

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

Test Report No.: WRD/QC/F.6-2/Cube -T : 001 To 004, 009 To 012, 023 To 026 / Lab / **75** / 2020 - 21

Dated:- 26 / 06/ 2020

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

**Name of Work: - Construction of Barrage and up gradation of Raw water pumping station at Ganjem on Mhadei River for Augmentation of Raw water for Opa water works Part I: Construction of Barrage , providing and laying 1000 mm dia. D.I. pipe Rising main and Break Pressure Tank at Ganjem in Sattari Taluka.**

Ref. to Requisition No.: WRD/WDVI/SD I /F.W.215/2020-21/ **96** Dated :- 15-06-2020

Qty. Recived. : 12 Sets of cube Date of Receipt: -15/06/2020. Tested on:- 15 TO 17/06/2020 as per due dates. Ref to CPWD :2009, Vol. I

Sample: RCC 1 : 1.5 : 3 Mix O.S No. : 3912,3913,3917,3918,3928 & 3929/SS. Lab. Sample No.: 9217 To 9228, Tested By: - Mrs. S.B. Naik Shirodkar, J.E.

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SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissible	% above or below	REMARK
1	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 18/05/2020. RCC for wall on RHS on D/s up to 1.80m .	28th day compressive strength	294.48	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	7.71	Represents Qty. 13.00 Cum.
			271.83	Kg/Cm <sup>2</sup>			
			289.95	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>285.42</b>	<b>Kg/Cm<sup>2</sup></b>			
2	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 18/05/2020. RCC for wall on RHS on D/s up to 1.80m .	28th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	5.43	--- do ---
			287.69	Kg/Cm <sup>2</sup>			
			267.30	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>279.38</b>	<b>Kg/Cm<sup>2</sup></b>			
3	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 18/05/2020. RCC for abutment on RHS from 2.4 m to 3.6 m.	28th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	6.57	Represents Qty. 15.00 Cum.
			285.42	Kg/Cm <sup>2</sup>			
			278.63	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>282.40</b>	<b>Kg/Cm<sup>2</sup></b>			
4	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 18/05/2020. RCC for abutment on RHS from 2.4 m to 3.6 m.	28th day compressive strength	271.83	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	6.00	--- do ---
			280.89	Kg/Cm <sup>2</sup>			
			289.95	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>280.89</b>	<b>Kg/Cm<sup>2</sup></b>			
5	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 19/05/2020. RCC for pier P6-3 <sup>rd</sup> Lift.	28th day compressive strength	301.28	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	9.42	Represents Qty. 13.50 Cum.
			294.48	Kg/Cm <sup>2</sup>			
			274.10	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>289.95</b>	<b>Kg/Cm<sup>2</sup></b>			
6	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 19/05/2020. RCC for pier P6-3 <sup>rd</sup> Lift.	28th day compressive strength	303.55	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	8.85	--- do ---
			285.42	Kg/Cm <sup>2</sup>			
			276.36	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>288.44</b>	<b>Kg/Cm<sup>2</sup></b>			

Junior Engineer

Assistant Engineer

SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
7	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 19/05/2020. RCC for pier P7-3 <sup>rd</sup> Lift.	28th day compressive strength	278.63	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	7.99	Represents Qty. 13.50 Cum.
			289.95	Kg/Cm <sup>2</sup>			
			289.95	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>286.18</b>	<b>Kg/Cm<sup>2</sup></b>			
8	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 19/05/2020. RCC for pier P7-3 <sup>rd</sup> Lift.	28th day compressive strength	294.48	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	8.56	--- do ---
			285.42	Kg/Cm <sup>2</sup>			
			283.16	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>287.69</b>	<b>Kg/Cm<sup>2</sup></b>			
9	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 20/05/2020. RCC for pier P8-3 <sup>rd</sup> Lift.	28th day compressive strength	310.34	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	16.54	Represents Qty. 13.00 Cum.
			317.14	Kg/Cm <sup>2</sup>			
			299.01	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>308.83</b>	<b>Kg/Cm<sup>2</sup></b>			
10	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 20/05/2020. RCC for pier P8-3 <sup>rd</sup> Lift.	28th day compressive strength	294.48	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	12.55	Represents Qty. 13.50 Cum.
			296.75	Kg/Cm <sup>2</sup>			
			303.55	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>298.26</b>	<b>Kg/Cm<sup>2</sup></b>			
11	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 20/05/2020. RCC for pier P9-2 <sup>nd</sup> Lift.	28th day compressive strength	301.28	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	13.41	Represents Qty. 13.50 Cum.
			308.08	Kg/Cm <sup>2</sup>			
			292.22	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>300.52</b>	<b>Kg/Cm<sup>2</sup></b>			
12	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 20/05/2020. RCC for pier P9-2 <sup>nd</sup> Lift.	28th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	10.84	--- do ---
			294.48	Kg/Cm <sup>2</sup>			
			303.55	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>293.73</b>	<b>Kg/Cm<sup>2</sup></b>			

- 1.Copy to: The Assistant Engineer SD I , WD VI , WRD , Bicholim Goa.
2. Copy submitted to:The Superintending Engineer ,CPO,WRD, Sinchai Bhavan, Porvorim Goa. For kind Information.
3. Copy submitted to:The Executive Engineer ,WDVI,WRD, Bicholim-Goa.
4. QC Lab File.      5. Bill File.

Junior Engineer

Assistant Engineer