

GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DEPARTMENT

Test Report No.: WRD / QC / F.6-2 / Cube -T :894 to 897,908 to 911,915,916/ Lab / **274**/ 2020 - 21 Dated:- 27/ 02 / 2021. Laboratory : Bicholim - Goa
,926 to 929 ,939,940,972 to 975,980,981,1035 to 1038 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 1000mm dia D.Ipipe Rising main and Break Pressure Tank at Ganjem in Sattari Taluka.**

Ref. to Requisition No.:WRD/ WDV/SDI/F.W.215/2020-21/506 Dated :- 05/ 02 / 2021.

Qty. Recived. :26 Sets of cube Date of Receipt:- 05/ 02 / 2021. Tested on: -05,06,07,08,09,12,13 & 17/02/21 as per due dates. Ref to CPWD :2009, Vol. I

Sample: Cube Mix 1:1.5:3 O.S No.:4926 to 4929,4942 to 4945,4952,4953,4964 to ,4967,4981,4982,5020 to 5023,5030,5031,5094 to 5097/SS Lab. Sample No.:330 to 355
Tested By: Mrs. S.B. Naik Shirodkar. J.E.

REPORT PAGE 01 OF 04

SR. NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
1	Cement concrete cube of mix 1 : 1.5: 3 , cast on 08/01/2021. RCC for Pier P2-11.85m to 13.05m	28 th day compressive strength	280.89	Kg/Cm ²	265.00 Kg/cm ²	10.84	Qty represents - 13.50 Cum.
			292.22	Kg/Cm ²			
			308.08	Kg/Cm ²			
		Average	293.73	Kg/Cm²			
2	Cement concrete cube of mix 1 : 1.5: 3 , cast on 08/01/2021. RCC for Pier P2-11.85m to 13.05m	28 th day compressive strength	296.75	Kg/Cm ²	265.00 Kg/cm ²	9.42	Qty represents - 13.50 Cum.
			283.16	Kg/Cm ²			
			289.95	Kg/Cm ²			
		Average	289.95	Kg/Cm²			
3	Cement concrete cube of mix 1 : 1.5: 3 , cast on 08/01/2021. RCC for Pier P3-10.80m to 11.85m	28 th day compressive strength	278.63	Kg/Cm ²	265.00 Kg/cm ²	4.86	Qty represents - 12.00 Cum.
			260.51	Kg/Cm ²			
			294.48	Kg/Cm ²			
		Average	277.87	Kg/Cm²			
4	Cement concrete cube of mix 1 : 1.5: 3 , cast on 08/01/2021. RCC for Pier P3-10.80m to 11.85m	28 th day compressive strength	283.16	Kg/Cm ²	265.00 Kg/cm ²	10.56	Qty represents - 12.00 Cum.
			292.22	Kg/Cm ²			
			303.55	Kg/Cm ²			
		Average	292.97	Kg/Cm²			
5	Cement concrete cube of mix 1 : 1.5: 3 , cast on 09/01/2021. RCC for Pier P4-10.80m to 11.85m	28 th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/cm ²	4.00	Qty represents - 12.00 Cum.
			289.95	Kg/Cm ²			
			265.04	Kg/Cm ²			
		Average	275.61	Kg/Cm²			
6	Cement concrete cube of mix 1 : 1.5: 3 , cast on 09/01/2021. RCC for Pier P4-10.80m to 11.85m	28 th day compressive strength	283.16	Kg/Cm ²	265.00 Kg/cm ²	8.28	Qty represents - 12.00 Cum.
			294.48	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	286.93	Kg/Cm²			

