

# The Sandur Manganese & Iron Ores Limited

(An ISO 9001:2015; ISO 14001:2015 and 45001:2018 certified company)  
CIN: L85110KA1954PLC000759; Website: www.sandurgroup.com

## REGISTERED OFFICE

'SATYALAYA', No.266  
Ward No.1, Palace Road  
Sandur - 583 119, Ballari District  
Karnataka, India  
Tel: +91 8395 260301/ 283173-199  
Fax: +91 8395 260473



## CORPORATE OFFICE

'SANDUR HOUSE', No.9  
Bellary Road, Sadashivanagar  
Bengaluru - 560 080  
Karnataka, India  
Tel: +91 80 4152 0176 - 79 / 4547 3000  
Fax: +91 80 4152 0182

No: SMIORE/MN/090226/2678/ 1015

09 February 2026

The Environmental Officer,  
Karnataka State Pollution Control Board,  
Ward No.25, 4th Main Road,  
Kuvempu Nagar,  
Ballari - 583104

Dear Sir,

Sub: Submission of reports pertaining to monitoring environmental parameters for the month of January 2026 in respect of Mining Lease No. 2678.

Ref: 1. Environmental Clearance F.No. IA-J-11015/45/2021-IA-II(M) dated 25 April 2023.  
2. Consent for Operation No. AW-345054 dated 18 September 2024.  
3. Consent for Operation No. AW-348549 dated 29 April 2025.

With reference to the letter cited above, we are enclosing herewith environmental monitoring reports from NABET accredited and MoEF&CC empaneled laboratory M/s Mineral Engineering Services as per stipulated environmental parameters in Environmental Clearance and Consent for Operation-Expansion for the month of January 2026 in respect of Mining Lease No. 2678 of The Sandur Manganese & Iron Ores Limited.

Kindly request you to acknowledge receipt of the reports and oblige.

Thank you,  
for The Sandur Manganese & Iron Ores Limited,

Parthipan P  
Sr. General Manager & Agent

Encl: Monitoring Reports



**MINES OFFICE:** Deogiri - 583112, Sandur Taluk, Ballari District  
Tel: +91 8395 271025 / 28 / 29 / 40; Fax: +91 8395 271066

**PLANT OFFICE:** Metal & Ferroalloy Plant, Vyasankere, Mariyammanahalli - 583 222, Hosapete Taluk, Ballari District  
Tel: +91 8394 244450 / 244335



National Accreditation Board for  
Testing and Calibration Laboratories

**CERTIFICATE OF ACCREDITATION**

**ENVIRONMENTAL LABORATORY (UNIT OF MINERAL  
ENGINEERING SERVICES LLP)**

has been assessed and accredited in accordance with the standard

**ISO/IEC 17025:2017**

**"General Requirements for the Competence of Testing &  
Calibration Laboratories"**

for its facilities at

#948,2ND CROSS, ST.THOMAS TOWN POST,KAMMANAHALLI MAIN ROAD, BENGALURU, BENGALURU  
URBAN, KARNATAKA, INDIA

in the field of

**TESTING**

Certificate Number: TC-6172

Issue Date: 24/05/2025

Valid Until: 23/05/2027

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.  
(To see the scope of accreditation of this laboratory, you may also visit NABL website [www.nabl-india.org](http://www.nabl-india.org))

Name of Legal Entity: MINERAL ENGINEERING SERVICES LLP

Signed for and on behalf of NABL



Anuja Anand  
Director

N. Venkateswaran  
Chief Executive Officer



**LIFE**  
Lifestyle For  
Environment



केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
CENTRAL POLLUTION CONTROL BOARD  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार  
MINISTRY OF ENVIRONMENT FOREST & CLIMATE CHANGE GOVT OF INDIA

12<sup>th</sup> June 2025

F. No. LB/99/7/2021-INST LAB-HO-CPCB-HO/Pvt./554

**Recognition Letter**

To,  
The Head of Laboratory,  
M/s Environmental Laboratory (Unit of Mineral Engineering Services),  
948 2<sup>nd</sup> Cross St Thomas Town Post,  
Kammanahalli, Bengaluru-560084,  
Karnataka.

**Subject: Recognition of M/s Environmental Laboratory (Unit of Mineral Engineering Services), 948 2<sup>nd</sup> Cross St Thomas Town Post, Kammanahalli, Bengaluru-560084, Karnataka as Environmental laboratory under the Environmental (Protection) Act- 1986- reg.**

Sir,

With reference to your application dated 19/03/2025 along with acceptance of the terms & conditions of the guidelines for recognition of environmental laboratories under the Environmental (Protection) Act, 1986, submitted to Central Pollution Control Board (CPCB), the Competent Authority of CPCB has accorded approval for renewal of recognition of Environmental laboratory and Govt. Analysts. Subsequently, M/s **Environmental Laboratory (Unit of Mineral Engineering Services), 948 2<sup>nd</sup> Cross St Thomas Town Post, Kammanahalli, Bengaluru-560084, Karnataka** shall be notified considering the current requirement of mandatory accreditation / certifications of the laboratory with a validity up to 23/05/2028 (for three years), subject to validity of ISO/IEC 17025 and IS/ISO 45001.

2. The following analysts have been approved as Government Analysts:

1. Sh. M. Sachin Raju
2. Smt. Arshiya Kousar
3. Smt. Binu Mani

3. The laboratory should compulsorily follow the accepted terms and conditions and may undertake the following tests:

- a) **Physical Tests:** Conductivity, Colour, pH, Fixed & Volatile Solids, Total Solids, Total Dissolved Solids, Total Suspended Solids, Turbidity, Temperature, Velocity & Discharge Measurement of Industrial Effluent Stream, Flocculation Test (Jar Test), Odour, Salinity, Settleable Solids and Sludge Volume Index (SVI).
- b) **Inorganic (General and Non-metallic):** Acidity, Alkalinity, Ammonical Nitrogen, Chloride, Chlorine Residual, Dissolved Oxygen, Fluoride, Total Hardness, Total Kjeldahl Nitrogen (TKN), Nitrite Nitrogen, Nitrate Nitrogen, Phosphate, Sulphate, Cyanide, Silica and Sulphide.
- c) **Inorganic (Trace Metals):** Boron, Cadmium, Calcium, Total Chromium, Chromium Hexavalent, Copper, Iron, Lead, Magnesium, Mercury, Nickel, Potassium, Sodium, Sodium Absorption Ratio (SAR), Zinc, Arsenic, Aluminium, Antimony, Barium, Cobalt, Selenium, Silver, Tin and Vanadium.
- d) **Organics (General) and Trace Organics:** Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Oil and Grease, Phenolic Compounds, Pesticides (each) (Organo-Chlorine and Organo Nitrogen-Phosphorus), Poly-Chlorinated Biphenyl (PCB's) each, Polynuclear Aromatic Hydrocarbon (PAH), Surfactants and Tannin & Lignin.
- e) **Microbiological Test:** Total Coliform, Faecal Coliform, *E. coli*, Faecal Streptococci and Total Plate Count.
- f) **Toxicological Tests:** Bioassay Method for Evaluation of Toxicity Using Fish (90% survival of fish after 96 hrs in 100% effluent) and Measurement of toxicity using Daphnia or other organism.

contd.

‘परिवेश भवन’ पर्वी अर्जुन नगर, दिल्ली-110032

Parivesh Bhawan, East Arjun Nagar, Delhi-110032

दूरभाष/Tel : 43102030, 22305792, वेबसाइट/Website : www.cpcb.nic.in



- g) **Biological Test:** Macrophytic Identification, Planktonic Identification Count and Chlorophyll.
- h) **Characterization of Hazardous Waste:** Corrosivity, Ignibility (Flash Point) and Measurement of Heavy Metals/Pesticides in the Waste/Leachate.
- i) **Soil/Sludge/Sediment and Solid Waste:** Boron, Cation Exchange Capacity (CEC), Electrical Conductivity, Nitrogen (Available), Organic Carbon/Matter (Chemical Method), pH, Phosphorous (Available), Phosphate (Ortho), Phosphate (Total), Potassium, SAR in Soil Extract, Sodium, Soil Moisture, TKN, Calorific Value, Ammonia, Bicarbonate, Calcium, Calcium Carbonate, Chloride, Colour, H. Acid, Heavy Metal, Magnesium, Nitrate, Nitrite, Potash(Available), Sulphate, Sulphur, Total Organic Carbon (TOC), Total Water Soluble Salt and Water Holding Capacity.
- j) **Ambient Air/ Fugitive Emissions:** Nitrogen Dioxide (NO<sub>2</sub>), Sulphur Dioxide (SO<sub>2</sub>), Total Suspended Particulate Matter, Respirable Suspended Particulate Matter (PM<sub>10</sub>), Ammonia, Carbon monoxide, Chlorine, Lead, Ozone, Benzene Toluene Xylene (BTX), Polycyclic Aromatic Hydrocarbon (PAH) Benzo-a-Pyrene & others and PM<sub>2.5</sub>.
- k) **Stack Gases/ Source Emission:** Particulate Matter, Sulphur Dioxide, Velocity & Flow, Carbon Dioxide, Carbon Monoxide, Temperature, Oxygen, Oxides of Nitrogen, Acid Mist, Ammonia, Chlorine, Total Hydrocarbon, Hydrogen Sulphide and Carbon Disulphide.
- l) **Noise Level:** Noise level measurement (20 to 140 dba) and Ambient Noise & Source Specific Noise.
- m) **Meteorological:** Ambient Temperature, Wind Direction, Wind Speed, Relative Humidity, Solar Radiation and Rain Fall.
4. The laboratory shall compulsorily participate in the Analytical Quality Control (AQC) Exercise conducted by the CPCB to ascertain the capability of the laboratory and analysts. The lab shall submit quarterly progress report on the sample analysis carried out to CPCB.
5. The surprise inspection / periodic surveillance of the recognized environment laboratory will be undertaken to assess its proper functioning systematic operation and reliability of data generated at the laboratory by a Joint Team as per the Notification.
6. The laboratory should have the mandatory requisite accreditation and certificate of the ISO: 17025 and ISO: 45001 as per rules. This recognition is subject to such accreditations and renewals as applicable and in case of serious non-compliance of any of the terms and conditions, the laboratory may be black listed for a minimum period of two years and civil/criminal proceedings, as applicable, may be initiated for performing functions on behalf of the Government in an unauthorized manner.
7. **M/s Environmental Laboratory (Unit of Mineral Engineering Services), Bengaluru, Karnataka** is required to apply for further renewal of recognition through online using CPCB web portal (<https://cpcbepalab.in/epalab>) before expiry of recognition with mandatory accreditation / certification concerned.

