

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

Test Report No.: WRD/QC/F.6-2/Cube -T : 9625 To 9636 / Lab / **33** / 2020 - 21      Dated:- 28 / 05/ 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 Reg. 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/ **57**      Dated :- 23-05-2020

Qty. Recived. : 12 Sets of cube      Date of Receipt: -23 /05/2020.      Tested on:- 25/05/2020 .      Ref to CPWD :2009, Vol. I

Sample: RCC 1 : 1.5 : 3 Mix      O.S No. : 3687 & 3688/SS. Lab. Sample No.: 8908 To 8919      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	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 27/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	9.42	Represents Qty. 15.00 Cum.
			294.48	Kg/Cm <sup>2</sup>			
			292.22	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>289.95</b>	<b>Kg/Cm<sup>2</sup></b>			
2	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 27/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	271.83	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	7.42	--- do ---
			280.89	Kg/Cm <sup>2</sup>			
			301.28	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>284.67</b>	<b>Kg/Cm<sup>2</sup></b>			
3	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 27/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	305.81	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	11.70	--- do ---
			292.22	Kg/Cm <sup>2</sup>			
			289.95	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>295.99</b>	<b>Kg/Cm<sup>2</sup></b>			
4	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 27/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	294.48	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	8.56	--- do ---
			283.16	Kg/Cm <sup>2</sup>			
			285.42	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>287.69</b>	<b>Kg/Cm<sup>2</sup></b>			
5	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 27/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	9.42	--- do ---
			296.75	Kg/Cm <sup>2</sup>			
			289.95	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>289.95</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
6	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 27/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	301.28	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	12.84	Represents Qty. 15.00 Cum.
			305.81	Kg/Cm <sup>2</sup>			
			289.95	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>299.01</b>	<b>Kg/Cm<sup>2</sup></b>			
7	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 27/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	289.95	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	5.14	--- do ---
			280.89	Kg/Cm <sup>2</sup>			
			265.04	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>278.63</b>	<b>Kg/Cm<sup>2</sup></b>			
8	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 27/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	280.89	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	7.14	--- do ---
			283.16	Kg/Cm <sup>2</sup>			
			287.69	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>283.91</b>	<b>Kg/Cm<sup>2</sup></b>			
9	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 27/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	285.42	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	4.86	--- do ---
			271.83	Kg/Cm <sup>2</sup>			
			276.36	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>277.87</b>	<b>Kg/Cm<sup>2</sup></b>			
10	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 27/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	280.89	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	7.71	--- do ---
			292.22	Kg/Cm <sup>2</sup>			
			283.16	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>285.42</b>	<b>Kg/Cm<sup>2</sup></b>			
11	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 27/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	271.83	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	6.57	--- do ---
			294.48	Kg/Cm <sup>2</sup>			
			280.89	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>282.40</b>	<b>Kg/Cm<sup>2</sup></b>			
12	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 27/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	8.85	--- do ---
			289.95	Kg/Cm <sup>2</sup>			
			292.22	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>288.44</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