GOVERNMENT OF GOA QUALITY CONTROL LABORATORY WATER RESOURCES DEPARTMENT

Test Report No: WRD/QC/F. 6-2/Cube -T : 5477,5478,5479,5480,5481,5482,5483/Lab/225/2022 - 23 Dated: - 02/01/2023.

5484,5485,5542,5543.

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.19/2022-23/90. Dt.:- 30/11/2022

Qty. Recived. : 11 Sets of cube Date of Receipt:- 30/11/2022. Tested on: - 30/11/2022 & 01,26/12/2022 as per due dates. Ref to CPWD :2009, Vol. I

Sample: Cube Mix RCC M30 & PCC M15 O.S No : 9490,9491,9492,9493,9494,9495,9496,9497,9498/SS & 865,866/RK. Lab. Sample No: 5399 to 5409 Tested By: Mrs. S.B. Naik Shirodkar. J.E. & Mrs. R.R.Kadam A.E.

SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
1	Cement concrete cube of mix RCC M30 , cast on 02/11/2022. For Panel room slab and retaining wall of approach and retaining wall of substation Columns of Pump portion.(12.75 RL).	28 th day compressive strength	382.83	Kg/Cm ²	- 345.00 Kg/cm ²	7.68	Oty represents - 86 Cum for Seven sets of cube.
			385.09	Kg/Cm ²			
			346.59	Kg/Cm ²			
		Average	371.50	Kg/Cm ²			
	Cement concrete cube of mix RCC M30 , cast on 02/11/2022. For Panel room slab and retaining wall of approach and retaining wall of substation Columns of Pump portion.(12.75 RL).	28 th day	330.73	Kg/Cm ²	- 345.00 Kg/cm ²	5.27	do
2		compressive strength	371.50	Kg/Cm ²			
2			387.36	Kg/Cm ²			
		Average	363.20	Kg/Cm ²			
	Cement concrete cube of mix RCC M30 , cast on 02/11/2022. For Panel room slab and retaining wall of approach and retaining wall of substation Columns of Pump portion.(12.75 RL).	28 th day compressive strength	394.16	Kg/Cm ²	- 345.00 Kg/cm ²	7.90	do
2			385.09	Kg/Cm ²			
5			337.52	Kg/Cm ²			
		Average	372.26	Kg/Cm ²			
4	Cement concrete cube of mix RCC M30 , cast on 02/11/2022. For Panel room slab and retaining wall of approach and retaining wall of substation Columns of Pump portion.(12.75 RL).	28 th day	326.20	Kg/Cm ²		1.99	do
		compressive strength	357.91	Kg/Cm ²	345.00 Kg/cm ²		
			371.50	Kg/Cm ²			
		Average	351.87	Kg/Cm ²			

REPORT PAGE 01 OF 03

Junior Engineer

Assistant Engineer

SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
5	Cement concrete cube of mix RCC M30 , cast on 02/11/2022. For Panel room slab and retaining wall of approach and retaining wall of substation Columns of Pump portion.(12.75 RL).	28 th day compressive strength	357.91	Kg/Cm ²	345.00 Kg/cm ²	2.43	Qty represents - 86 Cum for Seven sets of cube.
			339.79	Kg/Cm ²			
			362.44	Kg/Cm ²			
		Average	353.38	Kg/Cm ²			
	Cement concrete cube of mix RCC M30 , cast on 02/11/2022. For Panel room slab and retaining wall of approach and retaining wall of substation Columns of Pump portion.(12.75 RL).	28 th day	335.26	Kg/Cm ²	- 345.00 Kg/cm ²	2.65	do
,		compressive strength	355.65	Kg/Cm ²			
6			371.50	Kg/Cm ²			
		Average	354.14	Kg/Cm ²			
	Cement concrete cube of mix RCC M30 , cast on 02/11/2022. For Panel room slab and retaining wall of approach and retaining wall of substation Columns of Pump portion.(12.75 RL).	28 th day compressive strength 351.12 366.97 Kg/Cm ² 353.38 Kg/Cm ²	Kg/Cm ²				
			366.97	Kg/Cm ²	345.00 Kg/cm ²	3.52	do
/			353.38	Kg/Cm ²			
		Average	357.16	Kg/Cm ²			
8	Cement concrete cube of mix PCC M15 , cast on 03/11/2022. For Substation retaining wall.	28 th day	181.22	Kg/Cm ²		9.64	Qty represents - 20 Cum for Two sets of cube.
		compressive strength	233.32	Kg/Cm ²	177.00 Kg/cm ²		
			167.63	Kg/Cm ²			
		Average	194.06	Kg/Cm ²			

REPORT PAGE 02 OF 03

Junior Engineer

Assistant Engineer

SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK		
9	Cement concrete cube of mix PCC M15 , cast on 03/11/2022. For Substation retaining wall.	28 th day	167.63	Kg/Cm ²	177.00 Kg/cm ²	8.78	Qty represents - 20 Cum for Two sets of cube.		
		compressive	190.28	Kg/Cm ²					
		strength	219.73	Kg/Cm ²					
		Average	192.55	Kg/Cm ²					
10	Cement concrete cube of mix RCC M30 , cast on 28/11/2022. For Tie beam at 16.25 RI gantry projection.	28 th day	328.46	Kg/Cm ²	345.00 Kg/cm ²	4.40	Qty represents - 15 Cum for Two sets of cube.		
		compressive	369.24	Kg/Cm ²					
		strength	382.83	Kg/Cm ²					
		Average	360.18	Kg/Cm ²					
	Cement concrete cube of mix RCC M30 , cast on 28/11/2022. For Tie beam at 16.25 RI gantry projection.	28 th day	360.18	Kg/Cm ²	345.00 Kg/cm ²	2.65	do		
		compressive	339.79	Kg/Cm ²					
		strength	362.44	Kg/Cm ²					
		Average	354.14	Kg/Cm ²					

REPORT PAGE 03 OF 03

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, WD VII, WRD, Dhargal Pernem - Goa.

4. QC Lab File. 5. Bill File.

Junior Engineer

Assistant Engineer