GOVERNMENT OF GOA QUALITY CONTROL LABORATORY WATER RESOURCES DEPARTMENT

Test Report No.: WRD / QC / F.6-2 / Cube -T :1972,1973,1980,1981,1996,1997,2005,2006,2013/ Lab / **88**/ 2021 - 22 Dated:- 31 / 05 / 2021. Laboratory : Bicholim - Goa. 2014,2027,2028,2033,2034,2043,2044,2054,2055,2066,2071,2072,2076,2077,2083,2084,2092,2093 Sub Division V (QC)/WRD/ Bicholim- Goa.

Name of work : Construction of Anjuna Distributory taking off at ch.28.970km of the left Bank Main canal of Tillari irrigation Project in Siolim & Anjuna village of Bardez Taluka.part II:Construction of Rising Main and reinstatement of allied structures of Anjuna Distributory from ch.0.0kms to ch.4.50kms in Cucholim and Siolim village of Bardez Taluka.

Ref. to Requisition No.:SDIII/WDVIII/WRD/WF.32(PART-II)/21-22/33 Dated :- 03/05/2021.

Qty. Recived. :28 Sets of cube Date of Receipt:- 03/05/2021. Tested on: -14,15,17 to 29/05/2021 as per due dates. Ref to CPWD :2009, Vol. I

Sample: Cube Mix 1:1.5:3 & 1:2:4 O.S No.:

6198,6199,6206,6207,6226,6227/SS.59,60/RK,6236,6237,6251,6252,6257,6258,6267,6268,6278,6279,6291,6292,6298,6299,6305,6306,6313,6314,6325,6326/SS. Lab. Sample No.: 1437 To 1464 Tested By: Mrs.R.R.Kadam.A.E. & Mrs.Shirodkar. J.E.

SR.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value	% above or	REMARK
NO		TESTEDTOR			permissable	below	KEWAKK
1	Cement concrete cube of mix 1:2:4 , cast on 16/04/2021. For R/wall wing wall at Cucholim bridge.foundation	28 th day	231.06	Kg/Cm ²			Qty represents - 20.50 Cum for two sets of cubes.
		compressive	215.20	Ka/Cm ²	210.00 Kg/cm ²	3.91	
		strength	208.40	Kg/Cm ²			
		Average	218.22	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4 , cast on 16/04/2021. For R/wall wing wall at Cucholim bridge.foundation	28 th day	212.93	Kg/Cm ²		4.99	do
		compressive	210.67	Kg/Cm ²	210.00 Kg/cm ²		
		strenath	237.85	Ka/Cm ²	210.00 Kg/CIII		
		Average	220.49	Kg/Cm ²			
	Cement concrete cube of mix 1:1.5:3 , cast on 17/04/2021. For 90deg thrust block at Cucholim bridge.	28 th day	283.16	Kg/Cm ²	265.00 Kg/cm ²	5.71	Qty represents - 20.00 Cum for two sets of cubes.
		compressive	305.81	Ka/Cm ²			
		strength	251.44	Kg/Cm ²			
		Average	280.14	Kg/Cm ²			
	Cement concrete cube of mix 1:1.5:3 , cast on 17/04/2021. For 90deg thrust block at Cucholim bridge.	28 th day	294.48	Kg/Cm ²	265.00 Kg/cm ²	6.00	do
		compressive	271.83	Kg/Cm ²			
		strenath	276.36	Ka/Cm ²			
		Average	280.89	Kg/Cm ²			
	Cement concrete cube of mix 1:1.5:3 , cast on 19/04/2021. For 90deg thrust block at Cucholim bridge.	28 th day	285.42	Kg/Cm ²	265.00 Kg/cm ²	3.43	Qty represents - 20.00 Cum for two sets of cubes.
		compressive	265.04	Ka/Cm ²			
		strength	271.83	Kg/Cm ²			
		Average	274.10	Kg/Cm ²			
	Cement concrete cube of mix 1:1.5:3 , cast on 19/04/2021. For 90deg thrust block at Cucholim bridge.	28 th day	262.77	Kg/Cm ²	265.00 Kg/cm ²	5.43	do
		compressive	294.48	Kg/Cm ²			
0		strength	280.89	Kq/Cm ²			
		Average	279.38	Kg/Cm ²			

