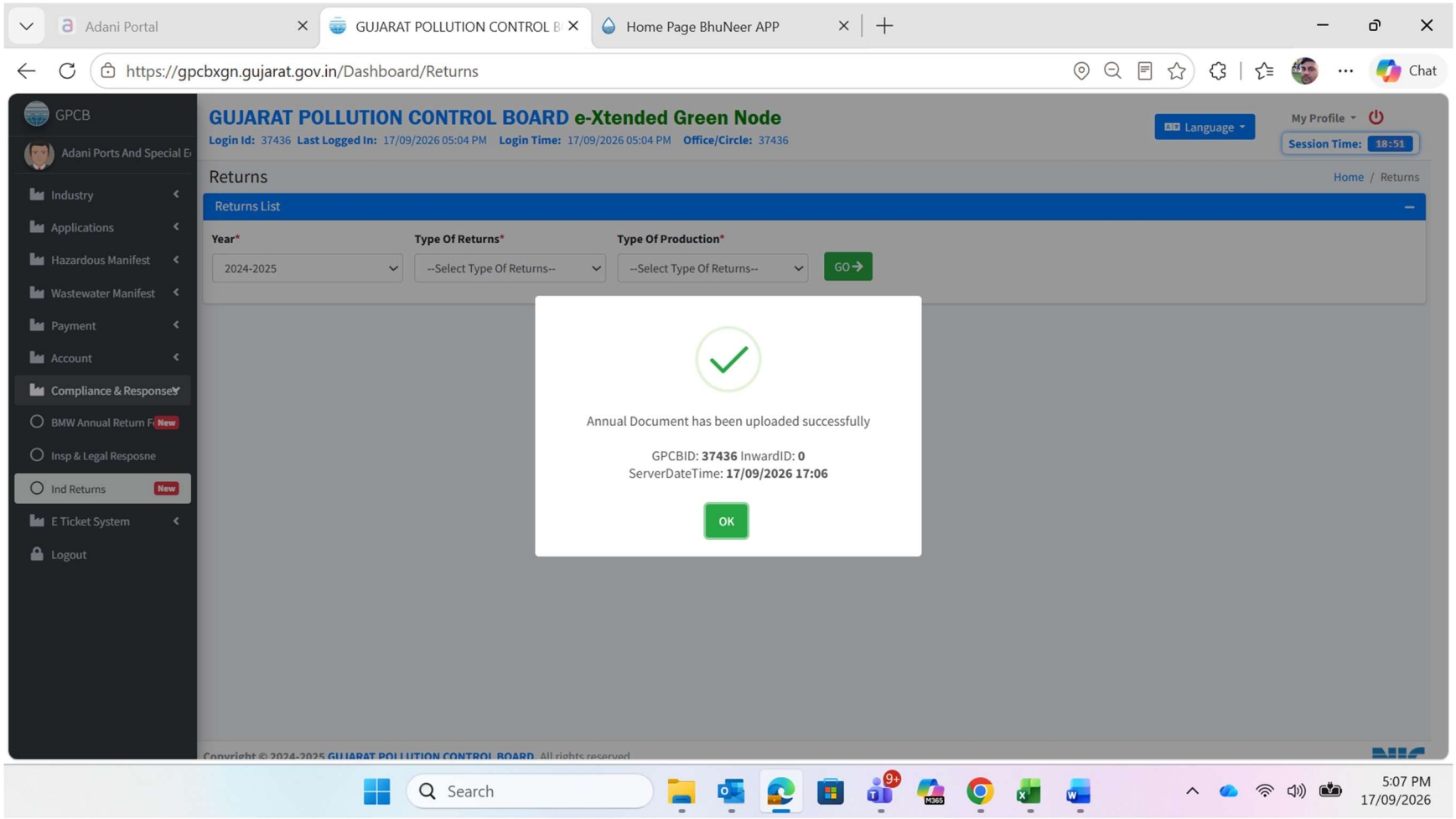
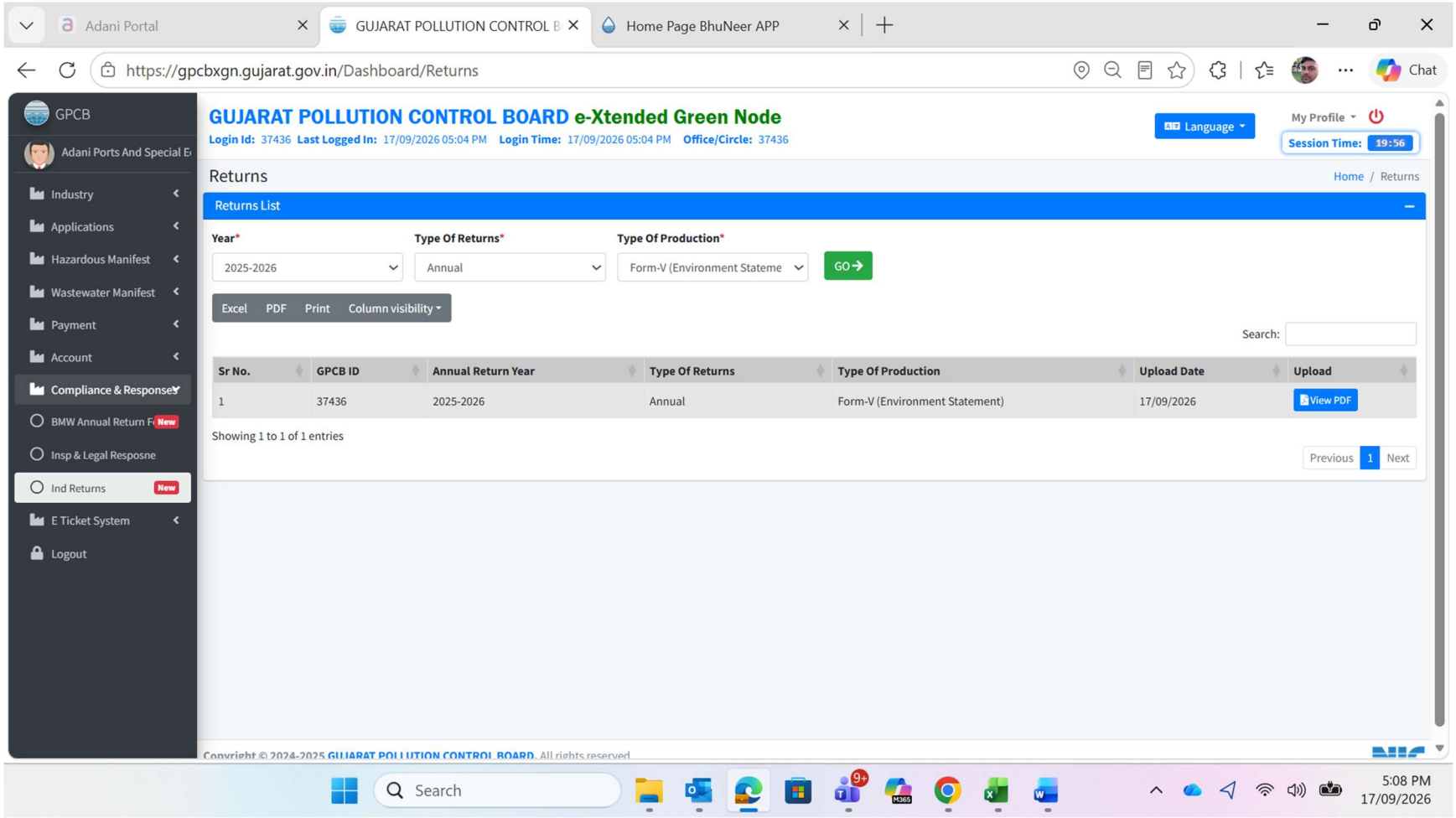

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Previous
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PCB ID: 37436

APSEZL/EnvCell/2026-27/054 **Date: 14.09.2026**

To,
Member Secretary
Gujarat Pollution Control Board
Paryavaran Bhavan,
Sector-10-A, Gandhinagar-382010

Dear Sir,

Sub: Environmental Statement for the financial year ending 31st March, 2026 for **M/s Adani Ports and Special Economic Zone Limited (SPM & Pipeline for Crude Oil Terminal)**

Ref: PCB ID: - 37436, Consent Order No. WH-117830, issued on: 29/03/2022, Valid up to: 26/04/2027

With reference to the above-mentioned subject and reference, please find enclosed Environmental Statement in Form V prescribed under Rule 14 of the Environment (Protection) Rules 1986, for M/s **Adani Ports and Special Economic Zone Limited (SPM & Pipeline for COT), Mundra, Dist. Kutch - 370421** for the financial year ending 31st March 2026.

Thank you,

Yours faithfully,

For **Adani Ports and Special Economic Zone Limited**

Authorized Signatory

Encl: As above.

Copy to: The Regional Officer, Gujarat Pollution Control Board, Gandhidham.

Adani Ports and Special Economic Zone Ltd
Adani House,
PO Box No. 1
Mundra, Kutch 370 421
Gujarat, India
CIN: L63090GJ1998PLC034182

Tel +91 2838 25 5000
Fax +91 2838 25 51110
info@adani.com
www.adani.com

Registered Office: Adani Corporate House, Shantigram, Nr. Vaishno Devi Circle, S.G. Highway, Khodiyar, Ahmedabad – 382421, Gujarat, India

Environment Statement for 2025-26 for M/s Adani Ports & SEZ Limited (SPM & Pipeline for COT)

(PCB ID: 37436)

FORM V
(See Rule 14)

Environmental Statement for the Financial Year ending 31st March 2026

PART – A

(i)	Name and address of the Owner/ Occupier of the Industry Operation or Process	:	Mr. Niraj Bansal CEO – Mundra & Tuna Port Adani Ports and SEZ Limited 4th Floor, Adani House, Mundra, Kutch – 370421. Ph No. (02838) 255000
(ii)	Industry Category Primary (STC Code) Secondary (STC Code)	:	Red-Large NA NA
(iii)	Production Capacity	:	SPM and Pipeline for Crude Oil Terminal: 25.0 MMTPA
(iv)	Year of Establishment	:	2005
(v)	Date of last Environment Statement submitted	:	08/09/2025

Environment Statement for 2025-26 for M/s Adani Ports & SEZ Limited (SPM & Pipeline for COT)

(PCB ID: 37436)

PART – B

Water and Raw Material Consumption

(i) Water Consumption

Water Consumption m^3/Day	**Average**
Process	Nil
Cooling	Nil
Domestic	1.0 m^3/day

Name of Products	**Process Water Consumption per unit of Product Output**	
	During the current financial year (2024-25)	**During the current financial year (2025-26)**
Single Point Mooring (SPM) for Crude Oil Handling and transporting through pipeline*	--	--

*** Unit does not go under any manufacturing process. The unit involves single point mooring system and pipeline for transporting Crude Oil from SPM to Storage Terminal of IOCL. There is no industrial water consumption for storage and handling.**

(ii) Raw Material Consumption

Name of Raw Material	**Name of Products**	**Consumption of Raw Material per Unit of output**	
		During the current financial year (2024-25)	**During the current financial year (2025-26)**
--	Crude Oil Handling and transporting through pipeline*	6.74 MMT	7.27 MMT

*** Unit does not go under any manufacturing process. Hence there is no any raw material consumption.**

Environment Statement for 2025-26 for M/s Adani Ports & SEZ Limited (SPM & Pipeline for COT)

(PCB ID: 37436)

PART – C

Pollutants discharged to Environment/Unit of Output
(Parameters as specified in consent issued)

Pollutants	Quantity of pollutants discharged (Mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a) Water	• Nil		
(b) Air	• Nil • Marine water quality monitoring is being done on regular basis. • Refer **Annexure – 1** for marine water quality.		
Particulate Matter (mg/Nm^3)			
Sulphur Dioxide (PPM)			
Nitrogen Oxide (PPM)			

*** There is no wastewater generation and air emission from the said facility.**

PART – D

Hazardous Wastes
(As specified under Hazardous and Other Wastes Management Rules 2016)

Hazardous Wastes	Total Quantity (Kg)	
	During the current financial year (2024-25)	During the current financial year (2025-26)
(a) From Process	--	--
(b) From Pollution Control facilities	--	--

Environment Statement for 2025-26 for M/s Adani Ports & SEZ Limited (SPM & Pipeline for COT)

(PCB ID: 37436)

PART – E

Solid Waste

Solid Waste	Total Quantity Generated (MT/Annum)	
	During the current financial year (2024-25)	During the current financial year (2025-26)
a) From Process (Ash)	Nil	Nil
b) From Pollution Control facilities	-	-
(C-1) Quantity recycled or reutilized within the unit	Details is Attached as **Refer Annexure – 2**	
(C-2) Sold		
(C-3) Disposed		

Note: Above Quantity shown is waste generated / disposed from entire Adani Ports & SEZ Limited.

PART - F

Please specify the characterization (in terms of Composition and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes:

- "Zero Waste company" initiative by APSEZ i.e. No waste is being sent to landfill or incineration facility @ Adani Ports & SEZ, rather being managed through 5 R principal of waste Management.
- APSEZ has an eminent material recovery facility (MRF), having appropriate facility to proper segregate & recover the materials as per set process. Mixed Waste is being segregated via specialized mix waste segregation machine in two forms –Bio and Non bio without manual segregation, where risk to health hazards is minimized. Further waste is segregated into 16 streams at MRF, which is sent to different end users following the 5 R principle. To manage all operation of MRF, APSEZ developed local vendor though his past learnings and employed local women staff mainly to segregate waste.
- Wet Waste is being managed through Organic Waste Composting Facility and Biogas generation.
- Installed 02 no's biogas plant at Central Kitchen location. This plant is sufficient to manage the food Waste generated from APSEZ area. (700 Kg + 200 kg per day)
- Dry waste and e-waste collection drive is being organized every month within townships to collect municipal solid waste as well as e-waste from households.
- Plastic Free APSEZ Drive-which demonstrate commitment towards elimination of single use plastic.
- Plastic free APSEZ Drive:
    - APSEZ pasted stickers spreading awareness among their zone as plastic are prohibited now.
    - Replacement of conventional plastic garbage collection bag with biodegradable / compostable bags & also Rafia bags (more than 120 µm size) for other waste collection.

- Conducted Training Awareness Program with GKE Consultants Pvt. Ltd. on "ESG and Sustainability" for employee and APSEZ member industries in June 2025.
- Plastic Waste Collection Drive was conducted on 07th June 2025 at Mundra village river, aimed at combating plastic pollution, and fostering environmental sustainability. The drive was continued for full working day and collected approx. 500 kgs of plastic waste from river area and disposed of as RDF in Ambuja Cement.
- Awareness sessions organized among department and contract workers.
- Made shop keepers and canteen owners to stop providing plastic carry bags to carry the material.
- Regular supervision by Team Members at Port Canteens and Shops townships for verification of prohibition of plastic.
- Defined 3 Levels to achieve plastic free APSEZ.

- APSEZ, Mundra has been awarded the Zero Waste to Landfill Management System certification (Certificate No.: CII/ZWL/2025/001) by the Confederation of Indian Industry (CII), valid until 22nd December 2027.

- SEZ industries are managing their waste as per their own standard procedure and following regulatory norms.

- APSEZ, demonstrating its dedication to environmental responsibility, organized a week-long program for World Environment Day/Week 2025 (June 4th - 12th). The theme, "End Plastic Pollution Globally" led a series of events focused on planting trees, raising awareness, and promoting action. Over 1,000 saplings were planted in Samudra and Shantivan colonies. Employees received Tulsi plants and participated in a cleanliness drive, collecting nearly 500 kg of waste responsibly disposed of as RDF.

- An awareness campaign organized targeting children in Shantivan & Samundra Colony focused on banning single-use plastic and water conservation. Knowledge sharing was fostered through an external training program on environmental regulations for APSEZ employees and other businesses in the SEZ. Encouraging creativity, APSEZ held online quizzes, poster competitions and waste to best. The week concluded with a special event at Adani Public School, where students took an environmental oath and received Tulsi plants. Winners of various competitions were also recognized.

PART – G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

Energy Savings (APSEZ)

- Installed 8.8 MW roof top solar power plant at various locations and 22.4 MW wind power plant in SEZ in Mundra.
- Installed 8.8 MW roof top solar power plant at various locations in SEZ in Mundra which has generated nearly 8.69 million units in FY 2025-26 and utilized the renewable source of energy for captive use. This reduced the emission of CO2 by nearly 7,127 tCO2e.

- Planned development of 1000 MW Solar Park at Khavda, out of which 300 MW capacity has already been developed and in operation which has generated nearly 15.19 million units in FY 2025-26 and utilized the renewable source of energy for captive use in APSEZ, Mundra. This reduced the emission of CO2 by nearly 12,361 tCO2e.

