

(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3264

Issue Date: 06.03.2023

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd.
(Metal & Ferro Alloys Plant)
Vyasanakere, Hanumanahalli Village,
Hospet Taluk, Bellary District, Karnataka.

- 2. Name of the location
- 3. Sample Collected By
- 4. Particulars of the sample
- 5. Date of Sampling
- 6. Date of Sample Receipt
- 7. Sample Code
- 8. Analysis Starting Date
- 9. Analysis Completion Date
- : Smiore Colony: MSV Analytical Laboratories, Bellary.
- : Sample collected with RDS APM460 and FDS GTI-131
- 02.03.2023
- : 03.03.2023
- : 3565
- : 03.03.2023
- 10. Sample Tested as Received
- : 06.03.2023

S.No	Parameter	Protocols	Shi	ft wise res	ults	Units	Result in Avg.	Tolerance limits
			1	2	3	Onics		
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	55.4	54.3	52.6	μg / m³	54.10	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	26.8	25.1	22.4	μg / m³	24.77	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	12.14	10.25	11.05	μg / m³	11.15	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	18.45	15.85	13.95	μg / m³	16.08	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	14.5	12.6	11.3	μg / m³	12.80	100
6	Lead	IS-5182(Part22)	0.036	0.032	0.024	μg / m³	0.031	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.40	0.36	0.32	mg / m³	0.36	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.26	1.36	1.22	μg / m³	1.28	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

BALLARI PO

Authorized Signatory

Complete the Schinna Lingana Gouda
Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3264

Issue Date: 06.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location

Sample Collected By 3.

Particulars of the sample

**Date of Sampling Date of Sample Receipt** 

Sample Code 7.

**Analysis Starting Date** 9.

**Analysis Completion Date** 

Sample Tested as Received

**Smiore Colony** 

MSV Analytical Laboratories, Bellary.

Sample collected with RDS APM460 and FDS GTI-131

02.03.2023

03.03.2023 3565

03.03.2023

06.03.2023

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in Avg.	Tolerance limits
	7/4		1	2	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyr <mark>ene</mark> (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

**INFERENCE** 

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

**Authorized Signatory** 

y 4.2 B.Chinna Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3265

Issue Date: 06.03.2023

1. Name of the Project

 M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)
 Vyasanakere, Hanumanahalli Village,

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Kallahalli Village

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

: Sample collected with RDS APM460 and FDS GTI-131 02.03.2023

5. Date of Sampling6. Date of Sample Receipt

: 03.03.2023

7. Sample Code

: 3566

8. Analysis Starting Date

: 03.03.2023

9. Analysis Completion Date
10. Sample Tested as Received

: 06.03.2023

S.No	Parameter	Protocols	Shif	ft wise res	ults	Units	Result	Tolerance limits
			1	2	. 3		in Avg.	
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	53.2	52.5	51.4	μg / m³	52.37	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	16.7	16.4	15.2	μg / m³	16.10	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	9.4	8.2	5.8	μg / m³	7.80	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	13.62	12.4	10.06	μg / m³	12.03	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	6.7	7.4	6.5	μg / m³	6.87	100
6	Lead	IS-5182(Part22)	0.032	0.027	0.025	μg / m³	0.028	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.26	0.30	0.24	mg/m³	0.27	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.30	1.36	1.32	μg / m³	1.33	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

-: END OF REPORT:

Authorized Signatory

Lingana Gouda

Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Kallahalli Village

Test Report No: MSVAL/2023/3265

Issue Date: 06.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

MSV Analytical Laboratories, Bellary.

Sample collected with RDS APM460 and FDS GTI-131

- Name of the location
- Sample Collected By 3.
- Particulars of the sample
- **Date of Sampling** 5.
- **Date of Sample Receipt**
- 7. Sample Code
- 8.
- **Analysis Completion Date** 9.
- **Analysis Starting Date**
- 03.03.2023 3566
- 10. Sample Tested as Received
- 03.03.2023 06.03.2023

02.03.2023

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in Avg.	Tolerance limits
		Y	1	2 \	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m <sup>3</sup>	<0.01	- 6

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory Loga Lof . W B.Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3266

Issue Date: 06.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

Sample Collected By

Particulars of the sample

5. Date of Sampling

**Date of Sample Receipt** 6. 7. Sample Code

3.

8. **Analysis Starting Date** 

**Analysis Completion Date** 9. Sample Tested as Received 10.

Vysanakere Village MSV Analytical Laboratories, Bellary.

Sample collected with RDS APM460 and FDS GTI-131

02.03.2023

03.03.2023 3567

03.03.2023 06.03.2023

S.No	Parameter	Protocols	Shif	ft wise res	ults	Units	Result	Tolerance limits
5.110	Turumeter		1	2	3	Omes	in Avg.	
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	53.2	51.6	52.8	μg / m³	52.53	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	17.5	16.4	15.7	μg / m³	16.53	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	10.4	11.6	8.24	μg / m³	10.08	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	16.7	14.2	12.7	μg / m³	14.53	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	8.4	9.2	6.4	μg / m³	8.00	100
6	Lead	IS-5182(Part22)	0.023	0.018	0.016	μg / m³	0.019	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.25	0.23	0.18	mg/m³	0.22	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.33	1.25	1.22	μg / m³	1.27	20

**INFERENCE** 

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

**Authorized Signatory** Le. 2 B. Chinna Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3266

Issue Date: 06.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location

Vysanakere Village MSV Analytical Laboratories, Bellary.

3. Sample Collected By Particulars of the sample 4.

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sampling** 

02.03.2023 03.03.2023

**Date of Sample Receipt** 6.

3567

7. Sample Code **Analysis Starting Date** 8.

03.03.2023

9. **Analysis Completion Date** 

06.03.2023

Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in	Tolerance limits
			1	2	3		Avg.	
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

As per NAAQS Standards INFERENCE Report Status: The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signator B.Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st &  $2^{nd}$  Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3267

Issue Date: 06.03.2023

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

3. Sample Collected By

4. Particulars of the sample

5. Date of Sampling 6. Date of Sample Receipt

7. Sample Code

8. Analysis Starting Date

Analysis Completion Date
 Sample Tested as Received

: Gunda Village: MSV Analytical Laboratories, Bellary.

: Sample collected with RDS APM460 and FDS GTI-131

02.03.2023

03.03.2023 3568

: 03.03.2023

: 06.03.2023

S.No	Parameter	Protocols	Shii	ft wise res	ults	Units	Result	Tolerance
	74		1,	2	3	-	in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	54.2	53.6	52.3	μg / m³	53.37	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	14.4	14.7	12.3	μg / m³	13.80	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	8.05	9.2	8.24	μg / m³	8.50	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	11.4	10.8	11.34	μg / m³	11.18	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	9.6	9.4	8.3	μg / m³	9.10	100
6	Lead	IS-5182(Part22)	<0.01	<0.01	< 0.01	μg / m³	<0.01	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.26	0.36	0.24	mg/m³	0.29	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	<0.01	<0.01	<0.01	μg / m³	<0.01	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

BALLAN PI END OF REPORTS

Authorized Signatory

B. Chinna Lingana Gouda

Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/3267

Issue Date: 06.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location

Sample Collected By 3.

Particulars of the sample

**Date of Sampling Date of Sample Receipt** 

Sample Code

10.

8. **Analysis Completion Date** 

**Analysis Starting Date** Sample Tested as Received **Gunda Village** MSV Analytical Laboratories, Bellary.

Sample collected with RDS APM460 and FDS GTI-131

02.03.2023 03.03.2023

3568

03.03.2023

06.03.2023

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in Avg.	Tolerance limits
			1	2	3		Avg.	
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE	As per NAAQS Standards
INTERENCE	Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

**Authorized Signatory** 

B.Chinna Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3674

Issue Date: 10.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location

**Smiore Colony** 

3. Sample Collected By MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling **Date of Sample Receipt**  07.03.2023

6.

08.03.2023

Sample Code 7.

4062

8. **Analysis Starting Date**  08.03.2023

9. **Analysis Completion Date**  10.03.2023

10. Sample Tested as Received

S.No	Parameter	Protocols	Shif	t wise res	ults	Units	Result	Tolerance limits
			1	2	3		in Avg.	
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	59.3	53.2	57.6	μg / m³	56.70	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	17.5	14.5	16.3	μg / m³	16.10	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	8.75	9.6	6.32	μg / m³	8.22	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	18.6	14.9	16.7	μg / m³	16.73	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	8.6	9.7	6.9	μg / m³	8.40	100
6	Lead	IS-5182(Part22)	0.026	0.024	0.020	μg / m³	0.023	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.33	0.32	0.30	mg/m³	0.32	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.12	1.15	1.14	μg / m³	1.14	20

**INFERENCE** 

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Authorized Signatory B.Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3674

Issue Date: 10.03.2023 M/s. The Sandur Manganese & Iron Ores Ltd.

Name of the Project

(Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Smiore Colony

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

: Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling

07.03.2023 : 08.03.2023

6. Date of Sample Receipt

. 4062

7. Sample Code8. Analysis Starting Date

: 08.03.2023

9. Analysis Completion Date

Sample Tested as Received

: 10.03.2023

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in Avg.	Tolerance
			1	2	3			limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m <sup>3</sup>	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

BALLARI OF REPORT

Authorized Signatory
B.Chinna Lingana Gouda
Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

 $4. Total\ liability\ of\ our\ laborator y\ is\ limited\ to\ the\ invoice\ amount. Any\ dispute\ arising\ out\ of\ this\ report\ is\ subject\ to\ Bellary\ Jurisdiction\ only.$ 

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3675

Issue Date: 10.03.2023

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the locationSample Collected By

: Kallahalli Village

3. Sample Collected By4. Particulars of the sample

: MSV Analytical Laboratories, Bellary.

5. Date of Sampling

Sample collected with RDS APM460 and FDS GTI-131 07.03.2023

6. Date of Sample Receipt7. Sample Code

: 08.03.2023

7. Sample Code 8. Analysis Starting Date : 4063 : 08.03.2023

9. Analysis Completion Date
10. Sample Tested as Received

: 10.03.2023

20.	oumpie	robtou	uo	necenteu

S.No	Parameter	Protocols	Shi	ft wise res	ults	Units	Result	Tolerance
			1	2	3	0	in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	54.24	57.8	53.4	μg / m³	55.15	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	16.3	17.2	15.7	μg / m³	16.40	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	8.3	7.4	9.7	μg / m³	8.47	80
4	Oxides of Nitrog <mark>en as NO<sub>x</sub></mark>	IS-5182(Part-6)	11.7	14.6	12.4	μg / m³	12.90	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	12.6	8.4	9.3	μg / m³	10.10	100
6	Lead	IS-5182(Part22)	0.024	0.020	0.017	$\mu g / m^3$	0.020	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.30	0.34	0.28	mg/m³	0.31	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.22	1.17	1.16	μg / m³	1.18	20

**INFERENCE** 

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

BALLARI O

B. Chima Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3675

Issue Date: 10.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location

Kallahalli Village

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample 4.

Sample collected with RDS APM460 and FDS GTI-131

Date of Sampling **Date of Sample Receipt**  07.03.2023 08.03.2023

Sample Code

4063

8. **Analysis Starting Date**  08.03.2023

9. **Analysis Completion Date**  10.03.2023

Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in	Tolerance
	10		1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg /˙m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

**INFERENCE** 

As per NAAQS Standards

Report Status: The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory

B.Chinna Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169.

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/36746

Issue Date: 10.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

Sample Collected By 3.

Vysanakere Village

Particulars of the sample

MSV Analytical Laboratories, Bellary.

Date of Sampling

Sample collected with RDS APM460 and FDS GTI-131 07.03.2023

**Date of Sample Receipt** 6.

9.

08.03.2023

Sample Code **Analysis Starting Date** 8.

4064

**Analysis Completion Date** 

08.03.2023 10.03.2023

Sample Tested as Received

S.No	Parameter	Protocols	Shif	ft wise res	ults	Units	Result	Tolerance limits
			1	2	3		in Avg.	
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	50.3	53.5	52.4	μg / m³	52.07	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	11.4	15.5	13.1	μg / m³	13.33	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	8.3	7.5	6.7	μg / m³	7.50	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	11.7	12.2	10.2	μg / m³	11.37	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	0.23	0.25	0.20	μg / m³	0.23	100
6	Lead	IS-5182(Part22)	0.028	0.022	0.024	μg / m³	0.025	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.16	0.15	0.12	mg/m³	0.14	2
8	Ammonia as NH₃	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.20	1.24	1.22	μg / m³	1.22	20

INFERENCE

As per NAAQS Standards

Report Status: - The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory B. Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/3676

Issue Date: 10.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location

Sample Collected By 3.

Particulars of the sample

**Date of Sampling Date of Sample Receipt** 

7. Sample Code

10.

