6.5200	12.9263
82	32:32:06	0.0494	0.0489	6.5200	12.9263
83	33:02:08	0.0495	0.0490	6.5333	12.9243
84	33:32:10	0.0495	0.0490	6.5333	12.9243
85	34:02:13	0.0496	0.0491	6.5467	12.9223
86	34:32:15	0.0496	0.0491	6.5467	12.9223
87	35:02:17	0.0497	0.0492	6.5600	12.9203
88	35:32:20	0.0497	0.0492	6.5600	12.9203
89	36:02:22	0.0497	0.0492	6.5600	12.9203

90	36:32:24	0.0498	0.0493	6.5733	12.9183
91	37:02:26	0.0499	0.0494	6.5867	12.9163
92	37:32:29	0.0499	0.0494	6.5867	12.9163
93	38:02:31	0.0499	0.0494	6.5867	12.9163
94	38:32:33	0.0499	0.0494	6.5867	12.9163
95	39:02:36	0.0500	0.0495	6.6000	12.9144
96	39:32:38	0.0500	0.0495	6.6000	12.9144
97	40:02:40	0.0500	0.0495	6.6000	12.9144
98	40:32:42	0.0500	0.0495	6.6000	12.9144
99	41:02:45	0.0501	0.0496	6.6133	12.9124
100	41:32:47	0.0501	0.0496	6.6133	12.9124
101	42:02:49	0.0502	0.0497	6.6267	12.9104
102	42:32:52	0.0502	0.0497	6.6267	12.9104
103	43:02:54	0.0502	0.0497	6.6267	12.9104
104	43:32:56	0.0503	0.0498	6.6400	12.9084
105	44:02:58	0.0503	0.0498	6.6400	12.9084
106	44:33:01	0.0504	0.0499	6.6533	12.9064
107	45:03:03	0.0504	0.0499	6.6533	12.9064
108	45:33:05	0.0505	0.0500	6.6667	12.9044
109	46:03:08	0.0506	0.0501	6.6800	12.9024
110	46:33:06	0.0506	0.0501	6.6800	12.9024
111	47:03:02	0.0506	0.0501	6.6800	12.9024
112	47:32:57	0.0506	0.0501	6.6800	12.9024
113	48:02:53	0.0506	0.0501	6.6800	12.9024
114	48:32:48	0.0506	0.0501	6.6800	12.9024
115	49:02:44	0.0506	0.0501	6.6800	12.9024

Consolidation Test Results
(Sequence 4) Load 0.250 tsf

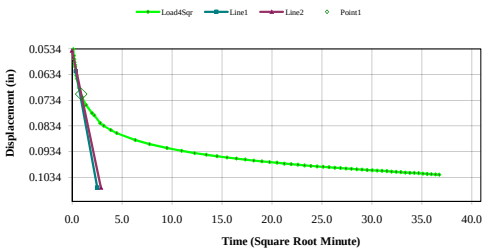
Consolidation Test Results
(Sequence 4) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 11 May 2011
Test Number:

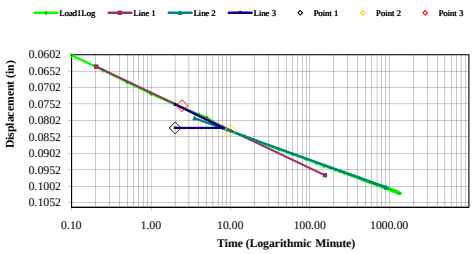
Sample Number:
Soil Description:
Boring Number: BHSP-SI3-30
Peat (PT)
Depth: 15 - 17 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0506	0.0501	6.6800	12.9024
1	00:00:01	0.0535	0.0530	7.0667	12.8448
2	00:00:02	0.0560	0.0555	7.4000	12.7952
3	00:00:03	0.0574	0.0569	7.5867	12.7674
4	00:00:04	0.0586	0.0581	7.7467	12.7435
5	00:00:05	0.0596	0.0591	7.8800	12.7237
6	00:00:06	0.0604	0.0599	7.9867	12.7078
7	00:00:12	0.0638	0.0633	8.4400	12.6402
8	00:00:15	0.0650	0.0645	8.6000	12.6164
9	00:00:30	0.0686	0.0681	9.0800	12.5449
10	00:01:00	0.0721	0.0716	9.5467	12.4754
11	00:02:00	0.0753	0.0748	9.9733	12.4118
12	00:04:00	0.0784	0.0779	10.3867	12.3502
13	00:05:00	0.0793	0.0788	10.5067	12.3324
14	00:08:00	0.0823	0.0818	10.9067	12.2728
15	00:10:00	0.0833	0.0828	11.0400	12.2529
16	00:15:01	0.0850	0.0845	11.2667	12.2191
17	00:20:01	0.0862	0.0857	11.4267	12.1953
18	00:40:03	0.0889	0.0884	11.7867	12.1417
19	01:00:04	0.0905	0.0900	12.0000	12.1099
20	01:30:06	0.0920	0.0915	12.2000	12.0801
21	02:00:09	0.0931	0.0926	12.3467	12.0582
22	02:30:11	0.0940	0.0935	12.4667	12.0404
23	03:00:13	0.0946	0.0941	12.5467	12.0284
24	03:30:16	0.0952	0.0947	12.6267	12.0165
25	04:00:18	0.0957	0.0952	12.6933	12.0066
26	04:30:20	0.0961	0.0956	12.7467	11.9987
27	05:00:22	0.0965	0.0960	12.8000	11.9907
28	05:30:25	0.0969	0.0964	12.8533	11.9828
29	06:00:27	0.0972	0.0967	12.8933	11.9768
30	06:30:29	0.0975	0.0970	12.9333	11.9708
31	07:00:32	0.0977	0.0972	12.9600	11.9669
32	07:30:34	0.0981	0.0976	13.0133	11.9589
33	08:00:36	0.0983	0.0978	13.0400	11.9550
34	08:30:39	0.0985	0.0980	13.0667	11.9510
35	09:00:41	0.0988	0.0983	13.1067	11.9450
36	09:30:43	0.0990	0.0985	13.1333	11.9410

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.0992	0.0987	13.1600	11.9371
38	10:30:48	0.0993	0.0988	13.1733	11.9351
39	11:00:50	0.0995	0.0990	13.2000	11.9311
40	11:30:52	0.0997	0.0992	13.2267	11.9271
41	12:00:55	0.0998	0.0993	13.2400	11.9252
42	12:30:57	0.1000	0.0995	13.2667	11.9212
43	13:00:59	0.1001	0.0996	13.2800	11.9192
44	13:31:01	0.1003	0.0998	13.3067	11.9152
45	14:01:04	0.1004	0.0999	13.3200	11.9132
46	14:31:06	0.1006	0.1001	13.3467	11.9093
47	15:01:08	0.1007	0.1002	13.3600	11.9073
48	15:31:10	0.1008	0.1003	13.3733	11.9053
49	16:01:13	0.1009	0.1004	13.3867	11.9033
50	16:31:15	0.1010	0.1005	13.4000	11.9013
51	17:01:17	0.1012	0.1007	13.4267	11.8973
52	17:31:20	0.1013	0.1008	13.4400	11.8954
53	18:01:22	0.1014	0.1009	13.4533	11.8934
54	18:31:24	0.1016	0.1011	13.4800	11.8894
55	19:01:27	0.1017	0.1012	13.4933	11.8874
56	19:31:29	0.1017	0.1012	13.4933	11.8874
57	20:01:31	0.1018	0.1013	13.5067	11.8854
58	20:31:33	0.1020	0.1015	13.5333	11.8815
59	21:01:36	0.1021	0.1016	13.5467	11.8795
60	21:31:38	0.1022	0.1017	13.5600	11.8775
61	22:01:40	0.1023	0.1018	13.5733	11.8755
62	22:28:49	0.1024	0.1019	13.5867	11.8735

Consolidation Test Results
(Sequence 5) Load 0.500 tsf

Consolidation Test Results
(Sequence 5) Load 0.500 tsf

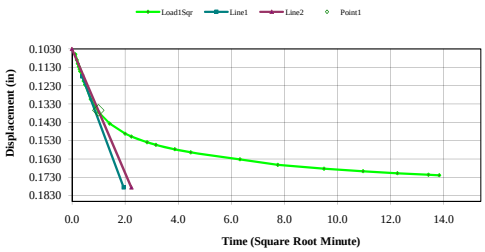
Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 11 May 2011
Test Number:

Sample Number:
Soil Description:
Boring Number: BHSP-SI3-30
Peat (PT)
Depth: 15 - 17 feet
Remarks:
Sample Type: Undisturbed

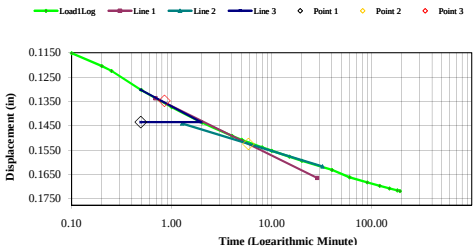
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1024	0.1019	13.5867	11.8735
1	00:00:01	0.1059	0.1054	14.0533	11.8040
2	00:00:02	0.1090	0.1085	14.4667	11.7424
3	00:00:03	0.1110	0.1105	14.7333	11.7027
4	00:00:04	0.1126	0.1121	14.9467	11.6709
5	00:00:05	0.1140	0.1135	15.1333	11.6431
6	00:00:06	0.1152	0.1147	15.2933	11.6193
7	00:00:12	0.1205	0.1200	16.0000	11.5140
8	00:00:15	0.1225	0.1220	16.2667	11.4743
9	00:00:30	0.1304	0.1299	17.3200	11.3173
10	00:01:00	0.1374	0.1369	18.2533	11.1783
11	00:02:01	0.1437	0.1432	19.0933	11.0532
12	00:04:01	0.1492	0.1487	19.8267	10.9439
13	00:05:01	0.1508	0.1503	20.0400	10.9121
14	00:08:01	0.1539	0.1534	20.4533	10.8505
15	00:10:01	0.1553	0.1548	20.6400	10.8227
16	00:15:01	0.1577	0.1572	20.9600	10.7751
17	00:20:02	0.1594	0.1589	21.1867	10.7413
18	00:40:03	0.1632	0.1627	21.6933	10.6658
19	01:00:05	0.1662	0.1657	22.0933	10.6062
20	01:30:07	0.1683	0.1678	22.3733	10.5645
21	02:00:09	0.1697	0.1692	22.5600	10.5367
22	02:30:12	0.1708	0.1703	22.7067	10.5149
23	03:00:14	0.1716	0.1711	22.8133	10.4990
24	03:11:18	0.1719	0.1714	22.8533	10.4930

Tested By:
Checked By:

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 6) Load 1.000 tsf

Consolidation Test Results
(Sequence 6) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

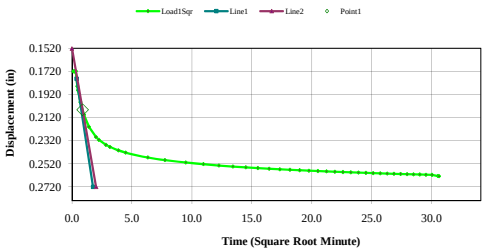
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI3-30
Depth: 15 - 17 feet
Sample Type: Undisturbed

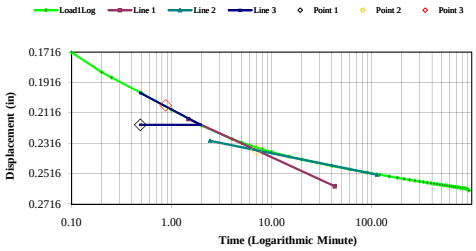
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1719	0.1714	22.8533	10.4930
1	00:00:01	0.1720	0.1715	22.8667	10.4910
2	00:00:02	0.1720	0.1715	22.8667	10.4910
3	00:00:03	0.1720	0.1715	22.8667	10.4910
4	00:00:04	0.1720	0.1715	22.8667	10.4910
5	00:00:05	0.1720	0.1715	22.8667	10.4910
6	00:00:06	0.1718	0.1713	22.8400	10.4950
7	00:00:12	0.1849	0.1844	24.5867	10.2348
8	00:00:15	0.1884	0.1879	25.0533	10.1653
9	00:00:30	0.1987	0.1982	26.4267	9.9607
10	00:01:00	0.2096	0.2091	27.8800	9.7441
11	00:02:00	0.2201	0.2196	29.2800	9.5356
12	00:04:00	0.2289	0.2284	30.4533	9.3608
13	00:05:00	0.2313	0.2308	30.7733	9.3131
14	00:08:00	0.2357	0.2352	31.3600	9.2257
15	00:10:00	0.2375	0.2370	31.6000	9.1900
16	00:15:01	0.2405	0.2400	32.0000	9.1304
17	00:20:01	0.2424	0.2419	32.2533	9.0926
18	00:40:03	0.2466	0.2461	32.8133	9.0092
19	01:00:04	0.2489	0.2484	33.1200	8.9635
20	01:30:07	0.2510	0.2505	33.4000	8.9218
21	02:00:09	0.2524	0.2519	33.5867	8.8940
22	02:30:11	0.2536	0.2531	33.7467	8.8702
23	03:00:14	0.2545	0.2540	33.8667	8.8523
24	03:30:16	0.2552	0.2547	33.9600	8.8384
25	04:00:18	0.2558	0.2553	34.0400	8.8265
26	04:30:20	0.2564	0.2559	34.1200	8.8145
27	05:00:23	0.2569	0.2564	34.1867	8.8046
28	05:30:25	0.2573	0.2568	34.2400	8.7967
29	06:00:27	0.2577	0.2572	34.2933	8.7887
30	06:30:30	0.2581	0.2576	34.3467	8.7808
31	07:00:32	0.2584	0.2579	34.3867	8.7748
32	07:30:34	0.2587	0.2582	34.4267	8.7689
33	08:00:36	0.2590	0.2585	34.4667	8.7629
34	08:30:39	0.2593	0.2588	34.5067	8.7569
35	09:00:41	0.2595	0.2590	34.5333	8.7530
36	09:30:43	0.2597	0.2592	34.5600	8.7490

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.2600	0.2595	34.6000	8.7430
38	10:30:48	0.2602	0.2597	34.6267	8.7391
39	11:00:50	0.2604	0.2599	34.6533	8.7351
40	11:30:53	0.2606	0.2601	34.6800	8.7311
41	12:00:55	0.2608	0.2603	34.7067	8.7271
42	12:30:57	0.2609	0.2604	34.7200	8.7252
43	13:00:59	0.2611	0.2606	34.7467	8.7212
44	13:31:02	0.2613	0.2608	34.7733	8.7172
45	14:01:04	0.2614	0.2609	34.7867	8.7152
46	14:31:06	0.2616	0.2611	34.8133	8.7112
47	15:01:09	0.2617	0.2612	34.8267	8.7093
48	15:31:11	0.2627	0.2622	34.9600	8.6894
49	15:36:52	0.2629	0.2624	34.9867	8.6854

Consolidation Test Results
(Sequence 7) Rebound 0.250 tsf

Consolidation Test Results
(Sequence 7) Rebound 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

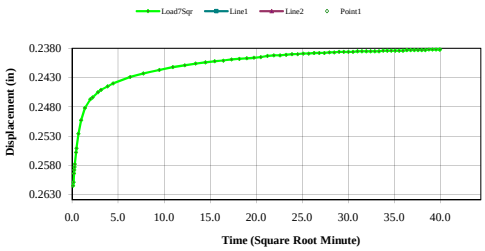
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI3-30
Depth: 15 - 17 feet
Sample Type: Undisturbed

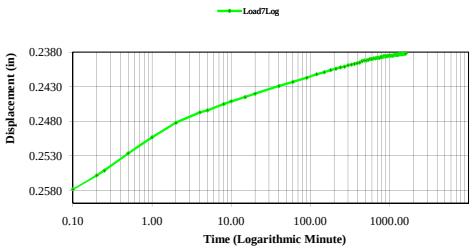
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2629	0.2624	34.9867	8.6854
1	00:00:01	0.2615	0.2610	34.8000	8.7132
2	00:00:02	0.2609	0.2604	34.7200	8.7252
3	00:00:03	0.2594	0.2589	34.5200	8.7549
4	00:00:04	0.2588	0.2583	34.4400	8.7669
5	00:00:05	0.2583	0.2578	34.3733	8.7768
6	00:00:06	0.2578	0.2573	34.3067	8.7867
7	00:00:12	0.2558	0.2553	34.0400	8.8265
8	00:00:15	0.2551	0.2546	33.9467	8.8404
9	00:00:30	0.2526	0.2521	33.6133	8.8900
10	00:01:00	0.2503	0.2498	33.3067	8.9357
11	00:02:00	0.2482	0.2477	33.0267	8.9774
12	00:04:01	0.2467	0.2462	32.8267	9.0072
13	00:05:01	0.2464	0.2459	32.7867	9.0132
14	00:08:01	0.2455	0.2450	32.6667	9.0310
15	00:10:01	0.2451	0.2446	32.6133	9.0390
16	00:15:01	0.2445	0.2440	32.5333	9.0509
17	00:20:02	0.2440	0.2435	32.4667	9.0608
18	00:40:03	0.2429	0.2424	32.3200	9.0827
19	01:00:05	0.2423	0.2418	32.2400	9.0946
20	01:30:07	0.2417	0.2412	32.1600	9.1065
21	02:00:09	0.2412	0.2407	32.0933	9.1165
22	02:30:12	0.2409	0.2404	32.0533	9.1224
23	03:00:14	0.2406	0.2401	32.0133	9.1284
24	03:30:16	0.2404	0.2399	31.9867	9.1324
25	04:00:18	0.2402	0.2397	31.9600	9.1363
26	04:30:21	0.2401	0.2396	31.9467	9.1383
27	05:00:23	0.2399	0.2394	31.9200	9.1423
28	05:30:25	0.2398	0.2393	31.9067	9.1443
29	06:00:28	0.2397	0.2392	31.8933	9.1463
30	06:30:30	0.2396	0.2391	31.8800	9.1482
31	07:00:32	0.2395	0.2390	31.8667	9.1502
32	07:30:34	0.2393	0.2388	31.8400	9.1542
33	08:00:37	0.2392	0.2387	31.8267	9.1562
34	08:30:39	0.2392	0.2387	31.8267	9.1562
35	09:00:41	0.2391	0.2386	31.8133	9.1582
36	09:30:43	0.2390	0.2385	31.8000	9.1602

