

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

Test Report No.: WRD/Q.C./F.6-4/ Aggr-T- 9440, 9441, Sand-T-4920, Cement-T-1104 /Lab/ **285** /2019-20 Dated:15/10/2019.

Laboratory: Bicholim-Goa

Sub Div V/ (QC), WD VIII, WRD, Bicholim-Goa

Sub: Providing Micro network system for DWC 18 BL of RBMC of TIP at village Dhargal in Pernem Taluka.

Ref to requisition No: SD IV/ WDVII / WRD/ F.10/19-20/112 Dated: 09/10/2019

Qty. Received: 1 bags each **Date of Receipt:** 11/10/2019 **Tested on:** 14 & 15/10/2019 **Ref to Specification:** CPWD 2002, Vol. I & IS: 4031-4, 1988

Sample: 20mm, 12.5mm size aggrt, Sand, JK cement 43 grade **O.S. No. :** 1139/AF to 1142/AF **Lab. Sample No.:** 6834 TO 6837

Tested by: Mr. Anil R. Fadte , J.E.

REPORT

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
1.	<u>20 mm Size Aggregate:</u>	Particle size distribution:	It is single sized aggregate of 20 mm nominal size (Qty. rep. 25m ³)		
2.	<u>12 mm Size Aggregate:</u>	Particle size distribution:	It is single sized aggregate of 12.5 mm nominal size. (Qty. rep. 15m ³)		
<u>REMARK:</u> After blending 20 mm aggregate with 12 mm aggregates at the ratio of <u>1:2</u> by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.					
3.	<u>Sand:</u>	i) Silt & Clay by S.A. method	:- 3.60%	(Qty. rep. 15m ³)	
		ii) Silt by sedimentation	:- 4.76 %		
		iii) Fineness Modulus	:- 2.85		
		iv) Grading Zone	:- II		
<u>REMARK:</u> The observed results are within the permissible limits of the coarse sand.					
4.	<u>Cement:</u> JK cement, bearing IS: 269 Ordinary Portland cement, Manuf. date: Week 39, Month 09, Year'2019. CM/L =0003401033 Qty. rep. -m ³ To be used for – Not specified		i) Fineness of Cement	: 1.24 %	----- (It should not be more than 10%)
			ii) Consistency of cement	: 31.00%	(It should be in the neighborhood of 35%)
			iii) Initial Setting Time	: 160 minutes	---- (It should not be less than 30 minutes)
			iv) Final Setting Time	: 280 minutes	-- (It should not be more than 600 minutes)
<u>REMARK:</u> The observed results are within the permissible limit for tested Ordinary Portland cement.					

Copy to: 1. The Assistant Engineer, S. D. IV, WD VII, WRD, Dhargal-Pernem-Goa.

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

3. Submitted to The Executive Engineer, W.D. VII, WRD, Dhargal-Pernem-Goa

4. Q.C. Lab file

5. Bill File

Junior Engineer

Assistant Engineer

