

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: TC720722000014261F

Report Issued Date:11.07.2022

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 05.07.2022

Date of Sample Receipt
 Analysis Starting Date
 Analysis Completion Date

: 06.07.2022 : 11.07.2022

3. Sample Tested as Received

S.No	Parameter	Protocols	Shi	ft wise res	ults	Units	Result in Avg.	Tolerance limits
			1	2	3	James		
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) - 2006	56.4	58.4	54.0	μg / m³	56.2	100
2	Particulate Matter or PM _{2.5} µg/m ³	LAB SOP MSVAL/SOP/A/005	28.4	29.3	26.2	μg / m³	27.9	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) – 2001	12.06	12.7	9.71	μg / m³	11.4	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) - 2006	16.0	16.3	13.8	μg / m³	15.3	80
5	Ozone as O ₃	IS 5182(part-9)1974	10.3	12.2	08.2	μg / m³	10.2	100
6	Lead	IS-5182(Part22) – 2004	0.03	0.02	0.02	μg / m³	0.02	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.42	0.46	0.38	mg/m³	0.42	2
8	Ammonia as NH ₃	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.26	1.28	1.20	ng/m³	1.24	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,

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.



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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/2022/7168

Report Issued Date: 11.07.2022

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

Date of Sample Receipt
 Analysis Starting Date
 Analysis Completion Date

05.07.2022 06.07.2022

3. Sample Tested as Received

11.07.2022

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
		CHI TO BERTON CONTROL	1	2	3		Avg.	limits
10	Benzene as C ₆ H ₆	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

S End of The Report

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.

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MSVAL/A/F/16/03

ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014263F

Report Issued Date: 11.07.2022

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

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

2. Name of the location :

Kallahalli Village

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

5. Date of Sample Receipt6. Analysis Starting Date

: 05.07.2022 : 06.07.2022

7. Analysis Completion Date

: 11.07.2022

ed as Received

S.No	Parameter	Protocols	Shi	ift wise res	ults	Units	Result in Avg.	Tolerance limits
50			1	2	3			
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) – 2006	55.8	54.0	52.0	μg / m³	53.9	100
2	Particulate Matter or PM _{2.5} µg/m ³	LAB SOP MSVAL/SOP/A/005	18.9	16.4	15.0	μg / m³	16.7	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) - 2001	10.8	9.6	7.9	μg / m³	9.4	80
4	Oxides of Nitrogen as NO_x	IS-5182(Part-6) – 2006	16.9	16.1	14.0	μg / m³	15.6	80
5	Ozone as O ₃	IS 5182(part-9)1974	10.4	11.5	08.0	μg / m³	9.9	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.02	0.01	μg / m³	0.01	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.32	0.35	0.30	mg/m³	0.32	2
8	Ammonia as NH ₃	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.20	1.10	1.08	ng / m³	1.12	20

INFERENCE

As per NAAQS Standards

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

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Verified by

-: End of T

Authorized Signature

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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.

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MSVAL/A/F/16/03

ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7169

Report Issued Date: 11.07.2022

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.

Particulars of the sample
 Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131

6. Analysis Starting Date

: 05.07.2022 : 06.07.2022

7. Analysis Completion Date

11.07.2022

8. Sample Tested as Received

Shift wise results Result in Tolerance S.No Parameter **Protocols** Units Avg. limits 1 3 IS:5182(part 11) -10 Benzene as C₆H₆ < 0.01 < 0.01 < 0.01 $\mu g / m^3$ < 0.01 5 2006 Benzo (α) Pyrene < 0.01 11 **CPCB** Procedure < 0.01 < 0.01 < 0.01 ng/m^3 1 (RaP) 12 Arsenic as As **CPCB** Procedure < 0.01 < 0.01 < 0.01 < 0.01 ng/m^3 6

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





Lewy J. Z.
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.

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MSVAL/A/F/16/03

Report Issued Date: 11.07.2022

ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014262F

: 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 Date of Sample Receipt

1. Name of the Project

05.07.2022

Analysis Starting Date Analysis Completion Date . 06.07.2022 11.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result	Toleranc
			1	2	3	Junes	in Avg.	e limits
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) - 2006	53.4	52.0	50.0	μg / m³	51.8	100
2	Particulate Matter or PM _{2.5} μg/m ³	LAB SOP MSVAL/SOP/A/005	18.4	17.6	16.4	μg / m³	17.4	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) – 2001	10.9	9.6	8.7	μg / m³	9.7	80
4	Oxides of Nitrogen as NO_x	IS-5182(Part-6) – 2006	15.3	14.8	13.7	μg / m³	14.6	80
5	Ozone as O ₃	IS 5182(part-9)1974	9.8	8.4	8.0	μg / m³	8.7	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.01	0.01	μg / m³	0.01	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.26	0.28	0.20	mg/m³	0.24	2
8	Ammonia as NH ₃	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	1.32	1.20	ng/m³	1.26	20

INFERENCE

As per NAAQS Standards

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

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

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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/2022/7170

Report Issued Date: 11.07.2022

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

05.07.2022

7. Analysis Completion Date

06.07.2022 11.07.2022

8. Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
144262-000			1	2	3		Avg.	limits
10	Benzene as C ₆ H ₆	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

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





Authorized Signature

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MSVAL/A/F/16/03

ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014264F

Report Issued Date: 11.07.2022

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

7.

05.07.2022 : 06.07.2022 : 11.07.2022

Analysis Completion Date Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result	Tolerance
			1	2	3	Units	in Avg.	limits
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) - 2006	58.4	56.2	55.0	μg / m³	56.5	100
2	Particulate Matter or PM _{2.5} µg/m ³	LAB SOP MSVAL/SOP/A/005	16.0	15.0	14.0	μg / m³	15.0	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) - 2001	8.1	8.3	7.3	μg / m³	7.9	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) – 2006	13.8	12.8	10.4	μg / m³	12.3	80
5	Ozone as O ₃	IS 5182(part-9)1974	8.6	7.6	6.8	μg / m³	7.6	100
6	Lead	IS-5182(Part22) - 2004	1.32	1.28	1.20	μg / m³	1.26	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.30	0.32	0.28	mg/m³	0.30	2
8	Ammonia as NH ₃	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	0.04	0.04	0.03	ng/m³	0.03	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyze dvalues for above measured parameter are within the limits

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

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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/2022/7171

Report Issued Date: 11.07.2022

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

3. Sample Collected By

Gunda Village

: 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

05.07.2022 06.07.2022

7. Analysis Completion Date

11.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in	Tolerance limits
Dirio	Tarameter	Trotocolo	1	/_2	3	00	Avg.	
10	Benzene as C ₆ H ₆	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





Lauthorized Signature

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MSVAL/A/F/16/03 ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014423F

Report Issued Date:13.07.2022

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 08.07.2022

Analysis Starting Date 7.

