

Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,

E-mail:msvalbellary2018@gmail.com, labmsv@gmail.com, Website:www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016222F

Report Issued Date: 09-08-2022

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** 

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample 4.

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt 5. **Analysis Starting Date** 

05-08-2022

**Analysis Completion Date** 

09-08-2022

	8. Sample Tested as R		Shift	wise resu	lts	Units	Result in Avg.	Tolerance
S.No	Parameter	Protocols	1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	58.4	56.3	54.4	μg / m³	56.4	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	28.5	27.2	25.4	μg / m³	27.0	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	9.6	8.9	7.6	$\mu g / m^3$	8.7	80
4	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	16.6	15.2	14.1	μg / m³	15.3	80
-	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	9.8	8.6	7.8	$\mu g / m^3$	8.7	100
5 6	Lead	IS-5182(Part22) - 2004	0.032	0.028	0.022	μg / m³	0.0	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.40	0.38	0.32	mg/m³	0.4	2
 8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.30	1.22	1.20	ng/m³	1.2	20

INFERENCE

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



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

<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 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/

Report Issued Date: 09-08-2022

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 location

**Smiore Colony** 

Sample Collected By

MSV Analytical Laboratories, Bellary. Sample collected with RDS APM460 and FDS GTI-131

Particulars of the sample

04-08-2022

Date of Sample Receipt **Analysis Starting Date** 

05-08-2022 09-08-2022

**Analysis Completion Date** 

Sample Tested as Received

C No	S.No Parameter	Protocols	Shift wise results			Units	Result in	Tolerance limits
3.110	rarameter	Trottocolo	1	2	3		Avg.	IIIIIG
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m <sup>3</sup>	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	< 0.01	ng / m³	<0.01	6

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





<sup>1.</sup> 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,

E-mail:msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com



MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016225F

Report Issued Date: 09-08-2022

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 location

Kallahalli Village

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt **Analysis Starting Date** 

04-08-2022 05-08-2022 ÷

**Analysis Completion Date** 

09-08-2022

		eceived Protocols	Shift	Shift wise results			Result in Avg.	Tolerance limits
S.No	Parameter	FIOLOCOIS	1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	56.4	55.0	54.2	μg / m³	55.2	100
2	Particulate Matter or	LAB SOP MSVAL/SOP/A/005	18.5	17.2	16.5	μg / m <sup>3</sup>	17.4	60
3	PM <sub>2.5</sub> μg/m <sup>3</sup> Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	9.9	9.0	7.9	$\mu g / m^3$	8.9	80
4	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	14.6	13.7	12.7	μg / m³	13.7	80
	NO <sub>x</sub>	IS 5182(part-9)1974	11.4	10.6	8.3	μg / m³	10.1	100
5 6	Ozone as O <sub>3</sub>	IS-5182(Part22) - 2004	0.030	0.008	0.020	μg / m³	0.0	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.38	0.32	0.28	mg/m³	0.3	2
8	CO 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	1.32	1.28	ng/m³	1.3	20

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



Authorized Signature

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 I 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.



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/

Report Issued Date: 09-08-2022

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 location

Kallahalli Village

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131 04-08-2022

**Analysis Starting Date** 

05-08-2022

**Analysis Completion Date** 

Sample Tested as Received

09-08-2022

S No	S.No Parameter	Protocols	Shift wise results		results Units		Result in	Tolerance limits
3.140	T di dinotor		1	2	3		Avg.	mmo
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m <sup>3</sup>	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

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



<sup>1.</sup> 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03 ·

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016223F

Report Issued Date: 09-08-2022

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 location 2.

Vysanakere Village

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample **Date of Sample Receipt** 

04-08-2022

**Analysis Starting Date Analysis Completion Date**  05-08-2022 09-08-2022

	8. Sample Tested as R	Protocols	Shift wise results			Units	Result in Avg.	Toleranc e limits
S.No	Parameter	Trotocoss	1	2	3		#00000000000	
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	51.6	50.0	48.3	μg / m³	50.0	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	18.3	17.1	15.5	μg / m³	17.0	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	10.5	8.2	7.6	μg / m³	8.8	80
4	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	13.5	12.8	11.5	μg / m³	12.6	80
	[resp. 5/4470	IS 5182(part-9)1974	9.5	9.2	9.0	μg / m³	9.2	100
5	Ozone as O <sub>3</sub>					, ,	0.0	1
6	Lead	IS-5182(Part22) - 2004	0.030	0.025	0.021	μg / m <sup>3</sup>	277.535.	-
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.358	0.32	0.30	mg/m³	0.3	2
 8	CO Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.0.1	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.28	1.25	1.22	ng/m³	1.3	20

INFERENCE

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



Cl. 2 Authorized Signature

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



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/

Report Issued Date: 09-08-2022

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 Sample Receipt6. Analysis Starting Date

: 04-08-2022 : 05-08-2022

7. Analysis Completion Date

: 03-08-2022

B. Sample Tested as Received

S.No	Parameter	Protocols		ift wise re	sults	Units	Result in	Tolerance limits
3.140	larameter	- K (X)	1	2	3		Avg.	IIIIIG
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

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





Lautherized Signature

<sup>1.</sup> 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 1month 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016224F

Report Issued Date: 09-08-2022

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.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sample Receipt **Analysis Starting Date** 

04-08-2022 05-08-2022

**Analysis Completion Date** 

09-08-2022

		Protocols	Shi	ft wise resu	ılts	Units	Result in Avg.	Tolerance limits
S.No	Parameter	Protocois	1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	55.8	54.0	53.4	μg / m³	54.4	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	18.5	17.4	16.0	μg / m³	17.3	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	8.9	8.0	7.3	μg / m³	8.1	80
4	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	16.8	15.3	14.7	μg / m³	15.6	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	10.5	9.8	9.2	μg / m³	9.8	100
6	Lead	IS-5182(Part22) - 2004	0.028	0.022	0.020	μg / m³	0.0	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.38	0.34	0.31	mg/m³	0.3	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	1.25	1.24	ng/m³	1.3	20

INFERENCE

As per NAAQS Standards

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



Author zed Signature

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

2. Water samples will destroyed after 10days, Filter papers & Thimbies 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 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/

Report Issued Date: 09-08-2022

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.

Particulars of the sample
 Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131

6. Analysis Starting Date

04-08-2022 05-08-2022

7. Analysis Completion Date

09-08-2022

8. Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in Avg.	Tolerance limits
SiNO	rarameter	. 100000	1	2	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

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





<sup>1.</sup> 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 1month from the date of test certificate issue. 3. This report is not to be reproduced wholly or in part 8 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016445F

Report Issued Date:13.08.2022

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** 

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt 5.

09.08.2022

**Analysis Starting Date** 6. **Analysis Completion Date**  10.08.2022 13.08.2022

Sample Tested as Received

		Protocols	Shif	Shift wise results Units		Units	Result in Avg.	Tolerance limits
S.No	Parameter	Protocols	1	2	3		m Avg.	
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	60.1	60.5	61.2	$\mu g / m^3$	60.6	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	22.4	22.8	23.2	$\mu g / m^3$	22.8	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	9.4	9.8	10.2	μg / m³	9.8	80
4	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	18.8	19.4	20.3	$\mu g / m^3$	19.5	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	9.2	9.4	9.6	μg / m³	9.4	100_
6	Lead	IS-5182(Part22) - 2004	0.0349	0.0348	0.0347	μg / m³	0.03	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.42	0.44	0.40	mg/m³	0.42	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	1.10	1.11	1.12	ng/m³	1.1	20

INFERENCE

As per NAAQS Standards

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



Authorized Signature

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

2. Water samples will destroyed after 10days, Filter papers & Thimbies 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 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8263

Report Issued Date: 13.08.2022

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** 

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131 09.08.2022

**Analysis Starting Date** 

10.08.2022

**Analysis Completion Date** 

: 13.08.2022

Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in Avg. <0.01	Tolerance limits
3.NU	rarameter	Trococolo	1	2	3		Avg.	mints
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng / m³	<0.01	6

INFERENCE

As per NAAQS Standards

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



<sup>1.</sup> 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and Accredited by NABL (Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com



MSVAL/A/F/16/03 .

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016446F

Report Issued Date: 13.08.2022

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 location 2. Sample Collected By

Kallahalli Village

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sample Receipt **Analysis Starting Date Analysis Completion Date** 

09.08.2022 10.08.2022

: 13.08.2022

		Protocols	Shift	wise resu	lts	Units	Result in Avg.	Tolerance limits
S.No	Parameter	Flotocois	1	2	3			
1	Particulate Matter	IS-5182(Part-23) - 2006	58.2	58.5	59.0	μg / m³	58.6	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	20.2	20.6	21.2	μg / m³	20.7	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	10.2	10.5	10.8	$\mu g / m^3$	10.5	80
4	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	14.6	15.2	15.8	μg / m³	15.2	80
	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	0.30	0.32	0.28	μg / m³	0.3	100
5 6	Lead	IS-5182(Part22) - 2004	0.032	0.031	0.030	μg / m³	0.0	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.30	0.32	0.28	mg/m³	0.3	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	1.10	1.11	1.12	ng/m³	1.1	20

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

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



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8264

Report Issued Date: 13.08.2022

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 location

Kallahalli Village

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample **Date of Sample Receipt** 

Sample collected with RDS APM460 and FDS GTI-131 09.08.2022

**Analysis Starting Date** 

10.08.2022

**Analysis Completion Date** 

13.08.2022

Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results		Shift wise results		Shift wise results		Shift wise results		Result in	Tolerance limits
5.NO	Parameter	Trotocols	1	2	3		Avg.	IIIIICS				
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5				
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1				
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6				

INFERENCE

As per NAAQS Standards

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

<sup>1.</sup> 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016447F

Report Issued Date: 13.08,2022

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

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample 4.

