

The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office, (IRO) - Ranchi 2nd floor, Headquarter, Jharkhand State Housing Board Harmu Chowk, Harmu Housing Colony, Argora, Jharkhand - 834002.

Ref No. - JMB/ENV/KOCP/24/ 248 /2025 May 28th, 2025

Ref.: Environmental Clearance letter no. - J-11015/252/2005-IA. II (M) dated June 22, 2006

SUB: Half Yearly Compliance Status Report of Environment Clearance conditions issued by MoEFCC, New Delhi to Kalimela Open Cast Project, Tata Steel Limited, Dhanbad for the period October-24 to March-2025.

Dear Sir,

We are enclosing herewith compliance report for the period **October-24 to March-2025** for the EC granted vide letter no.- J-11015/252/2005-IA.II(M), Dated-22nd June 2006 issued by Ministry of Environment, Forest and Climate Change, New Delhi.

We trust the information furnished is in line with your requirement.

Thanking you,

Yours faithfully,

Head (Planning) Jharia Division, Tata Steel Ltd.

Encl: As above.

- Copy to: Member Secretary, CPCB, Eastern Zonal Office, Southend Conclave, 502, 5th Floor 1582, Rajdanga Main Road, Kolkata -700107.
- Copy to: Member Secretary, JSPCB, T.A. Division Building (Ground Floor), H.E.C, Dhurwa, Ranchi - 834004.
- Copy to: Regional Officer, JSPCB, HIG -1 Sardar Patel Nagar, Housing Colony, Hirapur, Dhanbad

TATA STEEL LIMITED

Jharia Collieries Jamadoba 828 112 Dhanbad India Tel 91 326 2320263/2320265/2320267 Fax 91 326 2320268 Regd. Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001 Tel 91 22 66658282 Fax 91 22 66657724 Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

| Your (Half Yearly Compliance Report) has been Submitted with following details | | |
|--|-------------------------------------|--|
| Proposal No IA/JH/CMIN/8145/2005 | | |
| Compliance ID | 127785004 | |
| Compliance Number(For Tracking) | EC/M/COMPLIANCE/127785004/2025 | |
| Reporting Year | 2025 | |
| Reporting Period | 01 Jun(01 Oct - 31 Mar) | |
| Submission Date | 31-05-2025 | |
| RO/SRO Name | Shri Senthil Kumar Sampath | |
| RO/SRO Email | agmu156@ifs.nic.in | |
| State | JHARKHAND | |
| RO/SRO Office Address | Integrated Regional Offices, Ranchi | |
| Next CMC and E Mailler have seen to Child and Constall HADKHAND Little Notification to Design December | | |

Note:- SMS and E-Mail has been sent to Shri Senthil Kumar Sampath, JHARKHAND with Notification to Project Proponent.

| Half Yearly Compliance Report 2025 01 Jun(01 Oct - 31 Mar) Acknowledgement | | | | | |
|---|---|---------------------------|---------------|--|--|
| Proposal Name | Proposal Name Kalimela OCP Expn. | | | | |
| Name of Entity / Corporat | Name of Entity / Corporate Office Tata Steel Ltd. | | | | |
| Village(s) | Village(s) N/A | | | | |
| District | | DHANBAD | | | |
| Proposal No. | IA/JH/CMIN/8145/2005 | Category | Coal Mining | | |
| Plot / Survey / Khasra No. | N/A | Sub-District | N/A | | |
| State | State JHARKHAND | | ****2803M | | |
| MoEF File No. | J-11015/252/2005- IA.II(M) | Entity name as per PAN | UTSAV KASHYAP | | |

Compliance Reporting Details

Reporting Year

2025

| Remarks (if any) | Compliance status of Environmental Clearance of Kalimela Open Cast Mining Project (0.34 MTPA) of M/s Tata Steel Ltd., Village Dungri, Tehsil Jharia, dist. Dhanbad, Jharkhand vide MoEFCC Letter no J- 11015/252/2005-IA.II (M) dated June 22, 2006 for October 2024 to March 2025. |
|-------------------------|---|
| Reporting Period | 01 Jun(01 Oct - 31 Mar) |

Details of Production and Project Area

Tata Steel Ltd.

| Corporate Office Tata Steel Ltd. | | | | |
|----------------------------------|--------------------------------|-----------------------------------|--|--|
| | Project Area as per EC Granted | Actual Project Area in Possession | | |
| Private | 0 | 0 | | |
| Revenue Land | 14.37 | 14.37 | | |
| Forest | 0 | 0 | | |
| Others | 23.67 | 23.67 | | |
| Total | 38.04 | 38.04 | | |

Production Capacity

Name of Entity /

| | Sr. no | Product Name | units | Valid Upto | Capacity | Production last year | Capacity a per CTO |
|----------------------------|---|--|--|---|--|--|--|
| | 1 | Coal | Million Tons per Annum (MTPA) | N/A | 0.3 | 0 | |
| Conditio | ons | | | | | | |
| ecific Co | onditions | | | | | | |
| Sr.No. | Condition Ty | ре | Condit | ion Details | | | |
| 1 | Statutory com | pliance | | conditions stipul)5 are to be impl | | | o N-35 dated |
| NOC cor production | bmission: Compl aditions are being on is taking place. ogical reclamation | complied with. ' Currently the ba | ackfilling of the | | | | Date: 26/05/2025 |
| 2 | MISCELLAN | EOUS | highest fl | nd/embankment a ood level, based a to guard agains | on past data, in | n the Damodar | |
| The emb | bmission: Compl ankment exists alo e surface level of o | ong Dungri Jore | | | | ver is way | Date: 26/05/2025 |
| 3 | GREENBELT | | sites and | should be stack should not be ke lopment of green | pt active and s | | |
| No furthe been con | bmission: Completed and the top soil will be a pleted and the top so factivites is attached. | generated as coa soil is being us | sed for biologic | | | | Date: 29/05/2025 |
| 4 | Statutory com | pliance | ML area benches of exceed 28 decoaled dumpsite sustaining | uld be stacked at and shall be a ma of 10m each. The 8°. Backfilling sl area. Monitoring s should continu g. Compliance St al office at Bhub | aximum height e ultimate slope hall begin at the g and managen e until the vege tatus should be | of 60m only and of the dump sl e end of 3rd yea nent of existing etation becomes submitted to the | nd consist of nall not ar in the reclaimed s self- |
| OB was a has been followed | Ibmission: Compl stacked within MI stacked with an ap as well. This OB w the backfilling v | area at an area pproximate heig has been used fo | ght reached of 5 or backfilling th | 50 mts. The other he mine pit as pa | conditions are rt of our mine | e being closure | Date: 26/05/2025 |
| | | | | rains and siltatic ed to arrest silt a | | | |

| | maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of slit material. | | |
|--------------------------------------|---|---|---|
| Catch from C length constru | DB dumps. Collected water had been of catch drains was 2200 mts. Garla acted around the mine site to ensure | constructed to arrest the debris, silt and sediment flows n used for watering mine area, roads and plantation. Total and drains (about 1790 mts) had been completely e runoff water during rainy season is properly drained off. no additional garland drains are required as of now. | Date: 26/05/2025 |
| 6 | MISCELLANEOUS | Dimension of the retaining wall at the toe of the dum benches within the mine to check run-off and siltation based on the rainfall data | |
| | | 0 mts. exists around the dump area to check run-off and | Date: 26/05/2025 |
| 7 | MISCELLANEOUS | The effluents from the coal washery shall be treated norms before discharge from the lease. | to prescribed |
| There | of mines, about 1.5 kms away, whic | P Kalimela. We have a central coal washery for Jamadoba ch has a closed water circuit system to maintain zero | Date: 26/05/2025 |
| 8 | AIR QUALITY MONITORING AND PRESERVATION | Crushers at the CHP should be operated with high effilters, water sprinkling system should be provided to cemissions from crushing operations, conveyor system, transfer points, etc. | check fugitive |
| There | y has adequate measures in place su | ela. The existing CHP for Jamadoba group of mines the as water sprinkling system (fixed and movable) and dry | Date: 26/05/2025 |
| 9 | AIR QUALITY MONITORING AND PRESERVATION | Drills should be wet operated. | ' |
| | Submission: Complied of applicable now as mining has ceased | sed. | Date: 26/05/2025 |
| 10 | AIR QUALITY MONITORING AND PRESERVATION | Controlled blasting should be practiced only during of use of delay detonators. The mitigative measures for co- ground vibration and to arrest the fly rocks and boulde implemented. | ontrol of |
| | Submission: Complied of applicable now as mining has ceased | sed. | Date: 26/05/2025 |
| 11 | GREENBELT | Area brought under afforestation includes reclaimed dump (12.89 ha), backfilled area (25.15 ha), along ML along roads (0.45 ha) and in undisturbed area (1.14 ha) lease area by planting native species in consultation wi DFO/Agriculture Department. The density of the trees | boundary, within the th the local |

| | Submission: Complied ckfilling work has been completed and | | Date: 26/05/2025 |
|--|---|---|---|
| 12 | LAND RECLAMATION | A progressive closure plan shall be implemented by a quarry area of 25.15 ha which shall be backfilled and a planting native plant species in consultation with the lo DFO/Agriculture Department. The density of the trees around 2500 plants per ha. The balance 1.10 ha of deco be converted into a water reservoir, the upper benches be gently sloped and stabilized and reclaimed with plan | afforested by ocal should be oaled area sha of which shal |
| The rea of KOO | | ne progressive mine closure Plan. The mine closure plan Colliery (including MCP of Kalimela) has been | Date: 26/05/2025 |
| 13 | MISCELLANEOUS | Conservation Plan for endangered species, if any, for around the project area shall be formulated, if required consultation with the State Forest and Wildlife Departu | l, in |
| | Submission: Complied oplicable. | | Date: 26/05/2025 |
| 14 | WATER QUALITY MONITORING AND PRESERVATION | The company shall obtain prior approval of CGWA/ Regional Office for use of groundwater if any, for min | |
| | Submission: Complied oplicable. | | Date: 26/05/2025 |
| | | | |
| 15 | WATER QUALITY MONITORING AND PRESERVATION | Regular monitoring of groundwater level and quality carried out by establishing a network of existing wells construction of new peizometers. The monitoring for q be done four times a year in pre-monsoon (May), mon- post-monsoon (November) and winter (January) seaso quality in May. Data thus collected should be submittee Ministry of Environment & Forest and to the Central F Control Board quarterly within one month of monitoring | and quantity shoul soon (August) ns and for ed to the Pollution |
| Now th | MONITORING AND PRESERVATION Submission: Complied | carried out by establishing a network of existing wells construction of new peizometers. The monitoring for q be done four times a year in pre-monsoon (May), mon post-monsoon (November) and winter (January) seaso quality in May. Data thus collected should be submitte Ministry of Environment & Forest and to the Central F Control Board quarterly within one month of monitorin | and quantity should soon (August) ns and for ed to the Pollution ng. Date: |
| PPs S Now th | MONITORING AND PRESERVATION Submission: Complied here will be no impact on ground wate | carried out by establishing a network of existing wells construction of new peizometers. The monitoring for q be done four times a year in pre-monsoon (May), mon post-monsoon (November) and winter (January) seaso quality in May. Data thus collected should be submitte Ministry of Environment & Forest and to the Central F Control Board quarterly within one month of monitorin | and quantity should soon (August) ns and for ed to the Pollution ng. Date: 26/05/2025 harge measure t authorities |
| PPs \$ Now th ground 16 PPs \$ Now th | MONITORING AND PRESERVATION Submission: Complied here will be no impact on ground wate lwater is regularly analysed as required WATER QUALITY MONITORING AND PRESERVATION Submission: Complied | carried out by establishing a network of existing wells construction of new peizometers. The monitoring for q be done four times a year in pre-monsoon (May), mon post-monsoon (November) and winter (January) seaso quality in May. Data thus collected should be submitted Ministry of Environment & Forest and to the Central F Control Board quarterly within one month of monitoring r as mining has ceased. However, quality of d and attached in Annexure-II The Company shall put up artificial groundwater rectors for augmentation of groundwater resource. The project should meet water requirement of nearby village(s) in wells go dry due to dewatering of mine. | and quantity should soon (August) ns and for ed to the Pollution ng. Date: 26/05/2025 harge measure t authorities |
| PPs \$ Now th ground 16 PPs \$ Now th | MONITORING AND PRESERVATION Submission: Complied here will be no impact on ground wate lwater is regularly analysed as required WATER QUALITY MONITORING AND PRESERVATION Submission: Complied here will be no impact on ground wate | carried out by establishing a network of existing wells construction of new peizometers. The monitoring for q be done four times a year in pre-monsoon (May), mon post-monsoon (November) and winter (January) seaso quality in May. Data thus collected should be submitted Ministry of Environment & Forest and to the Central F Control Board quarterly within one month of monitoring r as mining has ceased. However, quality of d and attached in Annexure-II The Company shall put up artificial groundwater rectors for augmentation of groundwater resource. The project should meet water requirement of nearby village(s) in wells go dry due to dewatering of mine. | and quantity should soon (August) ns and for ed to the Pollution ng. Date: 26/05/2025 harge measure t authorities case the villag Date: 26/05/2025 |

| Oil and (| applicable. Though ETP for Centr Grease Trap. | ral Workshop has been commissioned having facility of | 26/05/2025 |
|--|--|--|---|
| 18 | Statutory compliance | R&R shall not be less than the norms laid down by Government and shall be completed within a specifie | |
| | ubmission: Complied applicable. | | Date: 26/05/2025 |
| 19Statutory complianceA Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests approval 5 years in advance of final mine closure for approval. | | & Forests for | |
| | ubmission: Complied en approved by MOC, Delhi and | submitted to MoEF and CC. | Date: 26/05/202: |
| 20 | Statutory compliance | Consent to operate shall be obtained before starting operations. | mining |
| Consent 1322685 reclamat plantatio | 58/2022/959 dated-04.07.2022, wh | PCB vide letter ref. No. SPCB/HO/RNC/CTO- hich was valid up to 30.09.2023, for backfilling and d, and biological reclamation is ongoing with trees red on 20.07.2023 vide letter no. | Date: 31/05/2025 |
| neral C Sr.No. | conditions | | |
| SELNO. | Condition Type | Condition Details | |
| | Condition Type Statutory compliance | Condition Details No change in mining technology and scope of work made without prior approval of the Ministry of Enviro forest. | |
| 1 PPs Su | Statutory compliance | No change in mining technology and scope of work made without prior approval of the Ministry of Enviro | Date: |
| 1 PPs Su | Statutory compliance | No change in mining technology and scope of work made without prior approval of the Ministry of Enviro forest. | Date: 26/05/2025 |
| 1 PPs Su All mini 2 PPs Su | Statutory compliance ubmission: Complied ng excavation activities are termin Statutory compliance ubmission: Complied | No change in mining technology and scope of work made without prior approval of the Ministry of Enviro forest. nated. Reclamation work is in progress No change in the calendar plan including excavation | Date: 26/05/202: n, quantum of Date: |
| 1 PPs Su All mini 2 PPs Su All mini | Statutory compliance ubmission: Complied ng excavation activities are termin Statutory compliance ubmission: Complied | No change in mining technology and scope of work made without prior approval of the Ministry of Environ forest. nated. Reclamation work is in progress No change in the calendar plan including excavation mineral coal and waste should be made. | Date: 26/05/202: n, quantum of Date: 26/05/202: l be establishe RSPM, SO2 ar ecided based o ironmentally of |
| 1 PPs Su All mini 2 PPs Su All mini 3 PPs Su The open | Statutory compliance Ibmission: Complied ng excavation activities are termin Statutory compliance Ibmission: Complied ng excavation activities are termin AIR QUALITY MONITORING AND PRESERVATION Ibmission: Complied | No change in mining technology and scope of work made without prior approval of the Ministry of Enviro forest. nated. Reclamation work is in progress No change in the calendar plan including excavation mineral coal and waste should be made. nated. Reclamation work is in progress. Four Ambient Air quality monitoring station should in the core zones as well as in the buffer zone SPM, F NOX monitoring location of the stations should be de the metrological data & topographical features & env | Date: 26/05/2025 n, quantum of Date: 26/05/2025 l be established RSPM, SO2 an ecided based o ironmentally d |

| Presentl | ubmission: Complied | | Date: |
|---------------------|--|---|---|
| | s is being done regularly. | rtation jobs are going on. However, water sprinkling | 26/05/2025 |
| 5 | AIR QUALITY MONITORING AND PRESERVATION | Data on ambient air quality (SPM, RSPM, SOx & N regularly submitted to the Ministry including its region Bhubaneswar and to the SPCB & CPCB once in six m | nal office at |
| The amb | ubmission: Complied bient air monitoring is done at 4 location C on half yearly basis Annexure - II | ons and the reports are submitted to SPCB, CPCB and | Date: 26/05/2025 |
| б | Noise Monitoring & Prevention | Adequate measures should be taken for control of no below 85 dBA in the work environment. Workers enga and drilling operations of HEMM etc. All should be pr Ear Plug/Muff. | aged in blastir |
| | ubmission: Complied applicable now. | | Date: 26/05/2025 |
| 7 | WATER QUALITY MONITORING AND PRESERVATION | Industrial waste water (Workshop and Waste water f should be properly collected, treated so as to conform prescribed under GSR 422(E) dated 19th May 1993 ar December 1993 or as amended from time to time befo Oil and Grease trap should be installed before discharg shop effluent. | to the standar ad 31st re discharged. |
| | ubmission: Complied no generation of wastewater. | | Date: 26/05/2025 |
| 8 | AIR QUALITY MONITORING AND PRESERVATION | Vehicular emissions should be kept under control an monitored. Vehicle used for transporting the mineral s covered with tarpaulins and optimally loaded. | •••• |
| No mine securing | | icles carrying OB are only allowed to ply after . Check list ensures the optimum load, good condition, | Date: 26/05/2025 |
| 9 | MISCELLANEOUS | Environmental laboratory should be established with number and type of pollution monitoring and analysis consultation with the SPCB. | |
| We have | | aboratory with qualified personnel. The monitoring by a NABL and JSPCB recognised laboratory. | Date: 26/05/2025 |
| 10 | Human Health Environment | Personnel working in dusty area should wear protect devices and they should also be provided with adequat information on safety and health aspect. Occupational Surveillance programme of the worker should be unde periodically to observe any contraction due to exposur take corrective measures if needed. | te training and Health rr taken |
| | | | |

| It is not | applicable now. | | 26/05/2025 |
|-----------|--|--|-----------------------|
| 11 | MISCELLANEOUS | A separate Environmental Management cell with suit personnel should be set up under the control of a senior who will report directly to the Head of the Company. | |
| We hav | ubmission: Complied e a separate Environmental Manag mental Cell is directly to General | gement Cell with four qualified personnel. The reporting of Manager of the Division. | Date: 26/05/2025 |
| 12 | Corporate Environmental Responsibility | Funds earmarked for environmental protection measures kept in separate A/C and should not be diverted for oth Year wise expenditure should be reported to this ministregional office at Bhubaneswar. | er purposes. |
| The Env | ubmission: Complied vironment Cell has a separate fund gal requirements. | l for Environmental protection measures and for complying | Date: 26/05/2025 |
| 13 | MISCELLANEOUS | The regional office of this ministry located at Bhubar monitor compliance of the stipulated conditions. The p authorities shall extend full co-operation to the officer office by furnishing the requisite Data/ information/ me report. | roject of regional |
| | ubmission: Complied omplied. All data is being furnishe | ed in the compliance report and during inspection. | Date: 26/05/2025 |
| | | Visit Remarks | |
| ast Site | Visit Report Date: | N/A | |
| ddition | al Remarks: | | |
| conside | ered as conclusion on any action o | n the compliance of the project. This is strictly for the project reference purpose. | proponent's |
| | | | |

HALF YEARLY COMPLIANCE REPORT (PERIOD: OCTOBER'24 – MARCH'25)

OCP KALIMELA PROJECT UNDER JAMADOBA COLLIERY



TATA STEEL LIMITED, JHARIA DIVISION

P.O.- JAMADOBA, DIST. - DHANBAD, STATE- JHARKHAND, PIN CODE – 828112.

ENVIRONMENTAL CLEARANCE GRANTED VIDE LETTER NO. - J-11015/252/2005-IA.II(M) DATED- 22ND JUNE 2006 ISSUED BY GOVT. OF INDIA, MINISTRY OF ENVIRONMENT & FOREST, NEW DELHI.

| S. No. | Condition | Compliance Status |
|--------|---|--|
| Specif | ic Condition: | |
| (i) | All the conditions stipulated by SPCB in their NOC no N-35 dated 31.01.2005 are to be implemented effectively. | NOC conditions are being complied with. The open cast operations have ceased, and no raw coal production is taking place. Currently the backfilling of the mine void by the OB has been completed and biological |
| (ii) | The bund/embankment shall be designed taking into account highest flood level, based on past data, in the Damodar River/ Dungri Jore so as to guard against mine inundation. | reclamation work is in progress. The embankment exists along Dungri Jore. The HFL (Highest flood line) of Damodar river is way below the surface level of open cast mine hence bunds across the river is not necessary. |
| (iii) | Topsoil should be stacked properly with proper slope at earmarked sites and should not be kept active and shall be used for reclamation and development of green belt. | No further top soil will be generated as coal mining activity has been ceased. The back filling has been completed and the top soil is being used for biological reclamation of backfilled and OB area. Glimpses of activites is attached as Annexure-1. |
| (iv) | OB should be stacked at earmarked external OB dumpsite(s) within ML area and shall be a maximum height of 60m only and consist of benches of 10m each. The ultimate slope of the dump shall not exceed 28°. Backfilling shall begin at the end of 3rd year in the decoaled area. Monitoring and management of existing reclaimed dumpsites should continue until the vegetation becomes self- sustaining. Compliance Status should be submitted to the MOEF and its regional office at Bhubaneswar on yearly basis. | OB was stacked within ML area at an area of 12 ha approx. About 24.08 lakh cum of OB generated has been stacked with an approximate height reached of 50 mts. The other conditions are being followed as well. This OB has been used for backfilling the mine pit as part of our mine closure plan. Now the backfilling work has been completed and biological reclamation work is in progress. |
| (v) | Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly desilted and maintained properly. Garland drains (size, gradient and length) and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate | Catch drain and siltation ponds have been constructed to arrest the debris, silt and sediment flows from OB dumps. Collected water had been used for watering mine area, roads & plantation. Total length of catch drains was 2200 mts. Garland drains (about 1790 mts) had been completely constructed around the mine site to ensure runoff water during rainy season is properly drained off. Since mine area has not going to expand, no additional garland drains are required as of now. |

| | retention period to allow proper settling of slit material. | |
|--------|--|--|
| (vi) | Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data | Retention wall (or Toe wall) of about 2200 mts. exists around the dump area to check run-off and siltation. |
| (vii) | The effluents from the coal washery shall be treated to prescribed norms before discharge from the lease. | There is no separate coal washery for OCP Kalimela. We have a central coal washery for Jamadoba group of mines, about 1.5 kms away, which has a closed water circuit system to maintain zero discharge. |
| (viii) | Crushers at the CHP should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc. | There is no separate CHP for OCP Kalimela. The existing CHP for Jamadoba group of mines already has adequate measures in place such as water sprinkling system (fixed and movable) and dry fog system. |
| (ix) | Drills should be wet operated. | It is not applicable now as mining has ceased. |
| (x) | Controlled blasting should be practiced only during daytime with use of delay detonators. The mitigative measures for control of ground vibration and to arrest the fly rocks and boulders should be implemented. | It is not applicable now as mining has ceased. |
| (xi) | Area brought under afforestation includes reclaimed external OB dump (12.89 ha), backfilled area (25.15 ha), along ML boundary, along roads (0.45 ha) and in undisturbed area (1.14 ha) within the lease area by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. | The backfilling work has been completed and the biological reclamation work is in progress. |
| (xii) | A progressive closure plan shall be implemented by reclamation of quarry area of 25.15 ha which shall be backfilled and afforested by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. The balance 1.10 ha of decoaled area shall be converted into a water reservoir, the upper benches of which shall be gently sloped and stabilized and reclaimed with plantation. | The reclamation work is in progress as per the progressive mine closure Plan. The mine closure plan of KOCP is under mining plan of Jamadoba Colliery (including MCP of Kalimela) has been approved by MOC, Delhi. |
| (xiii) | Conservation Plan for endangered species, if any, found in and around the project area shall be formulated, if required, in consultation with the State Forest and Wildlife Departments. | Not Applicable. |

| (wiv) | The company shall obtain prior approval of | Not Applicable. |
|---------|--|---|
| (xiv) | CGWA/ CGWB Regional Office for use of | |
| | groundwater if any, for mining operations. | |
| (xv) | Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new peizometers. The monitoring for quantity should be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected should be submitted to the Ministry of Environment & Forest and to the Central Pollution Control Board quarterly within one month of monitoring. | Now there will be no impact on ground water as mining has ceased. However, quality of groundwater is regularly analysed as required and attached in Annexure-II |
| (xvi) | The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. The project authorities should meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine. | Now there will be no impact on ground water as mining has ceased. However, quality of groundwater is regularly analysed as required and attached in Annexure-II |
| (xvii) | ETP should also be provided for workshop, coal washery and CHP wastewater. | It is not applicable. Though ETP for Central Workshop has been commissioned having facility of Oil & Grease Trap. |
| (xviii) | R&R shall not be less than the norms laid down by the State Government and shall be completed within a specified time-frame. | It is not applicable. |
| (xix) | A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests for approval 5 years in advance of final mine closure for approval. | It has been approved by MOC, Delhi and submitted to MoEF&CC. |
| (xx) | Consent to operate shall be obtained before starting mining operations. | Consent to operate was obtained from JSPCB vide letter ref. No. SPCB/HO/RNC/CTO-13226858/2022/959 dated-04.07.2022, which was valid up to 30.09.2023, for backfilling and reclamation. The activities were completed, and biological reclamation is ongoing with trees plantation. Hence, the CTO was surrendered on 20.07.2023 vide letter no. JMB/ENV/SPCB/08/519/2023. |
| Gene | ral Conditions: | |
| (i) | No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and forest. | All mining excavation activities are terminated. Reclamation work is in progress |

| (i) | No change in the calendar plan including excavation, quantum of mineral coal and | All mining excavation activities are terminated. Reclamation work is in progress. |
|-------|---|---|
| | waste should be made. | |
| (ii) | Four Ambient Air quality monitoring station should be established in the core zones as well as in the buffer zone SPM, RSPM, SO2 and NOX monitoring location of the stations should be decided based on the metrological data & topographical features & environmentally & ecologically sensitive targets in consultation with SPCB. | The operations have now ceased. The ambient air monitoring is done at 4 locations and the reports are attached as Annexure -II |
| (iii) | Fugitive dust emissions (SPM & RSPM) from all the sources should be controlled regularly monitored & data recorded properly. Water spraying arrangement on haul roads, wagon loading, and dump trucks (loading & unloading) points should be provided & properly maintained. | Presently no coal excavation and coal transportation jobs are going on. However, water sprinkling on roads is being done regularly. |
| (iv) | Data on ambient air quality (SPM, RSPM, SOx & NOx) should be regularly submitted to the Ministry including its regional office at Bhubaneswar and to the SPCB & CPCB once in six months. | The ambient air monitoring is done at 4 locations and the reports are submitted to SPCB, CPCB & MoEFCC on half yearly basis Annexure - II |
| (v) | Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations of HEMM etc. All should be provided with Ear Plug/Muff. | It is not applicable now. |
| (vi) | Industrial waste water (Workshop and Waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19th May 1993 and 31st December 1993 or as amended from time to time before discharged. Oil and Grease trap should be installed before discharge of Work shop effluent. | There is no generation of wastewater. |
| (vii) | Vehicular emissions should be kept under control and regularly monitored. Vehicle used for transporting the mineral should be covered with tarpaulins and optimally loaded. | No mineral is being transported now. The vehicles carrying OB are only allowed to ply after securing full compliance on vehicle check list. Check list ensures the optimum load, good condition, emissions under limit. |

| (viii | Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the SPCB. | We have a fully equipped Environment Cell Laboratory with qualified personnel. The monitoring and analysis are also done at regular intervals by a NABL and JSPCB recognised laboratory. |
|-------|---|--|
| (ix) | Personnel working in dusty area should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspect. Occupational Health Surveillance programme of the worker should be under taken periodically to observe any contraction due to exposure to dust and to take corrective measures if needed. | It is not applicable now. |
| (x) | A separate Environmental Management cell with suitable qualified personnel should be set up under the control of a senior executive, who will report directly to the Head of the Company. | We have a separate Environmental Management Cell with four qualified personnel. The reporting of Environmental Cell is directly to General Manager of the Division. |
| (xi) | Funds earmarked for environmental protection measures should be kept in separate A/C and should not be diverted for other purposes. Year wise expenditure should be reported to this ministry and its regional office at Bhubaneswar. | The Environment Cell has a separate fund for Environmental protection measures and for complying with legal requirements. |
| (xii) | The regional office of this ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities shall extend full co-operation to the officer of regional office by furnishing the requisite Data/ information/ monitoring report. | Being complied. All data is being furnished in the compliance report and during inspection. |

Eco restoration of mined out areas of Kalimela Opencast Project

Eco restoration through topsoil management, slope stabilisation through geocell has been completed. Plantation through native species is ongoing.







Eco restoration of mined out areas of Kalimela Opencast Project

Status of on-going plantation through native species. Around 4000 saplings have been planted in FY25.







