

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

Test Report No.: WRD/Q.C./F.6-4/ Aggr -T- 9356, 9357 /Lab/ 53 /2019-20

Dated: 22/ 04 / 2019.

Laboratory: Bicholim

Sand –T: 4869 , Cement: 1070.

Sub Div: V (QC)/WRD/Bicholim

Sub: Construction of Anjuna Distributory taking off at ch. 28.97 km of the Left bank main canal of Tillari Irrigation Project in Siolim & Anjuna Village of Bardez Taluka. **Part II** : Construction of Rising main and reinstatement of allied structures for Anjuna Distributory from ch.0.00km to ch. 4.50kms in Cucholim and Siolim Village of Bardez Taluka

Ref to requisition No: SDIII/WDVIII/WRD/WF. 32(PART- II)/2019-20/02 Dated: 03/04/2019.

Qty. Received: 1 bags each **Date of Receipt:** 08/04/2019 **Tested on:** 09,12,13 & 16/04/2019 **Ref to Specification:** CPWD 2002, Vol. I & IS:4031-4-1988

Sample: Sand , ,20mm, **O.S. No. :** 1620,1621,1708 & 1660/SS **Lab. Sample No.:** 4261 To 4264 **Tested by:** Mrs. S. B. Naik Shirodkar.JE.
10.0mm 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. – 50.00 m ³)	
2.	10.0 mm Size Aggregate:	Particle size distribution:	It is not single sized aggregate of 10.0 mm nominal size.	(Qty. rep. – 50.00 m ³)	
REMARK: After blending 20 mm aggregate with 10.0 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.	Sand: (L.S.No.4263)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 3.60% : - 4.16% : - 2.306 : - III		
REMARK: The observed results are within the permissible limits of the coarse sand.					
4.	Cement: J.K cement, bearing IS:269 Ordinary Portland cement, Manuf. date: Week <u>11</u> , Month <u>03</u> , Year' <u>2019</u> . CM/L = <u>0003401033</u>	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.18 % : 30.50% : 165minutes : 285 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)	
Qty. rep. – _____ . To be used for – 1:1.5:3 grade concrete for anchor block & thrust block.					
REMARK: The observed results are within the permissible limit for Ordinary Portland cement.					

- Copy to:
1. The Assistant Engineer, SDIII, WDVIII, Karaswada Bardez – Goa
 2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.
 3. Copy Submitted to The Executive Engineer, W.D.VIII, WRD, , Karaswada Bardez – Goa .
 4. Q.C. Lab file
 5. Bill File.

Junior Engineer

Assistant Engineer

**GOVERNMENT OF GOA
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WATER RESOURCES DEPARTMENT**

Test Report No.: WRD/Q.C./F.6-4/ Aggr -T- 9358, 9359 /Lab/ 54 /2019-20
Sand –T: 4870 , Cement: 1071.

Dated: 22/ 04 / 2019.

Laboratory: Bicholim

Sub Div: V (QC)/WRD/Bicholim

Sub: Construction of Anjuna Distributory taking off at ch. 28.97 km of the Left bank main canal of Tillari Irrigation Project in Siolim & Anjuna Village of Bardez Taluka. **Part III :** Construction of Rising main from ch.4.50km to ch. 7.29kms, Break Pressure tank (BPT), Gravity main from ch.0.00km to ch. 1.00 kms and reinstatement of allied structures for Anjuna Distributory in Siolim and Assagao Village of Bardez Taluka.

Ref to requisition No: SDIII/WDVIII/WRD/WF. 32(PART- III)/2019-20/03 Dated: 03/04/2019.

Qty. Received: 1 bags each **Date of Receipt:** 08/04/2019 **Tested on:** 11,12,13 & 16/04/2019 **Ref to Specification:** CPWD 2002, Vol. I & IS:4031-4-1988

Sample: Sand , 20mm, **O.S. No. :** 1658,1659,1678 & 1698/SS **Lab. Sample No.:** 4265 To 4268 **Tested by:** Mrs. S. B. Naik Shirodkar.JE.
10.0mm 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. – 50.00 m ³)	
2.	10.0 mm Size Aggregate:	Particle size distribution:	It is not single sized aggregate of 10.0 mm nominal size.	(Qty. rep. – 50.00 m ³)	
REMARK: After blending 20 mm aggregate with 10.0 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.	Sand: (L.S.No.4267)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 3.60% : - 4.25% : - 2.218 : - III		
REMARK: The observed results are within the permissible limits of the coarse sand.					
4.	Cement: J.K cement, bearing IS:269 Ordinary Portland cement, Manuf. date: Week 11, Month 03, Year'2019. CM/L = 0003401033	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.07 % : 30.00% : 150minutes : 255 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)	
Qty. rep. – _____. To be used for – 1:1.5:3 grade concrete for anchor block & thrust block.					
REMARK: The observed results are within the permissible limit for Ordinary Portland cement.					

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 4. Q.C. Lab file
 5. Bill File.

Junior Engineer

Assistant Engineer

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

Test Report No.: WRD/Q.C./F.6-4/ Aggr -T- 9360, 9361 /Lab/ 55 /2019-20
Sand –T: 4868 , Cement: 1069.

Dated: 22/ 04 / 2019.

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

Sub: Flood Control measures at Camrabhat, V.P. Taleigao, Tiswadi.

Ref to requisition No: MI/SDI/WDI/WRD/F. 57/2018-19/734 Dated: 29/03/2019.

Qty. Received: 1 bags each **Date of Receipt:** 08/04/2019 **Tested on:** 10,11 & 12/04/2019 **Ref to Specification:** CPWD 2002, Vol. I & IS:4031-4-1988

Sample: Sand ,20mm, **O.S.No.** 1622,1623,1634 & 1635 /SS **Lab. Sample No.:** 4228 To 4231 **Tested by:** Mrs. S. B. Naik Shirodkar.JE.
12.5mm 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. – --- 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.	Sand: (L.S.No.4230)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 4.00% : - 4.44% : - 2.198 : - III		
REMARK: The observed results are within the permissible limits of the coarse sand.					
4.	Cement: J.K cement, bearing IS:269 Ordinary Portland cement, Manuf. date: Week 12, Month 03, Year'2019. CM/L = 0003401033 Qty. rep. – _____. To be used for – NOT SPECIFIED.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.08 % : 30.50% : 160 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.					

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3. Copy Submitted to The Executive Engineer, W.D. I, WRD, Porvorim – Goa.

4. Q.C. Lab file

5. Bill File.

Junior Engineer

Assistant Engineer