

TSL/MoEF&CC/TS-26/2024-01/451 May 29, 2024

The Director(s)
Ministry of Environment, Forest & Climate Change,
Integrated Regional Office,
A/3, Chandrasekharpur,
Bhubaneswar-751023

Subject: Submission of half yearly EC compliance reports of 256 MW Power Plant of M/s. Tata Steel Limited, Meramandali for the period from October' 2023 to March' 2024.

Reference: EC vide letter No. J-13012/77/2011-IA-II(I); dated: 12.02.2015

Dear Sir,

With reference to the captioned subject and cited reference, we are herewith submitting six monthly compliance reports for the conditions stipulated in the Environmental Clearance of 256 MW power plant M/s. Tata Steel Limited, Meramandali for the period from October' 2023 to March' 2024 along with monitoring reports for your kind perusal.

The soft copies of the aforesaid compliance report are also being sent through mail to roez.bsr-mef@nic.in for your kind information and necessary record please. Also copy of 256 MW power plant EC compliance is being uploaded on MoEF&CC web site on portal http:// environmental clearance.nic.in.

Hope, the above are in line with the statutory requirements.

Thanking you

Yours faithfully,

Anoop Srivastava

For Tata Steel Limited

Chief Environment - TSM

Copy to: 1. The Zonal Officer, Central Pollution Control Board, Southern Conclave Block, 502, 5th & 6th Floors, 1582 Rajdanga Main Road, Kolkata – 700107.

 The Member Secretary, SPCB, Parivesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Odisha, Bhubaneswar-751012

3. The Regional Officer, State Pollution Control Board, Angul, Odisha.

SL.	STIPULATED CONDITIONS	COMPLIANCE STATUS
i	Vision document specifying prospective plan for the site shall be formulated and submitted to the RO of the Ministry within six months.	 Vision, Mission and Environment Policy statements have been submitted to the Regional Office, MoEF&CC, BBSR along with the compliance report.
ii	Harnessing solar power within the premises of the plant particularly at available roof tops shall be carried out and status of implementation including actual generation of solar power shall be submitted along with half yearly monitoring report.	 Power is being co-generated utilizing waste heat from DRI units through WHRBs. Additionally, coke oven and blast furnace gases are also used for generating green power through gas fired boilers utilizing renewal energy source. TERI has been engaged to carryout feasibility study for installation of solar power.
iii	Sulphur and ash contents in the imported coal to be used in the project shall not exceed 0.3% and 6% respectively at any given time. In case of variation of coal quality at any point of time, fresh reference shall be made to the Ministry for suitable amendments to environment clearance condition wherever necessary.	 Not applicable. As presently gas-based power plant of capacity 165 MW has been commissioned. This plant does not consume coal hence, no ash is being generated. Amendments in environment clearance has been made on 13th Aug'21 for switching of fuel from dual firing (Coal + Mixed gas) to 100 % mixed gas firing.
iv	A long term study of radioactivity and heavy metals contents in coal to be used shall be carried out through a reputed institute and results thereof analyzed every two years and reported along with monitoring reports. Thereafter mechanism for an in-built continuous monitoring for radioactivity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	 Not applicable. As presently gas-based power plant of capacity 165 MW has been commissioned. This plant does not consume coal hence, no ash is being generated. Hence, no need no monitor Radioactivity and heavy metals contents in coal and ash.
V	A stack of 220 meter height shall be provided with continuous online monitoring equipments for SO _x , NO _x , PM ₁₀ and PM _{2.5} . Exit velocity of flue gases shall not be less than 22 m / sec. Mercury emissions from stack shall also be monitored on periodic basis.	 Not applicable. As gas fired boiler has been commissioned instead of CFBC coal boiler. Chimney height 70 m and 40 m is attached to 60 TPH & 125 TPH and 250 TPH respectively. Online monitoring system has been installed for SOx and NOx in the stacks. Online data is

			transmitted to SPCB and CPCB servers through RT-DAS.
Vİ	High efficiency ESPs shall be installed to ensure that particulate emission does not exceed 50 mg / Nm³. Adequate dust extraction system such as cyclones/bag filters and water spraying system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.		Not applicable. As presently gas-based power plant of capacity 165 MW has been commissioned. This plant does not consume coal and particulate matter emission is very less. Hence, no requirement of ESPs.
vii	Adequate dust extraction system such as cyclones / bag filters and water spraying system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.		Not applicable. As presently gas-based power plant of capacity 165 MW has been commissioned. Hence, no coal and ash handling and dust extraction system such as cyclones / bag filters and water spraying system not required.
ix	Monitoring of surface water quantity and quality shall also be regularly conducted and records maintained. The monitoring data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of the flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report.	•	COC in the range of 7 -8 is maintained. Monitoring of surface water and ground water is being carried out regularly. Monthly monitoring reports are being submitted to the SPCB, Odisha. Last monitoring report was submitted on 10 th May 2024. The summarized data is enclosed as Annexure - I.
Х	A well designed rainwater harvesting system shall be put in place within six months, which shall comprise of rain water collection from the built up and open area in the plant premises and detailed records kept of the quantity of water harvested every year and its use.		Earthen pond and HDPE pond have been constructed to harvest rainwater. This water is reused in the process when required. During the period Oct'23 to Mar'24, 75162 m³ of rainwater has been utilized in process. Surface runoff water collected from DRI & RMHS area are channelized through drains into a series of storage pond for harvesting.
xi	No water bodies including natural drainage system in the area shall be disturbed due to activities associated	•	No water body or natural drainage system is disturbed. Water body is kept as it is.

	with the setting up / operation of the		
	power plant.		
xii	Hydrogeology of the area shall be reviewed annually from an institute / organization of repute to assess impact of surface water and ground regime (especially around ash dyke). In case any deterioration is observed, specific mitigation measures shall be undertaken, and report / data of water quality monitored regularly and maintained shall be submitted to the Regional Office of the Ministry.		Not applicable. As presently gas-based power plant of capacity 165 MW has been commissioned. However, ground water level and quality are being monitored on quarterly basis and hydrogeology study is being carried out by IMMT, Bhubaneswar. The summary of the report is attached as Annexure-II .
xiii	Wastewater generated from the plant shall be treated before discharge to comply limits prescribed by the SPCB / CPCB.	•	Wastewater generated from the plant is being treated in Effluent Treatment Plant Treated effluent is being reused in slag granulation, greenery development and lowend application in Blast Furnace & Sinter Plant etc. The water quality parameters are well within the limit as per the prescribed standard. Water analysis report is enclosed as Annexure-I.
xiv	Additional soil for leveling of the proposed site shall be generated within the site (to the extent possible) so that natural drainage system of the area is protected and improved.	•	No additional soil is required for leveling the site.
XV	Prior approval of the Ministry shall be obtained for Mine Void and abandoned stone quarry filling of fly ash based on the outcome of the pilot study for which permission was accorded to the existing units by the Ministry on 05.09.2013 subject to Hon'ble NGT's Order.	•	We request to withdraw this condition as this is not applicable. We have communicated vide letter No. TSBSL/MoEF&CC/BS-01/2020-01/57 dtd.27.08.20.
xvi	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry. Mercury and other heavy metals (As, Cr, Pb etc) will be monitored in the bottom	•	Not applicable. As presently gas-based power plant of capacity 165 MW has been commissioned. This plant does not consume coal hence, no ash is being generated.

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	ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying areas.	
xvii	Fugitive emission of fly ash (dry or wet) shall be controlled such that no agricultural or non-agricultural land is affected. Damage to any land shall be mitigated and suitable compensation provided in consultation with the local panchayat.	 Not applicable. As presently gas-based power plant of capacity 165 MW has been commissioned. This plant does not consume coal hence, no ash is being generated.
xviii	Ash pond shall be lined up with HDPE/LDPE lining or any other suitable material impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	
xix	Green belt consisting of three tire of plantation of native species around plant and at least 50 m width shall be raised. Wherever 50 m width is not feasible a 20 m width shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not be less than 2500 trees per ha with survival rate not less than 80%. Only native species shall be planted and the green belt development shall be expedited.	 Green belt development is under progress in and around the plant complex by planting indigenous species as per CPCB guidelines. Till Mar'24, 33 % of area (This includes Plant, R&R and CSR) has been covered under green belt. Rapid afforestation using MiyaWaki method in consultation with IIT, Kharagpur has also been implemented along the boundary wall. Plantation of saplings are done regularly based on the availability of vacant area. During the period Oct'23 to Mar'24, 6008 nos. of plant have been planted. Proper maintenance of green coverage is being ensured throughout the year.
XX	CSR schemes identified based on Public Hearing issues and need based assessment shall be implemented in consultation with the village panchayat and the District administration starting from the development of the project itself. As part of CSR, prior identification of local employable youth and eventual employment in the project after	 The peripheral development is being carried out based on socio economic survey and need based assessment. Based on this, company has provided the facilities of sanitation, drinking water, education, health care, road and communication facilities etc. in surrounding villages. Various socio-economic development programs covering education, safe drinking

	imparting relevant training shall be also undertaken. Company shall provide separate budget for community development activities and income generating program.	water, sports and health care etc. are undertaken in nearby villages. • Details breakup of CSR initiatives are enclosed as Annexure-III.
xxi	As committed, a minimum amount of Rs. 40.00 crore shall be earmarked for CSR activities for next five years. For proper and periodic monitoring of CSR activities, a CSR committee or a social audit committee or a suitable credible external agency shall be appointed. CSR activities shall also be evaluated by an independent external agency. This evaluation shall be both concurrent and final	CSR department has been established to monitor the CSR activities. The CSR activities are based on need-based assessment.
xxii	For proper and periodic monitoring of CSR activities, a CSR committee or a social audit committee or a suitable credible external agency shall be appointed. CSR activities shall also be evaluated by an independent external agency. This evaluation shall be both concurrent and final.	 As per the revised companies Act, 2013 and its amendment, CSR committee has been formed. Evaluation of each specific CSR intervention/activities is monitored & evaluated by the CSR Committee. Evaluation of the Impact of Corporate Social Responsibility Projects has been carried out by XIMB, Bhubaneswar.
xxiii	An Environmental Cell comprising of at least one expert in environment science/engineering, ecology, occupational health and social science, shall be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement / mitigation measures.	 Environment Management Department has been established for implementation of stipulated environmental safeguards and control of pollution. The head of the Environment department and other officers are having Environmental Science/Engineering qualification and adequate experience.

Α	General Conditions:	
i	Space for FGD shall be provided for future installation as may be required.	 Not applicable. As presently gas-based power plant of capacity 165 MW has been commissioned. This plant does not consume coal hence, generation SO2 is minimum. Hence, FGD is not required.
ii	The treated effluents conforming to the prescribed standards only shall be recirculated and re-used within the plant. Arrangements shall be made that effluents and storm water do not get mixed	Wastewater is treated in ETP. The treated effluent, conforming to the prescribed standards, are recycled, and reused for slag granulation, dust suppression and green area development.
iii	A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt / plantation.	STP of 100 m3 per day has been installed near Blast Furnace-I.
iv	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fire in coal yard especially during summer season. Copy of these measures with full details along with location on plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.	 Not applicable. As presently gas-based power plant of capacity 165 MW has been commissioned. This plant does not consume coal.
V	Storage facility for auxiliary liquid fuel such as LDO/HFO/LSHS shall be made in the plant area in consultation with the Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	 Not applicable. LDO/HFO/LSHS is not using for startup activities. Startup activities are being carried out by LPG or COG.
Vİ	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Adequate First aid and sanitation arrangements were made during construction phase of the plant and similar facilities are being maintained during operational phase also for the workers and employees.

Vii	Noise level emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 85 dB(A) from the source. For people working in the high noised areas, requisite PPEs like ear plugs/ear muffs etc shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric records and for treatment for any hearing loss including shifting to nonnoisy/less noisy areas.	 Silencers have been provided at boilers to control noise during steam venting. Necessary PPEs are being provided to all the workers working in noisy areas and periodic examination is being conducted for the workers engaged in noisy areas. Noise monitoring is carried out regularly in the work zone areas and reports are enclosed as Annexure-IV.
Viii	Regular monitoring of ambient air ground level concentration of SO ₂ , NO _x , PM _{2.5} , PM ₁₀ and Hg shall be carried out in the impact zone and records maintained. If at any stage levels are found to exceed the prescribe limits, necessary control measures shall be provided immediately. The locations of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the regional office of the Ministry. The data shall also be put on the website of the Company.	• Five manual ambient air quality monitoring stations have been set up in nearby villages for measuring ground level concentrations of PM ₁₀ , SO ₂ and NOx in consultation with SPCB. Odisha. EC compliance along with all report is being uploaded on the Company's website at http://www.tatasteel.com .
ix	Utilization of 100 % fly ash generated shall be made from 4 th year of operation. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	 Not applicable. As presently gas-based power plant of capacity 165 MW has been commissioned. This plant does not consume coal hence, no ash is being generated.
Х	Provision shall be made for the housing of contractor workers (as applicable) within the site with all necessary infrastructure facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc.	Adequate arrangements of housing for construction workers were made during construction phase of the plant.

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xi	The project proponent shall advertise in at least two local news papers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environment clearance and copies of the clearance letters are available with the SPCB/Committee and may also be seen at website of the Ministry of Environment and Forests at http://envfor.nic.in	 Advertisements were circulated in The Telegraph (English daily) dated 15.02.2015 and the Samaya (Oriya daily) dated 15.02.2015. A copy of the same was submitted to MoEF&CC vide our letter no. BSL/MoEF/BS-02/2015-09 dated 21.02.2015.
xii	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila 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 web site of the Company by the Proponent.	Copy of the environment clearance was submitted to the concerned panchayat, Zila Parishad, District Industry Centre etc.
xiii	The proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of measured data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF, the respective zonal office of CPCB and the SPCB. The criteria pollutant levels namely SPM, RSPM (PM ₁₀ and PM _{2.5}) SO ₂ , NO _x (ambient as well as stack emission) shall be displayed at a convenient location near the main gate of the Company in the public domain.	 Status of compliance of the stipulated environment clearance conditions are being uploaded on website and are being sent to the Ministry, CPCB and SPCB. Results of online air quality monitoring are displayed electronically near the main gate. The last half yearly compliance report was submitted vide letter no. TSL/MoEF&CC/BS-26/2023-02/395 dated 01.12.2023.
xiv	The environment statement for each financial year ending 31 st March in Firm-V as is mandated to be submitted by the project proponent to the concerned	The Environmental Statement in Form-V is being submitted to SPCB/CPCB/MOEF&CC regularly.

	SPCB 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 environment clearance conditions and shall also be sent to the respective Regional Office of the Ministry by e-mail.	The Environment Statement for the FY 2022- 23 was submitted vide letter no. TSL/SPCB/BS-03/2022-14/249, dated 25.09.2023.
XV	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of environment and Forests, its Regional Office, CPCB and SPCB. The project proponent shall upload the status of compliance of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional office of MoEF.	 Six monthly reports on status of the implementation of the stipulated environmental safeguards are being submitted. Status of compliance with the environmental clearance conditions is being uploaded on the Company's website at http://www.tatasteel.com.
xvi	Regional office of the MoEF will monitor the implementation of the stipulated conditions. A complete set of documents including Environment Impact Assessment report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will upload the compliance status in their website and update the same from time to time at least six monthly basis. Criteria pollutants levels including NOx (from stack and ambient air) shall be displayed at the main gate of the power plant.	 All the required documents have been already submitted to the Regional Office and will be made available during inspection. Compliance status is uploaded on the website and updated in every six months.
xvii	Separate funds shall be allocated for implementation of environmental protection measures along with item-	 Adequate funds are being provided by the management for pollution control and to meet recurring costs. Environmental requirements

	wise break-up. These shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and yearwise expenditure should be reported to the Ministry.	 are given top priority for fund allocation and approval of capital projects. The funds earmarked for environment pollution control measures are not diverted for any other purpose. The company has invested adequate capital expenditure to improve mix of clean power & also reduction of carbon emissions.
xviii	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the project authorities and the dates of land development work and commissioning of plant.	Financial closure and financial approval will be communicated to the regional office and the Ministry of MoEF&CC.
xix	Full cooperation shall be extended to the Scientists/Officers from the Ministry / Regional Office / CPCB / SPCB who would be monitoring the compliance on environmental status.	Full cooperation is extended to the Scientists/Officers from the Ministry / Regional Office / CPCB / SPCB who would be monitoring the compliance on environmental status.

	EC transfer from M/s Bhushan Steel L	imited to Tata Steel BSL Limited
SL	ADDITIONAL CONDITION	COMPLIANCE STATUS
i.	M/s Tata Steel BSL Ltd. (new incumbent) shall submit an application for amendment in EC for switching from 50% coal & 50% mix gases from Steel plant to 100% mix gases from steel plant for stipulation of adequate conditions on pollution control measures by the Ministry.	Amendment EC has been obtained for switching from 50% coal & 50% mixed gases from Steel plant to 100% mixed gases.
ii	The revised emission standards and specific water consumption as per the Ministry's Notification vide S.O.33.5 dated 17.12.2015 and subsequent amendments shall be complied with. The progress of implementation of new emission standards as per the extended timelines given by CPCB vide Order dated 16.04.2018 shall be submitted as part of compliance report.	The revised emission standards and specific water consumption as per the Ministry's Notification vide S.O.33.5 dated 17.12.2015 and subsequent amendments is being complied with.
iii	Details of quantity of water consumption, power generation and Specific water consumption shall be submitted as part of compliance report.	 Water consumption, power generation and specific water consumption for the period Oct'23 to Mar'24 are given below. Power Generation: 528158 MWh Average Specific water consumption: 3.00 m3/MWh (BFPP-I: 3.39 m³/MWh & BFPP-II: 2.62 m³/MWh)
iv	The status of case (CC case No.16/2014) filed before Hon'ble Sub Divisional Judicial Magistrate, Dhenkanal against Shri Neeraj Singhal, M/s Bhushan Steel Ltd. shall also be communicated to the Ministry.	Case is sub-judice at Hon'ble Sub Divisional Judicial Magistrate, Dhenkanal and pending for Supply of Prosecution Report.

	Amendment Environment clearance of 256 MW power plant Letter no.: J-13012/77/2011-I-A. II (T) dated 13.08.2021		
SL	ADDITIONAL CONDITION	COMPLIANCE STATUS	
1	Project Proponent shall submit Compliance report to Ministry Regional office within 6 months.		

LIST OF ENCLOSURES

SI. No.	Enclosure	Details
1.	Annexure -I	Water Analysis Report
2.	Annexure -II	Hyodrogeology Report
3.	Annexure -III	CSR Report
4.	Annexure -IV	Ambient & Work zone Noise Report

Summary of Surface Water Quality Analysis

(Period: From October 2023 to December 2023)

C N	Devemeter	l lm:t	Kishin	ida Nala	Lingra	a Nala	Brahama	ani River
S.N	Parameter	Unit	U/S	D/S	U/S	D/S	U/S	D/S
1	pH Value	-	6.88-7.4	6.62-7.50	6.69-7.50	6.69-7.12	6.87-7.58	6.69-7.0
2	Colour	Hazen	BDL(DL:0.005)	BDL(DL:1.0)	BDL(DL:1.0)	BDL(DL:1.0)	BDL(DL:1.0)	BDL(DL:1.0)
3	Temperature	Deg C	25-25.4	25-25.2	25-25.2	25-25.2	25-25.2	25-25.2
4	Total Suspended Solids	mg/l	10.6-24.1	2.8-28.5	2.8-5.6	4.2-5.2	4.2-30.2	4.1-40.8
5	Arsenic as As	mg/l	BDL(DL:0.005)	BDL(DL:0.005)	BDL(DL:0.005)	BDL(DL:0.005)	BDL(DL:0.005)	BDL(DL:0.005)
6	BOD, 3days at 27°C	mg/l	BDL(DL:2.0)	BDL(DL:2.0)	BDL(DL:2.0)	BDL(DL:2.0)	BDL(DL:2.0)	BDL(DL:2.0)
7	Boron as B	mg/l	BDL(DL:0.25)	BDL(DL:0.25)	BDL(DL:0.25)	BDL(DL:0.25)	BDL(DL:0.25)	BDL(DL:0.25)
8	Cadmium as Cd	mg/l	BDL(DL:0.001)	BDL(DL:0.001)	BDL(DL:0.001)	BDL(DL:0.001)	BDL(DL:0.001)	BDL(DL:0.001)
9	Calcium as Ca	mg/l	24-64.64	24.48-40	40-40.8	40-40.8	16.6-24.48	16.6-24.48
10	Chlorides as Cl	mg/l	19.79-39.59	19.79-29.69	19.79-29.69	24.74-29.69	14.85-19.79	14.85-19.79
11	COD	mg/l	11.52-23	7.7-19.2	7.7-11.5	11.5-15.4	15.4-19.2	19.2-30.7
12	Copper (as Cu)	mg/l	BDL(DL:0.02)	BDL(DL:0.02)	BDL(DL:0.02)	BDL(DL:0.02)	BDL(DL:0.02)	BDL(DL:0.02)
13	Cyanide as CN	mg/l	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)

14	Fluoride as F-	mg/l	0.89-4.45	0.25-0.92	0.25-0.39	0.28-0.30	0.21-0.32	0.24-0.35
15	Hexa Chromium as Cr +6	mg/l	BDL(DL:.01)	BDL(DL:.01)	BDL(DL:.01)	BDL(DL:.01)	BDL(DL:.01)	BDL(DL:.01)
16	Iron as Fe	mg/l	0.34-3.1	0.08-1.8	0.08-0.28	0.28-0.30	0.18-2.59	0.16-3.07
17	Lead (as Pb)	mg/l	BDL(DL:0.005)	BDL(DL:0.005)	BDL(DL:0.005)	BDL(DL:0.005)	BDL(DL:0.005)	BDL(DL:0.005)
18	Manganese (as Mn)	mg/l	BDL(DL:0.02)	BDL(DL:0.02)	BDL(DL:0.02)	BDL(DL:0.02)	BDL(DL:0.02)	BDL(DL:0.02)
19	Mercury (as Hg)	mg/l	BDL(DL:0.0002)	BDL(DL:0.0002)	BDL(DL:0.0002)	BDL(DL:0.0002)	BDL(DL:0.0002)	BDL(DL:0.0002)
20	Nickel (as Ni)	mg/l	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)
21	O&G	mg/l	BDL(DL:1.4)	BDL(DL:1.4)	BDL(DL:1.4)	BDL(DL:1.4)	BDL(DL:1.4)	BDL(DL:1.4)
22	Phenolic Comp	mg/l	BDL(DL:0.001)	BDL(DL:0.001)	BDL(DL:0.001)	BDL(DL:0.001)	BDL(DL:0.001)	BDL(DL:0.001)
23	Phosphate as P	mg/l	0.08-0.16	0.08-0.1	0.1-0.11	BDL(DL:0.05)	0.08-0.12	0.11-0.15
24	RFC	mg/l	BDL(DL:0.1)	BDL(DL:0.1)	BDL(DL:0.1)	BDL(DL:0.1)	BDL(DL:0.1)	BDL(DL:0.1)
25	Selenium (as Se)	mg/l	BDL(DL:0.005)	BDL(DL:0.005)	BDL(DL:0.005)	BDL(DL:0.005)	BDL(DL:0.005)	BDL(DL:0.005)
26	TKN	mg/l	BDL(DL:.3)	BDL(DL:.3)	BDL(DL:.3)	BDL(DL:.3)	BDL(DL:.3)	BDL(DL:.3)
27	Zinc (as Zn)	mg/l	BDL(DL:0.02)	BDL(DL:0.02)	BDL(DL:0.02)	BDL(DL:0.02)	BDL(DL:0.02)	BDL(DL:0.02)

Summary of Surface Water Quality Analysis

(Period: From January 2024 to March 2024)

CN	Donomoton	l losit	Kishir	nda Nala	Lingra	a Nala	Brahama	ani River
S.N	Parameter	Unit	U/S	D/S	U/S	D/S	U/S	D/S
1	pH Value	-	7.33 - 7.8	6.66 – 6.8	7.5 – 7.62	6.97 – 7.66	6.7 – 6.89	7.2 - 7.4
2	Colour	Hazen	BDL (DL:1.0)	BDL (DL:1.0)	BDL (DL:1.0)	BDL (DL:1.0)	BDL (DL:1.0)	BDL (DL:1.0)
3	Temperature	Deg C	< 26	< 26	< 26	< 26	< 26	< 26
4	Total Suspended Solids	mg/l	2.8 - 14	3.1 -4.2	-4.2 <2.5 - 3.4 3.5 - 4.9 3.8-5.2 - 4.9		3.5 – 4.8	
5	Arsenic as As	mg/l	BDL (DL:0.005)	BDL (DL:0.005)		BDL (DL:0.005)		
6	BOD, 3days at 27°C	mg/l	BDL (DL:2.0)	BDL (DL:2.0) BDL (DL:2.0) BDL (DL:2.0)		BDL (DL:2.0)	BDL (DL:2.0)	
7	Boron as B	mg/l	BDL (DL:0.25)	BDL (DL:0.25)	BDL (DL:0.25)		BDL (DL:0.25)	BDL (DL:0.25)
8	Cadmium as Cd	mg/l	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)
9	Calcium as Ca	mg/l	47.52 – 80.8	47.52 – 72.72	39.6 – 60.6	47.52 – 60.6	4.9 – 20.2	15.84 – 20.2
10	Chlorides as Cl	mg/l	29.99 - 98.97	68.58 – 88.17	29.39 – 54.43	48.98 – 58.78	14.7 - 23.5	14.7 - 29.39
11	COD	mg/l	16 - 27	8 - 16	7.7 - 20	11.5 - 16	8.0 - 15.4	12 – 19.2
12	Copper (as Cu)	mg/l	BDL (DL:0.02)	BDL (DL:0.02)	BDL (DL:0.02)	BDL (DL:0.02)	BDL (DL:0.02)	BDL (DL:0.02)
13	Cyanide as CN	mg/l	BDL (DL:0.01)	BDL (DL:0.01)	BDL (DL:0.01)	BDL (DL:0.01)	BDL (DL:0.01)	BDL (DL:0.01)

14	Fluoride as F-	mg/l	BDL (DL:0.1	BDL (DL:0.1	BDL (DL:0.1	BDL (DL:0.1	BDL (DL:0.1	BDL (DL:0.1
15	Hexa Chromium as Cr +6	mg/l	BDL (DL:0.01)	BDL (DL:0.01)	BDL (DL:0.01)	BDL (DL:0.01)	BDL (DL:0.01)	BDL (DL:0.01)
16	Iron as Fe	mg/l	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)
17	Lead (as Pb)	mg/l	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)
18	Manganese (as Mn)	mg/l	BDL (DL:0.02)	BDL (DL:0.02)	BDL (DL:0.02)	BDL (DL:0.02)	BDL (DL:0.02)	BDL (DL:0.02)
19	Mercury (as Hg)	mg/l	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)
20	Nickel (as Ni)	mg/l	BDL (DL:0.01)	BDL (DL:0.01)	BDL (DL:0.01)	BDL (DL:0.01)	BDL (DL:0.01)	BDL (DL:0.01)
21	O&G	mg/l	BDL (DL:1.4)	BDL (DL:1.4)	BDL (DL:1.4)	BDL (DL:1.4)	BDL (DL:1.4)	BDL (DL:1.4)
22	Phenolic Comp	mg/l	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)
23	Phosphate as P	mg/l	0.08 - 0.22	BDL (DL:0.05)	BDL (DL:0.05)	BDL (DL:0.05)	BDL (DL:0.05)	BDL (DL:0.05)
24	RFC	mg/l	BDL (DL:0.1)	BDL (DL:0.1)	BDL (DL:0.1)	BDL (DL:0.1)	BDL (DL:0.1)	BDL (DL:0.1)
25	Selenium (as Se)	mg/l	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)
26	TKN	mg/l	BDL (DL:0.3)	BDL (DL:0.3)	BDL (DL:0.3)	BDL (DL:0.3)	BDL (DL:0.3)	BDL (DL:0.3)
27	Zinc (as Zn)	mg/l	BDL (DL:0.02)	BDL (DL:0.02)	BDL (DL:0.02)	BDL (DL:0.02)	BDL (DL:0.02)	BDL (DL:0.02)

Note: BDL: Below Detectable Limit; DL: Detectable Limit, U/S: Upstream D/S: Downstream **Source:** Monitoring/ Analysis report of S.K. Mitra Private Limited and Environment Laboratory of TSM.