Sr. Chemist Aditi R&D Services



Technical Manager Aditi R&D Services, Sindri

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| DS | ISO/II | | ting Labor BL ACCREDI Board of Quality | atory TED y Council of In | dia) | Jharkhand - Email ID: sir Website: ad Phone: 0326 Fax: 0326-2 | strial Årea, arh, Dist - Dhanbao 828107 hdriaditi@gmail.com itimdservices.com 5-2952377 (O), |
|--------|-----------|-------------------------------------|--|--|--------------|---|---|
| Ref. N | No.: - A | ARDS/24-25/ AAQ/2 | | | Date | e: 04/12/20 | 024 |
| | | TEST RE | PORT OF A | MBIENT AI | R QUALITY | | |
| • | Nam | e of the industry | TATA S | TA STEEL, J. TEEL LIMITI OBA GROUI DHANBAD (J | ED | | |
| | Wor | k Order Ref. NO.: | : 4700126 | 557/932 Date | - 29/05/2024 | | |
| | Date | of Sample Collection | on : 26/11/202 | 4 to 27/11/2 | 024 | | |
| | | of Testing | | 24 to 02/12/2 | | | |
| | | Procedure | : As per IS- | | | | |
| 18 | 1.1.1.1.1 | | | 54970 | | | |
| | | | TEST | RESULTS | | | |
| | | LOCATION | - OFFICERS | COLONY, 12 | NO. DIGWADIH | | |
| | | Avg. Ambient Te | mperature | 25°C | Avg. Humid | ity | 46% |
| SIN | No. | Particulars | | Value | NAAQ - CPC | B STAND | ARD |
| | 1. | Particulate Matter (PM | l ₁₀), μg/m ³ | 76.58 | 100 | µg/m³ | |
| 1 | 2. | Particulate Matter (PM | l _{2.5}), µg/m³ | 41.36 | 60 | µg/m³ | ¥. |
| | 3. | SO ₂ , µg/m ³ | | 18.73 | 80 | µg/m³ | |
| 4 | 4. | NO ₂ , µg/m ³ | 1.50 | 26.65 | 80 | µg/m³ | |
| | 5. | Ozone, µg/m ³ | | 16.76 | 180 | µg/m³ | |
| | 6. | NH ₃ , µg/m ³ | | 13.78 | 400 | µg/m³ | |
| | 7. | CO, mg/m ³ | | 0.71 | 4 n | na/m³ | |

NOTE: BDL - Below Detection Limit

Benzene, µg/m3

Benzoapyrene ng/m³

Pb, µg/m³

As, ng/m3

Ni, ng/m³

8.

9.

10.

11.

12.





BDL

BDL

BDL

BDL

BDL

Technical Manager Aditi R&D Services, Sindri

1 µg/m3

6 ng/m³

20 ng/m³

5 µg/m³

1 ng/m³

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NOTE: BDL - Below Detection Limit

Sr. Chemist Aditi R&D Services



Technical Manager Aditi R&D Services, Sindri

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NOTE: BDL - Below Detection Limit





Technica anager Aditi R&D Services, Sindri

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- 3. This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.

| DS |) (A | Constit | Test NAI | ing Lab | EDITED | / | CES India) 01:2018 Certi | P.O Don Jharkhan Email ID: Website: 0 Phone: 03 Fax: 0326 | Justrial Area, ngarh, Dist Dhani d 828107 sindriaditi@gmail. aditimdservices.cc 126-2952377 (0), 2952377 3471358492, 0943 | |
|-----------|--------------------------------------|----------|-----------------------------|-----------|---|------|---|---|---|--|
| 1 | | | | | | | | DNITORING | | |
| | Ref. No | . & Date | | 1 | | AME | AND ADDRE | SS OF THE CL | ENT | |
| AR | 0S/24-25/NOISI | E/1Date | : 04/12 | /2024 | | M/S | TATA STEE | L, JAMADOB | A, | |
| | Date of N | Ionitori | ng | | TATA ST | | | MADOBA GR D (JHARKHAN | | |
| | 25/11/2024 1 | To 27/11 | /2024 | т | Avg. Ambient emperatur (°C) | | Average Humidity (%) | Weather Condition | Status of the plant | |
| | Work Order 4 | | | | 25 | | 49 | Clear | Running | |
| | Date:- 2 | 9/05/202 | 4 | MONI | TORING | RESI | JLTS | | | |
| SI. No | Place of Monitoring | (| Day Ti 6 AM to Avg. d | 10 PM) | Night Time (10 PM to 6 AM) Avg. dB(A) | | for Industr CPCB No (Regulatio (Amendme notified vio Dt. 2 | Noise level (Ambient standard for Industrial Area as per CPCB Noise Pollution (Regulation and Control) (Amendment) Rules , 2000 notified vide S.O. 1046(E) Dt. 22.11.2020 Limit in dB(A) Leg | | |
| | | | | | | | | Day Time | Night Time | |
| JAM | LOCATION ADOBA GROUP | MAX | MIN | AVG. dB(/ | A) MAX | MIN | AVERAGE dB(A) Leq | Industrial Area | Industrial Area | |
| 1. | Central Workshop Area | 57.9 | 54.3 | 56.46 | 49.6 | 42.1 | 47.3 | 75 | 70 | |
| 2. | 6 & 7 Pits Colliery Office | 59.7 | 51.9 | 57.36 | 46.8 | 40.6 | 44.72 | . Milde | | |
| | | | 2 | | | 1 | | Residential Area | Residential Area | |
| 3. | Officer Colony 12 No. Digwadih | 53.4 | 49.6 | 51.9 | 45.6 | 42.7 | 44.39 | 65 | 55 | |
| | | | | | 1 | | 4 | Silence Zone | Silence Zone | |
| 4. | Tata Central Hospital | 47.2 | 42.8 | 45.53 | 39.4 | 36.4 | 38.15 | 50 | 40 | |
| í | Sr. Chemi Aditi R&D S | | 4 | | | | Tech Aditi R&I | nical Manag D Services, S | er Sindri | |

2. The test results reported in this report are valid at the time of and under the stated condition of measurment.



| SI No. | Particulars | Mineralogical Composition (%) | | | | | |
|--------|----------------------------------|-------------------------------|------|--------------------------------|------|--|--|
| | 그 가지 않는 것이 있는 | SiO ₂ | FeO | Al ₂ O ₃ | CaO | | |
| 1. | Central Work Shop Area, Jamadoba | 1.90 | 0.14 | 1.41 | 2.8 | | |
| 2. | Officer Colony 12 No. Digwadih | 1.87 | 0.12 | 1.35 | 2.36 | | |





Technical Aditi R&D Services, Sindri

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| R D S | | ing Lai BL ACCE | boratory REDITED uality Council | of India) | Plot No I-B-17 (P) Sindri, Industrial Area, P.O Domgarh, Dist Dhanbai Jharkhand - 828107 Email ID: sindriaditi@gmail.co Website: aditimdservices.com Phone: 0326-2952377 (O), Fax: 0326-2952377 Mobile: 09471358492, 094315 |
|--------|-----------------------------------|--------------------|---------------------------------------|-------------------------------|---|
| Ref. N | lo.: - ARDS/24-25/SW/1 | | | | Date: 04/12/2024 |
| | TEST R | EPORT | OF SURF | ACE WATE | R |
| | Name of the industry | : M/S | TATA STEE | L, JAMADOE | 3A, |
| | | TAT | A STEEL LI | MITED | |
| | | JAN | ADOBA GR | OUP PLANT | |
| | | | | D (JHARKH | • |
| | | DIS | | | |
| • | Work Order Ref. NO.: | : | | 932 Date:- 29 | |
| • | Sample Code | | | River Up St River Down | |
| | Date of Sample Collecti | on: | 27/11/2024 | River Down | Stream |
| | Date of Testing | : | | To 03/12/202 | 24 |
| | Test | : | pH, TDS, Tu | urbidity, DO, | BOD, CI, F, SO4 |
| | | т | ST RESULT | | |
| | | | ST RESULT | | |
| SI. | PARAMETERS OF TE | ST | VA | LUE | Test |
| No. | 1.00 | | Damodar River Up Stream | Damodar River Dn Stream | Method |
| 1. | pH | | 7.2 | 7.3 | IS-3025 (P-11): 1983 |
| 2. | Total Dissolved Solids | , mg/l | 410 | 428 | IS-3025 (P-16): 1984 |
| 3. | Turbidity, NTU | | 2 | 2 | IS-3025 (P-10):1984 |
| 4. | Dissolved Oxygen, r | ng/l | 5.6 | 5.8 | IS-3025 (P-38):1989 |
| 5. | Bio chemical Oxyg Demand, mg/l | en | 1.6 | 1.9 | IS-3025 (P-44):1994 |
| 6. | Chloride as Cl, mg | g/l | 28 | 27.5 | IS-3025 (P-32):1988 |
| 7. | Fluoride as F, mg | /1 | 0.58 | 0.62 | IS-3025 (P-60):2008 |





65.0

60.4

Technical Manager Aditi R&D Services, Sindri

IS-3025 (P-24):1986

Statements :

8.

1. The test report refers only to the particular item(s) submitted for testing.

Sulphate as SO₄, mg/l

2. The test results reported in this report are valid at the time of and under the stated condition of measurment.

| | a la | DITIR | | | CES | Plot No I-B-17 (P) Sindri, Industrial Area P.O Domgarh, Dist - | |
|--|---|--|--|---|---|---|-----------|
| A | RDS | | sting Labo | and the second se | | Jharkhand - 828107 Email ID: sindriaditi@ | |
| Con a | LARCENCE | | ABL ACCRE | | - | Website: aditimdservi | ices.com |
| | | A Constituent | | the second s | | Phone: 0326-295237 Fax: 0326-2952377 | 7 (0), - |
| | ISO/IEC 170 | 25:2017, ISO 9 | 001:2015,ISC | (OHSAS) 4 | 5001:2018 C | Mobile: 09471358492 | 094315126 |
| | Ref. No.: - ARDS/2 | | | - | | Date: 04/12/2024 | |
| | 1 | TEST REP | ORTOFN | INE WA | TER DISC | HARGE | |
| | Name of the second s | e industry | T J | I/S TATA S ATA STEE AMADOB/ IST DHA | A GROUP |) | |
| | Work Orde | r Ref. NO.: | | | | 29/05/2024 | |
| | Sample C | ode | | | Jamadoba | | |
| | | | 2 | | Jamadoba | | |
| | | | 3 | | Pits Collie adih Collie | | |
| | Date of Sa Date of Te Test | ample Collecter | : 2 | 5/11/2024 8/11/2024 H, TDS, TS | To 03/12/2 | S. S | |
| SI. | Date of Te Test | | : 2 : p | 8/11/2024 H, TDS, TS T RESULT | To 03/12/2 SS, BOD, C | 2024 | |
| | Date of Te | | : 2 : p <u>TES</u> | 8/11/2024 H, TDS, TS T RESULT | To 03/12/2 SS, BOD, C | 024 COD, OIL & GREASE. | |
| No. | Date of Te Test PARAMETERS OF | 2 Pit Jamadoba | : 2 : P <u>TES</u> VALU 3 Pit Jamadoba | 8/11/2024 H, TDS, TS <u>T RESULT</u> E 6 & 7 Pits | To 03/12/2 SS, BOD, C | 024 COD, OIL & GREASE. | |
| No. 1. | Date of Te Test PARAMETERS OF TEST | 2 Pit Jamadoba Colliery | : 2 : p <u>TES</u> VALU 3 Pit Jamadoba Colliery 7.7 839 | 8/11/2024 H, TDS, TS T RESULT E 6 & 7 Pits Colliery | To 03/12/2 SS, BOD, C Digwadih Colliery | 2024 COD, OIL & GREASE. Test Method | |
| No. 1. 2. | Date of Te Test PARAMETERS OF TEST pH, Total Dissolved Solids, mg/l Total Suspended | 2 Pit Jamadoba Colliery 7.5 | : 2 : p <u>TES</u> VALU 3 Pit Jamadoba Colliery 7.7 | 8/11/2024 H, TDS, TS T RESULT E 6 & 7 Pits Colliery 7.5 | To 03/12/2 SS, BOD, C Digwadih Colliery 7.4 | 2024 COD, OIL & GREASE. Test Method IS-3025 (P-11):1983 | |
| No. 1. 2. 3. | Date of Te Test PARAMETERS OF TEST pH, Total Dissolved Solids, mg/l Total Suspended Solids, mg/l Bio chemical Oxygen Demand, | 2 Pit Jamadoba Colliery 7.5 865 | : 2 : p <u>TES</u> VALU 3 Pit Jamadoba Colliery 7.7 839 | 8/11/2024 H, TDS, TS T RESULT E 6 & 7 Pits Colliery 7.5 915 | To 03/12/2 SS, BOD, C Digwadih Colliery 7.4 790 | 2024 COD, OIL & GREASE. Test Method IS-3025 (P-11):1983 IS-3025 (P-16):1984 | |
| SI. No. 1. 2. 3. 4. 5. | Date of Te Test PARAMETERS OF TEST pH, Total Dissolved Solids, mg/l Total Suspended Solids, mg/l Bio chemical | 2 Pit Jamadoba Colliery 7.5 865 39 | : 2 : P <u>TES</u> VALU 3 Pit Jamadoba Colliery 7.7 839 42 | 8/11/2024 H, TDS, TS T RESULT E 6 & 7 Pits Colliery 7.5 915 46 | To 03/12/2 SS, BOD, C Digwadih Colliery 7.4 790 38 | 2024 COD, OIL & GREASE. Test Method IS-3025 (P-11):1983 IS-3025 (P-16):1984 IS-3025(P-17): 1984 | |
| No. 1. 2. 3. 4. | Date of Te Test PARAMETERS OF TEST PH, Total Dissolved Solids, mg/l Total Suspended Solids, mg/l Bio chemical Oxygen Demand, mg/l Chemical Oxygen | 2 Pit Jamadoba Colliery 7.5 865 39 2.2 | : 2 : p <u>TES</u> VALU 3 Pit Jamadoba Colliery 7.7 839 42 3.4 | 8/11/2024 H, TDS, TS T RESULT E 6 & 7 Pits Colliery 7.5 915 46 2.9 | To 03/12/2 SS, BOD, C Digwadih Colliery 7.4 790 38 2.7 | 2024 COD, OIL & GREASE. Test Method IS-3025 (P-11):1983 IS-3025 (P-16):1984 IS-3025 (P-17): 1984 IS-3025 (P-4):1994 | |

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5 Sr. Chemist Aditi R&D Services



Technical Manager Aditi R&D Services, Sindri

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| A R D | 72 | ng L | aboratory CREDITED | and the second second second | i | Piot No I-B-17 (P) Sindri, Industrial Area, P.O Domgarh, Dist - Dhanbad Jharkhand - 828107 Email ID: sindriadit@gmail.com Website: aditimdservices.com |
|------------|--|-------|----------------------------|---|---------------|---|
| ¥ | (A Constituent Bo ISO/IEC 17025:2017, ISO 900 | | | | artified | Phone: 0326-2952377 (0), * Fax: 0326-2952377 |
| R | ef. No.: - ARDS/24-25/ETP/1 | 1.201 | 3,130 (011343) | 45001.2010 | - Contraction | Mobile: 09471358492, 09431512 te: 04/12/2024 |
| | | | | | | |
| | TES | RE | PORT OF | EFFLUEN | <u>1</u> | |
| | Name of the industry | : | TATA STI JAMADO | STEEL, JA EEL LIMITE BA GROUP IANBAD (JI | D PLANT, | |
| | Work Order Ref. NO.: | : | 470012655 | 7/932 Date:- | 29/05/20 | 24 |
| | Sample Code | : | 1. E.T.P. 0 | Dutlet T.C.H | | |
| | | | 2. E.T.P. (| Dutlet Garag | ge | |
| | Date of Sample Collection | on: | 25/11/202 | 4 To 26/11 | 2024 | |
| | Date of Testing | : | 28/11/202 | 4 To 03/12 | /2024 | |
| | Test | : | pH, TDS, | TSS, BOD, | COD, OI | L & GREASE. |
| | | 1 | TEST RESU | I | | |
| SI. No. | PARAMETERS OF TEST | | | LUE | | Test Method |
| NO. | - | | E.T.P. Outlet T.C.H. | E.T.P. Outlet Garage | | * |
| 1. | pH, | - | 8.2 | 8.0 | IS-3025 | 5 (P-11): 1983 |
| 2. | Total Dissolved Solids, mg/ | 1 | 788 | 895 | IS-3025 | 5 (P-16): 1984 |
| 3. | Total Suspended Solids, mg | n I | 39 | 43 | IS-3025 | 5(P-17) : 1984 |
| 4. | Bio chemical Oxygen Deman | d, | 2.4 | 7.2 | IS-302 | 5 (P-44):1994 |
| 5. | Chemical Oxygen Demand, m | g/l | 58 | 89 | IS-302 | 5 (P-58):2006 |
| 6. | Oil & Grease, mg/l | 1.2 | 0.9 | 2.4 | IS-302 | 5 (P-39):2021 |
| N | ote : BDL - Below Detection Limit | | ADI | 95 | | |
| | Sr. Chemist Aditi R&D Services | (| | | | Manager vices, Sindri |

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| | Ì | | g Labora ACCREDIT | tory ED | | Sind P.O. Jhar Ema Web | khand - 82 il ID: sindri site: aditim | l Area, Dist Dhant |
|--|---|---|---|---|---|---|--|---|
| | ISO/IEC 17025:2 | | a state of the second se | | and the second se | | 0326-2952 ile: 094713 | 2377 58492, 0943 |
| Ref | . No.: - ARDS/24-2 | | EPORT OF | DRINKING | WATER | Date: 04 | 1/12/2024 | с., |
| | Name of the i | 5 | JAMADO DIST D | EEL LIMIT | ed Plant, Jharkh | AND) | | |
| | Work Order R Sample Code | | : 1. Ca | 557/932 Da anteen- Ja anteen- Ja | madoba C | olliery | | |
| | | | 3. Ca 4. Ca | anteen- Di anteen- 68 | gwadih Co 7 Pits Co | olliery | | |
| | Date of Samp Date of Testir Test | | 22 SUD71 | 8.2024 To 8.2024 To | | 10583 - | | |
| | Compound, Me | ercury, Cadmi | ium, Arsenie | c, Cyanide, | | | | henolic |
| SI. | | ercury, Cadmi | ium, Arsenio ity, Aluminiu | c, Cyanide, m & Boron. RESULT | Lead, Zin | litrate, Flu nc, Total | Coliform, per IS | henolic Total Test |
| SI. No | Compound, Me Chromium, Mine | ercury, Cadmi | ium, Arsenio ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba | c, Cyanide, m & Boron. RESULT | Lead, Zin | litrate, Flu ic, Total | Coliform, per IS | henolic Total Test |
| (T. S. | Compound, Me Chromium, Mine PARAMETERS | ercury, Cadmi eral Oil, Alkalin Canteen- Jamadoba | ium, Arsenie ity, Aluminiu <u>TEST R</u> VAL Canteen- | c, Cyanide, m & Boron. <u>RESULT</u> UE Canteen Digwadih | Lead, Zin Canteen- 6&7 Pits | litrate, Flu nc, Total IS as p 10500 Desirab | Coliform, per IS 2012 Permi | Total Total Test Method |
| No | Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour | Canteen- Jamadoba Colliery 1 Agreeable | ium, Arsenio ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery 1 Agreeable | c, Cyanide, m & Boron. <u>ESULT</u> UE Canteen Digwadih Colliery 1 Agreeable | Lead, Zin Canteen- 6&7 Pits Colliery 1 Agreeable | litrate, Flu nc, Total IS as p 10500 Desirab Ie 5.00 Agreeabl e | Coliform, per IS 2012 Permi ssible 15.0° Agree able | Test Test Method (P-4):202 IS 3025 (5):2018 |
| No 1. | Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) | Canteen- Jamadoba Colliery | ium, Arsenio ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery 1 | c, Cyanide, Im & Boron. RESULT UE Canteen Digwadih Colliery 1 | Lead, Zin Canteen- 6&7 Pits Colliery 1 | litrate, Flu nc, Total IS as p 10500: Desirab le 5.00 Agreeabl e Agreeabl e | Coliform, per IS 2012 Permi ssible 15.0° Agree able | Test Test Method IS 3025 (P-4):202 IS 3025 (5):2018 IS 3025 (7):2017 |
| No 1. 2. | Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour | Canteen- Jamadoba Colliery 1 Agreeable | ium, Arsenio ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery 1 Agreeable | c, Cyanide, m & Boron. <u>ESULT</u> UE Canteen Digwadih Colliery 1 Agreeable | Lead, Zin Canteen- 6&7 Pits Colliery 1 Agreeable | litrate, Flu nc, Total IS as p 10500 Desirab le 5.00 Agreeabl e Agreeabl | Coliform, per IS 2012 Permi ssible 15.0° Agree able Agree | Test Test Metho (P-4):203 (5):2018 IS 3025 (7):2017 IS 3025 |
| No 1. 2. 3. | Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour Taste | Canteen- Jamadoba Colliery 1 Agreeable Agreeable | ium, Arsenio ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery 1 Agreeable Agreeable | c, Cyanide, Im & Boron. ESULT UE Canteen Digwadih Colliery 1 Agreeable Agreeable | Lead, Zin Canteen- 6&7 Pits Colliery 1 Agreeable Agreeable | litrate, Flu nc, Total IS as p 10500: Desirab le 5.00 Agreeabl e 1.0 6.5-8.5 | Coliform, ber IS 2012 Permi ssible 15.0° Agree able Agree able | Test Total Test Metho (P-4):207 (S 3025 (5):2018 (S 3025 (7):2017 (S 3025 (7):2017 (S 3025 (7):2017 (S 3025) (11):198 |
| No 1. 2. 3. 4. | Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour Taste Turbidity, NTU | Canteen- Jamadoba Colliery 1 Agreeable Agreeable | ium, Arsenio ity, Aluminiu <u>TEST F</u> VAL Canteen- Jamadoba Washery 1 Agreeable Agreeable 0.8 | c, Cyanide, Im & Boron. ESULT UE Canteen Digwadih Colliery 1 Agreeable Agreeable 0.2 | Lead, Zin Canteen- 6&7 Pits Colliery 1 Agreeable Agreeable 3.0 | litrate, Flu nc, Total IS as p 10500: Desirab le 5.00 Agreeabl e Agreeabl e 1.0 | Coliform, ber IS 2012 Permi ssible 15.0° Agree able Agree able 5.0 No. | Test Total Test Metho (P-4):207 (S 3025 (7):2017 (S 3025 (7):2017 (S 3025 (7):2017 (S 3025 (7):2017 (S 3025 (11):198 (S 3025) (11):198 |
| No 1. 2. 3. 4. 5. | Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour Taste Turbidity, NTU pH Total Hardness | Canteen- Jamadoba Colliery 1 Agreeable Agreeable 1.0 7.52 | ium, Arsenio ity, Aluminiu <u>TEST F</u> VAL Canteen- Jamadoba Washery 1 Agreeable Agreeable 0.8 7.76 | c, Cyanide, Im & Boron. ESULT UE Canteen Digwadih Colliery 1 Agreeable Agreeable 0.2 7.92 | Lead, Zin Canteen- 6&7 Pits Colliery 1 Agreeable Agreeable 3.0 7.80 | litrate, Flu nc, Total IS as p 10500: Desirab le 5.00 Agreeabl e 1.0 6.5-8.5 | Coliform, Der IS 2012 Permi ssible 15.0° Agree able Agree able 5.0 No. Relax. | Test Total Test Method IS 3025 (P-4):207 IS 3025 (5):2018 IS 3025 (7):2017 IS 3025 (11):198 IS-3025 (21):200 IS 3025 (|
| No 1. 2. 3. 4. 5. 6. | Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour Taste Turbidity, NTU pH Total Hardness as CaCO ₃ , mg/l Chloride as Cl, mg/l Res. Free chlorine as Cl ₂ mg/l | Canteen- Jamadoba Colliery 1 Agreeable Agreeable 1.0 7.52 400 | ium, Arsenio ity, Aluminiu <u>TEST F</u> VAL Canteen- Jamadoba Washery 1 Agreeable 0.8 7.76 580 80.81 NIL | c, Cyanide, Im & Boron. ESULT UE Canteen Digwadih Colliery 1 Agreeable Agreeable 0.2 7.92 540 | Lead, Zin Canteen- 6&7 Pits Colliery 1 Agreeable Agreeable 3.0 7.80 304 | litrate, Flu nc, Total IS as p 10500: Desirab le 5.00 Agreeabl e 1.0 6.5-8.5 200 | Coliform, Der IS 2012 Permi ssible 15.0° Agree able Agree able 5.0 No. Relax. 600 | henolic Total Total IS 3025 (P-4):207 IS 3025 (P-4):207 IS 3025 (5):2011 IS 3025 (7):2017 IS 3025 (11):198 IS-3025 (21):200 IS 3025 (32):198 IS 3025 |
| No 1. 2. 3. 4. 5. 6. 7. | Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour Taste Turbidity, NTU pH Total Hardness as CaCO ₃ , mg/l Chloride as Cl, mg/l Res. Free chlorine as Cl ₂ mg/l Total Dissolved | Canteen- Jamadoba Colliery 1 Agreeable Agreeable 1.0 7.52 400 65.77 | ium, Arsenio ity, Aluminiu <u>TEST F</u> VAL Canteen- Jamadoba Washery 1 Agreeable Agreeable 0.8 7.76 580 80.81 | c, Cyanide, Im & Boron. ESULT UE Canteen Digwadih Colliery 1 Agreeable 0.2 7.92 540 67.65 | Lead, Zin Canteen- 6&7 Pits Colliery 1 Agreeable Agreeable 3.0 7.80 304 33.82 | litrate, Flu nc, Total IS as p 10500: Desirab le 5.00 Agreeabl e 1.0 6.5-8.5 200 250 | Coliform, Der IS 2012 Permi ssible 15.0° Agree able 5.0 No. Relax. 600 1000 | henolic Total Total IS 3025 (P-4):207 IS 3025 (5):2017 IS 3025 (5):2017 IS 3025 (7):2017 IS 3025 (11):198 IS-3025 (21):200 IS 3025 (32):198 IS 3025 (26):202 |
| No 1. 2. 3. 4. 5. 6. 7. 8. | Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour Taste Turbidity, NTU pH Total Hardness as CaCO ₃ , mg/I Chloride as Cl, mg/I Res. Free chlorine as Cl ₂ mg/I Total Dissolved Solids, mg/I Calcium as | Canteen- Jamadoba Colliery 1 Agreeable Agreeable 1.0 7.52 400 65.77 NIL | ium, Arsenio ity, Aluminiu <u>TEST F</u> VAL Canteen- Jamadoba Washery 1 Agreeable 0.8 7.76 580 80.81 NIL | c, Cyanide, Im & Boron. ESULT UE Canteen Digwadih Colliery 1 Agreeable 0.2 7.92 540 67.65 NIL | Lead, Zin Canteen- 6&7 Pits Colliery 1 Agreeable 3.0 7.80 304 33.82 NIL | litrate, Flu nc, Total IS as p 10500: Desirab le 5.00 Agreeabl e 1.0 6.5-8.5 200 250 0.20 | Coliform, ber IS 2012 Permi ssible 15.0° Agree able 5.0 No. Relax. 600 1000 1.0 | henolic Total Total IS 3025 (P-4):207 IS 3025 (5):2017 IS 3025 (5):2017 IS 3025 (11):198 IS 3025 (21):200 IS 3025 (32):198 IS 3025 (26):202 IS 3025 (16):198 IS 3025 (16):198 |
| No 1. 2. 3. 4. 5. 6. 7. 8. 9. | Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour Taste Turbidity, NTU pH Total Hardness as CaCO ₃ , mg/l Chloride as Cl, mg/l Res. Free chlorine as Cl ₂ mg/l Total Dissolved Solids, mg/l | Canteen- Jamadoba Colliery 1 Agreeable 1.0 7.52 400 65.77 NIL 535 | ium, Arsenio ity, Aluminiu <u>TEST F</u> VAL Canteen- Jamadoba Washery 1 Agreeable 0.8 7.76 580 80.81 NIL 540 | c, Cyanide, Im & Boron. ESULT UE Canteen Digwadih Colliery 1 Agreeable 0.2 7.92 540 67.65 NIL 595 | Lead, Zin Canteen- 6&7 Pits Colliery 1 Agreeable 3.0 7.80 304 33.82 NIL 280 | litrate, Flu nc, Total IS as p 10500: Desirab le 5.00 Agreeabl e 1.0 6.5-8.5 200 250 0.20 500 | Coliform, ber IS 2012 Permi ssible 15.0° Agree able 5.0 No. Relax. 600 1000 1.0 2000 | Test Test Method IS 3025 (P-4):202 IS 3025 (5):2018 IS 3025 (|

Statements :

