

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE BENCH
AT CHENNAI

OA No 156 OF 2023

IN THE MATTER OF:

THOTA GANGA RAJU

..... Applicant

Vs

**THE GOVERNMENT OF ANDHRA PRADESH REP. BY ITS PRINCIPAL
SECRETARY WATER RESOURCES (IRRIGATION) DEPARTMENT & OTHERS**

.... Respondents

REPORT FILED BY THE APPCB 4TH RESPONDENT

DATE - 26.03.2025



**M/s MADHURI DONTI REDDY
ADVOCATE**

STANDING COUNSEL FOR GOVERNMENT OF ANDHRA PRADESH

A.P. POLLUTION CONTROL BOARD

#26, S2, Royal Castle, Gill Nagar Extension, Choolaimedu, Chennai – 600 094.

Mobile: 98407 98460 / 63831 21322,

Email: reddymadhuri09@gmail.com

BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI

Original Application No. 156 of 2023(SZ)

IN THE MATTER OF

Thota Ganga Raju, Andhra Pradesh.

....Applicant(s)

Versus

The Government of Andhra Pradesh Rep. by its Principal Secretary,

Andhra Pradesh and Ors.


....Respondent(s)

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Place: Eluru.

Date:24.03.2025


Environmental Engineer,
APPCB, Regional Office, Eluru
ENVIRONMENTAL ENGINEER
ANDHRA PRADESH POLLUTION CONTROL BOARD
REGIONAL OFFICE, ELURU.

STATUS REPORT OF ANDHRA PRADESH POLLUTION CONTROL BOARD IN THE MATTER OF O.A.No.156 of 2023 (SZ).


1. The Original Application (O.A.) No.156 of 2023 has been registered in Hon'ble National Green Tribunal (NGT), Southern Bench, Chennai on representation of the Sri Thota Ganga Raju, Tundurru Village, Bhimavaram Mandal, West Godavari District regarding water pollution of Adavikodu Channel due to discharges of sewage & toilet waste of Srungavruksham Gram Panchayat, Palakoderu Mandal, West Godavari District through irrigation field Bhodhe/Pipe No.10 and illegal fish/prawn culture water.
2. The Hon'ble NGT (SZ) in its Order dt.10.10.2023 directed the Andhra Pradesh Pollution Control Board to inspect the in question and file a detailed report along with the remedial measures, if any, required. The APPCB Officials inspected the Adavikodu Irrigation Canal at Srungavruksham Village and its surroundings on 26.10.2023 and the APPCB report was filed in Hon'ble NGT (SZ) on 08.11.2023.
3. The Hon'ble NGT (SZ) heard the matter on 09.11.2023 & 07.12.2023 and directed the other respondents to file their reports.
4. The Hon'ble NGT (SZ) in its order dt.21.08.2024 stated that the District Collector, West Godavari is yet to file his report. The APPCB filed status report along with analysis report on 06.11.2023 and 21.09.2024 in the matter. The copy of the water analysis report dt.10.11.2023 is enclosed as **Annexure -A**.
5. The Hon'ble NGT (SZ) in its order dt.23.09.2024 stated that the applicant seeks time to file objections to the report of the Andhra Pradesh Pollution Control Board.
6. The Hon'ble NGT (SZ) in its order dt.22.10.2024 stated that the objection of the applicant is not filed and the matter is listed on 07.01.2025.
7. The Hon'ble NGT (SZ) in its order dt.07.01.2025 stated that at the request of the learned counsel appearing for the State of Andhra Pradesh. The matter is listed on 27.02.2025.
8. The Hon'ble NGT (SZ) in its order dt.27.02.2025 stated that the water analysis report of the Andhra Pradesh Pollution Control Board is yet to be filed, as the earlier report is silent on the fecal coliform. The matter is listed on 27.03.2025. The copy of the order is enclosed as **Annexure -B**.
9. It is submitted that the APPCB Officials again inspected the Adavikodu Irrigation Channel & its connected channels at Srungavruksham Gram Panchayat, Palakoderu Mandal, West Godavari District on 10.03.2025. Sri Thota Ganga Raju, the applicant has accompanied during inspection. Water samples were collected at three different points of Adavikodu Irrigation Channel & its connected channels at Srungavruksham Gram Panchayat in the presence of the applicant which were same previous collection points and submitted to APPCB, Zonal Laboratory, Visakhapatnam for analysis. The analysis results were received on 19.03.2025. **Annexure-C**.