8. **Analysis Starting Date** 9. **Analysis Completion Date** 

Sample Tested as Received

**Vysanakere Village** MSV Analytical Laboratories, Bellary.

Sample collected with RDS APM460 and FDS GTI-131

07.03.2023 08.03.2023

4064

08.03.2023

10.03.2023

S.No	Parameter	Protocols			sults	Units	Result in	Tolerance limits
			1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

B.Chinna Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3677

Issue Date: 10.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location

Sample Collected By

**Gunda Village** MSV Analytical Laboratories, Bellary.

3. Particulars of the sample 4.

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sampling** 

07.03.2023

**Date of Sample Receipt** 6.

08.03.2023 4065

Sample Code 7.

08.03.2023

**Analysis Starting Date** 8. Q **Analysis Completion Date** 

10.03.2023

10. Sample Tested as Received

S.No	Parameter	Protocols	Shif	ft wise res	ults	Units	Result	Tolerance
<b>D</b> (0	2/2		1	2	3		in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	54.3	56.6	50.4	μg / m³	53.77	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	17.6	14.7	11.6	μg / m³	14.63	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	8.7	7.9	6.3	μg / m³	7.63	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	11.7	13.2	12.3	μg / m <sup>3</sup>	12.40	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	5.6	6.8	4.9	μg / m³	5.77	100
6	Lead	IS-5182(Part22)	<0.01	<0.01	<0.01	μg / m³	<0.01	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.26	0.24	0.22	mg/m³	0.24	2
. 8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	<0.01	<0.01	<0.01	µg / m³	<0.01	20

INFERENCE

As per NAAQS Standards

Report Status: The analyzed values for above measured parameter are within the limits

B. Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellarv.com

MSVAL/A/F/16/03

Issue Date: 10.03.2023

### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/3677

Name of the Project

Name of the location

Sample Collected By 3. Particulars of the sample

5. **Date of Sampling** 6. **Date of Sample Receipt** 

7. Sample Code

8. **Analysis Starting Date Analysis Completion Date** 

Sample Tested as Received

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village,

Hospet Taluk, Bellary District, Karnataka.

**Gunda Village** 

MSV Analytical Laboratories, Bellary.

Sample collected with RDS APM460 and FDS GTI-131

07.03.2023 08.03.2023

4065

08.03.2023 10.03.2023

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in	Tolerance
			1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	µg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg <sub>.</sub> / m <sup>3</sup>	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status: The analyzed values for above measured parameter are within the limits

B.Chinna Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3955

Issue Date: 14.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location **Smiore Colony** 

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample 4.

Sample collected with RDS APM460 and FDS GTI-131

5. **Date of Sampling** 6. **Date of Sample Receipt**  10.03.2023 11.03.2023

Sample Code

4385

7.

**Analysis Starting Date** 8. 9.

11.03.2023 14.03.2023

**Analysis Completion Date** 

Sample Tested as Received

S.No	Parameter	Protocols	Shii	ft wise resu	ılts	Units	Result in Avg.	Tolerance limits
			1	2	3		ın Avg.	
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	52.8	53.4	51.6	μg / m³	52.6	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	22.4	22.8	20.6	μg / m³	21.9	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	9.6	11.8	9.4	μg / m³	10.3	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	18.4	20.4	18.2	μg / m³	19.0	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	9.2	10.8	9.8	μg / m³	9.9	100
6	Lead	IS-5182(Part22)	0.032	0.030	0.034	μg / m³	0.032	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.42	0.44	0.48	mg/m³	0.45	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.12	2.1	2.2	μg / m³	1.81	20

INFERENCE

As per NAAQS Standards

Report Status: The analyzed values for above measured parameter are within the limits

Analysed by

**Authorized Signatory** B.Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

Issue Date: 14.03.2023

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/3955

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village,

Name of the location

Sample Collected By 3.

Particulars of the sample 4.

5. Date of Sampling **Date of Sample Receipt** 6.

8. **Analysis Starting Date** 

9. **Analysis Completion Date** 

Sample Code

Sample Tested as Received

Hospet Taluk, Bellary District, Karnataka.

**Smiore Colony** MSV Analytical Laboratories, Bellary.

Sample collected with RDS APM460 and FDS GTI-131

10.03.2023

11.03.2023

4385 11.03.2023

14.03.2023

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in	Tolerance
	3/1		1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status: The analyzed values for above measured parameter are within the limits

Analysed by

B.Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3956

Issue Date: 14.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location 2.

Sample Collected By

Kallahalli Village MSV Analytical Laboratories, Bellary.

3. Particulars of the sample 4.

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sampling** 

10.03.2023

Date of Sample Receipt 6.

11.03.2023

7. Sample Code 4386

R. **Analysis Starting Date** 9.

11.03.2023 14.03.2023

**Analysis Completion Date** 10. Sample Tested as Received

Shift wise results Result **Tolerance** Units Protocols S.No Parameter limits in Avg. 2 3 1 Particulate Matter PM<sub>10</sub> IS-5182(Part-23) 58.4 59.8 56.6  $\mu g / m^3$ 58.3 100 1 LAB SOP 2 20.2 22.8 19.6  $\mu g / m^3$ 20.9 60 Particulate Matter or PM<sub>2.5</sub> MSVAL/SOP/A/005 9.6 80 3 Sulphur Dioxide as SO<sub>2</sub> IS-5182(Part-2) 9.6 10.4 8.8  $\mu g / m^3$ IS-5182(Part-6) 13.4 14.8 13.2 13.8 80 4 Oxides of Nitrogen as NOx  $\mu g / m^3$ 5 Ozone as O<sub>3</sub> IS 5182(part-9) 8.6 9.4 7.8  $\mu g / m^3$ 8.6 100 IS-5182(Part22) 0.038 0.036 0.034 0.036 6 Lead  $\mu g / m^3$ LAB SOP 2 7 Carbon Monoxide as CO 0.32 0.36 0.34  $mg/m^3$ 0.34 MSVAL/SOP/A/007 LAB SOP < 0.01 < 0.01 < 0.01 400 8 Ammonia as NH<sub>3</sub> < 0.01  $\mu g / m^3$ MSVAL/SOP/A/006 LAB SOP 9 1.28 2.1 1.50 20 Nickel as Ni 1.12  $\mu g / m^3$ MSVAL/SOP/A/008

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory B. Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellarv.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/3956

Issue Date: 14.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location

Sample Collected By

Kallahalli Village MSV Analytical Laboratories, Bellary.

3. Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling 10.03.2023

**Date of Sample Receipt** 6.

11.03.2023 4386

Sample Code 7.

11.03.2023

Analysis Starting Date 8. 9. **Analysis Completion Date** 

14.03.2023

Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in	Tolerance
3.110	1 arameter	Trotocois	1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

1: mm le B.Chinna Lingana Gouda Chief executive of the laboratory

<sup>1.</sup> The results listed only to the tested samples & applicable parameters,

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/3957

Issue Date: 14.03.2023

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Vysanakere Village

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling6. Date of Sample Receipt

10.03.2023 : 11.03.2023

7. Sample Code

: 4387

8. Analysis Starting Date

: 11.03.2023

9. Analysis Completion Date

14.03.2023

10. Sample Tested as Received

S.No	Parameter	Protocols	Shif	ft wise resu	ults	Units	Result	Tolerance
5	# C	,	1	2	3	515	in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	52.8	54.4	51.2	μg / m³	52.8	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	16.8	17.6	16.4	μg / m³	16.9	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	7.4	8.8	7.6	μg / m³	7.9	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	12.2	13.8	11.8	μg / m³	12.6	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	6.8	7.8	6.2	μg / m³	6.9	100
6	Lead	IS-5182(Part22)	0.092	0.090	0.086	μg / m³	0.089	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.24	0.28	0.26	mg/m³	0.26	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.28	1.24	1.26	μg / m³	1.26	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

BALLARI PI END OF REPORTS

B. Chinha Lingana Gouda
Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

Issue Date: 14.03.2023

### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/3957 Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location 2.

Vysanakere Village

3. Sample Collected By MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sampling** 5. **Date of Sample Receipt**  10.03.2023 11.03.2023

7. Sample Code

1.

4387

**Analysis Starting Date** 8.

11.03.2023

**Analysis Completion Date** 

14.03.2023

Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in	Tolerance
Direc		V 1100000	1	2 (	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1

< 0.01

**CPCB Procedure** 

< 0.01

< 0.01

INFERENCE	As per NAAQS Standards Report Status :- The analyzed values for above measured parameter are within the limits

Analysed by

12

Arsenic as As

**Authorized Signatory B.Chinna Lingana Gouda** Chief executive of the laboratory

 $\mu g / m^3$ 

< 0.01

6

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/3958

**Issue Date:** 14.03.2023

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Gunda Village

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling6. Date of Sample Receipt

10.03.2023 11.03.2023

7. Sample Code

4388

8. Analysis Starting Date

: 11.03.2023

Analysis Completion Date
 Sample Tested as Received

: 14.03.2023

S.No	Parameter	Protocols	Shif	t wise resi	ılts	Units	Result	9000 19
5	· unumotor		1	2	3		in Avg.	
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	60.4	57.8	56.2	μg / m³	58.1	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	18.2	18.4	17.6	μg / m³	18.1	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	8.8	7.8	7.2	μg / m <sup>3</sup>	7.9	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	11.4	10.6	10.8	μg / m³	10.9	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	9.4	8.8	8.2	μg / m³	8.8	100
6	Lead	IS-5182(Part22)	0.028	0.024	0.022	μg / m³	0.025	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.22	0.24	0.26	mg/m³	0.24	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.26	1.24	1.28	μg / m³	1.26	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

BALLARD A STORY

Authorized Signatory

B. Chinna Lingana Gouda
Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellarv.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/3958

Issue Date: 14.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location 2.

**Gunda Village** 

3. Sample Collected By MSV Analytical Laboratories, Bellary.

Particulars of the sample 4.

Sample collected with RDS APM460 and FDS GTI-131

Date of Sampling 5. **Date of Sample Receipt** 6.

10.03.2023

Sample Code

11.03.2023 4388

8.

**Analysis Starting Date Analysis Completion Date**  11.03.2023 14.03.2023

Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in	Tolerance
	17/		1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	~ 5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE	As per NAAQS Standards Report Status :- The analyzed values for above measured parameter are within the limits
-----------	--

Analysed by

B.Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4118

Issue Date: 16.03.2023

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Smiore Colony

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131 13.03.2023

5. Date of Sampling6. Date of Sample Receipt

14.03.2023

7. Sample Code

: 4574

8. Analysis Starting Date

: 14.03.2023

9. Analysis Completion Date

16.03.2023

10. Sample Tested as Received

S.No	Parameter	Protocols	Shii	t wise res	ults	Units	Result	Tolerance
			1	2	3	-	in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	60.4	60.8	58.6	μg / m³	59.9	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	23.8	25.4	23.2	μg / m³	24.1	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	8.8	10.8	8.2	μg / m³	9.3	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	18.2	20.4	17.8	μg / m³	18.8	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	9.2	8.4	8.6	μg / m³	8.7	100
6	Lead	IS-5182(Part22)	0.028	0.026	0.030	μg / m³	0.028	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.40	0.42	0.38	mg/m³	0.40	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.6	1.8	2.2	μg / m³	1.9	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

BACARI PATO

Authorized Signatory

B.Chinha Lingana Gouda

Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

Issue Date: 16.03.2023

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4118

: M/s. The Sandur Manganese & Iron Ores Ltd.

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Smiore Colony

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling

13.03.2023

6. Date of Sample Receipt

: 14.03.2023

Sample Code
 Analysis Starting Date

: 4574 : 14.03.2023

9. Analysis Completion Date

: 16.03.2023

10. Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in	Tolerance
	10		1	2	3	_	Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

-: ENDORREPORT:

Authorized Signatory
B.Chinna Lingana Gouda
Chief executive of the laboratory

Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

 $<sup>5. \,</sup> Sampling \, is \, not \, done \, by \, us \, unless \, otherwise \, specified. \, 6. \, The \, tests \, and/or \, calibrations \, marked \, with \, an \, are \, not \, accredited \, by \, NABL.$ 



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4119

Issue Date: 16.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location

Kallahalli Village

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131 13.03.2023

**Date of Sampling** 5. **Date of Sample Receipt** 

14.03.2023

7. Sample Code 4575

**Analysis Starting Date** 8. 9. **Analysis Completion Date**  14.03.2023 16.03.2023

10. Sample Tested as Received

S.No	Parameter	Protocols	Shi	ft wise res	ults	Units	Result	
			1	2	3		in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	56.8	57.6	54.4	μg / m³	56.3	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	20.4	22.4	20.6	μg / m³	21.1	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	8.6	10.2	8.4	μg / m³	9.1	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	12.6	14.2	12.4	μg / m³	13.1	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	8.2	7.8	7.4	μg / m³	7.8	100
6	Lead	IS-5182(Part22)	0.030	0.034	0.038	μg / m³	0.034	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.30	0.28	0.34	mg/m³	0.31	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.82	1.84	1.88	μg / m³	1.85	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

- Lel. 2 B. Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

Issue Date: 16.03.2023

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4119
1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Kallahalli Village

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

: Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling

13.03.2023

6. Date of Sample Receipt

: 14.03.2023

7. Sample Code

: 4575

8. Analysis Starting Date9. Analysis Completion Date

: 14.03.2023 : 16.03.2023

10. Sample Tested as Received

. 10.03

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in	Tolerance limits
	10		1	2	3	32	Avg.	
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE

As per NAAQS Standards
Report Status: The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory

B.Chiona Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4120

Name of the Project

Name of the location 3. Sample Collected By

Particulars of the sample 4.