Yours faithfully,

*M. S. S. S.*  
*12/6/2024*  
Divisional Head  
Instrumentation Laboratory

फा. सं. एलबी-2021/7/99/इंस्टलैब-एचओ-सीपीसीबी-एचओ / प्राइवेट / 554

मान्यता पत्र

सेवा में,

प्रयोगशाला प्रमुख,  
मैसर्स एनवायरनमेंटल लैबोरेटरी (यूनिट ऑफ मिनरल इंजीन्यरिंग सर्विसेस एलएलपी),  
948 दूसरी क्रॉस सेंट थॉमस टाउन पोस्ट,  
कम्पनहल्ली, बेंगलुरु-560084,  
कर्नाटक।

विषय: पर्यावरण (संरक्षण) अधिनियम, 1986 के अंतर्गत पर्यावरणीय प्रयोगशाला के रूप में मैसर्स एनवायरनमेंटल लैबोरेटरी (यूनिट ऑफ मिनरल इंजीन्यरिंग सर्विसेस एलएलपी), 948 दूसरी क्रॉस सेंट थॉमस टाउन पोस्ट, कम्पनहल्ली, बेंगलुरु-560084, कर्नाटक की मान्यता के बारे में।

महोदय,

केंद्रीय प्रदूषण नियंत्रण बोर्ड (के.प्र.नि.बोर्ड) को पर्यावरण (संरक्षण) अधिनियम, 1986 के अंतर्गत पर्यावरण प्रयोगशालाओं की मान्यता के लिए दिशानिर्देशों के निबंधन और शर्तों की स्वीकृति के साथ आपके दिनांक 19/03/2025 के प्रस्तुत आवेदन के संदर्भ में, के.प्र.नि.बोर्ड के सक्षम प्राधिकारी ने पर्यावरण प्रयोगशाला और सरकार के विश्लेषक की मान्यता के नवीनीकरण को अनुमोदन प्रदान किया है। तदनुसार, मैसर्स एनवायरनमेंटल लैबोरेटरी (यूनिट ऑफ मिनरल इंजीन्यरिंग सर्विसेस एलएलपी), 948 दूसरी क्रॉस सेंट थॉमस टाउन पोस्ट, कम्पनहल्ली, बेंगलुरु-560084, कर्नाटक को भारत की राजपत्र अधिसूचना में प्रयोगशाला की अनिवार्य प्रत्यायन/प्रमाणन की वर्तमान अपेक्षा को ध्यान में रखते हुए दिनांक 23/05/2028 (तीन साल) तक आईएसओ/ आईईसी 17025 और आईएस/आईएसओ 45001 की वैधता के साथ अधिसूचित किया जाएगा।

2. निम्नलिखित विश्लेषकों को सरकारी विश्लेषक के रूप में अनुमोदित किया गया है:

1. श्री. एम. सचिन राजू
2. श्रीमती अर्शिया कौसर
3. श्रीमती. बिनु मणि

3. प्रयोगशाला अनिवार्य रूप से स्वीकृत निबंधन और शर्तों का पालन करते हुए निम्नलिखित परीक्षणों करेगी:

- क. **भौतिक परीक्षण:** चालकता, रंग, पीएच, स्थिर और वाष्पशील ठोस, कुल ठोस, कुल विलीन ठोस, कुल निलंबित ठोस, आविलता, तापमान, वेग एवं निर्वहन औद्योगिक बहिःस्राव धारा का विसर्जन मापन, फ्लोक्यूलेशन टेस्ट (जार टेस्ट), गंध, लवणता, निपटान योग्य ठोस और आपंक वॉल्यूम इंडेक्स (एसवीआई)।
- ख. **अकार्बनिक (सामान्य और गैर-धात्विक):** अम्लता, क्षारीयता, अमोनिकल नाइट्रोजन, क्लोराइड, क्लोरीन अवशिष्ट, विलीन ऑक्सीजन, फ्लोराइड, कुल कठोरता, कुल केजेलडहल नाइट्रोजन (टीकेएन), नाइट्राइट नाइट्रोजन, नाइट्रेट नाइट्रोजन, फॉस्फेट, सल्फेट, साइनाइड, सिलिका और सल्फाइड।
- ग. **अकार्बनिक (सूक्ष्म मात्रिक धातु):** बोरोन, कैडमियम, कैल्शियम, टोटल क्रोमियम, क्रोमियम हेक्सावैलेंट, तांबा, लोहा, सीसा, मैग्नीशियम, पारा, निकल, पोटेशियम, सोडियम, सोडियम अवशोषण अनुपात (एसएआर), जिंक, आर्सेनिक, एल्युमीनियम, एंटीमनी, बेरियम, कोबाल्ट, सेलेनियम, सिल्वर, टिन और वैनेडियम।
- घ. **ऑर्गेनिक्स (सामान्य) और ट्रेस ऑर्गेनिक्स:** बायोकेमिकल ऑक्सीजन डिमांड (बीओडी), रासायनिक ऑक्सीजन डिमांड (सीओडी), तेल और ग्रीस, फेनोलिक यौगिक, कीटनाशक (प्रत्येक) (ऑर्गेनो-क्लोरीन और ऑर्गेनो नाइट्रोजन-फॉस्फोरस), पॉली-क्लोरीनेटेड बाइफेनाइल (पीसीबी) (प्रत्येक), पॉलीन्यूक्लियर एरोमैटिक हाइड्रोकार्बन (पीएच), सर्फेक्टेंट और टैनिन & लिग्निन।
- ङ. **सूक्ष्म जीवविज्ञान परीक्षण:** टोटल कोलीफॉर्म, फीकल कोलीफॉर्म, ई.कोली, फीकल स्ट्रेप्टोकोक्की, स्ट्रेप्टोकोक्की और टोटल प्लेट काउंट।
- च. **आविष विज्ञानी परीक्षण:** मछली का उपयोग करके विषाक्तता के मूल्यांकन के लिए जैव परख विधि (100% प्रवाह में 96 घंटे के बाद मछली का 90% जीवित रहना), और डैफ़निया या अन्य जीव का उपयोग करके विषाक्तता का मापन।

जारी.

- छ. **जैविक परीक्षण:** मैक्रोफाइटिक पहचान, प्लवक पहचान गणना और क्लोरोफिल।
- ज. **परिसंकटमय अपशिष्ट का लक्षण वर्णन:** संक्षारकता, ज्वलनशीलता (फ्लैश प्वाइंट) और अपशिष्ट & निक्षालक में भारी धातुओं/पीड़कनाशियों का मापन।
- झ. **मृदा/आपंक/तलछट और ठोस अपशिष्ट:** बोरॉन, कटियन एक्सचेंज क्षमता (सीईसी), विद्युत चालकता, नाइट्रोजन (उपलब्ध), कार्बनिक कार्बन/पदार्थ (रासायनिक विधि), पीएच, फास्फोरस (उपलब्ध), फॉस्फेट (ऑर्थो), फॉस्फेट (कुल), पोटेशियम, मृदा के अर्क में एसएआर, सोडियम, मृदा की नमी, टीकेएन, कैलोरी मान, अमोनिया, बाइकार्बोनेट, कैल्शियम, कैल्शियम कार्बोनेट, क्लोराइड, रंग, एच एसिड, भारी धातु, मैग्नीशियम, नाइट्रेट, नाइट्राइट, पोटेश (उपलब्ध), सल्फेट, सल्फर, कुल कार्बनिक कार्बन (टीओसी), कुल पानी में घुलनशील नमक और जल धारण क्षमता।
- ञ. **परिवेशी वायु/पलायक उत्सर्जन:** नाइट्रोजन डाइऑक्साइड (एनओ<sub>2</sub>), सल्फर डाइऑक्साइड (एसओ<sub>2</sub>), कुल निलंबित विविक्त कण, श्वसन योग्य निलंबित कण पदार्थ (पीएम<sub>10</sub>), अमोनिया, कार्बन मोनोऑक्साइड, क्लोरीन, सीसा, ओजोन, बेंजीन टोल्युनि जाइलीन (बीटीएक्स), पॉलीसाइक्लिक एरोमैटिक हाइड्रोकार्बन (पीएच) बेंजो-ए-पाइरिन और अन्य और पीएम<sub>2.5</sub>।
- ट. **चिमनी गैसें/स्रोत उत्सर्जन:** पार्टिकुलेट मैटर, सल्फर डाइऑक्साइड, वेग और प्रवाह, कार्बन डाइऑक्साइड, कार्बन मोनोऑक्साइड, तापमान, ऑक्सीजन, नाइट्रोजन के ऑक्साइड, एसिड धुंध, अमोनिया, कुल हाइड्रोकार्बन, हाइड्रोजन सल्फाइड और कार्बन डाइसल्फाइड।
- ठ. **रव (शोर) स्तर:** शोर स्तर माप (20 से 140 डीबीए) और परिवेश रव & स्रोत विशिष्ट रव।
- ड. **मौसम संबंधी:** परिवेश का तापमान, हवा की दिशा, हवा की गति, सापेक्ष आर्द्रता, सौर विकिरण और वर्षा।
4. प्रयोगशाला और विश्लेषकों की क्षमता का पता लगाने के लिए प्रयोगशाला को के.प्र.नि. बोर्ड द्वारा आयोजित विश्लेषणात्मक गुणवत्ता नियंत्रण) एक्ज्यूसी (अभ्यास में अनिवार्य रूप से भाग लेना होगा। प्रयोगशाला किए गए नमूना विश्लेषण पर के.प्र.नि. बोर्ड को तिमाही प्रगति रिपोर्ट प्रस्तुत करेगी।
5. अधिसूचना के अनुसार, एक संयुक्त दल द्वारा मान्यता प्राप्त पर्यावरण प्रयोगशाला का औचक निरीक्षण/आवधिक निगरानी उस के उचित कामकाज, व्यवस्थित प्रचालन और प्रयोगशाला में तैयार किए गए आंकड़ों की विश्वसनीयता का निर्धारण करने के लिए की जाएगी।
6. प्रयोगशाला के पास नियमानुसार ISO/IEC: 17025)2017 ( और IS/ ISO: 45001 का अपेक्षित प्रत्यायन और प्रमाण पत्र होना चाहिए। यह मान्यता यथा लागू प्रत्यायन और नवीनीकरण के अधीन है और किसी भी निबंधन और शर्तों के गंभीर गैर-अनुपालन के मामले में, प्रयोगशाला को न्यूनतम दो साल की अवधि के लिए ब्लैकलिस्ट किया जा सकता है और सरकार की ओर से अनधिकृत तरीके से कार्य करने के लिए, यथा लागू सिविल/आपराधिक कार्यवाही शुरू की जा सकती है।
7. **मैसर्स एनवायरनमेंटल लैबोरेटरी (यूनिट ऑफ मिनरल इंजीनियरिंग सर्विसेस एलएलपी), बेंगलुरु, कर्नाटक** को संबंधित अनिवार्य प्रत्यायन/प्रमाणीकरण के साथ मान्यता की समाप्ति से पूर्व केंद्रीय प्रदूषण नियंत्रण बोर्ड के वेबपोर्टल (<https://cpcbepalab.in/epalab>) का उपयोग कर के ऑनलाइन मान्यता के नवीनीकरण के लिए आवेदन करना अपेक्षित है।

भवदीय,  
 14/6/2024  
 प्रभागप्रमुख  
 उपकरणीय प्रयोगशाला

# ENVIRONMENTAL MONITORING REPORT

Project	<b>Mining Lease No. 2678</b>
Location	Deogiri Manganese & Iron Ore Mine, Kammathuru Iron Ore Mine, Subrayanahalli Manganese & Iron Ore Mine, Sandur Taluk, Ballari Dist, Karnataka
Client	M/s. The Sandur Manganese & Iron Ores Limited
Office Address	Sandur, Ballari District, Karnataka
Monitoring Month	January -2026

## **ENVIRONMENTAL LABORATORY** **(Unit of Mineral Engineering Services LLP)**

Recognised by MoEF&CC Under E(P) Act 1986

&

Accredited by NABL

#948, 2<sup>nd</sup> Cross, Kammanahalli Main Road,  
St Thomas Town Post,  
Bangalore- 560 084, Karnataka

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## TEST REPORT

Table No.1

### AMBIENT AIR QUALITY

Name of the Client : The Sandur Manganese & Iron Ores Limited  
Name of the Project : Mining Lease No. 2678  
Location : Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.  
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)  
Code & Station : A1 - Mine Pit (SK) / (CBG)  
Duration : 24 Hrs  
Issue date : 02.02.2026  
Sampling & Test Methc: IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
02.01.2026	N001026012	8	12	54	27	0.35
03.01.2026	N006126012	12	18	58	32	0.52
09.01.2026	N027026012	10	16	50	28	0.42
10.01.2026	N001126013	9	12	47	26	0.28
12.01.2026	N007426013	14	18	55	29	0.36
13.01.2026	N014126013	9	10	43	24	0.31
23.01.2026	N019626014	11	13	53	27	0.24
24.01.2026	N000726015	12	16	40	22	0.54
26.01.2026	N006926015	9	13	49	28	0.48
27.01.2026	N012226015	14	17	57	32	0.28
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No.2