The following observations were made during inspection and revealed from analysis reports.

- I. The Irrigation Bodhe connected to upstream of Adavikodu Channel at backside of Kanaka Durgamma Temple, Srungavruksham Village is filled with Srungavruksham Village sewage & debris. The photograph is enclosed.
 - Water Sample collected from irrigation bodhe connected to upstream of Adavikodu Channel at backside of Kanaka Durgamma Temple, Srungavruksham Village. (Sample Code: 220) (Water is being used for irrigation purpose). As per Central Pollution Control Borad (CPCB) surface water quality criteria for different uses, the characteristic of water body is fall under 'E' category.

- II. No water was observed in Irrigation Bodhe No.10 near Srungavruksham Railway Gate connected to Adavikodu Channel due to summer and is stagnated with mud, Village sewage & debris. No representative water available for collection of sample. The photograph is enclosed.
- No representative water sample was collected.
- III. The Irrigation Bodhe No.10 is filled with Srungavruksham Village Sewage, domestic waste and debris at downstream of Adavikodu Channel before joining into Adavikodu Channel.
- Water Sample collected from Irrigation bodhe No.10 before joining into downstream of Adavikodu Channel. (Sample Code: 221) (Water is being used for irrigation purpose). As per Central Pollution Control Borad (CPCB) surface water quality criteria for different uses, the characteristic of water body is fall under 'E' category.
- IV. Debris was observed in Adavikodu Irrigation Channel at down stream which is being used for drinking water purpose for downstream Villages.
- Water Sample collected from downstream of Adavikodu Channel after joining of Irrigation Bodhe No.10. (Sample Code: 222) (Water is being used for Irrigation and drinking water purpose). As per Central Pollution Control Borad (CPCB) surface water quality criteria for different uses, the characteristic of water body is fall under 'C' category except for total coliform parameter.
- V. **Remarks:**
- Total coliform, fecal coliform and E-coli contamination is present in all three water samples. The surface water is having different uses.
10. It is submitted that the following remedial measures are suggested for supply safe drinking water to the Public.
- A. It is submitted that the Panchayat Raj Department, Government of Andhra Pradesh may be directed to isolate the sewage contamination to drinking water source. The Rural Water Supply (RWS) under Panchayat Raj Department shall provide safe pipeline network for drawl of drinking water to supply public after treatment.
 - B. The Panchayat Secretary, Srungavruksham Village shall take necessary action such as stipulating condition that there shall not be allowed discharge of sewage into nearby abutting canals while issuing Panchayat permissions for new construction of houses. The existing sewage discharge pipelines shall be routed to septic tanks as a preventive measure.
 - C. The sewage of Srungavruksham Village and discharges of fish/prawn ponds shall be reduced or controlled by diverting them to the nearby notified drains by Water Resource Department such that to avoid water pollution of Tundurru Branch Channel of Adavikodu Channel.
11. With respect to aquaculture disposal, it is submitted that the water remains in pond after harvest of aqua culture & shrimp culture are disposing as recommended by APSADA Act and guidelines of Ministry of Agriculture, GoI in accordance with Andhra Pradesh. Water Resource Department. It is suggested that the water resource department shall facilitate dedicated notified drain system for disposal of aqua pond water without contamination of drinking water source.
- Submitted.

Place: Eluru.
Date: 24.03.2025.


Environmental Engineer,
APPCB, Regional Office, Eluru
ENVIRONMENTAL ENGINEER
ANDHRA PRADESH POLLUTION CONTROL BOARD
REGIONAL OFFICE, ELURU.

**Inspection Photos of Adavikodu Irrigation Channel at Srungavruksham Village,
Palacoderu Mandal, West Godavari District.**



Sampling Location - I

Collection of water sample from Irrigation Bhodhe connected to upstream of Adavikodu Channel at backside of Kanaka Durgamma Temple, Srungavruksham Village.



