



BROOKSIDE LABORATORIES, INC.
GEOTECHNICAL DIVISION
200 WHITE MOUNTAIN DRIVE
NEW BREMEN, OH 45869

**** PHYSICAL ANALYSIS REPORT ****

The Summit
Las Vegas, NV

File Number: 73668

Date Received/Started : 9/27/2019
Date Completed/Reported: 10/4/2019

Submitted By: Soil and Water Consulting

Lab Number	1801
Sample Description	AUGUSTA WHITE ON SITE PILE
Sample Condition	<u>XX</u> Normal ___ Other (see comments)

Method References

ASTM D5550
ASTM F1632
ASTM F1647 - Method A
ASTM F1815

D Values

** D10: 0.22
** D60: 0.63
** Coefficient of Uniformity: 2.88

*Reported values are an average of duplicated analysis

** NON A2LA ACCREDITED
* *This report may only be reproduced in its entirety.*
* *These results represent the sample submitted only.*



Geotechnical
(Putting Green Materials)
Certificate Number: 736.01

CAPPING CHARACTERISTICS

The Summit
Las Vegas, NV

File Number : 73668
 ** Date of Analysis **
 Start Date : 9/27/2019
 Completed : 10/4/2019

Submitted By: Soil and Water Consulting Reviewed by:

Tiffany Albers

Lab Number 1801
 Sample Description AUGUSTA WHITE
 ON SITE FILE

Particle Size Analysis

Clay	<.002mm	%	0.3
Silt	.002mm - .05mm	%	2.0
Sand	.05mm - 2.00mm	%	97.7
Gravel	> 2.0mm	%	0.0

Org Mat 360 deg C (LOI) 0.12

Sand Fractions

Sieve Size		% Retained
#	mm	
10 -	2.0	Fine Gravel 0.0
18 -	1.0	Very Coarse Sand 1.4
35 -	.500	Coarse Sand 52.7
60 -	.250	Medium Sand 34.3
100 -	.150	Fine Sand 5.4
140 -	.106	Very Fine Sand 2.3
270 -	.053	Very Fine Sand 1.6