: 09.07.2022 13.07.2022 :

Analysis Completion Date Sample Tested as Received

Shift wise results S.No Parameter Result Protocols **Tolerance** Units in Avg. limits 1 2 3 Particulate Matter IS-5182(Part-23) -1 60.1 $PM_{10} \mu g/m^3$ 60.6 61.0 60.5 2006 $\mu g / m^3$ 100 Particulate Matter or LAB SOP 2 22.6 23.1 23.4 $PM_{2.5} \mu g/m^3$ MSVAL/SOP/A/005 $\mu g / m^3$ 23.0 60 IS-5182(Part-2) -3 Sulphur Dioxide as SOx 9.5 10.1 10.5 10.0 $\mu g / m^3$ 2001 80 Oxides of Nitrogen as IS-5182(Part-6) -4 19.0 NO_x 19.6 19.7 $\mu g / m^3$ 19.4 80 2006 Ozone as O₃ 5 IS 5182(part-9)1974 9.2 9.4 9.6 9.4 $\mu g / m^3$ 100 IS-5182(Part22) -6 Lead 0.03 0.03 0.03 $\mu g / m^3$ 0.03 2004 1 Carbon Monoxide as LAB SOP 7 0.42 0.44 0.40 CO 0.42 MSVAL/SOP/A/007 mg/m^3 2 LAB SOP 8 Ammonia as NH₃ < 0.01 < 0.01 < 0.01 $\mu g / m^3$ < 0.01 400 MSVAL/SOP/A/006 LAB SOP 9 Nickel as Ni 1.08 1.07 1.06 MSVAL/SOP/A/008 ng/m^3 1.07 20

INFERENCE

As per NAAQS Standards

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

Authorized Signature

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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.



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

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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/2022/7247

Report Issued Date: 13.07.2022

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 **Date of Sample Receipt**

Sample collected with RDS APM460 and FDS GTI-131 08.07.2022

Analysis Starting Date

09.07.2022

Analysis Completion Date

13.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Protocols Shift wise result			Units	Result in	Tolerance
			1	2	3	Onics	Avg.	limits
10	Benzene as C ₆ H ₆	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

uthorized Signature

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

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

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)

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MSVAL/A/F/16/03

ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014424F

Report Issued Date: 13.07.2022

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.

4. Particulars of the sample Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131

Analysis Starting Date

08.07.2022 : 09.07.2022

Analysis Completion Date Sample Tested as Received

13.07.2022 :

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result	Tolerance
			1	2	3		in Avg.	limits
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) - 2006	58.0	58.5	59.0	μg / m³	58.5	100
2	Particulate Matter or PM _{2.5} μg/m ³	LAB SOP MSVAL/SOP/A/005	20.1	20.6	21.0	μg / m³	20.5	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) – 2001	10.2	10.8	11.3	μg / m³	10.7	80
4	Oxides of Nitrogen as NO_x	IS-5182(Part-6) – 2006	14.3	14.8	15.3	μg / m³	14.8	80
5	Ozone as O ₃	IS 5182(part-9)1974	8.4	8.6	8.8	μg / m³	8.6	100
6	Lead	IS-5182(Part22) – 2004	0.30	0.32	0.28	μg / m³	0.3	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	8.4	8.6	8.8	mg/m³	8.6	2
8	Ammonia as NH ₃	LAB SOP	<0.01	<0.01	<0.01	ug / m³	<0.01	100

< 0.01

1.06

INFERENCE

Nickel as Ni

9

As per NAAQS Standards

MSVAL/SOP/A/006

LAB SOP

MSVAL/SOP/A/008

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

< 0.01

1.05

< 0.01

1.04

 $\mu g / m^3$

ng / m³

< 0.01

1.05

400

20

Authorized Signature

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

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

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

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



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

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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/2022/7248

Report Issued Date: 13.07.2022

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

Date of Sample Receipt

08.07.2022

Analysis Starting Date Analysis Completion Date

09.07.2022 13.07.2022

Sample Tested as Received

S.No	Parameter /	Protocols	Sh	ift wise r	esults	Units	Result in	Tolerance
			1	2	3	Omits	Avg.	limits
10	Benzene as C ₆ H ₆	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

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

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)



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MSVAL/A/F/16/03

ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014425F

Report Issued Date: 13.07.2022

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

08.07.2022

5. Date of Sample Receipt6. Analysis Starting Date

09.07.2022

7. Analysis Completion Date

13.07.2022

3. Sample Tested as Received

S.No	Parameter	Protocols	Shi	ft wise res	ults	Units	Result	Tolerance limits
			1	2	3		in Avg.	
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) - 2006	50.8	51.2	51.4	μg / m³	51.1	100
2	Particulate Matter or PM _{2.5} µg/m ³	LAB SOP MSVAL/SOP/A/005	17.4	17.8	18.2	μg / m³	17.8	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) - 2001	6.9	7.7	7.8	μg / m³	7.4	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) – 2006	12.3	12.55	13.05	μg / m³	12.6	80
5	Ozone as O ₃	IS 5182(part-9)1974	6.9	7.2	7.4	μg / m³	7.1	100
6	Lead	IS-5182(Part22) - 2004	0.082	0.081	0.080	μg / m³	0.08	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.24	0.26	0.22	mg/m³	0.24	2
8	Ammonia as NH ₃	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	1.26	1.25	1.04	ng/m³	1.18	20

INFERENCE

As per NAAQS Standards

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

Verified by

-: End of The Report

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.



