

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 | 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-S4 **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: LEVEL 2 NORTH SECTION 3

Particle Size Distribution

Method: AASHTO T 27, AASHTO T 11

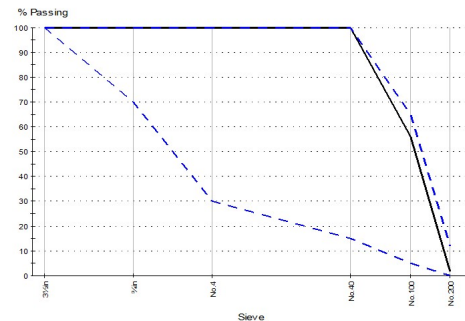
Date Tested: 1/16/2018
Tested By: Lab

| 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) | 56 | 5 to 65 |
| No.200 (75µm) | 1.8 | ≤12 |

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 | | 1/16/2018 | |
| Maximum Dry Unit Weight (lb/ft³) | ASTM D 1557 | 104.6 | |
| Corrected Maximum Dry Unit Weight (lb/ft³) | | 104.6 | |
| Optimum Water Content (%) | | 12.4 | |
| Corrected Optimum Water Content (%) | | 12.4 | |
| Tested By | | Lab | |
| Date Tested | | 1/16/2018 | |
| 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 | | 1/16/2018 | |

Chart



Comments

NP = Non Plastic

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| Client Sample ID: | | | |
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| 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: | LEVEL 2 NORTH SECTION 3 | | |

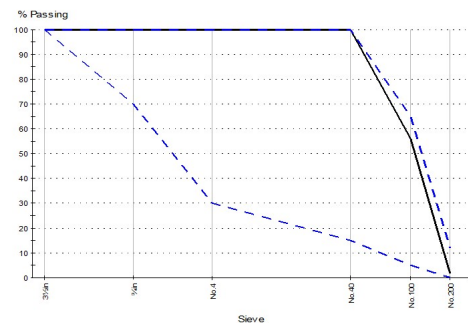
Particle Size Distribution

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Other Test Results

| Description | Method | Result | Limits |
|--------------------------|-----------|--------|--------|
| Organic Content 1 | FM 1-T267 | 0.77 | |
| Organic Content 2 | | 0.74 | |
| Organic Content 3 | | 0.84 | |
| Average Organic Content | | 0.8 | ≤2.0 |
| pH | FM 5-550 | 6.20 | 5 to 9 |
| Reading 1 | FM 5-551 | 30.0 | |
| Multiplier 1 | | 1000 | |
| Resistivity 1 (ohm-cm) | | 30000 | |
| Reading 2 | | 32.0 | |
| Multiplier 2 | | 1000 | |
| Resistivity 2 (ohm-cm) | | 32000 | |
| Reading 3 | | 33.0 | |
| Multiplier 3 | | 1000 | |
| Resistivity 3 (ohm-cm) | | 33000 | |
| Reading 4 | | 48.0 | |
| Multiplier 4 | | 1000 | |
| Resistivity 4 (ohm-cm) | | 48000 | |
| Min Resistivity (ohm-cm) | | 30000 | >3000 |
| Drops | FM 5-552 | 1 | |
| Chloride Ion (ppm) | | 15 | <100 |
| Meter | FM 5-553 | 134.0 | <200 |
| Sulfate Ion (ppm) | | 35.0 | |

Chart



Comments

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