5. Date of Sampling Date of Sample Receipt 6.

7. Sample Code

8. **Analysis Starting Date Analysis Completion Date** 9.

Sample Tested as Received

Issue Date: 16.03.2023

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Vvsanakere Village

MSV Analytical Laboratories, Bellary.

Sample collected with RDS APM460 and FDS GTI-131

13.03.2023 14.03.2023

4576

14.03.2023

16.03.2023

S.No	Parameter	Protocols	Shii	ft wise res	ults	Units	Result	
	2.3	, 9	1	2	3		in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	52.4	52.8	50.4	μg / m³	51.9	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	17.4	18.8	15.6	μg / m³	17.3	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	9.2	7.6	6.8	μg / m³	7.9	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	12.4	14.2	11.8	μg / m³	12.8	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	4.2	3.8	3.6	μg / m³	3.9	100
6	Lead	IS-5182(Part22)	0.086	0.088	0.092	μg / m³	0.089	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.24	0.26	0.28	mg/m³	0.26	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.16	1.20	1.18	μg / m³	1.18	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

-: END OF

**Authorized Signatory** 

B. Chinna Lingana Gouda Chief executive of the laboratory

- we-

Note: 1. The results listed only to the tested samples & applicable parameters,

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

Issue Date: 16.03.2023

### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4120 Name of the Project

1.

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location Vysanakere Village

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

Date of Sampling

13.03.2023

**Date of Sample Receipt** 

14.03.2023

Sample Code 7.

4576

8. **Analysis Starting Date Analysis Completion Date**  14.03.2023

10. Sample Tested as Received 16.03.2023

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in Avg.	Tolerance limits	
	- 74		1	2	3		Avg.	limits	
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5	
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1	
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6	

**INFERENCE** 

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

**Authorized Signatory** dr-· W.2 B.Chinha Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only. 5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015, ISO 22000-2018, ISO 45001-2018, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4121

Issue Date: 16.03.2023

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Gunda Village

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample5. Date of Sampling

Sample collected with RDS APM460 and FDS GTI-131 13.03.2023

6. Date of Sample Receipt

14.03.2023

7. Sample Code

4577

8. Analysis Starting Date9. Analysis Completion Date

: 14.03.2023

10. Sample Tested as Received

16.03.2023

S.No	Parameter	Protocols	Shi	ft wise res	ults	Units	Result	a responsable and
	44		1	2	3		in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	54.8	53.6	51.8	μg / m³	53.4	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	15.4	14.8	14.2	μg / m³	14.8	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	6.8	6.4	4.6	μg / m³	5.9	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	10.2	9.4	8.4	μg / m³	9.3	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	7.4	7.2	6.2	μg / m³	6.9	100
6	Lead	IS-5182(Part22)	0.016	0.018	0.014	μg / m³	0.016	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.24	0.28	0.22	mg/m³	0.25	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.20	1.24	1.28	μg / m³	1.24	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

BAQAA :: END OF REPORT

B. Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015, ISO 22000-2018, ISO 45001-2018, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

Issue Date: 16.03.2023

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4121

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location 2.

**Gunda Village** 

3. Sample Collected By MSV Analytical Laboratories, Bellary.

Particulars of the sample 4.

Sample collected with RDS APM460 and FDS GTI-131

Date of Sampling 5.

13.03.2023 14.03.2023

**Date of Sample Receipt** 6.

4577

Sample Code

8. **Analysis Starting Date** 

14.03.2023 : 16.03.2023

9. **Analysis Completion Date** Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in	Tolerance limits
	ranameter		1	2	3		Avg.	
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

**INFERENCE** 

As per NAAQS Standards

Report Status: The analyzed values for above measured parameter are within the limits

Analysed by

B.Chinna Lingana Gouda Chief executive of the laboratory

**Authorized Signatory** 

1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

Issue Date: 18.03.2023

### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4409

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

Sample Collected By 3.

**Smiore Colony** 

4. Particulars of the sample MSV Analytical Laboratories, Bellary. Sample collected with RDS APM460 and FDS GTI-131

**Date of Sampling** 5.

15.03.2023

**Date of Sample Receipt** 6.

16.03.2023 4913

Sample Code 7.

8. **Analysis Starting Date** 

16.03.2023 18.03.2023

9. **Analysis Completion Date** 

Sample Tested as Received

S.No	Parameter	Protocols	Shif	ft wise res	ults	Units	Result	Tolerance
Direc		1100000	1	2	3		in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	60.8	60.2	58.6	μg / m³	59.9	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	22.4	23.6	22.4	μg / m³	22.8	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	17.0	19.2	17.8	μg / m³	18.0	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	20.8	21.6	20.2	μg / m³	20.9	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	8.4	9.6	8.2	μg / m³	8.7	100
6	Lead	IS-5182(Part22)	0.036	0.038	0.034	μg / m³	0.036	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	<0.01	<0.01	<0.01	mg/m³	<0.01	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	1.28	1.34	1.26	μg / m³	1.29	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.82	1.84	1.86	μg / m³	1.84	20

INFERENCE

As per NAAQS Standards

Report Status: - The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory

B.Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellarv.com

MSVAL/A/F/16/03

Issue Date: 18.03.2023

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4409

Name of the Project

Name of the location 3. Sample Collected By Particulars of the sample 4.

Date of Sampling 5. **Date of Sample Receipt** 6.

Sample Code 7. 8. Analysis Starting Date

**Analysis Completion Date** 9. Sample Tested as Received M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

**Smiore Colony** MSV Analytical Laboratories, Bellary.

Sample collected with RDS APM460 and FDS GTI-131

15.03.2023 16.03.2023 4913 16.03.2023 18.03.2023

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
	19/100		1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE	As per NAAQS Standards Report Status :- The analyzed values for above measured parameter are within the limits
-----------	---

Analysed by

Authorized Signatory B.Chinna Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellarv.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4410

Issue Date: 18.03.2023

1. Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

Kallahalli Village

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

: Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling

15.03.2023 : 16.03.2023

6. Date of Sample Receipt7. Sample Code

4914

8. Analysis Starting Date

16.03.2023

. Analysis Completion Date

18.03.2023

10. Sample Tested as Received

S.No	Parameter	Protocols	Shii	t wise resi	ults	Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	55.4	56.8	53.6	μg / m³	55.3	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	18.8	20.4	17.6	μg / m³	18.9	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	12.4	13.2	14.8	μg / m³	13.5	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	16.6	17.8	16.2	μg / m³	16.9	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	8.2	10.4	7.6	μg / m³	8.7	100
6	Lead	IS-5182(Part22)	1.20	1.26	1.24	μg / m³	1.23	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.34	0.40	0.38	mg/m³	0.37	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.40	1.42	1.32	μg / m³	1.38	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

BALLAR END OF REPORTS

Authorized Signatory

B. Chinna Lingana Gouda

Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

Issue Date: 18.03.2023

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4410

M/s. The Sandur Manganese & Iron Ores Ltd.

Name of the Project

(Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location Kallahalli Village

Sample Collected By 3. Particulars of the sample MSV Analytical Laboratories, Bellary.

4.

Sample collected with RDS APM460 and FDS GTI-131

Date of Sampling **Date of Sample Receipt** 6.

15.03.2023 16.03.2023

Sample Code

4914

**Analysis Starting Date** 

16.03.2023

8. **Analysis Completion Date** 

18.03.2023

Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
	**		1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by



Authorized Signatory - 6 B.Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4411

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd.

Issue Date: 18.03.2023

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

3. Sample Collected By

: Vysanakere Village: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

: Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling

15.03.2023

6. Date of Sample Receipt

: 16.03.2023

18.03.2023

7. Sample Code

: 4915 : 16.03.2023

8. Analysis Starting Date9. Analysis Completion Date

pived

10. Sample Tested as Received

S.No	Parameter	Protocols	Shii	ft wise res	ults	Units	Result	Tolerance
	1		1	2	3		in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	56.8	55.2	53.4	μg / m³	55.1	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	18.2	17.4	16.6	μg / m³	17.4	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	9.4	8.8	8.2	μg / m³	8.8	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	14.8	13.6	13.2	μg / m³	13.9	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	8.8	7.4	9.2	μg / m³	8.5	100
6	Lead	IS-5182(Part22)	0.028	0.024	0.032	μg / m³	0.028	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.28	0.24	0.34	mg/m³	0.29	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.32	1.36	1.30	μg / m³	1.33	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by



B. Chinna Lingana Gouda
Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

Issue Date: 18.03.2023

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4411

Name of the Project

1.

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location 2.

Sample Collected By 3.

Vysanakere Village

MSV Analytical Laboratories, Bellary.

Particulars of the sample 4. 5. **Date of Sampling** 

Sample collected with RDS APM460 and FDS GTI-131 15.03.2023

**Date of Sample Receipt** 6.

16.03.2023

Sample Code 7.

4915

8. **Analysis Starting Date**  16.03.2023

9. **Analysis Completion Date**  18.03.2023

Sample Tested as Received 10.

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in Avg.	Tolerance limits
			1	2	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1

INFERENCE	As per NAAQS Standards
INFERENCE	Report Status:- The analyzed values for above measured parameter are within the limits

< 0.01

**CPCB Procedure** 

< 0.01

< 0.01

Analysed by

12

Arsenic as As

Authorized Signatory

 $\mu g / m^3$ 

< 0.01

6

B.Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4412

Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd.

Issue Date: 18.03.2023

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location **Gunda Village** 

3. Sample Collected By MSV Analytical Laboratories, Bellary.

4. Particulars of the sample **Date of Sampling** 5.

Sample collected with RDS APM460 and FDS GTI-131 15.03.2023

**Date of Sample Receipt** 6.

16.03.2023

Sample Code 7.

4916

Analysis Starting Date 8. 9. **Analysis Completion Date**  16.03.2023

Sample Tested as Received 10.

18.03.2023

S.No	Parameter	Protocols	Shi	ft wise resu	ılts	Units	Result	Tolerance
	. 6		1	2	3		in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	55.2	54.8	52.2	μg / m³	54.1	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	16.6	16.2	14.8	μg / m³	15.9	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	9.0	8.4	8.2	μg / m³	8.5	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	18.0	16.8	17.4	μg / m³	17.4	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	7.8	6.6	6.4	μg / m³	6.9	100
6	Lead	IS-5182(Part22)	1.44	1.36	1.32	μg / m <sup>3</sup>	1.37	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.32	0.26	0.34	mg/m³	0.31	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.28	1.24	1.32	ng / m³	1.28	20

**INFERENCE** 

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory - W1.2 B. Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO 14001-2015, OHSAS18001-2007, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msv.lab01@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4412

Issue Date: 18.03.2023

1. Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Gunda Village

15.03.2023

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling6. Date of Sample Receipt

16.03.2023

7. Sample Code

: 4916

8. Analysis Starting Date

: 16.03.2023

9. Analysis Completion Date

: 18.03.2023

10. Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in Avg.	Tolerance limits
			1	2	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Py <mark>rene</mark> (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

	The state of the s
INFERENCE	As per NAAQS Standards
INFERENCE	Report Status: The analyzed values for above measured parameter are within the limits





B.Chinna Lingana Gouda
Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) :9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

٥

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4631

Issue Date: 22.03.2023

1. Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

Smiore Colony

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131 18.03.2023

5. Date of Sampling6. Date of Sample Receipt

20.03.2023

7. Sample Code

5116

8. Analysis Starting Date

: 20.03.2023

9. Analysis Completion Date

22.03.2023

10. Sample Tested as Received

S.No	Parameter	Protocols	Shi	ft wise resu	ılts	Units	Result	Tolerance	
	9/1×	~	1	2 3			in Avg.	limits	
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	53.8	55.2	52.6	μg / m³	53.9	100	
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	23.2	24.8	21.8	μg / m³	23.3	60	
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	10.4	11.2	8.8	μg / m³	10.1	80	
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	17.8	18.6	17.2	μg / m³	17.9	80	
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	10.6	11.4	10.8	μg / m³	10.9	100	
6	Lead	IS-5182(Part22)	0.026	0.028	0.030	μg / m³	0.028	1	
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.37	0.42	0.40	mg/m³	0.40	2	
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400	
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.32	1.28	1.30	μg / m³	1.30	20	

INFERENCE

As per NAAQS Standards

Report Status: The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory

B.Chimha Lingana Gouda Chief executive of the laboratory

Page:1

Note: 1. The results listed only to the tested samples & applicable parameters,

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

Issue Date: 22.03.2023

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4631

Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

Sample Collected By

**Smiore Colony** 

Particulars of the sample

MSV Analytical Laboratories, Bellary.