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.2390	0.2385	31.8000	9.1602
38	10:30:48	0.2389	0.2384	31.7867	9.1621
39	11:00:50	0.2389	0.2384	31.7867	9.1621
40	11:30:52	0.2388	0.2383	31.7733	9.1641
41	12:00:55	0.2388	0.2383	31.7733	9.1641
42	12:30:57	0.2388	0.2383	31.7733	9.1641
43	13:00:59	0.2387	0.2382	31.7600	9.1661
44	13:31:02	0.2387	0.2382	31.7600	9.1661
45	14:01:04	0.2386	0.2381	31.7467	9.1681
46	14:31:06	0.2386	0.2381	31.7467	9.1681
47	15:01:08	0.2386	0.2381	31.7467	9.1681
48	15:31:11	0.2386	0.2381	31.7467	9.1681
49	16:01:13	0.2385	0.2380	31.7333	9.1701
50	16:31:15	0.2385	0.2380	31.7333	9.1701
51	17:01:18	0.2385	0.2380	31.7333	9.1701
52	17:31:20	0.2385	0.2380	31.7333	9.1701
53	18:01:22	0.2385	0.2380	31.7333	9.1701
54	18:31:24	0.2385	0.2380	31.7333	9.1701
55	19:01:27	0.2384	0.2379	31.7200	9.1721
56	19:31:29	0.2384	0.2379	31.7200	9.1721
57	20:01:31	0.2384	0.2379	31.7200	9.1721
58	20:31:34	0.2384	0.2379	31.7200	9.1721
59	21:01:36	0.2384	0.2379	31.7200	9.1721
60	21:31:38	0.2384	0.2379	31.7200	9.1721
61	22:01:40	0.2383	0.2378	31.7067	9.1741
62	22:31:43	0.2383	0.2378	31.7067	9.1741
63	23:01:45	0.2383	0.2378	31.7067	9.1741
64	23:31:47	0.2383	0.2378	31.7067	9.1741
65	24:01:49	0.2383	0.2378	31.7067	9.1741
66	24:31:52	0.2383	0.2378	31.7067	9.1741
67	25:01:54	0.2382	0.2377	31.6933	9.1761
68	25:31:56	0.2382	0.2377	31.6933	9.1761
69	26:01:59	0.2382	0.2377	31.6933	9.1761
70	26:32:01	0.2382	0.2377	31.6933	9.1761
71	26:36:58	0.2382	0.2377	31.6933	9.1761

Consolidation Test Results
(Sequence 8) Rebound 0.063 tsf

Consolidation Test Results
(Sequence 8) Rebound 0.063 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

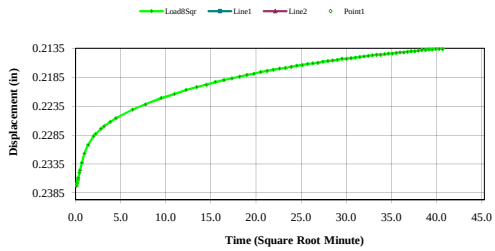
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI3-30
Depth: 15 - 17 feet
Sample Type: Undisturbed

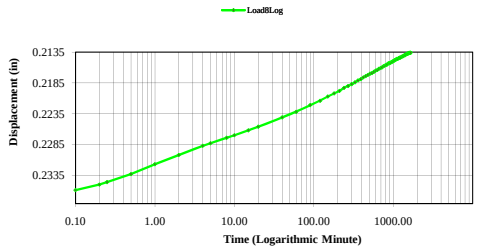
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2382	0.2377	31.6933	9.1761
1	00:00:01	0.2373	0.2368	31.5733	9.1939
2	00:00:02	0.2369	0.2364	31.5200	9.2019
3	00:00:03	0.2366	0.2361	31.4800	9.2078
4	00:00:04	0.2363	0.2358	31.4400	9.2138
5	00:00:05	0.2361	0.2356	31.4133	9.2178
6	00:00:06	0.2359	0.2354	31.3867	9.2217
7	00:00:12	0.2350	0.2345	31.2667	9.2396
8	00:00:15	0.2346	0.2341	31.2133	9.2476
9	00:00:30	0.2333	0.2328	31.0400	9.2734
10	00:01:00	0.2317	0.2312	30.8267	9.3052
11	00:02:00	0.2302	0.2297	30.6267	9.3350
12	00:04:00	0.2287	0.2282	30.4267	9.3648
13	00:05:00	0.2283	0.2278	30.3733	9.3727
14	00:08:00	0.2274	0.2269	30.2533	9.3906
15	00:10:00	0.2270	0.2265	30.2000	9.3985
16	00:15:01	0.2262	0.2257	30.0933	9.4144
17	00:20:01	0.2256	0.2251	30.0133	9.4263
18	00:40:03	0.2241	0.2236	29.8133	9.4561
19	01:00:04	0.2232	0.2227	29.6933	9.4740
20	01:30:07	0.2221	0.2216	29.5467	9.4959
21	02:00:09	0.2214	0.2209	29.4533	9.5098
22	02:30:11	0.2207	0.2202	29.3600	9.5237
23	03:00:13	0.2202	0.2197	29.2933	9.5336
24	03:30:16	0.2198	0.2193	29.2400	9.5415
25	04:00:18	0.2193	0.2188	29.1733	9.5515
26	04:30:20	0.2190	0.2185	29.1333	9.5574
27	05:00:22	0.2187	0.2182	29.0933	9.5634
28	05:30:25	0.2184	0.2179	29.0533	9.5694
29	06:00:27	0.2181	0.2176	29.0133	9.5753
30	06:30:29	0.2179	0.2174	28.9867	9.5793
31	07:00:32	0.2176	0.2171	28.9467	9.5852
32	07:30:34	0.2174	0.2169	28.9200	9.5892
33	08:00:36	0.2172	0.2167	28.8933	9.5932
34	08:30:38	0.2170	0.2165	28.8667	9.5972
35	09:00:41	0.2169	0.2164	28.8533	9.5991
36	09:30:43	0.2167	0.2162	28.8267	9.6031

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.2165	0.2160	28.8000	9.6071
38	10:30:48	0.2164	0.2159	28.7867	9.6091
39	11:00:50	0.2162	0.2157	28.7600	9.6130
40	11:30:52	0.2161	0.2156	28.7467	9.6150
41	12:00:55	0.2160	0.2155	28.7333	9.6170
42	12:30:57	0.2158	0.2153	28.7067	9.6210
43	13:00:59	0.2157	0.2152	28.6933	9.6230
44	13:31:01	0.2156	0.2151	28.6800	9.6250
45	14:01:04	0.2155	0.2150	28.6667	9.6270
46	14:31:06	0.2153	0.2148	28.6400	9.6309
47	15:01:08	0.2153	0.2148	28.6400	9.6309
48	15:31:10	0.2152	0.2147	28.6267	9.6329
49	16:01:13	0.2151	0.2146	28.6133	9.6349
50	16:31:15	0.2150	0.2145	28.6000	9.6369
51	17:01:17	0.2149	0.2144	28.5867	9.6389
52	17:31:20	0.2148	0.2143	28.5733	9.6409
53	18:01:22	0.2147	0.2142	28.5600	9.6428
54	18:31:24	0.2146	0.2141	28.5467	9.6448
55	19:01:26	0.2146	0.2141	28.5467	9.6448
56	19:31:29	0.2145	0.2140	28.5333	9.6468
57	20:01:31	0.2144	0.2139	28.5200	9.6488
58	20:31:33	0.2144	0.2139	28.5200	9.6488
59	21:01:35	0.2143	0.2138	28.5067	9.6508
60	21:31:38	0.2142	0.2137	28.4933	9.6528
61	22:01:40	0.2142	0.2137	28.4933	9.6528
62	22:31:42	0.2141	0.2136	28.4800	9.6548
63	23:01:45	0.2140	0.2135	28.4667	9.6567
64	23:31:47	0.2140	0.2135	28.4667	9.6567
65	24:01:49	0.2139	0.2134	28.4533	9.6587
66	24:31:51	0.2138	0.2133	28.4400	9.6607
67	25:01:54	0.2138	0.2133	28.4400	9.6607
68	25:31:56	0.2137	0.2132	28.4267	9.6627
69	26:01:58	0.2137	0.2132	28.4267	9.6627
70	26:32:01	0.2136	0.2131	28.4133	9.6647
71	27:02:03	0.2136	0.2131	28.4133	9.6647
72	27:32:05	0.2136	0.2131	28.4133	9.6647
73	27:32:47	0.2136	0.2131	28.4133	9.6647

Consolidation Test Results
(Sequence 9) Load 0.250 tsf

Consolidation Test Results
(Sequence 9) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

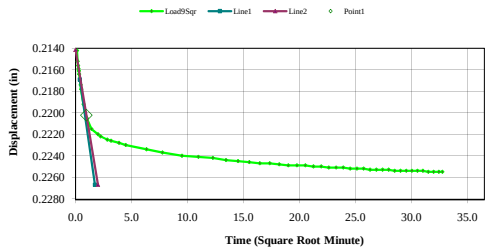
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI3-30
Depth: 15 - 17 feet
Sample Type: Undisturbed

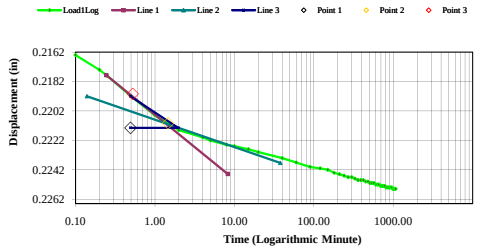
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2136	0.2131	28.4133	9.6647
1	00:00:01	0.2142	0.2137	28.4933	9.6528
2	00:00:02	0.2152	0.2147	28.6267	9.6329
3	00:00:03	0.2156	0.2151	28.6800	9.6250
4	00:00:04	0.2159	0.2154	28.7200	9.6190
5	00:00:05	0.2161	0.2156	28.7467	9.6150
6	00:00:06	0.2164	0.2159	28.7867	9.6091
7	00:00:12	0.2174	0.2169	28.9200	9.5892
8	00:00:15	0.2178	0.2173	28.9733	9.5813
9	00:00:30	0.2192	0.2187	29.1600	9.5535
10	00:01:00	0.2205	0.2200	29.3333	9.5276
11	00:02:00	0.2215	0.2210	29.4667	9.5078
12	00:04:00	0.2220	0.2215	29.5333	9.4978
13	00:05:00	0.2222	0.2217	29.5600	9.4939
14	00:08:00	0.2225	0.2220	29.6000	9.4879
15	00:10:01	0.2226	0.2221	29.6133	9.4859
16	00:15:01	0.2228	0.2223	29.6400	9.4820
17	00:20:01	0.2230	0.2225	29.6667	9.4780
18	00:40:03	0.2234	0.2229	29.7200	9.4700
19	01:00:04	0.2237	0.2232	29.7600	9.4641
20	01:30:07	0.2240	0.2235	29.8000	9.4581
21	02:00:09	0.2241	0.2236	29.8133	9.4561
22	02:30:11	0.2242	0.2237	29.8267	9.4541
23	03:00:14	0.2244	0.2239	29.8533	9.4502
24	03:30:16	0.2245	0.2240	29.8667	9.4482
25	04:00:18	0.2246	0.2241	29.8800	9.4462
26	04:30:20	0.2247	0.2242	29.8933	9.4442
27	05:00:23	0.2247	0.2242	29.8933	9.4442
28	05:30:25	0.2248	0.2243	29.9067	9.4422
29	06:00:27	0.2249	0.2244	29.9200	9.4402
30	06:30:29	0.2249	0.2244	29.9200	9.4402
31	07:00:32	0.2249	0.2244	29.9200	9.4402
32	07:30:34	0.2250	0.2245	29.9333	9.4383
33	08:00:36	0.2250	0.2245	29.9333	9.4383
34	08:30:38	0.2251	0.2246	29.9467	9.4363
35	09:00:41	0.2251	0.2246	29.9467	9.4363
36	09:30:43	0.2251	0.2246	29.9467	9.4363

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.2252	0.2247	29.9600	9.4343
38	10:30:48	0.2252	0.2247	29.9600	9.4343
39	11:00:50	0.2252	0.2247	29.9600	9.4343
40	11:30:52	0.2253	0.2248	29.9733	9.4323
41	12:00:55	0.2253	0.2248	29.9733	9.4323
42	12:30:57	0.2253	0.2248	29.9733	9.4323
43	13:00:59	0.2253	0.2248	29.9733	9.4323
44	13:31:01	0.2254	0.2249	29.9867	9.4303
45	14:01:04	0.2254	0.2249	29.9867	9.4303
46	14:31:06	0.2254	0.2249	29.9867	9.4303
47	15:01:08	0.2254	0.2249	29.9867	9.4303
48	15:31:11	0.2254	0.2249	29.9867	9.4303
49	16:01:13	0.2254	0.2249	29.9867	9.4303
50	16:31:15	0.2255	0.2250	30.0000	9.4283
51	17:01:17	0.2255	0.2250	30.0000	9.4283
52	17:31:20	0.2255	0.2250	30.0000	9.4283
53	17:51:53	0.2255	0.2250	30.0000	9.4283

Consolidation Test Results
(Sequence 10) Load 0.500 tsf

Consolidation Test Results
(Sequence 10) Load 0.500 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

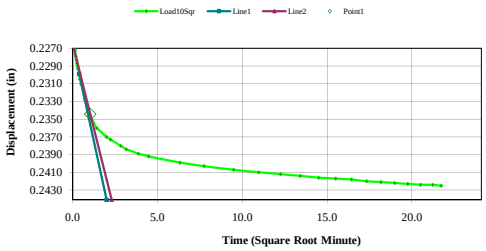
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI3-30
Depth: 15 - 17 feet
Sample Type: Undisturbed

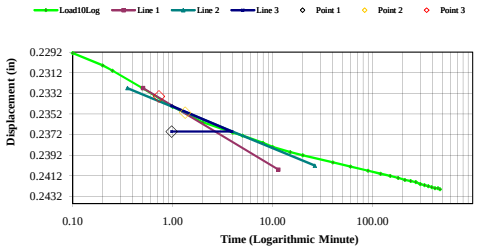
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2255	0.2250	30.0000	9.4283
1	00:00:01	0.2272	0.2267	30.2267	9.3946
2	00:00:02	0.2279	0.2274	30.3200	9.3806
3	00:00:03	0.2283	0.2278	30.3733	9.3727
4	00:00:04	0.2287	0.2282	30.4267	9.3648
5	00:00:05	0.2290	0.2285	30.4667	9.3588
6	00:00:06	0.2293	0.2288	30.5067	9.3528
7	00:00:12	0.2305	0.2300	30.6667	9.3290
8	00:00:15	0.2310	0.2305	30.7333	9.3191
9	00:00:30	0.2327	0.2322	30.9600	9.2853
10	00:01:00	0.2345	0.2340	31.2000	9.2495
11	00:02:00	0.2360	0.2355	31.4000	9.2198
12	00:04:00	0.2370	0.2365	31.5333	9.1999
13	00:05:00	0.2373	0.2368	31.5733	9.1939
14	00:08:00	0.2380	0.2375	31.6667	9.1800
15	00:10:00	0.2384	0.2379	31.7200	9.1721
16	00:15:01	0.2389	0.2384	31.7867	9.1621
17	00:20:01	0.2392	0.2387	31.8267	9.1562
18	00:40:03	0.2399	0.2394	31.9200	9.1423
19	01:00:04	0.2403	0.2398	31.9733	9.1343
20	01:30:06	0.2407	0.2402	32.0267	9.1264
21	02:00:09	0.2410	0.2405	32.0667	9.1204
22	02:30:11	0.2412	0.2407	32.0933	9.1165
23	03:00:13	0.2414	0.2409	32.1200	9.1125
24	03:30:16	0.2416	0.2411	32.1467	9.1085
25	04:00:18	0.2417	0.2412	32.1600	9.1065
26	04:30:20	0.2418	0.2413	32.1733	9.1045
27	05:00:22	0.2420	0.2415	32.2000	9.1006
28	05:30:25	0.2421	0.2416	32.2133	9.0986
29	06:00:27	0.2422	0.2417	32.2267	9.0966
30	06:30:29	0.2423	0.2418	32.2400	9.0946
31	07:00:32	0.2424	0.2419	32.2533	9.0926
32	07:30:34	0.2424	0.2419	32.2533	9.0926
33	07:52:03	0.2425	0.2420	32.2667	9.0906

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 11) Load 1.000 tsf

Consolidation Test Results
(Sequence 11) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

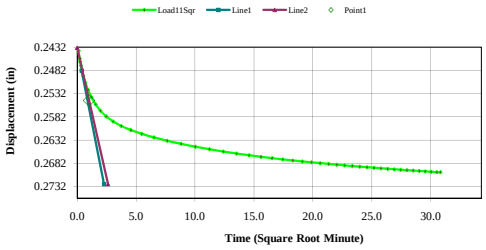
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI3-30
Depth: 15 - 17 feet
Sample Type: Undisturbed

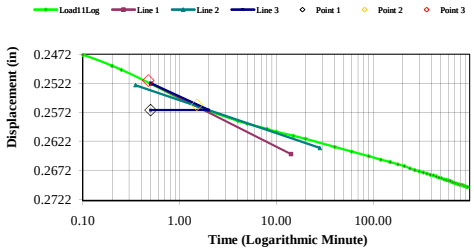
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2425	0.2420	32.2667	9.0906
1	00:00:01	0.2440	0.2435	32.4667	9.0608
2	00:00:02	0.2452	0.2447	32.6267	9.0370
3	00:00:03	0.2458	0.2453	32.7067	9.0251
4	00:00:04	0.2464	0.2459	32.7867	9.0132
5	00:00:05	0.2469	0.2464	32.8533	9.0032
6	00:00:06	0.2473	0.2468	32.9067	8.9953
7	00:00:12	0.2492	0.2487	33.1600	8.9576
8	00:00:15	0.2499	0.2494	33.2533	8.9437
9	00:00:30	0.2523	0.2518	33.5733	8.8960
10	00:01:00	0.2549	0.2544	33.9200	8.8443
11	00:02:00	0.2570	0.2565	34.2000	8.8026
12	00:04:00	0.2587	0.2582	34.4267	8.7689
13	00:05:00	0.2592	0.2587	34.4933	8.7589
14	00:08:01	0.2601	0.2596	34.6133	8.7410
15	00:10:01	0.2606	0.2601	34.6800	8.7311
16	00:15:01	0.2613	0.2608	34.7733	8.7172
17	00:20:02	0.2618	0.2613	34.8400	8.7073
18	00:40:03	0.2632	0.2627	35.0267	8.6795
19	01:00:05	0.2640	0.2635	35.1333	8.6636
20	01:30:07	0.2648	0.2643	35.2400	8.6477
21	02:00:09	0.2654	0.2649	35.3200	8.6358
22	02:30:11	0.2658	0.2653	35.3733	8.6278
23	03:00:14	0.2662	0.2657	35.4267	8.6199
24	03:30:16	0.2665	0.2660	35.4667	8.6139
25	04:00:18	0.2669	0.2664	35.5200	8.6060
26	04:30:21	0.2672	0.2667	35.5600	8.6000
27	05:00:23	0.2674	0.2669	35.5867	8.5960
28	05:30:25	0.2676	0.2671	35.6133	8.5921
29	06:00:27	0.2678	0.2673	35.6400	8.5881
30	06:30:30	0.2680	0.2675	35.6667	8.5841
31	07:00:32	0.2681	0.2676	35.6800	8.5821
32	07:30:34	0.2683	0.2678	35.7067	8.5782
33	08:00:37	0.2685	0.2680	35.7333	8.5742
34	08:30:39	0.2686	0.2681	35.7467	8.5722
35	09:00:41	0.2688	0.2683	35.7733	8.5682
36	09:30:43	0.2689	0.2684	35.7867	8.5662

