

| Surface Water Quality Data in Yanam Region - 2021 |                                                       |                                                        |                               |                                                |
|---------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------|-------------------------------|------------------------------------------------|
| Sl.No.                                            | Parameters                                            | Gautami -<br>Godavari River<br>Near Balayogi<br>Bridge | Coringa River<br>(Tidal Lock) | Gautami -<br>Godavari River<br>Near Adavipolam |
|                                                   | Station Code                                          | 2442                                                   | 2444                          | 2443                                           |
| 1                                                 | Latitude                                              | 16° 43' 30.25" N                                       | 16° 43' 48.6" N               | 16° 42' 52.54" N                               |
| 2                                                 | Longitude                                             | 82 ° 12' 21.46" E                                      | 82 ° 13' 2.6" E               | 82 ° 15' 41.53" E                              |
| 3                                                 | Dt.Of Sampling                                        | 21.12.2021                                             | 21.12.2021                    | 21.12.2021                                     |
| 4                                                 | Time                                                  | 10.00 AM                                               | 10.40 A.M                     | 12.00 P.M                                      |
| 5                                                 | Temperature °C                                        | 27.0                                                   | 27.0                          | 26.5                                           |
| 6                                                 | DO mg/l                                               | 6.1                                                    | 5.5                           | 6.8                                            |
| 7                                                 | pH                                                    | 7.92                                                   | 7.85                          | 7.97                                           |
| 8                                                 | Conductivity µmho/cm                                  | 20800                                                  | 23500                         | 24900                                          |
| 9                                                 | BOD mg/l                                              | 2.0                                                    | 20.0                          | 25.0                                           |
| 10                                                | Nitrate - N mg/l                                      | BDL (DL-0.3)                                           |                               |                                                |
| 11                                                | Nitrate mg/l                                          | 0.252                                                  | 0.261                         | 0.177                                          |
| 12                                                | Nitrite - N mg/l                                      | BDL (DL-0.02)                                          |                               |                                                |
| 13                                                | Turbidity NTU                                         | 1.5                                                    | 1.8                           | 1.1                                            |
| 14                                                | Total Alkalinity (mg/l)                               | 198.0                                                  | 186.0                         | 210                                            |
| 15                                                | Bi- Carbonate as HCO <sub>3</sub> <sup>-</sup> (mg/l) | 231.8                                                  | 224.5                         | 246.4                                          |
| 16                                                | P. Alkalinity (mg/l)                                  | 8                                                      | BDL (DL-5.0)                  | 8                                              |
| 17                                                | Carbonate as CO <sub>3</sub> <sup>2-</sup> (mg/l)     | 4.8                                                    | BDL (DL-3.0)                  | 4.8                                            |
| 18                                                | Chloride mg/l                                         | 9866.4                                                 | 10470.5                       | 10973.9                                        |
| 19                                                | COD mg/l                                              | 148.0                                                  | 280.0                         | 380.0                                          |
| 20                                                | Total Hardness mg/l                                   | 2316.6                                                 | 2593.8                        | 2653.2                                         |
| 21                                                | Calcium Hardness mg/l                                 | 1603.8                                                 | 1673.1                        | 1722.6                                         |
| 22                                                | Calcium as Ca <sup>++</sup> mg/l                      | 641.52                                                 | 669.24                        | 689.0                                          |
| 23                                                | Magnesium Hardness mg/l                               | 712.8                                                  | 920.7                         | 930.6                                          |
| 24                                                | Magnesium as Mg <sup>++</sup> mg/l                    | 173.2                                                  | 223.73                        | 226.1                                          |
| 25                                                | Sulphate mg/l                                         | 767.92                                                 | 857.75                        | 976.10                                         |
| 26                                                | Orthophosphate mg/l                                   | 0.13                                                   | 0.12                          | 0.10                                           |

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|--------|--------------------------|--------------------------------------------------------|-------------------------------|------------------------------------------------|
|        | Station Code             | 2442                                                   | 2444                          | 2443                                           |
| 27     | TDS mg/l                 | 13995                                                  | 15511                         | 16233                                          |
| 28     | TSS mg/l                 | BDL (DL-10)                                            |                               |                                                |
| 29     | FDS/TFS mg/l             | 11720                                                  | 12978                         | 13536                                          |
| 30     | Ammonia - N mg/l         | BDL (DL - 0.4)                                         |                               |                                                |
| 31     | Sodium mg/l              | 3961.0                                                 | 4382.0                        | 4390.0                                         |
| 32     | Potassium mg/l           | 169.10                                                 | 168.70                        | 172.10                                         |
| 33     | Hexavalent Chromium mg/l | BDL                                                    |                               |                                                |
| 34     | % Sodium                 | 77.21                                                  | 77.15                         | 76.79                                          |
| 35     | SAR                      | 35.7                                                   | 37.3                          | 37.0                                           |
| 36     | Arsenic mg/l             | BDL (DL - 0.00049)                                     |                               |                                                |
| 37     | Cadmium mg/l             | BDL (DL - 0.00042)                                     |                               |                                                |
| 38     | Copper mg/l              | 0.181                                                  | 0.265                         | 0.252                                          |
| 39     | Lead mg/l                | BDL (DL - 0.00031)                                     |                               |                                                |
| 40     | Total Chromium mg/l      | BDL (DL - 0.00056)                                     |                               |                                                |
| 41     | Mercury mg/l             | BDL (DL - 0.00052)                                     |                               |                                                |
| 42     | Nickel mg/l              | BDL (DL - 0.00054)                                     |                               |                                                |
| 43     | Zinc mg/l                | 0.183                                                  | BDL (DL - 0.1)                |                                                |
| 44     | Manganese as Mn (mg/l)   | BDL (DL - 0.00043)                                     |                               |                                                |
| 45     | Iron mg/l                | 0.65                                                   | 0.37                          | 0.29                                           |

BDL - Below Detectable Limit; DL - Detection Limit