

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/101225/2678/856

10 December 2025

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 November 2025 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 November 2025 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



blc

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)

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

12th 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 2nd Cross St Thomas Town Post,
Kammanahalli, Bengaluru-560084,
Karnataka.

Subject: Recognition of M/s Environmental Laboratory (Unit of Mineral Engineering Services), 948 2nd 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 2nd 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 (NO₂), Sulphur Dioxide (SO₂), Total Suspended Particulate Matter, Respirable Suspended Particulate Matter (PM₁₀), Ammonia, Carbon monoxide, Chlorine, Lead, Ozone, Benzene Toluene Xylene (BTX), Polycyclic Aromatic Hydrocarbon (PAH) Benzo-a-Pyrene & others and PM_{2.5}.
 - 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 इंजीनियरिंग 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 इंजीनियरिंग 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 इंजीनियरिंग 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:

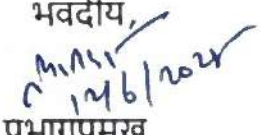
1. श्री. एम. सचिन राजू
2. श्रीमती अर्शिया कौसर
3. श्रीमती. बिनु मणि

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 कैल्सियम 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 (एनओ₂), सल्फर डाइऑक्साइड (एसओ₂), कुल निलंबित विविक्त कण, श्वसन योग्य निलंबित कण पदार्थ (पीएम₁₀), अमोनिया, कार्बन मोनोऑक्साइड, क्लोरीन, सीसा, ओजोन, बेंजीन टोल्यूनि ज़ाइलीन (बीटीएक्स), पॉलीसाइक्लिक एरोमैटिक हाइड्रोकार्बन (पीएच) बेंजो-ए-पाइरिन और अन्य और पीएम_{2.5}।
- 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,

 प्रभागप्रमुख
 उपकरणीय प्रयोगशाला

ENVIRONMENTAL MONITORING REPORT

Project	Mining Lease No. 2678
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	November -2025

ENVIRONMENTAL LABORATORY (Unit of Mineral Engineering Services LLP)

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

&

Accredited by NABL

#948, 2nd 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 : 02.12.2025
Sampling & Test Method: IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter		Carbon Monoxide* (CO), mg/m ³
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	
07.11.2025	N010525112	6	11	48	25	0.52
08.11.2025	N000925113	7	12	52	27	0.46
10.11.2025	N010525113	8	10	39	18	0.35
11.11.2025	N016325113	11	12	50	26	0.48
21.11.2025	N021025114	9	10	37	19	0.25
22.11.2025	N000725115	6	13	46	24	0.33
24.11.2025	N006925115	9	11	31	19	0.28
25.11.2025	N013325115	11	14	53	27	0.21
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 : 02.12.2025
Sampling & Test Method: IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter		Carbon Monoxide* (CO), mg/m ³
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	
07.11.2025	N010625112	7	9	46	25	0.64
08.11.2025	N001025113	9	11	36	21	0.24
10.11.2025	N010625113	11	13	49	25	0.51
11.11.2025	N016425113	8	10	38	21	0.33
21.11.2025	N021125114	12	15	35	18	0.28
22.11.2025	N000825115	7	11	43	26	0.45
24.11.2025	N007025115	9	10	51	28	0.36
25.11.2025	N013425115	7	9	37	20	0.25
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

