

**REPUBLIC OF KENYA**

**MINISTRY OF ROADS AND TRANSPORT**

**STATE DEPARTMENT OF ROADS**

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Ref No. M.1458/35/L/10 Date: 13th January, 2023

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| **Laboratory Test Report** |

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| 1. **Customer’s Details:** RESIDENT ENGINEER KeNHA   **E-mail:** rd.nairobi@kenha.co.ke  **Address:** P.O. Box 3314-00300 NRB Phone: 0724967038  **2. Customer Contact:** 0724967038 6. Job Card No.1337/S/2022  **3. Sample Description:** Gravel 7. Date fee paid: 20/12/2022  **4. Sampled by:** CLIENT. 8. GOK MR No. 4115696  **5. Date Sample received:** 20/12/2022 9. Date Analysis started: 23/12/2022  **10. Additional information provided by the customer:** Routine Maintenance and Spot Improvement of Kiserian Oletepesi (B19) Road.  **Source:** Km 3+200   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | | | | | **TEST RESULTS** | | | | | | | | | | | | | | **Sample No.** | **Reference** |  | **Grading** | | | | | | | **Atterberg Limits** | | | | | **Compaction T180** | | **CBR** | | |  | **% Passing BS Sieve Size (mm)** | | | | | | | **LL** | **PL** | **PI** | **LS** | **PM** | **MDD** | **OMC** | **4days Soak**  **(%)** | **Swell** | | **Dosage** | **20** | **10** | **5** | | **2** | **0.425** | **0.075** | **%** | **%** | **%** | **%** |  | **Kg/m3** | **( % )** | **(%)** | | 547/S/22 | Gravel For Shoulders | Neat | 100 | 87 | 78 | | 67 | 32 | 12 | 46 | 28 | 18 | 9 | 576 | 1618 | 12.9 | 30 | 0.35 | | **SOIL COMPOSITION: Gravel =33%, Sand =55%, Silt/clay =12%** | | | | | | | | | | | | | | | | | C | Improved with Bamburi Cement 42.5 N,7 Days cure & 7 Days soak | | | | | | | | | | | | | | | | | 1% |  |  |  | |  |  |  | 24 | 14 | 10 | 5 | 320 |  |  | 70 | 0.3 | | 2% |  |  |  | |  |  |  | 25 | 17 | 8 | 4 | 256 |  |  | 130 | 0.2 | | 3% |  |  |  | |  |  |  | 27 | 21 | 6 | 3 | 192 |  |  | 190 | 0.1 | | 4% |  |  |  | |  |  |  | 32 | 28 | 4 | 2 | 128 |  |  | 240 | <0.1 | |

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**Eng. J. M. Mbarua**

**For: CHIEF ENGINEER (MATERIALS)**

**OiC** **Soils Laboratory CSE Soils Laboratory**

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