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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/2022/7249

Report Issued Date: 13.07.2022

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

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt **Analysis Starting Date**

08.07.2022 09.07.2022

Analysis Completion Date

13.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
		\	1	2	3		Avg.	limits
10	Benzene as C ₆ H ₆	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,

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)

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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: TC720722000014426F

Report Issued Date: 13.07.2022

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 Receipt6. Analysis Starting Date

08.07.2022 09.07.2022

7. Analysis Completion Date

13.07.2022

. Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise res	ults	Units	Result	Tolerance limits
		~ (Y)	1	2	3		in Avg.	
1	Particulate Matter PM ₁₀ μg/m ³	IS-5182(Part-23) - 2006	53.2	53.8	54.1	μg / m³	53.7	100
2	Particulate Matter or PM _{2.5} µg/m ³	LAB SOP MSVAL/SOP/A/005	15.2	15.6	16.1	μg / m³	15.6	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) – 2001	7.7	8.15	8.2	μg / m³	8.0	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) – 2006	11.15	11.3	11.75	μg / m³	11.4	80
5	Ozone as O ₃	IS 5182(part-9)1974	8.0	8.2	8.4	μg / m³	8.2	100
6	Lead	IS-5182(Part22) – 2004	0.017	0.018	0.016	μg / m³	0.01	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 ₃	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.22	1.21	1.20	ng / m³	1.21	20

INFERENCE

As per NAAQS Standards

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

Verified by

-: End of The Repo

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, ISO 22000-2018, ISO 45001-2018, ISO 9001-2015)

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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/2022/7250

Report Issued Date: 13.07.2022

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

Sample Collected By

Gunda Village

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131 08.07.2022

Date of Sample Receipt

09.07.2022

Analysis Starting Date Analysis Completion Date

13.07.2022

Sample Tested as Received

S.No	Parameter /	Protocols	Sh	ift wise r	esults	Units	Result in	Tolerance
			1	2	3	James	Avg.	limits
10	Benzene as C ₆ H ₆	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

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.



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)



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MSVAL/A/F/16/03

ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014697F

Report Issued Date: 16.07.2022

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 Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131

Analysis Starting Date

12.07.2022 13.07.2022

Analysis Completion Date

: 16.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result	Tolerance
			1//	2	3		in Avg.	limits
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) - 2006	52.6	51.4	50.8	μg / m ³	51.6	100
2	Particulate Matter or PM _{2.5} μg/m ³	LAB SOP MSVAL/SOP/A/005	22.0	21.5	20.6	μg / m³	21.3	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) - 2001	9.8	9.5	8.8	μg / m ³	9.3	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) - 2006	15.7	15.1	14.1	μg / m³	14.9	80
5	Ozone as O ₃	IS 5182(part-9)1974	9.6	9.2	8.7	μg / m ³	9.1	100
6	Lead	IS-5182(Part22) – 2004	0.02	0.02	0.01	μg / m³	0.01	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.40	0.35	0.31	mg/m³	0.35	2
8	Ammonia as NH ₃	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	1.18	1.15	1.12	ng/m³	1.15	20

INFERENCE

As per NAAQS Standards

Report Status:- The analyzed values for above measured parameter are 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 & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.

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

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



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

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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/2022/7370

Report Issued Date: 16.07.2022

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

12.07.2022 13.07.2022

Analysis Completion Date
 Sample Tested as Received

16.07.2022

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
E-CONTRACT	A		1	2	3		Avg.	limits
10	Benzene as C ₆ H ₆	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,

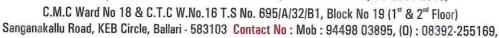
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4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.

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.



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)



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MSVAL/A/F/16/03

ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014698F

Report Issued Date: 16.07.2022

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 Particulars of the sample

MSV Analytical Laboratories, Bellary.

Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131 12.07.2022

Analysis Starting Date Analysis Completion Date

13.07.2022 16.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise res	sults	Units	Result	Tolerance
			1	2	3	- Omes	in Avg.	limits
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) – 2006	58.6	57.8	57.2	μg / m³	57.8	100
2	Particulate Matter or PM _{2.5} µg/m ³	LAB SOP MSVAL/SOP/A/005	17.5	16.4	15.6	μg / m³	16.5	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) – 2001	8.5	7.8	7.2	μg / m³	7.8	80
4	Oxides of Nitrogen as NO_x	IS-5182(Part-6) – 2006	13.0	12.4	11.8	μg / m³	12.4	80
5	Ozone as O ₃	IS 5182(part-9)1974	8.5	8.2	7.6	μg / m³	8.1	100
6	Lead	IS-5182(Part22) – 2004	0.01	0.01	0.01	μg / m³	0.01	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.28	0.24	0.20	mg/m³	0.24	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	1.12	1.10	1.07	ng / m³	1.09	20

INFERENCE

As per NAAQS Standards

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

End of Th

Authorized Signature

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

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

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

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



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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/2022/7373

Report Issued Date: 16.07.2022

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 3.

MSV Analytical Laboratories, Bellary.

Particulars of the sample 4. Date of Sample Receipt 5.

Sample collected with RDS APM460 and FDS GTI-131

Analysis Starting Date

12.07,2022 13.07.2022

Analysis Completion Date

16.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3		g.	
10	Benzene as C ₆ H ₆	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





Authorized Signature

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.

^{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,

^{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: TC720722000014699F

Report Issued Date: 16.07.2022

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.

4. Particulars of the sample Date of Sample Receipt

12.07.2022

6. **Analysis Starting Date**

13.07.2022 16.07.2022

	Analysis Completion Date
3.	Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise res	sults	Units	Result	
		Y	1	2	3		in Avg.	e limits
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) – 2006	56.0	55.4	54.6	μg / m³	55.3	100
2	Particulate Matter or PM _{2.5} μg/m ³	LAB SOP MSVAL/SOP/A/005	16.2	15.8	15.1	µg / m³	15.7	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) - 2001	7.8	7.2	6.5	μg / m³	7.1	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) - 2006	12.4	- 11.7	11.1	μg / m³	11.7	80
5	Ozone as O ₃	IS 5182(part-9)1974	8.5	8.2	8.0	μg / m³	8.2	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.01	0.01	μg / m ³	0.01	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.22	0.20	0.17	mg/m³	0.19	2
8	Ammonia as NH ₃	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	1.15	1.13	1.10	ng/m³	1.12	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.



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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/2022/7371

Report Issued Date: 16.07.2022

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 Receipt 6. Analysis Starting Date 12.07.2022 13.07.2022

7. Analysis Completion Date

: 16.07.2022

8. Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
3.140		0.0000	1	2	3		Avg.	IIIIIIII
10	Benzene as C ₆ H ₆	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

End of The Report

Authorized Signature

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

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

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

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.



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)







MSVAL/A/F/16/03

Report Issued Date: 16.07.2022

ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014700F

: 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

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt **Analysis Starting Date**

12.07.2022 13.07.2022

Analysis Completion Date Sample Tested as Received 16.07.2022

S.No	Parameter	Protocols	Sh	ift wise res	ults	Units	Result	Tolerance
3.110	Taraneter	riotocois	1	2	3	0	in Avg.	limits
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) - 2006	56.0	57.5	56.8	μg / m³	56.7	100
2	Particulate Matter or PM _{2.5} μg/m ³	LAB SOP MSVAL/SOP/A/005	15.8	15.2	14.5	μg / m³	15.1	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) – 2001	7.9	7.4	6.8	μg / m³	7.3	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) – 2006	13.0	12.4	11.8	μg / m³	12.4	80
5	Ozone as O ₃	IS 5182(part-9)1974	9.0	8.7	8.4	μg / m ³	8.7	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.01	0.01	μg / m³	0.01	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.25	0.21	0.16	mg/m³	0.20	2
8	Ammonia as NH ₃	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	1.15	1.13	1.10	ng/m³	1.12	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.

