

GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DEPARTMENT

Test Report No.: WRD / QC / F.6-2 / Cube -T :1395,1419,1420,1456,1457,1472,1473,1483/ Lab / **23** / 2021 - 22 Dated:-22 / 04/ 2021. Laboratory : Bicholim - Goa.
,1484,1513,1514, 1528,1529,1553,1554,1530,1531,1574,1575,1581,1582,1596,1598,1612,1627,1636,1647 Sub Division V (QC)/WRD/ Bicholim- Goa.

Name of work :Construction of Barrage and up gardation of Raw water pumping station at Ganjem on Madei River for Augmentation of Raw for OPA Water Works.Part II Construction of Bank protection wall for upstream of Barrage at Ganjem .

Ref. to Requisition No.:MIN/WDVI/WRD/SDII/F.62/20-21/579 Dated :- 16/ 03/ 2021.

Qty. Recived. :27 Sets of cube Date of Receipt:- 16/ 03 / 2021. Tested on: -20,21,23 to 27 , 31/03/2021 & 02,03,05,06,08,09,10 & 12/04/2021 as per due dates.

Ref to CPWD : 2009, Vol. I

Sample: Cube Mix 1:1.5:3 O.S No. :

5520,5548,5549,5587,5588,5603,5604,5615,5616,5648,5649,5666,5667,5692,5693,5668,5669,5716,5717,5733,5734,5752,5756,5775,5792,5803,5815/SS

Lab. Sample No.: 861 To 887 Tested By:Mrs. Shirodkar. J.E.

REPORT PAGE 01 OF 04

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissible	% above or below	REMARK
1	Cement concrete cube of mix 1 :1.5 : 3 , cast on 20/02/2021. For Wall X bed D/s of O.T.B Ganjem Right side Foundation Ch 0.00to 8.00mt	28 th day compressive strength	278.63	Kg/Cm ²	265.00 Kg/cm ²	5.14	Qty represents -20.00 Cum.
			271.83	Kg/Cm ²			
			285.42	Kg/Cm ²			
			Average	278.63			
2	Cement concrete cube of mix 1 :1.5 : 3 , cast on 21/02/2021. For Wall X bed D/s of O.T.B Ganjem Right side Foundation Ch 8.00to 15.00mt	28 th day compressive strength	280.89	Kg/Cm ²	265.00 Kg/cm ²	3.15	Qty represents -23.00 Cum for two sets of cubes.
			262.77	Kg/Cm ²			
			276.36	Kg/Cm ²			
			Average	273.34			
3	Cement concrete cube of mix 1 :1.5 : 3 , cast on 21/02/2021. For Wall X bed D/s of O.T.B Ganjem Right side Foundation Ch 8.00to 15.00mt	28 th day compressive strength	258.24	Kg/Cm ²	265.00 Kg/cm ²	3.43	----- do -----
			280.89	Kg/Cm ²			
			283.16	Kg/Cm ²			
			Average	274.10			
4	Cement concrete cube of mix 1 :1.5 : 3 , cast on 23/02/2021. For Wall IX 1st lift D/s of O.T.B Ganjem Right side Foundation Ch 15.00to 22.00mt	28 th day compressive strength	253.71	Kg/Cm ²	265.00 Kg/cm ²	4.00	Qty represents - 22.00 Cum for two sets of cubes.
			285.42	Kg/Cm ²			
			287.69	Kg/Cm ²			
			Average	275.61			
5	Cement concrete cube of mix 1 :1.5 : 3 , cast on 23/02/2021. For Wall IX 1st lift D/s of O.T.B Ganjem Right side Foundation Ch 15.00to 22.00mt	28 th day compressive strength	267.30	Kg/Cm ²	265.00 Kg/cm ²	4.86	----- do -----
			294.48	Kg/Cm ²			
			271.83	Kg/Cm ²			
			Average	277.87			
6	Cement concrete cube of mix 1 :1.5 : 3 , cast on 24/02/2021. For Wall X bed D/s of O.T.B Ganjem Right side Foundation Ch 22.00to 31.00mt	28 th day compressive strength	285.42	Kg/Cm ²	265.00 Kg/cm ²	3.15	Qty represents - 25.00 Cum for two sets of cubes.
			258.24	Kg/Cm ²			
			276.36	Kg/Cm ²			
			Average	273.34			

