

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

Test Report No.: WRD/Q.C./F.6-4/Aggr-T-9436 , 9437 /Lab/ 283 /2019-20

Dated: 15/ 10/2019.**Laboratory:** Bicholim

Sand –T: 4917 , 4918 , Cement: 1103.

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 Ugvem in Pernem Taluka.

Ref to requisition No: SDII/WDVII/WRD/F. 18/2019-20/83 Dated: 04/10/2019.

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

Sample:Sand,20mm, **O.S. No.** 1131 To 1135 /AF **Lab. Sample No.:** 6822 To 6826 **Tested by:** Mr. Anil R. Fadte, JE.

12.50mm size aggrt, cement.

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. – 40 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. – 40 m ³)	
REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:2 by weight; it is satisfying therequired criteria for graded aggregate of 20 mm nominal size.					
3.	Coarse Sand: (L.S.No.6824)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 3.80% : - 5.68% : - 2.79 : - II	4. Coarse Sand: (L.S.No.6825)	i) Silt & Clay by S.A. method : - 4.20% ii) Silt by sedimentation : - 5.56% iii) Fineness Modulus : - 2.47 iv) Grading Zone : - III
REMARK: The observed results are within the permissible limits of the coarse sand.					
5.	Cement: J.K cement, bearing IS:269 Ordinary Portland cement, Manuf. date: Week 39, Month 09, Year'2019. CM/L =0003401033 Qty. rep. – To be used for – PCC and RCC.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.32% : 30.50% : 140 minutes : 270 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