

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

Test Report No.: WRD/Q.C. / F.6-4 /Aggr-T- 273,274/Lab/304/2022-23 **Dated:** 09/03/2023.

Laboratory: Bicholim-Goa

Sand –T: 5363. Cement-T: 1421 Laterite Stone-T:- 0461.

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

Sub: Improvement to existing tank in Sy.no.11 V.P. Karapure in Bicholim Taluka.

Ref to requisition No:- F.50/SDIV/WDVI/WRD/2022-23/203 **Dated:** 28/02/2023.

Qty. Received: 1 bags each **Date of Receipt:** 03/03/2023 **Tested on:** 04,05,07 & 08/03/2023 **Ref to Specification:** CPWD 2009, Vol. I&IS: 4031-4-1968

Sample: Sand, 20mm, **O.S. No.** 346,347,349,345,361/SS. **Lab. Sample No.:** 6368 To 6372 **Tested by:** Mrs. S.B. Naik Shirodkar J.E.

12.5mm size Aggr, Cement and Laterite Stone.

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 20.00 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 the required criteria for graded aggregate of 20 mm nominal size.					
3.	Coarse Sand: (L.S.No.6370)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 4.50 % : - 4.08 % : - 3.55 % : - I		
REMARK: The observed results are within the permissible limits of the Coarse sand.					
4.	Cement: JK Super 43 Grade Cement, bearing IS:269 Ordinary Portland cement, Manuf. date:W,M-Invisible, Y- 2023 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	: 1.23 % : 30.00 % : 150 minutes : 255 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)	
REMARK: The observed results are within the permissible limit for Ordinary Portland cement.					

Junior Engineer

Assistant Engineer

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

Test Report No.: WRD/Q.C. / F.6-4 /Aggr-T- 273,274/Lab/304/2022-23 **Dated:** 09/03/2023.

Laboratory: Bicholim-Goa

Sand –T: 5363. Cement-T: 1421 Laterite Stone-T:- 0461.

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

Sub: Improvement to existing tank in Sy.no.11 V.P. Karapure in Bicholim Taluka.

Ref to requisition No:- F.50/SDIV/WDVI/WRD/2022-23/203 **Dated:** 28/02/2023.

Qty. Received: 1 bags each **Date of Receipt:** 03/03/2023 **Tested on:** 04,05,07 & 08/03/2023 **Ref to Specification:** CPWD 2009, Vol. I&IS: 4031-4-1968

Sample: Sand, 20mm, **O.S. No.** 346,347,349,345,361/SS. **Lab. Sample No.:** 6368 To 6372 **Tested by:** Mrs. S.B. Naik Shirodkar J.E.
12.5mm size Aggr, Cement and Laterite Stone.

R E P O R T 02 O F 02

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remark
5.	Laterite stone	A) Compressive strength test :-	i) 43.03 Kg /cm ² 35.00kg/cm² ii) 40.77 Kg /cm ² iii) <u>42.47 Kg /cm²</u> Avg. 42.09 Kg/cm ²		Remark: - The average Compressive strength achieved is 20.25 %More than the specified value of 35 Kg/cm² .
		B) Water Absorption Test :-	i) 9.64 % ii) 9.89 % iii) <u>10.49 %</u> Avg. 10.00 %		Remark: The average water absorption is 10.00 % ,less than the maximum permissible limit of 12% .

Copy to: 1. The Assistant Engineer, SDIV, 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