



LARSEN & TOUBRO

Larsen & Toubro Limited
Hazira Central Services
A M Naik Heavy Engineering Complex
Post: Mora, Surat 394 517
Gujarat, INDIA
Tel.: +91 261 280 5000
Fax: +91 261 280 5050
www.Larsentoubro.com

Date: 21.05.2025

To,

Deputy Director General of Forests (C),
Ministry of Environment, Forest and Climate Change,
Integrated Regional Office, Gandhi Nagar A wing- 407 & 409,
Aranya Bhawan, Near CH-3 Circle, Sector-10A,
Gandhi Nagar-382010

SUB: Six Monthly CRZ Compliance Report for the period from Oct-2024 to Mar-2025 of
Outfitting Jetty at village Mora, Surat – Hazira Road, District Surat, Gujarat by
M/s Larsen & Toubro Limited

REF: F. No. 11-53/2012-IA-III dated: 15/01/2013

Dear Sir,

This has reference to your F. No. 11-53/2012-IA-III dated: 15/01/2013 on the above subject. As per condition, we are submitting herewith Six Monthly CRZ Compliance Report for the period from Oct-2024 to Mar-2025 for your kind perusal.

Thanking you.

Yours faithfully,

For Larsen and Toubro

(AUTHORIZED SIGNATORY)



Six Monthly CRZ Compliance Report (October 2024 to March 2025)

FOR

Outfitting Jetty

OF

LARSEN & TOUBRO LIMITED

AT

Hazira Manufacturing Complex, Surat, Gujarat.

Land/Plot area: 11,700 m²

[CRZ Clearance Letter No. 11-53/2012-IA-III dated: 15/01/2013]



Applicant

Larsen & Toubro Limited

Plot No: Sr. No. 148/A, 230,
Hazira Notified Area,
Surat-Hazira Road,
Hazira-394510 Tal: Chorasi
Dist: Surat
Phone: 0261 2805315
Fax: 0261-2455000

Consultant

Ecosystem Resource Management Pvt. Ltd.

Office Floor, Ashoka Pavilion 'A', New Civil
Road, Surat, Gujarat.
(NABL accredited certificate No. TC-11369)
E-mail: eco@ecshripad.com
Tel No: +912612231630

LARSEN & TOUBRO LIMITED (OUTFITTING JETTY)
Six Monthly CRZ Compliance Report (October 2024 to March 2025)

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ECOSYSTEM RESOURCE MANAGEMENT PVT. LTD.

Office Floor, Ashoka Pavillion–A, Opp. Kapadia Health Club, New Civil Road, Surat–395 001.

Tele–No: 91–0261–2231630, E–mail: eco@ecoshripad.com Web: www.ecosystemindia.com

LARSEN & TOUBRO LIMITED (OUTFITTING JETTY)

Six Monthly CRZ Compliance Report (October 2024 to March 2025)

INTRODUCTION

Larsen and Toubro Limited (L&T), Hazira Works is a heavy engineering work complex situated on a 200 acres plot at Hazira, near Surat in Gujarat. It is a state-of-the-art engineering workshop which is involved in designing and manufacturing of custom-built fabricated equipment's, modules and systems required for the core sector industries of national importance viz., nuclear, defence and various process plants i.e. refineries, petrochemicals, fertilizer etc. L&T is in the forefront of India's march towards globalization.

Hazira Works was established in the year 1987. During the initial years Hazira works lacked infrastructural facilities viz. power, water, roads, communication, housing for staff & workmen, etc. With advent of other major industries like Reliance Petrochemicals and Essar Limited and after declaration of Hazira as a notified area, the situations improved in all fronts gradually over 10 years. Construction of fabrication shops, jetty and installation of major equipment provided a boost to the working capacity of Hazira works.

Today L & T has 65,000 m² of modern heavy shops and 3,00,000 m² of open fabrication facilities coupled with private jetties/load out facilities, modern offices, training centers, canteens and other industrial utilities backed by a qualified and experienced team of workmen, engineers and managers developed over last 20 years.

From the past four decades, this division has been active in design, engineering and manufacturing of critical high-tech plant and equipment for the core sectors such as Steel & Cement, Fertilizers, Oil & Gas, Petrochemicals & Refinery Equipment, Nuclear Power, Aerospace and Defense.

In view of overall and general good economic situation L&T Ltd. has taken NOC, CRZ Clearance from the concerned department for "**Construction of Outfitting Jetty**".

The outfitting jetty is exclusively utilized for conducting small-scale operations, such as the maintenance and repairs of interceptor boats belonging to the Indian Coast Guard, which are berthed at the jetty site.

The Gujarat SCZMA has recommended the project vide letter no. ENV-10-2010-180-E dated 11/05/2012 and CRZ clearance has been obtained from MoEF&CC, New Delhi for the vide letter no. File. No. 11-53-2012-IA-III dated 15/01/2013. The study has been carried out to comply with the CRZ condition and environment legislation for submission of six-monthly compliance report for the same.

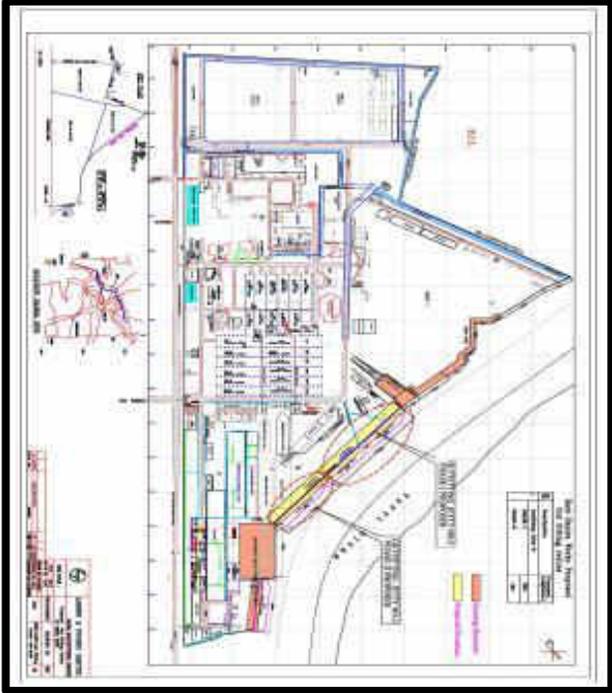


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LARSEN & TOUBRO LIMITED (OUTFITTING JETTY)
Six Monthly CRZ Compliance Report (October 2024 to March 2025)

DATA SHEET

1.	Project type: River-Valley / Mining / Industry / Thermal / Nuclear, Other (specify)	:	Construction of Outfitting jetty.
2.	Name of the project	:	Larsen and Toubro Limited
3.	Clearance letter (s) O M No and date	:	11-53/2012-IA-III dated 15/01/2013
4.	Location		
	a. District	:	Surat
	b. State	:	Gujarat
	c. Latitude / Longitude	:	Latitude: 21°09'31.99"N Longitude:72°39'57.96"E
			
5.	Address for correspondence		
	a. Address of concerned project Chief engineer (with pin code & telephone / telex/fax	:	Mahesh Joshi Head - Central Services LARSEN & TOUBRO LIMITED,



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LARSEN & TOUBRO LIMITED (OUTFITTING JETTY)
Six Monthly CRZ Compliance Report (October 2024 to March 2025)

	number)		A.M. Naik Heavy Engineering Complex, Post Batha, Surat -394 510, Telephone:0261-2807642 E-mail-mahesh.Joshi@larsentoubro.com																																
	b. Address of Executive project engineer /Manager (with pin code /fax numbers)	:	As Above																																
6.	Salient features																																		
	a. of the project	:	<table border="1"> <thead> <tr> <th>Sr. No</th> <th>Particulars</th> <th>Name</th> <th>Aerial Distance from the project site</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Nearest Village</td> <td>Mora</td> <td>@ 2.42 km in NW direction</td> </tr> <tr> <td>2.</td> <td>Nearest Town/city</td> <td>Surat</td> <td>@ 17.50 km in E direction</td> </tr> <tr> <td>3.</td> <td>Nearest National Highway</td> <td>NH-6</td> <td>@ 0.55 km in NW direction</td> </tr> <tr> <td>4.</td> <td>Nearest State Highway</td> <td>SH-66</td> <td>@ 7.94 km in SE direction</td> </tr> <tr> <td>5.</td> <td>Nearest Railway Station</td> <td>Surat</td> <td>@ 20.00 km in NE direction</td> </tr> <tr> <td>6.</td> <td>Nearest Airport</td> <td>Surat</td> <td>@ 10.50 km in SE direction.</td> </tr> <tr> <td>7.</td> <td>River</td> <td>Tapi</td> <td>@ 0.15 km in SE direction.</td> </tr> </tbody> </table>	Sr. No	Particulars	Name	Aerial Distance from the project site	1.	Nearest Village	Mora	@ 2.42 km in NW direction	2.	Nearest Town/city	Surat	@ 17.50 km in E direction	3.	Nearest National Highway	NH-6	@ 0.55 km in NW direction	4.	Nearest State Highway	SH-66	@ 7.94 km in SE direction	5.	Nearest Railway Station	Surat	@ 20.00 km in NE direction	6.	Nearest Airport	Surat	@ 10.50 km in SE direction.	7.	River	Tapi	@ 0.15 km in SE direction.
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	b. of the environmental management plans.	:	Adequate environmental safeguards have been incorporated in EMP which was submitted to the Ministry during grant of the CRZ.																																
7.	Breakup of the project area	:	1.17 Hectare																																
	a. Submergence area: forest & non-forest	:	NIL																																
	b. Others	:	NIL																																