**Date of Sampling** 

Sample collected with RDS APM460 and FDS GTI-131 18.03.2023

Date of Sample Receipt Sample Code

20.03.2023

8. **Analysis Starting Date**  5116

**Analysis Completion Date** 

20.03.2023

22.03.2023

Sample Tested as Received

10.	Sample Testeu as Received	

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in Avg.	Tolerance limits
			1	2	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

**INFERENCE** 

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

**Authorized Signatory** - U.1 **B.Chinna Lingana Gouda** Chief executive of the laboratory

Page:2

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4632

Issue Date: 22.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location

Kallahalli Village

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample 4.

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sampling Date of Sample Receipt** 6.

18.03.2023 20.03.2023

Sample Code

5117

20.03.2023

**Analysis Starting Date** 8. 9. **Analysis Completion Date** 

10. Sample Tested as Received 22.03.2023

S.No	Parameter	Protocols	Shift wise results			Units	Result	Tolerance
	X		1	2	3		in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	56.4	57.2	54.8	μg / m³	56.1	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	18.8	20.4	18.2	μg / m³	19.1	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	10.6	10.4	9.2	$\mu g / m^3$	10.1	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	17.6	20.8	19.4	μg / m³	19.3	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	10.8	9.6	8.4	μg / m³	9.6	100
6	Lead	IS-5182(Part22)	0.026	0.030	0.032	μg / m <sup>3</sup>	0.029	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.26	0.32	0.34	mg/m³	0.31	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.28	1.24	1.32	μg / m³	1.3	20

INFERENCE

As per NAAOS Standards

Report Status: The analyzed values for above measured parameter are within the limits

Authorized Signatory

B. Chima Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.

43



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4632

Issue Date: 22.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village,

Hospet Taluk, Bellary District, Karnataka.

Name of the location

Kallahalli Village

3. Sample Collected By MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131 18.03.2023

**Date of Sampling Date of Sample Receipt** 

20.03.2023

5117

Sample Code 7.

20.03.2023

8. **Analysis Starting Date Analysis Completion Date** 9.

Sample Tested as Received

22.03.2023

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in Avg.	Tolerance limits
	30		1	2	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory

B.Chinna Lingana Gouda Chief executive of the laboratory

Page:2

1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4633

Issue Date: 22.03.2023

1. Name of the Project M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location Vvsanakere Village

Sample Collected By 3.

4. Particulars of the sample MSV Analytical Laboratories, Bellary. Sample collected with RDS APM460 and FDS GTI-131

**Date of Sampling** 

18.03.2023

Date of Sample Receipt 6.

20.03.2023

7. Sample Code 5118

8. **Analysis Starting Date** 

20.03.2023 :

**Analysis Completion Date** 9.

22.03.2023

		•	
10.	Sample	Tested as	Received

S.No	Parameter	Protocols	Shii	ft wise res	ults	Units Result		Tolerance	
			1	2	3		in Avg.	limits	
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	58.6	57.1	56.2	μg / m³	57.3	100	
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	22.6	21.0	20.1	μg / m³	21.2	60	
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	9.04	7.82	7.01	μg / m³	8.0	80	
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	16.76	16.06	15.41	μg / m³	16.1	80	
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	8.8	9.2	7.6	μg / m³	8.5	100	
6	Lead	IS-5182(Part22)	0.029	0.026	0.024	μg / m³	0.026	1	
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.28	0.32	0.24	mg/m³	0.28	2	
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400	
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.27	1.29	1.25	μg / m³	1.3	20	

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Authorized Signatory B. Chima Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only. 5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

Page:1

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4633

Issue Date: 22.03.2023

1. Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Vysanakere Village

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling

18.03.2023 20.03.2023

6. Date of Sample Receipt7. Sample Code

20.03.202 5118

8. Analysis Starting Date

20.03.2023

9. Analysis Completion Date

: 22.03.2023

10. Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in	Tolerance
			1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status: - The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory

B.Chinna Lingana Gouda Chief executive of the laboratory

Page:2

Note: 1. The results listed only to the tested samples & applicable parameters,

Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015.ISO 22000-2018, ISO 45001-2018.ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4634

Issue Date: 22.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location

**Gunda Village** 

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

4. Particulars of the sample **Date of Sampling** 

Sample collected with RDS APM460 and FDS GTI-131 18.03.2023

5. **Date of Sample Receipt** 6.

20.03.2023

Sample Code 7.

5119

8. **Analysis Starting Date** 

20.03.2023

**Analysis Completion Date** 9

22.03.2023

Sample Tested as Received

S.No	Parameter	Protocols	Shi	ft wise res	ults	Units	Result	Tolerance
	(4)	and the same of th	1	2 3			in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	59.3	58.7	57.1	μg / m³	58.37	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	23.4	22.5	21.2	μg / m³	22.37	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	9.19	8.54	7.15	μg / m³	8.29	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	16.11	14.26	14.20	μg / m³	14.86	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	8.8	8.0	6.8	μg / m³	7.87	100
6	Lead	IS-5182(Part22)	0.030	0.028	0.026	μg / m³	0.028	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.28	0.34	0.30	mg/m³	0.31	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.28	1.26	1.24	μg / m³	1.26	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

B. Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No. 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No. 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 9945456764, 08392-255169

Email : labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID : www.msvalbellary.com

Page:1

MSVAL/A/F/16/03

### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4634

Issue Date: 22.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2 Name of the location **Gunda Village** 

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample 4.

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sampling** 

18.03.2023

**Date of Sample Receipt** 6.

20.03.2023

Sample Code

5119

8. **Analysis Starting Date**  20.03.2023 22.03.2023

9. **Analysis Completion Date** 10.

Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in	Tolerance
	Low Low		1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

As per NAAQS Standards **INFERENCE** Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory B.Chidna Lingana Gouda Chief executive of the laboratory

Page:2

Note: 1. The results listed only to the tested samples & applicable parameters,

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015, ISO 22000-2018, ISO 45001-2018, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895. (0) : 9945456764.08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

Issue Date: 28.03.2023

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4995

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

**Smiore Colony** 

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131 24.03.2023

**Date of Sampling Date of Sample Receipt** 6.

25.03.2023

Sample Code

5563

**Analysis Starting Date** 8.

25.03.2023

9. **Analysis Completion Date**  28.03.2023

Sample Tested as Received

S.No	Parameter	Protocols	Shii	ft wise res	ults	Units	Result	Tolerance
			1	2	3		in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	58.8	60.4	57.6	$\mu g / m^3$	58.93	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	21.4	23.2	20.6	μg / m³	21.73	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	10.8	11.8	9.6	μg / m³	10.73	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	19.2	20.6	18.4	μg / m³	19.40	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	<0.01	<0.01	<0.01	μg / m³	<0.01	100
6	Lead	IS-5182(Part22)	0.080	0.081	0.084	μg / m³	0.082	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.28	0.32	0.36	mg/m³	0.32	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.20	1.24	1.26	μg / m³	1.23	20

**INFERENCE** 

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

**Authorized Signatory** - W. le B.Chimna Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.



(Certified by ISO-14001-2015, ISO 22000-2018, ISO 45001-2018, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4995

Issue Date: 28.03.2023

1. Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

Smiore Colony

3. Sample Collected By

MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

: Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling

24.03.2023 25.03.2023

6. Date of Sample Receipt7. Sample Code

: 5563

8. Analysis Starting Date

25.03.2023

9. Analysis Completion Date

Sample Tested as Received

28.03.2023

	_		

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in	Tolerance
	70		1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

**Authorized Signatory** 

B.Chinna Lingana Gouda

Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4996

Issue Date: 28.03.2023

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Kallahalli Village

3. Sample Collected By

MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling

24.03.2023

6. Date of Sample Receipt

: 25.03.2023 : 5564

7. Sample Code

: 5564

8. Analysis Starting Date9. Analysis Completion Date

: 25.03.2023

10. Sample Tested as Received

: 28.03.2023

S.No	Parameter	Protocols	Shi	ft wise res	ults	Units	Units Result	
		/	1	2	3	oes	in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	53.4	55.8	52.6	μg / m³	53.9	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	17.4	18.6	16.8	μg / m³	17.6	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	7.8	8.4	6.8	μg / m³	7.7	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	14.6	15.8	14.2	μg / m³	14.9	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	8.2	9.4	7.6	μg / m³	8.4	100
6	Lead	IS-5182(Part22)	0.030	0.031	0.034	μg / m³	0.032	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.22	0.24	0.26	mg/m³	0.24	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.12	1.16	1.14	ng / m³	1.14	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

BALLARI OF REPORTS

Authorized Signatory

B. Clanna Lingana Gouda
Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.



(Certified by ISO-14001-2015, ISO 22000-2018, ISO 45001-2018, ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/4996

Issue Date: 28.03.2023

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

Kallahalli Village

3. Sample Collected By

MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling

24.03.2023

6. Date of Sample Receipt

25.03.2023

Sample Code

: 5564

8. Analysis Starting Date

: 25.03.2023

9. Analysis Completion Date10. Sample Tested as Received

: 28.03.2023

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in	Tolerance
	70		1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory

B.Chinna Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015.ISO 22000-2018, ISO 45001-2018.ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4997

Issue Date: 28.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location

3. Sample Collected By Vvsanakere Village

Particulars of the sample 4.

MSV Analytical Laboratories, Bellary.

**Date of Sampling** 5. **Date of Sample Receipt** 6.

Sample collected with RDS APM460 and FDS GTI-131 24.03.2023

7. Sample Code 25.03.2023 5565

8. **Analysis Starting Date**  25.03.2023

**Analysis Completion Date** 9.

28.03.2023

Sample Tested as Received

S.No	Parameter	Protocols	Shi	ft wise res	ults	Units	Result	Tolerance	
			1	2	3		in Avg.	limits	
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	55.4	54.8	54.2	μg / m³	54.8	100	
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	16.2	15.8	15.6	μg / m³	15.9	60	
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	. 8.2	7.8	6.6	μg / m³	7.5	80	
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	13.8	12.6	11.4	μg / m³	12.6	80	
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	6.2	6.0	6.4	μg / m³	6.2	100	
6	Lead	IS-5182(Part22)	0.022	0.026	0.024	μg / m³	0.024	1	
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.38	0.40	0.36	mg/m³	0.38	2	
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400	
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.36	1.38	1.40	ng / m³	1.38	20	

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory - Ul-Re

B. Chinna Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.

53

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4997

Issue Date: 28.03.2023

Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village,

Hospet Taluk, Bellary District, Karnataka.

Name of the location

Vysanakere Village

3. Sample Collected By MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sampling** 

24.03.2023

**Date of Sample Receipt** 

25.03.2023

Sample Code 7

5565

8. **Analysis Starting Date Analysis Completion Date** 9.

25.03.2023

10. Sample Tested as Received 28.03.2023

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Units Result in	
	74		1	2 <	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status: The analyzed values for above measured parameter are within the limits

Analysed by

-: END OF REPORT

**Authorized Signatory** - Ul. **B.Chinna Lingana Gouda** Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4998

Issue Date: 28.03.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village,

Hospet Taluk, Bellary District, Karnataka.

2. Name of the location **Gunda Village** 

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

Date of Sampling **Date of Sample Receipt** 6.

24.03.2023 25.03.2023

Sample Code

5566

**Analysis Starting Date** 8. 9. **Analysis Completion Date**  25.03.2023

28.03.2023

Sample Tested as Received 10.

S.No	Parameter	Protocols	Shi	ft wise res	ults	Units	Result	Tolerance
			1 2 3			in Avg.	limits	
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	55.4	55.8	53.6	μg / m³	54.9	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	20.8	21.4	20.4	μg / m³	20.9	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	7.8	8.6	7.2	μg / m³	7.9	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	16.2	17.4	15.6	μg / m³	16.4	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	8.2	8.4	8.6	μg / m³	8.4	100
6	Lead	IS-5182(Part22)	0.020	0.024	0.022	μg / m³	0.022	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.22	0.26	0.20	mg/m³	0.23	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.20	1.24	1.26	μg / m³	1.23	20

**INFERENCE** 

As per NAAOS Standards

Report Status: The analyzed values for above measured parameter are within the limits

Authorized Signatory B. Chinna Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters.