1. The test report refers only to the particular item(s) submitted for testing.

2. The test results reported in this report are valid at the time of and under the stated condition of measurment.

| R D S | | Testing NABL A | Laborato CCREDITEL | ory ouncil of Inc | dia) | Pi Jh Er W Pt | arkhand - 8 nail ID: sind ebsite: aditir none: 0326-2 a: 0326-295 | h, Dist - Dhant 28107 riaditi@gmail.c ndservices.co 2952377 (O), |
|------------|--|----------------------|-----------------------|----------------------|---------------------------|---------------------------|---|--|
| | | | | | | | | 3 |
| SI. No. | PARAMETERS OF TEST | Canteen- | VALI | JE Canteen | Canteen | | per IS 0:1991 | Test Method |
| NO. | 1231 | Jamadoba Colliery | Jamadoba Washery | Digwadih Colliery | - 6&7 Pits Colliery | Desira ble | Permis sible | Method |
| 12. | Manganese as Mn, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.10 | 0.30 | IS 3025 (I 59):2006 |
| 13. | Sulphate as SO4, mg/l | 48.10 | 41.70 | 51.4 | 42.6 | 200 | 400 | IS 3025 (I 24):1986 |
| 14. | Nitrate as NO ₃ , mg/l | 3.3 | 5.6 | 4.9 | 4.2 | 45 | No. Relax | IS 3025 (I 34):1988 |
| 15. | Fluoride as F, mg/l | 0.34 | 0.30 | 0.32 | 0.37 | 1.0 | 1.5 | IS 3025 (I 60):2008 |
| 16. | Phenolic Compound as (C6H5OH) mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.001 | 0.002 | IS 3025 (I 43):1992 |
| 17. | Mercury as Hg, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.001 | No. Relax | IS 3025 (I 48):1994 |
| 18. | Cadmium as Cd, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.003 | No. Relax | IS 3025 (I 41):1992 |
| 19. | Arsenic as As, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.01 | No. Relax | IS 3025 (I 37):1988 |
| 20. | Cyanide as CN, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.05 | No. Relax | IS 3025 (I 27):1980 |
| 21. | Lead as Pb, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.01 | No. Relax | IS 3025 (I 47):1994 |
| 22. | Zinc as Zn, mg/l, | 0.12 | 0.18 | 0.23 | 0.16 | 5 | 15 | IS 3025 (I 42):1992 |
| 23. | Total Coliform, No./100ml | Absent B.D.L | Absent B.D.L | Absent | Absent | Absen t | Absent | IS 3025 (1 49):1994 |
| 24. | Total Chromium as Cr, mg/l | | | B.D.L | B.D.L | 0.05 | No. Relax | IS 3025 (I 52):2003 |
| 25. | Mineral Oil, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.5 | No. Relax | IS 3025 (I 39):1989 |
| 26. | Alkalinity as CaCO ₃ , mg/l, | 424 | 388 | 400 | 568 | 200 | 600 | IS 3025 (I 23):1983 |
| 27. | Aluminium as Al, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.03 | 0.2 | IS 3025 (1 55):2003 |
| 28. | Boron as B, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.5 | 1.0 | IS 3025 (I 57):2005 |

Sr. Chemist Aditi R&D Services



Technical Manager

Aditi R&D Services, Sindri

Statements :

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2. The test results reported in this report are valid at the time of and under the stated condition of measurment.

| | R D S | (A Co | Tes N | ABL ACCR Board of Qu 001:2015,IS | EDITED | y uncil of Indi | a) | Sin P.O Jha Em We Pho Fax | rkhand - 8 ail ID: sind bsite: aditi ane: 0326- c 0326-29 | nal Area, h, Dist - Dhanbad (28107 Inaditi@gmail.com mdservices.com 2952377 (O), |
|--|--|--|--|--|--|---|---|--|--|--|
| | Ref. No.: - A | RDS/24-2 | | TREPOR | TOFOE | | | Date: 0 | 4/12/202 | 24 |
| | • Name | of the in | | : M/ST TATA JAM/ | TATA ST A STEEL ADOBA (| EEL, JAM/ LIMITED GROUP PL BAD (JHA | ADOBA, | | | |
| | | Order R | ef. NO. | : 4700 : | 126557/9 1. Purna 2. Digwa 3. Kali M 4. Upper | 032 Date:- adih (Jorap adih 10 No Iela Kali M r Dungari uadih Bast | 29/05/202 okhar) F&J. andir | | | |
| | Date | of Samn | le Collect | | 6. 6&7 P | its (Ayodh 24 to 26/1 | ya Nagri) | | | |
| | | of Testir | | : | 28/11/20 | 024 To 04/ Odour, Taste | 12/2024 | , pH, To | tal Hardr | 1855, |
| | Date Test PARAMETER | | | : | 28/11/20 Colour, C Iron, Chk Solids, C Fluoride, Arsenic, | 024 To 04/ Odour, Taste oride, Res. alcium, Cop Phenolic C Cyanide, Le m, Mineral (| 12/2024 e, Turbidity Free chlori oper, Mang ompound, ad, Zinc, 1 | ne, Tota ganese, Mercury Total Col ity, Alum | I Dissolv Sulphate /, Cadmin liform, ninium 8 per IS | red 9, Nitrate, um, |
| | • Date • Test | | | : | 28/11/20 Colour, C Iron, Chlo Solids, C Fluoride, Arsenic, Chromiu ST RES | 024 To 04/ Odour, Taste oride, Res. alcium, Cop Phenolic C Cyanide, Le m, Mineral (| 12/2024 e, Turbidity Free chlori oper, Mang ompound, ad, Zinc, 1 | ne, Tota ganese, Mercury Total Col ity, Alum | I Dissolv Sulphate /, Cadmin liform, hinium & | ed , Nitrate, um, & Boron. |
| No 1. | Date Test PARAMETER S OF TEST Colour, (Hazen Unit) | Purnad ih 2 | Digwadih 10 NoF&J. 1 | : : <u>TE</u> V Kali Mela KaliMandir 2 | 28/11/20 Colour, C Iron, Chi Solids, C Fluoride, Arsenic, Chromiu <u>ST RES</u> /ALUE Upper Dungari 2 | 24 To 04/ Dour, Tastroride, Res. I salcium, Cop Phenolic C Cyanide, Le m, Mineral C <u>ULT</u> Kenduadih Basti 1 | 12/2024 e, Turbidity Free chlori oper, Mang ompound, ad, Zinc, 1 Dil, Alkalini 6 & 7Pit (Ayodhya Nagri) 1 | ne, Tota janese, S Mercury Total Col ity, Alum IS as 1050 Desir - able 5 | I Dissolv Sulphate 7, Cadmin liform, ninium 8 per IS 0:1991 Permi- ssible 15 | red , Nitrate, um, & Boron. Test Method IS 3025 (P- 4):2021 |
| No 1. 2. | Date Test PARAMETER S OF TEST Colour, (Hazen Unit) Temperature "C Electrical Conductivity, | Purnad ih | Digwadih 10 NoF&J. | : : <u>TE</u> V Kali Mela KaliMandir | 28/11/20 Colour, C Iron, Chk Solids, C Fluoride, Arsenic, Chromiu ST RES /ALUE Upper Dungari | 24 To 04/ Ddour, Taste oride, Res. alcium, Cop Phenolic C Cyanide, Le m, Mineral C ULT Kenduadih Basti | 412/2024 e, Turbidity Free chlori opper, Mang ompound, ad, Zinc, 1 Dil, Alkalini 6 & 7Pit (Ayodhya Nagri) | ne, Tota ganese, S Mercury Total Col ity, Alum IS as 1050 Desir - able | I Dissolv Sulphate 7, Cadmin liform, ninium 8 per IS 0:1991 Permi- ssible | ed , Nitrate, um, & Boron. Test Method IS 3025 (P- |
| No 1. 2. 3. | • Date • Test • Test PARAMETER S OF TEST Colour, (Hazen Unit) Temperature "C Electrical Conductivity, µmhos/cm Total Dissolved | Purnad ih 2 25 | Digwadih 10 NoF&J. 1 24 | : : <u>TE</u> V Kali Mela Kali Mandir 2 25 | 28/11/20 Colour, C Iron, Chi Solids, C Fluoride, Arsenic, Chromiu ST RES /ALUE Upper Dungari 2 2 | 24 To 04/ Dodour, Taste oride, Res. I salcium, Cop Phenolic C Cyanide, Le m, Mineral G SULT Kenduadih Basti 1 25 | 12/2024 e, Turbidity Free chlori oper, Mang ompound, ad, Zinc, 1 Dil, Alkalini 6 & 7Pit (Ayodhya Nagri) 1 24 | ne, Tota janese, S Mercury Total Col ity, Alum IS as 1050 Desir - able 5 | I Dissolv Sulphate 7, Cadmin liform, ninium 8 per IS 0:1991 Permi- ssible 15 | ed , Nitrate, um, & Boron. Test Method IS 3025 (P- 4):2021 |
| No 1. 2. 3. 4. | • Date • Test • Test PARAMETER S OF TEST Colour, (Hazen Unit) Temperature "C Electrical Conductivity, µmhos/cm | Purnad ih 2 25 1414 | Digwadih 10 NoF&J. 1 24 1390 | : : <u>TE</u> Kali Mela KaliMandir 2 25 1070 | 28/11/20 Colour, C Iron, Chi Solids, C Fluoride, Arsenic, Chromiu <u>ST RES</u> /ALUE Upper Dungari 2 24 590 | 24 To 04/ Dour, Tastroride, Res. I alcium, Cop Phenolic C Cyanide, Le m, Mineral G ULT Kenduadih Basti 1 25 780 | (12/2024 e, Turbidity Free chlori oper, Mang ompound, ad, Zinc, 1 Dil, Alkalini 6 & 7Pit (Ayodhya Nagri) 1 24 810 | ne, Tota janese, S Mercury fotal Col ity, Alum IS as 1050 Desir - able 5 - | I Dissolv Sulphate 7, Cadmin liform, ninium & per IS 0:1991 Permi- ssible 15 - | ed , Nitrate, um, & Boron. Test Method IS 3025 (P- 4):2021 |
| No 1. 2. 3. 4. 5. | • Date • Test • Test PARAMETER S OF TEST Colour, (Hazen Unit) Temperature "C Electrical Conductivity, µmhos/cm Total Dissolved Solids, mg/l pH Total Hardness as CaCO ₃ , mg/l | Purnad ih 2 25 1414 710 7.9 575 | Digwadih 10 NoF&J. 1 24 1390 680 7.8 480 | : : <u>TE</u> V Kali Mela KaliMandir 2 25 1070 513 | 28/11/20 Colour, C Iron, Chil Solids, C Fluoride, Arsenic, Chromiu ST RES /ALUE Upper Dungari 2 24 590 539 | 24 To 04/ Dour, Taste oride, Res. Lalcium, Cop Phenolic C Cyanide, Le m, Mineral G ULT Kenduadih Basti 1 25 780 577 7.3 380 | 12/2024 e, Turbidity Free chlori oper, Mang ompound, ead, Zinc, T Dil, Alkalini 6 & 7Pit (Ayodhya Nagri) 1 24 810 510 7.8 362 | ne, Tota janese, S Mercury Total Col ity, Alum IS as 10500 Desir - able 5 - 500 6.5- 8.5 200 | I Dissolv Sulphate 7, Cadmin liform, ninium 8 0:1991 Permi- ssible 15 - 2000 No | ed , Nitrate, um, & Boron. Test Method IS 3025 (P- 4):2021 - - IS 3025(P- 16):1984 IS-3025(P- 11):1983 IS 3025(P- 21):2009 |
| No 1. 2. 3. 4. 5. 6. 7. | • Date • Test • Test PARAMETER S OF TEST Colour, (Hazen Unit) Temperature "C Electrical Conductivity, µmhos/cm Total Dissolved Solids, mg/l pH Total Hardness as CaCO ₃ , mg/l Calcium as Ca, mg/l | of Testir Purnad ih 2 25 1414 710 7.9 575 155.2 | Digwadih 10 NoF&J. 1 24 1390 680 7.8 480 163.4 | : : Kali Mela Kali Mandir 2 25 1070 513 7.4 496 95 | 28/11/20 Colour, C Iron, Chi Solids, C Fluoride, Arsenic, Chromiu ST RES /ALUE Upper Dungari 2 24 590 539 7.7 336 144 | 24 To 04/ Dour, Taste oride, Res. I salcium, Cop Phenolic C Cyanide, Le m, Mineral G ULT Kenduadih Basti 1 25 780 577 7.3 380 78 | 12/2024 e, Turbidity Free chlori oper, Mang compound, ead, Zinc, 1 Dil, Alkalini 6 & 7Pit (Ayodhya Nagri) 1 24 810 510 7.8 362 67.5 | ne, Tota janese, S Mercury Total Col ity, Alum IS as 10500 Desir - able 5 - 500 6.5- 8.5 200 75 | I Dissolv Sulphate 7, Cadmin liform, ninium 8 per IS 0:1991 Permi- ssible 15 - 2000 No Relax 600 200 | ed , Nitrate, um, & Boron. Test Method IS 3025 (P- 4):2021 - - IS 3025(P- 16):1984 IS-3025(P- 11):1983 IS 3025(P- 21):2009 IS 3025(P- 40):1991 |
| No 1. 2. 3. 4. 5. 6. 7. 8. | • Date • Test • Test PARAMETER S OF TEST Colour, (Hazen Unit) Temperature "C Electrical Conductivity, µmhos/cm Total Dissolved Solids, mg/l PH Total Hardness as CaCO ₃ , mg/l Calcium as Ca, mg/l Magnesium as Mg, mg/l | of Testir Purnad ih 2 25 1414 710 7.9 575 155.2 50.4 | ng Digwadih 10 NoF&J. 1 24 1390 680 7.8 680 7.8 480 163.4 20.2 | : : Kali Mela Kali Mandir 2 25 1070 513 7.4 496 95 62.8 | 28/11/20 Colour, C Iron, Chi Solids, C Fluoride, Arsenic, Chromiu ST RES /ALUE Upper Dungari 2 24 590 539 7.7 336 144 48.2 | 024 To 04/ Odour, Taste oride, Res. I salcium, Cop Phenolic C Cyanide, Le m, Mineral G <u>ULT</u> Kenduadih Basti 1 25 780 577 7.3 380 78 43.5 | (12/2024 e, Turbidity Free chlori oper, Mang ompound, ad, Zinc, 1 Dil, Alkalini (Ayodhya Nagri) 1 24 810 510 7.8 362 67.5 48.4 | ne, Tota janese, S Mercury Total Col ity, Alum IS as 10500 Desir - able 5 - 500 6.5- 8.5 200 75 30 | I Dissolv Sulphate 7, Cadmin liform, ninium 8 per IS 0:1991 Permi- ssible 15 - 2000 No Relax 600 200 100 | ed , Nitrate, um, & Boron. Test Method IS 3025 (P- 4):2021 - - - IS 3025(P- 16):1984 IS-3025(P- 11):1983 IS 3025(P- 21):2009 IS 3025(P- 21):2009 IS 3025(P- 40):1991 IS 3025(P- 46):1994 |
| | • Date • Test • Test PARAMETER S OF TEST Colour, (Hazen Unit) Temperature "C Electrical Conductivity, µmhos/cm Total Dissolved Solids, mg/l pH Total Hardness as CaCO ₃ , mg/l Calcium as Ca, mg/l Magnesium as | of Testir Purnad ih 2 25 1414 710 7.9 575 155.2 | Digwadih 10 NoF&J. 1 24 1390 680 7.8 480 163.4 | : : Kali Mela Kali Mandir 2 25 1070 513 7.4 496 95 | 28/11/20 Colour, C Iron, Chi Solids, C Fluoride, Arsenic, Chromiu ST RES /ALUE Upper Dungari 2 24 590 539 7.7 336 144 | 24 To 04/ Dour, Taste oride, Res. I salcium, Cop Phenolic C Cyanide, Le m, Mineral G ULT Kenduadih Basti 1 25 780 577 7.3 380 78 | 12/2024 e, Turbidity Free chlori oper, Mang compound, ead, Zinc, 1 Dil, Alkalini 6 & 7Pit (Ayodhya Nagri) 1 24 810 510 7.8 362 67.5 | ne, Tota janese, S Mercury Total Col ity, Alum IS as 10500 Desir - able 5 - 500 6.5- 8.5 200 75 | I Dissolv Sulphate 7, Cadmin liform, ninium 8 per IS 0:1991 Permi- ssible 15 - 2000 No Relax 600 200 | ed , Nitrate, um, & Boron. Test Method IS 3025 (P- 4):2021 - - IS 3025 (P- 16):1984 IS-3025 (P- 11):1983 IS 3025 (P- 21):2009 IS 3025 (P- 40):1991 IS 3025 (P- |

Statements :

1. The test report refers only to the particular item(s) submitted for testing.

2. The test results reported in this report are valid at the time of and under the stated condition of measurment.

| | A R D S A R | | | | | | | | | - Dhanbad ggmail.com ices.com 7 (O), |
|-----------|--|----------|-----------------------|------------------------|------------------|---------------------|--------------------------------|----------------|---------------------------|---|
| | | | | | 2. | | | | | |
| SI. No | PARAMETERS OF TEST | | | VAI | LUE | | | IS as 10500 | per IS :1991 | Test Method |
| • | | Purnadih | Digwadih 10 NoF&J. | KaliMela KaliMandir | Upper Dungari | Kenduadi h Basti | 6 & 7Pit (Ayodhya Nagri) | Desir- able | Perm is- sible | |
| 11 | Sulphate as SO ₄ , mg/l | 47.2 | 53.4 | 59.0 | 52.0 | 54.80 | 39.2 | 200 | 400 | IS 3025(P 24):1986 |
| 12. | Nitrate as NO ₃ , mg/l | 7.2 | 7.9 | 8.4 | 7.5 | 8.0 | 7.8 | 45 | No. Relax | IS 3025(P 34):1988 |
| 13. | Alkalinity as CaCO ₃ , mg/l, | 15.0 | 16.0 | 5.8 | 4.8 | 7.0 | 418 | 200 | 600 | IS 3025(P 23):1983 |
| 14. | Lead as Pb, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | B.D.L. | 0.01 | No. Relax | IS 3025(P 47):1994 |
| 15. | Zinc as Zn, mg/l, | 0.19 | 0.12 | 0.13 | 0.2 | 0.18 | 0.19 | 5 | 15 | IS 3025(P 42):1992 |
| 16. | Iron a Fe, mg/l | 0.13 | 0.20 | 0.24 | 0.22 | 0.25 | 0.12 | 1.0 | No. Relax | IS 3025(P 53):2003 |
| 17. | Copper as Cu, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | B.D.L. | 0.05 | 1.5 | IS3025 (P 42):1992 |
| 18. | Mercury as Hg, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | B.D.L. | 0.001 | No. Relax | IS 3025(P 48):1994 |
| 19. | Cadmium as Cd, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | B.D.L. | 0.003 | No. Relax | IS 3025(P 41):1992 |
| 20. | Nickel as Ni, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | B.D.L. | 0.02 | [°] No. Relax | IS 3025(P 37):1992 |
| 21. | Arsenic as As, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | B.D.L. | 0.01 | No. Relax | IS 3025(P 37):1988 |
| 22. | Cyanide as CN, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | B.D.L. | 0.05 | No. Relax | IS 3025(P 27):1986 |
| 23. | Total Chromium as Cr. mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | B.D.L. | 0.05 | No. Relax | IS 3025(P 52):2003 |

Sr. Chemist Aditi R&D Services



Technical Manager Aditi R&D Services, Sindri

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| ISO/II | ADITI R&D SE Testing Labora NABL ACCREDIT (A Constituent Board of Quality EC 17025:2017, ISO 9001:2015,ISO (O | TED Council of Inc | dia) 2018 Certified | Website: aditimo Phone: 0326-29 Fax: 0326-2952 | I Àrea, Dist Dhanbad 3107 aditi@gmail.com dservices.com 52377 (O), * |
|--|---|--|---|---|---|
| Ref. No.: | - ARDS/24-25/AAQ/1 | | Dat | e: 19/02/2025 | 5 |
| | TEST REPORT OF | | IR QUALITY | | |
| | TATA S JAMAD DIST | OBA GROU | | | |
| | | | e:- 29/05/2024 | | |
| Da | te of Sample Collection : 12/02/20 | 25 To 13/02/2 | 025 | | |
| | And the second se | | | | |
| | te of Testing : 14/02/20 st Procedure : As per IS | 25 To 18/02/3 -5182 | 2025 | | |
| | st Procedure : As per IS <u>TEST</u> | -5182 RESULTS | | | |
| | st Procedure : As per IS TEST LOCATION - 6 & 7 | -5182 RESULTS PITS COLLIE | RY OFFICE | | |
| Te | st Procedure : As per IS <u>TEST</u> LOCATION - 6 & 7 Avg. Ambient Temperature | -5182 RESULTS PITS COLLIE 29 ⁰ C | RY OFFICE Avg. Humid | | 0.75 |
| Te SI No. | st Procedure : As per IS <u>TEST</u> LOCATION - 6 & 7 Avg. Ambient Temperature Particulars | -5182 RESULTS PITS COLLIE 29 ⁰ C Value | RY OFFICE Avg. Humid NAAQ - CPC | BSTANDAR | 0.75 |
| Te SI No. 1. | st Procedure : As per IS <u>TEST</u> LOCATION - 6 & 7 Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ | -5182 RESULTS PITS COLLIE 29 ⁰ C Value 79.78 | RY OFFICE Avg. Humid NAAQ - CPC 100 | B STANDAR | 0.75 |
| Te SI No. | st Procedure : As per IS <u>TEST</u> LOCATION - 6 & 7 Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ | -5182 RESULTS PITS COLLIE 29 ⁰ C Value 79.78 46.06 | RY OFFICE Avg. Humid NAAQ - CPC 100 60 | B STANDAR) µg/m³ µg/m³ | 075 |
| Te SI No. 1. 2. | st Procedure : As per IS <u>TEST</u> LOCATION - 6 & 7 Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ | -5182 RESULTS PITS COLLIE 29 ⁰ C Value 79.78 46.06 18.33 | RY OFFICE Avg. Humid NAAQ - CPC 100 60 80 | CB STANDAR) µg/m ³ µg/m ³ µg/m ³ | 075 |
| Te SI No. 1. 2. 3. | st Procedure : As per IS <u>TEST</u> LOCATION - 6 & 7 Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ | -5182 RESULTS PITS COLLIE 29 ⁰ C Value 79.78 46.06 18.33 26.74 | RY OFFICE Avg. Humid NAAQ - CPC 100 60 80 80 | CB STANDAR) µg/m ³ µg/m ³ µg/m ³ µg/m ³ | 075 |
| Te SI No. 1. 2. 3. 4. | st Procedure : As per IS <u>TEST</u> LOCAT/ON - 6 & 7 Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ Ozone, µg/m ³ | -5182 RESULTS PITS COLLIE 29°C Value 79.78 46.06 18.33 26.74 15.42 | RY OFFICE Avg. Humid NAAQ - CPC 100 60 80 80 80 180 | CB STANDAR) µg/m ³ µg/m ³ µg/m ³ µg/m ³ µg/m ³ | 075 |
| Te SI No. 1. 2. 3. 4. 5. 6. | st Procedure : As per IS <u>TEST</u> LOCAT/ON - 6 & 7 Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ Ozone, µg/m ³ NH ₃ , µg/m ³ | -5182 RESULTS PITS COLLIE 29°C Value 79.78 46.06 18.33 26.74 15.42 12.81 | RY OFFICE Avg. Humid NAAQ - CPC 100 60 80 80 180 400 | 2B STANDAR µg/m ³ µg/m ³ µg/m ³ µg/m ³ µg/m ³ µg/m ³ | 075 |
| Te SI No. 1. 2. 3. 4. 5. | st Procedure : As per IS <u>TEST</u> LOCATION - 6 & 7 Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ Ozone, µg/m ³ NH ₃ , µg/m ³ CO, mg/m ³ | -5182 RESULTS PITS COLLIE 29°C Value 79.78 46.06 18.33 26.74 15.42 12.81 0.74 | RY OFFICE Avg. Humid NAAQ - CPC 100 60 80 80 180 400 4 n | 2B STANDAR 9 µg/m ³ µg/m ³ µg/m ³ µg/m ³ µg/m ³ µg/m ³ µg/m ³ | 075 |
| Te SI No. 1. 2. 3. 4. 5. 6. 7. | st Procedure : As per IS <u>TEST</u> LOCAT/ON - 6 & 7 Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ Ozone, µg/m ³ NH ₃ , µg/m ³ CO, mg/m ³ Pb, µg/m ³ | -5182 RESULTS PITS COLLIE 29°C Value 79.78 46.06 18.33 26.74 15.42 12.81 0.74 BDL | RY OFFICE Avg. Humid NAAQ - CPC 100 60 80 80 180 400 4 n 1 µ | 2B STANDAR 9 µg/m ³ µg/m ³ µg/m ³ µg/m ³ µg/m ³ ng/m ³ µg/m ³ | 075 |
| Te SI No. 1. 2. 3. 4. 5. 6. 7. 8. | st Procedure : As per IS <u>TEST</u> LOCATION - 6 & 7 Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ Ozone, µg/m ³ NH ₃ , µg/m ³ CO, mg/m ³ | -5182 RESULTS PITS COLLIE 29°C Value 79.78 46.06 18.33 26.74 15.42 12.81 0.74 BDL BDL | RY OFFICE Avg. Humid NAAQ - CPC 100 60 80 80 180 400 4 n 1 µ 6 n | CB STANDAR µg/m ³ µg/m ³ µg/m ³ µg/m ³ µg/m ³ µg/m ³ µg/m ³ µg/m ³ µg/m ³ | 0.75 |
| Te SI No. 1. 2. 3. 4. 5. 6. 7. 8. 9. | st Procedure : As per IS <u>TEST</u> LOCATION - 6 & 7 Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ Ozone, µg/m ³ NH ₃ , µg/m ³ CO, mg/m ³ Pb, µg/m ³ As, ng/m ³ | -5182 RESULTS PITS COLLIE 29°C Value 79.78 46.06 18.33 26.74 15.42 12.81 0.74 BDL | RY OFFICE Avg. Humid NAAQ - CPC 100 60 80 80 180 400 4 n 1 µ 6 n 20 | 2B STANDAR 9 µg/m ³ µg/m ³ µg/m ³ µg/m ³ µg/m ³ ng/m ³ µg/m ³ | 0.75 |

Sr. Aditi R&D Services



Technical Manager Aditi R&D Services, Sindri

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|-------|-----------|--|--|---|---|
| | Ref. No.: | - ARDS/24-25/ AAQ/2 | | Date: | 19/02/2025 |
| | | TEST REPORT OF | | | 1010212020 |
| | • Da | DIST ork Order Ref. NO.: : 4700126 te of Sample Collection : 12/02/20 | 6557/932 Dat 025 to 13/02/ 025 to 18/02/ | JHARKHAND) e:- 29/05/2024 2025 | |
| | | | RESULTS | | |
| | - | LOCATION - OFFICERS | | Canada a construction of the | |
| | CINA | Avg. Ambient Temperature | 29°C | Avg. Humidity | Concerns and the second se |
| | SI No. | Particulars | Value | NAAQ - CPCB | |
| | 2. | Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ |), μg/m ³ 39.29 17.79 | | g/m ³ |
| | 3. | SO2, µg/m ³ | | | /m ³ |
| | 4. | NO ₂ , µg/m ³ | | | /m ³ • |
| | 5. | Ozone, µg/m ³ | 25.32 | 80 µg | |
| | 6. | NH ₃ , µg/m ³ | 13.09 | 180 µ 400 µ | |
| | 7. | CO, mg/m ³ | 0.67 | 400 µ 4 mg/ | |
| | 8. | Pb, μg/m ³ | BDL | 1 µg/ | |
| | | | | - HA | |

Sr. Chemist

Aditi R&D Service

As, ng/m³

Ni, ng/m³

Benzene, µg/m3

NOTE: BDL - Below Detection Limit

Benzoapyrene ng/m³

9.

10.

11.

12.