Water Conservation:

- Water reducers have been installed in the Residence Area and various offices.
- Waterless urinals have been placed in various offices.
- Modifications of flush tank have been added in water system of the toilet area in Port User Buildings.
- Recollection of water provided for hydro testing through water.

Following safeguard measures are taken for abatement of dust and noise emissions:

- Regular cleaning of roads
- D.G. Set having acoustic enclosures

Adequate greenbelt and plantation area

PART – H

Additional measures /investment/ proposal for environmental protection including abatement of pollution, prevention of pollution.

- Unit has formed a dedicated Horticulture department & developing green belt within port premises.
- In entire APSEZ more than 458 ha. area is developed as greenbelt with samplings of more than 9.06 Lacs.
- The following safeguard measures are taken for abatement of dust and noise emissions.
  - ✓ Regular sprinkling on road and other open area
  - ✓ Regular cleaning of roads
  - ✓ Development of greenbelt along the periphery of the storage yards/back up area
  - ✓ D.G. Sets having acoustic enclosures.

PART – I

Any other particulars for improving the quality of the environment:

- Monitoring of environmental parameters such as Air, Noise, and wastewater quality being done regular basis through MoEF&CC & NABL recognized laboratory (M/s. Unistar Environment and Research Labs Pvt. Ltd., Vapi).
- APSEZ Budget for environmental management measures (including horticulture) for the FY 2025-26 is to the tune of INR **1349.79** lakh. Out of which, Approx. INR **1042.95** is spent during the year FY 2025-26. Detailed breakup of the expenditures for the FY 2025-26 is attached as ***Annexure – 3.***

- APSEZ is driving paperless office and plastic free drive to eliminate the use of papers and plastic materials to the extent possible within ports, SEZ and residential townships.



Date: 14-09-2026

(Signature of a person carrying out an industry, operation or process)
Designation: **Head-Environment Cell**

ANNEXURE – 2

Waste Disposal Details, APSEZ, Mundra

F.Y. 2025 - 26

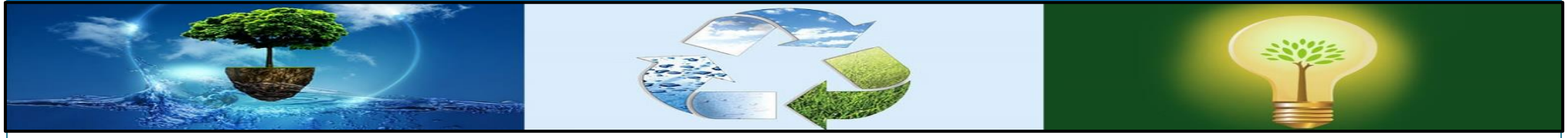
Sr. No.	Waste Description	Disposal Method	Unit	Quantity 2024-25	Quantity 2025-26
Non-Hazardous:					
1.	Dry Waste (Recyclable waste- Metal, Wood, paper, plastic etc.)	Recycle (send to reg. recycler)/ Reuse (Used by Org.)	MT	4274.89	3063.96
2.	RDF (Non-Recyclable)	Co-processing at cement plant	MT	337.3	258.59
3.	STP Sludge	Reprocess (Manure)	MT	0	0
4.	Organic Waste (included food waste)	Reprocess & Recovery Manure/biogas	MT	1101.12	1165.27
5.	E-Waste	Recycle (send to reg. recycler)	MT	28.08	4.21

ANNEXURE – 3

Cost of Environmental Protection Measures of APSEZ, Mundra

F.Y. 2025-26

Sr. No.	Activity	Cost incurred (INR in Lacs)		Budgeted Cost (INR in Lacs)
		2024 – 25	2025 – 26	2025 – 26
1.	Environmental Study / Audit and Consultancy	40.46	37.39	45.2
2.	Legal & Statutory Expenses	17.37	10.55	13
3.	Environmental Monitoring Services	17.27	21.38	20.46
4.	Hazardous / Non-Hazardous Waste Management & Disposal	122.46	150.67	156.13
5.	Environment Days Celebration and Advertisement / Business development	1.85	1.83	4.5
6.	Treatment and Disposal of Bio-Medical Waste	2.39	2.51	2.4
7.	Mangrove Plantation, Monitoring & Conservation	0.00	0.00	0.00
8.	Other Horticulture Expenses	570	570	831
9.	O&M of Sewage Treatment Plant and Effluent Treatment Plant (including STP, ETP of Port & SEZ & Common Effluent Treatment Plant)	164.31	216.44	227.69
10.	Expenditure of Environment Dept. (Apart from above head)	93.40	32.18	49.41
	Total	**1029.51**	**1042.95**	**1349.79**



“Half Yearly Environmental Monitoring Reports “

ANNEXURE - 1

For,

adani
Ports and Logistics

M/S. ADANI PORTS & SPECIAL ECONOMIC ZONE LTD.

PLOT NO. 169/P, AT - NAVINAL ISLAND, TAL. - MUNDRA, DIST. - KUTCH - 370421.

Monitoring Period: April – 2025 to September - 2025

Submitted By

UniStar
Environment and Research Labs Pvt. Ltd.

UniStar Environment & Research Labs Pvt. Ltd.

Plot No. 51 Vibrant Business Park Vapi, Dist. Valsad 396191 l Gujarat l India



UniStar
Environment and Research Labs Pvt. Ltd.

Plot No.51, Vibrant Business Park,
NH No.48, GIDC, Vapi-396195
Dist-Valsad (Gujarat), India
Phone + 91 260 2433966/2425610
Email : response@uerl.in Website : www.uerl.in

MoEF&CC Recog. Environmental Laboratory under The EPA, 1986 (02.04.2025 to 29.03.2028) | NABL (ISO/IEC 17025: 2017) Accredited Testing Laboratory (TC-15345) (22.01.2025 to 22.09.2026) | QCI-NABET Accredited EIA & GW Consultant Organisation | GPCB Recognized Environmental Auditor (Sch-II) | ISO 9001: 2015 Certified Company | ISO 45001: 2018 Certified OHS Management System

MARINE WATER MONITORING SUMMARY REPORT

RESULTS OF MARINE WATER [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.09	7.88	8.18	8.02	8.14	7.92	8.11	7.94	8.14	8.02	8.06	7.98	IS 3025(Part 11) :2022
2.	Temperature	°C	29.8	29.7	29.9	29.8	29.8	29.7	29.7	29.6	29.6	29.5	29.5	29.4	IS 3025 (Part 9):2023
3.	Total Suspended Solids	mg/L	116	88	122	94	118	86	134	110	142	116	148	122	APHA 24th Ed., 2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3	BDL(MDL :1.0)	2.4	BDL(MDL :1.0)	2.8	BDL(MDL :1.0)	2.9	BDL(MDL :1.0)	2.6	BDL(MDL :1.0)	2.7	BDL(MDL :1.0)	IS 3025 (Part 44):2023
5.	Dissolved Oxygen	mg/L	6.83	6.73	6.65	6.55	6.83	6.73	6.65	6.55	6.71	6.6	6.57	6.47	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.54	37.15	36.68	37.28	36.52	37.15	36.4	36.98	36.32	36.84	36.12	36.71	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	IS 3025 (Part 39) :2021
8.	Nitrate as NO_3	µmol/L	2.1	1.77	2.74	2.58	3.06	2.74	3.55	3.23	3.06	2.9	2.74	2.58	APHA 24th Ed. 2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	0.283	0.261	0.304	0.283	0.37	0.326	0.283	0.261	0.304	0.283	0.261	0.239	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	4.11	4.06	4.32	4.27	4.85	4.79	3.59	3.48	3.42	3.39	3.59	3.48	APHA 24th Ed. 2023,4500- NH3 B
11.	Phosphates as PO_4	µmol/L	1.26	1.16	1.37	1.26	1.26	BDL(MDL :0.4)	1.58	1.37	1.47	1.37	BDL(MDL :0.4)	1.16	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	6.493	6.091	7.364	7.133	8.28	7.856	7.423	6.971	6.784	6.573	6.591	6.299	APHA 24th Ed. 2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35324	36140	35604	36320	35426	36124	35140	36350	35174	36290	35210	36118	IS 3025(Part 16):2023
15.	COD	mg/L	32.7	20.4	27.9	16	29.1	16.6	24.4	12.2	28.1	16.1	32.2	20.1	IS 3025(Part 58):2023

Continue…

RESULTS OF MARINE WATER [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A	Phytoplankton														
1.	Chlorophyll	mg/m³	3.06	3.26	3.07	3.27	3.06	3.26	3.07	3.25	3.06	3.26	3.07	3.25	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	7	1.54	6	1.55	7	1.54	8	1.55	7	1.54	6	1.56	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10^3/L	113	92	112	91	113	92	112	91	113	93	112	92	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Coscinodiscus*	*Odontella*	*Nitzschia*	*Biddulphia*	*Nitzschia*	*Biddulphia*	*Thalassiothrix*	*Dinophysis*	*Thalassiothrix*	*Dinophysis*	*Thalassiothrix*	*Dinophysis*	APHA (24th Ed. 2023)10200A-G
			Diploneis	*Rhizosolenia*	*Diploneis*	*Rhizosolenia*	*Pinnularia*	*Rhizosolenia*	*Surirella*	*Pinnularia*	*Surirella*	*Pinnularia*	*Biddulphia*	*Pinnularia*	
			Rhizosolenia	*Coscinodiscus*	*Rhizosolenia*	*Coscinodiscus*	*Rhizosolenia*	*Coscinodiscus*	*Navicula*	*Thalassiothrix*	*Navicula*	*Thalassiothrix*	*Navicula*	*Thalassiothrix*	
			Dinophysis	*Grammatophora*	*Dinophysis*	*Grammatophora*	*Dinophysis*	*Grammatophora*	*Thallassiosira*	*Grammatophora*	*Nitzschia*	*Grammatophora*	*Nitzschia*	*Grammatophora*	
			Thalassionema	*Thallassiosira*	*Biddulphia*	*Navicula*	*Biddulphia*	*Navicula*	*Skeletonema*	*Ceratium*	*Skeletonema*	*Ceratium*	*Skeletonema*	*Ceratium*	

B	Zooplankton								
1	Abudance(Population)	noX103/ 100 m3	66	67	66	67	66	66	APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Crustacean Larvae*	*Oikoplura*	*Oikoplura*	*Egg(Fish and Shrimps)*	*Egg(Fish and Shrimps)*	*Egg(Fish and Shrimps)*	
			Egg(Fish and Shrimps)	*Pinnularia*	*Pinnularia*	*Oikoplura*	*Oikoplura*	*Oikoplura*	
			Copepods	*Copepods*	*Copepods*	*Copepods nauplii*	*Copepods nauplii*	*Copepods nauplii*	
			Crustacean	*Copepods nauplii*	*Copepods nauplii*	*Crustacean*	*Crustacean*	*Crustacean*	
			Bivalve Larvae	*Thalassionema*	*Thalassionema*	*Bivalve Larvae*	*Bivalve Larvae*	*Bivalve Larvae*	
3	Total Biomass	ml/100 m³	13.66	13.67	13.66	13.67	13.66	13.66	

Continue…

UniStar
Environment and Research Labs Pvt. Ltd.

Plot No.51, Vibrant Business Park,
NH No.48, GIDC, Vapi-396195
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Phone + 91 260 2433966/2425610
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MoEF&CC Recog. Environmental Laboratory under The EPA, 1986 (02.04.2025 to 29.03.2028) | NABL (ISO/IEC 17025: 2017) Accredited Testing Laboratory (TC-15345) (22.01.2025 to 22.09.2026) | QCI-NABET Accredited EIA & GW Consultant Organisation | GPCB Recognized Environmental Auditor (Sch-II) | ISO 9001: 2015 Certified Company | ISO 45001: 2018 Certified OHS Management System

RESULTS OF MARINE WATER [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C	Microbiological														
1	Total Bacterial Count	CFU/ml	112		113		112		114		112		112		APHA 24th Ed.2023,9215-C
2	Total Coliform	/100ml	12		13		12		13		14		14		APHA 24thEd.2023,9222-B
3	Ecoli	/100ml	87		88		87		88		89		89		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023,9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF SEDIMENT ANALYSIS [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.46	0.51	0.48	0.44	0.48	0.52	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	554.3	564.8	546	522	534	542	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	N.D.	ND	ND	ND	ND	ND	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	4.03	4.08	3.58	3.62	3.59	3.44	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	154.6	162.5	148.6	132.5	124.6	111.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	674.2	710.5	684.2	642.8	623.5	615.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	3.94	3.99	3.85	3.75	3.77	3.74	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	44.8	46.2	44.2	49.5	48.2	44.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	58.2	62.8	58.6	51.2	46.4	42.8	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	115.6	121.5	125.6	112.4	115.2	120.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.02	2.11	2.18	1.95	1.82	1.68	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

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RESULTS OF SEDIMENT ANALYSIS [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D	Benthic Organisms								
1	Macrobenthos	--	*Isopods*	*Isopods*	*Isopods*	*Foraminiferan*	*Foraminiferan*	*Foraminiferan*	APHA (24th Ed. 2023)10500
			Polychates	*Polychates*	*Polychates*	*Decapods Larvae*	*Decapods Larvae*	*Decapods Larvae*	
			Sipunculids	*Sipunculids*	*Sipunculids*	*Amphipods*	*Gastropods*	*Gastropods*	
			Amphipods	*Foraminiferan*	*Foraminiferan*	*Polychates*	*Polychates*	*Polychates*	
2	MeioBenthos	--	*Herpectacoids*	*Gastropods*	Herpectacoids	Turbellarians	*Turbellarians*	*Turbellarians*	
			Decapods Larvae	*Decapods Larvae*	*Decapods Larvae*	*Foraminiferan*	*Foraminiferan*	*Foraminiferan*	
3	Population	no/m²	366	367	366	367	366	366	

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RESULTS OF MARINE WATER [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.12	7.96	8.19	8.4	8.24	8.04	8.18	7.95	8.22	7.98	8.12	7.94	IS 3025(Part 11):2022
2.	Temperature	°C	29.9	29.8	30	29.9	29.9	29.8	29.7	26.6	29.6	28.5	29.5	29.4	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	136	112	142	118	132	110	146	118	152	124	156	132	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3.1	BDL(MDL :1.0)	2.8	BDL(MDL :1.0)	2.9	BDL(MDL :1.0)	3.1	BDL(MDL :1.0)	2.5	BDL(MDL :1.0)	2.6	BDL(MDL :1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.73	6.53	6.55	6.35	6.73	6.53	6.55	6.35	6.6	6.4	6.47	6.27	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.08	37.12	36.18	37.19	36.22	37.02	36.05	36.87	35.98	36.74	35.86	36.62	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO_3	µmol/L	2.58	2.42	2.42	2.26	2.74	2.58	3.06	2.74	3.39	3.23	3.06	2.9	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	0.37	0.348	0.261	0.239	0.304	0.283	0.326	0.304	0.283	0.261	0.304	0.283	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	4.01	3.95	4.22	4.16	4.74	4.69	3.64	3.59	3.53	3.48	3.48	3.42	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO_4	µmol/L	1.05	BDL(MDL :0.4)	1.16	BDL(MDL :0.4)	1.26	1.05	1.16	BDL(MDL :0.4)	BDL(MDL :0.4)	BDL(MDL :0.4)	1.16	1.05	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	6.96	6.718	6.901	6.659	7.784	7.553	7.026	6.634	7.203	6.971	6.844	6.603	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	36120	36880	36244	37010	35966	36848	35744	36820	35712	36540	35644	36380	IS 3025(Part 16):2023
15.	COD	mg/L	36.8	24.5	31.9	20	33.3	20.8	28.5	16.3	32.1	20.1	36.3	24.2	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A	Phytoplankton														
1.	Chlorophyll	mg/m³	2.95	2.65	2.96	2.66	2.97	2.67	2.96	2.66	2.97	2.67	2.98	2.66	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.05	2.02	2.04	2.01	2.03	2.02	2.02	2.01	2.01	2.02	2.02	2.04	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10^3/L	91	143	92	142	91	141	92	142	93	143	92	142	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Thalassiothrix*	*Pinnularia*	*Thalassiothrix*	*Pinnularia*	*Dinophysis*	*Pinnularia*	*Navicula*	*Thalassiothrix*	*Surirella*	*Thalassiothrix*	*Surirella*	*Thalassiothrix*	APHA (24th Ed. 2023)10200A-G
			Surirella	*Biddulphia*	*Surirella*	*Biddulphia*	*Surirella*	*Biddulphia*	*Skeletonema*	*Surirella*	*Pinnularia*	*Surirella*	*Pinnularia*	*Surirella*	
			Navicula	*Navicula*	*Navicula*	*Navicula*	*Nitzschia*	*Navicula*	*Rhizosolenia*	*Navicula*	*Rhizosolenia*	*Navicula*	*Melosira*	*Navicula*	
			Thallassiosira	*Rhizosolenia*	*Cyclotella*	*Rhizosolenia*	*Cyclotella*	*Rhizosolenia*	*Dinophysis*	*Thallassiosira*	*Dinophysis*	*Thallassiosira*	*Dinophysis*	*Thallassiosira*	
			Skeletonema	*Skeletonema*	*Skeletonema*	*Thallassiosira*	*Skeletonema*	*Thallassiosira*	*Thalassionema*	*Skeletonema*	*Thalassionema*	*Skeletonema*	*Thalassionema*	*Skeletonema*	
B	Zooplankton														
1	Abudance (Population)	noX10 3/ 100 m3	42		43		42		41		43		43		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Crustacean Larvae*		*Crustacean Larvae*		*Crustacean Larvae*		
			Copepods		*Oikoplura*		*Nitzschia*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		
			Copepods nauplii		*Copepods nauplii*		*Copepods nauplii*		*Copepods*		*Copepods*		*Copepods*		
			Crustacean		*Crustacean*		*Pinnularia*		*Crustacean*		*Crustacean*		*Copepods nauplii*		
			Bivalve Larvae		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		
3	Total Biomass	ml/100 m^3	15.1		15.2		15.1		15.2		15.1		15.1		