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



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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/2022/7372

Report Issued Date: 16.07.2022

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.

Gunda Village

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample 5. Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131 12.07.2022

Analysis Starting Date

13.07.2022

Analysis Completion Date

: 16.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Protocols Shift wise results		Shift wise results		Shift wise results		Result in	Tolerance
			1	2	3	Units	Avg.	limits		
10	Benzene as C ₆ H ₆	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,

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.

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



MSVAL/A/F/16/03

Authorized Signature

ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014905F

Report Issued Date: 20.07.2022

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

3. Sample Collected By 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** 6.

15.07.2022 150 16.07.2022 20.07.2022

Analysis Completion Date 7.

Sample Tested as Received

S.No	Parameter	Protocols	Shif	t wise resi	ults	Units	Result	Tolerance limits
3.NO	rarameter	110101010	1	2	3		in Avg.	mmes
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) - 2006	60.4	59.6	58.2	μg / m³	59.4	100
2	Particulate Matter or PM _{2.5} µg/m ³	LAB SOP MSVAL/SOP/A/005	23.6	22.0	21.0	μg / m³	22.2	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) - 2001	9.80	8.80	8.23	μg / m³	8.9	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) - 2006	17.57	17.22	15.81	μg / m³	16.8	80
5	Ozone as O ₃	IS 5182(part-9)1974	12.8	11.1	10.5	μg / m³	11.4	100
6	Lead	IS-5182(Part22) - 2004	0.08	0.07	0.06	μg / m³	0.07	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.22	0.20	0.18	mg/m³	0.20	2
8	Ammonia as NH ₃	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	1.20	1.18	ng/m³	1.20	20

INFERENCE

As per NAAQS Standards

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

Verified by

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

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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/2022/7493

Report Issued Date: 20.07.2022

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

15.07.2022

Analysis Starting Date Analysis Completion Date 16.07.2022

Sample Tested as Received

20.07.2022

S.No	Parameter	Protocols	Shift wise results				Result in Avg.	Tolerance
3.110		J. G.	1	2	3		11.6	IIIII
10	Benzene as C ₆ H ₆	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	μg / m ³	<0.01	5
11	Benzo (α) Pyrene	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 / m ³	<0.01	6

INFERENCE

As per NAAQS Standards

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

Verified by

Lauthorized 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.



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)

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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: TC720722000014906F

Report Issued Date: 20.07.2022

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**

15.07.2022 : 16.07.2022

Analysis Completion Date

: 20.07.2022

S.No	Parameter	Protocols	Shif	t wise resu	ılts	Units	Result in Avg.	Tolerance limits
3.NO	rarameter	11000000	1	2	3		III AV g.	1111110
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) – 2006	52.4	53.5	51.0	μg / m³	52.3	100
2	Particulate Matter or PM _{2.5} µg/m ³	LAB SOP MSVAL/SOP/A/005	18.5	17.6	16.5	μg / m³	17.5	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) - 2001	8.87	8.04	7.26	μg / m³	8.05	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) – 2006	15.6	14.7	13.8	μg / m³	14.7	80
5	Ozone as O ₃	IS 5182(part-9)1974	8.4	8.2	8.0	μg / m³	8.2	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.028	0.022	μg / m³	0.02	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.28	0.26	0.22	mg/m³	0.25	2
8	Ammonia as NH ₃	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	1.88	1.80	1.78	ng / m³	1.82	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.

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



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

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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/2022/7494

Report Issued Date: 20.07.2022

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

15.07.2022

Analysis Completion Date

16.07.2022 20.07.2022

Sample Tested as Received

	Davameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
S.No	Parameter	Frotocols	1	2	3		1116.	1000000
10	Benzene as C ₆ H ₆	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

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

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,





MSVAL/A/F/16/03

ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014907F

Report Issued Date: 20.07.2022

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

3.

Vysanakere Village

Sample Collected By

MSV Analytical Laboratories, Bellary.

Particulars of the sample 5. Date of Sample Receipt

15.07.2022

Analysis Starting Date

16.07.2022 20.07.2022 :

Analysis Completion Date

Sample Tested as Received

Shift wise results Tolerance Result Units Protocols limits **Parameter** in Avg. S.No 1 IS-5182(Part-23) -100 Particulate Matter $\mu g / m^3$ 52.1 50.5 52.3 53.6 1 2006 $PM_{10} \mu g/m^3$ LAB SOP 60 11.5 Particulate Matter or $\mu g / m^3$ 12.8 11.6 10.3 2 MSVAL/SOP/A/005 $PM_{2.5} \mu g/m^3$ IS-5182(Part-2) -80 7.03 6 47 $\mu g / m^3$ 7.56 7.06 Sulphur Dioxide as SOx 3 2001 IS-5182(Part-6) -80 10.6 Oxides of Nitrogen as $\mu g / m^3$ 10.78 9.53 11.74 4 2006 NO_x 8.4 $\mu g / m^3$ 100 8.6 8.0 8.8 IS 5182(part-9)1974 Ozone as O3 5 IS-5182(Part22) -0.02 1 0.02 $\mu g / m^3$ 0.02 0.02 6 Lead 2004 LAB SOP 2 0.26 Carbon Monoxide as 0.24 mg/m^3 0.26 0.28 7 MSVAL/SOP/A/007 CO 400 LAB SOP < 0.01 $\mu g / m^3$ < 0.0.1 < 0.01 < 0.01 Ammonia as NH₃ 8 MSVAL/SOP/A/006 LAB SOP 20 1.24 ng / m³ 1.28 1.20 1.26 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

erified by

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, ISO 22000-2018, ISO 45001-2018, ISO 9001-2015)

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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/2022/7495

Report Issued Date: 20.07.2022

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

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt Analysis Starting Date

15.07.2022 16.07.2022

6. **Analysis Completion Date**

20.07.2022

Sample Tested as Received

	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in Avg.	Tolerance limits
S.No		Protocols	1	2	3			
10	Benzene as C ₆ Ḣ ₆	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,

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: TC720722000014908F

Report Issued Date: 20.07.2022

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 Analysis Starting Date Analysis Completion Date 15.07.2022 16.07.2022 20.07.2022