BDL

BDL

BDL

BDL

Technical Manager Aditi R&D Services, Sindri

6 ng/m³

20 ng/m3

5 µg/m³

1 ng/m³

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|---------|--|--|
| Re | . No.: - ARDS/24-25/ AAQ/3 | Date: 19/02/2025 |
| | TEST REPORT OF AMBIENT AIR | QUALITY |
| • | Name of the industry : M/S TATA STEEL, JAN TATA STEEL LIMITE JAMADOBA GROUP DIST DHANBAD (JH | D PLANT, |
| | Work Order Ref. NO. : 4700126557/932 Date:- | 29/05/2024 |
| • | Date of Sample Collection : 11/02/2025 to 12/02/202 | 25 |
| • | Date of Testing : 14/02/2025 to 18/02/202 | 25 |
| • | Test Procedure : As per IS-5182 | |
| | TEST RESULTS | |

| | Avg. Ambient Temperature | 29°C | Avg. Humidity | 28% |
|--------|-------------------------------------|-------|-----------------------|-----|
| SI No. | Particulars | Value | NAAQ - CPCB STAND | ARD |
| 1. | Particulate Matter (PM10), µg/m3 | 82.45 | 100 µg/m ³ | |
| 2. | Particulate Matter (PM2.5), µg/m3 | 46.79 | 60 µg/m ³ | 2 |
| 3. | SO ₂ , µg/m ³ | 20.69 | 80 µg/m ³ | |
| 4. | NO ₂ , µg/m ³ | 28.46 | 80 µg/m ³ | |
| 5. | Ozone, µg/m³ | 17.89 | 180 µg/m ³ | |
| 6. | NH ₃ , µg/m ³ | 15.92 | 400 µg/m ³ | |
| 7. | CO, mg/m ³ | 0.89 | 4 mg/m ³ | |
| 8. | Pb, µg/m ³ | BDL | 1 µg/m ³ | - |
| 9. | As, ng/m ³ | BDL | 6 ng/m ³ | |
| 10. | Ni, ng/m ³ | BDL | 20 ng/m ³ | |
| 11. | Benzene, µg/m ³ | BDL | 5 µg/m ³ | - |
| 12. | Benzoapyrene ng/m ³ | BDL | 1 ng/m ³ | - |

NOTE: BDL - Below Detection Limit

Sr. Chemist Aditi R&D Service



Technical Manager Aditi R&D Services, Sindri

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| AS S | | ADITI R&D SE Testing Laborat NABL ACCREDITI (A Constituent Board of Quality O C 17025:2017, ISO 9001:2015,ISO (OH | ED Council of Ind | ia) | P.O Dom Jharkhand Email ID: s Website: a Phone: 032 Fax: 0326- | ustrial Årea, garh, Dist Dr I - 828107 sindriaditi@gm ditimdservices 26-2952377 ((| ail.com s.com D), L |
|------|---|--|--|--|--|---|---------------------------|
| | Ref. No.: · | ARDS/24-25/ AAQ/4 | | Da | te: 19/02/ | /2025 | |
| | | TEST REPORT OF A | MBIENT A | R QUALITY | | | |
| | | ork Order Ref. NO.: : 4700126 | 557/932 Date | JHARKHAND) e:- 29/05/2024 | 8 | | |
| | • Da | st Procedure : As per IS | 25 to 18/02/3 3-5182 RESULTS | 2025 | | | |
| | • Da | te of Testing : 14/02/20 st Procedure : As per IS <u>TEST I</u> LOCATION - TATA | 25 to 18/02/2 5-5182 RESULTS A CENTRAL I | 2025 HOSPITAL | | 201/ | |
| | • Da • Te: | te of Testing : 14/02/20 st Procedure : As per IS <u>TEST I</u> LOCATION – TATA Avg. Ambient Temperature | 25 to 18/02/2 5-5182 RESULTS CENTRAL 1 29°C | 2025 HOSPITAL Avg. Humi | State State State State | 28% | |
| | Da Tes SI No. | te of Testing : 14/02/20 st Procedure : As per IS <u>TEST I</u> LOCATION – TATA Avg. Ambient Temperature Particulars | 25 to 18/02/2 5-5182 RESULTS A CENTRAL I 29°C Value | 10SPITAL Avg. Humi NAAQ - CP | CB STAN | | |
| | Da Tes SI No. 1. | te of Testing : 14/02/20 st Procedure : As per IS <u>TEST I</u> LOCATION – TATA Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ | 25 to 18/02/3 S-5182 RESULTS CENTRAL 1 29°C Value 66.31 | 10SPITAL Avg. Humi NAAQ - CP 10 | CB STAN 0 µg/m ³ | NDARD | |
| | Da Tes SI No. 1. 2. | te of Testing : 14/02/20 st Procedure : As per IS <u>TEST</u> LOCATION – TATA Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ | 25 to 18/02/2 S-5182 RESULTS CENTRAL I 29°C Value 66.31 36.81 | 10SPITAL Avg. Humi NAAQ - CP 10 | CB STAN 0 µg/m ³ 0 µg/m ³ | | |
| | Da Tes SI No. 1. | te of Testing : 14/02/202 st Procedure : As per IS <u>TEST I</u> LOCATION - TATA Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ | 25 to 18/02/3 S-5182 RESULTS CENTRAL 1 29°C Value 66.31 | HOSPITAL Avg. Humi NAAQ - CP 10 60 80 | CB STAN O µg/m ³ O µg/m ³ O µg/m ³ | NDARD | |
| | Da Tes SI No. 1. 2. 3. 4. | te of Testing : 14/02/20 st Procedure : As per IS <u>TEST I</u> LOCATION - TATA Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ | 25 to 18/02/3 S-5182 RESULTS CENTRAL 1 29°C Value 66.31 36.81 15.56 25.06 | Avg. Humi NAAQ - CP 10 60 80 80 80 | CB STAN 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ | NDARD | |
| | Da Tes SI No. 1. 2. 3. | te of Testing : 14/02/202 st Procedure : As per IS <u>TEST I</u> LOCATION – TATA Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ Ozone, µg/m ³ | 25 to 18/02/3 S-5182 A CENTRAL I 29°C Value 66.31 36.81 15.56 | 2025 HOSPITAL Avg. Humi NAAQ - CP 10 60 80 80 80 80 81 81 | CB STAN 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ | NDARD | |
| | Da Tes SI No. 1. 2. 3. 4. 5. | te of Testing : 14/02/20 st Procedure : As per IS <u>TEST I</u> LOCATION - TATA Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ | 25 to 18/02/2 S-5182 A CENTRAL I 29°C Value 66.31 36.81 15.56 25.06 16.86 | 2025 HOSPITAL Avg. Humi NAAQ - CP 10 60 80 80 80 80 80 80 80 80 80 80 80 80 80 | CB STAN 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ | NDARD | |
| | Da Tes SI No. 1. 2. 3. 4. 5. 6. | te of Testing : 14/02/20 st Procedure : As per IS <u>TEST I</u> LOCATION - TATA Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ NO ₂ , µg/m ³ NH ₃ , µg/m ³ | 25 to 18/02/3 S-5182 RESULTS CENTRAL 1 29°C Value 66.31 36.81 15.56 25.06 16.86 14.85 | 2025 HOSPITAL Avg. Humi NAAQ - CP 10 60 80 80 80 80 80 80 80 80 80 80 80 80 80 | CB STAN 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ | NDARD | |
| | Da Tes SI No. 1. 2. 3. 4. 5. 6. 7. | te of Testing : 14/02/20 st Procedure : As per IS <u>TEST I</u> LOCATION - TATA Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ Ozone, µg/m ³ NH ₃ , µg/m ³ CO, mg/m ³ | 25 to 18/02/3 S-5182 RESULTS CENTRAL 1 29°C Value 66.31 36.81 15.56 25.06 16.86 14.85 0.79 | 2025 HOSPITAL Avg. Humi NAAQ - CP 10 60 80 80 80 80 80 80 80 80 80 80 80 80 80 | CB STAN 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ mg/m ³ | NDARD | |
| | Da Tes SI No. 1. 2. 3. 4. 5. 6. 7. 8. | te of Testing : 14/02/20 st Procedure : As per IS <u>TEST I</u> LOCATION - TATA Avg. Ambient Temperature Particulars Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ Ozone, µg/m ³ NH ₃ , µg/m ³ CO, mg/m ³ Pb, µg/m ³ | 25 to 18/02/2 S-5182 RESULTS CENTRAL 1 29°C Value 66.31 36.81 15.56 25.06 16.86 14.85 0.79 BDL | 2025 HOSPITAL Avg. Humi NAAQ - CP 10 60 80 80 80 80 80 80 80 80 80 80 80 80 80 | CB STAN 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ mg/m ³ µg/m ³ | NDARD | |
| | Da Tes SI No. 1. 2. 3. 4. 5. 6. 7. 8. 9. | te of Testing : 14/02/20 st Procedure : As per IS <u>TEST I</u> LOCATION - TATA Avg. Ambient Temperature Particulars Particulate Matter (PM ₁₀), µg/m ³ Particulate Matter (PM _{2.5}), µg/m ³ SO ₂ , µg/m ³ NO ₂ , µg/m ³ Ozone, µg/m ³ NH ₃ , µg/m ³ CO, mg/m ³ Pb, µg/m ³ As, ng/m ³ | 25 to 18/02/3 S-5182 RESULTS CENTRAL 1 29°C Value 66.31 36.81 15.56 25.06 16.86 14.85 0.79 BDL BDL | 2025 HOSPITAL Avg. Humi NAAQ - CP 10 60 80 80 80 80 80 80 80 80 80 80 80 80 80 | CB STAN 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ 0 µg/m ³ mg/m ³ i ng/m ³ | NDARD | |

emis Aditi R&D Services



Technical Manager Aditi R&D Services, Sindri

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| | | RTO | - NOIS | | | | ila) 2018 Certifi EVEL MC | Fax: 0326- | 471358492, 0943 | | |
|----------------------------------|---|---|--|--|---|---|--|--|--|--|--|
| Ref. No. & | Date | | - | _ | - | NAME | | SS OF THE CL | IENT | | |
| 5/NOISE/11 | Date | : 19/02 | /2025 | - | -10 | COLUMN TWO IS NOT | | | | | |
| ate of Mon | itorin | ng | | TA | TA ST | | | | Contraction of the second | | |
| 2/2025 To 1 | 13/02/ | /2025 | | Ar | nbient | A H | verage | Weather Condition | Status of the plant | | |
| | | | | | 29 | | 30 | Clear | Running | | |
| Date:- 29/05 | 5/2024 | 4 | MON | NITO | RING | RESU | TS | | | | |
| | Day Time (6 AM to 10 PM) Avg. dB(A) | | | Night Time (10 PM to 6 AM) Avg. dB(A) | | | o 6 AM) | Noise level (Ambient standar for Industrial Area as per CPCB Noise Pollution (Regulation and Control) (Amendment) Rules, 2000 notified vide S.O. 1046(E) Dt. 22.11.2020 Limit in dB(A) Leg | | | |
| | | | | | | | | Day | Night | | |
| | MAX MIN | | N AVG. dB(| | Contraction of the second s | MIN | AVERAGE dB(A) Leq | Industrial | Industrial Area | | |
| | | | 2-4 | | | | | Area | | | |
| | .68 | 57.01 | 60.71 | 1 | 52.08 | 44.21 | 49.73 | 76 | . 70 | | |
| | 79 | 54.49 | 58.69 | 9 | 49.14 | 42.63 | 47.01 | | 70 | | |
| | | | | | ti | | | Residential | Residential Area | | |
| | 07 | 58.87 | 57.69 | 9 | 47.88 | 44.83 | 46.62 | 65 | 55 | | |
| | | | | | | | | Silence | Silence Zone | | |
| | .56 | 49.5 | 49.06 | 5 | 41.37 | 38.22 | 40.07 | 50 | 40 | | |
| k iccontractions interview | 25/NOISE/11 Date of Mon 02/2025 To k Order 4700 Date:- 29/05 http://www.communication bace of itoring lon M/ GROUP its y Office 60. Pits y Office 56. dih | 25/NOISE/1Date Date of Monitoria 02/2025 To 13/02 A Order 47001265 Date:- 29/05/202 Date:- 29/05/202 A Order 47001265 Date:- 29/05/202 A Order 47001265 A Order 47001265 Date:- 29/05/202 A Order 47001265 A Order 47000000000000000000000000000000000000 | 25/NOISE/1Date: 19/02 Date of Monitoring 02/2025 To 13/02/2025 x Order 4700126557/932 Date:- 29/05/2024 ace of itoring ION MAX ION MAX ION MAX ION GROUP ION Second 56.07 58.87 dih entral 485.56 49.5 | 25/NOISE/1Date: 19/02/2025 Date of Monitoring 02/2025 To 13/02/2025 & Order 4700126557/932 Date:- 29/05/2024 MOR acc of itoring ION MAX ION GROUP MAX MIN Avg. dB(A) Ion MAX GROUP 62.68 57.01 60.79 54.49 S8.61 Colony 56.07 58.87 57.61 dih 48.56 49.5 | 25/NOISE/1Date: 19/02/2025 TA Date of Monitoring TA 02/2025 To 13/02/2025 Ar Corder 4700126557/932 Date:- 29/05/2024 Date:- 29/05/2024 MONITO Ince of itoring Day Time (6 AM to 10 PM) Avg. dB(A) ION MAX MIN Avg. dB(A) ION 62.68 57.01 60.71 Pits 60.79 54.49 58.69 Y Office 56.07 58.87 57.69 Gentral 48.56 49.5 49.06 | 25/NOISE/1Date: 19/02/2025 TATA ST Date of Monitoring TATA ST 02/2025 To 13/02/2025 Avg. Ambient Temperatur (°C) k Order 4700126557/932 Date:- 29/05/2024 29 MONITORING MONITORING acce of itoring Day Time (6 AM to 10 PM) Avg. dB(A) MAX ION MAX MIN AVG. dB(A) ION 62.68 57.01 60.71 52.08 Pits y Office 60.79 54.49 58.69 49.14 Colony 56.07 58.87 57.69 47.88 entral 48.56 49.5 49.06 41.37 | 25/NOISE/1Date: 19/02/2025 M/S Date of Monitoring TATA STEEL L 02/2025 To 13/02/2025 Avg. Ambient Temperature (°C) x Order 4700126557/932 29 Date:- 29/05/2024 MONITORING RESUL itoring Day Time (6 AM to 10 PM) (10 PM t Avg. dB(A) Avg. dB(A) MAX ION MAX GROUP 62.68 57.01 office 60.79 54.49 58.69 49.14 42.63 office 56.07 58.87 57.69 47.88 44.83 dih 48.56 49.5 49.06 41.37 38.22 | Z5/NOISE/1Date: 19/02/2025 M/S TATA STEE Date of Monitoring M/S TATA STEE D02/2025 To 13/02/2025 Avg. Ambient Temperature (°C) Average Humidity (%) 02/2025 To 13/02/2025 Avg. Ambient Temperature (°C) Average Humidity (%) 02/2025 To 13/02/2025 Avg. Avg. Bate: 29/05/2024 Average Humidity (%) 02/2025 To 13/02/2025 Avg. Ambient Temperature (°C) Average Humidity (%) 02/2025 To 13/02/2024 DIST DHANBAD DIST DHANBAD (°C) Average Humidity (%) 02/2025 To 13/02/2024 Avg. DIST DHANBAD (°C) Average Humidity (%) 02/2025 To 13/02/2024 DIST DHANBAD (°C) Average Humidity (%) 02/2025 To 13/02/2024 DIST DHANBAD (°C) Average Humidity (%) 02/2025 To 13/02/2024 DIST DHANBAD (°C) Average Humidity (%) 02/2024 Day Time (6 AM to 10 PM) Avg. dB(A) Night Time (10 PM to 6 AM) Avg. dB(A) 10N MAX MIN Average (B(A) 10N MAX MIN Average (B(A) 10N 62.68 57.01 60.71 52.08 44.21 10N 56.07 58.87 | 25/NOISE/1Date: 19/02/2025 M/S TATA STEEL, JAMADOBA GR DIST DHANBAD (JHARKHAI) 02/2025 To 13/02/2025 Avg. (°C) Average (°C) Average Humidity (%) Weather Condition Night Time (°C) Noise level (/ (%) Noise level (/ for Industr CPCB No (Regulation (A montroring) Noise level (A for Industr (%) Noise level (A for Industr CPCB No (Regulation (A montroring) Noise level (A for Industr CPCB No (CPC No (A montroring) Noise level (A for Industr CPCB No (CPC No (A mendme notified via Day Time) ION (6 AM to 10 PM) Avg. dB(A) Night Time (10 PM to 6 AM) Avg. dB(A) Noise level (A for Industr CPCB No (CPC No (A mendme notified via Day Time) ION (GROUP MAX MIN AVG. dB(A) Leq MAX MIN AVERAGE dB(A) Leq Industrial Area ION (GROUP MAX MIN AVG. dB(A) Leq MAX MIN AVERAGE dB(A) Leq Industrial Area ION (S Colony 56.07 58.87 57.69 47.88 44.83 46.62 65 Glane (Colony Silence Zone entral 48.56 | | |
| | | | Annexure- |
|---------|--------------------------------------|---|--|
| A R D S | Testin NABL (A Constituent Boa | ACCREDITED rd of Quality Council of India) :2015,ISO (OHSAS) 45001:2018 Certified | Plot No I-B-17 (P) Sindri, Industrial Area, P.O Domgarh, Dist Dhanbad Jharkhand - 828107 Email ID: sindriaditi@gmail.com Website: aditirndservices.com Phone: 0326-2952377 (O), Fax: 0326-2952377 Mobile: 09471358492, 09431512608 |
| Re | f. No.: - ARDS/24-25/MINER./1 | D | ate: 19/02/2025 |
| | TEST REPORT | T OF MINERALOGICAL COMPOSI | TION |
| | <u>0</u> | F PARTICULATE MATTER | |
| • | Name of the industry | : M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED JAMADOBA GROUP PLANT, DIST DHANBAD (JHARKHAND | » |
| | Work Order Ref. NO. | : 4700126557/932 Date:- 29/05/2024 | ·*·· |
| • | and a second second second second | n : 12/02/2025 and 13/02/2025 | |
| • | Date of Testing | : 14/02/2025 To 18/02/2025 | |
| | | TEST RESULTS | |
| | SI No. Particulars | Mineralogical C | omposition (%) |

| SI No. | Particulars | Mineralogical Composition (| | | | |
|--------|----------------------------|-----------------------------|------|--------------------------------|------|--|
| | | SiO ₂ | FeO | Al ₂ O ₃ | ĊaO | |
| 1. | 6 & 7 Pits Colliery Office | 1.81 | 0.13 | 1.34 | 2.70 | |
| 2. | Tata Central Hospital | 1.78 | 0.11 | 1.28 | 2.24 | |

Sr. Chemist Aditi R&D Services



Technical Manager Aditi R&D Services, Sindri

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| IS | ADITI R&D Testing La NABL ACC (A Constituent Board of C O/IEC 17025:2017, ISO 9001:2015,I | boratory REDITED tuality Counc | il of India) | P.O - Jhan Emai Web Phon | No I-B-17 (P) ri, Industrial Area, Domgarh, Dist Dhanbai khand - 828107 il ID: sindriaditi@gmail.com site: aditimdservices.com re: 0326-2952377 (O), 0326-2952377 le: 09471358492, 094315 |
|---|--|--|--|---|---|
| Ref. | No.: - ARDS/24-25/SW/1 | | | Date: 1 | 9/02/2025 |
| | TEST REPO | RT OF SU | RFACE V | VATER | |
| | Name of the industry : N | S TATA ST | TEEL, JAM | ADOBA, | |
| | т | ATA STEE | L LIMITED | | |
| | J | AMADOBA | GROUP P | LANT, | |
| | D | IST DHAN | NBAD (JHA | RKHAND) | |
| | Work Order Ref. NO.: : | 4700126 | 557/932 Da | te:- 29/05/2024 | |
| | | 24 2000 | dar River I | Jp Stream | |
| • | Sample Code : | | | and the second se | |
| • | | 2. Damo | dar River | own Stream | |
| • | Date of Sample Collection: Date of Testing : | 2. Damo 11/02/20 14/02/20 | dar River I 25 25 To 18/0 | own Stream 2/2025 | 5.00 |
| • | Date of Sample Collection: Date of Testing : Test : | 2. Damo 11/02/20 14/02/20 pH, TDS <u>TEST RESI</u> | odar River E 125 125 To 18/0 9, Turbidity, <u>ULT</u> | own Stream 2/2025 DO, BOD, CI, | , F, SO₄ |
| SI. No. | Date of Sample Collection: Date of Testing : | 2. Damo 11/02/20 14/02/20 pH, TDS TEST RESI VAI Damodar River Up | odar River E 25 25 To 18/0 5, Turbidity, ULT LUE Damodar River Dn | own Stream 2/2025 | F, SO₄ Test Method |
| 100000000000000000000000000000000000000 | Date of Sample Collection: Date of Testing : Test : | 2. Damo 11/02/20 14/02/20 pH, TDS <u>TEST RESI</u> VAI Damodar | odar River E 25 25 To 18/0 5, Turbidity, ULT LUE Damodar | 2/2025 DO, BOD, CI, Limit as per IS 2296 | Test Method |
| No. | Date of Sample Collection: Date of Testing : Test : PARAMETERS OF TEST | 2. Damo 11/02/20 14/02/20 pH, TDS TEST RESI VAI Damodar River Up Stream | odar River D 25 25 To 18/0 5, Turbidity, ULT LUE Damodar River Dn Stream | 2/2025 DO, BOD, CI, Limit as per IS 2296 Class - C | Test Method IS-3025 (P-11): 1983 |
| No. 1. | Date of Sample Collection: Date of Testing : Test : PARAMETERS OF TEST PH | 2. Damo 11/02/20 14/02/20 pH, TDS TEST RESI VAI Damodar River Up Stream 7.9 | odar River E 25 25 To 18/03 5, Turbidity, ULT LUE Damodar River Dn Stream 7.6 | Limit as per IS 2296 Class - C 6.5 -8.5 | Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984 |
| No. 1. 2. | Date of Sample Collection: Date of Testing : Test : PARAMETERS OF TEST pH Total Dissolved Solids, mg/I | 2. Damo 11/02/20 14/02/20 pH, TDS TEST RESI VAI Damodar River Up Stream 7.9 434 | odar River E 25 25 To 18/0 5, Turbidity, ULT LUE Damodar River Dn Stream 7.6 532 | Limit as per IS 2296 Class - C 6.5 -8.5 | Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984 IS-3025 (P-10):1984 |
| No. 1. 2. 3. | Date of Sample Collection: Date of Testing : Test : PARAMETERS OF TEST PH Total Dissolved Solids, mg/l Turbidity, NTU | 2. Damo 11/02/20 14/02/20 pH, TDS TEST RESI VAI Damodar River Up Stream 7.9 434 1 | odar River E 25 25 To 18/03 5, Turbidity, ULT LUE Damodar River Dn Stream 7.6 532 1 | 2/2025 DO, BOD, CI, Limit as per IS 2296 Class - C 6.5 -8.5 1500 | Test |
| No. 1. 2. 3. 4. | Date of Sample Collection: Date of Testing : Test : PARAMETERS OF TEST PH Total Dissolved Solids, mg/l Turbidity, NTU Dissolved Oxygen, mg/l Bio chemical Oxygen | 2. Damo 11/02/20 14/02/20 pH, TDS TEST RESI VAI Damodar River Up Stream 7.9 434 1 5.1 | odar River E 25 25 To 18/0 5, Turbidity, ULT Damodar River Dn Stream 7.6 532 1 5.2 | 2/2025 DO, BOD, CI, Limit as per IS 2296 Class - C 6.5 -8.5 1500 - | Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984 IS-3025 (P-10):1984 IS-3025 (P-38):1989 IS-3025 (P-44):1994 |
| No. 1. 2. 3. 4. 5. | Date of Sample Collection: Date of Testing : Test : PARAMETERS OF TEST PH Total Dissolved Solids, mg/l Turbidity, NTU Dissolved Oxygen, mg/l Bio chemical Oxygen Demand, mg/l | 2. Damo 11/02/20 14/02/20 pH, TDS TEST RESI VAI Damodar River Up Stream 7.9 434 1 5.1 1.7 | odar River D 25 25 To 18/03 5, Turbidity, ULT LUE Damodar River Dn Stream 7.6 532 1 5.2 2.2 | 2/2025 DO, BOD, CI, Limit as per IS 2296 Class - C 6.5 -8.5 1500 - 4.0 (Min) 3.0 | Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984 IS-3025 (P-10):1984 IS-3025 (P-38):1989 |

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| R D | 5 | NAE onstituent Bo | ng Labora BL ACCREDI | atory TED Council of | f India) | S P. J. E V P | lot No I-B-17 (P) indri, Industrial Area, O Domgarh, Dist Dhanba harkhand - 828107 mail ID: sindriaditi@gmail.co /ebsite: aditimdservices.com hone: 0326-2952377 (O), ax: 0326-2952377 lobile: 09471358492, 094315 | m |
|-----------------------|--|--|--|--|--|--|---|---|
| | Ref. No.: - ARDS/ | 24-25/MWD/1 | | | | Date | : 21/02/2025 | |
| | | TEST REP | ORTOF | INE WA | TER DIS | CHARG | E | |
| | Name of th | | T J D | I/S TATA S ATA STEI AMADOB/ IST DHA | EL LIMITE A GROUP ANBAD (JI | ED PLANT, HARKHAI | ND) | |
| | Work Orde Sample C | r Ref. NO.: ode | : 4 : 1 2 3 4 | . 3 Pit . 6 & 7 | Jamadob Jamadob Pits Colli | a Colliery a Colliery ery | | |
| | | | - | . Digw | adih Colli | ery | | |
| | Date of Sa Date of Te Test | ample Colle esting | ction: 1 : 1 : p | 1/02/2025 4/02/2025 H, TDS, TS | To 12/02/ To 18/02/ SS, BOD, 0 | 2025 2025 | & GREASE. | |
| 51 | Date of Te Test | | ction: 1 : 1 : p <u>TES</u> | 1/02/2025 4/02/2025 H, TDS, TS T RESULT | To 12/02/ To 18/02/ SS, BOD, 0 | 2025 2025 COD, OIL | | |
| SI. No. | Date of Te | | ction: 1 : 1 : p | 1/02/2025 4/02/2025 H, TDS, TS T RESULT | To 12/02/ To 18/02/ SS, BOD, 0 | 2025 2025 | & GREASE. Test Method | |
| | Date of Te Test PARAMETERS OF | 2 Pit Jamadoba | ction: 1 : 1 : p <u>TES</u> VALU 3 Pit Jamadoba | 1/02/2025 4/02/2025 H, TDS, TS <u>T RESULT</u> E 6 & 7 Pits | To 12/02/ To 18/02/ SS, BOD, 0 | 2025 2025 COD, OIL Limit as per IS-2296 Class B (For | Test | |
| No. | Date of Te Test PARAMETERS OF TEST PH, Total Dissolved Solids, mg/l | 2 Pit Jamadoba Colliery | ction: 1 : 1 : p <u>TES</u> VALU 3 Pit Jamadoba Colliery 7.6 | 1/02/2025 4/02/2025 H, TDS, TS <u>T RESULT</u> E 6 & 7 Pits Colliery | To 12/02/ To 18/02/ SS, BOD, 0 | 2025 2025 COD, OIL Limit as per IS-2296 Class B (For Bathing) | Test Method IS-3025 (P-11): | |
| No. 1. 2. 3. | Date of Te Test PARAMETERS OF TEST pH, Total Dissolved Solids, mg/l Total Suspended Solids, mg/l | 2 Pit Jamadoba Colliery 7.9 1209 22 | ction: 1 : 1 : p <u>TES</u> VALU <u>3 Pit</u> Jamadoba Colliery 7.6 897 25 | 1/02/2025 4/02/2025 H, TDS, TS <u>T RESULT</u> E 6 & 7 Pits Colliery 7.9 624 27 | To 12/02/ To 18/02/ SS, BOD, 0 Digwadih Colliery 7.8 987 29 | 2025 2025 COD, OIL Limit as per IS-2296 Class B (For Bathing) 6.5-8.5 | Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984 IS-3025(P-17) : 1984 | |
| No. 1. 2. | Date of Te Test PARAMETERS OF TEST pH, Total Dissolved Solids, mg/l Total Suspended | 2 Pit Jamadoba Colliery 7.9 1209 | ction: 1 : 1 : p <u>TES</u> VALU 3 Pit Jamadoba Colliery 7.6 | 1/02/2025 4/02/2025 H, TDS, TS <u>T RESULT</u> E 6 & 7 Pits Colliery 7.9 624 | To 12/02/ To 18/02/ SS, BOD, 0 Digwadih Colliery 7.8 987 | 2025 2025 COD, OIL Limit as per IS-2296 Class B (For Bathing) 6.5-8.5 | Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984 IS-3025(P-17) | |
| No. 1. 2. 3. | Date of Te Test PARAMETERS OF TEST PH, Total Dissolved Solids, mg/l Total Suspended Solids, mg/l Bio chemical Oxygen Demand, | 2 Pit Jamadoba Colliery 7.9 1209 22 | ction: 1 : 1 : p <u>TES</u> VALU <u>3 Pit</u> Jamadoba Colliery 7.6 897 25 | 1/02/2025 4/02/2025 H, TDS, TS <u>T RESULT</u> E 6 & 7 Pits Colliery 7.9 624 27 | To 12/02/ To 18/02/ SS, BOD, 0 Digwadih Colliery 7.8 987 29 | 2025 2025 COD, OIL Limit as per IS-2296 Class B (For Bathing) 6.5-8.5 | Test Method IS-3025 (P-11): 1983 IS-3025 (P-16): 1984 IS-3025 (P-17) : 1984 IS-3025 (P- | |



Technical Manager Aditi R&D Services, Sindri

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Sr. Chemist Aditi R&D Services

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| R D S | | Laborate ACCREDITE | D D | dia) | Plot No I-B-17 (P) Sindri, Industrial Area, P.O Domgarh, Dist Dhanbad Jharkhand - 828107 Email ID: sindriaditi@gmail.com Website: aditimdservices.com Phone: 0326-2952377 (O), Fax: 0326-2952377 Mobile: 09471358492, 094315126 | | |
|-------|--|------------------------------------|----------------------------|---|---|--|--|
| | Ref. No.: - ARDS/24-25/ETP/1 | | | D | ate: 19/02/2025 | | |
| | TEST | REPORT | OF EF | FLUENT | | | |
| | Name of the industry | TA | TA STEEL | EEL, JAMADO LIMITED GROUP PLAN IBAD (JHARKH | т, | | |
| | Work Order Ref. NO.: | : 4700126557/932 Date:- 29/05/2024 | | | | | |
| | Sample Code | : 1.6 | E.T.P. Out | et T.C.H. | | | |
| | Date of Sample Collection Date of Testing Test | : 14/ : pH | 02/2025 T | o 12/02/2025 o 18/02/2025 S, BOD, COD, C | DIL & GREASE. | | |
| SI. | PARAMETERS OF TEST | VAL | States - | Canami | Test | | |
| No. | PARAMETERS OF TEST | E.T.P. Outlet T.C.H. | E.T.P. Outlet Garage | General Standard for discharge of Environmental Pollutants, Inland Surface water by the MoEF&C | Method | | |
| 1. | pH, | 8.5 | 8.3 | 5.5-9.0 | IS-3025 (P-11): 1983 | | |
| 2. | Total Dissolved Solids, mg/l | 845 | 715 | | IS-3025 (P-16): 1984 | | |
| 3. | Total Suspended Solids, mg/l | 26 | 65 | 100 | IS-3025(P-17) : 1984 | | |
| 4. | Bio chemical Oxygen Demand, mg/l | 5.0 | 7.0 | 30 | IS-3025 (P-44):1994 | | |
| 5. | Chemical Oxygen Demand, mg/l | 40 | 56 | 250 | IS-3025 (P-58):2006 | | |
| 6. | Oil & Grease, mg/l | 1.6 | 3.2 | 10 | IS-3025 (P-39):2021 | | |

