

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

**Test Report No.:** WRD/Q.C./F.6-4/Aggr-T- 9783, 9784 /Lab/262/2020-21 **Dated:** 24/ 02/2021. **Laboratory:** Bicholim  
**Sand –T:** 5112 Cement-1227 **Sub Div:** V (QC)/WRD/Bicholim Goa.

**Sub:-Stabilization of hillslope by construction of retaining wall behind Ibona Miranda in ward no.20 at Mala,Panaji-Goa.**

**Ref to requisition No:** MI/SDIV/WDI/WRD/F.38/20-21/577 **Dated:** 16/02/2021.

**Qty. Received:** 1 bags each **Date of Receipt:** 17/02/2021 **Tested on:** 18,19 & 20/02/2021 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

**Sample:**Sand,20mm, **O.S. No.**5113,5114,5135,5115/SS **Lab. Sample No.:** 507 To510 **Tested by:** Mrs. S. B. Naik Shirodkar.JE.  
12.5mm size aggrt., Cement

**R E P O R T 01 O F 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>1:1</b> by weight; it is satisfying therequired criteria for graded aggregate of 20 mm nominal size.					
3.	<b>Sand:</b> (L.S.No.509)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 4.80% : - 5.43% : - 2.53% : - II		
<b>REMARK:</b> The observed results are within the permissible limits of the coarse sand.					
4.	<b>Cement:</b> JK.Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: Week06, Month02, Year'2020. CM/L =0003401033 Qty. rep. –	i)Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.06% : 32.00% : 175 minutes : 325 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, SDIV, WDI,WRDPorvorim – Goa.  
2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.  
3. Copy Submitted to The Executive Engineer, W.D. I, WRDPorvorim – Goa  
4. Q.C. Lab file 5. Bill File.

**Junior Engineer**

**Assistant Engineer**