Sample Tested as Received

G 31	Davameter	Protocols	Shi	ft wise resu	lts	Units	Result	Tolerance limits
S.No	Parameter	Fiotocois	1	2	3	2000 Aug 1 200	in Avg.	lillits
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) - 2006	56.4	55.4	53.2	$\mu g / m^3$	55.0	100
2	Particulate Matter or PM _{2.5} µg/m ³	LAB SOP MSVAL/SOP/A/005	18.5	17.8	16.5	$\mu g / m^3$	17.6	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) - 2001	8.09	7.06	6.32	μg / m³	7.1	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) – 2006	14.0	12.6	11.6	$\mu g / m^3$	12.7	80
5	Ozone as O ₃	IS 5182(part-9)1974	1.12	10.6	09.6	$\mu g / m^3$	7.1	100
6	Lead	IS-5182(Part22) - 2004	0.028	0.026	0.024	$\mu g / m^3$	0.02	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	11.2	10.6	9.6	mg/m³	10.4	2
8	Ammonia as NH ₃	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.26	1.28	1.20	ng/m³	1.24	20

INFERENCE

As per NAAQS Standards

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

erified b

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 Beliary Jurisdiction only.



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

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor)
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 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/2022/7496

Report Issued Date: 20.07.2022

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 Receipt6. Analysis Starting Date

15.07.2022

7. Analysis Completion Date

16.07.2022 20.07.2022

8. Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in Avg.	Tolerance limits
Olivo		110100013	1	2	3			
10	Benzene as C ₆ H ₆	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 & 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: TC720722000015345F

Report Issued Date: 23.07.2022

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 3. Sample Collected By

Smiore Colony

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**

19.07.2022 20.07.2022

Analysis Completion Date

: 23.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result	Tolerance
			1	2	3	Units	in Avg.	limits
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) - 2006	61.8	60.4	58.6	μg / m ³	60.2	100
2	Particulate Matter or PM _{2.5} μg/m ³	LAB SOP MSVAL/SOP/A/005	18.9	17.6	16.3	μg / m³	17.6	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) - 2001	15.6	15.0	14.0	µg / m³	14.8	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) – 2006	9.2	8.8	7.8	μg / m³	8.6	80
5	Ozone as O ₃	IS 5182(part-9)1974	18.2	19.6	17.7	μg / m³	18.5	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.03	0.02	μg / m ³	0.02	100 1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.44	0.48	0.32	mg/m³	0.41	2
8	Ammonia as NH ₃	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	1.08	1.12	1.04	ng/m³	1.08	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

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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.



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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: MSVAL/2022/7620

Report Issued Date: 23.07.2022

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 3. Sample Collected By

Smiore Colony

20.07.2022

23.07.2022

MSV Analytical Laboratories, Bellary.

Particulars of the sample 5. Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131 19.07.2022

Analysis Starting Date 7. Analysis Completion Date

8. Sample Tested as Received

Parameter	Protocols	Shift wise results			Ilnita	Result in	Tolerance
		1	2	3	Units	Avg.	limits
Benzene as C ₆ H ₆	IS:5182(part 11) -	<0.01	<0.01	<0.01	µg / m³	<0.01	5
Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01		7-200 W.C.	
Arsenic as As	CPCR Procedure	<0.01	-0.01			V0.01	1
	Benzene as C ₆ H ₆ Benzo (α) Pyrene (BaP)	Benzene as C ₆ H ₆ Benzo (α) Pyrene (BaP) IS:5182(part 11) – 2006 CPCB Procedure	1 Benzene as C ₆ H ₆ IS:5182(part 11) - <0.01	1 2	Trottotis 1 2 3	Trototois Units 1 2 3 Benzene as C ₆ H ₆ IS:5182(part 11) – 2006 <0.01	Benzene as C ₆ H ₆ IS:5182(part 11) - $\frac{2006}{2006}$ CPCB Procedure $\frac{1}{2000}$ Procedure $\frac{1}{2000}$ Procedure $\frac{1}{2000}$ Procedure $\frac{1}{2000}$ Procedure $\frac{1}{20000}$ Procedure $\frac{1}{20000}$ Procedure $\frac{1}{20000}$

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

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.

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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)

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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: TC720722000015346F

Report Issued Date: 23.07.2022

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**

19.07.2022 20.07.2022

Analysis Completion Date

23.07.2022

8.	Samp	e T	ested	as	Received

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM ₁₀ µg/m³	IS-5182(Part-23) – 2006	55.2	56.4	54.6	μg / m³	55.4	100
2	Particulate Matter or PM _{2.5} µg/m ³	LAB SOP MSVAL/SOP/A/005	18.4	19.7	17.3	μg / m ³	18.4	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) - 2001	09.5	10.2	07.7	μg / m³	9.1	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) – 2006	15.7	16.9	14.2	µg / m³	15.6	80
5	Ozone as O ₃	IS 5182(part-9)1974	18.4	17.6	16.8	μg / m ³	17.6	
6	Lead	IS-5182(Part22) - 2004	0.02	0.02	0.02	μg / m ³	0.02	100 1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.46	0.52	0.38	mg/m³	0.45	2
8	Ammonia as NH ₃	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	1.07	1.02	1.00	ng/m³	1.03	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

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

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



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

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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/2022/7621

Report Issued Date: 23.07.2022

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 Date of Sample Receipt

Sample collected with RDS APM460 and FDS GTI-131

Analysis Starting Date Analysis Completion Date

19.07.2022 20.07.2022 23.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
			1	2	3		Avg.	limits
10	Benzene as C ₆ H ₆	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,

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: TC720722000015347F

Report Issued Date: 23.07.2022

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 3.

Vysanakere Village

Sample Collected By Particulars of the sample

MSV Analytical Laboratories, Bellary.

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

19.07.2022 20.07.2022 23.07.2022

Analysis Completion Date Sample Tested as Received

S.No Shift wise results Parameter Protocols Result Tolerance Units in Avg. limits 1 3 Particulate Matter IS-5182(Part-23) -1 PM₁₀ μg/m³ 53.7 52.5 51.1 2006 $\mu g / m^3$ 52.4 100 Particulate Matter or 2 LAB SOP $PM_{2.5} \mu g/m^3$ MSVAL/SOP/A/005 20.9 194 18.5 $\mu g / m^3$ 19.6 60 3 IS-5182(Part-2) -Sulphur Dioxide as SO, 9.5 8.1 6.8 2001 $\mu g / m^3$ 8.1 80 Oxides of Nitrogen as IS-5182(Part-6) -4 NO_x 14.7 132 2006 12.8 $\mu g / m^3$ 13.5 80 Ozone as O3 5 IS 5182(part-9)1974 10.2 09.4 08.3 $\mu g / m^3$ 9.3 100 IS-5182(Part22) -6 Lead 0.02 0.02 0.02 2004 $\mu g / m^3$ 0.02 1 Carbon Monoxide as 7 LAB SOP 0.22 0.28 MSVAL/SOP/A/007 0.22 mg/m^3 0.24 2 8 Ammonia as NH3 LAB SOP < 0.01 MSVAL/SOP/A/006 < 0.0.1 < 0.01 $\mu g / m^3$ < 0.01 400 9 LAB SOP Nickel as Ni 1.15 1.12 MSVAL/SOP/A/008 1.10 ng / m³ 1.12 20

INFERENCE

As per NAAQS Standards

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

erified by

End of The R

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

3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing. 4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.