### AMBIENT AIR QUALITY

Name of the Client : The Sandur Manganese & Iron Ores Limited  
Name of the Project : Mining Lease No. 2678  
Location : Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.  
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)  
Code & Station : A2 - Kammathuru (within ML Area)  
Duration : 24 Hrs  
Issue date : 02.02.2026  
Sampling & Test Methc : IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
02.01.2026	N001126012	9	11	56	30	0.31
03.01.2026	N006226012	10	13	40	28	0.44
09.01.2026	N027126012	14	16	51	26	0.25
10.01.2026	N001226013	8	10	48	23	0.46
12.01.2026	N007526013	10	13	43	21	0.52
13.01.2026	N014226013	12	16	54	29	0.25
23.01.2026	N019726014	7	9	40	22	0.38
24.01.2026	N000826015	15	18	56	30	0.45
26.01.2026	N007026015	12	14	50	28	0.28
27.01.2026	N012326015	9	13	45	23	0.33
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No.3

### AMBIENT AIR QUALITY

Name of the Client	: The Sandur Manganese & Iron Ores Limited					
Name of the Project	: Mining Lease No. 2678					
Location	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.					
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Code & Station	: A3 - Deogiri (within ML Area)					
Duration	: 24 Hrs					
Issue date	: 02.02.2026					
Sampling & Test Methc:	: IS 5182 & Lab SOP					
Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
02.01.2026	N001226012	13	18	48	25	0.47
03.01.2026	N006326012	11	15	51	27	0.25
09.01.2026	N027226012	10	13	58	33	0.45
10.01.2026	N001326013	7	10	53	28	0.52
12.01.2026	N007626013	14	17	43	22	0.38
13.01.2026	N014326013	11	13	47	25	0.46
23.01.2026	N019826014	9	11	52	27	0.33
24.01.2026	N000926015	12	15	56	29	0.24
26.01.2026	N007126015	7	10	40	23	0.28
27.01.2026	N012426015	10	13	50	26	0.45
NAAQS Limits for Industrial, Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr
Note : * Parameters monitored for period of 1 hr						

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No.4

### AMBIENT AIR QUALITY

Name of the Client : The Sandur Manganese & Iron Ores Limited  
Name of the Project : Mining Lease No. 2678  
Location : Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.  
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)  
Code & Station : A4 - SBH Plot (Mine Boundary)  
Duration : 24 Hrs  
Issue date : 02.02.2026  
Sampling & Test Methc : IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
02.01.2026	N001326012	9	16	40	25	0.26
03.01.2026	N006426012	12	18	53	28	0.33
09.01.2026	N027326012	11	14	47	26	0.54
10.01.2026	N001426013	9	13	56	30	0.26
12.01.2026	N007726013	10	16	50	27	0.42
13.01.2026	N014426013	13	18	43	22	0.25
23.01.2026	N019926014	11	15	52	28	0.36
24.01.2026	N001026015	9	13	49	26	0.45
26.01.2026	N007226015	7	11	41	22	0.52
27.01.2026	N012526015	13	16	55	30	0.44
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No.5

### AMBIENT AIR QUALITY

Name of the Client : The Sandur Manganese & Iron Ores Limited  
Name of the Project : Mining Lease No. 2678  
Location : Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.  
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)  
Code & Station : A5 - Subbarayanahalli (within ML Area)  
Duration : 24 Hrs  
Issue date : 02.02.2026  
Sampling & Test Methc : IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
02.01.2026	N001426012	10	12	50	27	0.56
03.01.2026	N006526012	11	15	46	26	0.35
09.01.2026	N027426012	9	14	58	32	0.42
10.01.2026	N001526013	12	18	43	22	0.51
12.01.2026	N007826013	10	15	55	28	0.38
13.01.2026	N014526013	9	12	41	26	0.44
23.01.2026	N020026014	7	14	50	29	0.26
24.01.2026	N001126015	9	11	48	26	0.34
26.01.2026	N007326015	10	13	39	22	0.57
27.01.2026	N012626015	9	11	52	27	0.52
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiyakousar*  
ARSHIYAKOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No.6

### AMBIENT AIR QUALITY

Name of the Client : The Sandur Manganese & Iron Ores Limited  
Name of the Project : Mining Lease No. 2678  
Location : Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.  
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)  
Code & Station : A6 - Appayyanahalli (Narayanpura)  
Duration : 24 Hrs  
Issue date : 02.02.2026  
Sampling & Test Methc : IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
02.01.2026	N001526012	9	13	54	30	0.44
03.01.2026	N006626012	10	15	48	26	0.38
09.01.2026	N027526012	8	10	50	28	0.26
10.01.2026	N001626013	10	11	52	25	0.27
12.01.2026	N007926013	8	13	43	22	0.42
13.01.2026	N014626013	9	14	46	27	0.35
23.01.2026	N020126014	11	16	55	30	0.22
24.01.2026	N001226015	8	10	50	27	0.28
26.01.2026	N007426015	11	14	56	28	0.31
27.01.2026	N012726015	9	15	53	27	0.38
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiy Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No.7

### AMBIENT AIR QUALITY

Name of the Client : The Sandur Manganese & Iron Ores Limited  
Name of the Project : Mining Lease No. 2678  
Location : Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.  
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)  
Code & Station : A7 - Vitalanagar (Navalatti)  
Duration : 24 Hrs  
Issue date : 02.02.2026  
Sampling & Test Methc : IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
02.01.2026	N001626012	7	11	46	24	0.35
03.01.2026	N006726012	10	13	52	26	0.26
09.01.2026	N027626012	12	16	43	25	0.54
10.01.2026	N001726013	9	14	58	32	0.47
12.01.2026	N008026013	14	18	53	28	0.26
13.01.2026	N014726013	10	12	45	24	0.55
23.01.2026	N020226014	9	13	51	28	0.34
24.01.2026	N001326015	12	16	55	29	0.47
26.01.2026	N007526015	9	11	48	25	0.25
27.01.2026	N012826015	11	15	54	28	0.36
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No.8

### AMBIENT AIR QUALITY

Name of the Client : The Sandur Manganese & Iron Ores Limited  
Name of the Project : Mining Lease No. 2678  
Location : Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.  
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)  
Code & Station : A8 - Swamihalli  
Duration : 24 Hrs  
Issue date : 02.02.2026  
Sampling & Test Methc : IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
02.01.2026	N001726012	10	13	45	24	0.24
03.01.2026	N006826012	9	10	44	23	0.31
09.01.2026	N027726012	12	18	55	30	0.22
10.01.2026	N001826013	9	13	50	28	0.27
12.01.2026	N008126013	11	16	47	25	0.26
13.01.2026	N014826013	7	14	53	27	0.31
23.01.2026	N020326014	13	15	49	22	0.25
24.01.2026	N001426015	9	17	55	32	0.42
26.01.2026	N007626015	11	14	47	25	0.30
27.01.2026	N012926015	10	13	52	27	0.26
NAAQS Limits for Industrial ; Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# ENVIRONMENTAL LABORATORY

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## TEST REPORT

Table No.9

### AMBIENT AIR QUALITY

Name of the Client : The Sandur Manganese & Iron Ores Limited  
Name of the Project : Mining Lease No. 2678  
Location : Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.  
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)  
Code & Station : A9 - Yeswanthanagar  
Duration : 24 Hrs  
Issue date : 02.02.2026  
Sampling & Test Methc : IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
02.01.2026	N001826012	9	15	45	23	0.42
03.01.2026	N006926012	9	10	58	32	0.55
09.01.2026	N027826012	13	18	52	29	0.36
10.01.2026	N001926013	12	16	49	27	0.42
12.01.2026	N008226013	11	14	54	28	0.51
13.01.2026	N014926013	7	11	45	23	0.36
23.01.2026	N020426014	9	13	51	27	0.27
24.01.2026	N001526015	10	15	53	29	0.42
26.01.2026	N007726015	13	18	47	24	0.53
27.01.2026	N013026015	9	13	41	21	0.48
NAAQS Limits for Industrial ; Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiyaa Kousar*  
ARSHIYAA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No.10

### AMBIENT AIR QUALITY

Name of the Client : The Sandur Manganese & Iron Ores Limited  
Name of the Project : Mining Lease No. 2678  
Location : Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.  
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)  
Code & Station : A10 - Tonasigeri  
Duration : 24 Hrs  
Issue date : 02.02.2026  
Sampling & Test Methc : IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Particulate Matter		Carbon Monoxide* (CO), mg/m <sup>3</sup>
				PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	
02.01.2026	N001926012	12	14	46	24	0.25
03.01.2026	N007026012	9	11	50	26	0.34
09.01.2026	N027926012	10	13	56	32	0.21
10.01.2026	N002026013	9	15	46	23	0.2
12.01.2026	N008326013	12	17	52	29	0.26
13.01.2026	N015026013	8	11	56	30	0.33
23.01.2026	N020526014	10	13	59	32	0.42
24.01.2026	N001626015	9	11	46	26	0.21
26.01.2026	N007826015	10	13	50	27	0.35
27.01.2026	N013126015	7	9	40	21	0.24
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	4 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiy Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 11

### Fugitive Emission

<b>Name of the Client</b>	: The Sandur Manganese & Iron Ores Limited
<b>Name of the Project</b>	: Deogiri Manganese & Iron Ore Mine (ML NO. 2678)
<b>Location</b>	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.
<b>Sample Collected by</b>	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
<b>Duration</b>	: 08 Hrs
<b>Issue Date</b>	: 02.02.2026

Code & Station	Date of sample	Report No	Particulate mater ( $\mu\text{g}/\text{m}^3$ )
FA1-Mine Face / Benches	23.01.2026	N020626014	267
FA2 - Haulage Road / Service Road	23.01.2026	N020726014	456
FA3 - Crushing & Screening Plant	23.01.2026	N020826014	385
FA4 - Mineral Stack Yard / Loading	24.01.2026	N001726015	426
FA5 - Active Waste Dump	24.01.2026	N001826015	487

Ref : As per CFO in Annexure - II issued KSPCB

<b>Permissible limits for Fugitive Emissions</b>	<b>Particulate mater (<math>\mu\text{g}/\text{m}^3</math>)</b> <b>600 <math>\mu\text{g}/\text{m}^3</math></b>
--	--

*Arshiyak Kusar*  
ARSHIYAK KUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 12

### Fugitive Emission

<b>Name of the Client</b>	: The Sandur Manganese & Iron Ores Limited		
<b>Name of the Project</b>	: Kammathuru Iron Ore (KTIO) (ML No. 2678)		
<b>Location</b>	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.		
<b>Sample Collected by</b>	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)		
<b>Duration</b>	: 08 Hrs		
<b>Issue Date</b>	: 02.02.2026		
Code & Station	Date of sample	Report No	Particulate mater ( $\mu\text{g}/\text{m}^3$ )
FA1-Mine Face / Benches	09.01.2026	N028026012	365
FA2 - Haulage Road / Service Road	09.01.2026	N028126012	458
FA3 - Crushing & Screening Plant	09.01.2026	N028226012	469
FA4 - Mineral Stack Yard / Loading	10.01.2026	N002126013	358
FA5 - Active Waste Dump	10.01.2026	N002226013	467
Ref : As per CFO in Annexure - II issued KSPCB			
<b>Permissible limits for Fugitive Emissions</b>			<b>Particulate mater (<math>\mu\text{g}/\text{m}^3</math>)</b> 600 $\mu\text{g}/\text{m}^3$

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 13


### Fugitive Emission

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Subrayanahalli Manganese & Iron Ore Mine (ML NO. 2678)
Location	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Duration	: 08 Hrs
Issue Date	: 02.02.2026

