

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

Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 199,200/Lab/186/2022-23 **Dated:-**09/11/2022. **Laboratory:** Bicholim
Sand –T:- 5311. **Cement-T:-** 1383. **Sub Div:** V (QC)/WRD/Bicholim Goa.

Sub:- Development and Repair of Bunds, Fish tanks and Water channel of Estuarine Fish farm at Ela-Old Goa in Tiswadi Taluka.

Ref to requisition No:- S.D.IV/WDI/WRD/F.38/22-23/493 **Dated :-** 31/10/2022

Qty. Received: 1 bags each **Date of Receipt:-** 02/11/2022 **Tested on:-** 03,04,07 & 08/11/2022 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample:Sand,20mm, **O.S. NO:-** 9452,9453,9456 & 9455/SS **Lab. Sample No.:-** 5362 to 5365 **Tested by:-** Mrs. S. B. Naik Shirodkar J.E.

12.5mm size Aggr, Sand, 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.5364)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	:- 11.00% :- 13.15% :- 2.98% :- 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 Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W-41, M-10,Y-2022 CM/L = 0003401033 Qty. rep. –.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	:- 1.10% :- 32.50% :- 160 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, SDIV,WDI,WRD, Porvorim– Goa.
2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.
3. Copy Submitted to The Executive Engineer, WD I, WRD, Porvorim – Goa
4. Q.C. Lab file 5. Bill File.

Junior Engineer

Assistant Engineer