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

C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1st & 2nd Floor) Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No: Mob: 94498 03895, (0): 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/2022/7622

Report Issued Date: 23.07.2022

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 Sample Collected By

Vysanakere Village

23.07.2022

MSV Analytical Laboratories, Bellary.

Particulars of the sample 5.

Sample collected with RDS APM460 and FDS GTI-131

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

19.07.2022 20.07.2022

Sample Tested as Received

S.No Parameter	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
	- A		1	2	3	Units	Avg.	limits
10	Benzene as C ₆ H ₆	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		2008-2000	5
12	Arsenic as As	CDCD D		5000	10.01	ng/m³	<0.01	1
		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

erified by

-: End of The Report:

Authorized Signature

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

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

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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: TC720722000015348F

Report Issued Date: 23.07.2022

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

MSV Analytical Laboratories, Bellary.

Particulars of the sample Date of Sample Receipt

Sample collected with RDS APM 460 and FDS GTI-131 19.07.2022

Analysis Starting Date Analysis Completion Date

: 20.07.2022 23.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	sults	11-24-	Result	Tolerance limits
			1	2	3	Units	in Avg.	
1	Particulate Matter PM ₁₀ μg/m ³	IS-5182(Part-23) - 2006	52.4	53.6	50.6	μg / m³	52.2	1-1-1-2
2	Particulate Matter or PM _{2.5} μg/m ³	LAB SOP MSVAL/SOP/A/005	17.6	18.5	15.8	μg / m ³		100
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) – 2001	7.2	8.4	6.1	μg / m ³	7.2	60
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) – 2006	14.6	15.8	12.9	µg / m³	14.4	80
5	Ozone as O ₃	IS 5182(part-9)1974	7.8	6.5	6.0	μg / m ³		60
6	Lead	IS-5182(Part22) - 2004	0.02	0.02	0.02	µg / m³	0.02	100
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.22	0.24	0.20	mg/m³		1
8	Ammonia as NH ₃	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	2
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.30	1.38	1.20	ng/m³	1.29	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

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

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



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

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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/2022/7623

Report Issued Date: 23.07.2022

1. Name of the Project

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

(Metal & Ferro Alloys Plant)

Vyasana<mark>ke</mark>re, 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 APM 460 and FDS GTI-131 19.07.2022

Date of Sample Receipt **Analysis Starting Date**

20.07.2022

Analysis Completion Date Sample Tested as Received

23.07.2022

S.No	Parameter	Protocols	Shift wise results			***	Result in	Tolerance
			1 2 3	3	Units	Avg.	limits	
10	Benzene as C ₆ H ₆	IS:5182(part 11) -	<0.01	<0.01	<0.01			
11	Benzo (α) Pyrene	2006		-0.01	V0.01	μg / m³	<0.01	5
	(BaP)	CPCB Procedure	<0.01	< 0.01	<0.01	ng / m³	10.01	
12	Arsenic as As	CPCB Procedure	0.04	/	Parameter	ng/m³	<0.01	1
		of CD Flocedure	<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

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.



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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: TC720722000015545F

Report Issued Date: 27.07.2022

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 **Date of Sample Receipt**

Sample collected with RDS APM460 and FDS GTI-131

Analysis Starting Date

22.07.2022 . 23.07.2022

Analysis Completion Date

27.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result	Tolerance
		4 11	1	2	3	Onics	in Avg.	limits
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) - 2006	63.5	62.4	60.5	μg / m³	62.1	100
2	Particulate Matter or PM _{2.5} µg/m ³	LAB SOP MSVAL/SOP/A/005	20.6	19.8	18.3	μg / m³	19.5	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) - 2001	16.2	14.4	13.8	μg / m³	14.8	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) – 2006	10.4	09.5	08.5	μg / m³	9.4	80
5	Ozone as O ₃	IS 5182(part-9)1974	18.4	17.2	16.5	μg / m³	17.3	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.02	0.02	μg / m ³	0.02	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.50	0.46	0.37	mg/m³	0.44	2
8	Ammonia as NH ₃	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.22	1.18	1.12	ng/m³	1.17	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.



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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/2022/7712

Report Issued Date: 27.07.2022

1. Name of the Project

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

(Metal & Ferro Alloys Plant)

Vyasanake<mark>re, Hanu</mark>manahalli 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

22.07.2022 23.07.2022

7. Analysis Completion Date

27.07.2022

8. Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in Avg.	Tolerance limits
		N N	1	2	3			
10	Benzene as C ₆ H ₆	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

	1 2 2 7
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 & 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.

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

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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: TC720722000015546F

Report Issued Date: 27.07.2022

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 22.07.2022

Date of Sample Receipt **Analysis Starting Date**

23.07.2022 10.1

Analysis Completion Date 7.

: 27.07.2022

S.No	Parameter	Protocols	Shift wise results			Units	Result	Tolerance
	PA SAN COMO DE PROPERTIENCE		1	2	3	Joints	in Avg.	limits
1	Particulate Matter PM ₁₀ μg/m ³	IS-5182(Part-23) – 2006	56.8	55.6	54.2	μg / m³	55.5	100
2	Particulate Matter or PM _{2.5} μg/m ³	LAB SOP MSVAL/SOP/A/005	19.7	18.3	17.5	μg / m³	18.5	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) - 2001	10.0	08.9	07.6	μg / m³	8.8	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) – 2006	17.8	15.7	14.5	μg / m³	16.0	80
5	Ozone as O ₃	IS 5182(part-9)1974	17.6	16.5	14.5	μg / m ³	16.2	100
6	Lead	IS-5182(Part22) – 2004	0.03	0.02	0.02	µg / m³	0.02	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.48	0.50	0.40	mg/m³	0.46	2
8	Ammonia as NH ₃	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	1.18	1.10	1.04	ng/m³	1.10	20

INFERENCE

As per NAAQS Standards

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

Verified by

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

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

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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.