Sampling Location - I

Debris and Village sewage is observed in Irrigation Bhodhe at backside of Kanaka Durgamma Temple, Srungavruksham Village.



Sampling Location -II

Mud, Village sewage and debris were observed in Irrigation Bhodhe No.10 near Srungavruksham Railway Gate.



Sampling Location -III

Debris and Village sewage is observed in Irrigation Bhodhe No.10 at downstream of Adavikodu Channel, Srungavruksham Village.



Sampling Location -IV
Adavikodu Irrigation Channel which is being used for Irrigation
and Drinking Water Purpose.



The APPCB officials and Applicant at Inspection





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ANDHRA PRADESH POLLUTION CONTROL BOARD
ZONAL LABORATORY :: VISAKHAPATNAM
39-33-20/4/1, Madhavadhara VUDA Colony,
Visakhapatnam - 530018. Ph : 0891 – 2719380/481



Report No: VSP202310744 to 747

Date: 10th day of November, 2023**ANALYSIS REPORT**Sample No. : **VSP202310744 to 747**

Sample Location/Address : Sample collected from Irrigation Bhodi Srungavruksham, West Godavari District

Sample Source : VSP202310744: Water sample collected from irrigation Bhodi No.10 at Railway Track, Srungavruksham (Water is being used for irrigation)

VSP202310745: Water sample collected from irrigation Bhodi back side of Kanaka Durgamma Temple, Srungavruksham (Water is being used for irrigation)

VSP202310746: Water sample collected from irrigation Bhodi No.10, near Adavikodu Channel, Srungavruksham (Bore joining into Adavikodu Channel) (Water is being used both drinking & irrigation)

VSP202310747: Water sample collected from Adavikodu Channel, Srungavruksham (Water is being used for Drinking water)

Sample collected on : 26.10.2023

Sample received on : 28.10.2023

Sample collected by : AEE, Regional Office, Eluru

Report issued on : 10.11.2023

It is to certify that the aforementioned samples were analyzed from 28.10.2023 to 10.11.2023 and declare the analysis results as follows:

S. No.	Parameter	Sample codes & Analysis Results		Test Method
		744	745	
1.	pH	7.40	7.44	APHA (24 th Edition, 2023) 4500-H+B: Page No.473 to 478.
2.	Electrical Conductivity (as $\mu\text{S}/\text{cm}$)	2650	1320	APHA (24 th Edition, 2023) 2510- B: Page No.134 & 135.
3.	Total Suspended Solids (TSS)	11	10	APHA (24 th Edition, 2023) 2540- D: Page No. 146 & 147
4.	Total Dissolved Solids (TDS)	1768	880	APHA (24 th Edition, 2023) 2540- C: Page No 145
5.	Chemical Oxygen Demand (COD)	32	20	APHA (24 th Edition, 2023) 5220- B: Page No.544 & 545.
6.	Biochemical Oxygen Demand (BOD) 3 days @ 27°C	7.5	4.6	IS 3025 (Part 44): 1993 (Reaffirmed 2014)
7.	Chloride (as Cl ⁻)	474.5	225.0	APHA (24 th Edition, 2023) 4500- Cl- B: Page No.340 & 341
8.	Total Hardness (as CaCO ₃)	464	252	APHA (24 th Edition, 2023) 2340- C: Page No. 124 to 126.



