

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.

# Material Test Report

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

**Project:** PASCO MINE  
 SPRING HILL, FL

**CC:** BRENDA  
 NEWBERRY  
 MARA HUNT  
 THERESA  
 MCLAUGHLIN  
 THOMAS LANG

Approved Signatory: James Kenney (Branch Manager)  
 Date of Issue: 1/17/2018

## Sample Details

**Sample ID:** 0390975-21-S5    **Lift:**

**Client Sample ID:**

**Date Sampled:** 12/13/17

**Sampled By:** John Stahl

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

**Supplier:**

**Source:**

**Material:** Gray SAND

**Sampling Method:**

**Soil Description:**

**General Location:** COUNTY LINE MINE

**Location:** TOP SOUTH SECTION 4

## Particle Size Distribution

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

**Date Tested:** 1/17/2018

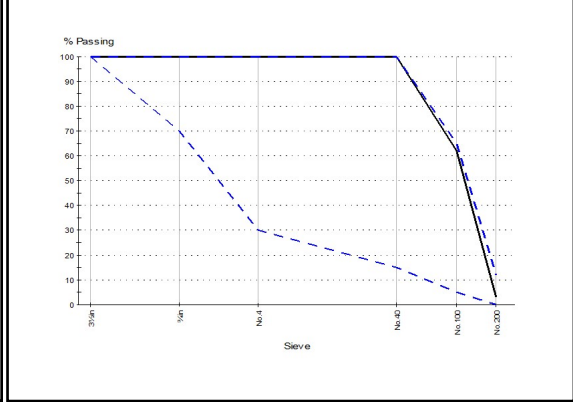
**Tested By:** Lab

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)	100	15 to 100
No.100 (150µm)	62	5 to 65
No.200 (75µm)	2.9	≤12

## Other Test Results

Description	Method	Result	Limits
Maximum Dry Unit Weight (lb/ft³)	ASTM D 1557	107.4	
Corrected Maximum Dry Unit Weight (lb/ft³)		107.4	
Optimum Water Content (%)		8.6	
Corrected Optimum Water Content (%)		8.6	
Tested By		Lab	
Date Tested		1/17/2018	
Approximate maximum grain size	ASTM D 4318		
Material retained on 425µm (No. 40) (%)			
Method of Removal			
Grooving Tool Type			
Specimen preparation method			
Drying Method			
Special selection process			
Rolling Method for PL			
As Received Water Content (%)			
Liquid Limit Device Type			
Liquid Limit		N/A	≤15
Plastic Limit		NP	
Plasticity Index		NP	≤6
Liquid Limit Procedure			
Tested By		Lab	
Date Tested		1/17/2018	
Organic Content 1	FM 1-T267	1.45	
Organic Content 2		1.27	
Organic Content 3		1.30	
Average Organic Content		1.3	≤2.0
pH	FM 5-550	6.54	5 to 9

## Chart



## Comments

NP = Non Plastic

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**Location:** TOP SOUTH SECTION 4

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

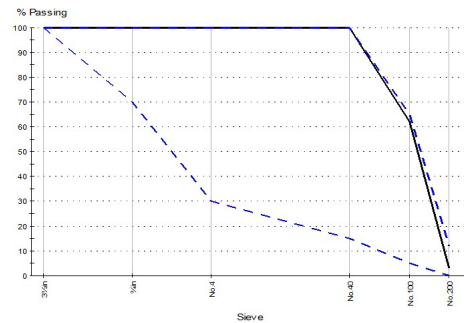
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## Other Test Results

Description	Method	Result	Limits
Reading 1	FM 5-551	11.0	
Multiplier 1		1000	
Resistivity 1 (ohm-cm)		11000	
Reading 2		9.0	
Multiplier 2		1000	
Resistivity 2 (ohm-cm)		9000	
Reading 3		8.0	
Multiplier 3		1000	
Resistivity 3 (ohm-cm)		8000	
Reading 4		10.0	
Multiplier 4		1000	
Resistivity 4 (ohm-cm)		10000	
Min Resistivity (ohm-cm)		8000	>3000
Drops	FM 5-552	1	
Chloride Ion (ppm)		37	<100
Meter	FM 5-553	134.0	<200
Sulfate Ion (ppm)		6.0	

## Chart



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