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RESULTS OF MARINE WATER [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C	Microbiological														
1	Total Bacterial Count	CFU/ml	134		135		134		132		134		134		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	34		36		37		36		35		35		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	12		13		12		11		11		11		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF SEDIMENT ANALYSIS [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.52	0.56	0.52	0.49	0.52	0.51	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	604.2	614.1	596.6	612.5	586	592	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	ND	ND	ND	ND	ND	ND	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.98	4.05	3.82	3.74	3.66	3.56	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	152.3	164.8	146.2	138.4	142.5	132.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	704	723	688	702	685	644.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.12	4.11	3.95	3.88	3.76	3.68	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	38.9	40.5	42.2	38.6	40.2	42.8	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	49.5	51.6	52.4	46.2	44.6	41.3	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	112.4	115.5	120.2	114.6	111	130.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.08	2.16	1.95	2.02	1.96	1.74	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

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RESULTS OF SEDIMENT ANALYSIS [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D			Benthic Organisms						
1	Macrobenthos	--	*Decapods Larvae*	*Polychates*	*Polychates*	*Foraminiferan*	*Foraminiferan*	*Foraminiferan*	APHA (24th Ed. 2023)10500
			Isopods	Isopods	*Isopods*	*Gastropods*	*Gastropods*	Gastropods	
			Amphipods	*Amphipods*	*Gastropods*	*Isopods*	*Isopods*	*Isopods*	
			Sipunculids	*Sipunculids*	*Sipunculids*	*Sipunculids*	*Amphipods*	*Amphipods*	
2	MeioBenthos	--	*Foraminiferan*	*Foraminiferan*	*Decapods Larvae*	*Herpectacoids*	*Sipunculids*	*Sipunculids*	
			Herpectacoids	*Herpectacoids*	*Herpectacoids*	*Polychates*	*Polychates*	*Polychates*	
3	Population	no/m^2	301	302	301	302	301	301	

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RESULTS OF MARINE WATER [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.17	8.04	8.28	8.11	8.22	8.09	8.17	8.02	8.25	8.08	8.16	8.02	IS 3025(Part 11):2022
2.	Temperature	°C	29.8	29.7	29.8	29.6	29.7	29.6	29.6	29.5	29.5	29.4	29.4	29.3	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	124	108	134	118	142	124	156	122	144	108	146	118	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3.2	BDL(MDL: 1.0)	3.4	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	3.3	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	2.7	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.73	6.63	6.55	6.45	6.73	6.63	6.55	6.45	6.6	6.5	6.47	6.37	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	35.98	37.24	36.21	37.35	36.18	37.16	36.12	36.98	35.88	36.74	35.72	36.68	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO_3	µmol/L	2.9	2.74	2.58	2.26	2.9	2.74	3.39	3.06	3.55	3.39	3.23	3.06	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	0.413	0.391	0.348	0.326	0.304	0.283	0.348	0.304	0.261	0.239	0.261	0.239	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	4.11	4.06	4.11	4.01	4.64	4.58	3.74	3.69	3.59	3.48	3.39	3.32	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO_4	µmol/L	1.16	1.05	1.05	BDL(MDL: 0.4)	1.16	1.05	1.47	1.37	1.58	1.47	1.37	1.26	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	7.423	7.191	7.038	6.596	7.844	7.603	7.478	7.054	7.401	7.109	6.881	6.619	APHA 24th Ed.2023,4500 NH3
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35520	36260	35760	36554	35500	36110	35380	36288	35464	36350	35320	36110	IS 3025(Part 16):2023
15.	COD	mg/L	28.6	16.3	24	12	25	12.5	20.4	8.1	24.1	12	28.2	16.1	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	2.41	2.46	2.42	2.47	2.41	2.46	2.42	2.47	2.41	2.46	2.45	2.44	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	1.65	1.41	1.66	1.42	1.67	1.43	1.66	1.42	1.65	1.41	1.55	1.42	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10^3/L	154	96	155	97	154	96	153	97	152	96	150	94	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Pinnularia*	*Coscinodiscus*	*Pinnularia*	*Coscinodiscus*	*Pinnularia*	*Coscinodiscus*	*Melosira*	*Cyclotella*	*Melosira*	*Cyclotella*	*Melosira*	*Cyclotella*	APHA (24th Ed. 2023)10200A-G
			Biddulphia	*Pinnularia*	*Biddulphia*	*Pinnularia*	*Biddulphia*	*Pinnularia*	*Pinnularia*	*Pinnularia*	*Pinnularia*	*Pinnularia*	*Pinnularia*	*Pinnularia*	
			Navicula	*Rhizosolenia*	*Navicula*	*Rhizosolenia*	*Navicula*	*Rhizosolenia*	*Skeletonema*	*Skeletonema*	*Rhizosolenia*	*Skeletonema*	*Rhizosolenia*	*Skeletonema*	
			Thallassiosira	*Dinophysis*	*Thallassiosira*	*Dinophysis*	*Thallassiosira*	*Dinophysis*	*Thallassiosira*	*Thallassiosira*	*Thallassiosira*	*Thallassiosira*	*Thallassiosira*	*Thallassiosira*	
			Skeletonema	*Thalassionema*	*Skeletonema*	*Thalassionema*	*Skeletonema*	*Thalassionema*	*Thalassionema*	*Thalassionema*	*Thalassionema*	*Thalassionema*	*Thalassionema*	*Thalassionema*	
B			Zooplankton												
1	Abudance (Population)	noX10 3/ 100 m3	41		42		41		43		41		41		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Copepods*		*Copepods*		*Rhizosolenia*		*Crustacean*		*Crustacean*		*Crustacean*		
			Copepods nauplii		*Copepods nauplii*		*Crustacean Larvae*		*Copepods nauplii*		*Copepods nauplii*		*Copepods nauplii*		
			Egg(Fish and Shrimps)		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Crustacean Larvae*		*Crustacean Larvae*		*Crustacean Larvae*		
			Crustacean		*Pinnularia*		*Oikoplura*		*Crustacean*		*Crustacean*		*Egg(Fish and Shrimps)*		
			Bivalve Larvae		*Bivalve Larvae*		*Thalassionema*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		
3	Total Biomass	ml/100 m³	15.3		15.2		15.3		15.2		15.3		15.3		

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RESULTS OF MARINE WATER [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25	Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM		
C			Microbiological											
1	Total Bacterial Count	CFU/ml	142		143		144		143		144	144		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	32		31		30		31		33	33		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	21		22		21		20		22	22		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent	Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent	Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent	Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent	Absent		IS: 5887 (Part V):1976

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RESULTS OF SEDIMENT ANALYSIS [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.62	0.45	0.52	0.46	0.49	0.46	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	624.3	596.5	602	582	566	552	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	ND	ND	ND	ND	ND	ND	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	4.12	4.03	4.12	3.92	3.74	3.62	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	130.2	136.4	114	121	116	118	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	524.6	550.8	546.2	564.2	554	582.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	3.94	3.88	3.67	3.71	3.54	3.62	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	44.3	49.4	48.6	51.2	48.6	43.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	38.24	42.2	41.3	44.5	42.3	39.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	124.6	111.5	115.2	104.5	111.2	125	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.03	1.95	1.84	1.76	1.55	1.62	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

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RESULTS OF SEDIMENT ANALYSIS [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D	Benthic Organisms								
1	Macrobenthos	--	Polychates	*Polychates*	*Amphipods*	*Gastropods*	*Gastropods*	*Decapods Larvae*	APHA (24th Ed. 2023)10500
			Gastropods	*Gastropods*	*Gastropods*	*Isopods*	*Isopods*	*Isopods*	
			Isopods	*Isopods*	*Isopods*	*Amphipods*	*Amphipods*	*Amphipods*	
			Sipunculids	*Sipunculids*	*Sipunculids*	*Sipunculids*	*Sipunculids*	*Sipunculids*	
2	MeioBenthos	--	*Herpectacoids*	*Herpectacoids*	*Herpectacoids*	*Polychates*	*Polychates*	*Foraminiferan*	
			Polychates	*Polychates*	*Polychates*	*Herpectacoids*	*Herpectacoids*	*Herpectacoids*	
3	Population	no/m²	297	298	297	296	297	297	

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RESULTS OF MARINE WATER [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.15	8.01	8.24	8.09	8.21	8.11	8.24	8.06	8.22	8.09	8.14	7.91	IS 3025(Part 11):2022
2.	Temperature	°C	29.7	29.6	29.8	29.7	29.7	29.6	29.5	29.4	29.4	29.3	29.3	29.2	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	124	106	112	94	134	108	162	114	132	110	142	124	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3.1	BDL(MDL: 1.0)	2.7	BDL(MDL: 1.0)	2.9	BDL(MDL: 1.0)	2.6	BDL(MDL: 1.0)	2.7	BDL(MDL: 1.0)	2.9	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.93	6.73	6.75	6.55	6.94	6.73	6.75	6.55	6.81	6.6	6.67	6.47	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.42	37.32	36.58	37.44	36.27	37.28	36.32	37.14	36.17	36.94	36.02	36.88	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO_3	µmol/L	2.74	2.58	2.9	2.58	3.23	3.06	3.06	2.9	3.71	3.55	3.39	3.23	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	0.413	0.391	0.304	0.283	0.239	0.217	0.283	0.261	0.326	0.304	0.283	0.261	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	4.16	4.06	3.95	3.9	4.53	4.48	3.8	3.74	3.69	3.64	3.64	3.59	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO_4	µmol/L	1.16	BDL(MDL: 0.4)	1.05	BDL(MDL: 0.4)	1.16	BDL(MDL: 0.4)	1.05	BDL(MDL: 0.4)	1.16	BDL(MDL: 0.4)	BDL(MDL: 0.4)	BDL(MDL: 0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	7.313	7.031	7.154	6.763	7.999	7.757	7.143	6.901	7.726	7.494	7.313	7.081	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	36380	37090	36640	37250	36580	37138	36234	36940	35860	36520	35486	36322	IS 3025(Part 16):2023
15.	COD	mg/L	32.7	20.4	27.9	16	29.1	16.6	28.5	12.2	32.1	16.1	28.2	20.1	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A	Phytoplankton														
1.	Chlorophyll	mg/m³	2.36	3.1	2.37	3.2	2.36	3.1	2.37	3.2	2.36	3.1	2.35	3	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.2	9	2.1	8	2.2	7	2.1	6	2.2	7	2.1	8	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10^3/L	155	87	154	88	155	87	154	88	155	89	154	88	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Coscinodiscus*	*Surirella*	*Surirella*	*Surirella*	*Coscinodiscus*	*Surirella*	*Thallassiosira*	*Coscinodiscus*	*Thallassiosira*	*Coscinodiscus*	*Thallassiosira*	*Coscinodiscus*	APHA (24th Ed. 2023)10200A-G
			Diploneis	*Biddulphia*	*Diploneis*	*Biddulphia*	*Diploneis*	*Biddulphia*	*Melosira*	*Diploneis*	*Melosira*	*Diploneis*	*Melosira*	*Diploneis*	
			Rhizosolenia	*Navicula*	*Thalassiothrix*	*Coscinodiscus*	*Skeletonema*	*Coscinodiscus*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	
			Dinophysis	*Thallassiosira*	*Navicula*	*Thallassiosira*	*Navicula*	*Thallassiosira*	*Rhizosolenia*	*Dinophysis*	*Rhizosolenia*	*Dinophysis*	*Rhizosolenia*	*Dinophysis*	
			Thalassionema	*Skeletonema*	*Thalassionema*	*Skeletonema*	*Thalassionema*	*Skeletonema*	*Pleurosigma*	*Thalassionema*	*Pleurosigma*	*Thalassionema*	*Pleurosigma*	*Thalassionema*	

B	Zooplankton														
1	Abudance (Population)	noX10 3/ 100 m3	35		36		35		37		36		36		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Oikoplura*		*Oikoplura*		*Copepods nauplii*		*Copepods nauplii*		*Copepods nauplii*		*Copepods nauplii*		
			Copepods nauplii		*Rhizosolenia*		*Rhizosolenia*		*Crustacean Larvae*		*Crustacean Larvae*		*Egg(Fish and Shrimps)*		
			Crustacean Larvae		*Crustacean Larvae*		*Egg(Fish and Shrimps)*		*Oikoplura*		*Oikoplura*		*Oikoplura*		
			Crustacean		*Crustacean*		*Crustacean*		*Bivalve Larvae*		*Bivalve Larvae*		*Copepods nauplii*		
			Bivalve Larvae		*Bivalve Larvae*		*Bivalve Larvae*		*Oikoplura*		*Oikoplura*		*Oikoplura*		
3	Total Biomass	ml/100 m^3	14.28		14.27		14.26		14.27		14.26		14.26		

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RESULTS OF MARINE WATER [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	106		107		106		108		110		110		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	42		43		42		41		41		41		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	10		11		10		12		12		12		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF SEDIMENT ANALYSIS [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.48	0.54	0.52	0.47	0.44	0.48	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	552.4	562.4	649.4	624.2	611.2	614	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	ND	ND	ND	ND	ND	ND	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	4.11	4.15	3.82	3.76	3.64	3.58	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	132.4	142.3	135.4	123.4	120	112.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	522.4	534.4	510.2	498.6	485	490.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	3.95	4.01	3.85	3.72	3.64	3.72	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	41.3	42.4	44.2	48.6	46.5	41.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	58.6	64.5	62.1	66.7	65.2	55.8	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	440.6	466.5	456.2	172.5	180.5	164.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.05	2.15	1.86	1.71	1.66	1.48	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

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RESULTS OF SEDIMENT ANALYSIS [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D	Benthic Organisms								
1	Macrobenthos	--	*Foraminiferan*	*Amphipods*	*Amphipods*	*Sipunculids*	*Sipunculids*	Sipunculids	APHA (24th Ed. 2023)10500
			Gastropods	*Gastropods*	*Gastropods*	*Decapods Larvae*	*Decapods Larvae*	*Decapods Larvae*	
			Isopods	*Isopods*	*Isopods*	*Polychates*	*Polychates*	*Polychates*	
			Sipunculids	*Sipunculids*	*Turbellarians*	*Isopods*	*Isopods*	*Foraminiferan*	
2	MeioBenthos	--	*Herpectacoids*	*Herpectacoids*	*Herpectacoids*	*Turbellarians*	Gastropods	*Gastropods*	
			Polychates	*Turbellarians*	*Decapods Larvae*	*Herpectacoids*	*Herpectacoids*	*Herpectacoids*	
3	Population	no/m²	301	302	303	301	302	302	

