

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

**Test Report No.:** WRD/Q.C. / F.6-4 /Aggr-T- 211,212/Lab/204/2022-23 **Dated:** 12/12/2022 **Laboratory:** Bicholim-Goa  
**Sand -T: 5319, Cement-T: 1389** **Sub Div: V (QC)/W.D.VIII/Bicholim Goa.**

**Sub:** Construction of Protection wall on Valvanti River in property bearing Sy. No.75/1 at Tulshimal, Poriem in Sattari Taluka.

**Ref to requisition No:-** F.50/SDIV/WDVI/WRD/2022-23/119 **Dated:** 08/11/2022.

**Qty. Received:** 1 bags each **Date of Receipt:** 02/12/2022 **Tested on:** 06 & 07/12/2022. **Ref to Specification:** CPWD 2009, Vol. I&IS: 4031-4-1968  
**Sample:** 20mm, **O.S. No.** 9517,9518,9526,9515/SS. **Lab. Sample No.:** 5440 To 5443 **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	Remark
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>Crushed Sand:</b> (L.S.No.5442)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 14.40 % : - 14.28 % : - 2.99 % : - II	<b>(Limit of Deleterious material is 15.00% for crushed sand)</b>	
<b>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).</b>					
4.	<b>Cement:</b> JK Cement, bearing IS:269 Ordinary Portland cement, Manuf. date:W:- 41, M:- 10, Y:- 2022 CM/L =_0003401033 Qty. rep. – ____-- To be used for –	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.22 % : 31.00 % : 155 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)	
<b>REMARK: The observed results are within the permissible limit for Ordinary Portland cement.</b>					

Copy to: 1. The Assistant Engineer, SD IV, WD VI, W.R.D. Bicholim-Goa.

2. Copy Submitted to The Superintending Engineer, CPO, WRD, Sinchai Bhavan Porvorim-Goa for kind Information

3. Copy Submitted to The Executive Engineer, WD VI, W.R.D. Bicholim-Goa.

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

**Junior Engineer**

**Assistant Engineer**