

GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DEPARTMENT

Test Report No.: WRD / QC / F.6-2 / Cube -T-8239,8240,8252 To 8254,8267 To 8269,8279 To 8281,8291 To 8296,8301 To 8305,8320 To 8322,8331,8332,8337,8338,8356 To 8358,8377

To 8379/Lab/ **379** / 2019-20 Dated: - 10 / 01 / 2020 Laboratory : Bicholim - Goa.

Name of work : Providing RCC Lining for B2 Distributory from ch. 0.000km to 2.150 km of RBMC of TIP in V.P. Allorna in Pernem Taluka.

Ref No.:- SD IV/WD VII/ WRD / F.10/2019-20/205 dated :-20 / 12 / 2019.

Qty. Recived. : 35 Sets of cubes Date of Receipt:- 23/ 12 / 2019. Tested on: -28 /12/2019 To 08/01/2020 as per due dates Ref to CPWD :2009 -Vol. I

Sample: Cube Mix 1 : 1.5 : 3 & 1:3:6 O.S No. :1380,1381,1391 To 1393,1406 To 1408,1418 To 1420/AF,2923 To 2928,2934 To 2938/SS,1436 To 1438,1447,1448,1464,1465,1478 To 1480/AF,2966 To 2968/SS Lab. Sample No.: 7278 To 7312. Tested By: Mr. Anil R. Fadte, J.E. & Mrs. S.B.Naik Shirodkar, J.E..

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SR. NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissible	% above or below	REMARK
1	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 30/ 11 / 2019, for RCC canal lining from Ch.1372.00 to 1308.00(C57) .	28 th day compressive strength	274.10	Kg/Cm ²	265.00 Kg/Cm ²	20.81	Quantity Represents 19.60 m3.
			344.32	Kg/Cm ²			
			342.05	Kg/Cm ²			
			Average	320.16			
2	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 30/ 11 / 2019, for RCC canal lining from Ch.1308.00 to 1344.00(C58) .	28th day compressive strength	332.99	Kg/Cm ³	265.00 Kg/Cm ²	21.95	-Do-
			326.20	Kg/Cm ³			
			310.34	Kg/Cm ²			
			Average	323.18			
3	Plain Cement concrete cube of mix 1:3:6, cast on 02/12/2019,for canal bed from ch.1416.00 to 1488.00m.(C59)	28 th day compressive strength	122.32	Kg/Cm ²	100 kg/cm2	25.34	-Do-
			126.85	Kg/Cm ²			
			126.85	Kg/Cm ²			
			Average	125.34			
4	Plain Cement concrete cube of mix 1:3:6, cast on 02/12/2019,for canal bed from ch.1488.00 to 1560.00m.(C60)	28 th day compressive strength	129.12	Kg/Cm ²	100 kg/cm2	22.32	-Do-
			120.06	Kg/Cm ²			
			117.79	Kg/Cm ²			
			Average	122.32			
5	Plain Cement concrete cube of mix 1:3:6, cast on 02/12/2019,for canal bed from ch.1560.00 to 1632.00m.(C61)	28 th day compressive strength	126.85	Kg/Cm ²	100 kg/cm2	26.85	-Do-
			129.12	Kg/Cm ²			
			124.59	Kg/Cm ²			
			Average	126.85			
6	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 03/ 12 / 2019, for RCC canal lining from Ch.1344.00 to 1380.00(C62) .	28th day compressive strength	294.48	Kg/Cm ³	265.00 Kg/Cm ²	18.82	-Do-
			305.81	Kg/Cm ³			
			344.32	Kg/Cm ²			
			Average	314.87			