Summary of Treated Domestic Effluent Analysis

(Period: From October 2023 to March 2024)

S.N.	Location	Parameters in Range							
		рН	Suspended Solid in mg/l	BOD (3 days at 27°C) in mg/l					
1.	Colony STP	7.0-7.56	12-56	3.1-28					
2.	AEL STP	7.05-7.74	11-74	10-28					
3.	BF-1 STP	6.88-7.85	<2.5-41	<2.0-10.7					

Summary of Effluent Treatment Plant Analysis

(Period: From October 2023 to March 2024)

		Parameters in Range								
S.N	Location	рН	Suspended Solid in mg/l	Chemical Oxygen Demand in mg/l	BOD (3days at 27°C) in mg/l	Oil & Grease	Iron as Fe			
1.	ETP-1 (Outlet)	6.90-7.98	2.6-54	<4.0-23	<2.0-5.4	<5	0.29-1.9			
2.	ETP-2 (Outlet)	7.01-7.49	3.5-43	11-29	2.4-6.8	<5	0.23-0.56			
3.	ETP-3 (Outlet)	6.8-8.32	3.7-59	16-64	3.7-19	<5	0.37-2.5			
4.	CRM (ETP Outlet)	7.01-7.56	2.5-42	<4.0-180	<2.0-26.7	<5	0.22-1.1			
5.	BF-1 (Thickener Outlet)	7.04-7.60	57-125	45-216	-	<5	3.5-94			
6.	BF-2 (Thickener Outlet)	6.74-7.36	6.9-63	8-80	-	<5	0.21-1.6			
7.	BOF (Thickener Outlet)	7.2-7.52	19-99	3.5-85	-	<5	10-48			

		Parameters in Range									
S.N.	Location	рН	Suspended Solid in mg/l	Chemical Oxygen Demand in mg/l	BOD (3days at 27°C) in mg/l	Oil & Grease	TCN	Phenol			
8.	Coke Oven-1 (BOD-1 Outlet)	6.69-7.86	3.7-77	28-190	7.2-26.7	<5.0	<0.02-0.18	0.17-0.48			
9.	Coke Oven-2 (BOD-2 Outlet)	6.97-7.56	10-82	24-160	6.1-43	<5.0	<0.02-0.44	0.01-0.43			

Summary of ground water level monitoring report inside plant premises

(Period: From October 2023 to March 2024)

S.N.	Location with description	Sample Code	Depth of Monitoring Bore Well	Longitude	Latitude
1	Colony near STP	GW-1	165ft	20°49.045'	85°15.734'
2	RMHS Near Wagon Tippler	GW-2	300ft	20°47.752'	85°15.993'
3	Near Blast Furnace-2	GW-3	162ft	20°47.25'	85°15.613'
4	Near Railway bridge	GW-4	156ft	20°48.920'	85°15.858'

Ground Water Quality Analysis

S.N.	Parameter	Unit	GW-2	GW-3	GW-4	GW-6	Standard as per IS-10500-2012
1	рН	-	6.74	7.20	6.90	6.7	6.5-8.5
2	Colour	Hazen	Colourless	Colourless	Colourless	Colourless	15
3	Odour	-	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable	-
4	T. Hardness (as CaCO3)	mg/l	420	164.9	388	388	300
5	Calcium as Ca	mg/l	93.12	38.8	93.12	93.12	75
6	Magnesium as Mg	mg/l	37.25	16.3	37.25	37.25	30
7	Iron as Fe	mg/l	0.09	0.14	0.08	0.09	0.3
8	Chloride as Cl	mg/l	79.18	29.69	49.48	79.18	250
9	Fluoride as F-	mg/l	1.21	0.24	0.72	1.21	1
10	Dissolved solids	mg/l	560	196	490	560	500
11	Nitrate as NO3	mg/l	0.86	0.84	1.2	0.86	45
12	Chromium as Cr+6	mg/l					0.05
13	Alkalinity as CaCO3	mg/l	380	150	220	380	200

Summary of ground water level monitoring report inside plant premises

Ground Water Level Period: March 2024

S.N	Location	Sample Code	Longitude	Latitude	Water Level from GL (m) BGL March'24
1	Kharagprasad	GW-01	20º 49.299'	85º 18.923'	4.2
2	Charadagadia	GW-02	20º 47.768'	85º 17.083'	7.5
3	Sibpur	GW-03	20° 46.941′	85° 14.394'	6.8
4	Kochilamada	GW-04	20º 47.541'	85º 16.802'	5.9
5	Galapada	GW-05	20º 48.142'	85º 18.600'	4.7
6	Motonga	GW-06	20º 48.143'	85º 18.599'	4.1
7	Narendrapur	GW-08	20º 49.483'	85° 15.530'	9.2
8	Khaliberena	GW-09	20º 46.946'	85° 14.396'	4.6
9	Ganthigadia	GW-10	20º 48.501'	85º 15.118'	2.2

Ground Water Quality Analysis Report of surrounding villages

November 2023

S.N.	Parameters	unit	GW-01	GW-02	GW-03	GW-04	GW-05	GW-06	GW-07	GW-08	GW-9
1	рН		7.20	6.92	7.40	6.77	7.04	6.87	6.95	7.52	6.80
2	Odour	-	Agreeable								
3	Colour	mg/l	BDL (DL:1.0)	BDL(DL:1.0)							
4	Turbidity	N.T. U	7.4	16.6	2.7	BDL(DL:1.0)	BDL(DL:1.0)	19.2	BDL(DL:1.0)	BDL(DL:1.0)	BDL(DL:1.0)
5	Total Dissolved Solids (as TDS)	mg/l	190	905	1855	550	160	640	376	365	592
6	Aluminium as Al	mg/l	BDL(DL:0.01)								
7	Anionic Surface- Active Agents as (MBAS)	mg/l	BDL(DL:0.05)								
8	Boron as B	mg/l	BDL(DL:0.25)								
9	Calcium as Ca	mg/l	32.64	163.2	293.76	97.92	32.64	89.76	57.12	65.28	81.6
10	Chloride as Cl	mg/l	29.69	148.5	494.85	49.48	19.79	89.7	59.38	49.48	118.76
11	Copper as Cu	mg/l	, ,	· · · · · ·	BDL(DL:0.02)	,	, ,	BDL(DL:0.02)		`	BDL(DL:0.02)
12	Fluoride as F	mg/l	0.3	0.58	0.24	0.61	0.25	1.11	0.36	0.28	1.18
13	Residual Free Chlorine	mg/l	BDL(DL:0.1)								
14	Iron as Fe	mg/l	0.35	0.25	0.28	0.08	BDL(DL:05)	0.85	BDL(DL:0.05)	0.08	0.08
15	Magnesium as Mg	mg/l	14.69	48.96	73.44	39.17	14.69	48.96	19.58	19.58	39.17
16	Manganese as Mn	mg/l	BDL(DL:0.02)								
17	Mineral Oil	mg/l	BDL(DL:0.5)								
18	Nitrate as NO3	mg/l	0.78	0.69	1.02	0.95	0.7	0.9	0.95	0.85	0.8
19	Phenolic Compounds as C6H5OH	mg/l	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)	BDL (DL:0.001)
20	Selenium as Se	mg/l	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)	BDL (DL:0.005)
21	Sulphate as SO4	mg/l	5.2	20.6	30.8	12.4	5.66	12.4	8.5	9.88	15.66
22	Total Alkalinity as CaCO3	mg/l	101	424.2	525.2	363.6	121.2	363.6	161.6	202	343.4
23	Total Hardness as CaCO3	mg/l	142.8	612	1040.4	408	142.8	428.4	224.4	244.8	367.2
24	Zinc as Zn	mg/l	BDL(DL:0.02)								

25	Cadmium as Cd	mg/l	BDL (DL:0.001)								
26	Cyanide as CN	mg/l	BDL(DL:0.01)								
27	Lead as Pb	mg/l	BDL (DL:0.005)								
28	Mercury as Hg	mg/l	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)
29	Nickel (as Ni)	mg/l	BDL(DL:0.01)								
30	Total Arsenic (as As)	mg/l	BDL (DL:0.005)								
31	E. coli	/100ml	Not Detected	Not Detected	Not Detected	Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected

March 2024

S.N.	Parameters	unit	GW-01	GW-02	GW-03	GW-04	GW-05	GW-06	GW-07	GW-08	GW-9
1	рН		6.76	7.11	7.59	7.16	7.05	7.29	7.52	7.57	7.54
2	Odour		Agreeable								
3	Colour	mg/l	<5	<5	<5	<5	<5	<5	<5	<5	<5
4	Turbidity	N.T. U	3.45	1,7	2.70	0.75	1.19	1.66	7.75	1.10	4.71
5	Total Dissolved Solids (as TDS)	mg/l	277.0	1268.0	493	503	186.0	7.29	565.0	484.0	591.0
6	Aluminium as Al	mg/l	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)	BDL(DL:0.01)
7	Anionic Surface- Active Agents as (MBAS)	mg/l	BDL(DL:0.05)	BDL(DL:0.05)	BDL(DL:0.05)	BDL(DL:0.05)	BDL(DL:0.05)	BDL(DL:0.05)	BDL(DL:0.05)	BDL(DL:0.05)	BDL(DL:0.05)
8	Boron as B	mg/l	BDL(DL:0.25)	BDL(DL:0.25)	BDL(DL:0.25)	BDL(DL:0.25)	BDL(DL:0.25)	BDL(DL:0.25)	BDL(DL:0.25)	BDL(DL:0.25)	BDL(DL:0.25)
9	Calcium as Ca	mg/l	40.08	35.27	80.16	52.91	32.06	89.78	16.03	83.37	83.37
10	Chloride as Cl	mg/l	29	240.0	57.0	50.0	15.00	118.0	45.0	40.0	47.0
11	Copper as Cu	mg/l	0.012	0.007	0.014	0.011	0.032	0.005	0.008	0.018	0.013
12	Fluoride as F	mg/l	0.12	0.98	0.46	1.10	0.19	1.0	0.94	0.55	1.10
13	Residual Free Chlorine	mg/l	BDL(DL:0.1)								
14	Iron as Fe	mg/l	0.228	0.125	0.157	0.238	0.989	0.153	0.172	0.339	0.301
15	Magnesium as Mg	mg/l	14.58	126.62	32.08	44.71	5.83	99.14	69.01	39.85	55.40
16	Manganese as Mn	mg/l	0.025	0.032	0.086	0.027	0.077	0.060	0.354	0.027	0.028
17	Mineral Oil	mg/l	BDL(DL:0.5)								
18	Nitrate as NO3	mg/l	12.3	182.0	3.76	49.6	3.12	12.1	10.63	3.58	17.2

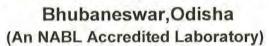
19	Phenolic Compounds as C6H5OH	mg/l	BDL (DL:0.001)								
20	Selenium as Se	mg/l	BDL (DL:0.005)								
21	Sulphate as SO4	mg/l	30.67	125.41	63.39	57.25	13.61	129.96	62.25	47.26	82.02
22	Total Alkalinity as CaCO3	mg/l	140	484	304	392	96	320	376	364	413
23	Total Hardness as CaCO3	mg/l	160	608.0	332.0	316.0	104.0	632.0	324.0	372.0	436.0
24	Zinc as Zn	mg/l	0.057	0.079	0.084	0.073	0.227	0.064	0.064	0.089	0.108
25	Cadmium as Cd	mg/l	BDL(DL:0.01)								
26	Cyanide as CN	mg/l	BDL(DL:0.01)								
27	Lead as Pb	mg/l	BDL(DL:0.01)								
28	Mercury as Hg	mg/l	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)	BDL (DL:0.0002)
29	Nickel (as Ni)	mg/l	BDL(DL:0.01)								
30	Total Arsenic (as As)	mg/l	BDL (DL:0.005)								
31	E. coli	/100ml	Not Detected	Not Detected	Not Detected	Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected

----- End of Report -----



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Environmental Chemical Laboratory





TEST REPORT

Issued to: Tata Steel Limited, Meramandali

Date: 23.04.2024

Test Report No.03/2024-001

Sample Condition: In Plastic Jar

Sample quantity: 2 Litre

Sampling Method: APHA1060B

Source of Sample : Kisinda UP & Down stream

Letter Reference:

Sample Collected on: 01.03.2024

Sample Analysed on: 01.03.2024

SI No	Characteristics	Test Method As Per APHA	Kisinda UP- stream	Kisinda down stream	Standard as per Class C-IS 2296/CPCB/SPCB
1	pH Value	APHA 4500H+ B	7.98	7.97	6.0-9.0
2	Colour	APHA 2120 B, C	<5	<5	300 (max)
3	Electrical Conductivity, μs/cm	APHA 2510 B	950	995	
4	Total Dissolved Solids, mg/l	APHA 2540 C	608.0	508.0	1500 (max)
5	Dissolved Oxygen, mg/l	APHA 2540 C	9.0	9.5	4 (min)
6	BOD (3) days at 27°C	APHA 5210 B	4.5	3.1	3 (max)
7	Chloride, mg/l	APHA 4500Cl- B	91.0	143.0	600 (max)
8	Fluoride as F, mg/l	APHA 4500F- C	3.20	1.80	1.5 (max)
9	Sulphates (SO ₄), mg/l	APHA 4500 SO42- E	186.76	140.18	400 (max)
10	Nitrate as NO ₃ , mg/l	APH4500 NO3- E	3.62	9.10	50 (max)
11	Hexa Chromium as Cr +6, mg/l	APHA 3500Cr B	0.009	0.008	0.05
12	Cyanide as CN,	APHA 4500 CN- C,D	<0.03	<0.03	0.05 (max)
13	Copper as Cu, mg/l	APHA 3111 B,C	0.013	0.006	1.5 (max)
14	Iron as Fe, mg/l	APHA 3500Fe, B	0.138	0.252	0.5 (max)
15	Cadmium as Cd , mg/l	APHA 3111 B,C	< 0.001	<0.001	0.01 (max)
16	Selenium as Se, mg/l	APHA 3114 B	<0.001	<0.001	0.05 (max)

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Environmental Chemical Laboratory



Bhubaneswar, Odisha (An NABL Accredited Laboratory)

TEST REPORT

17	Arsenic as As, mg/l	APHA 3114 B	< 0.001	< 0.001	0.2 (max)
18	Lead as Pb(max), mg/l	APHA 3111 B,C	< 0.001	<0.001	0.1 (max)
19	Zinc as Zn(max), mg/l	APHA 3111 B,C	0.108	0.036	15 (max)
20	Sodium Absorption Ratio	By Calculation	6.57	9.72	15-
21	Total Coliform	APHA 9221 B	172/100ml	542/100ml	5000
22	Fecal Coliform	APHA 9221 B	33/100ml	9/100ml	300
23	Manganese as Mn, mg/l		0.028	0.025	0.1
24	Sodium as Na, mg/l		49.99	66.18	
25	Potassium as K, mg/l		3.47	7.97	
26	Nickel as Ni, mg/l		0.004	0.007	0.02
27	Chemical Oxygen Demand, mg/l		20.0	16.0	
28	Free Ammonia, mg/l		<0.01	<0.01	0.5
29	Boron as B, mg/l		0.006	0.004	0.5

Authorized Signatory, Atakshita Majhi

Signatory Senior Principal Sources (Environmental Chemical Lab) (ISO17025 2017, 122 Call Environmental & Sustainability Dept. CSIR (March 1997) Senior Section (Inc.) (Inc

Dr Arakshita Majhi Senior Principal Scientist Phone - 0674-2379236 E mail I.D- arakshita@immt.res.in



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Environmental Chemical Laboratory

Bhubaneswar, Odisha (An NABL Accredited Laboratory)



TEST REPORT

Issued to: Tata Steel Limited, Meramandali

Date: 23.04.2024

Sample Collected on: 01.03.2024

Test Report No.03/2024-002

Sample Condition: In Plastic Jar

Sample quantity: 2 Litre

Sampling Method: APHA1060B

Source of Sample :Lingra UP & Down stream

Letter Reference : Sample Analysed on: 01.03.2024

SI No	Characteristics	Test Method As Per APHA	Lingra UP- stream	Lingra down stream	Standard as per Class C-IS 2296/CPCB/SPCB
1	pH Value	APHA 4500H+ B	8.38	7.77	6.0-9.0
2	Colour	APHA 2120 B, C	1.6	1.4	300 (max)
3	Electrical Conductivity, μs/cm	APHA 2510 B	431	708	÷
4	Total Dissolved Solids, mg/l	APHA 2540 C	248	596.0	1500 (max)
5	Dissolved Oxygen, mg/l	APHA 2540 C	8.6	6.0	4 (min)
6	BOD (3) days at 27°C	APHA 5210 B	1.8	2.6	3 (max)
7	Chloride, mg/l	APHA 4500CI- B	37.0	82.0	600 (max)
8	Fluoride as F, mg/l	APHA 4500F- C	0.63	1.60	1.5 (max)
9	Sulphates (SO ₄), mg/l	APHA 4500 SO42- E	11.38	65.43	400 (max)
10	Nitrate as NO ₃ , mg/l	APH4500 NO3- E	2.54	10.8	50 (max)
11	Hexa Chromium as Cr +6, mg/l	APHA 3500Cr B	0.016	0.022	0.05
12	Cyanide as CN, mg/l	APHA 4500 CN- C,D	<0.03	<0.03	0.05 (max)
13	Copper as Cu, mg/l	APHA 3111 B,C	0.016	0.007	1.5 (max)
14	Iron as Fe, mg/l	APHA 3500Fe, B	0.160	0.175	0.5 (max)
15	Cadmium as Cd, mg/l	APHA 3111 B,C	<0.001	<0.001	0.01 (max)

Dr. Arakshita Majhi

1of 2

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Bhubaneswar-751013, Odisha, INDIA



(A Govt. of India Autonomous Body)

Environmental Chemical Laboratory



Bhubaneswar, Odisha (An NABL Accredited Laboratory)

TEST REPORT

16	Selenium as Se, mg/l	APHA 3114 B	<0.001	<0.001	0.05 (max)
17	Arsenic as As, mg/l	APHA 3114 B	< 0.001	<0.001	0.2 (max)
18	Lead as Pb(max), mg/l	APHA 3111 B,C	< 0.001	<0.001	0.1 (max)
19	Zinc as Zn(max), mg/l	APHA 3111 B,C	0.035	0.079	15 (max)
20	Sodium Absorption Ratio	By Calculation	7.51	10.79	
21	Total Coliform (CFU/ml)	APHA 9221 B	348/100ml	221/100ml	5000
22	Fecal Coliform (CFU/ml)	APHA 9221 B	14/100ml	7/100ml	300
23	Manganese as Mn, mg/l		0.028	0.032	0.1
24	Sodium as Na, mg/l		37.08	74.25	
25	Potassium as K, mg/l		2.84	11.52	
26	Nickel as Ni, mg/l		0.001	0.008	0.02
27	Chemical Oxygen Demand, mg/l		24.0	22.0	
28	Free Ammonia, mg/l		<0.01	<0.01	0.5
29	Boron as B, mg/l		0.004	0.001	0.5

Authorized Signatory

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(A Govt. of India Autonomous Body) Environmental Chemical Laboratory Bhubaneswar, Odisha TEST REPORT



Issued to: TATA STEEL LIMITED, MERAMANDALI	Date : 23.04.2	024
Test report No - 03/2024-003		
Source of Sample: Ganthigadia	Sample receiving Date :	01.03.2024
Source of Sample . Gartingadia	Committee of the control of the cont	

SI No	Characteristics	Test Method (P)of IS:3025		per IS 10500:2012(Latest Persion)	Test Result	
			Acceptable limit	Permissible Limit		
1.	Turbidity, NTU	Part 10	1	5	4.71	
2.	pH@Temp° C	Part 11	6.5-8.5	No relaxation	7.54@25.0	
3.	Total Dissolved Solids mg/L	Part 16	500	2000	591.0	
4.	Total Hardness (as CaCO ₃),mg/L	Part 21	200	600	436.0	
5.	Calcium as Ca, mg/L	Part 40	75	200	83.37	
6.	Magnesium as Mg, mg/L	Part 46	30	100	55.40	
7.	Alkalinity as CaCO ₃ , mg/L	Part 23	200	600	413.0	
8.	Chloride as Cl, mg/L	Part 32	250	1000	47.0	
9.	Sulfate as SO ₄ , mg/L	Part 24	200	400	82.02	
10.	Fluoride as F, mg/L	Part 60	1.0	1.5	1.10	
11.	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.301	
12.	Copper as Cu, mg/L	Part 42	0.05	1.5	0.013	
13.	Manganese as Mn, mg/L	APHA(PART 3111B)	0.1	0.3	0.028	
14.	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.108	
15.	Lead as Pb, mg/L	Part 47	0.01	No relaxation	< 0.001	
16.	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	< 0.001	
17.	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	< 0.001	
18.	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	<0.001	

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Dr. Arakshita Majhi

Senior Principal Scientist

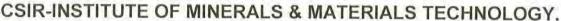
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E mail - arakshita@immt.res.in

NOTES:

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- This certificate shall not be used in any advertising media or as evidence in the court of Law without prior written consent of laboratory.
- 4. Latest version of test methods used as per latest specification.
- 5. It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned in "acceptable limit" render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicate under "permissible limit" in the absence of alternative sources, above which the source will have to be rejected.

Non NABL Test report - P.T.O



(A Govt. of India Autonomous Body) **Environmental Chemical Laboratory** Bhubaneswar, Odisha **TEST REPORT**

Issued to: TATA STEEL LIMITED, MERAMANDALI Date: 23.04.2024

Test report No -03/2024-003

Source of Sample: Ganthigadia Sample receiving Date: 01.03.2024

Type of Sample: well water Sample Analysis Date: 01.03.2024

19.	*Color, Hazen units	Part 4	5	15	<5
20.	*Odour	Part 5	Agreeable	Agreeable	Agreeable
21,	*Conductivity, μs/cm	Part 14	-	-	1015
22.	*Total Suspended Solid, mg/l	Part 17		+	6.0
23.	*Nitrite as NO2,mg/L	Part 34		4.	0.181
24.	*Nitrate as NO ₃ , mg/L	Part 34	45	No relaxation	17.2
25.	Sodium, mg/l	Part 45			30.47
26.	Potassium, mg/l	Part 45	S	,~;	0.33
27.	Residual Free Chlorine, mg/l	Part 26	0.2	1.0	<0.1
28.	Arsenic as As, mg/l	Part 37	0.01	No relaxation	<0.001
29.	Total Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	542/100ml
30.	Fecal Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	39/100ml

Authorized Signatory

Dr. Arakshita Maini Senior Principal Scienti (Emphrental Chemical Lab) (ISO17025:2017, NAOL L. Principal & Sustainability Dept.

Dr. Arakshita Wiji Milinerals & Materials Technick

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- 6. Testing parameters which are not set limitation has marked as "-".



(A Govt. of India Autonomous Body) Environmental Chemical Laboratory Bhubaneswar, Odisha TEST REPORT



Issued to: TATA STEEL LIMITED, MERAMANDALI	Date : 23.04.2	024
Test report No - 03/2024-004		
Source of Sample: Khaliberena	Sample receiving Date :	01.03.2024
Type of Sample: well water	Sample Analysis Date :	01.03.2024

SI No	Characteristics	Test Method (P)of IS:3025		er IS 10500:2012(Latest ersion)	Test Result	
			Acceptable limit	Permissible Limit		
1.	Turbidity, NTU	Part 10	1	5	1.10	
2.	pH@Temp° C	Part 11	6.5-8.5	No relaxation	7.57@25.0	
3.	Total Dissolved Solids mg/L	Part 16	500	2000	484.0	
4.	Total Hardness (as CaCO ₃),mg/L	Part 21	200	600	372.0	
5.	Calcium as Ca, mg/L	Part 40	75	200	83.37	
6.	Magnesium as Mg, mg/L	Part 46	30	100	39.85	
7.	Alkalinity as CaCO ₃ , mg/L	Part 23	200	600	364.0	
8.	Chloride as Cl, mg/L	Part 32	250	1000	40.0	
9.	Sulfate as SO ₄ , mg/L	Part 24	200	400	47.26	
10.	Fluoride as F, mg/L	Part 60	1.0	1.5	0.55	
11.	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.339	
12.	Copper as Cu, mg/L	Part 42	0.05	1.5	0.018	
13.	Manganese as Mn, mg/L	APHA(PART 3111B)	0.1	0.3	0.027	
14.	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.089	
15.	Lead as Pb, mg/L	Part 47	0.01	No relaxation	< 0.001	
16.	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	< 0.001	
17.	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	< 0.001	
18.	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	<0.001	

Authorized Signator 7. Arakshita Majhi Senior Principal Scientist

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Environmental & Sustainability Deat
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Bhubaneswar-751013, Odisha, INDIA

Dr. Arakshita Majhi

Senior Principal Scientist

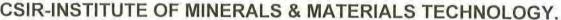
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E mail - arakshita@immt.res.in

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Non NABL Test report - P.T.O



(A Govt. of India Autonomous Body) **Environmental Chemical Laboratory** Bhubaneswar, Odisha TEST REPORT

Issued to: TATA STEEL LIMITED, MERAMANDALI Date: 23.04.2024

Test report No -03/2024-004

Source of Sample: Khaliberena Sample receiving Date: 01.03.2024

Type of Sample: well water Sample Analysis Date: 01.03.2024

19.	*Color, Hazen units	Part 4	5	15	<5
		rait 4			~3
20.	*Odour	Part 5	Agreeable	Agreeable	Agreeable
21.	*Conductivity, μs/cm	Part 14	+		845
22.	*Total Suspended Solid, mg/l	Part 17		1-5	12.0
23.	*Nitrite as NO2,mg/L	Part 34	-	-	0.045
24.	*Nitrate as NO ₃ , mg/L	Part 34	45	No relaxation	3.58
25.	Sodium, mg/l	Part 45	*	-	36.57
26.	Potassium, mg/l	Part 45	3	-	0.67
27.	Residual Free Chlorine, mg/l	Part 26	0.2	1.0	<0.1
28.	Arsenic as As, mg/l	Part 37	0.01	No relaxation	< 0.001
29.	Total Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	542/100ml
30.	Fecal Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	2/100ml

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Senior Principal Scientist

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Testing parameters which are not set limitation has marked as "-".



(A Govt. of India Autonomous Body) Environmental Chemical Laboratory Bhubaneswar, Odisha TEST REPORT



Issued to: TATA	STEEL LIMITED, MERAMANDALI	Date: 23.04.2024		
Test report No - 03	3/2024-005			
Source of Sample :	SARAPA	Sample receiving Date :	01.03.2024	

SI No	Characteristics	Test Method (P)of IS:3025	Requirements as per IS 10500:2012(Latest Version)		Test Result
			Acceptable limit	Permissible Limit	
1.	Turbidity, NTU	Part 10	1	5	13.28
2.	pH@Temp° C	Part 11	6.5-8.5	No relaxation	6.80@25.0
3.	Total Dissolved Solids mg/L	Part 16	500	2000	1390
4.	Total Hardness (as CaCO ₃),mg/L	Part 21	200	600	580.0
5.	Calcium as Ca, mg/L	Part 40	75	200	136.27
6.	Magnesium as Mg, mg/L	Part 46	30	100	58.32
7.	Alkalinity as CaCO ₃ , mg/L	Part 23	200	600	216.0
8.	Chloride as Cl, mg/L	Part 32	250	1000	425.0
9.	Sulfate as SO ₄ , mg/L	Part 24	200	400	157.45
10.	Fluoride as F, mg/L	Part 60	1.0	1.5	0.39
11.	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.471
12.	Copper as Cu, mg/L	Part 42	0.05	1.5	0.021
13.	Manganese as Mn, mg/L	APHA(PART 3111B)	0.1	0.3	1.004
14.	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.147
15.	Lead as Pb, mg/L	Part 47	0.01	No relaxation	< 0.001
16.	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	< 0.001
17.	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	< 0.001
18.	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	<0.001

Authorized Signatory

Dr. Arakshita Majhi Senior Principal Scientist (Environ ental Chemical Las) (1501-1025,20) Environmental & Sustain Ibility For

Dr. Arakshita Majhi 75 14 14 -

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NOTES:

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Non NABL Test report - P.T.O





(A Govt. of India Autonomous Body) **Environmental Chemical Laboratory** Bhubaneswar, Odisha TEST REPORT

TATA CTEEL LINAUTED NACDANAANDALL

ISS	ued to: TATA STEEL LIMIT	ED, MERAMAN	Date : 23.04.2024			
Tes	st report No -03/2024-005					
Soi	urce of Sample: SARAPA			Sample	receiving Date: 01	.03.2024
Type of Sample: well water				Sample Analysis Date: 01.03.2024		
19.	*Color, Hazen units	Part 4	5		15	<5
20.	*Odour	Part 5	Agre	eable	Agreeable	Agreeable
21.	*Conductivity, µs/cm	Part 14	-			1663
22.	*Total Suspended Solid, mg/l	Part 17	1.4		- 1 5/1	26.0
23.	*Nitrite as NO2,mg/L	Part 34	3			0.121
24.	*Nitrate as NO ₃ , mg/L	Part 34	45		No relaxation	28.2
25.	Sodium, mg/I	Part 45	-		-	108.29
26.	Potassium, mg/l	Part 45	-		-	0.93
27.	Residual Free Chlorine, mg/l	Part 26	0.2		1,0	<0.1

0.01

Shall not be detectable

Shall not be detectable

in 100ml sample

in 100ml sample

No relaxation

No relaxation

No relaxation

< 0.001

2/100ml

2/100ml

Arsenic as As, mg/l

Total Coliform by MPN

Fecal Coliform by MPN



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NOTES:

28.

