

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

Test Report No.: WRD/QC/F.6-2/Cube -T : 9655 To 9666, 9681 To 9692 / Lab / **34** / 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/ **60** Dated :- 26-05-2020

Qty. Recived. : 24 Sets of cube Date of Receipt: -26 /05/2020. Tested on:- 26 & 27/05/2020 as per due dates. Ref to CPWD :2009, Vol. I

Sample: RCC 1 : 1.5 : 3 Mix O.S No. : 3697,3698,3707 & 3708/SS. Lab. Sample No.: 8928 To 8951, 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 1:1.5:3 , cast on 28/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	294.48	Kg/Cm ²	265.00 Kg/Cm ²	9.42	Represents Qty. 20.00 Cum.
			283.16	Kg/Cm ²			
			292.22	Kg/Cm ²			
		Average	289.95	Kg/Cm²			
2	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 28/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/Cm ²	5.14	--- do ---
			265.04	Kg/Cm ²			
			299.01	Kg/Cm ²			
		Average	278.63	Kg/Cm²			
3	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 28/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	289.95	Kg/Cm ²	265.00 Kg/Cm ²	8.28	--- do ---
			276.36	Kg/Cm ²			
			294.48	Kg/Cm ²			
		Average	286.93	Kg/Cm²			
4	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 28/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	303.55	Kg/Cm ²	265.00 Kg/Cm ²	10.56	--- do ---
			294.48	Kg/Cm ²			
			280.89	Kg/Cm ²			
		Average	292.97	Kg/Cm²			
5	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 28/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/Cm ²	4.29	--- do ---
			276.36	Kg/Cm ²			
			280.89	Kg/Cm ²			
		Average	276.36	Kg/Cm²			
6	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 28/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	292.22	Kg/Cm ²	265.00 Kg/Cm ²	4.86	--- do ---
			271.83	Kg/Cm ²			
			269.57	Kg/Cm ²			
		Average	277.87	Kg/Cm²			

Junior Engineer

Assistant Engineer

SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
7	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 28/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	305.81	Kg/Cm ²	265.00 Kg/Cm ²	7.14	Represents Qty. 20.00 Cum.
			271.83	Kg/Cm ²			
			274.10	Kg/Cm ²			
			Average	283.91			
8	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 28/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	294.48	Kg/Cm ²	265.00 Kg/Cm ²	10.27	--- do ---
			285.42	Kg/Cm ²			
			296.75	Kg/Cm ²			
			Average	292.22			
9	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 28/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/Cm ²	4.00	--- do ---
			283.16	Kg/Cm ²			
			271.83	Kg/Cm ²			
			Average	275.61			
10	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 28/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	280.89	Kg/Cm ²	265.00 Kg/Cm ²	6.85	--- do ---
			292.22	Kg/Cm ²			
			276.36	Kg/Cm ²			
			Average	283.16			
11	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 28/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	301.28	Kg/Cm ²	265.00 Kg/Cm ²	13.12	--- do ---
			303.55	Kg/Cm ²			
			294.48	Kg/Cm ²			
			Average	299.77			
12	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 28/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	283.16	Kg/Cm ²	265.00 Kg/Cm ²	6.28	--- do ---
			289.95	Kg/Cm ²			
			271.83	Kg/Cm ²			
			Average	281.65			
13	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 29/04/2020. 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			
14	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 29/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	294.48	Kg/Cm ²	265.00 Kg/Cm ²	6.57	--- do ---
			271.83	Kg/Cm ²			
			280.89	Kg/Cm ²			
			Average	282.40			
15	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 29/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	296.75	Kg/Cm ²	265.00 Kg/Cm ²	7.14	--- do ---
			278.63	Kg/Cm ²			
			276.36	Kg/Cm ²			
			Average	283.91			
16	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 29/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	289.95	Kg/Cm ²	265.00 Kg/Cm ²	10.27	--- do ---
			299.01	Kg/Cm ²			
			287.69	Kg/Cm ²			
			Average	292.22			

Junior Engineer

Assistant Engineer

SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
17	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 29/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	305.81	Kg/Cm ²	265.00 Kg/Cm ²	8.28	Represents Qty. 20.00 Cum.
			280.89	Kg/Cm ²			
			274.10	Kg/Cm ²			
		Average	286.93	Kg/Cm²			
18	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 29/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/Cm ²	3.15	--- do ---
			265.04	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	273.34	Kg/Cm²			
19	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 29/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	294.48	Kg/Cm ²	265.00 Kg/Cm ²	11.41	--- do ---
			305.81	Kg/Cm ²			
			285.42	Kg/Cm ²			
		Average	295.24	Kg/Cm²			
20	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 29/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	280.89	Kg/Cm ²	265.00 Kg/Cm ²	4.57	--- do ---
			271.83	Kg/Cm ²			
			278.63	Kg/Cm ²			
		Average	277.12	Kg/Cm²			
21	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 29/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/Cm ²	9.70	--- do ---
			308.08	Kg/Cm ²			
			292.22	Kg/Cm ²			
		Average	290.71	Kg/Cm²			
22	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 29/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	301.28	Kg/Cm ²	265.00 Kg/Cm ²	7.99	--- do ---
			280.89	Kg/Cm ²			
			276.36	Kg/Cm ²			
		Average	286.18	Kg/Cm²			
23	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 29/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	303.55	Kg/Cm ²	265.00 Kg/Cm ²	13.41	--- do ---
			292.22	Kg/Cm ²			
			305.81	Kg/Cm ²			
		Average	300.52	Kg/Cm²			
24	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 29/04/2020. for floor of barrage from ch. 88 m - 113 m.	28th day compressive strength	289.95	Kg/Cm ²	265.00 Kg/Cm ²	10.27	--- do ---
			303.55	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	292.22	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