

**REPUBLIC OF KENYA**

**MINISTRY OF ROADS AND TRANSPORT**

**STATE DEPARTMENT OF ROADS**

Telegraphic Address: “MINWORKS”, Nairobi Materials Testing & Research Division Telephone: Nairobi 0202554950 Machakos Road, Industrial Area Fax: 554877 P.O. Box 11873 – 00400 E-mail: [chiefengineer@mtrd.go.ke](mailto:chiefengineer@mtrd.go.ke) **NAIROBI**

Ref No. M.1815/35/L/10 Date: 1st March, 2023

|  |
| --- |
| **Laboratory Test Report** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1. Customer’s Details:** SAMA HOLDINGS LIMITED  **E-mail:** Not provided  **Address:** Not provided Phone: 0714768578  **2. Customer Contact:** 0714768578 6. Job Card No. 1790/S/2023  **3. Sample Description:** Alignment 7. Date fee paid: 20/02/2023  **4. Sampled by:** Client. 8. GOK MR No.4127600  **5. Date Sample received:** 15/02/2023 9. Date Analysis started:20/02/2023  **10. Additional information provided by the customer:** Construction to Bitumen Standards of Andolo-Waiguru Link Road.     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | TEST RESULTS | | | | | | | | | | | | | | | | | | **Sample No.** | **Reference** | **Dosage**% | **Grading** | | | | | | **Atterberg Limits** | | | | | **Compaction T99** | | **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 | | 707/S/22 | KM 0+120 CL | Neat | 100 | 92 | 66 | 51 | 41 | 37 | 37 | 19 | 18 | 9 | 738 | 1542 | 17.0 | 14 | 1.0 | | **SOIL COMPOSITION: Gravel = 49%, Sand = 14%, Silt/clay =37%** | | | | | | | | | | | | | | | | 708/S/22 | KM 0+400 LHS | Neat | 100 | 90 | 72 | 58 | 46 | 42 | 48 | 29 | 19 | 10 | 874 | 1592 | 19.3 | 18 | 1.2 | | **SOIL COMPOSITION: Gravel = 42%, Sand = 16%, Silt/clay =42%** | | | | | | | | | | | | | | | | 709/S/22 | KM 0+550 RHS | Neat | 100 | 91 | 69 | 55 | 40 | 39 | 38 | 24 | 14 | 7 | 560 | 1445 | 19.0 | 20 | 1.2 | | **SOIL COMPOSITION: Gravel = 45%, Sand = 16%, Silt/clay =39%** | | | | | | | | | | | | | | | | 710/S/22 | KM 0+600 RHS | Neat | 100 | 92 | 72 | 59 | 46 | 41 | 45 | 27 | 18 | 9 | 828 | 1497 | 18.2 | 18 | 1.3 | | **SOIL COMPOSITION: Gravel = 41%, Sand = 18%, Silt/clay =41%** | | | | | | | | | | | | | | | |

**Eng. J. M. Mbarua**

**For: CHIEF ENGINEER (MATERIALS)**

**OiC Soils Laboratory CSE Soils Laboratory**

**………………. …………………….**