

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

**Test Report No.:** WRD/Q.C./F.6-4/Aggr-T- 9797, 9798 /Lab/299/2020-21 **Dated:** 16/ 03/2021. **Laboratory:** Bicholim  
**Sand –T: 5124&5125 .Cement-1235** **Sub Div:** V (QC)/WRD/Bicholim Goa.

**Sub:**Improvement of existing canal in the field of 1)Sada Gaonkar to Uday Gaonkar field 2)Dattaram Gawade to Vasu Gaonkar field of lift irrigation Scheme VantemV.P.Bhironda in Sattari Taluka

**Ref to requisition No:** MIN/WDVI/WRD/SDII/F.62/20-21/521 **Dated:** 25/02/2021.

**Qty. Received:** 1 bags each **Date of Receipt:** 09/03/2021 **Tested on:** 15&16/03/2021 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

**Sample:**Sand,20mm, **O.S. No.**5411,5412,5420,5421,5410 /SS **Lab. Sample No.:** 801 To 805 **Tested by:** Mrs. S. B. Naik Shirodkar.JE.  
12.5mm size aggrt., Cement

**R E P O R T 01 OF 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:</b> After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of <b>1:1</b> by weight; it is satisfying therequired criteria for graded aggregate of 20 mm nominal size.					
3.	<b>Sand:</b> (L.S.No.804)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 5.40% : - 5.10% : - 2.11 : - III		
To be used for – <b>REMARK:</b> The observed results are within the permissible limits of the coarse sand.					
4.	<b>CrushedSand:</b> (L.S.No.803)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 13.20% : - 14.28% : - 2.65 : - --	( Limit of Deleterious material is 15.00% for crushed sand)	
<b>REMARK:</b> The observed results are within the permissible limits for crushed sand (Fine Aggregate) vide table 2 of IS 383: 2016(Clause 5.2.1).					

Junior Engineer

Assistant Engineer

**R E P O R T 02 OF 02**

<b>Sr. No.</b>	<b>Description of sample</b>	<b>Tested for</b>	<b>Results</b>	<b>Max. /Min. value permissible</b>	<b>Remarks</b>
5.	<b><u>Cement:</u></b> JK.Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: Week <u>05</u> , Month <u>02</u> , Year' <u>2021</u> CM/L = <u>0003401033</u> Qty. rep. – To be used for – <b><u>REMARK: The observed results are within the permissible limit for Ordinary Portland cement.</u></b>		i) Fineness of Cement : 1.11% ii) Consistency of cement : % iii) Initial Setting Time : 165 minutes iv) Final Setting Time : 315 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)	

- Copy to: 1. The Assistant Engineer, SDII, WDV, WRD, Valpoi-Sattari – 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**