29.

30.

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Part 37

IS 1622 RA 2019

IS 1622 RA 2019

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- 4. Latest version of test methods used as per latest specification.
- It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned in "acceptable limit" render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicate under "permissible limit" in the absence of alternative sources, above which the source will have to be rejected.
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(A Govt. of India Autonomous Body) **Environmental Chemical Laboratory** Bhubaneswar, Odisha TEST REPORT



Issued to: TATA STEEL LIMITED, MERAMANDALI	Date: 23.04.2024		
Test report No - 03/2024-006			
Source of Sample: SIBAPUR	Sample receiving Date :	01.03.2024	

SI No	Characteristics	Test Method (P)of IS:3025	Requirements as per IS 10500:2012(Latest Version)		Test Result
			Acceptable limit	Permissible Limit	
1.	Turbidity, NTU	Part 10	1	5	2.70
2,	pH@Temp° C	Part 11	6.5-8.5	No relaxation	7.59@25.0
3.	Total Dissolved Solids mg/L	Part 16	500	2000	493.0
4.	Total Hardness (as CaCO₃),mg/L	Part 21	200	600	332.0
5.	Calcium as Ca, mg/L	Part 40	75	200	80.16
6.	Magnesium as Mg, mg/L	Part 46	30	100	32.08
7,	Alkalinity as CaCO ₃ , mg/L	Part 23	200	600	304.0
8.	Chloride as Cl, mg/L	Part 32	250	1000	57.0
9.	Sulfate as SO ₄ , mg/L	Part 24	200	400	63.39
10.	Fluoride as F, mg/L	Part 60	1.0	1.5	0.46
11.	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.157
12.	Copper as Cu, mg/L	Part 42	0.05	1.5	0.014
1.3.	Manganese as Mn, mg/L	APHA(PART 3111B)	0.1	0.3	0.086
14.	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.084
15.	Lead as Pb, mg/L	Part 47	0.01	No relaxation	< 0.001
16.	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	< 0.001
17.	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	<0.001
18.	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	<0.001

Authorized Signatory rakshita Majhi

Senior Principal Scient 1 (Environmental Chemical Lab) (ISO 17025-2017); vironmental & Sustainability De-Ditute of Minerals & Material Dr. Arakshita Majhi

Senior Principal Scientist

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- Latest version of test methods used as per latest specification.
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Non NABL Test report - P.T.O





Issued to:

(A Govt. of India Autonomous Body) **Environmental Chemical Laboratory** Bhubaneswar, Odisha **TEST REPORT**

Test report No -03/2024-006		
Source of Sample: SIBAPUR	Sample receiving Date :	01.03.2024

Date: 23.04.2024

TATA STEEL LIMITED, MERAMANDALI

Type of Sample: well water Sample Analysis Date: 01.03.2024

19.	*Color, Hazen units	Part 4	5	15	<5
20.	*Odour	Part 5	Agreeable	Agreeable	Agreeable
21.	*Conductivity, µs/cm	Part 14	-	-	669
22.	*Total Suspended Solid, mg/l	Part 17	*	-	4.0
23.	*Nitrite as NO2,mg/L	Part 34		1	0.026
24.	*Nitrate as NO ₃ , mg/L	Part 34	45	No relaxation	3.76
25.	Sodium, mg/l	Part 45	×	9	19.62
26.	Potassium, mg/l	Part 45	-	-5	16.89
27.	Residual Free Chlorine, mg/l	Part 26	0.2	1.0	<0.1
28.	Arsenic as As, mg/l	Part 37	0.01	No relaxation	< 0.001
29.	Total Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	542/100ml
30.	Fecal Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	14/100ml

Authorized Signator&rakshita Majhi

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(A Govt. of India Autonomous Body) **Environmental Chemical Laboratory** Bhubaneswar, Odisha TEST REPORT



Issued to: TATA STEEL LIMITED, MERAMANDALI	Date: 23.04.2024	
Test report No - 03/2024-007		
Source of Sample: CHARADA	Sample receiving Date :	01.03.2024

SI No	Characteristics	Test Method (P)of IS:3025	Requirements as per IS 10500:2012(Latest Version)		Test Result
			Acceptable limit	Permissible Limit	
1.	Turbidity, NTU	Part 10	1	5	1.70
2.	pH@Temp° C	Part 11	6.5-8.5	No relaxation	7.11@25.0
3.	Total Dissolved Solids mg/L	Part 16	500	2000	1268.0
4.	Total Hardness (as CaCO₃),mg/L	Part 21	200	600	608.0
5.	Calcium as Ca, mg/L	Part 40	75	200	35.27
6.	Magnesium as Mg, mg/L	Part 46	30	100	126.62
7.	Alkalinity as CaCO₃, mg/L	Part 23	200	600	484.0
8.	Chloride as Cl, mg/L	Part 32	250	1000	240.0
9.	Sulfate as SO ₄ , mg/L	Part 24	200	400	125.41
10.	Fluoride as F, mg/L	Part 60	1.0	1.5	0.98
11.	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.125
12.	Copper as Cu, mg/L	Part 42	0.05	1.5	0.007
13.	Manganese as Mn, mg/L	APHA(PART 3111B)	0.1	0.3	0.032
14.	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.079
15.	Lead as Pb, mg/L	Part 47	0.01	No relaxation	< 0.001
16.	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	< 0.001
17.	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	<0.001
18.	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	<0.001

Authorized Signatory r. Arakshita Majhi
Senior Principal Scientist
(Environmental Chemical Lab) (ISO17025:2017, NABL Lab)
Environmental & Sustainability Dept.
CSIR_Institute of Minerals & Materials Technology CSIR-Institute of Minerals & Materials Technology Bhubaneswal - 13. Odisha, INDIA

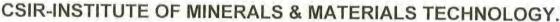
Dr. Arakshita Majhi

Senior Principal Scientist Phone: 0674-2379236, E mail - arakshita@immt.res.in

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Non NABL Test report - P.T.O



(C)

(A Govt. of India Autonomous Body)
Environmental Chemical Laboratory
Bhubaneswar, Odisha
TEST REPORT

Issued to: TATA STEEL LIMITED, MERAMANDALI Date: 23.04.2024

Test report No -03/2024-007

Source of Sample: CHARADA Sample receiving Date: 01.03.2024

Type of Sample: well water Sample Analysis Date: 01.03.2024

19.	*Color, Hazen units	Part 4	5	15	<5
20.	*Odour	Part 5	Agreeable	Agreeable	Agreeable
21.	*Conductivity, µs/cm	Part 14	-	4	1772
22.	*Total Suspended Solid, mg/l	Part 17	3	-	6.0
23.	*Nitrite as NO2,mg/L	Part 34	×	-	0.556
24.	*Nitrate as NO ₃ , mg/L	Part 34	45	No relaxation	182.0
25.	Sodium, mg/I	Part 45	-	-	167.48
26.	Potassium, mg/l	Part 45	3	2	5.61
27.	Residual Free Chlorine, mg/l	Part 26	0.2	1.0	<0.1
28.	Arsenic as As, mg/l	Part 37	0.01	No relaxation	< 0.001
29,	Total Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	221/100m
30.	Fecal Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	4/100ml

Authorized Signatory Arakshita Majhi

Senior Principal Scientist
(Environmenta Chemical Lab) (ISO17025:2017, MAN, L. S.
Environmental & Sustainability Dept
CSIR-Institute of Minerals & Materials Technology

Dr. Arakshita Majiri 751013, General Well. Senior Principal Scientist

Phone: 0674-2379236.

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6. Testing parameters which are not set limitation has marked as "-".



(A Govt. of India Autonomous Body) Environmental Chemical Laboratory Bhubaneswar, Odisha TEST REPORT



Issued to: TATA STEEL LIMITED, MERAMANDALI	Date: 23.04.2024	
Test report No - 03/2024-008	-1	
Source of Sample: KOCHILAMARA	Sample receiving Date :	01.03.2024

SI No	Characteristics	Test Method (P)of IS:3025	Requirements as per IS 10500:2012(Latest Version)		Test Result
			Acceptable limit	Permissible Limit	
1.	Turbidity, NTU	Part 10	1	5	0.75
2.	pH@Temp° C	Part 11	6.5-8.5	No relaxation	7.16@25.0
3.	Total Dissolved Solids mg/L	Part 16	500	2000	503
4.	Total Hardness (as CaCO ₃),mg/L	Part 21	200	600	316.0
5.	Calcium as Ca, mg/L	Part 40	75	200	52.91
6.	Magnesium as Mg, mg/L	Part 46	30	100	44.71
7.	Alkalinity as CaCO ₃ , mg/L	Part 23	200	600	392.0
8.	Chloride as Cl, mg/L	Part 32	250	1000	50.0
9.	Sulfate as SO ₄ , mg/L	Part 24	200	400	57.25
10.	Fluoride as F, mg/L	Part 60	1.0	1.5	1.10
11.	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.238
12.	Copper as Cu, mg/L	Part 42	0.05	1.5	0.011
13.	Manganese as Mn, mg/L	APHA(PART 3111B)	0.1	0.3	0.027
14.	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.073
15.	Lead as Pb, mg/L	Part 47	0.01	No relaxation	< 0.001
16.	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	< 0.001
17.	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	< 0.001
18.	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	<0.001

Authorized Signatory

Dr. Arakshita Majhi Senior Principal Sciential Principal Sciential Chemical Lab) (ISO17025:2017, Nadition Principal & Sustainability Dept CSIR-Institute of Minerals & Materials Trans

Dr. Arakshita Majhiswar-751013 Occana, INC.

Senior Principal Scientist Phone: 0674-2379236.

E mail - arakshita@immt.res.in

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Non NABL Test report - P.T.O



(A Govt. of India Autonomous Body) **Environmental Chemical Laboratory** Bhubaneswar, Odisha **TEST REPORT**

Issued to: TATA STEEL LIMITED, MERAMANDALI Date: 23.04.2024

Test report No -03/2024-008

Source of Sample: KOCHILAMARA Sample receiving Date: 01.03.2024

Type of Sample: well water Sample Analysis Date: 01.03.2024

19.	*Color, Hazen units	Part 4	5	15	<5
20.	*Odour	Part 5	Agreeable	Agreeable	Agreeable
21.	*Conductivity, µs/cm	Part 14	i.	-	869
22.	*Total Suspended Solid, mg/l	Part 17	*	+	2.0
23.	*Nitrite as NO2,mg/L	Part 34	9	3.	0.115
24.	*Nitrate as NO ₃ , mg/L	Part 34	45	No relaxation	49.6
25.	Sodium, mg/l	Part 45	-	~	89.2
26.	Potassium, mg/l	Part 45	4	i-	0.55
27.	Residual Free Chlorine, mg/l	Part 26	0.2	1.0	<0.1
28.	Arsenic as As, mg/l	Part 37	0.01	No relaxation	<0.001
29.	Total Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	542/100m
30.	Fecal Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	14/100ml

Authorized Signatory Arakshita Majhi

Senior Principal Scientist
(Environment Chemical Lab) (ISO17025 2017, 14 = 11)
Environment Chemical Lab) (ISO17025 2017, 14 = 11)
Environment Chemical & Sustainability D.
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Dr. Arakshita Majhi 75

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(A Govt. of India Autonomous Body) Environmental Chemical Laboratory Bhubaneswar, Odisha TEST REPORT



Issued to: TATA STEEL LIMITED, MERAMANDALI	Date: 23.04.2024	
Test report No - 03/2024-009		
Source of Sample: KHARAGPRASAD	Sample receiving Date: 01.03.2024	
	Sample Analysis Date: 01.03.2024	

SI No	Characteristics	Test Method (P)of IS:3025	Requirements as per IS 10500:2012(Latest Version)		Test Result
			Acceptable limit	Permissible Limit	
1.	Turbidity, NTU	Part 10	1	5	3.45
2.	pH@Temp° C	Part 11	6.5-8.5	No relaxation	6.76@25.0
3.	Total Dissolved Solids mg/L	Part 16	500	2000	277.0
4.	Total Hardness (as CaCO₃),mg/L	Part 21	200	600	160.0
5.	Calcium as Ca, mg/L	Part 40	75	200	40.08
6.	Magnesium as Mg, mg/L	Part 46	30	100	14.58
7.	Alkalinity as CaCO ₃ , mg/L	Part 23	200	600	140.0
8.	Chloride as Cl, mg/L	Part 32	250	1000	29.0
9.	Sulfate as SO ₄ , mg/L	Part 24	200	400	30.67
10.	Fluoride as F, mg/L	Part 60	1.0	1.5	0.12
11.	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.228
12.	Copper as Cu, mg/L	Part 42	0.05	1.5	0.012
13.	Manganese as Mn, mg/L	APHA(PART 3111B)	0.1	0.3	0.025
14.	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.057
15.	Lead as Pb, mg/L	Part 47	0.01	No relaxation	< 0.001
16.	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	< 0.001
17.	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	< 0.001
18.	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	<0.001

Authorized Signatory

Dr. Arakshita Majhi Senior Principal Scientist Environmental Chemical Labi (ISO17025, 2017, NAR)

Dr. Arakshita Majhihubaneswar-751013, Odisha, INDIX.

Senior Principal Scientist

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Non NABL Test report - P.T.O





(A Govt. of India Autonomous Body) **Environmental Chemical Laboratory** Bhubaneswar, Odisha **TEST REPORT**

Issued to:	TATA STEEL LIMITED, MERAMANDALI	Date: 23.04.2024

Test report No -03/2024-009

Source of Sample: KHARAGPRASAD Sample receiving Date: 01.03.2024

Type of Sample: well water Sample Analysis Date: 01.03.2024

19.	*Color, Hazen units	Part 4	5	15	<5
20.	*Odour	Part 5	Agreeable	Agreeable	Agreeable
21.	*Conductivity, µs/cm	Part 14	4	-	450
22,	*Total Suspended Solid, mg/l	Part 17	¥	~	3.0
23.	*Nitrite as NO2,mg/L	Part 34	>	÷	0.048
24.	*Nitrate as NO ₃ , mg/L	Part 34	4.5	No relaxation	12.3
25.	Sodium, mg/l	Part 45			9.84
26.	Potassium, mg/l	Part 45		-	10.33
27.	Residual Free Chlorine, mg/l	Part 26	0.2	1.0	<0.1
28.	Arsenic as As, mg/l	Part 37	0.01	No relaxation	<0.001
29.	Total Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	348/100ml
30.	Fecal Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	10/100ml

Authorized Signatory Arakshila Mathi

Senior Principal Scientific (Environmental Chemical Lab) (ISO17025-2017 Na 21 L. CSIR-INSTITUTE of Minerals & Sustainability Dopt. Bhubaneswar-751013, Odisha, INDIA

Senior Principal Scientist Phone: 0674-2379236,

E mail - arakshita@immt.res.in

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(A Govt. of India Autonomous Body) **Environmental Chemical Laboratory** Bhubaneswar, Odisha TEST REPORT



Issued to: TATA STEEL LIMITED, MERAMANDALI	Date: 23.04.2024	
Test report No - 03/2024-0010		
Source of Sample: MOTANGA	Sample receiving Date :	01.03.2024
Type of Sample: well water	Sample Analysis Date :	01.03.2024

SI No	Characteristics	Test Method (P)of IS:3025	Requirements as per IS 10500:2012(Latest Version)		Test Result
			Acceptable limit	Permissible Limit	
1.	Turbidity, NTU	Part 10	1	5	1.66
2.	pH@Temp° C	Part 11	6.5-8.5	No relaxation	7.29@25.0
3.	Total Dissolved Solids mg/L	Part 16	500	2000	676.0
4.	Total Hardness (as CaCO ₃),mg/L	Part 21	200	600	632,0
5.	Calcium as Ca, mg/L	Part 40	75	200	89.78
6.	Magnesium as Mg, mg/L	Part 46	30	100	99.14
7.	Alkalinity as CaCO ₃ , mg/L	Part 23	200	600	320.0
8.	Chloride as Cl, mg/L	Part 32	250	1000	118.0
9.	Sulfate as SO ₄ , mg/L	Part 24	200	400	129.96
10.	Fluoride as F, mg/L	Part 60	1.0	1.5	1.0
11.	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.153
12.	Copper as Cu, mg/L	Part 42	0.05	1.5	0.005
13.	Manganese as Mn, mg/L	APHA(PART 3111B)	0.1	0.3	0.060
14.	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.064
15.	Lead as Pb, mg/L	Part 47	0.01	No relaxation	< 0.001
16.	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	< 0.001
17.	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	< 0.001
18.	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	<0.001

Authorized Signatory

Dr. Arakshita Majhi Senior Principal Scientist Imental Chemical Lab) (ISO17025:2017, NAGL Lab) Dr. Arakshita Majhineswar-751013, Onisha, INDIA

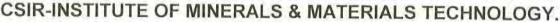
Senior Principal Scientist

Phone: 0674-2379236. E mail - arakshita@immt.res.in

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Non NABL Test report - P.T.O





(A Govt. of India Autonomous Body)
Environmental Chemical Laboratory
Bhubaneswar, Odisha
TEST REPORT

Issued to: TATA STEEL LIMITED, MERAMANDALI Date: 23.04.2024

Test report No - 03/2024-0010

Source of Sample: MOTANGA Sample receiving Date: 01.03.2024

Type of Sample: well water Sample Analysis Date: 01.03.2024

				2.72.3/400.5.4.4.121	
19.	*Color, Hazen units	Part 4	5	15	<5
20.	*Odour	Part 5	Agreeable	Agreeable	Agreeable
21.	*Conductivity, µs/cm	Part 14		ė.	1275
22.	*Total Suspended Solid, mg/l	Part 17		-	2.0
23.	*Nitrite as NO2,mg/L	Part 34	*		0.039
24.	*Nitrate as NO ₃ , mg/L	Part 34	45	No relaxation	12.1
25.	Sodium, mg/l	Part 45	-	-	69.8
26.	Potassium, mg/l	Part 45	-	(-)	1.33
27.	Residual Free Chlorine, mg/l	Part 26	0.2	1.0	<0.1
28.	Arsenic as As, mg/l	Part 37	0.01	No relaxation	< 0.001
29.	Total Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	17/100ml
30.	Fecal Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	2/100ml

Authorized Signatory

Senior Principal Scientist
(Environmental & Sustainability For CSIR Institute of Minerals & Maleral Land

Dr. Arakshita Majayar-7510 M.

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(A Govt. of India Autonomous Body) Environmental Chemical Laboratory Bhubaneswar, Odisha TEST REPORT



Issued to: TATA STEEL LIMITED, MERAMANDA	LI Date : 23.04.2024
Test report No - 03/2024-011	
Source of Sample: GALPADA	Sample receiving Date: 01.03.202
Type of Sample: well water	Sample Analysis Date: 01.03.202

SI No	Characteristics	Test Method (P)of IS:3025	The state of the s	oer IS 10500:2012(Latest ersion)	Test Result
			Acceptable limit	Permissible Limit	
1.	Turbidity, NTU	Part 10	1	5	1.19
2.	pH@Temp° C	Part 11	6.5-8.5	No relaxation	7.05@25.0
3.	Total Dissolved Solids mg/L	Part 16	500	2000	186.0
4.	Total Hardness (as CaCO₃),mg/L	Part 21	200	600	104.0
5.	Calcium as Ca, mg/L	Part 40	75	200	32.06
6.	Magnesium as Mg, mg/L	Part 46	30	100	5.83
7.	Alkalinity as CaCO ₃ , mg/L	Part 23	200	600	96.0
8.	Chloride as Cl, mg/L	Part 32	250	1000	15.00
9.	Sulfate as SO ₄ , mg/L	Part 24	200	400	13.61
10.	Fluoride as F, mg/L	Part 60	1.0	1.5	0.19
11.	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.989
12.	Copper as Cu, mg/L	Part 42	0.05	1.5	0.032
13.	Manganese as Mn, mg/L	APHA(PART 3111B)	0.1	0.3	0.077
14.	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.227
15.	Lead as Pb, mg/L	Part 47	0.01	No relaxation	< 0.001
16.	Cadmium as Cd, mg/l.	Part 41	0.003	No relaxation	< 0.001
17.	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	< 0.001
18.	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	<0.001

Authorized Signatory

Senior Principal Scientist
Senior Principal Scientist
Senior Principal Scientist
Senvironmental Chemical Lab) (ISO17025:2017, NAIL Laboration Senvironmental & Sustainability Dental SiR-Institute of Minerals & Materials incurring Bhubaneswar-751013, Odisha, INDIA

Dr. Arakshita Majhi

Senior Principal Scientist

Phone: 0674-2379236,

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Non NABL Test report - P.T.O



imul

(A Govt. of India Autonomous Body)
Environmental Chemical Laboratory
Bhubaneswar, Odisha
TEST REPORT

Issued to: TATA STEEL LIMITED, MERAMANDALI Date: 23.04.2024

Test report No - 03/2024-011

Source of Sample: GALPADA Sample receiving Date: 01.03.2024

Type of Sample: well water Sample Analysis Date: 01.03.2024

19.	*Color, Hazen units	Part 4	5	15	<5
20.	*Odour	Part 5	Agreeable	Agreeable	Agreeable
21.	*Conductivity, µs/cm	Part 14	*	*	248
22.	*Total Suspended Solid, mg/l	Part 17	be .	-	2.0
23.	*Nitrite as NO2,mg/L	Part 34	×	-	0.024
24.	*Nitrate as NO ₃ , mg/L	Part 34	45	No relaxation	3.12
25.	Sodium, mg/l	Part 45		-	7.72
26.	Potassium, mg/l	Part 45		+	0.44
27.	Residual Free Chlorine, mg/l	Part 26	0.2	1.0	<0.1
28.	Arsenic as As, mg/l	Part 37	0.01	No relaxation	<0.001
29.	Total Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	141/100ml
30.	Fecal Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	2/100ml

Authorized Signatory
Dr. Arakshila Maihi

Senior Principal Scient of (Environmental & Sustainability (2)

Or. Arakshita (Viajhor-751013) Gdisha (NDIA)

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(A Govt. of India Autonomous Body) **Environmental Chemical Laboratory** Bhubaneswar, Odisha TEST REPORT



Issued to: TATA STEEL LIMITED, MERAMANI	DALI Date : 23.04.2024
Test report No – 03/2024-012	
Source of Sample: ETAPA	Sample receiving Date: 01.03.2024
Type of Sample: well water	Sample Analysis Date: 01.03.2024

SI No	Characteristics	Test Method (P)of IS:3025			Test Result
		10.1	Acceptable limit	Permissible Limit	
1.	Turbidity, NTU	Part 10	1	5	123
2.	pH@Temp° C	Part 11	6,5-8.5	No relaxation	7.11@25.0
3.	Total Dissolved Solids mg/L	Part 16	500	2000	586.0
4.	Total Hardness (as CaCO ₃),mg/L	Part 21	200	600	328.0
5.	Calcium as Ca, mg/L	Part 40	75	200	16.03
6.	Magnesium as Mg, mg/L	Part 46	30	100	69.98
7.	Alkalinity as CaCO ₃ , mg/L	Part 23	200	600	188.0
8.	Chloride as Cl, mg/L	Part 32	250	1000	85.0
9.	Sulfate as SO ₄ , mg/L	Part 24	200	400	1.98
10.	Fluoride as F, mg/L	Part 60	1.0	1.5	1.00
11.	Iron as Fe, mg/L	Part 53	0.3	No relaxation	2.522
12.	Copper as Cu, mg/L	Part 42	0.05	1.5	0.016
13.	Manganese as Mn, mg/L	APHA(PART 3111B)	0.1	0.3	2.715
14.	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.212
15.	Lead as Pb, mg/L	Part 47	0.01	No relaxation	< 0.001
16.	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	< 0.001
17.	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	< 0.001
18.	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	<0.001

Authorized Signatory

Senior Principal Scientist
(Environmental Chemical Lab) (ISO17025:2017, NABL Lab) Environmental & Sustainability Dept.

CSIR-Institute of Minerals & Materials Technology

Dr. Arakshita Majhi

Senior Principal Scientist

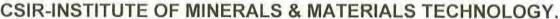
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NOTES:

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- This certificate shall not be used in any advertising media or as evidence in the court of Law without prior written consent of laboratory.
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Non NABL Test report - P.T.O





(A Govt. of India Autonomous Body) **Environmental Chemical Laboratory** Bhubaneswar, Odisha TEST REPORT

Issued to: TATA STEEL LIMITED, MERAMANDALI Date: 23.04.2024

Test report No - 03/2024-012

Source of Sample: ETAPA Sample receiving Date: 01.03.2024

Type of Sample: well water Sample Analysis Date: 01.03.2024

19.	*Color, Hazen units	Part 4	5	15	10
20.	*Odour	Part 5	Agreeable	Agreeable	Agreeable
21.	*Conductivity, µs/cm	Part 14	7	8	962
22.	*Total Suspended Solid, mg/l	Part 17	d .	-	56.0
23.	*Nitrite as NO2,mg/L	Part 34	12	-	0.053
24.	*Nitrate as NO ₃ , mg/L	Part 34	45	No relaxation	3.94
25.	Sodium, mg/l	Part 45	\$		123.9
26.	Potassium, mg/l	Part 45	-	-	17.19
27.	Residual Free Chlorine, mg/l	Part 26	0.2	1.0	<0.1
28.	Arsenic as As, mg/l	Part 37	0.01	No relaxation	< 0.001
29.	Total Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	542/100ml
30.	Fecal Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	120/100ml

Authorized Signatory

(Environmental Manical Lab) (ISO17025-2017, MABI Lab)
Environmental & Sustainability Dept.
CSIR-Institute of Minerals & Materials Technology
Dr. Arakshita Majhi-751013, Odisha, INDIA

Senior Principal Scientist Phone: 0674-2379236,

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- 6. Testing parameters which are not set limitation has marked as "-".



(A Govt. of India Autonomous Body) Environmental Chemical Laboratory Bhubaneswar, Odisha TEST REPORT



Issued to: TATA STEEL LIMITED, MERAMANDALI	Date : 23.04.2	024
Test report No - 03/2024-013	1	
Source of Sample: NARENDRAPUR	Sample receiving Date :	01.03.2024
Type of Sample: well water	Sample Analysis Date :	01.03.2024

SI No	Characteristics	Test Method (P)of IS:3025	Requirements as per IS 10500:2012(Latest Version)		Test Result
		1700 677	Acceptable limit	Permissible Limit	
1.	Turbidity, NTU	Part 10	1	5	7.75
2.	pH@Temp° C	Part 11	6.5-8.5	No relaxation	7.52@25.0
3.	Total Dissolved Solids mg/L	Part 16	500	2000	565.0
4.	Total Hardness (as CaCO ₃),mg/L	Part 21	200	600	324.0
5.	Calcium as Ca, mg/L	Part 40	75	200	16.03
6.	Magnesium as Mg, mg/L	Part 46	30	100	69.01
7.	Alkalinity as CaCO ₃ , mg/L	Part 23	200	600	376.0
8.	Chloride as Cl, mg/L	Part 32	250	1000	45.0
9.	Sulfate as SO ₄ , mg/L	Part 24	200	400	62.25
10.	Fluoride as F, mg/L	Part 60	1.0	1.5	0.94
11.	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.172
12.	Copper as Cu, mg/L	Part 42	0.05	1.5	0.008
13.	Manganese as Mn, mg/L	APHA(PART 3111B)	0.1	0.3	0.354
14.	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.064
15.	Lead as Pb, mg/L	Part 47	0.01	No relaxation	< 0.001
16.	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	< 0.001
17.	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	< 0.001
18.	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	<0.001

Authorized Signatory

Dr. Arakshita Majhi
Sentor Principal Scientist
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Senior Principal Scientist

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Non NABL Test report - P.T.O





(A Govt. of India Autonomous Body)
Environmental Chemical Laboratory
Bhubaneswar, Odisha
TEST REPORT

Issued to:	TATA STEEL LIMITED,	MERAMANDALI	Date: 23.04.2024

Test report No - 03/2024-013

Source of Sample: NARENDRAPUR Sample receiving Date: 01.03.2024

Type of Sample: well water Sample Analysis Date: 01.03.2024

19.	*Color, Hazen units	Part 4	5	15	<5
20.	*Odour	Part 5	Agreeable	Agreeable	Agreeable
21.	*Conductivity, µs/cm	Part 14	4		964
22.	*Total Suspended Solid, mg/l	Part 17	4	P.	8.0
23.	*Nitrite as NO2,mg/L	Part 34	9	84	0.089
24.	*Nitrate as NO3, mg/L	Part 34	45	No relaxation	10.63
25.	Sodium, mg/l	Part 45	-	P-	75.36
26.	Potassium, mg/l	Part 45	-	2	3.39
27.	Residual Free Chlorine, mg/l	Part 26	0.2	1.0	<0.1
28.	Arsenic as As, mg/l	Part 37	0.01	No relaxation	<0.001
29.	Total Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	542/100m
30.	Fecal Coliform by MPN	IS 1622 RA 2019	Shall not be detectable in 100ml sample	No relaxation	120/100m

Authorized Signatory Arakshita Majhi

Senior Principal Samular (Environmental Chemical Lab) (100170/2017, N. Lab) Commental & Sustainability Dept.