Arshiyar 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 : 02.12.2025
Sampling & Test Method: IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter		Carbon Monoxide* (CO), mg/m ³
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	
07.11.2025	N010725112	10	14	40	22	0.33
08.11.2025	N001125113	9	12	45	23	0.42
10.11.2025	N010725113	7	9	38	20	0.51
11.11.2025	N016525113	11	13	53	28	0.35
21.11.2025	N021225114	10	11	48	26	0.29
22.11.2025	N000925115	8	11	54	30	0.33
24.11.2025	N007125115	7	9	43	25	0.54
25.11.2025	N013525115	9	13	50	27	0.49
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 Housar
ARSHIYA HOUSAR
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 : 02.12.2025
Sampling & Test Method : IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter		Carbon Monoxide* (CO), mg/m ³
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	
07.11.2025	N010825112	5	10	29	19	0.26
08.11.2025	N001225113	6	12	38	21	0.48
10.11.2025	N010825113	9	11	47	26	0.52
11.11.2025	N016625113	8	12	36	25	0.22
21.11.2025	N021325114	8	10	52	26	0.36
22.11.2025	N001025115	12	14	44	24	0.34
24.11.2025	N007225115	11	16	40	22	0.46
25.11.2025	N013625115	6	12	49	25	0.40
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 Fousar
ARSHIYA FOUSAR
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 : 02.12.2025
Sampling & Test Method : IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter		Carbon Monoxide* (CO), mg/m ³
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	
07.11.2025	N010925112	14	16	43	21	0.33
08.11.2025	N001325113	7	13	37	19	0.54
10.11.2025	N010925113	10	15	46	26	0.48
11.11.2025	N016725113	14	18	50	28	0.59
21.11.2025	N021425114	9	12	38	20	0.24
22.11.2025	N001125115	12	14	43	24	0.35
24.11.2025	N007325115	8	10	35	17	0.47
25.11.2025	N013725115	10	13	46	24	0.56
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.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 : 02.12.2025
Sampling & Test Method: IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter		Carbon Monoxide* (CO), mg/m ³
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	
07.11.2025	N011025112	7	11	45	26	0.31
08.11.2025	N001425113	9	13	35	20	0.24
10.11.2025	N011025113	13	15	50	28	0.36
11.11.2025	N016825113	7	13	55	30	0.48
21.11.2025	N021525114	9	12	48	24	0.24
22.11.2025	N001225115	9	11	49	20	0.25
24.11.2025	N007425115	10	14	53	28	0.36
25.11.2025	N013825115	6	10	50	26	0.21
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.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 : 02.12.2025
Sampling & Test Method: IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter		Carbon Monoxide* (CO), mg/m ³
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	
07.11.2025	N011125112	8	12	45	23	0.33
08.11.2025	N001525113	11	14	48	25	0.45
10.11.2025	N011125113	9	13	51	27	0.40
11.11.2025	N016925113	12	16	56	32	0.28
21.11.2025	N021625114	9	14	46	25	0.34
22.11.2025	N001325115	5	10	42	22	0.22
24.11.2025	N007525115	10	12	36	19	0.54
25.11.2025	N013925115	11	16	50	27	0.62
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 K. Pusar
ARSHIYA K. PUSAR
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 : 02.12.2025
Sampling & Test Method: IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter		Carbon Monoxide* (CO), mg/m ³
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	
07.11.2025	N011225112	11	12	40	19	0.44
08.11.2025	N001625113	7	11	54	27	0.29
10.11.2025	N011225113	9	13	37	21	0.21
11.11.2025	N017025113	8	9	46	23	0.35
21.11.2025	N021725114	5	10	50	26	0.46
22.11.2025	N001425115	9	13	42	26	0.51
24.11.2025	N007625115	6	10	33	18	0.42
25.11.2025	N014025115	8	11	45	25	0.35
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.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 : 02.12.2025
Sampling & Test Method: IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter		Carbon Monoxide* (CO), mg/m ³
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	
07.11.2025	N011325112	6	13	33	17	0.48
08.11.2025	N001725113	9	12	47	25	0.21
10.11.2025	N011325113	9	10	36	16	0.35
11.11.2025	N017125113	8	12	49	26	0.46
21.11.2025	N021825114	7	10	38	19	0.21
22.11.2025	N001525115	8	10	47	25	0.52
24.11.2025	N007725115	9	12	38	21	0.36
25.11.2025	N014125115	8	13	52	28	0.22
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 Rousar
ARSHIYA ROUSAR
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 : 02.12.2025
Sampling & Test Method: IS 5182 & Lab SOP

Date of Sampling	Report No	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter		Carbon Monoxide* (CO), mg/m ³
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	
07.11.2025	N011425112	10	12	49	25	0.21
08.11.2025	N001825113	9	14	53	28	0.26
10.11.2025	N011425113	9	11	47	24	0.35
11.11.2025	N017225113	12	16	35	18	0.42
21.11.2025	N021925114	10	11	50	29	0.38
22.11.2025	N001625115	9	12	43	24	0.21
24.11.2025	N007825115	12	15	47	26	0.26
25.11.2025	N014225115	11	13	40	24	0.22
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. 11

Fugitive Emission

Name of the Client	: The Sandur Manganese & Iron Ores Limited		
Name of the Project	: Deogiri 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	: 02.12.2025		
Code & Station	Date of sample	Report No	Particulate mater ($\mu\text{g}/\text{m}^3$)
FA1-Mine Face / Benches	21.11.2025	N022025114	293
FA2 - Haulage Road / Service Road	21.11.2025	N022125114	358
FA3 - Crushing & Screening Plant	21.11.2025	N022225114	426
FA4 - Mineral Stack Yard / Loading	22.11.2025	N001725115	358
FA5 - Active Waste Dump	22.11.2025	N001825115	367
Ref : As per CFO in Annexure - II issued KSPCB			
Permissible limits for Fugitive Emissions			Particulate mater ($\mu\text{g}/\text{m}^3$) 600 $\mu\text{g}/\text{m}^3$

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. 12

Fugitive Emission

Name of the Client	: The Sandur Manganese & Iron Ores Limited		
Name of the Project	: Kammathuru Iron Ore (KTIO) (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	: 02.12.2025		

Code & Station	Date of sample	Report No	Particulate mater ($\mu\text{g}/\text{m}^3$)
FA1-Mine Face / Benches	07.11.2025	N011525112	368
FA2 - Haulage Road / Service Road	07.11.2025	N011625112	458
FA3 - Crushing & Screening Plant	07.11.2025	N011725112	480
FA4 - Mineral Stack Yard / Loading	08.11.2025	N001925113	354
FA5 - Active Waste Dump	08.11.2025	N002025113	388

Ref : As per CFO in Annexure - II issued KSPCB	
Particulate mater ($\mu\text{g}/\text{m}^3$)	600 $\mu\text{g}/\text{m}^3$
Permissible limits for Fugitive Emissions	

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	: 02.12.2025		
Code & Station	Date of sample	Report No	Particulate mater ($\mu\text{g}/\text{m}^3$)
FA1-Mine Face / Benches	10.11.2025	N011525113	258
FA2 - Haulage Road / Service Road	10.11.2025	N011625113	387
FA3 - Crushing & Screening Plant	10.11.2025	N011725113	412
FA4 - Mineral Stack Yard / Loading	11.11.2025	N017325113	396
FA5 - Active Waste Dump	11.11.2025	N017425113	375
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
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	01.11.2025 to 30.11.2025
Sample Type	Dust Fall
Duration of Monitoring	One Month
Issue Date	02.12.2025

