PLATES
Fig. 4.5 Total dissolved solids (Water)

Dumas: 26031 mg/L, 19410 mg/L
Magdalla: 24729 mg/L, 20319 mg/L
Hazira: 25720 mg/L, 28424 mg/L

Fig. 4.6: Total suspended solids (Water)

Dumas: 6963 mg/L, 5291 mg/L
Magdalla: 5187 mg/L, 4377 mg/L
Hazira: 5436 mg/L, 4723 mg/L

Fig. 4.7 pH (Water)

Dumas: 7.6, 7.6
Magdalla: 7.9, 7.9
Hazira: 7.9, 7.9

Fig. 4.8: Salinity (Water)

Dumas: 21 ppt, 16 ppt
Magdalla: 26 ppt, 20 ppt
Hazira: 27 ppt, 21 ppt
Fig. 4.9: Sodium (Water)

Fig. 4.10: Chloride (Water)

Fig. 4.11 Dissolved oxygen (Water)

Fig. 4.12 BOD (Water)

PLATE-V
Fig. 4.13 COD (Water)
Fig. 4.14 Nitrite (Water)
Fig. 4.15 Nitrate (Water)
Fig. 4.16 Phosphate (Water)

PLATE-VI
Fig. 4.17 Calcium (Water)

Fig. 4.18 Potassium (Water)

Fig. 4.19 Oil & grease (Water)

Fig. 4.20 Total petroleum hydrocarbon (Water)

PLATE-VII
Fig. 4.21 Moisture (Sediment)

Fig. 4.22 pH (Sediment)

Fig. 4.23 Carbon (Sediment)

Fig. 4.24 Organic matter (Sediment)

PLATE-VIII
Fig. 4.25 Nitrate (Sediment)

Fig. 4.26 Available phosphorous (Sediment)

Fig. 4.27 Total petroleum hydrocarbon (Sediment)
Fig. 4.28 Mercury (Water)

Fig. 4.29 Cadmium (Water)

Fig. 4.30 Lead (Water)

Fig. 4.31 Zinc (Water)

Fig. 4.32 Distribution of heavy metals (Water)
Fig. 4.33 Mercury (Sediment)

Fig. 4.34 Cadmium (Sediment)

Fig. 4.35 Lead (Sediment)

Fig. 4.36 Zinc (Sediment)

Fig. 4.37 Distribution of heavy metals (Sediment)
Fig. 4.38 Mercury (Fish)

Fig. 4.39 Cadmium (Fish)

Fig. 4.40 Lead (Fish)

Fig. 4.41 Zinc (Fish)

Fig. 4.42 Distribution of heavy metals (Fish)

PLATE-XII
Fig. 4.43 Distribution of mercury in three levels

Fig. 4.44 Distribution of cadmium in three levels

Fig. 4.45 Distribution of lead in three levels

Fig. 4.46 Distribution of zinc in three levels
**Fig. 4.47** Biocaccumulation of lead in fish muscle

- **X-axis**: 96 hours, 192 hours
- **Y-axis**: µg/g dry weight
- **1.47 mg/L**
- **14.73 mg/L**
- **72.48 mg/L**

**Fig. 4.48** Lead residue in water after uptake by fish

- **X-axis**: 96 hours, 192 hours
- **Y-axis**: %
- **lower(1.47)**
- **higher(14.73)**
- **31.05%**
- **47.76%**

**Fig. 4.49** Reduction of lead from culture medium

- **X-axis**: Incubation hours (0-150)
- **Y-axis**: Removal efficiency (%)

**Fig. 4.50** Uptake of lead by A. niger

- **X-axis**: Incubation hours (0-150)
- **Y-axis**: Biomass uptake (µg/g)

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**PLATE-XIV**