Commental & Sustainability Dept.

Brub Nesylar-751013, Odisha, INDIA

Senior Principal Scientist Phone: 0674-2379236, E mail - arakshita@immt.res.in

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(A Govt. of India Autonomous Body)

Environmental Chemical Laboratory



Bhubaneswar, Odisha (An NABL Accredited Laboratory)

TEST REPORT

Issued to: Tata Steel Limited, Meramandali

Date: 23.04.2024

Test Report No.03/2024-014

Sample Condition: In Plastic Jar

Sample quantity: 2 Litre

Sampling Method: APHA1060B

Source of Sample: Letter Reference:

Sample Collected on: 01.03.2024

Sample Analysed on: 01.03.2024

SI No	Characteristics	Test Method As Per APHA	Discharge to Lingra	Sepage water	Standard as per Class C-IS 2296/CPCB/SPCB
1	pH Value	APHA 4500H+ B	7.46	8.03	6.0-9.0
2	Colour	APHA 2120 B, C	1.3	4.6	300 (max)
3	Electrical Conductivity, μs/cm	APHA 2510 B	1485	1549	
4	Total Dissolved Solids, mg/l	APHA 2540 C	967.0	1056.0	1500 (max)
5	Dissolved Oxygen, mg/l	APHA 2540 C	7.2	6.7	4 (min)
6	BOD (3) days at 27°C	APHA 5210 B	5.2	2.1	3 (max)
7	Chloride, mg/l	APHA 4500CI- B	264.0	120.0	600 (max)
8	Fluoride as F, mg/l	APHA 4500F- C	9.8	2.0	1.5 (max)
9	Sulphates (SO ₄), mg/l	APHA 4500 SO42- E	169.0	478.0	400 (max)
10	Nitrate as NO ₃ , mg/l	APH4500 NO3- E	86.4	3.57	50 (max)
11	Hexa Chromium as Cr ⁺⁶ , mg/l	APHA 3500Cr B	0.009	0.014	0.05
12	Cyanide as CN, mg/l	APHA 4500 CN- C,D	<0.03	<0.03	0.05 (max)
13	Copper as Cu, mg/l	APHA 3111 B,C	0.014	0.019	1.5 (max)
14	Iron as Fe, mg/l	APHA 3500Fe, B	0.152	0.089	0.5 (max)
15	Cadmium as Cd, mg/l	APHA 3111 B,C	< 0.001	<0.001	0.01 (max)

Bhubaneswar-751013, Odlina, INDIA



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Environmental Chemical Laboratory



Bhubaneswar, Odisha (An NABL Accredited Laboratory)

TEST REPORT

16	Selenium as Se, mg/l	APHA 3114 B	<0.001	< 0.001	0.05 (max)
17	Arsenic as As, mg/l	APHA 3114 B	< 0.001	<0.001	0.2 (max)
18	Lead as Pb(max), mg/l	APHA 3111 B,C	< 0.001	<0.001	0.1 (max)
19	Zinc as Zn(max), mg/l	APHA 3111 B,C	0.086	0.071	15 (max)
20	Sodium Absorption Ratio	By Calculation	16.43	12.84	-
21	Total Coliform (CFU/ml)	APHA 9221 B			5000
22	Fecal Coliform (CFU/ml)	APHA 9221 B			300
23	Manganese as Mn, mg/l		0.009	0.012	0.1
24	Sodium as Na, mg/l		125.68	126.71	
25	Potassium as K, mg/l		40.59	3.69	
26	Nickel as Ni, mg/l		0.008	0.005	0.02
27	Chemical Oxygen Demand, mg/l		48.0	32.0	
28	Free Ammonia, mg/l		<0.01	<0.01	0.5
29	Boron as B, mg/l		0.007	0.014	0.5

Authorized Signator Way Principal Scientist
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Environmental & Sustainability Dept.
CSIR-Institute of Minerals & Materials Technology
Dr Arakshita Wajhwar-751013, Odisha, INDIA

Senior Principal Scientist Phone -0674-2379236

E mail I.D- arakshita@immt.res.in

TATA Steel Meramandali

SI no	Location	Depth
S-1	Kisinda UP Stream- Surface water	
S-2	Ganthigadia – Ground water	2.2 metre
S-3	Khaliberena – Ground water	4.6 metre
S-4	Lingra UP Stream- Surface water	
S-5	Sarapa – Ground water	1.8 metre
S-6	Sibapur – Ground water	6.8 Metre
S-7	Charada – Ground water	7.5 Metre
S-8	Kochilamara – Ground water	5.9 metre
S-9	Kharag Prasad – Ground water	4.2 metre
S-10	Motonga – Ground water	4.1 Metre
S-11	Galpada – Ground water	4.7 metre
S-12	Lingara Down stream Surface water	
S-13	Kisinda Down Stream Surface water	
S-14	Etapa – Ground water	8.2 metre
S-15	Narendrapur – Ground water	9.2 Metre

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CSR EXPENDITURE AND ACTIVITY HIGHLIGHTS (Around Tata Steel Ltd. Meramandali)

Period: From April'23 to March'24

PROGRAM HEAD	Expenditure (Rupees) in Lakh	MAJOR INTERVENTIONS/REMARKS
Health & drinking wtr	327.43	Public Health Unit; Rishta; Dengue/Malaria control, Cataract, Non communicable disease control
Education	912.85	PISCI culture, Lemon grass, SRI farming
Livelihood	173.55	Odapada pond renovation work. 9 acre
Infrastructure & misc.	792.16	Installation of tubewells; deep bore wells, pipeline system and water supply through tanker
Sports	50.80	School infrastructure; Education project: QUEST
Empowerment	94.48	WEE Project
Ethnicity	2.38	Volleyball coaching
Relief fund	0.03	Odia New year celebration (Maha Bisuva Sankranti)
TOTAL	2353.68	

Ref.No. EMD/LAB/2023-24/138 Dt. 07.11.2023

 $\frac{\partial^2 (x^2 + x^2

S.N	Name of the unit	Location	Noise level in dB(A)			
			Min	Max	Leq	
1	BF-2 Cast House	Control room	56.1	60.1	58.4	
2	BE 2 Charles III	Near B F-2 Furnace area	80.7	83.8	82.2	
3	BF-2 Stock House	Control room office	48.4	59.3	56.7	
	Lime Plant	Inside office building	59.0	66.6	61.9	
4 5	BF PP-1 Boiler-03	Near Control room office	55.4	69.3	58.7	
5	Gas fired boiler 250 TPH Area	Office and Control Room	51.8	75.2	62.4	
		KILN NO-1, Near 1& 2 control room office	51,3	63.3	54.9	
	ĺ	KILN NO-3, Near 3& 4control room office	51.6	61.6	52.7	
6	DRI	KILN NO-5, Near 5& 6 control room office	51.3	63.7	53.7	
		KILN NO-7, Near 7& 8 control room office	51.5	73	58.2	
<u></u>	· · · · · · · · · · · · · · · · · · ·	KILN NO-8, Near 9&10 control room office	51.4	77.9	60.1	
7 	BF-1 Cast House	Near B F-1 Furnace	81 1	82.6	80.8	
 	BF-1 Stock House	BF-1 Office	48.9	60.2	58.7	
	CRM	Near CRM Mill Complex Area	78.9	86.8	84.5	
		Near L.L.L	SD	SD	SD	
		Near ETP area	SD	SD	<u>50</u> _ SD	
		Near GP-1 Zinc Pot	\$D	SD	SD	
		Near GP-2 Zinc Pot	82.9	86.4		
		Near GP-3 Zinc Pot	85.1	90	84.8 87.5	
		Colour Coating Line	83.2	91.5	87.5	
9		Mill-1	85.5	90.6		
		Mill-2	51.2	58.4	88.7	
		Mill-3	85.3	95.4	56.3 88.6	
		CRM Plant Office	78.1	90.5		
		ECL	85.9	7" -	83.3	
		CRCA	SD	89.4 SD	86.9 SD	
		SPM	78.9	86.8	84.5	
		RGM	SD	SD	SD	
		9 m office room	56.7	70.3	62.8	
0	Sinter Plant-1	15 m office	69.3	80.7	71.1	
	onter Mant-1	19 m office	55.0	71.2	63.7	
	<u> </u>	Store area	70.0	77.7	71	
		Electrical office	54.4	64.4	55.6	
1	Coke Oven-1	Control room office	53.4	85.5	55.7	
,	Cinta Di Los	Laboratory	50.3	58.3	54.5	
	Sinter Plant-02	Control Room Area	58	82.8	64.6	
3 1	Sinter Plant-03	Control Room Area	57.6	80.3	63.9	
	BOF Shop	BOF office area	54.7	69.9	59.5	
		Near Wage bridge area	68.7	80.5	73.6	

SMS-2-FES-1&2		Booster House (ID Fan)	80.3	91.2	84.8
15		Near Control room Area	51.2	79.8	60.5
		Near RHF Office area (Pulpit)	68.7	76.5	69.3
16		Near Roll Shop area	80.2	84.1	83.4
	HSM	Near HSM Quality Lab area	46.2	50.2	48.3
		DC pulpit office area	48.2	58.4	55.8
		FM area	85.9	88.5	86.5
		Near DC sampling Station	84.8	86.2	85.6
17	Coke Oven-2	Control Room Office	59.7	63.3	60.2
18	BFPP-2 Boiler-3	Control room	58.9	67.4	
19 	Oxygen Plant-02	Control Room Office	43.6	50.2	60.2
20	BB Plant	BB Plant Office	48.9	53.6	48.7
21	RMPP	Control Room Office	48.9	51.2	50.2
23	Coal Washery	Lab & Office Area	43.1	48.5	50.7
24	IBMD	New Sarpa MRP-II (Operator Cabin)	41.2	48.2	47 <u>.2</u> 45.3
25	IBMD	Office & Operator Cabin (Old MRP)	43.6	48.2	45.3

N: B- All employees are provided ear plug / earmuff in noise prone areas.

A-K-Parachhan Section (I/C)

Tuest Kontisamal.

िङ (Manager (Lab)

Mai Jeyel Des Sr. Area Manager (Lab I/C)

...End Report...

Page 2 of 2

Ref.No. EMD/LAB/2023-24/0140 Dt.07.11.2023



S.N	Location	Monitoring Date	Noise Level dB(A) Leq (Day time)	Standard dB(A) Leq(Day Time)	Noise Level dB(A) Leq (Night time)	Standard dB(A) Leq(Night Time)
11	Colony	0.10.2023	52.8	55.0	42.3	45.0
2	Coke Oven-2	13.10.2023	65.1	75.0	58.1	70.0
3	AEL	25.10.2023	64.2	75.0	57.8	70.0

A.K. Paradhan. Section (I/C)

Ger Manager (Lab)

Sr. Area Manager (Lab I/C)

...End Report...

Ref.No. EMD/LAB/2023-24/143 Dt.08.12.2023

	S.N	Location	Monitoring Date	Noise Level dB(A) Leq (Day time)	Standard dB(A) Leq(Day Time)	Noise Level dB(A) Leq (Night time)	Standard dB(A) Leq(Night Time)
	1	Colony	10.11.23	52.6	55.0	48.8	45.0
	2	Coke Oven-2	16.11.23	63.1	75.0	56.8	70.0
	3	AEL	21.1123	64.2	75.0	76.6	70.0

A-K-Pa-Golhan. Section (I/C)

for Som de Ha Day A dail-leyel Dies Manager (Lab I/C)

...End Report...

	SMS-2-FES-1&2	Booster House (ID Fan)	78.4	81.3	80.6
15	51VIS-2-FES-10(2	Near Control room Area	58.6	73.1	62.7
		Near RHF Office area (Pulpit)	52.5	79.2	67.7
		Near Roll Shop area	79.1	84.9	83.0
16	HSM	Near HSM Quality Lab area	40.3	48.2	46.1
10	HOM	DC pulpit office area	44.3	49.2	47.8
		FM area	84.9	90.0	86.9
		Near DC sampling Station	84.3	86.9	85.1
17	Coke Oven-2	Control Room Office	48.6	68.6	53.6
18	BFPP-2 Boiler-3	Control room	46.2	50.3	49.1
19	Oxygen Plant-02	Control Room Office	53.6	59.4	55.8
20	BB Plant	BB Plant Office	45.1	50.0	48.3
21	RMPP	Control Room Office	51 0	83.8	60.0
22	Coal washery	Lab & Office area	72.3	84.1	75.0
23	RMHS	RMHS Office	54.7	77.7	67.5
24	IBMD	New Sarpa MRP-II (Operator Cabin)	51.5	75.6	62.8
25	IONID	Office & Operator Cabin (Old MRP)	54.4	67.9	56.5

N: B- All employees are provided ear plug / earmuff in noise prone areas.

/}−K ∙ዖ૪℃ ካፍງ Section (I/C) FOR SOMMAHODLY

Manager (Lab)

Sr. Area Manager (Lab I/C)

...End Report...

Page 2 of 2

Ref.No. EMD/LAB/2023-24/141 Dt.08.12.2023

S.N	Name of the unit	Location	Noise level in dB(A)		
3.N		Location	Min .	Max	Leg
1	BF-2 Cast House	Control room	45.7	50.3	48.3
	Di -2 Gast riotise	Near B F-2 Furnace area	80.7	84.3	82.1
2	BF-2 Stock House	Control room office	45.2	48.3	46.1
3	Lime Plant	Inside office building	57.0	68.7	60.2
4	BF PP-1 Boiler-03	Near Control room office	44.7	51.3	48 9
5	Gas fired boiler 250 TPH Area	Office and Control Room	48.2	56.9	50.3
		KILN NO-1, Near 1& 2 control room office	50.9	85.5	60
		KILN NO-3, Near 3& 4control room office	48.3	56.9	51.4
6	DRI	KILN NO-5, Near 5& 6 control room office	50.1	60.4	53.3
		KILN NO-7, Near 7& 8 control room office	45.9	51.3	48.3
		KILN NO-8, Near 9&10 control room office	48.3	55.4	50.1
7	BF-1 Cast House	Near B F-1 Furnace	80.3	83.0	81.5
8	BF-1 Stock House	BF-1 Office	43.9	48.3	47.3
		Near CRM Mill Complex Area	78.0	80.7	79.4
	CRM	Near T.L.L	SD	SD	SD
		Near ETP area	82.6	86.1	84.0
		Near GP-1 Zinc Pot	85.0	92.1	87.1
		Near GP-2 Zinc Pot	84.5	90.9	87.1
		Near GP-3 Zinc Pot	SD	SD	SD
		Colour Coating Line	80.5	97.5	84.1
9		Mill-1	SD	SD	SD
		Mill-2	84.1	92.3	88.4
		Mill-3	84.6	90.4	86.5
		CRM Plant Office	43.5	49.3	45.4
		₩CL	86.0	92.3	88.9
		CRCA	77.9	89.2	81.2
		SPM	86.7	91.4	89.0
		RGM	77.4	86.9	80.8
		9 m office room	66.9	84.2	73.1
		15 m office	60.9	70.0	65.4
10	Sinter Plant-1	19 m office	50.7	60.1	58.9
		Store area	77.1	80.2	78.2
		Electrical office	48.9	50.1	49.0
11	Coke Oven 1	Control room office	55.8	798	58.3
11	Coke Oven-1	Laboratory	54.6	60.6	55.8
12	Sinter Plant-02	Control Room Area	45.1	48.3	45.1
13	Sinter Plant-03	Control Room Area	42.3	49.0	44.8
	6050	BOF office area	45.3	48.3	47.1
14	BOF Shop	Near Wage bridge area	78.5	81.6	80.3

Doc MSK/GEN/19/07

1 ESTING + INSPECTION

Mitra S. K. Private Limited

Address of Laboratory:

Building No. P. 48, Udayan Industrial Estate. 3, Pagladanga Road, Kolkata 700015 Wost Bengal

Tel: +91 7044036120 Email. udayanlab@mitrask.com







ULR: TC-895023000008246F

Scan for Portal

TEST REPORT

Name & Address of Customer:

TATA STEEL LTD.

NH-55, NARENDRAPUR, MERAMANDU, DHENKANAL

ODISHA India Pin 759129

Report No. : M\$KPL/EU/2023-24/RPD64J

02/12/2023 Date:

MSKNB/ED/2023-24/11/X43020 Sample No.:

28/11/2023 Date of receipt of sample:

Date(s) of performance: 28/11/2023 - 02/12/2023

Location of performance of

Reference No. & Date:

Discipline:

Permanent Facility

3000148695/AOG, Date - 15/12/2022

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique identification of sample(if any)	NA
4. Date of sampling	24/11/2023
5. Place of sampling	CAAOMS 7(Material Gate)
6. Environmental conditions during sampling & Transport	NA NA
7. Sampling Plan & Method used	15 9989:1981
8. Identification of the personnel performing sampling by MSK	Mr. Chinmaya Biswal
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No. :

M\$KPL/ED/2023-24/RPD64J

Sample No.:

M5KN8/ED/2023-24/11/X43020

RESULT

Chemica	al .			
SI No.	Parameter	UOM	Method	Result
1	Leq dB(A) day	dB(A)	IS 9989	72.0
2	Leg dB(A) night	dB(A)	15 9989	69.2

Opinion:

NA NA

Statement of Conformity

---- END -----

Playmen By

Sometime

Diseignation

Authorized Schools

Signature

Designation

The feeture feets only to the semile) liested
This Tell Report shall not be reproduced except in full, without the permission of Altira S.K. Private Limited.
The resemble pirt of semple(s) for themstall analysis (Non-postacles sample(s) Food, Visiter) shall be initiated for 15 days from the date of issue of the Telt Report. Perishable sample(s) shall be returned? days from the date of issue of the Telt Report.
The resemble pirt of semple(s) for phonoical energies (Soil, Soild & Liquid Visiter) shall be interested for 15 days from the date of issue of the Telt Report.
The resemble part of semple(s) for phonoical energies (Soil, Soild & Liquid Visiter) shall be interested for 15 days from the date of issue of the Telt Report.
The resemble part of semple(s) for interested analysis (Non-perishable sample(s) Food, Goaled Visiter), Basic direct food shall be retained for 15 days from the date of issue of the Telt Report.

Mitra S. K. Private Limited

Address of Laboratory:

Building No. P- 48, Udayan Industrial Estate. 3, Pagladanga Road, Kolkata 700015

Name & Address of Customer:

NH-55, NARENDRAPUR, MERAMANDU, DHENKANAL

Wast Bongal

TATA STEEL LTD.

QDISHA India Pin 759129

Tel.: +91 7044036120 Email: udayanlab@mitrask.com







ULR; TC-095023000008245F

TEST REPORT

Report No. :

MSKPL/ED/2023-24/YAD642 02/12/2023

Date:

Sample No.:

MSKNB/ED/2023-24/11/2M302U

Date of receipt of sample:

28/11/2023

Date(s) of performance:

28/11/2023 - 02/12/2023

Location of performance of

Permanent Facility

Reference No. & Date:

3000148895/A06, Date - 15/12/2022

Discipline:

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

itte itter of the second of th	
1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique identification of sample(if any)	NA .
4. Date of sampling	24/11/2023
5. Place of sampling	CAAQMS 6(Wagon Tippler)
6. Environmental conditions during sampling & Transport	NA NA
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Mr. Chinmaya Biswal
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No.:

M\$KPL/ED/2023-24/VAD64Z

Sample No.:

MSKNB/ED/2023-24/11/2M302U

RESULT

Chemical				**************************************
SI No.	Parameter	UOM	Method	Result
1	Leq dB(A) day	dB(A)	(S 9989	72.5
2	Leq dB(A) night	dB(A)	IS 9989	68.7

Opinion:

NA

Elatement of Conformity

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---END -----

Reviewed By

Signature

Désignation : Executive Chem

Authorizad Styratory

General

Déscriation

Nome

Executive Chartest

The results retaile only to the item(s) tested
This Test Report shall not be reproduced except in full, without the permission of Mara S K. Private Limited.
The resolved part of sample(s) for chemical analysis (Non - pershable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report.
The reserved part of sample(s) for chemical analysis (Non - pershable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report.
The reserved part of sample(s) for chemical analysis (Sos, Solid & Liquid Waste) shall be retained for 15 days from the Test Report.
The reserved part of sample(s) for Microbiological analysis (Non - pershable sample(s) Food, Solide Water, Sesied Water, Sesied food; shall be retained for 15 days from the date of issue of the Test Report.

Head Office:

Structy Centre (5th Floor): 748, A.J.C. Bose Road, Kolletta - 700015, West Beoget, Index for 91:33 40143000 / 22550007 Fax: 91:33.22550008 Emild : rVo@mikrak.com Website : www.mikraek.com

Doc MSM/GEN/3967

Mitra S. K. Private Limited

Address of Laboratory:

Building No. Pr 48, Udayan Industrial Estate, 3, Pagiadanga Road, Kofkata 700015 West Bengal

Tel.: +91 7044036120

Email: udayanlab@mitrask.com





ULR: TC-695023000008241F

TEST REPORT

Name & Address of Customer:

TATA STEEL LTD.

NH-55, NARENDRAPUR, MERAMANDU, DHENKANAL ODISHA Indio Pin 759129

Report No.: Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/1AD64S

02/12/2023 MSKNB/ED/2023-24/11/NA302Y

25/11/2023

25/11/2023 - 02/12/2023 **Permanent Facility**

3000148695/A06, Date - 15/12/2022

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(If any)	NA
4. Date of sampling	22/11/2023
5. Place of sampling	CAAQMS 1(Colony)
6. Environmental conditions during sampling & Transport	NA .
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Mr. Chinmeya Biswal
9, Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No. :

MSKPL/ED/2023-24/1AD64S

Sample No. :

MSKNB/ED/2023-24/11/NA302Y

RESULT

Chemica	1			
SI No.	Parameter	UOM	Method	Rasult
1	Leq dB(A) day	dB(A)	15 9989	71.7
2	Leq dB(A) night	dB(A)	IS:9989	67.3

Opinion:

NA

Statement of Conformity

NA

----- END -----

Reviewed By.

مراجاتها

Executive Charmins Description :

Authorized Standary

Sepreture

Executive Chemist Designation

This results restar only to the item(s) lested.
This results restar only to the item(s) lested.
This results restar only to the item(s) lested.
This results restar only to the item(s) lested.
This reserved part of sample(s) for chemical analysis (Non-perchable sample(s) Food, Water) shall be retained for 15 days from the date of lested of the Tent Report Pertainable sample(s) shall be retained for 15 days from the date of lested of the Tent Report.
The reserved part of sample(s) for sharple(s) analysis (Non-perchable sample(s) for disputed of sample(s) for sharple(s) fo

Doc MS RAGENMARCA

1 ESTING * INSPECTION

Mitra S. K. Private Limited

Address of Laboratory:

Building No. P- 48, Udayan industrial Estate, 3, Pegladenga Road, Kolkata 700015 West Bengal

Tel.: +91 7044036120

Email: udayanisb@mitrask.com







ULR: TC-895023000007976F

TEST REPORT

Report No.:

Sample No. :

Discipline:

Date of receipt of sample:

Location of performance of

Date(s) of performance:

Reference No. & Date :

Date:

21/11/2023

MSKN9/ED/2023-24/11/UH1E55

16/11/2023

16/11/2023 - 21/11/2023

Permanent Facility

3000148695/A06, Date - 15/12/2022

MSKPL/ED/2023-24/7PCBFO

Chemical

Name & Address of Customer:

TATA STEEL LTD.

NH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL

ODISHA India Pin 759129

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique identification of sample(if any)	NA NA
4. Date of sampling	13/11/2023
5. Place of sampling	Caagms-2(AEL)
6. Environmental conditions during sampling & Transport	NA
7. Sampling Plan & Method used	IS 9989:1981
6. Identification of the personnel performing sampling by MSK	Mr. Chinnaya Biswal
9. Fleid Equipments Used	MSK/B8SR/FIELD/SLM-01

Report No. ;

MSKPL/ED/2023-24/7PC6FQ

Sample No. :

MSKNB/ED/2023-24/11/UH1E55

RESULT

Chemical					
SI No.	Parameter .	UOM	Meiho	đ	Result
1	Leq dB(A) day	dB(A)	IS 998	9	71.3
2	Leq dB(A) night	dB(A)	IS 998	9	68.0

Opinion:

NΑ

Statement of Conformity

- END ---

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The residence shall not be reproduced except it full, without the permission of Mitra S.K. Private Limited.
The resourced part of samples(s) for chemical ensistes (from perishetile samples(s) Food, Water) shall be retained for 15 days from the date of (same of the Tibit Report. Perishable samples(s) shall be retained 2 days.

The reserved part of sample(s) for thembal enalysis (Soil, Soild & Liquid Waste) shall be retained for 15 days as pier CPCB guidesine 6 (Ab) I month from the date of liquid waste) shall be retained for 15 days as pier CPCB guidesine 6 (Ab) I month from the date of liquid of the Test Report.

The reserved part of sample(s) for Microbiological analysis (North-perishable sample(s) Food, Sealed Water, Sealed Rood) shall be retained for 15 days from the date of issue bit the Test Report.

The reserved part of sample(s) for Microbiological analysis (North-perishable sample(s) Food, Sealed Water, Sealed Rood) shall be retained for 15 days from the date of issue bit the Test Report.

Streets Centre (Str Floor), 749, A.S.C. Bose Road, Kokata: -700016, West Benget India. Tel. 91.33 40143000 / 22650007 Fax: 91.33 22650000 Email: x/Mg/mirask.com Webset: www.mirask.com

Page 1 of 1

Dec MSKNSEN/ASON

Mitra S. K. Private Limited

Address of Laboratory:

Building No. P- 48, Udayan Industrial Estate, 3. Pagladanga Road, Kolkata 700015

Name & Address of Customer :

NH-55, NARENDRAPUR MERAMANDLI, DHENKANAL

West Bengal

Tel.: +91 7044036120

TATA STEEL LTD.

ODISHA India Pin 759120

Email: udayanfab@mitrask.com







Scan for Portal

ULR: TC-695023000007970F

TEST REPORT

Report No. ;

Date:

21/11/2023

Sample No.:

MSKNB/ED/2023-24/11/QV1C7Z

Date of receipt of sample:

14/11/2023

Date(s) of performance:

14/11/2023 - 21/11/2023 Permanent Foodity

Location of performance of Reference No. & Date:

3000148695/A06, Date - 15/12/2022

MSKPL/ED/2023-24/JQCB39

Discipline:

Chemical

We hereby certify that the following sample Drewn by us has been analyzed with the following results:

1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA NA
4. Date of sampling	10/11/2023
5. Place of sampling	Caeqms-4(HSM Water Complex)
6. Environmental conditions during sampling & Transport	NA
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Mr. Chinmaya Biswal
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No.:

MSKPL/ED/2023-24/JQCB39

Sample No.:

MSKNB/ED/2023-24/11/QV1C7Z

RESULT

Chemical	en in de la companya de la companya de la companya de la companya de la companya de la companya de la companya		
St No. Parameter	UOM	Method	Result
1 Leq dB(A) day	dB(A)	IS 9989	71,7
2 Leg dB(A) night	dB(A)	1\$ 9989	69,9

Opinion:

NA NA

Statement of Conformity

---- END ----

Revewed By

Suresture

Authorized Signatory

The results relate only to the demi(s) tested.

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The riserved part of semple(s) for chamical energials (Non - pershable sample(s) Food, Water) shall be retained for (5 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 2 days.