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.2690	0.2685	35.8000	8.5643
38	10:30:48	0.2691	0.2686	35.8133	8.5623
39	11:00:50	0.2693	0.2688	35.8400	8.5583
40	11:30:53	0.2694	0.2689	35.8533	8.5563
41	12:00:55	0.2695	0.2690	35.8667	8.5543
42	12:30:57	0.2696	0.2691	35.8800	8.5523
43	13:00:59	0.2697	0.2692	35.8933	8.5504
44	13:31:02	0.2697	0.2692	35.8933	8.5504
45	14:01:04	0.2698	0.2693	35.9067	8.5484
46	14:31:06	0.2699	0.2694	35.9200	8.5464
47	15:01:09	0.2700	0.2695	35.9333	8.5444
48	15:31:11	0.2701	0.2696	35.9467	8.5424

Consolidation Test Results
(Sequence 12) Load 2.000 tsf

Consolidation Test Results
(Sequence 12) Load 2.000 tsf

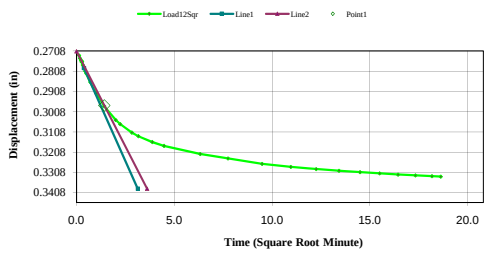
Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 11 May 2011
Test Number:

Sample Number:
Soil Description:
Boring Number: BHSP-SI3-30
Peat (PT)
Depth: 15 - 17 feet
Remarks:
Sample Type: Undisturbed

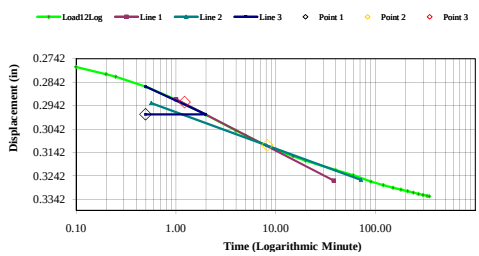
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2701	0.2696	35.9467	8.5424
1	00:00:01	0.2730	0.2725	36.3333	8.4848
2	00:00:02	0.2745	0.2740	36.5333	8.4550
3	00:00:03	0.2754	0.2749	36.6533	8.4371
4	00:00:04	0.2762	0.2757	36.7600	8.4212
5	00:00:05	0.2760	0.2755	36.7333	8.4252
6	00:00:06	0.2777	0.2772	36.9600	8.3914
7	00:00:12	0.2808	0.2803	37.3733	8.3299
8	00:00:15	0.2819	0.2814	37.5200	8.3080
9	00:00:30	0.2862	0.2857	38.0933	8.2226
10	00:01:00	0.2917	0.2912	38.8267	8.1134
11	00:02:00	0.2981	0.2976	39.6800	7.9862
12	00:04:00	0.3049	0.3044	40.5867	7.8512
13	00:05:00	0.3070	0.3065	40.8667	7.8094
14	00:08:00	0.3111	0.3106	41.4133	7.7280
15	00:10:00	0.3129	0.3124	41.6533	7.6923
16	00:15:00	0.3158	0.3153	42.0400	7.6346
17	00:20:00	0.3177	0.3172	42.2933	7.5969
18	00:40:00	0.3217	0.3212	42.8267	7.5175
19	01:00:00	0.3239	0.3234	43.1200	7.4738
20	01:30:02	0.3266	0.3261	43.4800	7.4201
21	02:00:04	0.3281	0.3276	43.6800	7.3903
22	02:30:06	0.3292	0.3287	43.8267	7.3685
23	03:00:08	0.3300	0.3295	43.9333	7.3526
24	03:30:11	0.3307	0.3302	44.0267	7.3387
25	04:00:13	0.3313	0.3308	44.1067	7.3268
26	04:30:15	0.3319	0.3314	44.1867	7.3148
27	05:00:18	0.3323	0.3318	44.2400	7.3069
28	05:30:20	0.3327	0.3322	44.2933	7.2990
29	05:46:52	0.3329	0.3324	44.3200	7.2950

Tested By:
Checked By:

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 13) Load 4.000 tsf

Consolidation Test Results
(Sequence 13) Load 4.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

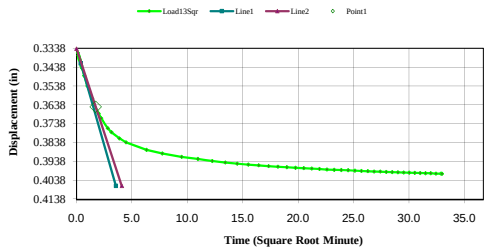
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI3-30
Depth: 15 - 17 feet
Sample Type: Undisturbed

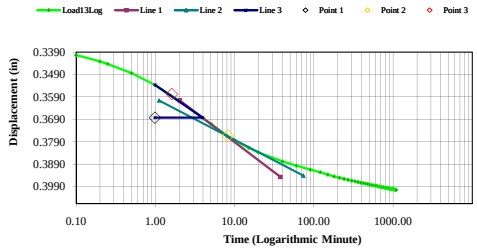
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3329	0.3324	44.3200	7.2950
1	00:00:01	0.3363	0.3358	44.7733	7.2274
2	00:00:02	0.3376	0.3371	44.9467	7.2016
3	00:00:03	0.3384	0.3379	45.0533	7.1857
4	00:00:04	0.3392	0.3387	45.1600	7.1698
5	00:00:05	0.3398	0.3393	45.2400	7.1579
6	00:00:06	0.3404	0.3399	45.3200	7.1460
7	00:00:12	0.3432	0.3427	45.6933	7.0904
8	00:00:15	0.3443	0.3438	45.8400	7.0685
9	00:00:30	0.3484	0.3479	46.3867	6.9871
10	00:01:00	0.3538	0.3533	47.1067	6.8798
11	00:02:00	0.3606	0.3601	48.0133	6.7448
12	00:04:00	0.3685	0.3680	49.0667	6.5878
13	00:05:00	0.3710	0.3705	49.4000	6.5382
14	00:08:00	0.3763	0.3758	50.1067	6.4329
15	00:10:00	0.3784	0.3779	50.3867	6.3912
16	00:15:01	0.3817	0.3812	50.8267	6.3256
17	00:20:01	0.3838	0.3833	51.1067	6.2839
18	00:40:01	0.3878	0.3873	51.6400	6.2045
19	01:00:01	0.3897	0.3892	51.8933	6.1667
20	01:30:04	0.3915	0.3910	52.1333	6.1310
21	02:00:06	0.3926	0.3921	52.2800	6.1091
22	02:30:08	0.3937	0.3932	52.4267	6.0873
23	03:00:11	0.3945	0.3940	52.5333	6.0714
24	03:30:13	0.3951	0.3946	52.6133	6.0595
25	04:00:15	0.3956	0.3951	52.6800	6.0495
26	04:30:17	0.3960	0.3955	52.7333	6.0416
27	05:00:20	0.3964	0.3959	52.7867	6.0337
28	05:30:22	0.3967	0.3962	52.8267	6.0277
29	06:00:24	0.3970	0.3965	52.8667	6.0217
30	06:30:26	0.3973	0.3968	52.9067	6.0158
31	07:00:29	0.3975	0.3970	52.9333	6.0118
32	07:30:31	0.3977	0.3972	52.9600	6.0078
33	08:00:33	0.3979	0.3974	52.9867	6.0039
34	08:30:36	0.3982	0.3977	53.0267	5.9979
35	09:00:38	0.3984	0.3979	53.0533	5.9939
36	09:30:40	0.3985	0.3980	53.0667	5.9919

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:42	0.3986	0.3981	53.0800	5.9900
38	10:30:45	0.3988	0.3983	53.1067	5.9860
39	11:00:47	0.3990	0.3985	53.1333	5.9820
40	11:30:49	0.3991	0.3986	53.1467	5.9800
41	12:00:51	0.3993	0.3988	53.1733	5.9760
42	12:30:54	0.3993	0.3988	53.1733	5.9760
43	13:00:56	0.3995	0.3990	53.2000	5.9721
44	13:30:58	0.3996	0.3991	53.2133	5.9701
45	14:01:01	0.3997	0.3992	53.2267	5.9681
46	14:31:03	0.3998	0.3993	53.2400	5.9661
47	15:01:05	0.3999	0.3994	53.2533	5.9641
48	15:31:07	0.4000	0.3995	53.2667	5.9621
49	16:01:10	0.4001	0.3996	53.2800	5.9602
50	16:31:12	0.4002	0.3997	53.2933	5.9582
51	17:01:14	0.4002	0.3997	53.2933	5.9582
52	17:31:17	0.4004	0.3999	53.3200	5.9542
53	18:01:19	0.4004	0.3999	53.3200	5.9542
54	18:07:03	0.4005	0.4000	53.3333	5.9522

Consolidation Test Results
(Sequence 14) Load 8.000 tsf

Consolidation Test Results
(Sequence 14) Load 8.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

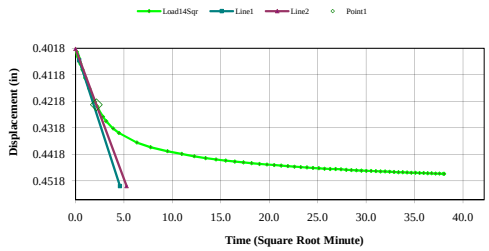
Project Number: 10883-011-00
Test Date: 11 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI3-30
Depth: 15 - 17 feet
Sample Type: Undisturbed

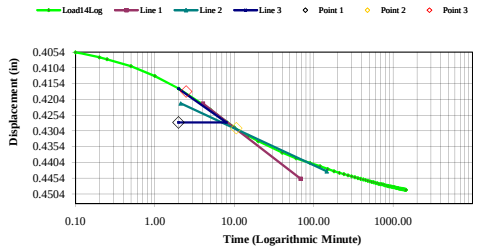
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.4005	0.4000	53.3333	5.9522
1	00:00:01	0.4032	0.4027	53.6933	5.8986
2	00:00:02	0.4039	0.4034	53.7867	5.8847
3	00:00:03	0.4044	0.4039	53.8533	5.8747
4	00:00:04	0.4048	0.4043	53.9067	5.8668
5	00:00:05	0.4052	0.4047	53.9600	5.8589
6	00:00:06	0.4055	0.4050	54.0000	5.8529
7	00:00:12	0.4071	0.4066	54.2133	5.8211
8	00:00:15	0.4077	0.4072	54.2933	5.8092
9	00:00:30	0.4099	0.4094	54.5867	5.7655
10	00:01:00	0.4130	0.4125	55.0000	5.7039
11	00:02:00	0.4170	0.4165	55.5333	5.6245
12	00:04:00	0.4220	0.4215	56.2000	5.5251
13	00:05:00	0.4237	0.4232	56.4267	5.4914
14	00:08:00	0.4276	0.4271	56.9467	5.4139
15	00:10:00	0.4293	0.4288	57.1733	5.3801
16	00:15:01	0.4320	0.4315	57.5333	5.3265
17	00:20:01	0.4337	0.4332	57.7600	5.2927
18	00:40:03	0.4373	0.4368	58.2400	5.2212
19	01:00:04	0.4391	0.4386	58.4800	5.1855
20	01:30:06	0.4406	0.4401	58.6800	5.1557
21	02:00:09	0.4416	0.4411	58.8133	5.1358
22	02:30:11	0.4425	0.4420	58.9333	5.1179
23	03:00:13	0.4432	0.4427	59.0267	5.1040
24	03:30:16	0.4437	0.4432	59.0933	5.0941
25	04:00:18	0.4441	0.4436	59.1467	5.0862
26	04:30:20	0.4445	0.4440	59.2000	5.0782
27	05:00:22	0.4448	0.4443	59.2400	5.0723
28	05:30:25	0.4451	0.4446	59.2800	5.0663
29	06:00:27	0.4454	0.4449	59.3200	5.0603
30	06:30:29	0.4456	0.4451	59.3467	5.0564
31	07:00:32	0.4458	0.4453	59.3733	5.0524
32	07:30:34	0.4460	0.4455	59.4000	5.0484
33	08:00:36	0.4462	0.4457	59.4267	5.0445
34	08:30:38	0.4464	0.4459	59.4533	5.0405
35	09:00:41	0.4466	0.4461	59.4800	5.0365
36	09:30:43	0.4467	0.4462	59.4933	5.0345

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.4469	0.4464	59.5200	5.0305
38	10:30:48	0.4470	0.4465	59.5333	5.0286
39	11:00:50	0.4472	0.4467	59.5600	5.0246
40	11:30:52	0.4473	0.4468	59.5733	5.0226
41	12:00:54	0.4473	0.4468	59.5733	5.0226
42	12:30:57	0.4474	0.4469	59.5867	5.0206
43	13:00:59	0.4476	0.4471	59.6133	5.0166
44	13:31:01	0.4477	0.4472	59.6267	5.0147
45	14:01:04	0.4478	0.4473	59.6400	5.0127
46	14:31:06	0.4479	0.4474	59.6533	5.0107
47	15:01:08	0.4480	0.4475	59.6667	5.0087
48	15:31:10	0.4480	0.4475	59.6667	5.0087
49	16:01:13	0.4481	0.4476	59.6800	5.0067
50	16:31:15	0.4482	0.4477	59.6933	5.0047
51	17:01:17	0.4482	0.4477	59.6933	5.0047
52	17:31:20	0.4483	0.4478	59.7067	5.0027
53	18:01:22	0.4484	0.4479	59.7200	5.0008
54	18:31:24	0.4485	0.4480	59.7333	4.9988
55	19:01:26	0.4485	0.4480	59.7333	4.9988
56	19:31:29	0.4486	0.4481	59.7467	4.9968
57	20:01:31	0.4487	0.4482	59.7600	4.9948
58	20:31:33	0.4487	0.4482	59.7600	4.9948
59	21:01:36	0.4488	0.4483	59.7733	4.9928
60	21:31:38	0.4488	0.4483	59.7733	4.9928
61	22:01:40	0.4489	0.4484	59.7867	4.9908
62	22:31:43	0.4489	0.4484	59.7867	4.9908
63	23:01:45	0.4490	0.4485	59.8000	4.9888
64	23:31:47	0.4490	0.4485	59.8000	4.9888
65	24:01:49	0.4491	0.4486	59.8133	4.9868
66	24:08:43	0.4491	0.4486	59.8133	4.9868

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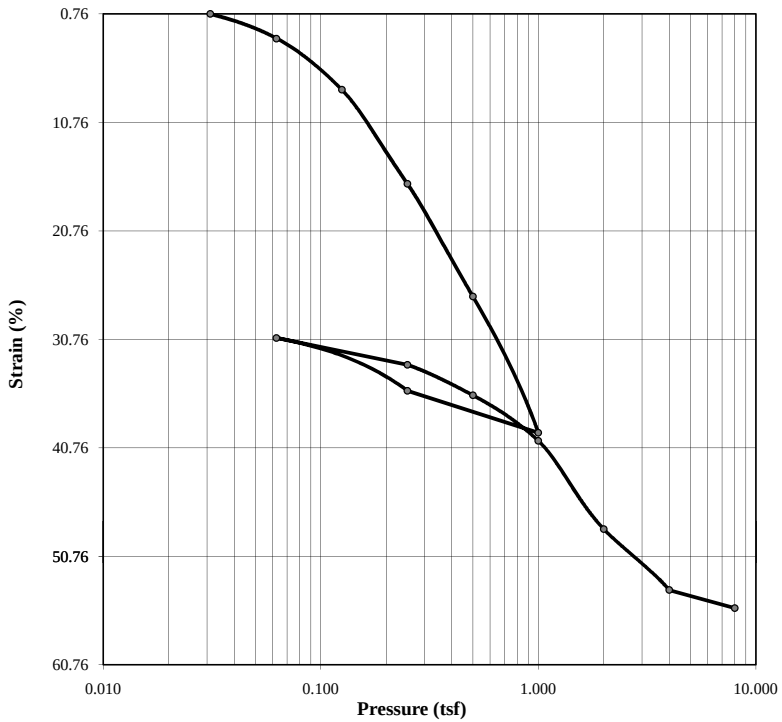
Consolidation Test
Test Results

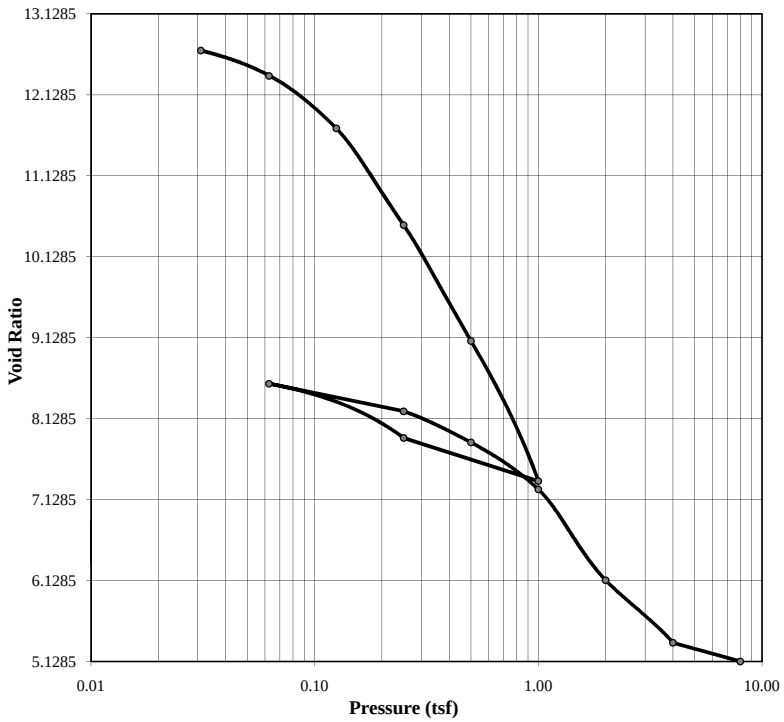


	Before	After				
			Liquid Limits:	641	**Test Date:**	13 May 2011
Moisture (%):	689.43	292.85	**Plastic Limits:**	264		
Dry Density (pcf):	8.06	14.90	**Plasticity Index (%):**	376		
Saturation (%):	95.93	80.73				
Void Ratio:	12.7695	5.1228	**Specific Gravity:**	1.782	Measured	