Result

Code	Location	Result	unit	Reference Method
DF1	Deogiri mines office	0.120	g/m ² month	IS 5182 (Part 01) : 2006
DF2	Kammathuru (Near School)	0.112	g/m ² month	IS 5182 (Part 01) : 2006
DF3	Appayyanahalli	0.132	g/m ² month	IS 5182 (Part 01) : 2006
DF4	Subbarayanahalli (Near Hospital)	0.122	g/m ² month	IS 5182 (Part 01) : 2006
DF5	Yeswanthanagar (Near Railway Track)	0.129	g/m ² month	IS 5182 (Part 01) : 2006
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)				

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. 15

AMBIENT NOISE LEVEL DATA

Report No : ELMES022511

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	: 02.12.2025
Sampling	: IS : 9989 & CPCB Guidelines

Corezone

Code No.	Monitoring stations	Date of monitoring	Day			Night		
			L _{min}	L _{eq}	L _{max}	L _{min}	L _{eq}	L _{max}
N1	Mine Pit (SK/CBG)	07.11.2025	40.0	57.7	65.0	34.0	49.6	56.8
N2	Kammathuru ML Area	07.11.2025	38.0	54.0	63.5	37.0	52.7	60.0
N3	Deogiri ML Area	07.11.2025	36.0	52.7	61.0	35.0	49.6	58.6
N4	SBS Plot (Mine Boundary)	08.11.2025	38.0	51.1	57.8	35.6	48.2	55.0
N5	SB Halli ML Area	08.11.2025	39.0	56.9	64.5	37.0	50.0	59.3
N6	Mine area	08.11.2025	40.0	63.2	70.0	35.0	55.7	63.0

Bufferzone

Code No.	Monitoring stations	Date of monitoring	Day			Night		
			L _{min}	L _{eq}	L _{max}	L _{min}	L _{eq}	L _{max}
N7	Appayanahalli (Narayanapura)	10.11.2025	38.0	48.9	57.0	34.0	40.9	46.5
N8	Vitthalanagar (Navalatti)	10.11.2025	38.0	49.6	56.0	35.0	43.3	46.5
N9	Swamihalli	10.11.2025	36.0	47.6	54.0	34.0	39.1	43.7
N10	Yeshwanthnagar	11.11.2025	37.0	50.8	56.2	35.0	41.9	47.0
N11	Tonasingeri	11.11.2025	36.0	51.5	56.2	36.0	42.5	47.0
N12	Kumaraswamy Temple	11.11.2025	35.2	47.4	53.0	34.0	40.0	44.6

Permissible Limits of Ambient Noise Levels as per CPCB Guidelines

	Leq. Limit dB(A)	
	Day	Night
Industrial areas	75	70
Commercial area	65	55
Residential area	55	45

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. 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 : 07.11.2025
Date of sample receipt : 08.11.2025
Report No : M001525113
Issue Date : 02.12.2025

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

Sl.No.	Sample Code	STP1	Results	Method of Testing
	Parameters	Unit		
1	pH	-	6.65	IS 3025 (P-11) 2022
2	Biochemical Oxygen Demand BOD ₅ 27 ^o C	mg/l	63	IS 3025 (Part 44) 2023
3	Chemical Oxygen Demand (COD)	mg/l	288	IS 3025 (Part 58) 2023
4	Total Suspended Solids, at 105 ^o C	mg/l	280	IS 3025 (P-17) 2022
5	Ammonium (H4-N)	mg/l	1.9	IS:3025 (Part-34 Sec 1) 2023
6	Total Nitrogen (N-Total)	mg/l	10	IS 3025 (Part-34 sec 1) 2023
7	Fecal coliform	MPN/100ml	220	APHA 24 th Edition chapter 9221 E


BINU MANI
TM - Microbiology
Govt Analyst/Authorised Signatory


ARSHIYA KDUSAR
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	: 07.11.2025
Date of sample receipt	: 08.11.2025
Report No	: M001625113
Issue Date	: 02.12.2025

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

Sl.No.	Parameters	units	Results	Sewage Effluent Discharge Standards	Method of Testing
1	pH	-	6.70	6.5 - 9.0	IS 3025 (P-11) 2022
2	Biochemical Oxygen Demand BOD ₅ 27 ⁰ C	mg/l	6.5	<10	IS 3025 (Part 44) 2023
3	Chemical Oxygen Demand (COD)	mg/l	30	<50	IS 3025 (Part 58) 2023
4	Total Suspended Solids, at 105 ⁰ C	mg/l	16	<20	IS 3025 (P-17) 2022
5	Ammonium (H4-N)	mg/l	0.8	<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	20	<100	APHA 24 th 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	: 07.11.2025
Date of sample receipt	: 08.11.2025
Issue Date	: 02.12.2025
Ref : IS : 2296, Water Quality Standards	