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8.	Breakup of the project affected population with enumeration of those losing houses/dwelling units only agriculture land only, both dwelling units and agricultural land & landless laborers / artisan.																				
	a. SC.ST / Adivasis	:	NIL																		
	b. Others	:	NIL																		
9.	Financial details																				
	a. Project cost as originally planned & subsequent revised estimates and the year of price reference.	:	Proposed: Rs. 58 Crores Actual Capital Investment: 80.62 Crores																		
	b. Allocation made for environmental management plans with item-wise & year wise break up	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">Sr. No</th> <th style="width: 65%;">Particulars</th> <th style="width: 30%;">Lakhs/Annum</th> </tr> <tr> <td></td> <td></td> <th style="text-align: center;">For the year 2024-25</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>Air Pollution Control</td> <td rowspan="4" style="text-align: center; vertical-align: middle;">5.00</td> </tr> <tr> <td style="text-align: center;">2.</td> <td>Water Pollution Control</td> </tr> <tr> <td style="text-align: center;">3.</td> <td>Noise Abatement</td> </tr> <tr> <td style="text-align: center;">4.</td> <td>Miscellaneous</td> </tr> <tr> <td colspan="2" style="text-align: center;">Total</td> <td style="text-align: center;">5.00</td> </tr> </tbody> </table>	Sr. No	Particulars	Lakhs/Annum			For the year 2024-25	1.	Air Pollution Control	5.00	2.	Water Pollution Control	3.	Noise Abatement	4.	Miscellaneous	Total		5.00
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1.	Air Pollution Control	5.00																			
2.	Water Pollution Control																				
3.	Noise Abatement																				
4.	Miscellaneous																				
Total		5.00																			
10.	Forest Land requirement		NOT APPLICABLE																		
	a. The status of approval for diversion of forest land and non-forestry use	:																			
	b. The status of clearing falling	:																			



LARSEN & TOUBRO LIMITED (OUTFITTING JETTY)
Six Monthly CRZ Compliance Report (October 2024 to March 2025)

	c. The status of compensatory afforestation, if any	:	
	d. Comments on the viability and sustainability of compensatory afforestation Program in the light of actual field experience so far	:	
11.	The status of clear falling in non-areas (much as submergence area of reservoir, approach roads), if any with quantitative information	:	NOT APPLICABLE
12.	The status of construction	:	
	a. Date of commencement (actual and / or planned)	:	Sep'2011
	b. Date of completion (actual) and/or planned	:	Aug' 2013
13.	Reasons for the delay if the project is yet to start	:	NOT APPLICABLE
14.	Dates of site visits	:	
	a. The dates on which the project was monitored by the Regional office on previous occasion, if any	:	GPCB RO visit has not been done in during this period of October 2024 to March 2025
	b. Date of site visit for this monitoring report	:	Dates of sampling are mentioned in respective analysis report.
15.	Details of correspondence with project authorities for obtaining act on plans / information on status of compliance to safeguards other than the routine letters for logistic	:	Last six-monthly compliance report for the period of January 2024 to September 2024 was submitted in December 2024 to RO, MOEFCC Bhopal.



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<p>support for site visits (The first manufacturing report may contain the details of all the letters issued so far, but the letter reports may cover only the letters issued subsequently)</p>	
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COASTAL REGULATION ZONE (CRZ) CLEARANCE BY MoEFCC

No. 11-53/2012-IA-III dated: 15/01/2013



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F. No. 11-53/2012-IA-III
Government of India
Ministry of Environment & Forests

Room No. 143,
Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi - 110 003.

Dated: 15th January, 2013

To
M/s Larson and Toubro Limited,
L&T House, Ballard Estate, P.O. Box 278,
Mumbai - 400 001, Maharashtra

Subject: CRZ Clearance for construction of outfitting Jetty at Hazira Manufacturing Complex, Surat, Gujarat by M/s Larson and Toubro Limited - Reg.

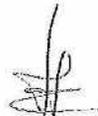
This has reference to the letter no. No. ENV-10-2010-180-E dated 11.05.2012 from Director (Environment) & Additional Secretary, Govt. of Gujarat forwarding the above proposal for prior CRZ Clearance under the CRZ Notification, 2011. The proposal has been appraised as per prescribed procedure in the light of provisions under the CRZ Notification, 2011 on the basis of the mandatory documents enclosed with the application viz., the Questionnaire, demarcation of HTL, recommendation of Gujarat Coastal Zone Management Authority and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the competent authority in its meetings held on 9th -10th July, 2012 and 19th - 21st September, 2012.

2. It is inter-alia noted that the proposal involves development of Outfitting Jetty at Hazira Manufacturing complex, Surat. Larsen & Toubro (L&T) is a USD 12.8 billion technology, engineering, construction, manufacturing and financial services conglomerate, with global operations. The proposed Outfitting Jetty will be used for berthing of new vessels manufactured in Hazira. The outfitting of these vessels will be carried out while these are berthed at the Jetty before sea trials. Subsequently, this facility will be used for dispatch of the fabricated equipment/vessels, etc. It is also used for outfitting works of ships such as piping, electrical, engineering equipment, accommodation, deck equipment. The total power requirement with DGVCL is 1500 KVA. The total water required for domestic & construction activity is 4.0 KLD. The Sewage generated (i.e. 1 KLD) after domestic use will be treated in the STP of the existing facility of L&T HZMC.

The size of the Outfitting Jetty is as follow:

Sr. No.	Particular	Dimension of Jetty
1	Length (m)	450
2	Width (m)	26
3	Height (m)	15
4	Area (Sq.m)	11700

1



3. The Gujarat SCZMA has recommended the project vide letter No. ENV-10-2010-180-E dated 11.05.2012.

4. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of CRZ Clearance for the project. Accordingly, the Ministry hereby accord necessary CRZ Clearance for the above project as per the provisions of CRZ Notification, 2011 subject to strict compliance of the terms and conditions as follows:

5. Specific Conditions:

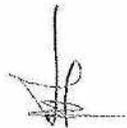
- (i) "Consent for Establishment" shall be obtained from State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.
- (ii) Only outfitting of ships - which includes piping, electrical, engineering equipment, accommodation, deck equipment shall be carried out at the proposed facility.
- (iii) Project proponent shall use only precast material for construction purposes.
- (iv) There shall be no painting and sand blasting activities.
- (v) All conditions stipulated by Gujarat Coastal Zone Management Authority vide letter No. ENV-10-2010-180-E dated 11.05.2012 shall be strictly complied with.
- (vi) No ground water shall be tapped within the CRZ area.
- (vii) There shall be no disposal of solid or liquid wastes on coastal area. Solid waste Management shall be as per Municipal Solid (Management and Handling) Rules, 2000.
- (viii) There shall be no disposal of wastes in CRZ area.
- (ix) EMP/DMP shall be updated taking into the consideration of natural calamity including OM on Tsunami and submitted.
- (x) No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (xi) It shall be ensured that the project does not lead to any shoreline changes. Periodic monitoring shall be carried out to assess the shoreline changes.



- (xii) The wastewater generated shall be treated and reused. There shall be no disposal into sea or creek.
- (xiii) Green belt with appropriate species shall be developed within the project site.
- (xiv) The site shall be kept free from pollution by providing suitable drainage system.
- (xv) The project proponent shall provide adequate funds in the Environment Management Plan of the project.
- (xvi) It shall be ensured that the fishing/fisherman communities shall not be disturbed during operation of the project.

6. General Conditions:

- (i) The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/ local administration, meticulously conforming to the existing local and Central rules and regulations including the provisions of Coastal Regulation Zone Notification, 2011 and the approved Coastal Zone Management Plan of Gujarat.
- (ii) A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bhopal regarding the implementation of the stipulated conditions.
- (iii) Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.
- (iv) The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.
- (v) In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment and Forests.
- (vi) The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
- (vii) A copy of the clearance letter shall be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/



representation has been made received while processing the proposal.

- (viii) State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Center and Collector's Office/Tehsildar's office for 30 days.

7. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 1994, including the amendments and rules made thereafter.

8. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

9. The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bhopal.

10. This clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

11. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.

12. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

13. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

14. The proponent shall upload the status of compliance of the stipulated Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.



15. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

16. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

(Lalit Kapur)
Director (IA-III)

Copy to:

1. The Principal Secretary, Department of Forests & Environment and Chairman, GCZMA, Govt. of Gujarat, Sachivalaya, Gandhinagar.
2. The Director, Forests & Environment Department, Govt. of Gujarat, Block No.14, 8th Floor, Sachivalaya, Gandhinagar - 382 010.
3. The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32.
4. The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhinagar-382 010.
5. The Chief Conservator of Forests, Ministry of Environment and Forests, Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No. 3, Ravishankar Nagar, Bhopal-462016 (M.P.)
6. Guard File.
7. Monitoring Cell, MoEF.


(Lalit Kapur)
Director (IA-III)