Sample Description: Peat (PT)
Project Number: 10883-011-00 **Depth:** 11 - 13 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-SI4-30
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Test Results

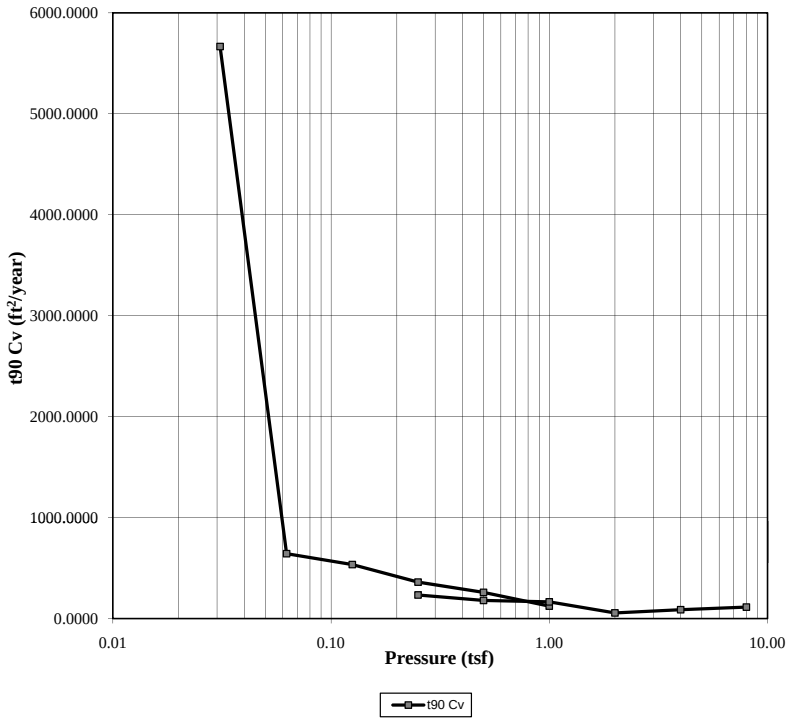


	Before	After				
			Liquid Limits:	641	**Test Date:**	13 May 2011
Moisture (%):	689.43	292.85	**Plastic Limits:**	264		
Dry Density (pcf):	8.06	14.90	**Plasticity Index (%):**	376		
Saturation (%):	95.93	80.73				
Void Ratio:	12.7695	5.1228	**Specific Gravity:**	1.782	Measured	

Soil Description: Peat (PT)
Project Number: 10883-011-00 **Depth:** 11 - 13 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-SI4-30
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	641	**Test Date:**	13 May 2011
Moisture (%):	689.43	292.85	**Plastic Limits:**	264		
Dry Density (pcf):	8.06	14.90	**Plasticity Index (%):**	376		
Saturation (%):	95.93	80.73				
Void Ratio:	12.7695	5.1228	**Specific Gravity:**	1.782	Measured	

Soil Description: Peat (PT)

Project Number: 10883-011-00 **Depth:** 11 - 13 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-SI4-30

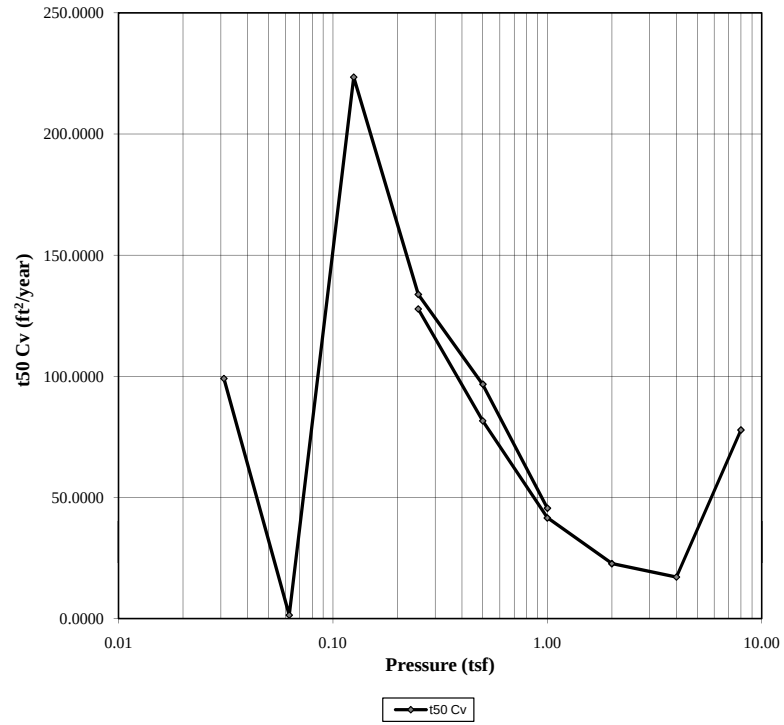
Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test
Test Results



	Before	After				
			Liquid Limits:	641	**Test Date:**	13 May 2011
Moisture (%):	689.43	292.85	**Plastic Limits:**	264		
Dry Density (pcf):	8.06	14.90	**Plasticity Index (%):**	376		
Saturation (%):	95.93	80.73				
Void Ratio:	12.7695	5.1228	**Specific Gravity:**	1.782	Measured	

Soil Description: Peat (PT)

Project Number: 10883-011-00 **Depth:** 11 - 13 feet **Remarks:**

Sample Number: **Boring Number:** BHSP-SI4-30

Project: LA-16 Non-Rock Demo

Client: NRCS

Location:

GeoEngineers

Consolidation Test Results
Summary

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

Project Number: 10883-011-00

Sample Number:
Boring Number: BHSP-SI4-30
Depth: 11 - 13 feet
Sample Type: Undisturbed

Sample Description:
Peat (PT)
Remarks:

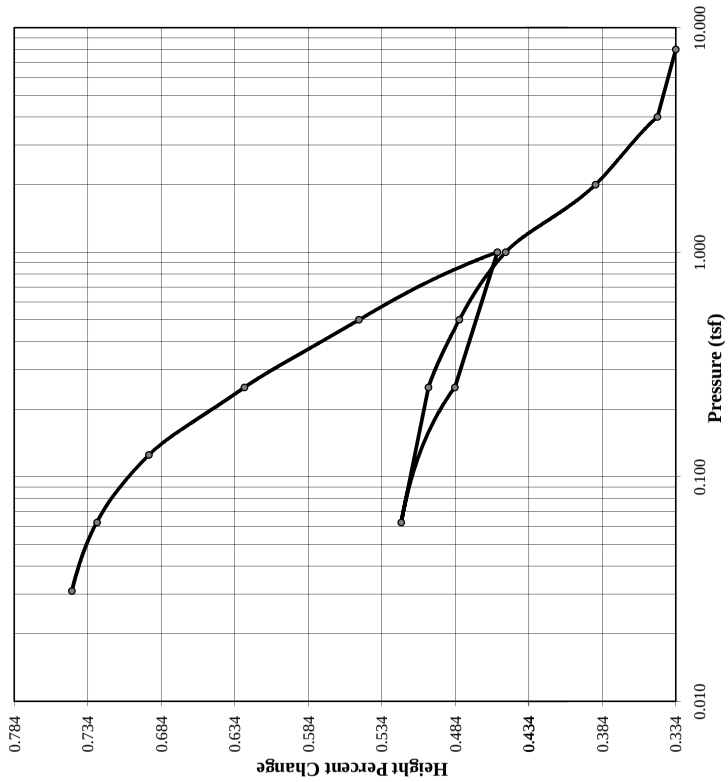
Test Number:
Test Date: 13 May 2011

Index	Load Sequence (tsf)	Cummulative Change in Height (in)	Specimen Height (in)	Height of Void (in)	Vertical Strain (%)	Void Ratio	t90 Fitting Time (min)	t50 Fitting Time (min)	t90 Cv (ft2/year)	t50 Cv (ft2/year)
0	0.000	0.0000	0.7500	0.6956	0.00	12.7822	0.000	0.000	0.000	0.000
1	0.031	0.0057	0.7443	0.6899	0.76	12.6774	0.076	1.005	5665.816	99.071
2	0.063	0.0228	0.7272	0.6728	3.04	12.3632	0.636	67.894	643.933	1.400
3	0.125	0.0581	0.6919	0.6375	7.75	11.7145	0.693	* 0.3851	534.400	223.466
4	0.250	0.1231	0.6269	0.5725	16.41	10.5201	0.840	0.528	362.059	133.805
5	0.500	0.2010	0.5490	0.4946	26.80	9.0886	0.897	0.560	259.982	96.700
6	1.000	0.2952	0.4548	0.4004	39.36	7.3575	1.286	0.817	124.498	45.530
7	0.250	0.2662	0.4838	0.4294	35.49	7.8904	0.000	0.000	0.000	0.000
8	0.063	0.2298	0.5202	0.4658	30.64	8.5593	0.000	0.000	0.000	0.000
9	0.250	0.2483	0.5017	0.4473	33.11	8.2194	0.837	0.354	232.749	127.813
10	0.500	0.2693	0.4807	0.4263	35.91	7.8335	0.991	0.509	180.426	81.623
11	1.000	0.3008	0.4492	0.3948	40.11	7.2546	0.942	0.873	165.763	41.566
12	2.000	0.3619	0.3881	0.3337	48.25	6.1318	2.089	1.193	55.800	22.702
13	4.000	0.4040	0.3460	0.2916	53.87	5.3582	1.042	1.253	88.923	17.176
14	8.000	0.4165	0.3335	0.2791	55.53	5.1285	0.754	0.257	114.109	77.863

Predicted value indicated with *

GeoEngineers

Consolidation Test
Test Results



	Before	After			
Moisture (%):	689.43	292.85	**Liquid Limits:**	641	**Test Date:** 13 May 2011
Dry Density (pcf):	8.06	14.90	**Plastic Limits:**	264	
Saturation (%):	95.93	80.73	**Plasticity Index (%):**	376	
Void Ratio:	12.7695	5.1228	**Specific Gravity:**	1.782	Measured

Soil Description: Peat (PT)
Project Number: 10883-011-00 **Depth:** 11 - 13 feet **Remarks:**
Sample Number: **Boring Number:** BHSP-SI4-30
Project: LA-16 Non-Rock Demo
Client: NRCS
Location:

GEOENGINEERS

Consolidation Test
Consolidation Specimen Information

Project: LA-16 Non-Rock Demo **Project Number:** 10883-011-00
Location:
Job Number: 11-19 **Test Date:** 13 May 2011

Sample Number: **Sample Description:**
Boring Number: BHSP-SI4-30 Peat (PT)
Depth: 11 - 13 feet **Remarks:**
Sample Type: Undisturbed

Test Number:
Liquid Limit: 641.0000 **Initial Void Ratio:** 12.7695 **Initial Height (in):** 0.7500
Plastic Limit: 264.0000 **Plasticity Index (%):** 376.0000 **Initial Diameter (in):** 2.5000
Specific Gravity: 1.7820 Measured **Weight of Ring (g):** 234.9000

Parameters	Initial Specimen	Final Specimen
Moist Weight + Container (g)	138.61	43.97
Dry Soil + Container (g)	41.40	25.55
Weight of Container (g)	27.30	19.26
Moisture Content (%)	689.43	292.85
Void Ratio	12.7695	5.1228
Saturation (%)	95.93	80.73
Dry Density (pcf)	8.06	14.90

Consolidation Test Results
(Sequence 1) Load 0.031 tsf

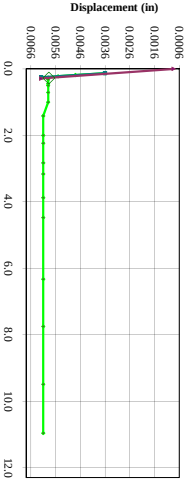
Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

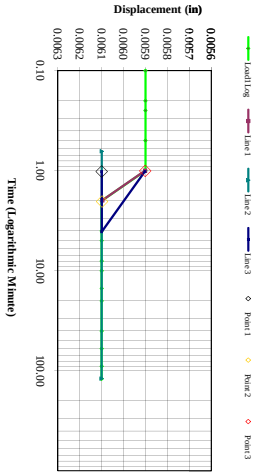
Sample Number: **Soil Description:**
Boring Number: BHSP-SI4-30 Peat (PT)
Depth: 11 - 13 feet **Remarks:**
Sample Type: Undisturbed

Project Number: 10883-011-00
Test Date: 13 May 2011
Test Number:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0004	0.0000	0.0000	12.7695
1	00:00:01	0.0036	0.0032	0.4267	12.7107
2	00:00:02	0.0048	0.0044	0.5867	12.6807
3	00:00:03	0.0055	0.0051	0.6800	12.6638
4	00:00:04	0.0059	0.0055	0.7333	12.6685
5	00:00:05	0.0059	0.0055	0.7333	12.6685
6	00:00:06	0.0059	0.0055	0.7333	12.6685
7	00:00:12	0.0059	0.0055	0.7333	12.6685
8	00:00:15	0.0059	0.0055	0.7333	12.6685
9	00:00:30	0.0059	0.0055	0.7333	12.6685
10	00:01:00	0.0059	0.0055	0.7333	12.6685
11	00:02:00	0.0061	0.0057	0.7600	12.6648
12	00:04:00	0.0061	0.0057	0.7600	12.6648
13	00:05:00	0.0061	0.0057	0.7600	12.6648
14	00:08:00	0.0061	0.0057	0.7600	12.6648
15	00:10:00	0.0061	0.0057	0.7600	12.6648
16	00:15:01	0.0061	0.0057	0.7600	12.6648
17	00:20:01	0.0061	0.0057	0.7600	12.6648
18	00:40:03	0.0061	0.0057	0.7600	12.6648
19	01:00:04	0.0061	0.0057	0.7600	12.6648
20	01:30:06	0.0061	0.0057	0.7600	12.6648
21	02:00:09	0.0061	0.0057	0.7600	12.6648

Tested By: **Checked By:**





Consolidation Test Results
(Sequence 2) Load 0.063 tsf

Consolidation Test Results
(Sequence 2) Load 0.063 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

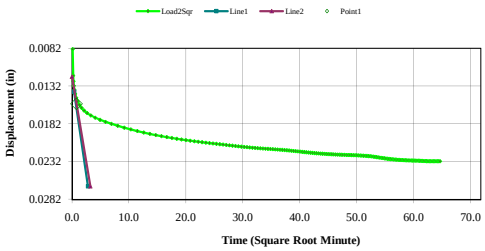
Project Number: 10883-011-00
Test Date: 13 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI4-30
Depth: 11 - 13 feet
Sample Type: Undisturbed

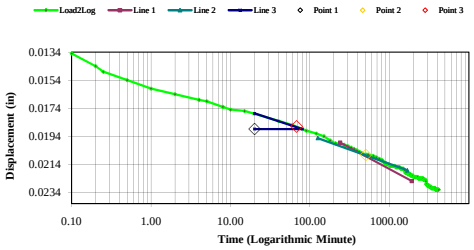
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0061	0.0057	0.7600	12.6648
1	00:00:01	0.0083	0.0079	1.0533	12.6244
2	00:00:02	0.0116	0.0112	1.4933	12.5639
3	00:00:03	0.0123	0.0119	1.5867	12.5510
4	00:00:04	0.0128	0.0124	1.6533	12.5418
5	00:00:05	0.0132	0.0128	1.7067	12.5345
6	00:00:06	0.0135	0.0131	1.7467	12.5290
7	00:00:12	0.0144	0.0140	1.8667	12.5124
8	00:00:15	0.0148	0.0144	1.9200	12.5051
9	00:00:30	0.0154	0.0150	2.0000	12.4941
10	00:01:00	0.0160	0.0156	2.0800	12.4831
11	00:02:00	0.0164	0.0160	2.1333	12.4757
12	00:04:01	0.0168	0.0164	2.1867	12.4684
13	00:05:01	0.0169	0.0165	2.2000	12.4665
14	00:08:01	0.0173	0.0169	2.2533	12.4592
15	00:10:01	0.0175	0.0171	2.2800	12.4555
16	00:15:01	0.0176	0.0172	2.2933	12.4537
17	00:20:02	0.0178	0.0174	2.3200	12.4500
18	00:40:03	0.0183	0.0179	2.3867	12.4408
19	01:00:05	0.0186	0.0182	2.4267	12.4353
20	01:30:07	0.0190	0.0186	2.4800	12.4280
21	02:00:09	0.0192	0.0188	2.5067	12.4243
22	02:30:12	0.0194	0.0190	2.5333	12.4206
23	03:00:14	0.0197	0.0193	2.5733	12.4151
24	03:30:16	0.0199	0.0195	2.6000	12.4115
25	04:00:17	0.0199	0.0195	2.6000	12.4115
26	04:30:20	0.0200	0.0196	2.6133	12.4096
27	05:00:22	0.0201	0.0197	2.6267	12.4078
28	05:30:24	0.0202	0.0198	2.6400	12.4060
29	06:00:27	0.0203	0.0199	2.6533	12.4041
30	06:30:29	0.0204	0.0200	2.6667	12.4023
31	07:00:31	0.0205	0.0201	2.6800	12.4005
32	07:30:34	0.0206	0.0202	2.6933	12.3986
33	08:00:36	0.0207	0.0203	2.7067	12.3968
34	08:30:38	0.0207	0.0203	2.7067	12.3968
35	09:00:40	0.0207	0.0203	2.7067	12.3968
36	09:30:43	0.0208	0.0204	2.7200	12.3949

