

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

Test Report No.: WRD/Q.C./F.6-4/Aggr-T-9691 & 9692 /Lab/ 159 /2020-21

Dated: 08/ 12/2020.

Laboratory: Bicholim

Sand –T: 5064, Cement:T: 1200

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

Sub: Construction of Pump House , Rising Main and Allied Structures for pumping water from Ch. 7.190 Km To Ch.8.002 Km and Gravity Main from Ch. 8.002 Km To Ch.8.780 Km of B-6 Distributary of R.B.M.C. of T.I.P. at Ugvem in Pernem Taluka.

Ref to requisition No: SDII/WDVII/WRD/F. 23/2020-21/110 Dated: 26/11/2021.

Qty. Received: 2 bags each **Date of Receipt:** 04/12/2020 **Tested on:** 04,05 & 07/12/2020 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample: Sand,20mm, **O.S. No.** 4332,4333,4330 & 4342/ SS **Lab. Sample No.:** 9661 TO 9664 **Tested by:** Mrs. S.B. Naik Shirodkar, JE.

12.5mm size aggrt, & 1 beg 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: (L.S.No.9661 & 9662)	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 1:2 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.			
3.	Crushed. Sand: (L.S.No.9663)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 14.20% : - 13.95% : - 2.70 : - II	(Limit of Deleterious material is 15.00% for crushed sand)	
4.	Cement: J.K. cement, bearing IS:269 Ordinary Portland cement, Manuf. date: Week 49 Month 12, Year'2020. CM/L = 0003401033 Qty. rep. – _____.		i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.14 % : 31.00% : 150 minutes : 260 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)
	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).				
	REMARK: The observed results are within the permissible limit for Ordinary Portland cement.				

Copy to: 1. The Assistant Engineer, S. D. II, WD VII, WRD, Dhargal -Pernem – Goa.

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

3. Submitted to The Executive Engineer, W.D. VII, WRD, Dhargal -Pernem – Goa. .

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

Junior Engineer

Assistant Engineer