**COMPLIANCE TO THE CONDITIONS STIPULATED IN COASTAL REGULATION
ZONE CLEARANCE**

No. 11-53/2012-IA-III dated: 15/01/2013



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Sr. No.	Conditions	Compliance status
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A.	Specific Condition	
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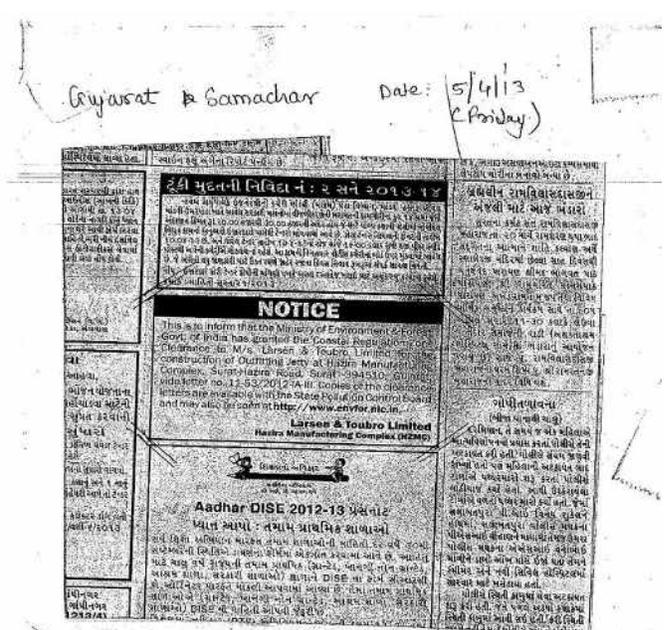
i.	<p>“Consent for Establishment” shall be obtained from State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.</p>	<p>Complied</p> <ul style="list-style-type: none"> L&T has obtained NOC vide order No. GPCB/CTE/SRT-2361/ID-30581/90325 dated 29/08/2011. <div data-bbox="915 491 1403 1142" data-label="Image"> </div> <ul style="list-style-type: none"> L&T has also obtained CC&A Renewal vide order No. AW-131200 dated 26/12/2023. <div data-bbox="886 1272 1403 1923" data-label="Image"> </div>
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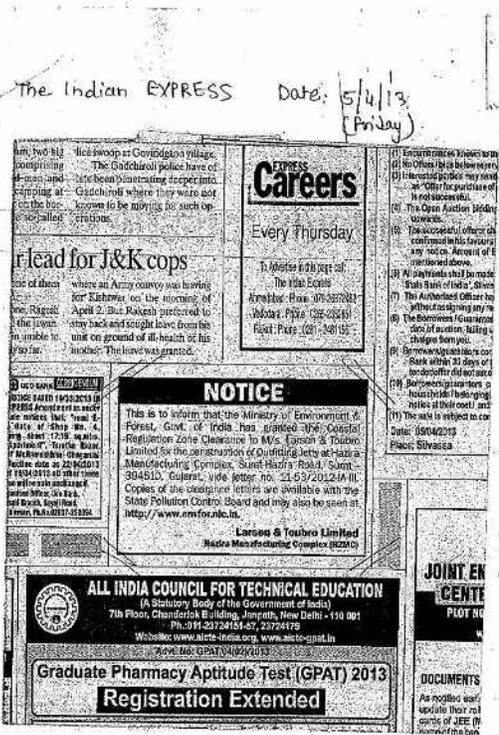
Sr. No.	Conditions	Compliance status
ii.	Only outfitting of ships – which include piping, electrical, engineering equipment, accommodation, deck equipment shall be carried out at the proposed facility.	<p>Complied</p> <ul style="list-style-type: none"> • Facility is used only for conducting small-scale operations, such as the maintenance and repairs of interceptor boats belonging to the Indian Coast Guard, which are berthed at the jetty site.
iii.	Project proponent shall use only precast material for construction purposes.	<p>Complied</p> <ul style="list-style-type: none"> • Only precast materials have been used for construction purpose.
iv.	There shall be no painting and sand blasting activities.	<p>Complied</p> <ul style="list-style-type: none"> • No painting or sand blasting activities is being carried out at project site.
v.	All the conditions stipulated by the Environment Department, Government of Gujarat vide their letter No. ENV-10-2010-180-E dated 11.05.2012 should be strictly complied with.	<p>Complied</p> <ul style="list-style-type: none"> • All the conditions stipulated in letter No. ENV-10-2010-180-E dated 11.05.2012 are strictly complied.
vi.	No ground water shall be tapped within the CRZ area.	<p>Complied</p> <ul style="list-style-type: none"> • Company has not tapped ground water within the CRZ area.
vii.	There shall be no disposal of solid or liquid wastes on coastal area. Solid waste Management shall be as per Municipal Solid (Management and Handling) Rules, 2000.	<p>Complied</p> <ul style="list-style-type: none"> • No solid or liquid wastes are disposed on coastal area. • Solid waste is disposed as per Municipal Solid (Management and Handling) Rules, 2016.
viii.	There shall be no disposal of wastes in CRZ area.	<p>Complied</p> <ul style="list-style-type: none"> • No solid or liquid wastes are disposed on coastal area. • There is no disposal of wastes in CRZ area.
ix.	EMP/DMP shall be updated taking into the consideration of natural calamity including OM on Tsunami and submitted.	<p>Complied</p> <ul style="list-style-type: none"> • EMP/DMP is updated regularly taking into the consideration of natural calamity including OM on Tsunami and has been submitted.

Sr. No.	Conditions	Compliance status															
x.	No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone Area.	Complied <ul style="list-style-type: none"> No construction works other than those permitted in Coastal Regulation Zone Notification has been carried out in Coastal Regulation Zone Area. 															
xi.	It shall be ensured that the project does not lead to any shoreline changes. Periodic monitoring shall be carried out to assess the shoreline changes.	Noted & Agreed <ul style="list-style-type: none"> All the necessary measures are taken that project does not lead to any shoreline changes. Periodic monitoring is carried out regularly to assess the shoreline changes. 															
xii.	The wastewater generated shall be treated and reused. There shall be no disposal into sea or creek.	Complied <ul style="list-style-type: none"> There is no wastewater generation from Industrial process and as well as domestic sewage. 															
xiii.	Green belt with appropriate species shall be developed within the project site.	Complied <ul style="list-style-type: none"> Company has developed adequate greenbelt area within the project site. 															
xiv.	The site shall be kept free from pollution by providing suitable drainage system.	Complied <ul style="list-style-type: none"> Company has already provided drainage system for efficient management of storm water with adequate capacity to prevent over flooding during heavy rains. 															
xv.	The project proponent shall provide adequate funds in the Environmental Management Plan of the project.	Complied <table border="1" data-bbox="800 1304 1482 1755"> <thead> <tr> <th data-bbox="800 1304 927 1421">Sr. No.</th> <th data-bbox="927 1304 1258 1421">Particulars</th> <th data-bbox="1258 1304 1482 1421">Cost (Lakhs/Annum)</th> </tr> </thead> <tbody> <tr> <td data-bbox="800 1421 927 1488">1.</td> <td data-bbox="927 1421 1258 1488">Air Pollution Control</td> <td data-bbox="1258 1421 1482 1488" rowspan="4" style="text-align: center; vertical-align: middle;">5.0</td> </tr> <tr> <td data-bbox="800 1488 927 1556">2.</td> <td data-bbox="927 1488 1258 1556">Water Pollution Control</td> </tr> <tr> <td data-bbox="800 1556 927 1623">3.</td> <td data-bbox="927 1556 1258 1623">Noise Abatement</td> </tr> <tr> <td data-bbox="800 1623 927 1690">4.</td> <td data-bbox="927 1623 1258 1690">Miscellaneous</td> </tr> <tr> <td colspan="2" data-bbox="800 1690 1258 1755" style="text-align: center;">Total</td> <td data-bbox="1258 1690 1482 1755" style="text-align: center;">5.00</td> </tr> </tbody> </table>	Sr. No.	Particulars	Cost (Lakhs/Annum)	1.	Air Pollution Control	5.0	2.	Water Pollution Control	3.	Noise Abatement	4.	Miscellaneous	Total		5.00
Sr. No.	Particulars	Cost (Lakhs/Annum)															
1.	Air Pollution Control	5.0															
2.	Water Pollution Control																
3.	Noise Abatement																
4.	Miscellaneous																
Total		5.00															
xvi.	It shall be ensured that the fishing/ fisherman communities shall not be disturbed during operation of the project.	Complied <ul style="list-style-type: none"> There is no fishing activity near the project area. 															

Sr. No.	Conditions	Compliance status
B.	General Conditions	
i.	The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/ local administration, meticulously conforming to the existing local and Central rules and regulations including the provisions of Coastal Regulation Zone Notification, 2011 and the approved Coastal Zone Management Plan of Gujarat.	<p>Complied</p> <ul style="list-style-type: none"> • The said facility has been constructed conforming to the existing central/ local rules and regulations.
ii.	A six-monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bhopal regarding the implementation of the stipulated conditions.	<p>Complied</p> <ul style="list-style-type: none"> • Six monthly compliance report along with monitoring data are regularly submitted to the Environment Department, Government of Gujarat and Regional office, Bhopal.
iii.	Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.	<p>Noted & Agreed</p> <ul style="list-style-type: none"> • Company will comply with the condition to be stipulated subsequently by the MoEF&CC or any other competent authority, if necessary in the interest of environment.
iv.	The ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry	<p>Noted & Agreed.</p>
v.	In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment and Forests.	<p>Agreed</p> <ul style="list-style-type: none"> • In the event of a change in the project, company will make a fresh-reference to the MoEF&CC for modification in the clearance conditions.
vi.	The project proponents shall inform the Regional Office as well as the Ministry,	<p>Agreed</p> <ul style="list-style-type: none"> • We will do the needful when required.

Sr. No.	Conditions	Compliance status
	the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.	
vii.	A copy of the clearance letter will be marked to the concerned Panchayat/ local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.	<p>Complied</p> <ul style="list-style-type: none"> • Copy of clearance was marked to NGO/ Gram Panchayat. No suggestion received yet from Panchayat/local NGO, we will do as and when required.
viii.	State Pollution Control board shall, display copy of the clearance letter at the Regional Office, District Industries Centre and Collector's office/Tehsildar's office for 30 days.	<p>Complied</p> <ul style="list-style-type: none"> • GPCB has displayed a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's office/Tehsildar's office for 30 days.
C.	General Point	
1.	These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 1994, including the amendments and rules made thereafter.	Noted & Agreed.
2.	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	Not Applicable

Sr. No.	Conditions	Compliance status
3.	<p>The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry of Bhopal.</p>	<p>Complied</p> <ul style="list-style-type: none"> Information on Environmental Clearance for new projects was advertised in two local newspapers as detailed below and also sent to Regional Office, GPCB. <ol style="list-style-type: none"> 1. Gujarat Samachar - 05/04/2013 2. Indian Express – 05/04/2013 

Sr. No.	Conditions	Compliance status
		
4.	This clearance of subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.	Noted & Agreed.
5.	Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.	Noted.
6.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/ Municipal Corporation, Urban Local Body and Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on	Noted. <ul style="list-style-type: none"> • Copy of clearance was marked to Panchayat/ local NGO and no suggestion received yet from Panchayat/ local NGO, we will do as and when required.

