

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

Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 341,342/Lab/132/2023-24 **Dated:-** 10/07/2023.

Laboratory: Bicholim-Goa

Sand –T:- 5400. Cement-T:- 1456.

Sub Div: V (QC)/WRD/Bicholim Goa.

Sub:- Fifth Revised Estimate of the interstate Tillari Irrigation Project Canal network in Goa. Res:- Strengthening and modifications of Right Bank Main Canal TIP Canal, aqueduct and other appurtenances for ch. 6.20 kms to 17.470 kms.

Ref to requisition No:- F.16-1/SDI/WDVII/WRD/23-24/52 **Dated :-** 30/06/2023

Qty. Received: 1 bags each **Date of Receipt:-** 04/07/2023 **Tested on:-** 05,06,07,08 & 09/07/2023. **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample: Sand, 20mm, **O.S. NO:-** 1075,1076,1088,1066/SS. **Lab. Sample No :-** 7638 to 7641 **Tested by:-** Mrs. S. B. Naik Shirodkar J.E.

12.5mm size Aggr, and Cement

R E P O R T 01 OF 01

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
1.	20.00 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 the required criteria for graded aggregate of 20 mm nominal size.					
3.	Crushed Sand: (L.S.No.7640)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	:- 10.20% :- 9.57% :- 3.07% :- I	(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).					
4.	Cement: JK Super Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W-25,M-05,Y-2023 CM/L = 0003401033 Qty. rep. –.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	:- 1.19% :- 31.00% :- 175 minutes :- 320 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)	
To be used for - REMARK: The observed results are within the permissible limit for Ordinary Portland cement.					

Copy to:1. The Assistant Engineer, SDI, WDVII, WRD, Dhargal Pernem– Goa.

2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.

3. Copy Submitted to The Executive Engineer, WDVII, WRD, Dhargal Pernem– Goa.

4. Q.C. Lab file 5. Bill File.

Junior Engineer

Assistant Engineer