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RESULTS OF MARINE WATER [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.21	7.97	8.14	7.99	8.16	8.04	8.19	8.01	8.23	8.05	8.13	8.02	IS 3025(Part 11):2022
2.	Temperature	°C	29.7	29.6	29.8	29.7	29.7	29.6	29.5	29.4	29.4	29.3	29.3	29.2	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	138	114	130	108	146	122	138	106	142	114	152	118	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27oC)	mg/L	2.8	BDL(MDL: 1.0)	2.4	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	3.4	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	3	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.63	6.53	6.45	6.35	6.63	6.53	6.45	6.35	6.5	6.4	6.37	6.27	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	35.74	37.11	35.86	37.24	35.88	37.11	35.74	36.82	35.71	36.74	35.74	36.66	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO3	µmol/L	3.23	3.06	3.06	2.74	2.74	2.58	3.23	2.9	3.06	2.9	2.9	2.74	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO2	µmol/L	0.348	0.326	0.348	0.326	0.304	0.283	0.239	0.217	0.348	0.326	0.239	0.217	APHA 24th Ed.2023,4500NO2 B
10.	Ammonical Nitrogen as NH3	µmol/L	3.95	3.9	4.01	3.9	4.37	4.32	3.9	3.85	3.74	3.69	3.69	3.64	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO4	µmol/L	1.26	1.16	1.16	1.05	1.16	BDL(MDL: 0.4)	1.37	1.26	1.05	1.16	1.16	BDL(MDL: 0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	7.528	7.286	7.418	6.966	7.414	7.183	7.369	6.967	7.148	6.916	6.829	6.597	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35230	36110	35610	36380	35434	36108	35390	36180	35410	36240	35380	36160	IS 3025(Part 16):2023
15.	COD	mg/L	20.4	16.3	16	12	16.6	12.5	12.2	8.1	16.1	12	20.1	16.1	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	3.11	3.12	3.12	3.11	3.11	3.12	3.12	3.13	3.11	3.12	3.12	3.11	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.2	1.22	2.1	1.23	2.2	1.22	2.1	1.21	2.2	1.22	2.4	1.25	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10^3/L	122	112	123	113	122	112	124	113	126	112	125	114	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Diplonеis*	*Navicula*	*Diplonеis*	*Navicula*	*Navicula*	*Navicula*	*Navicula*	*Pinnularia*	*Navicula*	*Pinnularia*	*Navicula*	*Pinnularia*	APHA (24th Ed. 2023)10200A-G
			Rhizosolenia	*Skeletonema*	*Rhizosolenia*	*Skeletonema*	*Biddulphia*	*Skeletonema*	*Biddulphia*	*Biddulphia*	*Biddulphia*	*Biddulphia*	*Biddulphia*	*Rhizosolenia*	
			Nitzschia	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Navicula*	*Nitzschia*	*Navicula*	*Odontella*	*Dinophysis*	
			Cyclotella	*Dinophysis*	*Cyclotella*	*Biddulphia*	*Cyclotella*	*Biddulphia*	*Cyclotella*	*Thallassiosira*	*Cyclotella*	*Thallassiosira*	*Cyclotella*	*Coscinodiscus*	
			Pleurosigma	*Thalassionema*	*Pleurosigma*	*Thalassionema*	*Pleurosigma*	*Thalassionema*	*Pleurosigma*	*Skeletonema*	*Pleurosigma*	*Skeletonema*	*Pleurosigma*	*Skeletonema*	
B			Zooplankton												
1	Abudance (Population)	noX10 3/ 100 m3	52		51		50		52		51		52		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Copepods nauplii*		*Nitzschia*		*Nitzschia*		*Crustacean Larvae*		*Crustacean Larvae*		*Crustacean Larvae*		
			Crustacean Larvae		*Crustacean Larvae*		*Crustacean Larvae*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		
			Oikoplura		*Oikoplura*		*Oikoplura*		*Copepods*		*Copepods*		*Copepods nauplii*		
			Bivalve Larvae		*Bivalve Larvae*		*Bivalve Larvae*		*Crustacean*		*Crustacean*		*Crustacean*		
			Oikoplura		*Oikoplura*		*Oikoplura*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		
3	Total Biomass	ml/100 m³	14.13		14.12		14.11		14.12		14.11		14.12		

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RESULTS OF MARINE WATER [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C			Microbiological												
1	Total Bacterial Count	CFU/ml	148		147		146		144		146		145		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	32		31		32		31		32		30		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	16		15		14		13		11		12		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF SEDIMENT ANALYSIS [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.58	0.62	0.58	0.54	0.49	0.47	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	634.5	644	610	612	620	608	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	N.D.	ND	ND	ND	ND	ND	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	4.12	4.18	3.86	3.74	3.65	3.46	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	154.6	162.5	152.4	148.5	144.2	131.1	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	605.4	610.4	596.2	604.2	582.5	490.1	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.21	4.33	4.11	3.84	3.75	3.65	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	48.6	52.4	55.4	51.6	52.2	55.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	52.6	62.5	60.3	49.8	44.2	38.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	112.4	118.5	121.4	110.6	102.3	110.8	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.03	2.11	1.96	2.02	1.92	1.86	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

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RESULTS OF SEDIMENT ANALYSIS [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D			Benthic Organisms						
1	Macrobenthos	--	*Amphipods*	*Amphipods*	*Amphipods*	*Isopods*	*Isopods*	*Isopods*	APHA (24th Ed. 2023)10500
			Polychates	*Sipunculids*	*Polychates*	*Polychates*	*Polychates*	*Gastropods*	
			Isopods	*Isopods*	*Isopods*	*Sipunculids*	*Sipunculids*	*Sipunculids*	
			Gastropods	*Gastropods*	*Gastropods*	*Amphipods*	*Amphipods*	*Amphipods*	
2	MeioBenthos	--	Decapods Larvae	Decapods Larvae	Foraminiferan	Polychates	Herpectacoids	*Herpectacoids*	
			Herpectacoids	*Gastropods*	*Herpectacoids*	*Foraminiferan*	*Foraminiferan*	*Polychates*	
3	Population	no/m^2	306	305	306	307	306	305	

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RESULTS OF MARINE WATER [M7 EAST PORT N 22°47'120" E 069°47'110"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	29.7	8.02	8.25	8.05	8.26	8.11	7.96	7.84	8.12	7.95	8.09	7.92	IS 3025(Part 11):2022
2.	Temperature	°C	142	29.6	29.8	29.7	29.7	29.6	29.6	29.5	29.5	29.4	29.4	29.3	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	2.9	118	136	108	128	112	144	118	130	122	154	126	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	6.83	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	2.9	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	35.82	6.73	6.65	6.55	6.83	6.73	6.65	6.55	6.71	6.6	6.57	6.47	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	BDL(MDL: 2.0)	37.09	36.02	37.26	36.14	37.12	35.92	36.94	35.88	36.74	35.96	36.71	By Calculation
7.	Oil & Grease	mg/L	2.9	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO_3	µmol/L	0.413	2.58	3.23	3.06	2.9	2.74	2.58	2.42	3.39	3.23	3.23	2.9	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	3.8	0.391	0.37	0.348	0.326	0.304	0.283	0.261	0.261	0.239	0.283	0.261	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	1.16	3.74	4.01	3.95	4.22	4.11	3.95	3.9	3.8	3.69	3.69	3.64	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO_4	µmol/L	7.113	BDL(MDL: 0.4)	1.26	1.16	1.05	BDL(MDL: 0.4)	1.16	BDL(MDL: 0.4)	BDL(MDL: 0.4)	BDL(MDL: 0.4)	1.16	1.05	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	ND	6.711	7.61	7.358	7.446	7.154	6.813	6.581	7.451	7.159	7.203	6.801	APHA 24th Ed.2023,4500 NH3
13.	Petroleum Hydrocarbon	µg/L	36150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	24.5	36930	36440	37124	36090	36920	36260	37050	36324	36990	36310	36780	IS 3025(Part 16):2023
15.	COD	mg/L			20	16	20.8	16.6	24.4	20.4	28.1	24.1	24.2	20.1	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M7 EAST PORT N 22°47'120" E 069°47'110"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	3.06	2.5	3.07	2.6	3.06	2.7	3.07	2.6	3.06	2.7	3.07	2.8	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.5	1.77	2.6	1.78	2.7	1.77	2.6	1.77	2.7	1.78	2.8	1.74	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10^3/L	91	123	92	122	91	123	92	122	91	121	90	122	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Nitzschia*	*Thalassiothrix*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	*Diplonelis*	*Coscinodiscus*	*Diplonelis*	*Coscinodiscus*	*Diplonelis*	*Coscinodiscus*	APHA (24th Ed. 2023)10200A-G
			Pinnularia	*Surirella*	*Pinnularia*	*Surirella*	*Odontella*	*Surirella*	*Rhizosolenia*	*Diploneis*	*Rhizosolenia*	*Diploneis*	*Rhizosolenia*	*Diploneis*	
			Odontella	*Navicula*	*Dinophysis*	*Navicula*	*Dinophysis*	*Navicula*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	
			Dinophysis	*Thallassiosira*	*Pleurosigma*	*Thalassionema*	*Pleurosigma*	*Thalassionema*	*Thalassiothrix*	*Dinophysis*	*Thalassiothrix*	*Dinophysis*	*Thalassiothrix*	*Dinophysis*	
			Surirella	*Skeletonema*	*Surirella*	*Skeletonema*	*Cyclotella*	*Skeletonema*	*Pleurosigma*	*Thalassionema*	*Pleurosigma*	*Thalassionema*	*Cyclotella*	*Thalassionema*	
B			Zooplankton												
1	Abudance (Population)	noX10 3/ 100 m3	41		40		42		41		40		42		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Nitzschia*		*Nitzschia*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		
			Pinnularia		*Pinnularia*		*Coscinodiscus*		*Oikoplura*		*Oikoplura*		*Oikoplura*		
			Odontella		*Odontella*		*Odontella*		*Copepods nauplii*		*Copepods nauplii*		*Copepods nauplii*		
			Dinophysis		*Dinophysis*		*Dinophysis*		*Crustacean*		*Crustacean*		*Crustacean*		
			Surirella		*Surirella*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		
3	Total Biomass	ml/100 m^3	16.58		16.57		16.56		16.55		16.54		16.52		

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RESULTS OF MARINE WATER [M7 EAST PORT N 22°47'120" E 069°47'110"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	92		93		92		91		92		94		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	27		26		27		26		25		26		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	10		11		10		11		10		16		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF MARINE WATER [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	29.8	7.99	8.27	8.03	8.24	8.12	8.22	7.95	8.18	7.99	8.11	7.97	IS 3025(Part 11):2022
2.	Temperature	°C	122	29.7	29.9	29.8	29.8	29.7	29.6	29.5	29.5	29.4	29.4	29.3	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	3.2	104	134	124	142	118	164	128	152	114	154	120	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	6.93	BDL(MDL: 1.0)	3.5	BDL(MDL: 1.0)	2.9	BDL(MDL: 1.0)	3.3	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	36.15	6.73	6.84	6.65	7.04	6.83	6.85	6.65	6.91	6.71	6.77	6.57	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	BDL(MDL: 2.0)	37.18	36.35	37.29	36.34	37.31	36.02	37.04	36.11	36.84	35.96	36.81	By Calculation
7.	Oil & Grease	mg/L	2.9	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO_3	µmol/L	0.435	2.74	3.39	3.23	3.06	2.9	2.74	2.58	3.06	2.9	3.23	2.9	APHA 24th Ed.2023,4500 NO3-
9.	Nitrite as NO_2	µmol/L	3.9	0.413	0.391	0.37	0.348	0.326	0.217	0.196	0.261	0.239	0.304	0.283	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	1.16	3.85	4.11	4.01	4.06	3.95	4.06	3.9	3.8	3.74	3.8	3.69	APHA 24th Ed.2023,4500-NH3
11.	Phosphates as PO_4	µmol/L	7.235	1.05	1.05	BDL(MDL: 0.4)	1.37	1.16	1.05	BDL(MDL: 0.4)	1.16	BDL(MDL: 0.4)	BDL(MDL: 0.4)	BDL(MDL: 0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	ND	7.003	7.891	7.61	7.468	7.176	7.017	6.676	7.121	6.879	7.334	6.873	APHA 24th Ed.2023,4500 NH3
13.	Petroleum Hydrocarbon	µg/L	35430	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	24.5	36120	35860	36380	35460	36060	35284	36192	35350	36210	35410	36164	IS 3025(Part 16):2023
15.	COD	mg/L		16.3	20	12	20.8	12.5	28.5	20.4	32.1	24.1	28.2	20.1	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	3.1	3.12	3.2	3.11	3.1	3.12	3.2	3.11	3.1	3.12	3.2	3.2	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	1.5	1.6	1.4	1.5	1.3	1.4	1.2	1.3	1.3	1.2	1.2	1.1	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	112	107	111	108	112	107	113	106	112	107	114	104	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Odentella*	*Cyclotella*	*Odentella*	*Cyclotella*	*Odentella*	*Cyclotella*	*Nitzschia*	*Diploneis*	*Nitzschia*	*Diploneis*	*Nitzschia*	*Diploneis*	APHA (24th Ed. 2023)10200A-G
			Rhizosolenia	*Pinnularia*	*Rhizosolenia*	*Pinnularia*	*Rhizosolenia*	*Pinnularia*	*Grammatophora*	*Rhizosolenia*	*Grammatophora*	*Rhizosolenia*	*Grammatophora*	*Rhizosolenia*	
			Coscinodiscus	*Skeletonema*	*Coscinodiscus*	*Skeletonema*	*Coscinodiscus*	*Skeletonema*	*Diploneis*	*Nitzschia*	*Diploneis*	*Nitzschia*	*Diploneis*	*Nitzschia*	
			Grammatophora	*Thallassiosira*	*Grammatophora*	*Thallassiosira*	*Grammatophora*	*Thallassiosira*	*Thalassiothrix*	*Cyclotella*	*Thalassiothrix*	*Cyclotella*	*Thalassiothrix*	*Grammatophora*	
			Thallassiosira	*Thalassionema*	*Thallassiosira*	*Thalassionema*	*Thallassiosira*	*Thalassionema*	*Pleurosigma*	*Pleurosigma*	*Pleurosigma*	*Pleurosigma*	*Pleurosigma*	*Pleurosigma*	
B			Zooplankton												
1	Abudance(Population)	noX10 3/ 100 m3	32		33		32		33		34		32		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Coscinodiscus*		*Coscinodiscus*		*Odontella*		*Oikoplura*		*Oikoplura*		*Oikoplura*		
			Diploneis		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Copepods nauplii*		*Copepods nauplii*		*Egg(Fish and Shrimps)*		
			Rhizosolenia		*Rhizosolenia*		*Rhizosolenia*		*Crustacean Larvae*		*Crustacean Larvae*		*Crustacean Larvae*		
			Dinophysis		*Bivalve Larvae*		*Bivalve Larvae*		*Crustacean*		*Crustacean*		*Crustacean*		
			Thalassionema		*Thalassionema*		*Thalassionema*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		
3	Total Biomass	ml/100 m³	14.77		14.78		14.77		14.76		14.77		14.78		

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RESULTS OF MARINE WATER [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	14		13		12		14		13		10		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	11		12		11		10		11		18		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	10		13		12		11		9		10		IS :15185:2016
4	Enterococcus	/100ml	6		7		6		7		6		8		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF SEDIMENT ANALYSIS [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.58	0.62	0.58	0.52	0.58	0.61	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	611.4	615.4	620.2	586.5	602	611	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	N.D.	ND	ND	ND	ND	ND	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	4.06	4.11	3.96	3.82	3.76	3.68	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	148.6	152.6	148.4	139.8	144.2	128.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	594.5	602.4	592	568.5	554.6	560.7	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	4.11	4.16	3.96	3.79	3.66	3.59	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	46.5	48.2	44.7	48.2	44.3	49.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	52.2	56.4	52.5	55.2	52.3	55.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	124.3	128.5	130.4	124.1	124.9	116.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	2.03	2.11	1.96	1.82	1.75	1.68	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

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RESULTS OF SEDIMENT ANALYSIS [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D			Benthic Organisms						
1	Macrobenthos	--	*Polychates*	*Gastropods*	*Gastropods*	*Polychates*	*Polychates*	*Polychates*	APHA (24th Ed. 2023)10500
			Decapods Larvae	*Decapods Larvae*	*Decapods Larvae*	*Amphipods*	*Amphipods*	*Amphipods*	
			Isopods	*Isopods*	*Isopods*	*Isopods*	*Isopods*	*Sipunculids*	
			Sipunculids	*Sipunculids*	*Sipunculids*	*Sipunculids*	*Herpectacoids*	*Herpectacoids*	
2	MeioBenthos	--	*Herpectacoids*	*Herpectacoids*	*Herpectacoids*	*Foraminiferan*	*Foraminiferan*	*Foraminiferan*	
			Turbellarians	*Turbellarians*	Turbellarians	Turbellarians	Turbellarians	*Turbellarians*	
3	Population	no/m²	368	367	368	367	368	366	