Sr. No.	Conditions	Compliance status																																																																							
	website of the company by the proponent.																																																																								
7.	Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Agreed.																																																																							
8.	The proponent shall upload the status of compliance of the stipulated Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	<p>Noted & Agreed.</p> <ul style="list-style-type: none"> Monthly Environmental monitoring has been done by NABL and MoEF&CC approved laboratory and the reports have been attached in Annexures. Monthly ambient air monitoring has been carried out and summary of the same is attached as under. Analysis reports of the ambient air monitoring are attached as Annexure-1. <table border="1" data-bbox="776 1041 1503 1367"> <thead> <tr> <th colspan="2">LOCATION</th> <th>PM_{2.5} (µg/m³)</th> <th>PM₁₀ (µg/m³)</th> <th>SO₂ (µg/m³)</th> <th>NO_x (µg/m³)</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Near Main Gate</td> <td>Min</td> <td>32.9</td> <td>68.2</td> <td>13.9</td> <td>21</td> </tr> <tr> <td>Max</td> <td>39.5</td> <td>75.1</td> <td>18.1</td> <td>26.5</td> </tr> <tr> <td rowspan="2">Jetty2</td> <td>Min</td> <td>29.6</td> <td>70</td> <td>11.2</td> <td>19.2</td> </tr> <tr> <td>Max</td> <td>37.9</td> <td>73.1</td> <td>19.1</td> <td>26.5</td> </tr> <tr> <td rowspan="2">Shop 1</td> <td>Min</td> <td>31.4</td> <td>65.2</td> <td>13.5</td> <td>20</td> </tr> <tr> <td>Max</td> <td>38.2</td> <td>73.6</td> <td>19.9</td> <td>24.8</td> </tr> <tr> <td rowspan="2">Jetty 1</td> <td>Min</td> <td>31</td> <td>67.1</td> <td>13</td> <td>20.1</td> </tr> <tr> <td>Max</td> <td>36.6</td> <td>71.7</td> <td>18.7</td> <td>23.4</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Overall ambient noise level was found in the range of 60 – 74 dB (A) in day time and 52 – 70 dB (A) in night time. During day time & night time, all results were well within the prescribed limit. Noise level monitoring reports are attached as Annexure-2 and summary of the same is tabulated as below. <table border="1" data-bbox="776 1703 1503 1919"> <thead> <tr> <th colspan="2">Location</th> <th></th> <th>Day Time dB(A)</th> <th>Night Time dB(A)</th> </tr> </thead> <tbody> <tr> <td rowspan="2">MC Shop</td> <td rowspan="2">0.5 m</td> <td>Min</td> <td>66</td> <td>56</td> </tr> <tr> <td>Max</td> <td>73</td> <td>67</td> </tr> <tr> <td rowspan="2">Nr. ADM Building</td> <td rowspan="2">10 m</td> <td>Min</td> <td>56</td> <td>54</td> </tr> <tr> <td>Max</td> <td>68</td> <td>60</td> </tr> </tbody> </table>	LOCATION		PM _{2.5} (µg/m ³)	PM ₁₀ (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	Near Main Gate	Min	32.9	68.2	13.9	21	Max	39.5	75.1	18.1	26.5	Jetty2	Min	29.6	70	11.2	19.2	Max	37.9	73.1	19.1	26.5	Shop 1	Min	31.4	65.2	13.5	20	Max	38.2	73.6	19.9	24.8	Jetty 1	Min	31	67.1	13	20.1	Max	36.6	71.7	18.7	23.4	Location			Day Time dB(A)	Night Time dB(A)	MC Shop	0.5 m	Min	66	56	Max	73	67	Nr. ADM Building	10 m	Min	56	54	Max	68	60
LOCATION		PM _{2.5} (µg/m ³)	PM ₁₀ (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)																																																																				
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Sr. No.	Conditions	Compliance status				
		Nr. Jetty 2	10 m	Min	69	60
				Max	73	68
		Nr. Jetty 1	5 m	Min	70	63
				Max	74	69
		Nr. Ware House (Paint)	0.5 m	Min	65	61
				Max	72	64
		Nr. STP	5 m	Min	61	53
				Max	73	68
		Nr. Canteen	0.5 m	Min	60	54
				Max	68	58
		Nr. Gate 2	5 m	Min	68	55
				Max	73	67
		Nr. SHBD Shop -1	1 m	Min	70	62
				Max	74	69
9.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	<p>Complied</p> <ul style="list-style-type: none"> Six monthly compliance report along with monitoring data are regularly submitted to the Environment Department, Government of Gujarat and Regional office, Bhopal. 				
10.	The environmental statement for each financial year ending 31 st March in Form-V as in mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	<p>Complied</p> <ul style="list-style-type: none"> Environmental statement for each financial year in Form – V is being submitted to GPCB and uploaded on GPCB XGN portal. 				

SUMMARY

L&T has 65,000 m² of modern heavy shops and 3,00,000 m² of open fabrication facilities coupled with private jetties/load out facilities, modern offices, training centers, canteens and other industrial utilities at Hazira backed by a qualified and experienced team of workmen, engineers and managers developed over last 20 years.

L&T has obtained NOC, CC&A & CRZ Clearance from the concerned department for Construction of Outfitting Jetty. The Outfitting jetty is used for berthing of new vessels manufactured in Hazira. The outfitting of these vessels is carried out while these are berthed at jetty before sea trials. Subsequently, this facility is used for dispatch of the fabricated equipment/vessels, etc. it is also used for outfitting works of ships such as piping, electrical, engineering equipment, accommodation, deck equipment.

The industry has awarded contract for the Environmental monitoring and preparation of six monthly CRZ compliance report to Ecosystem Resource Management Pvt. Ltd. The consultancy firm has its own well-equipped laboratory to measure the pollution parameters related to Environmental Monitoring (Air, Water, Wastewater, Soil) with National Accreditation Board for Testing and Calibration Laboratories (NABL) accreditation & approved by MoEF&CC. All monitoring equipment's are available to measure Stack emissions, Ambient Air quality and noise level of various plants.

Six monthly compliance report along with monitoring data are regularly submitted to the concerned department and during monitoring period of this report, RO visit was not undertaken during this period.

All the conditions stipulated in CRZ clearance were compiled by the project proponent during construction phase as well as operation phase.

MEMBERS ASSOCIATED WITH REPORT

Project Proponent

Mahesh Joshi

Head - Central Services

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E-mail – Mahesh.Joshi@larsentoubro.com

Team Leader

Mrs. Rekha Shah (Director – Ecosystem Resource Management Pvt. Ltd.)

Team Members (ERM):

Environmental Monitoring & : Team Leader – Mr. Krishna Patel
Data Collection : Team Members – Mr. Divyang Goswami
Sample Analysis : Lab. In charge – Mr. Sunil Kumar Pandey
Chemist – Mr. Bharat Patel
Report Prepared By : Mr. Divyang Goswami
Report Checked By : Mr. Rajat Gondaliya
Report Approved By : Mrs. Rekha Shah

MONITORING & ANALYSIS REPORTS

Annexure - 1. Ambient Air Quality Monitoring Reports



TEST REPORT
AMBIENT AIR QUALITY MONITORING REPORT
TEST REPORT NO:QF/7.8/01 B/AMBIENT/L&T/Rev.0-00/10-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Ambient Air Quality Monitoring
Sample Collected On	: 02/10/2024
Sample Received on	: 03/10/2024
Sample Analyzed& Completion	: 03/10/2024 & 04/10/2024
Quantity/No. of Sample	: 1-1 no. of filter paper for PM ₁₀ & PM _{2.5} , approx. 25 ml exposed scrubbing media for SO ₂ and NO ₂ in 1-1 no. of polyethylene bottle (each locations)/16 Nos.
Packing/ Seal	: Packed
Protocol (Purpose)	: As per work order
Height from Ground Level (m)	: 3.0
Average Wind speed (Km/hr)	: 8.0
Average Temperature (°C)	: 31.0
Average Humidity (%)	: 72.0
Dominant wind direction	: SW
Sampling Procedure	: As per Test method given for the following parameters & instrument manual
Sample Collected By	: ERM Team

Sr. No.	Location	Parameters			
		Fine Particulate Matter (PM _{2.5}) µg/m ³	RSPM (PM ₁₀) µg/m ³	Sulphur Dioxide (SO ₂) µg/m ³	Oxides of Nitrogen (NO ₂) µg/m ³
1.	Near Main Gate	36.2	72.6	15.9	21.5
2.	Jetty 2	33.8	70.1	13.0	19.2
3.	Shop 1	35.0	65.2	13.5	20.0
4.	Jetty 1	31.9	69.9	16.1	21.8
GPCB Limit		60	100	80	80
Test Method		IS 5182 (Part 24):2019	IS 5182 (Part 23) : 2006	IS 5182 (Part 2) : 2001	IS 5182 (Part 6) :2006

Note: (1) These results relate to the sample tested only.

(2) The report shall not be reproduced except in full without written approval of the laboratory.

CHEMIST

AUTHORIZED SIGNATORY
(Haresh Ahir)



Issue Date: 02/12/2024

TEST REPORT
AMBIENT AIR QUALITY MONITORING REPORT
TEST REPORT NO:QF/7.8/01 B/AMBIENT/L&T/Rev.0-00/11-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Ambient Air Quality Monitoring
Sample Collected On	: 07/11/2024
Sample Received on	: 08/11/2024
Sample Analyzed & Completion	: 08/11/2024 & 09/11/2024
Quantity/No. of Sample	: 1-1 no. of filter paper for PM ₁₀ & PM _{2.5} , approx. 25 ml exposed scrubbing media for SO ₂ and NO ₂ in 1-1 no. of polyethylene bottle (each locations)/16 Nos.
Packing/ Seal	: Packed
Protocol (Purpose)	: As per work order
Height from Ground Level (m)	: 3.0
Average Wind speed (Km/hr)	: 3.8
Average Temperature (°C)	: 29.0
Average Humidity (%)	: 49.0
Dominant wind direction	: N
Sampling Procedure	: As per Test method given for the following parameters & instrument manual
Sample Collected By	: ERM Team

Sr. No.	Location	Parameters			
		Fine Particulate Matter (PM _{2.5}) µg/m ³	RSPM (PM ₁₀) µg/m ³	Sulphur Dioxide (SO ₂) µg/m ³	Oxides of Nitrogen (NO ₂) µg/m ³
1.	Near Main Gate	32.9	75.1	13.9	21.0
2.	Jetty 2	29.6	70.9	11.2	19.6
3.	Shop 1	31.4	69.3	14.5	22.2
4.	Jetty 1	33.0	67.5	13.0	20.1
GPCB Limit		60	100	80	80
Test Method		IS 5182 (Part 24):2019	IS 5182 (Part 23) : 2006	IS 5182 (Part 2) : 2001	IS 5182 (Part 6) :2006

Note: (1) These results relate to the sample tested only.