Code & Station	Date of sample	Report No	Particulate mater ( $\mu\text{g}/\text{m}^3$ )
FA1-Mine Face / Benches	12.01.2026	N008426013	421
FA2 - Haulage Road / Service Road	12.01.2026	N008526013	455
FA3 - Crushing & Screening Plant	13.01.2026	N015126013	478
FA4 - Mineral Stack Yard / Loading	13.01.2026	N015226013	285
FA5 - Active Waste Dump	13.01.2026	N015326013	388

Ref : As per CFO in Annexure - II issued KSPCB

Permissible limits for Fugitive Emissions Particulate mater ( $\mu\text{g}/\text{m}^3$ )  
600  $\mu\text{g}/\text{m}^3$

  
 ARSHIYA KOUSAR  
 Dy TM - Chemical  
 Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT


Table No. 14

### Analysis Report of Dust Fall Measurement

Name of the Client	The Sandur Manganese & Iron Ores Limited
Name of the Project	Mining Lease No. 2678
Location	Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.
Month	01.01.2026 to 31.01.2026
Sample Type	Dust Fall
Duration of Monitoring	One Month
Issue Date	02.02.2026

#### Result

Code	Location	Result	unit	Reference Method
DF1	Deogiri mines office	0.132	g/m <sup>2</sup> month	IS 5182 (Part 01) : 2006
DF2	Kammathuru (Near School)	0.128	g/m <sup>2</sup> month	IS 5182 (Part 01) : 2006
DF3	Appayyanahalli	0.159	g/m <sup>2</sup> month	IS 5182 (Part 01) : 2006
DF4	Subbarayanahalli (Near Hospital)	0.116	g/m <sup>2</sup> month	IS 5182 (Part 01) : 2006
DF5	Yeswanthanagar (Near Railway Track)	0.142	g/m <sup>2</sup> month	IS 5182 (Part 01) : 2006
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)				

  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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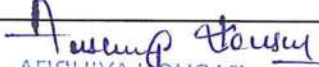
## TEST REPORT

Table No. 15

### AMBIENT NOISE LEVEL DATA

Report No : ELMES026104

Name of the Client	: The Sandur Manganese & Iron Ores Limited							
Name of the Project	: Mining Lease No. 2678							
Location	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.							
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)							
Particulars of Sample	: Noise levels							
Issue Date	: 02.02.2026							
Sampling	: IS : 9889 & CPCB Guidelines							
<b>Corezone</b>								
Code No.	Monitoring stations	Date of monitoring	Day			Night		
			L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>	L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>
N1	Mine Pit (SK/CBG)	09.01.2026	43.0	61.9	70.0	34.0	51.3	56.8
N2	Kammathuru ML Area	09.01.2026	40.1	58.7	68.5	37.0	52.7	60.0
N3	Deogiri ML Area	09.01.2026	42.0	56.7	66.0	35.0	47.1	55.0
N4	SBS Plot (Mine Boundary)	10.01.2026	41.5	61.2	71.0	38.0	51.8	58.0
N5	SB Halli ML Area	10.01.2026	43.0	66.6	74.0	37.0	50.6	60.0
N6	Mine area	10.01.2026	41.6	66.3	75.0	40.0	50.7	56.0
<b>Bufferzone</b>								
Code No.	Monitoring stations	Date of monitoring	Day			Night		
			L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>	L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>
N7	Appayanahalli (Narayanapura)	12.01.2026	38.0	47.8	55.0	34.0	41.8	46.5
N8	Vitthalanagar (Navalatti)	12.01.2026	41.0	50.4	57.5	36.0	44.6	50.0
N9	Swamihalli	12.01.2026	37.5	49.0	56.8	34.0	41.5	46.5
N10	Yeshwanthnagar	13.01.2026	38.0	50.8	56.2	35.0	44.6	49.0
N11	Tonasingeri	13.01.2026	37.3	52.5	56.8	36.0	42.3	46.2
N12	Kumaraswamy Temple	13.01.2026	37.5	51.6	57.3	34.0	43.3	49.0
<b>Permissible Limits of Ambient Noise Levels as per CPCB Guidelines</b>								
			Leq. Limit dB(A)					
			Day			Night		
Industrial areas			75			70		
Commercial area			65			55		
Residential area			55			45		

  
 ARSHIYA KOUSAR  
 Dy TM - Chemical  
 Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 16

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Mining Lease No. 2678
Location	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Nature of Sample	: STP Water
Sample Location	: STP1, Inlet Water sample from 100 KLD STP, Deogiri
Date of sample collection	: 10.01.2026
Date of sample receipt	: 12.01.2026
Report No	: M003626013
Issue Date	: 02.02.2026

Ref: G S R 1265 (e) and CPCB Standards

Sl.No.	Sample Code	STP1	Results	Method of Testing
	Parameters	Unit		
1	pH	-	6.55	IS 3025 (P-11) 2022
2	Biochemical Oxygen Demand BOD <sub>5</sub> 27 <sup>o</sup> C	mg/l	60	IS 3025 (Part 44) 2023
3	Chemical Oxygen Demand (COD)	mg/l	240	IS 3025 (Part 58) 2023
4	Total Suspended Solids, at 105 <sup>o</sup> C	mg/l	300	IS 3025 (P-17) 2022
5	Ammonium (H4-N)	mg/l	2	IS:3025 (Part-34 Sec 1) 2023
6	Total Nitrogen (N-Total)	mg/l	14	IS 3025 (Part-34 sec 1) 2023
7	Fecal coliform	MPN/100ml	190	APHA 24 <sup>th</sup> Edition chapter 9221 E

**BINU MANI**  
TM - Microbiology  
Govt Analyst/Authorised Signatory

**ARSHIYA KOUSAR**  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 17

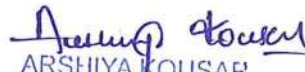
Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Mining Lease No. 2678
Location	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Nature of Sample	: STP Water
Sample Location	: STP2, Outlet Water sample from 100 KLD STP, Deogiri
Date of sample collection	: 10.01.2026
Date of sample receipt	: 12.01.2026
Report No	: M003726013
Issue Date	: 02.02.2026

Ref: G S R 1265 (e) and CPCB Standards

Sl.No.	Parameters	units	Results	Sewage Effluent Discharge Standards	Method of Testing
1	pH	-	6.93	6.5 - 9.0	IS 3025 (P-11) 2022
2	Biochemical Oxygen Demand BOD <sub>3</sub> 27 <sup>o</sup> C	mg/l	5.2	<10	IS 3025 (Part 44) 2023
3	Chemical Oxygen Demand (COD)	mg/l	28	<50	IS 3025 (Part 58) 2023
4	Total Suspended Solids, at 105 <sup>o</sup> C	mg/l	16	<20	IS 3025 (P-17) 2022
5	Ammonium (H4-N)	mg/l	2.6	<5	IS:3025 (Part-34 Sec 1) 2023
6	Total Nitrogen (N-Total)	mg/l	2	<10	IS 3025 (Part-34 sec 1) 2023
7	Fecal coliform	MPN/100ml	19	<100	APHA 24 <sup>th</sup> Edition chapter 9221 E

  
BINU MANI

TM - Microbiology  
Govt Analyst/Authorised Signatory

  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 18

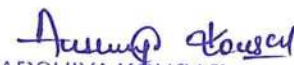
Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Mining Lease No. 2678
Location	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Nature of sample	: Surface water
Sample Location	: SW1 - Durgammakolla spring water, SW2 - JLK spring water SW3 - Katrasinghkolla spring water
Date of sample collection	: 10.01.2026
Date of sample receipt	: 12.01.2026
Issue Date	: 02.02.2026
Ref : IS : 2296, Water Quality Standards	

Report No		M002426013	M002526013	M002626013	Limits	Method of Testing
Sl.No.	Sample Code	SW1	SW2	SW3		
Parameters		Results				
1	pH	8.21	6.90	7.52	6.5 to 8.5	IS:3025(Part-11)2022
2	Colour (Hazen Units)	1	1	3	300	IS 3025 (Part 11) 2022
3	Odour	Agreeable	Agreeable	Agreeable	-	IS:3025 (P-5) 2018
4	Total Dissolved Solids (mg/l)	320	130	136	1500	IS 3025 (Part 16) 2023
5	Total Suspended Solids, mg/l	8	16	30	-	IS 3025 (Part 17) 2023
6	Dissolved Oxygen (as O <sub>2</sub> ), mg/l	5.5	5.8	5.7	Min 4	IS:3025(Part-38)1989RA 2019
7	Biochemical Oxygen Demand (as O <sub>2</sub> ), mg/l	<3.0	<3.0	<3.0	3	IS 3025 (Part 44) 2023
8	Total Hardness (as CaCO <sub>3</sub> ),mg/l	220	44	50	-	IS:3025 (P-21):2009 RA 2023
9	Sulphates as SO <sub>4</sub> (mg/l)	20.0	6.6	7.0	400	APHA (24th Edition ):4110B
10	Phosphates (as P), mg/l	<0.05	<0.05	<0.05	-	IS 3025 (P-31) Sec 1 2022
11	Chloride (as Cl),mg/l	38.0	26.0	58.0	600	IS:3025(Part-32) 1988RA2019
12	Fluoride (as F),mg/l	0.40	0.38	0.35	0.38	IS 3025 (Part 60-Sec1) 2023
13	Sulphide (as H <sub>2</sub> S), mg/l	<0.01	<0.01	<0.01	-	IS:3025 (P-29) 2022
14	Boron (as B), mg/l	<0.1	<0.1	<0.1	-	IS:3025 (Part-57) 2021
15	Iron (as Fe),mg/l	<0.005	<0.005	<0.005	50	IS 3025 (Part 65) 2022
16	Percent of Sodium (%)	23.14	20.15	20.75	-	IS 11624 .2009
17	Residual Sodium Carbonate (meq/l)	<0.5	<0.5	<0.5	-	IS 11624 .2009
18	Total Coliform, MPN/100ml	60	58	62	5000	IS 15185 2016 RA 2021

""END OF REPORT""

  
BINU MANI

TM - Microbiology  
Govt Analyst/Authorised Signatory

  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT


Table No.19

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Mining Lease No. 2678
Location	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Nature of sample	: Surface water
Sample Location	: SW4 - Hari Shankar Spring Water, SW5 - Narihalla Dam water
Date of sample collection	: 10.01.2026
Date of sample receipt	: 12.01.2026
Issue Date	: 02.02.2026
Ref : IS : 2296, Water Quality Standards	

Report No		M002726013	M002826013	Limits	Method of Testing
Sl.No.	Sample Code	SW4	SW5		
Parameters		Results			
1	pH	6.88	8.35	6.5 to 8.5	IS:3025(Part-11)2022
2	Colour (Hazen Units)	3.0	5.0	300	IS 3025 (Part 11) 2022
3	Odour	Agreeable	Agreeable	-	IS:3025 (P-5) 2018
4	Total Dissolved Solids (mg/l)	60.0	518.0	1500	IS 3025 (Part 16) 2023
5	Total Suspended Solids, mg/l	40	90	-	IS 3025 (Part 17) 2023
6	Dissolved Oxygen (as O <sub>2</sub> ), mg/l	5.80	5.40	Min 4	IS:3025(Part-38)1989RA 2019
7	Biochemical Oxygen Demand (as O <sub>2</sub> ), mg/l	<3.0	<3.0	3	IS 3025 (Part 44) 2023
8	Total Hardness (as CaCO <sub>3</sub> ),mg/l	16.0	260	-	IS:3025 (P-21):2009 RA 2023
9	Sulphates as SO <sub>4</sub> (mg/l)	9.4	38.0	400	APHA (24th Edition ):4110B
10	Phosphates (as P), mg/l	<0.05	<0.05	-	IS 3025 (P-31) Sec 1 2022 1976
11	Chloride (as Cl),mg/l	24.0	140	600	IS:3025(Part-32) 1988RA2019
12	Fluoride (as F),mg/l	0.28	0.81	1.5	IS 3025 (Part 60-Sec1) 2023
13	Sulphide (as H <sub>2</sub> S), mg/l	<0.01	<0.01	-	IS:3025 (P-29) 2022
14	Boron (as B), mg/l	<0.1	<0.1	-	IS:3025 (Part-57) 2021
15	Iron (as Fe),mg/l	<0.005	<0.005	50	IS 3025 (Part 65) 2022
16	Percent of Sodium (%)	22.4	21.8	-	IS 2488 part 5
17	Residual Sodium Carbonate (meq/l)	<0.5	<0.5	-	IS 11624 .2009
18	Total Coliform, MPN/100ml	35	48	5000	IS 15185 2016 RA 2021