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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: MSVAL/2022/7713

Report Issued Date: 27.07.2022

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**

22.07.2022 23.07.2022

Analysis Completion Date Sample Tested as Received 27.07.2022

S.No	Parameter	Protocols	Sh	ift wise re	esults	Units	Result in Avg.	Tolerance limits
			1	2	3			
10	Benzene as C ₆ H ₆	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





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.



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

MSVAL/A/F/16/03

Authorized Signature

ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000015547F

Report Issued Date: 27.07.2022

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 Date of Sample Receipt

22.07.2022

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

23.07.2022 27.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Sh	ift wise re	sults	Units	Result	Toleranc
		50,000,000	1	2	3	Oilles	in Avg.	e limits
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) - 2006	55.2	54.6	52.4	μg / m³	54.0	100
2	Particulate Matter or PM _{2.5} μg/m ³	LAB SOP MSVAL/SOP/A/005	21.4	20.2	19.4	μg / m³	20.3	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) - 2001	18.4	16.9	15.9	μg / m³	17.0	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) – 2006	13.5	12.8	11.5	μg / m³	12.6	80
5	Ozone as O ₃	IS 5182(part-9)1974	12.6	10.4	08.2	μg / m³	10.4	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.02	0.02	μg / m³	0.02	100
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.24	0.28	0.22	mg/m³	0.24	2
8	Ammonia as NH ₃	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	1.18	1.14	1.12	ng/m³	1.14	20

INFERENCE

As per NAAOS Standards

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

-: End of The Report:-

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

Report Issued Date: 27.07.2022

Test Report No: MSVAL/2022/7714

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 22.07.2022

Analysis Starting Date 23.07.2022 7. **Analysis Completion Date** 27.07.2022

Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in	Tolerance
		T (Y	1	2	3		Avg.	limits
10	Benzene as C ₆ H ₆	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

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

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.



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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: TC720722000015548F

Report Issued Date: 27.07.2022

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

MSV Analytical Laboratories, Bellary.

Particulars of the sample

Sample collected with RDS APM460 and FDS GTI-131

Date of Sample Receipt **Analysis Starting Date**

22.07.2022 23.07.2022 : 27.07.2022

Analysis Completion Date Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result	Tolerance
		1 525 7 2 5 7 7	1	2	3	Onics	in Avg.	limits
1	Particulate Matter PM ₁₀ µg/m ³	IS-5182(Part-23) – 2006	54.6	53.1	52.6	μg / m³	53.4	100
2	Particulate Matter or PM _{2.5} µg/m ³	LAB SOP MSVAL/SOP/A/005	18.5	17.6	16.3	μg / m³	17.4	60
3	Sulphur Dioxide as SO _x	IS-5182(Part-2) – 2001	7.9	6.6	5.8	μg / m³	6.7	80
4	Oxides of Nitrogen as NO _x	IS-5182(Part-6) – 2006	15.7	14.9	13.9	μg / m³	14.8	80
5	Ozone as O ₃	IS 5182(part-9)1974	10.4	y 8.3	7.6	μg / m³	8.7	100
6	Lead	IS-5182(Part22) – 2004	0.03	0.02	0.02	μg / m³	0.02	1
7	Carbon Monoxide as	LAB SOP MSVAL/SOP/A/007	0.28	0.34	0.26	mg/m³	0.29	2
8	Ammonia as NH ₃	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	μg / m³	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.28	1.24	1.22	ng/m³	1.24	20

INFERENCE

As per NAAQS Standards

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

-: End of The Report:-

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.

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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: MSVAL/2022/7715

Report Issued Date: 27.07.2022

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

MSV Analytical Laboratories, Bellary.

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

Sample collected with RDS APM460 and FDS GTI-131 22.07.2022

Analysis Starting Date Analysis Completion Date

23.07.2022 27.07.2022

Sample Tested as Received

Shift wise results

3.NO	Parameter	Protocols		Since wise results		Units		Result in	Tolerance
			1	2	3	James	Avg.	limits	
10	Benzene as C ₆ H ₆	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

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 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.

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MSVAL/A/F/18/03

ANALYSIS REPORT FOR SOURCE EMMISSION

Test Report No: TC720722000015409F

Report Issued Date: 28.07.2022

(Metal & Ferro Alloys Plant)

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

Stack ID 2.

Sample Collected By

Name of the Industry

3. Particulars of Sample Collected 4.

Date of Sample Receipt 5. Analysis Starting Date

6. **Analysis Completion Date**

7. Sample Tested as Received M/s. The Sandur Manganese & Iron Ores Ltd.

Coke Cutter MSV Analytical Laboratories, Bellary.

Sample collected with VSS - 1 20.07.2022

21.07.2022

28.07.2022

GENERAL DETAILS 20.07.2022 **Date of Monitoring Fuel Used** 39 Stack Temperature (°C) 5.1 Velocity (m/s) 15mtrs AGL Height (m) 0.7

Diameter (m) 0.38465 Cross sectional area (m2) DECHITS

Grosser	RESULT	<u>rs</u>		GSR 277 (E)
	Protocol	Unit	Result 23.7	Standards
Parameters		mg/Nm³		50
Particulate Matter	IS-11255(Part1) - 1985			800
Sulphur dioxide	IS-11255(Part2) - 1985	mg/Nm³	100	500
Nitrogen dioxide	IS-11255(Part7) - 2005	mg/Nm³		1/ 104
Carbon Monoxide		%	0.18	Max 1%
as(CO)	March and American Company	1		

as(co)		
	As per KSPCB Standards Report Status :- The analyzed value for above measured parameter is	
INFERENCE	Report Status: - The analyzed value within the limits.	
	WALLES	و

Verified by

thorized 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 wi

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.



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

MSVAL/A/F/18/03

ANALYSIS REPORT FOR SOURCE EMMISSION Report Issued Date: 28.07.2022

Test Report No: TC720722000015409F

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

(Metal & Ferro Alloys Plant)

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

Coal Crushing Area

Stack ID 2.

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

3. Particulars of Sample Collected 4.

Date of Sample Receipt 5. Analysis Starting Date 6.

