

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

Test Report No.: WRD/Q.C./F.6-4/Aggr-T-9616, 9617 /Lab/ 30 /2020-21

Dated: 27/ 05/2020.

Laboratory: Bicholim

Sand –T: 5019 & Cement T: 1167 .

Sub Div: V (QC)/WRD/Bicholim Goa.

Sub: Construction of pump house, Rising main and allied structures for pumping water from Ch.7.190 km to ch.8.002 km and gravity main from ch.8.002 km to 8.780 km of B6 Distributory of RBMC of TIP at Ugve in Pernem Taluka.

Ref to requisition No: SDII/WDVII/WRD/F. 18/2020-21/21 Dated: 22/05/2020.

Qty. Received: 1 bags each **Date of Receipt:** 16/05/2020 **Tested on:** 22 & 23/05/2020 **Ref to Specification:** CPWD 2009, Vol. I & IS:4031-4-1968

Sample: Sand, 20mm, 12.5mm size aggrt, & Cement **O.S. No.** 3662, 3663, 3654 & 3666 /SS **Lab. Sample No.:** 8854 To 8857 **Tested by:** Mrs. S.B. Naik Shirodkar, JE.

R E P O R T 01 OF 01

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. – -- 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 1:2 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.					
3.	M. Sand: (L.S.No.8856)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 14.20% : - 13.72% : - 2.612 : - II	(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).					
4.	Cement: J.K cement, bearing IS:269 Ordinary Portland cement, Manuf. date: Week 20, Month 05, Year'2020. 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	: 1.14 % : 31.50% : 145 minutes : 245 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.					

- Copy to:
1. The Assistant Engineer, SDII, WDVII, WRD, Dhargal, Pernem – Goa.
 2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.
 3. Copy Submitted to The Executive Engineer, W.D.VII, WRD, Dhargal, Pernem – Goa.
 4. Q.C. Lab file
 5. Bill File.

Junior Engineer

Assistant Engineer