""END OF REPORT""

  
**BINU MANI**  
 TM - Microbiology  
 Govt Analyst/Authorised Signatory

  
**ARSHIYA KOUSAR**  
 Dy TM - Chemical  
 Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT


Table No. 20

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Mining Lease No. 2678
Location	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Nature of sample	: Ground water
Sample Location	: GW1 - Deogiri Mine Office Bore water, GW2 - Borewell near Kumarswamy temple, GW3 - Appayyanahalli (Narayanpura) Bore water
Date of sample collection	: 10.01.2026
Date of sample receipt	: 12.01.2026
Issue Date	: 02.02.2026
Ref	: IS:10500-2012 Norms Amendment - 4 (Drinking Water Standards)

Sl. No.	Report No	M002926013	M003026013	M003126013	Desirable Limits	Permissible Limits	Method of Testing
		GW1	GW2	GW3			
Parameters	Results						
1	Colour (Hazen Units)	<1	1	1	5	15	IS:3025 (P-4) 2021
2	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P-5) 2018
3	pH Value	6.79	6.97	7.82	6.5 to 8.5	6.5 - 8.5	IS:3025 (P-11)2022
4	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P- 8) 2023
5	Turbidity,NTU	<0.1	1.60	3.00	1	5	IS:3025 (P-10) 2023
6	Total Dissolved Solids,mg/l	102.0	210.0	1090.0	500	2000	IS:3025 (P-16) 2023
7	Aluminium (as Al)	<0.005	<0.005	<0.005	0.03	0.2	IS:3025 (P-55) 2022
8	Ammonia (as total Ammonia -N),mg/l	<0.1	<0.1	<0.1	0.5	0.5	IS:3025 (P-34)1 Sec 1 2023
9	Anionic Detergents (as MBAS),mg/l	<0.1	<0.1	<0.1	0.2	1.0	IS:3025 (P-68) 2023
10	Barium (as Ba), mg/l	<0.005	<0.005	<0.005	0.7	0.7	IS:3025(P-65) 2022
11	Boron (as B), mg/l	<0.1	<0.1	<0.1	0.5	2.4	IS:3025 (Part-57) 2021
12	Calcium (as Ca),mg/l	9.61	34.00	152.30	75	200	IS:3025 (P-40) 2021
13	Chloramines as C12	<0.1	<0.1	<0.1	4	4	Clause 6 of IS 3025 (P-26) 2021
14	Chloride as Cl (mg/l)	26.00	45.00	220.00	250	1000	IS:3025 (P-32)1988 RA 2019
15	Copper (as Cu),mg/l	<0.0005	<0.0005	<0.0005	0.05	1.5	IS:3025 (P-65) 2022
16	Fluoride (as F),mg/l	<0.1	0.40	0.98	1	1.5	IS:3025 (P-60) Sec 2022
17	Residual, Free Chlorine,mg/l	<0.1	<0.1	<0.1	0.2	1	IS:3025 (P-26) 2021
18	Iron (as Fe),mg/l	<0.005	<0.005	<0.005	1.0	1.0	IS:3025 (Part-65) 2022
19	Magnesium (as Mg)mg/l	2.91	17.00	77.70	30	100	IS:3025 (P-46)1 2023
20	Manganese (as Mn),mg/l	<0.001	<0.001	<0.001	0.1	0.3	IS:3025 (P-65) 2022
21	Mineral Oil,mg/l	<0.5	<0.5	<0.5	1.0	1.0	IS:3025 (P-39) 2021
22	Nitrates (as NO <sub>3</sub> ),mg/l	3.50	8.60	30.80	45	45	IS:3025 (P-34) 1988 RA 2019
23	Phenolics (as C <sub>6</sub> H <sub>5</sub> OH),mg/l	<0.001	<0.001	<0.001	0.001	0.002	IS:3025 (P-43) Sec 1 2023
24	Selenium (as Se),mg/l	<0.0005	<0.0005	<0.0005	0.01	0.01	IS:3025(P-65) 2022
25	Silver (as Ag), mg/l	<0.005	<0.005	<0.005	0.1	0.1	IS:3025(P-65) 2022
26	Sulphate (as SO <sub>4</sub> ),mg/l	26.00	12.00	88.00	200	400	IS:3025 (P-24) Sec 1 2022
27	Sulphide (as H <sub>2</sub> S) , mg/l	<0.01	<0.01	<0.01	0.05	0.05	IS:3025 (P-29) 2022
28	Total Alkalinity (as CaCO <sub>3</sub> ) mg/l	32.0	130.0	56.0	200	600	IS:3025 (P-23):2023
29	Total Hardness (as CaCO <sub>3</sub> ),mg/l	36.0	155.0	700.0	200	600	IS:3025 (P-21):2009 RA 2023
30	Zinc (as Zn),mg/l	<0.005	<0.005	<0.005	5	15	IS:3025 (P-65) 2022
31	Cadmium (as Cd),mg/l	<0.0005	<0.0005	<0.0005	0.003	0.003	IS:3025 (P-65) 2022
32	Cyanide (as CN),mg/l	<0.01	<0.01	<0.01	0.05	0.05	IS:3025 (P-27)Sec 1 2021
33	Lead (as Pb),mg/l	<0.0005	<0.0005	<0.0005	0.01	0.01	IS:3025 (P-65) 2022
34	Mercury (as Hg),mg/l	<0.0005	<0.0005	<0.0005	0.001	0.001	IS:3025 (P-65) 2022
35	Molybdenum (as Mo), mg/l	<0.0005	<0.0005	<0.0005	0.07	0.07	IS:3025 (P-65) 2022
36	Nickel (as Ni),mg/l	<0.01	<0.01	<0.01	0.02	0.02	IS:3025 (P-65) 2022
37	Arsenic (as As),mg/l	<0.0005	<0.0005	<0.0005	0.01	0.01	IS:3025 (P-65) 2022
38	Total Chromium (as Cr),mg/l	<0.001	<0.001	<0.001	0.05	0.05	IS:3025 (P-65) 2022
39	Escherichia coli/100ml	Not Detected	Not Detected	Not Detected	Shall not be detectable in any 100ml Sample		IS:15185:2016 RA 2021
40	Total Coliform /100ml)	Not Detected	Not Detected	Not Detected			IS:15185:2016 RA 2021
41	Electrical Conductivity (µmhos/cm)	190.0	390.0	1910.0	-	-	IS 3025 (P-14) 2013 RA 2023

"END OF REPORT"

  
BINU MANI  
TM - Microbiology  
Govt Analyst/Authorised Signatory

  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office &amp; Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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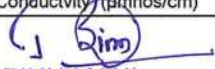
## TEST REPORT

Table No. 21

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Mining Lease No. 2678
Location	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Nature of sample	: Ground water
Sample Location	: GW4 - SB Halli Bore water (near hospital), GW5 - Yeshwanthnagar Bore water (near railway track)
Date of sample collection	: 10.01.2026
Date of sample receipt	: 12.01.2026
Issue Date	: 02.02.2026
Ref :	IS:10500-2012 Norms Amendment - 4 (Drinking Water Standards)

Sl. No.	Sample Code	Report No		Desirable Limits	Permissible Limits	Method of Testing
		M003226013	M003326013			
	Parameters	GW4	GW5			
		Results				
1	Colour (Hazen Units)	1	1	5	15	IS:3025 (P-4) 2021
2	Odour	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P-5) 2018
3	pH Value	6.60	7.78	6.5 to 8.5	6.5 - 8.5	IS:3025 (P-11)2022
4	Taste	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P- 8) 2023
5	Turbidity,NTU	2.60	3.20	1	5	IS:3025 (P-10) 2023
6	Total Dissolved Solids,mg/l	216.0	1450.0	500	2000	IS:3025 (P-16) 2023
7	Aluminium (as Al)	<0.005	<0.005	0.03	0.2	IS:3025 (P-55) 2022
8	Ammonia (as total Ammonia -N),mg/l	<0.1	<0.1	0.5	0.5	IS:3025 (P-34)1 Sec 1 2023
9	Anionic Detergents (as MBAS),mg/l	<0.1	<0.1	0.2	1.0	IS:3025 (P-68) 2023
10	Barium (as Ba), mg/l	<0.005	<0.005	0.7	0.7	IS:3025(P-65) 2022
11	Boron (as B), mg/l	<0.1	<0.1	0.5	2.4	IS:3025 (Part-57) 2021
12	Calcium (as Ca),mg/l	36.00	200.00	75	200	IS:3025 (P-40) 2021
13	Chloramines as C12	<0.1	<0.1	4	4	Clause 6 of IS 3025 (P-26) 2021
14	Chloride as Cl (mg/l)	40.00	360.00	250	1000	IS:3025 (P-32)1988 RA 2019
15	Copper (as Cu),mg/l	<0.0005	<0.0005	0.05	1.5	IS:3025 (P-65) 2022
16	Fluoride (as F),mg/l	0.76	1.25	1	1.5	IS:3025 (P-60) Sec 2022
17	Residual, Free Chlorine,mg/l	<0.1	<0.1	0.2	1	IS:3025 (P-26) 2021
18	Iron (as Fe),mg/l	<0.005	<0.005	1.0	1.0	IS:3025 (Part-65) 2022
19	Magnesium (as Mg)mg/l	14.60	82.60	30	100	IS:3025 (P-46)1 2023
20	Manganese (as Mn),mg/l	<0.001	<0.001	0.1	0.3	IS:3025 (P-65) 2022
21	Mineral Oil,mg/l	<0.5	<0.5	1.0	1.0	IS:3025 (P-39) 2021
22	Nitrates (as NO <sub>3</sub> ),mg/l	6.00	43.00	45	45	IS:3025 (P-34) 1988 RA 2019
23	Phenolics (as C <sub>6</sub> H <sub>5</sub> OH),mg/l	<0.001	<0.001	0.001	0.002	IS:3025 (P-43) Sec 1 2023
24	Selenium (as Se),mg/l	<0.0005	<0.0005	0.01	0.01	IS:3025(P-65) 2022
25	Silver (as Ag), mg/l	<0.005	<0.005	0.1	0.1	IS:3025(P-65) 2022
26	Sulphate (as SO <sub>4</sub> ),mg/l	24.00	80.00	200	400	IS:3025 (P-24) Sec 1 2022
27	Sulphide (as H <sub>2</sub> S) , mg/l	<0.01	<0.01	0.05	0.05	IS:3025 (P-29) 2022
28	Total Alkalinity (as CaCO <sub>3</sub> ) mg/l	105.0	700.0	200	600	IS:3025 (P-23):2023
29	Total Hardness (as CaCO <sub>3</sub> ),mg/l	150.0	840.0	200	600	IS:3025 (P-21):2009 RA 2023
30	Zinc (as Zn),mg/l	<0.005	<0.005	5	15	IS:3025 (P-65) 2022
31	Cadmium (as Cd),mg/l	<0.0005	<0.0005	0.003	0.003	IS:3025 (P-65) 2022
32	Cyanide (as CN),mg/l	<0.01	<0.01	0.05	0.05	IS:3025 (P-27)Sec 1 2021
33	Lead (as Pb),mg/l	<0.0005	<0.0005	0.01	0.01	IS:3025 (P-65) 2022
34	Mercury (as Hg),mg/l	<0.0005	<0.0005	0.001	0.001	IS:3025 (P-65) 2022
35	Molybdenum (as Mo), mg/l	<0.0005	<0.0005	0.07	0.07	IS:3025 (P-65) 2022
36	Nickel (as Ni),mg/l	<0.01	<0.01	0.02	0.02	IS:3025 (P-65) 2022
37	Arsenic (as As),mg/l	<0.0005	<0.0005	0.01	0.01	IS:3025 (P-65) 2022
38	Total Chromium (as Cr),mg/l	<0.001	<0.001	0.05	0.05	IS:3025 (P-65) 2022
39	Escherichia coli/100ml	Not Detected	Not Detected	Shall not be detectable in any		IS:15185:2016 RA 2021
40	Total Coliform /100ml	Not Detected	Not Detected	100ml Sample		IS:15185:2016 RA 2021
41	Electrical Conductivity (µmhos/cm)	400.0	2500.0	-	-	IS 3025 (P-14) 2013 RA 2023

