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Material Test Report

Report No: MAT:0390975-10-S1

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.

Approved Signatory: James Kenney (Branch Manager)
 Date of Issue: 10/4/2016

Sample Details

Sample ID: 0390975-10-S1 **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 Fine Sand

Sampling Method:

Soil Description: Yellowish Brown Fine Sand

General Location: STOCKPILE ONSITE MATERIAL

Location: SOUTH PILE AT ENTRANCE

Particle Size Distribution

Method: AASHTO T 27, AASHTO T 11

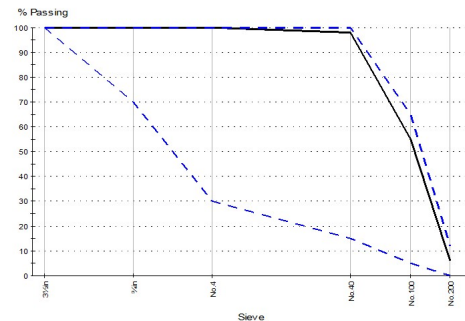
Date Tested:
Tested By:

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)	98	15 to 100
No.100 (150µm)	55	5 to 65
No.200 (75µm)	6.0	≤12

Other Test Results

Description	Method	Result	Limits
Organic Content (%)	AASHTO T 267	0.20	
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	108.8	
Corrected Maximum Dry Unit Weight (lb/ft³)		108.8	
Optimum Water Content (%)		11.5	
Corrected Optimum Water Content (%)		11.5	
Method		A	
Preparation Method		Dry	
Tested By	William McGinn		
Date Tested	8/30/2016		
pH	FM 5-550	6.90	5 to 9
Reading 1	FM 5-551		
Multiplier 1			
Resistivity 1 (ohm-cm)			
Reading 2			
Multiplier 2			
Resistivity 2 (ohm-cm)			
Reading 3			
Multiplier 3			
Resistivity 3 (ohm-cm)			
Min Resistivity (ohm-cm)			>3000
Drops	FM 5-552	1	
Chloride Ion (ppm)		60	<100
Meter	FM 5-553	48.4	<200
Sulfate Ion (ppm)		120.3	

Chart



Comments

NP = Non Plastic
 Soil Classification: A-3