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sample Receipt** 5. **Analysis Starting Date** 

09.08.2022 10.08.2022

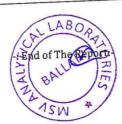
**Analysis Completion Date** 7.

13,08,2022

	8. Sample Tested as R	Protocols	Shift	wise resul	ts	Units	Result in Avg.	Tolerance limits
S.No	Parameter	Protocois	1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	50.8	51.2	51.8	μg / m³	51.3	100
2	Particulate Matter or	LAB SOP MSVAL/SOP/A/005	17.4	17.8	18.2	μg / m³	17.8	60
	PM <sub>2.5</sub> μg/m <sup>3</sup> Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	7.8	8.1	8.8	μg / m³	8.2	80
4	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	12.8	13.4	14.0	$\mu g / m^3$	13.4	80
	NOx	IS 5182(part-9)1974	7.3	7.2	7.4	μg / m³	7.3	100
5	Ozone as O <sub>3</sub>				0.002	μg / m³	0.1	1
6	Lead	IS-5182(Part22) - 2004	0.090	0.091	0.092	рв / ш		-
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.24	0.26	0.22	mg/m³	0.2	2
8	CO Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.0.1	<0.01	μg / m <sup>3</sup>	<0.01	400
 	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.20	1.21	1.22	ng/m³	1.2	20

INFERENCE

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



Authorized Signature

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 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.



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8265

Report Issued Date: 13.08.2022

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 location

Vysanakere Village

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt

09.08.2022 10.08.2022

**Analysis Starting Date Analysis Completion Date** 

13.08.2022

Sample Tested as Received

S.No	Parameter	Protocols	Sh	Shift wise results			Result in	Tolerance limits
2.NO	Farameter	Trotocois	1	2	3		Avg.	mints
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

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



<sup>1.</sup> 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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): 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016448F

Report Issued Date: 13.08.2022

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 location

**Gunda Village** 

3. Sample Collected By MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt

09.08.2022 : 10.08.2022

**Analysis Starting Date** 7 **Analysis Completion Date** 

Sample Tested as Received

: 13.08.2022

S.No	Parameter	Protocols	Sh	Shift wise results		Units	Result	Tolerance
			1	2	3		in Avg.	limits
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) – 2006	53.6	54.0	54.5	μg / m³	54.0	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	15.8	16.1	16.6	μg / m³	16.2	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	7.8	8.2	7.8	μg / m³	7.9	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	11.6	11.5	12.2	μg / m³	11.8	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	8.0	8.2	8.4	μg / m³	8.2	100
6	Lead	IS-5182(Part22) - 2004	0.019	0.020	0.021	μg / m³	0.0	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.22	0.24	0.20	mg/m³	0.2	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	1.54	1.25	1.26	ng/m³	1.4	20

INFERENCE

As per NAAQS Standards

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



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 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8266

Report Issued Date: 13.08.2022

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

Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample5. Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131 09.08.2022

6. Analysis Starting Date7. Analysis Completion Date

: 10.08.2022 : 13.08.2022

8. Sample Tested as Received

C No.	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in	Tolerance limits
S.No	Parameter	Trotocois	1	2	3		Avg.	Illints
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m <sup>3</sup>	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	< 0.01	< 0.01	ng/m³	<0.01	6

INFERENCE

As per NAAQS Standards

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

Verified by

End of The Reports

<sup>1.</sup> The results listed only to the tested samples & applicable parameters, 2. Water samples will destroyed after 10days, Filter papers & Thimbies will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1month 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016606F

Report Issued Date: 18.08.2022

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** 

MSV Analytical Laboratories, Bellary.

Sample Collected By Particulars of the sample Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt

12.08.2022

**Analysis Starting Date Analysis Completion Date**  13.08.2022

18.08.2022

	8. Sample Tested as R		Shift	wise resul	its	Units	Result in Avg.	Tolerance limits
S.No	Parameter	Protocols	1	2	3			1 5/100
1	Particulate Matter	IS-5182(Part-23) - 2006	62.1	62.5	63.2	μg / m³	62.6	100
2	PM <sub>10</sub> μg/m <sup>3</sup> Particulate Matter or	LAB SOP MSVAL/SOP/A/005	20.1	20.4	20.8	$\mu g / m^3$	20.4	60
3	PM <sub>2.5</sub> μg/m <sup>3</sup> Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	16.0	16.7	17.0	μg / m³	16.6	80
	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	9.8	10.4	11.2	$\mu g / m^3$	10.5	80
4	NOx	IS 5182(part-9)1974	18.3	18.5	18.7	μg / m <sup>3</sup>	18.5	100
5	Ozone as O <sub>3</sub>	IS-5182(Part22) -	0.033	0.034	0.035	μg / m³	0.0	1
6	Lead	2004 LAB SOP	0.22	0.24	0.20	mg/m³	0.2	2
7	Carbon Monoxide as	MSVAL/SOP/A/007 LAB SOP	<0.01	<0.01	<0.01	μg / m³	<0.01	400
8	Ammonia as NH <sub>3</sub>	MSVAL/SOP/A/006			0.035	ng/m³	0.1	20
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	0.033	0.34	0.035	ng / m		

INFERENCE

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



Authorized Signature

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

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 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8352

Report Issued Date: 18.08.2022

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** 

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sample Receipt 6. Analysis Starting Date

12.08.2022 13.08.2022

**Analysis Completion Date** 

: 18.08.2022

	8. Sample Tested a		Units	Result in Avg.	Tolerance limits			
S.No	Parameter	Flotocols	1	2	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene	CPCB Procedure	<0.01	<0.01	<0.01	ng / m³	<0.01	1
12	(BaP) Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

**INFERENCE** 

As per NAAQS Standards

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



<sup>1.</sup> 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 o issue of lest 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 invoic 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016607F

Report Issued Date: 18.08.2022

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

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt

12.08.2022

6. Analysis Starting Date

13.08.2022 18.08.2022

-	8. Sample Tested as R	1	Shift wise results			Units	Result in Avg.	Tolerance limits
S.No	Parameter	Protocols	1	2	3			
	Particulate Matter	IS-5182(Part-23) - 2006	56.0	56.5	57.5	μg / m³	56.7	100
1	PM <sub>10</sub> μg/m <sup>3</sup>	LAB SOP	100	19.6	20.1	$\mu g / m^3$	19.6	60
2	Particulate Matter or	MSVAL/SOP/A/005	19.0	19.0			250.00	80
4	PM <sub>2.5</sub> μg/m <sup>3</sup>	IS-5182(Part-2) -	7.8	8.4	8.8	$\mu g / m^3$	8.3	80
3	Sulphur Dioxide as SO <sub>x</sub>	2001						90
	Oxides of Nitrogen as	IS-5182(Part-6) -	17.6	18.2	18.8	μg / m³	18.2	100
4	NO <sub>x</sub>	2006		0.2	8.4	μg / m³	8.3	100
	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	8.3	8.2	0.1		0.0	1
5	Ozone as es	IS-5182(Part22) -	0.033	0.034	0.035	μg / m <sup>3</sup>	0.0	•
6	Lead	2004				1 3	0.2	2
	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.22	0.24	0.20	mg/m³	0.2	4
7	CO				2.61	μg / m³	<0.01	400
	A maria as NHa	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / III		
8	Ammonia as NH <sub>3</sub>		-				1.3	20
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.30	1.31	1.32	ng / m³	1.5	

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





Authorized Signature

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 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed 3months from the date of issue of test certificate unless otherwise specified. 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. and done by us unless otherwise specified, 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8353

Report Issued Date: 18.08.2022

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 location

Kallahalli Village

Sample Collected By

MSV Analytical Laboratories, Bellary. Sample collected with RDS APM460 and FDS GTI-131

Particulars of the sample 12.08.2022 5. Date of Sample Receipt 13.08.2022 6. Analysis Starting Date

7. Analysis Completion Date

18.08.2022

		Protocols	Shi	ift wise re	sults	Units	Result in Avg.	Tolerance limits
S.No	Parameter	Protocois	1	2	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
1,000,000	Benzo (α) Pyrene	CPCB Procedure	<0.01	<0.01	<0.01	ng / m³	<0.01	1
11	(BaP) Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

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

<sup>1.</sup> The results listed only to the tested samples & applicable parameters, 2. Water samples will destroyed after 10days, Filter papers & Thimbies 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 particular test certificate unless otherwise specified. 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016608F

Report Issued Date: 18.08.2022

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

18.08.2022

LAB SOP

MSVAL/SOP/A/006

LAB SOP

MSVAL/SOP/A/008

2. Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt Analysis Starting Date 6.