Report No		M000525113	M000625113	M000725113	Limits	Method of Testing
Sl.No.	Sample Code	SW1	SW2	SW3		
	Parameters	Results				
1	pH	6.66	8.10	7.71	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)	146	260	162	1500	IS 3025 (Part 16) 2023
5	Total Suspended Solids, mg/l	20	16	18	-	IS 3025 (Part 17) 2023
6	Dissolved Oxygen (as O ₂), mg/l	5.8	5.7	5.7	Min 4	IS:3025(Part-38)1989RA 2019
7	Biochemical Oxygen Demand (as O ₂), mg/l	<3.0	<3.0	<3.0	3	IS 3025 (Part 44) 2023
8	Total Hardness (as CaCO ₃),mg/l	54	180	62	-	IS:3025 (P-21):2009 RA 2023
9	Sulphates as SO ₄ (mg/l)	22.0	30.0	26.0	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	36.0	55.0	600	IS:3025(Part-32) 1988RA2019
12	Fluoride (as F),mg/l	0.22	0.4	0.59	0.38	IS 3025 (Part 60-Sec1) 2023
13	Sulphide (as H ₂ 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 (%)	20.12	21.82	22.32	-	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	68	5000	IS 15185 2016 RA 2021

END OF REPORT


BINU MARI
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

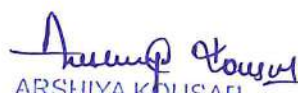
Name of the Client	: The Sandur Manganese & Iron Ores Limited
Name of the Project	: Mining Lease No. 2678
Location	: Deogiri, Subbarayanahalli, Ramghad & Kammathuru Villages, Sandur Tq, Ballari Dt.
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Nature of sample	: Surface water
Sample Location	: SW4 - Hari Shankar Spring Water, SW5 - Narihalla Dam water
Date of sample collection	: 06.11.2025
Date of sample receipt	: 07.11.2025
Issue Date	: 02.12.2025
Ref : IS : 2296, Water Quality Standards	

Report No		M003225112	M003325112	Limits	Method of Testing
Sl.No.	Sample Code	SW4	SW5		
	Parameters	Results			
1	pH	6.70	6.63	6.5 to 8.5	IS:3025(Part-11)2022
2	Colour (Hazen Units)	1.0	3.0	300	IS 3025 (Part 11) 2022
3	Odour	Agreeable	Agreeable	-	IS:3025 (P-5) 2018
4	Total Dissolved Solids (mg/l)	70.0	500.0	1500	IS 3025 (Part 16) 2023
5	Total Suspended Solids, mg/l	12	32	-	IS 3025 (Part 17) 2023
6	Dissolved Oxygen (as O ₂), mg/l	5.60	5.40	Min 4	IS:3025(Part-38)1989RA 2019
7	Biochemical Oxygen Demand (as O ₂), mg/l	<3.0	<3.0	3	IS 3025 (Part 44) 2023
8	Total Hardness (as CaCO ₃), mg/l	30.0	260	-	IS:3025 (P-21):2009 RA 2023
9	Sulphates as SO ₄ (mg/l)	5.6	66.0	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	120	600	IS:3025(Part-32) 1988RA2019
12	Fluoride (as F), mg/l	0.38	0.78	1.5	IS 3025 (Part 60-Sec1) 2023
13	Sulphide (as H ₂ 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 (%)	25.0	23.0	-	IS 2488 part 5
17	Residual Sodium Carbonate (meq/l)	<0.5	<0.5	-	IS 11624 .2009
18	Total Coliform, MPN/100ml	20	31	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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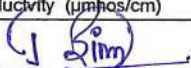
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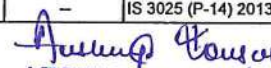
TEST REPORT

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 : 07.11.2025
Date of sample receipt : 08.11.2025
Issue Date : 02.12.2025
Ref : IS:10500-2012 Norms Amendment - 4 (Drinking Water Standards)

Report No		M000825113	M000925113	M001025113	Desirable Limits	Permissible Limits	Method of Testing
Sl. No.	Sample Code	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	8.03	7.25	8.11	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	1.20	1.20	0.60	1	5	IS:3025 (P-10) 2023
6	Total Dissolved Solids,mg/l	164.0	222.0	784.0	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	36.80	28.00	112.20	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)	16.00	30.00	150.00	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	0.28	0.32	0.65	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	16.50	21.80	58.30	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 ₃),mg/l	8.00	11.50	38.40	45	45	IS:3025 (P-34) 1988 RA 2019
23	Phenolics (as C ₆ H ₅ 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 ₄),mg/l	16.00	30.00	80.00	200	400	IS:3025 (P-24) Sec 1 2022
27	Sulphide (as H ₂ S) , mg/l	<0.01	<0.01	<0.01	0.05	0.05	IS:3025 (P-29) 2022
28	Total Alkalinity (as CaCO ₃) mg/l	150.0	132.0	480.0	200	600	IS:3025 (P-23):2023
29	Total Hardness (as CaCO ₃),mg/l	160.0	160.0	520.0	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)	340.0	410.0	1400.0	-	-	IS 3025 (P-14) 2013 RA 2023