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.0208	0.0204	2.7200	12.3949
38	10:30:47	0.0208	0.0204	2.7200	12.3949
39	11:00:50	0.0209	0.0205	2.7333	12.3931
40	11:30:52	0.0209	0.0205	2.7333	12.3931
41	12:00:54	0.0210	0.0206	2.7467	12.3913
42	12:30:56	0.0210	0.0206	2.7467	12.3913
43	13:00:59	0.0211	0.0207	2.7600	12.3894
44	13:31:01	0.0211	0.0207	2.7600	12.3894
45	14:01:03	0.0212	0.0208	2.7733	12.3876
46	14:31:06	0.0213	0.0209	2.7867	12.3858
47	15:01:08	0.0213	0.0209	2.7867	12.3858
48	15:31:10	0.0214	0.0210	2.8000	12.3839
49	16:01:12	0.0214	0.0210	2.8000	12.3839
50	16:31:15	0.0214	0.0210	2.8000	12.3839
51	17:01:17	0.0215	0.0211	2.8133	12.3821
52	17:31:19	0.0215	0.0211	2.8133	12.3821
53	18:01:21	0.0215	0.0211	2.8133	12.3821
54	18:31:24	0.0215	0.0211	2.8133	12.3821
55	19:01:26	0.0215	0.0211	2.8133	12.3821
56	19:31:28	0.0215	0.0211	2.8133	12.3821
57	20:01:31	0.0216	0.0212	2.8267	12.3803
58	20:31:33	0.0216	0.0212	2.8267	12.3803
59	21:01:35	0.0216	0.0212	2.8267	12.3803
60	21:31:38	0.0216	0.0212	2.8267	12.3803
61	22:01:40	0.0216	0.0212	2.8267	12.3803
62	22:31:42	0.0216	0.0212	2.8267	12.3803
63	23:01:44	0.0217	0.0213	2.8400	12.3784
64	23:31:47	0.0217	0.0213	2.8400	12.3784
65	24:01:49	0.0217	0.0213	2.8400	12.3784
66	24:31:51	0.0217	0.0213	2.8400	12.3784
67	25:01:53	0.0217	0.0213	2.8400	12.3784
68	25:31:56	0.0218	0.0214	2.8533	12.3766
69	26:01:58	0.0218	0.0214	2.8533	12.3766
70	26:32:00	0.0220	0.0216	2.8800	12.3729
71	27:02:02	0.0220	0.0216	2.8800	12.3729
72	27:32:05	0.0220	0.0216	2.8800	12.3729
73	28:02:07	0.0220	0.0216	2.8800	12.3729
74	28:32:09	0.0221	0.0217	2.8933	12.3711
75	29:02:11	0.0221	0.0217	2.8933	12.3711
76	29:32:14	0.0221	0.0217	2.8933	12.3711
77	30:02:16	0.0221	0.0217	2.8933	12.3711
78	30:32:18	0.0221	0.0217	2.8933	12.3711
79	31:02:21	0.0222	0.0218	2.9067	12.3692
80	31:32:23	0.0222	0.0218	2.9067	12.3692
81	32:02:25	0.0222	0.0218	2.9067	12.3692
82	32:32:28	0.0222	0.0218	2.9067	12.3692
83	33:02:30	0.0222	0.0218	2.9067	12.3692
84	33:32:32	0.0223	0.0219	2.9200	12.3674
85	34:02:34	0.0223	0.0219	2.9200	12.3674
86	34:32:37	0.0223	0.0219	2.9200	12.3674
87	35:02:39	0.0223	0.0219	2.9200	12.3674
88	35:32:41	0.0223	0.0219	2.9200	12.3674
89	36:02:43	0.0223	0.0219	2.9200	12.3674

90	36:32:46	0.0223	0.0219	2.9200	12.3674
91	37:02:48	0.0223	0.0219	2.9200	12.3674
92	37:32:50	0.0223	0.0219	2.9200	12.3674
93	38:02:53	0.0223	0.0219	2.9200	12.3674
94	38:32:55	0.0224	0.0220	2.9333	12.3656
95	39:02:57	0.0224	0.0220	2.9333	12.3656
96	39:32:59	0.0224	0.0220	2.9333	12.3656
97	40:03:02	0.0224	0.0220	2.9333	12.3656
98	40:33:04	0.0224	0.0220	2.9333	12.3656
99	41:03:06	0.0224	0.0220	2.9333	12.3656
100	41:33:09	0.0224	0.0220	2.9333	12.3656
101	42:03:11	0.0224	0.0220	2.9333	12.3656
102	42:33:13	0.0224	0.0220	2.9333	12.3656
103	43:03:15	0.0224	0.0220	2.9333	12.3656
104	43:33:18	0.0224	0.0220	2.9333	12.3656
105	44:03:20	0.0224	0.0220	2.9333	12.3656
106	44:33:22	0.0224	0.0220	2.9333	12.3656
107	45:03:25	0.0225	0.0221	2.9467	12.3637
108	45:33:27	0.0225	0.0221	2.9467	12.3637
109	46:03:29	0.0225	0.0221	2.9467	12.3637
110	46:33:31	0.0225	0.0221	2.9467	12.3637
111	47:03:34	0.0225	0.0221	2.9467	12.3637
112	47:33:36	0.0225	0.0221	2.9467	12.3637
113	48:03:38	0.0226	0.0222	2.9600	12.3619
114	48:33:40	0.0228	0.0224	2.9867	12.3582
115	49:03:43	0.0228	0.0224	2.9867	12.3582
116	49:33:45	0.0228	0.0224	2.9867	12.3582
117	50:03:47	0.0229	0.0225	3.0000	12.3564
118	50:33:50	0.0229	0.0225	3.0000	12.3564
119	51:03:52	0.0229	0.0225	3.0000	12.3564
120	51:33:54	0.0229	0.0225	3.0000	12.3564
121	52:03:56	0.0229	0.0225	3.0000	12.3564
122	52:33:59	0.0229	0.0225	3.0000	12.3564
123	53:04:01	0.0230	0.0226	3.0133	12.3546
124	53:34:03	0.0230	0.0226	3.0133	12.3546
125	54:04:06	0.0230	0.0226	3.0133	12.3546
126	54:34:08	0.0230	0.0226	3.0133	12.3546
127	55:04:10	0.0230	0.0226	3.0133	12.3546
128	55:34:12	0.0230	0.0226	3.0133	12.3546
129	56:04:15	0.0230	0.0226	3.0133	12.3546
130	56:34:17	0.0231	0.0227	3.0267	12.3527
131	57:04:19	0.0231	0.0227	3.0267	12.3527
132	57:34:21	0.0231	0.0227	3.0267	12.3527
133	58:04:24	0.0231	0.0227	3.0267	12.3527
134	58:34:26	0.0231	0.0227	3.0267	12.3527
135	59:04:28	0.0231	0.0227	3.0267	12.3527
136	59:34:31	0.0231	0.0227	3.0267	12.3527
137	60:04:33	0.0231	0.0227	3.0267	12.3527
138	60:34:35	0.0231	0.0227	3.0267	12.3527
139	61:04:37	0.0231	0.0227	3.0267	12.3527
140	61:34:40	0.0231	0.0227	3.0267	12.3527
141	62:04:42	0.0231	0.0227	3.0267	12.3527
142	62:34:44	0.0231	0.0227	3.0267	12.3527

143	63:04:47	0.0231	0.0227	3.0267	12.3527
144	63:34:49	0.0232	0.0228	3.0400	12.3509
145	64:04:51	0.0232	0.0228	3.0400	12.3509
146	64:34:53	0.0232	0.0228	3.0400	12.3509
147	65:04:56	0.0232	0.0228	3.0400	12.3509
148	65:34:58	0.0232	0.0228	3.0400	12.3509
149	66:05:00	0.0232	0.0228	3.0400	12.3509
150	66:35:02	0.0232	0.0228	3.0400	12.3509
151	67:05:05	0.0232	0.0228	3.0400	12.3509
152	67:35:07	0.0232	0.0228	3.0400	12.3509
153	68:05:09	0.0232	0.0228	3.0400	12.3509
154	68:35:12	0.0232	0.0228	3.0400	12.3509
155	69:05:14	0.0232	0.0228	3.0400	12.3509
156	69:35:16	0.0232	0.0228	3.0400	12.3509

Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Consolidation Test Results
(Sequence 3) Load 0.125 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

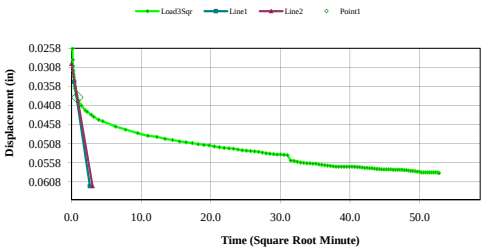
Project Number: 10883-011-00
Test Date: 13 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI4-30
Depth: 11 - 13 feet
Sample Type: Undisturbed

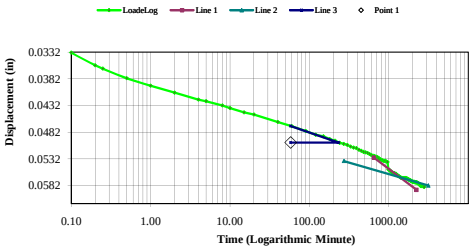
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0232	0.0228	3.0400	12.3509
1	00:00:01	0.0259	0.0255	3.4000	12.3013
2	00:00:02	0.0288	0.0284	3.7867	12.2481
3	00:00:03	0.0304	0.0300	4.0000	12.2187
4	00:00:04	0.0317	0.0313	4.1733	12.1948
5	00:00:05	0.0326	0.0322	4.2933	12.1783
6	00:00:06	0.0333	0.0329	4.3867	12.1655
7	00:00:12	0.0357	0.0353	4.7067	12.1214
8	00:00:15	0.0363	0.0359	4.7867	12.1104
9	00:00:30	0.0381	0.0377	5.0267	12.0773
10	00:01:00	0.0395	0.0391	5.2133	12.0516
11	00:02:00	0.0408	0.0404	5.3867	12.0278
12	00:04:00	0.0421	0.0417	5.5600	12.0039
13	00:05:00	0.0424	0.0420	5.6000	11.9984
14	00:08:01	0.0432	0.0428	5.7067	11.9837
15	00:10:01	0.0437	0.0433	5.7733	11.9745
16	00:15:01	0.0445	0.0441	5.8800	11.9598
17	00:20:02	0.0449	0.0445	5.9333	11.9525
18	00:40:03	0.0463	0.0459	6.1200	11.9268
19	01:00:05	0.0471	0.0467	6.2267	11.9121
20	01:30:07	0.0480	0.0476	6.3467	11.8956
21	02:00:09	0.0487	0.0483	6.4400	11.8827
22	02:30:11	0.0490	0.0486	6.4800	11.8772
23	03:00:14	0.0495	0.0491	6.5467	11.8680
24	03:30:16	0.0498	0.0494	6.5867	11.8625
25	04:00:18	0.0502	0.0498	6.6400	11.8552
26	04:30:21	0.0504	0.0500	6.6667	11.8515
27	05:00:23	0.0506	0.0502	6.6933	11.8478
28	05:30:25	0.0509	0.0505	6.7333	11.8423
29	06:00:27	0.0511	0.0507	6.7600	11.8387
30	06:30:30	0.0512	0.0508	6.7733	11.8368
31	07:00:32	0.0515	0.0511	6.8133	11.8313
32	07:30:34	0.0517	0.0513	6.8400	11.8276
33	08:00:36	0.0519	0.0515	6.8667	11.8240
34	08:30:39	0.0520	0.0516	6.8800	11.8221
35	09:00:41	0.0521	0.0517	6.8933	11.8203
36	09:30:43	0.0523	0.0519	6.9200	11.8166

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.0525	0.0521	6.9467	11.8130
38	10:30:48	0.0526	0.0522	6.9600	11.8111
39	11:00:50	0.0527	0.0523	6.9733	11.8093
40	11:30:52	0.0528	0.0524	6.9867	11.8074
41	12:00:54	0.0529	0.0525	7.0000	11.8056
42	12:30:57	0.0531	0.0527	7.0267	11.8019
43	13:00:59	0.0533	0.0529	7.0533	11.7983
44	13:31:01	0.0534	0.0530	7.0667	11.7964
45	14:01:03	0.0535	0.0531	7.0800	11.7946
46	14:31:06	0.0536	0.0532	7.0933	11.7928
47	15:01:08	0.0536	0.0532	7.0933	11.7928
48	15:31:10	0.0537	0.0533	7.1067	11.7909
49	16:01:13	0.0538	0.0534	7.1200	11.7891
50	16:31:15	0.0552	0.0548	7.3067	11.7634
51	17:01:17	0.0553	0.0549	7.3200	11.7615
52	17:31:20	0.0555	0.0551	7.3467	11.7579
53	18:01:22	0.0557	0.0553	7.3733	11.7542
54	18:31:24	0.0558	0.0554	7.3867	11.7524
55	19:01:27	0.0559	0.0555	7.4000	11.7505
56	19:31:29	0.0559	0.0555	7.4000	11.7505
57	20:01:31	0.0560	0.0556	7.4133	11.7487
58	20:31:33	0.0560	0.0556	7.4133	11.7487
59	21:01:36	0.0562	0.0558	7.4400	11.7450
60	21:31:38	0.0563	0.0559	7.4533	11.7432
61	22:01:40	0.0564	0.0560	7.4667	11.7414
62	22:31:42	0.0565	0.0561	7.4800	11.7395
63	23:01:45	0.0566	0.0562	7.4933	11.7377
64	23:31:47	0.0567	0.0563	7.5067	11.7358
65	24:01:49	0.0568	0.0564	7.5200	11.7340
66	24:31:51	0.0568	0.0564	7.5200	11.7340
67	25:01:54	0.0568	0.0564	7.5200	11.7340
68	25:31:56	0.0568	0.0564	7.5200	11.7340
69	26:01:58	0.0568	0.0564	7.5200	11.7340
70	26:32:01	0.0568	0.0564	7.5200	11.7340
71	27:02:03	0.0568	0.0564	7.5200	11.7340
72	27:32:05	0.0568	0.0564	7.5200	11.7340
73	28:02:07	0.0569	0.0565	7.5333	11.7322
74	28:32:10	0.0569	0.0565	7.5333	11.7322
75	29:02:12	0.0570	0.0566	7.5467	11.7303
76	29:32:14	0.0571	0.0567	7.5600	11.7285
77	30:02:16	0.0571	0.0567	7.5600	11.7285
78	30:32:19	0.0572	0.0568	7.5733	11.7267
79	31:02:21	0.0572	0.0568	7.5733	11.7267
80	31:32:23	0.0573	0.0569	7.5867	11.7248
81	32:02:25	0.0574	0.0570	7.6000	11.7230
82	32:32:28	0.0574	0.0570	7.6000	11.7230
83	33:02:30	0.0575	0.0571	7.6133	11.7212
84	33:32:32	0.0575	0.0571	7.6133	11.7212
85	34:02:35	0.0575	0.0571	7.6133	11.7212
86	34:32:37	0.0575	0.0571	7.6133	11.7212
87	35:02:39	0.0575	0.0571	7.6133	11.7212
88	35:32:41	0.0576	0.0572	7.6267	11.7193
89	36:02:44	0.0576	0.0572	7.6267	11.7193

90	36:32:46	0.0576	0.0572	7.6267	11.7193
91	37:02:48	0.0576	0.0572	7.6267	11.7193
92	37:32:51	0.0576	0.0572	7.6267	11.7193
93	38:02:53	0.0577	0.0573	7.6400	11.7175
94	38:32:55	0.0577	0.0573	7.6400	11.7175
95	39:02:58	0.0578	0.0574	7.6533	11.7157
96	39:33:00	0.0579	0.0575	7.6667	11.7138
97	40:03:02	0.0579	0.0575	7.6667	11.7138
98	40:33:04	0.0580	0.0576	7.6800	11.7120
99	41:03:07	0.0581	0.0577	7.6933	11.7101
100	41:33:09	0.0581	0.0577	7.6933	11.7101
101	42:03:11	0.0583	0.0579	7.7200	11.7065
102	42:33:06	0.0583	0.0579	7.7200	11.7065
103	43:03:02	0.0583	0.0579	7.7200	11.7065
104	43:32:57	0.0583	0.0579	7.7200	11.7065
105	44:02:53	0.0583	0.0579	7.7200	11.7065
106	44:32:48	0.0583	0.0579	7.7200	11.7065
107	45:02:44	0.0583	0.0579	7.7200	11.7065
108	45:32:39	0.0583	0.0579	7.7200	11.7065
109	46:02:35	0.0583	0.0579	7.7200	11.7065
110	46:23:49	0.0585	0.0581	7.7467	11.7028

Consolidation Test Results
(Sequence 4) Load 0.250 tsf

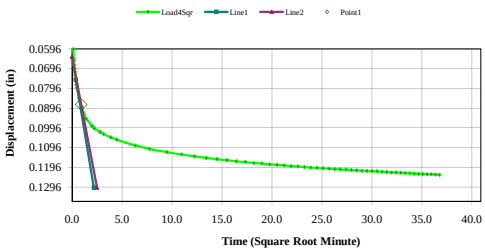
Consolidation Test Results
(Sequence 4) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 13 May 2011
Test Number:

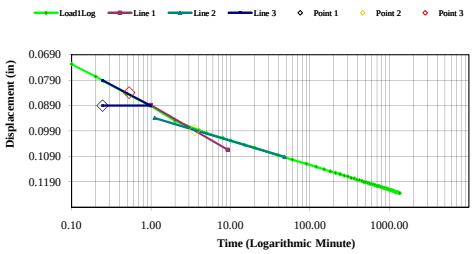
Sample Number:
Soil Description:
Boring Number: BHSP-SI4-30
Peat (PT)
Depth: 11 - 13 feet
Remarks:
Sample Type: Undisturbed

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.0585	0.0581	7.7467	11.7028
1	00:00:01	0.0597	0.0593	7.9067	11.6808
2	00:00:02	0.0653	0.0649	8.6533	11.5780
3	00:00:03	0.0679	0.0675	9.0000	11.5302
4	00:00:04	0.0696	0.0692	9.2267	11.4990
5	00:00:05	0.0712	0.0708	9.4400	11.4696
6	00:00:06	0.0727	0.0723	9.6400	11.4421
7	00:00:12	0.0776	0.0772	10.2933	11.3521
8	00:00:15	0.0793	0.0789	10.5200	11.3209
9	00:00:30	0.0845	0.0841	11.2133	11.2255
10	00:01:00	0.0892	0.0888	11.8400	11.1392
11	00:02:00	0.0950	0.0946	12.6133	11.0327
12	00:04:00	0.0987	0.0983	13.1067	10.9648
13	00:05:00	0.0999	0.0995	13.2667	10.9427
14	00:08:00	0.1018	0.1014	13.5200	10.9078
15	00:10:00	0.1028	0.1024	13.6533	10.8895
16	00:15:01	0.1045	0.1041	13.8800	10.8583
17	00:20:01	0.1056	0.1052	14.0267	10.8381
18	00:40:03	0.1086	0.1082	14.4267	10.7830
19	01:00:04	0.1103	0.1099	14.6533	10.7518
20	01:30:06	0.1119	0.1115	14.8667	10.7224
21	02:00:09	0.1131	0.1127	15.0267	10.7004
22	02:30:11	0.1141	0.1137	15.1600	10.6820
23	03:00:13	0.1149	0.1145	15.2667	10.6673
24	03:30:15	0.1155	0.1151	15.3467	10.6563
25	04:00:18	0.1160	0.1156	15.4133	10.6471
26	04:30:20	0.1166	0.1162	15.4933	10.6361
27	05:00:22	0.1169	0.1165	15.5333	10.6306
28	05:30:25	0.1175	0.1171	15.6133	10.6196
29	06:00:27	0.1177	0.1173	15.6400	10.6159
30	06:30:29	0.1182	0.1178	15.7067	10.6067
31	07:00:31	0.1184	0.1180	15.7333	10.6031
32	07:30:34	0.1187	0.1183	15.7733	10.5976
33	08:00:36	0.1191	0.1187	15.8267	10.5902
34	08:30:38	0.1192	0.1188	15.8400	10.5884
35	09:00:41	0.1195	0.1191	15.8800	10.5829
36	09:30:43	0.1198	0.1194	15.9200	10.5774