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(Haresh Ahir)



Issue Date: 01/01/2025

TEST REPORT
AMBIENT AIR QUALITY MONITORING REPORT
TEST REPORT NO:QF/7.8/01 B/AMBIENT/L&T/Rev.0-00/12-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Ambient Air Quality Monitoring
Sample Collected On	: 04/12/2024
Sample Received on	: 05/12/2024
Sample Analyzed & Completion	: 05/12/2024 & 06/12/2024
Quantity/No. of Sample	: 1-1 no. of filter paper for PM ₁₀ & PM _{2.5} , approx. 25 ml exposed scrubbing media for SO ₂ and NO ₂ in 1-1 no. of polyethylene bottle (each locations)/16 Nos.
Packing/ Seal	: Packed
Protocol (Purpose)	: As per work order
Height from Ground Level (m)	: 3.0
Average Wind speed (Km/hr)	: 14.3
Average Temperature (°C)	: 25.0
Average Humidity (%)	: 44.0
Dominant wind direction	: NNE
Sampling Procedure	: As per Test method given for the following parameters & instrument manual
Sample Collected By	: ERM Team

Sr. No.	Location	Parameters			
		Fine Particulate Matter (PM _{2.5}) µg/m ³	RSPM (PM ₁₀) µg/m ³	Sulphur Dioxide (SO ₂) µg/m ³	Oxides of Nitrogen (NO ₂) µg/m ³
1.	Near Main Gate	37.8	75.1	16.3	23.1
2.	Jetty 2	33.1	70.9	19.1	26.5
3.	Shop 1	35.3	73.6	15.5	20.2
4.	Jetty 1	31.0	71.7	17.9	22.9
GPCB Limit		60	100	80	80
Test Method		IS 5182 (Part 24):2019	IS 5182 (Part 23) : 2006	IS 5182 (Part 2) : 2001	IS 5182 (Part 6) :2006

Note: (1) These results relate to the sample tested only.

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CHEMIST

AUTHORIZED SIGNATORY
(Haresh Ahir)



Issue Date: 01/02/2025

TEST REPORT
AMBIENT AIR QUALITY MONITORING REPORT
TEST REPORT NO:QF/7.8/01 B/AMBIENT/L&T/Rev.0-00/01-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Ambient Air Quality Monitoring
Sample Collected On	: 02/01/2025
Sample Received on	: 03/01/2025
Sample Analyzed & Completion	: 03/01/2025 & 04/01/2025
Quantity/No. of Sample	: 1-1 no. of filter paper for PM ₁₀ & PM _{2.5} , approx. 25 ml exposed scrubbing media for SO ₂ and NO ₂ in 1-1 no. of polyethylene bottle (each locations)/16 Nos.
Packing/ Seal	: Packed
Protocol (Purpose)	: As per work order
Height from Ground Level (m)	: 3.0
Average Wind speed (Km/hr)	: 11.3
Average Temperature (°C)	: 22.0
Average Humidity (%)	: 56.0
Dominant wind direction	: NE
Sampling Procedure	: As per Test method given for the following parameters & instrument manual
Sample Collected By	: ERM Team

Sr. No.	Location	Parameters			
		Fine Particulate Matter (PM _{2.5}) µg/m ³	RSPM (PM ₁₀) µg/m ³	Sulphur Dioxide (SO ₂) µg/m ³	Oxides of Nitrogen (NO ₂) µg/m ³
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Test Method		IS 5182 (Part 24):2019	IS 5182 (Part 23) : 2006	IS 5182 (Part 2) : 2001	IS 5182 (Part 6) :2006

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CHEMIST

AUTHORIZED SIGNATORY
(Haresh Ahir)



Issue Date: 01/03/2025

TEST REPORT
AMBIENT AIR QUALITY MONITORING REPORT
TEST REPORT NO:QF/7.8/01 B/AMBIENT/L&T/Rev.0-00/02-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Ambient Air Quality Monitoring
Sample Collected On	: 03/02/2025
Sample Received on	: 04/02/2025
Sample Analyzed & Completion	: 04/02/2025 & 05/02/2025
Quantity/No. of Sample	: 1-1 no. of filter paper for PM ₁₀ & PM _{2.5} , approx. 25 ml exposed scrubbing media for SO ₂ and NO ₂ in 1-1 no. of polyethylene bottle (each locations)/16 Nos.
Packing/ Seal	: Packed
Protocol (Purpose)	: As per work order
Height from Ground Level (m)	: 3.0
Average Wind speed (Km/hr)	: 5.3
Average Temperature (°C)	: 23.0
Average Humidity (%)	: 52.0
Dominant wind direction	: N
Sampling Procedure	: As per Test method given for the following parameters & instrument manual
Sample Collected By	: ERM Team

Sr. No.	Location	Parameters			
		Fine Particulate Matter (PM _{2.5}) µg/m ³	RSPM (PM ₁₀) µg/m ³	Sulphur Dioxide (SO ₂) µg/m ³	Oxides of Nitrogen (NO ₂) µg/m ³
1.	Near Main Gate	39.5	70.9	18.1	26.5
2.	Jetty 2	37.9	73.1	15.3	22.3
3.	Shop 1	38.2	72.5	19.9	24.8
4.	Jetty 1	35.8	70.3	16.6	23.4
GPCB Limit		60	100	80	80
Test Method		IS 5182 (Part 24):2019	IS 5182 (Part 23) : 2006	IS 5182 (Part 2) : 2001	IS 5182 (Part 6) :2006

Note: (1) These results relate to the sample tested only.

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Issue Date: 01/04/2025

TEST REPORT
AMBIENT AIR QUALITY MONITORING REPORT
TEST REPORT NO:QF/7.8/01 B/AMBIENT/L&T/Rev.0-00/03-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Ambient Air Quality Monitoring
Sample Collected On	: 03/03/2025
Sample Received on	: 04/03/2025
Sample Analyzed & Completion	: 04/03/2025 & 05/03/2025
Quantity/No. of Sample	: 1-1 no. of filter paper for PM ₁₀ & PM _{2.5} , approx. 25 ml exposed scrubbing media for SO ₂ and NO ₂ in 1-1 no. of polyethylene bottle (each locations)/16 Nos.
Packing/ Seal	: Packed
Protocol (Purpose)	: As per work order
Height from Ground Level (m)	: 3.0
Average Wind speed (Km/hr)	: 5.8
Average Temperature (°C)	: 27.0
Average Humidity (%)	: 35.0
Dominant wind direction	: W
Sampling Procedure	: As per Test method given for the following parameters & instrument manual
Sample Collected By	: ERM Team

Sr. No.	Location	Parameters			
		Fine Particulate Matter (PM _{2.5}) µg/m ³	RSPM (PM ₁₀) µg/m ³	Sulphur Dioxide (SO ₂) µg/m ³	Oxides of Nitrogen (NO ₂) µg/m ³
1.	Near Main Gate	34.9	68.4	15.2	22.0
2.	Jetty 2	31.0	70.2	12.9	19.4
3.	Shop 1	37.5	72.9	16.0	21.9
4.	Jetty 1	32.8	67.1	13.8	21.2
GPCB Limit		60	100	80	80
Test Method		IS 5182 (Part 24):2019	IS 5182 (Part 23) : 2006	IS 5182 (Part 2) : 2001	IS 5182 (Part 6) :2006

Note: (1) These results relate to the sample tested only.

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Annexure – 2. Noise Level Monitoring Reports



Issue Date: 01/11/2024

TEST REPORT
NOISE LEVEL MONITORING REPORT
TEST REPORT NO:QF/7.8/01 D/NOISE/L&T/Rev.0-00/10-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Noise Level Monitoring
Date of Monitoring	: 17/10/2024
Quantity/No. of Observations	: 9 stations/18 observations
Protocol (Purpose)	: As per Work Order
Sampling Method	: Instrument's Manual & IS 9989 : 1981 Reaffirmed 2020
Noise level monitored by	: ERM Team

Sr. No.	Location	Distance from the source	Day Time	Night Time
			dB (A) 14:00 to 15:00 hr	dB (A) 22:00 to 23:00 hr
1.	MC Shop	0.5 m	67	56
2.	Nr. ADM Building	10 m	56	54
3.	Jetty 2	10 m	69	67
4.	Jetty 1	5 m	71	66
5.	Ware House (Paint)	0.5 m	67	63
6.	STP	5 m	71	64
7.	Canteen	0.5 m	68	54
8.	Gate 2	5 m	69	55
9.	SHBD Shop- I	1 m	70	63
GPCB LIMIT			75	70

Note: (1) These results relate to the measurement taken at a time for particular place.

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Issue Date: 02/12/2024

TEST REPORT
NOISE LEVEL MONITORING REPORT
TEST REPORT NO:QF/7.8/01 D/NOISE/L&T/Rev.0-00/11-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Noise Level Monitoring
Date of Monitoring	: 18/11/2024
Quantity/No. of Observations	: 9 stations/18 observations
Protocol (Purpose)	: As per Work Order
Sampling Method	: Instrument's Manual & IS 9989 : 1981 Reaffirmed 2020
Noise level monitored by	: ERM Team

Sr. No.	Location	Distance from the source	Day Time	Night Time
			dB (A) 14:00 to 15:00 hr	dB (A) 22:00 to 23:00 hr
1.	MC Shop	0.5 m	66	62
2.	Nr. ADM Building	10 m	64	56
3.	Jetty 2	10 m	71	65
4.	Jetty 1	5 m	74	67
5.	Ware House (Paint)	0.5 m	67	62
6.	STP	5 m	73	68
7.	Canteen	0.5 m	68	58
8.	Gate 2	5 m	70	60
9.	SHBD Shop- I	1 m	74	65
GPCB LIMIT			75	70

Note: (1) These results relate to the measurement taken at a time for particular place.

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Issue Date: 01/01/2025

TEST REPORT
NOISE LEVEL MONITORING REPORT
TEST REPORT NO:QF/7.8/01 D/NOISE/L&T/Rev.0-00/12-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Noise Level Monitoring
Date of Monitoring	: 18/12/2024
Quantity/No. of Observations	: 9 stations/18 observations
Protocol (Purpose)	: As per Work Order
Sampling Method	: Instrument's Manual & IS 9989 : 1981 Reaffirmed 2020
Noise level monitored by	: ERM Team

Sr. No.	Location	Distance from the source	Day Time	Night Time
			dB (A) 14:00 to 15:00 hr	dB (A) 22:00 to 23:00 hr
1.	MC Shop	0.5 m	73	67
2.	Nr. ADM Building	10 m	67	58
3.	Jetty 2	10 m	73	65
4.	Jetty 1	5 m	70	63
5.	Ware House (Paint)	0.5 m	72	64
6.	STP	5 m	73	63
7.	Canteen	0.5 m	63	57
8.	Gate 2	5 m	73	61
9.	SHBD Shop- I	1 m	70	62
GPCB LIMIT			75	70

Note: (1) These results relate to the measurement taken at a time for particular place.

