



No.C-14011/CPCB/PT-29/Water/68

Dated: 04th July, 2013

LABORATORY DIVISION – WATER LABORATORY
29th PROFICIENCY TESTING PROGRAMME – WATER – FEBRUARY, 2013

REPORT

Laboratory Address : The Laboratory Incharge
Maharashtra Pollution Control Board,
Regional Office Laboratory
5th Floor, Udyog Bhavan, Civil Lines
NAGPUR – 440 001

Laboratory Code : 68

| 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 | 107.50 | 12.2 | 114 | 83.04 | 131.96 | 0.53 | Y |
| | | | B | 135.00 | 18.0 | 148 | 99.05 | 170.95 | 0.72 | Y |
| 2. | FDS | mg/l | A | 66.00 | 13.3 | 68 | 39.31 | 92.69 | 0.15 | Y |
| | | | B | 92.50 | 14.1 | 76 | 64.33 | 120.67 | 0.72 | Y |
| 3. | TKN | mg/l | A | 4.31 | 1.7 | 1.90 | 0.90 | 7.72 | -1.38 | Y |
| | | | B | 6.66 | 1.4 | 5.32 | 3.84 | 9.48 | -0.95 | Y |
| 4. | NH ₃ -N | mg/l | A | 1.91 | 1.16 | 1.42 | 1.50 | 4.22 | -0.42 | Y |
| | | | B | 3.56 | 0.82 | 2.97 | 1.92 | 5.19 | -0.72 | Y |
| 5. | Sodium | mg/l | A | 9.57 | 1.6 | 9.06 | 6.36 | 12.77 | -0.32 | Y |
| | | | B | 18.00 | 1.6 | 17.55 | 14.74 | 21.26 | -0.28 | Y |
| 6. | Potassium | mg/l | A | 13.85 | 1.3 | 13.53 | 11.28 | 16.42 | -0.25 | Y |
| | | | B | 18.10 | 1.4 | 17.9 | 15.36 | 20.84 | -0.15 | Y |
| 7. | PO ₄ -P | mg/l | A | 0.12 | 0.07 | 0.17 | 0.02 | 0.30 | 0.09 | Y |
| | | | B | 0.31 | 0.05 | 0.28 | 0.20 | 0.42 | -0.48 | Y |
| 8. | COD | mg/l | A | 147.00 | 7.7 | 142 | 131.52 | 162.48 | -0.65 | Y |
| | | | B | 104.00 | 5.9 | 103 | 92.14 | 115.86 | -0.17 | Y |
| 9. | BOD | mg/l | A | 74.00 | 13.9 | 81 | 46.25 | 101.75 | 0.5 | Y |
| | | | B | 47.00 | 11.1 | 49 | 24.76 | 69.24 | 0.18 | Y |
| 10. | pH | mg/l | A | 4.01 | 0.04 | 3.99 | 3.93 | 4.08 | -0.51 | Y |
| | | | B | 9.18 | 0.07 | 9.26 | 9.05 | 9.31 | 1.2 | Y |
| Overall performance in % | | | | | | | | | | 100 |

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

IQR (Inter Quartile Range) = Q3-Q1; Q1 = 1st Quartile; Q3 = 3rd Quartile

NIQR (Normalized IQR) = IQRx0.7413 = 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