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.1199	0.1195	15.9333	10.5755
38	10:30:48	0.1201	0.1197	15.9600	10.5719
39	11:00:50	0.1203	0.1199	15.9867	10.5682
40	11:30:52	0.1206	0.1202	16.0267	10.5627
41	12:00:54	0.1207	0.1203	16.0400	10.5609
42	12:30:57	0.1208	0.1204	16.0533	10.5590
43	13:00:59	0.1210	0.1206	16.0800	10.5553
44	13:31:01	0.1212	0.1208	16.1067	10.5517
45	14:01:03	0.1214	0.1210	16.1333	10.5480
46	14:31:06	0.1215	0.1211	16.1467	10.5462
47	15:01:08	0.1216	0.1212	16.1600	10.5443
48	15:31:10	0.1217	0.1213	16.1733	10.5425
49	16:01:13	0.1219	0.1215	16.2000	10.5388
50	16:31:15	0.1221	0.1217	16.2267	10.5351
51	17:01:17	0.1223	0.1219	16.2533	10.5315
52	17:31:19	0.1223	0.1219	16.2533	10.5315
53	18:01:22	0.1224	0.1220	16.2667	10.5296
54	18:31:24	0.1225	0.1221	16.2800	10.5278
55	19:01:26	0.1227	0.1223	16.3067	10.5241
56	19:31:29	0.1229	0.1225	16.3333	10.5205
57	20:01:31	0.1230	0.1226	16.3467	10.5186
58	20:31:33	0.1231	0.1227	16.3600	10.5168
59	21:01:35	0.1232	0.1228	16.3733	10.5150
60	21:31:38	0.1232	0.1228	16.3733	10.5150
61	22:01:40	0.1233	0.1229	16.3867	10.5131
62	22:31:05	0.1235	0.1231	16.4133	10.5094

Consolidation Test Results
(Sequence 5) Load 0.500 tsf

Consolidation Test Results
(Sequence 5) Load 0.500 tsf

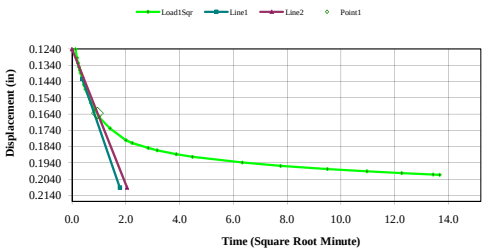
Project: LA-16 Non-Rock Demo
Project Number: 10883-011-00
Location:
Job Number: 11-19
Test Date: 13 May 2011
Test Number:

Sample Number:
Soil Description:
Boring Number: BHSP-SI4-30
Peat (PT)
Depth: 11 - 13 feet
Remarks:
Sample Type: Undisturbed

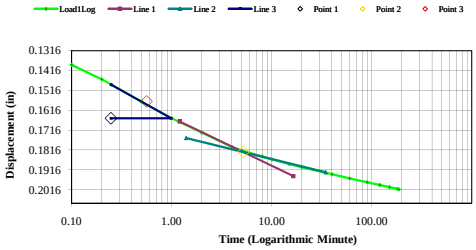
Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.1235	0.1231	16.4133	10.5094
1	00:00:01	0.1241	0.1237	16.4933	10.4984
2	00:00:02	0.1294	0.1290	17.2000	10.4011
3	00:00:03	0.1327	0.1323	17.6400	10.3405
4	00:00:04	0.1351	0.1347	17.9600	10.2965
5	00:00:05	0.1370	0.1366	18.2133	10.2616
6	00:00:06	0.1387	0.1383	18.4400	10.2304
7	00:00:12	0.1460	0.1456	19.4133	10.0964
8	00:00:15	0.1487	0.1483	19.7733	10.0468
9	00:00:30	0.1572	0.1568	20.9067	9.8907
10	00:01:00	0.1656	0.1652	22.0267	9.7365
11	00:02:00	0.1728	0.1724	22.9867	9.6043
12	00:04:01	0.1801	0.1797	23.9600	9.4703
13	00:05:01	0.1818	0.1814	24.1867	9.4391
14	00:08:01	0.1848	0.1844	24.5867	9.3840
15	00:10:01	0.1863	0.1859	24.7867	9.3565
16	00:15:01	0.1887	0.1883	25.1067	9.3124
17	00:20:02	0.1903	0.1899	25.3200	9.2830
18	00:40:03	0.1938	0.1934	25.7867	9.2188
19	01:00:05	0.1959	0.1955	26.0667	9.1802
20	01:30:07	0.1978	0.1974	26.3200	9.1453
21	02:00:09	0.1992	0.1988	26.5067	9.1196
22	02:30:12	0.2003	0.1999	26.6533	9.0995
23	03:00:14	0.2012	0.2008	26.7733	9.0829
24	03:06:46	0.2014	0.2010	26.8000	9.0793

Tested By:
Checked By:

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 6) Load 1.000 tsf

Consolidation Test Results
(Sequence 6) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

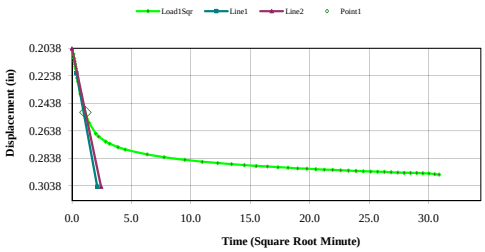
Project Number: 10883-011-00
Test Date: 13 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI4-30
Depth: 11 - 13 feet
Sample Type: Undisturbed

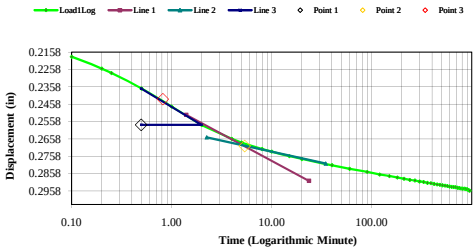
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2014	0.2010	26.8000	9.0793
1	00:00:01	0.2080	0.2076	27.6800	8.9581
2	00:00:02	0.2111	0.2107	28.0933	8.9012
3	00:00:03	0.2134	0.2130	28.4000	8.8589
4	00:00:04	0.2153	0.2149	28.6533	8.8241
5	00:00:05	0.2170	0.2166	28.8800	8.7929
6	00:00:06	0.2185	0.2181	29.0800	8.7653
7	00:00:12	0.2253	0.2249	29.9867	8.6405
8	00:00:15	0.2279	0.2275	30.3333	8.5927
9	00:00:30	0.2368	0.2364	31.5200	8.4293
10	00:01:00	0.2472	0.2468	32.9067	8.2384
11	00:02:00	0.2579	0.2575	34.3333	8.0420
12	00:04:00	0.2658	0.2654	35.3867	7.8969
13	00:05:00	0.2679	0.2675	35.6667	7.8584
14	00:08:01	0.2716	0.2712	36.1600	7.7904
15	00:10:01	0.2731	0.2727	36.3600	7.7629
16	00:15:01	0.2757	0.2753	36.7067	7.7152
17	00:20:01	0.2774	0.2770	36.9333	7.6839
18	00:40:03	0.2809	0.2805	37.4000	7.6197
19	01:00:05	0.2830	0.2826	37.6800	7.5811
20	01:30:07	0.2848	0.2844	37.9200	7.5481
21	02:00:09	0.2863	0.2859	38.1200	7.5206
22	02:30:11	0.2872	0.2868	38.2400	7.5040
23	03:00:14	0.2880	0.2876	38.3467	7.4893
24	03:30:16	0.2887	0.2883	38.4400	7.4765
25	04:00:18	0.2894	0.2890	38.5333	7.4636
26	04:30:21	0.2897	0.2893	38.5733	7.4581
27	05:00:23	0.2903	0.2899	38.6533	7.4471
28	05:30:25	0.2906	0.2902	38.6933	7.4416
29	06:00:28	0.2911	0.2907	38.7600	7.4324
30	06:30:30	0.2913	0.2909	38.7867	7.4288
31	07:00:32	0.2917	0.2913	38.8400	7.4214
32	07:30:34	0.2920	0.2916	38.8800	7.4159
33	08:00:37	0.2922	0.2918	38.9067	7.4122
34	08:30:39	0.2925	0.2921	38.9467	7.4067
35	09:00:41	0.2927	0.2923	38.9733	7.4031
36	09:30:44	0.2929	0.2925	39.0000	7.3994

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.2932	0.2928	39.0400	7.3939
38	10:30:48	0.2934	0.2930	39.0667	7.3902
39	11:00:50	0.2935	0.2931	39.0800	7.3884
40	11:30:53	0.2936	0.2932	39.0933	7.3865
41	12:00:55	0.2939	0.2935	39.1333	7.3810
42	12:30:57	0.2941	0.2937	39.1600	7.3773
43	13:01:00	0.2943	0.2939	39.1867	7.3737
44	13:31:02	0.2944	0.2940	39.2000	7.3718
45	14:01:04	0.2944	0.2940	39.2000	7.3718
46	14:31:07	0.2946	0.2942	39.2267	7.3682
47	15:01:09	0.2948	0.2944	39.2533	7.3645
48	15:31:11	0.2953	0.2949	39.3200	7.3553
49	15:53:16	0.2956	0.2952	39.3600	7.3498

Consolidation Test Results
(Sequence 7) Rebound 0.250 tsf

Consolidation Test Results
(Sequence 7) Rebound 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

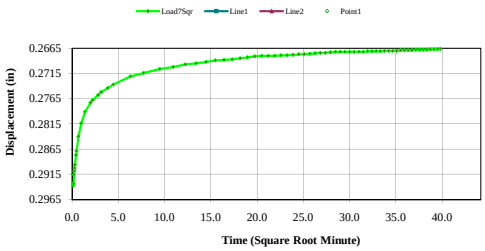
Project Number: 10883-011-00
Test Date: 13 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI4-30
Depth: 11 - 13 feet
Sample Type: Undisturbed

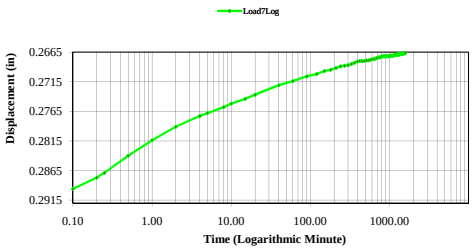
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2956	0.2952	39.3600	7.3498
1	00:00:01	0.2938	0.2934	39.1200	7.3829
2	00:00:02	0.2934	0.2930	39.0667	7.3902
3	00:00:03	0.2916	0.2912	38.8267	7.4232
4	00:00:04	0.2909	0.2905	38.7333	7.4361
5	00:00:05	0.2903	0.2899	38.6533	7.4471
6	00:00:06	0.2896	0.2892	38.5600	7.4600
7	00:00:12	0.2877	0.2873	38.3067	7.4948
8	00:00:15	0.2869	0.2865	38.2000	7.5095
9	00:00:30	0.2840	0.2836	37.8133	7.5628
10	00:01:00	0.2814	0.2810	37.4667	7.6105
11	00:02:00	0.2791	0.2787	37.1600	7.6527
12	00:04:01	0.2773	0.2769	36.9200	7.6858
13	00:05:01	0.2768	0.2764	36.8533	7.6950
14	00:08:01	0.2758	0.2754	36.7200	7.7133
15	00:10:01	0.2752	0.2748	36.6400	7.7243
16	00:15:01	0.2744	0.2740	36.5333	7.7390
17	00:20:02	0.2737	0.2733	36.4400	7.7519
18	00:40:03	0.2721	0.2717	36.2267	7.7813
19	01:00:05	0.2714	0.2710	36.1333	7.7941
20	01:30:07	0.2706	0.2702	36.0267	7.8088
21	02:00:09	0.2702	0.2698	35.9733	7.8161
22	02:30:12	0.2697	0.2693	35.9067	7.8253
23	03:00:14	0.2695	0.2691	35.8800	7.8290
24	03:30:16	0.2692	0.2688	35.8400	7.8345
25	04:00:18	0.2689	0.2685	35.8000	7.8400
26	04:30:21	0.2688	0.2684	35.7867	7.8418
27	05:00:23	0.2687	0.2683	35.7733	7.8437
28	05:30:25	0.2685	0.2681	35.7467	7.8473
29	06:00:28	0.2683	0.2679	35.7200	7.8510
30	06:30:30	0.2681	0.2677	35.6933	7.8547
31	07:00:32	0.2680	0.2676	35.6800	7.8565
32	07:30:34	0.2680	0.2676	35.6800	7.8565
33	08:00:37	0.2680	0.2676	35.6800	7.8565
34	08:30:39	0.2679	0.2675	35.6667	7.8584
35	09:00:41	0.2679	0.2675	35.6667	7.8584
36	09:30:43	0.2678	0.2674	35.6533	7.8602

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.2677	0.2673	35.6400	7.8620
38	10:30:48	0.2677	0.2673	35.6400	7.8620
39	11:00:50	0.2676	0.2672	35.6267	7.8639
40	11:30:53	0.2675	0.2671	35.6133	7.8657
41	12:00:55	0.2674	0.2670	35.6000	7.8675
42	12:30:57	0.2674	0.2670	35.6000	7.8675
43	13:00:59	0.2673	0.2669	35.5867	7.8694
44	13:31:02	0.2672	0.2668	35.5733	7.8712
45	14:01:04	0.2672	0.2668	35.5733	7.8712
46	14:31:06	0.2672	0.2668	35.5733	7.8712
47	15:01:09	0.2672	0.2668	35.5733	7.8712
48	15:31:11	0.2672	0.2668	35.5733	7.8712
49	16:01:13	0.2672	0.2668	35.5733	7.8712
50	16:31:15	0.2672	0.2668	35.5733	7.8712
51	17:01:18	0.2671	0.2667	35.5600	7.8730
52	17:31:20	0.2671	0.2667	35.5600	7.8730
53	18:01:22	0.2671	0.2667	35.5600	7.8730
54	18:31:24	0.2671	0.2667	35.5600	7.8730
55	19:01:27	0.2670	0.2666	35.5467	7.8749
56	19:31:29	0.2670	0.2666	35.5467	7.8749
57	20:01:31	0.2670	0.2666	35.5467	7.8749
58	20:31:34	0.2670	0.2666	35.5467	7.8749
59	21:01:36	0.2669	0.2665	35.5333	7.8767
60	21:31:38	0.2669	0.2665	35.5333	7.8767
61	22:01:40	0.2669	0.2665	35.5333	7.8767
62	22:31:43	0.2669	0.2665	35.5333	7.8767
63	23:01:45	0.2668	0.2664	35.5200	7.8786
64	23:31:47	0.2668	0.2664	35.5200	7.8786
65	24:01:50	0.2668	0.2664	35.5200	7.8786
66	24:31:52	0.2668	0.2664	35.5200	7.8786
67	25:01:54	0.2667	0.2663	35.5067	7.8804
68	25:31:56	0.2667	0.2663	35.5067	7.8804
69	26:01:59	0.2667	0.2663	35.5067	7.8804
70	26:24:50	0.2666	0.2662	35.4933	7.8822

Consolidation Test Results
(Sequence 8) Rebound 0.063 tsf

Consolidation Test Results
(Sequence 8) Rebound 0.063 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

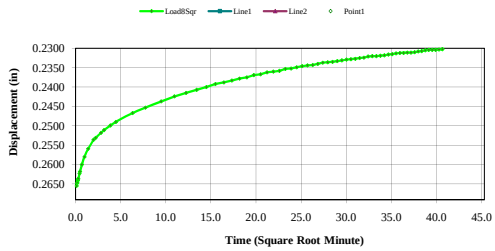
Project Number: 10883-011-00
Test Date: 13 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI4-30
Depth: 11 - 13 feet
Sample Type: Undisturbed

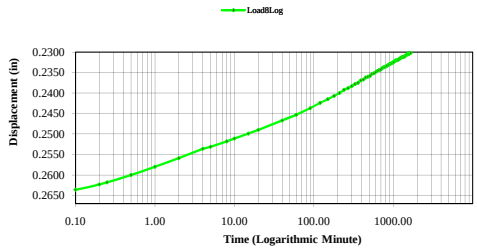
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2666	0.2662	35.4933	7.8822
1	00:00:01	0.2655	0.2651	35.3467	7.9024
2	00:00:02	0.2648	0.2644	35.2533	7.9153
3	00:00:03	0.2645	0.2641	35.2133	7.9208
4	00:00:04	0.2640	0.2636	35.1467	7.9300
5	00:00:05	0.2639	0.2635	35.1333	7.9318
6	00:00:06	0.2636	0.2632	35.0933	7.9373
7	00:00:12	0.2623	0.2619	34.9200	7.9612
8	00:00:15	0.2618	0.2614	34.8533	7.9704
9	00:00:30	0.2600	0.2596	34.6133	8.0034
10	00:01:00	0.2580	0.2576	34.3467	8.0401
11	00:02:00	0.2559	0.2555	34.0667	8.0787
12	00:04:00	0.2536	0.2532	33.7600	8.1209
13	00:05:01	0.2531	0.2527	33.6933	8.1301
14	00:08:01	0.2518	0.2514	33.5200	8.1539
15	00:10:01	0.2511	0.2507	33.4267	8.1668
16	00:15:01	0.2499	0.2495	33.2667	8.1888
17	00:20:02	0.2490	0.2486	33.1467	8.2054
18	00:40:03	0.2467	0.2463	32.8400	8.2476
19	01:00:05	0.2453	0.2449	32.6533	8.2733
20	01:30:07	0.2437	0.2433	32.4400	8.3027
21	02:00:09	0.2424	0.2420	32.2667	8.3265
22	02:30:12	0.2415	0.2411	32.1467	8.3430
23	03:00:14	0.2407	0.2403	32.0400	8.3577
24	03:30:16	0.2400	0.2396	31.9467	8.3706
25	04:00:18	0.2392	0.2388	31.8400	8.3853
26	04:30:21	0.2388	0.2384	31.7867	8.3926
27	05:00:23	0.2383	0.2379	31.7200	8.4018
28	05:30:25	0.2378	0.2374	31.6533	8.4110
29	06:00:28	0.2375	0.2371	31.6133	8.4165
30	06:30:30	0.2369	0.2365	31.5333	8.4275
31	07:00:32	0.2367	0.2363	31.5067	8.4312
32	07:30:34	0.2362	0.2358	31.4400	8.4404
33	08:00:37	0.2360	0.2356	31.4133	8.4440
34	08:30:39	0.2358	0.2354	31.3867	8.4477
35	09:00:41	0.2353	0.2349	31.3200	8.4569
36	09:30:44	0.2352	0.2348	31.3067	8.4587

