

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

Test Report No.: WRD/Q.C./ F.6-4 /Aggr-T- 9973,9974/Lab/285/2021-22 **Dated:** 05/02/2022.

Laboratory: Bicholim

Sand –T: 5237, 5238, 5239 **Cement-T:** 1325

Sub Div: V(QC)/W.D.VIII/Bicholim Goa.

Sub: Construction of Protection wall for Nalla along the Survey No 143/11 & 142/13 at Ambegal – Pale in sankhalim Constituency of Bicholim Taluka.

Ref to requisition No:- F.241/WRD/WDVI/SDI/433/20-21 **Dated :-** 19/01/2022

Qty. Received: 1 bags each **Date of Receipt:** 22/01/2022 **Tested on:** 25, 27, 28, 29 & 30/01/2022 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample: Sand, 20mm, **O.S. No.** 7508, 7509, 7520, 7528, 7537 & 7466/S.S. **Lab. Sample No.:** 2799 To 2804 **Tested by:** Mrs. S.B. Naik Shirodkar J.E.
12.5mm size aggrt., Sand, Cement

R E P O R T 01 OF 02

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remark
1.	20 mm Size Aggregate:	Particle size distribution:	It is single sized aggregate of 20 mm nominal size.	(Qty. rep. – --m ³)	
2.	12.5 mm Size Aggregate:	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size.	(Qty. rep. – -- m ³)	
REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying therequired criteria for graded aggregate of 20 mm nominal size.					
3.	Coarse Sand: (L.S.No.2801)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 4.80% : - 5.40% : - 2.23% : - III		
REMARK: The observed results are within the permissible limits of the coarse sand.					
4.	Fine Sand: (L.S.No.2802)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 6.00% : - 5.71% : - 2.05% : - IV		
REMARK: The observed results are within the permissible limits of the Fine sand.					
To be used for----.					

Junior Engineer

Assistant Engineer

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

Test Report No.: WRD/Q.C./ F.6-4 /Aggr-T- 9973,9974/Lab/285/2021-22 **Dated:** 05/02/2022.

Laboratory: Bicholim

Sand –T: 5237, 5238, 5239 **Cement-T:** 1325

Sub Div: V(QC)/W.D.VIII/Bicholim Goa.

Sub: Construction of Protection wall for Nalla along the Survey No 143/11 & 142/13 at Ambegal – Pale in sankhalim Constituency of Bicholim Taluka.

Ref to requisition No.: F.241/WRD/WDVI/SDI/433/20-21 **Dated :-** 19/01/2022

Qty. Received: 1 bags each **Date of Receipt:** 22/01/2022 **Tested on:** 25, 27, 28, 29 & 30/01/2022 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample: Sand, 20mm, **O.S. No.** 7508, 7509, 7520, 7528, 7537 & 7466/S.S. **Lab. Sample No.:** 2799 To 2804 **Tested by:** Mrs. S.B. Naik Shirodkar J.E.
12.5mm size aggrt., Sand, Cement

R E P O R T 02 OF 02

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remark
5.	Crushed Sand: (L.S.No.2803)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 14.40% : - 14.63% : - 2.13% : - III	(Limit of Deleterious material is 15.00% for crushed sand)	

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).

6.	Cement: J.K Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W - 02, M- 01, Y- 2022 CM/L = 0003401033 Qty. rep. – ____--.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.33% ----- (It should not be more than 10%) : 32.50% (It should be in the neighborhood of 35%) : 160 minutes ---- (It should not be less than 30 minutes) : 310 minutes -- (It should not be more than 600 minutes)
----	--	---	---

To be used for – **REMARK: 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, Sinchai Bhavan Porvorim-Goa for kind Information

3. Copy Submitted to The Executive Engineer, WDVI, WRD, Bicholim – Goa

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

Junior Engineer

Assistant Engineer