Junior Engineer

Assistant Engineer

REPORT PAGE 02 OF 04

SR. NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissible	% above or below	REMARK
7	Cement concrete cube of mix 1 : 1.5: 3 , cast on 09/01/2021. RCC for Pier P5-6.00m to 7.20m	28 th day compressive strength	276.36	Kg/Cm ²	265.00 Kg/cm ²	6.28	Qty represents - 13.50 Cum.
			296.75	Kg/Cm ²			
			271.83	Kg/Cm ²			
		Average	281.65	Kg/Cm²			
8	Cement concrete cube of mix 1 : 1.5: 3 , cast on 09/01/2021. RCC for Pier P5-6.00m to 7.20m	28 th day compressive strength	294.48	Kg/Cm ²	265.00 Kg/cm ²	13.69	Qty represents - 13.50 Cum.
			303.55	Kg/Cm ²			
			305.81	Kg/Cm ²			
		Average	301.28	Kg/Cm²			
9	Cement concrete cube of mix 1 : 1.5: 3 , cast on 10/01/2021. RCC for Pier P3-11.85m to 13.05m	28 th day compressive strength	296.75	Kg/Cm ²	265.00 Kg/cm ²	11.70	Qty represents - 13.50 Cum.
			287.69	Kg/Cm ²			
			303.55	Kg/Cm ²			
		Average	295.99	Kg/Cm²			
10	Cement concrete cube of mix 1 : 1.5: 3 , cast on 10/01/2021. RCC for Pier P3-11.85m to 13.05m	28 th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/cm ²	3.72	Qty represents - 13.50 Cum.
			280.89	Kg/Cm ²			
			271.83	Kg/Cm ²			
		Average	274.85	Kg/Cm²			
11	Cement concrete cube of mix 1 : 1.5: 3 , cast on 11/01/2021. RCC for Pier P4-11.85m to 13.05m	28 th day compressive strength	260.51	Kg/Cm ²	265.00 Kg/cm ²	7.99	Qty represents - 13.50 Cum.
			294.48	Kg/Cm ²			
			303.55	Kg/Cm ²			
		Average	286.18	Kg/Cm²			
12	Cement concrete cube of mix 1 : 1.5: 3 , cast on 11/01/2021. RCC for Pier P4-11.85m to 13.05m	28 th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/cm ²	8.28	Qty represents - 13.50 Cum.
			305.81	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	286.93	Kg/Cm²			
13	Cement concrete cube of mix 1 : 1.5: 3 , cast on 11/01/2021. RCC for Pier P5-7.20m to 8.40m	28 th day compressive strength	283.16	Kg/Cm ²	265.00 Kg/cm ²	8.56	Qty represents - 13.50 Cum.
			289.95	Kg/Cm ²			
			289.95	Kg/Cm ²			
		Average	287.69	Kg/Cm²			

Junior Engineer

Assistant Engineer

REPORT PAGE 03 OF 04

SR. NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
14	Cement concrete cube of mix 1 : 1.5: 3 , cast on 11/01/2021. RCC for Pier P5-7.20m to 8.40m	28 th day compressive strength	299.01	Kg/Cm ²	265.00 Kg/cm ²	8.56	Qty represents - 13.50 Cum.
			271.83	Kg/Cm ²			
			292.22	Kg/Cm ²			
		Average	287.69	Kg/Cm²			
15	Cement concrete cube of mix 1 : 1.5: 3 , cast on 12/01/2021. RCC for Pier P6-6.00m to 7.20m	28 th day compressive strength	280.89	Kg/Cm ²	265.00 Kg/cm ²	5.71	Qty represents - 13.50 Cum.
			269.57	Kg/Cm ²			
			289.95	Kg/Cm ²			
		Average	280.14	Kg/Cm²			
16	Cement concrete cube of mix 1 : 1.5: 3 , cast on 12/01/2021. RCC for Pier P6-6.00m to 7.20m	28 th day compressive strength	287.69	Kg/Cm ²	265.00 Kg/cm ²	9.70	Qty represents - 13.50 Cum.
			280.89	Kg/Cm ²			
			303.55	Kg/Cm ²			
		Average	290.71	Kg/Cm²			
17	Cement concrete cube of mix 1 : 1.5: 3 , cast on 15/01/2021. RCC for Pier P7-6.00m to 7.20m	28 th day compressive strength	283.16	Kg/Cm ²	265.00 Kg/cm ²	11.13	Qty represents - 13.50 Cum.
			294.48	Kg/Cm ²			
			305.81	Kg/Cm ²			
		Average	294.48	Kg/Cm²			
18	Cement concrete cube of mix 1 : 1.5: 3 , cast on 15/01/2021. RCC for Pier P7-6.00m to 7.20m	28 th day compressive strength	276.36	Kg/Cm ²	265.00 Kg/cm ²	4.86	Qty represents - 13.50 Cum.
			271.83	Kg/Cm ²			
			285.42	Kg/Cm ²			
		Average	277.87	Kg/Cm²			
19	Cement concrete cube of mix 1 : 1.5: 3 , cast on 15/01/2021. RCC for Pier P5-8.40m to 9.60m	28 th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/cm ²	8.85	Qty represents - 13.50 Cum.
			294.48	Kg/Cm ²			
			299.01	Kg/Cm ²			
		Average	288.44	Kg/Cm²			
20	Cement concrete cube of mix 1 : 1.5: 3 , cast on 15/01/2021. RCC for Pier P5-8.40m to 9.60m	28 th day compressive strength	283.16	Kg/Cm ²	265.00 Kg/cm ²	7.99	Qty represents - 13.50 Cum.
			303.55	Kg/Cm ²			
			271.83	Kg/Cm ²			
		Average	286.18	Kg/Cm²			