12.08.2022 13.08.2022

Analysis Completion Date Sample Tested as Received

7. Toleranc Result Shift wise results e limits Units in Avg. **Protocols** 3 Parameter 2 1 S.No 100 54.6  $\mu g / m^3$ 55.2 IS-5182(Part-23) -54.6 54.1 Particulate Matter 2006 60 19.6 1  $PM_{10} \mu g/m^3$  $\mu g / m^3$ 20.2 19.5 LAB SOP 19.2 Particulate Matter or MSVAL/SOP/A/005 80 9.4 2  $PM_{2.5} \mu g/m^3$  $\mu g / m^3$ 10.1 IS-5182(Part-2) -9.4 8.8 Sulphur Dioxide as SO<sub>x</sub> 2001 3 80 12.7  $\mu g / m^3$ 17.6 IS-5182(Part-6) -10.0 10.4 Oxides of Nitrogen as 2006 100 0.2 4  $\mu g / m^3$ 0.20 0.24 0.22 IS 5182(part-9)1974 1 0.0 Ozone as O3  $\mu g / m^3$ 0.036 5 0.035 IS-5182(Part22) -0.034 2004 2 Lead 10.4 6 mg/m³ 10.6 10.4 LAB SOP 10.2 Carbon Monoxide as MSVAL/SOP/A/007 400 < 0.01  $\mu g / m^3$ 7 < 0.01 < 0.0.1

< 0.01

1.30

INFERENCE

Ammonia as NH3

Nickel as Ni

8

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

1.31



Authorized Signature

1.3

ng/m3

1.32

20

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

<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 the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used as evidence in the court of law & should not be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the law & should not be used in any advertising media without our special permission in writing the law & should not be used in any advertising media without our special permission in writing the law & should not be used as each of the law & should not be used as each of the law & should not be used as each of the law & should not be used as each of the law & should not be used

<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. unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8354

Report Issued Date: 18.08.2022

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.

Sample Collected By 3. Particulars of the sample Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt 6. Analysis Starting Date

12.08.2022 13.08.2022

7. Analysis Completion Date

18.08.2022

	8. Sample Tested as	Protocols	Shi	ft wise re	sults	Units	Result in Avg.	Tolerance limits
S.No	Parameter	Protocols	1	2	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
	Benzo (α) Pyrene	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
11	(BaP)			<0.01	<0.01	ng/m³	<0.01	6
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	20.01	116 / 111		

INFERENCE

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



<sup>1.</sup> The results listed only to the tested samples & applicable parameters, 2. Water samples will destroyed after 10days, Filter papers & Thimbies will be destroyed 3months from the date 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016609F

Report Issued Date: 18.08.2022

Name of the Project

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

(Metal & Ferro Alloys Plant)

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

Gunda Village

Name of the location Sample Collected By MSV Analytical Laboratories, Bellary.

3. Particulars of the sample Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt 5. Analysis Starting Date 6.

12.08.2022 13.08.2022

18.08.2022

	8. Sample Tested as R Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
S.No			1	2	3			
5	Particulate Matter	IS-5182(Part-23) - 2006	53.0	53.5	54.1	$\mu g / m^3$	53.5	100
1	PM <sub>10</sub> μg/m <sup>3</sup>	LAB SOP	18.1	18.6	19.5	$\mu g / m^3$	18.7	60
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	MSVAL/SOP/A/005	10.1	ATT - CA MARIA		- /3	8.1	80
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	7.7	8.1	8.4	μg / m³		
ა 		IS-5182(Part-6) -	15.8	16.4	17.0	μg / m³	16.4	80
4	Oxides of Nitrogen as NO <sub>x</sub>	2006	10.0		0.4	μg / m <sup>3</sup>	8.2	100
	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	8.1	8.2	8.4	μg/III		
5	Uzone as Us	IS-5182(Part22) -	0.039	0.038	0.040	μg / m <sup>3</sup>	0.0	1
6	Lead	2004		0.40	0.36	mg/m³	0.4	2
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.38	0.40			6	400
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m <sup>3</sup>		
8	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.38	1.39	1.40	ng/m³	1.4	20

INFERENCE

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





Authorized Signature

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. 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.



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8355

Report Issued Date: 18.08.2022

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

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sample Receipt** 

12.08.2022

**Analysis Starting Date Analysis Completion Date**  13.08.2022 18.08.2022

S.No Parameter	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in Avg.	Tolerance limits
	1 arameter		1	2	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	< 0.01	ng/m³	<0.01	6

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





<sup>1.</sup> 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail:msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016820F

Report Issued Date: 20.08.2022

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** 

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sample Receipt** 

16.08.2022

**Analysis Starting Date Analysis Completion Date** 

17.08.2022 : 20.08.2022

		Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
S.No	Parameter	Protocois	1	2	3		III AVS.	
1	Particulate Matter PM <sub>10</sub> μg/m <sup>3</sup>	IS-5182(Part-23) - 2006	60.7	58.2	63.0	μg / m³	60.6	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	22.3	19.3	18.8	μg / m³	20.1	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) – 2001	11.2	9.8	8.9	μg / m³	10.0	80
4	Oxides of Nitrogen as	IS-5182(Part-6) – 2006	16.7	15.3	14.5	μg / m³	15.5	80
	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	13.4	12.6	14.2	μg/m³	13.4	100
5 6	Lead	IS-5182(Part22) - 2004	0.024	0.037	0.019	μg / m³	0.0	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.36	0.24	0.18	mg/m³	0.3	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	1.36	1.48	1.06	ng / m³	1.3	20

INFERENCE

As per NAAQS Standards

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

Authorized Signature

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



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8518

Report Issued Date: 20.08.2022

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 location

**Smiore Colony** 

3. Sample Collected By MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt

16.08.2022

6. Analysis Starting Date

17.08.2022 : 20.08.2022

**Analysis Completion Date** 

8. Sample Tested as Received

S.No Parameter	Parameter	Protocols	SI	Shift wise results			Result in	Tolerance
		1	2	3		Avg.	limits	
10	Benzene as C₅H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

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





<sup>1.</sup> 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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): 08392-255169, E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com



MSVAL/A/F/16/03

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

Test Report No: TC720722000016821F

Report Issued Date: 20.08.2022

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

Date of Sample Receipt
 Analysis Starting Date

16.08.2022

7. Analysis Completion Date

17.08.2022 20.08.2022

8. Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise resu	ults	Units	Result in	Tolerance
•		( Y )	1	2	3		Avg.	limits
1	Particulate Matter PM <sub>10</sub> μg/m <sup>3</sup>	IS-5182(Part-23) — 2006	55.6	58.7	59.7	μg / m³	58.0	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	19.3	17.8	20.4	μg / m³	19.2	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	11.6	10.6	10.4	μg / m³	10.9	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) – 2006	15.8	14.8	14.5	μg/m³	15.0	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	14.2	13.8	16.0	μg/m³	14.7	100
6	Lead	IS-5182(Part22) – 2004	0.019	0.037	0.028	μg/m³	0.0	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.14	0.36	0.22	mg/m³	0.2	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	1.24	1.37	1.09	ng/m³	1.2	20

INFERENCE

As per NAAQS Standards

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





Authorized Signature

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

Water samples will destroyed after 10days, Filter papers & Thimbies 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 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-583103. Contact No: Mob: 94498 03895, (0): 08392-255169,
E-mail: msv.lab01@gmail.com, Labmsv@gmail.com, Website: www.msvalbellary.com

-: End of The Report:-

MSVAL/A/F/16/03

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

Test Report No: MSVAL/2022/8519

Report Issued Date: 20.08.2022

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

Arsenic as As

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

: Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sample Receipt 6. Analysis Starting Date 16.08.2022 17.08.2022

7. Analysis Completion Date

20.08.2022

CPCB Procedure

. Sample Tested as Received

S.No	5.No Parameter	Protocols	Shift wise results		Shift wise results		Result in	Tolerance
	L L		1	2	3	Units	Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) – 2006	<0.01	<0.01	<0.01	μg / m <sup>3</sup>	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1

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

< 0.01

< 0.01

< 0.01

ng/m³

Verified by

End of the periods

Lauthorized Signature 1. 2

< 0.01

6

<sup>1.</sup> 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 1month 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,

E-mail:msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com



MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016822F

Report Issued Date: 20.08.2022

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

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample 4.

16.08.2022

**Date of Sample Receipt Analysis Starting Date** 

17.08.2022 20.08.2022

**Analysis Completion Date** 

	8. Sample Tested as Rec	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
S.No	Parameter	Protocols	1	2	3			
1	Particulate Matter PM <sub>10</sub> μg/m <sup>3</sup>	IS-5182(Part-23) — 2006	62.5	59.4	58.2	μg / m³	60.0	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	20.0	19.2	21.1	μg / m³	20.1	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	10.6	9.2	11.0	μg / m <sup>3</sup>	10.3	80
4	Oxides of Nitrogen as	IS-5182(Part-6) – 2006	16.8	15.2	17.1	μg / m³	16.4	80
7	NO <sub>x</sub>		12.6	16.8	14.2	$\mu g / m^3$	14.5	100
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	12.0	10.0			0.0	1
6	Lead	IS-5182(Part22) - 2004	0.039	0.042	0.018	μg / m <sup>3</sup>	0.0	
- 223	Carbon Monoxide as CO	LAB SOP	0.28	0.16	0.14	mg/m³	0.2	2
7 8	Ammonia as NH <sub>3</sub>	MSVAL/SOP/A/007 LAB SOP MSVAL/SOP/A/006	<0.01	<0.0.1	<0.01	μg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.14	1.27	1.39	ng / m <sup>3</sup>	1.3	20

INFERENCE

As per NAAQS Standards

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



Authorized Signature

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 I 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.



