

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

Test Report No.: WRD/QC/F.6-2/Cube -T : 9710 To 9721,9737 To 9748 . / Lab / **35** / 2020 - 21 Dated:- 30 / 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 No1.: WRD/WDVI/SD I /F.W.215/2020-21/ **62** Dated :- 28-05-2020

Ref. to Requisition No.2: WRD/WDVI/SD I /F.W.215/2020-21/ **64** Dated :- 29-05-2020

Qty. Recived. : 12+12= 24 Sets of cube Date of Receipt: -28 & 30 /05/2020. Tested on:- 28 & 30/05/2020 as per due dates. Ref to CPWD :2009, Vol. I

Sample: RCC 1 : 1.5 : 3 Mix O.S No. : 3719 TO 3724, 3745 & 3746 /SS. Lab. Sample No.: 8961 To 8972 & 9006 To 9017 Tested By: - Mrs. S.B. Naik Shirodkar, J.E.

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SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
1	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 30/04/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	289.95	Kg/Cm ²	265.00 Kg/Cm ²	10.84	Represents Qty. 20.00 Cum.
			308.08	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	293.73	Kg/Cm²			
2	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 30/04/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	317.14	Kg/Cm ²	265.00 Kg/Cm ²	10.27	--- do ---
			283.16	Kg/Cm ²			
			276.36	Kg/Cm ²			
		Average	292.22	Kg/Cm²			
3	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 30/04/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	292.22	Kg/Cm ²	265.00 Kg/Cm ²	9.13	--- do ---
			294.48	Kg/Cm ²			
			280.89	Kg/Cm ²			
		Average	289.20	Kg/Cm²			
4	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 30/04/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	280.89	Kg/Cm ²	265.00 Kg/Cm ²	6.00	--- do ---
			271.83	Kg/Cm ²			
			289.95	Kg/Cm ²			
		Average	280.89	Kg/Cm²			
5	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 30/04/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	289.95	Kg/Cm ²	265.00 Kg/Cm ²	9.42	--- do ---
			280.89	Kg/Cm ²			
			299.01	Kg/Cm ²			
		Average	289.95	Kg/Cm²			

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 1:1.5:3 , cast on 30/04/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	294.48	Kg/Cm ²	265.00 Kg/Cm ²	7.71	Represents Qty. 20.00 Cum.
			289.95	Kg/Cm ²			
			271.83	Kg/Cm ²			
		Average	285.42	Kg/Cm²			
7	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 30/04/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	280.89	Kg/Cm ²	265.00 Kg/Cm ²	12.27	--- do ---
			294.48	Kg/Cm ²			
			317.14	Kg/Cm ²			
		Average	297.50	Kg/Cm²			
8	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 30/04/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	305.81	Kg/Cm ²	265.00 Kg/Cm ²	9.99	--- do ---
			271.83	Kg/Cm ²			
			296.75	Kg/Cm ²			
		Average	291.46	Kg/Cm²			
9	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 30/04/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	294.48	Kg/Cm ²	265.00 Kg/Cm ²	11.98	--- do ---
			289.95	Kg/Cm ²			
			305.81	Kg/Cm ²			
		Average	296.75	Kg/Cm²			
10	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 30/04/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	299.01	Kg/Cm ²	265.00 Kg/Cm ²	10.27	--- do ---
			287.69	Kg/Cm ²			
			289.95	Kg/Cm ²			
		Average	292.22	Kg/Cm²			
11	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 30/04/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	280.89	Kg/Cm ²	265.00 Kg/Cm ²	9.13	--- do ---
			299.01	Kg/Cm ²			
			287.69	Kg/Cm ²			
		Average	289.20	Kg/Cm²			
12	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 30/04/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	296.75	Kg/Cm ²	265.00 Kg/Cm ²	7.99	--- do ---
			289.95	Kg/Cm ²			
			271.83	Kg/Cm ²			
		Average	286.18	Kg/Cm²			
13	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 02/05/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	310.34	Kg/Cm ²	265.00 Kg/Cm ²	9.70	--- do ---
			285.42	Kg/Cm ²			
			276.36	Kg/Cm ²			
		Average	290.71	Kg/Cm²			

SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
14	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 02/05/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	283.16	Kg/Cm ²	265.00 Kg/Cm ²	9.13	Represents Qty. 20.00 Cum.
			303.55	Kg/Cm ²			
			280.89	Kg/Cm ²			
		Average	289.20	Kg/Cm²			
15	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 02/05/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/Cm ²	7.42	--- do ---
			294.48	Kg/Cm ²			
			287.69	Kg/Cm ²			
		Average	284.67	Kg/Cm²			
16	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 02/05/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	305.81	Kg/Cm ²	265.00 Kg/Cm ²	10.27	--- do ---
			292.22	Kg/Cm ²			
			278.63	Kg/Cm ²			
		Average	292.22	Kg/Cm²			
17	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 02/05/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	285.42	Kg/Cm ²	265.00 Kg/Cm ²	5.71	--- do ---
			283.16	Kg/Cm ²			
			271.83	Kg/Cm ²			
		Average	280.14	Kg/Cm²			
18	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 02/05/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	289.95	Kg/Cm ²	265.00 Kg/Cm ²	8.85	--- do ---
			283.16	Kg/Cm ²			
			292.22	Kg/Cm ²			
		Average	288.44	Kg/Cm²			
19	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 02/05/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	299.01	Kg/Cm ²	265.00 Kg/Cm ²	8.56	--- do ---
			280.89	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	287.69	Kg/Cm²			
20	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 02/05/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	294.48	Kg/Cm ²	265.00 Kg/Cm ²	14.26	--- do ---
			308.08	Kg/Cm ²			
			305.81	Kg/Cm ²			
		Average	302.79	Kg/Cm²			
21	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 02/05/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	283.16	Kg/Cm ²	265.00 Kg/Cm ²	7.14	--- do ---
			276.36	Kg/Cm ²			
			292.22	Kg/Cm ²			
		Average	283.91	Kg/Cm²			

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SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
22	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 02/05/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	265.04	Kg/Cm ²	265.00 Kg/Cm ²	5.43	Represents Qty. 20.00 Cum.
			283.16	Kg/Cm ²			
			289.95	Kg/Cm ²			
		Average	279.38	Kg/Cm²			
23	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 02/05/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	303.55	Kg/Cm ²	265.00 Kg/Cm ²	11.41	--- do ---
			294.48	Kg/Cm ²			
			287.69	Kg/Cm ²			
		Average	295.24	Kg/Cm²			
24	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 02/05/2020. RCC for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	296.75	Kg/Cm ²	265.00 Kg/Cm ²	10.56	--- do ---
			287.69	Kg/Cm ²			
			294.48	Kg/Cm ²			
		Average	292.97	Kg/Cm²			

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