

**GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DEPARTMENT**

Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 9809, 9810 /Lab/321/2020-21 Dated: 05/ 04/2021. **Laboratory:** Bicholim
Sand –T: 5132&5133 .Cement-1241 **Sub Div:** V (QC)/WRD/Bicholim Goa.

Sub:Improvement and supply of M.S.Gates to open type Bandhara near lift irrigation Scheme at AdvoiV.P.Bhironda in Sattari Taluka..

Ref to requisition No: MIN/WDVI/WRD/SDII/F.62/20-21/600 Dated: 23/03/2021.

Qty. Received: 1 bags each **Date of Receipt:** 25/03/2021 **Tested on:** 26,27,29& 30/03/2021 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample:Sand,20mm, **O.S. No.**5652,5653,5670,5671&5631 /SS **Lab. Sample No.:** 1026 To 1031 **Tested by:** Mrs. Shirodkar.JE.

12.5mm size aggrt., Cement

R E P O R T 01 OF 02

| Sr. No. | Description of sample | Tested for | Results | Max. /Min. value permissible | Remarks |
|---|---------------------------------------|---|---|---|---------|
| 1. | 20 mm Size Aggregate: | Particle size distribution: | It is single sized aggregate of 20 mm nominal size. | (Qty. rep. – --m ³) | |
| 2. | 12.5 mm Size Aggregate: | Particle size distribution: | It is not single sized aggregate of 12.5 mm nominal size. | (Qty. rep. – -- m ³) | |
| REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying therequired criteria for graded aggregate of 20 mm nominal size. | | | | | |
| 3. | Sand: (L.S.No.1030) | i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone | : - 5.00% : - 5.43% : - 2.198 : - III | | |
| REMARK: The observed results are within the permissible limits of the coarse sand. | | | | | |
| 4. | Crushed Sand: (L.S.No.1029) | i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone | : - 11.20% : - 10.86% : - 2.65 : - II | (Limit of Deleterious material is 15.00% for crushed sand) | |
| REMARK: The observed results are within the permissible limits for crushed sand (Fine Aggregate) vide table 2 of IS 383: 2016(Clause 5.2.1). | | | | | |

Junior Engineer

Assistant Engineer

R E P O R T 02 OF 02

| Sr. No. | Description of sample | Tested for | Results | Max. /Min. value permissible | Remarks |
|----------------|--|-------------------|---|--|---|
| 5. | <u>Cement:</u> Dalmia.Cement, bearing IS:269 Ordinary Portland cement, Manuf. date:Week <u>12</u> , Month <u>03</u> , Year' <u>2021</u> CM/L = <u>6200022577</u> Qty. rep. –. To be used for – 1:2:4 mix concrete | | i)Fineness of Cement : 1.32% ii) Consistency of cement : 30.00% iii) Initial Setting Time : 165 minutes iv) Final Setting Time : 305 minutes | ----- (It should not be more than 10%) (It should be in the neighborhood of 35%) ---- (It should not be less than 30 minutes) -- (It should not be more than 600 minutes) | <u>REMARK: The observed results are within the permissible limit for Ordinary Portland cement.</u> |

- Copy to: 1. The Assistant Engineer, SDII, WDV, WRD, Valpoi-Sattari – Goa.
2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.
3. Copy Submitted to The Executive Engineer, W.D. VI, WRD, Bicholim – Goa
4. Q.C. Lab file 5. Bill File.

Junior Engineer

Assistant Engineer