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-583103. Contact No: Mob: 94498 03895, (0): 08392-255169,

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

-: End of The Report:-

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/8520

Report Issued Date: 20.08.2022

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

Date of Sample Receipt
 Analysis Starting Date

16.08.2022 17.08.2022

7. Analysis Completion Date

20.08.2022

8. Sample Tested as Received

S.No	Parameter	Protocols	Sh	nift wise re	sults	Units	Result in	Tolerance limits
3.110	Parameter	110101013	1	2	. 3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) – 2006	<0.01	<0.01	<0.01	μg / m <sup>3</sup>	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

INFERENCE

As per NAAQS Standards

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

Verified by

End of The Report

<sup>1.</sup> 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 1month 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169, E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com



MSVAL/A/F/16/03

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

Test Report No: TC720722000016823F

Report Issued Date: 20.08.2022

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** 

3 Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

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

16.08.2022 : 17.08.2022

**Analysis Completion Date** 

: 20.08.2022

8.	Sample	Tested	as	Received

S.No	Parameter	Protocols	SI	nift wise res	ults	Units	Result in	Tolerance
	``		1	2	3	-	Avg.	limits
1	Particulate Matter PM <sub>10</sub> μg/m <sup>3</sup>	IS-5182(Part-23) — 2006	56.7	54.7	55.6	μg/m³	55.7	100
2	Particulate Matter or PM <sub>2.5</sub> μg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	21.8	19.3	18.5	μg/m³	19.9	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) — 2001	9.5	7.8	10.2	μg/m³	9.2	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) – 2006	16.4	14.5	14.2	μg/m³	15.0	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	16.4	15.2	16.0	μg / m³	15.9	100
6	Lead	IS-5182(Part22) - 2004	0.019	0.026	0.032	μg/m³	0.0	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	16.4	15.2	16.0	mg/m³	15.9	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	1.22	1.84	ng/m³	1.5	20

INFERENCE

As per NAAQS Standards

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





ote: 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. 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>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 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-583103. Contact No: Mob: 94498 03895, (0): 08392-255169, E-mail: msv.lab01@gmail.com, Labmsv@gmail.com, Website: www.msvalbellary.com

-: End of The Report:-

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/8521

Report Issued Date: 20.08.2022

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** 

3. Sample Collected By 4.

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt **Analysis Starting Date** 

16.08.2022 17.08.2022

**Analysis Completion Date** 

20.08.2022

Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
			1	2	3	Jimes	Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) – 2006	<0.01	<0.01	<0.01	μg/m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

INFERENCE

As per NAAQS Standards

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

<sup>1.</sup> 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 ssue 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 \*



Recognition by MoEF under Environment (Protection) Act, 1986 and 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): 08392-255169,



E-mail:msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016943F

Report Issued Date: 24.08.2022

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** 

Sample Collected By 3. Particulars of the sample MSV Analytical Laboratories, Bellary. Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt 5.

19.08.2022 20.08.2022

**Analysis Starting Date Analysis Completion Date** 

24.08.2022

Sample Tested as Received

S.No	Parameter	Protocols	Shift	wise resu	lts	Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m³	IS-5182(Part-23) - 2006	62.1	63.5	64.3	μg / m³	63.3	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	19.0	20.1	21.3	μg / m³	20.1	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	15.3	15.7	16.3	μg / m³	15.8	80
4	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	10.4	10.5	11.2	$\mu g / m^3$	10.7	80
	NOx	IS 5182(part-9)1974	18.3	18.5	18.7	$\mu g / m^3$	18.5	100
5	Ozone as O <sub>3</sub>				NAME OF THE PERSON OF THE PERS		0.0	1
6	Lead	IS-5182(Part22) - 2004	0.034	0.033	0.032	μg / m <sup>3</sup>		
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.22	0.24	0.20	mg/m³	0.2	2
8	CO Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.32	1.31	1.30	ng / m³	1.3	20

INFERENCE

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



Authorized Signature

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



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8580

Report Issued Date: 24.08.2022

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** 

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample 5. Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131 19.08.2022

**Analysis Starting Date Analysis Completion Date** 

20.08.2022

Sample Tested as Received

24.08.2022

	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
S.No			1	2	3		1476.	
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	(BaP) Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng / 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

<sup>1.</sup> 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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 &  $2^{nd}$  Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03 ·

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016944F

Report Issued Date: 24.08.2022

Name of the Project

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

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

Kallahalli Village

Name of the location

MSV Analytical Laboratories, Bellary.

Sample collected with RDS APM460 and FDS GTI-131 Sample Collected By Particulars of the sample

19.08.2022 Date of Sample Receipt 20.08.2022 **Analysis Starting Date** 24.08.2022 **Analysis Completion Date** 

8. Sample Tested as R Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
		1	2	3			10000000
Particulate Matter	IS-5182(Part-23) - 2006	56.2	57.1	58.3	μg / m³	57.2	100
Particulate Matter or	LAB SOP MSVAL/SOP/A/005	19.2	20.3	21.5	μg / m <sup>3</sup>	20.3	60
	IS-5182(Part-2) -	7.8	8.8	9.8	μg / m <sup>3</sup>	8.8	80
Oxides of Nitrogen as	IS-5182(Part-6) -	17.3	17.6	18.2	μg / m³	17.7	80
		10.2	10.2	10.4	$\mu g / m^3$	10.3	100
Ozone as O <sub>3</sub>			2.022	0.031	μσ / m³	0.0	1
Lead	IS-5182(Part22) = 2004	0.033	0.032	0.031	P6 / ***		
Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.22	0.24	0.20	mg/m³	0.2	2
	LAB SOP	<0.01	<0.01	<0.01	μg / m³	<0.01	400
	LAB SOP	1.30	1.31	1.29	ng / m³	1.3	20
]	Particulate Matter PM <sub>10</sub> µg/m³  Particulate Matter or PM <sub>2.5</sub> µg/m³  Sulphur Dioxide as SO <sub>x</sub> Oxides of Nitrogen as NO <sub>x</sub> Ozone as O <sub>3</sub>	Particulate Matter PM <sub>10</sub> µg/m³  Particulate Matter or PM <sub>2.5</sub> µg/m³  Sulphur Dioxide as SO <sub>x</sub> Oxides of Nitrogen as NO <sub>x</sub> Ozone as O <sub>3</sub> Lab SOP  Sulphur Dioxide as SO <sub>x</sub> IS-5182(Part-2) - 2001  IS-5182(Part-6) - 2006  IS 5182(part-9)1974  IS-5182(Part-2) - 2004  Lab SOP  MSVAL/SOP/A/007  LAB SOP  MSVAL/SOP/A/006  LAB SOP  MSVAL/SOP/A/006  LAB SOP	Particulate Matter PM <sub>10</sub> μg/m³ Particulate Matter or PM <sub>2.5</sub> μg/m³ Particulate Matter or PM <sub>2.5</sub> μg/m³ Sulphur Dioxide as SO <sub>x</sub> Oxides of Nitrogen as NO <sub>x</sub> Ozone as O <sub>3</sub> IS-5182(Part-2) – 2001  IS-5182(Part-6) – 2006  IS-5182(Part-6) – 2006  IS-5182(Part-9)1974  IS-5182(Part-9	Particulate Matter PM <sub>10</sub> μg/m³ IS-5182(Part-23) - 2006	Particulate Matter PM <sub>10</sub> μg/m³	Particulate Matter PM <sub>10</sub> μg/m³	Particulate Matter PM <sub>10</sub> μg/m³ IS-5182(Part-23) - 2006

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





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 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.



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8581

Report Issued Date: 24.08.2022

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

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sample Receipt** 

19.08.2022

6. Analysis Starting Date **Analysis Completion Date**  20.08.2022 24.08.2022

Sample Tested as Received

	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
S.No			1	2	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene	CPCB Procedure	<0.01	<0.01	<0.01	ng / m <sup>3</sup>	<0.01	1
12	(BaP) Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

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

<sup>1.</sup> 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 8 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169, E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com



MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016945F

Report Issued Date: 24.08.2022

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

MSV Analytical Laboratories, Bellary.