Note : BDL - Below Detection Limit

Sr Aditi R&D Services



Technical Mahager Aditi R&D Services, Sindri

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| | ADIT | | | | ES | Sindri, I P.O D | | rea, st Dhanbad |
|---|--|--|--|--|--|---|---|--|
| •) | | Testing L | aborato | ry | | | and - 8281(D: sindriadi |)7 ti@gmail.com |
| / | | | CREDITED | | | Website | | ervices.com |
| | (A Constit | tuent Board o | f Quality Co | uncil of Ind | ia) | Emr 07 | 26-295237 | 7 |
| 15 | SO/IEC 17025:2017, | ISO 9001:201 | 5,ISO (OHS/ | AS) 45001.2 | ora cerune | Mobile | 09471300 | 492, 0943151 |
| Ref. | . No.: - ARDS/24-2 | | | - | | Date: 21 | /02/2025 | |
| | | TESTR | EPORT OF | DRINKING | WATER | | | |
| | Name of the in | ndustry | JAMADO | BA GROU | | | | |
| | • Work Order R | ef. NO.: | : 4700126 | | | | | |
| | Sample Code | | 2. Ca | anteen- Ja | madoba C madoba V gwadih Co | Vashery | | |
| | Date of Samp Date of Testin | | n: 11/0 | | 7 Pits Col 12/02/20 | 25 | | |
| SI. | Test Colour, Odour, T Dissolved Solid Compound, Me Chromium, Mine PARAMETERS | Taste, Turbidii Is, Calcium, Ircury, Cadm Iral Oil, Alkalir | : y, pH, Total Copper, M ium, Arsenid ity, Aluminiu <u>TEST R</u> VAL | Hardness, li langanese, c, Cyanide, im & Boron. <u>RESULT</u> UE | ron, Chlorid Sulphate, M Lead, Zir | e, Res. Fre Nitrate, Flu nc, Total | oride, P Coliform | henolic , Total Test |
| | Test Colour, Odour, 1 Dissolved Solid Compound, Me Chromium, Mine | Taste, Turbidit Is, Calcium, rcury, Cadm | : y, pH, Total Copper, M ium, Arsenid ity, Aluminiu TEST R | Hardness, li anganese, c, Cyanide, im & Boron. RESULT UE Canteen | ron, Chlorid Sulphate, M Lead, Zir | e, Res. Fre Nitrate, Flu nc, Total | oride, P Coliform | henolic , Total |
| SI. No | Test Colour, Odour, T Dissolved Solid Compound, Me Chromium, Mine PARAMETERS OF TEST | Taste, Turbidit Is, Calcium, Froury, Cadmeral Oil, Alkalin Canteen- Jamadoba Colliery | : y, pH, Total Copper, M ium, Arsenid ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery | Hardness, li anganese, c, Cyanide, im & Boron. <u>RESULT</u> UE Canteen Digwadih Colliery | ron, Chlorid Sulphate, M Lead, Zir Canteen- 6&7 Pits Colliery | e, Res. Fre Nitrate, Flu nc, Total IS as p 10500: Desirab Ie | er IS 2012 Permi ssible | henolic , Total Test Method |
| SI. | Test Colour, Odour, T Dissolved Solid Compound, Me Chromium, Mine PARAMETERS | Taste, Turbidii Is, Calcium, Frcury, Cadm Fral Oil, Alkalin Canteen- Jamadoba | : y, pH, Total Copper, M ium, Arsenid ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba | Hardness, li anganese, c, Cyanide, im & Boron. RESULT UE Canteen Digwadih | ron, Chlorid Sulphate, M Lead, Zir Canteen- 6&7 Pits | e, Res. Fre Nitrate, Flu nc, Total IS as p 10500: Desirab | er IS 2012 Permi | henolic , Total Test Method IS 3025 (P-4):2021 |
| SI. No | Test Colour, Odour, T Dissolved Solid Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen | Taste, Turbidit Is, Calcium, Froury, Cadmeral Oil, Alkalin Canteen- Jamadoba Colliery | : y, pH, Total Copper, M ium, Arsenid ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery | Hardness, li anganese, c, Cyanide, im & Boron. <u>RESULT</u> UE Canteen Digwadih Colliery | ron, Chlorid Sulphate, M Lead, Zir Canteen- 6&7 Pits Colliery | e, Res. Fre Nitrate, Flu nc, Total IS as p 10500: Desirab Ie | er IS 2012 Permi ssible | henolic , Total Test Method IS 3025 (P-4):2021 IS 3025 (P- 5):2018 |
| SI. No 1. | Test Colour, Odour, T Dissolved Solid Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) | Taste, Turbidit Is, Calcium, ercury, Cadm eral Oil, Alkalin Canteen- Jamadoba Colliery 1 | : y, pH, Total Copper, M ium, Arsenid ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery 1 | Hardness, li anganese, c, Cyanide, im & Boron. <u>RESULT</u> UE Canteen Digwadih Colliery 1 | ron, Chlorid Sulphate, M Lead, Zir Canteen- 6&7 Pits Colliery 1 | e, Res. Fre Nitrate, Flu nc, Total IS as p 10500: Desirab Ie 5.00 Agreeabl | er IS 2012 Permi ssible 15.0 | henolic , Total Test Method IS 3025 (P-4):2021 IS 3025 (P- 5):2018 IS 3025 (P- |
| SI. No 1. 2. | Test Colour, Odour, ¹ Dissolved Solid Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour | Taste, Turbidit Is, Calcium, rrcury, Cadm rral Oil, Alkalin Canteen- Jamadoba Colliery 1 Agreeable | : y, pH, Total Copper, M ium, Arsenid ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery 1 Agreeable | Hardness, II anganese, c, Cyanide, im & Boron. <u>RESULT</u> UE Canteen Digwadih Colliery 1 Agreeable | ron, Chlorid Sulphate, M Lead, Zir Canteen- 6&7 Pits Colliery 1 Agreeable | e, Res. Fre Nitrate, Flu nc, Total IS as p 10500: Desirab Ie 5.00 Agreeabl e Agreeabl | er IS 2012 Permi ssible 15.0 Agree able Agree | henolic , Total Test Method IS 3025 (P-4):2021 IS 3025 (P- 5):2018 IS 3025 (P- 7):2017 IS 3025 (P- 7):2017 |
| SI. No 1. 2. 3. | Test Colour, Odour, T Dissolved Solid Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour Taste | Taste, Turbidit Is, Calcium, Ircury, Cadm Iral Oil, Alkalin Canteen- Jamadoba Colliery 1 Agreeable Agreeable | : y, pH, Total Copper, M ium, Arseniu ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery 1 Agreeable Agreeable | Hardness, Ir anganese, c, Cyanide, im & Boron. <u>RESULT</u> UE Canteen Digwadih Colliery 1 Agreeable Agreeable | ron, Chlorid Sulphate, M Lead, Zir Canteen- 6&7 Pits Colliery 1 Agreeable Agreeable | e, Res. Fre Nitrate, Flu nc, Total IS as p 10500: Desirab Ie 5.00 Agreeabl e Agreeabl e | er IS 2012 Permi ssible 15.0 Agree able Agree able 5.0 No. | henolic , Total Test Method IS 3025 (P-4):2021 IS 3025 (P- 5):2018 IS 3025 (P- 7):2017 IS 3025 (P- 10):1984 IS-3025 (P- |
| SI. No 1. 2. 3. | Test Colour, Odour, T Dissolved Solid Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour Taste Turbidity, NTU pH Total Hardness | Taste, Turbidit Is, Calcium, incury, Cadm ral Oil, Alkalin Canteen- Jamadoba Colliery 1 Agreeable Agreeable 2 | : y, pH, Total Copper, M ium, Arseniu ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery 1 Agreeable Agreeable 2 | Hardness, Ir anganese, c, Cyanide, im & Boron. <u>RESULT</u> UE Canteen Digwadih Colliery 1 Agreeable Agreeable | ron, Chlorid Sulphate, M Lead, Zir Canteen- 6&7 Pits Colliery 1 Agreeable Agreeable | e, Res. Fre Nitrate, Flu nc, Total IS as p 10500: Desirab Ie 5.00 Agreeabl e Agreeabl e 1.0 | er IS 2012 Permi ssible 15.0 Agree able 5.0 | henolic , Total Test Method IS 3025 (P-4):2021 IS 3025 (P- 5):2018 IS 3025 (P- 7):2017 IS 3025 (P- 10):1984 IS-3025 (P- 11):1983 IS 3025 (P- |
| SI. No 1. 2. 3. 4. 5. | Test Colour, Odour, Dissolved Solid Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour Taste Turbidity, NTU pH Total Hardness as CaCO ₃ , mg/l Chloride as CI, | Taste, Turbidit Is, Calcium, ercury, Cadmeral Oil, Alkalin Canteen- Jamadoba Colliery 1 Agreeable Agreeable 2 7.8 | : y, pH, Total Copper, M ium, Arseniu ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery 1 Agreeable Agreeable 2 7.7 | Hardness, II anganese, c, Cyanide, im & Boron. <u>RESULT</u> UE Canteen Digwadih Colliery 1 Agreeable Agreeable | ron, Chlorid Sulphate, M Lead, Zir Canteen- 6&7 Pits Colliery 1 Agreeable Agreeable 1 7.9 | e, Res. Fre Nitrate, Flu nc, Total IS as p 10500: Desirab Ie 5.00 Agreeabl e Agreeabl e 1.0 6.5-8.5 | er IS 2012 Permi ssible 15.0 Agree able Agree able 5.0 No. Relax. | henolic , Total Test Method IS 3025 (P-4):2021 IS 3025 (P- 5):2018 IS 3025 (P- 7):2017 IS 3025 (P- 10):1984 IS-3025 (P- 11):1983 IS 3025 (P- 21):2009 |
| SI. No 1. 2. 3. 4. 5. 6. | Test Colour, Odour, T Dissolved Solid Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour Taste Turbidity, NTU pH Total Hardness as CaCO ₃ , mg/l Chloride as Cl, mg/l Res. Free chlorine as Cl ₂ | Taste, Turbidit Is, Calcium, ircury, Cadm irral Oil, Alkalin Ganteen- Jamadoba Colliery 1 Agreeable 2 7.8 583.8 | : y, pH, Total Copper, M ium, Arsenid ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery 1 Agreeable 2 7.7 567.0 | Hardness, II anganese, c, Cyanide, im & Boron. <u>RESULT</u> UE Canteen Digwadih Colliery 1 Agreeable Agreeable 1 7.9 441.0 | ron, Chlorid Sulphate, M Lead, Zir Canteen- 6&7 Pits Colliery 1 Agreeable Agreeable 1 7.9 344.4 | e, Res. Fre Nitrate, Flu nc, Total IS as p 10500: Desirab Ie 5.00 Agreeabl e Agreeabl e 1.0 6.5-8.5 200 | er IS 2012 Permi ssible 15.0 Agree able Agree able 5.0 No. Relax. 600 | henolic , Total Test Method IS 3025 (P-4):2021 IS 3025 (P- 5):2018 IS 3025 (P- 7):2017 IS 3025 (P- 10):1984 IS 3025 (P- 11):1983 IS 3025 (P- 21):2009 IS 3025 (P- 32):1988 |
| SI. No 1. 2. 3. 4. 5. 6. 7. | Test Colour, Odour, T Dissolved Solid Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour Taste Turbidity, NTU pH Total Hardness as CaCO ₃ , mg/l Chloride as Cl, mg/l Res. Free chlorine as Cl ₂ mg/l Total Dissolved | Taste, Turbidit Is, Calcium, ircury, Cadm irral Oil, Alkalin Ganteen- Jamadoba Colliery 1 Agreeable 2 7.8 583.8 71.8 | : y, pH, Total Copper, M ium, Arseniu ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery 1 Agreeable 2 7.7 567.0 74.0 | Hardness, II anganese, c, Cyanide, im & Boron <u>RESULT</u> UE Canteen Digwadih Colliery 1 Agreeable Agreeable 1 7.9 441.0 75.0 | ron, Chlorid Sulphate, M Lead, Zir Canteen- 6&7 Pits Colliery 1 Agreeable 1 7.9 344.4 40.7 | e, Res. Fre Nitrate, Flu Ic, Total IS as p 10500: Desirab le 5.00 Agreeabl e 1.0 6.5-8.5 200 250 0.20 | er IS 2012 Permi ssible 15.0 Agree able Agree able 5.0 No. Relax. 600 | henolic , Total Test Method IS 3025 (P-4):2021 IS 3025 (P- 5):2018 IS 3025 (P- 7):2017 IS 3025 (P- 10):1984 IS 3025 (P- 21):2009 IS 3025 (P- 21):2009 IS 3025 (P- 32):1988 IS 3025 (P- 32):1988 |
| SI. No 1. 2. 3. 4. 5. 6. 7. 8. | Test Colour, Odour, T Dissolved Solid Compound, Me Chromium, Mine PARAMETERS OF TEST Colour, (Hazen Unit) Odour Taste Turbidity, NTU pH Total Hardness as CaCO ₃ , mg/l Chloride as Cl, mg/l Res. Free chlorine as Cl ₂ mg/l | Taste, Turbidit Is, Calcium, ircury, Cadmeral Oil, Alkalin Canteen- Jamadoba Colliery 1 Agreeable 2 7.8 583.8 71.8 NIL | : y, pH, Total Copper, M ium, Arseniu ity, Aluminiu <u>TEST R</u> VAL Canteen- Jamadoba Washery 1 Agreeable 2 7.7 567.0 74.0 NIL | Hardness, II anganese, c, Cyanide, im & Boron. <u>RESULT</u> UE Canteen Digwadih Colliery 1 Agreeable 1 7.9 441.0 75.0 NIL | ron, Chlorid Sulphate, M Lead, Zir Canteen- 6&7 Pits Colliery 1 Agreeable 1 7.9 344.4 40.7 NIL | e, Res. Fre Nitrate, Flu IC, Total IS as p 10500: Desirab le 5.00 Agreeabl e 1.0 6.5-8.5 200 250 0.20 | er IS 2012 Permi ssible 15.0 Agree able Agree able 5.0 No. Relax. 600 1000 | henolic , Total Test Method IS 3025 (P-4):2021 IS 3025 (P- 5):2018 IS 3025 (P- 7):2017 IS 3025 (P- 10):1984 IS-3025 (P- 11):1983 IS 3025 (P- 21):2009 IS 3025 (P- 26):2021 IS 3025 (P- 26):2021 |



Statements :

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2. The test results reported in this report are valid at the time of and under the stated condition of measurment.

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| | Te | sting La | uality Coun | cil of India |) | Sind P.O. Jhan Ema Web Pho | khand - 828 II ID: sindria site: aditimo ne: 0326-29 0326-2952 | Area, Dist - Dhanbad 107 Iditi@gmail.con dservices.com 52377 (O), |
|-----|--|----------------------|---------------------|----------------------|---------------------------|---|--|--|
| | | | - 2 | ! - | | | | |
| SI. | PARAMETERS OF | | VAL | JE | | IS as | per IS | Test |
| No. | TEST | Canteen- | Canteen | Canteen | Canteen | 1050 | 0:1991 | Method |
| | | Jamadoba Colliery | Jamadoba Washery | Digwadih Colliery | - 6&7 Pits Colliery | Desira ble | Permis sible | |
| 12. | Manganese as Mn, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.10 | 0.30 | IS 3025 (P 59):2006 |
| 13. | Sulphate as SO ₄ , mg/l | 35.6 | 37.8 | 34.8 | 38.6 | 200 | 400 | IS 3025 (P 24):1986 |
| 14. | Nitrate as NO ₃ , mg/l | 5.4 | 5.3 | 5.2 | 5.0 | 45 | No. Relax | IS 3025 (P 34):1988 |
| 15. | Fluoride as F, mg/l | 0.3 | 0.4 | 0.2 | 0.2 | 1.0 | 1.5 | IS 3025 (P 60):2008 |
| 16. | Phenolic Compound as (C6H5OH) mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.001 | 0.002 | IS 3025 (P 43):1992 |
| 17. | Mercury as Hg, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.001 | No. Relax | IS 3025 (P 48):1994 |
| 18. | Cadmium as Cd, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.003 | No. Relax | IS 3025 (P 41):1992 |
| 19. | Arsenic as As, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.01 | No. Relax | IS 3025 (P 37):1988 |
| 20. | Cyanide as CN, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.05 | No. Relax | IS 3025 (P 27):1986 |
| 21. | Lead as Pb, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.01 | No. Relax | IS 3025 (P 47):1994 |
| 22. | Zinc as Zn, mg/l, | 2 | 3 | 2 | 2 | 5 | 15 | IS 3025 (P 42):1992 |
| 23. | Total Coliform, No./100ml | Absent | Absent | Absent | Absent | Absen t | Absent | IS 3025 (P 49):1994 |
| 24. | Total Chromium as Cr, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.05 | No. Relax | IS 3025 (P 52):2003 |
| 25. | Mineral Oil, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.5 | No. Relax | IS 3025 (P 39):1989 |
| 26. | Alkalinity as CaCO ₃ , mg/l, | 448 | 424 | 400 | 184 | 200 | 600 | IS 3025 (P 23):1983 |
| 27. | Aluminium as Al, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.03 | 0.2 | IS 3025 (P 55):2003 |
| 28. | Boron as B, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | 0.5 | 1.0 | IS 3025 (P 57):2005 |

Sr. emist Aditi R&D Services



Technical' Manager Aditi R&D Services, Sindri

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| Testing La NABL ACC (A Constituent Board of C | boratory REDITED Quality Council of | India) | Jharkhand - Email ID: sir Website: adi Phone: 0326 Fax: 0326-2 | strial Area, arh, Dist Dhanba 828107 ndriaditi@gmail.co itimdservices.com 8-2952377 (O), | |
|--|--|---|--|---|--|
| TEST REPO | RT OF STAC | K EMISSIC | <u>N</u> | | |
| Ref. No & Dt. | NAI | ME AND ADDR | ESS OF THE CL | IENT | |
| RDS/23-24/S/1 Date: 20/02/2025 Date of Sample Collection 14/02/2025 | TATA STEE | L LIMITED, J | JAMADOBA GR | OUP PLANT, | |
| Date of Testing | Nature of Sam | pling Collection | ISO - KINETIC | SAMPLING | |
| 17/02/2025 to 18/02/2025 | Weather condition | Status of the Plant | Ambient Temperature (⁰ C) | R.Humidity (%) | |
| the second s | Clear | Running | 28 | 49 | |
| GE | NERAL INFORMA | TION | | | |
| Nature of the Plant | | 1. | M.S. | | |
| Capacity of DG Set | 2.0+2.0+2.0 MVA (6.0 MVA) | | | | |
| Location | | Central V | Vorkshop Area | , Jamadoba | |
| No. of Stack | | | 1 | 1 | |
| Stack Height from G.L. in Meter | | | 30 | | |
| Inner Shape & Size of Stack (in meter | er)ø | | 2.5 | | |
| Stack attached to | State - 1997 | man an in | DG Set | | |
| Type of Fuel used | | | HSD | | |
| SEOUS EMISSION ANALYSIS R | ESULTS | | 1 | | |
| | | | | | |
| | Testing La NABL ACC (A Constituent Board of C O/IEC 17025:2017, ISO 9001:2015, Inter the Stack Stack Height from & Dt. Ref. No & Dt. Ref. No & Dt. RDS/23-24/S/1 Date: 20/02/2025 Date of Sample Collection 14/02/2025 Date of Testing 17/02/2025 to 18/02/2025 Date of Testing 17/02/2025 to 18/02/2025 Date of Testing 17/02/2025 to 18/02/2025 Date of Testing Nature of the Plant Capacity of DG Set Location No. of Stack Stack Height from G.L. in Meter Inner Shape & Size of Stack (in meter Stack attached to Type of Fuel used | Testing Laboratory NABL ACCREDITED (A Constituent Board of Quality Council of O/IEC 17025:2017, ISO 9001:2015,ISO (OHSAS) 4500 TEST REPORT OF STACC Ref. No & Dt. Ref. No & Dt. NAU RDS/23-24/S/1 Date: 20/02/2025 M Date of Sample Collection TATA STEE 14/02/2025 M Date of Testing Nature of Sam 17/02/2025 to 18/02/2025 Weather condition Clear SENERAL INFORMA Nature of the Plant Capacity of DG Set Location No. of Stack Stack Height from G.L. in Meter Inner Shape & Size of Stack (in meter) Stack attached to | NABL ACCREDITED (A Constituent Board of Quality Council of India) O/IEC 17025:2017, ISO 9001:2015,ISO (OHSAS) 45001:2018 Certific DIST COLSPAND NAME AND ADDR Ref. No & Dt. NAME AND ADDR RDS/23-24/S/1 Date: 20/02/2025 Date of Sample Collection TATA STEEL LIMITED, . Date of Testing Nature of Sampling Collection 14/02/2025 to 18/02/2025 Date of Testing Nature of Sampling Collection 17/02/2025 to 18/02/2025 ORERAL INFORMATION Nature of the Plant Celear Central V No. of Stack Stack of the Plant Central V No. of Stack Stack Height from G.L. in Meter Inner Shape & Size of Stack (in meter) Stack attached to Transition Central V No. of Stack | Testing Laboratory NABL ACCREDITED P.ODomg Jharkhand MABL ACCREDITED Starkhand MABL ACCREDITED Email ID: si Website: ad Phone: 032 OJEC 17025:2017, ISO 9001:2015,ISO (OHSAS) 45001:2018 Certified Test report of starking Mobile: 094 TEST REPORT OF STACK EMISSION Ref. No & Dt. NAME AND ADDRESS OF THE CL RDS/23-24/S/1 Date: 20/02/2025 Date of Sample Collection TATA STEEL LIMITED, JAMADOBA GR DIST DHANBAD (JHARKHAI) Date of Testing Nature of Sampling Collection: ISO – KINETIC 17/02/2025 Weather condition Status of the Plant Ambient Temperature (°C) 17/02/2025 Clear Running 28 GENERAL INFORMATION Nature of the Plant M.S. Capacity of DG Set 2.0+2.0+2.0 MVA (6. Location Central Workshop Area No. of Stack 1 Statk ached to DG Set Inner Shape & Size of Stack (in meter)) 2.5 Stack attached to DG Set Type of Fuel used HSD | |

| 51. NO | Particulars | Method | Value | As per CPCB STANDARD mg/Nm ³ |
|--------|---|---------------------|-----------|--|
| 1. | Flue gas temperature (⁰ C) | IS: 11255 (Part-3) | 103 | - |
| 2. | Velocity of flue gas (m/sec) | IS: 11255 (Part-3) | 9.2 | - |
| 3. | Flow Rate of Flue gas (Nm ³ /Hr) | IS: 11255 (Part-3) | 128903.11 | |
| 4. | Concentration of Particulate Matter (mg/ Nm ³) at 15% O ₂ | IS: 11255 (Part-1) | 62.36 | 75 |
| 5. | Concentration of SOX as SO ₂ (mg/ Nm ³) at 15% O ₂ | IS : 11255 (Part-2) | 54.76 | 2 |
| 6. | Concentration of NOX as NO ₂ (mg/ Nm ³) at 15% O ₂ | IS: 11255 (Part-7) | 126.41 | 360 |
| 7. | Non Methane Hydrocarbon (NMHC) at 15% O ₂ | IS : 13270 | 46.79 | 100 |
| 8. | Carbon Monoxide (CO) (mg/Nm)3 | IS: 13270 | 37.2 | 150 |

Sr Cl emis Aditi R&D Services



Technical Manager Aditi R&D Services, Sindri

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Annexure- II ADITI R&D SERVICES Plot No. - I-B-17 (P) Sindri, Industrial Area, P.O.- Domgarh, Dist.- Dhanbad ARD Testing Laboratory Jharkhand - 828107 Email ID: sindriaditi@gmail.com NABL ACCREDITED Website: aditimdservices.com (A Constituent Board of Quality Council of India) Phone: 0326-2952377 (O). Fax: 0326-2952377 ISO/IEC 17025:2017, ISO 9001:2015,ISO (OHSAS) 45001:2018 Certified Mobile: 09471358492, 09431512608 TEST REPORT OF NOISE (AMBIENT) LEVEL MONITORING Ref. No. & Date NAME AND ADDRESS OF THE CLIENT ARDS/23-24/N/S/1 Date: 20/02/2025 M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED, JAMADOBA GROUP PLANT, Date of Monitoring DIST. - DHANBAD (JHARKHAND) Avg. Average Weather Status of Humidity (%) 12/02/2025 Ambient Condition the plant Temperature (°C) Work Order 4700092573/932 28 49 Clear Running Dt. 20.07.2021 MONITORING RESULTS Noise level (Ambient standard) SI. Place of for Industrial Area as per CPCB **Day Time** No Monitoring Noise Pollution (Regulation and Control) (Amendment) Rules . (6 AM to 10 PM) 2000 notified vide S.O. 1046(E) dB(A) Dt. 22.11.2020 Limit in dB(A) Leq Day Time **Night Time** LOCATION MAX JAMADOBA GROUP MIN Industrial Area **Industrial Area** Central Workshop Area 71.2 66.4 Jamadoba near DG Set 75 70 Remarks: Noise level is well within the standard specified limit for Industrial Area. Sr. Technician Technic al-Manager Aditi R&D Service Aditi R&D Services, Sindri Statements :

The test report refers only to the particular item(s) submitted for testing.