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S. No.	Parameter	Sample codes & Analysis Results		Test Method
		744	745	
9.	Total Alkalinity(as CaCO ₃)	452	208	APHA (24th Edition, 2023) 2320- B: Page No. 112 to 114.
10.	Ortho Phosphate (as PO ₄ ³⁻)	0.17	0.04	APHA (24th Edition,2023) 4500- P D: Page No. 485 & 486
11.	Fluoride (as F ⁻)	0.90	0.52	APHA (24th Edition, 2023) 4500-F-B&D: Page No.397 to 401
12.	Sulphate (as SO ₄ ²⁻)	168.7	99.5	APHA (24th Edition,2023) 4500-SO42- E: Page No. 505 & 506
13.	Calcium (as Ca)	68.8	43.2	APHA (24th Edition, 2023) 3500-Ca-B: Page No.254 & 255
14.	Magnesium (as Mg)	70.95	34.99	APHA (24th Edition,2023) 3500-Mg-B, Page No.274
15.	Ammonical Nitrogen (as NH ₃ -N)	2.90	2.01	APHA (24th Edition, 2023) 4500-NH3- F: Page No. 429 to 430
16.	Nitrate (as NO ₃)	26.0	8.9	APHA (24th Edition,2023) 4500-NO3- B: Page No. 434 & 435
17.	Nitrite Nitrogen (as NO ₂ -N)	0.12	0.25	APHA (24th Edition, 2023) 4500-NO2- B: Page No. 449 to 451
18.	Sodium (as Na ⁺)	333.3	160.78	APHA (24th Edition, 2023) 3500- Na B: Page No.290 to 292
19.	Potassium (as K ⁺)	64.42	13.03	APHA (24th Edition, 2023) 3500- K B: Page No. 279 to 280
20.	% Na	57.05	56.58	
21.	SAR	6.73	4.41	
22.	Chromium (as Cr)	<0.001	<0.001	APHA (24th Edition, 2023) 3125 - B: Page No.233 to 242
23.	Manganese (as Mn)	<0.001	<0.001	
24.	Iron (as Fe)	0.071	0.045	
25.	Nickel (as Ni)	<0.001	<0.001	
26.	Copper (as Cu)	<0.001	<0.001	
27.	Zinc (as Zn)	<0.001	<0.001	
28.	Arsenic (as As)	0.004	0.001	
29.	Cadmium (as Cd)	<0.001	<0.001	
30.	Lead (as Pb)	<0.001	<0.001	



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39-33-20/4/1, Madhavadhara VUDA Colony,
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S. No.	Parameter	Sample codes & Analysis Results		Test Method
		746	747	
1.	pH	7.34	7.46	APHA (24 th Edition, 2023) 4500-H+B: Page No. 473 to 478.
2.	Electrical Conductivity (as $\mu\text{S/cm}$)	1217	1945	APHA (24 th Edition, 2023) 2510- B: Page No. 134 & 135.
3.	Total Suspended Solids (TSS)	20	35	APHA (24 th Edition, 2023) 2540- D: Page No. 146 & 147
4.	Total Dissolved Solids (TDS)	808	1292	APHA (24 th Edition, 2023) 2540- C: Page No 145
5.	Chemical Oxygen Demand	24	36	APHA (24 th Edition, 2023) 5220- B: Page No. 544 & 545.
6.	Biochemical Oxygen Demand	5.2	8.0	IS 3025 (Part 44): 1993 (Reaffirmed 2014)
7.	Chloride (as Cl ⁻)	200.5	342.4	APHA (24 th Edition, 2023) 4500- Cl- B: Page No. 340 & 341
8.	Total Hardness (as CaCO ₃)	248	352	APHA (24 th Edition, 2023) 2340- C: Page No. 124 to 126.
9.	Total Alkalinity (as CaCO ₃)	256	364	APHA (24 th Edition, 2023) 2320- B: Page No. 112 to 114.
10.	Ortho Phosphate (as PO ₄ ³⁻)	0.32	0.38	APHA (24 th Edition, 2023) 4500- P D: Page No. 485 & 486
11.	Fluoride (as F ⁻)	0.51	0.46	APHA (24 th Edition, 2023) 4500-F- B&D: Page No. 397 to 401
12.	Sulphate (as SO ₄ ²⁻)	58.9	97.7	APHA (24 th Edition, 2023) 4500-SO ₄ ²⁻ - E: Page No. 505 & 506
13.	Calcium (as Ca)	38.4	54.4	APHA (24 th Edition, 2023) 3500-Ca-B: Page No. 254 & 255
14.	Magnesium (as Mg)	36.93	52.48	APHA (24 th Edition, 2023) 3500-Mg-B, Page No. 274
15.	Ammonical Nitrogen (as NH ₃ -N)	0.10	0.94	APHA (24 th Edition, 2023) 4500-NH ₃ - F: Page No. 429 to 430
16.	Nitrate (as NO ₃)	11.8	16.3	APHA (24 th Edition, 2023) 4500-NO ₃ - B: Page No. 434 & 435
17.	Nitrite Nitrogen (as NO ₂ -N)	BDL	0.07	APHA (24 th Edition, 2023) 4500-NO ₂ - B: Page No. 449 to 451
18.	Sodium (as Na ⁺⁺)	122.44	215.94	APHA (24 th Edition, 2023) 3500- Na B: Page No. 290 to 292
19.	Potassium (as K ⁺⁺)	33.74	59.64	APHA (24 th Edition, 2023) 3500- K B: Page No. 279 to 280
20.	% Na	47.80	51.87	
21.	SAR	3.38	4.95	