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/4998

Issue Date: 28.03.2023

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

**Gunda Village** 

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

: Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling

24.03.2023 25.03.2023

6. Date of Sample Receipt

: 5566

7. Sample Code

25.03.2023

8. Analysis Starting Date9. Analysis Completion Date

: 28.03.2023

10. Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
			1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory

B.Chinna Lingana Gouda
Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.

56



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1<sup>st</sup> & 2<sup>nd</sup> Floor)
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

Z

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/5232

Issue Date: 01.04.2023

1. Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village,

Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Smiore Colony

3. Sample Collected By

MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131 30.03.2023

5. Date of Sampling6. Date of Sample Receipt

: 31.03.2023

7. Sample Code

: 5818

8. Analysis Starting Date9. Analysis Completion Date

: 31.03.2023

10. Sample Tested as Received

: 01.04.2023

S.No	Parameter	Protocols	Shi	ft wise resu	ılts	Units	Result in Avg.	Tolerance limits
			1	2	3		in Avg.	
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	52.4	54.8	51.6	μg / m³	52.9	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	24.8	26.6	24.2	μg / m³	25.2	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	10.8	11.4	10.2	μg / m³	10.8	80
4	Oxides of Nitrog <mark>en as NO<sub>x</sub></mark>	IS-5182(Part-6)	18.8	20.4	17.8	μg / m³	19.0	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	11.4	13.4	10.8	μg / m³	11.9	100
6	Lead	IS-5182(Part22)	0.030	0.028	0.026	μg / m³	0.028	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.28	0.26	0.24	mg/m³	0.26	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.34	1.38	1.36	μg / m³	1.36	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

BALLARI PH EMP OF REPORTS Authorized Signatory Renukamma Quality Manager

Remo

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email : labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID : www.msvalbellary.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/5232

Issue Date: 01.04.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location 2.

**Smiore Colony** 

3. Sample Collected By MSV Analytical Laboratories, Bellary.

Particulars of the sample 4.

Sample collected with RDS APM460 and FDS GTI-131

5. **Date of Sampling** 6. **Date of Sample Receipt**  30.03.2023

7. Sample Code 31.03.2023 5818

**Analysis Starting Date** 8.

31.03.2023

9. **Analysis Completion Date**  01.04.2023

Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
	100		1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

μg

INFERENCE

As per NAAOS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

**Authorized Signatory** 

**Ouality Manager** 

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/5233

Issue Date: 01.04.2023

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Kallahalli Village

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample5. Date of Sampling

Sample collected with RDS APM460 and FDS GTI-131 30.03.2023

6. Date of Sample Receipt

: 31.03.2023

7. Sample Code

: 5819

8. Analysis Starting Date

: 31.03.2023

Analysis Completion Date
 Sample Tested as Received

01.04.2023

S.No	Parameter	Protocols	Shil	ft wise res	ults	Units	Result in Avg.	Tolerance
		,0	1	2	3		ın Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	54.8	56.2	54.4	μg / m³	55.1	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	17.8	18.8	16.4	μg / m³	17.7	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	7.8	8.4	6.6	μg / m³	7.6	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	18.2	20.8	17.4	μg / m³	18.8	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	8.4	8.6	7.4	μg / m³	8.1	100
6	Lead	IS-5182(Part22)	0.026	0.030	0.028	μg / m³	0.028	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.30	0.34	0.32	mg/m³	0.32	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.28	1.32	1.30	μg / m³	1.30	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory

Quality Manager

.

The results listed only to the tested samples & applicable parameters,
 Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

REPORT:-

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/5233

Issue Date: 01.04.2023

1. Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

: Kallahalli Village

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

: Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling

30.03.2023 31.03.2023

6. Date of Sample Receipt7. Sample Code

5819

8. Analysis Starting Date

31.03.2023

. Analysis Completion Date

01.04.2023

10. Sample Tested as Received

ed

S.No	S.No Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
			1	2	3	8	Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE As per NAAQS Standards Report Status: - The analyzed values for above measured parameter are within the limits	
--	--

Analysed by

**Authorized Signatory** 

Renukamma Quality Manager

-: END REPO

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2023/5234

Issue Date: 01.04.2023

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location

Vysanakere Village

3. Sample Collected By MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. **Date of Sampling** Date of Sample Receipt 30.03.2023

6. 7. 31.03.2023

Sample Code

5820

**Analysis Starting Date** 8.

31.03.2023

9. **Analysis Completion Date** Sample Tested as Received 01.04.2023

S.No	Parameter	Protocols	Shir	ft wise res	ults	Units	Result	Tolerance
on to		/ 110100010	1	2	3	Sints	in Avg.	limits
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	60.4	58.8	59.2	μg / m³	59.5	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	24.8	22.4	22.2	μg / m³	23.1	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	9.4	8.6	8.2	µg / m³	8.7	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	17.8	16.4	16.6	μg / m³	16.9	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	9.2	8.8	8.4	μg / m³	8.8	100
6	Lead	IS-5182(Part22)	0.026	0.028	0.024	μg / m³	0.026	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.24	0.26	0.28	mg/m³	0.26	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	< 0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.40	1.36	1.38	μg / m³	1.38	20

INFERENCE

As per NAAQS Standards

Report Status: - The analyzed values for above measured parameter are within the limits

Analysed by

Authorized Signatory Renukamma **Quality Manager** 

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/5234

Issue Date: 01.04.2023

1. Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

Vysanakere Village

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

: Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sampling

30.03.2023

6. Date of Sample Receipt

31.03.2023

7. Sample Code

: 5820

8. Analysis Starting Date

: 31.03.2023

9. Analysis Completion Date10. Sample Tested as Received

01.04.2023

S.No	Parameter	Protocols  Shift wise results  1 2 3	Shift wise results			Units	Result in	Tolerance limits
	The state of the s			Avg.	HIHITS			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	6

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

**Authorized Signatory** 

Renukamma Quality Manager

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/5235

Issue Date: 01.04.2023

1. Name of the Project

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the location

3. Sample Collected By

: Gunda Village

Sample Collected By
 Particulars of the sample

: MSV Analytical Laboratories, Bellary.

Sample collected with RDS APM460 and FDS GTI-131 30.03.2023

5. Date of Sampling6. Date of Sample Receipt

31.03.2023

7. Sample Code

: 5821

8. Analysis Starting Date

: 31.03.2023

9. Analysis Completion Date

: 01.04.2023

10. Sample Tested as Received

S.No	Parameter	Protocols	Shir	ft wise res	ults	Units	Result	Tolerance limits
			1	2	3		ın Avg.	
1	Particulate Matter PM <sub>10</sub>	IS-5182(Part-23)	60.4	58.8	59.6	μg / m³	59.6	100
2	Particulate Matter or PM <sub>2.5</sub>	LAB SOP MSVAL/SOP/A/005	24.6	22.8	21.4	μg / m³	22.9	60
3	Sulphur Dioxide as SO <sub>2</sub>	IS-5182(Part-2)	9.4	8.8	7.6	μg / m³	8.6	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6)	18.2	16.6	15.8	μg / m³	16.9	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)	<0.01	<0.01	<0.01	μg / m³	<0.01	100
6	Lead	IS-5182(Part22)	0.026	0.024	0.028	μg / m³	0.026	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.28	0.30	0.32	mg/m³	0.30	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.24	1.26	1.22	μg / m³	1.38	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

**Authorized Signatory** 

Renukamma Quality Manager

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/16/03

Issue Date: 01.04.2023

#### **ANALYSIS REPORT OF AMBIENT AIR QUALITY**

Test Report No: MSVAL/2023/5235

Name of the Project

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Allovs Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the location 2.

Sample Collected By 3.

**Gunda Village** 

Particulars of the sample

MSV Analytical Laboratories, Bellary.

4. 5. Date of Sampling Sample collected with RDS APM460 and FDS GTI-131 30.03.2023

Date of Sample Receipt 6.

31.03.2023

Sample Code

5821

**Analysis Starting Date Analysis Completion Date** 9.

31.03.2023

Sample Tested as Received

: 01.04.2023

S.No	Parameter	Protocols	Sh	Shift wise results			Result in	Tolerance
			1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11)	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	μg / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	< 0.01	μg / m³	< 0.01	6

As per NAAOS Standards **INFERENCE** Report Status:- The analyzed values for above measured parameter are within the limits

Analysed by

**Authorized Signatory** 

**Quality Manager** 

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/18/03

### **ANALYSIS REPORT FOR SOURCE EMMISSION**

Test Report No: MSVAL/2023/4654

Report Issued Date: 22.03.2023

1. Name of the Industry

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Stack ID

Coke Screening& Store

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of Sample Collected

: Sample collected with VSS – 1

5. Date of Sample Receipt

: 18.03.2023

6. Sample Code

: 5140

7. Analysis Starting Date

: 20.03.2023

8. Analysis Completion Date

: 22.03.2023

9. Sample Tested as Received

**GENERAL DETAILS** 

18.03.2023							
J172~ +-							
45							
6.4							
15mtrs AGL							
0.7							
0.38465							

**RESULTS** 

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm³	32.5	50

INFERENCE

As per GSR 277 (E) Standards.

Report Status:- The analyzed value for above measured parameter is within the limits.

Analysed by

**Authorized Signatory** 

B.Chinna Lingana Gouda
Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/18/03

### ANALYSIS REPORT FOR SOURCE EMMISSION

Test Report No: MSVAL/2023/4655

Report Issued Date: 22.03.2023

Name of the Industry 1.

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Stack ID 2.

**Coke Cutter** 

3. Sample Collected By MSV Analytical Laboratories, Bellary.

Particulars of Sample Collected 4.

Sample collected with VSS - 1

Date of Sample Receipt 5.

18.03.2023 5141

Sample Code 6. **Analysis Starting Date** 7.

20.03.2023

8. **Analysis Completion Date**  22.03.2023

9. Sample Tested as Received

GENERAL DETAILS

GENERALE	BITHE
Date of Monitoring	18.03.2023
Fuel Used	
Stack Temperature (°C)	44
Velocity (m/s)	4.1
Height (m)	15mtrs AGL
Diameter (m)	0.7
Cross sectional area (m <sup>2</sup> )	0.38465

RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm³	32.3	50

**INFERENCE** 

As per KSPCB Standards

Report Status:- The analyzed value for above measured parameter is within the limits.

Analysed by

Authorized Signatory

B.Chinna Lingana Gouda Chief executive of the laboratory

1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015) C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 ( $1^{st}$  &  $2^{nd}$  Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764,08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary2018@gmail.com

### ANALYSIS REPORT FOR SOURCE EMMISSION

Test Report No: MSVAL/2023/4656

Report Issued Date: 22.03.2023

1. Name of the Industry

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Stack ID

: Coal Crushing Area

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of Sample Collected

Sample collected with VSS - 118.03.2023

5. Date of Sample Receipt6. Sample Code

: 5142

7. Analysis Starting Date

: 20.03.2023

8. Analysis Completion Date

: 22.03.2023

9. Sample Tested as Received

GENERAL DETAILS

GENERALE DETTILES			
Date of Monitoring	18.03.2023		
Fuel Used	- Land		
Stack Temperature (°C)	33		
Velocity (m/s)	5.5		
Height (m)	15mtrs AGL		
Diameter (m)	0.75		
Cross sectional area (m²)	0.44156		

RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm³	26	50

INFERENCE

As per KSPCB Standards

Report Status: - The analyzed value for above measured parameter is within the limits.

Analysed by

Authorized Signatory

B.Chinna Lingana Gouda
Chief executive of the laboratory

:-

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing,

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email : labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID : www.msvalbellary.com

MSVAL/A/F/18/03

#### **ANALYSIS REPORT FOR SOURCE EMMISSION**

Test Report No: MSVAL/2023/2559

Name of the Industry

Report Issued Date: 23.03.2023

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Ferro Alloy Arc Furnace 5

3. Sample Collected By

Particulars of Sample Collected 4.

**Date of Sample Receipt** 5.

Sample Code 6.

Stack ID

2.

7. **Analysis Starting Date** 

**Analysis Completion Date** 8.

9. Sample Tested as Received

MSV Analytical Laboratories, Bellary.

Sample collected with VSS - 1 18.03.2023

2905

25.02.2023

23.03.2023

### **GENERAL DETAILS**

Date of Monitoring	18.03.2023
Fuel Used	
Stack Temperature (°C)	40
Velocity (m/s)	6.56
Height (m)	35 mtrs AGL
Diameter (m)	2.5
Cross sectional area (m²)	4.90625
Flow/Discharge Rate of Gas Nm³/Hr	120811.5

#### RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm³	31.8	150
Sulphur dioxide	IS-11255(Part2) – 1985	mg/Nm³	20.2	800
Nitrogen dioxide	IS-11255(Part7) – 2005	mg/Nm³	32.5	500
Carbon Monoxide as(CO)	IS 13270	%	0.32	Max 1%
Oxygen as O2	Instrument Method	%	5.2	

As per GSR 277 (E) Standards. **INFERENCE** Report Status:- The analyzed value for above measured parameter is within the limits.