Junior Engineer

Assistant Engineer

REPORT PAGE 04 OF 04

SR. NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
21	Cement concrete cube of mix 1 : 1.5: 3 , cast on 16/01/2021. RCC for Pier P6-7.20m to 8.40m	28 th day compressive strength	283.16	Kg/Cm ²	265.00 Kg/cm ²	8.28	Qty represents - 13.50 Cum.
			285.42	Kg/Cm ²			
			292.22	Kg/Cm ²			
		Average	286.93	Kg/Cm²			
22	Cement concrete cube of mix 1 : 1.5: 3 , cast on 16/01/2021. RCC for Pier P6-7.20m to 8.40m	28 th day compressive strength	292.22	Kg/Cm ²	265.00 Kg/cm ²	11.13	Qty represents - 13.50 Cum.
			283.16	Kg/Cm ²			
			308.08	Kg/Cm ²			
		Average	294.48	Kg/Cm²			
23	Cement concrete cube of mix 1 : 1.5: 3 , cast on 20/01/2021. RCC for Pier P7-7.20m to 8.40m	28 th day compressive strength	296.75	Kg/Cm ²	265.00 Kg/cm ²	12.55	Qty represents - 13.50 Cum.
			305.81	Kg/Cm ²			
			292.22	Kg/Cm ²			
		Average	298.26	Kg/Cm²			
24	Cement concrete cube of mix 1 : 1.5: 3 , cast on 20/01/2021. RCC for Pier P7-7.20m to 8.40m	28 th day compressive strength	289.95	Kg/Cm ²	265.00 Kg/cm ²	10.84	Qty represents - 13.50 Cum.
			294.48	Kg/Cm ²			
			296.75	Kg/Cm ²			
		Average	293.73	Kg/Cm²			
25	Cement concrete cube of mix 1 : 1.5: 3 , cast on 20/01/2021. RCC for Pier P5-9.60m to 10.80m	28 th day compressive strength	303.55	Kg/Cm ²	265.00 Kg/cm ²	9.70	Qty represents - 13.50 Cum.
			283.16	Kg/Cm ²			
			285.42	Kg/Cm ²			
		Average	290.71	Kg/Cm²			
26	Cement concrete cube of mix 1 : 1.5: 3 , cast on 20/01/2021. RCC for Pier P5-9.60m to 10.80m	28 th day compressive strength	283.16	Kg/Cm ²	265.00 Kg/cm ²	6.28	Qty represents - 13.50 Cum.
			289.95	Kg/Cm ²			
			271.83	Kg/Cm ²			
		Average	281.65	Kg/Cm²			

Copy to: 1. 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 , WD VI ,WRD, Bicholim- Goa.

4. QC Lab File. 5. Bill File.

Junior Engineer

Assistant Engineer