Junior Engineer

Assistant Engineer

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SR. NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
7	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 03/ 12 / 2019, for RCC canal lining from Ch.1380.00 to 1416.00(C63) .	28th day	314.87	Kg/Cm ³	265.00 Kg/Cm ²	19.67	Quantity Represents 19.60 m3.
		compressive	292.22	Kg/Cm ³			
		strength	344.32	Kg/Cm ²			
		Average	317.14	Kg/Cm²			
8	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 03/ 12 / 2019, for RCC canal lining from Ch.1416.00 to 1452.00(C64) .	28 th day	323.93	Kg/Cm2	265.00 Kg/Cm ²	27.08	-Do-
		compressive	344.32	Kg/Cm2			
		strength	342.05	Kg/Cm2			
		Average	336.77	Kg/Cm2			
9	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 04/ 12 / 2019, for RCC canal lining from Ch.1452.00 to 1488.00(C65) .	28 th day	269.57	Kg/Cm ²	265.00 Kg/Cm ²	3.15	... Do
		compressive	271.83	Kg/Cm ²			
		strength	278.63	Kg/Cm ²			
		Average	273.34	Kg/Cm²			
10	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 04/ 12 / 2019, for RCC canal lining from Ch.1488.00 to 1524.00(C66) .	28 th day	265.04	Kg/Cm ²	265.00 Kg/Cm ²	8.28	... Do
		compressive	269.57	Kg/Cm ²			
		strength	326.20	Kg/Cm ²			
		Average	286.93	Kg/Cm²			
11	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 04/ 12 / 2019, for RCC canal lining from Ch.1524.00 to 1560.00(C67) .	28 th day	262.77	Kg/Cm ²	265.00 Kg/Cm ²	3.72	... Do
		compressive	287.69	Kg/Cm ²			
		strength	274.10	Kg/Cm ²			
		Average	274.85	Kg/Cm²			
12	Plain Cement concrete cube of mix 1:3:6, cast on 05/12/2019,for canal bed from ch.1632.00 to 1704.00m.(C68)	28 th day	124.59	Kg/Cm2	100 kg/cm2	16.28	... Do
		compressive	113.26	Kg/Cm2			
		strength	111.00	Kg/Cm2			
		Average	116.28	Kg/Cm2			
13	Plain Cement concrete cube of mix 1:3:6, cast on 05/12/2019,for canal bed from ch.1704.00 to 1776.00m.(C69)	28 th day	135.92	Kg/Cm2	100 kg/cm2	20.06	... Do
		compressive	108.73	Kg/Cm2			
		strength	115.53	Kg/Cm2			
		Average	120.06	Kg/Cm2			
14	Plain Cement concrete cube of mix 1:3:6, cast on 05/12/2019,for canal bed from ch.1776.00 to 1848.00m.(C70)	28 th day	115.53	Kg/Cm2	100 kg/cm2	14.02	... Do
		compressive	117.79	Kg/Cm2			
		strength	108.73	Kg/Cm2			
		Average	114.02	Kg/Cm2			
15	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 05/ 12 / 2019, for RCC canal lining from Ch.1560.00 to 1596.00(C71) .	28 th day	339.79	Kg/Cm2	265.00 Kg/Cm ²	15.12	... Do
		compressive	303.55	Kg/Cm2			
		strength	271.83	Kg/Cm2			
		Average	305.06	Kg/Cm2			

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Assistant Engineer

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SR. NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
16	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 05/ 12 / 2019, for RCC canal lining from Ch.1596.00 to 1632.00(C72) .	28 th day compressive strength	330.73	Kg/Cm ²	265.00 Kg/Cm ²	9.13	Quantity Represents 19.60 m3.
			260.51	Kg/Cm ²			
			276.36	Kg/Cm ²			
		Average	289.20	Kg/Cm²			
17	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 05/ 12 / 2019, for RCC canal lining from Ch.1632.00 to 1668.00(C73) .	28 th day compressive strength	269.57	Kg/Cm ²	265.00 Kg/Cm ²	8.28	... Do
			283.16	Kg/Cm ²			
			308.08	Kg/Cm ²			
		Average	286.93	Kg/Cm²			
18	Plain Cement concrete cube of mix 1:3:6, cast on 06/12/2019,for canal bed from ch.1848.00 to 1920.00m.(C74)	28 th day compressive strength	124.59	Kg/Cm ²	100.00 Kg/Cm ²	23.83	... Do
			115.53	Kg/Cm ²			
			131.39	Kg/Cm ²			
		Average	123.83	Kg/Cm²			
19	Plain Cement concrete cube of mix 1:3:6, cast on 06/12/2019,for canal bed from ch.1920.00 to 1992.00m.(C75)	28 th day compressive strength	111.00	Kg/Cm ²	100 kg/cm ²	20.06	... Do
			129.12	Kg/Cm ²			
			120.06	Kg/Cm ²			
		Average	120.06	Kg/Cm²			
20	Plain Cement concrete cube of mix 1:3:6, cast on 06/12/2019,for canal bed from ch.1992.00 to 2064.00m.(C76)	28 th day compressive strength	126.85	Kg/Cm ²	100 kg/cm ²	24.59	... Do
			120.06	Kg/Cm ²			
			126.85	Kg/Cm ²			
		Average	124.59	Kg/Cm²			
21	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 06/ 12 / 2019, for RCC canal lining from Ch.1668.00 to 1704.00(C77) .	28 th day compressive strength	308.08	Kg/Cm ²	265.00 Kg/Cm ²	19.96	... Do
			317.14	Kg/Cm ²			
			328.46	Kg/Cm ²			
		Average	317.89	Kg/Cm²			
22	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 06/ 12 / 2019, for RCC canal lining from Ch.1704.00 to 1740.00(C78) .	28 th day compressive strength	321.67	Kg/Cm ²	265.00 Kg/Cm ²	21.95	... Do
			332.99	Kg/Cm ²			
			314.87	Kg/Cm ²			
		Average	323.18	Kg/Cm²			