Sample Collected By 3. Particulars of the sample

**Date of Sample Receipt** 

19.08.2022 20.08.2022

**Analysis Starting Date** 6. **Analysis Completion Date** 

24.08.2022

	8. Sample Tested as R	0.03	Shift	wise resul	ts	Units	Result in Avg.	Tolerance limits
S.No	Parameter	Protocols	1	2	3			
1	Particulate Matter	IS-5182(Part-23) - 2006	53.0	54.2	55.2	μg / m³	54.1	100
	PM <sub>10</sub> μg/m <sup>3</sup> Particulate Matter or	LAB SOP	38.2	39.1	40.2	$\mu g / m^3$	39.2	60
2	PM <sub>2.5</sub> μg/m <sup>3</sup>	MSVAL/SOP/A/005 IS-5182(Part-2) -		8.8	9.8	μg / m <sup>3</sup>	9.0	80
3	Sulphur Dioxide as SO <sub>x</sub>	2001	8.4	0.0			P. V. S. S. V.	00
	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	14.2	14.6	15.8	μg / m³	14.9	80
4	NOx	7.77	7.1	7.2	7.4	μg / m <sup>3</sup>	7.2	100
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	7.1		800.0	1 3	0.0	1
	load	IS-5182(Part22) - 2004	0.023	0.022	0.021	μg / m <sup>3</sup>	0.0	
6	Lead	LAB SOP	0.36	0.38	0.34	mg/m³	0.4	2
7	Carbon Monoxide as	MSVAL/SOP/A/007		-0.01	<0.01	μg / m³	<0.01	400
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.0.1	10.01		4.0	20
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.29	1.30	1.28	ng/m³	1.3	20

INFERENCE

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



Authorized Signature

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



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8582

Report Issued Date: 24.08.2022

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 location 2.

Vysanakere Village

Sample Collected By 3.

MSV Analytical Laboratories, Bellary. Sample collected with RDS APM460 and FDS GTI-131

Particulars of the sample 5. Date of Sample Receipt

**Analysis Starting Date** 

19.08.2022 20.08.2022

**Analysis Completion Date** 7.

24.08.2022

Sample Tested as Received

		Protocols	Shi	ift wise re	sults	Units	Result in Avg.	Tolerance limits
S.No	Parameter	Frotocols	1	2	3		11.6	
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene	CPCB Procedure	<0.01	<0.01	<0.01	ng / m³	<0.01	1
12	(BaP) Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng / m³	<0.01	6

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





<sup>1.</sup> 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 o 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000016946F

Report Issued Date: 24.08.2022

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.

Particulars of the sample Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131 19.08.2022

5. **Analysis Starting Date Analysis Completion Date** 7.

20.08.2022 24.08.2022

		Protocols	Shi	ft wise resu	lts	Units	Result in Avg.	Tolerance limits
S.No	Parameter	Totocois	1	2	3			17-50-00
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	57.1	58.2	59.6	μg / m³	58.3	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	21.2	22.5	23.6	μg / m³	22.4	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	9.4	9.8	10.8	μg / m³	10.0	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	18.2	18.8	19.4	μg / m³	18.8	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	8.6	8.8	9.2	μg / m³	8.9	100
6	Lead	IS-5182(Part22) - 2004	0.044	0.043	0.042	μg / m³	0.0	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.30	0.32	0.28	mg/m³	0.3	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	1.31	1.30	ng/m³	1.3	20

INFERENCE

As per NAAQS Standards

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

End of The

Authorized Signature

2. Water samples will destroyed after 10days, Filter papers & Thimbies will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be Note: 1. The results listed only to the tested samples & applicable parameters, destroyed after 1 month from the date of lest 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 14001-2004, OHSAS18001-2007, ISO 9001-2008)

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2st Floor) Sanganakallu Road, KEB Circle, Bellary-583103. Contact No : Mob : 9449803895, (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/2022/8583

Report Issued Date: 24.08.2022

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 Sample Receipt

19.08.2022

6. Analysis Starting Date7. Analysis Completion Date

: 20.08.2022 : 24.08.2022

8. Sample Tested as Received

S.No	Parameter	Protocols	Sh	Shift wise results			Shift wise results		Shift wise results		Shift wise results		Shift wise results		Shift wise results Units		Units	Result in	Tolerance
			1	2	3		Avg.	mints											
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5											
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1											
12	Arsenic as As	CPCB Procedure	<0.01	< 0.01	< 0.01	ng/m³	<0.01	6											

INFERENCE

As per NAAQS Standards

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





<sup>1.</sup> 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 1month 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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): 08392-255169,

E-mail:msvalbellary2018@gmail.com, labmsv@gmail.com, Website:www.msvalbellary.com



MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000017351F

Report Issued Date: 30.08.2022

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 location

**Smiore Colony** 

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sample Receipt Analysis Starting Date Analysis Completion Date** 

25.08.2022 26.08.2022 30.08.2022

Sample Tested as Received

C.V.	Paramatar	Protocols	Shif	t wise resi	ılts	Units	Result	Tolerance limits
S.No	Parameter	Protocols	1	2	3		in Avg.	limits
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	59.5	61.2	63.7	μg / m³	61.5	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	23.6	24.4	25.5	$\mu g / m^3$	24.5	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	11.1	12.5	13.2	$\mu g / m^3$	12.3	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	14.2	18.4	20.2	μg / m³	17.6	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	11.2	11.8	12.1	μg / m³	11.7	100
6	Lead	IS-5182(Part22) - 2004	0.073	0.081	0.077	μg / m³	0.1	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.48	0.46	0.38	mg/m³	0.4	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	1.35	1.38	ng/m³	1.4	20

INFERENCE

As per NAAQS Standards

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



Authorized Signature

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

2. Water samples will destroyed after 10days, Filter papers & Thimbies 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 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/

Report Issued Date: 30.08.2022

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 location

**Smiore Colony** 

MSV Analytical Laboratories, Bellary.

Sample Collected By Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt

25.08.2022 26.08.2022

**Analysis Starting Date Analysis Completion Date** 

30.08.2022

nle Tested as Received

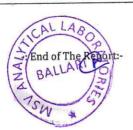
S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in	Tolerance limits
3.110	Parameter	Trotocols	1	1 2 3		Avg.		
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	< 0.01	ng / m³	<0.01	6

INFERENCE

As per NAAQS Standards

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





<sup>1.</sup> 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169, E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com



MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000017352F

Report Issued Date: 30.08.20222

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

**Date of Sample Receipt Analysis Starting Date** 

25.08.2022 26.08.2022 : 30.08.2022 :

**Analysis Completion Date** Sample Tested as Received

Tolerance Shift wise results Result Units Protocols Parameter in Avg. limits S.No 3 1 Particulate Matter IS-5182(Part-23) -53.8 100  $\mu g / m^3$ 54.8 56.2 50.4 1 2006 PM<sub>10</sub> μg/m<sup>3</sup> LAB SOP 60 Particulate Matter or 185 19.8  $\mu g / m^3$ 18.6 17.2 2 MSVAL/SOP/A/005 PM<sub>2.5</sub> μg/m<sup>3</sup> IS-5182(Part-2) -80 8.6 7.7 9.7  $\mu g / m^3$ 8.4 Sulphur Dioxide as SOx 3 2001 IS-5182(Part-6) -16.0 80 Oxides of Nitrogen as 16.6  $\mu g / m^3$ 13.6 17.8 4 2006  $NO_x$ 9.2 9.1 8.8  $\mu g / m^3$ 100 9.7 IS 5182(part-9)1974 Ozone as O<sub>3</sub> 5 IS-5182(Part22) -0.0 1 0.030 0.033  $\mu g / m^3$ 0.027 6 Lead 2004 LAB SOP Carbon Monoxide as 2 0.3 0.34 0.26  $mg/m^3$ 0.28 7 MSVAL/SOP/A/007 CO LAB SOP 400 < 0.01 < 0.01 < 0.01  $\mu g / m^3$ < 0.01 Ammonia as NH<sub>3</sub> 8 MSVAL/SOP/A/006 LAB SOP 20 1.2 1.21 ng / m<sup>3</sup> 1.18 1.11 Nickel as Ni MSVAL/SOP/A/008

INFERENCE

As per NAAQS Standards

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



Authorized Signature

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

2. Water samples will destroyed after 10days, Fifter papers & Thimbies 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 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/

Report Issued Date: 30.08.2022

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
5. Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sample Receipt 6. Analysis Starting Date 25.08.2022 26.08.2022

7. Analysis Completion Date

30.08.2022

3. Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in	Tolerance limits
Sino	rarameter	( )	1	2	3		Avg.	
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	< 0.01	< 0.01	ng/m³	< 0.01	6

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

Verified by



<sup>1.</sup> 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03 .

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000017353F

Report Issued Date: 30.08.2022 M/s. The Sandur Manganese & Iron Ores Ltd.

Name of the Project (Metal & Ferro Alloys Plant)

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

Vysanakere Village Name of the location

MSV Analytical Laboratories, Bellary.

