



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:0390975-10-S2**  
**Issue No: 2**

**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: 10/4/2016

**Sample Details**

**Sample ID:** 0390975-10-S2 **Lift:**

**Client Sample ID:**

**Date Sampled:** 08/23/16

**Sampled By:** William Morrison

**Specification:** AGSO Sec. 548 - Retaining Wall

**Supplier:**

**Source:** STOCKPILE

**Material:** Yellowish Brown Silty SAND

**Sampling Method:**

**Soil Description:** Yellowish Brown Silty SAND

**General Location:** STOCKPILE ONSITE MATERIAL

**Location:** PILE AT S.E. CORNER OF MINE

**Particle Size Distribution**

**Method:** AASHTO T 27, AASHTO T 11

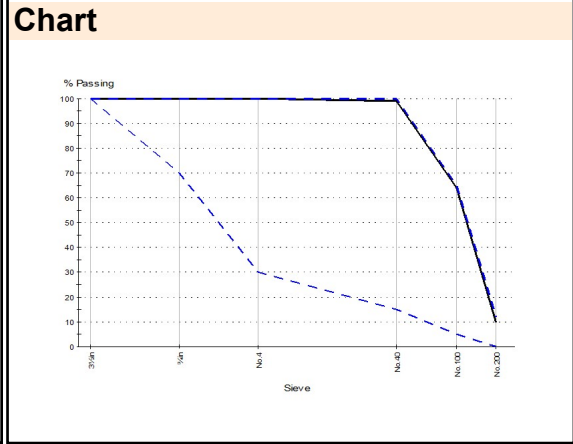
**Date Tested:**

**Tested By:**

Sieve Size	% Passing	Limits
3/4in (90.0mm)	100	100
1/2in (19.0mm)	100	70 to 100
No.4 (4.75mm)	100	30 to 100
No.40 (425µm)	99	15 to 100
No.100 (150µm)	64	5 to 65
No.200 (75µm)	9.6	≤12

**Other Test Results**

Description	Method	Result	Limits
Organic Content (%)	AASHTO T 267	0.50	
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	8/31/2016		
Maximum Dry Unit Weight (lb/ft³)	ASTM D 1557	108.2	
Corrected Maximum Dry Unit Weight (lb/ft³)		108.2	
Optimum Water Content (%)		13.6	
Corrected Optimum Water Content (%)		13.6	
Method		A	
Preparation Method		Dry	
Tested By	William McGinn		
Date Tested	8/30/2016		
pH	FM 5-550	6.60	5 to 9
Reading 1	FM 5-551	2.6	
Multiplier 1		10000	
Resistivity 1 (ohm-cm)		26000	
Reading 2		2.3	
Multiplier 2		10000	
Resistivity 2 (ohm-cm)		23000	
Reading 3		2.0	
Multiplier 3		10000	
Resistivity 3 (ohm-cm)		20000	
Reading 4		2.0	
Multiplier 4		10000	
Resistivity 4 (ohm-cm)		20000	
Min Resistivity (ohm-cm)		20000	>3000
Drops	FM 5-552	1	
Chloride Ion (ppm)		60	<100



**Comments**

NP = Non Plastic  
 Soil Classification: A-3



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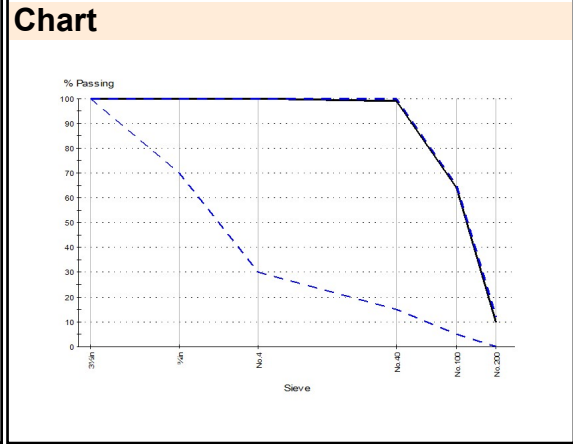
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**Other Test Results**

Description	Method	Result	Limits
Meter	FM 5-553	27.8	<200
Sulfate Ion (ppm)		193.8	



**Comments**

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