

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

Test Report No.: WRD/Q.C./F.6-4/ Aggr-T- 9484 To 9487,Sand-T-4944,4945, Cement-T-1115 /Lab/ **318** / 2019-20 **Dated:-** 04 / 12 / 2019.

Laboratory: Bicholim –Goa.

Sub DivV/ (QC)/WRD/Bicholim – Goa.

Sub: - Providing RCC lining for B/2 Distributory from Ch. 0.000 Km To Ch. 2.150 Km of R.B.M.C. of T.I.P. in V.P Allorna in Pernem Taluka

Ref to requisition No: WRD/ SD IV/ WDVII / F10/ 2019-20/154 **Dated:** - 21 /11 / 2019

Qty. Received: 1 bags each **Date of Receipt:** 26 / 11 / 2019 **Tested on:** 28 & 29/11/2019 **Ref to Specification:** CPWD 2002, Vol. I & IS: 4031, 1968

Sample: 20mm, 12mm size aggrt. M-Sand(2Nos), J,K, cement 43 grade **O.S. No. :** 1168/AF to 1174/AF **Lab. Sample No.:** 6967 TO 6973.

Tested by: Mr. Anil R. Fadte , J.E.

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
1.	20 mm Size Aggregate: (L.S.No 6967 & 6968)	Particle size distribution:	It is single sized aggregate of 20 mm nominal size	(Qty. - rep.)	
2.	12 mm Size Aggregate: (L.S.No 6969 & 6970)	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size.	(Qty. - rep.)	
REMARK: After blending 20 mm aggregate with 12 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.	M - Sand: - (L. S. No. 6971)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 4.40 % : - 4.10 % : - 3.170 : - I	(Qty. rep.)	
REMARK: The observed results are within the permissible limits of the Coarse Sand.					
3.	M - Sand: - (L.S.No.6972)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 5.00 % : - 6.12 % : - 3.150 : - I	(Qty. rep.)	
REMARK: The observed results are within the permissible limits of the Coarse Sand.					
4.	J.K., Super Cement: J.K. cement. OPC,43 Grade Ordinary Portland cement, Manuf. date: Week 46, Month 11, Year'2019. CM/L = 0003401033 Qty. rep. To be used for – For PCC 1:3:6,1:1.5:3.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.30 % : 31.00 % : 140 Minutes : 300 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 limit for tested Ordinary Portland cement.					

Copy to: 1. The Assistant Engineer, S. D. IV, 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