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.2349	0.2345	31.2667	8.4642
38	10:30:48	0.2346	0.2342	31.2267	8.4697
39	11:00:50	0.2344	0.2340	31.2000	8.4734
40	11:30:53	0.2343	0.2339	31.1867	8.4752
41	12:00:55	0.2340	0.2336	31.1467	8.4807
42	12:30:57	0.2337	0.2333	31.1067	8.4862
43	13:00:59	0.2336	0.2332	31.0933	8.4881
44	13:31:02	0.2335	0.2331	31.0800	8.4899
45	14:01:04	0.2333	0.2329	31.0533	8.4936
46	14:31:06	0.2331	0.2327	31.0267	8.4973
47	15:01:09	0.2329	0.2325	31.0000	8.5009
48	15:31:11	0.2328	0.2324	30.9867	8.5028
49	16:01:13	0.2327	0.2323	30.9733	8.5046
50	16:31:15	0.2325	0.2321	30.9467	8.5083
51	17:01:18	0.2324	0.2320	30.9333	8.5101
52	17:31:20	0.2321	0.2317	30.8933	8.5156
53	18:01:22	0.2320	0.2316	30.8800	8.5175
54	18:31:25	0.2320	0.2316	30.8800	8.5175
55	19:01:27	0.2319	0.2315	30.8667	8.5193
56	19:31:29	0.2318	0.2314	30.8533	8.5211
57	20:01:31	0.2316	0.2312	30.8267	8.5248
58	20:31:34	0.2315	0.2311	30.8133	8.5266
59	21:01:36	0.2313	0.2309	30.7867	8.5303
60	21:31:38	0.2312	0.2308	30.7733	8.5321
61	22:01:40	0.2312	0.2308	30.7733	8.5321
62	22:31:43	0.2311	0.2307	30.7600	8.5340
63	23:01:45	0.2311	0.2307	30.7600	8.5340
64	23:31:47	0.2310	0.2306	30.7467	8.5358
65	24:01:50	0.2308	0.2304	30.7200	8.5395
66	24:31:52	0.2307	0.2303	30.7067	8.5413
67	25:01:54	0.2305	0.2301	30.6800	8.5450
68	25:31:56	0.2304	0.2300	30.6667	8.5468
69	26:01:59	0.2304	0.2300	30.6667	8.5468
70	26:32:01	0.2304	0.2300	30.6667	8.5468
71	27:02:03	0.2303	0.2299	30.6533	8.5487
72	27:32:06	0.2302	0.2298	30.6400	8.5505
73	27:32:27	0.2302	0.2298	30.6400	8.5505

Consolidation Test Results
(Sequence 9) Load 0.250 tsf

Consolidation Test Results
(Sequence 9) Load 0.250 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

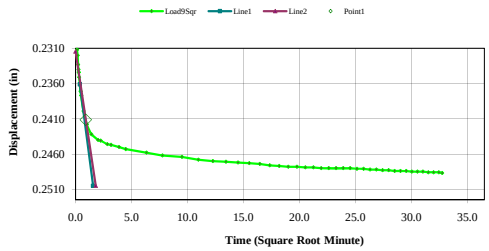
Project Number: 10883-011-00
Test Date: 13 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI4-30
Depth: 11 - 13 feet
Sample Type: Undisturbed

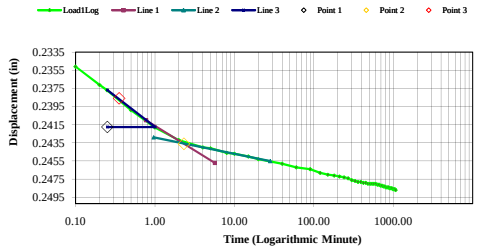
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2302	0.2298	30.6400	8.5505
1	00:00:01	0.2312	0.2308	30.7733	8.5321
2	00:00:02	0.2320	0.2316	30.8800	8.5175
3	00:00:03	0.2333	0.2329	31.0533	8.4936
4	00:00:04	0.2340	0.2336	31.1467	8.4807
5	00:00:05	0.2344	0.2340	31.2000	8.4734
6	00:00:06	0.2351	0.2347	31.2933	8.4605
7	00:00:12	0.2371	0.2367	31.5600	8.4238
8	00:00:15	0.2377	0.2373	31.6400	8.4128
9	00:00:30	0.2399	0.2395	31.9333	8.3724
10	00:01:00	0.2418	0.2414	32.1867	8.3375
11	00:02:00	0.2432	0.2428	32.3733	8.3118
12	00:04:01	0.2440	0.2436	32.4800	8.2971
13	00:05:01	0.2441	0.2437	32.4933	8.2953
14	00:08:01	0.2446	0.2442	32.5600	8.2861
15	00:10:01	0.2447	0.2443	32.5733	8.2843
16	00:15:01	0.2450	0.2446	32.6133	8.2788
17	00:20:02	0.2453	0.2449	32.6533	8.2733
18	00:40:03	0.2458	0.2454	32.7200	8.2641
19	01:00:05	0.2462	0.2458	32.7733	8.2568
20	01:30:07	0.2464	0.2460	32.8000	8.2531
21	02:00:09	0.2468	0.2464	32.8533	8.2457
22	02:30:12	0.2470	0.2466	32.8800	8.2421
23	03:00:14	0.2471	0.2467	32.8933	8.2402
24	03:30:16	0.2472	0.2468	32.9067	8.2384
25	04:00:18	0.2473	0.2469	32.9200	8.2366
26	04:30:21	0.2474	0.2470	32.9333	8.2347
27	05:00:23	0.2476	0.2472	32.9600	8.2311
28	05:30:25	0.2477	0.2473	32.9733	8.2292
29	06:00:28	0.2478	0.2474	32.9867	8.2274
30	06:30:30	0.2478	0.2474	32.9867	8.2274
31	07:00:32	0.2479	0.2475	33.0000	8.2255
32	07:30:34	0.2479	0.2475	33.0000	8.2255
33	08:00:37	0.2480	0.2476	33.0133	8.2237
34	08:30:39	0.2480	0.2476	33.0133	8.2237
35	09:00:41	0.2480	0.2476	33.0133	8.2237
36	09:30:43	0.2480	0.2476	33.0133	8.2237

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.2480	0.2476	33.0133	8.2237
38	10:30:48	0.2481	0.2477	33.0267	8.2219
39	11:00:50	0.2481	0.2477	33.0267	8.2219
40	11:30:53	0.2482	0.2478	33.0400	8.2200
41	12:00:55	0.2482	0.2478	33.0400	8.2200
42	12:30:57	0.2483	0.2479	33.0533	8.2182
43	13:00:59	0.2483	0.2479	33.0533	8.2182
44	13:31:02	0.2484	0.2480	33.0667	8.2164
45	14:01:04	0.2484	0.2480	33.0667	8.2164
46	14:31:06	0.2484	0.2480	33.0667	8.2164
47	15:01:09	0.2485	0.2481	33.0800	8.2145
48	15:31:11	0.2485	0.2481	33.0800	8.2145
49	16:01:13	0.2485	0.2481	33.0800	8.2145
50	16:31:16	0.2486	0.2482	33.0933	8.2127
51	17:01:18	0.2486	0.2482	33.0933	8.2127
52	17:31:20	0.2486	0.2482	33.0933	8.2127
53	17:50:56	0.2487	0.2483	33.1067	8.2109

Consolidation Test Results
(Sequence 10) Load 0.500 tsf

Consolidation Test Results
(Sequence 10) Load 0.500 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

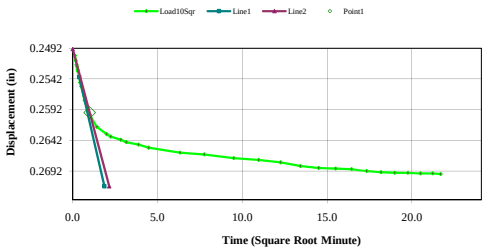
Project Number: 10883-011-00
Test Date: 13 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI4-30
Depth: 11 - 13 feet
Sample Type: Undisturbed

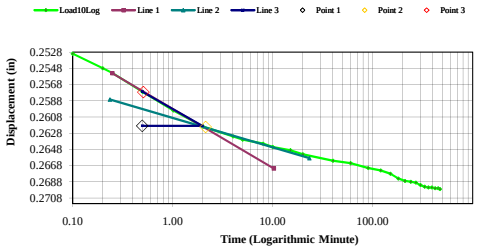
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2487	0.2483	33.1067	8.2109
1	00:00:01	0.2504	0.2500	33.3333	8.1796
2	00:00:02	0.2512	0.2508	33.4400	8.1650
3	00:00:03	0.2519	0.2515	33.5333	8.1521
4	00:00:04	0.2522	0.2518	33.5733	8.1466
5	00:00:05	0.2527	0.2523	33.6400	8.1374
6	00:00:06	0.2530	0.2526	33.6800	8.1319
7	00:00:12	0.2548	0.2544	33.9200	8.0989
8	00:00:15	0.2554	0.2550	34.0000	8.0879
9	00:00:30	0.2577	0.2573	34.3067	8.0456
10	00:01:01	0.2600	0.2596	34.6133	8.0034
11	00:02:01	0.2620	0.2616	34.8800	7.9667
12	00:04:01	0.2632	0.2628	35.0400	7.9447
13	00:05:01	0.2636	0.2632	35.0933	7.9373
14	00:08:01	0.2641	0.2637	35.1600	7.9281
15	00:10:01	0.2645	0.2641	35.2133	7.9208
16	00:15:02	0.2649	0.2645	35.2667	7.9134
17	00:20:02	0.2654	0.2650	35.3333	7.9043
18	00:40:03	0.2662	0.2658	35.4400	7.8896
19	01:00:05	0.2665	0.2661	35.4800	7.8841
20	01:30:07	0.2671	0.2667	35.5600	7.8730
21	02:00:10	0.2674	0.2670	35.6000	7.8675
22	02:30:12	0.2678	0.2674	35.6533	7.8602
23	03:00:14	0.2684	0.2680	35.7333	7.8492
24	03:30:16	0.2687	0.2683	35.7733	7.8437
25	04:00:19	0.2688	0.2684	35.7867	7.8418
26	04:30:21	0.2689	0.2685	35.8000	7.8400
27	05:00:23	0.2692	0.2688	35.8400	7.8345
28	05:30:26	0.2694	0.2690	35.8667	7.8308
29	06:00:28	0.2695	0.2691	35.8800	7.8290
30	06:30:30	0.2695	0.2691	35.8800	7.8290
31	07:00:33	0.2696	0.2692	35.8933	7.8272
32	07:30:35	0.2696	0.2692	35.8933	7.8272
33	07:50:26	0.2697	0.2693	35.9067	7.8253

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 11) Load 1.000 tsf

Consolidation Test Results
(Sequence 11) Load 1.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

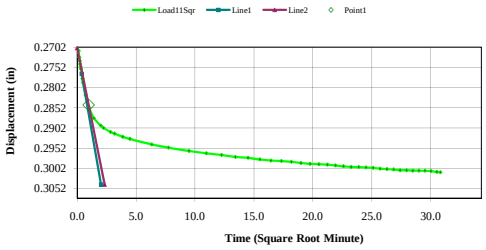
Project Number: 10883-011-00
Test Date: 13 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI4-30
Depth: 11 - 13 feet
Sample Type: Undisturbed

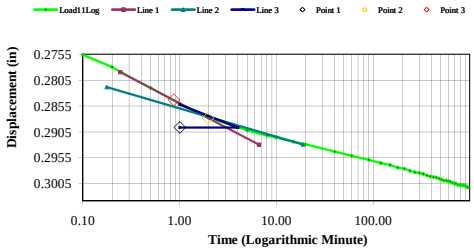
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.2697	0.2693	35.9067	7.8253
1	00:00:01	0.2711	0.2707	36.0933	7.7996
2	00:00:02	0.2727	0.2723	36.3067	7.7702
3	00:00:03	0.2736	0.2732	36.4267	7.7537
4	00:00:04	0.2744	0.2740	36.5333	7.7390
5	00:00:05	0.2751	0.2747	36.6267	7.7262
6	00:00:06	0.2756	0.2752	36.6933	7.7170
7	00:00:12	0.2780	0.2776	37.0133	7.6729
8	00:00:15	0.2790	0.2786	37.1467	7.6546
9	00:00:30	0.2820	0.2816	37.5467	7.5995
10	00:01:00	0.2851	0.2847	37.9600	7.5426
11	00:02:00	0.2878	0.2874	38.3200	7.4930
12	00:04:00	0.2896	0.2892	38.5600	7.4600
13	00:05:00	0.2902	0.2898	38.6400	7.4489
14	00:08:01	0.2912	0.2908	38.7733	7.4306
15	00:10:01	0.2916	0.2912	38.8267	7.4232
16	00:15:01	0.2924	0.2920	38.9333	7.4086
17	00:20:01	0.2929	0.2925	39.0000	7.3994
18	00:40:03	0.2943	0.2939	39.1867	7.3737
19	01:00:04	0.2951	0.2947	39.2933	7.3590
20	01:30:07	0.2959	0.2955	39.4000	7.3443
21	02:00:09	0.2965	0.2961	39.4800	7.3333
22	02:30:11	0.2969	0.2965	39.5333	7.3259
23	03:00:14	0.2974	0.2970	39.6000	7.3168
24	03:30:16	0.2976	0.2972	39.6267	7.3131
25	04:00:18	0.2980	0.2976	39.6800	7.3057
26	04:30:20	0.2983	0.2979	39.7200	7.3002
27	05:00:23	0.2984	0.2980	39.7333	7.2984
28	05:30:25	0.2986	0.2982	39.7600	7.2947
29	06:00:27	0.2989	0.2985	39.8000	7.2892
30	06:30:30	0.2991	0.2987	39.8267	7.2856
31	07:00:32	0.2992	0.2988	39.8400	7.2837
32	07:30:34	0.2993	0.2989	39.8533	7.2819
33	08:00:37	0.2995	0.2991	39.8800	7.2782
34	08:30:39	0.2997	0.2993	39.9067	7.2745
35	09:00:41	0.2999	0.2995	39.9333	7.2709
36	09:30:43	0.2999	0.2995	39.9333	7.2709

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:46	0.3000	0.2996	39.9467	7.2690
38	10:30:48	0.3001	0.2997	39.9600	7.2672
39	11:00:50	0.3003	0.2999	39.9867	7.2635
40	11:30:52	0.3004	0.3000	40.0000	7.2617
41	12:00:55	0.3005	0.3001	40.0133	7.2598
42	12:30:57	0.3007	0.3003	40.0400	7.2562
43	13:00:59	0.3007	0.3003	40.0400	7.2562
44	13:31:02	0.3008	0.3004	40.0533	7.2543
45	14:01:04	0.3008	0.3004	40.0533	7.2543
46	14:31:06	0.3008	0.3004	40.0533	7.2543
47	15:01:09	0.3009	0.3005	40.0667	7.2525
48	15:31:11	0.3011	0.3007	40.0933	7.2488
49	15:49:52	0.3012	0.3008	40.1067	7.2470

Consolidation Test Results
(Sequence 12) Load 2.000 tsf

Consolidation Test Results
(Sequence 12) Load 2.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

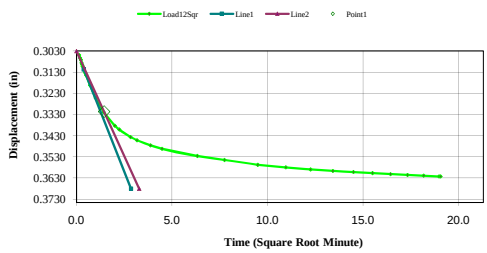
Project Number: 10883-011-00
Test Date: 13 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI4-30
Depth: 11 - 13 feet
Sample Type: Undisturbed

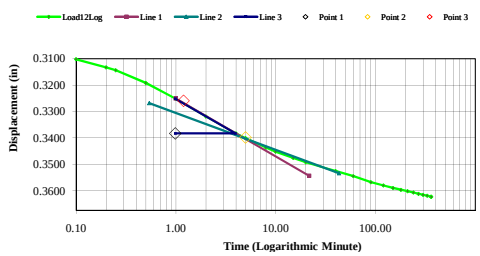
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3012	0.3008	40.1067	7.2470
1	00:00:01	0.3049	0.3045	40.6000	7.1791
2	00:00:02	0.3063	0.3059	40.7867	7.1534
3	00:00:03	0.3072	0.3068	40.9067	7.1368
4	00:00:04	0.3086	0.3082	41.0933	7.1111
5	00:00:05	0.3094	0.3090	41.2000	7.0965
6	00:00:06	0.3102	0.3098	41.3067	7.0818
7	00:00:12	0.3133	0.3129	41.7200	7.0248
8	00:00:15	0.3144	0.3140	41.8667	7.0047
9	00:00:30	0.3192	0.3188	42.5067	6.9165
10	00:01:00	0.3252	0.3248	43.3067	6.8064
11	00:02:00	0.3319	0.3315	44.2000	6.6834
12	00:04:00	0.3383	0.3379	45.0533	6.5659
13	00:05:00	0.3401	0.3397	45.2933	6.5328
14	00:08:00	0.3437	0.3433	45.7733	6.4667
15	00:10:00	0.3452	0.3448	45.9733	6.4392
16	00:15:00	0.3476	0.3472	46.2933	6.3951
17	00:20:00	0.3492	0.3488	46.5067	6.3658
18	00:40:00	0.3526	0.3522	46.9600	6.3033
19	01:00:00	0.3545	0.3541	47.2133	6.2684
20	01:30:02	0.3568	0.3564	47.5200	6.2262
21	02:00:04	0.3580	0.3576	47.6800	6.2042
22	02:30:06	0.3590	0.3586	47.8133	6.1858
23	03:00:09	0.3597	0.3593	47.9067	6.1730
24	03:30:11	0.3602	0.3598	47.9733	6.1638
25	04:00:13	0.3607	0.3603	48.0400	6.1546
26	04:30:16	0.3612	0.3608	48.1067	6.1454
27	05:00:18	0.3616	0.3612	48.1600	6.1381
28	05:30:20	0.3619	0.3615	48.2000	6.1326
29	06:00:22	0.3623	0.3619	48.2533	6.1252
30	06:03:19	0.3623	0.3619	48.2533	6.1252

