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

Report No: MAT:0390975-21-S2
Issue No: 2

Material Test Report

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

CC: BRENDA NEWBERRY
MARA HUNT
THERESA MCLAUGHLIN
THOMAS LANG

Project: PASCO MINE
SPRING HILL, FL

Approved Signatory: James Kenney (Branch Manager)
Date of Issue: 3/22/2018

Sample Details

Sample ID: 0390975-21-S2 **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: US 41 MINE
Location: LEVEL 1 PHASE 1

Other Test Results

Description	Method	Result	Limits
	AASHTO M 145		
General Classification		Granular Materials	
Group Classification		A-3(0)	
Tested By		William McGinn	
Date Tested		1/15/2018	
Maximum Dry Unit Weight (lbf/ft³)	ASTM D 1557	105.1	
Corrected Maximum Dry Unit Weight (lbf/ft³)		105.1	
Optimum Water Content (%)		11.4	
Corrected Optimum Water Content (%)		11.4	
Tested By		Lab	
Date Tested		1/15/2018	
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		1/15/2018	

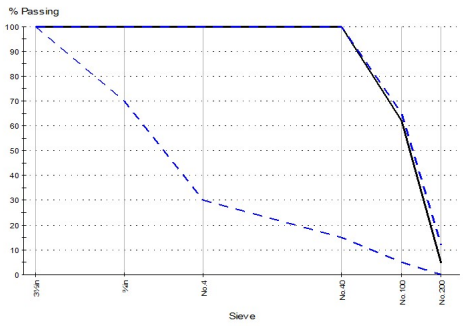
Particle Size Distribution

Method: AASHTO T 27, AASHTO T 11

Date Tested: 1/15/2018
Tested By: Lab

Sieve Size	% Passing	Limits
3½in (90.0mm)	100	100
¾in (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)	4.6	≤12

Chart



Comments

NP = Non Plastic

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Location: LEVEL 1 PHASE 1

Other Test Results

Description	Method	Result	Limits
Organic Content 1	FM 1-T267	0.68	
Organic Content 2		0.69	
Organic Content 3		0.68	
Average Organic Content		0.7	≤2.0
pH	FM 5-550	6.10	5 to 9
Reading 1	FM 5-551	28.0	
Multiplier 1		1000	
Resistivity 1 (ohm-cm)		28000	
Reading 2		32.0	
Multiplier 2		1000	
Resistivity 2 (ohm-cm)		32000	
Reading 3		20.0	
Multiplier 3		1000	
Resistivity 3 (ohm-cm)		20000	
Reading 4		18.0	
Multiplier 4		1000	
Resistivity 4 (ohm-cm)		18000	
Min Resistivity (ohm-cm)		18000	>3000
Drops	FM 5-552	1	
Chloride Ion (ppm)		45	<100
Meter	FM 5-553	134.0	<200
Sulfate Ion (ppm)		25.0	

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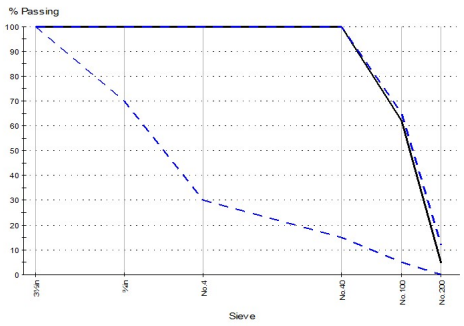

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