



No.C-14011/CPCB/AQC-31/Water/65

Dated: 15<sup>th</sup> April, 2015

LABORATORY DIVISION – WATER LABORATORY  
31<sup>st</sup> PROFICIENCY TESTING PROGRAMME – WATER – DECEMBER, 2014

150424FT00

REPORT

Laboratory Address : The Laboratory Incharge  
Maharashtra Pollution Control Board,  
Jog Centre, 3rd Floor,  
Old Pune - Mumbai Road  
Wakdewdi, PUNE - 411 003,  
MAHARASHTRA

Laboratory Code :65

S.No.	Test Parameter	Unit	Sample	Reference Value	SD (NIQR Basis)	Lab's result	Lower Accept. Limit	Higher Accept. Limit	Robust Z-score	Remarks (Y/N/NR)
1.	Conductivity	mg/l	A	226	14.08	211	197.83	254.17	-1.06	Y
			B	143	7.89	136	127.23	158.77	-0.89	Y
2.	T Hardness	mg/l	A	72	7.06	68	57.88	86.12	-0.57	Y
			B	46	5.83	44	34.34	57.66	-0.34	Y
3.	Chloride	mg/l	A	25	2.89	23	19.11	30.68	-0.66	Y
			B	17	2.47	14	12.00	21.89	-1.19	Y
4.	Fluoride	mg/l	A	1.47	0.23	1.4	1.02	1.92	-0.31	Y
			B	0.82	0.14	0.8	0.53	1.11	-0.14	Y
5.	Sulphate	mg/l	A	40	3.25	40.1	33.60	46.60	0.00	Y
			B	23	3.00	23.1	16.95	28.95	0.05	Y
6.	Calcium	mg/l	A	12	2.07	11.2	7.88	16.16	-0.40	Y
			B	8	1.46	7.2	5.10	10.94	-0.56	Y
7.	Magnesium	mg/l	A	10	1.20	9.72	7.60	12.40	-0.23	Y
			B	6	1.25	6.318	3.80	8.81	0.01	Y
8.	Boron	mg/l	A	0.99	0.21	1.01	0.58	1.41	0.08	Y
			B	1.88	0.24	2.05	1.39	2.37	0.70	Y
9.	Cr <sup>+6</sup>	mg/l	A	0.74	0.07	0.8	0.59	0.89	0.81	Y
			B	0.38	0.04	0.43	0.30	0.46	1.23	Y
10.	TSS	mg/l	A	90	5.19	92	79.62	100.38	0.39	Y
			B	144	7.41	147	129.17	158.83	0.40	Y
Overall performance in %										100

Note: Acceptable limits are fixed based on Reference value (Median)  $\pm$  2 Standard Deviation (NIQR basis) i.e. within  $\pm$  2 Z Scores values for both sample A & B individually.

IQR (Inter Quartile Range) = Q3-Q1;

Q1 = 1<sup>st</sup> Quartile; Q3 = 3<sup>rd</sup> Quartile

NIQR (Normalized IQR) = IQR  $\times$  0.7413 = 1 Standard Deviation

Z Score = (Observed value - Reference Value) / 1 Standard Deviation

Y - Within Acceptable Limit;

N - Not within acceptable limit;

NR - Not Reported

(Dr. P. K. Behera)  
Scientist 'C' &  
I/c. Water Lab