

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

**Test Report No.:** WRD/Q.C./F.6-4/Aggr-T- 9747, 9748 /Lab/246/2020-21      **Dated:** 16/ 02/2021.      **Laboratory:** Bicholim  
**Sand –T: 5108&5109 .Cement-1225**      **Sub Div: V (QC)/WRD/Bicholim Goa.**

**Sub:** Improvement to Katcha canal in Sy.No 118/1 at Nawarwada-Ambegale Pale in Sankhalim Constituency of Bicholim Taluka.

**Ref to requisition No:** F.231/WRD/WDVI/SDI/517/2020-21      **Dated:** 10/02/2021.

**Qty. Received:** 1 bags each      **Date of Receipt:** 10/02/2021      **Tested on:** 11,12,13& 14/02/2021      **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

**Sample:** Sand, 20mm,      **O.S. No.** 5010,5011,5042,5043,5012 /SS      **Lab. Sample No.:** 424 To 428      **Tested by:** Mrs. S. B. Naik Shirodkar.JE.  
12.5mm size aggrt., Cement      **R E P O R T 01 OF 01**

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:</b> After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of <b>1:2</b> by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.					
3.	<b>Sand:</b> (L.S.No.426)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 4.60% : - 4.16% : - 2.60 : - II	<b>Sand:</b> (L.S.No.427)	i) Silt & Clay by S.A. method : - 5.20% ii) Silt by sedimentation : - 5.82% iii) Fineness Modulus : - 2.00 iv) Grading Zone : - IV
To be used for – 1:2:4 concrete work. <b>REMARK:</b> The observed results are within the permissible limits of the coarse sand & Fine sand.					
4.	<b>Cement:</b> JK Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: Week 05, Month 02, Year' 2021 CM/L = 0003401033 Qty. rep. –		i) Fineness of Cement : 0.98% ii) Consistency of cement : 32.00% iii) Initial Setting Time : 155 minutes iv) Final Setting Time : 290 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:</b> The observed results are within the permissible limit for Ordinary Portland cement.					

- Copy to: 1. The Assistant Engineer, SDI, WDVI, WRD, Bicholim – Goa.  
2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.  
3. Copy Submitted to The Executive Engineer, W.D. VI, WRD, Bicholim – Goa  
4. Q.C. Lab file      5. Bill File.

**Junior Engineer**

**Assistant Engineer**