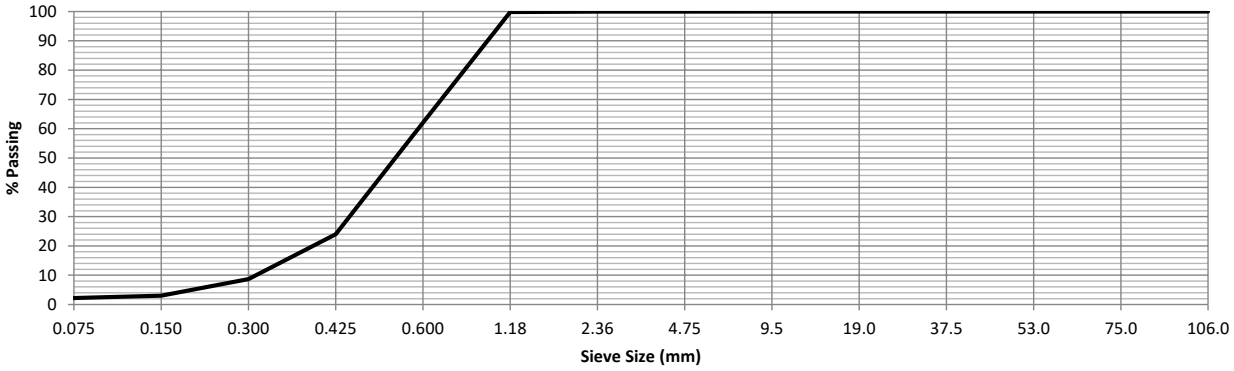
BLACKTOP MATERIALS ENGINEERING
PO Box 1018 Geraldton WA 6531
ACN: 098 257 071 / ABN: 52 098 257 071
PHONE: (08) 9921 1878
email: laboratory@blacktopengineering.com.au

# TEST CERTIFICATE

| | | | |
|---|---|---|---|
| **CLIENT:** | In-Situ Construction & Maintenance | **CERTIFICATE No.:** | **24BME2716** |
| **ADDRESS:** | 49 Bailey Street, Dongara Western Australia 6525 | **SAMPLE No.:** | 24BME2716 |
| **PROJECT:** | NGE Cataby Solar Farm | **DATE SAMPLED:** | 20/05/2024 |
| **PROJECT:** | Desert Run Sands | **DATE TESTED:** | 20-23/05/2024 |
| **LOCATION:** | Sample 1 | **PROJECT No.:** | Not Supplied |
| **DESCRIPTION:** | Sand minor Silt | **CONTRACT No.:** | Not Supplied |
| **PROPOSED USE:** | Backfill | **CLIENT LOT No:** | Not Supplied |
| | | **PURCHASE ORDER No:** | PO-14051 |
| | | **TEST REQUEST No:** | Not Supplied |

## SOIL CLASSIFICATION TESTS




### PARTICLE SIZE DISTRIBUTION

in accordance with Test Method AS 1289 3.6.1

| Sieve Size (mm) | % Passing |
|---|---|
| 106.0 | 100 |
| 75.0 | 100 |
| 53.0 | 100 |
| 37.5 | 100 |
| 19.0 | 100 |
| 9.5 | 100 |
| 4.75 | 100 |
| 2.36 | 100 |
| 1.18 | 100 |
| 0.600 | 62 |
| 0.425 | 24 |
| 0.300 | 9 |
| 0.150 | 3 |
| 0.075 | 2 |

### ATTERBERG LIMITS

in accordance with Test Method AS 1289*

| | | |
|---|---|---|
| **Liquid Limit** (*3.9.1) | **22** | **%** |
| **Plastic Limit** (*3.2.1) | **Non Plastic** | **%** |
| **Plasticity Index** (*3.3.2) | **Non Plastic** | **%** |
| **Linear Shrinkage** (*3.4.1) | **0.0** | **%** |

**Note:**

Testing performed at Blacktop Materials Engineering Geraldton Laboratory 111 Anderson St Geraldton WA 6530.
Moisture contents determined by method AS 1289 2.1.1.
Tested as received. Sample supplied by client.

**Particle Size Distribution**

No upper and lower grading curve guides provided by client.

**Atterberg Limits**

Cone penetrometer method. Sample air dried. Preparation dry sieved.
No cracking, crumbling or curling with Linear Shrinkage.