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. 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	: 07.11.2025					
Date of sample receipt	: 08.11.2025					
Issue Date	: 02.12.2025					
Ref : IS:10500-2012 Norms Amendment - 4 (Drinking Water Standards)						
Report No	M001125113	M001225113	Desirable Limts	Permissible Limts	Method of Testing	
Sl. No.	Sample Code	Parameters	Results			
1	Colour (Hazen Units)		<1	<1	5	15
2	Odour		Agreeable	Agreeable	Agreeable	Agreeable
3	pH Value		7.96	7.20	6.5 to 8.5	6.5 - 8.5
4	Taste		Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity, NTU		0.70	1.20	1	5
6	Total Dissolved Solids, mg/l		310.0	1400.0	500	2000
7	Aluminium (as Al)		<0.005	<0.005	0.03	0.2
8	Ammonia (as total Ammonia -N), mg/l		<0.1	<0.1	0.5	0.5
9	Anionic Detergents (as MBAS), mg/l		<0.1	<0.1	0.2	1.0
10	Barium (as Ba), mg/l		<0.005	<0.005	0.7	0.7
11	Boron (as B), mg/l		<0.1	<0.1	0.5	2.4
12	Calcium (as Ca), mg/l		50.10	208.40	75	200
13	Chloramines as C12		<0.1	<0.1	4	4
14	Chloride as Cl (mg/l)		50.00	350.00	250	1000
15	Copper (as Cu), mg/l		<0.0005	<0.0005	0.05	1.5
16	Fluoride (as F), mg/l		0.36	0.89	1	1.5
17	Residual, Free Chlorine, mg/l		<0.1	<0.1	0.2	1
18	Iron (as Fe), mg/l		<0.005	<0.005	1.0	1.0
19	Magnesium (as Mg), mg/l		20.60	92.30	30	100
20	Manganese (as Mn), mg/l		<0.001	<0.001	0.1	0.3
21	Mineral Oil, mg/l		<0.5	<0.5	1.0	1.0
22	Nitrates (as NO ₃), mg/l		14.80	40.50	45	45
23	Phenolics (as C ₆ H ₅ OH), mg/l		<0.001	<0.001	0.001	0.002
24	Selenium (as Se), mg/l		<0.0005	<0.0005	0.01	0.01
25	Silver (as Ag), mg/l		<0.005	<0.005	0.1	0.1
26	Sulphate (as SO ₄), mg/l		50.00	140.00	200	400
27	Sulphide (as H ₂ S), mg/l		<0.01	<0.01	0.05	0.05
28	Total Alkalinity (as CaCO ₃), mg/l		150.0	600.0	200	600
29	Total Hardness (as CaCO ₃), mg/l		210.0	900.0	200	600
30	Zinc (as Zn), mg/l		<0.005	<0.005	5	15
31	Cadmium (as Cd), mg/l		<0.0005	<0.0005	0.003	0.003
32	Cyanide (as CN), mg/l		<0.01	<0.01	0.05	0.05
33	Lead (as Pb), mg/l		<0.0005	<0.0005	0.01	0.01
34	Mercury (as Hg), mg/l		<0.0005	<0.0005	0.001	0.001
35	Molybdenum (as Mo), mg/l		<0.0005	<0.0005	0.07	0.07
36	Nickel (as Ni), mg/l		<0.01	<0.01	0.02	0.02
37	Arsenic (as As), mg/l		<0.0005	<0.0005	0.01	0.01
38	Total Chromium (as Cr), mg/l		<0.001	<0.001	0.05	0.05
39	Escherichia coli/100ml		Not Detected	Not Detected	Shall not be detectable in any 100ml Sample	
40	Total Coliform /100ml		Not Detected	Not Detected		
41	Electrical Conductivity (µmhos/cm)		560.0	2400.0	-	-

"END OF REPORT"

BINU MANI
TM - Microbiology
Govt Analyst/Authorised Signatory

ARSHIYA 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. 22

TABLE NO. 2

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	: 02.12.2025					
Ref : IS:10500-2012 Norms Amendment - 4 (Drinking Water Standards)						
Date of sample collection		07.11.2025	07.11.2025	Desirable Limits	Permissible Limits	Method of Testing
Date of sample receipt		08.11.2025	08.11.2025			
Report No		M001325113	M001425113			
Sl. No.	Sample Code	DW1	DW2	Results		
	Parameters					
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	7.20	7.70	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	0.9	1	5	IS:3025 (P-10) 2023
6	Total Dissolved Solids,mg/l	110.0	302.0	500	2000	IS:3025 (P-16) 2023
7	Calcium (as Ca),mg/l	9.61	30.00	75	200	IS:3025 (P-40) 2021
8	Chloride as Cl (mg/l)	20.00	50.00	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	6.80	28.00	30	100	IS:3025 (P-46) 2023
12	Nitrates (as NO ₃),mg/l	2.60	11.50	45	45	IS:3025 (P-34) Sec 1 2023
13	Sulphate (as SO ₄),mg/l	4.80	4.00	200	400	IS:3025 (P-24) Sec 1 2022
14	Total Alkalinity (as CaCO ₃) mg/l	54.0	160.00	200	600	IS:3025 (P-23):2023
15	Total Hardness (as CaCO ₃),mg/l	52.0	190.0	200	600	IS:3025 (P-21):2009 RA 2019
16	Electrical Conductivity (µmhos/cm)	200.0	550.0	—	—	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

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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