The reserved part of semple(s) for chemical smallysis (Soit, Solid & Liquid Weste) shall be retained by 15 days as per CPCB guideline 5 (Air) 1 month from the date or lacue of the Test Report.
The reserved part of semple(s) for Microbiological analysis (Non - parahable sample(s) Food, Sealed Wafer, Septed food) shall be retained for 15 days from the date of lacue of the Test Report. Head Office:

Stracts Centra (5th Floor), 748, A.J.C. Bose Road, Kokats - 700/16, West Bengel, India Tell : 91 33.40143000 / 22650007 Fax : 91 33 22650008 Enlad : info@mitrack.com Website : leww.mdrask.com

Rof.No. EMD/LAB/2023-24/0146 Dt.- 01.01.2024

AMBIENT NOISE MONITORING TATA STEEL Ltd. (Dec' 23)

S.N	Location	Monitoring Date	Noise Level dB(A) Leq (Day time)	Standard dB(A) Leq(Day Time)	Noise Level dB(A) Leq (Night time)	Standard dB(A) Leq(Night Time)
1	Colony	29.12.23	53.9	55.0	53.3	45.0
2	Coke Oven-2	16.12.23	62.8	75.0	58.9	70.0
3	AEL	22.12.23	64.2	75.0	57.9	70.0

Source (VC)

Soo Manager (Lab)

Mori eyee & 15 Sr. Manager (Lap I/C)

...End Report...

page 1 of 1

Ref.No. EMD/LAB/2023-24/0144 Dt- 05.01.2024

If the being devices and experiences of the entire of the e

S.N	Name of the unit	Location	Noise	e level in	dB(A)
		aveauon	Min	Max	Leq
1	BF-2 Cast House	Control room	51.1		55.9
		Near B F-2 Furnace area	79.3		80.7
2		Control room office	513		52.7
3		Inside office building	55.3		64.2
4		Near Control room office	45.6		60.7
5	Gas fired boiler 250 TPH Area	Office and Control Room	44.8	68.3	
		KILN NO-1, Near 1& 2 control room office	60.2	60.2	59.0
		KILN NO-3, Near 3& 4control room office	62.4]	64.4
6	DRI	KILN NO-5, Near 5& 6 control room office	61.0		65.3
		KILN NO-7, Near 7& 8 control room office		· • · · · · · · · · · · · · · · · · · ·	63.6
		KILN NO-8, Near 9&10 control room office	61.4		65.5
7	BF-1 Cast House	Near B F-1 Furnace	62.2	1	65.6
8	BF-1 Stock House	BF-1 Office	75.3	1	79.6
	//. 1		43.7	!	48.9
			75.6	1	78.2
			SD	! ··	SD
			79.0	-	80.1
	BF-1 Cast House BF-1 Stock House CRM		SD		\$D
			87.0		87.8
ĺ	ŀ		85.8	88.4	87.2
9	CRM		84.6	62.1 82.1 57.0 78.5 65.9 68.3 69.3 68.7 71.7 78.0 73.6 97.3 50.3 84.6 SD 82.5 SD	85.6
[-		85.3		86.6
	BF-2 Cast House BF-2 Stock House Lime Plant BF PP-1 Boiler-03 Gas fired boiler 250 TPH Area DRI BF-1 Cast House BF-1 Stock House CRM CRM Coke Oven-1 Sinter Plant-02 Sinter Plant-03		85.4	88.7	86.7
			SD	SD	SD
			48.1	55.6	49.8
			SD		SD
ļ			77.4		79.8
		***	86.6		88.0
			79.3		83.0
	Near CRM Mill Complex Area Near T.L.L Near ETP area Near GP-1 Zinc Pot Near GP-3 Zinc Pot Near GP-3 Zinc Pot Colour Coating Line Mill-1 Mill-2 Mill-3 CRM Plant Office ECL CRCA SPM RGM 9 m office room 15 m office Sinter Plant-1 Near GP-1 Zinc Pot Near GP-2 Zinc Pot Near GP-3 Zinc Pot CRM Near GP-3 Zinc Pot Colour Coating Line CRCA SPM RGM 9 m office	63.8		71.9	
0	Sinter Plant-1		51.7	62.1 82.1 57.0 78.5 65.9 68.3 69.3 68.7 71.7 78.0 73.6 97.3 50.3 84.6 SD 82.5 SD 90.4 88.4 86.6 90.7 88.7 SD 55.6 SD 84.7 89.6 84.7 89.6 84.7 89.6 83.3 78.4 78.6 83.3 78.4 78.6 83.3 78.4 78.5 78.7	64.3
ĺ		Store area	61.4		72.4
			74.9	62.1 82.1 57.0 78.5 65.9 68.3 69.3 68.7 71.7 78.0 73.6 97.3 50.3 84.6 SD 82.5 SD 90.4 88.4 86.6 90.7 88.7 SD 55.6 SD 84.7 89.6 88.7 74.8 78.6 83.3 78.4 78.3 62.7 53.4 57.7 83.5 79.7	76.9
		Electrical office	51.5	78.3	67.7
1	Coke Oven-1	Control room office	45.3	62.7	60.0
2 :	Sinter Plant-02	Laboratory	49.8	58.4	57.6
	······································	Control Room Area	49.6	57.7	51.0
	Onaci Flantioo	Control Room Area	63.6	83.5	66.6
1	BOF Shop	BOF office area	51.7	79.7	65.0
		Near Wage bridge area	69.5	70.8	73.0

	SMS-2-FES-1&2	Booster House (ID Fan)	80.1	91.0	84.3
15	13000	Near Control room Aroa	60.3	72.1	64.8
		Near RHF Office area (Pulpit)	73.5	82.7	75.4
		Near Roll Shop area	75.8	86.7	81.6
16	HSM	Near HSM Quality Lab area	50.1	60.1	58.4
		DC pulpit office area	61.3	81.0	67.4
		FM area	86.3	95.9	88.6
_		Near DC sampling Station	78.4	102.4	85.7
17	Coke Oven-2	Control Room Office	62.7	75.2	65.6
18	BFPP-2 Boiler-3	Control room	50.8	60.9	58.4
19	Oxygen Plant-02	Control Room Office	55.4	65.3	62.9
20	BB Plant	BB Plant Office	74.4	81.3	80.7
21	RMPP'	Control Room Office	52.6	82.0	69.8
22	Coal washery	Lab & Office area	54.6	72.8	58.6
23	RMHS	RMHS Office	54.1	59.0	56.1
24	IBMO	New Sarpa MRP-II (Operator Cabin)	48.5	55.9	51.3
25		Office & Operator Cabin (Old MRP)	51.6	58.9	54.9

N: B- All employees are provided ear plug / earmuff in noise prone areas.

Section (I/C)

& Manager (Lab)

Mcei suy sedes Sr. Area Manager (Lab I/C)

...End Report...

Page 2 of 2

Dee MSK/SCN/19/07

TESTING - INSPECTION

Mitra S. K. Private Limited

Address of Laboratory:

Building No. P- 48, Udayan Industrial Estate, 3. Pagladanga Road, Kolkata 700015 West Bengal

Name & Address of Gustomer:

NH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL

Tel.: +91 7044036120

TATA STEEL LTD.

ODISHA India Pin 759129

Email udayanlab@mitrask.com







ULR: TC-695024000000093F

TEST REPORT

Report No. :

Date :

Sample No. :

Date of receipt of sample: Date(s) of performance:

Location of performance of

Reference No. & Date :

Discipline:

MSKPL/ED/2023-24/I PFC2W

03/01/2024

MSKNB/ED/2023-24/12/CV57AD

29/12/2023

29/12/2023 - 03/01/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Almospheric Pollution	
2. Description of sample	Noise	
3. Unique Identification of sample(if any)	NA .	
4. Date of sampling	27/12/2023	
5. Place of sampling	Caagms-4(FISM Water Complex)	
6. Environmental conditions during sampling & Transport	NA Year Valer Complexy	
7. Sampling Plan & Method used	IS 9989:1981	
8. Identification of the personnel performing sampling by MSK	Ranjit Pradhan	
9. Field Equipments Used	N/A	

Report No. :

MSKPL/ED/2023-24/LPEC2W

Sample No. :

M3KNB/ED/2023-24/12/CV57AD

RESULT

Chemical				
SI No.	Parameter	UOM	Method	Result
1	Leq dB(A) day	dB(A)	IS 9989	72.1
2 Dulates :	Leq dB(A) night	dB(A)	IS 9989	67.6

Opinion:

NA

Statement of Conformity NA

-- END ----

Reviewed By

Designation : **Executive Chemist** Authorized Signatory

Signature

Name

The results relate only to the semi(s) tersent.

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The reserved part of sample(s) for chemical analysis (Non - perhabetic sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report.

The reserved part of sample(s) for chemical analysis (Soil, Solid & Liquid Waste) shall be retained for 15 days as part of sample(s) for chemical analysis (Soil, Solid & Liquid Waste) shall be retained for 15 days as part of sample(s) for chemical analysis (Non - perhabetic sample(s) for chemical analysis (Non - perhabetic sample(s) for chemical analysis (Non - perhabetic sample(s) for sample(s) for microcological analysis (Non - perhabetic sample(s) Food, Sealed Water, Sealed food) shall be retained for 15 days from the date of issue of the Test Report. Head Office:

Shrachi Centre (5th Floor), 74B, A.J.C. Bose Road, Kokata - 700016, West Bengal, India Tel: 91 33 40145000 / 22050007 Fax: 91 33 22050000 Emist info@mitrask.com Website: www.mitrask.com

Page 1 of 1

Bot, MSJOGEN/1902

Mitra S. K. Private Limited

Address of Laboratory:

Building No. P. 48, Udayan Industrial Estate, 3, Paglodanga Road, Kolkata 700015 West Bengal

Tel. . +91 7044036120 Email: udayantab@mitrask.com







ULR: TC-6950240000000091F

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Name & Address of Customer:

TATA STEEL LTD.

NH-56, NARENDRAPUR,MERAMANDLI,DHENKANAL ODISHA India Pin 759129

TEST REPORT

Report No. :

Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance:

Location of performance of Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/C6EC2S

D3/D1/2024

MSKNB/E0/2023-24/12/XN57AU

29/12/2023

29/12/2023 - 03/01/2024

Permanent Facility

3000148595/A05, Date - 15/12/2022

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

Atmospheric Pollution
Noise
NA
26/12/2023
Caagms-3(CRM)
NA NA
IS 9989:1981
Ranjit Pradhan

Report No.;

MSKPL/ED/2023-24/C6EC2S

Sample No.:

MSKNB/ED/2023-24/12/XN57AU

RESULT

Chemical			100	
SI No.	Parameter	UOM	Method	Result
1 1	Leq dB(A) day	dB(A)	I\$ 9989	7: 2
2	Leq d8(A) night	dB(A)	IS 9989	67.5

Opinion:

NA

Statement of Conformity ŅΑ

----- END -----

Authorized State

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The reserved period of acceptably for Microbiological analysis (Noir - period by the Test Report.)

Page 1 of 5

Shrachi Centre (5th Roce), 74B, A.J.C. Bose Road, Kolkata - 700016, West Bengal, India Tet.: 91:33:401430007:22650007 Fex: 91:33:224650008 Chies introdpristrates port Website www.mdresk.com

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Mitra S. K. Private Limited



Building No. P. 48, Udayan Industrial Estate. 3, Pegladanga Road, Kelkata 700016 West Bengal

Name & Address of Customer:

NH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL

Tel. . +91 7044030120

TATA STEEL LTD.

ODISHA India Pin 759129

Email: udayanlab@mitrask.com







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ULR: TC 695024000000238F

TEST REPORT

Report No. :

Date:

Sample No.:

Date of receipt of sample: Date(s) of performance:

Location of performance of

Discipline:

Reference No. & Date:

MSKPL/ED/2023-24/LRECJA

05/01/2024

MSKNB/ED/2023-24/12/ZC61BF

01/01/2024

01/01/2024 - 05/01/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

We hereby cartify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA.
4. Date of sampling	29/12/2023
5. Place of sampling	Coke Oven-1 Laboratory
5. Environmental conditions during sampling & Transport	NA .
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Field Equipments Used	N/A

Report No.:

MSKPL/ED/2023-24/LREC3A

Sample No.:

MSKNB/ED/2023-24/12/ZC61BF

RESULT

VA - Service - S				
Chemical				
SI No.	Parameter	UOM	Method	Result
1	Average dB(A)	dB(A)	1S 9989	58.8

Opinion:

NA NA

Statement of Conformity

-- END -----

Reviewed By

Signature

Designation

Executive Chemist

Authorized Signatory

Signature

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The reserved part of sample(s) for chemical analysis (Non - perishable sample(s) Food. Water) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 2 days from the date of issue of the Test Report.

The reserved part of sample(s) for extension energies (Edit, Edit 5, Liquid Waste) shall be retained for 15 days as per CPCB guideline 2 (Au) 1 month from the date of issue of the Test Report.

The reserved part of sample(s) for Microbiological analysis (Non - perishable sample(s) Food, Sesied Water, Sealed lood) shall be retained for 15 days from the date of issue of the Test Report.

Page 1 of 1

Head Office:

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Address of Laboratory:

Building No. P- 48, Udayan Industrial Estate, 3. Pagladanga Road, Kolkata 700015

Name & Address of Customer:

NH-55, HARENDRAPUR, MERAMANDLI, DHENKANAL

West Bengal Tel : 101 7044036120

TATA STEEL LTD.

ODISHA India Pin 759129

Email: udayanlab@mitrask.com







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ULR: TC-695024000000237F

TEST REPORT

Report No.:

Date:

Sample No.:

Date of receipt of sample: Date(s) of performance:

Location of performance of

Reference No. & Date :

Discipline:

MSKPL/ED/2023-24/NPEG3E

05/01/2024

M5KNB/ED/2023-24/12/KN01D3

01/01/2024

01/01/2024 - 05/01/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA .
4. Date of sampling	29/12/2023
5. Place of sampling	Coke Oven-1 Control Room Office
6. Environmental conditions during sampling & Transport	NA
7. Sampling Plan & Method used	IS 9989:1981
0. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Fleid Equipments Used	N/A

Report No.;

MSKPL/ED/2023-24/NPEC3E

Sample No.:

MSKNB/ED/2023-24/12/KN61D3

RESULT

Chemical		i in a second		Talk u
SI No.	Parameter	UOM	Method	Result
1	Average dB(A)	dB(A)	IS 9989	68.0

Opinion:

NA NA

Statement of Conformity

- END ---

Reviewed By.

Signature

Head Office:

Designation : Executive Chemist

Authorized Signatory

Signature

Name

Designation

The results relate only to the item(s) tested.

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This testerved part of sample(s) for chemical analysis (from - perishable sample(s) finds, Veter) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 2 days from the date of issue of the Test Report.

The reserved part of sample(s) for resemble analysis (Sod, Sold & Ligad Waste) shall be retained for 15 days as per CPCB guidatina & (Air) 1 month from the date of issue of the Test Report. The reserved part of sample(s) for Microbiological enalysis (Non - penshable sample(s) Food, Sealed Water, Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

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Address of Laboratory :

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ODISHA India Pin 759129

Email: udayanlab@mitrask.com







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TEST REPORT

Report No.:

Date:

Sample No.:

Date of receipt of sample: Dato(e) of performance:

Location of performance of

Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/A6EC3C

05/01/2024

MSKNB/ED/2023-24/12/J161FVV

01/01/2024

01/01/2024 - 05/01/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA .
4. Date of sampling	29/12/2023
5. Place of sampling	Coke Oven-1 Near Battery-2 Area
6. Environmental conditions during sampling & Transport	NA
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Chinnaya Biswal
9. Field Equipments Used	N/A

Report No. :

MSKPL/ED/2023-24/A6EC3C

Sample No.:

MSKNB/ED/2023-24/12/J161FW

RESULT

Chemical				
SI No.	Parameter	UOM	Method	Result
1	Average dB(A)	dB(A)	IS 9989	84.1

Opinion:

NA

Statement of Conformity

- END -----

Reviewed By:

Signature

Head Office:

Designation Executive Unemist Authorized Signatory

Skarveture

Designation

Executive Chemist

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The resonant part of semplet(s) six diversional analysis (Non - personance sample(s) Food, Water) shall be reteined for 15 days from the date of issue of the Test Report.
The resonand part of sample(s) for chamical analysis (Sox, Solid & Liquid Weste) shall be reteined for 15 days as per CPCB guideline #, (Air) 1 month from the date of issue of the Test Report.
The resonand part of sample(s) for chamical analysis (Sox, Solid & Liquid Weste) shall be reteined for 15 days as per CPCB guideline #, (Air) 1 month from the date of issue of the Test Report.
The resonand part of sample(s) for Microbiological analysis (Non - perishable sample(s) Food, Soaled Wester, Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

Shrachi Centra (5th Floor) 74B, A.J.C. Bose Road, Koketa -700016. West Rengal India. Tel: 91 33 40143001/22650007 Fax: 91 33 22650008. Email: info@mitrask.com Website: www.mitrask.com

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TATA STEEL LTD.

ODISHA India Pin 759129

Email: udayanlab@mitrask.com







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ULR: TC-695024000000235F

TEST REPORT

Report No. :

Date:

Sample No.:

Date of receipt of sample: Date(s) of performance:

Location of performance of Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/HZEC3X

05/01/2024

MSKNB/ED/2023-24/12/8L61EU

01/01/2024

01/01/2024 - 05/01/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Almospheric Polution
2. Description of sample	Noise
3. Unique identification of sample(if any)	NA SASSASSASSASSASSASSASSASSASSASSASSASSA
4. Date of sampling	29/12/2023
5. Place of sampling	Coke Oven-1 Near Battery-1 Area
6. Environmental conditions during sampling & Transport	NA
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Field Equipments Used	N/A

Report No.:

MSKPL/ED/2023-24/HZEC3X

Sample No.:

MSKNB/ED/2023-24/12/6L61EU

RESULT

Chemic				:
SI No.	Parameter	UOM	. Method	Result
1	Average dB(A)	dB(A)	1S 9989	85.1

Opinion:

NA NA

Statement of Conformity

- END -----

Reviewed By:

5ญาสเขต

Designation

Adhorized Signatory

The results relate only to the exmit() (ested:
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The resurved part of semiploids for inhighted enabytic (Not's -purishable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report. Parishable semple(s) shall be retained 2 days from the date of issue of the Test Report.

The reserved part of sample(s) for chemical analysis (Sos, Sord & Liquid Waste) shalf be retained for 15 days as per CPCB guideline & (Aur.) I month from the date of issue of the Test Report. The reserved part of sample(s) for Efficiblicional analysis (Non - penahadise sample(s) Food, Solded Water, Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

Address of Laboratory:

Building No. P- 48, Udayan Industrial Estate. 3. Pagladanga Read, Kolkata 700016 West Dengal

Name & Address of Customer:

NH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL

Tel +91 7044030120

TATA STEEL LTD

ODISHA India Pin 759129

Email: udayanlab@mitrask.com





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ULR: TC-695024000000234F

TEST REPORT

Report No. :

Date:

Sample No.:

Date of receipt of sample: Date(s) of performance:

Location of performance of Reference No. & Date :

Discipline:

MSKPL/ED/2023-24/N8EC39

05/01/2024

MSKNB/ED/2023-24/12/0161CE

01/01/2024

01/01/2024 - 05/01/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA
4. Date of sampling	29/12/2023
5. Place of sampling	Coke Oven-1 Near Stone Cutter Building Area
6. Environmental conditions during sampling & Transport	NA
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Field Equipments Used	N/A

Report No.:

MSKPL/ED/2023-24/N8EC39

Sample No. :

M5KNB/ED/2023-24/12/0L61CE

RESULT

Chemical				
SI No.	Parameter	UOM	Method	Result
1	Average dB(A)	dB(A)	IS 9989	83.6

Opinion:

Statement of Conformity

NA

- END -----

Reviewed By

Designation

Signature

Executive Chemist

Authorized Signatory

Signature

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The reserved part of sample(s) for chemical analysis (Non - perishable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report.
The reserved part of sample(s) for chemical analysis (Sos, Solid & Liquid Weste) shall be retained for 15 days as per CPCB guideline & (Air) 1 menth from the date of issue of the Test Report.
The reserved part of sample(s) for Microbiological analysis (Non - perishable sample(s) Food, Sealed Water, Sealed Water, Sealed food) shall be retained for 15 days from the date of issue of the Test Report.
The reserved part of sample(s) for Microbiological analysis (Non - perishable sample(s) Food, Sealed Water, Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

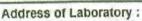
Page 1 of 1

Head Office:

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DOC M5K/GEN/19/07

TESTING . INSPECTION



Building No. P- 48, Udayan Industrial Estate. 3, Pagladanga Road, Kolkata 700015 West Bengal

Name & Address of Customer:

NH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL

Tel : +91 7044030120

TATA STEEL LTD.

ODISHA India Pin 759129

Email: udayanlab@mltrask.com





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ULR: TC-695024000000233F

TEST REPORT

Report No.:

Date:

Sample No.:

Date of receipt of sample: Date(s) of performance:

Location of performance of Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/DBEC32

05/01/2024

MSKNB/ED/2023-24/12/0361BG

30/12/2023

30/12/2023 - 05/01/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA
4. Date of sampling	28/12/2023
5. Place of sampling	Caaqms-5(Coke Oven-2)
6. Environmental conditions during sampling & Transport	NA
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No.:

MSKPL/ED/2023-24/DBEC32

Sample No.:

MSKNB/ED/2023-24/12/C361BG

RESULT

Chemical				
SI No.	Parameter	UOM	Method	Result
1	Leg dB(A) day	dB(A)	IS 9989	71.6
2	Leq dB(A) night	dB(A)	IS 9989	68.4

Opinion :

NA

Statement of Conformity

NA

-- END -----

Reviewed By

Sionature Name

Designation : Executive Chemist

Authorized Signatory

Designation

The results relate only to the item(s) tested.
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The reserved part of sample(s) for chemical pranysis (Non - perishable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report. Permisside sample(s) shall be received 2 days from the date of issue of the Test Report.

The reserved pert of semple(s) for elemental energies (Soil, Soild & Liquid Waste) shall be retained for 15 days as per CPCB guideline & (Air) 1 month from the date of itsue of the Test Report.

The reserved pert of semple(s) for Microbiological snalysis (Non - perishable sample(s) Food. Sealed Water. Sealed food) shall be retained for 15 days from the date of itsue of the Test Report.

Shrachs Centre (5th Finor), 74B, A.J.C. Rose Ruad Kolliata - 700016. West Bongal, India. Tel.: 91 33 40143000 / 22650007 Fax: 91 33 22650006. Email: info@mitrask.com Website: www.mitrask.com. Head Office:

Ref.No. EMD/LAB/2023-24/0147 Dt.07.02.2024

randist same stoff to the con-

		d dd is		Noise level in dB(A)			
5.N	Name of the unit	Location	Min Max		Leq		
		Control room	57,4	61.2	59.4		
1	BF-2 Cast House	Near B F-2 Furnace area	78.2	89.4	80.7		
2	BF-2 Stock House	Control room office	55.4	62.3	58.7		
3	Lime Plant	Inside office building	55.5	71,7	59.4		
4	BF PP-1 Boiler-03	Near Control room office	65.5	89.5	73.3		
5	Gas fired boiler 250 TPH Area	Office and Control Room	54.9	63.8	58.4		
		KILN NO-1, Near 1& 2 control room office	57.4	64.2	61.7		
		KILN NO-3, Near 3& 4control room office	49.9	65	59.5		
6	DRI	KILN NO-5, Near 5& 6 control room office	44.5	63.2	58.2		
		KILN NO-7, Near 7& 8 control room office	46 3	74.7	63		
		KILN NO-8, Near 9&10 control room office	46.2	69	58.6		
7	BF-1 Cast House	Near B F-1 Furnace	78.5	86.5	80.3		
 8	BF-1 Stock House	BF-1 Office	60.2	66.2	63.5		
		Near CRM Mill Complex Area	66.4	83.8	74		
		Near T.L.L	82	89.6	86.3		
		Near ETP area	77.6	85.6	82.9		
		Near GP-1 Zinc Pot	85.1	90.9	87.2		
		Near GP-2 Zinc Pot	85	90.8	87.6		
		Near GP-3 Zinc Pot	85.4	89.3	87.6		
		Colour Coating Line	82.9	87.2	84.5		
9	CRM	Mill-1	81.8	96.8	85.7		
		Mill-2	84.1	88.6	86.8		
		Mill-3	SD	SD	\$D		
	1	CRM Plant Office	49	52.6	51.3		
		ECL.	86.6	89.2	88.2		
		CRCA	78.4	85.2	82.6		
		SPM	84.8	98.7	88.9		
		RGM	78.7	86.2	82.2		
1		9 m office room	48.3	74	55.5		
		15 m office	50 .3	67	56.3		
10	Sinter Plant-1	19 m office	61.3	83.3	75.1		
		Store area	78	81.3	79.3		
		Electrical office	51.4	85.1	73.4		
		Control room office	60.8	71.9	62.8		
11	Coke Oven-1	Laboratory	54.5	60	57.4		
1 2	Sinter Plant-02	Control Room Area	56.3	62.8	58.4		
13	Sinter Plant-03	Control Room Area	54.9	60.3	57.8		
		BOF office area	53.5	82.8	70.8		
14	BOF Shop	Near Wage bridge area	71.4	90.7	75.8		

		Booster House (ID Fan)	81.2	86.2	84.1
15	SMS-2-FES-182	Near Control room Area	56.2	67.8	61.3
10		Near RHF Office area (Pulpit)	81-7	91.1	84.1
		Near Roll Shop area Near HSM Quality Lab area	75.1	82.7	77.5
			55.9	63.2	60.3
16	HSM	DC pulpit office area	61.7	86.8	66.5
		FM area	87.5	98.1	90.4
		Near DC sampling Station	76.3	92.4	80.4
17	Coke Oven-2	Control Room Office	48.5	72.4	60.8
18	BFPP-2 Boiler-3	Control room	63	86.2	72.1
19	Oxygen Plant-02	Control Room Office	56.3	81.9	63.3
20	BB Plant	BB Plant Office	55.2	64.1	59.8
21	RMPP	Control Room Office	53.3	71.2	56.2
22	Coal washery	Lab & Office area	53.1	82.9	60.4
23	RMHS	RMHS Office	50.7	74,3	57.4
24	rea de	New Sarpa MRP II (Operator Cabin)	54.1	60.2	58.3
25	IBMD	Office & Operator Cabin (Old MRP)	58.4	69.3	60.4

N: B- All employees are provided ear plug / earmuff in noise prone areas.

Tik. Somal.

Section (I/C)

...End Report...

Sr. Area Manager (Lab I/C)

Page 2 of 2

Ref.No. EMD/LAB/2023-24/0149 Dt.- 07.02.2024

AMBIENT NOISE MONITORING TATA STEEL Ltd. (January' 2024)

S.N	Location Monitoring Date		Noise Level dB(A) Leq (Day time)	Standard dB(A) Leq(Day Time)	Noise Level dB(A) Leq (Night time)	Standard dB(A) Leq(Night Time)
		00004	50.5	55.0	43.6	45.0
1	Colony	05.01.2024			58.6	70.0
2	Coke Oven-2	19.01.2024	59.2	75.0		70.0
3	AEL	12.01.2024	67.7	75.0	58.0	10.0

Ak Pradhan. Section (I/C) Manager (Lab)

Sr. Area Manager

...End Report...

TRG . INSPECTION

See MSR/CON-1879

Mitra S. K. Private Limited

Address of Laboratory:

Building No. P- 48, Udayan Industrial Estate. 3. Pagtadanga Rond, Kelkata 700015 West Bengal

Name & Address of Customer:

NH-55, NARENDRAPUR, MERAMANOLI, DHENKANAL

Tel. +91 7044036120 Email: udayantab@mitrask.com

TATA STEEL LTO.

ODISHA India Pin 759129







Scan for Portal ULR: TC-695024000001066F

MSRPL/ED/2023-24/610CA7

MSKNB/E0/2023-24/01/FN254C

TEST REPORT

Report No. :

Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date: Discipline:

18/01/2024 18/01/2024 - 24/01/2024 Permanent Facility

24/01/2024

3000148695/A0B, Date - 15/12/2022

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

to runery certify that the source of setting by us that been energyzed with the topic wild testify:			
Atmospheric Poliution			
Noise			
NA			
15/01/2024			
Caagms-1(Colony)			
NA			
IS 9989:1981			
Chinmaya Biswal			
MSK/BBSR/FIELD/SLM-03			

Report No.:

MSKPL/ED/2023-24/810CA7

Sample No.:

MSKNB/ED/2023-24/01/FN254C

RESULT

Chemic	3			en en en en en en en en en en en en en e
81 No.	Parameter	UOM	Method	Result
1	Leq dB(A) day	dB(A)	IS 9989	63.3
2	Leg dB(A) night	dB(A)	I S 998 9	59.7

Opinion:

NA

Statement of Conformity NA

---- END ------

Hevidaed By

Signature

Designation

Authorited Signation

5-constant

Designation

Executive Chemia:

The results restill only to the skinkly insted
This Test Report should be reproduced decept in Ad, without the portriosion of Miles S.K. Private Limited
This Test Report should be reproduced decept in Ad, without the portriosion of Miles S.K. Private Limited
The reserved part of semplo(s) for chamical instalying (Non--periodicial semplo(s) Food, Water) shell be retained for 15 days from the date of issue of the Test Report.
The reserved part of semplo(s) for chamical smallysis (Soc. Solid & Liquid Weste) shell be retained for 15 days as per CPCB guideline & (Air.) I month from the date of issue of the Test Report.
The reserved part of semplo(s) for chamical smallysis (Non--periodicial smallysi

Head Office:

Dec MSNGDN/1940/

Mitra S. K. Private Limited

Address of Laboratory:

Building No. P- 48, Udayon Industrial Estate. 3. Pagiadanga Road, Kolkata 700015

Name & Address of Customer:

NH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL

West Bengal

Tel.: +91 7044036120

TATA STEEL LTD.