ANDHRA PRADESH POLLUTION CONTROL BOARD
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 39-33-20/4/1, Madhavadhara VUDA Colony,
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S. No.	Parameter	Sample codes & Analysis Results		Test Method
		746	747	
22.	Chromium (as Cr)	<0.001	<0.001	APHA (24th Edition, 2023) 3125 - B: Page No.233 to 242
23.	Manganese (as Mn)	<0.001	0.002	
24.	Iron (as Fe)	0.040	0.060	
25.	Nickel (as Ni)	<0.001	<0.001	
26.	Copper (as Cu)	<0.001	<0.001	
27.	Zinc (as Zn)	<0.001	<0.001	
28.	Arsenic (as As)	0.001	0.001	
29.	Cadmium (as Cd)	<0.001	<0.001	
30.	Lead (as Pb)	<0.001	<0.001	

Note: -1. All values are expressed in mg/L except pH
 2. Results are related to sample as received and tested

Authorized Signatory

STATE BOARD ANALYST
 (M. RAVI)

Senior Environmental Scientist
 Zonal Laboratory, Visakhapatnam.

Item No.12:-**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

[Through Physical Hearing (Hybrid Option)]

Original Application No.156 of 2023 (SZ)

IN THE MATTER OF:

Thota Ganga Raju,
Andhra Pradesh.

...Applicant(s)

With

The Government of Andhra Pradesh
Rep. by its Principal Secretary,
Andhra Pradesh and Ors.

... Respondent(s)



Date of hearing: 27.02.2025.

CORAM:

HON'BLE SMT. JUSTICE PUSHPA SATHYANARAYANA, JUDICIAL MEMBER

HON'BLE Dr. SATYAGOPAL KORLAPATI, EXPERT MEMBER

For Applicant(s): Mr. Thota Ganga Raju (*Party in Person*)

For Respondent(s): Mrs. Madhuri Donti Reddy for R1 to R6.

ORDER

1. The water analysis report of the Andhra Pradesh Pollution Control Board is yet to be filed, as the earlier report is silent on the faecal coliform.
2. Post the matter on **27.03.2025**, finally.

Sd/-

Smt. Justice Pushpa Sathyanarayana, JM

Sd/-

Dr. Satyagopal Korlapati, EM

O.A. No.156/2023 (SZ)
27th February, 2025. AD.





ANDHRA PRADESH POLLUTION CONTROL BOARD
ZONAL LABORATORY :: VISAKHAPATNAM
39-33-20/4/1, Madhavadhara VUDA Colony,
Visakhapatnam - 530018. Ph : 0891 - 2719380/481



Form No: APPCB/ZL/VSP/CI.7.8/FM38

ANALYSIS REPORT

Report No : VSP202503220 & 221
Customer Name : Regional Office, Eluru
Sample source / Address : **Samples from Irrigation Bhodhe & Adavikodu Channel at Srungavruksham (V), Palakoderu (M), West Godavri District.**

Sample Code No. : **Sample description**
VSP202503220 : Water sample collected from Irrigation Bodhe connected to upstream of Adavikodu Channel at backside of Kanaka Durgamma Temple, Srungavruksham Village.
VSP202503221 : Water sample collected from Irrigation Bodhe No.10 before joining into downstream of Adavikodu Channel.