"END OF REPORT"

  
BINU MANI  
TM - Microbiology  
Govt Analyst/Authorised Signatory

  
ARSHIYA KOJSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 22

Name of the Client		: The Sandur Manganese & Iron Ores Limited				
Name of the Project		: Mining Lease No. 2678				
Location		: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.				
Sample Collected by		: Environmental Laboratory (Unit of Mineral Engineering Services LLP)				
Nature of sample		: Drinking water				
Sample Location		: DW1 - Drinking Water Deogiri Near Office : DW2 - Drinking Water Subbarayanahalli Near Office				
Issue Date		: 02.02.2026				
Ref : IS:10500-2012 Norms Amendment - 4 (Drinking Water Standards)						
Date of sample collection		10.01.2026	10.01.2026	Desirable Limits	Permissible Limits	Method of Testing
Date of sample receipt		12.01.2026	12.01.2026			
Report No		M003426013	M003526013			
Sl. No.	Sample Code	DW1	DW2			
	Parameters	Results				
1	Colour (Hazen Units)	<1	<1	5	15	IS:3025 (P-4) 2021
2	Odour	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P-5) 2018
3	pH Value	6.96	7.13	6.5 to 8.5	6.5 - 8.5	IS:3025 (P-11)2022
4	Taste	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P- 8) 2023
5	Turbidity,NTU	<0.1	<0.1	1	5	IS:3025 (P-10) 2023
6	Total Dissolved Solids,mg/l	98.0	254.0	500	2000	IS:3025 (P-16) 2023
7	Calcium (as Ca),mg/l	10.40	34.00	75	200	IS:3025 (P-40) 2021
8	Chloride as Cl (mg/l)	23.00	55.00	250	1000	IS:3025 (P-32)1988 RA 2019
9	Fluoride (as F),mg/l	<0.1	<0.1	1	1.5	IS:3025 (P-60) Sec1 2022
10	Iron (as Fe),mg/l	<0.005	<0.005	1.0	1.0	IS:3025 (Part-2) 2022
11	Magnesium (as Mg)mg/l	3.90	19.40	30	100	IS:3025 (P-46) 2023
12	Nitrates (as NO <sub>3</sub> ),mg/l	5.00	8.20	45	45	IS:3025 (P-34) Sec 1 2023
13	Sulphate (as SO <sub>4</sub> ),mg/l	2.00	24.00	200	400	IS:3025 (P-24) Sec 1 2022
14	Total Alkalinity (as CaCO <sub>3</sub> ) mg/l	38.0	115.00	200	600	IS:3025 (P-23):2023
15	Total Hardness (as CaCO <sub>3</sub> ),mg/l	42.0	165.0	200	600	IS:3025 (P-21):2009 RA 2019
16	Electrical Conductivity (µmhos/cm)	180.0	470.0	--	--	IS 3025 (P-14) : 2013RA 2023
17	Escherichia coli/100ml	Not Detected	Not Detected	Shall not be detectable in any 100ml Sample		IS:15185:2016 RA 2021
18	Total Coliform /100ml)	Not Detected	Not Detected			IS:15185:2016 RA 2021

"END OF REPORT"

  
**BINU MANI**  
 TM - Microbiology  
 Govt Analyst/Authorised Signatory

  
**ARSHIYA KOUSAR**  
 Dy TM - Chemical  
 Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 23

Name of the Client		: The Sandur Manganese & Iron Ores Limited				
Name of the Project		: Mining Lease No. 2678				
Location		: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.				
Sample Collected by		: Environmental Laboratory (Unit of Mineral Engineering Services LLP)				
Nature of sample		: Drinking water				
Sample Location		: W1 - GSIWTP 150 KLD In let water Deogiri : W2 - GSIWTP 150 KLD Out let water Deogiri				
Issue Date		: 02.02.2026				
Ref : IS:10500-2012 Norms Amendment - 4 (Drinking Water Standards)						
Date of sample collection		10.01.2026	10.01.2026	Desirable Limts	Permissible Limts	Method of Testing
Date of sample receipt		12.01.2026	12.01.2026			
Report No		M003826013	M003926013			
Sample Code		DW1	DW2			
Sl. No.	Parameters	Results				
1	Colour (Hazen Units)	1	1	5	15	IS:3025 (P-4) 2021
2	Odour	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P-5) 2018
3	pH Value	6.64	8.44	6.5 to 8.5	6.5 - 8.5	IS:3025 (P-11)2022
4	Taste	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P- 8) 2023
5	Turbidity,NTU	3.5	4.0	1	5	IS:3025 (P-10) 2023
6	Total Dissolved Solids,mg/l	60.0	108.0	500	2000	IS:3025 (P-16) 2023
7	Calcium (as Ca),mg/l	4.00	17.60	75	200	IS:3025 (P-40) 2021
8	Chloride as Cl (mg/l)	16.00	14.00	250	1000	IS:3025 (P-32)1988 RA 2019
9	Fluoride (as F),mg/l	<0.1	<0.1	1	1.5	IS:3025 (P-60) Sec1 2022
10	Iron (as Fe),mg/l	<0.005	<0.005	1.0	1.0	IS:3025 (Part-2) 2022
11	Magnesium (as Mg)mg/l	1.94	8.26	30	100	IS:3025 (P-46) 2023
12	Nitrates (as NO <sub>3</sub> ),mg/l	9.50	11.20	45	45	IS:3025 (P-34) Sec 1 2023
13	Sulphate (as SO <sub>4</sub> ),mg/l	10.00	7.00	200	400	IS:3025 (P-24) Sec 1 2022
14	Total Alkalinity (as CaCO <sub>3</sub> ) mg/l	14.0	68.00	200	600	IS:3025 (P-23):2023
15	Total Hardness (as CaCO <sub>3</sub> ),mg/l	18.0	78.0	200	600	IS:3025 (P-21):2009 RA 2019
16	Electrical Conductivity (µmhos/cm)	105.0	110.0	200	—	IS 3025 (P-14) : 2013RA 2023
17	Escherichia coli/100ml	Not Detected	Not Detected	Shall not be detectable in any 100ml Sample		IS:15185:2016 RA 2021
18	Total Coliform /100ml)	Not Detected	Not Detected			IS:15185:2016 RA 2021

"END OF REPORT"

BINU MANI

TM - Microbiology

Govt Analyst/Authorised Signatory

ARSHIYA KOUSAR

Dy TM - Chemical

Govt Analyst/Authorised Signatory

Office &amp; Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 24

Name of the Client		: The Sandur Manganese & Iron Ores Limited					
Name of the Project		: Mining Lease No. 2678					
Location		: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.					
Sample Collected by		: Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Nature of Samples		: Soil Samples					
Date of sample collection		: 12.01.2026					
Date of sample receipt		: 13.01.2026					
Issue Date		: 02.02.2026					
Report No		M005526013	M005626013	M005726013	M005826013	M005926013	
SL. No.	Sample Code	S1	S2	S3	S4	S5	
	Parameters	Unit					
		Results					
<b>Physical Properties</b>							
1	Colour	--	Red Soil	Red Soil	Red Soil	Red Soil	
2	Textural class	--	Clay Loam	Sandy Loam	Clay Loam	Clay Loam	
Size Distribution							
3	Sand	%	31.88	32.55	31.62	30.88	32.89
	Clay	%	23.52	25.11	28.31	29.85	26.11
	Silt	%	44.60	42.34	40.07	39.27	41.00
4	Moisture Content	%	7.38	7.3	7.44	7.88	7.58
5	Bulk Density	gm/cc	1.7	1.68	1.52	1.82	1.77
6	Water holding capacity	%	26.32	30.33	21.42	28.33	22.52
7	pH	--	6.22	6.33	7.63	7.66	6.72
8	EC	m.mohs/cm	0.168	0.258	0.265	0.292	0.188
<b>Chemical Properties</b>							
9	Organic Carbon	%	0.58	0.32	0.26	0.33	1.84
10	Nitrogen as N	Kg/Ha	110	174	119	168	188
11	Phosphorous as P	Kg/Ha	6.22	8.22	7.22	7.44	7.72
12	Potassium as K <sub>2</sub> O	Kg/Ha	184	125	118	122	160
13	Sodium as Na	mg/kg	23	28	31	38	21
14	Chloride as Cl	mg/kg	123	120	140	155	135
15	Sulphate as SO <sub>4</sub>	mg/kg	23	27	32	36	28
<b>Sample Location</b>							
S1 - Top soil (Kammathuru)							
S2 - Top soil (Deogiri)							
S3 - Top soil (SB Halli)							
S4 - Active Dump (Deogiri)							
S5 - Active Dump (SB Halli)							

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 25

Name of the Client		: The Sandur Manganese & Iron Ores Limited				
Name of the Project		: Mining Lease No. 2678				
Location		: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.				
Sample Collected by		: Environmental Laboratory (Unit of Mineral Engineering Services LLP)				
Nature of Samples		: Soil Samples				
Date of sample collection		: 12.01.2026				
Date of sample receipt		: 13.01.2026				
Issue Date		: 02.02.2026				
Report No		M006026013	M006126013	M006226013	M006326013	M006426013
SL. No.	Sample Code	S6	S7	S8	S9	S10
	PARAMETERS	Unit				
		Results				
<b>Physical Properties</b>						
1	Colour	--	Red Soil	Red Soil	Red Soil	Red Soil
2	Textural class	--	Clay Loam	Clay Loam	Slity Clay	Slity Clay
3	Size Distribution					
	Sand	%	32.72	31.66	32.35	31.82
	Clay	%	28.12	27.55	28.44	27.55
	Silt	%	39.16	40.79	39.21	40.63
4	Moisture Content	%	6.88	7.25	6.96	6.42
5	Bulk Density	gm/cc	1.68	2.91	7.32	6.85
6	Water holding capacity	%	31.44	26.33	26.45	29.88
7	pH	--	7.33	7.42	7.38	6.75
8	EC	m.mohs/cm	0.499	0.562	0.622	0.287
<b>Chemical Properties</b>						
9	Organic Carbon	%	0.86	0.55	0.61	0.93
10	Nitrogen as N	Kg/Ha	138	146	119	154
11	Phosphorous as P	Kg/Ha	7.42	7.28	7.82	6.35
12	Potassium as K <sub>2</sub> O	Kg/Ha	142	145	128	158
13	Sodium as Na	mg/kg	42	32	30	27
14	Chloride as Cl	mg/kg	30	27	28	23
15	Sulphate as SO <sub>4</sub>	mg/kg	32	31	30	27
<b>Sample Location</b>						
S6 - Appayyanahalli agriculture lan						
S7 - Vitthalanagar agriculture land						
S8 - Swamihalli agriculture land						
S9 -Tonasigere agriculture land						
S10 - Yeshwanthnagar agriculture land						