ODISHA India Pin 759129

Emaß: udayanlab@mitrask.com





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ULR: TC-695024000001340F

TEST REPORT

Report No.:

Date:

29/01/2024

Sample No.:

MSKNB/ED/2023-24/01/VWZ/AU

MSKPLJED/2023-24/G10FFK

Date of receipt of sample:

20/01/2024

Date(s) of performance:

20/01/2024 - 29/01/2024 Permanent Facility

Location of performance of Reference No. & Date:

3000148695/A06, Date - 15/12/2022

Discipline:

Chemical

We hereby redily that the following sample Drawn by us has been enalyzed with the following results:

1, Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA
4. Date of sampling	17/01/2024
5. Place of sampling	Casoms-2(AEL)
6. Environmental conditions during sampling & Transport	NA
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Chismaya Biswal
9. Field Equipments Used	MSK/BBSRFIELD/SLM-03

Report No. :

MSKPL/ED/2023-24/G10FFK

Sample No.:

MSKNB/ED/2023-24/01/W27AU

RESULT

Chemic	al			
SI No.	Parameter	WOW	Method	Result
1	Leg dB(A) day	dB(A)	IS 9989	67.3
2	Leg dB(A) night	d8(A)	IS 9989	62.0

Opinion:

NA

Statement of Conformity NA

END -----

Reviewed By

Designation

Signature

Executive Chamist

Authorized Signators

Signature

Description

Executive Chanties

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This Test Report shall not be reproduced except in full, without the permission of Mitra S.R., Private Lumbou.
This restricted part of sample(s) for chemical analysis (Non - permission of Mitra S.R., Private Lumbou.
The reserved part of sample(s) for chemical analysis (Non - permission beautifully Food, Water) shall be retained for 15 days from the date of assure of the Test Report.
The reserved part of sample(s) for chemical analysis (Sos, Solid & Equip Waster) shall be retained for 15 days as per CPCB guideline & (As) 1 month (can the date of sever of the Test Report.
The reserved part of sample(s) for chemical analysis (Nos - permission sample(s) Food, Sealed Waster, Sealed food) shall be retained for 15 days from the date of sever of the Test Report.
The reserved part of sample(s) for Microbiological analysis (Nos - permission sample(s) Food, Sealed Waster, Sealed food) shall be retained for 15 days from the date of sever of the Test Report.

The reserved part of sample(s) for Microbiological analysis (Nos - permission sample(s) Food, Sealed Waster, Sealed food) shall be retained for 15 days from the date of sever of the Test Report.

Address of Laboratory:

Building No. P. 48, Udayan Industrial Estato, 3, Pagladanga Road, Kolkata 700015

Name & Address of Customer:

NH-55, NARENDRAPUR MERAMANDLI, DHENKANAL

West Bengal Tel.: +91 7044035120

TATA STEEL LTD

ODISHA India Pin 759129

Email udayanlab@mitrask.com







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MSKPUED/2023-24/010FFZ

ULR: TC-695024000001342F

TEST REPORT

Report No.:

Date:

29/01/2024

Sample No.:

Discipline:

MSKNB/ED/2023-24/01/9935CA

Date of receipt of sample:

20/01/2024

Date(s) of performance: Location of performance of 20/01/2024 - 29/01/2024

Permanent Facility

Reference No. & Date:

3000148695/A06, Date - 15/12/2022

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

sa training Cautal and			
1. Group	Atmospheric Pollution		
2. Description of sample	Noise		
3. Unique Identification of sample(if any)	MA CONTRACTOR OF THE PROPERTY		
4. Date of sampling	18/01/2024		
5. Place of sampling	Cpagms-4(HSM Water Complex)		
6. Environmental conditions during sampling & Transport	NA		
7. Sampling Plan & Method used	15 9989:1981		
8. Identification of the personnel performing sampling by MSK	Chinmaya Biswal		
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03		

Report No.:

MSKPL/ED/2023-24/010FFZ

Sample No.:

MSKNB/ED/2023-24/01/9935CA

RESULT

AL				
Chemica	31			
Si No.	Parameter.	MOU	Method	Result
1	Leg dB(A) day	dB(A)	IS 9989	67.1
2	Leq dB(A) night	dB(A)	IS 9989	66.3

Opinion:

NA

Statement of Conformity NA

--- END ----

Réviewer By

Besignstion /

Expounte Chomist

The results rolate only to the identity people.

The results rolate only to the identity people in full, without the permission of Mitte S.K. Private Limited.

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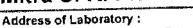
The reserved part of semploys (for otherical analysis (Non - possibilities simple(s) Food, Wister) shall be retained for 15 days from the date of issue of the Test Report.

The reserved part of semploys for chemical analysis (Stot & Liquet Weste) shall be retained for 15 days as per CPCB quidoline & (Air) 1 more through date of issue of the Test Report.

The reserved part of semplo(s) for Microbiological analysis (Non - perishabile semplo(s) Food, Sealed Wister, Bested food) shall be retained for 15 days from the date of issue of the Test Report.

Page 1 of 1

Strach: Cooks (5th Elois), 749. A. F.C. Bose Road, Kokata - 700016, West Bengal, India Tel: 91-33 401430007 2069007 Fax: 91-33 22650006 Erials Info@mittesk.com Website www.mittask.com Head Office:



Building No. P. 48, Udayan Industrial Estate. 3, Pagtadanga Road, Kelkata 700015 West Bengal Tel: +91 7044036120 Email: udayaniab@mitrask.com







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ULR: TC-695024000001372F

TEST REPORT

Name & Address of Customer:

TATA STEEL LTD.

NH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL

ODISHA India Pin 759129

Report No.: Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance:

Location of performance of Reference No. & Date:

Discipline:

24/01/2024

24/01/2024 - 30/01/2024

Permanent Facility

MSKPL/E0/2023-24/V10FF4

MSKNB/ED/2023-24/01/ST3C88

3000148895/A08, Date - 15/17/2022

Chemical

30/01/2024

male Crown by us has been analyzed with the following results.

We hereby certify that the following sample Drawn by us has been allery:	
1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	M
4. Date of sampling	22/01/2024
5, Place of sampling	Canoms-5(Coke Öven-2)
6. Environmental conditions during sampling & Transport	NA
7. Sampling Plan & Method used	IS 9989.1981
8. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No. :

MSKPL/ED/2023-24/V10FF4

Sample No. :

MSKNB/ED/2023-24/01/ST3C88

RESULT

Chemica	1		Weight and the second s	
SI No.	Parameter	UOM	Method	Result
1	Leg dB(A) day	dB(A)	15 9989	70.4
2	Lea dB(A) night	dB(A)	IS 9989	65.0

Opinion:

NA

Statement of Conformity

NA

---- END -----

Reviewed By

Executive Chemiel

Authorized Signs

STANDARD

Designation

Executive Chames

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This Test Report shall not be reproduced in author in full, without the permission of Mitrs 8 K. Proyate Limited.
The reserved part of estimated in the Test Report.
The reserved part of estimated in the Test Report.

The results related for the Test Report.

The meaned part of sample(s) for otherwise (Soil, Soild S.), legic Water) shall be retained for 15 days as per CPCB quiceline S. (Air 1 month from the date of issue of the Test Report. The reserved part of sample(s) for Microbiological analysis (Non-penshadic sample(s) Eood, Sealed Water, Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

Structo Centre (5th Floor), 74B, A. J. C. Bone Road, Kohata - 700036, West Banque, India Tel.: 91 33 601430007 22050007 Fax: 91 33 22050008 Head Office: Emal, idolaminask com Website; waw moask com



Address of Laboratory:

Building No. P. 48, Udayan Industrial Estate, 3, Pagiadanga Road, Kelkata 700015

West Bengal

Tel: +91 7044036120

Email: udayanlab@mdrask.com







Dec MSROGEN/18/04

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ULR: TC-695024000001343F

TEST REPORT

Name & Address of Customer:

TATA STEEL LTD.

NH-55, NARENDRAPUR,MERAMANDLI,DHENKANAL ODISHA India Pin 759129

Report No.: Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/610FFR

29/01/2024

MSKNB/ED/2023-24/01/P235CA

22/01/2024

22/01/2024 - 29/01/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

We hereby certify that the following semple Drawn by us has been analyzed with the following results:

Ne nereby centry that the matering semple brank by 45 red book and 3	Abnospheric Pollution
1. Group	
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA
4. Date of sampling	19/01/2024
5, Place of sampling	Ceagms-6(Wagon Tippler)
6. Environmental conditions during sampling & Transport	<u> </u>
7. Sampling Plan & Method used	IS 9989:1981
8. identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No.:

MSKPL/ED/2023-24/610FFR

Sample No.:

MSKNB/ED/2023-24/01/P235CA

RESULT

Chemica	I _			
SI No.	Parameter	UOM	Method	Result
,	Leg dB(A) day	dB(Å)	IS 9989	 66.1
2	Leg dB(A) night	dB(A)	IS 9989	 64.1

Opinion:

NA

Statement of Conformity NΑ

-- END ------

Reviewed By

Designation

Harrie

5gnetura

Authorized Standson

Signature

Designation

Disculve Chemat

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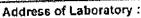
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Permission of the Test Report.

Permission of the Test Report.

Permission of the Test Report.

num usuase on resource on the regions.
The resource part of sensor is on the resource analysis (SO), Solid & Liquid Waste) and be retained for 15 days as por CPCB guidatine & (Air) 1 month from the date of issue of the Test Report.
The reserved part of sensors (an Microbiological embysis (Non - portshottle somption) Food, Sealed Water, Sealed Sold) shall be intuined for 15 days from the date of its un of the Test Report.



Building No. P. 48, Udayan Industrial Estate, 3, Pagladanna Road, Kolkata 700015

West Bongal Tel.: +91 7044036120

Email: udayanlab@mitrask.com







Disc MSRPCEN/1992

MSKPL/ED/2023-24/010FF4

ULR: TC-695024000001344F

TEST REPORT

Date of receipt of sample:

Location of performance of

Date(s) of performance:

Reference No. & Date:

Report No.:

Sample No.:

Discipline:

Date:

29/01/2024

MSKNB/ED/2023-24/01/5F35EU

22/01/2024

22/01/2024 - 29/01/2024

Permanent Facility

300014B895/A06, Date - 15/12/2022

Chemical

Name & Address of Customer:

TATA STEEL LYD.

NH-65, NARENDRAPUR,MERAMANDU,DHENKANAL

ODISHA India Pin 759129

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

ve nereby certify that the lottowing sample brants by	
1, Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique identification of sample(if any)	NA
4. Date of sampling	20/01/2024
5. Place of sampling	Caeqms-7(Material Gate)
6. Environmental conditions during sampling & Transport	NA
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Fleid Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No.:

MSKPL/ED/2023-24/010FF4

Sample No.:

MSKNB/E0/2023-24/01/5F35EU

RESULT

				· .
Chemica		<u> </u>	and the second s	
SI No.	Parameter	UCM	Method	Result
1	Leg dB(A) day	dB(A)	IS 9989	70.3
2	Leg dB(A) night	dB(A)	IS 9989	67.7

Opinion:

NA

NA Statement of Conformity

- END -----

Reviewed By

Securitaire

Mr. Barrey Jorna

Designation Executive Chemist Authorized Signatory

Samulure

Mr. Barry Jena

Executive Chemist

The results relate only to the nent(s) tested
This Test Report shall not be reproduced except in full, without the permission of Maria S.K. Private Lembed
This Test Report shall not be reproduced except in full, without the permission of Maria S.K. Private Lembed
This reserved part of sample(s) for chemical energies (Non - perishable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report
The reserved part of sample(s) for chemical energies (Sod, Soxt 5, Liquel Wester) shall be retained for 16 days as per CPCB guideline 3. (Air) 1 month from the date of listue of the Test Report
The reserved part of sample(s) for chemical energies (Sod, Soxt 5, Liquel Wester) shall be retained for 15 days from the date of listue of the Test Report
The reserved part of sample(s) for Right-biological analysis (Non - perishable simple(s) Food, Seesed Water, Soaled Sood) shall be retained for 15 days from the date of listue of the Test Report
The reserved part of sample(s) for Right-biological analysis (Non - perishable simple(s) Food, Seesed Water, Soaled Sood) shall be retained for 15 days from the date of listue of the Test Report
The reserved part of sample(s) for Right-biological analysis (Non - perishable simple(s) Food, Seesed Water, Soaled Sood) shall be retained for 15 days from the date of listue of the Test Report
The reserved part of sample(s) for Right-biological analysis (Non - perishable simple(s) Food, Seesed Water, Soaled Sood) shall be retained for 15 days from the date of listue of the Test Report

Structu Centre (Sin Floor), 749, A.J.C. Bose Road, Kobata -700015, What Bengal, India Tel: 31 33 40143000 / 20450007 Fax: 93 33 27550008 Ental: info@mitrack.com Wobside : www.mitrack.com Head Office:

Ref.No. EMD/LAB/2023-24/0150 Dt.06.03.2024

AMBIENT NOISE MONITORING TATA STEEL Ltd. (Feb' 24)

S.N	Location	Monitoring Date	Noise Level dB(A) Leq (Day time)	Standard dB(A) Leq(Day Time)	Noise Level dB(A) Leq (Night time)	Standard dB(A) Leq(Night
1	Colony	16.02.24	51.2	55.0	40.0	Time)
2	Coke Oven-2	02.02.24			43.8	45.0
3			58.0	75.0	56.2	70.0
· u	AEL	09.02.24	58.6	75.0	57.6	70.0

A.K. Pagdhan.

Manager (Lab)

Sr.Area Manager

...End Report...

page 1 of 1

Ref.No. EMD/LAB/2023-24/0151 Dt.06.03,2024

NORW MONITOREDG REPORT TATA STEFF LIN (February 2024)

S.N	Name of the unit	Location	Noise level in dB(A)		
	-10 m/-10	Location	Min	Max	Lea
1	BF-2 Cast House	Control room	58	65.9	59.8
		Near B F-2 Furnace area	77.9	83	79.9
2	BF-2 Stock House	Control room office	56.3	66.8	57.4
3	Lime Plant	Inside office building	55.6	75.4	59.7
4	BF PP-1 Boiler-03	Near Control room office	63.5	74.4	65.9
5	Gas fired boiler 250 TPH Area	Office and Control Room	64.3	81,2	68.5
		KILN NO-1, Near 1& 2 control room office	58	66.2	62.3
		KILN NO-3, Near 3& 4control room office	54.3	60.2	59.9
6	DRI	KILN NO-5, Near 5& 6 control room office	51.6		61.1
		KILN NO-7, Near 7& 8 control room office	49.9	1	62.2
		KILN NO-8, Near 9&10 control room office	Min Max 58 65.9 77.9 83 56.3 66.8 55.6 75.4 63.5 74.4 64.3 81.2 58 66.2 54.3 60.2 51.6 68.6 49.9 70.8 51.2 70.2 72.4 79.4 52.9 80.3 64.7 83.6 79.7 98.4 78.2 88.9 84.1 91.3 86.3 94.3 85.9 89.1 81.3 90.7 83.4 89.5 84 96.6 85.4 89.2 52.4 62.7 86.5 90.1 SD SD 82.9 88 77.5 89 56.4 62.8 55.5 81.2 72.5 77 75.8 84.3<	60.4	
7	BF-1 Cast House	Near B F-1 Furnace			73.6
8	BF-1 Stock House	BF-1 Office			59.9
		Near CRM Mill Complex Area	P. C.	58 65.9 77.9 83 56.3 66.8 55.6 75.4 63.5 74.4 64.3 81.2 58 66.2 64.3 60.2 61.6 68.6 69.9 70.8 61.2 70.2 72.4 79.4 62.9 80.3 64.7 83.6 79.7 98.4 78.2 88.9 44.1 91.3 66.3 94.3 75.9 89.1 41.3 90.7 3.4 89.5 84 96.6 5.4 89.2 2.4 62.7 6.5 90.1 5D 20 88 7.5 89 6.4 62.8 65.5 81.2 2.5 77 5.8 84.3 2.8 75 73.6	73
		Near T.L.L			88.6
		Near ETP area			83
		Near GP-1 Zinc Pot		1	87.2
		Near GP-2 Zinc Pot	11111		88.7
		Near GP-3 Zinc Pot		-	87,1
	1	Colour Coating Line		100000	84.9
9	CRM	Mill-1	- Contract - Contract	Max 65.9 83 66.8 75.4 74.4 81.2 66.2 60.2 68.6 70.8 70.2 79.4 80.3 83.6 98.4 88.9 91.3 94.3 89.1 90.7 89.5 96.6 89.2 62.7 90.1 SD 88 89 62.8 81.2 77 84.3 75.1	85.8
		Mill-2			87.1
		Mill-3			86.8
1		CRM Plant Office			58.8
		ECL			88.4
		CRCA		11	SD
		SPM	82.9	88	86.9
		RGM	77.5	89	80.6
		9 m office room	56,4	62.8	57.8
		15 m office	55.5	81.2	62.9
0	Sinter Plant-1	19 m office	72.5	Max 65.9 83 66.8 75.4 74.4 81.2 66.2 60.2 68.6 70.8 70.2 79.4 80.3 83.6 98.4 88.9 91.3 94.3 89.1 90.7 89.5 96.6 89.2 62.7 90.1 SD 88 89 62.8 81.2 77 84.3 75.6 65.1 72.3 66.1 72.3 66.1 72.3 66.2	74.3
		Store area	75.8	84.3	81.1
		Electrical office		11000000	69.2
1	Coke Oven-1	Control room office			61.2
		Laboratory		100000000000000000000000000000000000000	58.2
2	Sinter Plant-02	Control Room Area			60.3
3	Sinter Plant-03	Control Room Area	51.7		58.5
4	BOF Shop	BOF office area	50.4		60.9
7	GOT SHOP	Near Wage bridge area	74.2	87.6	77.6

	SMS-2-FES-1&2	Booster House (ID Fan)	81.8	86.7	84.5
1.5		Near Control room Area	78.7	83.6	81.4
		Near RHF Office area (Pulpit)	79.5	88	81.8
		Near Roll Shop area	78.1	88.5	81
16	HSM	Near HSM Quality Lab area	54.7	60.3	58.9
		DC pulpit office area	52.9	62.4	60.5
		FM area	86.6	92.6	89.3
2.5		Near DC sampling Station	81.7	84.9	83.7
17	Coke Oven-2	Control Room Office	49.9	62.4	58.9
18	BFPP-2 Boiler-3	Control room	65.7	76.4	69.2
19	Oxygen Plant-02	Control Room Office	57.2	74.9	63.5
20	BB Plant	BB Plant Office	55.1	60	58.9
21	RMPP	Control Room Office	51.5	78.6	59.4
22	Coal washery	Lab & Office area	49.9	73.9	
23	RMHS	RMHS Office	49.7	58.9	56.2 57.9
24	IBMD	New Sarpa MRP-II (Operator Cabin)	55.2	67.4	58.8
25	IONID	Office & Operator Cabin (Old MRP)	52.7	60.4	57.4

N: B- All employees are provided ear plug / earmuff in noise prone areas.

A-Kiprowhan.

Manager (Lab)

...End Report...

Page 2 of 2

ddress of Laboratory:

uilding No. P- 48, Udayan Industrial Estate. Pagladanga Road, Kolkata 700015 Vest Bengal el +91 7044036120 imail: udayanlab@mitrask.com





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ULR: TC-695024000003766F

Jame & Address of Customer:

ATA STEEL LTD.

IH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL DISHA India Pin 759129

TEST REPORT

Report No. : Date:

Sample No. :

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date :

Discipline:

MSKPL/ED/2023-24/N13C1L/

07/03/2024

MSKNB/ED/2023-24/03/GN953H

02/03/2024

02/03/2024 - 07/03/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

le hereby certify that the following sample Drawn by us has been analyzed with the following results:

I. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA .
4. Date of sampling	29/02/2024
5. Place of sampling	Sinter Plant 1-9m office room
5. Environmental conditions during sampling & Transport	NA
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No. :

MSKPL/ED/2023-24/N13C1U

Sample No. :

MSKNB/ED/2023-24/03/GN953H

RESULT

1	Average dB(A)	dB(A)	IS 9989	76.2
SI No.	Parameter	UOM	Method	Result
Chemical	L			

Opinion:

NA

Statement of Conformity

END -

Designation : Executive Chemist

Authorized Signato

Signature

Designation

Executive Chemist

he results relate only to the item(s) tested.

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The reserved part of sample(s) for chemical analysis (Non-perishable sample(s) Food, Water) shall be retained for 15 days from the date of asset of the Test Report. Perishable sample(s) shall be retained 2 days from the date of asset of the Test Report.

The reserved part of sample(s) for Microthological analysis (Soil & Liquid Waste) shall be retained for 15 days as per CPCB guideline & (Air) is morth from the date of Issue of the Test Report.
The reserved part of sample(s) for Microthological analysis (Non - penahable sample(s) Food, Sealed Water, Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

Shrech Certre (5th Floor) 748, A.J.C. Bose Road, Kokata - 700016, West Bengal, India. Tel : 91 33 40143000 / 22650007 Fax: 91 33 22650000 Email: info@mitrask.com Wikbelle: www.matrask.com Head Office:



fullding No. P. 48, Udayan Industrial Estate. Pagladanga Road, Kolkata 700015 Vest Bengal el.: +91 7044036120 imail: udayanlab@mitrask.com







ULR: TC-695024000003765F

lame & Address of Customer:

ATA STEEL LTD.

IH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL IDISHA India Pin 759129

TEST REPORT

Report No. : Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/K13C1D

07/03/2024

MSKNB/ED/2023-24/03/49L52J

02/03/2024

02/03/2024 - 07/03/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

'e hereby certify that the following sample Drawn by us has been analyzed with the following results:

. Group	Atmospheric Pollution
. Description of sample	Noise
. Unique Identification of sample(if any)	NA NA
. Date of sampling	29/02/2024
i. Place of sampling	IBMD- office & operator (old MRP)
L Environmental conditions during sampling & Transport	NA .
. Sampling Plan & Method used	IS 9989:1981
Identification of the personnel performing sampling by MSK	Chinmaya Biswal
. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

deport No. :

MSKPL/ED/2023-24/K13C1D

Sample No. :

MSKNB/ED/2023-24/03/49L52J

RESULT

hemic	al Telephone			
SI No.	Parameter	UOM	Method	Result
1	Average dB(A)	dB(A)	IS 9989	62.2

)pinion:

NA

itatement of Conformity

NA

END

Reviewed By

Authorized Schnetor

Skorunbire

Executive Checist

a results relate only to the item(s) tested is Test Report shall not be reproduced except in full, without the permission of Mitra S.K. Private Limited.

e reserved part of sample(s) for chemical analysis (Non - perishable sample(s) Food, Water) shall be retained for 15 days from the date of assec of the Test Report. Perenhable sample(s) shall be retained 2 days on the date of laster of the Test Report.

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Strech: Certife (5th Floor), 74B, A.J.C. Bose Road, Kokata - 700016, West Bengal, India Tel. 91 33 40143000 / 22650007 Fax: 91 33 22650000 Email: info@nitrask.com/Websac: www.initrask.com/

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uilding No. P- 48, Udayan Industrial Estate, Pegladanga Road, Kolkata 700015 Vest Bengal el. +91 7044036120





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ULR: TC-695024000003764F

imail udayanlab@mitrask.com

lame & Address of Customer:

ATA STEEL LTD.

IH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL IDISHA India Pin 759129

TEST REPORT

Report No. : Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

MSKPU/ED/2023-24/C13C1V

07/03/2024

MSKNB/ED/2023-24/03/0NN54F

02/03/2024

02/03/2024 - 07/03/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

'e hereby certify that the following sample Drawn by us has been analyzed with the following results:

. Group	Almospheric Pollution
. Description of sample	Noise
. Unique Identification of sample(if any)	NA .
. Date of sampling	29/02/2024
. Place of sampling	IBMD-New sarpa MRP-II (Operator cabin)
. Environmental conditions during sampling & Transport	NA .
. Sampling Plan & Method used	IS 9989:1981
. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No. :

MSKPL/ED/2023-24/C13C1V

Sample No.:

MSKNB/ED/2023-24/03/0NN54F

RESULT

-1	Average dB(A)	dB(A)	IS 9989	61.1
SI No.	Parameter	UOM	Method	Result
hemical				

)pinion:

NA

itatement of Conformity

NA

END -

Reviewed By

Signature

Designation : Executive Chemist

Authorized Signatory

Signature

Name

Executive Chemist

to Test Report shall not be reproduced except in full, without the permission of Mitral S.K. Private Limited to reproduced except in full, without the permission of Mitral S.K. Private Limited to reserved part of sample(s) for chemical analysis (Non-pershable sample(s) Food. Water) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 2 days in the line of lesse of the Test Report to sample(s) for chemical analysis (Soil, Soild & Liquid Waste) shall be retained for 15 days as per CPCB guidaline & (Air) 1 month from the date of issue of the Test Report to sample(s) for chemical analysis (Non-penshable sample(s) Food, Spaled Water, Spaled food) what be retained for 15 days from the date of lesse of the Test Report.

Stractu Centre (5th Floor), 748, A.J.C. Bose Roet, Kokela - 700016, West Bengal India Tel: 91 33 40143000 / 22650007 Fax: 91 33 22650006 lead Office: Email info@merask.com Website : www.mitrask.com

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TESTING + INSPECTION

Mitra S. K. Private Limited

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ULR: TC-695024000003763F

lame & Address of Customer:

ATA STEEL LTD.

H-55, NARENDRAPUR, MERAMANDLI, DHENKANAL DISHA India Pin 759129

TEST REPORT

Report No.: Date:

Sample No.:

MSKPL/ED/2023-24/913C18 07/03/2024

MSKNB/ED/2023-24/02/PV4D4N

Date of receipt of sample:

02/03/2024

Date(s) of performance: Location of performance of 02/03/2024 - 07/03/2024

Permanent Facility

Reference No. & Date:

3000148695/A06, Date - 15/12/2022

Discipline:

Chemical

a hereby certify that the following sample submitted by the customer has been analyzed with the following results:

. Group	Atmospheric Pollution
Description of sample	Noise
Unique Identification of sample(if any)	l NA
Date of sampling	28/02/2024
Place of sampling	Caaqms-7(Material Gate)
Environmental conditions during sampling & Transport	NA
Sampling Plan & Method used	1S 9989:1981
Identification of the personnel performing sampling by MSK	Chinmaya Biswal
Field Equipments Used	MSK/BBSR/FIELD/SLM-03

eport No.:

MSKPL/ED/2023-24/913C18

Sample No.:

MSKNB/ED/2023-24/02/PV4D4N

RESULT

hemical				
BI No.	Parameter	UOM	Method	Result
1	Leq dB(A) day	dB(A)	IS 9989	68.9
2	Leq dB(A) night	dB(A)	IS 9989	66.9

pinion:

NA

tatement of Conformity

END -

inignation - Executive Chemist

Authorized Sign

Designation

Executive Otremist

results retails only to the item(s) tested.

Test Report shall not be reproduced except in full, without the permission of Mitra S.K. Private Limited. holds) for chemical analysis (Non - perishable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained for 15 days

sample(s) for charmical analysis (Self, Solid & Liquid Weste) shall be retained for 15 days as per CPCB guideline & (Air) I recruit from the date of insure of the Test Reports) for Microbiological analysis (Non - penshable sample(s) Food, Sealed Water, Sealed food) shall be retained for 15 days from the date of issue of the Test Rep ad Office:

Strech Centre (5th Floor), 74B, A.J.C. Bose Roed, Kokata -700016, West Bengal, India Tel., 91.33.401430007/22650007 Fax., 91.33.226650008 Email: info@mstrask.com Website: www.milirask.com

ddress of Laboratory:

uliding No. P- 48, Udayan Industrial Estate, Pagladanga Road, Kolketa 700015 lest Bengal el :+91 7044036120 mail: udayanlab@mitrask.com

lame & Address of Customer:

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IDISHA India Pin 759129







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ULR: TC-695024000003574F

TEST REPORT

Report No. :

Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance:

Location of performance of Reference No. & Date :

Discipline:

MSKPL/ED/2023-24/X13C1R

06/03/2024

MSKNB/ED/2023-24/02/NN4CCS

01/03/2024

01/03/2024 - 06/03/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

'e hereby certify that the following sample Drawn by us has been analyzed with the following results:

l. Group	Almospheric Pollution
2. Description of sample	Noise
Unique Identification of sample(if any)	lw .
I. Date of sampling	28/02/2024
5. Place of sampling	Caaqms-3(CRM)
3. Environmental conditions during sampling & Transport	NA .
7. Sampling Plan & Method used	IS 9989:1981
3. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
). Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No. :

MSKPL/ED/2023-24/X13C1R

Sample No.:

MSKNB/ED/2023-24/02/NN4CCS

RESULT

hemic	al			N + V
SI No.	Parameter .	UOM	Method	Result
1	Leg dB(A) day	dB(A)	IS 9989	68.9
2	Leq dB(A) night	dB(A)	IS 9989	66.9

Opinion:

NA NA

Statement of Conformity

-- END ----

Reviewed By.