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E-mail : eco@ecoshipad.com **Website :** www.ecosystemindia.com



Issue Date: 01/02/2025

TEST REPORT
NOISE LEVEL MONITORING REPORT
TEST REPORT NO:QF/7.8/01 D/NOISE/L&T/Rev.0-00/01-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Noise Level Monitoring
Date of Monitoring	: 15/01/2025
Quantity/No. of Observations	: 9 stations/18 observations
Protocol (Purpose)	: As per Work Order
Sampling Method	: Instrument's Manual & IS 9989 : 1981 Reaffirmed 2020
Noise level monitored by	: ERM Team

Sr. No.	Location	Distance from the source	Day Time	Night Time
			dB (A) 14:00 to 15:00 hr	dB (A) 22:00 to 23:00 hr
1.	MC Shop	0.5 m	72	64
2.	Nr. ADM Building	10 m	68	59
3.	Jetty 2	10 m	73	60
4.	Jetty 1	5 m	71	64
5.	Ware House (Paint)	0.5 m	67	61
6.	STP	5 m	70	63
7.	Canteen	0.5 m	65	58
8.	Gate 2	5 m	69	64
9.	SHBD Shop- I	1 m	71	65
GPCB LIMIT			75	70

Note: (1) These results relate to the measurement taken at a time for particular place.

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Issue Date: 01/03/2025

TEST REPORT
NOISE LEVEL MONITORING REPORT
TEST REPORT NO:QF/7.8/01 D/NOISE/L&T/Rev.0-00/02-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Noise Level Monitoring
Date of Monitoring	: 17/02/2025
Quantity/No. of Observations	: 9 stations/18 observations
Protocol (Purpose)	: As per Work Order
Sampling Method	: Instrument's Manual & IS 9989 : 1981 Reaffirmed 2020
Noise level monitored by	: ERM Team

Sr. No.	Location	Distance from the source	Day Time	Night Time
			dB (A) 14:00 to 15:00 hr	dB (A) 22:00 to 23:00 hr
1.	MC Shop	0.5 m	70	66
2.	Nr. ADM Building	10 m	65	60
3.	Jetty 2	10 m	71	63
4.	Jetty 1	5 m	73	66
5.	Ware House (Paint)	0.5 m	70	64
6.	STP	5 m	66	57
7.	Canteen	0.5 m	60	56
8.	Gate 2	5 m	71	67
9.	SHBD Shop- I	1 m	73	69
GPCB LIMIT			75	70

Note: (1) These results relate to the measurement taken at a time for particular place.

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Issue Date: 01/04/2025

TEST REPORT
NOISE LEVEL MONITORING REPORT
TEST REPORT NO:QF/7.8/01 D/NOISE/L&T/Rev.0-00/03-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Noise Level Monitoring
Date of Monitoring	: 17/03/2025
Quantity/No. of Observations	: 9 stations/18 observations
Protocol (Purpose)	: As per Work Order
Sampling Method	: Instrument's Manual & IS 9989 : 1981 Reaffirmed 2020
Noise level monitored by	: ERM Team

Sr. No.	Location	Distance from the source	Day Time	Night Time
			dB (A) 14:00 to 15:00 hr	dB (A) 22:00 to 23:00 hr
1.	MC Shop	0.5 m	70	61
2.	Nr. ADM Building	10 m	66	59
3.	Jetty 2	10 m	72	68
4.	Jetty 1	5 m	71	69
5.	Ware House (Paint)	0.5 m	65	61
6.	STP	5 m	61	60
7.	Canteen	0.5 m	63	57
8.	Gate 2	5 m	68	62
9.	SHBD Shop- I	1 m	72	65
GPCB LIMIT			75	70

Note: (1) These results relate to the measurement taken at a time for particular place.

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Annexure – 3. Marine Water Sample Analysis Reports



TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/10-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 17/10/2024
Sample Received on	: 18/10/2024
Sample Analyzed & Completion	: 18/10/2024 to 26/10/2024
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	25	24	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	7.79	7.65	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	12	14	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	40	88	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1910	2320	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	68	88	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	423	510	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	152	180	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	9.8	16.3	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	572	685	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.6	0.72	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.31	0.45	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.1	2.2	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.25	0.31	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.07	0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.4	0.5	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.11	0.15	IS 3025 (Part 57): 2021 (Curcumin Method)

Note: (1) These results relate to the sample tested only.

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/10-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 17/10/2024
Sample Received on	: 18/10/2024
Sample Analyzed & Completion	: 18/10/2024 to 26/10/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	580	445	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	80	68	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	12	21	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	6	8	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	2	3	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

Note: (1) These results relate to the sample tested only.

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Issue Date: 01/11/2024

TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/10-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 17/10/2024
Sample Received on	: 18/10/2024
Sample Analyzed & Completion	: 18/10/2024 to 26/10/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	465	380	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	21	19	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	14	22	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	65	59	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

Note: (1) These results relate to the sample tested only.

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/10-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 17/10/2024
Sample Received on	: 18/10/2024
Sample Analyzed & Completion	: 18/10/2024 to 26/10/2024
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	26	25	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	7.81	8.08	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	14	18	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	56	101	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1240	3480	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	116	128	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	231	768	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	150	163	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	12.7	24.6	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	630	686	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.6	0.5	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.3	0.6	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.2	2.2	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.38	0.32	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.06	0.07	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.36	0.39	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.09	0.13	IS 3025 (Part 57): 2021 (Curcumin Method)

Note: (1) These results relate to the sample tested only.

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/10-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 17/10/2024
Sample Received on	: 18/10/2024
Sample Analyzed & Completion	: 18/10/2024 to 26/10/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	530	490	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	70	64	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	17	23	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	9	8	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	4	5	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/10-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 17/10/2024
Sample Received on	: 18/10/2024
Sample Analyzed & Completion	: 18/10/2024 to 26/10/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	560	515	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cyanophyceae	%	27	32	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	28	27	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	45	41	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/10-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 17/10/2024
Sample Received on	: 18/10/2024
Sample Analyzed & Completion	: 18/10/2024 to 26/10/2024
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	26	25	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	8.11	8.19	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	9	12	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	56	95	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1290	3720	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	128	120	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	236	831	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	144	162	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	15.1	27.8	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	630	652	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.4	0.5	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.32	0.38	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.6	3.1	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.27	0.35	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.11	0.09	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.44	0.52	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.1	0.12	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/10-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 17/10/2024
Sample Received on	: 18/10/2024
Sample Analyzed & Completion	: 18/10/2024 to 26/10/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	550	475	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maithi
2	Protozoa	%	71	65	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maithi
3	Rotifera	%	15	20	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maithi
4	Nematoda	%	8	7	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maithi
5	Copepoda	%	6	8	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maithi

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/10-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 17/10/2024
Sample Received on	: 18/10/2024
Sample Analyzed & Completion	: 18/10/2024 to 26/10/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	560	515	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	27	31	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	28	29	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	45	40	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/11-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 18/11/2024
Sample Received on	: 19/11/2024
Sample Analyzed & Completion	: 19/11/2024 to 27/11/2024
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	24	25	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	7.87	8.01	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	12	14	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	40	94	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1650	2194	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	84	116	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	350	460	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	162	181	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	10.4	17.2	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	560	645	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.5	0.7	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.41	0.53	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.1	2.5	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.27	0.38	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.08	0.1	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.46	0.48	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.11	0.17	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/11-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 18/11/2024
Sample Received on	: 19/11/2024
Sample Analyzed & Completion	: 19/11/2024 to 27/11/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	580	520	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	71	68	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	16	19	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	9	6	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	4	7	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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Issue Date: 02/12/2024

TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/11-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 18/11/2024
Sample Received on	: 19/11/2024
Sample Analyzed & Completion	: 19/11/2024 to 27/11/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	495	460	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	32	31	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	17	24	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	51	45	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/11-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 18/11/2024
Sample Received on	: 19/11/2024
Sample Analyzed & Completion	: 19/11/2024 to 27/11/2024
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	26	25	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	8.09	8.22	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	14	18	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	40	86	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1190	3640	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	112	144	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	221	797	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	152	165	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	Ppt	16.3	24.1	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	625	656	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.58	0.73	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.41	0.56	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.1	2.4	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.39	0.45	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.05	0.08	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.5	0.7	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.11	0.15	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/11-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 18/11/2024
Sample Received on	: 19/11/2024
Sample Analyzed & Completion	: 19/11/2024 to 27/11/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	590	496	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	76	67	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	12	15	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	8	9	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	4	8	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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Issue Date: 02/12/2024

TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/11-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 18/11/2024
Sample Received on	: 19/11/2024
Sample Analyzed & Completion	: 19/11/2024 to 27/11/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	550	505	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	30	26	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	21	28	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	49	46	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/11-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 18/11/2024
Sample Received on	: 19/11/2024
Sample Analyzed & Completion	: 19/11/2024 to 27/11/2024
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	26	25	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	7.99	8.11	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	9	16	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	40	82	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1130	3620	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	112	136	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	207	797	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	142	165	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	14.6	25.2	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	640	680	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.6	0.7	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.9	1.1	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.1	2.0	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.27	0.36	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.06	0.07	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.35	0.41	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.10	0.13	IS 3025 (Part 57): 2021 (Curcumin Method)

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Issue Date: 02/12/2024

TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/11-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 18/11/2024
Sample Received on	: 19/11/2024
Sample Analyzed & Completion	: 19/11/2024 to 27/11/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	590	510	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	75	67	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	11	13	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	6	9	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	8	11	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/11-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 18/11/2024
Sample Received on	: 19/11/2024
Sample Analyzed & Completion	: 19/11/2024 to 27/11/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	510	455	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	32	29	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	22	30	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	46	41	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/12-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 18/12/2024
Sample Received on	: 19/12/2024
Sample Analyzed & Completion	: 19/12/2024 to 27/12/2024
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	26	25	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	7.95	8.18	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	9	14	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	44	95	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1750	2420	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	76	128	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	379	510	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	152	168	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	10.1	17.5	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	521	615	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.56	0.75	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.41	0.52	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	<2	<2	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.41	0.46	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.05	0.07	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.31	0.45	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.16	0.17	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/12-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 18/12/2024
Sample Received on	: 19/12/2024
Sample Analyzed & Completion	: 19/12/2024 to 27/12/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	580	495	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	75	69	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	14	16	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	6	8	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	5	7	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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Issue Date: 01/01/2025

TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/12-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 18/12/2024
Sample Received on	: 19/12/2024
Sample Analyzed & Completion	: 19/12/2024 to 27/12/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	545	480	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	37	31	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	14	24	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	49	45	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/12-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 18/12/2024
Sample Received on	: 19/12/2024
Sample Analyzed & Completion	: 19/12/2024 to 27/12/2024
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	25	26	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	7.89	8.09	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	12	18	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	36	91	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1120	3520	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	108	160	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	207	758	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	151	163	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	11.6	23.2	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	596	670	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.7	0.8	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.5	0.32	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.1	2.4	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.28	0.35	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.06	0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.32	0.34	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.13	0.11	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/12-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 18/12/2024
Sample Received on	: 19/12/2024
Sample Analyzed & Completion	: 19/12/2024 to 27/12/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	630	545	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	73	68	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	15	13	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	7	6	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	5	13	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/12-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 18/12/2024
Sample Received on	: 19/12/2024
Sample Analyzed & Completion	: 19/12/2024 to 27/12/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	585	530	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	34	31	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	16	24	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	50	45	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/12-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 18/12/2024
Sample Received on	: 19/12/2024
Sample Analyzed & Completion	: 19/12/2024 to 27/12/2024
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	26	25	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	8.07	8.15	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	12	16	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	38	90	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1090	3650	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	116	146	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	194	805	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	152	166	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	10.8	22.5	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	621	645	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.6	0.7	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	1.1	1.2	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.2	2.6	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.38	0.45	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.06	0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.4	0.5	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.10	0.11	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/12-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 18/12/2024
Sample Received on	: 19/12/2024
Sample Analyzed & Completion	: 19/12/2024 to 27/12/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	605	495	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	81	75	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	12	17	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	4	5	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	3	3	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/12-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 18/12/2024
Sample Received on	: 19/12/2024
Sample Analyzed & Completion	: 19/12/2024 to 27/12/2024
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	620	545	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	36	32	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	17	27	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	47	41	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/01-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 15/01/2025
Sample Received on	: 16/01/2025
Sample Analyzed & Completion	: 16/01/2025 to 24/01/2025
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	26	26	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	7.91	8.05	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	12	18	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	40	92	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1750	2340	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	72	120	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	382	496	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	158	173	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	9.8	18.2	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	516	620	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.52	0.71	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.48	0.51	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	<2	<2	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.41	0.53	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.06	0.07	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.35	0.42	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.17	0.11	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/01-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 15/01/2025
Sample Received on	: 16/01/2025
Sample Analyzed & Completion	: 16/01/2025 to 24/01/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	590	525	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	76	69	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	14	17	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	6	9	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	4	5	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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Issue Date: 01/02/2025

TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/01-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 15/01/2025
Sample Received on	: 16/01/2025
Sample Analyzed & Completion	: 16/01/2025 to 24/01/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	585	505	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	32	29	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	19	29	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	49	42	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/01-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 15/01/2025
Sample Received on	: 16/01/2025
Sample Analyzed & Completion	: 16/01/2025 to 24/01/2025
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	25	26	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	7.96	8.11	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	9	18	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	42	95	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1130	3420	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	108	136	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	209	748	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	154	160	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	12.1	23.4	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	593	645	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.6	0.8	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.44	0.56	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.1	2.2	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.33	0.27	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.07	0.08	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.56	0.51	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.18	0.15	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/01-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 15/01/2025
Sample Received on	: 16/01/2025
Sample Analyzed & Completion	: 16/01/2025 to 24/01/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	640	565	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	72	63	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	14	16	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	7	6	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	7	15	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/01-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 15/01/2025
Sample Received on	: 16/01/2025
Sample Analyzed & Completion	: 16/01/2025 to 24/01/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	595	520	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	33	31	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	16	24	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	51	45	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/01-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 15/01/2025
Sample Received on	: 16/01/2025
Sample Analyzed & Completion	: 16/01/2025 to 24/01/2025
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	26	25	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	8.07	8.18	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	14	23	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	41	86	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1210	3640	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	128	144	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	216	797	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	148	163	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	10.9	21.6	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	593	638	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.6	0.8	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	1.1	1.2	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.2	2.1	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.33	0.45	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.05	0.06	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.41	0.52	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.13	0.11	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/01-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 15/01/2025
Sample Received on	: 16/01/2025
Sample Analyzed & Completion	: 16/01/2025 to 24/01/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	652	560	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	78	70	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	14	15	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	3	8	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	5	7	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/01-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 15/01/2025
Sample Received on	: 16/01/2025
Sample Analyzed & Completion	: 16/01/2025 to 24/01/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	590	485	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	33	30	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	15	23	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	52	47	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/02-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 17/02/2025
Sample Received on	: 18/02/2025
Sample Analyzed & Completion	: 18/02/2025 to 26/02/2025
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	26	26	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	7.89	8.04	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	12	18	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	42	95	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1760	2380	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	72	128	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	384	501	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	154	166	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	10.5	20.3	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	510	635	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.65	0.70	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.40	0.48	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	<2	<2	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.38	0.47	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.08	0.07	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.4	0.32	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.17	0.14	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/02-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 17/02/2025
Sample Received on	: 18/02/2025
Sample Analyzed & Completion	: 18/02/2025 to 26/02/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	610	545	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	79	75	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	10	12	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	7	5	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	4	8	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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Issue Date: 01/03/2025

TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/02-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 17/02/2025
Sample Received on	: 18/02/2025
Sample Analyzed & Completion	: 18/02/2025 to 26/02/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	570	495	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	35	31	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	14	25	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	51	44	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/02-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 17/02/2025
Sample Received on	: 18/02/2025
Sample Analyzed & Completion	: 18/02/2025 to 26/02/2025
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	25	26	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	7.91	8.12	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	12	18	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	36	95	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1140	3460	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	108	112	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	211	773	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	145	163	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	11.8	23.2	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	572	640	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.7	0.9	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.4	0.5	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.3	2.6	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.31	0.38	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.06	0.08	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.32	0.51	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.12	0.15	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/02-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 17/02/2025
Sample Received on	: 18/02/2025
Sample Analyzed & Completion	: 18/02/2025 to 26/02/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	660	545	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	71	65	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	15	10	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	7	6	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	7	9	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/02-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 17/02/2025
Sample Received on	: 18/02/2025
Sample Analyzed & Completion	: 18/02/2025 to 26/02/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	605	550	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	30	28	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	18	27	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	52	45	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/02-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 17/02/2025
Sample Received on	: 18/02/2025
Sample Analyzed & Completion	: 18/02/2025 to 26/02/2025
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	25	26	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	8.06	8.23	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	14	20	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	42	90	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1210	3660	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	120	136	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	221	807	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	153	165	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	11.5	23.4	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	592	615	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.6	0.8	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	1.1	1.3	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.1	2.4	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.25	0.38	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.05	0.08	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.35	0.41	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.13	0.19	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/02-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 17/02/2025
Sample Received on	: 18/02/2025
Sample Analyzed & Completion	: 18/02/2025 to 26/02/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	590	485	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	75	69	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	13	17	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	6	9	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	6	5	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/02-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 17/02/2025
Sample Received on	: 18/02/2025
Sample Analyzed & Completion	: 18/02/2025 to 26/02/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	615	550	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	32	35	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	19	24	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	49	41	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/03-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 17/03/2025
Sample Received on	: 18/03/2025
Sample Analyzed & Completion	: 18/03/2025 to 25/03/2025
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	26	25	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	7.91	8.09	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	10	14	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	45	92	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1710	2360	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	68	120	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	374	501	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	152	168	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	10.4	18.9	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	580	634	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.6	0.7	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.5	0.6	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	<2	<2	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.38	0.52	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.05	0.06	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.36	0.45	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.14	0.16	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/03-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 17/03/2025
Sample Received on	: 18/03/2025
Sample Analyzed & Completion	: 18/03/2025 to 25/03/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	610	525	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	80	75	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	11	14	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	3	7	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	6	4	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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Issue Date: 01/04/2025

TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/03-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Narmada Cement Jetty
Sample Collected on	: 17/03/2025
Sample Received on	: 18/03/2025
Sample Analyzed & Completion	: 18/03/2025 to 25/03/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	580	495	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	34	31	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	18	25	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	48	44	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/03-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 17/03/2025
Sample Received on	: 18/03/2025
Sample Analyzed & Completion	: 18/03/2025 to 25/03/2025
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	25	26	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	7.88	8.11	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	14	20	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	38	89	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1120	3440	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	104	104	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	209	773	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	148	160	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	12.2	22.8	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	582	670	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.68	0.72	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	0.4	0.47	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.2	2.5	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.36	0.41	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.06	0.07	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.35	0.51	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.11	0.13	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/03-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 17/03/2025
Sample Received on	: 18/03/2025
Sample Analyzed & Completion	: 18/03/2025 to 25/03/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	640	565	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	74	67	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	15	18	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	5	7	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	6	8	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/03-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Jetty of L&T Ltd.
Sample Collected on	: 17/03/2025
Sample Received on	: 18/03/2025
Sample Analyzed & Completion	: 18/03/2025 to 25/03/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	590	515	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	32	34	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	16	19	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	52	47	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT

MARINE WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/03-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 17/03/2025
Sample Received on	: 18/03/2025
Sample Analyzed & Completion	: 18/03/2025 to 25/03/2025
Quantity/No. of Sample	: 2+1+1 L in plastic carboys (Each Location) /6 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			Low Tide	High Tide	
1	Temperature	°C	26	25	IS 3025 (Part 9): 1984 (Thermometer)
2	pH at 25 °C	pH Unit	7.97	8.28	IS 3025 (Part 11): 2022 (Electrometric Method)
3	Colour	pt.co.scale	14	24	APHA 23 rd Edition, (Part 2000) Section: 2120, C : 2017 (Spectrophotometric - Single Wavelength Method)
4	Total Suspended Solids	mg/L	44	91	IS 3025 (Part 17): 2022 (Gravimetric Method)
5	Total Hardness as CaCO ₃	mg/L	1240	3520	IS 3025 (Part 21): 2009 (EDTA Method)
6	Calcium as Ca	mg/L	112	120	IS 3025 (Part 40): 1991 (EDTA Titrimetric method)
7	Magnesium as Mg	mg/L	233	782	IS 3025 (Part 46): 1994 (Volumetric Method using EDTA)
8	Total Alkalinity as CaCO ₃	mg/L	154	160	IS 3025 (Part 23): 1986 (Color Indicator Titration Method)
9	Salinity	ppt	11.6	23.8	APHA 23 rd Edition- 2017, Section: 2520
10	Sulphate as SO ₄	mg/L	572	605	APHA 23 rd Edition, (Part 4000) Section 4500-SO ₄ -2, E : 2017 (Turbidimetric Method)
11	Phenolic compounds as (C ₆ H ₅ OH)	mg/L	<0.01	<0.01	IS 3025 (Part 43/Section 1) : 2022 (4 -Aminoantipyrine method without Chloroform Extraction)
12	Oil and Grease	mg/L	<0.1	<0.1	IS 3025 (Part 39): 2021 (Partition Gravimetric Method)
13	Total Nitrogen	mg/L	0.6	0.8	IS 3025 (Part 34) : 1988 (Titrimetric Method)
14	Phosphate as PO ₄	mg/L	1.1	1.2	APHA 23 rd Edition, (Part 4000) Section:4500-P, D: 2017
15	BOD (3 Days at 27°C)	mg/L	3.2	2.4	IS 3025 (Part 44) :1993
16	Iron as Fe	mg/L	0.31	0.46	IS 3025 (Part 53): 2003 (1,10 Phenanthroline Method)
17	Copper as Cu	mg/L	0.06	0.07	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
18	Chromium as Cr	mg/L	<0.03	<0.03	IS 3025 (Part 52): 2003 (Diphenylcarbazide Method)
19	Zinc as Zn	mg/L	0.32	0.45	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
20	Cadmium as Cd	mg/L	<0.05	<0.05	APHA 23 rd Edition, (Part-3000) Section: 3111, B: 2017 (AAS Method)
21	Boron as B	mg/L	0.13	0.17	IS 3025 (Part 57): 2021 (Curcumin Method)

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/03-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Zooplankton Analysis
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 17/03/2025
Sample Received on	: 18/03/2025
Sample Analyzed & Completion	: 18/03/2025 to 25/03/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	660	545	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Protozoa	%	79	71	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Rotifera	%	13	12	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Nematoda	%	3	9	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
5	Copepoda	%	5	8	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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TEST REPORT
MARINE WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/MARINE WATER/L&T/Rev.0-00/03-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Marine water for Phytoplankton Analysis
Sampling Location	: Tapi River Near Jetty of ArcelorMittal Nippon Steel India Limited (AMNS)
Sample Collected on	: 17/03/2025
Sample Received on	: 18/03/2025
Sample Analyzed & Completion	: 18/03/2025 to 25/03/2025
Quantity/No. of Sample	: 100ml concentrated water sample in plastic carboys (During High Tide & Low Tide)/2 Nos.
Protocol (Purpose)	: As Per work order
Packing/ Seal	: Packed
Sampling Method	: APHA 23 rd Edition 2017, Part-9000, Section: 9060 A
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Test Method
			High Tide	Low Tide	
1	Total Count	No/L	605	520	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
2	Cynophyceae	%	37	35	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
3	Chlorophyena	%	11	18	APHA, 23 rd Ed. - 2017, Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti
4	Bacillariophyceae	%	52	47	APHA, 23 rd Ed. - 2017 Part-9000 & Handbook of methods in Environmental studies by S.K.Maitti

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Annexure – 4. STP Water Sample Analysis Reports



Issue Date: 01/11/2024

TEST REPORT
SEWAGE SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/SEWAGE/L&T/Rev.0-00/10-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Sewage Sample
Mode Of Sampling	: Grab
Sample Collected On	: 17/10/2024
Sample Received on	: 18/10/2024
Sample Analyzed & Completion	: 18/10/2024 to 26/10/2024
Quantity/No. of Sample	: 2 Litre In plastic carboys (each location)/2 Nos.
Packing/ Seal	: Packed
Protocol (Purpose)	: As per work order
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Consent Limit	Test Method
			Inlet	Outlet		
1.	pH at 25 °C	pH-Unit	6.81	7.25	6.5-8.5	IS 3025 (Part 11): 2022
2.	Total Suspended Solids	mg/L	84	22	30	IS 3025 (Part 17): 2022
3.	BOD (3 days at 27 °C)	mg/L	70	10	20	IS 3025 (Part 44): 1993
4.	Free Residual Chlorine	mg/L	Nil	0.6	>0.5	IS 3025 (Part 26): 2021

Note: (1) These results relate to the sample tested only.

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Issue Date: 02/12/2024

TEST REPORT
SEWAGE SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/SEWAGE/L&T/Rev.0-00/11-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Sewage Sample
Mode Of Sampling	: Grab
Sample Collected On	: 18/11/2024
Sample Received on	: 19/11/2024
Sample Analyzed & Completion	: 19/11/2024 to 27/11/2024
Quantity/No. of Sample	: 2 Litre In plastic carboys (each location)/2 Nos.
Packing/ Seal	: Packed
Protocol (Purpose)	: As per work order
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Consent Limit	Test Method
			Inlet	Outlet		
1.	pH at 25 °C	pH-Unit	7.05	7.41	6.5-8.5	IS 3025 (Part 11): 2022
2.	Total Suspended Solids	mg/L	76	20	30	IS 3025 (Part 17): 2022
3.	BOD (3 days at 27 °C)	mg/L	70	14	20	IS 3025 (Part 44): 1993
4.	Free Residual Chlorine	mg/L	Nil	0.5	>0.5	IS 3025 (Part 26): 2021

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Issue Date: 01/01/2025

TEST REPORT
SEWAGE SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/SEWAGE/L&T/Rev.0-00/12-2024

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Sewage Sample
Mode Of Sampling	: Grab
Sample Collected On	: 18/12/2024
Sample Received on	: 19/12/2024
Sample Analyzed & Completion	: 19/12/2024 to 27/12/2024
Quantity/No. of Sample	: 2 Litre In plastic carboys (each location)/2 Nos.
Packing/ Seal	: Packed
Protocol (Purpose)	: As per work order
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Consent Limit	Test Method
			Inlet	Outlet		
1.	pH at 25 °C	pH-Unit	7.05	7.40	6.5-8.5	IS 3025 (Part 11): 2022
2.	Total Suspended Solids	mg/L	86	25	30	IS 3025 (Part 17): 2022
3.	BOD (3 days at 27 °C)	mg/L	82	13	20	IS 3025 (Part 44): 1993
4.	Free Residual Chlorine	mg/L	Nil	0.8	>0.5	IS 3025 (Part 26): 2021

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Issue Date: 01/02/2025

TEST REPORT
SEWAGE SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/SEWAGE/L&T/Rev.0-00/01-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Sewage Sample
Mode Of Sampling	: Grab
Sample Collected On	: 15/01/2025
Sample Received on	: 16/01/2025
Sample Analyzed & Completion	: 16/01/2025 to 24/01/2025
Quantity/No. of Sample	: 2 Litre In plastic carboys (each location)/2 Nos.
Packing/ Seal	: Packed
Protocol (Purpose)	: As per work order
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Consent Limit	Test Method
			Inlet	Outlet		
1.	pH at 25 °C	pH-Unit	7.01	7.44	6.5-8.5	IS 3025 (Part 11): 2022
2.	Total Suspended Solids	mg/L	82	24	30	IS 3025 (Part 17): 2022
3.	BOD (3 days at 27 °C)	mg/L	78	15	20	IS 3025 (Part 44): 1993
4.	Free Residual Chlorine	mg/L	Nil	0.5	>0.5	IS 3025 (Part 26): 2021

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Issue Date: 01/03/2025

TEST REPORT
SEWAGE SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/SEWAGE/L&T/Rev.0-00/02-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Sewage Sample
Mode Of Sampling	: Grab
Sample Collected On	: 17/02/2025
Sample Received on	: 18/02/2025
Sample Analyzed & Completion	: 18/02/2025 to 26/02/2025
Quantity/No. of Sample	: 2 Litre In plastic carboys (each location)/2 Nos.
Packing/ Seal	: Packed
Protocol (Purpose)	: As per work order
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Consent Limit	Test Method
			Inlet	Outlet		
1.	pH at 25 °C	pH-Unit	6.88	7.30	6.5-8.5	IS 3025 (Part 11): 2022
2.	Total Suspended Solids	mg/L	84	22	30	IS 3025 (Part 17): 2022
3.	BOD (3 days at 27 °C)	mg/L	76	18	20	IS 3025 (Part 44): 1993
4.	Free Residual Chlorine	mg/L	Nil	0.6	>0.5	IS 3025 (Part 26): 2021

Note: (1) These results relate to the sample tested only.

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Issue Date: 01/04/2025

TEST REPORT
SEWAGE SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/SEWAGE/L&T/Rev.0-00/03-2025

Name of the Client	: M/s. Larsen & Toubro Limited Hazira Works, Dist. Surat
Sample Description	: Sewage Sample
Mode Of Sampling	: Grab
Sample Collected On	: 17/03/2025
Sample Received on	: 18/03/2025
Sample Analyzed & Completion	: 18/03/2025 to 25/03/2025
Quantity/No. of Sample	: 2 Litre In plastic carboys (each location)/2 Nos.
Packing/ Seal	: Packed
Protocol (Purpose)	: As per work order
Sampling Method	: APHA 23 rd Edition 2017, Part 1000 Section 1060 B
Sample Collected By	: ERM Team

Sr. No.	Parameters	Unit	Result		Consent Limit	Test Method
			Inlet	Outlet		
1.	pH at 25 °C	pH-Unit	7.02	7.41	6.5-8.5	IS 3025 (Part 11): 2022
2.	Total Suspended Solids	mg/L	86	28	30	IS 3025 (Part 17): 2022
3.	BOD (3 days at 27 °C)	mg/L	80	18	20	IS 3025 (Part 44): 1993
4.	Free Residual Chlorine	mg/L	Nil	0.6	>0.5	IS 3025 (Part 26): 2021

Note: (1) These results relate to the sample tested only.

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