Sample group/Discipline : Water / Surface water

Sample collected on : 10.03.2025
Sample collected by : Analyst (Gr-I), RO, Eluru
Inpresence of Sri. Thota Gangaraju, Advocate (Petitioner)

Sample received on : 11.03.2025
Purpose of sampling : Hon'ble NGT Order, dt.27.02.2025 in O.A No.156 of 2023(SZ)

Sample quantity & Number : 1 Litre in Plastic Can (2 No.s)
Report issued on : 19.03.2025

Sample Conditions : Fit for analysis
Page No : 1 of 2

It is to certify that the aforementioned samples were analyzed from 11.03.2025 to 19.03.2025 and declare the analysis results as follows:

S. No.	Parameter	Unit	SAMPLE CODES		Test Method [APHA (24 th Edition)]
			Analysis Results		
			220	221	
1.	pH @ 25°C	--	7.11	7.14	4500-H+B
2.	Electrical Conductivity	µS/cm	560	616	2510- B:
3.	Salinity	PSU	0.32	0.38	2520- A
4.	Dissolved Oxygen	mg/L	1.0	1.5	4500-O C
5.	Total Suspended Solids (at 105°C)	mg/L	24	28	2540- D
6.	Total Dissolved Solids (at 180°C)	mg/L	380	412	2540- C
7.	Chemical Oxygen Demand (COD)	mg/L	72	76	5220- B
8.	Biochemical Oxygen Demand (BOD) 3 days @ 27°C	mg/L	16	18	IS 3025 (Part 44)
9.	Chloride (as Cl)	mg/L	125	140	4500- Cl- B
10.	Total Hardness (as CaCO ₃)	mg/L	164	156	2340- C
11.	Total Alkalinity (as CaCO ₃)	mg/L	216	236	2320- B
12.	Ortho Phosphate (as PO ₄ ³⁻)	mg/L	<0.1	<0.1	4500- P D
13.	Sulphate (as SO ₄ ²⁻)	mg/L	16.8	24.7	4500- SO42- E
14.	Fluoride (as F)	mg/L	0.36	0.13	4500-F- B&D
15.	Calcium Hardness (as CaCO ₃)	mg/L	88	96	3500- Ca-B

(P.T.O)



S. No.	Parameter	Unit	SAMPLE CODES		Test Method [APHA (24 th Edition)]
			Analysis Results		
			220	221	
16.	Magnesium Hardness (as CaCO ₃)	mg/L	76	60	3500-Mg-B
17.	Sulphide (as S ²⁻)	mg/L	0.4	0.4	4500- S ²⁻
18.	% Sodium	meq/L	38.3	48.6	Calculated Method
19.	SAR	meq/L	1.77	2.45	
20.	Total Coli Form	MPN/ 100 ml	>2419.6	1986.3	9223.B
21.	Fecal Coli Form		478.6	218.7	
22.	E. coli		20.1	5.2	

Note:

1. Result is related to sample as received and tested.
2. This report shall not be reproduced except in full without the prior approval of Laboratory.

Authorized Signatory

(M. RAVI)

STATE BOARD ANALYST
 Senior Environmental Scientist
 Zonal Laboratory, Visakhapatnam

***END OF THE REPORT ***



Form No: APPCB/ZL/VSP/CI.7.8/FM38

ANALYSIS REPORT

Report No : VSP202503222
Customer Name : Regional Office, Eluru
Sample source / Address : Samples from Irrigation Bhodhe & Adavikodu Channel at Srungavruksham (V), Palakoderu (M), West Godavri District.
Sample Code No. : VSP202503222
Sample description : Water sample collected from downstream of Adavikodu Channel after joining of Irrigation Bodhe No.10 .
Sample group/Discipline : Water / Surface water
Sample collected on : 10.03.2025
Sample collected by : Analyst(Gr-I),RO,Eluru
 Impresence of Sri. Thota Gangaraju, Advocate (Petitioner)
Sample received on : 11.03.2025
Purpose of sampling : Hon'ble NGT Order, dt.27.02.2025 in O.A No.156 of 2023(SZ)
Sample quantity & Number : 1 Litre in Plastic Can (2 No.s)
Sample Conditions : Fit for analysis
Report issued on : 19.03.2025
Page No : 1 of 2