Table No. 2

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	: 11.11.2025						
Date of sample receipt	: 12.11.2025						
Issue Date	: 02.12.2025						
Report No			M002325113	M002425113	M002525113	M002625113	M002725113
SL. No.	Sample Code		S1	S2	S3	S4	S5
	Parameters	Unit	Results				
Physical Properties							
1	Colour	—	Red Soil	Red Soil	Red Soil	Red Soil	Red Soil
2	Textural class	—	Clay Loam	Sandy Loam	Clay Loam	Clay Loam	Clay Loam
3	Size Distribution						
	Sand	%	30.85	32.42	31.33	31.95	32.41
	Clay	%	22.15	24.21	27.05	29.35	25.12
	Silt	%	47	43.37	41.62	38.7	42.47
4	Moisture Content	%	7.21	7.16	7.1	7.42	7.33
5	Bulk Density	gm/cc	1.56	1.52	1.58	1.66	1.58
6	Water holding capacity	%	26.35	30.08	21.45	28.11	22.31
7	pH	—	6.21	6.2	7.58	7.42	6.56
8	EC	m.mohs/cm	0.178	0.249	0.21	0.281	0.189
Chemical Properties							
9	Organic Carbon	%	0.60	0.24	0.22	0.26	1.77
10	Nitrogen as N	Kg/Ha	118	188	119	160	175
11	Phosphorous as P	Kg/Ha	6.32	8.11	7.06	7.32	7.54
12	Potassium as K ₂ O	Kg/Ha	188	122	108	144	152
13	Sodium as Na	mg/kg	22	32	26	35	20
14	Chloride as Cl	mg/kg	124	120	130	138	122
15	Sulphate as SO ₄	mg/kg	28	27	20	29	23
Sample Location							
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. 24

Table No. 2

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	: 11.11.2025						
Date of sample receipt	: 12.11.2025						
Issue Date	: 02.12.2025						
Report No			M002825113	M002925113	M003025113	M003125113	M003225113
SL. No.	Sample Code		S6	S7	S8	S9	S10
	PARAMETERS	Unit	Results				
Physical Properties							
1	Colour	—	Red Soil	Red Soil	Red Soil	Red Soil	Red soil
2	Textural class	—	Clay Loam	Clay Loam	Slity Clay	Slity Clay	Clay Loam
3	Size Distribution						
	Sand	%	32.65	32.12	31.25	33.08	36.08
	Clay	%	26.05	28.22	28.13	28.14	29.42
	Silt	%	41.3	39.66	40.62	38.78	34.5
4	Moisture Content	%	6.88	6.95	6.85	6.25	7.42
5	Bulk Density	gm/cc	1.61	2.75	7.22	6.59	6.96
6	Water holding capacity	%	32.42	26.15	28.96	30.22	35.88
7	pH	—	7.25	7.32	7.32	6.93	7.42
8	EC	m.mohs/cm	0.496	0.548	0.611	0.282	0.53
Chemical Properties							
9	Organic Carbon	%	0.81	0.48	0.72	0.88	0.46
10	Nitrogen as N	Kg/Ha	130	132	128	158	140
11	Phosphorous as P	Kg/Ha	28	30	33	62	52
12	Potassium as K ₂ O	Kg/Ha	136	144	127	158	144
13	Sodium as Na	mg/kg	40	30	36	32	33
14	Chloride as Cl	mg/kg	30	27	30	33	30
15	Sulphate as SO ₄	mg/kg	29	30	32	29	27
Sample Location							
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. 25

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)			
Location	: KVH Iron Ore Mines			
Stack ID & Capacity	: DG 1010 KVA (808 KW)			
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)			
Instrument used for sampling	: Emissions collected through stack sampler			
Date of Collection	: 07.11.2025			
Date of Sample Receipt	: 08.11.2025			
Report No	: N000125113			
Issue date	: 02.12.2025			
STACK DETAILS				
1	Fuel Used	Diesel		
2	Ambient Temperature (°C)	28		
3	Stack Temperature (°C)	178		
4	Velocity (m/s)	13.87		
5	Stack diameter (M)	0.30		
6	Quantity of flue Gas Discharged into atmosphere (Nm ³ /hr)	3174		
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	NOx (as NO ₂) (as 15% O ₂), dry basis	ppmv	26.22	360
2	NMHC (as C) (at 15 % O ₂)	mg/Nm ³	30.00	100
3	PM (as C) (at 15 % O ₂)	mg/Nm ³	42.00	75
4	CO (at 15 % O ₂)	(mg/Nm ³)	52.00	150


 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 Mine	: Deogiri Manganese & Iron Ore Mine (ML NO. 2678)			
Location	: Deogiri - Work Shop			
Stack ID & Capacity	: DG Set 160 KVA Doosan Light Source			
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)			
Instrument used for sampling	: Emissions collected through stack sampler			
Date of Collection	: 07.11.2025			
Date of Sample Receipt	: 08.11.2025			
Report No	: N000225113			
Issue date	: 02.12.2025			
STACK DETAILS				
1	Fuel Used	Diesel		
2	Ambient Temperature (°C)	27		
3	Stack Temperature (°C)	140		
4	Velocity (m/s)	7.82		
5	Stack diameter (M)	0.15		
6	Quantity of flue Gas Discharged into atmosphere (Nm ³ /hr)	347		
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	0.098	<0.2
2	CO	g/Kw-hr	0.104	<3.5
3	Nox +HC	g/Kw-hr	0.241	<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 KC 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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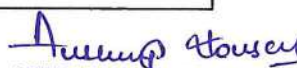
TEST REPORT