2. The test results reported in this report are valid at the time of and under the stated condition of measurment.

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| RD | lin | | &D SI | | CES | | Plot No I-B-17 (P Sindri, Industrial An P.O Domgarh, Dis Jharkhand - 82810 | ea, et Dhanbad 7 |
|---|--|---|---|---|---|--|---|---|
| - | 13 | NA | BL ACCRED | TED | | | Email ID: sindriaditi Website: aditimdse | |
| GLABOR | (A Co | nstituent Bo | oard of Quality | y Council o | f India) | | Phone: 0326-29523 | 377 (O), |
| | ISO/IEC 17025:2 | | 01:2015,ISO (| OHSAS) 450 | 001:2018 0 | Certified | Fax: 0326-2952377 Mobile: 094713584 | |
| | Ref. No.: - ARD6/24 | | EST REPO | RT OF S | SEWAG | 0.000 | te: 21/02/2025 | |
| | Name of the | 1.1 | : N T J | I/S TATA S ATA STE AMADOB/ IST DHA | STEEL, J El limit A grouf | amadoe Ted P plant | ; | |
| | Work Order | Ref NO . | | 700126557/ | 1 | | and the second se | |
| | Sample Co | | SC 52 | . STP Out | | | | |
| | Date of San | nple Colle | 3 4 5 | STP Outl STP Outl STP Outl STP Outl 1/02/2025 | let -Digw let- Jmb. let- JCPP | adih 12 N Canteen Canteer | | lony flat |
| | Date of Tes | ting | : 1 | 4/02/2025 | To 18/0 | 2/205 | | |
| | • Test | | a P | nd Fecal C hosphoro | Coliform, us. | | IL & GREASE, trogen, Total | |
| | | | IES | T RESULT | <u>1</u> | | | |
| SI. | PARAMETERS OF | | and the second se | VALUE | | | As per | Test |
| SI. No. | PARAMETERS OF TEST | STP Outlet Railway Colony | and the second se | VALUE STP Outlet Digwadi h 12 No. Supervis | STP Outlet Jmb. Cantee n | STP Outlet- JCPP Cantee n | As per MoEF&CC Notification for Sewage Treatment Plant | Test Method |
| 222/22 | | Outlet Railway | STP Outlet Digwadih 12 No Officers | VALUE STP Outlet Digwadi h 12 No. | STP Outlet Jmb. Cantee | Outlet- JCPP Cantee | MoEF&CC Notification for Sewage Treatment | Method IS-3025(P- |
| No. | PH, Total Dissolved | Outlet Railway Colony | STP Outlet Digwadih 12 No Officers Colony | VALUE STP Outlet Digwadi h 12 No. Supervis or flat | STP Outlet Jmb. Cantee n | Outlet- JCPP Cantee n | MoEF&CC Notification for Sewage Treatment Plant | Method IS-3025(P- 11):1983 IS-3025(P- |
| No. | TEST pH, | Outlet Railway Colony 7.6 | STP Outlet Digwadih 12 No Officers Colony 8.1 | VALUE STP Outlet Digwadi h 12 No. Supervis or flat 7.8 | STP Outlet Jmb. Cantee n 7.6 | Outlet- JCPP Cantee n 8.3 | MoEF&CC Notification for Sewage Treatment Plant | Method IS-3025(P- 11):1983 |
| No. 1. 2. | PH, Total Dissolved Solids, mg/l Total Suspended Solids, mg/l Bio chemical Oxygen Demand, mg/l | Outlet Railway Colony 7.6 1306.5 | STP Outlet Digwadih 12 No Officers Colony 8.1 916.5 | VALUE STP Outlet Digwadi h 12 No. Supervis or flat 7.8 1144 | STP Outlet Jmb. Cantee n 7.6 1105 15 9.0 | Outlet- JCPP Cantee n 8.3 760.5 19 9.8 | MoEF&CC Notification for Sewage Treatment Plant 5.5-9.0. - 20 10 | Method IS-3025(P- 11):1983 IS-3025(P- 16):1984 IS-3025(P- 17):1984 IS-3025(P- 44):1994 |
| No. 1. 2. 3. | PH, PH, Total Dissolved Solids, mg/l Total Suspended Solids, mg/l Bio chemical Oxygen Demand, mg/l Chemical Oxygen Demand, mg/l | Outlet Railway Colony 7.6 1306.5 12 8.2 30 | STP Outlet Digwadih 12 No Officers Colony 8.1 916.5 10 6.5 45 | VALUE STP Outlet Digwadi h 12 No. Supervis or flat 7.8 1144 20 8.0 48 | STP Outlet Jmb. Cantee n 7.6 1105 15 9.0 48.8 | Outlet- JCPP Cantee n 8.3 760.5 19 9.8 47.6 | MoEF&CC Notification for Sewage Treatment Plant 5.5-9.0- - 20 | Method IS-3025(P- 11):1983 IS-3025(P- 16):1984 IS-3025(P- 17):1984 IS-3025(P- 44):1994 IS-3025(P- 58):2006 |
| No. 1. 2. 3. 4. 5. 6. | PH, PH, Total Dissolved Solids, mg/l Total Suspended Solids, mg/l Bio chemical Oxygen Demand, mg/l Chemical Oxygen Demand, mg/l Oil & Grease, mg/l | Outlet Railway Colony 7.6 1306.5 12 8.2 30 1.3 | STP Outlet Digwadih 12 No Officers Colony 8.1 916.5 10 6.5 45 1.5 | VALUE STP Outlet Digwadi h 12 No. Supervis or flat 7.8 1144 20 8.0 8.0 48 1.9 | STP Outlet Jmb. Cantee n 7.6 1105 15 9.0 48.8 2.3 | Outlet- JCPP Cantee n 8.3 760.5 19 9.8 47.6 2.5 | MoEF&CC Notification for Sewage Treatment Plant 5.5-9.0. - 20 10 50 | Method IS-3025(P- 11):1983 IS-3025(P- 16):1984 IS-3025(P- 17):1984 IS-3025(P- 44):1994 IS-3025(P- 58):2006 IS-3025(P- 39):2021 |
| No. 1. 2. 3. 4. 5. | PH, PH, Total Dissolved Solids, mg/l Total Suspended Solids, mg/l Bio chemical Oxygen Demand, mg/l Chemical Oxygen Demand, mg/l | Outlet Railway Colony 7.6 1306.5 12 8.2 30 | STP Outlet Digwadih 12 No Officers Colony 8.1 916.5 10 6.5 45 | VALUE STP Outlet Digwadi h 12 No. Supervis or flat 7.8 1144 20 8.0 48 | STP Outlet Jmb. Cantee n 7.6 1105 15 9.0 48.8 2.3 128 | Outlet- JCPP Cantee n 8.3 760.5 19 9.8 47.6 | MoEF&CC Notification for Sewage Treatment Plant 5.5-9.0. - 20 10 | Method IS-3025(P- 11):1983 IS-3025(P- 16):1984 IS-3025(P- 17):1984 IS-3025(P- 44):1994 IS-3025(P- 58):2006 IS-3025(P- 39):2021 IS - 1622 |
| No. 1. 2. 3. 4. 5. 6. | PH, PH, Total Dissolved Solids, mg/l Total Suspended Solids, mg/l Bio chemical Oxygen Demand, mg/l Chemical Oxygen Demand, mg/l Oil & Grease, mg/l Fecal Coliform (FC) (MPN/100ml) Total Nitrogen as N, mg/l | Outlet Railway Colony 7.6 1306.5 12 8.2 30 1.3 1.3 125 8.2 | STP Outlet Digwadih 12 No Officers Colony 8.1 916.5 10 6.5 45 1.5 116 7.7 | VALUE STP Outlet Digwadi h 12 No. Supervis or flat 7.8 1144 20 8.0 48 1.9 122 8.9 | STP Outlet Jmb. Cantee n 7.6 1105 15 9.0 48.8 2.3 128 7.8 | Outlet- JCPP Cantee n 8.3 760.5 19 9.8 47.6 2.5 136 8.0 | MoEF&CC Notification for Sewage Treatment Plant 5.5-9.0- - 20 10 50 - Desirable 100 & Permissible 230 10 | Method IS-3025(P- 11):1983 IS-3025(P- 16):1984 IS-3025(P- 17):1984 IS-3025(P- 44):1994 IS-3025(P- 58):2006 IS-3025(P- 39):2021 IS - 1622 IS - 3025 (P-34):1988 |
| No. 1. 2. 3. 4. 5. 6. 7. | PH, PH, Total Dissolved Solids, mg/l Total Suspended Solids, mg/l Bio chemical Oxygen Demand, mg/l Chemical Oxygen Demand, mg/l Oil & Grease, mg/l Fecal Coliform (FC) (MPN/100ml) Total Nitrogen as N, | Outlet Railway Colony 7.6 1306.5 12 8.2 30 1.3 1.3 | STP Outlet Digwadih 12 No Officers Colony 8.1 916.5 10 6.5 45 1.5 116 | VALUE STP Outlet Digwadi h 12 No. Supervis or flat 7.8 1144 20 8.0 48 1.9 1.9 | STP Outlet Jmb. Cantee n 7.6 1105 15 9.0 48.8 2.3 128 | Outlet- JCPP Cantee n 8.3 760.5 19 9.8 47.6 2.5 136 | MoEF&CC Notification for Sewage Treatment Plant 5.5-9.0- - 20 10 50 - Desirable 100 & Permissible 230 | Method IS-3025(P- 11):1983 IS-3025(P- 16):1984 IS-3025(P- 17):1984 IS-3025(P- 44):1994 IS-3025(P- 58):2006 IS-3025(P- 39):2021 IS - 1622 IS - 3025 |

Statements :

1. The test report refers only to the particular item(s) submitted for testing.

- 2. The test results reported in this report are valid at the time of and under the stated condition of measurment.
- 3. This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.

Annexure- II ADITI R&D SERVICES Plot No. - I-B-17 (P) Sindri, Industrial Area. P.O.- Domgarh, Dist.- Dhanbad Testing Laboratory ARD Jharkhand - 828107 Email ID: sindriaditi@gmail.com NABL ACCREDITED Website: aditimdservices.com (A Constituent Board of Quality Council of India) Phone: 0326-2952377 (O). Fax: 0326-2952377 ISO/IEC 17025:2017, ISO 9001:2015,ISO (OHSAS) 45001:2018 Certified Mobile: 09471358492, 09431512608 Ref. No.: - ARDS/23-24/GW/1 Date: 21/02/2025 TEST REPORT OF GROUND WATER Name of the industry : M/S TATA STEEL, JAMADOBA, TATA STEEL LIMITED JAMADOBA GROUP PLANT, DIST. - DHANBAD (JHARKHAND) Work Order Ref. NO. : 4700126557/932 Date:- 29/05/2024 Sample Code 1. Jorapokhar Kustand 2. Bhowra 13 No. 3. Mohalbani Basti 4. Lower Dungari 5. Jamadoba 3 No. Date of Sample Collection : 11/02/2025 to 12/02/2025 Date of Testing 14/02/2025 to 20/02/2025 Test Colour, Odour, Taste, Turbidity, pH, Total Hardness, 1 Iron, Chloride, Res. Free chlorine, Total Dissolved Solids, Calcium, Copper, Manganese, Sulphate, Nitrate, Fluoride, Phenolic Compou'nd, Mercury, Cadmium, Arsenic, Cyanide, Lead, Zinc, Total Coliform, Chromium, Mineral Oil, Alkalinity, Aluminium & Boron. TEST RESULT SI. PARAME-TERS VALUE IS as per IS Test No OF TEST 10500:1991 Method Jorapokhar Bhowra 13 Mohalbani Lower Jama Desir-Permi-Kustand No. Basti Dungari doba able ssible 3 No 1. Colour, 2 2 2 2 5 1 15 IS 3025 (P-(Hazen Unit) 4):2021 Temperature [®]C 2. 27 28 27 28 27 3. Electrical 2030 730 1030 660 840 Conductivity, µmhos/cm 4. Total Dissolved 1308 460 650 415 546 500 2000 IS 3025(P-Solids, mg/l 16):1984 5. pH 7.8 7.5 7.1 6.7 7.3 6 5-No IS-3025(P-11):1983 8.5 Relax 6. **Total Hardness** 399 281.4 340.2 298.2 310 200 600 IS 3025(Pas CaCO3, mg/l 21):2009 7. Calcium as Ca, 124 86.6 116.0 67.2 80.4 75 200 IS 3025(Pmg/l 40):1991 8. Magnesium as 21.4 16.2 12.0 31.2 26.2 30 100 IS 3025(P-Mg, mg/l 46):1994 9. Chloride as CI, 248 64 106.7 85.3 72.6 250 1000 IS 3025(P mg/l 32):1988 10. Fluoride as F, 0.2 0.2 0.5 0.2 0.1 1.0 1.5 IS 3025(Pmg/l 60):2008 Continued on Page -2

Statements :

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| R D | ADITIR&DSERVICES Testing Laboratory NABL ACCREDITED (A Constituent Board of Quality Council of India) ISO/IEC 17025:2017, ISO 9001:2015,ISO (OHSAS) 45001:2018 Certified 2 | | | | | | | | | | |
|-----------|---|-----------------------|------------------|--------------------|------------------|-------------------|-----------------|------------------|------------------------|--|--|
| SI. No | PARAMETERS OF TEST | | | VALUE | | | | per IS 0:1991 | Test Metho | | |
| • • | UF TEST | Jorapokhar Kustand | Bhowra 13 No. | Mohalbani Basti | Lower Dungari | Jamado ba 3 No | Desir - able | Permis -sible | | | |
| 11 | Sulphate as SO ₄ , mg/l | 45.5 | 40.6 | 50.6 | 45.2 | 56.4 | 200 | 400 | IS 3025(P- 24):1986 | | |
| 12. | Nitrate as NO ₃ , mg/l | 4.9 | 4.8 | 5.6 | 4.8 | 4.9 | 45 | No. Relax | IS 3025(P- 34):1988 | | |
| 13. | Alkalinity as CaCO ₃ , mg/l, | 676 | 252 | 236 | 168 | 268 | 200 | 600 | IS 3025(P- 23):1983 | | |
| 14. | Lead as Pb, mg/l | B.D.L | B.D.L | B.D.L | B.D.L. | B.D.L. | 0.01 | No. Relax | IS 3025(P- 47):1994 | | |
| 15. | Zinc as Zn, mg/l, | 3 | 3 | 3 . | 2 | 2 | 5 | 15 | IS 3025(P- 42):1992 | | |
| 16. | Iron a Fe, mg/l | 0.17 | 0.15 | 0.15 | 0.17 | 0.18 | 1.0 | No. Relax | IS 3025(P- 53):2003 | | |
| 17. | Copper as Cu, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.05 | 1.5 | IS3025 (P- 42):1992 | | |
| 18. | Mercury as Hg, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.001 | No. Relax | IS 3025(P- 48):1994 | | |
| 19. | Cadmium as Cd, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.003 | No. Relax | IS 3025(P- 41):1992 | | |
| 20. | Nickel as Ni, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.02 | No. Relax | IS 3025(P- 37):1992 | | |
| 21. | Arsenic as As, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.01 | No. Relax | IS 3025(P- 37):1988 | | |
| 22. | Cyanide as CN, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.05 | No. Relax | IS 3025(P- 27):1986 | | |
| 23. | Total Chromium as Cr, mg/l | B.D.L | B.D.L | B.D.L | B.D.L | B.D.L. | 0.05 | No. Relax- | IS 3025(P- 52):2003 | | |

NOTE: BDL - Below Detection Limit

Sr. nist Aditi R&D Services



Technical Manager Aditi R&D Services, Sindri

Statements :

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2. The test results reported in this report are valid at the time of and under the stated condition of measurment.

3. This particular test report cannot be reproduced except in full, without prior written permission of Quality Manager of the laboratory.

TATA STEEL LIMITED JHARIA DIVISION

Area. Manager, Digwadih Colliery Area. Manager, 6 & 7 Pits Colliery Head, Jamadoba Coal Washery CMO, Tata Central Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 687 / 24 Date: 12 / 11 / 2024

Re: AIR QUALITY REPORT

We wish to inform you that Air Quality Monitoring was carried out in JAMADOBA GROUP in the month of OCTOBER'2024. The results are as given below.

Core zone (as per Ambient Air quality standards for coal mines notified vide notification G.S.R. 742(E) dated-25.09.2000

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | SPM 24 Hourly Limit-700 µg/m ³ | RSPM 24 Hourly Limit-300 µg/m ³ | SO2 24 Hourly Limit-120 µg/m ³ | NOx 24 Hourly Limit-120 µg/m ³ |
|------|-----------------------------|-----------------------------|---------------------|----------------------|--|---|--|--|
| 1 | 6&7 Pits Kalimandir area | 23°43'15" N/ 86°24'12" E | 04.10.24 | Cloudy | 190.7 | 66.3 | 17.8 | 20.5 |

Buffer zone (as per NAAQS 2009 for Ambient Air quality standards)

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | PM 10 24 Hourly Limit-100 µg/m ³ | PM 2.5 24 Hourly Limit- 60 µg/m ³ | SO ₂ 24 Hourly Limit-80 μg/m ³ | NOx 24 Hourly Limit-80 µg/m ³ |
|------|---------------------------------|-------------------------------|---------------------|----------------------|--|---|---|---|
| 1 | Jamadoba Group Office | 23°42'15.3" N/ 86°24'11" E | 03.10.24 | Cloudy | 70.6 | 35.8 | 16.5 | 19.2 |
| 2 | Digwadih 12 No. Colony | 23°41'42" N/ 86°24'45.3" E | 07.10.24 | Clear | 86.3 | 42.8 | 17.2 | 20.8 |
| 3 | New Village Colony, Jamadoba | 23°41'51" N/ 86°23'19" E | 08.10.24 | Clear | 80.1 | 40.7 | 18.6 | 21.1 |
| 4 | Tata Central Hospital | 23°42'36" N/ 86°24'10.4"E | 09.10.24 | Clear | 76.2 | 38.5 | 15.4 | 18.3 |

Note: PM 10 - Less than 10-micron Particulate Matter PM2.5 - Less than 2.5-micron Particulate Matter

μg - Microgram

This is for your information and necessary action please.

Ponahato

Lab. Assistant (Environment)

Area Manager (Environment)

Annexure- II

TATA STEEL LIMITED JHARIA DIVISION

Area Manager, Jamadoba Colliery Area. Manager, Digwadih Colliery Area. Manager, 6 & 7 Pits Colliery Head, Jamadoba Coal Washery CMO, Tata Central Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 770 / 24 Date: 09 / 12. / 2024

Re: AIR QUALITY REPORT

We wish to inform you that Air Quality Monitoring was carried out in JAMADOBA GROUP in the month of NOVEMBER'2024. The results are as given below.

Core zone (as per Ambient Air quality standards for coal mines notified vide notification G.S.R. 742(E) dated-25.09.2000

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | SPM 24 Hourly Limit-700 µg/m ³ | RSPM 24 Hourly Limit-300 µg/m ³ | SO2 24 Hourly Limit-120 µg/m ³ | NOx 24 Hourly Limit-120 µg/m ³ |
|------|-----------------------------|-----------------------------|---------------------|----------------------|--|---|--|--|
| 1 | 6&7 Pits Kalimandir area | 23°43'15" N/ 86°24'12" E | 12.11.24 | Clear | 216.9 | 84.6 | 15.2 | 17.0 |

Buffer zone (as per NAAQS 2009 for Ambient Air quality standards)

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | PM 10 24 Hourly Limit-100 µg/m ³ | PM 2.5 24 Hourly Limit- 60 µg/m ³ | SO ₂ 24 Hourly Limit-80 µg/m ³ | NOx 24 Hourly Limit-80 µg/m ³ |
|------|---------------------------------|-------------------------------|---------------------|----------------------|--|---|---|---|
| 1 | Jamadoba Group Office | 23°42'15.3" N/ 86°24'11" E | 12.11.24 | Clear | 90.2 | 54.6 | 19.7 | 22.3 |
| 2 | Digwadih 12 No. Colony | 23°41'42" N/ 86°24'45.3" E | 12.11.24 | Clear | 82.5 | 41.3 | 16.1 | 18.4 |
| 3 | New Village Colony, Jamadoba | 23°41'51" N/ 86°23'19" E | 13.11.24 | Clear | 78.4 | 37.5 | 17.8 | 20.4- |
| 4 | Tata Central Hospital | 23°42'36" N/ 86°24'10.4"E | 13.11.24 | Clear | 80.6 | 39.2 | 18.3 | 21.7 |

Note: PM 10 - Less than 10-micron Particulate Matter

PM2.5 - Less than 2.5-micron Particulate Matter

μg - Microgram

This is for your information and necessary action please.

Emahats Lab. Assistant (Environment)

Manager (Environment)

ENVIRONMENT CELL LABORATORY, JAMADOBA AUTHORIZED VIDE LETTER NO. B – 3922 DATED- 30.08.2012 BY JHARKHAND STATE POLLUTION CONTROL BOARD, RANCHL

TATA STEEL LIMITED JHARIA DIVISION

Area Manager, Jamadoba Colliery Area. Manager, Digwadih Colliery Area. Manager, 6 & 7 Pits Colliery Head, Jamadoba Coal Washery CMO, Tata Central Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / \$10 / 24 Date: \$1/ 12 / 2024

Re: AIR QUALITY REPORT

We wish to inform you that Air Quality Monitoring was carried out in JAMADOBA GROUP in the month of DECEMBER'2024. The results are as given below.

| Core zone (as per Ambient Air quality standards for coal mines notified vide notification G.S | .R. |
|---|-----|
| 742(E) dated-25.09.2000 | |

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | SPM 24 Hourly Limit-700 µg/m ³ | RSPM 24 Hourly Limit-300 µg/m ³ | SO2 24 Hourly Limit-120 µg/m ³ | NOx 24 Hourly Limit-120 µg/m ³ |
|------|-----------------------------|-----------------------------|---------------------|----------------------|--|---|--|--|
| 1 | 6&7 Pits Kalimandir area | 23°43'15" N/ 86°24'12" E | 06.12.24 | Clear | 248.9 | 82.5 | 16.8 | 18.3 |

Buffer zone (as per NAAQS 2009 for Ambient Air quality standards)

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | PM 10 24 Hourly Limit-100 µg/m ³ | PM 2.5 24 Hourly Limit- 60 µg/m ³ | SO2 24 Hourly Limit-80 µg/m ³ | NOx 24 Hourly Limit-80 µg/m ³ |
|------|---------------------------------|-------------------------------|---------------------|----------------------|--|---|---|---|
| 1 | Jamadoba Group Office | 23°42'15.3" N/ 86°24'11" E | 06,12.24 | Clear | 88.7 | 47.5 | 17.2 | 19.1 |
| 2 | Digwadih 12 No. Colony | 23°41'42" N/ 86°24'45.3" E | 06.12.24 | Clear | 80.6 | 39.7 | 18.2 | 20.3 |
| 3 | New Village Colony, Jamadoba | 23°41'51" N/ 86°23'19" E | 10.12.24 | Clear | 76.2 | 32.1 | 15.9 | 17.2 |
| 4 | Tata Central Hospital | 23°42'36" N/ 86°24'10.4"E | 10.12.24 | Clear | 92.5 | 51.8 | 19.7 | 22.4 |

Note: PM 10 - Less than 10-micron Particulate Matter

PM2.5 - Less than 2.5-micron Particulate Matter

μg - Microgram

This is for your information and necessary action please.

Pmahato

Manager (Environment)

TATA STEEL LIMITED JHARIA DIVISION

Area Manager, Jamadoba Colliery Area. Manager, Digwadih Colliery Area. Manager, 6 & 7 Pits Colliery Head, Jamadoba Coal Washery CMO, Tata Central Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 4/4 / 25 Date: 3/ / 0/ / 2025

Re: AIR QUALITY REPORT

We wish to inform you that Air Quality Monitoring was carried out in JAMADOBA GROUP in the month of JANUARY'2025. The results are as given below.

| Core zone (as per Ambient Air | quality standards for coa | I mines notified vide notification G.S.R. |
|-------------------------------|---------------------------|---|
| | 742(E) dated-25.09.2 | 000 |

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | SPM 24 Hourly Limit-700 µg/m ³ | RSPM 24 Hourly Limit-300 µg/m ³ | SO2 24 Hourly Limit-120 µg/m ³ | NOx 24 Hourly Limit-120 µg/m ³ |
|------|-----------------------------|-----------------------------|---------------------|----------------------|--|---|--|--|
| 1 | 6&7 Pits Kalimandir area | 23°43'15" N/ 86°24'12" E | 07.01.25 | Clear | 239.5 | 80.3 | 17.2 | 20,4 |

Buffer zone (as per NAAQS 2009 for Ambient Air quality standards)

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | PM 10 24 Hourly Limit-100 µg/m ³ | PM 2.5 24 Hourly Limit- 60 µg/m ³ | SO2 24 Hourly Limit-80 µg/m ³ | NOx 24 Hourly Limit-80 µg/m ³ |
|------|---------------------------------|-------------------------------|---------------------|----------------------|--|---|---|---|
| 1 | Jamadoba Group Office | 23°42'15.3" N/ 86°24"11" E | 07.01.25 | Clear | 86.5 | 42.1 | 16.8 | 18.3 |
| 2 | Digwadih 12 No. Colony | 23°41'42" N/ 86°24'45.3" E | 07.01.25 | Clear | 82.1 | 40.3 | 15.9 | 17.6 |
| 3 | New Village Colony, Jamadoba | 23°41'51" N/ 86°23'19" E | 08.01.25 | Clear | 70.8 | 30.9 | 17.3 | 19.5 |
| 4 | Tata Central Hospital | 23°42'36" N/ 86°24'10.4"E | 08.01.25 | Clear | 90.4 | 46.7 | 18.2 | 21.3 |

Note: PM 10 - Less than 10-micron Particulate Matter

PM_{2.5} - Less than 2.5-micron Particulate Matter µg - Microgram

This is for your information and necessary action please.

Crechet.

Lab. Assistant (Environment)

Manager (Environment)

TATA STEEL LIMITED JHARIA DIVISION

Area Manager, Jamadoba Colliery Area. Manager, Digwadih Colliery Area. Manager, 6 & 7 Pits Colliery Head, Jamadoba Coal Washery CMO, Tata Central Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 29 / 25 Date: 28/ 92 / 2025

Re: AIR QUALITY REPORT

We wish to inform you that Air Quality Monitoring was carried out in JAMADOBA GROUP in the month of FEBRUARY'2025. The results are as given below.

Core zone (as per Ambient Air quality standards for coal mines notified vide notification G.S.R. 742(E) dated-25.09.2000

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | SPM 24 Hourly Limit-700 µg/m ³ | RSPM 24 Hourly Limit-300 µg/m ³ | SO2 24 Hourly Limit-120 µg/m ³ | NOx 24 Hourly Limit-120 µg/m ³ |
|------|-----------------------------|-----------------------------|---------------------|----------------------|--|---|--|--|
| 1 | 6&7 Pits Kalimandir area | 23°43'15" N/ 86°24'12" E | 11.02.25 | Clear | 231.7 | 84.6 | 18.3 | 21.7 |

Buffer zone (as per NAAQS 2009 for Ambient Air quality standards)

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | PM 10 24 Hourly Limit-100 µg/m ³ | PM 2.5 24 Hourly Limit- 60 µg/m ³ | SO2 24 Hourly Limit-80 µg/m ³ | NOx 24 Hourly Limit-80 µg/m ³ |
|------|---------------------------------|-------------------------------|---------------------|----------------------|--|---|---|---|
| 1 | Jamadoba Group Office | 23°42'15.3" N/ 86°24'11" E | 11.02.25 | Clear | 78.9 | 37.2 | 15.0 | 17.2 |
| 2 | Digwadih 12 No. Colony | 23°41'42" N/ 86°24'45.3" E | 11.02.25 | Clear | 80.6 | 39.5 | 17.2 | 19.1 |
| 3 | New Village Colony, Jamadoba | 23°41'51" N/ 86°23'19" E | 12.02.25 | Clear | 76.2 | 33.1 | 16.4 | 18. |
| 4 | Tata Central Hospital | 23°42'36" N/ 86°24'10.4"E | 12.02.25 | Clear | 87.5 | 42.2 | 19.2 | 22.4 |

Note: PM 10 - Less than 10-micron Particulate Matter

PM2.5 - Less than 2.5-micron Particulate Matter

μg - Microgram

This is for your information and necessary action please.

Lab. Assistant (Environment)



Annexure- II

TATA STEEL LIMITED JHARIA DIVISION

Area Manager, Jamadoba Colliery Area. Manager, Digwadih Colliery Area. Manager, 6 & 7 Pits Colliery Head, Jamadoba Coal Washery CMO, Tata Central Hospital, Jamadoba

Ref: JMB /ENV /LAB /02 / 153 / 25 Date: 07/04 / 2025

Re: AIR QUALITY REPORT

We wish to inform you that Air Quality Monitoring was carried out in JAMADOBA GROUP in the month of MARCH'2025. The results are as given below.

| Core zone (as per Ambient Air quality standards for coal mines notified vide notification G.S.R. |
|--|
| 747(F) datad-25.09.2000 |

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | SPM 24 Hourly Limit-700 μg/m ³ | RSPM 24 Hourly Limit-300 µg/m ³ | SO2 24 Hourly Limit-120 µg/m ³ | NOx 24 Hourly Limit-120 µg/m ³ |
|------|-----------------------------|-----------------------------|---------------------|----------------------|--|---|--|--|
| 1 | 6&7 Pits Kalimandir area | 23°43'15" N/ 86°24'12" E | 05.03.25 | Clear | 247.6 | 86.2 | 19.1 | 22.6 |

Buffer zone (as per NAAQS 2009 for Ambient Air quality standards)

| S.No | Location | Latitude/ Longitude | Date of Sampling | Weather Condition | PM 10 24 Hourly Limit-100 µg/m ³ | PM 2.5 24 Hourly Limit- 60 µg/m ³ | SO2 24 Hourly Limit-80 µg/m ³ | NOx 24 Hourly Limit-80 µg/m ³ |
|------|---------------------------------|-------------------------------|---------------------|----------------------|--|---|---|---|
| I | Jamadoba Group Office | 23°42'15.3" N/ 86°24'11" E | 05.03.25 | Clear | 92.4 | 51.6 | 18.2 | 21.7 |
| 2 | Digwadih 12 No. Colony | 23°41'42" N/ 86°24'45.3" E | 05.03.25 | Clear | 84.5 | 42.3 | 16.8 | 18.3 |
| 3 | New Village Colony, Jamadoba | 23°41'51" N/ 86°23'19" E | 06.03.25 | Clear | 78.6 | 36.5 | 15.1 | 17.4 |
| 4 | Tata Central Hospital | 23°42'36" N/ 86°24'10.4"E | 06.03.25 | Clear | 83.1 | 40.9 | 17.8 | 20.1 |

Note: PM 10 - Less than 10-micron Particulate Matter

PM2.5 - Less than 2.5-micron Particulate Matter μg - Microgram

This is for your information and necessary action please.

Emphal.

Lab. Assistant (Environment)

Manager (Environment)

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Colliery Head, Jamadoba Coal Washery Sr. Manager, Digwadih Colliery Sr. Manager, 6 & 7 Pits Colliery

Ref : JMB/ ENV/ LAB/ 05/ 64/ /24 Dated: 01 / 11 / 2024

Re: Ambient Noise Level Report

We wish to inform you that Ambient Noise Level Monitoring was carried out in JAMADOBA GROUP in the month of OCTOBER'2024. The results are as given below:

| S.No | Monitoring Station | Det | Day (0 | 6.00 - 22. | 00 Hrs.) | Night (| (22.00-06. | 00 Hrs) |
|-------|--------------------------------|----------|--------|-------------------|----------|-------------------|------------|---------|
| 5.140 | Monitoring Station | Date | CPCI | CPCB Standard- 55 | | CPCB Standard- 45 | | |
| | Residential Area (Buffer Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg |
| 1 | Digwadih 12 No. Colony | 24.10.24 | 42.2 | 44.5 | 43.4 | 34.3 | 36.7 | 35.5 |
| 2 | New Village Colony, Jamadoba | 24.10.24 | 43.5 | 45.7 | 44.6 | 35.7 | 37.8 | 36.8 |
| 3 | 6&7 Pits Kalimandir Colony | 24.10.24 | 42.4 | 44.7 | 43.6 | 34.5 | 36.4 | 35.5 |
| 4 | Digwadih 10 No. Colony | 24.10.24 | 43.1 | 45.6 | 44.4 | 35.3 | 37.5 | 36.4 |

| 0 M. | Manitanian Station | Data | Day (0 | 5.00 - 22. | 00 Hrs.) | Night | (22.00-06. | 00 Hrs) |
|------|-------------------------------------|----------|-------------------|------------|----------|-------------------|------------|---------|
| S.No | Monitoring Station | Date | CPCB Standard- 75 | | | CPCB Standard- 70 | | |
| | Industrial Area (Core Zone) | 1.2 | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | 2 Pit Main Gate Security Post | 24.10.24 | 53.4 | 56.7 | 55.1 | 45.2 | 48.4 | 46.8 |
| 2 | 2 Pit Top Kalimandir, Jamadoba | 24.10.24 | 52.1 | 55.4 | 53.8 | 44.3 | 47.6 | 46.0 |
| 3 | Weigh Bridge, Digwadih | 24.10.24 | 49.7 | 52.6 | 51.2 | 41.5 | 44.7 | 43.1 |
| 4 | Canteen Complex, Digwadih | 24.10.24 | 46.4 | 47.7 | 47.1 | 38.1 | 40.3 | 39.2 |
| 5 | Head Office Complex, Digwadih | 24.10.24 | 46.2 | 48.5 | 47.4 | 38,4 | 40.6 | 39.5 |
| 6 | Check Post Security Gate, 6&7 Pits | 24.10.24 | 50.5 | 53.8 | 52.2 | 42.7 | 45.9 | 44.3 |
| 7 | Canteen Complex, 6&7 Pits | 24.10.24 | 46.3 | 47.6 | 47.0 | 38.5 | 40.7 | 39.6 |
| 8 | Fan house- Nitrogen Plant, 6&7 Pits | 24.10.24 | 72.3 | 73.5 | 72.9 | 64.2 | 65.6 | 64.9 |
| 9 | Joota Gate, JCPP | 24.10.24 | 58.8 | 61.9 | 60.4 | 50.6 | 53.4 | 52.0 |
| 10 | Main Gate Stores, JCPP | 24.10.24 | 53.6 | 56.4 | 55.0 | 45.4 | 48.6 | 47.0 |
| 11 | Railway Siding Yard, JCPP | 24.10.24 | 50.4 | 53.7 | 52.1 | 42.7 | 45.4 | 44.1 |

Analysis: All the values are within permissible limit.