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SR. NO		TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK		
		28 th day	310.34	Kg/Cm ²	portiniounio	below			
7	Cement concrete cube of mix 1:1.5:3 , cast on 20/04/2021. For 90deg thrust block at Cucholim bridge.	compressive	292.22	Kg/Cm ²	265.00 Kg/cm ²	15.69	Qty represents - 20.50 Cum for two sets of cubes.		
		strenath	317.14	Kg/Cm ²					
		Average	306.57	Kq/Cm ²					
	Cement concrete cube of mix 1:1.5:3 , cast on 20/04/2021. For 90deg thrust block at Cucholim	28 th day	294.48	Kg/Cm ²	265.00 Kg/cm ²	11.41	do		
8		compressive	285.42	Kg/Cm ²					
	bridge.	strength	305.81	Kg/Cm ²					
		Average	295.24	Kg/Cm ²					
	Cement concrete cube of mix 1:1.5:3, cast on	28 th day	253.71	Kg/Cm ²	-	2.29	Qty represents - 18.50 Cum for two sets of cubes.		
9	21/04/2021. For 90deg thrust block at Cucholim	compressive	283.16 276.36	Kg/Cm ² Kg/Cm ²	265.00 Kg/cm ²				
	bridge.	strenath Average	270.30 271.08	Kg/Cm ²	-				
	Cement concrete cube of mix 1:1.5:3 , cast on 21/04/2021. For 90deg thrust block at Cucholim bridge.	28 th day	276.36	Kg/Cm ²	265.00 Kg/cm ²	5.14	do		
		compressive	283.16	Kg/Cm ²					
10		strength	276.36	Ka/Cm Ka/Cm ²					
		Average	278.63	Kg/Cm ²					
	Cement concrete cube of mix 1:1.5:3 , cast on 22/04/2021. For 11.25 deg thrust block at Cucholim bridge at air valve of pressure conduit.	28 th day	258.24	Kg/Cm ²	265.00 Kg/cm ²	3.43	Qty represents - 20.00 Cum for two sets of cubes.		
11		compressive	292.22	Kg/Cm ²					
		strength	271.83	Kg/Cm ²					
		Average	274.10	Kg/Cm ²					
	Cement concrete cube of mix 1:1.5:3 , cast on 22/04/2021. For 11.25 deg thrust block at Cucholim bridge at air valve of pressure conduit.	28 th day	258.24	Kg/Cm ²	265.00 Kg/cm ²	2.86	do		
10		compressive	269.57	Kg/Cm ²					
12		strength	289.95	Kg/Cm ²					
		Average	272.59	Kg/Cm ²					
	Cement concrete cube of mix 1:2:4 , cast on 23/04/2021. For R/wall wing at Cucholim bridge 1 st lift.	28 th day	262.77	Kg/Cm ²	210.00 Kg/cm ²	13.98	Qty represents - 18.00 Cum for two sets of cubes.		
12		compressive	219.73	Kg/Cm ²					
15		strength	235.59	Kg/Cm ²					
		Average	239.36	Kg/Cm ²					
	Cement concrete cube of mix 1:2:4 , cast on 23/04/2021. For R/wall wing at Cucholim bridge 1 st lift.	28 th day	226.53	Kg/Cm ²	210.00 Kg/cm ²	5.71	do		
11		compressive	208.40	Kg/Cm ²					
14		strength	231.06	Kg/Cm ²					
		Average	222.00	Kg/Cm ²					