Analysed by

B.Chinna Lingana Gouda Chief executive of the laboratory

1. The results listed only to the tested samples & applicable parameters,

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3 months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/18/03

### **ANALYSIS REPORT FOR SOURCE EMMISSION**

**Test Report No:** 

Report Issued Date: 23.03.2023

1. Name of the Industry

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Stack ID

Ferro Alloy Arc Furnace 3

3. Sample Collected By

MSV Analytical Laboratories, Bellary.

4. Particulars of Sample Collected

Sample collected with VSS - 1

5. Date of Sample Receipt

6. Sample Code

:

7. Analysis Starting Date8. Analysis Completion Date

9. Sample Tested as Received

### **GENERAL DETAILS**

Date of Monitoring	
Fuel Used	~/O
Stack Temperature (°C)	100
Velocity (m/s)	1
Height (m)	35 mtrs AGL
Diameter (m)	2.5
Cross sectional area (m²)	4.90625
Flow/Discharge Rate of Gas Nm³/Hr	SVI

RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm³	Shutdown	150
Sulphur dioxide	IS-11255(Part2) – 1985	mg/Nm³		800
Nitrogen dioxide	IS-11255(Part7) – 2005	mg/Nm³		500
Carbon Monoxide as(CO)	IS 13270	%		Max 1%
Oxygen as O2	Instrument Method	%	The state of the s	

	As per GSR 277 (E) Standards.	Ų
INFERENCE	Report Status:- The analyzed value for above measured parameter is	
	within the limits.	

Analysed by

**Authorized Signatory** 

B.Chinna Lingana Gouda Chief executive of the laboratory

-: END OF REPORT:-

Note: 1. The results listed only to the tested samples & applicable parameters,

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>2.</sup> Water samples will destroyed after 10days, Filter paper's & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1<sup>st</sup> & 2<sup>nd</sup> Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/18/03

### **ANALYSIS REPORT FOR SOURCE EMMISSION**

Test Report No: MSVAL/2023/5126A

Report Issued Date: 30.03.2023 M/s. The Sandur Manganese & Iron Ores Ltd.

1. Name of the Industry

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Stack ID

Coke Oven Battery - Passes Through WHRB-1

3. Sample Collected By

MSV Analytical Laboratories, Bellary.

4. Particulars of Sample Collected5. Date of Sample Receipt

Sample collected with VSS - 123.03.2023

6. Sample Code

: 5356

7. Analysis Starting Date

: 28.03.2023

8. Analysis Completion Date

30.03.2023

### 9. Sample Tested as Received

#### **GENERAL DETAILS**

Date of Monitoring	23.03.2023
Fuel Used	077
Stack Temperature (°C)	120
Velocity (m/s)	6.61
Height (m)	60 mtrs AGL
Diameter (m)	4.6
Cross sectional area (m²)	16.61
Flow/Discharge Rate of Gas Nm³/Hr	275061.6

#### RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm³	25.0	50
Sulphur dioxide	IS <mark>-112</mark> 55(Part2) – 1985	mg/Nm³	22.1	800
Nitrogen dioxide	IS-11 <mark>25</mark> 5(Part7) – 2005	mg/Nm³	56.8	500
Carbon Monoxide as(CO)	IS 13270	%	0.24	Max 1%
Oxygen as O2	Instrument Method	%	5.20	

As per GSR 277 (E) Standards.

INFERENCE Report Status :- The analyzed value for above measured parameter is within the limits.

Analysed by

BALLARI PA

B.Chinna Lingana Gouda Chief executive of the laboratory

Note: 1. The results listed only to the tested samples & applicable parameters,

OF REPORT:-

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/18/03

#### **ANALYSIS REPORT FOR SOURCE EMMISSION**

Test Report No: MSVAL/2023/5126

Name of the Industry

Report Issued Date: 30.03.2023

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka. Coke Oven Battery - Passes Through WHRB-2

2. Stack ID

3. Sample Collected By

Particulars of Sample Collected 4.

Date of Sample Receipt 5. Sample Code

6. **Analysis Starting Date** 7.

8. **Analysis Completion Date** Sample Tested as Received

MSV Analytical Laboratories, Bellary.

Sample collected with VSS - 1

23.03.2023 5357

28.03.2023

30.03.2023

#### GENERAL DETAILS

GENERALD	LIMIUS
Date of Monitoring	23.03.2023
Fuel Used	
Stack Temperature (°C)	150
Velocity (m/s)	7.12
Height (m)	60 mtrs AGL
Diameter (m)	4.6
Cross sectional area (m²)	16.61
Flow/Discharge Rate of Gas Nm <sup>3</sup> /Hr	425747.52

RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm³	21.8	50
Sulphur dioxide	IS-11255(Part2) - 1985	mg/Nm³	30.7	800
Nitrogen dioxide	IS-11255(Part7) – 2005	mg/Nm³	54.2	500
Carbon Monoxide as(CO)	IS 13270	%	0.26	Max 1%
Oxygen as O2	Instrument Method	%	6.2	

As per GSR 277 (E) Standards. **INFERENCE** Report Status:- The analyzed value for above measured parameter is within the limits.

Analysed by

B.Chinna Lingana Gouda Chief executive of the laboratory

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

 $Sanganakallu\ Road,\ KEB\ Circle,\ Ballari\ \cdot 583103\ \ Contact\ No: Mob: 94498\ 03895, (0): 9945456764, 08392-255169$ 

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/W/F/13/00

#### ANALYSIS REPORT OF WATER QUALITY

Test Report No: MSVAL/2023/5157

Report Issued Date: 30.03.2023

1. Name of the Industry

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka. Surface water - Tungabhadra Reservoir

2. Name of the sample

MSV Analytical Laboratories

3. Sample Collected By

2 Liters

4. Sample Quantity5. Sample Description/condition

Good/Satisfactory

6. Date of Sample Receipt

18.03.2023

7. Analysis Starting Date

20.03.2023

8. Analysis Completion date9. Sample tested As Received

: 23.03.2023

S.No	Parameters	Protocol	Unit	Result	Standards as per IS - 2296
		Physical parameter	ers		
1	Taste	IS: 3025(part-7)	P., ~	Agreeable	Agreeable
2	Color	IS: 3025(part-4)	J D-4 - 1	<1	10
3	Odor	IS: 3025(part-5)	F	Un objectionable	Un objectionable
4	pH	IS: 3025(part-11)	'	7.46	6.5-8.5
5	Conductivity	IS-3025 (part 14)	μs/cm	874	
	10	Chemical paramet	ers	N.	
6	Total Dissolved Solids	IS: 3025(part-16)	mg/l	440	500
7	Calcium as Ca	IS: 3025(part-40)	mg/l	24.2	80.10
8	Total Hardness as CaCO <sub>3</sub>	IS: 3025(part-21)	mg/l	146.8	300
9	Magnesium as Mg	IS: 3025(part-46)	mg/l	20.9	24.28
10	Oil &Grease	IS: 3025(part-39)	mg/l	Nil	
11	Mineral Oil	APHA 23 <sup>rd</sup> EDITION - 5520 C	mg/l	Nil	0.01
12	Sulphate as SO <sub>4</sub>	IS: 3025(part-24)	mg/l	10.4	400
13	Chloride as Cl	IS: 3025(part-32)	mg/l	24.9	250
14	Nitrate as NO <sub>3</sub>	IS: 3025(part-34)	mg/l	2.26	20
15	Iron as Fe	IS: 3025(part-53)	mg/l	0.004	0.3
16	Fluoride as F	IS: 3025(part-60)	mg/l	0.24	1.50
17	Bio-chemical Oxygen Demand (3 days at 27°C), Max	IS 3025 (Part 44): 1993	mg/l	Nil	2
18	Dissolved Oxygen	IS 3025 (Part 38): 1993	mg/l	8.0	Min 6
19	Free CO2	LAB SOP	mg/l	Nil	
20	Free Ammonia	LAB SOP	mg/l	Nil	

**INFERENCE** 

IS - 2296 Standards, BDL - Below Detectable Limit

Report Status: - The above parameters are within limits.

Verified by

\*End of the Report\*\*

Authorized Signature

Note: 1. The results listed only to the tested samples & applicable parameters,

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/W/F/13/00

### ANALYSIS REPORT OF WATER QUALITY

Test Report No: MSVAL/2023/5157

Report Issued Date: 30.03.2023

1. Name of the Industry

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka. Surface water – Tungabhadra Reservoir

2. Name of the sample

: MSV Analytical Laboratories

Sample Collected By
 Sample Quantity

2 Liters

5. Sample Description/condition

Good/Satisfactory

6. Date of Sample Receipt7. Analysis Starting Date

18.03.2023 20.03.2023

8. Analysis Completion date

23.03.2023

9. Sample tested As Received

S.No	Parameters	Protocol	Unit	Result	Standards as per IS - 2296
		Chemical parameter	S		6
21	Manganese as Mn	APHA 23 rd EDITION -3111 B	mg/l	0.014	0.5
22	Zinc as Zn	IS: 3025(part-49)	mg/l	0.026	15
23	Boron as B	APHA 23 rd EDITION -4500 B	mg/l	Nil	
24	Barium as Ba	APHA 23 rd EDITION -3500 Ba	mg/l	0.003	1.0
25	Silver as Ag	APHA 23 rd EDITION -3500 Ag	mg/l	< 0.001	0.05
26	Arsenic as As	APHA 23 rdEDITION -3112 B	mg/l	< 0.002	0.05
27	Mercury as Hg	APHA 23rd EDITION -3112 B	mg/l	< 0.001	0.001
28	Lead as Pb	APHA 23 rd EDITION -3111 B	mg/l	< 0.002	0.1
29	Cadmium as Cd	APHA 23 rd EDITION -3111 B	mg/l	< 0.001	0.01
30	Chromium as Cr	APHA 23 rd EDITION -3111 B	mg/l	< 0.002	0.05
31	Selenium as Se	APHA 23 rd EDITION -3500 B	mg/l	< 0.001	0.01
32	Cyanide as CN	APHA 23 rd EDITION -4500 D	mg/l	Nil	0.05
33	Phenols	IS: 3025(part-43)	mg/l	Nil	0.002
34	Anionic Detergents as MBAS	IS: 13428-2005	mg/l	<0.1	0.2
35	Percent Sodium	LAB SOP	%	21.44	
36	Sodium Absorption Ratio	LAB SOP	mg/l	11.1	

INFERENCE

IS - 2296 Standards, BDL - Below Detectable Limit Report Status: - The above parameters are within limits.

Verified by

\*\*End of

Authorized Signature

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.

27)



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 9945456764, 08392-255169

Email: labmsy@gmail.com, msyalbellary2018@gmail.com, msy.lab01@gmail.com Web ID: www.msyalbellary.com

MSVAL/A/F/18/03

### ANALYSIS REPORT FOR WATER IN MICROBIOLOGY

Test Report No: MSVAL/2023/5157

Report Issued Date: 30.03.2023

1. Name of the Industry

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka. Surface water - Tungabhadra Reservoir

2. Sample Type

3. Sample Collected By

MSV Analytical Laboratories, Bellary.

4. Sample Quantity

250 ml (Sterilized Bottle)

5. Sample description/condition

Good/satisfactory

6. Date of sample Receipt

18.03.2023

7. Analysis Starting Date

20.03.2023

8. Analysis Completion Date 9. Sample tested as Received 23.03.2023

#### RESULTS

Parameters	Protocol	Unit	Result	Standards as per IS - 2296
Total Coliform	IS 1622:1981	MPN/100 ml	16	50

	The state of the s	
INFERENCE	IS - 2296 Standards, BDL - Below Detectable Limit	
	Report Status: - The above parameters are within limits.	

Verified by

uthorized Signature

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



1.