Junior Engineer

Assistant Engineer

REPORT PAGE 02 OF 04

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
7	Cement concrete cube of mix 1:1.5:3 , cast on 24/02/2021. For Wall X bed D/s of O.T.B Ganjem Right side Foundation Ch 22.00to 31.00mt	28 th day compressive strength	292.22	Kg/Cm ²	265.00 Kg/cm ²	1.44	Qty represents - 25.00 Cum for two sets of cubes.
			269.57	Kg/Cm ²			
			244.65	Kg/Cm ²			
			Average	268.81			
8	Cement concrete cube of mix 1:1.5:3 , cast on 25/02/2021. For Wall X bed D/s of O.T.B Ganjem Right side Foundation Ch 31.00to 39.70mt	28 th day compressive strength	262.77	Kg/Cm ²	265.00 Kg/cm ²	3.43	Qty represents - 25.00 Cum for two sets of cubes.
			283.16	Kg/Cm ²			
			276.36	Kg/Cm ²			
			Average	274.10			
9	Cement concrete cube of mix 1:1.5:3 , cast on 25/02/2021. For Wall X bed D/s of O.T.B Ganjem Right side Foundation Ch 31.00to 39.70mt	28 th day compressive strength	269.57	Kg/Cm ²	265.00 Kg/cm ²	2.86	----- do -----
			258.24	Kg/Cm ²			
			289.95	Kg/Cm ²			
			Average	272.59			
10	Cement concrete cube of mix 1:1.5:3 , cast on 26/02/2021. For Wall X bed D/s of O.T.B Ganjem Right side Foundation Ch 39.70to 54.30mt	28 th day compressive strength	287.69	Kg/Cm ²	265.00 Kg/cm ²	6.00	Qty represents - 28.00 Cum for two sets of cubes.
			260.51	Kg/Cm ²			
			294.48	Kg/Cm ²			
			Average	280.89			
11	Cement concrete cube of mix 1:1.5:3 , cast on 26/02/2021. For Wall X bed D/s of O.T.B Ganjem Right side Foundation Ch 39.70to 54.30mt	28 th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/cm ²	3.43	----- do -----
			258.24	Kg/Cm ²			
			292.22	Kg/Cm ²			
			Average	274.10			
12	Cement concrete cube of mix 1:1.5:3 , cast on 27/02/2021. For Wall X Above Foundation Right side 1st lift Ch 0.00 to 8.00mt	28 th day compressive strength	278.63	Kg/Cm ²	265.00 Kg/cm ²	3.72	Qty represents - 25.00 Cum for two sets of cubes.
			274.10	Kg/Cm ²			
			271.83	Kg/Cm ²			
			Average	274.85			
13	Cement concrete cube of mix 1:1.5:3 , cast on 27/02/2021. For Wall X Above Foundation Right side 1st lift Ch 0.00 to 8.00mt	28 th day compressive strength	253.71	Kg/Cm ²	265.00 Kg/cm ²	1.72	----- do -----
			283.16	Kg/Cm ²			
			271.83	Kg/Cm ²			
			Average	269.57			
14	Cement concrete cube of mix 1:1.5:3 , cast on 27/02/2021. For Wall X Above Foundation Right side 1st lift Ch 16.00 to 22.00mt	28 th day compressive strength	285.42	Kg/Cm ²	265.00 Kg/cm ²	3.15	Qty represents - 25.00 Cum for two sets of cubes.
			271.83	Kg/Cm ²			
			262.77	Kg/Cm ²			
			Average	273.34			