It is to certify that the aforementioned samples were analyzed from 11.03.2025 to 19.03.2025 and declare the analysis results as follows:

S. No.	Parameter	Unit	SAMPLE CODES	Test Method [APHA (24 th Edition)]
			Analysis Results	
			222	
1.	pH @ 25°C	--	7.43	4500-H+B
2.	Conductivity	µS/cm	780	2510- B
3.	Dissolved Oxygen	mg/L	4.2	4500-O C
4.	Total Dissolved Solids (at 180°C)	mg/L	470	2540- C
5.	Chemical Oxygen Demand (COD)	mg/L	40	5220- B
6.	Chloride (as Cl)	mg/L	134	4500- Cl- B
7.	Total Hardness (as CaCO ₃)	mg/L	160	2340- C
8.	Total Alkalinity (as CaCO ₃)	mg/L	188	2320- B
9.	Ortho Phosphate (as PO ₄ ³⁻)	mg/L	0.03	4500- P D
10.	Sulphate (as SO ₄ ²⁻)	mg/L	38.2	4500- SO42- E
11.	Fluoride (as F)	mg/L	0.34	4500-F- B&D
12.	Nitrate (as NO ₃)	mg/L	4.51	4500-NO ₃ - B
13.	Nitrite Nitrogen (as NO ₂ -N)	mg/L	0.02	4500-NO ₂ - B
14.	Ammonical Nitrogen(as NH ₃ -N)	mg/L	<0.1	4500-NH ₃ - F
15.	Calcium Hardness (as CaCO ₃)	mg/L	88.0	3500- Ca-B
16.	Magnesium Hardness (as CaCO ₃)	mg/L	72.0	3500-Mg-B
17.	Sodium (as Na)	mg/L	120.0	3500- Na B
18.	Potassium (as K)	mg/L	3.7	3500- K-B
19.	Total Coli Form	MPN/ 100 ml	>2419.6	9223.B
20.	Fecal Coli Form		101.2	
21.	E. coli		2.0	

Note:

1. Result is related to sample as received and tested.
2. This report shall not be reproduced except in full without the prior approval of Laboratory.
3. Metal Analysis could not be analyzed due to repair of ICP-MS Instrument.

Authorized Signatory

(M. RAVI)

STATE BOARD ANALYST
Senior Environmental Scientist
Zonal Laboratory, Visakhapatnam

CPCB Water Quality Criteria for Designated Best Use

Designated-best- use	Class of water	Criteria
Drinking Water Source without conventional treatment but after disinfection.	A	<ul style="list-style-type: none"> • Total Coli forms Organism MPN/100 ml shall be 50 or less. • pH between 6.5 and 8.5 • Dissolved oxygen 6 mg/l or more. • Biochemical Oxygen Demand 5 days 20°C 2mg/l or less.
Outdoor bathing (Organized)	B	<ul style="list-style-type: none"> • Total Coli forms Organism MPN/100 ml shall be 500 or less. • pH between 6.5 and 8.5 • Dissolved oxygen 5 mg/l or more. • Biochemical Oxygen Demand 5 days 20°C 3mg/l or less.
Drinking Water Source after conventional treatment and disinfection.	C	<ul style="list-style-type: none"> • Total Coli forms Organism MPN/100 ml shall be 5000 or less. • pH between 6 to 9 • Dissolved oxygen 4 mg/l or more. • Biochemical Oxygen Demand 5 days 20°C 3mg/l or less
Propagation of Wild life and Fisheries.	D	<ul style="list-style-type: none"> • pH between 6.5 to 8.5 • Dissolved oxygen 4 mg/l or more. • Free Ammonia (as N) 1.2 mg/l or less • pH 9 between 6.0 to 8.5.
Irrigation, Industrial Cooling, Controlled Waste disposal.	E	<ul style="list-style-type: none"> • Electrical Conductivity at 25°C micro mhos/cm Max. 2250. • Sodium Absorption ratio Max. 26 • Boron Max.2 mg/l.
	Below -E	Not Meeting A, B, C, D & E Criteria.