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 26

### Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Subrayanahalli Manganese & Iron Ore Mine (ML NO. 2678)
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Sample Location	: KVH Iron Ore Mines
Stack ID & Capacity	: DG 1010 KVA (808 KW)
Instrument used for sampling	: Emissions collected through stack sampler
Date of Collection	: 09.01.2026
Date of Sample Receipt	: 10.01.2026
Report No	: N000126013
Issue date	: 02.02.2026

#### STACK DETAILS

1	Fuel Used	Diesel
2	Ambient Temperature ( $^{\circ}$ C)	25
3	Stack Temperature ( $^{\circ}$ C)	188
4	Velocity (m/s)	13.79
5	Stack diameter (M)	0.30
6	Quantity of flue Gas Discharged into atmosphere ( $\text{Nm}^3/\text{hr}$ )	3185
7	Sample Condition When Received	Satisfactory
8	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
9	Serial No. of the Equipment	338 DTH 14
10	Calibration due date	17.07.2026
11	Test Method	IS 11255 & flue gas analyser

#### Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Standard
1	NO <sub>x</sub> (as NO <sub>2</sub> ) (as 15% O <sub>2</sub> ), dry basis	ppmv	28.33	360
2	NMHC (as C) (at 15 % O <sub>2</sub> )	mg/Nm <sup>3</sup>	42.00	100
3	PM (as C) (at 15 % O <sub>2</sub> )	mg/Nm <sup>3</sup>	54.00	75
4	CO (at 15 % O <sub>2</sub> )	(mg/Nm <sup>3</sup> )	56.00	150

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 27

### Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Deogiri Manganese & Iron Ore Mine (ML NO. 2678)
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Sample Location	: Katasinkolla
Stack ID & Capacity	: DG Set 62.5 KVA
instrument used for sampling	: Emissions collected through stack sampler
Date of Collection	: 09.01.2026
Date of Sample Receipt	: 10.01.2026
Report No	: N000226013
Issue date	: 02.02.2026

#### STACK DETAILS

1	Fuel Used	Diesel
2	Ambient Temperature (°C)	23
3	Stack Temperature (°C)	155
4	Velocity (m/s)	8.26
5	Stack diameter (M)	0.15
6	Quantity of flue Gas Discharged into atmosphere (Nm <sup>3</sup> /hr)	354
7	Sample Condition When Received	Satisfactory
8	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
9	Serial No. of the Equipment	338 DTH 14
10	Calibration due date	17.07.2026
11	Test Method	IS 11255 & flue gas analyser

#### Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Standard
1	Particulate Matter	g/Kw-hr	0.198	<0.2
2	CO	g/Kw-hr	0.277	<3.5
3	NOx +HC	g/Kw-hr	0.130	<4.0

INFERENCE	As per KSPCB
	Report Status - The measured values for the above parameters for those standards have been specified were observed to be within the said standards

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 28

### Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Subrayanahalli Manganese & Iron Ore Mine (ML NO. 2678)
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Sample Location	: KVH Iron Ore Mine
Stack ID & Capacity	: DG Set 6.0 KVA Doosan Light Source
Instrument used for sampling	: Emissions collected through stack sampler
Date of Collection	: 09.01.2026
Date of Sample Receipt	: 10.01.2026
Report No	: N000326013
Issue date	: 02.02.2026

#### STACK DETAILS

1	Fuel Used	Diesel
2	Ambient Temperature ( $^{\circ}$ C)	25
3	Stack Temperature ( $^{\circ}$ C)	148
4	Velocity (m/s)	6.47
5	Stack diameter (M)	0.15
6	Quantity of flue Gas Discharged into atmosphere ( $\text{Nm}^3/\text{hr}$ )	281
7	Sample Condition When Received	Satisfactory
8	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
9	Serial No. of the Equipment	86 BTF 12
10	Calibration due date	17.07.2026
11	Test Method	IS 11255 & flue gas analyser

#### Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Standard
1	Particulate Matter	g/Kw-hr	0.103	<0.2
2	CO	g/Kw-hr	0.844	<3.5
3	NOx +HC	g/Kw-hr	1.690	<4.0

INFERENCE	As per KSPCB Report Status - The measured values for the above parameters for those standards have been specified were observed to be within the said standards
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*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 29

### Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Deogiri Manganese & Iron Ore Mine (ML NO. 2678)
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Sample Location	: KTION Work Shop
Stack ID & Capacity	: DG Set 6.0 KVA Doosan Light Source
instrument used for sampling	: Emissions collected through stack sampler
Date of Collection	: 09.01.2026
Date of Sample Receipt	: 10.01.2026
Report No	: N000726013
Issue date	: 02.02.2026

#### STACK DETAILS

1	Fuel Used	Diesel
2	Ambient Temperature ( $^{\circ}$ C)	24
3	Stack Temperature ( $^{\circ}$ C)	156
4	Velocity (m/s)	7.78
5	Stack diameter (M)	0.15
6	Quantity of flue Gas Discharged into atmosphere ( $\text{Nm}^3/\text{hr}$ )	332
7	Sample Condition When Received	Satisfactory
8	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
9	Serial No. of the Equipment	86 BTF 12
10	Calibration due date	17.07.2026
11	Test Method	IS 11255 & flue gas analyser

#### Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Standard
1	Particulate Matter	g/Kw-hr	0.996	<0.2
2	CO	g/Kw-hr	0.886	<3.5
3	NOx +HC	g/Kw-hr	1.633	<4.0

INFERENCE	As per KSPCB Report Status - The measured values for the above parameters for those standards have been specified were observed to be within the said standards
-----------	--

*Arshiya K. Usar*  
ARSHIYA K. USAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 30

### Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Kammathuru Iron Ore (KTIO) (ML No. 2678)
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Sample Location	: KTIO Sub Station
Stack ID & Capacity	: DG Set 125 KVA
instrument used for sampling	: Emissions collected through stack sampler
Date of Collection	: 10.01.2026
Date of Sample Receipt	: 12.01.2026
Report No	: N000426013
Issue date	: 02.02.2026

#### STACK DETAILS

1	Fuel Used	Diesel
2	Ambient Temperature (°C)	25
3	Stack Temperature (°C)	153
4	Velocity (m/s)	12.78
5	Stack diameter (M)	0.15
6	Quantity of flue Gas Discharged into atmosphere (Nm <sup>3</sup> /hr)	550
7	Sample Condition When Received	Satisfactory
8	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
9	Serial No. of the Equipment	338 DTH 14
10	Calibration due date	17.07.2026
11	Test Method	IS 11255 & flue gas analyser

#### Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Standard
1	Particulate Matter	g/Kw-hr	0.088	<0.2
2	CO	g/Kw-hr	0.123	<3.5
3	NOx +HC	g/Kw-hr	0.431	<4.0

INFERENCE	As per KSPCB Report Status - The measured values for the above parameters for those standards have been specified were observed to be within the said standards
-----------	--

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 31

### Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Kammathuru Iron Ore (KTIO) (ML No. 2678)
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Sample Location	: KTIO Sub Station
Stack ID & Capacity	: DG Set 82.5 KVA
instrument used for sampling	: Emissions collected through stack sampler
Date of Collection	: 10.01.2026
Date of Sample Receipt	: 12.01.2026
Report No	: N000526013
Issue date	: 02.02.2026

#### STACK DETAILS

1	Fuel Used	Diesel
2	Ambient Temperature ( $^{\circ}$ C)	24
3	Stack Temperature ( $^{\circ}$ C)	142
4	Velocity (m/s)	8.43
5	Stack diameter (M)	0.15
6	Quantity of flue Gas Discharged into atmosphere (Nm <sup>3</sup> /hr)	372
7	Sample Condition When Received	Satisfactory
8	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
9	Serial No. of the Equipment	338 DTH 14
10	Calibration due date	17.07.2026
11	Test Method	IS 11255 & flue gas analyser

#### Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Standard
1	Particulate Matter	g/Kw-hr	0.081	<0.2
2	CO	g/Kw-hr	0.189	<3.5
3	Nox +HC	g/Kw-hr	0.478	<4.0

INFERENCE	As per KSPCB
	Report Status - The measured values for the above parameters for those standards have been specified were observed to be within the said standards

*Arshiya Kojisar*  
ARSHIYA KOJSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 32

### Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Kammathuru Iron Ore (KTIO) (ML No. 2678)
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Sample Location	: KTIO - D-09 Dump
Stack ID & Capacity	: DG Set 7.5 KVA
instrument used for sampling	: Emissions collected through stack sampler
Date of Collection	: 10.01.2026
Date of Sample Receipt	: 12.01.2026
Report No	: N000626013
Issue date	: 02.02.2026

#### STACK DETAILS

1	Fuel Used	Diesel
2	Ambient Temperature ( $^{\circ}$ C)	23
3	Stack Temperature ( $^{\circ}$ C)	140
4	Velocity (m/s)	7.87
5	Stack diameter (M)	0.15
6	Quantity of flue Gas Discharged into atmosphere (Nm <sup>3</sup> /hr)	349
7	Sample Condition When Received	Satisfactory
8	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
9	Serial No. of the Equipment	86 BTF 12
10	Calibration due date	17.07.2026
11	Test Method	IS 11255 & flue gas analyser

#### Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Standard
1	Particulate Matter	g/Kw-hr	0.139	<0.2
2	CO	g/Kw-hr	0.486	<3.5
3	NOx +HC	g/Kw-hr	1.956	<4.0

INFERENCE	As per KSPCB Report Status - The measured values for the above parameters for those standards have been specified were observed to be within the said standards
-----------	--

*Arshiy Kolsar*  
ARSHIYA KOLSAR  
Dy TM - Chemical  
Govt Analysts/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 33

### Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited			
Name of the Project	: Kammathuru Iron Ore (KTIO) (ML No. 2678)			
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)			
Sample Location	: KTIO - Work Shop			
Stack ID & Capacity	: DG 6 KVA Doosan Light Source			
instrument used for sampling	: Emissions collected through stack sampler			
Date of Collection	: 12.01.2026			
Date of Sample Receipt	: 13.01.2026			
Report No	: N000726013			
Issue date	: 02.02.2026			
STACK DETAILS				
1	Fuel Used	Diesel		
2	Ambient Temperature (°C)	25		
3	Stack Temperature (°C)	148		
4	Velocity (m/s)	6.98		
5	Stack diameter (M)	0.15		
6	Quantity of flue Gas Discharged into atmosphere (Nm <sup>3</sup> /hr)	304		
7	Sample Condition When Received	Satisfactory		
8	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1		
9	Serial No. of the Equipment	86 BTF 12		
10	Calibration due date	17.07.2026		
11	Test Method	IS 11255 & flue gas analyser		
Pollutional Parameters (Result)				
Sl.No	Parameters	Unit	Results	Standard
1	Particulate Matter	g/Kw-hr	0.106	<0.2
2	CO	g/Kw-hr	0.708	<3.5
3	NOx +HC	g/Kw-hr	2.620	<4.0

INFERENCE	As per KSPCB
	Report Status - The measured values for the above parameters for those standards have been specified were observed to be within the said standards

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 34

### Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Kammathuru Iron Ore (KTIO) (ML No. 2678)
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Sample Location	: KTIO - Work Shop
Stack ID & Capacity	: DG 6 KVA Doosan Light Source
instrument used for sampling	: Emissions collected through stack sampler
Date of Collection	: 12.01.2026
Date of Sample Receipt	: 13.01.2026
Report No	: N000826013
Issue date	: 03.11.2025

#### STACK DETAILS

1	Fuel Used	Diesel
2	Ambient Temperature ( $^{\circ}$ C)	24
3	Stack Temperature ( $^{\circ}$ C)	152
4	Velocity (m/s)	7.57
5	Stack diameter (M)	0.15
6	Quantity of flue Gas Discharged into atmosphere ( $\text{Nm}^3/\text{hr}$ )	326
7	Sample Condition When Received	Satisfactory
8	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
9	Serial No. of the Equipment	86 BTF 12
10	Calibration due date	17.07.2026
11	Test Method	IS 11255 & flue gas analyser

#### Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Standard
1	Particulate Matter	g/Kw-hr	0.125	<0.2
2	CO	g/Kw-hr	0.598	<3.5
3	NOx +HC	g/Kw-hr	2.382	<4.0

INFERENCE	<p>As per KSPCB</p> <p><b>Report Status</b> - The measured values for the above parameters for those standards have been specified were observed to be within the said standards</p>
-----------	--

  
 ARSHIYAA KUPUSAR  
 Dy TM - Chemical  
 Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 35

### Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited			
Name of the Mine	: Kammathuru Iron Ore Mine (KTIO) (ML No. 2678)			
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)			
Screening Plant Make & code	: Sandvik Screening & Crushing Plant (MCP- 2)			
Mobile Crusher Capacity	: 500 TPH			
Date of Collection	: 23.01.2026			
Date of Sample Receipt	: 24.01.2026			
Report No	: N000126015			
Issue date	: 02.02.2026			
<b>STACK DETAILS</b>				
1	Fuel Used	Diesel		
2	Stack diameter (M)	0.13		
3	Stack Temperature (°C)	52		
4	Velocity (m/s)	10.89		
5	Quantity of flue Gas Discharged into atmosphere (Nm <sup>3</sup> /hr)	444.00		
6	Sample Condition When Received	Satisfactory		
7	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1		
8	Serial No. of the Equipment	338 DTH 14		
9	Calibration due date	17.07.2026		
10	Test Method	IS 11255		
<b>Pollutional Parameters (Result)</b>				
Sl.No	Parameters	Unit	Results	Permissible limits
1	Particulate Matter	mg/Nm <sup>3</sup>	56	100

  
**ARSHIYA KOUSAR**  
 Dy TM - Chemical  
 Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 36

### Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited			
Name of the Mine	: Kammathuru Iron Ore Mine (KTIO) (ML No. 2678)			
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)			
Screening Plant Make & code	: Keestrak Crushing & Screening Plant (MCP- 3)			
Mobile Crusher Capacity	: 350 TPH			
Date of Collection	: 23.01.2026			
Date of Sample Receipt	: 24.01.2026			
Report No	: N000226015			
Issue date	: 02.02.2026			
<b>STACK DETAILS</b>				
1	Fuel Used	Diesel		
2	Stack diameter (M)	0.20		
3	Stack Temperature (°C)	46		
4	Velocity (m/s)	10.00		
5	Quantity of flue Gas Discharged into atmosphere (Nm <sup>3</sup> /hr)	984.0		
6	Sample Condition When Received	Satisfactory		
7	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1		
8	Serial No. of the Equipment	338 DTH 14		
9	Calibration due date	17.07.2026		
10	Test Method	IS 11255		
<b>Pollutional Parameters (Result)</b>				
Sl.No	Parameters	Unit	Results	Permissible limits
1	Particulate Matter	mg/Nm <sup>3</sup>	62	100

  
 ARSHIYA KOUSAR  
 Dy TM - Chemical  
 Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
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## TEST REPORT

Table No. 37

### Stack Monitoring Report

Name of the Client	:The Sandur Manganese & Iron Ores Limited			
Name of the Mine	: Subrayanahalli Manganese & Iron Ore Mine (ML NO. 2678)			
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)			
Sample Location	: KVH			
Screening Plant Make & code	: Sandvik Screening & Crushing Plant (MCP - 1)			
Mobile Crusher Capacity	: 500 TPH			
Date of Collection	: 23.01.2026			
Date of Sample Receipt	: 24.01.2026			
Report No	: N000326015			
Issue date	: 02.02.2026			
<b>STACK DETAILS</b>				
1	Fuel Used	Diesel		
2	Stack diameter (M)	0.13		
3	Stack Temperature ( <sup>0</sup> C)	55		
4	Velocity (m/s)	12.04		
5	Quantity of flue Gas Discharged into atmosphere (Nm <sup>3</sup> /hr)	786.44		
6	Sample Condition When Received	Satisfactory		
7	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1		
8	Serial No. of the Equipment	338 DTH 14		
9	Calibration due date	17.07.2026		
10	Test Method	IS 11255		
<b>Pollutional Parameters (Result)</b>				
Sl.No	Parameters	Unit	Results	Permissible limits
1	Particulate Matter	mg/Nm <sup>3</sup>	63	100

  
 ARSHIYA KOUSAR  
 Dy TM - Chemical  
 Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli; Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 38

### Stack Monitoring Report


Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Mine	: ML NO. 2678
Location	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Screening Plant Make & code	: Terex Screening Plant (MSP - 2)
Mobile Crusher Capacity	: 350 TPH
Date of Collection	: 24.01.2026
Date of Sample Receipt	: 25.01.2026
Report No	: N000426015
Issue date	: 02.02.2026

#### STACK DETAILS

1	Fuel Used	Diesel
2	Stack diameter (M)	0.20
3	Stack Temperature ( $^{\circ}$ C)	51
4	Velocity (m/s)	11.95
5	Quantity of flue Gas Discharged into atmosphere (Nm <sup>3</sup> /hr)	1157.0
6	Sample Condition When Received	Satisfactory
7	Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1
8	Serial No. of the Equipment	86BTF12
9	Calibration due date	17.07.2026
10	Test Method	IS 11255

#### Pollutional Parameters (Result)

Sl.No	Parameters	Unit	Results	Permissible limits
1	Particulate Matter	mg/Nm <sup>3</sup>	65	100

  
ARSHIYA KOUSAR  
Dy 1M - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No.39

### Stack Monitoring Report

Name of the Client	:The Sandur Manganese & Iron Ores Limited		
Name of the Mine	: ML NO. 2678		
Location	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.		
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)		
Date of Collection	: 24.01.2026		
Date of Sample Receipt	: 25.01.2026		
Issue date	: 02.02.2026		
<b>STACK DETAILS</b>			
Screening Plant Make & code	Keestrak Screening Plant (MSP-1)	Keestrak Screening Plant (MSP-3)	
Report No	N000526015	N000626015	
1 Fuel Used	Diesel	Diesel	
2 Capacity	600 TPH	350 TPH	
3 Stack diameter (M)	0.20	0.20	
4 Stack Temperature (°C)	49	55	
5 Velocity (m/s)	11.72	11.90	
6 Quantity of flue Gas Discharged into atmosphere (Nm <sup>3</sup> /hr)	1141.0	1135.0	
7 Sample Condition When Received	Satisfactory		
8 Model of the Equipment used for Monitoring	Vayubodhan Stack Sampler VSS1		
9 Serial No. of the Equipment	86BTF12		
10 Calibration due date	17.07.2026		
11 Test Method	IS 11255		
<b>Pollutional Parameters (Result)</b>			
Sl.No	Parameters	Unit	Results
1	Particulate Matter	mg/Nm <sup>3</sup>	62      64
	Permissible limits	mg/Nm <sup>3</sup>	100

  
 ARSHIYAHOUSAR  
 Dy TM - Chemical  
 Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

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## TEST REPORT

Table No. 40

### RESULTS OF RESIPARBLE AIR-BORNE DUST SURVEY

Name of the Owner : The Sandur Manganese & Iron Ores Limited  
Name of the Mine : Subrayanahalli Manganese & Iron Ore Mine (ML NO. 2678)  
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)  
Issue Date : 02.02.2026

#### PERSONAL AND STATIC SAMPLER

SL. NO	DATE OF SAMPLE COLLECTION	Filter paper code	Report No	LOCATION / CATEGORY	Name of the person & Static	DURATION OF SAMPLING			Volume of air (Lts)	DUST CONCENTRATION mg/m <sup>3</sup> RPM	*PERMISSIBLE LIMIT mg/m <sup>3</sup>
						FROM	TO	TOTAL HRS			
1	12.01.2026	A-256	FS000126013	Excavator Operator EC2100 323 D 3	Khajavali	08:30	16:20	7:50	669.8	0.90	1
2	12.01.2026	A-254	FS000226013	Tipper Driver	Chethan Kumar	08:40	16:25	7:45	662.6	0.75	1
3	12.01.2026	A-258	FS000326013	Loading Pont - Foreman	H Honnurswamy	08:45	16:30	7:45	639.4	0.78	1
4	12.01.2026	A-255	FS000426013	Loading Point	Static	09:00	16:40	7:40	639.4	0.86	1
5	12.01.2026	A-259	FS000526013	Weigh Bridge	Static	09:15	16:50	7:35	632.5	0.95	1
6	12.01.2026	A-257	FS000626013	Weigh Bridge Operator	Ningoji Rao	9:20	17:00	7:40	639.4	0.83	1
7	13.01.2026	A-261	FS000726013	Dumping Point	Static	09:30	17:00	7:30	650.3	0.92	1
8	13.01.2026	A-262	FS000826013	Wheel Loader Operator AC Volvo L120H KA 34 P 8644	Jadi Murthi	09:00	16:10	7:10	591.3	0.85	1
9	13.01.2026	A-260	FS000926013	Spotter of waste Dump	Bramananda	10:00	17:05	7:05	599.3	0.83	1
10	13.01.2026	A-263	FS001026013	Screening Operator	T A Arunkumar	09:15	16:40	7:25	618.6	0.81	1
11	13.01.2026	A-264	FS001226013	Screening Plant	Static	09:15	16:40	7:25	618.6	0.87	1
12	13.01.2026	A-265	FS001126013	Feeding Point Excavator Operator Volvo EC300 DLC	Sunil Kumar T U	09:20	17:10	7:50	669.8	0.72	1

\*Note: Free Silica Analysis report for Subrayanahalli Manganese & Iron Ore Mine (ML NO. 2678) show less than 5% Free silica the permissible limit for dust concentration shall be 1 mg/m<sup>3</sup> (Ref : DGMS (Tech) Circular (MAMID) /08 Dated 29.04.2020)

*Arshiya Kousar*  
ARSHIYA KOUSAR  
Dy TM - Chemical  
Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 41

### Free Silica Analysis Report

Name of the Owner	: The Sandur Manganese & Iron Ores Limited				
Name of the Mine	: Subrayanahalli Manganese & Iron Ore Mine (ML NO. 2678)				
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)				
Issue Date	: 02.02.2026				
<b>PERSONAL AND STATIC SAMPLER</b>					
SL.NO	DATE OF SAMPLE COLLECTION	LOCATION / CATEGORY	Name of the person / Static	Free Silica Content (%)	Free Silica Limits (%)
1	12.01.2026	Excavator Operator EC2100 323 D 3	Khajavali	ND	5
2	12.01.2026	Tipper Driver	Chethan Kumar	ND	5
3	12.01.2026	Loading Pont - Foreman	H Honnurswamy	ND	5
4	12.01.2026	Loading Point	Static	ND	5
5	12.01.2026	Weigh Bridge	Static	ND	5
6	12.01.2026	Weigh Bridge Operator	Ningoji Rao	ND	5
7	13.01.2026	Dumping Point	Static	ND	5
8	13.01.2026	Wheel.Loader Operator AC Volvo L120H KA 34 P 8644	Jadi Murthi	ND	5
9	13.01.2026	Spotter of waste Dump	Bramananda	ND	5
10	13.01.2026	Screening Operator	T A Arunkumar	ND	5
11	13.01.2026	Screening Plant	Static	ND	5
12	13.01.2026	Feeding Point Excavator Operator Volvo EC300 DLC	Sunil Kumar T U	ND	5
<b>Note: ND-Not Detected, Detection Level : 0.0005%</b>					

  
 ARSHIYA KOUSAR  
 Dy TM - Chemical  
 Govt Analyst/Authorised Signatory

Office & Lab Address : # 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in