

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

Test Report No.: WRD/QC/F.6-2/Cube -T : 7289 To 7302 / Lab / **205**/ 2019 - 20 Dated:- 20 / 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/ 211 Dated :- 17-06-2019

Qty. Recived. : 14 Sets of cube Date of Receipt: - 17/06/2019. Tested on: -17/06/2019 Ref to CPWD :2002, Vol. I

Sample: PCC 1 : 2 : 4 Mix O.S No. : 904/AF To 917/AF. Lab. Sample No.: 6248 To 6261. 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	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	262.77	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	19.02	Represents Qty. 20.00 Cum.
			237.85	Kg/Cm <sup>2</sup>			
			249.18	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>249.93</b>	<b>Kg/Cm<sup>2</sup></b>			
2	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	249.18	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	22.61	--- do---
			267.30	Kg/Cm <sup>2</sup>			
			255.97	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>257.48</b>	<b>Kg/Cm<sup>2</sup></b>			
3	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	265.04	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	22.25	--- do---
			246.91	Kg/Cm <sup>2</sup>			
			258.24	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>256.73</b>	<b>Kg/Cm<sup>2</sup></b>			
4	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	242.38	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	21.53	--- do---
			262.77	Kg/Cm <sup>2</sup>			
			260.51	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>255.22</b>	<b>Kg/Cm<sup>2</sup></b>			
5	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	260.51	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	22.25	--- do---
			249.18	Kg/Cm <sup>2</sup>			
			260.51	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>256.73</b>	<b>Kg/Cm<sup>2</sup></b>			
6	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	262.77	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	21.17	--- do---
			246.91	Kg/Cm <sup>2</sup>			
			253.71	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>254.46</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	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	249.18	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	22.61	Represents Qty. 20.00 Cum.
			260.51	Kg/Cm <sup>2</sup>			
			262.77	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>257.48</b>	<b>Kg/Cm<sup>2</sup></b>			
8	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	265.04	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	22.97	--- do---
			251.44	Kg/Cm <sup>2</sup>			
			258.24	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>258.24</b>	<b>Kg/Cm<sup>2</sup></b>			
9	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	255.97	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	23.33	--- do---
			265.04	Kg/Cm <sup>2</sup>			
			255.97	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>258.99</b>	<b>Kg/Cm<sup>2</sup></b>			
10	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	235.59	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	11.47	--- do---
			217.47	Kg/Cm <sup>2</sup>			
			249.18	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>234.08</b>	<b>Kg/Cm<sup>2</sup></b>			
11	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	255.97	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	17.94	--- do---
			251.44	Kg/Cm <sup>2</sup>			
			235.59	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>247.67</b>	<b>Kg/Cm<sup>2</sup></b>			
12	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	240.12	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	21.17	--- do---
			262.77	Kg/Cm <sup>2</sup>			
			260.51	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>254.46</b>	<b>Kg/Cm<sup>2</sup></b>			
13	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	258.24	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	21.53	--- do---
			262.77	Kg/Cm <sup>2</sup>			
			244.65	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>255.22</b>	<b>Kg/Cm<sup>2</sup></b>			
14	Plain Cement concrete cube of mix 1 : 2 : 4, cast on 20 / 05 /2019, PCC for plum concrete below barrage floor from Ch. 95 - 113 m.	28th day compressive strength	246.91	Kg/Cm <sup>2</sup>	210.00 Kg/Cm <sup>2</sup>	21.17	--- do---
			255.97	Kg/Cm <sup>2</sup>			
			260.51	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>254.46</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