Name of the Industry

20.07.2022 21.07.2022

Analysis Completion Date

28.07.2022

Sample Tested as Received

GENERAL DETAILS

GENERAL D	ETAILS	
	20.07.2022	
Date of Monitoring	707	
Fuel Used	89	
Stack Temperature (°C)	9.8	
Velocity (m/s)	15mtrs AGL	
Height (m)	0.75	
Diameter (m)	0.44156	
Cross sectional area (m²)		
DECI	TC	

RESULTS GSR 277 (E) Result Standards Unit **Protocol Parameters** 50 IS-11255(Part1) - 1985 mg/Nm³ 24.5 Particulate Matter 800 13.0 IS-11255(Part2) - 1985 mg/Nm³ Sulphur dioxide 500 10.4 mg/Nm3 IS-11255(Part7) - 2005 Nitrogen dioxide Max 1% 0.20 % Carbon Monoxide IS 13270

as(CO) As per KSPCB Standards Report Status:- The analyzed value for above measured parameter is INFERENCE within the limits. Authorized Signature

Verified by

600

-: END OF REPORT:-

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,

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MSVAL/A/F/18/03

ANALYSIS REPORT FOR SOURCE EMMISSION

Test Report No: TC720722000015411F

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

Report Issued Date: 28.07.2022

(Metal & Ferro Alloys Plant)

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

DG Set 750 KVA

Stack ID 2.

Sample Collected By 3.

Particulars of Sample Collected

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

Name of the Industry

Analysis Completion Date 7.

Sample Tested as Received 8.

MSV Analytical Laboratories, Bellary.

Sample collected with VSS - 1 20.07.2022

21.07.2022

28.07.2022

GENERAL DETAILS

<u>ULIVLIAL I</u>	JE I AILS
Date of Monitoring	20.07.2022
Fuel Used	Diesel
Stack Temperature (°C)	112
Velocity (m/s)	6.3
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	13.6	50
Nitrogen dioxide	IS-11255(Part7) - 2005	PPM	16.8	50

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

Verified by

uthorized Signature

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

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

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MSVAL/A/F/18/03

ANALYSIS REPORT FOR SOURCE EMMISSION

Test Report No: TTC720722000015408F

Report Issued Date: 28.07.2022

Name of the Industry 1.

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

(Metal & Ferro Alloys Plant)

Vyasanakere, Hanumanahalli Village,

Hospet Taluk, Bellary District, Karnataka.

2. Stack ID 3. Sample Collected By

Coke Oven Battery - Passes Through WHRB-1

Particulars of Sample Collected 4.

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

Date of Sample Receipt 5. 6.

20.07.2022

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

21.07.2022 28.07.2022

Sample Tested as Received 8.

GENERAL DETAILS

Date of Monitoring GENERAL	<u>DETAILS</u>		
Fuel Used	20.07.2022		
Stack Temperature (°C)	10/		
Velocity (m/s)	37		
Height (m)	4.9		
Diameter (m)	60 mtrs AGL		
Cross sectional area (m²)	3.4		
DECIN	9.0746		

Parameters	Protocol	Unit	Result	GSR 277 (E)
Particulate Matter	IS-11255(Part1) - 1985	(D) 0		Standards
Sulphur dioxide		mg/Nm³	24.4	50
Nitrogen dioxide	IS-11255(Part2) - 1985	mg/Nm³	16.0	800
	IS-11255(Part7) - 2005	mg/Nm ³	12.0	
Carbon Monoxide	IS 13270	8/ 1111	12.0	500
as(CO)		%	0.25	Max 1%

INFERENCE

As per GSR 277 (E) Standards.

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

Verified by

Authorized Signature

e: 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

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MSVAL/A/F/18/03

ANALYSIS REPORT FOR SOURCE EMMISSION

Test Report No: TC720722000015413F

Report Issued Date: 28.07.2022

Name of the Industry

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

(Metal & Ferro Alloys Plant)

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

Ferro Alloy Arc Furnace Stack ID 2.

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of Sample Collected 4.

Sample collected with VSS - 1

Date of Sample Receipt 5.

20.07.2022

Analysis Starting Date Analysis Completion Date 7.

21.07.2022 28.07.2022

Sample Tested as Received 8.

GENERAL DETAILS

. GENERAL E	BITTIES
Date of Monitoring	20.07.2022
Fuel Used	<u></u>
Stack Temperature (°C)	103
Velocity (m/s)	6.3
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	
	IS-11255(Part1) - 1985	mg/Nm³	32.2	150	

INFERENCE

As per GSR 277 (E) Standards.

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

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 & 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.

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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 : TC720722000013441F

Report Issued Date: 28.07.2022 M/s. The Sandur Manganese & Iron Ores Ltd.

Name of the Industry

(Metal & Ferro Alloys Plant)

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

Coke Screening & Store

Stack ID 2.

Sample Collected By 3.

MSV Analytical Laboratories, Bellary.

Particulars of Sample Collected 4.

Sample collected with VSS - 1

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

20.07.2022 21.07.2022

Analysis Completion Date 7.

28.07.2022

Sample Tested as Received 8.

CENERAL DETAILS

GENERALD	LITTED
Date of Monitoring	20.07.2022
Fuel Used	A
Stack Temperature (°C)	155
Velocity (m/s)	8.2
Height (m)	15mtrs AGL
Diameter (m)	0.7
Cross sectional area (m²)	0.38465

RESULTS GSR 277 (E) Result Unit Standards Protocol **Parameters** 50 mg/Nm3 24.5 IS-11255(Part1) - 1985 Particulate Matter 800 15.3 mg/Nm³ IS-11255(Part2) - 1985 Sulphur dioxide 500 11.5 mg/Nm3 IS-11255(Part7) - 2005 Nitrogen dioxide Max 1% Carbon Monoxide 0.25 % IS 13270 as(CO)

INFERENCE

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

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MSVAL/A/F/18/03

ANALYSIS REPORT FOR SOURCE EMMISSION

Test Report No: TC720722000015414F

Report Issued Date: 28.07.2022

Name of the Industry 1.

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

(Metal & Ferro Alloys Plant)

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

Stack ID 2.

MSV Analytical Laboratories, Bellary.

Sample Collected By 3.

Sample collected with VSS - 1

Particulars of Sample Collected Date of Sample Receipt 5.

20.07.2022

Analysis Starting Date 6.

21.07.2022

Analysis Completion Date 7.

28.07.2022

Sample Tested as Received 8.

GENERAL DETAILS

Date of Monitoring	20.07.2022		
Fuel Used	T		
Stack Temperature (°C)	93		
Velocity (m/s)	6.8		
Height (m)	60 mtrs AGL		
Diameter (m)	3.4		
Cross sectional area (m²)	9.0746		

RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
	IS-11255(Part1) - 1985	mg/Nm ³	46.8	50
Particulate Matter	IS-11255(Part2) - 1985	mg/Nm ³	33.6	800
Sulphur dioxide	IS-11255(Part7) - 2005	mg/Nm ³	46.5	500
Nitrogen dioxide Carbon Monoxide	IS 13270	%	0.22	Max 1%
as(CO)	15 15270			

As per GSR 277 (E) Standards.

INFERENCE

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

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.

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