

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

Test Report No.: WRD/Q.C./F.6-4/ Aggr-T- 9517 To 9519, Sand-T-4963, Cement-T-1129 /Lab/ **373** / 2019-20 Dated:- 06 / 01 / 2020.

Laboratory: Bicholim –Goa.

Sub DivV/ (QC)/WRD/Bicholim – Goa.

Sub: Improvement and strengthening of nallah bank near the house of Shri. Dilip Varak in Sy. No.16/1 village Bhuipal V.P. Honda in Sattari Taluka.

Ref to requisition No: MI/ WDVI /WRD/ SDII/ F62/ 2019-20/372 Dated: - 18 /12 / 2019

Qty. Received: 1 bags each **Date of Receipt:** 24 / 12 / 2019 **Tested on:** 24 & 26/12/2019 **Ref to Specification:** CPWD 2009, Vol. I & IS: 4031, 1968,

Sample: 20mm, 12mm, 40mm size aggrt., Sand, J.K. cement 43 grade **O.S. No. :** 1455/AF to 1459/AF **Lab. Sample No.:** 7323 TO 7327. **Tested by:** Mr. Anil R. Fadte,J.E.

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
1.	20 mm Size Aggregate:	Particle size distribution:	It is single sized aggregate of 20 mm nominal size	(Qty. - rep.)	
2.	12 mm Size Aggregate:	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size.	(Qty. - rep.)	
3.	40 mm Size Aggregate:	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size.	(Qty. - rep.)	
	<p>i) REMARK: After blending 20 mm aggregate with 12.50 mm aggregates at the ratio of 1:2 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.</p> <p>ii) REMARK: After blending 40 mm aggregate with 12.50 mm aggregates at the ratio of 1:2 by weight; it is satisfying the required criteria for graded aggregate of 40 mm nominal size.</p>				
4.	Coarse Sand: -	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	:- 3.40 % :- 3.85 % :- 2.51 :- II.	(Qty. rep.)	
	REMARK: The observed results are within the permissible limits of the Coarse Sand.				
5.	J.K., OPC Cement:	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	:1.40 % : 31.50 % : 150 Minutes : 400 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)	
	Ordinary Portland cement, Manuf. date: Week 45, Month 11, Year'2019. CM/L =0003401033 Qty. rep. To be used for – For PCC 1:2:4.				
	REMARK:- The observed results are within the permissible limit for tested Ordinary Portland cement.				

Copy to: 1. The Assistant Engineer, S. D.II, WD VI, WRD , Valpo-Sattari – Goa.

2. Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.

3. Submitted to The Executive Engineer, W.D. VI, WRD, Bicholim – Goa

4. Q.C. Lab file

5. Bill File

Junior Engineer

Assistant Engineer