

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

Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 9823, 9824 /Lab/22/2021-22 **Dated:** 22/ 04/2021.

Laboratory: Bicholim

Sand –T: 5142&5143 .Cement-1250

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

Sub: Construction of Bandhara (Rajwalachobandh) at village Golauli in V.P.Dongurli Thane in Sattari Taluka.

Ref to requisition No: MIN/WDVI/WRD/SDII/F.62/21-22/13 **Dated:** 12/04/2021.

Qty. Received: 1 bags each **Date of Receipt:** 12/04/2021 **Tested on:** 15,16&17/04/2021 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample: Sand,20mm, **O.S. No.**5873,5874,5894,5907 & 5864 /SS **Lab. Sample No.:** 1164 To1168 **Tested by:** Mrs. Shirodkar.JE.

12.5mm size aggrt., Cement

R E P O R T 01 OF 02

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 1:1 by weight; it is satisfying therequired criteria for graded aggregate of 20 mm nominal size.					
3.	Sand: (L.S.No.1167)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 4.60% : - 5.20% : - 2.94 : - II		
REMARK: The observed results are within the permissible limits of the coarse sand.					
4.	Crushed Sand: (L.S.No.1166)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 13.20% : - 12.50% : - 2.78 : - 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).					

Junior Engineer

Assistant Engineer

R E P O R T 02 OF 02

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
5.	<u>Cement:</u> Ultratech.Cement, bearing IS:269 Ordinary Portland cement, Manuf. date:W/M-Invisible CM/L =7171769 Qty. rep. – To be used for – 1:2:4&1:1.5:3mix concrete		i)Fineness of Cement : 1.28% ii) Consistency of cement : 31.50% iii) Initial Setting Time : 165 minutes iv) Final Setting Time : 195 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)	<u>REMARK: The observed results are within the permissible limit for Ordinary Portland cement.</u>

- Copy to: 1. The Assistant Engineer, SDII, WDV, WRD, Valpoi-Sattari – Goa.
 2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.
 3. Copy Submitted to The Executive Engineer, W.D. VI, WRD, Bicholim – Goa
 4. Q.C. Lab file 5. Bill File.

Junior Engineer

Assistant Engineer