# **MSV** Analytical Laboratories

(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

 $Sanganakallu\ Road,\ KEB\ Circle,\ Ballari\ \cdot\ 583103\ \ Contact\ No:\ Mob:\ 94498\ 03895, (0):9945456764, 08392-255169$ 

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/W/F/13/00

#### **ANALYSIS REPORT OF WATER QUALITY**

Test Report No: MSVAL/2023/5158

Report Issued Date: 30.03.2023

Name of the Industry :

M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the sample : Surface water – Canal Near Vysanakere 3. Sample Collected By : MSV Analytical Laboratories

4. Sample Quantity : 2 Liters

5. Sample Description/condition
6. Date of Sample Receipt
7. Analysis Starting Date
Good/Satisfactory
18.03.2023
20.03.2023

8. Analysis Completion date : 23.03.2023
9. Sample tested As Received

	9. Sample tested As Rec	eived		T	Cton doude on non
S.No	Parameters	Protocol	Unit	Result	Standards as per IS – 2296
		Physical paramete	ers		
1	Taste	IS: 3025(part-7)	FE OF	Agreeable	Agreeable
2	Color	IS: 3025(part-4)	12-	<5	10
3	Odor	IS: 3025(part-5)	- F	Un objectionable	Un objectionable
4	pH	IS: 3025(part-11)		7.98	6.5-8.5
5	Conductivity	IS-3025 (part 14)	μs/cm	842	
		Chemical paramete	ers	N	
6	Total Dissolved Solids	IS: 3025(part-16)	mg/l	430	500
7	Calcium as Ca	IS: 3025(part-40)	mg/l	16.2	80.10
8	Total Hardness as CaCO <sub>3</sub>	IS: 3025(part-21)	√ mg/l	100.4	300
9	Magnesium as Mg	IS: 3025(part-46)	mg/l	14.6	24.28
10	Oil &Grease	IS: 3025(part-39)	mg/l	Nil	
11	Mineral Oil	APHA 23 <sup>rd</sup> EDITION - 5520 C	mg/l	Nil	0.01
12	Sulphate as SO <sub>4</sub>	IS: 3025(part-24)	mg/l	6.98	400
13	Chloride as Cl	IS: 3025(part-32)	mg/l	21.9	250
14	Nitrate as NO <sub>3</sub>	IS: 3025(part-34)	mg/l	0.76	20
15	Iron as Fe	IS: 3025(part-53)	mg/l	0.002	0.3
16	Fluoride as F	IS: 3025(part-60)	mg/l	0.24	1.50
17	Bio-chemical Oxygen Demand (3 days at 27°C), Max	IS 3025 (Part 44): 1993	mg/l	Nil	2
18	Dissolved Oxygen	IS 3025 (Part 38): 1993	mg/l	8.0	Min 6
19	Free CO2	LAB SOP	mg/l	Nil	
20	Free Ammonia	LAB SOP	mg/l	Nil	

INFERENCE IS – 2296 Standards, BDL – Below Detectable Limit Report Status: - The above parameters are within limits.

Verified by

\*\*End of the Report\*

Authorized Signature

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com. msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/W/F/13/00

### **ANALYSIS REPORT OF WATER QUALITY**

Test Report No: MSVAL/2023/5158

Report Issued Date: 30.03.2023

Name of the Industry 1.

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Name of the sample 2.

Surface water - Canal Near Vysanakere MSV Analytical Laboratories

Sample Collected By 3. 4. Sample Quantity

2 Liters

Sample Description/condition 5.

Good/Satisfactory

6. **Date of Sample Receipt** 7. **Analysis Starting Date** 

18.03.2023 20.03.2023

**Analysis Completion date** 8.

23.03.2023

	9. Sample tested As	Received	1		0. 1 1
S.No	Parameters	Protocol	Unit	Result	Standards as per IS - 2296
		Chemical parameters	S		
21	Manganese as Mn	APHA 23 rd EDITION -3111 B	mg/l	0.012	0.5
22	Zinc as Zn	IS: 3025(part-49)	mg/l	0.020	15
23	Boron as B	APHA 23 rd EDITION -4500 B	mg/l	Nil	
24	Barium as Ba	APHA 23 rd EDITION -3500 Ba	mg/l	0.002	1.0
25	Silver as Ag	APHA 23 rd EDITION -3500 Ag	mg/l	< 0.001	0.05
26	Arsenic as As	APHA 23 rdEDITION -3112 B	mg/l	< 0.002	0.05
27	Mercury as Hg	APHA 23rd EDITION -3112 B	mg/l	< 0.001	0.001
28	Lead as Pb	APHA 23 rd EDITION -3111 B	mg/l	< 0.002	0.1
29	Cadmium as Cd	APHA 23 rd EDITION -3111 B	mg/l	< 0.001	0.01
30	Chromium as Cr	APHA 23 rd EDITION -3111 B	mg/l	< 0.002	0.05
31	Selenium as Se	APHA 23 rd EDITION -3500 B	mg/l	< 0.001	0.01
32	Cyanide as CN	APHA 23 rd EDITION -4500 D	mg/l	Nil	0.05
33	Phenols	IS: 3025(part-43)	mg/l	Nil	0.002
34	Anionic Detergents as MBAS	IS: 13428-2005	mg/l	<0.1	0.2
35	Percent Sodium	LAB SOP	%	18.8	
36	Sodium Absorption Ratio	LAB SOP	mg/l	10.3	

**INFERENCE** 

IS - 2296 Standards, BDL - Below Detectable Limit Report Status: - The above parameters are within limits.

Verified by

Authorized Signature

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 9945456764, 08392-255169

Email: labmsy@gmail.com, msvalbellarv2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellarv.com

MSVAL/A/F/18/03

#### ANALYSIS REPORT FOR WATER IN MICROBIOLOGY

Test Report No: MSVAL/2023/5158

Report Issued Date: 30.03.2023

Name of the Industry

: M/s. The Sandur Manganese & Iron Ores Ltd. (Metal & Ferro Alloys Plant) Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Sample Type

3. Sample Collected By

Surface water - Canal Near Vysanakere

4. Sample Quantity

MSV Analytical Laboratories, Bellary. 250 ml (Sterilized Bottle)

5. Sample description/condition

Good/satisfactory

6. Date of sample Receipt

18.03.2023

7. Analysis Starting Date

20.03.2023

**Analysis Completion Date** 

23.03.2023

9. Sample tested as Received

### RESULTS

Parameters	Protocol	Unit	Result	Standards as per IS - 2296
Total Coliform	IS 1622:1981	MPN/100 ml	20	50

	A.J.	
INFERENCE	IS - 2296 Standards, BDL - Below Detectable Limit	
	Report Status: - The above parameters are within limits.	

Verified by

Authorized Signature

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only. 5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/W/F/13/00

### **ANALYSIS REPORT OF WATER QUALITY**

:

Test Report No: MSVAL/2023/5159

Report Issued Date: 30.03.2023

1. Name of the Industry M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka. Surface water - Dhananayakana Kere Water

2. Name of the sample

Sample Collected By 3.

MSV Analytical Laboratories

Sample Quantity 4.

2 Liters

Sample Description/condition 5.

Good/Satisfactory

6. **Date of Sample Receipt** 7. **Analysis Starting Date** 

18.03.2023 20.03.2023

**Analysis Completion date** 8.

23.03.2023

Sample tested As Received 9.

S.No	Parameters	Protocol	Unit	Result	Standards as per IS - 2296
		Physical paramete	ers		
1	Taste	IS: 3025(part-7)		Agreeable	Agreeable
2	Color	IS: 3025(part-4)	FR 15	<5	10
3	Odor	IS: 3025(part-5)	1A	Un objectionable	Un objectionable
4	рН	IS: 3025(part-11)	(^)	8.00	6.5-8.5
5	Conductivity	IS-3025 (part 14)	μs/cm	746	
	11	Chemical parameter	ers		
6	Total Dissolved Solids	IS: 3025(part-16)	mg/l	418	500
7	Calcium as Ca	IS: 3025(part-40)	mg/l	5.80	80.10
8	Total Hardness as CaCO <sub>3</sub>	IS: 3025(part-21)	mg/l	72.4	300
9	Magnesium as Mg	IS: 3025(part-46)	mg/l	14.1	24.28
10	Oil &Grease	IS: 3025(part-39)	mg/l	Nil	
11	Mineral Oil	APHA 23 <sup>rd</sup> EDITION - 5520 C	mg/l	Nil	0.01
12	Sulphate as SO <sub>4</sub>	IS: 3025(part-24)	mg/l	20.4	400
13	Chloride as Cl	IS: 3025(part-32)	mg/l	44.9	250
14	Nitrate as NO <sub>3</sub>	IS: 3025(part-34)	mg/l	1.46	20
15	Iron as Fe	IS: 3025(part-53)	mg/l	0.002	0.3
16	Fluoride as F	IS: 3025(part-60)	mg/l	0.50	1.50
17	Bio-chemical Oxygen Demand (3 days at 27°C), Max	IS 3025 (Part 44): 1993	mg/l	Nil	2
18	Dissolved Oxygen	IS 3025 (Part 38): 1993	mg/l	7.4	Min 6
19	Free CO2	LAB SOP	mg/l	Nil	1
20	Free Ammonia	LAB SOP	mg/l	Nil	

INFERENCE

IS - 2296 Standards, BDL - Below Detectable Limit

Report Status: - The above parameters are within limits.

Verified by

Authorized Signature

28

1. The results listed only to the tested samples & applicable parameters,

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>5.</sup> Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169 Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/W/F/13/00

### **ANALYSIS REPORT OF WATER QUALITY**

Test Report No: MSVAL/2023/5159

Report Issued Date: 30.03.2023

Name of the Industry 1.

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka. Surface water - Dhananayakana Kere Water

Name of the sample 2.

Sample Collected By 3.

MSV Analytical Laboratories

4. Sample Quantity 2 Liters Good/Satisfactory

5. Sample Description/condition **Date of Sample Receipt** 6.

18.03.2023

7. **Analysis Starting Date**  20.03.2023

**Analysis Completion date** 8.

23.03.2023

Sample tested As Received

S.No	Parameters	Protocol	Unit	Result	Standards as per IS - 2296
		Chemical parameter	S		
21	Manganese as Mn	APHA 23 rd EDITION -3111 B	mg/l	0.014	0.5
22	Zinc as Zn	IS: 3025(part-49)	mg/l	0.018	15
23	Boron as B	APHA 23 rd EDITION -4500 B	mg/l	Nil	
24	Barium as Ba	APHA 23 rd EDITION -3500 Ba	mg/l	0.002	1.0
25	Silver as Ag	APHA 23 rd EDITION -3500 Ag	mg/l	< 0.001	0.05
26	Arsenic as As	APHA 23 rdEDITION -3112 B	mg/l	< 0.002	0.05
27	Mercury as Hg	APHA 23rd EDITION -3112 B	mg/l	< 0.001	0.001
28	Lead as Pb	APHA 23 rd EDITION -3111 B	mg/l	< 0.002	0.1
29	Cadmium as Cd	APHA 23 rd EDITION -3111 B	mg/l	< 0.001	0.01
30	Chromium as Cr	APHA 23 rd EDITION -3111 B	mg/l	< 0.002	0.05
31	Selenium as Se	APHA 23 rd EDITION -3500 B	mg/l	< 0.001	0.01
32	Cyanide as CN	APHA 23 rd EDITION -4500 D	mg/l	Nil	0.05
33	Phenols	IS: 3025(part-43)	mg/l	Nil	0.002
34	Anionic Detergents as MBAS	IS: 13428-2005	mg/l	<0.1	0.2
35	Percent Sodium	LAB SOP	%	20.3	
36	Sodium Absorption Ratio	LAB SOP	mg/l	12.2	

**INFERENCE** 

IS - 2296 Standards, BDL - Below Detectable Limit Report Status: - The above parameters are within limits.

Note: 1. The results listed only to the tested samples & applicable parameters,

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/18/03

#### ANALYSIS REPORT FOR WATER IN MICROBIOLOGY

Test Report No: MSVAL/2023/5159

Report Issued Date: 30.03.2023

1. Name of the Industry

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Sample Type

3. Sample Collected By

Surface water - Dhananayakana Kere Water MSV Analytical Laboratories, Bellary.

4. Sample Quantity

250 ml (Sterilized Bottle)

5. Sample description/condition

Good/satisfactory

6. Date of sample Receipt

18.03.2023

7. Analysis Starting Date

20.03.2023

8. Analysis Completion Date

23.03.2023

9. Sample tested as Received

### RESULTS

Parameters	Protocol	Unit	Result	Standards as per IS – 2296
Total Coliform	IS 1622:1981	MPN/100 ml	14	50

	The state of the s
INFERENCE	IS - 2296 Standards, BDL - Below Detectable Limit
	Report Status: - The above parameters are within limits.

Verified by

Authorized Signature

Note: 1. The results listed only to the tested samples & applicable parameters,

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only. 5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169 Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/W/F/13/00

### **ANALYSIS REPORT OF WATER QUALITY**

Test Report No: MSVAL/2023/5160

Report Issued Date: 30.03.2023

1. Name of the Industry M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the sample

Surface water - Water body near Narayadevarakere MSV Analytical Laboratories

Sample Collected By 3. Sample Quantity 4.

2 Liters

Sample Description/condition 5. **Date of Sample Receipt** 

Good/Satisfactory 18.03.2023

7. **Analysis Starting Date** 

6.

