

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

**Test Report No.:** WRD/Q.C./F.6-4/ Aggr-T- 9420, 9421, Sand-T-4908 & 4909, Cement-T-1099 /Lab/ **277** /2019-20 Dated:04/10/2019.

**Laboratory:** Bicholim

**Sub Div V/ (QC) / WRD /**

**Sub:** Providing field channels for lift Irrigation near ch 20.500 kms. Of RBMC of TIP at village Dadachiwadi Dhargal in Pernem Taluka.

**Ref to requisition No:** SD IV/ WDVII / WRD/ F.10/19-20/105 Dated: 23/09/2019

**Qty. Received:** 1 bags each **Date of Receipt:** 26/09/2019 **Tested on:** 26 & 27/09/2019 **Ref to Specification:** CPWD 2002, Vol. I & IS: 4031, 1968

**Sample:** 20mm, 12.5mm size aggrt, Sand ( 2Nos), JK super cement 43 grade **O.S. No. :** 1108/AF to 1112/AF **Lab. Sample No.:** 6788 TO 6792

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

**REPORT**

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
1.	<b>20 mm Size Aggregate:</b> ( L. S. No. 6788)	Particle size distribution:	It is single sized aggregate of 20 mm nominal size (Qty. rep. 40m <sup>3</sup> )		
2.	<b>12 mm Size Aggregate:</b> ( L. S. No. 6789)	Particle size distribution:	It is single sized aggregate of 12.5 mm nominal size. (Qty. rep. 40m <sup>3</sup> )		
<b>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.</b>					
3.	<b>Sand:</b> ( L. S. No. 6790 )	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 3.60% : - 4.76 % : - 2.75 : - II	(Qty. rep. 40m <sup>3</sup> )	
<b>REMARK: The observed results are within the permissible limits of the coarse sand.</b>					
4.	<b>Sand:</b> ( L.S.No.6791 )	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 4.40% : - 5.21 % : - 2.57 : - III	(Qty. rep. 40m <sup>3</sup> )	
<b>REMARK: The observed results are within the permissible limits of the coarse sand.</b>					
5.	<b>Cement:</b> ( L. S. No. 6792) JK super cement, bearing IS: 269 Ordinary Portland cement, Manuf. date: Week 36, Month 09, Year'2019. CM/L =0003401033	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.31 % : 31.00% : 150 minutes : 270 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)	
<b>REMARK: The observed results are within the permissible limit for tested Ordinary Portland cement.</b>					

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

