

GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DEPARTMENT

Test Report No: WRD/QC/F.6-2/Cube -T : 6762 To 6775, 6783 To 6796/Lab/45/2023 - 24 Dated:- 06/05/2023.

Laboratory : Bicholim - Goa.

Sub Division V (QC)/WRD/ Bicholim- Goa.

Name of work : Augmentation of Right Bank Main Canal of T.I.P at ch 12.950 km from Kalna river to secure uninterrupted raw water supply for drinking, agricultural and industrial purpose during the annual canal maintenance period of TIP dam and its appurtenances.

Ref. to Requisition No : SDIV/WDVII/WRD/F.19/23-24/07 Dt.:- 27/04/2023

Qty. Received : 28 Sets of cube Date of Receipt:- 27/04/2023. Tested on: 27 & 28/04/2023. as per due dates. Ref to CPWD :2009, Vol. I

Sample: Cube Mix **M15, 1:1.5:3, 1:2:4** O.S No: 1115,1116,1117,1118,1119,1120,1121,1122,1123,1124,1125,1126,1127,1128/RK &

746,747,748,749,750,751,752,753,754,755,756,757,758,759,/SS Lab. Sample No: 6949 to 6976 Tested By: Mrs. R.R. Kadam A.E. & Mrs. S. B. Naik Shirodkar J.E.

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SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
1	Cement concrete cube of mix M15 , cast on 30/03/2023. PCC for Retaining Wall.	28 th day compressive strength	185.75	Kq/Cm ²	177.00 Kg/cm ²	4.52	Qty represents - 100.00 Cum for Seven sets of Cube.
			181.22	Kq/Cm ²			
			188.02	Kq/Cm ²			
		Average	185.00	Kq/Cm²			
2	Cement concrete cube of mix M15 , cast on 30/03/2023. PCC for Retaining Wall.	28 th day compressive strength	188.02	Kq/Cm ²	177.00 Kg/cm ²	4.94	---do--
			176.69	Kq/Cm ²			
			192.55	Kq/Cm ²			
		Average	185.75	Kq/Cm²			
3	Cement concrete cube of mix M15 , cast on 30/03/2023. PCC for Retaining Wall.	28 th day compressive strength	192.55	Kq/Cm ²	177.00 Kg/cm ²	7.50	---do--
			199.34	Kq/Cm ²			
			178.96	Kq/Cm ²			
		Average	190.28	Kq/Cm²			
4	Cement concrete cube of mix M15 , cast on 30/03/2023. PCC for Retaining Wall.	28 th day compressive strength	183.49	Kq/Cm ²	177.00 Kg/cm ²	4.94	---do--
			192.55	Kq/Cm ²			
			181.22	Kq/Cm ²			
		Average	185.75	Kq/Cm²			

Junior Engineer

Assistant Engineer

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SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
5	Cement concrete cube of mix M15 , cast on 30/03/2023. PCC for Retaining Wall.	28 th day compressive strength	181.22	Kq/Cm ²	177.00 Kg/cm ²	3.24	Qty represents - 100.00 Cum for Seven sets of Cube.
			176.69	Kq/Cm ²			
			190.28	Kq/Cm ²			
		Average	182.73	Kq/Cm²			
6	Cement concrete cube of mix M15 , cast on 30/03/2023. PCC for Retaining Wall.	28 th day compressive strength	194.81	Kq/Cm ²	177.00 Kg/cm ²	5.37	---do--
			183.49	Kq/Cm ²			
			181.22	Kq/Cm ²			
		Average	186.51	Kq/Cm²			
7	Cement concrete cube of mix M15 , cast on 30/03/2023. PCC for Retaining Wall.	28 th day compressive strength	188.02	Kq/Cm ²	177.00 Kg/cm ²	3.66	---do--
			178.96	Kq/Cm ²			
			183.49	Kq/Cm ²			
		Average	183.49	Kq/Cm²			
8	Cement concrete cube of mix 1:1.5:3 , cast on 30/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	267.30	Kq/Cm ²	265.00 Kg/cm ²	5.71	Qty represents - 100.00 Cum for Seven sets of Cube.
			285.42	Kq/Cm ²			
			287.69	Kq/Cm ²			
		Average	280.14	Kq/Cm²			
9	Cement concrete cube of mix 1:1.5:3 , cast on 30/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	294.48	Kq/Cm ²	265.00 Kg/cm ²	6.85	---do--
			262.77	Kq/Cm ²			
			292.22	Kq/Cm ²			
		Average	283.16	Kq/Cm²			
10	Cement concrete cube of mix 1:1.5:3 , cast on 30/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	274.10	Kq/Cm ²	265.00 Kg/cm ²	3.72	---do--
			280.89	Kq/Cm ²			
			269.57	Kq/Cm ²			
		Average	274.85	Kq/Cm²			
11	Cement concrete cube of mix 1:1.5:3 , cast on 30/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	265.04	Kq/Cm ²	265.00 Kg/cm ²	2.29	---do--
			271.83	Kq/Cm ²			
			276.36	Kq/Cm ²			
		Average	271.08	Kq/Cm²			