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RESULTS OF MARINE WATER [M11 MPT T1 JETTY N 22°42'278" E 069°43'450"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.23	8.06	8.21	8.04	8.25	8.14	7.98	7.82	8.24	8.09	8.1	7.93	IS 3025 (Part 11):2022
2.	Temperature	°C	29.9	29.8	30	29.9	29.9	29.8	29.6	29.5	29.5	29.4	29.4	29.3	IS 3025 (Part 9):2023
3.	Total Suspended Solids	mg/L	132	110	140	118	134	110	142	118	136	122	144	128	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3.1	BDL(MDL: 1.0)	2.9	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	2.9	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	IS 3025 (Part 44):2023
5.	Dissolved Oxygen	mg/L	6.63	6.53	6.55	6.45	6.73	6.63	6.55	6.45	6.6	6.5	6.47	6.37	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.52	37.33	36.71	37.45	36.52	37.31	36.18	37.01	36.22	36.86	36.09	36.94	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025 (Part 39):2021
8.	Nitrate as NO_3	µmol/L	3.23	3.06	3.55	3.39	3.39	3.23	3.23	2.9	3.55	3.39	3.39	3.06	APHA 24th Ed. 2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	0.391	0.37	0.391	0.37	0.37	0.348	0.304	0.283	0.283	0.261	0.261	0.239	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	4.06	4.01	3.9	3.85	4.06	3.95	4.11	4.01	3.85	3.8	3.95	3.85	APHA 24th Ed. 2023,4500- NH3 B
11.	Phosphates as PO_4	µmol/L	1.05	BDL(MDL: 0.4)	1.26	1.16	1.37	1.26	1.58	1.47	1.26	1.37	1.37	1.26	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	7.681	7.44	7.841	7.61	7.82	7.528	7.644	7.193	7.683	7.451	7.601	7.149	APHA 24th Ed. 2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35510	36420	35740	36840	35322	35996	35190	36088	35220	36120	35314	36142	IS 3025(Part 16):2023
15.	COD	mg/L	24.5	20.4	20	16	20.8	16.6	28.5	24.4	32.1	28.1	28.2	24.2	IS 3025(Part 58):2023

Continue…

RESULTS OF MARINE WATER [M11 MPT T1 JETTY N 22°42'278" E 069°43'450"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	2.6	2.7	2.7	2.6	2.6	2.7	2.7	2.6	2.6	2.7	2.4	2.8	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.3	1.3	2.4	1.2	2.3	1.1	2.2	1.2	2.1	1.3	2	1.4	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	133	122	134	123	133	122	131	121	132	122	131	120	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Dinophysis*	*Navicula*	*Odontella*	*Cyclotella*	*Cyclotella*	*Surirella*	*Odontella*	*Nitzschia*	*Odontella*	*Nitzschia*	*Odontella*	*Nitzschia*	APHA (24th Ed. 2023)10200A-G
			Pinnularia	*Skeletonema*	*Rhizosolenia*	*Pinnularia*	*Pinnularia*	*Skeletonema*	*Rhizosolenia*	*Pinnularia*	*Rhizosolenia*	*Pinnularia*	*Rhizosolenia*	*Pinnularia*	
			Thalassiothrix	*Rhizosolenia*	*Coscinodiscus*	*Skeletonema*	*Thalassiothrix*	*Rhizosolenia*	*Coscinodiscus*	*Odontella*	*Coscinodiscus*	*Odontella*	*Coscinodiscus*	*Odontella*	
			Grammatophora	*Dinophysis*	*Grammatophora*	*Thallassiosira*	*Rhizosolenia*	*Cyclotella*	*Grammatophora*	*Dinophysis*	*Grammatophora*	*Dinophysis*	*Pleurosigma*	*Dinophysis*	
			Ceratium	*Thalassionema*	*Thallassiosira*	*Thalassionema*	*Ceratium*	*Thalassionema*	*Thallassiosira*	*Surirella*	*Thallassiosira*	*Surirella*	*Thallassiosira*	*Surirella*	

B			Zooplankton						
1	Abudance(Population)	noX103/ 100 m3	32	30	31	34	36	34	APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Diploneis*	*Diploneis*	*Diploneis*	*Decapoda*	*Decapoda*	*Decapoda*	
			Rhizosolenia	*Rhizosolenia*	*Rhizosolenia*	*Copepods*	*Copepods*	*Oikoplura*	
			Nitzschia	*Nitzschia*	*Nitzschia*	*Crustacean Larvae*	*Crustacean Larvae*	*Crustacean Larvae*	
			Thalassiothrix	*Coscinodiscus*	*Coscinodiscus*	*Crustacean*	*Crustacean*	*Bivalve Larvae*	
			Pleurosigma	*Pleurosigma*	*Pleurosigma*	*Oikoplura*	*Oikoplura*	*Oikoplura*	
3	Total Biomass	ml/100 m³	15.22	15.21	15.22	15.22	15.21	15.2	

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RESULTS OF MARINE WATER [M11 MPT T1 JETTY N 22°42'278" E 069°43'450"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	236		237		236		234		236		234		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	42		41		40		42		40		42		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	30		32		31		30		32		30		IS :15185:2016
4	Enterococcus	/100ml	13		12		11		12		10		11		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

Mr. Nilesh Patel
Sr. Chemist

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RESULTS OF MARINE WATER [M12 SPM N 22°40'938" E 069°39'191"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.17	8.06	8.22	8.01	8.27	8.16	8.04	7.81	8.14	8.03	8.09	7.89	IS 3025 (Part 11):2022
2.	Temperature	°C	29.9	29.8	30	29.9	29.8	29.7	29.6	29.5	29.5	29.4	29.4	29.3	IS 3025 (Part 9):2023
3.	Total Suspended Solids	mg/L	130	110	142	118	122	96	138	102	124	110	132	114	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3	BDL(MDL :1.0)	2.8	BDL(MDL :1.0)	3.4	BDL(MDL :1.0)	2.8	BDL(MDL :1.0)	2.5	BDL(MDL :1.0)	3.1	BDL(MDL :1.0)	IS 3025 (Part 44):2023
5.	Dissolved Oxygen	mg/L	6.83	6.73	6.75	6.65	6.94	6.83	6.75	6.65	6.81	6.71	6.67	6.57	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.56	37.28	36.52	37.38	36.29	37.11	36.44	37.19	36.25	37.03	36.22	36.94	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	IS 3025 (Part 39):2021
8.	Nitrate as NO_3	µmol/L	3.39	3.23	3.23	3.06	2.9	2.74	3.39	3.23	3.23	3.06	3.55	3.39	APHA 24th Ed. 2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	0.435	0.391	0.413	0.391	0.37	0.348	0.326	0.304	0.239	0.217	0.283	0.261	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	4.11	4.01	4.27	4.22	4.16	4.06	4.11	4.01	3.74	3.69	4.01	3.95	APHA 24th Ed. 2023,4500- NH3 B
11.	Phosphates as PO_4	µmol/L	1.26	1.16	1.37	1.26	1.47	1.37	1.37	1.26	1.26	1.16	1.47	1.37	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	7.935	7.631	7.913	7.671	7.43	7.148	7.826	7.544	7.209	6.967	7.843	7.601	APHA 24th Ed. 2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35790	36610	35940	36840	36120	36880	36340	37116	36300	37060	36146	36944	IS 3025(Part 16):2023
15.	COD	mg/L	28.6	24.5	24	20	25	20.8	28.5	24.4	32.1	28.1	36.3	32.2	IS 3025(Part 58):2023

Continue…

RESULTS OF MARINE WATER [M12 SPM N 22°40'938" E 069°39'191"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	2.2	2.3	2.1	2.2	2.2	2.1	2.1	2.2	2.2	2.1	2.1	2	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	1.18	1.48	1.17	1.47	1.16	1.46	1.17	1.47	1.16	1.46	1.14	1.44	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	78	133	76	132	77	133	76	132	77	133	78	135	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Ceratium*	*Melosira*	*Ceratium*	*Rhizosolenia*	*Surirella*	*Rhizosolenia*	*Skeletonema*	*Odontella*	*Skeletonema*	*Odontella*	*Skeletonema*	*Odontella*	APHA (24th Ed. 2023)10200A-G
			Pinnularia	*Dinophysis*	*Pinnularia*	*Dinophysis*	*Pinnularia*	*Dinophysis*	*Gramma tophora*	*Rhizosolenia*	*Gramma tophora*	*Rhizosolenia*	*Gramma tophora*	*Rhizosolenia*	
			Odontella	*Skeletonema*	*Odontella*	*Skeletonema*	*Gramma tophora*	*Skeletonema*	*Nitzschia*	*Coscinodiscus*	*Nitzschia*	*Coscinodiscus*	*Nitzschia*	*Coscinodiscus*	
			Thalassiothrix	*Thallassiosira*	*Thalassiothrix*	*Thallassiosira*	*Thalassiothrix*	*Thallassiosira*	*Thalassiothrix*	*Gramma tophora*	*Thalassiothrix*	*Gramma tophora*	*Coscinodiscus*	*Pinnularia*	
			Thallassiosira	*Thalassionema*	*Thallassiosira*	*Melosira*	*Rhizosolenia*	*Melosira*	*Pleurosigma*	*Thallassiosira*	*Pleurosigma*	*Thallassiosira*	*Pleurosigma*	*Thallassiosira*	
B			Zooplankton												
1	Abudance (Population)	noX10 3/ 100 m3	72		70		71		70		71		70		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Nitzschia*		*Nitzschia*		*Nitzschia*		*Copepods*		*Copepods*		*Copepods*		
			Grammatophora		*Grammatophora*		*Grammatophora*		*Oikoplura*		*Oikoplura*		*Oikoplura*		
			Diploneis		*Diploneis*		*Egg(Fish and Shrimps)*		*Crustacean Larvae*		*Crustacean Larvae*		*Crustacean Larvae*		
			Thalassiothrix		*Thalassiothrix*		*Thalassiothrix*		*Crustacean*		*Crustacean*		*Crustacean*		
			Pleurosigma		*Pleurosigma*		*Pleurosigma*		*Bivalve Larvae*		*Bivalve Larvae*		*Egg(Fish and Shrimps)*		
3	Total Biomass	ml/100 m³	14.56		14.56		14.57		14.56		14.55		14.52		

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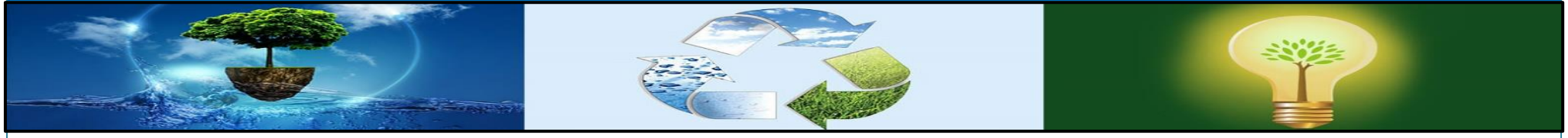
RESULTS OF MARINE WATER [M12 SPM N 22°40'938" E 069°39'191"]

SR. NO.	TEST PARAMETERS	UNIT	Apr-25		May-25		Jun-25		Jul-25		Aug-25		Sep-25		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	262		262		264		266		264		266		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	51		51		52		50		52		50		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	42		42		41		40		41		40		IS :15185:2016
4	Enterococcus	/100ml	34		34		31		32		31		30		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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MARINE WATER MONITORING SUMMARY REPORT

RESULTS OF MARINE WATER [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.11	8.02	8.15	8.02	8.12	7.96	8.14	7.89	8.11	7.96	8.15	8.02	IS 3025(Part 11) :2022
2.	Temperature	°C	29.4	29.3	29.2	29.1	29	28.9	28.8	28.7	28.7	28.6	28.6	28.5	IS 3025 (Part 9):2023
3.	Total Suspended Solids	mg/L	154	128	142	130	132	112	144	126	138	122	142	126	APHA 24th Ed., 2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.8	BDL(MDL :1.0)	2.6	BDL(MDL :1.0)	2.4	BDL(MDL :1.0)	2.8	BDL(MDL :1.0)	2.9	BDL(MDL :1.0)	3.2	BDL(MDL :1.0)	IS 3025 (Part 44):2023
5.	Dissolved Oxygen	mg/L	6.73	6.3	6.6	6.5	6.44	6.34	6.63	6.53	6.55	6.45	6.4	6.3	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.28	36.84	35.78	36.58	35.64	36.28	35.48	36.17	35.52	36.22	35.64	36.28	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	IS 3025 (Part 39) :2021
8.	Nitrate as NO_3	µmol/L	2.42	2.26	2.9	2.58	3.55	3.23	3.23	3.06	2.9	2.74	3.23	3.06	APHA 24th Ed. 2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	0.239	0.217	0.283	0.261	0.304	0.283	0.326	0.261	0.304	0.283	0.326	0.283	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	3.64	3.59	3.53	3.48	3.59	3.48	3.53	3.42	3.59	3.53	3.64	3.59	APHA 24th Ed. 2023,4500- NH3 B
11.	Phosphates as PO_4	µmol/L	1.26	1.16	1.05	BDL(MDL :0.4)	1.26	1.16	1.05	BDL(MDL :0.4)	1.26	1.16	1.05	BDL(MDL :0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	6.299	6.067	6.713	6.321	7.444	6.993	7.086	6.741	6.794	6.553	7.196	6.933	APHA 24th Ed. 2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35304	36280	35510	36120	35420	36980	35510	36924	35624	36980	35710	36964	IS 3025(Part 16):2023
15.	COD	mg/L	23.6	11.8	35.5	23.7	28.4	16.2	32	20	24	12	28	16	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A	Phytoplankton														
1.	Chlorophyll	mg/m³	3.05	3.2	3	3.4	4	4.01	6	3.92	7	4	8	7	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	5	1.55	5.2	1.45	5.26	2.14	5.22	2.43	4.98	3.2	4.26	3.7	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10^3/L	110	90	112	88	110	86	112	96	112	94	116	91	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Coscinodiscus*	*Odontella*	*Nitzschia*	*Biddulphia*	*Nitzschia*	*Biddulphia*	*Thalassiothrix*	*Dinophysis*	*Thalassiothrix*	*Dinophysis*	*Thalassiothrix*	*Dinophysis*	APHA (24th Ed. 2023)10200A-G
			Diploneis	*Rhizosolenia*	*Diploneis*	*Rhizosolenia*	*Pinnularia*	*Rhizosolenia*	*Surirella*	*Pinnularia*	*Surirella*	*Pinnularia*	*Biddulphia*	*Pinnularia*	
			Rhizosolenia	*Coscinodiscus*	*Rhizosolenia*	*Coscinodiscus*	*Rhizosolenia*	*Coscinodiscus*	*Navicula*	*Thalassiothrix*	*Navicula*	*Thalassiothrix*	*Navicula*	*Thalassiothrix*	
			Dinophysis	*Grammatophora*	*Dinophysis*	*Grammatophora*	*Dinophysis*	*Grammatophora*	*Thallassiosira*	*Grammatophora*	*Nitzschia*	*Grammatophora*	*Nitzschia*	*Grammatophora*	
			Thalassionema	*Thallassiosira*	*Biddulphia*	*Navicula*	*Biddulphia*	*Navicula*	*Skeletonema*	*Ceratium*	*Skeletonema*	*Ceratium*	*Skeletonema*	*Ceratium*	

B	Zooplankton								
1	Abudance(Population)	noX103/ 100 m3	66	64	62	67	56	51	APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Crustacean Larvae*	*Oikoplura*	*Oikoplura*	*Egg(Fish and Shrimps)*	*Egg(Fish and Shrimps)*	*Egg(Fish and Shrimps)*	
			Egg(Fish and Shrimps)	*Pinnularia*	*Pinnularia*	*Oikoplura*	*Oikoplura*	*Oikoplura*	
			Copepods	*Copepods*	*Copepods*	*Copepods nauplii*	*Copepods nauplii*	*Copepods nauplii*	
			Crustacean	*Copepods nauplii*	*Copepods nauplii*	*Crustacean*	*Crustacean*	*Crustacean*	
			Bivalve Larvae	*Thalassionema*	*Thalassionema*	*Bivalve Larvae*	*Bivalve Larvae*	*Bivalve Larvae*	
3	Total Biomass	ml/100 m³	13.66	14.22	14.24	14.32	15.32	15.33	

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RESULTS OF MARINE WATER [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C	Microbiological														
1	Total Bacterial Count	CFU/ml	110		112		124		122		124		122		APHA 24th Ed.2023,9215-C
2	Total Coliform	/100ml	16		14		12		16		18		17		APHA 24thEd.2023,9222-B
3	Ecoli	/100ml	84		80		76		28		24		21		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023,9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF SEDIMENT ANALYSIS [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.43	0.48	0.44	0.54	0.59	0.62	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	564	575	589	612	624	628	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	ND	ND	ND	ND	ND	ND	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.35	3.39	3.12	3.26	3.33	3.62	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	124.2	130.1	118.6	120.5	125.1	110.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	584.6	596.2	574.2	566	548.2	544.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	3.62	3.58	3.64	3.45	3.28	3.38	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	38.9	39.4	42.2	44.9	40.2	46.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	44.5	45.2	41.8	45.2	48.4	42.8	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	102.5	110.2	120.8	134.2	121.1	106.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	1.55	1.62	1.55	1.24	1.11	1.18	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