Sample collected with RDS APM460 and FDS GTI-131 Sample Collected By Particulars of the sample

25.08.2022 **Date of Sample Receipt** 26.08.2022 **Analysis Starting Date** 30.08.2022 **Analysis Completion Date** 

	8. Sample Tested as R		Shift	wise resul	ts	Units	Result in Avg.	Toleranc e limits
S.No	Parameter	Protocols	1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	55.5	57.7	58.8	μg / m³	57.3	100
2	Particulate Matter or	LAB SOP MSVAL/SOP/A/005	21.7	22.5	24.7	μg / m³	23.0	60
3	PM <sub>2.5</sub> μg/m <sup>3</sup> Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	9.7	10.2	11.1	μg / m³	10.3	80
4	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	12.4	14.2	17.2	μg / m³	14.6	80
	NOx	IS 5182(part-9)1974	8.7	8.3	7.9	μg / m <sup>3</sup>	8.3	100
5 6	Ozone as O <sub>3</sub>	IS-5182(Part22) - 2004	0.028	0.031	0.035	μg / m³	0.0	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.32	0.34	0.30	mg/m³	0.3	2
8	CO Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.0.1	<0.01	/μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.33	1.36	1.38	ng / m³	1.4	20

INFERENCE

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



Authorized Signature

2. Water samples will destroyed after 10days, Filter papers & Thimbies will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will 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 writin 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 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/

Report Issued Date: 30.08.2022

1. 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

Vysanakere Village

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sample Receipt** 6. Analysis Starting Date

25.08.2022 26.08.2022

7. Analysis Completion Date

30.08.2022

8. Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in	Tolerance limits
		L K IY	<b>(1)</b> /	2	3		Avg.	
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

INFERENCE

As per NAAQS Standards

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



<sup>1.</sup> 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000017354F

Report Issued Date: 30.08.2022

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 location

Gunda Village

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131 25.08.2022

5. **Analysis Starting Date**  26.08.2022

**Analysis Completion Date** 

30.08.2022

	8. Sample Tested as R	Protocols	Shif	ft wise resu	lts	Units	Result in Avg.	Tolerance limits
S.No	Parameter	Protocois	1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	53.7	56.8	58.4	μg / m³	56.3	100
2	Particulate Matter or	LAB SOP MSVAL/SOP/A/005	19.6	22.1	23.5	μg / m³	21.7	60
3	PM <sub>2.5</sub> μg/m <sup>3</sup> Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2)	10.4	12.1	23.5	μg / m³	15.3	80
4	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	15.4	19.6	17.2	μg / m³	17.4	80
	NO <sub>x</sub> Ozone as O <sub>3</sub>	IS 5182(part-9)1974	7.8	6.7	7.3	μg / m <sup>3</sup>	7.3	100
5 6	Lead	IS-5182(Part22) - 2004	0.023	0.025	0.029	μg / m³	0.0	1
	Carbon Monoxide as	LAB SOP	0.25	0.27	0.31	mg/m³	0.3	2
7	CO Ammonia as NH <sub>3</sub>	MSVAL/SOP/A/007 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	1.45	1.48	1.51	ng/m³	1.5	20

INFERENCE

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





Authorized Signature

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 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.



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-583103. Contact No : Mob : 9449803895, (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/2022/

Report Issued Date: 30.08.2022

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

Date of Sample Receipt
 Analysis Starting Date

25.08.2022

7. Analysis Completion Date

26.08.2022 30.08.2022

. Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
		L R IY	1	2	3		Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng / m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

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





<sup>1.</sup> 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000017609F

Report Issued Date: 03.09.2022

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** 

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sample Receipt Analysis Starting Date** 

29.08.2022 30.08.2022

03.09.2022

	8. Sample Tested as R Parameter		Shift wise results			Units	Result in Avg.	Tolerance limits
S.No		Protocols	1	2	3			
1	Particulate Matter	IS-5182(Part-23) - 2006	56.4	55.7	54.6	$\mu g / m^3$	55.6	100
	PM <sub>10</sub> μg/m <sup>3</sup> Particulate Matter or	LAB SOP MSVAL/SOP/A/005	29.2	28.4	27.4	$\mu g / m^3$	28.3	60
2	PM <sub>2.5</sub> μg/m <sup>3</sup>	IS-5182(Part-2) -	9.8	8.8	8.1	$\mu g / m^3$	8.9	80
3	Sulphur Dioxide as SO <sub>x</sub>	2001 IS-5182(Part-6) -	16.1	15.2	14.2	μg / m³	15.2	80
4	Oxides of Nitrogen as NO <sub>x</sub>	2006	. \_	8.7	8.2	μg / m³	8.7	100
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	9.2		0.023	μg / m <sup>3</sup>	0.0	1
6	Lead	IS-5182(Part22) - 2004	0.032	0.028			0.3	2
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.38	0.34	0.31	mg/m³	-	400
	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m <sup>3</sup>	<0.01	
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.28	1.25	1.20	ng/m³	1.2	20

INFERENCE

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



Authorized Signature

1. The results instead only to the tested samples of 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 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. Seconding is not done by usualess otherwise specified. 5. The total and locality and the point is not done by usualess otherwise specified.



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8874

Report Issued Date: 03.09.2022

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 Sample Receipt

29.08.2022

6. Analysis Starting Date 7. Analysis Completion Date 30.08.2022

8. Sample Tested as Received

: 03.09.2022

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in Avg.	Tolerance limits
5			1	2	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	< 0.01	<0.01	ng/m³	<0.01	6

INFERENCE

As per NAAQS Standards

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





<sup>1.</sup> The results listed only to the tested samples & applicable parameters, 2. Water samples will destroyed after 10days, Filler 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and Accredited by NABL (Certified by ISO-14001-2015,ISO 22000-2018, ISO 45001-2018,ISO 9001-2015)



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com



MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000017610F

Report Issued Date: 03.09.2022

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.

Kallahalli Village

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample 4. Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131

**Analysis Starting Date Analysis Completion Date** 

29.08.2022 30.08.2022

03.09.2022

	8. Sample Tested as R	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
S.No	Parameter	FIGURE	1	2	3	Ţ		100
1	Particulate Matter PM <sub>10</sub> µg/m³	IS-5182(Part-23) - 2006	56.2	55.7	54.2	μg / m³	55.4	100
2	Particulate Matter or	LAB SOP MSVAL/SOP/A/005	19.4	18.5	17.6	μg / m³	18.5	60
3	PM <sub>2.5</sub> μg/m <sup>3</sup> Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	10.3	9.5	8.8	μg / m³	9.5	80
	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	17.5	16.4	15.8	μg / m³	16.6	80
4	NOx	**************************************	10.7	10.4	10.1	μg / m <sup>3</sup>	10.4	100
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	- T		0.015	ug / m³	0.0	1
6	Lead	IS-5182(Part22) - 2004	0.024	0.020	0.015	μg / m <sup>3</sup>	0.0	
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.35	0.32	0.27	mg/m³	0.3	2
- 000	CO	LAB SOP	<0.01	<0.01	<0.01	μg / m³	<0.01	400
8	Ammonia as NH <sub>3</sub>	MSVAL/SOP/A/006					12	20
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.21	1.17	1.13	ng/m³	1.2	20

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



Authorized Signature

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 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. Samoling 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 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8875

Report Issued Date: 03.09.2022

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

5. Date of Sample Receipt

29.08.2022

6. Analysis Starting Date

30.08.2022

**Analysis Completion Date** Sample Tested as Received 03.09.2022

S.No	8. Sample Tested as	Protocols	Shi	ift wise re	sults	Units	Result in	Tolerance limits
		Protocois	1	2	3		Myg.	
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	(BaP) Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

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





<sup>1.</sup> 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 8 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000017611F

Report Issued Date: 03.09.2022

Name of the Project

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

(Metal & Ferro Alloys Plant)

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

Vysanakere Village

MSV Analytical Laboratories, Bellary. Name of the location

Sample collected with RDS APM460 and FDS GTI-131 2. Sample Collected By Particulars of the sample

29.08.2022 **Date of Sample Receipt** 30.08.2022 **Analysis Starting Date** 03.09.2022 **Analysis Completion Date** 

- 1	8. Sample Tested as R		Shift wise results			Units	Result in Avg.	Toleranc e limits
S.No	Parameter	Protocols	1	2	3			
	Particulate Matter	IS-5182(Part-23) - 2006	51.8	50.4	49.7	μg / m³	50.6	100
1	PM <sub>10</sub> μg/m <sup>3</sup>	LAB SOP	124	12.5	11.2	μg / m³	12.4	60
2	Particulate Matter or	MSVAL/SOP/A/005	13.4	12.0			7.0	80
	PM <sub>2.5</sub> μg/m <sup>3</sup> Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	7.5	5.9	7.5	μg / m³	7.0	-
3				44.5	10.3	μg / m³	11.3	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	12.2	11.5	10.5		67	100
<b>a</b>		IS 5182(part-9)1974	7.2	6.7	6.2	$\mu g / m^3$	6.7	100
5	Ozone as O <sub>3</sub>			2.000	0,015	μg / m³	0.0	1
	Lead	IS-5182(Part22) - 2004	0.024	0.020	0.013	P87		-
6		LAB SOP	0.24	0.20	0.16	$mg/m^3$	0.2	2
7	Carbon Monoxide as	MSVAL/SOP/A/007			<0.01	μg / m³	<0.01	400
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.0.1	<0.01	-		20
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.28	1.25	1.21	ng/m³	1.2	20

	Agnor NA AOS Standards	pove measured parameter are within the limits
INFERENCE	Report Status :- The analyzed values for ab	ove measured pur
	1.01	Long h





Authorized Signature

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 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 the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising media without our special permission in writing the court of law & should not be used in any advertising the law advertising the law advertise in the court of law & should not be used in any advertising the law advertise in the court of law & should not be used in any advertise in the law adv

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



(Certified by ISO 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8876

Report Issued Date: 03.09.2022

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

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sample Receipt** 5. **Analysis Starting Date** 

29.08.2022 30.08.2022

**Analysis Completion Date** 

03.09.2022

S.No		Protocols	Shi	ift wise re	sults	Units	Result in Avg.	Tolerance limits
	Parameter		1	2	3			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene	CPCB Procedure	<0.01	<0.01	<0.01	ng / m <sup>3</sup>	<0.01	1
12	(BaP) Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

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





<sup>1.</sup> 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 o 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY Report Issued Date: 03.09.2022

Test Report No: TC720722000017612F

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

 Name of the Project (Metal & Ferro Alloys Plant)

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

**Gunda Village** Name of the location

2. MSV Analytical Laboratories, Bellary. Sample Collected By

Sample collected with RDS APM460 and FDS GTI-131 Particulars of the sample 4.