Designation Executive Chemist

Authorized Signate

Designation **Executive Chemist**

he results relate only to the item(s) tested

The results relate only to the fleming tested.

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The reserved part of sample(s) for chemical analysis (Non - pershable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report.

The reserved part of sample(s) for chemical analysis (Soil, Soild & Liquid Waste) shall be retained for 15 days as per CPCB guideline & (Air) 1 month from the date of issue of the Test Report.

The reserved part of sample(s) for chemical analysis (Soil, Soild & Liquid Waste) shall be retained for 15 days as per CPCB guideline & (Air) 1 month from the date of issue of the Test Report.

The reserved part of sample(s) for Microbiological analysis (Rion - perishable sample(s) Food, Sealed Visiter, Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

ddress of Laboratory:

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TEST REPORT

ame & Address of Customer: ATA STEEL LTD.

H-55, NARENDRAPUR MERAMANDLI DHENKANAL DISHA India Pin 759129

Report No.: Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

MSKPUED/2023-24/U13C1C

06/03/2024

MSKNB/ED/2023-24/02/JW490B

28/02/2024

28/02/2024 - 06/03/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

e hereby certify that the following sample Drawn by us has been analyzed with the following results:

. Group	Almospheric Pollution
. Description of sample	Noise
Unique Identification of sample(if any)	NA .
Date of sampling	26/02/2024
. Place of sampling	Caagms-2(AEL)
Environmental conditions during sampling & Transport	NA .
Sampling Plan & Method used	15 9989:1981
Identification of the personnel performing sampling by MSK	Chinmaya Biswal
Field Equipments Used	MSK/BBSR/FIELD/SLM-03

teport No. :

MSKPL/ED/2023-24/U13C1C

Sample No.:

MSKNB/ED/2023-24/02/JW490B

RESULT

hemic	al .			
SI No.	Parameter	UOM	Method	Result
1	Leq dB(A) day	dB(A)	IS 9989	65.1
2	Leq dB(A) night	dB(A)	IS 9989	61.6

)pinlon :

Itatement of Conformity NA

- END ---

Reviewed By:

lead Office:

Authorized Signatory

Executive Chemist

we results relate only to the secure) lessed or

to results return only to the section is stated output in full, without the permission of Mitra S.K. Private Limited.

It for Report shall not be reproduced except in full, without the permission of Mitra S.K. Private Limited.

It reserved pert of sample(s) for chemical analysis (Non - perishable sample(s) Food, Wilder) shall be retained for 15 days from the date of issue of the Test Report.

It is not asked of issue of the Test Report.

It reserved part of sample(s) for this collection analysis (Soil & Liquid Waste) shall be refamed for 15 days as por CPCB guideline & (Air) 1 month from the date of issue of the Test Report to reserved part of sample(s) for Microbiological analysis (Non - penshable sample(s) Food, Seeled Water, Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

Shrachi Certre (5th Floor), 748, A.J.C. Bose Road, Konata - 700016, West Bengal, India Tel: 91 33 40143000 / 22850007 Fas - 91 33 22650006 Email: nfo@msrask.com Webatis www.mitrask.com

Address of Laboratory:

Juilding No. P- 48, Udayan Industrial Estate. I, Pagladanga Road, Kolkata 700015 Vest Bengal el : +91 7044036120 imail. udayanlab@mitrask.com







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ULR: TC-695024000003165F

TEST REPORT Jame & Address of Customer:

'ATA STEEL LTD.

1H-55, NARENDRAPUR, MERAMANDLI, DHENKANAL DDISHA India Pin 759129

Report No.: Date:

Sample No. :

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/E1364N

29/02/2024

MSKNB/ED/2023-24/02/YC400D

24/02/2024

24/02/2024 - 29/02/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

re hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	INA
4. Date of sampling	22/02/2024
5. Place of sampling	RMHS - RMHS Office
6. Environmental conditions during sampling & Transport	NA .
7. Sampling Plan & Method used	IS 9989:1981
B. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No. :

MSKPL/ED/2023-24/E1364N

Sample No. :

MSKNB/ED/2023-24/02/YC400D

RESULT

1	Average dB(A)	dB(A)	IS 9989	63,5
SI No.	Parameter	UOM	Method	Result
Chemical		.g / 100		

Opinion:

Statement of Conformity

NA

END -

Reviewed By

Sommers

Designation

Head Office:

Authorized Signator

Signature

Designation

Executive Chemist

The results relate drify to the names) tested.

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The reserved port of sample(s) for chemical analysis (Non - perishable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 2 days

The reserved part of sample(s) for chemical analysis (Soil Solid & Liquid Weste) shall be retained for 15 days as per CPCB guideline & (Air) 1 month from the date of issue of the Test Report. The reserved part of sample(s) for Microbiological analysis (Non - pershable sample(s) Food, Sealed Water, Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

Stractic Centre (5th Floor), 74B, A J.C. Bose Road, Kokata - 700016. West Bengal, India Tel: 91-33-40143000 / 22650007 Fax: 91-33-22650008 Finals: wto-grintratik com Website : welve mitratik com

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TESTING . INSPECTION

Vitra S. K. Private Limited

Address of Laboratory:

Juilding No. P- 48, Udayan Industrial Estate. i. Pagladanga Road, Kolkata 700015 **Vest Bengal** 'el : +91 7044036120 imail: udayanlab@mitrask.com







ULR: TC-695024000003164F

lame & Address of Customer:

ATA STEEL LTD.

IH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL IDISHA India Pin 759129

TEST REPORT

Report No. :

Date:

Sample No.: Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date :

Discipline:

MSKPL/ED/2023-24/Y 1363H

29/02/2024

MSKNB/ED/2023-24/02/Y73FDD

24/02/2024

24/02/2024 - 29/02/2024

Permanent Facility

3000148595/A06, Date - 15/12/2022

Chemical

'a hereby certify that the following sample Drawn by us has been analyzed with the following results:

. Group	Atmospheric Pollution
. Description of sample	Noise
. Unique Identification of sample(if any)	NA .
. Date of sampling	22/02/2024
. Place of sampling	110 MW power Plant- Boiler 7
Environmental conditions during sampling & Transport	NA .
. Sampling Plan & Method used	IS 9989:1981
. Identification of the personnel performing sampling by MSK	Chinmava Biswal
Field Equipments Used	MSK/BBSR/FIELD/SLM-03

leport No. :

MSKPL/ED/2023-24/Y1363H

Sample No. :

MSKND/ED/2023-24/02/Y73FDD

RESULT

minion :	NA		Existing the second sec	The state of the s
1	Average dB(A)	dB(A)	IS 9989	83.9
SI No.	Parameter	UOM	Method	Result
hemical				

tatement of Conformity

END -

eviewed By

Executive Chemist

Authorized Signatory

Signature

Executive Chemiat

results relate only to the sem(s) tested
Litest Report shall not be reproduced except in full, without the permission of Mitra S.K. Private Limited.
Testerved part of sample(s) for chemical enalysis (Non - perishable sample(s) Food. Water) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 2 days
the date of issue of the Test Report.

new date of research or the 1 sect responsition of the 1 section of the 2 section of the 1 section of the 2 section of the 1 section of the 2 section of the 3 ed food) shall be received for 15 days from the date of issue of this Tess Report ad Office:

VH-55, NARENDRAPUR MERAMANDLI DHENKANAL

Address of Laboratory:

TATA STEEL LTD.

DDISHA India Pin 759129

Building No. P- 48, Udayan Industrial Estate i, Pagladanga Road, Kolkata 700015 **Nest Bengal** rel.: +91 7044036120 Email: udayanlab@mitrask.com







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ULR: TC-695024000003163F

TEST REPORT

Report No.: Vame & Address of Customer:

Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance:

Location of performance of Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/41363E

29/02/2024

MSKNB/ED/2023-24/02/NT3FCB

24/02/2024

24/02/2024 - 29/02/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

Ve hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA .
4. Date of sampling	22/02/2024
5. Place of sampling	CRM -ECL
6. Environmental conditions during sampling & Transport	l NA
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No.;

MSKPL/ED/2023-24/41363E

Sample No. :

MSKNB/ED/2023-24/02/NT3FCB

RESULT

	A			
1	Average dB(A)	dB(A)	IS 9989	84.1
SI No.	Parameter	UOM	Method	Result
Chemic	al			

Opinion:

Statement of Conformity

NA

END -

Reviewed By

Designation

Authorized Signatory

Signature

Nama

Designation

Executive Chemiat

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This Test Report shall not be reproduced except in full, without the permission of Mitra S.K. Private Limited.
The reserved part of sample(s) for chemical analysis (Non - perishable sample(s) Food. Water) shall be retained to 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 2 days.

The reserved part of sample(s) for chemical analysis (Soit, Soits & Liquid Waste) shall be retained for 15 days as per CPCB guideline & (Air) 1 month from the date or issue of the Test Report The reserved part of sample(s) for Microbiological analysis (Non- perishable sample(s) Food, Sealed Water, Sealed food) shall be retained for 15 days from the date or issue of the Test Report

Stracts Centre (5th Floor), 748, A.J.C. Bose Road, Kos,ata - 700016, West Bengal, India Tel.: 91 33 40143000722650007 Fax - 91 33 22650008 Head Office: Email sylogenerask com Website www.marask.com

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TESTING . INSPECTION

Vitra S. K. Private Limited

Address of Laboratory:

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Email: udayanlab@mitrask.com

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DISHA India Pin 759129







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ULR: TC-695024000003162F

TEST REPORT

lame & Address of Customer: Report No.:

Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance:

Location of performance of Reference No. & Date :

Discipline:

MSKPL/ED/2023-24/G1363Z

29/02/2024

MSKNB/ED/2023-24/02/MJ3FB4

24/02/2024

24/02/2024 - 29/02/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

le hereby certify that the following sample Drawn by us has been analyzed with the following results:

l. Group	Atmospheric Pollution
Description of sample	Noise
3. Unique identification of sample(if any)	NA .
I. Date of sampling	22/02/2024
5. Place of sampling	Coke oven 2 control room office
i. Environmental conditions during sampling & Transport	NA
/. Sampling Plan & Method used	IS 9989:1981
3. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
). Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No.:

MSKPL/ED/2023-24/G13632

Sample No.:

MSKNB/ED/2023-24/02/MJ3FB4

RESULT

1	Average dB(A)	dB(A)	IS 9989	49.8
SI No.	Parameter	UOM	Method	Result
hemical				

)pinion:

NA NA

itatement of Conformity

END ---

Reviewed By

ead Office:

Designation **Executive Chemist** Authorized Signator

Signature

Designation

Executive Chemist

ie results relate only to the Barrica) tested.

Is Test Report shall not be reproduced except in full, without the permission of Mitris S. K. Polyste Limited.

Is Test Report shall not be reproduced except in full, without the permission of Mitris S. K. Polyste Limited.

Is resorved part of sample(s) for chemical analysis (Non - perishable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 2 days.

in the date of issue of the Test Report.

In the date of issue of the Test Report.

In respond part of sample(s) for chemical analysis (Soil, Soid & Liquid Wasse) shall be retained for 15 days as per CPCB quideline & (Air) 1 morest from the cote of issue of the Test Report.

In respond part of sample(s) for Microbiological analysis (Non-peristable sample(s) Food, Sealed Water, Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

Strechi Certre (5th Floor), 749, A.J.C. Bole Road, Kokata - 700016, West Bengal, India Tel : 91 33 40143000 / 22650007 Fax - 91 33 22650008 Email info@mitrask.com V/bosto i www.mitrask.com

Address of Laboratory:

Juliding No. P- 48, Udayan Industrial Estate, , Pagladanga Road, Kolkata 700015 Vest Bengal 'el : +91 7044036120 Email: udayanlab@mitrask.com







ULR: TC-695024000003161F

TEST REPORT

Vame & Address of Customer:

'ATA STEEL LTD.

1H-55, NARENDRAPUR, MERAMANDLI, DHENKANAL DISHA India Pin 759129

Report No. :

Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/M135F3

29/02/2024

MSKNB/ED/2023-24/02/GN3FEB

24/02/2024

24/02/2024 - 29/02/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

/e hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA .
6. Date of sampling	22/02/2024
5. Place of sampling	Coke oven 1 laboratory
5. Environmental conditions during sampling & Transport	NA .
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No. :

MSKPL/ED/2023-24/M135F3

Sample No. :

MSKNB/ED/2023-24/02/GN3FEB

RESULT

Method	Result
	Method

Opinion:

NA

Statement of Conformity

NA

END

Reviewed By

5 gnature

Name Designation

Executive Chemist

Authorized Signatory

Skenature

Designation

Executive Chemist

he results relate only to the item(s) tested his Test Report shall not be reproduced except in full, without the permission of Mira S.K. Private Limited. he reserved part of semple(s) for chemical analysis (Non - perishable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 2 days on the date of issue of the Test Report.

orn products to resear of our process respect.

The repended part of sample(s) for chemical analysis (Soil, Soild & Liquid Weste) street to retained for 15 days as por CPCB guideline & (Vis) 1 month from the date of issue of the Test Report.
The reserved part of sample(s) for Microbiological analysis (Non - penshable sample(s) Food. Sealed Water, Sealed food) shall be refained for 15 days from the date of issue of the Test Report.

Strachi Centre (5th Floor), 74B, A.J.C. Bose Road, Kolkata - 700016, West Bengal, India Tel: 91 33 40143000 / 22650007 Fax : 91 33 22650008 Email: Info@mitrask.com Website I www.mitrask.com Head Office:

Address of Laboratory:

Juilding No. P- 48, Udayan Industrial Estate. i. Pagladanga Road, Kolkata 700016 Vest Bengal el :+91 7044036120 Email udayanlab@mitrask.com

Jame & Address of Customer:

1H-55, NARENDRAPUR, MERAMANDLI, DHENKANAL

'ATA STEEL LTD.

DISHA India Pin 759129





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ULR: TC-695024000003160F

TEST REPORT

Report No.:

Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date :

Discipline:

MSKPL/ED/2023-24/A135FU

29/02/2024

MSKNB/ED/2023-24/02/4C3FFA

24/02/2024

24/02/2024 - 29/02/2024

Permanent Facility

3000148695/A06. Date - 15/12/2022

Chemical

le hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	M
4. Date of sampling	22/02/2024
5. Place of sampling	Coke oven 1 control room office
5. Environmental conditions during sampling & Transport	NA .
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No.:

MSKPL/ED/2023-24/A135FU

Sample No. :

MSKNB/ED/2023-24/02/4C3FFA

RESULT

	The state of the s	The same of the sa	I was a second of the second o	AND THE RESERVE OF THE PARTY OF
1	Average dB(A)	dB(A)	IS 9989	60.0
SI No.	Parameter	UOM	Method	Result
Chemical				

Dpinion:

NA

Statement of Conformity

NA

END ----

Signature

Authorized Significan

Signature

Designation

Name

Executive Charnet

he results relate only to the item(s) tested
his Test Report shall not be reproduced except in full, without the permission of little S.K. Private Limited
he reserved part of sample(s) for chamical analysis (Non - perishable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 2 days
on the date of issue of the Test Report.

he reserved part of sample(s) for chemical analysis (Sos, Solid & Liquid Waste) shall be retained for 15 days as per CP CB guideline & (Air) it month from the date of laster of first Test Report, he reserved part of sample(s) for Microbiological analysis (Non - perishable sample(s) Food, Sealed Water, Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

Shrach Centre (6th Floor), 748, A.J.C. Bose Road, Kokata - 700016, West Bengal, India Tel : 91 33 401400007 22050007 Fax: 91 33 22050001 tead Office:

Email: edo@mitrask.com Website: www.mitrask.com

DOC MSK/GEN/19/07

TESTING . INSPECTION

litra S. K. Private Limited

ddress of Laboratory:

ullding No. P-48, Udayan Industrial Estate. Pagladanga Road, Kolkata 700015 lest Bengal al. :+91 7044036120 mail udayanlab@mitrask.com







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ULR: TC-695024000002554F

TEST REPORT

ame & Address of Customer:

ATA STEEL LTD.

H-55, NARENDRAPUR, MERAMANDLI, DHENKANAL DISHA India Pin 759129

Report No. : Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/C1249Y

17/02/2024

MSKNB/ED/2023-24/02/BF13EC

12/02/2024

12/02/2024 - 17/02/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

thereby certify that the following sample Drawn by us has been analyzed with the following results:

Group	Atmospheric Pollution
Description of sample	Noise
Unique Identification of sample(if any)	NA
Date of sampling	10/02/2024
Place of sampling	BF 1 cast house near BF 1 furnece
Environmental conditions during sampling & Transport	NA NA
Sampling Plan & Method used	IS 9989:1981
Identification of the personnel performing sampling by MSK	Chinmaya Biswal
Field Equipments Used	MSK/BBSR/FIELD/SLM-03

sport No. :

MSKPL/ED/2023-24/C1249Y

Sample No.:

MSKNB/ED/2023-24/02/BF13EC

RESULT

3I No.	Parameter	UOM	Method	Result
10	Average dB(A)	dB(A)	IS 9989	81.4

: noinic

NA

atement of Conformity

END -

ivwwwdBy.

isignation

ad Office:

mature

Executive Chemist

Authorized Signatury

Signature

Designation

rejusts relate only to the item(s) tested

Test Report shall not be reproduced except in full, without the permission of Mara S.K. Private Limited

reserved part of sample(s) for chemical enalysis (Non-- perishable sample(s) Food. Water) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 2 days

the date of issue of the Test Report. Testers of the Test Report reserved part of sample(s) for chemical analysis (Soil, Solid & Liquid Waste) shall be retained for 15 days as per CPGB guideline & (Air) if export from the date of issue of the Test Report.

Reserved part of sample(s) for Microbiological analysis (Non-- perishable sample(s) Food. Sealed Water. Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

Shruch: Centre (5th Floor) 74B, A.J.C. Bose Road, Kokutta - 700016. West Bengal, India Tel. 91 33 40143000 / 22650007 Fax: 91 33 22650006. Emmi: WorDhatinia com Websel, www.murask.com

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TESTING + INSPECTION

vittra S. K. Private Limited

Address of Laboratory :

Building No. P. 48. Udayan Industrial Estate. l. Pagladanga Road, Kolkata 700015 Vest Bengal 61 : +91 7044036120 mail udayanlab@mitrask.com







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ULR: TC-695024000002553F

TEST REPORT

lame & Address of Customer ;

ATA STEEL LTD.

H-55, NARENDRAPUR, MERAMANDLI, DHENKANAL DISHA India Pin 759129

Report No. : Date:

Sample No. :

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/H1249H

17/02/2024

MSKN8/ED/2023-24/02/6P140H

12/02/2024

12/02/2024 - 17/02/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

3 hereby certify that the following sample Drawn by us has been analyzed with the following results:

. Group	Atmospheric Pollution
Description of sample	Noise
. Unique Identification of sample(If any)	NA .
Date of sampling	10/02/2024
Place of sampling	DRI-Near 5&6 control room office
Environmental conditions during sampling & Transport	M
Sampling Plan & Method used	IS 9989:1981
Identification of the personnel performing sampling by MSK	Chinmaya Biswal
Field Equipments Used	MSK/BBSR/FIELD/SLM-03

eport No.:

MSKPL/ED/2023-24/H1249H

Sample No. :

MSKNB/ED/2023-24/02/6P140H

RESULT

-1-1	114			
MI I	Average dB(A)	dB(A)	IS 9989	56.2
BI No.	Parameter	UOM	Method	Result
nemical				

: noinic

NA NA

atement of Conformity

- END ----

Executive Chemat

Authorized Signatory

Sonature

Name

Designation

Executive Chemist

results relete only to the item(s) tested

Test Report shall not be reproduced except in full, without the permission of Mittar S.K. Private Limited.

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Test Report shall not be reproduced except in full, without the permission of Mittar S.K. Private Limited.

Test Report Permission sample(s) shall be interested 2 days from the date of issue of the Test Report.

Test Report Permission S.K. Solid S. Full Wisdel shall be retained for 15 days as per CPCS guideline & (Air) 1 month from the date of issue of the Test Report.

secured part of sample(s) for chemical analysis (Set, Solid & Liquid Vissia) shall be retained for 15 days as per CPCB guideline & (Air) 1 monitarings the date of issue of the Test Report secured part of sample(s) for Microbiological analysis (Non - perishable sample(s) Food. Sealed Vistor, Sealed food) shall be retained for 15 days from the date of issue of the Test Report. Shrachi Contre (5th Floor), 748, A J.C. Bose Road, Rokata - 700016, West Bangai, India Tel: 91 33 40143000 / 22850007 Fax: 91.33 22650008 Elmai info@ntruss.com Website ; www.mtruss.com id Office:

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Vitra S. K. Private Limited

Address of Laboratory:

tuilding No. P- 48, Udayan Industrial Estato. I, Pagladanga Road, Kolkata 700015 Vest Bengal el. . +91 7044036120 imail: udayanlab@mitrask.com

lame & Address of Customer:

H-55, NARENDRAPUR, MERAMANDLI, DHENKANAL

ATA STEEL LTD.

DISHA India Pin 759129







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ULR: TC-695024000002552F

TEST REPORT

Report No.:

Date:

Sample No. :

Date of receipt of sample: Date(s) of performance:

Location of performance of Reference No. & Date :

Discipline:

MSKPL/ED/2023-24/R1249P

17/02/2024

MSKN8/ED/2023-24/02/6G13F7

12/02/2024

12/02/2024 - 17/02/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

hereby certify that the following sample Drawn by us has been analyzed with the following results:

Стоир	Atmospheric Pollution
Description of sample	Noise
Unique Identification of sample(if any)	NA .
Date of sampling	10/02/2024
Place of sampling	DRI-Near 3&4 control room office
Environmental conditions during sampling & Transport	NA NA
Sampling Plan & Method used	1S 9989:1981
Identification of the personnel performing sampling by MSK	Chinmava Biswai
Field Equipments Used	MSK/BBSR/FIELD/SLM-03

eport No. :

MSKPL/ED/2023-24/R1249P

Sample No. :

MSKNB/ED/2023-24/02/6G13F7

RESULT

Inlen:	NA			VE.U
1	Average dB(A)	dB(A)	IS 9989	52.5
l No.	Parameter	UOM	Method	Result
emical				

atement of Conformity

NA

END -

viewed By:

signation

irvacura

Executive Chemist

Authorized Signator

Skriahre Name

Designation

Executive Chemist

results (eithe only to the Kemi(s) tested

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Test Report shall not be reproduced except in full shall not be represented by the Priva the date of sample(s) for chemical analysis (Soil, Solid & Lique) Waste) shall be retained for 15 days as per CPCB guideline & (Air) 1 month from the date of issue of the Test Report extended for 15 days from the date of issue of the Test Report of sample(s) for Microbiological analysis (Non - perishable sample(s) Food Sealed Water Sealed food) shall be retained for 15 days from the date of asset of the Test Report

Sheath Centre (5th Faor), 74B, A.J.C. Bose Road, Kokata - 700016. Wish Bengal, India Tel: B1 33 40143000 / 22650007 Fax: 91 33 22650008 ad Office:

LESTING * INSPECTION

viitra S. K. Private Limited

Address of Laboratory:

Juilding No. P- 48, Udayan Industrial Estate. i, Pagladanga Road, Kolkata 700015 Vest Bengal 'el : +91 7044036120 :mail: udayanlab@mitrask.com







Scan for Portal

ULR: TC-695024000002551F

lame & Address of Customer :

ATA STEEL LTD

H-55, NARENDRAPUR, MERAMANDLI, DHENKANAL DISHA India Pin 759129

TEST REPORT

Report No. : Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of Reference No. & Date:

Discipline:

MSKPL/E0/2023-24/W1249P

17/02/2024

MSKNB/ED/2023-24/02/4G13CQ

12/02/2024

12/02/2024 - 17/02/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

hereby certify that the following sample Drawn by us has been analyzed with the following results:

Group	Atmospheric Pollution
Description of sample	Noise
Unique Identification of sample(if any)	NA
Date of sampling	10/02/2024
Place of sampling	DRI-Near 182 control room office
Environmental conditions during sampling & Transport	NA
Sampling Plan & Method used	IS 9989 1981
Identification of the personnel performing sampling by MSK	Chinmaya Biswal
Field Equipments Used	MSK/BBSR/FIELD/SLM-03

eport No. :

MSKPL/ED/2023-24/W1249P

NA

Sample No.:

MSKNB/ED/2023-24/02/4G13CQ

RESULT

1	Average dB(A)	dB(A)	IS 9989	60.6
I No.	Parameter	UOM	Method	Result
emical				

atement of Conformity

---- END -----

VARWING BY.

signation Executive Chemiat Authorized Signatory

Signature

Designation

Executive Chemist

esuits relate only to the item(s) tested.

Test Report shall not be reproduced except in full, without the permission of Matra S.K. Private Limited.

Beaned part of sample(s) for chemical analysis (Non - perishable sample(s) Food. Water) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained for 15 days as per CPCH guideline 8 (Air) 1 mores from the date of issue of the Test Report search of analysis (Soil, Soild & Liquid Waste) shall be retained for 15 days as per CPCH guideline 8 (Air) 1 mores from the date of issue of the Test Report searches) for Microbiological analysis (Non - perishable sample(s) Food. Sealed Water. Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

id Office:

Strecht Centre (5th Floor), 748, A.J.C. Bose Road, Kokata - 700016, West Bangal, India. Tel. 91 33 40143000 / 22650007 Fax: 91 33 2050008. Email: info@minaix.com Website: www.minarsk.com

TESTING . INSPECTION

Mitra S. K. Private Limited

Address of Laboratory:

fullding No. P- 46, Udayan Industrial Estate. , Pagladanga Road, Kolkata 700015 Vest Bengal 'el.: +91 7044036120 imail udayanlab@mitrask.com

Jame & Address of Customer:

IH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL

ATA STEEL LTD.

IDISHA India Pin 759129







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ULR: TC-695024000002550F

TEST REPORT

Report No.:

Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/Q12494

17/02/2024

MSKN8/ED/2023-24/02/2313DC

12/02/2024

12/02/2024 - 17/02/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

'e hereby certify that the following sample Drawn by us has been analyzed with the following results:

. Group	Atmospheric Pollution		
. Description of sample	Noise		
l. Unique Identification of sample(if any)	NA .		
. Date of sampling	10/02/2024		
. Place of sampling	BFPP 1 Boiler -3-near control room office		
. Environmental conditions during sampling & Transport	INA		
. Sampling Plan & Method used	IS 9989:1981		
. Identification of the personnel performing sampling by MSK	Chinmaya Biswal		
). Field Equipments Used	MSK/BBSR/FIELD/SLM-03		

Report No. :

MSKPL/ED/2023-24/Q12494

Sample No. :

MSKNB/ED/2023-24/02/2313DC

RESULT

hemical				
SI No.	Parameter	UOM	Method	Result
1	Average dB(A)	dB(A)	IS 9989	47.6
V-1-1	kiA	***************************************		

)pinion :

Hatement of Conformity

END

Reviewed By:

Signature

Executive Chemis!

Authorized Signatory

Segrentiare

Executive Chemist

es results relate only to the terminal tested as Test Report shall without the permission of Mitra S.K. Private Limited as Test Report shall not be reproduced except in full, without the permission of Mitra S.K. Private Limited for 15 days from the date of lesues of the Test Report. Perishable sample(s) Food, Weter) shall be retained for 15 days from the date of lesues of the Test Report. Perishable sample(s) shall be retained 2 days. en the date of issue of the Test Report

is reserved part of sample(s) for chemical analysis (Soil, Soild & Liquid Wasse) shall be retained for 15 days as per CPCB guideline & (Air) 1 month from the date of lesue of the Test Report, is reserved part of sample(s) for Microbiological analysis (Non - perishable sample(s) Food, Sealed Water, Sealed food) shall be retained for 15 days from the date of lesue of the Test Report. lead Office:

Shrachi Centra (5th Floor), 74B, A.J.C. Bose Road, Koškata - 700016, West Bengal, India Tel : 01:33:40143000 / 22650007 Fax: 91:33:22650006

TESTING . INSPECTION

Mitra S. K. Private Limited

iddress of Laboratory:

luikling No. P- 48, Udayan Industrial Estate. Pagladanga Road, Kolkata 700015 Vest Bengat 'el +91 7044036120 mail: udayanlab@mitrask.com

lame & Address of Customer:

IH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL

ATA STEEL LTD.