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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 1 :2 : 4 , cast on 24/04/2021. For R/wall Marna opp.Ganeshpuri jn.Road.foundation.	28 th day	235.59	Kg/Cm ²	210.00 Kg/cm ²		Qty represents - 14.50 Cum for two sets of cubes.
		compressive	258.24	Kg/Cm ²		17.94	
		strength	249.18	Kg/Cm ²			
		Average	247.67	Kg/Cm ²			
		28 th day	255.97	Kg/Cm ²			do
	Cement concrete cube of mix 1:2:4, cast on	compressive	244.65	Kg/Cm ²		17.00	
	24/04/2021. For R/wall Marna opp.Ganeshpuri jn.Road.foundation.	strength	237.85	Kg/Cm ²	210.00 Kg/cm ²	17.22	
		Average	246.16	Kg/Cm ²			
		28 th day	244.65	Kg/Cm ²		10.75	Qty represents - 12.00 Cum for two sets of cubes.
	Cement concrete cube of mix 1:2:4 , cast on	compressive	226.53	Kg/Cm ²	210.00 Kg/cm ²		
17	26/04/2021. For R/wall wing at Cucholim bridge 2 nd lift.	strength	226.53	Kg/Cm ²			
		Average	232.57	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4 , cast on 26/04/2021. For R/wall wing at Cucholim bridge 2 nd lift.	28 th day	217.47	Kg/Cm ²	210.00 Kg/cm ²	4.63	do
10		compressive	226.53	Kg/Cm ²			
10		strenath	215.20	Kg/Cm ²			
		Average	219.73	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4, cast on	28 th day	226.53	Kg/Cm ²	210.00 Kg/cm ²	10.39	Qty represents - 12.50 Cum for two sets of cubes.
	27/04/2021. For R/wall Marna opp.Ganeshpuri jn.Road. 1 st lift.	compressive	231.06	Kq/Cm ²			
.,		strenath	237.85	Kg/Cm ²			
		Average	231.81	Kg/Cm ²			
	Cement concrete cube of mix 1 : 2 : 4 , cast on 27/04/2021. For R/wall Marna opp.Ganeshpuri jn.Road. 1 st lift.	28 th day	228.79	Kg/Cm ²	210.00 Kg/cm ²		do
20		compressive	224.26	Kg/Cm ²		9.67	
		strenath	237.85	Kg/Cm ²			
		Average	230.30	Kq/Cm ²			
	Cement concrete cube of mix 1:2:4 , cast on 28/04/2021. For R/wall Marna opp.Ganeshpuri jn.Road. 2 nd lift.	28 th day	228.79	Ka/Cm ²	210.00 Kg/cm ²	6.79	Qty represents -6.00 Cum for two sets of cubes.
21		compressive	217.47	Ka/Cm ²			
		strenath	226.53	Ka/Cm ²			
		Average	224.26	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4 , cast on 28/04/2021. For R/wall Marna opp.Ganeshpuri jn.Road. 2 nd lift.	28 th day	237.85	Kq/Cm ²	210.00 Kg/cm ²	14.34	do
		compressive	246.91	Kg/Cm ²			
		strenath	235.59	Ka/Cm ²			
		Average	240.12	Kg/Cm ²			

Junior Engineer

Assistant Engineer

		REPORT PAG	E 04 OF 04				
SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
	Cement concrete cube of mix 1:2:4 , cast on 29/04/2021. For R/wall at Cucholim near Horticulture shop-foundation.	28 th day	217.47	Kg/Cm ²	210.00 Kg/cm ²	7.15	Qty represents -17.00 Cum for two sets of cubes.
22		compressive	231.06	Kg/Cm ²			
23		strength	226.53	Kg/Cm ²			
		Average	225.02	Ka/Cm ²			
	Cement concrete cube of mix 1:2:4 , cast on 29/04/2021. For R/wall at Cucholim near Horticulture shop-foundation.	28 th day	210.67	Kg/Cm ²		5.71	do
24		compressive	217.47	Ka/Cm ²	210.00 Kg/cm ²		
		strength	237.85	Kg/Cm ²	210.00 Kg/cm		
		Average	222.00	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4 , cast on 30/04/2021. For R/wall at Cucholim near Horticulture shop- 1st lift.	28 th day	212.93	Kg/Cm ²	210.00 Kg/cm ²	3.91	Oty represents -13.00 Cum for two sets of cubes.
25		compressive	235.59	Kg/Cm ²			
25		strength	206.14	Kg/Cm ²			
		Average	218.22	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4 , cast on 30/04/2021. For R/wall at Cucholim near Horticulture shop- 1st lift.	28 th day	237.85	Kg/Cm ²	210.00 Kg/cm ²	8.23	do
24		compressive	226.53	Kg/Cm ²			
20		strength	217.47	Kg/Cm ²			
		Average	227.28	Ka/Cm ²			
	Cement concrete cube of mix 1:2:4 , cast on 01/05/2021. For R/wall at Cucholim near Horticulture shop-2 nd lift.	28 th day	242.38	Kg/Cm ²	210.00 Kg/cm ²	6.43	Qty represents -8.00 Cum for two sets of cubes.
27		compressive	212.93	Kg/Cm ²			
21		strenath	215.20	Kg/Cm ²			
		Average	223.51	Kg/Cm ²			
	Cement concrete cube of mix 1:2:4 , cast on 01/05/2021. For R/wall at Cucholim near Horticulture shop-2 nd lift.	28 th day	226.53	Ka/Cm ²	1	8.23	do
28		compressive	235.59	Kg/Cm ²	210.00 Kg/cm ²		
20		strenath	219.73	Kq/Cm ²	210.00 kg/cm		
		Average	227.28	Kg/Cm ²			

Copy to: 1. The Assistant Engineer , SDIII , WD VIII, WRD, Karaswada-Bardez - 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 VIII, WRD, Karaswada-Bardez- Goa.

4. QC Lab File. 5. Bill File.

Junior Engineer

Assistant Engineer