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RESULTS OF SEDIMENT ANALYSIS [M1 LEFT SIDE OF BOCHA CREEK - N 22°45'183" E 069°43'241"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D	Benthic Organisms								
1	Macrobenthos	--	*Isopods*	*Isopods*	*Isopods*	*Foraminiferan*	*Foraminiferan*	*Foraminiferan*	APHA (24th Ed. 2023)10500
			Polychates	*Polychates*	*Polychates*	*Decapods Larvae*	*Decapods Larvae*	*Decapods Larvae*	
			Sipunculids	*Sipunculids*	*Sipunculids*	*Amphipods*	*Gastropods*	*Gastropods*	
			Amphipods	*Foraminiferan*	*Foraminiferan*	*Polychates*	*Polychates*	*Polychates*	
2	MeioBenthos	--	*Herpectacoids*	*Gastropods*	Herpectacoids	Turbellarians	*Turbellarians*	*Turbellarians*	
			Decapods Larvae	*Decapods Larvae*	*Decapods Larvae*	*Foraminiferan*	*Foraminiferan*	*Foraminiferan*	
3	Population	no/m²	366	368	360	358	360	363	

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RESULTS OF MARINE WATER [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	7.98	7.85	8.16	8.01	8.14	8.05	8.11	8.02	8.14	8.01	8.19	8.05	IS 3025(Part 11):2022
2.	Temperature	°C	29.4	29.3	29.2	29.1	29	28.9	28.8	28.7	28.6	28.5	28.5	28.4	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	144	126	152	118	156	124	134	110	128	114	134	108	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.5	BDL(MDL :1.0)	2.2	BDL(MDL :1.0)	2.5	BDL(MDL :1.0)	2.9	BDL(MDL :1.0)	3.1	BDL(MDL :1.0)	3.4	BDL(MDL :1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.63	6.43	6.5	6.3	6.34	6.15	6.53	6.33	6.55	6.35	6.4	6.2	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.01	36.74	35.76	36.54	35.81	36.31	35.66	36.24	35.71	36.29	35.84	36.41	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO_3	µmol/L	2.74	2.58	3.06	2.74	2.9	2.58	3.39	3.06	3.06	2.9	3.39	3.06	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	0.196	0.174	0.239	0.217	0.217	0.196	0.239	0.196	0.348	0.304	0.326	0.304	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	3.39	3.32	3.64	3.59	3.42	3.39	3.64	3.48	3.74	3.69	3.69	3.59	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO_4	µmol/L	1.26	1.05	BDL(MDL :0.4)	BDL(MDL :0.4)	1.16	1.05	1.26	1.16	1.05	BDL(MDL :0.4)	1.26	1.16	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	6.326	6.074	6.939	6.547	6.537	6.166	7.269	6.736	7.148	6.894	7.406	6.954	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35420	36248	35360	36212	35122	36090	35320	36128	35460	36180	35320	36410	IS 3025(Part 16):2023
15.	COD	mg/L	27.5	15.7	39.5	27.6	32.4	20.3	36	24	28	16	32	20	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A	Phytoplankton														
1.	Chlorophyll	mg/m³	2.95	2.65	2.8	2.6	3	2.72	5	2.82	4	3	5	4	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.01	2.05	2.02	2.34	2.24	2.44	2.29	2.64	3.12	4	3.11	3	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	90	145	92	144	94	162	96	150	98	156	99	155	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Thalassiothrix*	*Pinnularia*	*Thalassiothrix*	*Pinnularia*	*Dinophysis*	*Pinnularia*	*Navicula*	*Thalassiothrix*	*Surirella*	*Thalassiothrix*	*Surirella*	*Thalassiothrix*	APHA (24th Ed. 2023)10200A-G
			Surirella	*Biddulphia*	*Surirella*	*Biddulphia*	*Surirella*	*Biddulphia*	*Skeletonema*	*Surirella*	*Pinnularia*	*Surirella*	*Pinnularia*	*Surirella*	
			Navicula	*Navicula*	*Navicula*	*Navicula*	*Nitzschia*	*Navicula*	*Rhizosolenia*	*Navicula*	*Rhizosolenia*	*Navicula*	*Melosira*	*Navicula*	
			Thallassiosira	*Rhizosolenia*	*Cyclotella*	*Rhizosolenia*	*Cyclotella*	*Rhizosolenia*	*Dinophysis*	*Thallassiosira*	*Dinophysis*	*Thallassiosira*	*Dinophysis*	*Thallassiosira*	
			Skeletonema	*Skeletonema*	*Skeletonema*	*Thallassiosira*	*Skeletonema*	*Thallassiosira*	*Thalassionema*	*Skeletonema*	*Thalassionema*	*Skeletonema*	*Thalassionema*	*Skeletonema*	
B	Zooplankton														
1	Abudance (Population)	noX10 3/ 100 m3	43		44		42		44		48		47		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Crustacean Larvae*		*Crustacean Larvae*		*Crustacean Larvae*		
			Copepods		*Oikoplura*		*Nitzschia*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		
			Copepods nauplii		*Copepods nauplii*		*Copepods nauplii*		*Copepods*		*Copepods*		*Copepods*		
			Crustacean		*Crustacean*		*Pinnularia*		*Crustacean*		*Crustacean*		*Copepods nauplii*		
			Bivalve Larvae		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		
3	Total Biomass	ml/100 m³	15.1		15.6		16.2		16.46		16.64		16.65		

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RESULTS OF MARINE WATER [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C	Microbiological														
1	Total Bacterial Count	CFU/ml	130		128		120		102		100		102		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	32		36		34		30		28		26		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	10		12		10		14		16		2		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF SEDIMENT ANALYSIS [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.56	0.62	0.58	0.62	0.52	0.56	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	604	614	620	614	596	602	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	ND	ND	ND	ND	ND	ND	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.64	3.56	3.42	3.29	3.15	3.34	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	138.6	144.2	126.5	110.4	125.2	142.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	618.6	586.3	565.2	542.4	552.4	576.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	3.82	3.71	3.65	3.45	3.36	3.21	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	46.8	44.2	48.1	42.9	44.5	49.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	52.4	50.2	49.2	44.8	41.9	38.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	106.4	110	102.4	110.4	124.2	112.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	1.62	1.42	1.31	1.2	1.22	1.28	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

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RESULTS OF SEDIMENT ANALYSIS [M2 MOUTH OF BOCHA & NAVINAL CREEK - N 22°44'239" E 069°43'757"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D			Benthic Organisms						
1	Macrobenthos	--	*Decapods Larvae*	*Polychates*	*Polychates*	*Foraminiferan*	*Foraminiferan*	*Foraminiferan*	APHA (24th Ed. 2023)10500
			Isopods	Isopods	*Isopods*	*Gastropods*	*Gastropods*	Gastropods	
			Amphipods	*Amphipods*	*Gastropods*	*Isopods*	*Isopods*	*Isopods*	
			Sipunculids	*Sipunculids*	*Sipunculids*	*Sipunculids*	*Amphipods*	*Amphipods*	
2	MeioBenthos	--	*Foraminiferan*	*Foraminiferan*	*Decapods Larvae*	*Herpectacoids*	*Sipunculids*	*Sipunculids*	
			Herpectacoids	*Herpectacoids*	*Herpectacoids*	*Polychates*	*Polychates*	*Polychates*	
3	Population	no/m²	301	300	286	294	300	302	

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Sr. Chemist

Mr. Nitin Tandel
Technical Manager

RESULTS OF MARINE WATER [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.09	7.95	8.21	8.06	8.24	8.12	8.17	8.09	8.14	8.05	8.18	7.96	IS 3025(Part 11):2022
2.	Temperature	°C	29.3	29.2	29.2	29.1	28.9	28.8	28.7	28.6	28.6	28.5	28.5	28.4	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	158	122	146	118	158	126	144	110	134	112	144	118	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.7	BDL(MDL: 1.0)	2.5	BDL(MDL: 1.0)	2.4	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	2.9	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.63	6.53	6.5	6.4	6.34	6.25	6.53	6.43	6.55	6.45	6.4	6.3	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	35.82	36.82	35.78	36.41	35.62	36.44	35.58	36.29	35.64	36.38	35.72	36.46	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO_3	µmol/L	3.06	2.9	2.58	2.42	2.42	2.26	2.74	2.58	3.23	3.06	2.9	2.74	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	0.217	0.196	0.196	0.174	0.239	0.217	0.261	0.217	0.326	0.283	0.283	0.261	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	3.59	3.53	3.48	3.42	3.48	3.39	3.69	3.64	3.64	3.59	3.53	3.48	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO_4	µmol/L	BDL(MDL: 0.4)	1.05	1.37	1.26	1.05	BDL(MDL: 0.4)	BDL(MDL: 0.4)	BDL(MDL: 0.4)	1.05	BDL(MDL: 0.4)	1.16	BDL(MDL: 0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	6.867	6.626	6.256	6.014	6.139	5.867	6.691	6.437	7.196	6.933	6.713	6.481	APHA 24th Ed.2023,4500 NH3
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35124	36328	35340	36110	35240	36220	35460	36550	35520	36740	35260	36458	IS 3025(Part 16):2023
15.	COD	mg/L	19.7	7.9	31.6	19.7	24.3	12.2	28	16	20	8	24	12	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	2.46	2.2	2.52	2.4	2.54	2.38	2.64	2.44	3.25	288	3.24	287	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	1.5	1.45	1.8	1.46	1.99	1.64	2	1.55	6	2.01	7	2.02	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	145	95	143	92	140	90	144	100	140	96	141	97	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Pinnularia*	*Coscinodiscus*	*Pinnularia*	*Coscinodiscus*	*Pinnularia*	*Coscinodiscus*	*Melosira*	*Cyclotella*	*Melosira*	*Cyclotella*	*Melosira*	*Cyclotella*	APHA (24th Ed. 2023)10200A-G
			Biddulphia	*Pinnularia*	*Biddulphia*	*Pinnularia*	*Biddulphia*	*Pinnularia*	*Pinnularia*	*Pinnularia*	*Pinnularia*	*Pinnularia*	*Pinnularia*	*Pinnularia*	
			Navicula	*Rhizosolenia*	*Navicula*	*Rhizosolenia*	*Navicula*	*Rhizosolenia*	*Skeletonema*	*Skeletonema*	*Rhizosolenia*	*Skeletonema*	*Rhizosolenia*	*Skeletonema*	
			Thallassiosira	*Dinophysis*	*Thallassiosira*	*Dinophysis*	*Thallassiosira*	*Dinophysis*	*Thallassiosira*	*Thallassiosira*	*Thallassiosira*	*Thallassiosira*	*Thallassiosira*	*Thallassiosira*	
			Skeletonema	*Thalassionema*	*Skeletonema*	*Thalassionema*	*Skeletonema*	*Thalassionema*	*Thalassionema*	*Thalassionema*	*Thalassionema*	*Thalassionema*	*Thalassionema*	*Thalassionema*	
B			Zooplankton												
1	Abudance (Population)	noX10 3/ 100 m3	40		48		44		48		41		50		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Copepods*		*Copepods*		*Rhizosolenia*		*Crustacean*		*Crustacean*		*Crustacean*		
			Copepods nauplii		*Copepods nauplii*		*Crustacean Larvae*		*Copepods nauplii*		*Copepods nauplii*		*Copepods nauplii*		
			Egg(Fish and Shrimps)		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Crustacean Larvae*		*Crustacean Larvae*		*Crustacean Larvae*		
			Crustacean		*Pinnularia*		*Oikoplura*		*Crustacean*		*Crustacean*		*Egg(Fish and Shrimps)*		
			Bivalve Larvae		*Bivalve Larvae*		*Thalassionema*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		
3	Total Biomass	ml/100 m³	15.2		14.8		15.2		15.62		15.34		15.33		

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RESULTS OF MARINE WATER [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	148		140		134		144		138		122		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	30		36		28		24		22		17		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	24		22		20		16		14		21		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF SEDIMENT ANALYSIS [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.52	0.65	0.54	0.45	0.49	0.56	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	534	514	538	564	588	605.2	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	ND	ND	ND	ND	ND	ND	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.42	3.55	3.39	3.25	3.19	3.38	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	112	119.2	124.6	118.2	128.4	133.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	564	544	562	546	562.2	558.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	3.44	3.51	3.49	3.29	3.35	3.25	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	44.9	45.6	41.8	44.3	41.8	44.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	40.6	51.2	52.5	48.2	44.3	42.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	120	126.2	130.2	106.5	110.2	105.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	1.56	1.59	1.46	1.29	1.22	1.25	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

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RESULTS OF SEDIMENT ANALYSIS [M3 EAST OF BOCHAISLANOT DETECTED - N 22°46'530" E 069°41'690"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D	Benthic Organisms								
1	Macrobenthos	--	Polychates	*Polychates*	*Amphipods*	*Gastropods*	*Gastropods*	*Decapods Larvae*	APHA (24th Ed. 2023)10500
			Gastropods	*Gastropods*	*Gastropods*	*Isopods*	*Isopods*	*Isopods*	
			Isopods	*Isopods*	*Isopods*	*Amphipods*	*Amphipods*	*Amphipods*	
			Sipunculids	*Sipunculids*	*Sipunculids*	*Sipunculids*	*Sipunculids*	*Sipunculids*	
2	MeioBenthos	--	*Herpectacoids*	*Herpectacoids*	*Herpectacoids*	*Polychates*	*Polychates*	*Foraminiferan*	
			Polychates	*Polychates*	*Polychates*	*Herpectacoids*	*Herpectacoids*	*Herpectacoids*	
3	Population	no/m²	296	280	297	300	288	363	

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RESULTS OF MARINE WATER [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.07	7.88	8.17	7.98	8.16	7.99	8.12	7.88	8.09	7.88	8.14	7.96	IS 3025(Part 11):2022
2.	Temperature	°C	29.2	29.1	29.1	29	28.9	28.8	28.8	28.7	28.6	28.5	28.5	28.4	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	166	134	128	112	134	104	142	112	134	116	114	96	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.8	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	2.2	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.83	6.63	6.7	6.5	6.54	6.34	6.73	6.53	6.75	6.55	6.59	6.4	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.11	36.84	36.03	36.81	36.12	36.47	35.74	36.41	35.81	36.54	35.62	36.72	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO_3	µmol/L	3.71	3.55	3.23	3.06	2.74	2.42	2.9	2.58	3.55	3.39	3.06	2.9	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	0.239	0.217	0.261	0.239	0.217	0.174	0.174	0.152	0.217	0.196	0.304	0.283	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	3.85	3.8	3.53	3.48	3.48	3.39	3.39	3.32	3.74	3.64	3.53	3.48	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO_4	µmol/L	BDL(MDL: 0.4)	1.16	1.16	1.05	BDL(MDL: 0.4)	BDL(MDL: 0.4)	1.16	1.05	1.16	BDL(MDL: 0.4)	1.37	1.26	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	7.799	7.567	7.021	6.779	6.437	5.984	6.464	6.052	7.507	7.226	6.894	6.663	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35622	36414	35240	36080	35150	35960	35290	36188	35350	36240	35340	36190	IS 3025(Part 16):2023
15.	COD	mg/L	19.7	11.8	31.6	23.7	28.4	16.2	28	20	20	12	24	16	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A	Phytoplankton														
1.	Chlorophyll	mg/m³	2.6	4	2.4	6	2.44	8	2.54	3.66	4.2	2.64	4.1	2.65	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.3	9	2.2	8	2.64	6	2.6	2.61	3.6	2.72	3.5	2.71	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10^3/L	155	85	156	89	150	92	148	94	150	94	151	93	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Coscinodiscus*	*Surirella*	*Surirella*	*Surirella*	*Coscinodiscus*	*Surirella*	*Thallassiosira*	*Coscinodiscus*	*Thallassiosira*	*Coscinodiscus*	*Thallassiosira*	*Coscinodiscus*	APHA (24th Ed. 2023)10200A-G
			Diploneis	*Biddulphia*	*Diploneis*	*Biddulphia*	*Diploneis*	*Biddulphia*	*Melosira*	*Diploneis*	*Melosira*	*Diploneis*	*Melosira*	*Diploneis*	
			Rhizosolenia	*Navicula*	*Thalassiothrix*	*Coscinodiscus*	*Skeletonema*	*Coscinodiscus*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	
			Dinophysis	*Thallassiosira*	*Navicula*	*Thallassiosira*	*Navicula*	*Thallassiosira*	*Rhizosolenia*	*Dinophysis*	*Rhizosolenia*	*Dinophysis*	*Rhizosolenia*	*Dinophysis*	
			Thalassionema	*Skeletonema*	*Thalassionema*	*Skeletonema*	*Thalassionema*	*Skeletonema*	*Pleurosigma*	*Thalassionema*	*Pleurosigma*	*Thalassionema*	*Pleurosigma*	*Thalassionema*	
B	Zooplankton														
1	Abudance (Population)	noX10 3/ 100 m3	35		36		40		52		46		45		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Oikoplura*		*Oikoplura*		*Copepods nauplii*		*Copepods nauplii*		*Copepods nauplii*		*Copepods nauplii*		
			Copepods nauplii		*Rhizosolenia*		*Rhizosolenia*		*Crustacean Larvae*		*Crustacean Larvae*		*Egg(Fish and Shrimps)*		
			Crustacean Larvae		*Crustacean Larvae*		*Egg(Fish and Shrimps)*		*Oikoplura*		*Oikoplura*		*Oikoplura*		
			Crustacean		*Crustacean*		*Crustacean*		*Bivalve Larvae*		*Bivalve Larvae*		*Copepods nauplii*		
			Bivalve Larvae		*Bivalve Larvae*		*Bivalve Larvae*		*Oikoplura*		*Oikoplura*		*Oikoplura*		
3	Total Biomass	ml/100 m³	14.3		15.2		14.28		14.32		14.62		14.61		

