

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

Test Report No.: WRD/QC/F.6-2/Cube -T : 7372 To 7381 & 7387 To 7396 / Lab / **210** / 2019 - 20 Dated:- 22 / 06 / 2019

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.215/2019-20/ **223** Dated :- 21-06-2019

Qty. Recived. : 20 Sets of cube Date of Receipt: - 21/06/2019. Tested on: -21 & 22/06/2019 Ref to CPWD :2002, Vol. I

Sample: RCC 1 : 1.5 : 3 Mix O.S No. : 942/AF To 951/AF & 957 To 966/AF Lab. Sample No.: 6359 To 6378. Tested By: - Mr. Anil R. Fadte,J.E.

REPORT PAGE 01 OF 02

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 24/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	258.24	Kg/Cm ²	265.00 Kg/Cm ²	5.43	Represents Qty. 20.00 Cum.
			285.42	Kg/Cm ²			
			294.48	Kg/Cm ²			
		Average	279.38	Kg/Cm²			
2	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 24/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	265.04	Kg/Cm ²	265.00 Kg/Cm ²	5.71	-do-
			292.22	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	280.14	Kg/Cm²			
3	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 24/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	269.57	Kg/Cm ²	265.00 Kg/Cm ²	7.42	-do-
			296.75	Kg/Cm ²			
			287.69	Kg/Cm ²			
		Average	284.67	Kg/Cm²			
4	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 24/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	265.04	Kg/Cm ²	265.00 Kg/Cm ²	5.14	-do-
			294.48	Kg/Cm ²			
			276.36	Kg/Cm ²			
		Average	278.63	Kg/Cm²			
5	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 24/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	280.89	Kg/Cm ²	265.00 Kg/Cm ²	5.43	-do-
			289.95	Kg/Cm ²			
			267.30	Kg/Cm ²			
		Average	279.38	Kg/Cm²			
6	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 24/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	289.95	Kg/Cm ²	265.00 Kg/Cm ²	5.71	-do-
			267.30	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	280.14	Kg/Cm²			

Junior Engineer

Assistant Engineer

REPORT PAGE 02 OF 02

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 24/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	262.77	Kg/Cm ²	265.00 Kg/Cm ²	6.00	Represents Qty. 20.00 Cum.
			299.01	Kg/Cm ²			
			280.89	Kg/Cm ²			
		Average	280.89	Kg/Cm²			
8	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 24/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	294.48	Kg/Cm ²	265.00 Kg/Cm ²	13.12	-do-
			326.20	Kg/Cm ²			
			278.63	Kg/Cm ²			
		Average	299.77	Kg/Cm²			
9	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 24/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	317.14	Kg/Cm ²	265.00 Kg/Cm ²	9.99	-do-
			265.04	Kg/Cm ²			
			292.22	Kg/Cm ²			
		Average	291.46	Kg/Cm²			
10	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 24/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	294.48	Kg/Cm ²	265.00 Kg/Cm ²	6.28	-do-
			267.30	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	281.65	Kg/Cm²			
11	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 25/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	292.22	Kg/Cm ²	265.00 Kg/Cm ²	4.57	-do-
			274.10	Kg/Cm ²			
			265.04	Kg/Cm ²			
		Average	277.12	Kg/Cm²			
12	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 25/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/Cm ²	3.43	-do-
			267.30	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	274.10	Kg/Cm²			
13	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 25/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	326.20	Kg/Cm ²	265.00 Kg/Cm ²	8.56	-do-
			274.10	Kg/Cm ²			
			262.77	Kg/Cm ²			
		Average	287.69	Kg/Cm²			
14	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 25/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	328.46	Kg/Cm ²	265.00 Kg/Cm ²	6.57	-do-
			235.59	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	282.40	Kg/Cm²			
15	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 25/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	330.73	Kg/Cm ²	265.00 Kg/Cm ²	10.84	Represents Qty. 20.00 Cum.
			267.30	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	293.73	Kg/Cm²			

Junior Engineer

Assistant Engineer

REPORT PAGE 03 OF 03

SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissible	% above or below	REMARK
16	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 25/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	287.69	Kg/Cm ²	265.00 Kg/Cm ²	11.13	Represents Qty. 20.00 Cum.
			317.14	Kg/Cm ²			
			278.63	Kg/Cm ²			
		Average	294.48	Kg/Cm²			
17	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 25/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	287.69	Kg/Cm ²	265.00 Kg/Cm ²	7.99	-do-
			265.04	Kg/Cm ²			
			305.81	Kg/Cm ²			
		Average	286.18	Kg/Cm²			
18	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 25/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	267.30	Kg/Cm ²	265.00 Kg/Cm ²	9.70	-do-
			308.08	Kg/Cm ²			
			296.75	Kg/Cm ²			
		Average	290.71	Kg/Cm²			
19	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 25/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	280.89	Kg/Cm ²	265.00 Kg/Cm ²	10.84	-do-
			292.22	Kg/Cm ²			
			308.08	Kg/Cm ²			
		Average	293.73	Kg/Cm²			
20	Reinforced Cement concrete cube of mix 1:1.5:3 , cast on 25/05/2019, RCC for floor of Barage from 55-88 m.	28th day compressive strength	278.63	Kg/Cm ²	265.00 Kg/Cm ²	8.85	-do-
			319.40	Kg/Cm ²			
			267.30	Kg/Cm ²			
		Average	288.44	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