Soil Moisture Measurements

Saturated Conductivity in/hr 34.0

Soil Density

Bulk Density	g/cc	1.55
Particle Density	g/cc	2.73

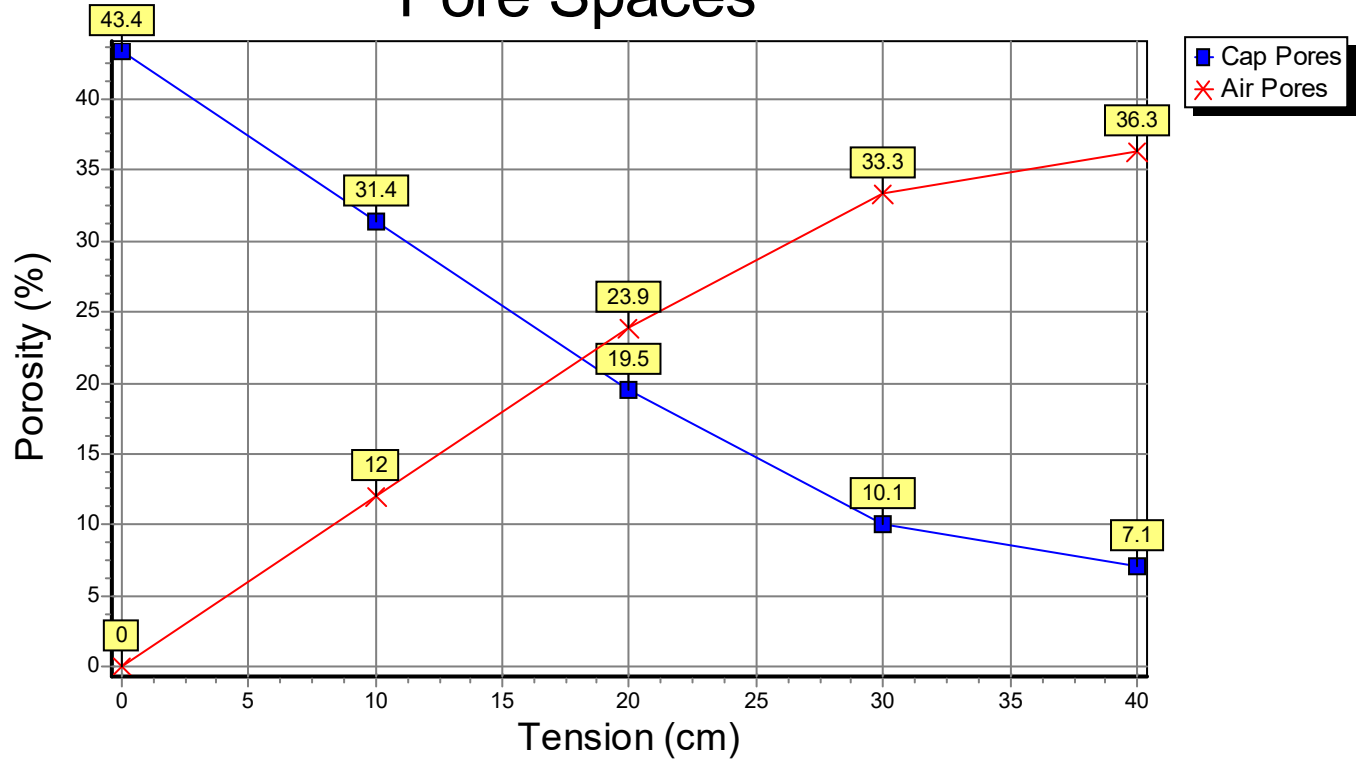
MOISTURE RETENTION %**PORE SPACE %**

		TOTAL	CAPILLARY	AIR FILLED
SATURATION	21.0	43.4	43.4	0.0
10 CM	20.3	43.4	31.4	12.0
20 CM	12.6	43.4	19.5	23.9
30 CM	6.5	43.4	10.1	33.3
40 CM	4.6	43.4	7.1	36.3

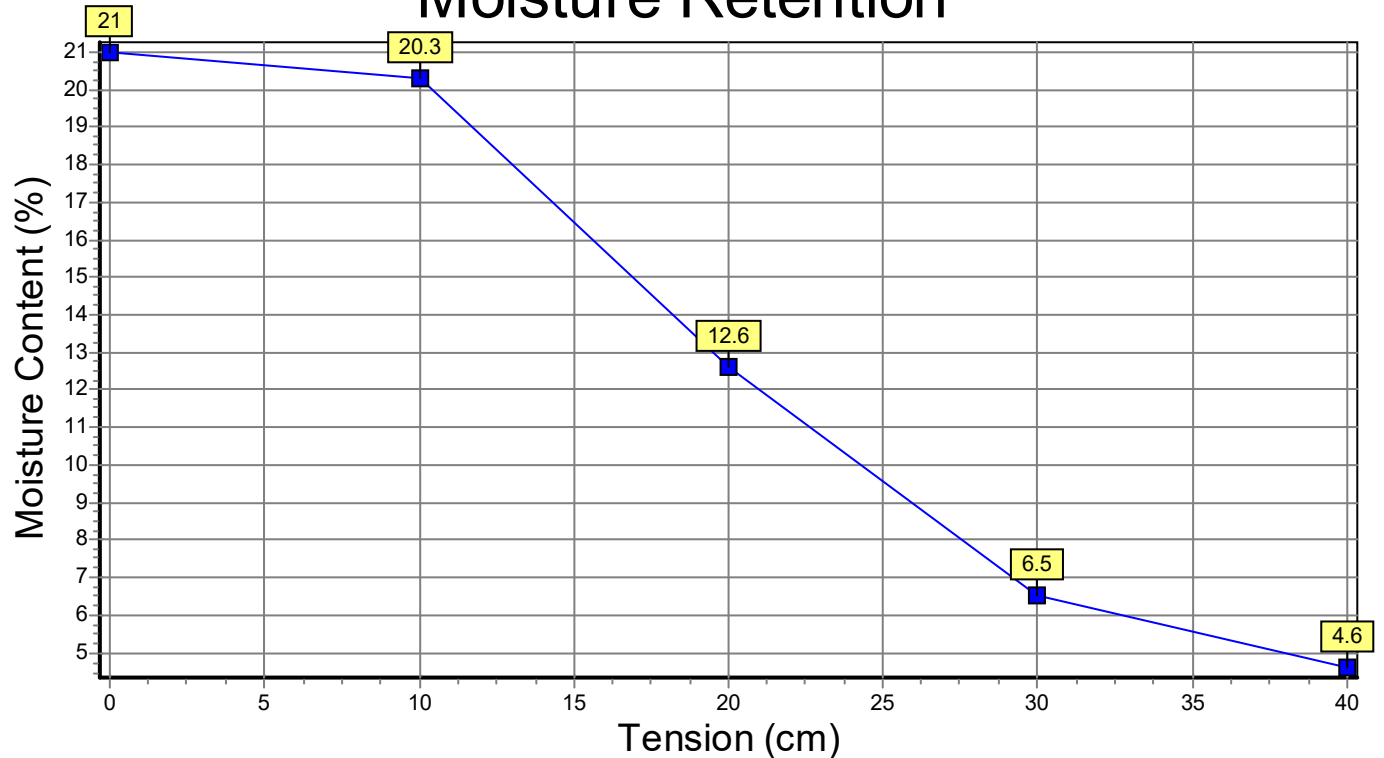
File Number: 73668
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 ON SITE PILE

Pore Spaces



Moisture Retention





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Lab Number
Sample Description

1802
EMERALD SAND
ON SITE PILE

Sample Condition

XX Normal ___ Other (see comments)

Method References

ASTM D5550
ASTM F1632
ASTM F1647 - Method A
ASTM F1815

D Values

** D10: 0.22
** D60: 0.62
** Coefficient of Uniformity: 2.82

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CAPPING CHARACTERISTICS

The Summit
Las Vegas, NV

File Number : 73668
 ** Date of Analysis **
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Submitted By: Soil and Water Consulting Reviewed by:

Tiffany Albers

Lab Number 1802
 Sample Description EMERALD SAND
 ON SITE FILE

Particle Size Analysis

Clay	<.002mm	%	0.1
Silt	.002mm - .05mm	%	1.8
Sand	.05mm - 2.00mm	%	97.7
Gravel	> 2.0mm	%	0.4

Org Mat 360 deg C (LOI) 0.14

Sand Fractions

Sieve Size		% Retained
#	mm	
10 -	2.0	Fine Gravel 0.4
18 -	1.0	Very Coarse Sand 8.4
35 -	.500	Coarse Sand 40.9
60 -	.250	Medium Sand 38.0
100 -	.150	Fine Sand 7.6
140 -	.106	Very Fine Sand 1.8
270 -	.053	Very Fine Sand 1.0

Soil Moisture Measurements

Saturated Conductivity in/hr 44.8

Soil Density

Bulk Density	g/cc	1.56
Particle Density	g/cc	2.71

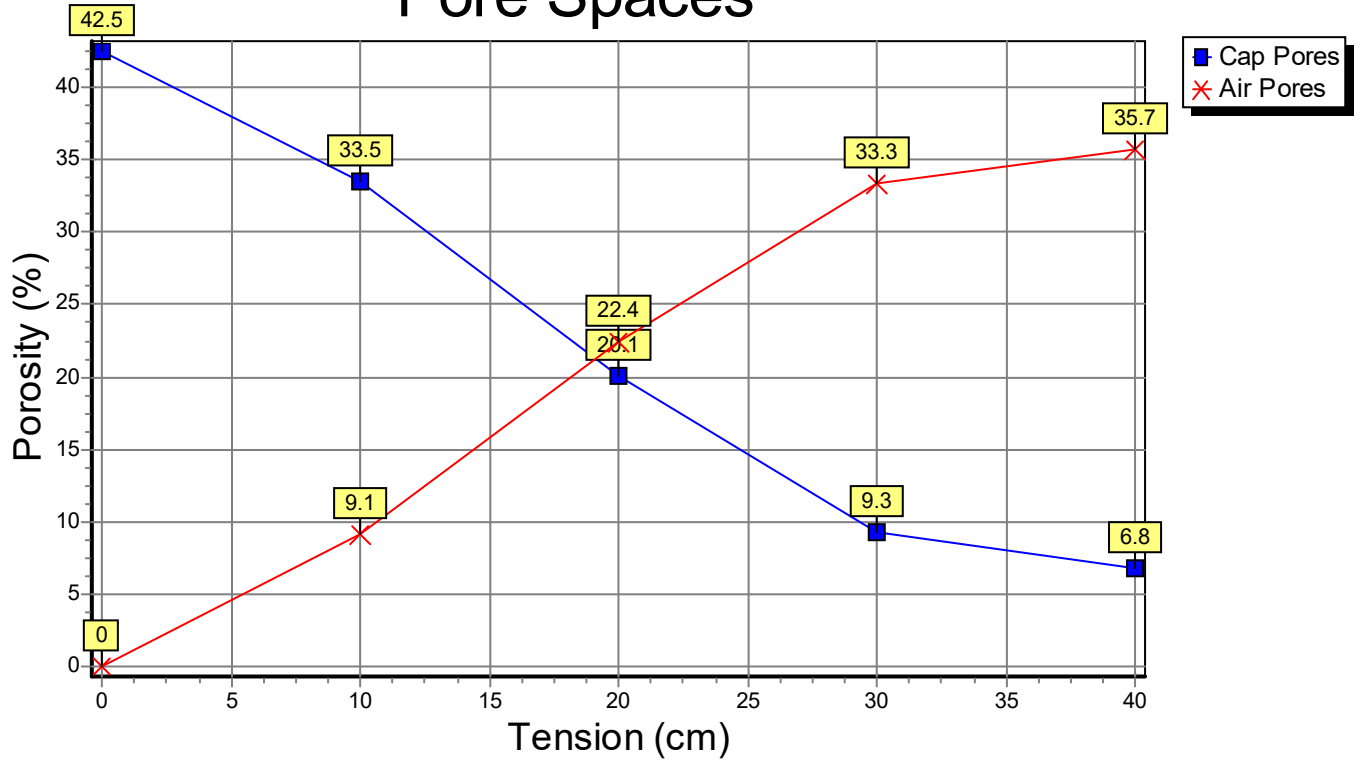
MOISTURE RETENTION %**PORE SPACE %**

		TOTAL	CAPILLARY	AIR FILLED
SATURATION	22.2	42.5	42.5	0.0
10 CM	21.5	42.5	33.5	9.1
20 CM	13.0	42.5	20.1	22.4
30 CM	6.0	42.5	9.3	33.3
40 CM	4.4	42.5	6.8	35.7

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 ON SITE PILE

Pore Spaces



Moisture Retention

