



Professional Service Industries, Inc.
 16550 Scheer Blvd, Suite 1
 Hudson, FL 34667
 Eng Certificate Of Authorization 3684
 Phone: (727) 868-9526
 Fax: (727) 868-0094

Material Test Report

Report No: MAT:0390975-11-S3
Issue No: 1

Client: LANG DEVELOPMENT
 C/O PASCO EXCAVATING LLC,
 18744 COUNTYLINE RD
 SPRING HILL, FL 34610

CC: MARA HUNT
 THERESA MCLAUGHLIN
 THOMAS LANG

Project: PASCO MINE
 SPRING HILL, FL

These test results apply only to the specific locations and materials noted and may not represent any other locations or elevations. This report may not be reproduced, except in full, without written permission by Professional Service Industries, Inc. If a non-compliance appears on this report, to the extent that the reported non-compliance impacts the project, the resolution is outside the PSI scope of engagement.

James Kenney

Approved Signatory: James Kenney (Branch Manager)
 Date of Issue: 10/17/2016

Sample Details

Sample ID: 0390975-11-S3 **Lift:**

Client Sample ID:

Date Sampled: 10/05/16

Sampled By: John Stahl

Specification: AGSO Sec. 548 - Retaining Wall

Supplier:

Source:

Material: Light Gray Silty SAND

Sampling Method:

Soil Description: Light Gray Silty SAND

General Location: PHASE 1 - LEVEL 2 - EAST OF HAUL ROAD (EAST PIT)

Location: PHASE 1 - LEVEL 2 - EAST OF HAUL ROAD (EAST PIT)

Particle Size Distribution

Method: AASHTO T 27, AASHTO T 11

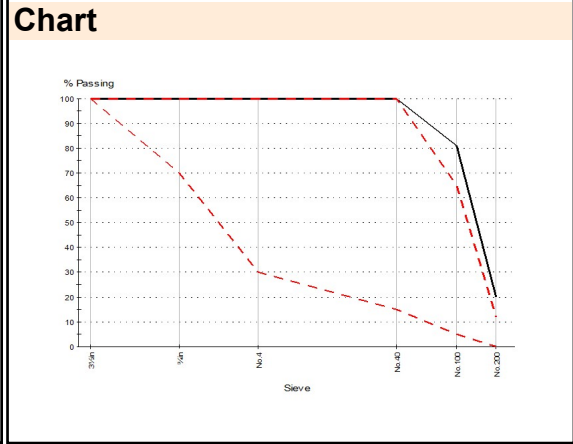
Date Tested: 10/14/2016

Tested By: William McGinn

Sieve Size	% Passing	Limits
3/4" (90.0mm)	100	100
3/8" (19.0mm)	100	70 to 100
No.4 (4.75mm)	100	30 to 100
No.40 (425µm)	100	15 to 100
No.100 (150µm)	81*	5 to 65
No.200 (75µm)	20*	≤12

Other Test Results

Description	Method	Result	Limits
Organic Content (%)	AASHTO T 267	1.10	
Date Tested		10/14/2016	
Liquid Limit (%)	AASHTO T 89-13	N/A	≤15
Plastic Limit (%)	AASHTO T 90-00	NP	
Plasticity Index	AASHTO T 90-00	NP	≤6
Tested By		William McGinn	
Date Tested		10/13/2016	
pH	FM 5-550	5.80	5 to 9
Date Tested		10/14/2016	
Reading 1	FM 5-551	3.9	
Multiplier 1		10000	
Resistivity 1 (ohm-cm)		39000	
Reading 2		3.5	
Multiplier 2		10000	
Resistivity 2 (ohm-cm)		35000	
Reading 3		3.3	
Multiplier 3		10000	
Resistivity 3 (ohm-cm)		33000	
Reading 4		3.2	
Multiplier 4		10000	
Resistivity 4 (ohm-cm)		32000	
Min Resistivity (ohm-cm)		32000	>3000
Date Tested		10/14/2016	
Drops	FM 5-552	1	
Chloride Ion (ppm)		60	<100
Date Tested		10/14/2016	
Meter	FM 5-553	39.6	<200
Sulfate Ion (ppm)		146.7	
Date Tested		10/14/2016	



Comments

NP = Non Plastic
 * = Result does not meet the specification
 Soil Classification: A-2-4



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Limerock Bearing Ratio Test Report

Report No: LBR:0390975-11-S3
Issue No: 1

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CC: MARA HUNT
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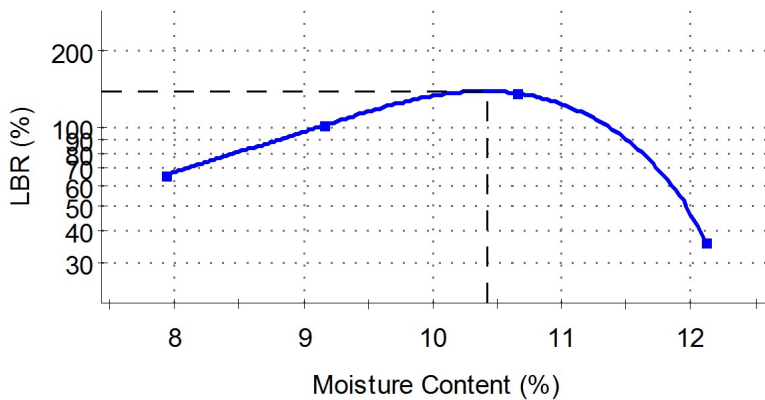
James Kenney

Approved Signatory: James Kenney (Branch Manager)
 Date of Issue: 10/17/2016

Sample Details

Sample ID: 0390975-11-S3	Date Sampled: 10/5/2016
Client Sample ID:	Sampling Method:
Source:	Material: Light Gray Silty SAND
Specification: AGSO Sec. 548 - Retaining Wall	Location: PHASE 1 - LEVEL 2 - EAST OF HAUL ROAD (EAST PIT)
Tested By: William McGinn	Date Tested: 10/14/2016

Moisture vs LBR

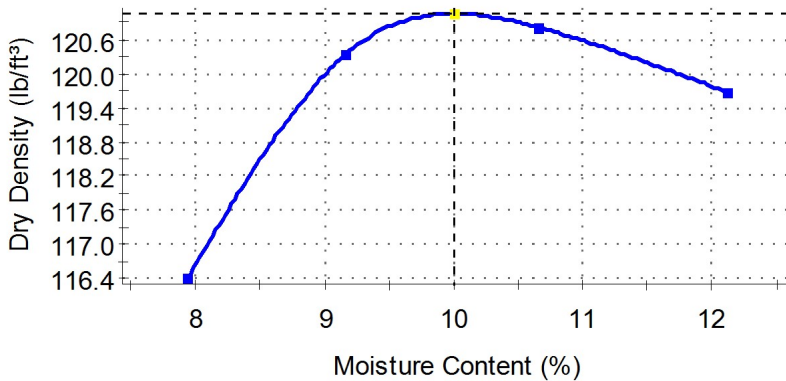


Test Results

FM 5-515

Required LBR (%): 40
Maximum LBR (%): 140
MDD (lb/ft³): 121
OMC (%): 10

Moisture vs Dry Density



Comments