29.08.2022 **Date of Sample Receipt** 5. 30.08.2022 **Analysis Starting Date** 6. 03.09.2022 **Analysis Completion Date** 7.

		Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
S.No	Parameter	Frotocols	1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	55.2	54.7	53.2	μg / m³	54.4	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	19.5	18.4	17.1	μg / m³	18.3	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	8.4	7.5	6.8	μg / m³	7.6	80
4	Oxides of Nitrogen as	IS-5182(Part-6) – 2006	17.2	16.3	15.1	μg / m³	16.2	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	8.4	8.0	7.4	μg / m³	7.9	100
6	Lead	IS-5182(Part22) - 2004	0.042	0.037	0.032	μg / m³	0.0	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.30	0.25	0.21	mg/m³	0.3	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	1.27	1.24	ng/m³	1.3	20

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



Authorized Signature

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

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 14001-2004, OHSAS18001-2007, ISO 9001-2008)

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, Bellary-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/2022/8877

Report Issued Date: 03.09.2022

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 Sample Receipt 6. Analysis Starting Date 29.08.2022 30.08.2022

6. Analysis Starting Date
7. Analysis Completion Date

: 03.09.2022

. Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
3.110			1	2	3	100	Avg.	minus
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

INFERENCE

As per NAAQS Standards

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

Verified by



<sup>1.</sup> 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 1month 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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): 08392-255169, E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com



MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000017663F

Report Issued Date: 03.09.2022

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
5. Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131

6. Analysis Starting Date
7. Analysis Completion Date

: 30.08.2022 : 01.09.2022 : 03.09.2022

8. Sample Tested as Received

Shift wise results Result Tolerance Units S.No Parameter Protocols limits in Avg. 2 3 1 IS-5182(Part-23) -Particulate Matter 60.5 100 61.2 59.6 60.8  $\mu g / m^3$ 1 PM<sub>10</sub> μg/m<sup>3</sup> 2006 LAB SOP Particulate Matter or 60 20.7  $\mu g / m^3$ 22.0 21.8 23.4 2 MSVAL/SOP/A/005  $PM_{25} \mu g/m^3$ IS-5182(Part-2) -11.0 80 11.6 Sulphur Dioxide as SOx 12.6 8.7  $\mu g / m^3$ 3 2001 Oxides of Nitrogen as IS-5182(Part-6) -80 14.7 17.7 16.5  $\mu g / m^3$ 16.3 4 2006 NO. IS 5182(part-9)1974 12.2 12.9 15.2 13.4 Ozone as 03 100  $\mu g / m^3$ 5 IS-5182(Part22) -0.12 0.13  $\mu g / m^3$ 0.1 1 0.11 6 Lead 2004 LAB SOP Carbon Monoxide as 0.28 0.34 0.4 2  $mg/m^3$ 0.46 7 MSVAL/SOP/A/007 LAB SOP < 0.01 400 < 0.01 < 0.01 < 0.01  $\mu g / m^3$ 8 Ammonia as NH3 MSVAL/SOP/A/006 LAB SOP 20 09 0.69 0.96 1.04  $ng/m^3$ 9 Nickel as Ni MSVAL/SOP/A/008

INFERENCE

As per NAAQS Standards

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

Verified by



Authorized Signature

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.



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

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/2022/8895

Report Issued Date: 03.09.2022

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 Sample Receipt6. Analysis Starting Date

30.08.2022

7. Analysis Completion Date

: 01.09.2022 : 03.09.2022

8. Sample Tested as Received

S.No	Parameter	Protocols Shift		ft wise results		Units	Result in	Tolerance
			1	2	3	1 5	Avg.	limits
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

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





Authorized Signature

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

Water samples will destroyed after 10days, Filter papers & Thimbies 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000015972F

Report Issued Date: 03.09.2022

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 5. Date of Sample Receipt Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt
 Analysis Starting Date
 Analysis Completion Date

30.08.2022 01.09.2022

8. Sample Tested as Received

: 03.09.2022

S.No	Parameter	Protocols	Shift wise results			Units	Result	Tolerance
2.110	Parameter	Trotocois	1	2	3		in Avg.	limits
1	Particulate Matter PM <sub>10</sub> μg/m <sup>3</sup>	IS-5182(Part-23) – 2006	62.2	58.7	56.9	μg / m³	59.3	100
2	Particulate Matter or PM <sub>2.5</sub> μg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	23.6	21.8	19.6	μg / m³	21.7	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) – 2001	7.8	12.2	10.6	μg / m³	10.2	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	15.8	17.2	18.4	μg / m³	17.1	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	19.4	20.2	21.2	μg / m³	20.3	100
6	Lead	IS-5182(Part22) – 2004	0.02	0.02	0.02	μg / m <sup>3</sup>	0.0	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.29	0.19	0.28	mg/m³	0.3	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	1.38	0.95	1.54	ng / m³	1.3	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are within the 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 lest 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/2022/8896

Report Issued Date: 03.09.2022

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

rion

Kallahalli Village MSV Analytical Laboratories, Bellary.

Sample Collected By
 Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sample Receipt

30.08.2022

6. Analysis Starting Date7. Analysis Completion Date

: 01.09.2022 : 03.09.2022

3. Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance limits
			1	2	3		Avg.	mints
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m <sup>3</sup>	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

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





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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,



E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com

MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000015973F

Report Issued Date: 03.09.2022

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

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample

30.08.2022

**Date of Sample Receipt Analysis Starting Date** 

01.09.2022

**Analysis Completion Date** 7. Sample Tested as Received 03.09.2022

C No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Toleranc e limits
S.No	Parameter	11000000	1	2	3		III Avg.	emmes
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	59.9	64.7	60.4	μg / m³	61.7	100
2	Particulate Matter or PM <sub>2.5</sub> μg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	24.6	18.6	20.4	μg / m³	21.2	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	8.6	11.2	9.6	μg / m³	9.8	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) – 2006	18.2	17.7	17.4	μg / m³	17.8	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	9.8	7.4	12.2	$\mu g / m^3$	9.8	100
6	Lead	IS-5182(Part22) - 2004	0.03	0.04	0.03	$\mu g / m^3$	0.0	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.15	0.37	0.29	mg/m³	0.3	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.0.1	<0.01	μg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.25	1.38	1.60	ng/m³	1.4	20

INFERENCE

As per NAAQS Standards

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





**Authorized Signature** 

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

2. Water samples will destroyed after 10days, Filter papers & Thimbies 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/2022/8897

Report Issued Date: 03.09.2022

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

5. Date of Sample Receipt

30.08.2022

**Analysis Starting Date** 7. **Analysis Completion Date**  01.09.2022 03.09.2022

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) - 2006	<0.01	<0.01	<0.01	μg / m³	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	6

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





**Authorized Signature** 

Keneka

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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169, E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com



MSVAL/A/F/16/03

#### ANALYSIS REPORT OF AMBIENT AIR QUALITY Report Issued Date: 03.09.2022

Test Report No: TC720722000015974F

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

1. Name of the Project (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.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

**Date of Sample Receipt** 5. **Analysis Starting Date** 

30.08.2022 01.09.2022 03.09.2022

**Analysis Completion Date** 

Sample Tested as Received

o N	Donomotor	Protocols	Shift wise results				Result in Avg.	Tolerance limits
S.No	Parameter	Titteti	1	2	3		m.r.g.	***************************************
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	55.8	57.4	62.2	μg / m³	58.5	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	17.6	18.8	18.8	μg / m³	18.4	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	11.2	8.8	11.6	μg / m³	10.5	80
4	Oxides of Nitrogen as	IS-5182(Part-6) - 2006	14.2	13.6	12.4	μg / m³	13.4	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	5.6	8.8	9.2	μg / m <sup>3</sup>	7.9	100
6	Lead	IS-5182(Part22) - 2004	0.03	0.02	0.02	μg / m³	0.0	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.19	0.21	0.16	mg/m³	0.2	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.37	1.38	1.36	ng/m³	0.4	20

INFERENCE

As per NAAQS Standards

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





**Authorized Signature** Lonaled

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/2022/8898

Report Issued Date: 03.09.2022

1. Name of the Project

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

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

Name of the location

Hospet Taluk, Bellary District, Karnataka. Gunda Village

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131 30.08.2022

Date of Sample Receipt **Analysis Starting Date** 7. Analysis Completion Date

01.09.2022 03.09.2022

Sample Tested as Received

S.No	Parameter	Protocols	Protocols Shift wise resul		Shift wise results		Shift wise results				Result in	Tolerance
			1	2	3	Units	Avg.	limits				
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	µg / m³	<0.01	5				
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	-				
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng/m³	<0.01	1				

INFERENCE As per NAAQS Standards

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





Authorized Signature Lemelos

lote: 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

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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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 & 2st Floor)

Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 08392-255169, E-mail:msvalbellary2018@gmail.com, labmsv@gmail.com, Website:www.msvalbellary.com

MSVAL/A/F/18/03

#### ANALYSIS REPORT FOR SOURCE EMMISSION

Test Report No: TC720722000017193F

Report Issued Date: 27.08.2022

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

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

4. Particulars of Sample Collected 5.

Sample collected with VSS - 1

Date of Sample Receipt 6.