This is for your information please.

Lab. Assistant (Environment)

Copy to: Specialist (OH). TCH

Area Manager (Environment)

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ENVIRONMENT CELL LABORATORY, JAMADOBA AUTHORIZED VIDE LETTER NO. B – 3922 DATED- 30.08,2012 BY JHARKHAND STATE POLLUTION CONTROL BOARD, RANCHI.

1.4

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Colliery Head, Jamadoba Coal Washery Sr. Manager, Digwadih Colliery Sr. Manager, 6 & 7 Pits Colliery

Ref : JMB/ENV/LAB/05/731/24 Dated: 04/12/2024

Re: Ambient Noise Level Report

We wish to inform you that Ambient Noise Level Monitoring was carried out in JAMADOBA GROUP in the month of NOVEMBER'2024. The results are as given below:

| | Marchandra Contan | Dete | Day (0 | 5.00 - 22. | 00 Hrs.) | Night | (22.00-06. | 00 Hrs) |
|------|--------------------------------|----------|--------|-------------------|----------|-------------------|------------|---------|
| S.No | Monitoring Station | Date | CPCI | CPCB Standard- 55 | | CPCB Standard- 45 | | |
| | Residential Area (Buffer Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | Digwadih 12 No. Colony | 22.11.24 | 42.4 | 44.7 | 43.6 | 34.7 | 36.5 | 35.6 |
| 2 | New Village Colony, Jamadoba | 22.11.24 | 43.1 | 45.3 | 44.2 | 35.3 | 37.6 | 36.5 |
| 3 | 6&7 Pits Kalimandir Colony | 22.11.24 | 42.3 | 44.5 | 43.4 | 34.5 | 36.3 | 35.4 |
| 4 | Digwadih 10 No. Colony | 22.11.24 | 43.5 | 45.7 | 44.6 | 35.2 | 37.4 | 36.3 |

| | | Dista | Day (00 | 5.00 - 22. | 00 Hrs.) | Night | (22.00-06. | 00 Hrs) |
|---------------------------------|-------------------------------------|----------|-------------------|------------|----------|-------------------|------------|---------|
| 2 3 4 5 6 7 8 | Monitoring Station | Date | CPCB Standard- 75 | | | CPCB Standard- 70 | | |
| | Industrial Area (Core Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | 2 Pit Main Gate Security Post | 22.11.24 | 51.5 | 54.8 | 53.2 | 43.3 | 46.5 | 44.9 |
| 2 | 2 Pit Top Kalimandir, Jamadoba | 22.11.24 | 50.3 | 53.5 | 51.9 | 42.4 | 45.7 | 44.1 |
| 3 | Weigh Bridge, Digwadih | 22.11.24 | 48.4 | 50.7 | 49.6 | 40.2 | 42.5 | 41.4 |
| 4 | Canteen Complex, Digwadih | 22.11.24 | 44.2 | 46.4 | 45.3 | 36.5 | 38.6 | 37.6 |
| 5 | Head Office Complex, Digwadih | 22.11.24 | 44.1 | 46.3 | 45.2 | 36.3 | 38.5 | 37.4 |
| 6 | Check Post Security Gate, 6&7 Pits | 22.11.24 | 50.4 | 52.6 | 51.5 | 42.6 | 44.8 | 43.7 |
| 7 | Canteen Complex, 6&7 Pits | 22.11.24 | 44.4 | 46.7 | 45.6 | 36.2 | 38.6 | 37.4 |
| 8 | Fan house- Nitrogen Plant, 6&7 Pits | 22.11.24 | 72.2 | 73.4 | 72.8 | 64.2 | 65.7 | 65.0 |
| 9 | Joota Gate, JCPP | 22.11.24 | 56.5 | 59.7 | 58.1 | 48.7 | 51.9 | 50.3 |
| 10 | Main Gate Stores, JCPP | 22.11.24 | 52.4 | 55.6 | 54.0 | 44.5 | 47.8 | 46.2 |
| 11 | Railway Siding Yard, JCPP | 22.11.24 | 50.1 | 53.3 | 51.7 | 42.3 | 45.4 | 43.9 |

Analysis: All the values are within permissible limit.

This is for your information please.

C

Lab. Assistant (Environment)

Copy to: Specialist (OH). TCH

Manager Environment)

.

ENVIRONMENT CELL LABORATORY, JAMADOBA AUTHORIZED VIDE LETTER NO. B – 3922 DATED- 30.08.2012 BY JHARKHAND STATE POLLUTION CONTROL BOARD, RANCHI.

Annexure- II

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Colliery Head, Jamadoba Coal Washery Sr. Manager, Digwadih Colliery Sr. Manager, 6 & 7 Pits Colliery

Ref : JMB/ ENV/ LAB/ 05/ 817/24 Dated: 31/12/2024

Re: Ambient Noise Level Report

We wish to inform you that Ambient Noise Level Monitoring was carried out in JAMADOBA GROUP in the month of DECEMBER'2024. The results are as given below:

| | | D | Day (0 | 6.00 - 22. | 00 Hrs.) | Night | 22.00-06. | 00 Hrs) |
|------|--------------------------------|----------|--------|-------------------|----------|-------------------|-----------|---------|
| S.No | Monitoring Station | Date | CPCI | CPCB Standard- 55 | | CPCB Standard- 45 | | |
| | Residential Area (Buffer Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | Digwadih 12 No. Colony | 20.12.24 | 42.2 | 44.5 | 43.4 | 34.4 | 36.7 | 35.6 |
| 2 | New Village Colony, Jamadoba | 20.12.24 | 44.3 | 45.7 | 45.0 | 36.5 | 38.8 | 37.7 |
| 3 | 6&7 Pits Kalimandir Colony | 20.12.24 | 42.7 | 44.6 | 43.7 | 34.3 | 36.5 | 35.4 |
| 4 | Digwadih 10 No. Colony | 20.12.24 | 43.1 | 45.3 | 44.2 | 35.6 | 37.9 | 36.8 |

| | Martin Charles | Dete | Day (0 | 5.00 - 22. | 00 Hrs.) | Night (| 22.00-06. | 00 Hrs) |
|------|-------------------------------------|----------|-------------------|------------|----------|-------------------|-----------|---------|
| S.No | Monitoring Station | Date | CPCB Standard- 75 | | | CPCB Standard- 70 | | |
| | Industrial Area (Core Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | 2 Pit Main Gate Security Post | 20.12.24 | 52.2 | 55.6 | 53.9 | 44.5 | 47.8 | 46.2 |
| 2 | 2 Pit Top Kalimandir, Jamadoba | 20.12.24 | 50.5 | 53.7 | 52.1 | 42.1 | 45.5 | 43.8 |
| 3 | Weigh Bridge, Digwadih | 20.12.24 | 48.2 | 50.4 | 49.3 | 40.3 | 42.6 | 41.5 |
| 4 | Canteen Complex, Digwadih | 20.12.24 | 44.7 | 45.6 | 45.2 | 36.2 | 38.4 | 37.3 |
| 5 | Head Office Complex, Digwadih | 20.12.24 | 44.4 | 46.5 | 45.5 | 36.5 | 38.7 | 37.6 |
| 6 | Check Post Security Gate, 6&7 Pits | 20.12.24 | 51.3 | 53.2 | 52.3 | 43.1 | 45.3 | 44.2 |
| 7 | Canteen Complex, 6&7 Pits | 20.12.24 | 44.6 | 45.4 | 45.0 | 36.4 | 38.7 | 37.6 |
| 8 | Fan house- Nitrogen Plant, 6&7 Pits | 20.12.24 | 72.3 | 73.5 | 72.9 | 64.4 | 65.6 | 65.0 |
| 9 | Joota Gate, JCPP | 20.12.24 | 57.4 | 60.7 | 59.1 | 49.5 | 52.8 | 51.2 |
| 10 | Main Gate Stores, JCPP | 20.12.24 | 51.6 | 54.9 | 53.3 | 43.2 | 46.5 | 44.9 |
| 11 | Railway Siding Yard, JCPP | 20.12.24 | 50.3 | 53.6 | 52.0 | 42.5 | 45.7 | 44.1 |

Analysis: All the values are within permissible limit.

This is for your information please.

Co

Lab. Assistant (Environment)

Copy to: Specialist (OH). TCH

Manager (Environment)

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Colliery Head, Jamadoba Coal Washery Sr. Manager, Digwadih Colliery Sr. Manager, 6 & 7 Pits Colliery

Ref : JMB/ ENV/ LAB/ 05/ 57/ /25 Dated: 31/01/2025

Re: Ambient Noise Level Report

We wish to inform you that Ambient Noise Level Monitoring was carried out in JAMADOBA GROUP in the month of JANUARY'2025. The results are as given below:

| S.No | Manitarian Station | Dete | Day (0 | 6.00 - 22. | 00 Hrs.) | Night | (22.00-06. | 00 Hrs) | |
|------|--------------------------------|----------|--------|------------|------------------------|-------|--|---------|--|
| 5.NO | Monitoring Station | Date | CPCI | 3 Standa | ard- 55 CPCB Standard- | | (22.00-06.0 B Standar Max. 35.8 36.5 36.8 37.6 | rd- 45 | |
| | Residential Area (Buffer Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. | |
| 1 | Digwadih 12 No. Colony | 13.01.25 | 41.7 | 43.4 | 42.6 | 33.5 | 35.8 | 34.7 | |
| 2 | New Village Colony, Jamadoba | 13.01.25 | 42.5 | 44.6 | 43.6 | 34.3 | 36.5 | 35.4 | |
| 3 | 6&7 Pits Kalimandir Colony | 13.01.25 | 42.3 | 44.5 | 43.4 | 34.6 | 36.8 | 35.7 | |
| 4 | Digwadih 10 No. Colony | 13.01.25 | 43.6 | 45.8 | 44.7 | 35.4 | 37.6 | 36.5 | |

| C Ma | Monitoring Station | Data | Day (0 | 6.00 - 22. | 00 Hrs.) | Night | (22.00-06. | 00 Hrs) |
|------|-------------------------------------|----------|-------------------|------------|----------|-------------------|------------|---------|
| S.No | Monitoring Station | Date | CPCB Standard- 75 | | | CPCB Standard- 70 | | |
| | Industrial Area (Core Zone) | 1.2 | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | 2 Pit Main Gate Security Post | 13.01.25 | 52.6 | 55.8 | 54.2 | 44.5 | 47.7 | 46.1 |
| 2 | 2 Pit Top Kalimandir, Jamadoba | 13.01.25 | 51.4 | 54.6 | 53.0 | 43.2 | 46.4 | 44.8 |
| 3 | Weigh Bridge, Digwadih | 13.01.25 | 49.7 | 51.5 | 50.6 | 41.6 | 43.8 | 42.7 |
| 4 | Canteen Complex, Digwadih | 13.01.25 | 45.2 | 47.5 | 46.4 | 37.3 | 39.6 | 38.5 |
| 5 | Head Office Complex, Digwadih | 13.01.25 | 44.8 | 46.6 | 45.7 | 36.5 | 38.7 | 37.6 |
| 6 | Check Post Security Gate, 6&7 Pits | 13.01.25 | 52.5 | 54.8 | 53.7 | 44.7 | 46.8 | 45.8 |
| 7 | Canteen Complex, 6&7 Pits | 13.01.25 | 44.1 | 46.3 | 45.2 | 36.3 | 38.5 | 37.4 |
| 8 | Fan house- Nitrogen Plant, 6&7 Pits | 13.01.25 | 72.4 | 73.6 | 73.0 | 64.5 | 65.7 | 65.1 |
| 9 | Joota Gate, JCPP . | 13.01.25 | 56.7 | 59.9 | 58.3 | 48.4 | 51.6 | 50.0 |
| 10 | Main Gate Stores, JCPP | 13.01.25 | 52.5 | 55.7 | 54.1 | 44.2 | 47.5 | 45.9 |
| 11 | Railway Siding Yard, JCPP | 13.01.25 | 51.4 | 54.5 | 53.0 | 43.5 | 46.7 | 45.1 |

Analysis: All the values are within permissible limit.

This is for your information please.

alto

Lab. Assistant (Environment)

Copy to: Specialist (OH). TCH

Manager (Environment)

ENVIRONMENT CELL LABORATORY, JAMADOBA AUTHORIZED VIDE LETTER NO. B – 3922 DATED- 30.08.2012 BY JHARKHAND STATE POLLUTION CONTROL BOARD, RANCHI.

Annexure- II

10.14

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Colliery Head, Jamadoba Coal Washery Sr. Manager, Digwadih Colliery Sr. Manager, 6 & 7 Pits Colliery

Ref : JMB/ ENV/ LAB/ 05/ / 0 ユ /25 Dated: . 2. g / 0 ユ / 2025

Re: Ambient Noise Level Report

We wish to inform you that Ambient Noise Level Monitoring was carried out in JAMADOBA GROUP in the month of FEBRUARY'2025. The results are as given below:

| | No. 11. 1. 10. 11. | Dete | Day (0 | 6.00 - 22. | 00 Hrs.) | Night | (22.00-06. | 00 Hrs) |
|------|--------------------------------|----------|-------------------|------------|----------|-------------------|------------|---------|
| S.No | Monitoring Station | Date | CPCB Standard- 55 | | | CPCB Standard- 45 | | |
| | Residential Area (Buffer Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | Digwadih 12 No. Colony | 26.02.25 | 44.8 | 46.5 | 45.7 | 36.4 | 38.6 | 37.5 |
| 2 | New Village Colony, Jamadoba | 26.02.25 | 42.4 | 44.6 | 43.5 | 34.6 | 36.8 | 35.7 |
| 3 | 6&7 Pits Kalimandir Colony | 26.02.25 | 48.4 | 50.2 | 49.3 | 40.3 | 42.5 | 41.4 |
| 4 | Digwadih 10 No. Colony | 26.02.25 | 45.6 | 47.7 | 46.7 | 37.5 | 39.8 | 38.7 |

| | | Det | Day (0 | 6.00 - 22. | 00 Hrs.) | Night (| (22.00-06. | 00 Hrs) |
|------|-------------------------------------|----------|-------------------|------------|----------|-------------------|------------|---------|
| S.No | Monitoring Station | Date | CPCB Standard- 75 | | | CPCB Standard- 70 | | |
| | Industrial Area (Core Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | 2 Pit Main Gate Security Post | 26.02.25 | 56.5 | 59.7 | 58.1 | 48.3 | 51.5 | 49.9 |
| 2 | 2 Pit Top Kalimandir, Jamadoba | 26.02.25 | 52.2 | 55.1 | 53.7 | 44.5 | 47.7 | 46.1 |
| 3 | Weigh Bridge, Digwadih | 26.02.25 | 50.4 | 52.6 | 51.5 | 42.2 | 44.5 | 43.4 |
| 4 | Canteen Complex, Digwadih | 26.02.25 | 48.6 | 50.4 | 49.5 | 40.4 | 42.7 | 41.6 |
| 5 | Head Office Complex, Digwadih | 26.02.25 | 43.2 | 45.5 | 44.4 | 35.5 | 37.6 | 36.6 |
| 6 | Check Post Security Gate, 6&7 Pits | 26.02.25 | 50.1 | 53.3 | 51.7 | 42.3 | 45.5 | 43.9 |
| 7 | Canteen Complex, 6&7 Pits | 26.02.25 | 47.4 | 49.6 | 48.5 | 39.6 | 41.8 | 40.7 |
| 8 | Fan house- Nitrogen Plant, 6&7 Pits | 26.02.25 | 61.7 | 63.8 | 62.8 | 53.4 | 52.6 | 53.0 |
| 9 | Joota Gate, JCPP | 26.02.25 | 59.3 | 62.5 | 60.9 | 51.2 | 54.4 | 52.8 |
| 10 | Main Gate Stores, JCPP | 26.02.25 | 54.6 | 57.7 | 56.2 | 46.4 | 49.5 | 48.0 |
| 11 | Railway Siding Yard, JCPP | 26.02.25 | 52.1 | 55.3 | 53.7 | 44.5 | 47.7 | 46.1 |

Analysis: All the values are within permissible limit.

This is for your information please.

at

Lab. Assistant (Environment)

Copy to: Specialist (OH). TCH

Manager (Environment)

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Colliery Head, Jamadoba Coal Washery Sr. Manager, Digwadih Colliery Sr. Manager, 6 & 7 Pits Colliery

Ref : JMB/ ENV/ LAB/ 05/ 149 /25 Dated: 07 /04/ 2025

Re: Ambient Noise Level Report

We wish to inform you that Ambient Noise Level Monitoring was carried out in JAMADOBA GROUP in the month of MARCH'2025. The results are as given below:

| | Manifestine Station | Dete | Day (0 | 5.00 - 22. | 00 Hrs.) | Night (22.00-06.00 Hrs | | | |
|------|--------------------------------|----------|--------|------------|----------|------------------------|------|------|--|
| S.No | Monitoring Station | Date | CPCI | 3 Standa | rd- 55 | CPCB Standard- 45 | | | |
| | Residential Area (Buffer Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. | |
| 1 | Digwadih 12 No. Colony | 24.03.25 | 42.3 | 44.6 | 43.5 | 34.5 | 36.7 | 35.6 | |
| 2 | New Village Colony, Jamadoba | 24.03.25 | 43.5 | 45.8 | 44.7 | 35.3 | 37.5 | 36.4 | |
| 3 | 6&7 Pits Kalimandir Colony | 24.03.25 | 46.7 | 48.5 | 47.6 | 38.4 | 40.7 | 39.6 | |
| 4 | Digwadih 10 No. Colony | 24.03.25 | 44.5 | 46.7 | 45.6 | 36.7 | 38.9 | 37.8 | |

| | and the standard standard | Du | Day (0 | 5.00 - 22. | 00 Hrs.) | Night (22.00-06.00 Hrs) CPCB Standard- 70 | | |
|------|-------------------------------------|----------|--------|------------|----------|--|------|------|
| S.No | Monitoring Station | Date | CPCI | 3 Standa | rd- 75 | | | |
| | Industrial Area (Core Zone) | | Min. | Max. | Avg. | Min. | Max. | Avg. |
| 1 | 2 Pit Main Gate Security Post | 24.03.25 | 57.2 | 60.5 | 58.9 | 49.4 | 52.7 | 51.1 |
| 2 | 2 Pit Top Kalimandir, Jamadoba | 24.03.25 | 51.4 | 54.7 | 53.1 | 43.1 | 46.3 | 44.7 |
| 3 | Weigh Bridge, Digwadih | 24.03.25 | 49.8 | 51.6 | 50.7 | 41.5 | 43.7 | 42.6 |
| 4 | Canteen Complex, Digwadih | 24.03.25 | 48.3 | 50.2 | 49.3 | 40.4 | 42.5 | 41.5 |
| 5 | Head Office Complex, Digwadih | 24.03.25 | 42.6 | 44.7 | 43.7 | 34.3 | 36.6 | 35.5 |
| 6 | Check Post Security Gate, 6&7 Pits | 24.03.25 | 50.3 | 52.5 | 51.4 | 42.5 | 44.8 | 43.7 |
| 7 | Canteen Complex, 6&7 Pits | 24.03.25 | 48.2 | 50.1 | 49.2 | 40.1 | 42.4 | 41.3 |
| 8 | Fan house- Nitrogen Plant, 6&7 Pits | 24.03.25 | 58.4 | 60.3 | 59.4 | 50.6 | 52.7 | 51.7 |
| 9 | Joota Gate, JCPP . | 24.03.25 | 60.2 | 63.5 | 61.9 | 52.4 | 55.6 | 54.0 |
| 10 | Main Gate Stores, JCPP | 24.03.25 | 52.7 | 55.6 | 54.2 | 44.5 | 47.8 | 46.2 |
| 11 | Railway Siding Yard, JCPP | 24.03.25 | 52.4 | 54.7 | 53.6 | 44.2 | 46.5 | 45.4 |

Analysis: All the values are within permissible limit.

This is for your information please.

Lab. Assistant (Environment)

Copy to: Specialist (OH). TCH

Manager (Environment)

Annexure- II

192

TATA STEEL LIMITED JHARIA DIVISION

Area Manager, Jamadoba Colliery Area Manager, Digwadih Colliery Area Manager,6&7 Pits Colliery

Ref. No. - JMB / ENV / LAB / 03 / 681 / 2024 Dated - 12/11 / 2024

Sub: MINE WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of OCTOBER'2024. The results are as given below:

| | Location | Sampling | Sampling | Temp | pH | TSS | TDS | BOD | COD | Oil & Grease |
|-------|---|----------|----------|--------|-----------|-------------|--------------|------------|-------------|-----------------|
| S. No | (Final Discharge Point) (Mine's Water) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/1 | 250 mg/l | 10 mg/l |
| 1 | 2 Pit Jamadoba Colliery | 24.10.24 | 05:05 PM | 30 | 7.7 | 20 | 773 | 2.4 | 68 | 0.5 |
| 2 | 3 Pit Jamadoba Colliery | 24.10.24 | 04:50 PM | 31 | 7.2 | 16 | 793 | 2.5 | 56 | 0.3 |
| 3 | 2 Incline Jamadoba Colliery | 24.10.24 | 04:15 PM | 2 | | No | Discharge | | | |
| 4 | 6 & 7 Pits Colliery | 24.10.24 | 02:20 PM | 30 | 7.3 | 14 | 724 | 2.8 | 92 | 0 |
| 5 | Digwadih Colliery | 24.10.24 | 02:40 PM | | | No | Discharge | 8 | | |

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All the parameters are within the limit, and you are requested to maintain the same. This is for your information and necessary action please.

Lab.Assistant (Environment)

Area Manager (Environment)

Annexure- II

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant Area Manager Jamadoba Colliery Area Manager Digwadih Colliery

Ref. No. - JMB / ENV / LAB / 03 / 680 / 2024 Dated - 12/11 / 2024

Sub: STP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of OCTOBER'2024. The results are as given below:

| 1227 | Location | Sampling | Sampling | Temp | pН | TSS | TDS | BOD | COD | Oil & Grease |
|-------|--|----------|----------|--------|-----------|-------------|--------------|------------|-------------|-----------------|
| S. No | (Final Discharge Point) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l |
| 1 | STP, Jmb. Canteen- Inlet | 24.10.24 | 12:30 PM | 27 | 7.8 | 145 | 1024 | 31.8 | 290 | 2.5 |
| 2 | STP, Jmb. Canteen- Outlet | 24.10.24 | 12:35 PM | 26 | 7.5 | 24 | 726 | 7.0 | 84 | 0.7 |
| 3 | STP, JCPP Canteen- Inlet | 24.10.24 | 01:40 PM | 27 | 7.9 | 137 | 924 | 32.9 | 306 | 3.7 |
| 4 | STP, JCPP Canteen- Outlet | 24.10.24 | 01:45 PM | 26 | 7.6 | 20 | 654 | 5.2 | 70 | 0.4 |
| 5 | STP, Railway Colony- Inlet | 24.10.24 | 03:45 PM | 28 | 8.4 | 178 | 1067 | 34.8 | 319 | 3.1 |
| 6 | STP, Railway Colony-Outlet | 24.10.24 | 03;50 PM | 27 | 8.1 | 36 | 953 | 6.9 | 52 | 1.4 |
| 7 | STP, Digwadih 12 No. Officer's colony-Inlet | 24.10.24 | 03:15 PM | 27 | 8.0 | 117 | 921 | 33.7 | 284 | 2.9 |
| 8 | STP, Digwadih 12 No. Officer's colony- Outlet | 24.10,24 | 03:20 PM | 26 | 7.7 | 39 | 637 | 4.6 | 102 | 1.3 |
| 9 | STP,Digwadih 12 No. Supervisor flat – Inlet | 24.10.24 | 02:55 PM | 27 | 7.8 | 122 | 974 | 29.8 | 332 | 3.2 |
| 10 | STP,Digwadih 12 No. Supervisor flat -Outlet | 24.10.24 | 03:00 PM | 26 | 7.6 | 18 | 735 | 6.2 | 64 | 0.9 |

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

Emphato.

Area Manager (Environment)

Annexure- II

10.00

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant Area Manager Jamadoba Colliery C.M.O, TCH, Jamadoba

Ref. No. - JMB / ENV / LAB / 03 / 682 / 2024 Dated - 12 / 11 / 2024

Sub: ETP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of OCTOBER'2024. The results are as given below:

| | Location | | Sampling | Sampling | Temp | pН | TSS | TDS | BOD | COD | Oil & Grease |
|-------|--------------------------|----------|----------|---------------------|-----------|-------------|--------------|------------|-------------|------------|-----------------|
| S. No | (Final Discharge Point) | Date | Time | < 40 ⁰ C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/1 | 250 mg/l | 10 mg/l | |
| 1 | ETP, TCH- Inlet | 24.10.24 | 02:00 PM | 27 | 8.3 | 98 | 742 | 28.2 | 260 | 1.5 | |
| 2 | ETP, TCH- Outlet | 24,10,24 | 02:05 PM | 26 | 8.1 | 19 | 675 | 6.4 | 52 | 0.3 | |
| 3 | ETP, Garage- Inlet | 24.10.24 | 12:45 PM | 27 | 8.2 | 161 | 972 | 31.2 | 326 | 3.8 | |
| 4 | ETP, Garage- Outlet | 24,10.24 | 12:50 PM | 26 | 7.8 | 34 | 816 | 7.2 | 94 | 1.6 | |
| 5 | Final Settling Pond JCPP | 24.10.24 | 04:35 PM | | | | Dry Pond | | | | |

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All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

Conchato

Lab.Assistant (Environment)

Area Manager (Environment)

Annexure- II

10.04

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant Area Manager Jamadoba Colliery C.M.O, TCH, Jamadoba

Ref. No. - JMB / ENV / LAB / 03 / 766 / 2024 Dated - 09/12 / 2024

Sub: ETP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of NOVEMBER*2024. The results are as given below:

| | Location | Sampling | Sampling | Temp | pH | TSS | TDS | BOD | COD | Oil & Grease |
|-------|--------------------------|----------|----------|--------|-----------|-------------|--------------|------------|-------------|-----------------|
| S. No | (Final Discharge Point) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l |
| 1 | ETP, TCH- Inlet | 22.11.24 | 12:25 PM | 28 | 8.4 | 116 | 736 | 27.8 | 294 | 1.8 |
| 2 | ETP, TCH- Outlet | 22.11.24 | 12:30 PM | 27 | 8.2 | 26 | 658 | 5.2 | 48 | 0.7 |
| 3 | ETP, Garage- Inlet | 22.11.24 | 01:30 PM | 27 | 8.1 | 139 | 928 | 29.1 | 316 | 4.1 |
| 4 | ETP, Garage- Outlet | 22.11.24 | 01:35 PM | 26 | 7.9 | 27 | 821 | 6.9 | 102 | 1.7 |
| 5 | Final Settling Pond JCPP | 22.11.24 | 09:55 AM | | | | Dry Pond | | | |

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All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

Emphato

Manager (Environment)

Annexure- II

TATA STEEL LIMITED JHARIA DIVISION

Area Manager, Jamadoba Colliery Area Manager, Digwadih Colliery Area Manager,6&7 Pits Colliery

Ref. No. - JMB / ENV / LAB / 03 / 768 / 2024 Dated - 09 /12 / 2024

Sub: MINE WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of NOVEMBER'202-The results are as given below:

| S. No | Location (Final Discharge Point) | Sampling | Sampling | | Temp | pH | TSS | TDS | BOD | COD | Oil & Grease |
|--------|-------------------------------------|----------|----------|--------|-----------|-------------|---------------|------------|-------------|------------|-----------------|
| 3, 140 | (Mine's Water) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l | |
| 1 | 2 Pit Jamadoba Colliery | 22.11.24 | 09:25 AM | | | No | Discharge | | | | |
| 2 | 3 Pit Jamadoba Colliery | 22.11.24 | 09:40 AM | 30 | 7.5 | 23 | 806 | 2.9 | 68 | 0.6 | |
| 3 | 2 Incline Jamadoba Colliery | 22.11.24 | 10:15 AM | ł. | | No | I Discharg | e | | | |
| 4 | 6 & 7 Pits Colliery | 22.11.24 | 12:10 PM | 31 | 7.7 | 32 | 789 | 2.6 | 74 | 0.4 | |
| 5 | Digwadih Colliery | 22.11.24 | 11:50 AM | | | No | Discharge | | | 1 | |

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All the parameters are within the limit, and you are requested to maintain the same. This is for your information and necessary action please.