IDISHA India Pin 759129







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ULR: TC-695024000002924F

TEST REPORT

Report No.:

Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date :

Discipline:

MSKPL/ED/2023-24/312C10

23/02/2024

MSKNB/ED/2023-24/02/U2363X

19/02/2024

19/02/2024 - 23/02/2024

Permanent Facility

3000148695/A06. Date - 15/12/2022

Chemical

'e hereby certify that the following sample Drawn by us has been analyzed with the following results:

. Group	Almospheric Pollution
. Description of sample	Nolse
. Unique identification of sample(if any)	NA .
. Date of sampling	17/02/2024
. Place of sampling	BB Plant Office
. Environmental conditions during sampling & Transport	NA .
. Sampling Plan & Method used	IS 9989:1981
. Identification of the personnel performing sampling by MSK	Chinmaya Biswol
. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

leport No.:

MSKPL/ED/2023-24/312C1D

NA

Sample No.:

MSKNB/ED/2023-24/02/U2363X

RESULT

)pinion :	NA	-		
1	Average dB(A)	dB(A)	IS 9989	47.7
Si No.	Parameter	UOM	Method	Result
hemical				

tatement of Conformity

- END ---

Reviewed By

Desagnation

Signature

Executive Chemist

Authorized Bignitton

Sixonature

Name

Designation

ie results relate only to the item(is) tested is Tast Report shall not be reproduced except in full, without the permission of Mitra S.K. Private Limited is reserved part of sample(s) for chemical analysis (Non) perishable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 2 days

on the date of issue of the Test Report. to reserved part of sample(s) for chemical analysis (Soit Soid & Liquid Weste) shat the retained for 15 days as per CPCB guideline & (Air) 1 month from the date of issue of the Test Report in reserved part of sample(s) for Microbiological analysis (Non - pershable sample(s) Food, Sealed Weter, Beard food) shall be retained for 15 days from the date of issue of the Test Report

Strech Centre (5th Fiscr), 748, A.J.C. Bose Road, Kokata, -700015. West Bengal, India Tel: 91 33 40140000 / 22650007 Fax: 91 33 22650008 ead Office:

Address of Laboratory:

Juilding No. P- 48, Udayan Industrial Estate, I, Pagladanga Road, Kolkata 700015 Vest Bengal el : +91 7044036120 imail: udayanlab@mitrask.com







Scan for Portal

ULR: TC-695024000002923F

TEST REPORT

Jame & Address of Customer:

ATA STEEL LTD.

IH-55, NARENDRAPUR.MERAMANDLI, DHENKANAL. DISHA India Pin 759129

Report No. :

Date:

Sample No. :

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date :

Discipline:

MSKPL/ED/2023-24/D12G1T

23/02/2024

MSKNB/ED/2023-24/02/KG3629

19/02/2024

19/02/2024 - 23/02/2024

Permanent Facility

3000148695/AD6 Date - 15/12/2022

Chemical

le hereby certify that the following sample Drawn by us has been analyzed with the following results:

I. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA .
t. Date of sampling	17/02/2024
5. Place of sampling	RMPP Control room office
5. Environmental conditions during sampling & Transport	NA .
7. Sampling Plan & Method used	IS 9989:1981
B. Identification of the personnel performing sampling by MSK	Chinmaya Biswat
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No.:

MSKPL/ED/2023-24/D12C1T

Sample No. :

MSKNB/ED/2023-24/02/KG3629

RESULT

4	Average dB(A)	dB(A)	IS 9989	64.2
SI No.	Parameter	UOM	Method	Result
hemical				

Opinion:

NA

Statement of Conformity

NA

END -

Designation

Signature

Executive Chemist

Authorized Sephetory

Signature

Designation

Name

he results relate only to the item(s) tested his Test Report shall, writhout the permission of Mira S.K. Private Limited he reserved part of sample(s) for chemical analysis (Non-perishable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) Food, Water) shall be retained 2 days from the date of issue of the Test Report.

the reserved part of sample(s) for chemical analysis (Solid & Liquid Waste) shall be retained for 15 days as per CPCB guideline & (Air) 1 month from the date of issue of the Test Report the reserved part of sample(s) for Microbiological analysis (Non-perchable sample(s) Food. Socied Water, Sealed food) shall be retained for 15 days from the date of issue of the Test Report.

Straich Centre (5th Floor), 74B, A J.C. Bose Road, Kokata - 700016, West Benge: India Tel: 81 23 40143000 / 22650007 Fax : 91 33 22650008 lead Office:

Address of Laboratory:

tuilding No. P- 48, Udayan Industrial Estato. L Pagladanga Road, Kolkata 700015 Vest Bengal 'el.: +91 7044036120 imail: udayanlab@mitrask.com







ULR: TC-695024000002922F

TEST REPORT

lame & Address of Customer:

ATA STEEL LTD

IH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL DISHA India Pin 759129

Report No.: Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/E12C1F

23/02/2024

MSKNB/ED/2023-24/02/JK3613

19/02/2024

19/02/2024 - 23/02/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

ie hereby certify that the following sample Drawn by us has been analyzed with the following results:

I. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA .
I. Date of sampling	17/02/2024
5. Place of sampling	Sinter Plant 3-control room area
5. Environmental conditions during sampling & Transport	NA .
7. Sampling Plan & Method used	IS 9989:1981
3. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
3. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No.:

MSKPL/ED/2023-24/E12C1F

Sample No.:

MSKNB/ED/2023-24/02/JK3613

RESULT

1	Average dB(A)	dB(A)	IS 9989	47.1
SI No.	Parameter	UOM	Method -	Result
hemical				

Opinion:

NA

Statement of Conformity

NA

END -

Reviewed By

Signature

Name Designation Educative Chemist

Authorized Signatory

Designation

the results relate only to the Hem(s) tested.

his Test Report shall not be reproduced except in full, without the permission of Mera S.K. Provate Limited

his Test Report shall not be reproduced analysis (Non - perishable sample(s) for one-mission of Mera S.K. Provate Limited

his Test Report shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 7 days

om the date of issue of the Test Report.

No reserved part of sample(s) for chemical analysis (Soil, Soild & Libuid Waste) shall be retained for 15 days from the date of issue of the Test Report.

the processor of the Pr

Shrachi Centre (5th Floor), 748, A.J.C. Bose Road, Kolkata - 700018. West Bengal, India Tel. 94 33 40143000 / 22650007 Fax | 91 33 22650008 lead Office: Email info@minask.com Website www.minask.com

Address of Laboratory:

Juilding No. P- 48, Udayan Industrial Estato. Pagladanga Road, Kolkata 700015 Vest Bengal

IH-55, NARENDRAPUR MERAMANDLI, DHENKANAL

BL : +91 7044036120 imail: udayanlab@mitrask.com

ATA STEEL LTD.

DISHA India Pin 759129







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ULR: TC-695024000002921F

DOC MENTHEN 1984

TESTING . INSPECTION

TEST REPORT

Jame & Address of Customer: Report No. :

Date:

Sample No.:

Date of receipt of sample: Date(s) of performance:

Location of performance of Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/A12C0K

23/02/2024

MSKNB/ED/2023-24/02/9G3602

19/02/2024

19/02/2024 - 23/02/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

'e hereby certify that the following sample Drawn by us has been analyzed with the following results:

. Group	Almospheric Pollution
. Description of sample	Noise
i. Unique Identification of sample(if any)	NA .
. Date of sampling	17/02/2024
. Place of sampling	DRI near 98.10 control room office
. Environmental conditions during sampling & Transport	NA
. Sampling Plan & Method used	IS 9989:1981
I Identification of the personnel performing sampling by MSK	Chinmaya Biswel
. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

teport No. :

MSKPL/ED/2023-24/A12C0K

Sample No. :

MSKNB/ED/2023-24/02/9G3602

RESULT

9	Average dB(A)	dB(A)	IS 9989	50.0
SI No.	Parameter	UOM	Method	Result
hemical				

)pinion:

NA

itatement of Conformity

NA

FND ---

Signature

Josephalico

Executive Chemist

Authorized Signatory

Signature

is Test Report shall not be reproduced except in full, without the permission of Mana S.K. Private Limbed.

a reserved part of sample(s) for chemical analysis (Non - perishable sample(s) Food, Water) shall be retained for 15 days from the date of issue of the Test Report. Perishable sample(s) shall be retained 2 days in the date of issue of the Test Report.

e reserved part of samplers) for creambas analyses (Soid, Soid & Liquid Waste) shall be reserved part of days as per CPCB quideline & (Aut) if moral from the durn of issue of the Test Report.

• reserved part of sample(s) for Microbiological analysis (Non - perishable sample(s) Food, Sealed Water, Sealed food) shall be retained by 15 days from the durn of issue of the Yest Report.

ead Office:

Shruchi Centre (5th Floor), 748, A.J.C. Bose Rosst, Kotketa - 750016, West Bengal, India. Tel: 91-33-40143000 / 22650007 Fax - 91-33-22650006 Email: vrforgmerask.com Website : www.mitrask.com

Iddress of Laboratory:

fullding No. P- 48, Udayan Industrial Estate, Pagladanga Road, Kolkata 700015 Vest Bengal

el : +91 7044036120 imail: udayanlab@mdrask.com







Scan for Portal

ULR: TC-695024000002920F

TEST REPORT

lame & Address of Customer:

ATA STEEL LTD.

IH-55, NARENDRAPUR, MERAMANDLI, DHENKANAL IDISHA India Pin 759129

Report No. : Date:

Sample No. :

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/112C08

23/02/2024

MSKNB/ED/2023-24/02/0935FQ

19/02/2024

19/02/2024 - 23/02/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

'e hereby certify that the following sample Drawn by us has been analyzed with the following results:

Group	Atmospheric Pollution
. Description of sample	Noise
. Unique Identification of sample(if any)	NA .
, Date of sampling	17/02/2024
. Pface of sampling	DRI near 7&8 control room office
. Environmental conditions during sampling & Transport	NA .
'. Sampling Plan & Method used	IS 9989:1981
Identification of the personnel performing sampling by MSK	Chinmaya Biswal
. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

teport No.:

MSKPL/ED/2023-24/112C0B

Sample No.:

MSKNB/ED/2023-24/02/0935FQ

RESULT

tututum .	Alk			
1	Average dB(A)	dB(A)	IS 9989	47.7
SI No.	Parameter	UOM	Method	Result
hemical				

ipinion:

tatement of Conformity

NA

END -

Executive Chemist **Xesignation**

Authorized Signatory

Signature

Norma

Designation

e results relate only to the item(s) tested.

Is Test Report shall not be reproduced except in hit, without the permission of Mitra S.K. Private Limited.

Is Test Report shall not be reproduced except in hit, without the permission of Mitra S.K. Private Limited.

Is restricted for 15 days from the date of issue of the Test Report. Permission sample(s) shall be retained 2 days from the date of issue of the Test Report.

In the date of issue of the Test Report.

e reserved part of samplets) for chemical enalysis (3od, 3od, 4 kipplet Wester) study the retained for 15 days as per CPCS guideline & (Ab.) I month from the date of issue of the Test Reports
in married part of samplets) for Microbiological enalysis (Non - perishable samplets) Food. Supplet Water, Sealed food; shall be retained to: 15 days from the date of issue of the Test Report

Stracti Centre (5th Floor), 7AB, A.J.C. Boxe Road, Kolkata - 700016, West Bengal, India. Tel., 61 33 40143000 / 22050007 Fax: 61 33 22650008 ead Office: Email into Smitrask com Wabsite www.mitrack.com

Ref.No. EMD/LAB/2023-24/0155 Dt. 01.04.2024

AMBIENT NOISE MONITORING TATA STEEL Ltd. (March: 24)

S.N	Location	Monitoring Date	Noise Level dB(A) Leq (Day time)	Standard dB(A) Leq(Day Time)	Noise Level dB(A) Leq (Night time)	Standard dB(A) Leq(Night Time)
1	Colony	01 03 2024	53.3	55.0	44.1	45.0
2	Coke Oven-2	15.03.2024	59.0	75.0	58.3	70.0
3	AEL	23.03.2024	69.1	75.0	68.1	70.0

A-K-Practhan Section (I/C)

Manager (Lab)

Sr.Area Manager

...End Report...

page 1 of 1

Ref.No. EMD/LAB/2023-24/0154 Dt. 01.04.2024

S.N	Name of the unit	Location	Noise level in dB(A)		
		Location	Min	Max	Leq
1	BF-2 Cast House	Control room	54.2	61.4	58.9
	DF-2 Cast Flouse	Near B F-2 Furnace area	78.8	81.7	80.0
2	BF-2 Stock House	Control room office	55.1	60.3	59.1
3	Lime Plant	Inside office building	56.2	71.1	60.1
4	BF PP-1 Boiler-03	Near Control room office	54.2	63.0	60,0
5	Gas fired boiler 250 TPH Area	Office and Control Room	57.0	61.2	59.3
		KILN NO-1, Near 1& 2 control room office	57,7	68.0	61.8
		KILN NO-3, Near 3& 4control room office	58.2	75.1	62.2
6	DRI	KILN NO-5, Near 5& 6 control room office	55.6	70.2	59.8
		KILN NO-7, Near 7& 8 control room office	50.1	72.2	60.4
		KILN NO-8, Near 9&10 control room office	55.9	62.3	61.0
7	BF-1 Cast House	Near B F-1 Furnace	78.9	84.0	81.0
8	BF-1 Stock House	BF-1 Office	49.3	62.4	58.8
		Near CRM Mill Complex Area	66.2	80.2	75.1
		Near T.L.L	77.9	92.9	85.4
		Near ETP area	81 7	83.5	82.6
		Near GP-1 Zinc Pot	SD	\$D	SD
		Near GP-2 Zinc Pot	SD	ŞD	SD
		Near GP-3 Zinc Pot	85.7	90.7	87.1
		Colour Coating Line	SD	SD	SD
9	CRM	Mill-1	83.8	89.6	87.0
		 Mill-2	SD	SD	SD
		Mill-3	84.6	87.8	85.1
		CRM Plant Office	53.4	62.8	59.1
		ECL	84.8	94.5	87.2
		CRCA	84.8	87.9	85.8
		SPM	84.2	87.9	85.5
		RGM	76.8	87.8	79.3
		9 m office room	56.8	69.4	58.1
		15 m office	57.3	74.3	60.4
10	Sinter Plant-1	19 m office	70 1	79.1	71.5
		Store area	74.4	84.6	79.2
		Flectrical office	58.4	78	68.3
		Control room office	54.2	61,4	60.0
11	Coke Oven-1	Laboratory	53.3	58.5	57.3
12	Sinter Plant-02	Control Room Area	61.3	74.2	62.4
13	Sinter Plant-03	Control Room Area	55.6	72.3	59.9
		BOF office area	51.1	74.1	62.5
14	BOF Shop	Near Wage bridge area	76.1	82.8	78.9

		Booster House (ID Fan)	82.3	85.4	84.3
5	SMS-2-FES-1&2	Near Control room Area	79.1	82.4	80.0
		Near RHF Office area (Pulpit)	80 1	87.2	81.2
		Near Roll Shop area	79.4	86.4	80.6
	l-a-	Near HSM Quality Lab area	57.2	67 1	60.2
6	HSM	DC pulpit office area	65	76.5	68.3
		FM area	87.2	90.2	88.9
	111	Near DC sampling Station	82,2	85.9	84.1
7	Coke Oven-2	Cantrol Room Office	54.7	63.0	59.6
8	BFPP-2 Boiler-3	Control room	44.3	60.5	58.8
9	Oxygen Plant-02	Control Room Office	58.9	69.2	62.2
20	BB Plant	BB Plant Office	53.5	79.4	60.6
21	RMPP	Control Room Office	55.4	61.0	59.0
22	Coal washery	Lab & Office area	56.4	61.0	58.7
23	RMHS	RMHS Office	55.3	59.0	58.1
24	IDMD	New Sarpa MRP-II (Operator Cabin)	48.6	60.2	59.1
25	IBMD -	Office & Operator Cabin (Old MRP)	54.7	60.0	58.1

N: B- All employees are provided ear plug / earmuff in noise prone areas.

A.K. Pradhan. Section (VC)

Manager (Lab)

...End Report...

Page 2 of 2

Doc MSKIGEN/19/07

Mitra S. K. Private Limited

Address of Laboratory:

Building No. P- 48, Udayan Industrial Estate. 3, Pagladanga Road, Kolkata 700015 West Bengal Tel: +91 7044036120

Name & Address of Customer:

NH-55, NARENDRAPUR, MERAMANDUI, DHENKANAL

Email: udayantab@mitrask.com

TATA STEEL LTD.

ODISHA India Pin 759129







Scan for Portal

ULR: TC-695024000004358F

TEST REPORT

Report No. :

Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

11/03/2024 - 15/03/2024 Permanent Facility

MSKPL/ED/2023-24/01486D

MSKNB/ED/2023-24/03/WV176T

3000148695/A06, Date - 15/12/2022

Chemical

15/03/2024

11/03/2024

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

Almospheric Pollution
Noise
NA
07/03/2024
Caagms-1(Colony)
NA .
IS 9989:1981
Chinmaya Biswal
MSK/BBSR/FIELD/SLM-03

Report No. :

MSKPL/ED/2023-24/0148ED

Sample No.:

MSKNB/ED/2023-24/03/W/176T

RESULT

Chemica	Ú.	4 (1		
Si No.	Parameter	UOM	Method	Result
1	Leq d8(A) day	d8(A)	IS 9989	69.4
2	Leg d8(A) níght	d8(A)	IS 9989	59.3

Opinion:

NA

Statement of Conformity

NA

----- END ---

Design Mich

Authorized Signatus

Executive Chemiat

The results related only to the item(s) issued.
This Test Report shall not be reproduced accept in full, without the permission of Main S.K. Private Limited.
This reserved part of sample(s) for chemical analysis (Non - permission of Main S.K. Private Limited.
This reserved part of sample(s) for chemical analysis (Non - permission of Main S.K. Private Limited.
This reserved part of sample(s) for chemical analysis (Non - permission sample(s) Food, Water) shall be retained on the data of assue of the Test Report. Perishable sample(s) what is despited to day a found that the Test Report.

The reserved part of service is an ask Hoport.
The reserved part of semple(s) for characteristics analysis (Soit Solid & Liquid Weste) shall be retained for 18 days as per CPCB guideline & (Air) 1 month from the date of issue of the Test Report.
The reserved part of semple(s) for Aircrobiological analysis (Non- personable semple(s) food, Sosied Wester, Sealed West

DOC MSK/GEN/1969

TESTING * INSPECTION

Mitra S. K. Private Limited

Address of Laboratory:

Building No. P- 48, Udayan Industrial Estate. 3, Pagladanga Road, Kolkata 700015

Name & Address of Customer:

NH-55, NARENDRAPUR, MERAMANDU, DHENKANAL

West Bengal Tel.: +91 7044036120

TATA STEEL LTD.

ODISHA India Pin 759129

Email: udayanlab@mitrask.com







ULR: TC-685024000004644F

TEST REPORT

Report No. :

Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

MSKPL/ED/2023-24/J1517G

19/03/2024

MSKNB/ED/2023-24/03/41212G

14/03/2024

14/03/2024 - 19/03/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

	A LINE OF CONTACT IS TOUR.
1. Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique identification of sample(if any)	NA
4. Date of sampling	12/03/2024
5. Place of sampling	Caagms-2(AEL)
6. Environmental conditions during sampling & Transport	NA NA
7. Sampling Plan & Method used	IS 9989 1981
8. Identification of the personnel performing sampling by MSK	Chinmaya Biswai
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No. :

MSKPL/ED/2023-24/J1517G

Sample No. :

MSKNB/ED/2023-24/03/41212G

RESULT

Chemical			The state of the s	**************************************
Si No.	Parameter	UOM	Method	Result
1	Leg dB(A) day	dB(A)	IS 9989	70.1
1 2 1	Leq dB(A) night	d8(A)	fS 9989	63.4

Opinion:

NA

Statement of Conformity

END ---

Signature

The results relate only to the dere(a) busined.

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The permission part of company is for chemical greens (Mon's permission of Marx S.K. Private Limited.

The results related part of company is produced in half, without the permission of Marx S.K. Private Limited.

The results related from the company is the chemical greens (Mon's permission acomplete) Food, Water) shall be related for 19 days from the date of treus of the Test Report. Perishable permission acomplete 2 days from the date of the control of the Test Report.

The reserved part of sample(s) for objected analysis (50s) School School School between the retained for 15 days as per CPCS guidatine & (Ab) 1 months from the case of issue of the Teal Heport.
The reserved part of sample(s) for Manobiological analysis (Non - personable sample(s) Food, Seelad Walse), Seelad body shall be retained for 15 days from the delic of issue of the Teal Report. Head Office:

Page 1 of 1

Shrach Centre (6m Ploor), 748, A.J.C. Dose Road, Kosusta - 700016, West Bengal, Inda Tal : 91 33 40143000 / 32650007 Feb; 91 33 22650006 Ental : shagestress com Webszer / werk mitrosk com

DOC MISKIGER/19/07

Mitra S. K. Private Limited

Address of Laboratory:

Building No. P. 48, Udayan industrial Estate. 3, Pagtadanga Road, Kolkata 700015

Name & Address of Customer:

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West Bengal

Tel.: +91 7044036120

TATA STEEL LTD.

ODISHA India Pin 759129

Email: udayanlab@mitrask.com







ULR: TC-695024000003826F

TEST REPORT

Report No.:

Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date: Discipline:

MSKPL/ED/2023-24/E1467K

08/03/2024

MSKNB/ED/2023-24/03/HK45AF

04/03/2024

04/03/2024 - 08/03/2024

Permanent Facility

3000148695/A06, Date - 15/12/2022

Chemical

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

ING NEIBON COMMING THE INC. INC. INC. INC. INC. INC. INC. INC.	
1, Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique identification of sample(if any)	NA
	02/03/2024
4. Date of sampling	Casoms-5(Coke Oven-2)
Place of sampling Environmental conditions during sampling & Transport	NA
	18 9989:1981
7. Sampling Plan & Method used 8. Identification of the personnel performing sampling by MSK	Chinmaya Biswal
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03
a, Light eduluments can	

Report No.:

MSKPL/ED/2023-24/E1467K

Sample No.:

MSKNB/ED/2023-24/03/HK45AF

RESULT

		The second secon		
Chemical				
Si No.	Parameter	LIOM	Method	Result
3	Leg dB(A) day	dB(A)	IS 99 89	70.3
2	Leg dB(A) night	d8(A)	1S 99 89	61,0

Opinion:

NA

Statement of Conformity

NA

-- END -----

Reversed By

Designation

Authorized Storero

Signature

Designation

The results resiste pay to the sample) tested.

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The reserved part of sample(s) for chemical analysis (Ron - parishable sample(s) food, Visiter) shipling his relatived of the Test Report.

From the date of issue of the Test Report.

The reserved part of sumple(s) for charmost enables (Soil, Soild & Liquid Weste) shall be retained for 15 days as per CPCB guideling & (Air)) month from the daily of issue of the Text Report. The reserved part of sample(s) for Aircrobiological enables (Non-portanable sample(s) Food. Shallow their sections) shall be retained for 15 days from the date of issue of the Text Report.

Strack/ Centre (Str. Floor), 740, A.J.C. Boss Noted, Noteta = 700016, West Bengel, India Tel: 91.33 40143000 / 22650007 Fax: 91.33 22650006 Email: Info@mitrask.com Websits : www.yz.orgel.com Head Office:

Doc MSK/GFN/18/07

Mitra S. K. Private Limited

Address of Laboratory:

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NH-55, NARENDRAPUR, MERAMANDU, DHENKANAL

Tel.: +91 7044036120

TATA STEEL LTD.

ODISHA India Pin 759129

Email: udayanlab@mitrask.com







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MSKPL/ED/2023-24/F1491W

MSKNB/ED/2023-24/03/45176J

3000148695/A06, Date - 15/12/2022

12/03/2024 - 15/03/2024

Permanent Facility

ULR: TC-695024000004359F

TEST REPORT

Name & Address of Customer: Report No.: Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

Chemical

15/03/2024

12/03/2024

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

1. Group	Atmosphéric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA
4. Date of sampling	09/03/2024
5. Place of sampling	Caagms-6(Wagon Tippler)
6. Environmental conditions during sampling & Transport	NA
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Chinmaya 8iswal
9. Field Equipments Used	MSK/BBSR/F(ELD/SLM-03

Report No.:

MSKPL/ED/2023-24/F1491W

Sample No.:

MSKNB/ED/2023-24/03/45176J

RESULT

Chemic	a l		The state of the s	
Si No.	Parameter	UOM	Method	Result
1	Leq dB(A) day	dB(A)	IS 9989	65,3
2	tieg dB(A) night	dB(A)	IS 99 89	60.2

Opinion:

NA NA

Statement of Conformity

-- END ---

Authorized Semetan

EGNALM

Executive Chemisi

The results relate only to the Bernet Seeked.

This Test Report shall not be reproduced accept in full, without the permission of Mary S.K. Private Limited.

The reterred year of sample(s) for charactel shall be returned to 15 days from the date of issue of the Test Report. Permission sample(s) shall be returned 2 days from the date of issue of the Test Report.

from the date or resist or the 1 sept. Report.

The reserved part of sample(s) for chamiteal smallest (Soit, Soid & Exquid Weste) shall be interiored for 15 days as per CPCB guideline. & (Ac) 1 month from the date of issue of the Test Report.

The reserved part of sample(s) for Microbiological analysis (Non - perishable sample(s)) Food. Sected Water, Seeled food) shall be retained for 15 days from the date of issue of the Test Report.

Head Office:

Shracts Gentre (Sh Floor), 749, A.J.C. Bose Read, Kohata - 700016, Viset Bengal, tritia.

Tel: 91.33-401400007 Z2650007 Fax: 91.33 Z2650008

Email: into@missel.com Website: wave minast.com

Doc: MSKaGEN(199)7

Mitra S. K. Private Limited

Address of Laboratory:

Building No. P- 48, Udayan Industrial Estate, 3, Pagladanga Road, Kelketa 700015 West Bengal

Name & Address of Customer:

NH-55, NARENDRAPUR, MERAMANDUL DHENKANAL

Tel.: +91 7044036120

TATA STEEL LTD.

ODISHA India Pin 759129

Email: udayanlab@mitrask.com







ULR: TC-695024000004700F

TEST REPORT

Report No. : Date:

Sample No.:

Date of receipt of sample:

Date(s) of performance: Location of performance of

Reference No. & Date:

Discipline:

15/03/2024 - 20/03/2024 Permanent Facility

MSKPU/ED/2023-24/P15174

MSKNB/ED/2023-24/03/KK24BR

3000148695/A05, Date - 15/12/2022

Chamical

20/03/2024

15/03/2024

We hereby certify that the following sample Drawn by us has been analyzed with the following results:

1, Group	Atmospheric Pollution
2. Description of sample	Noise
3. Unique Identification of sample(if any)	NA .
4. Date of sampling	13/03/2024
5. Place of sampling	Canqms-7(Material Gate)
6. Environmental conditions during sampling & Transport	NA
7. Sampling Plan & Method used	IS 9989:1981
8. Identification of the personnel performing sampling by MSK	Chinnaya Biswel
9. Field Equipments Used	MSK/BBSR/FIELD/SLM-03

Report No.:

MSKPL/ED/2023-24/P15174

Sample No. :

MSKNB/ED/2023-24/03/KK24BR

RESULT

Chemic	al Control			
SI No.	Parameter	UOM	Method	Result
1	Leq dB(A) day	(A)Bb	15 9989	64.2
2	Lea dB(A) night	dB(A)	IS 9989	60.2

Opinion:

NA

Statement of Conformity

- END -----

Rayadana Div

Signatural

The results relate only to the Rem(s) tessed

The Test Napor shall not be suppoliced accept in fail, without the permiseron of Mara 6. K. Private Limited

The reserved part of somple(s) for chemical energy (Napor portabable somple(s) Food, Water) shall be repaired by 15 days from the date of issue of the Test Report, Pershable sample(s) shall be retained 2 days.

The reserved part of somple(s) for chemical energy (Napor portabable somple(s) Food, Water) shall be repaired to 15 days.

The reserved part of sample(s) for chemical analysis (SGE, Bolid & Liquid Waster) state be returned for 15 days as per CPCR quideline & (Air) 1 month from the date of insule of the Test Report.
The reserved part of sample(s) for Microbiological analysis (Non - peratuable sample(s) Food, Sessed Waster, Sessed food) shall be retained for 15 days from the date of success of the Test Report. Head Office;