Table No. 27

Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited			
Name of the Mine	: Deogiri Manganese & Iron Ore Mine (ML NO. 2678)			
Location	: RMK Pump House			
Stack ID & Capacity	: DG Set 50 KVA water Pumping			
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)			
Instrument used for sampling	: Emissions collected through stack sampler			
Date of Collection	: 07.11.2025			
Date of Sample Receipt	: 08.11.2025			
Report No	: N000325113			
Issue date	: 02.12.2025			
STACK DETAILS				
1	Fuel Used	Diesel		
2	Ambient Temperature (°C)	28		
3	Stack Temperature (°C)	160		
4	Velocity (m/s)	8.00		
5	Stack diameter (M)	0.15		
6	Quantity of flue Gas Discharged into atmosphere (Nm ³ /hr)	339		
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	0.332	<3.5
3	Nox +HC	g/Kw-hr	0.819	<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
 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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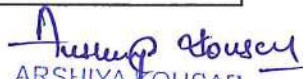
TEST REPORT

Table No. 28

Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited			
Name of the Mine	: Deogiri Manganese & Iron Ore Mine (ML NO. 2678)			
Location	: CBG Weigh Bridge			
Stack ID & Capacity	: DG Set 20 KVA Doosan Light Source			
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)			
Instrument used for sampling	: Emissions collected through stack sampler			
Date of Collection	: 08.11.2025			
Date of Sample Receipt	: 10.11.2025			
Report No	: N000425113			
Issue date	: 02.12.2025			
STACK DETAILS				
1	Fuel Used	Diesel		
2	Ambient Temperature (°C)	28		
3	Stack Temperature (°C)	124		
4	Velocity (m/s)	7.36		
5	Stack diameter (M)	0.15		
6	Quantity of flue Gas Discharged into atmosphere (Nm ³ /hr)	340		
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	0.118	<0.2
2	CO	g/Kw-hr	0.306	<3.5
3	Nox +HC	g/Kw-hr	1.307	<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
 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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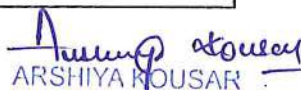
TEST REPORT

Table No.29

Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited			
Name of the Mine	: Deogiri Manganese & Iron Ore Mine (ML NO. 2678)			
Location	: BMM Plot			
Stack ID & Capacity	: DG Set 100 KVA Doosan Light Source			
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)			
Instrument used for sampling	: Emissions collected through stack sampler			
Date of Collection	: 08.11.2025			
Date of Sample Receipt	: 10.11.2025			
Report No	: N000525113			
Issue date	: 02.12.2025			
STACK DETAILS				
1	Fuel Used	Diesel		
2	Ambient Temperature (°C)	29		
3	Stack Temperature (°C)	138		
4	Velocity (m/s)	12.97		
5	Stack diameter (M)	0.15		
6	Quantity of flue Gas Discharged into atmosphere (Nm ³ /hr)	578		
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	0.104	<0.2
2	CO	g/Kw-hr	0.144	<3.5
3	Nox +HC	g/Kw-hr	0.208	<4.0

INFERENCE	as per KSPCB
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ARSHIYA ROUSAR
 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 Mine	: Subrayanahalli Manganese & Iron Ore Mine (ML NO. 2678)
Location	: SBS -PLOT-SB HALLI
Stack ID & Capacity	: DG Set 160 KVA Mineral Processing
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Instrument used for sampling	: Emissions collected through stack sampler
Date of Collection	: 10.11.2025
Date of Sample Receipt	: 11.11.2025
Report No	: N000625113
Issue date	: 02.12.2025

STACK DETAILS

1	Fuel Used	Diesel
2	Ambient Temperature (°C)	29
3	Stack Temperature (°C)	145
4	Velocity (m/s)	8.32
5	Stack diameter (M)	0.15
6	Quantity of flue Gas Discharged into atmosphere (Nm ³ /hr)	365
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	0.035	<0.2
2	CO	g/Kw-hr	0.043	<3.5
3	Nox +HC	g/Kw-hr	0.187	<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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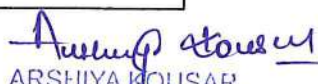
TEST REPORT

Table No. 31

Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited			
Name of the Mine	: Subrayanahalli Manganese & Iron Ore Mine (ML NO. 2678)			
Location	: KVH IO MINES - SB HALLI			
Stack ID & Capacity	: DG Set 35 KVA Doosan Light Source			
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)			
Instrument used for sampling	: Emissions collected through stack sampler			
Date of Collection	: 10.11.2025			
Date of Sample Receipt	: 11.11.2025			
Report No	: N000725113			
Issue date	: 02.12.2025			
STACK DETAILS				
1	Fuel Used	Diesel		
2	Ambient Temperature (°C)	28		
3	Stack Temperature (°C)	136		
4	Velocity (m/s)	7.92		
5	Stack diameter (M)	0.15		
6	Quantity of flue Gas Discharged into atmosphere (Nm ³ /hr)	355		
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	0.097	<0.2
2	CO	g/Kw-hr	0.253	<3.5
3	Nox +HC	g/Kw-hr	0.294	<4.0

INFERENCE	as per KSPCB
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 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. 32

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)			
Location	: KVH IO MINES - SB HALLI			
Stack ID & Capacity	: DG Set 125 KVA Doosan Light Source			
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)			
Instrument used for sampling	: Emissions collected through stack sampler			
Date of Collection	: 11.11.2025			
Date of Sample Receipt	: 12.11.2025			
Report No	: N000825113			
Issue date	: 02.12.2025			
STACK DETAILS				
1	Fuel Used	Diesel		
2	Ambient Temperature (°C)	30		
3	Stack Temperature (°C)	138		
4	Velocity (m/s)	8.04		
5	Stack diameter (M)	0.15		
6	Quantity of flue Gas Discharged into atmosphere (Nm ³ /hr)	358		
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	0.047	<0.2
2	CO	g/Kw-hr	0.046	<3.5
3	Nox +HC	g/Kw-hr	0.089	<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
 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. 33

