

No.C-14G11/CPCB/PT-29/Water/67

Dated: 14<sup>th</sup> June, 2013

**LABORATORY DIVISION – WATER LABORATORY**  
**29<sup>th</sup> PROFICIENCY TESTING PROGRAMME – WATER – FEBRUARY, 2013**

**REPORT**

**Laboratory Address** :The Laboratory Incharge  
Maharashtra Pollution Control Board,  
Regional Office Laboratory  
A-4/1, Behind Dhoot Hospital,  
MIDC - Chikalthana  
AURANGABAD – 431 005

**Laboratory Code** :67

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.	TDS	mg/l	A	106.67	6.9	116	92.81	120.53	1.35	Y
			B	141.00	19.3	160	102.45	179.55	0.99	Y
2.	FDS	mg/l	A	70.00	14.1	74	41.83	98.17	0.28	Y
			B	98.00	19.3	98	59.45	136.55	0	Y
3.	TKN	mg/l	A	4.80	1.5	5.12	1.84	7.76	0.22	Y
			B	7.28	1.3	7.56	4.44	9.79	0.22	Y
4.	NH <sub>3</sub> -N	mg/l	A	2.24	0.64	0.53	0.96	3.52	-2.68	N
			B	3.60	0.82	2.97	1.96	5.24	-0.77	Y
5.	Sodium	mg/l	A	10.78	1.3	8.30	8.10	13.45	-1.85	Y
			B	19.89	3.1	17.00	13.62	26.16	-0.92	Y
6.	Potassium	mg/l	A	14.20	1.6	13.40	11.09	17.31	-0.51	Y
			B	22.60	5.1	17.50	12.49	32.71	-1.01	Y
7.	PO <sub>4</sub> -P	mg/l	A	0.22	0.08	0.13	0.06	0.39	-1.10	Y
			B	0.33	0.07	0.33	0.19	0.47	0	Y
8.	COD	mg/l	A	145.00	7.4	144	130.17	159.83	-0.13	Y
			B	104.00	6.4	96	91.10	116.90	-1.24	Y
9.	BOD	mg/l	A	72.00	8.9	78	54.15	89.85	0.67	Y
			B	47.00	7.4	51	32.17	61.83	0.54	Y
10.	pH	mg/l	A	4.01	0.04	4.03	3.92	4.09	0.45	Y
			B	9.18	0.07	9.24	9.04	9.32	0.85	Y
<b>Overall performance in %</b>										<b>95</b>

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

*Handwritten signature and date:*  
22/5/13