20.03.2023

**Analysis Completion date** 8.

23.03.2023

Sample tested As Received

S.No	Parameters	Protocol	Unit	Result	Standards as per IS - 2296
	-	Physical paramete	ers		
1	Taste	IS: 3025(part-7)	11-	Agreeable	Agreeable
2	Color	IS: 3025(part-4)		<5	10
3	Odor	IS: 3025(part-5)	-(1)	Un objectionable	Un objectionable
4	рН	IS: 3025(part-11)		8.14	6.5-8.5
5	Conductivity	IS-3025 (part 14)	μs/cm	760	
111-201	- Sanday	Chemical paramet	ers		
6	Total Dissolved Solids	IS: 3025(part-16)	mg/l	468	500
7	Calcium as Ca	IS: 3025(part-40)	/ mg/l	42.4	80.10
8	Total Hardness as CaCO <sub>3</sub>	IS: 3025(part-21)	mg/l	192.8	300
9	Magnesium as Mg	IS: 3025(part-46)	mg/l	22.1	24.28
10	Oil &Grease	IS: 3025(part-39)	mg/l	Nil	
11	Mineral Oil	APHA 23 <sup>rd</sup> EDITION - 5520 C	mg/l	Nil	0.01
12	Sulphate as SO <sub>4</sub>	IS: 3025(part-24)	mg/l	29.2	400
13	Chloride as Cl	IS: 3025(part-32)	mg/l	99.9	250
14	Nitrate as NO <sub>3</sub>	IS: 3025(part-34)	mg/l	0.90	20
15	Iron as Fe	IS: 3025(part-53)	mg/l	0.004	0.3
16	Fluoride as F	IS: 3025(part-60)	mg/l	0.44	1.50
17	Bio-chemical Oxygen Demand (3 days at 27°C), Max	IS 3025 (Part 44): 1993	mg/l	Nil	2
18	Dissolved Oxygen	IS 3025 (Part 38): 1993	mg/l	8.0	Min 6
19	Free CO2	LAB SOP	mg/l	Nil	12.72
20	Free Ammonia	LAB SOP	mg/l	Nil	

**INFERENCE** 

IS - 2296 Standards, BDL - Below Detectable/Limit

Report Status: - The above parameters are within limits.

Verified by

\*\*End of the

Authorized Signature

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/W/F/13/00

### **ANALYSIS REPORT OF WATER QUALITY**

Test Report No: MSVAL/2023/5160

Report Issued Date: 30.03.2023

1. Name of the Industry

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

2. Name of the sample

Surface water – Water body near Narayadevarakere

3. Sample Collected By

MSV Analytical Laboratories

4. Sample Quantity

2 Liters

5. Sample Description/condition

Good/Satisfactory 18.03.2023

6. Date of Sample Receipt7. Analysis Starting Date

20.03.2023

8. Analysis Completion date

23.03.2023

9. Sample tested As Received

S.No	Parameters	Protocol	Unit	Result	Standards as per IS - 2296
		Chemical parameter	S		150
21	Manganese as Mn	APHA 23 rd EDITION -3111 B	mg/l	0.010	0.5
22	Zinc as Zn	IS: 3025(part-49)	mg/l	0.016	15
23	Boron as B	APHA 23 rd EDITION -4500 B	mg/l	Nil	
24	Barium as Ba	APHA 23 rd EDITION -3500 Ba	mg/l	0.002	1.0
25	Silver as Ag	APHA 23 rd EDITION -3500 Ag	mg/l	< 0.001	0.05
26	Arsenic as As	APHA 23 rdEDITION -3112 B	mg/l	< 0.002	0.05
27	Mercury as Hg	APHA 23rd EDITION -3112 B	mg/l	< 0.001	0.001
28	Lead as Pb	APHA 23 rd EDITION -3111 B	mg/l	< 0.002	0.1
29	Cadmium as Cd	APHA 23 rd EDITION -3111 B	mg/l	< 0.001	0.01
30	Chromium as Cr	APHA 23 rd EDITION -3111 B	mg/l	< 0.002	0.05
31	Selenium as Se	APHA 23 rd EDITION -3500 B	mg/l	< 0.001	0.01
32	Cyanide as CN	APHA 23 rd EDITION -4500 D	mg/l	Nil	0.05
33	Phenols	IS: 3025(part-43)	mg/l	Nil	0.002
34	Anionic Detergents as MBAS	IS: 13428-2005	mg/l	<0.1	0.2
-35	Percent Sodium	LAB SOP	%	22.2	
36	Sodium Absorption Ratio	LAB SOP	mg/l	11.8	

**INFERENCE** 

IS - 2296 Standards, BDL - Below Detectable Limit Report Status: - The above parameters are within limits.

Verified by

\*\*End of the Report\*\*

Authorized Signature

Note: 1. The results listed only to the tested samples & applicable parameters,

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.



(Certified by ISO-14001-2015.ISO 22000-2018, ISO 45001-2018.ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 9945456764, 08392-255169

Email: labmsy@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/A/F/18/03

Report Issued Date: 30.03.2023

### ANALYSIS REPORT FOR WATER IN MICROBIOLOGY

Test Report No: MSVAL/2023/5160

1. Name of the Industry

2. Sample Type

3. Sample Collected By

4. Sample Quantity

5. Sample description/condition

6. Date of sample Receipt 7. Analysis Starting Date

8. Analysis Completion Date

9. Sample tested as Received

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Surface water - Water body near Narayadevarakere

MSV Analytical Laboratories, Bellary.

250 ml (Sterilized Bottle)

: Good/satisfactory

: 18.03.2023

: 20.03.2023

23.03.2023

#### RESULTS

Parameters	Protocol	Unit	Result	Standards as per IS – 2296
Total Coliform	IS 1622:1981	MPN/100 ml	18	50

IS - 2296 Standards, BDL - Below Detectable Limit **INFERENCE** Report Status: - The above parameters are within limits.

Verified by

00)

Note: 1. The results listed only to the tested samples & applicable parameters,

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>3.</sup> This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only. not done by us uplace otherwise specified 6. The tasts and/or calibrations marked with an are not accredited by NARI



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/W/F/13/00

#### ANALYSIS REPORT OF WATER QUALITY

Test Report No: MSVAL/2023/5161

Report Issued Date: 30.03.2023 M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka. Surface water - Pond Water Ayyanahalli

Name of the sample 2. MSV Analytical Laboratories Sample Collected By 3.

Sample Quantity 2 Liters 4.

Sample Description/condition Good/Satisfactory 5.

**Date of Sample Receipt** 18.03.2023 6. 7. **Analysis Starting Date** 20.03.2023 Analysis Completion date 23.03.2023 8.

Sample tested As Received 9.

Name of the Industry

S.No	Parameters	Protocol	Unit	Result	Standards as per IS - 2296
		Physical paramete	ers		
1	Taste	IS: 3025(part-7)		Agreeable	Agreeable
2	Color	IS: 3025(part-4)	<i>y</i>	<5	10
3	Odor	IS : 3025(part-5)	VA!	Un objectionable	Un objectionable
4	рН	IS: 3025(part-11)		8.04	6.5-8.5
5	Conductivity	IS-3025 (part 14)	μs/cm	648	
	11	Chemical paramet	ers		
6	Total Dissolved Solids	IS: 3025(part-16)	mg/l	424	500
7	Calcium as Ca	IS: 3025(part-40)	mg/l	32.0	80.10
8	Total Hardness as CaCO <sub>3</sub>	IS: 3025(part-21)	mg/l	160.4	300
9	Magnesium as Mg	IS: 3025(part-46)	mg/l	19.5	24.28
10	Oil &Grease	IS: 3025(part-39)	mg/l	Nil	
11	Mineral Oil	APHA 23 <sup>rd</sup> EDITION - 5520 C	mg/l	Nil	0.01
12	Sulphate as SO <sub>4</sub>	IS: 3025(part-24)	mg/l	17.2	400
13	Chloride as Cl	IS: 3025(part-32)	mg/l	134.9	250
14	Nitrate as NO <sub>3</sub>	IS: 3025(part-34)	mg/l	1.30	20
15	Iron as Fe	IS: 3025(part-53)	mg/l	0.003	0.3
16	Fluoride as F	IS: 3025(part-60)	mg/l	0.38	1.50
17	Bio-chemical Oxygen Demand (3 days at 27°C), Max	IS 3025 (Part 44): 1993	mg/l	Nil	2
18	Dissolved Oxygen	IS 3025 (Part 38): 1993	mg/l	8.0	Min 6
19	Free CO2	LAB SOP	mg/l	Nil	
20	Free Ammonia	LAB SOP	mg/l	Nil	

INFERENCE

IS - 2296 Standards, BDL - Below Detectable Limit

Report Status: - The above parameters are within limits.

Verified by

Note: 1. The results listed only to the tested samples & applicable parameters,

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.

<sup>2.</sup> Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

<sup>4.</sup> Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellary2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellary.com

MSVAL/W/F/13/00

### **ANALYSIS REPORT OF WATER QUALITY**

Test Report No: MSVAL/2023/5161

Report Issued Date: 30.03.2023

1. Name of the Industry

M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka. Surface water – Pond Water Ayyanahalli

2. Name of the sample

MSV Analytical Laboratories

3. Sample Collected By4. Sample Quantity

2 Liters

5. Sample Description/condition

Good/Satisfactory

6. Date of Sample Receipt

18.03.2023

7. Analysis Starting Date

20.03.2023

8. Analysis Completion date

23.03.2023

9. Sample tested As Received

S.No	Parameters	Protocol	Unit	Result	Standards as per IS - 2296		
	Chemical parameters						
21	Manganese as Mn	APHA 23 rd EDITION -3111 B	mg/l	0.010	0.5		
22	Zinc as Zn	IS: 3025(part-49)	mg/l	0.012	15		
23	Boron as B	APHA 23 rd EDITION -4500 B	mg/l	Nil			
24	Barium as Ba	APHA 23 rd EDITION -3500 Ba	mg/l	0.002	1.0		
25	Silver as Ag	APHA 23 rd EDITION -3500 Ag	mg/l	< 0.001	0.05		
26	Arsenic as As	APHA 23 rdEDITION -3112 B	mg/l	< 0.002	0.05		
27	Mercury as Hg	APHA 23rd EDITION -3112 B	mg/l	< 0.001	0.001		
28	Lead as Pb	APHA 23 rd EDITION -3111 B	mg/l	< 0.002	0.1		
29	Cadmium as Cd	APHA 23 rd EDITION -3111 B	mg/l	< 0.001	0.01		
30	Chromium as Cr	APHA 23 rd EDITION -3111 B	mg/l	< 0.002	0.05		
31	Selenium as Se	APHA 23 rd EDITION -3500 B	mg/l	< 0.001	0.01		
32	Cyanide as CN	APHA 23 rd EDITION -4500 D	mg/l	Nil	0.05		
33	Phenols	IS: 3025(part-43)	mg/l	Nil	0.002		
34	Anionic Detergents as MBAS	IS: 13428-2005	mg/l	<0.1	0.2		
35	Percent Sodium	LAB SOP	%	20.8			
36	Sodium Absorption Ratio	LAB SOP	mg/l	10.8			

INFERENCE

IS - 2296 Standards, BDL - Below Detectable Limit Report Status: - The above parameters are within limits.

Verified by

\*\*End of th

Authorized Signature

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

 $4. Total\ liability\ of\ our\ laboratory\ is\ limited\ to\ the\ invoice\ amount. Any\ dispute\ arising\ out\ of\ this\ report\ is\ subject\ to\ Bellary\ Jurisdiction\ only.$ 

5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.

25)



(Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 9945456764, 08392-255169

Email: labmsv@gmail.com, msvalbellarv2018@gmail.com, msv.lab01@gmail.com Web ID: www.msvalbellarv.com

MSVAL/A/F/18/03

#### ANALYSIS REPORT FOR WATER IN MICROBIOLOGY

Test Report No: MSVAL/2023/5161

Report Issued Date: 30.03.2023

1. Name of the Industry

: M/s. The Sandur Manganese & Iron Ores Ltd.

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka.

Sample Type

Surface water - Pond Water Ayyanahalli

3. Sample Collected By 4. Sample Quantity

MSV Analytical Laboratories, Bellary.

250 ml (Sterilized Bottle) Good/satisfactory

5. Sample description/condition 6. Date of sample Receipt

18.03.2023

7. Analysis Starting Date

20.03.2023

8. Analysis Completion Date

23.03.2023

9. Sample tested as Received

RESULTS

Parameters	Protocol	Unit	Result	Standards as per IS – 2296
Total Coliform	IS 1622:1981	MPN/100 ml	24	50

	the state of the s	
INFERENCE	IS - 2296 Standards, BDL - Below Detectable Limit	
	Report Status: - The above parameters are within limits.	

Verified by

Note: 1. The results listed only to the tested samples & applicable parameters,

2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.

4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.