

**REPUBLIC OF KENYA**

**MINISTRY OF ROADS AND TRANSPORT**

**STATE DEPARTMENT OF ROADS**

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Ref No. M.1782/35/L/10 Date: 23rd February, 2023

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| **Laboratory Test Report** |

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| **1. Customer’s Details:** KENYA AIRPORTS AUTHORITY /HAMETHYST LIMITED  **E-mail:** Not provided  **Address:** P.O.BOX 57653-00200 NAIROBI Phone: 0725337459  **2. Customer Contact:** 0725337459 6. Job Card No. 1763/S/2023  **3. Sample Description:** Gravel 7. Date fee paid: 16/02/2023  **4. Sampled by:** Client. 8. GOK MR No.4127577  **5. Date Sample received:** 09/02/2023 9. Date Analysis started:16/02/2023  **10. Additional information provided by the customer:** Proposed Musa Gate Access Road and Civil Works JKIA.  **Contract No.** KAA/ES//JKIA/0199/C     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | TEST RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | **Sample No.** | **Reference** | **Dosage**% | **Grading** | | | | | | | | | | **Atterberg Limits** | | | | | | | | **Compaction T180** | | | **CBR** | | | % Passing BS Sieve Size (mm) | | | | | | | | | | LL | | PL | PI | | LS | | PM |  | | OMC (%) | 4days Soak  (%) | Swell (%) | | 20 | 10 | 5 | | 2 | | | 0.425 | 0.075 | | % | | % | % | | % | |  | MDD  Kg/m3 | | | 718/S/22 | Sojin B/pit (A) | Neat | 100 | 76 | 56 | | 38 | | | 24 | 20 | | 53 | | 28 | 25 | | 13 | | 600 | 1653 | | 15.0 | 15 | 2.5 | | **SOIL COMPOSITION: Gravel = 62%, Sand = 18%, Silt/clay =20%** | | | | | | | | | | | | | | | | | | | | | | | | 719/S/22 | Kilo B/Pit (B) | Neat | 100 | 85 | 72 | | 48 | | | 27 | 22 | | 42 | | 23 | 18 | | 9 | | 486 | 1886 | | 10.0 | 35 | 1.1 | | **SOIL COMPOSITION: Gravel = 52%, Sand = 26%, Silt/clay =22%** | | | | | | | | | | | | | | | | | | | | | | | | 720/S/22 | Kenyatta Rd B/Pit (C) | Neat | 100 | 86 | 66 | | 51 | | | 33 | 29 | | 42 | | 24 | 18 | | 9 | | 594 | 1610 | | 21.4 | 29 | 0.3 | | **SOIL COMPOSITION: Gravel = 49%, Sand = 22%, Silt/clay =29%** | | | | | | | | | | | | | | | | | | | | | | | | 721/S/22 | Blend A&B 50:50 | Neat | 100 | 80 | 65 | | 45 | | | 30 | 21 | | 50 | | 30 | 20 | | 10 | | 600 | 1742 | | 12.0 | 20 | 2.0 | | **SOIL COMPOSITION: Gravel = 55%, Sand = 24%, Silt/clay =21%** | | | | | | | | | | | | | | | | | | | | | | | | 722/S/22 | Blend A&C 50:50 | Neat | 100 | 80 | | 63 | | 45 | 28 | | | 25 | 51 | 31 | | | 20 | 10 | 560 | | | 1714 | 18.3 | 26 | 2.1 | | **SOIL COMPOSITION: Gravel = 55%, Sand = 20%, Silt/clay =25%** | | | | | | | | | | | | | | | | | | | | | | | | 723/S/22 | Blend B&C 50:50 | Neat | 100 | 86 | | 67 | | 50 | 29 | | | 24 | 45 | 27 | | | 18 | 9 | 522 | | | 1786 | 14.6 | 35 | 0.9 | | **SOIL COMPOSITION: Gravel = 50%, Sand = 26%, Silt/clay =24%** | | | | | | | | | | | | | | | | | | | | | | | |

**Eng. J. M. Mbarua**

**For: CHIEF ENGINEER (MATERIALS)**

**OiC Soils Laboratory CSE Soils Laboratory**

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