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



Consolidation Test Results
(Sequence 13) Load 4.000 tsf

Consolidation Test Results
(Sequence 13) Load 4.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

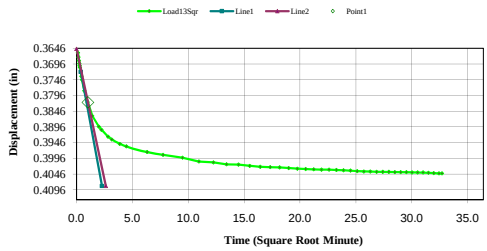
Project Number: 10883-011-00
Test Date: 13 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI4-30
Depth: 11 - 13 feet
Sample Type: Undisturbed

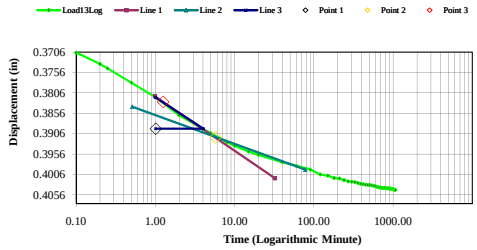
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.3623	0.3619	48.2533	6.1252
1	00:00:01	0.3660	0.3656	48.7467	6.0573
2	00:00:02	0.3674	0.3670	48.9333	6.0316
3	00:00:03	0.3685	0.3681	49.0800	6.0114
4	00:00:04	0.3694	0.3690	49.2000	5.9949
5	00:00:05	0.3701	0.3697	49.2933	5.9820
6	00:00:06	0.3707	0.3703	49.3733	5.9710
7	00:00:12	0.3735	0.3731	49.7467	5.9196
8	00:00:15	0.3746	0.3742	49.8933	5.8994
9	00:00:30	0.3781	0.3777	50.3600	5.8352
10	00:01:00	0.3817	0.3813	50.8400	5.7691
11	00:02:00	0.3861	0.3857	51.4267	5.6883
12	00:04:00	0.3895	0.3891	51.8800	5.6259
13	00:05:00	0.3905	0.3901	52.0133	5.6075
14	00:08:00	0.3927	0.3923	52.3067	5.5671
15	00:10:00	0.3936	0.3932	52.4267	5.5506
16	00:15:00	0.3950	0.3946	52.6133	5.5249
17	00:20:00	0.3958	0.3954	52.7200	5.5102
18	00:40:00	0.3976	0.3972	52.9600	5.4772
19	01:00:01	0.3985	0.3981	53.0800	5.4606
20	01:30:04	0.3994	0.3990	53.2000	5.4441
21	02:00:06	0.4006	0.4002	53.3600	5.4221
22	02:30:08	0.4009	0.4005	53.4000	5.4166
23	03:00:11	0.4015	0.4011	53.4800	5.4056
24	03:30:13	0.4016	0.4012	53.4933	5.4037
25	04:00:15	0.4020	0.4016	53.5467	5.3964
26	04:30:17	0.4023	0.4019	53.5867	5.3909
27	05:00:20	0.4024	0.4020	53.6000	5.3890
28	05:30:22	0.4025	0.4021	53.6133	5.3872
29	06:00:24	0.4027	0.4023	53.6400	5.3835
30	06:30:27	0.4029	0.4025	53.6667	5.3799
31	07:00:29	0.4030	0.4026	53.6800	5.3780
32	07:30:31	0.4031	0.4027	53.6933	5.3762
33	08:00:33	0.4032	0.4028	53.7067	5.3743
34	08:30:36	0.4032	0.4028	53.7067	5.3743
35	09:00:38	0.4033	0.4029	53.7200	5.3725
36	09:30:40	0.4034	0.4030	53.7333	5.3707

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:43	0.4035	0.4031	53.7467	5.3688
38	10:30:45	0.4037	0.4033	53.7733	5.3652
39	11:00:47	0.4038	0.4034	53.7867	5.3633
40	11:30:49	0.4038	0.4034	53.7867	5.3633
41	12:00:52	0.4039	0.4035	53.8000	5.3615
42	12:30:54	0.4039	0.4035	53.8000	5.3615
43	13:00:56	0.4039	0.4035	53.8000	5.3615
44	13:30:58	0.4040	0.4036	53.8133	5.3597
45	14:01:01	0.4040	0.4036	53.8133	5.3597
46	14:31:03	0.4040	0.4036	53.8133	5.3597
47	15:01:05	0.4041	0.4037	53.8267	5.3578
48	15:31:08	0.4041	0.4037	53.8267	5.3578
49	16:01:10	0.4041	0.4037	53.8267	5.3578
50	16:31:12	0.4042	0.4038	53.8400	5.3560
51	17:01:14	0.4043	0.4039	53.8533	5.3542
52	17:31:17	0.4044	0.4040	53.8667	5.3523
53	17:48:58	0.4044	0.4040	53.8667	5.3523

Consolidation Test Results
(Sequence 14) Load 8.000 tsf

Consolidation Test Results
(Sequence 14) Load 8.000 tsf

Project: LA-16 Non-Rock Demo
Location:
Job Number: 11-19

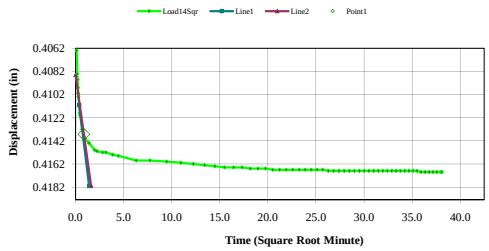
Project Number: 10883-011-00
Test Date: 13 May 2011
Test Number:

Sample Number:
Boring Number: BHSP-SI4-30
Depth: 11 - 13 feet
Sample Type: Undisturbed

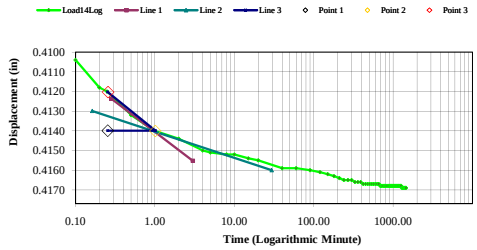
Soil Description: Peat (PT)
Remarks:

Index	Time	Displacement (in)	Settlement (in)	Axial Strain (%)	Void Ratio
0	00:00:00	0.4044	0.4040	53.8667	5.3523
1	00:00:01	0.4064	0.4060	54.1333	5.3156
2	00:00:02	0.4084	0.4080	54.4000	5.2789
3	00:00:03	0.4089	0.4085	54.4667	5.2697
4	00:00:04	0.4096	0.4092	54.5600	5.2568
5	00:00:05	0.4101	0.4097	54.6267	5.2477
6	00:00:06	0.4104	0.4100	54.6667	5.2422
7	00:00:12	0.4118	0.4114	54.8533	5.2165
8	00:00:15	0.4120	0.4116	54.8800	5.2128
9	00:00:30	0.4132	0.4128	55.0400	5.1908
10	00:01:00	0.4140	0.4136	55.1467	5.1761
11	00:02:00	0.4144	0.4140	55.2000	5.1687
12	00:04:00	0.4150	0.4146	55.2800	5.1577
13	00:05:00	0.4151	0.4147	55.2933	5.1559
14	00:08:00	0.4152	0.4148	55.3067	5.1540
15	00:10:01	0.4152	0.4148	55.3067	5.1540
16	00:15:01	0.4154	0.4150	55.3333	5.1504
17	00:20:01	0.4155	0.4151	55.3467	5.1485
18	00:40:03	0.4159	0.4155	55.4000	5.1412
19	01:00:04	0.4159	0.4155	55.4000	5.1412
20	01:30:07	0.4160	0.4156	55.4133	5.1393
21	02:00:09	0.4161	0.4157	55.4267	5.1375
22	02:30:11	0.4162	0.4158	55.4400	5.1357
23	03:00:13	0.4163	0.4159	55.4533	5.1338
24	03:30:16	0.4164	0.4160	55.4667	5.1320
25	04:00:18	0.4165	0.4161	55.4800	5.1302
26	04:30:20	0.4165	0.4161	55.4800	5.1302
27	05:00:23	0.4165	0.4161	55.4800	5.1302
28	05:30:25	0.4166	0.4162	55.4933	5.1283
29	06:00:27	0.4166	0.4162	55.4933	5.1283
30	06:30:29	0.4166	0.4162	55.4933	5.1283
31	07:00:32	0.4167	0.4163	55.5067	5.1265
32	07:30:34	0.4167	0.4163	55.5067	5.1265
33	08:00:36	0.4167	0.4163	55.5067	5.1265
34	08:30:39	0.4167	0.4163	55.5067	5.1265
35	09:00:41	0.4167	0.4163	55.5067	5.1265
36	09:30:43	0.4167	0.4163	55.5067	5.1265

Consolidation Graph (Squareroot Time)



Consolidation Graph (Logarithmic Time)



37	10:00:45	0.4167	0.4163	55.5067	5.1265
38	10:30:48	0.4167	0.4163	55.5067	5.1265
39	11:00:50	0.4167	0.4163	55.5067	5.1265
40	11:30:52	0.4168	0.4164	55.5200	5.1247
41	12:00:55	0.4168	0.4164	55.5200	5.1247
42	12:30:57	0.4168	0.4164	55.5200	5.1247
43	13:00:59	0.4168	0.4164	55.5200	5.1247
44	13:31:01	0.4168	0.4164	55.5200	5.1247
45	14:01:04	0.4168	0.4164	55.5200	5.1247
46	14:31:06	0.4168	0.4164	55.5200	5.1247
47	15:01:08	0.4168	0.4164	55.5200	5.1247
48	15:31:11	0.4168	0.4164	55.5200	5.1247
49	16:01:13	0.4168	0.4164	55.5200	5.1247
50	16:31:15	0.4168	0.4164	55.5200	5.1247
51	17:01:18	0.4168	0.4164	55.5200	5.1247
52	17:31:20	0.4168	0.4164	55.5200	5.1247
53	18:01:22	0.4168	0.4164	55.5200	5.1247
54	18:31:24	0.4168	0.4164	55.5200	5.1247
55	19:01:27	0.4168	0.4164	55.5200	5.1247
56	19:31:29	0.4168	0.4164	55.5200	5.1247
57	20:01:31	0.4168	0.4164	55.5200	5.1247
58	20:31:34	0.4168	0.4164	55.5200	5.1247
59	21:01:36	0.4168	0.4164	55.5200	5.1247
60	21:31:38	0.4169	0.4165	55.5333	5.1228
61	22:01:40	0.4169	0.4165	55.5333	5.1228
62	22:31:43	0.4169	0.4165	55.5333	5.1228
63	23:01:45	0.4169	0.4165	55.5333	5.1228
64	23:31:47	0.4169	0.4165	55.5333	5.1228
65	24:01:50	0.4169	0.4165	55.5333	5.1228
66	24:10:22	0.4169	0.4165	55.5333	5.1228

Project: Non-Rock Alternatives to Shoreline Protection Demonstration (LA-16)
Project Location: West Shore of Shark Island, Iberia Parish, Louisiana
Project No.: 10883-011-00

Boring No.	Field Vane Test		Field Vane Instrument Used	Field Vane Dimensions (mm)	Instrument Reading	Shear Stress Interpolated from Geonor H-10 Vane Borer Calibration Curves			Plasticity Index	Correction Factor	PI Corrected Shear Stress	
	Depth Below Barge Deck (feet)	Depth Below Mudline (feet)				kN/m^2	psf	ksf	%		psf	ksf
BHSP-SI1-50	21	15	2555	65/130	8	4.18	87	0.087	OH	0.7	61	0.061
BHSP-SI1-50	26	20	2555	65/130	9	4.71	98	0.098	OH	0.7	69	0.069
BHSP-SI2-30	8	3	2555	65/130	3	1.57	33	0.033	PT	0.5	16	0.016
BHSP-SI2-30	15	10	2555	65/130	9	4.71	98	0.098	209	0.5	49	0.049
BHSP-SI3-30	11	6	2555	65/130	8	4.18	87	0.087	PT	0.5	44	0.044
BHSP-SI3-30	17	12	2555	65/130	7	3.66	76	0.076	PT	0.5	38	0.038
BHSP-SI4-30	10	5	2555	65/130	8	4.18	87	0.087	PT	0.5	44	0.044
BHSP-SI4-30	13	8	2555	65/130	5	2.62	55	0.055	PT	0.5	27	0.027

Notes:

1. Field Vane testing was performed prior to sample extrusion/classification and soil type was not known. Peat is highly permeable and is poorly suited to the Field Vane Shear test.
2. Correction factors were selected based on Bjerrum's (1972) Recommended curve, as found in Figure 5.1 of "Recommended Practice for Soft Ground Site Characterization: Arthur Casagrande Lecture" by Ladd and Degroot (2003). Figure 5.1 correlates correction factors to the Plasticity Index of the material.
3. Correction factors for peat were assumed to be 0.5 based on "Engineering Properties of Fibrous Peats" by Mesri and Anjlouni. A review of miniature vane shear testing and triaxial compression testing shows good agreement between the two test types, suggesting that miniature vane and triaxial tests are better suited to these materials.
4. "OH" clays without a PI test were assigned a correction factor of 0.7 based on a review of OH materials from this project.
5. "CH" clays without a PI test were assigned a correction factor of 0.8 based on a review of CH materials from this project.

APPENDIX D
Report Limitations and Guidelines for Use

APPENDIX D
REPORT LIMITATIONS AND GUIDELINES FOR USE

This appendix provides information to help you manage your risks with respect to the use of this report.

Geotechnical Services Are Performed for Specific Purposes, Persons and Projects

This report has been prepared for the exclusive use by USDA-NRCS and their authorized agents for for the LA-16 Non-Rock Alternatives to Shoreline Protection Demonstration Project (Non-Rock Demo Project) located in Lafourche, Jefferson and Iberia Parish, Louisiana. This report may be made available to regulatory agencies for review. This report is not intended for use by others, and the information contained herein is not applicable to other sites.

GeoEngineers structures our services to meet the specific needs of our clients. For example, a geotechnical or geologic study conducted for a civil engineer or architect may not fulfill the needs of a construction contractor or even another civil engineer or architect that are involved in the same project. Because each geotechnical or geologic study is unique, each geotechnical engineering or geologic report is unique, prepared solely for the specific client and project site. Our report is prepared for the exclusive use of our Client. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the client and generally accepted geotechnical practices in this area at the time this report was prepared. This report should not be applied for any purpose or project except the one originally contemplated.

A Geotechnical Engineering or Geologic Report Is Based on a Unique Set of Project-specific Factors

This report has been prepared for the LA-16 Non-Rock Alternatives to Shoreline Protection Demonstration Project (Non-Rock Demo Project) located in Lafourche, Jefferson and Iberia Parish, Louisiana. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, do not rely on this report if it was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

For example, changes that can affect the applicability of this report include those that affect:

- the function of the proposed structure;

- elevation, configuration, location, orientation or weight of the proposed structure;
  - composition of the design team; or
  - project ownership.

If important changes are made after the date of this report, GeoEngineers should be given the opportunity to review our interpretations and recommendations and provide written modifications or confirmation, as appropriate.

Subsurface Conditions Can Change

This geotechnical or geologic report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the site, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Always contact GeoEngineers before applying a report to determine if it remains applicable.

Most Geotechnical and Geologic Findings Are Professional Opinions

Our interpretations of subsurface conditions are based on field observations from widely spaced sampling locations at the site. Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoEngineers reviewed field and laboratory data and then applied our professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ, sometimes significantly, from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

Geotechnical Engineering Report Recommendations Are Not Final

Do not over-rely on the preliminary construction recommendations included in this report. These recommendations are not final, because they were developed principally from GeoEngineers' professional judgment and opinion. GeoEngineers' recommendations can be finalized only by observing actual conditions revealed during construction. GeoEngineers cannot assume responsibility or liability for this report's recommendations if we do not perform construction observation.

Sufficient monitoring, testing and consultation by GeoEngineers should be provided during construction to confirm that the conditions encountered are consistent with those indicated by the explorations, to provide recommendations for design changes should the conditions revealed during the work differ from those anticipated, and to evaluate whether or not activities are completed in accordance with our recommendations. Retaining GeoEngineers for construction observation for this project is the most effective method of managing the risks associated with unanticipated conditions.

A Geotechnical Engineering or Geologic Report Could Be Subject to Misinterpretation

Misinterpretation of this report by other design team members can result in costly problems. You could lower that risk by having GeoEngineers confer with appropriate members of the design team after submitting the report. Also retain GeoEngineers to review pertinent elements of the design

team's plans and specifications. Contractors can also misinterpret a geotechnical engineering or geologic report. Reduce that risk by having GeoEngineers participate in pre-bid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Exploration Logs

Geotechnical engineers and geologists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering or geologic report should never be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, but recognize that separating logs from the report can elevate risk.

Give Contractors a Complete Report and Guidance

Some owners and design professionals believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering or geologic report, but preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with GeoEngineers and/or to conduct additional study to obtain the specific types of information they need or prefer. A pre-bid conference can also be valuable. Be sure contractors have sufficient time to perform additional study. Only then might an owner be in a position to give contractors the best information available, while requiring them to at least share the financial responsibilities stemming from unanticipated conditions. Further, a contingency for unanticipated conditions should be included in your project budget and schedule.

Contractors Are Responsible for Site Safety on Their Own Construction Projects

Our geotechnical recommendations are not intended to direct the contractor's procedures, methods, schedule or management of the work site. The contractor is solely responsible for job site safety and for managing construction operations to minimize risks to on-site personnel and to adjacent properties.

Read These Provisions Closely

Some clients, design professionals and contractors may not recognize that the geoscience practices (geotechnical engineering or geology) are far less exact than other engineering and natural science disciplines. This lack of understanding can create unrealistic expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory "limitations" provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you are unclear how these "Report Limitations and Guidelines for Use" apply to your project or site.

Geotechnical, Geologic and Environmental Reports Should Not Be Interchanged

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually relate any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground

storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding a specific project.

Biological Pollutants

This report does not include any interpretations, recommendations, findings, or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants and no conclusions or inferences should be drawn regarding Biological Pollutants, as they may relate to this project. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts.

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