Junior Engineer

Assistant Engineer

REPORT PAGE 03 OF 04

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissible	% above or below	REMARK
15	Cement concrete cube of mix 1:1.5:3 , cast on 27/02/2021. For Wall X Above Foundation Right side 1st lift Ch 16.00 to 22.00mt	28 th day compressive strength	253.71	Kg/Cm ²	265.00 Kg/cm ²	3.72	Qty represents - 25.00 Cum for two sets of cubes.
			283.16	Kg/Cm ²			
			287.69	Kg/Cm ²			
		Average	274.85	Kg/Cm²			
16	Cement concrete cube of mix 1:1.5:3 , cast on 03/03/2021. For Wall X Above Foundation Right side 1st lift Ch 8.00 to 16.00mt	28 th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/cm ²	4.57	Qty represents - 27.00 Cum for two sets of cubes.
			296.75	Kg/Cm ²			
			262.77	Kg/Cm ²			
		Average	277.12	Kg/Cm²			
17	Cement concrete cube of mix 1:1.5:3 , cast on 03/03/2021. For Wall X Above Foundation Right side 1st lift Ch 8.00 to 16.00mt	28 th day compressive strength	283.16	Kg/Cm ²	265.00 Kg/cm ²	4.86	----- do -----
			260.51	Kg/Cm ²			
			289.95	Kg/Cm ²			
		Average	277.87	Kg/Cm²			
18	Cement concrete cube of mix 1:1.5:3 , cast on 05/03/2021. For Wall X Above Foundation Right side 2nd lift Ch 0.00 to 11.00mt	28 th day compressive strength	260.51	Kg/Cm ²	265.00 Kg/cm ²	4.00	Qty represents - 27.00 Cum for two sets of cubes.
			280.89	Kg/Cm ²			
			285.42	Kg/Cm ²			
		Average	275.61	Kg/Cm²			
19	Cement concrete cube of mix 1:1.5:3 , cast on 05/03/2021. For Wall X Above Foundation Right side 2nd lift Ch 0.00 to 11.00mt	28 th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/cm ²	9.13	----- do -----
			305.81	Kg/Cm ²			
			289.95	Kg/Cm ²			
		Average	289.20	Kg/Cm²			
20	Cement concrete cube of mix 1:1.5:3 , cast on 06/03/2021. For Wall X Above Foundation Right side 2nd lift Ch 11.00 to 22.00mt	28 th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/cm ²	0.87	Qty represents -28.00 Cum for two sets of cubes.
			244.65	Kg/Cm ²			
			285.42	Kg/Cm ²			
		Average	267.30	Kg/Cm²			
21	Cement concrete cube of mix 1:1.5:3 , cast on 06/03/2021. For Wall X Above Foundation Right side 2nd lift Ch 11.00 to 22.00mt	28 th day compressive strength	296.75	Kg/Cm ²	265.00 Kg/cm ²	4.57	----- do -----
			262.77	Kg/Cm ²			
			271.83	Kg/Cm ²			
		Average	277.12	Kg/Cm²			
22	Cement concrete cube of mix 1:1.5:3 , cast on 08/03/2021. For Wall X Above Foundation Right side 1st lift Ch 22.00 to 31.00mt	28 th day compressive strength	260.51	Kg/Cm ²	265.00 Kg/cm ²	3.15	Qty represents -20.00 Cum.
			276.36	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	273.34	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
23	Cement concrete cube of mix 1 :1.5 : 3 , cast on 09/03/2021. For Wall X Above Foundation Right side 1st lift Ch 31.00 to 39.70mt	28 th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/cm ²	4.86	Qty represents -19.00 Cum.
			289.95	Kg/Cm ²			
			271.83	Kg/Cm ²			
		Average	277.87	Kg/Cm²			
24	Cement concrete cube of mix 1 :1.5 : 3 , cast on 11/03/2021. For Wall X Above Foundation Right side 3rd lift Ch 0.00 to 14.00mt	28 th day compressive strength	262.77	Kg/Cm ²	265.00 Kg/cm ²	2.86	Qty represents -20.00 Cum.
			271.83	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	272.59	Kg/Cm²			
25	Cement concrete cube of mix 1 :1.5 : 3 , cast on 12/03/2021. For Wall X Above Foundation Right side 3rd lift Ch 14.00 to 22.00mt	28 th day compressive strength	285.42	Kg/Cm ²	265.00 Kg/cm ²	4.29	Qty represents - 17.00 Cum.
			253.71	Kg/Cm ²			
			289.95	Kg/Cm ²			
		Average	276.36	Kg/Cm²			
26	Cement concrete cube of mix 1 :1.5 : 3 , cast on 13/03/2021. For Wall X Above Foundation Right side 2nd lift Ch 22.00 to 31.00mt	28 th day compressive strenath	276.36	Ka/Cm ²	265.00 Kg/cm ²	4.29	Qty represents - 17.00 Cum.
			262.77	Ka/Cm ²			
			289.95	Ka/Cm ²			
		Average	276.36	Ka/Cm²			
27	Cement concrete cube of mix 1 :1.5 : 3 , cast on 15/03/2021. For Wall X Above Foundation Right side 2nd lift Ch 31.00 to 39.70mt	28 th day compressive strenath	258.24	Ka/Cm ²	265.00 Kg/cm ²	4.00	Qty represents - 15.00 Cum.
			285.42	Ka/Cm ²			
			283.16	Ka/Cm ²			
		Average	275.61	Kg/Cm²			

Copy to: 1. The Assistant Engineer , SD II , WD VI , WRD-Valpoi-Sattari - 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