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SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
12	Cement concrete cube of mix 1:1.5:3 , cast on 30/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	289.95	Kg/Cm ²	265.00 Kg/cm ²	5.71	Qty represents - 100.00 Cum for Seven sets of Cube.
			267.30	Kg/Cm ²			
			283.16	Kg/Cm ²			
			Average	280.14			
13	Cement concrete cube of mix 1:1.5:3 , cast on 30/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	289.95	Kg/Cm ²	265.00 Kg/cm ²	4.29	---do--
			271.83	Kg/Cm ²			
			267.30	Kg/Cm ²			
			Average	276.36			
14	Cement concrete cube of mix 1:1.5:3 , cast on 30/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	262.77	Kg/Cm ²	265.00 Kg/cm ²	3.15	---do--
			283.16	Kg/Cm ²			
			274.10	Kg/Cm ²			
			Average	273.34			
15	Cement concrete cube of mix 1:2:4 , cast on 31/03/2023. PCC for Retaining Wall.	28 th day compressive strength	226.53	Kg/Cm ²	210.00 Kg/cm ²	3.20	Qty represents - 90.00 Cum for Seven sets of Cube.
			215.20	Kg/Cm ²			
			208.40	Kg/Cm ²			
			Average	216.71			
16	Cement concrete cube of mix 1:2:4 , cast on 31/03/2023. PCC for Retaining Wall.	28 th day compressive strength	210.67	Kg/Cm ²	210.00 Kg/cm ²	6.79	---do--
			235.59	Kg/Cm ²			
			226.53	Kg/Cm ²			
			Average	224.26			
17	Cement concrete cube of mix 1:2:4 , cast on 31/03/2023. PCC for Retaining Wall.	28 th day compressive strength	228.79	Kg/Cm ²	210.00 Kg/cm ²	7.15	---do--
			208.40	Kg/Cm ²			
			237.85	Kg/Cm ²			
			Average	225.02			
18	Cement concrete cube of mix 1:2:4 , cast on 31/03/2023. PCC for Retaining Wall.	28 th day compressive strength	219.73	Kg/Cm ²	210.00 Kg/cm ²	6.79	---do--
			228.79	Kg/Cm ²			
			224.26	Kg/Cm ²			
			Average	224.26			

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SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
19	Cement concrete cube of mix 1:2:4 , cast on 31/03/2023. PCC for Retaining Wall.	28 th day compressive strength	222.00	Kg/Cm ²	210.00 Kg/cm ²	3.91	Qty represents - 90.00 Cum for Seven sets of Cube.
			206.14	Kg/Cm ²			
			226.53	Kg/Cm ²			
		Average	218.22	Kg/Cm²			
20	Cement concrete cube of mix 1:2:4 , cast on 31/03/2023. PCC for Retaining Wall.	28 th day compressive strength	224.26	Kg/Cm ²	210.00 Kg/cm ²	9.67	---do--
			228.79	Kg/Cm ²			
			237.85	Kg/Cm ²			
		Average	230.30	Kg/Cm²			
21	Cement concrete cube of mix 1:2:4 , cast on 31/03/2023. PCC for Retaining Wall.	28 th day compressive strength	228.79	Kg/Cm ²	210.00 Kg/cm ²	5.35	---do--
			226.53	Kg/Cm ²			
			208.40	Kg/Cm ²			
		Average	221.24	Kg/Cm²			
22	Cement concrete cube of mix 1:1.5:3 , cast on 31/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	262.77	Kg/Cm ²	265.00 Kg/cm ²	4.57	Qty represents - 100.00 Cum for Seven sets of Cube.
			285.42	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	277.12	Kg/Cm²			
23	Cement concrete cube of mix 1:1.5:3 , cast on 31/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	274.10	Kg/Cm ²	265.00 Kg/cm ²	2.01	---do--
			265.04	Kg/Cm ²			
			271.83	Kg/Cm ²			
		Average	270.32	Kg/Cm²			
24	Cement concrete cube of mix 1:1.5:3 , cast on 31/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	271.83	Kg/Cm ²	265.00 Kg/cm ²	2.01	---do--
			276.36	Kg/Cm ²			
			262.77	Kg/Cm ²			
		Average	270.32	Kg/Cm²			
25	Cement concrete cube of mix 1:1.5:3 , cast on 31/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	269.57	Kg/Cm ²	265.00 Kg/cm ²	4.00	---do--
			274.10	Kg/Cm ²			
			283.16	Kg/Cm ²			
		Average	275.61	Kg/Cm²			

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SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
26	Cement concrete cube of mix 1:1.5:3 , cast on 31/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	262.77	Kg/Cm ²	265.00 Kg/cm ²	4.00	Qty represents - 100.00 Cum for Seven sets of Cube.
			283.16	Kg/Cm ²			
			280.89	Kg/Cm ²			
		Average	275.61	Kg/Cm²			
27	Cement concrete cube of mix 1:1.5:3 , cast on 31/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	267.30	Kg/Cm ²	265.00 Kg/cm ²	3.72	---do--
			285.42	Kg/Cm ²			
			271.83	Kg/Cm ²			
		Average	274.85	Kg/Cm²			
28	Cement concrete cube of mix 1:1.5:3 , cast on 31/03/2023. RCC for Thrust Blocks.	28 th day compressive strength	278.63	Kg/Cm ²	265.00 Kg/cm ²	5.14	---do--
			271.83	Kg/Cm ²			
			285.42	Kg/Cm ²			
		Average	278.63	Kg/Cm²			

Copy to: 1. The Assistant Engineer, SDIV, WD VII, WRD, Dhargal Pernem - 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 VII, WRD, Dhargal Pernem - Goa.

4. QC Lab File. 5. Bill File.

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