

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

Test Report No.: WRD/QC/F.6-2/Cube -T : 9056 To 9058,9073 To 9075,9095,9096,9111 To 9113,9129 & 9130 / Lab / **484** / 2019 - 20 Dated:- 11 / 03/ 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.215/2019-20/ **747** Dated :-06-03-2020

Qty. Recived. : 13 Sets of cube Date of Receipt: -06/03/2020. Tested on:- 06/03/2020 To 11/03/2020 as per due dates. Ref to CPWD :2009, Vol. I

Sample: RCC 1 : 1.5 : 3 Mix O.S No. : 3384,3385,3386,3400,3418,3438 & 3450/SS. Lab. Sample No.: 8331 To 8343 Tested By: - Mrs. S.B.Naik Shirodkar,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 <b>1:1.5:3</b> , cast on 07/02/2020, RCC for crest of 4 <sup>th</sup> opening.	28th day compressive strength	312.61	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	18.53	1) Represents Qty. 20.00 Cum. 2) Cube test is witnessed by Shri. Manjunath Dasmani., representative of PRN Infratech.
			326.20	Kg/Cm <sup>2</sup>			
			303.55	Kg/Cm <sup>2</sup>			
		Average	<b>314.12</b>	<b>Kg/Cm<sup>2</sup></b>			
2	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 07/02/2020, RCC for crest of 4 <sup>th</sup> opening.	28th day compressive strength	321.67	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	22.52	-do-
			335.26	Kg/Cm <sup>2</sup>			
			317.14	Kg/Cm <sup>2</sup>			
		Average	<b>324.69</b>	<b>Kg/Cm<sup>2</sup></b>			
3	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 07/02/2020, RCC for abutment on LHS	28th day compressive strength	271.83	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	9.99	1) Represents Qty. 16.00 Cum. 2) Same as Sl.No.1.
			310.34	Kg/Cm <sup>2</sup>			
			292.22	Kg/Cm <sup>2</sup>			
		Average	<b>291.46</b>	<b>Kg/Cm<sup>2</sup></b>			
4	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 08/02/2020, RCC for retaining wall on LHS.	28th day compressive strength	276.36	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	5.71	Represents Qty. 16.00 Cum.
			265.04	Kg/Cm <sup>2</sup>			
			299.01	Kg/Cm <sup>2</sup>			
		Average	<b>280.14</b>	<b>Kg/Cm<sup>2</sup></b>			
5	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 08/02/2020, RCC for retaining wall on LHS.	28th day compressive strength	317.14	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	11.98	-do-
			289.95	Kg/Cm <sup>2</sup>			
			283.16	Kg/Cm <sup>2</sup>			
		Average	<b>296.75</b>	<b>Kg/Cm<sup>2</sup></b>			
6	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 08/02/2020, RCC for retaining wall on LHS.	28th day compressive strength	305.81	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	7.99	-do-
			285.42	Kg/Cm <sup>2</sup>			
			267.30	Kg/Cm <sup>2</sup>			
		Average	<b>286.18</b>	<b>Kg/Cm<sup>2</sup></b>			

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 <b>1:1.5:3</b> , cast on 10/02/2020, RCC for crest of 5 <sup>th</sup> opening.	28th day compressive strength	267.30	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	4.00	Represents Qty. 20.00 Cum.
			276.36	Kg/Cm <sup>2</sup>			
			283.16	Kg/Cm <sup>2</sup>			
		Average	<b>275.61</b>	<b>Kg/Cm<sup>2</sup></b>			
8	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 10/02/2020, RCC for crest of 5 <sup>th</sup> opening.	28th day compressive strength	271.83	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	5.43	-do-
			287.69	Kg/Cm <sup>2</sup>			
			278.63	Kg/Cm <sup>2</sup>			
		Average	<b>279.38</b>	<b>Kg/Cm<sup>2</sup></b>			
9	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 11/02/2020, RCC for crest of 6 <sup>th</sup> opening.	28th day compressive strength	280.89	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	2.29	-do-
			267.30	Kg/Cm <sup>2</sup>			
			265.04	Kg/Cm <sup>2</sup>			
		Average	<b>271.08</b>	<b>Kg/Cm<sup>2</sup></b>			
10	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 11/02/2020, RCC for crest of 6 <sup>th</sup> opening.	28th day compressive strength	253.71	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	3.15	-do-
			289.95	Kg/Cm <sup>2</sup>			
			276.36	Kg/Cm <sup>2</sup>			
		Average	<b>273.34</b>	<b>Kg/Cm<sup>2</sup></b>			
11	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 11/02/2020, RCC for retaining wall on LHS.	28th day compressive strength	303.55	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	10.27	Represents Qty. 16.00 Cum.
			294.48	Kg/Cm <sup>2</sup>			
			278.63	Kg/Cm <sup>2</sup>			
		Average	<b>292.22</b>	<b>Kg/Cm<sup>2</sup></b>			
12	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 12/02/2020, RCC for retaining wall on LHS.	28th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	4.57	-do-
			269.57	Kg/Cm <sup>2</sup>			
			278.63	Kg/Cm <sup>2</sup>			
		Average	<b>277.12</b>	<b>Kg/Cm<sup>2</sup></b>			
13	Reinforced Cement concrete cube of mix <b>1:1.5:3</b> , cast on 12/02/2020, RCC for retaining wall on LHS.	28th day compressive strength	292.22	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	7.99	-do-
			294.48	Kg/Cm <sup>2</sup>			
			271.83	Kg/Cm <sup>2</sup>			
		Average	<b>286.18</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