23.08.2022

**Analysis Starting Date** 

24.08.2022

7. **Analysis Completion Date**  27.08.2022

Sample Tested as Received

GENERAL DETAILS

Date of Monitoring	Transport Appropriate Control Control
Fuel Used	23.08.2022
Stack Temperature (°C)	42
Velocity (m/s)	6.0
Height (m)	15mtrs AGL
Diameter (m)	0.7
Cross sectional area (m²)	0.38465

RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm³	23.5	50
Sulphur dioxide	IS-11255(Part2) - 1985	mg/Nm³	15.2	800
Nitrogen dioxide	IS-11255(Part7) - 2005	mg/Nm³	12.0	500
Carbon Monoxide as(CO)	IS 13270	%	0.20	Max 1%

INFERENCE	As per GSR 277 (E) Standards. Report Status: The analyzed value for above measured parameter is within the limits.
-----------	--





**Authorized Signature** 

ole: 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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 &  $2^{ml}$  Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail:msvalbellary2018@gmail.com, labmsv@gmail.com, Website:www.msvalbellary.com MSVAL/A/F/18/03

### ANALYSIS REPORT FOR SOURCE EMMISSION

Test Report No: TC720722000017194F

Report Issued Date: 27.08.2022

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 Cutter

3. Sample Collected By

Particulars of Sample Collected

MSV Analytical Laboratories, Bellary. Sample collected with VSS - 1

5. Date of Sample Receipt

23.08.2022

6. **Analysis Starting Date**  24.08.2022

**Analysis Completion Date** 7.

Sample Tested as Received 8.

27.08.2022

GENERAL DETAILS

Date of Monitoring		-
Fuel Used	23.08.2022	
Stack Temperature (°C)	42	
Velocity (m/s)	6.1	
Height (m)	15mtrs AGL	
Diameter (m)	0.7	$\dashv$
Cross sectional area (m²)	0.38465	$\neg$

RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm³	20.5	50
Sulphur dioxide	IS-11255(Part2) - 1985	mg/Nm³	11.2	800
Nitrogen dioxide	IS-11255(Part7) - 2005	mg/Nm³	9.0	500
Carbon Monoxide as(CO)	IS 13270	%	0.18	Max 1%

**INFERENCE** 

As per KSPCB Standards

Report Status :- The analyzed value for above measured parameter is within the limits.

**Authorized Signature** foruka

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

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

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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169,

E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary4999AL/A/F/18/03

### ANALYSIS REPORT FOR SOURCE EMMISSION

Test Report No: TC720722000017195F

Report Issued Date: 27.08.2022

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 - 1

5. Date of Sample Receipt

23.08.2022

**Analysis Starting Date** 6. 7.

24.08.2022

**Analysis Completion Date** 

27.08.2022

Sample Tested as Received

**GENERAL DETAILS** 

Date of Monitoring	23.08.2022
Fuel Used	
Stack Temperature (°C)	39
Velocity (m/s)	6.1
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	24.4	50
Sulphur dioxide	IS-11255(Part2) - 1985	mg/Nm³	14.0	800
Nitrogen dioxide	IS-11255(Part7) - 2005	mg/Nm³	10.5	500
Carbon Monoxide as(CO)	IS 13270	%	0.20	Max 1%

**INFERENCE** 

As per KSPCB Standards

Report Status:- The analyzed value for above measured parameter is

within the limits.



**Authorized Signature** 

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

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

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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392,255169/F/18 E-mail:msvalbellary2018@gmail.com, labmsv@gmail.com, Website:www.msvalbellary.com

#### ANALYSIS REPORT FOR SOURCE EMMISSION

Test Report No: TC720722000017196F

Report Issued Date: 27.08.2022

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

DG Set 750 KVA

Sample Collected By

4. Particulars of Sample Collected MSV Analytical Laboratories, Bellary. Sample collected with VSS - 1

5. Date of Sample Receipt

23.08.2022

6. **Analysis Starting Date** 

24.08.2022

7. **Analysis Completion Date**  27.08.2022

Sample Tested as Received

GENERAL DETAILS

GENERALI	JE I AILS
Date of Monitoring	23.08.2022
Fuel Used	Diesel
Stack Temperature (°C)	96
Velocity (m/s)	7.5
Height (m)	15mtrs AGL
Diameter (m)	0.3
Cross sectional area (m²)	0.07065

RESULTS

Parameters	Protocol	Unit	Result	KSPCB Consent Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm³	28.6	100
Sulphur dioxide	IS-11255(Part2) - 1985	PPM	23.4	50
Nitrogen dioxide	IS-11255(Part7) - 2005	PPM	15.6	50

	As per KSPCB Consent Standards. Report Status: The analyzed value for above measured parameter is within the limits.
--	--





Authorized Signature

ote: 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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 Flagst AL/A/F/18 Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,

E-mail: msvalbellan 2018 Sprail EPO Remse Poseit PROE Privat Sanon msvalbellary.com

Test Report No : TTC720722000017197F Name of the Industry

Report Issued Date: 27.08.2022

TC-7207

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

(Metal & Ferro Allovs 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. Particulars of Sample Collected Sample collected with VSS - 1

Date of Sample Receipt 5. 23.08.2022 6. **Analysis Starting Date** 24.08.2022 7. **Analysis Completion Date** 27.08.2022

Sample Tested as Received 8.

**GENERAL DETAILS** 

Date of Monitoring	
	23.08.2022
Fuel Used	
Stack Temperature (°C)	155
Velocity (m/s)	7.3
Height (m)	60 mtrs AGL
Diameter (m)	3.4
Cross sectional area (m²)	9.0746

RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm³	32.6	50
Sulphur dioxide	IS-11255(Part2) - 1985	mg/Nm³	28.2	800
Nitrogen dioxide	IS-11255(Part7) - 2005	mg/Nm³	50.4	500
Carbon Monoxide as(CO)	IS 13270	%	0.17	Max 1%

INFERENCE	As per GSR 277 (E) Standards. Report Status: The analyzed value for above measured parameter is within the limits.
-----------	--



**Authorized Signature** 

te: 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169, E-mail: msvalbellary2018@gmail.com, labmsv@gmail.com, Website: www.msvalbellary.com



MSVAL/A/F/18/03

#### ANALYSIS REPORT FOR SOURCE EMMISSION

Test Report No: TC720722000017198F

Report Issued Date: 27.08.2022

Name of the Industry

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

(Metal & Ferro Alloys Plant)

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

Stack ID

Ferro Alloy Arc Furnace

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of Sample Collected

Sample collected with VSS - 1

5. Date of Sample Receipt

23.08.2022

6. **Analysis Starting Date** 7. **Analysis Completion Date** 

24.08.2022 27.08.2022

Sample Tested as Received

GENERAL DETAILS

ULIVERAL	DE LAILS
Date of Monitoring	23.08.2022
Fuel Used	17 ) (
Stack Temperature (°C)	89
Velocity (m/s)	9.8
Height (m)	35 mtrs AGL
Diameter (m)	2.5
Cross sectional area (m²)	4.90625

DECIII TO

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm³	34.0	150

**INFERENCE** 

As per GSR 277 (E) Standards.

Report Status:- The analyzed value for above measured parameter is within the limits.



**Authorized Signature** 

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

2. Water samples will destroyed after 10days, Filter papers & Thimbies 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.



Recognition by MoEF under Environment (Protection) Act, 1986 and 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) : 08392-255169, E-mail:msvalbellary2018@gmail.com, labmsv@gmail.com, Website:www.msvalbellary.com



MSVAL/A/F/18/03

#### ANALYSIS REPORT FOR SOURCE EMMISSION

Test Report No: TC720722000017199F

Report Issued Date: 27.08.2022

Name of the Industry

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

(Metal & Ferro Allovs Plant)

Vyasanakere, Hanumanahalli Village, Hospet Taluk, Bellary District, Karnataka. Coke Oven Battery - Passes Through WHRB-2

2. Stack ID

3. Sample Collected By MSV Analytical Laboratories, Bellary. Sample collected with VSS - 1

Particulars of Sample Collected 4.

23.08.2022

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

24.08.2022

7. **Analysis Completion Date** 

27.08.2022

Sample Tested as Received

**GENERAL DETAILS** 

Date of Monitoring	23.08.2022		
Fuel Used			
Stack Temperature (°C)	156		
Velocity (m/s)	7.8		
Height (m)	60 mtrs AGL		
Diameter (m)	3.4		
Cross sectional area (m²)	9.0746		

RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm³	30.6	50
Sulphur dioxide	IS-11255(Part2) - 1985	mg/Nm³	32.4	800
Nitrogen dioxide	IS-11255(Part7) - 2005	mg/Nm³	55.4	500
Carbon Monoxide as(CO)	IS 13270	%	0.16	Max 1%

As per GSR 277 (E) Standards. Report Status: The analyzed value for above measured parameter is **INFERENCE** within the limits.

**Authorized Signature** 

Ronuba

ite: 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.