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RESULTS OF MARINE WATER [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	112		110		112		126		118		110		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	40		36		30		38		32		31		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	10		14		11		14		12		11		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF SEDIMENT ANALYSIS [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.52	0.58	0.47	0.49	0.52	0.56	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	610	612	625	610	621	628	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	ND	ND	ND	ND	ND	ND	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.42	3.52	3.48	3.42	3.44	3.25	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	105	110	124	112	118	134	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	444.8	442.1	426.1	415.2	420.5	456.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	3.46	3.62	3.54	3.24	3.11	3.28	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	45.2	46.8	44.2	42.8	44.2	41.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	51.6	52.1	55.6	51.2	49.6	52.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	186.2	174.6	165.2	134.6	124	118.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	1.56	1.62	1.52	1.12	1.16	1.24	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

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RESULTS OF SEDIMENT ANALYSIS [M4 JUNA BANOT DETECTEDAR N 22°47'577" E 069°43'620"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D	Benthic Organisms								
1	Macrobenthos	--	*Foraminiferan*	*Amphipods*	*Amphipods*	*Sipunculids*	*Sipunculids*	Sipunculids	APHA (24th Ed. 2023)10500
			Gastropods	*Gastropods*	*Gastropods*	*Decapods Larvae*	*Decapods Larvae*	*Decapods Larvae*	
			Isopods	*Isopods*	*Isopods*	*Polychates*	*Polychates*	*Polychates*	
			Sipunculids	*Sipunculids*	*Turbellarians*	*Isopods*	*Isopods*	*Foraminiferan*	
2	MeioBenthos	--	*Herpectacoids*	*Herpectacoids*	*Herpectacoids*	*Turbellarians*	Gastropods	*Gastropods*	
			Polychates	*Turbellarians*	*Decapods Larvae*	*Herpectacoids*	*Herpectacoids*	*Herpectacoids*	
3	Population	no/m^2	300	292	280	264	246	363	

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RESULTS OF MARINE WATER [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.16	8.05	8.09	7.89	8.11	7.99	8.09	7.89	8.15	8.01	8.17	8.98	IS 3025(Part 11):2022
2.	Temperature	°C	29.2	29.1	29.1	29	28.8	28.7	28.6	28.5	28.4	28.3	28.5	28.4	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	132	104	118	96	138	104	128	110	122	112	116	78	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27oC)	mg/L	2.8	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	3.3	BDL(MDL: 1.0)	3.4	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.53	6.43	6.4	6.3	6.25	6.15	6.43	6.33	6.45	6.35	6.3	6.2	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	35.65	36.75	35.74	36.81	35.92	36.88	35.74	36.72	35.86	36.74	36.02	36.98	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO3	µmol/L	3.23	3.06	3.39	3.23	2.58	2.42	3.06	2.9	3.71	3.55	2.74	2.58	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO2	µmol/L	0.174	0.152	0.174	0.152	0.283	0.261	0.239	0.217	0.174	0.152	0.261	0.239	APHA 24th Ed.2023,4500NO2 B
10.	Ammonical Nitrogen as NH3	µmol/L	3.9	3.85	3.69	3.64	3.32	3.26	3.59	3.53	3.64	3.53	3.42	3.39	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO4	µmol/L	1.37	1.26	1.05	BDL(MDL: 0.4)	1.16	1.05	1.05	BDL(MDL: 0.4)	1.37	1.26	1.05	BDL(MDL: 0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	7.304	7.062	7.254	7.022	6.183	5.941	6.889	6.647	7.524	7.232	6.421	6.209	APHA 24th Ed.2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35340	36130	35540	36322	35260	36240	35310	36380	35410	36560	35116	36284	IS 3025(Part 16):2023
15.	COD	mg/L	11.8	7.9	23.7	19.7	16.2	12.2	20	16	12	8	16	12	IS 3025(Part 58):2023

Continue…

RESULTS OF MARINE WATER [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	3.14	3.21	3.16	3.24	3.24	3.2	3.22	3.36	3.92	3.34	3.91	3.33	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.5	1.3	2.45	1.4	2.4	1.34	2.62	1.42	2.56	2.34	2.55	2.33	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10^3/L	120	116	119	112	120	114	124	112	132	116	131	117	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Diploneis*	*Navicula*	*Diploneis*	*Navicula*	*Navicula*	*Navicula*	*Navicula*	*Pinnularia*	*Navicula*	*Pinnularia*	*Navicula*	*Pinnularia*	APHA (24th Ed. 2023)10200A-G
			Rhizosolenia	*Skeletonema*	*Rhizosolenia*	*Skeletonema*	*Biddulphia*	*Skeletonema*	*Biddulphia*	*Biddulphia*	*Biddulphia*	*Biddulphia*	*Biddulphia*	*Rhizosolenia*	
			Nitzschia	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Navicula*	*Nitzschia*	*Navicula*	*Odontella*	*Dinophysis*	
			Cyclotella	*Dinophysis*	*Cyclotella*	*Biddulphia*	*Cyclotella*	*Biddulphia*	*Cyclotella*	*Thallassiosira*	*Cyclotella*	*Thallassiosira*	*Cyclotella*	*Coscinodiscus*	
			Pleurosigma	*Thalassionema*	*Pleurosigma*	*Thalassionema*	*Pleurosigma*	*Thalassionema*	*Pleurosigma*	*Skeletonema*	*Pleurosigma*	*Skeletonema*	*Pleurosigma*	*Skeletonema*	
B			Zooplankton												
1	Abudance (Population)	noX10 3/ 100 m3	50		56		52		60		62		61		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Copepods nauplii*		*Nitzschia*		*Nitzschia*		*Crustacean Larvae*		*Crustacean Larvae*		*Crustacean Larvae*		
			Crustacean Larvae		*Crustacean Larvae*		*Crustacean Larvae*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		
			Oikoplura		*Oikoplura*		*Oikoplura*		*Copepods*		*Copepods*		*Copepods nauplii*		
			Bivalve Larvae		*Bivalve Larvae*		*Bivalve Larvae*		*Crustacean*		*Crustacean*		*Crustacean*		
			Oikoplura		*Oikoplura*		*Oikoplura*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		
3	Total Biomass	ml/100 m^3	14.14		16.14		18.3		18.34		18.42		18.41		

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RESULTS OF MARINE WATER [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
C			Microbiological												
1	Total Bacterial Count	CFU/ml	140		136		132		124		120		121		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	36		30		34		28		30		32		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	14		12		14		12		10		11		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF SEDIMENT ANALYSIS [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.52	0.58	0.56	0.49	0.46	0.53	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	610	621	614	602	611	596.2	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	ND	ND	ND	ND	ND	ND	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.68	3.56	3.51	3.26	3.15	3.24	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	142.2	152.3	144.6	122.1	120.5	124.3	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	508.5	512.2	532.1	542.4	528	520.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	3.44	3.56	3.62	3.25	3.11	3.26	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	56.9	58.4	54.6	50.2	46.5	44.6	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	44.6	42.2	44.5	49.2	44.8	42.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	121.2	114.2	122.4	115.1	124.3	121.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	1.69	1.56	1.48	1.06	1.15	1.16	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

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RESULTS OF SEDIMENT ANALYSIS [M5 TOWARDS WESTERN SIDE OF EAST PORT – N 22°46'041" E 069°47'296"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D			Benthic Organisms						
1	Macrobenthos	--	*Amphipods*	*Amphipods*	*Amphipods*	*Isopods*	*Isopods*	*Isopods*	APHA (24th Ed. 2023)10500
			Polychates	*Sipunculids*	*Polychates*	*Polychates*	*Polychates*	*Gastropods*	
			Isopods	*Isopods*	*Isopods*	*Sipunculids*	*Sipunculids*	*Sipunculids*	
			Gastropods	*Gastropods*	*Gastropods*	*Amphipods*	*Amphipods*	*Amphipods*	
2	MeioBenthos	--	Decapods Larvae	Decapods Larvae	Foraminiferan	Polychates	Herpectacoids	*Herpectacoids*	
			Herpectacoids	*Gastropods*	*Herpectacoids*	*Foraminiferan*	*Foraminiferan*	*Polychates*	
3	Population	no/m²	306	304	300	286	272	274	

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RESULTS OF MARINE WATER [M7 EAST PORT N 22°47'120" E 069°47'110"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.17	7.95	8.21	8.08	8.06	7.86	8.14	8.01	8.04	7.84	8.17	8.05	IS 3025(Part 11):2022
2.	Temperature	°C	29.3	29.2	29.2	29.1	28.7	28.6	28.6	28.5	28.7	28.6	28.6	28.5	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	138	122	144	126	136	112	144	118	108	96	124	108	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	2.7	BDL(MDL: 1.0)	2.5	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	3.5	BDL(MDL: 1.0)	3.4	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.73	6.63	6.6	6.5	6.44	6.34	6.63	6.53	6.65	6.55	6.49	6.4	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.21	36.66	35.96	36.59	35.56	36.82	35.44	36.91	35.51	36.88	35.66	36.94	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO_3	µmol/L	3.55	3.39	2.9	2.74	2.9	2.58	3.23	2.9	3.39	3.23	3.06	2.9	APHA 24th Ed.2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	0.326	0.304	0.283	0.261	0.152	0.13	0.196	0.174	0.261	0.217	0.304	0.283	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	3.74	3.69	3.8	3.74	3.69	3.64	3.42	3.39	3.59	3.48	3.74	3.69	APHA 24th Ed.2023,4500-NH3 B
11.	Phosphates as PO_4	µmol/L	BDL(MDL: 0.4)	BDL(MDL: 0.4)	1.16	BDL(MDL: 0.4)	1.05	BDL(MDL: 0.4)	1.37	1.26	1.26	1.16	1.16	BDL(MDL: 0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	7.616	7.384	6.983	6.741	6.742	6.35	6.846	6.464	7.241	6.927	7.104	6.873	APHA 24th Ed.2023,4500 NH3
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	36246	37050	36108	36860	36380	37020	36420	37110	36320	37090	35964	37120	IS 3025(Part 16):2023
15.	COD	mg/L	15.7	11.8	19.7	15.8	16.2	12.2	16	12	8	4	12	8	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M7 EAST PORT N 22°47'120" E 069°47'110"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	3.08	2.9	3.12	2.6	3.16	2.62	3.12	2.52	3.52	3.06	3.54	3.07	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.9	1.72	3	1.72	4	1.8	6	1.94	8	2.31	6	2.32	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10^3/L	93	120	92	122	90	128	98	124	100	120	102	122	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Nitzschia*	*Thalassiothrix*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	*Diploneis*	*Coscinodiscus*	*Diploneis*	*Coscinodiscus*	*Diploneis*	*Coscinodiscus*	APHA (24th Ed. 2023)10200A-G
			Pinnularia	*Surirella*	*Pinnularia*	*Surirella*	*Odontella*	*Surirella*	*Rhizosolenia*	*Diploneis*	*Rhizosolenia*	*Diploneis*	*Rhizosolenia*	*Diploneis*	
			Odontella	*Navicula*	*Dinophysis*	*Navicula*	*Dinophysis*	*Navicula*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	*Nitzschia*	*Rhizosolenia*	
			Dinophysis	*Thallassiosira*	*Pleurosigma*	*Thalassionema*	*Pleurosigma*	*Thalassionema*	*Thalassiothrix*	*Dinophysis*	*Thalassiothrix*	*Dinophysis*	*Thalassiothrix*	*Dinophysis*	
			Surirella	*Skeletonema*	*Surirella*	*Skeletonema*	*Cyclotella*	*Skeletonema*	*Pleurosigma*	*Thalassionema*	*Pleurosigma*	*Thalassionema*	*Cyclotella*	*Thalassionema*	
B			Zooplankton												
1	Abudance (Population)	noX10 3/ 100 m3	44		42		46		42		38		37		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Nitzschia*		*Nitzschia*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		
			Pinnularia		*Pinnularia*		*Coscinodiscus*		*Oikoplura*		*Oikoplura*		*Oikoplura*		
			Odontella		*Odontella*		*Odontella*		*Copepods nauplii*		*Copepods nauplii*		*Copepods nauplii*		
			Dinophysis		*Dinophysis*		*Dinophysis*		*Crustacean*		*Crustacean*		*Crustacean*		
			Surirella		*Surirella*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		
3	Total Biomass	ml/100 m^3	16.58		16.5		15.8		15.92		15.84		15.83		

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RESULTS OF MARINE WATER [M7 EAST PORT N 22°47'120" E 069°47'110"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	98		96		102		106		108		100		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	28		24		27		30		26		25		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	10		10		10		10		12		11		IS :15185:2016
4	Enterococcus	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF MARINE WATER [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.16	8.04	8.21	8.11	8.14	7.84	8.18	7.98	8.22	8.11	8.24	8.06	IS 3025(Part 11):2022
2.	Temperature	°C	29.3	29.2	29.2	29.1	28.8	28.7	28.6	28.5	28.7	28.6	28.6	28.5	IS 3025(Part 9):2023
3.	Total Suspended Solids	mg/L	142	118	162	142	150	126	154	122	126	114	146	122	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3.1	BDL(MDL: 1.0)	2.9	BDL(MDL: 1.0)	2.5	BDL(MDL: 1.0)	2.8	BDL(MDL: 1.0)	3.2	BDL(MDL: 1.0)	3.5	BDL(MDL: 1.0)	IS 3025(Part 44):2023
5.	Dissolved Oxygen	mg/L	6.94	6.73	6.8	6.6	6.64	6.44	6.83	6.63	6.84	6.65	6.69	6.49	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	35.81	36.88	35.86	36.51	35.72	36.29	35.62	36.38	35.66	36.44	36.75	36.81	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025(Part 39):2021
8.	Nitrate as NO_3	µmol/L	4.03	3.87	3.23	3.06	3.06	2.74	2.58	2.42	3.55	3.39	3.39	3.23	APHA 24th Ed.2023,4500 NO3-
9.	Nitrite as NO_2	µmol/L	0.261	0.239	0.217	0.196	0.174	0.13	0.152	0.13	0.239	0.217	0.261	0.239	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	3.8	3.74	3.64	3.59	3.53	3.48	3.53	3.42	3.64	3.59	3.59	3.53	APHA 24th Ed.2023,4500-NH3
11.	Phosphates as PO_4	µmol/L	1.16	1.05	1.37	1.26	1.05	BDL(MDL: 0.4)	BDL(MDL: 0.4)	BDL(MDL: 0.4)	1.05	BDL(MDL: 0.4)	1.05	BDL(MDL: 0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	8.091	7.849	7.087	6.846	6.764	6.35	6.262	5.97	7.429	7.197	7.241	6.999	APHA 24th Ed.2023,4500 NH3
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35520	36340	35340	36104	35360	36210	36550	36354	35418	36210	35444	36324	IS 3025(Part 16):2023
15.	COD	mg/L	19.7	11.8	23.7	15.8	20.3	12.2	20	12	12	4	16	8	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m^3	3.2	3.1	3.3	3.2	3.28	3.24	2.88	3.26	4.1	3.36	4.1	3.37	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m^3	1.2	1.2	1.4	1.34	1.39	1.26	1.42	2.01	2	2.64	2	2.65	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x $10^3/L$	112	100	110	96	122	98	110	86	98	88	98	87	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Odentella*	*Cyclotella*	*Odentella*	*Cyclotella*	*Odentella*	*Cyclotella*	*Nitzschia*	*Diploneis*	*Nitzschia*	*Diploneis*	*Nitzschia*	*Diploneis*	APHA (24th Ed. 2023)10200A-G
			Rhizosolenia	*Pinnularia*	*Rhizosolenia*	*Pinnularia*	*Rhizosolenia*	*Pinnularia*	*Grammatophora*	*Rhizosolenia*	*Grammatophora*	*Rhizosolenia*	*Grammatophora*	*Rhizosolenia*	
			Coscinodiscus	*Skeletonema*	*Coscinodiscus*	*Skeletonema*	*Coscinodiscus*	*Skeletonema*	*Diploneis*	*Nitzschia*	*Diploneis*	*Nitzschia*	*Diploneis*	*Nitzschia*	
			Grammatophora	*Thallassiosira*	*Grammatophora*	*Thallassiosira*	*Grammatophora*	*Thallassiosira*	*Thalassiothrix*	*Cyclotella*	*Thalassiothrix*	*Cyclotella*	*Thalassiothrix*	*Grammatophora*	
			Thallassiosira	*Thalassionema*	*Thallassiosira*	*Thalassionema*	*Thallassiosira*	*Thalassionema*	*Pleurosigma*	*Pleurosigma*	*Pleurosigma*	*Pleurosigma*	*Pleurosigma*	*Pleurosigma*	
B			Zooplankton												
1	Abudance(Population)	noX10 3/ 100 m3	36		39		28		30		42		41		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Coscinodiscus*		*Coscinodiscus*		*Odontella*		*Oikoplura*		*Oikoplura*		*Oikoplura*		
			Diploneis		*Egg(Fish and Shrimps)*		*Egg(Fish and Shrimps)*		*Copepods nauplii*		*Copepods nauplii*		*Egg(Fish and Shrimps)*		
			Rhizosolenia		*Rhizosolenia*		*Rhizosolenia*		*Crustacean Larvae*		*Crustacean Larvae*		*Crustacean Larvae*		
			Dinophysis		*Bivalve Larvae*		*Bivalve Larvae*		*Crustacean*		*Crustacean*		*Crustacean*		
			Thalassionema		*Thalassionema*		*Thalassionema*		*Bivalve Larvae*		*Bivalve Larvae*		*Bivalve Larvae*		
3	Total Biomass	ml/100 m^3	14.8		14.6		16.2		16.34		16.38		16.39		