**Approved Signatory :** _____ D. Sherman (Senior Materials Technician)

**Date :** ***23/05/2024***

Accredited for compliance with ISO/IEC 17025 - Testing.
Accreditation No 14505.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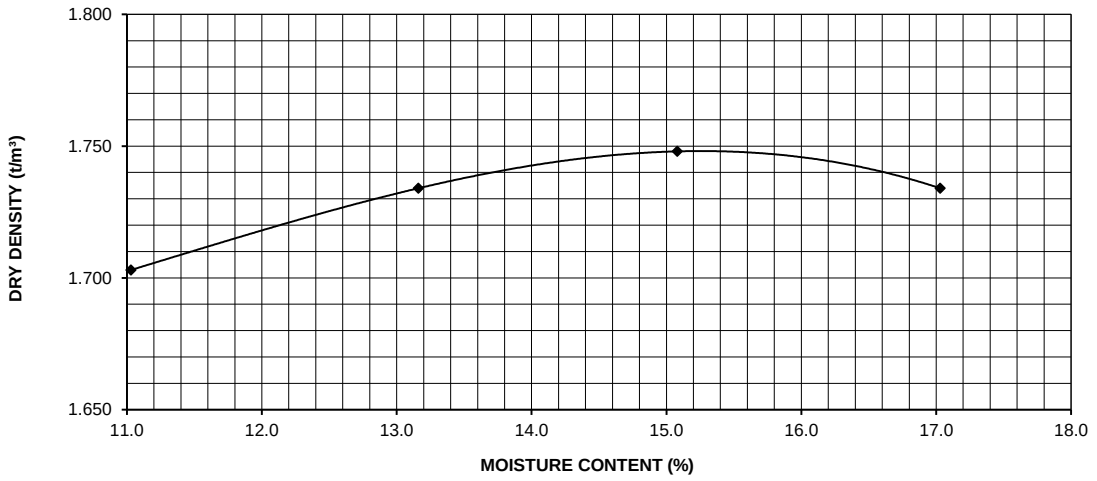
| | | **TEST REQUEST No:** | Not Supplied |

## DRY DENSITY/MOISTURE CONTENT RELATIONSHIP

-in accordance with Test Method AS 1289.5.2.1 (Modified Compaction)




**MAXIMUM DRY DENSITY (t/m³) = 1.75**

**OPTIMUM MOISTURE CONTENT (%) = 15.5**

**Note:**
Testing performed at Blacktop Materials Engineering Laboratory 111 Anderson St Geraldton WA 6530.
Tested as received. Sample supplied by client.
Liquid limit estimate has been based on a visual/tactile assessment by a competent person.
Minimum period of sample curing time - 2 hours.
0% retained on 19.0 mm sieve.

**Approved Signatory :** _____ D. Sherman (Senior Materials Technician)

**Date :** ***23/05/2024***

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## PERTH SAND PENETROMETER BLOWS PER 300 mm PENETRATION VERSES DRY DENSITY RATIO

TEST PERFORMED UNDER LABORATORY CONDITIONS IN ACCORDANCE WITH IN HOUSE METHOD BME-TP01

**LABORATORY COMPACTION DATA (AS 1289 5.2.1)**

Sample No.: BME 24BME2716

Max. Dry Density: (t/m$^3$) 1.749

Optimum Moisture: (%) 15.3

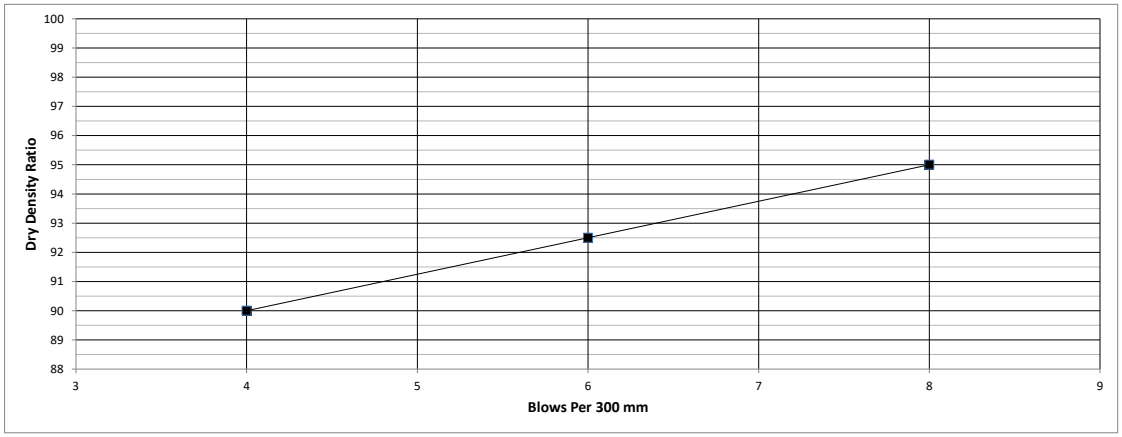
**DESIRED MOISTURE RATIO:** 75 %

**COMPACTION CONDITIONS:**

| Specimen | Dry Density Ratio (%) |
|---|---|
| **1** | 90 |
| **2** | 92.5 |
| **3** | 95 |

**CONDITIONS AT TEST:**

| Specimen | Blow Count |
|---|---|
| **1** | 4 |
| **2** | 6 |
| **3** | 8 |




**Notes:**

1. Laboratory testing performed by Blacktop Materials Engineering at 111 Anderson St Geraldton WA 6530.
2. Tested as received. Sample supplied by client.
3. Tested at density / moisture conditions as instructed by client.
4. Blacktop Materials Engineering stress that this test is performed under laboratory conditions for a particular material (Ref No. 24BME2716) at given moisture content and density ratios. The results are only valid for testing in the field when similar material and moisture conditions exist.
5. Perth Sand Penetrometer test conducted in accordance with AS 1289.6.3.3
6. Particle Size Distribution of 100% passing 2.36 mm sieve.

**Approved Signatory :** _____ D. Sherman (Senior Materials Technician)

**Date :** ***23/05/2024***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