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Assistant Engineer

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SR. NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
23	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 07/ 12 / 2019, for RCC canal lining from Ch.1740.00 to 1776.00(C79) .	28 th day compressive strength	342.05	Kg/Cm ²	265.00 Kg/Cm ²	24.80	Quantity Represents 19.60 m3.
			337.52	Kg/Cm ²			
			312.61	Kg/Cm ²			
		Average	330.73	Kg/Cm²			
24	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 07/ 12 / 2019, for RCC canal lining from Ch.1776.00 to 1812.00(C80) .	28 th day compressive strength	330.73	Kg/Cm ²	265.00 Kg/Cm ²	27.08	... Do
			337.52	Kg/Cm ²			
			342.05	Kg/Cm ²			
		Average	336.77	Kg/Cm²			
25	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 07/ 12 / 2019, for RCC canal lining from Ch.1812.00 to 1848.00(C81) .	28 th day compressive strength	339.79	Kg/Cm ²	265.00 Kg/Cm ²	23.66	... Do
			314.87	Kg/Cm ²			
			328.46	Kg/Cm ²			
		Average	327.71	Kg/Cm²			
26	Plain Cement concrete cube of mix 1:3:6, cast on 08/12/2019,for canal bed from ch.2064.00 to 2136.00m.(C82)	28 th day compressive strength	129.12	Kg/Cm ²	100 kg/cm2	23.83	... Do
			122.32	Kg/Cm ²			
			120.06	Kg/Cm ²			
		Average	123.83	Kg/Cm²			
27	Plain Cement concrete cube of mix 1:3:6, cast on 08/12/2019,for canal bed from ch.2136.00 to 2208.00m.(C83)	28 th day compressive strength	111.00	Kg/Cm2	100 kg/cm2	18.55	... Do
			117.79	Kg/Cm2			
			126.85	Kg/Cm2			
		Average	118.55	Kg/Cm2			
28	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 09/ 12 / 2019, for RCC canal lining from Ch.1848.00 to 1884.00(C84) .	28 th day compressive strength	317.14	Kg/Cm2	265.00 Kg/Cm ²	17.11	... Do
			303.55	Kg/Cm2			
			310.34	Kg/Cm2			
		Average	310.34	Kg/Cm2			
29	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 09/ 12 / 2019, for RCC canal lining from Ch.1884.00 to 1920.00(C85) .	28 th day compressive strength	332.99	Kg/Cm ²	265.00 Kg/Cm ²	13.98	... Do
			294.48	Kg/Cm ²			
			278.63	Kg/Cm ²			
		Average	302.03	Kg/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
30	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 10 / 12 / 2019, for RCC canal lining from Ch.1920.00 to 1956.00(C86) .	28 th day compressive strength	305.81	Kg/Cm ²	265.00 Kg/Cm ²	14.26	Quantity Represents 19.60 m3.
			299.01	Kg/Cm ²			
			303.55	Kg/Cm ²			
		Average	302.79	Kg/Cm²			
31	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 10 / 12 / 2019, for RCC canal lining from Ch.1956.00 to 1992.00(C87) .	28 th day compressive strength	308.08	Kg/Cm ²	265.00 Kg/Cm ²	12.55	... Do
			285.42	Kg/Cm ²			
			301.28	Kg/Cm ²			
		Average	298.26	Kg/Cm²			
32	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 10 / 12 / 2019, for RCC canal lining from Ch.1992.00 to 2028.00(C88) .	28 th day compressive strength	292.22	Kg/Cm ²	265.00 Kg/Cm ²	12.84	... Do
			305.81	Kg/Cm ²			
			299.01	Kg/Cm ²			
		Average	299.01	Kg/Cm²			
33	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 11 / 12 / 2019, for RCC canal lining from Ch.2028.00 to 2064.00(C89) .	28 th day compressive strength	260.51	Kg/Cm ²	265.00 Kg/Cm ²	12.55	... Do
			308.08	Kg/Cm ²			
			326.20	Kg/Cm ²			
		Average	298.26	Kg/Cm²			
34	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 11 / 12 / 2019, for RCC canal lining from Ch.2064.00 to 2100.00(C90) .	28 th day compressive strength	305.81	Kg/Cm ²	265.00 Kg/Cm ²	13.98	... Do
			308.08	Kg/Cm ²			
			292.22	Kg/Cm ²			
		Average	302.03	Kg/Cm²			
35	Reinforced Cement concrete cubes of mix 1:1.5:3 cast on 11 / 12 / 2019, for RCC canal lining from Ch.2100.00 to 2136.00(C91) .	28 th day compressive strength	296.75	Kg/Cm ²	265.00 Kg/Cm ²	11.41	... Do
			285.42	Kg/Cm ²			
			303.55	Kg/Cm ²			
		Average	295.24	Kg/Cm²			

Copy to: 1. The Assistant Engineer SD IV , 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 ,WDVII,WRD , Dhargal - Pernem- Goa.

4. QC Lab File. 5. Bill File.

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