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RESULTS OF MARINE WATER [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	12		10		114		118		112		114		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	16		12		10		12		10		11		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	8		6		4		6		4		5		IS :15185:2016
4	Enterococcus	/100ml	6		8		6		8		6		7		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF SEDIMENT ANALYSIS [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
1.	Organic Matter	%	0.55	0.59	0.56	0.51	0.56	0.62	IS: 2720 (Part 22):1972
2.	Phosphorus as P	µg/g	590.4	610.2	612.4	594.2	602	594	IS: 10158 :1982, Method B
3.	Texture	--	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Lab SOP No. UERL/CHM/LTM/108
4.	Petroleum Hydrocarbon	µg/g	ND	ND	ND	ND	ND	ND	APHA 24th Ed.2023,5520 F
5.0	Heavy Metals								
5.1	Aluminum as Al	%	3.74	3.65	3.44	3.28	3.24	3.36	IS3025(Part 55):2003
5.2	Total Chromium as Cr+3	µg/g	134.2	132.2	128.5	114.2	132.4	134.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.3	Manganese as Mn	µg/g	588.6	604.2	610.5	596.3	602.5	564.2	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.4	Iron as Fe	%	3.75	3.62	3.48	3.42	3.38	3.21	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.5	Nickel as Ni	µg/g	44.2	48.1	46.2	44.5	41.6	44.5	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.6	Copper as Cu	µg/g	52.2	55.4	52.8	51.1	50.4	42.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.7	Zinc as Zn	µg/g	109.5	110.6	121.4	109.2	110.8	126.4	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.8	Lead as Pb	µg/g	1.65	1.59	1.44	1.06	1.12	1.19	EPA 3050B/7000B (Extraction &Analytical Method):2007
5.9	Mercury as Hg	µg/g	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	EPA 7471B (Extraction &Analytical Method) :2007

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RESULTS OF SEDIMENT ANALYSIS [M8 RIGHT SIDE OF BOCHA CREEK N 22°45'987" E 069°43'119"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	TEST METHOD
			SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	
D			Benthic Organisms						
1	Macrobenthos	--	*Polychates*	*Gastropods*	*Gastropods*	*Polychates*	*Polychates*	*Polychates*	APHA (24th Ed. 2023)10500
			Decapods Larvae	*Decapods Larvae*	*Decapods Larvae*	*Amphipods*	*Amphipods*	*Amphipods*	
			Isopods	*Isopods*	*Isopods*	*Isopods*	*Isopods*	*Sipunculids*	
			Sipunculids	*Sipunculids*	*Sipunculids*	*Sipunculids*	*Herpectacoids*	*Herpectacoids*	
2	MeioBenthos	--	*Herpectacoids*	*Herpectacoids*	*Herpectacoids*	*Foraminiferan*	*Foraminiferan*	*Foraminiferan*	
			Turbellarians	*Turbellarians*	Turbellarians	Turbellarians	Turbellarians	*Turbellarians*	
3	Population	no/m²	362	360	352	350	340	342	

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RESULTS OF MARINE WATER [M11 MPT T1 JETTY N 22°42'278" E 069°43'450"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.24	8.09	8.11	7.98	8.14	8.01	8.19	8.05	8.24	8.12	8.21	8.07	IS 3025 (Part 11):2022
2.	Temperature	°C	29.3	29.2	29.2	29.1	28.8	28.7	28.6	28.5	28.7	28.6	28.6	28.5	IS 3025 (Part 9):2023
3.	Total Suspended Solids	mg/L	152	114	122	106	118	96	120	90	114	96	138	120	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3	BDL(MDL: 1.0)	3.1	BDL(MDL: 1.0)	3.3	BDL(MDL: 1.0)	2.9	BDL(MDL: 1.0)	3.4	BDL(MDL: 1.0)	2.7	BDL(MDL: 1.0)	IS 3025 (Part 44):2023
5.	Dissolved Oxygen	mg/L	6.63	6.53	6.5	6.4	6.34	6.25	6.53	6.43	6.55	6.45	6.4	6.3	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.22	36.79	36.09	36.71	36.14	36.82	35.78	36.92	35.82	37.02	35.74	37.15	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	BDL(MDL: 2.0)	IS 3025 (Part 39):2021
8.	Nitrate as NO_3	µmol/L	3.55	3.39	3.39	3.23	3.23	2.9	2.74	2.58	3.06	2.9	2.9	2.74	APHA 24th Ed. 2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	0.304	0.283	0.261	0.239	0.13	0.109	0.196	0.174	0.283	0.261	0.304	0.283	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	3.85	3.8	3.74	3.69	3.8	3.69	3.53	3.42	3.69	3.64	3.48	3.42	APHA 24th Ed. 2023,4500- NH3 B
11.	Phosphates as PO_4	µmol/L	BDL(MDL: 0.4)	1.05	1.26	1.16	1.16	BDL(MDL: 0.4)	1.26	1.16	1.37	1.26	1.26	1.16	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	7.704	7.473	7.391	7.159	7.16	6.699	6.466	6.174	7.033	6.801	6.684	6.443	APHA 24th Ed. 2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	35360	36180	36222	36020	36280	36220	36190	37160	36090	36940	35860	36746	IS 3025(Part 16):2023
15.	COD	mg/L	19.7	15.7	23.7	19.7	20.3	16.2	16	12	8	4	12	8	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M11 MPT T1 JETTY N 22°42'278" E 069°43'450"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	2.3	2..5	2.4	2.4	3.01	2.24	3.15	2.42	3.56	3.01	3.54	3.02	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	2.4	1.5	2.2	1.46	2.47	1.46	2.45	1.38	2.2	2.31	2.2	2.32	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	130	115	132	116	134	114	133	124	120	126	122	127	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Dinophysis*	*Navicula*	*Odontella*	*Cyclotella*	*Cyclotella*	*Surirella*	*Odontella*	*Nitzschia*	*Odontella*	*Nitzschia*	*Odontella*	*Nitzschia*	APHA (24th Ed. 2023)10200A-G
			Pinnularia	*Skeletonema*	*Rhizosolenia*	*Pinnularia*	*Pinnularia*	*Skeletonema*	*Rhizosolenia*	*Pinnularia*	*Rhizosolenia*	*Pinnularia*	*Rhizosolenia*	*Pinnularia*	
			Thalassiothrix	*Rhizosolenia*	*Coscinodiscus*	*Skeletonema*	*Thalassiothrix*	*Rhizosolenia*	*Coscinodiscus*	*Odontella*	*Coscinodiscus*	*Odontella*	*Coscinodiscus*	*Odontella*	
			Grammatophora	*Dinophysis*	*Grammatophora*	*Thallassiosira*	*Rhizosolenia*	*Cyclotella*	*Grammatophora*	*Dinophysis*	*Grammatophora*	*Dinophysis*	*Pleurosigma*	*Dinophysis*	
			Ceratium	*Thalassionema*	*Thallassiosira*	*Thalassionema*	*Ceratium*	*Thalassionema*	*Thallassiosira*	*Surirella*	*Thallassiosira*	*Surirella*	*Thallassiosira*	*Surirella*	

B			Zooplankton						
1	Abudance(Population)	noX103/ 100 m3	30	34	32	38	40	42	APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Diploneis*	*Diploneis*	*Diploneis*	*Decapoda*	*Decapoda*	*Decapoda*	
			Rhizosolenia	*Rhizosolenia*	*Rhizosolenia*	*Copepods*	*Copepods*	*Oikoplura*	
			Nitzschia	*Nitzschia*	*Nitzschia*	*Crustacean Larvae*	*Crustacean Larvae*	*Crustacean Larvae*	
			Thalassiothrix	*Coscinodiscus*	*Coscinodiscus*	*Crustacean*	*Crustacean*	*Bivalve Larvae*	
			Pleurosigma	*Pleurosigma*	*Pleurosigma*	*Oikoplura*	*Oikoplura*	*Oikoplura*	
3	Total Biomass	ml/100 m³	15.25	14.02	12.83	13.22	13.42	13.41	

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RESULTS OF MARINE WATER [M11 MPT T1 JETTY N 22°42'278" E 069°43'450"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	230		226		216		204		194		198		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	40		32		36		28		30		32		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	36		34		30		34		24		26		IS :15185:2016
4	Enterococcus	/100ml	10		8		10		4		6		5		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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RESULTS OF MARINE WATER [M12 SPM N 22°40'938" E 069°39'191"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
1.	pH	--	8.14	8.01	8.25	8.07	8.22	8.12	8.17	7.96	8.21	8.08	8.14	8.01	IS 3025 (Part 11):2022
2.	Temperature	°C	29.3	29.2	29.2	29.1	28.9	28.8	28.7	28.6	28.6	28.5	28.5	28.4	IS 3025 (Part 9):2023
3.	Total Suspended Solids	mg/L	140	122	158	144	144	102	128	114	148	126	158	126	APHA 24th Ed.,2023,2540- D
4.	BOD (3 Days @ 27°C)	mg/L	3	BDL(MDL :1.0)	2.8	BDL(MDL :1.0)	3.2	BDL(MDL :1.0)	2.7	BDL(MDL :1.0)	3.5	BDL(MDL :1.0)	2.9	BDL(MDL :1.0)	IS 3025 (Part 44):2023
5.	Dissolved Oxygen	mg/L	6.83	6.73	6.7	6.6	6.54	6.44	6.73	6.63	6.75	6.65	6.59	6.49	APHA 24th Ed.2023,4500-O, B
6.	Salinity	ppt	36.32	37.02	36.08	36.92	35.96	37.05	36.02	37.12	36.18	37.14	36.22	37.26	By Calculation
7.	Oil & Grease	mg/L	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	BDL(MDL :2.0)	IS 3025 (Part 39):2021
8.	Nitrate as NO_3	µmol/L	2.74	2.58	2.9	2.74	3.23	3.06	2.74	2.58	3.23	3.06	3.39	3.06	APHA 24th Ed. 2023,4500 NO3-B
9.	Nitrite as NO_2	µmol/L	0.261	0.239	0.217	0.196	0.196	0.174	0.152	0.13	0.196	0.174	0.217	0.196	APHA 24th Ed.2023,4500NO_2B
10.	Ammonical Nitrogen as NH_3	µmol/L	3.95	3.85	3.8	3.74	3.85	3.74	3.74	3.69	3.53	3.48	3.64	3.59	APHA 24th Ed. 2023,4500- NH3 B
11.	Phosphates as PO_4	µmol/L	1.58	1.47	1.16	BDL(MDL :0.4)	1.37	1.26	1.47	1.37	BDL(MDL :0.4)	BDL(MDL :0.4)	1.05	BDL(MDL :0.4)	APHA 24th Ed.2023,4500-P, D
12.	Total Nitrogen	µmol/L	6.951	6.669	6.917	6.676	7.276	6.974	6.632	6.4	6.956	6.714	7.247	6.846	APHA 24th Ed. 2023,4500 NH3 - B
13.	Petroleum Hydrocarbon	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	APHA 24th ED.2023,5520 F
14.	Total Dissolved Solids	mg/L	36240	37120	36118	36940	36240	37120	36324	37094	36340	37110	36216	37080	IS 3025(Part 16):2023
15.	COD	mg/L	27.5	23.6	31.6	27.6	24.3	20.3	28	24	20	16	24	20	IS 3025(Part 58):2023

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RESULTS OF MARINE WATER [M12 SPM N 22°40'938" E 069°39'191"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	
A			Phytoplankton												
1.	Chlorophyll	mg/m³	2.1	2.5	2.12	2.6	2.18	2.48	2.22	2.5	3	3.22	4	3.21	APHA (24th Ed. 2023)10200A-G
2.	Phaeophytin	mg/m³	1.15	1.55	1.22	1.6	1.29	1.52	1.32	1.66	2	2.64	3	2.65	APHA (24th Ed. 2023)10200A-G
3.	Cell Count	No. x 10³/L	79	130	80	132	84	130	92	136	96	130	97	133	APHA (24th Ed. 2023)10200A-G
4	Name of Group Number and name of group species of each group	--	*Ceratium*	*Melosira*	*Ceratium*	*Rhizosolenia*	*Surirella*	*Rhizosolenia*	*Skeletonema*	*Odontella*	*Skeletonema*	*Odontella*	*Skeletonema*	*Odontella*	APHA (24th Ed. 2023)10200A-G
			Pinnularia	*Dinophysis*	*Pinnularia*	*Dinophysis*	*Pinnularia*	*Dinophysis*	*Grammatophora*	*Rhizosolenia*	*Grammatophora*	*Rhizosolenia*	*Grammatophora*	*Rhizosolenia*	
			Odontella	*Skeletonema*	*Odontella*	*Skeletonema*	*Grammatophora*	*Skeletonema*	*Nitzschia*	*Coscinodiscus*	*Nitzschia*	*Coscinodiscus*	*Nitzschia*	*Coscinodiscus*	
			Thalassiothrix	*Thallassiosira*	*Thalassiothrix*	*Thallassiosira*	*Thalassiothrix*	*Thallassiosira*	*Thalassiothrix*	*Grammatophora*	*Thalassiothrix*	*Grammatophora*	*Coscinodiscus*	*Pinnularia*	
			Thallassiosira	*Thalassionema*	*Thallassiosira*	*Melosira*	*Rhizosolenia*	*Melosira*	*Pleurosigma*	*Thallassiosira*	*Pleurosigma*	*Thallassiosira*	*Pleurosigma*	*Thallassiosira*	
B			Zooplankton												
1	Abudance (Population)	noX10 3/ 100 m3	75		72		74		80		86		88		APHA (24rd Ed. 2023)10200 G
2	Name of Group Number and name of group species of each group		*Nitzschia*		*Nitzschia*		*Nitzschia*		*Copepods*		*Copepods*		*Copepods*		
			Grammatophora		*Grammatophora*		*Grammatophora*		*Oikoplura*		*Oikoplura*		*Oikoplura*		
			Diploneis		*Diploneis*		*Egg(Fish and Shrimps)*		*Crustacean Larvae*		*Crustacean Larvae*		*Crustacean Larvae*		
			Thalassiothrix		*Thalassiothrix*		*Thalassiothrix*		*Crustacean*		*Crustacean*		*Crustacean*		
			Pleurosigma		*Pleurosigma*		*Pleurosigma*		*Bivalve Larvae*		*Bivalve Larvae*		*Egg(Fish and Shrimps)*		
3	Total Biomass	ml/100 m³	14.5		15		16		15.96		15.86		15.87		

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RESULTS OF MARINE WATER [M12 SPM N 22°40'938" E 069°39'191"]

SR. NO.	TEST PARAMETERS	UNIT	Oct-25		Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		TEST METHOD
			SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM	SURFACE	BOTTOM			
C			Microbiological												
1	Total Bacterial Count	CFU/ml	250		246		238		228		228		226		APHA 24th Ed.2023,9215 -C
2	Total Coliform	/100ml	45		44		50		48		48		51		APHA 24thEd.2023, 9222-B
3	E.coli	/100ml	48		42		40		46		46		43		IS :15185:2016
4	Enterococcus	/100ml	32		30		20		22		22		21		IS:15186:2002
5	Salmonella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS:15187:2016
6	Shigella	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		APHA 24thEd.2023, 9260-E
7	Vibrio	/100ml	Absent		Absent		Absent		Absent		Absent		Absent		IS: 5887 (Part V):1976

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