Stack Monitoring Report

Name of the Client	: The Sandur Manganese & Iron Ores Limited			
Name of the Mine	: Kammathuru Iron Ore (KTIO) (ML No. 2678)			
Location	: KTIO - Dump			
Stack ID & Capacity	: DG Set 7.5 KVA Doosan Light Source			
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)			
Instrument used for sampling	: Emissions collected through stack sampler			
Date of Collection	: 11.11.2025			
Date of Sample Receipt	: 12.11.2025			
Report No	: N000925113			
Issue date	: 02.12.2025			
STACK DETAILS				
1	Fuel Used	Diesel		
2	Ambient Temperature (°C)	29		
3	Stack Temperature (°C)	144		
4	Velocity (m/s)	9.64		
5	Stack diameter (M)	0.15		
6	Quantity of flue Gas Discharged into atmosphere (Nm ³ /hr)	423		
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	0.068	<0.2
2	CO	g/Kw-hr	0.508	<3.5
3	Nox +HC	g/Kw-hr	1.241	<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
 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 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	: 21.11.2025			
Date of Sample Receipt	: 22.11.2025			
Report No	: N000125115			
Issue date	: 02.12.2025			
STACK DETAILS				
1	Fuel Used	Diesel		
2	Stack diameter (M)	0.13		
3	Stack Temperature ($^{\circ}\text{C}$)	44		
4	Velocity (m/s)	11.14		
5	Quantity of flue Gas Discharged into atmosphere (Nm^3/hr)	465.63		
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		
Pollutional Parameters (Result)				
Sl.No	Parameters	Unit	Results	Permissible limits
1	Particulate Matter	mg/Nm^3	45	100

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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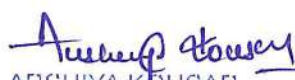
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TEST REPORT

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	: Keestrak Crushing & Screening Plant (MCP- 3)			
Mobile Crusher Capacity	: 350 TPH			
Date of Collection	: 21.11.2025			
Date of Sample Receipt	: 22.11.2025			
Report No	: N000225115			
Issue date	: 02.12.2025			
STACK DETAILS				
1	Fuel Used	Diesel		
2	Stack diameter (M)	0.20		
3	Stack Temperature ($^{\circ}\text{C}$)	45		
4	Velocity (m/s)	10.07		
5	Quantity of flue Gas Discharged into atmosphere (Nm^3/hr)	1007.0		
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		
Pollutional Parameters (Result)				
Sl.No	Parameters	Unit	Results	Permissible limits
1	Particulate Matter	mg/Nm^3	48	100


 ARSHIYA K DUSAR
 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	: 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	: 22.11.2025			
Date of Sample Receipt	: 24.11.2025			
Report No	: N000325115			
Issue date	: 02.12.2025			
STACK DETAILS				
1	Fuel Used	Diesel		
2	Stack diameter (M)	0.13		
3	Stack Temperature ($^{\circ}$ C)	48		
4	Velocity (m/s)	11.74		
5	Quantity of flue Gas Discharged into atmosphere (Nm^3/hr)	484.69		
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		
Pollutional Parameters (Result)				
Sl.No	Parameters	Unit	Results	Permissible limits
1	Particulate Matter	mg/Nm^3	60	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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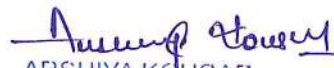
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TEST REPORT

Table No. 37

Stack Monitoring Report

Name of the Client	:The Sandur Manganese & Iron Ores Limited			
Name of the Mine	: 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	: 22.11.2025			
Date of Sample Receipt	: 24.11.2025			
Report No	: N000425115			
Issue date	: 02.12.2025			
STACK DETAILS				
1	Fuel Used	Diesel		
2	Stack diameter (M)	0.20		
3	Stack Temperature ($^{\circ}$ C)	43		
4	Velocity (m/s)	11.78		
5	Quantity of flue Gas Discharged into atmosphere (Nm^3/hr)	1169.1		
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^3	64	100


 ARSHIYA KOUSAR
 Dy TM - Chemical
 Govt Analyst/Authorised Signatory

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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)		
Date of Collection	: 22.11.2025		
Date of Sample Receipt	: 24.11.2025		
Issue date	: 02.12.2025		
STACK DETAILS			
Screening Plant Make & code	Keestrak Screening Plant (MSP-1)	Keestrak Screening Plant (MSP-3)	
Report No	N000525115	N000625115	
1 Fuel Used	Diesel	Diesel	
2 Capacity	600 TPH	350 TPH	
3 Stack diameter (M)	0.20	0.20	
4 Stack Temperature ($^{\circ}$ C)	39	47	
5 Velocity (m/s)	11.61	11.66	
6 Quantity of flue Gas Discharged into atmosphere (Nm^3/hr)	1157.1	1142.5	
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		
Pollutional Parameters (Result)			
Sl.No	Parameters	Unit	Results
1	Particulate Matter	mg/Nm^3	48 69
Permissible limits		mg/Nm^3	100

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