

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

Test Report No.: WRD/QC/F.6-2/Cube -T : 9850 To 9853, 9869 To 9872, 9877 To 9881 / Lab / 61 / 2020 - 2021

Dated:- 19/06/2020

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 Part I: 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/ 80 Dated :- 04-06-2020

Qty. Recived. : 13 Sets of cube Date of Receipt: -05/06/2020. Tested on:- 05 TO 07/06/2020 as per due dates. Ref to CPWD :2009, Vol. I

Sample: RCC 1 : 1.5 : 3 Mix O.S No. : 3805,3806,3807,3808,3819,3820,3824,3825 & 3826/SS. Lab. Sample No.: 9127 To 9139 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	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 08/05/2020. PCC for foundation of return wall on RHS.	28th day compressive strength	289.95	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	6.00	Represents Qty. 15.00 Cum.
			280.89	Kg/Cm <sup>2</sup>			
			271.83	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>280.89</b>			
2	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 08/05/2020. RCC for side wall and key wall on LHS on U/S - 6.0 m - 7.0 m.	28th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	9.70	Represents Qty. 12.00 Cum.
			303.55	Kg/Cm <sup>2</sup>			
			285.42	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>290.71</b>			
3	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 08/05/2020. RCC for LHS abutment RL- 7.2 m - 8.4 m.	28th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	10.56	Represents Qty. 15.00 Cum.
			301.28	Kg/Cm <sup>2</sup>			
			294.48	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>292.97</b>			
4	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 08/05/2020. RCC for LHS abutment RL- 7.2 m - 8.4 m.	28th day compressive strength	287.69	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	6.28	--- do ---
			280.89	Kg/Cm <sup>2</sup>			
			276.36	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>281.65</b>			
5	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 09/05/2020. RCC for LHS side wall and return wall on D/S - 6.0 m - 7.2 m.	28th day compressive strength	305.81	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	10.27	Represents Qty. 17.00 Cum.
			289.95	Kg/Cm <sup>2</sup>			
			280.89	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>292.22</b>			
6	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 09/05/2020. RCC for LHS side wall and return wall on D/S - 6.0 m - 7.2 m.	28th day compressive strength	271.83	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	7.14	--- do ---
			296.75	Kg/Cm <sup>2</sup>			
			283.16	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>283.91</b>			

Junior Engineer

Assistant Engineer

SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
7	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 09/05/2020. RCC for LHS side wall and return wall on D/S - 6.0 m - 7.2 m.	28th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	8.28	Represents Qty. 17.00 Cum.
			294.48	Kg/Cm <sup>2</sup>			
			283.16	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>286.93</b>			
8	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 09/05/2020. RCC for LHS side wall and return wall on D/S - 6.0 m - 7.2 m.	28th day compressive strength	278.63	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	9.42	--- do ---
			289.95	Kg/Cm <sup>2</sup>			
			301.28	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>289.95</b>			
9	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 10/05/2020. RCC for crest of barrage from ch.97 m - 108 m.	28th day compressive strength	271.83	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	7.14	Represents Qty. 20.00 Cum.
			294.48	Kg/Cm <sup>2</sup>			
			285.42	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>283.91</b>			
10	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 10/05/2020. RCC for crest of barrage from ch.97 m - 108 m.	28th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	11.13	--- do ---
			305.81	Kg/Cm <sup>2</sup>			
			294.48	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>294.48</b>			
11	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 10/05/2020. RCC for crest of barrage from ch.97 m - 108 m.	28th day compressive strength	289.95	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	9.13	--- do ---
			292.22	Kg/Cm <sup>2</sup>			
			285.42	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>289.20</b>			
12	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 10/05/2020. RCC for crest of barrage from ch.97 m - 108 m.	28th day compressive strength	287.69	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	8.28	--- do ---
			271.83	Kg/Cm <sup>2</sup>			
			301.28	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>286.93</b>			
13	Cement concrete cube of mix <b>1:1.5:3</b> , cast on 10/05/2020. RCC for crest of barrage from ch.97 m - 108 m.	28th day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/Cm <sup>2</sup>	6.57	--- do ---
			292.22	Kg/Cm <sup>2</sup>			
			271.83	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>282.40</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