

**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.1735/35/L/10 Date: 21st February, 2023

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| **Laboratory Test Report** |

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| 1. **Customer’s Details:** MS ORION LIMITED   **E-mail:** bufflocinv@yahoo.com  **Address:** P.O. Box 24153-00502 NRB Phone: 0720754373  **2. Customer Contact:** 0720754373 6. Job Card No.1664/S/2023  **3. Sample Description:** Gravel 7. Date fee paid: 02/02/2023  **4. Sampled by:** CLIENT. 8. GOK MR No. 4115986  **5. Date Sample received:** 01/02/2023 9. Date Analysis started: 03/02/2023  **10. Additional information provided by the customer:** Performance Based Contract for Maintenance & Safety of Naivasha Rironi Road.  **Source:** Rironi   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | TEST RESULTS | | | | | | | | | | | | | | | | | | **Sample No.** | **Reference** | **Dosage**% | **Grading** | | | | | | **Atterberg Limits** | | | | | **Compaction T180** | | **CBR** | | | % Passing BS Sieve Size (mm) | | | | | | LL | PL | PI | LS | PM | MDD Kg/m3 | OMC( % ) | 4days Soak  (%) | Swell(%) | | 20 | 10 | 5 | 2 | 0.425 | 0.075 | % | % | % | % |  |  |  | | 690/S/22 | **Base material** | Neat | 100 | 95 | 84 | 69 | 47 | 35 | 41 | 23 | 17 | 9 | 799 | 1757 | 15.2 | 30 | 0.2 | | **Improved with Bamburi Cement, 42.5N,7 Days Cure and 7 Days Soak** | | | | | | | | | | | | | | | | | **2** |  |  |  |  |  |  | 42 | 28 | 14 | 7 | 658 |  |  | 110 | <0.1 | | **3** |  |  |  |  |  |  | 40 | 28 | 12 | 6 | 564 |  |  | 170 | <0.1 | | **4** |  |  |  |  |  |  | 35 | 27 | 8 | 4 | 376 |  |  | 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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