Enchado ' Lab.Assistant (Environment)

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Manager (Environment)

Annexure- II

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant Area Manager Jamadoba Colliery Area Manager Digwadih Colliery

Ref. No. - JMB / ENV / LAB / 03 / 767 / 2024 Dated - 09/12 / 2024

Sub: STP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of NOVEMBER'2024 The results are as given below:

| | Location | Sampling | Sampling | Temp | pH | TSS | TDS | BOD | COD | Oil & Grease |
|-------|--|----------|----------|--------|-----------|-------------|--------------|------------|-------------|-----------------|
| S. No | (Final Discharge Point) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l |
| 1 | STP, Jmb. Canteen- Inlet | 22.11.24 | 01:10 PM | 27 | 8.0 | 137 | 916 | 34.6 | 316 | 2.6 |
| 2 | STP, Jmb. Canteen- Outlet | 22.11.24 | 01:15 PM | 26 | 7.7 | 31 | 694 | 6.9 | 72 | 0.5 |
| 3 | STP, JCPP Canteen- Inlet | 22.11.24 | 12:50 PM | 27 | 8.1 | 126 | 896 | 33.1 | 294 | 3.4 |
| 4 | STP, JCPP Canteen- Outlet | 22.11.24 | 12:55 PM | 26 | 7.8 | 34 | 672 | 6.2 | 108 | 0.6 |
| 5 | STP, Railway Colony- Inlet | 22.11.24 | 10:35 AM | 28 | 8.2 | 156 | 1025 | 33.2 | 332 | 2.9 |
| 6 | STP, Railway Colony-Outlet | 22.11.24 | 10:40 AM | 27 | 8.0 | 27 | 876 | 7.1 | 85 | 1.3 |
| 7 | STP, Digwadih 12 No. Officer's colony-Inlet | 22.11.24 | 11:05 AM | 28 | 8.1 | 124 | 936 | 34.1 | 310 | 3.2 |
| 8 | STP, Digwadih 12 No. Officer's colony- Outlet | 22.11.24 | 11:10 AM | 27 | 7.8 | 21 | 716 | 5.4 | 54 | 1.0 |
| 9 | STP,Digwadih 12 No. Supervisor flat – Inlet | 22.11.24 | 11:25 AM | 27 | 8.0 | 167 | 963 | 32.5 | 296 | 3.5 |
| 10 | STP,Digwadih 12 No. Supervisor flat -Outlet | 22.11.24 | 11:30 AM | 26 | 7.7 | 26 | 769 | 5.8 | 78 | 1.2 |

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

Emchat . Lab.Assistant (Environment)

Manager (Environment)

20.52

TATA STEEL LIMITED JHARIA DIVISION

Well Water Quality Report of Jamadoba Group for the month of NOVEMBER'2024

| S.No | Date | Location | Time | Depth in meter | рН | Electrical Conductivity µS/m |
|------|----------|----------------------------|----------|-------------------|-----|------------------------------------|
| 1 | 22.11.24 | Purnadih (Jorapokhar) | 01:15 PM | 4.13 | 7.3 | 1243 |
| 2 | 22.11.24 | Bhowra 13 No | 12:55 PM | 1.27 | 7.4 | 1014 |
| 3 | 22.11.24 | Mohalbani Basti | 02:25 PM | 2.13 | 7.3 | 1041 |
| 4 | 22.11.24 | Digwadih 10 No F & J | 12:10 PM | 1.52 | 7.1 | 1639 |
| 5 | 22.11.24 | Kalimela Shivmandir | 11:05 AM | 0.98 | 7.2 | 917 |
| 6 | 22.11.24 | Kalimela Kalimandir | 11:20 AM | 3.13 | 7.5 | 1358 |
| 7 | 22.11.24 | Lower Dungari | 10:45 AM | 3.67 | 7.3 | 725 |
| 8 | 22.11.24 | Upper Dungari | 10:25 AM | 1.72 | 7.2 | 756 |
| 9 | 22.11.24 | Pattia Basti | 10:00 AM | 3.48 | 7.0 | 894 |
| 10 | 22.11.24 | Kenduadih Basti | 09:35 AM | 1.32 | 7.2 | 972 |
| 11 | 22.11.24 | Jorapokhar Kushtand | 01:55 PM | 3.84 | 7.4 | 1637 |
| 12 | 22.11.24 | 6&7 Pits (Ayodhya Nagri) | 11:45 AM | 1.76 | 7.2 | 1242 |
| 13 | 22.11.24 | Jorapokhar Basti Chhattand | 12:25 PM | 1.13 | 7.4 | 1384 |
| 14 | 22.11.24 | Jorapokhar Babu Basa | 01:30 PM | 2.11 | 7.1 | 1169 |

JAMADOBA GROUP

Lab.Assistant (Environment)

Manager (Environment)

Annexure- II

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TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant Area Manager Jamadoba Colliery C.M.O, TCH, Jamadoba

Ref. No. - JMB / ENV / LAB / 03 / 2/2 / 2024 Dated - 3/ / /2 / 2024

Sub: ETP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of DECEMBER'2024. The results are as given below:

| | Location | Sampling | Sampling | Temp | pH | TSS | TDS | BOD | COD | Oil & Grease |
|-------|--------------------------|----------|----------|---------------------|-----------|-------------|--------------|------------|-------------|-----------------|
| S. No | (Final Discharge Point) | Date | Time | < 40 ⁰ C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l |
| 1 | ETP, TCH- Inlet | 20.12.24 | 12:30 PM | 26 | 8.3 | 164 | 816 | 29.1 | 264 | 1.4 |
| 2 | ETP, TCH- Outlet | 20.12.24 | 12:35 PM | 25 | 8,1 | 39 | 786 | 4.9 | 54 | 0.5 |
| 3 | ETP, Garage- Inlet | 20.12.24 | 01:35 PM | 25 | 8.3 | 142 | 941 | 30.5 | 310 | 3.6 |
| 4 | ETP, Garage- Outlet | 20.12.24 | 01:40 PM | 24 | 8.0 | 32 | 894 | 7.1 | 88 | 1.6 |
| 5 | Final Settling Pond JCPP | 20.12.24 | 09:55 AM | | | | Dry Pond | | | |

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All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

Conchat .

Manager (Environment)

Annexure- II

TATA STEEL LIMITED JHARIA DIVISION

Area Manager, Jamadoba Colliery Area Manager, Digwadih Colliery Area Manager,6&7 Pits Colliery

Ref. No. - JMB / ENV / LAB / 03 / / 2024 Dated - / / 2024

Sub: MINE WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of DECEMBER'2024 The results are as given below:

| . N | Location (Final Discharge Point) | (Final Discharge Point) Sa | Sampling | Sampling | Temp | pH | TSS | TDS | BOD | COD | Oil & Grease |
|-------|---|----------------------------|----------|----------|-----------|-------------|--------------|------------|-------------|------------|-----------------|
| S. No | (Final Discharge Point) (Mine's Water) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l | |
| 1 | 2 Pit Jamadoba Colliery | 20.12.24 | 09:30 AM | | | No | Discharge | 1 | | | |
| 2 | 3 Pit Jamadoba Colliery | 20.12.24 | 09:45 AM | 32 | 7.7 | 36 | 837 | 3.4 | 42 | 0.9 | |
| 3 | 2 Incline Jamadoba Colliery | 20.12.24 | 10:20 AM | * | | No | Discharg | e | | | |
| 4 | 6 & 7 Pits Colliery | 20.12.24 | 12:15 PM | 30 | 7.5 | 21 | 912 | 2.8 | 68 | 0.8 | |
| 5 | Digwadih Colliery | 20.12.24 | 11:55 AM | | | No | Discharge | | | | |

All the parameters are within the limit, and you are requested to maintain the same. This is for your information and necessary action please.

Emchat* Lab.Assistant (Environment) Manager (Environment)

Annexure- II

1.14

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant Area Manager Jamadoba Colliery Area Manager Digwadih Colliery

Ref. No. - JMB / ENV / LAB / 03 / *\$13* / 2024 Dated - *31* / / 2. / 2024

Sub: STP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of DECEMBER'2024 The results are as given below:

| | Location | Sampling | Sampling | Temp | pH | TSS | TDS | BOD | COD | Oil & Grease |
|-------|--|----------|----------|--------|-----------|-------------|--------------|------------|-------------|-----------------|
| S. No | (Final Discharge Point) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l |
| 1 | STP, Jmb. Canteen- Inlet | 20.12.24 | 01:15 PM | 25 | 7.9 | 126 | 924 | 35.7 | 338 | 2.9 |
| 2 | STP, Jmb. Canteen- Outlet | 20.12.24 | 01:20 PM | 24 | 7.6 | 34 | 810 | 4.8 | 65 | 0.9 |
| 3 | STP, JCPP Canteen- Inlet | 20.12.24 | 12:55 PM | 25 | 8.0 | 135 | 873 | 32.4 | 284 | 3.5 |
| 4 | STP, JCPP Canteen- Outlet | 20.12.24 | 01:00 PM | 24 | 7.5 | 29 | 712 | 6.4 | 72 | 0.8 |
| 5 | STP, Railway Colony- Inlet | 20.12.24 | 10:40 AM | 26 | 8.1 | 143 | 987 | 30.1 | 294 | 3.5 |
| 6 | STP, Railway Colony-Outlet | 20.12.24 | 10:45 AM | 25 | 7.9 | 22 | 855 | 5.2 | 87 | 1.0 |
| 7 | STP, Digwadih 12 No. Officer's colony-Inlet | 20.12.24 | 11:10 AM | 26 | 8.0 | 167 | 987 | 36.4 | 316 | 3.7 |
| 8 | STP, Digwadih 12 No. Officer's colony- Outlet | 20.12.24 | 11:15 AM | 25 | 7.7 | 36 | 845 | 5.9 | 79 | 0.8 |
| 9 | STP,Digwadih 12 No. Supervisor flat – Inlet | 20.12.24 | 11:30 AM | 25 | 8.2 | 128 | 1016 | 34.0 | 284 | 3.7 |
| 10 | STP,Digwadih 12 No. Supervisor flat -Outlet | 20.12.24 | 11:35 AM | 24 | 7.8 | 31 | 910 | 7.2 | 90 | 0.9 |

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

Enchato.

Manager (Environment)

Annexure- II

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant Area Manager Jamadoba Colliery C.M.O, TCH, Jamadoba

Ref. No. - JMB / ENV / LAB / 03 / 31 / 2025 Dated - 31 / 61 / 2025

Sub: ETP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of JANUARY'2025. The results are as given below:

| | Location | Sampling | Sampling | ampling | TSS | TDS | BOD | COD | Oil & Grease | |
|-------|--------------------------|----------|----------|--------------------|-----------|-------------|--------------|------------|-----------------|------------|
| S. No | (Final Discharge Point) | Date | Time | <40 [®] C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l |
| 1 | ETP, TCH- Inlet | 13.01.25 | 10:45 AM | 27 | 8.2 | 108 | 824 | 28.6 | 276 | 1.6 |
| 2 | ETP, TCH- Outlet | 13.01.25 | 10:50 AM | 26 | 8 | 32 | 774 | 5.1 | 72 | 0.4 |
| 3 | ETP, Garage- Inlet | 13.01.25 | 01:20 PM | 26 | 8.1 | 135 | 976 | 31.3 | 284 | . 3.8 |
| 4 | ETP, Garage- Outlet | 13.01.25 | 01:25 PM | 25 | 7.9 | 29 | 872 | 6.8 | 76 | 1.2 |
| 5 | Final Settling Pond JCPP | 13.01.25 | 09:50 AM | | | | Dry Pond | | | |

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All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

Ems hel

Manager (Environment)

Annexure- II

TATA STEEL LIMITED JHARIA DIVISION

Area Manager, Jamadoba Colliery Area Manager, Digwadih Colliery Area Manager,6&7 Pits Colliery

Ref. No. - JMB / ENV / LAB / 03 / 30 / 2025 Dated - 31 / 01 / 2025

Sub: MINE WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of JANUARY'2025. The results are as given below:

| 6 N- | Location (Final Discharge Point) | Sampling | Sampling Sampling Temp pH TSS TDS | BOD | COD | Oil & Grease | | | | | |
|-------|---|----------|-----------------------------------|--------|--------------|-----------------|--------------|------------|-------------|------------|--|
| S. No | (Final Discharge Point) (Mine's Water) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l | |
| 1 | 2 Pit Jamadoba Colliery | 13.01.25 | 09:20 AM | | | No | Discharge | | | | |
| 2 | 3 Pit Jamadoba Colliery | 13.01.25 | 09:35 AM | 32 | 7.6 | 23 | 796 | 3.2 | 72 | 0.7 | |
| 3 | 2 Incline Jamadoba Colliery | 13.01.25 | 10:05 AM | - | No Discharge | | | | | | |
| 4 | 6 & 7 Pits Colliery | 13.01.25 | 11:10 AM | 30 | 7.7 | 21 | 874 | 2.5 | 62 | 0.5 | |
| 5 | Digwadih Colliery | 13.01.25 | 12:15 PM | 32 | 7.8 | 36 | 916 | 2.7 | 80 | 0 | |

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All the parameters are within the limit, and you are requested to maintain the same. This is for your information and necessary action please.

Manager (Environment)

Annexure- II

200

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant Area Manager Jamadoba Colliery Area Manager Digwadih Colliery

Ref. No. - JMB / ENV / LAB / 03 / 29 / 2025 Dated - 31 / 01 / 2025

Sub: STP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of JANUARY'2025. The results are as given below:

| 6 N. | Location | Sampling | Sampling | Temp | pH | TSS | TDS | BOD | COD | Oil & Grease |
|-------|--|----------|----------|--------|-----------|-------------|--------------|------------|-------------|-----------------|
| S. No | (Final Discharge Point) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/1 | 250 mg/l | 10 mg/l |
| 1 | STP, Jmb. Canteen- Inlet | 13.01.25 | 01:05 PM | 26 | 8.1 | 122 | 918 | 34.8 | 332 | 3.1 |
| 2 | STP, Jmb. Canteen- Outlet | 13.01.25 | 01:10 PM | 25 | 7.8 | 25 | 779 | 4.5 | 84 | 0.7 |
| 3 | STP, JCPP Canteen- Inlet | 13.01.25 | 12:40 PM | 26 | 7.9 | 164 | 857 | 31.2 | 296 | 3.2 |
| 4 | STP, JCPP Canteen- Outlet | 13.01.25 | 12:45 PM | 25 | 7.6 | 26 | 772 | 5.7 | 102 | 0.3 |
| 5 | STP, Railway Colony- Inlet | 13.01.25 | 10:25 AM | 27 | 8.3 | 128 | 971 | 32.2 | 319 | 3.8 |
| 6 | STP, Railway Colony-Outlet | 13.01.25 | 10:30 AM | 26 | 8.0 | 36 | 832 | 5.8 | 98 | 1.2 |
| 7 | STP, Digwadih 12 No. Officer's colony-Inlet | 13.01.25 | 11:30 AM | 27 | 8.0 | 141 | 974 | 34.2 | 260 | 3.5 |
| 8 | STP, Digwadih 12 No. Officer's colony- Outlet | 13.01.25 | 11:35 AM | 26 | 7.6 | 34 | 836 | 5.7 | 62 | 0.2 |
| 9 | STP,Digwadih 12 No. Supervisor flat – Inlet | 13.01.25 | 11:50 AM | 26 | 8.1 | 152 | 987 | 33.6 | 324 | 3.8 |
| 10 | STP,Digwadih 12 No. Supervisor flat -Outlet | 13.01.25 | 11:55 AM | 25 | 7.9 | 22 | 896 | 6.9 | 106 | 0.7 |

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

Pm

Manager (Environment)

TATA STEEL LIMITED JHARIA DIVISION

Well Water Quality Report of Jamadoba Group for the month of JANUARY'2025

| S.No | Date | Location | Time | Depth in meter | рН | Electrical Conductivity µS/m |
|------|----------|----------------------------|----------|-------------------|-----|------------------------------------|
| 1 | 24.01.25 | Purnadih (Jorapokhar) | 09:55 AM | 4.45 | 7.2 | 1236 |
| 2 | 24.01.25 | Bhowra 13 No | 10:15 AM | 1.82 | 7.3 | 1024 |
| 3 | 24.01.25 | Mohalbani Basti | 02:10 PM | 2.46 | 7.4 | 1082 |
| 4 | 24.01.25 | Digwadih 10 No F & J | 10:40 AM | 1.95 | 7.5 | 1726 |
| 5 | 24.01.25 | Kalimela Shivmandir | 01:30 PM | 1.13 | 7.3 | 908 |
| 6 | 24.01.25 | Kalimela Kalimandir | 01:45 PM | 3.47 | 7.4 | 1339 |
| 7 | 24.01.25 | Lower Dungari | 01:10 PM | 3.85 | 7.2 | 762 |
| 8 | 24.01.25 | Upper Dungari | 12:45 PM | 1.98 | 7.4 | 768 |
| 9 | 24.01.25 | Pattia Basti | 12:25 PM | 3.72 | 7.2 | 905 |
| 10 | 24.01.25 | Kenduadih Basti | 12:05 PM | 1.67 | 7.3 | 968 |
| 11 | 24.01.25 | Jorapokhar Kushtand | 11:20 AM | 4.15 | 7.2 | 1708 |
| 12 | 24.01.25 | 6&7 Pits (Ayodhya Nagri) | 11:40 AM | 1.97 | 7.3 | 1216 |
| 13 | 24.01.25 | Jorapokhar Basti Chhattand | 10:55 AM | 1.27 | 7.2 | 1372 |
| 14 | 24.01.25 | Jorapokhar Babu Basa | 09:40 AM | 2.21 | 7.4 | 1176 |

JAMADOBA GROUP

Emphalo. Lab.Assistant (Environment)

Manager (Environment)

Annexure- II

10.5

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant Area Manager Jamadoba Colliery C.M.O, TCH, Jamadoba

Ref. No. - JMB / ENV / LAB / 03 / \$7 / 2025 Dated - 28 / 02_ / 2025

Sub: ETP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of FEBRUARY'2025. The results are as given below:

| | Location | Location Sampling | Sampling | Temp | pH | TSS | TDS | BOD | COD | Oil & Grease |
|-------|--------------------------|-------------------|----------|--------|-----------|-------------|--------------|------------|-------------|-----------------|
| S. No | (Final Discharge Point) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l |
| 1 | ETP, TCH- Inlet | 26.02.25 | 10:50 AM | 28 | 8.2 | 135 | 914 | 29.8 | 294 | 1.3 |
| 2 | ETP, TCH- Outlet | 26.02.25 | 10:55 AM | 27 | 7.9 | 29 | 846 | 5.6 | 72 | 1.0 |
| 3 | ETP, Garage- Inlet | 26.02.25 | 01:25 PM | 27 | 8.0 | 163 | 872 | 30.2 | 306 | 3.1 |
| 4 | ETP, Garage- Outlet | 26.02.25 | 01:30 PM | 26 | 7.8 | 33 | 715 | 7.2 | 74 | 1.7 |
| 5 | Final Settling Pond JCPP | 26.02.25 | 09:55 AM | | | | Dry Pond | | | |

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All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

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Manager (Environment)

Annexure- II

TATA STEEL LIMITED JHARIA DIVISION

Area Manager, Jamadoba Colliery Area Manager, Digwadih Colliery Area Manager,6&7 Pits Colliery

Ref. No. - JMB / ENV / LAB / 03 / 85 / 2025 Dated - 28/02 / 2025

Sub: MINE WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of FEBRUARY'202 The results are as given below:

| 0 N. | Location (Final Discharge Point) Sampling Sampling | pH | TSS | TDS | BOD | COD | Oil & Grease | | | | |
|-------|---|----------|----------|--------------|--------------|-------------|-----------------|------------|-------------|------------|--|
| S. No | (Mine's Water) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l | |
| 1 | 2 Pit Jamadoba Colliery | 26.02.25 | 09:25 AM | | | No | Discharge | | | | |
| 2 | 3 Pit Jamadoba Colliery | 26.02.25 | 09:40 AM | 30 | 7.5 | 20 | 896 | 2.1 | 86 | 1.2 | |
| 3 | 2 Incline Jamadoba Colliery | 26.02.25 | 10:10 AM | 1 | No Discharge | | | | | | |
| 4 | 6 & 7 Pits Colliery | 26.02.25 | 11:15 AM | | No Discharge | | | | | | |
| 5 | Digwadih Colliery | 26.02.25 | 12:20 PM | No Discharge | | | | | | | |

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All the parameters are within the limit, and you are requested to maintain the same. This is for your information and necessary action please.

heto Lab.Assistant (Environment)

Manager (Environment)

Annexure- II

10.04

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant Area Manager Jamadoba Colliery Area Manager Digwadih Colliery

Ref. No. - JMB / ENV / LAB / 03 / 86 / 2025 Dated - 28 / 02 / 2025

Sub: STP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of FEBRUARY'2025 The results are as given below:

| S. No | Location | Sampling | Sampling | Temp | рН | TSS | TDS | BOD | COD | Oil & Grease |
|-------|--|----------|----------|--------|-----------|-------------|--------------|------------|-------------|-----------------|
| | (Final Discharge Point) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l |
| 1 | STP, Jmb. Canteen- Inlet | 26.02.25 | 01:10 PM | 27 | 8.0 | 154 | 998 | 36.1 | 320 | 2 |
| 2 | STP, Jmb. Canteen- Outlet | 26.02.25 | 01:15 PM | 26 | 7.6 | 38 | 906 | 8.7 | 98 | 1.4 |
| 3 | STP, JCPP Canteen- Inlet | 26.02.25 | 12:45 PM | 28 | 8.1 | 132 | 836 | 33.4 | 327 | 2.9 |
| 4 | STP, JCPP Canteen- Outlet | 26.02.25 | 12:50 PM | 27 | 7.8 | 25 | 760 | 7.4 | 144 | 1.7 |
| 5 | STP, Railway Colony- Inlet | 26.02.25 | 10:30 AM | 28 | 8.0 | 167 | 1036 | 35.4 | 336 | 3.4 |
| 6 | STP, Railway Colony-Outlet | 26.02.25 | 10:35 AM | 27 | 7.6 | 41 | 996 | 8.9 | 82 | 1.5 |
| 7 | STP, Digwadih 12 No. Officer's colony-Inlet | 26.02.25 | 11:35 AM | 28 | 8.2 | 127 | 1016 | 33.1 | 290 | 3.8 |
| 8 | STP, Digwadih 12 No. Officer's colony- Outlet | 26.02.25 | 11:40 AM | 27 | 8.0 | 32 | 910 | 6.5 | 68 | 1.3 |
| 9 | STP,Digwadih 12 No. Supervisor flat - Inlet | 26.02.25 | 11:55 AM | 27 | 8.2 | 173 | 1038 | 31.9 | 296 | 2.9 |
| 10 | STP,Digwadih 12 No, Supervisor flat -Outlet | 26.02.25 | 12:05 PM | 26 | 7.8 | 39 | 987 | 7.8 | 84 | 1.9 |

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

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Manager (Environment)

Annexure- II

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TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant Area Manager Jamadoba Colliery C.M.O, TCH, Jamadoba

Ref. No. - JMB / ENV / LAB / 03 / 145 / 2025 Dated - 07 / 04 / 2025

Sub: ETP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of MARCH'2025. The results are as given below:

| | Location | Sampling | Sampling | Тетр | pН | TSS | TDS | BOD | COD | Oil & Grease |
|-------|--------------------------|----------|----------|--------|-----------|-------------|--------------|------------|-------------|-----------------|
| S. No | (Final Discharge Point) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l |
| 1 | ETP, TCH- Inlet | 24.03.25 | 02:00 PM | 27 | 8.3 | 147 | 935 | 31.7 | 286 | 2.1 |
| 2 | ETP, TCH- Outlet | 24.03.25 | 02:05 PM | 26 | 8.0 | 39 | 822 | 5.2 | 98 | 1.2 |
| 3 | ETP, Garage- Inlet | 24.03.25 | 12:45 PM | 27 | 8.1 | 163 | 867 | 29.5 | 316 | 3.5 |
| 4 | ETP, Garage- Outlet | 24.03.25 | 12:50 PM | 26 | 7.9 | 24 | 754 | 6.8 | 106 | 1.3 |
| 5 | Final Settling Pond JCPP | 24.03.25 | 04:35 PM | | | | Dry Pond | | | |

All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

Lab.Assistant (Environment)

Manager (Environment)

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TATA STEEL LIMITED JHARIA DIVISION

Area Manager, Jamadoba Colliery Area Manager, Digwadih Colliery Area Manager,6&7 Pits Colliery

Ref. No. - JMB / ENV / LAB / 03 / 147 / 2025 Dated - 07 / 04 / 2025

Sub: MINE WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of MARCH'2025. The results are as given below:

| | Location (Final Discharge Point) | Sampling | Sampling | Sampling | Temp | pH | TSS | TDS | BOD | COD | Oil & Grease |
|-------|---|----------|----------|--------------|--------------|-------------|--------------|------------|-------------|------------|-----------------|
| S. No | (Final Discharge Point) (Mine's Water) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/l | 2100 mg/l | 30 mg/l | 250 mg/l | 10 mg/l | |
| 1 | 2 Pit Jamadoba Colliery | 24.03.25 | 05.05 PM | | | No | Discharge | | | | |
| 2 | 3 Pit Jamadoba Colliery | 24.03.25 | 04:50 PM | 32 | 7.6 | 26 | 874 | 2.3 | 84 | 1.4 | |
| 3 | 2 Incline Jamadoba Colliery | 24.03.25 | 04:15 PM | * | | No | Discharge | 9 | | | |
| 4 | 6 & 7 Pits Colliery | 24.03.25 | 02:20 PM | | No Discharge | | | | | | |
| 5 | Digwadih Colliery | 24.03.25 | 02:40 PM | No Discharge | | | | | | | |

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All the parameters are within the limit, and you are requested to maintain the same.

This is for your information and necessary action please.

Lab.Assistant (Environment)

Manager (Environment)

TATA STEEL LIMITED JHARIA DIVISION

Head, Jamadoba Coal Preparation Plant Area Manager Jamadoba Colliery Area Manager Digwadih Colliery

Ref. No. - JMB / ENV / LAB / 03 / 146 / 2025 Dated - 07/04 / 2025

Sub: STP WATER ANALYSIS REPORT.

We wish to inform you that Trade Effluent Sampling was carried out in JAMADOBA GROUP in the month of MARCH'2025. The results are as given below:

| 22222 | Location | Sampling | Sampling | Temp | pH | TSS | TDS | BOD | COD | Oil & Grease |
|-------|--|----------|----------|--------|-----------|-------------|--------------|------------|-------------|-----------------|
| S. No | (Final Discharge Point) | Date | Time | < 40°C | 5.5 - 9.0 | 100 mg/1 | 2100 mg/l | 30 mg/1 | 250 mg/l | 10 mg/l |
| 1 | STP, Jmb. Canteen- Inlet | 24.03.25 | 12:30 PM | 28 | 7.9 | 133 | 954 | 35.2 | 316 | 3.9 |
| 2 | STP, Jmb. Canteen- Outlet | 24.03.25 | 12:35 PM | 27 | 7.5 | 28 | 872 | 7.2 | 116 | 0.8 |
| 3 | STP, JCPP Canteen- Inlet | 24.03.25 | 01:40 PM | 28 | 8.0 | 143 | 824 | 35.1 | 298 | 3.5 |
| 4 | STP, JCPP Canteen- Outlet | 24.03.25 | 01:45 PM | 27 | 7.7 | 31 | 728 | 6.9 | 112 | 1.4 |
| 5 | STP, Railway Colony- Inlet | 24.03.25 | 03:45 PM | 27 | 8.1 | 141 | 936 | 36.8 | 328 | 3.6 |
| 6 | STP, Railway Colony-Outlet | 24.03.25 | 03:50 PM | 26 | 7.7 | 21 | 872 | 8.2 | 86 | 1.0 |
| 7 | STP, Digwadih 12 No. Officer's colony-Inlet | 24.03.25 | 03:15 PM | 27 | 8.0 | 164 | 974 | 35.5 | 312 | 2.9 |
| 8 | STP, Digwadih 12 No. Officer's colony- Outlet | 24.03.25 | 03:20 PM | 26 | 7.8 | 27 | 873 | 6.4 | 114 | 1.5 |
| 9 | STP,Digwadih 12 No. Supervisor flat – Inlet | 24.03.25 | 02:55 PM | 27 | 7,9 | 135 | 1024 | 33.1 | 260 | 2.5 |
| 10 | STP,Digwadih 12 No. Supervisor flat -Outlet | 24.03.25 | 03:00 PM | 26 | 7.6 | 34 | 946 | 7.3 | 94 | 1.2 |

All the parameters are within the limit, and you are requested to maintain the same.

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This is for your information and necessary action please.

Emahado . Lab.Assistant (Environment)

Manager (Environment)

ENVIRONMENT CELL LABORATORY, JAMADOBA AUTHORIZED VIDE LETTER NO. B – 3922 DATED- 30.08.2012 BY JHARKHAND STATE POLLUTION CONTROL BOARD, RANCHI.

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