

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

**Test Report No.:** WRD/Q.C./F.6-4/Aggr-T- 117,118/Lab/344/2021-22    **Dated:-** 29/ 03 /2022.    **Laboratory:** Bicholim  
**Sand –T:5263    Cement-T: 1346,1347**    **Sub Div: V (QC)/WRD/Bicholim Goa.**

**Sub:-Construction of 30 MLD Raw Water Pumping Station at Calangute on Calangute distributary of Tillari Canal for Pilerne Industrial Estate and Surrounding Villages of Calangute and Saligao.**

**Ref to requisition No:-** WRD/WDI/SDV/F.27/2021-22/207    **Dated:** 23/03/2022.

**Qty. Received:** 1 bags each    **Date of Receipt:-**24/03/2022    **Tested on:-**25,26 & 28/03/2022    **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

**Sample:**Sand,20mm, **O.S. N:-** 281,282,308 & 267/R.K    **Lab. Sample No.:** 3488 To 3492    **Tested by:** Mrs. R. R. Kadam A.E.  
 12.5mm size aggrt., Sand, Cement

**R E P O R T 01 O F 02**

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
1.	<b>20 mm Size Aggregate:</b>	Particle size distribution:	It is single sized aggregate of 20 mm nominal size.	(Qty. rep. – --m <sup>3</sup> )	
2.	<b>12.5 mm Size Aggregate:</b>	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size.	(Qty. rep. – -- m <sup>3</sup> )	
<b>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.</b>					
3.	<b>Coarse Sand:</b> (L.S.No.3490)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 5.60% : - 5.00% : - 2.66 : - II		
To be used for----. <b>REMARK: The observed results are within the permissible limits of the coarse sand.</b>					
4.	<b>Cement:</b> J.K. Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W- 10, M-03, Year-2022 CM/L =0003401033 Qty. rep. –.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.22% : 31.00% : 145 minutes : 285 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 –. <b>REMARK: The observed results are within the permissible limit for Ordinary Portland cement.</b>					

Assistant Engineer

