



# MSV Analytical Laboratories

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 (1<sup>st</sup> & 2<sup>nd</sup> Floor)  
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (O) : 08392-255169,  
E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



TC-7207

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014261F

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.
- 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** : 05.07.2022
- Analysis Starting Date** : 06.07.2022
- Analysis Completion Date** : 11.07.2022
- Sample Tested as Received**

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	56.4	58.4	54.0	µg / m <sup>3</sup>	56.2	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	28.4	29.3	26.2	µg / m <sup>3</sup>	27.9	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	12.06	12.7	9.71	µg / m <sup>3</sup>	11.4	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	16.0	16.3	13.8	µg / m <sup>3</sup>	15.3	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	10.3	12.2	08.2	µg / m <sup>3</sup>	10.2	100
6	Lead	IS-5182(Part22) - 2004	0.03	0.02	0.02	µg / m <sup>3</sup>	0.02	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.42	0.46	0.38	mg / m <sup>3</sup>	0.42	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.26	1.28	1.20	ng / m <sup>3</sup>	1.24	20

<b>INFERENCE</b>	<b>As per NAAQS Standards</b> Report Status :- The analyzed values for above measured parameter are within the limits
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Verified by



End of The Report:-

Authorized Signature

- Note: 1. The results listed only to the tested samples & applicable parameters,  
2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.  
3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.  
4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.  
5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.



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Sanganakallu Road, KEB Circle, Ballari - 583103 **Contact No** : Mob : 94498 03895, (O) : 08392-255169,  
**E-mail** : msv.lab01@gmail.com, labmsv@gmail.com, **Website** : www.msvlabellary.com

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7168

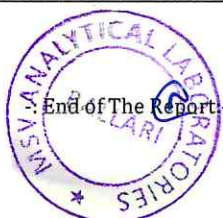
Report Issued Date: 11.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasanakere, Hanumanahalli Village,  
Hospet Taluk, Bellary District, Karnataka.
- 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** : 05.07.2022
- Analysis Starting Date** : 06.07.2022
- Analysis Completion Date** : 11.07.2022
- Sample Tested as Received**

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

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

Verified by



Authorized Signature

- Note:
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Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (O) : 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: TC720722000014263F

Report Issued Date: 11.07.2022

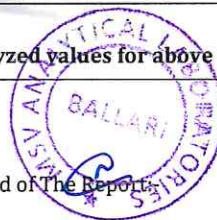
- Name of the Project : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasnakere, Hanumanahalli Village,  
Hospet Taluk, Bellary District, Karnataka.
- Name of the location : Kallahalli Village
- Sample Collected By : MSV Analytical Laboratories, Bellary.
- Particulars of the sample : Sample collected with RDS APM460 and FDS GTI-131
- Date of Sample Receipt : 05.07.2022
- Analysis Starting Date : 06.07.2022
- Analysis Completion Date : 11.07.2022
- Sample Tested as Received

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



Authorized Signature

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

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7169

Report Issued Date: 11.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasnakere, 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** : 05.07.2022
- Analysis Starting Date** : 06.07.2022
- Analysis Completion Date** : 11.07.2022
- Sample Tested as Received**

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

<b>INFERENCE</b>	<b>As per NAAQS Standards</b> <b>Report Status :- The analyzed values for above measured parameter are within the limits</b>
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Verified by



Authorized Signature

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MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014262F

Report Issued Date: 11.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vysanakere, 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** : 05.07.2022
- Analysis Starting Date** : 06.07.2022
- Analysis Completion Date** : 11.07.2022
- Sample Tested as Received**

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	53.4	52.0	50.0	µg / m <sup>3</sup>	51.8	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	18.4	17.6	16.4	µg / m <sup>3</sup>	17.4	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	10.9	9.6	8.7	µg / m <sup>3</sup>	9.7	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	15.3	14.8	13.7	µg / m <sup>3</sup>	14.6	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	9.8	8.4	8.0	µg / m <sup>3</sup>	8.7	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.01	0.01	µg / m <sup>3</sup>	0.01	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.26	0.28	0.20	mg / m <sup>3</sup>	0.24	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.28	1.32	1.20	ng / m <sup>3</sup>	1.26	20

<b>INFERENCE</b>	As per NAAQS Standards Report Status :- The analyzed values for above measured parameter are within the limits
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:- End of The Report:-



Authorized Signature

- 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.msvbellary.com

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7170

Report Issued Date: 11.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vysanakere, 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** : 05.07.2022
- Analysis Starting Date** : 06.07.2022
- Analysis Completion Date** : 11.07.2022
- Sample Tested as Received**

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

<b>INFERENCE</b>	<b>As per NAAQS Standards</b> <b>Report Status :- The analyzed values for above measured parameter are within the limits</b>
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Verified by

-: End of The Report:-



Authorized Signature

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



TC-7207

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 : 05.07.2022
6. Analysis Starting Date : 06.07.2022
7. Analysis Completion Date : 11.07.2022
8. Sample Tested as Received

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

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

Verified by



Authorized Signature

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MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7171

Report Issued Date: 11.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyanakere, 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** : 05.07.2022
- Analysis Starting Date** : 06.07.2022
- Analysis Completion Date** : 11.07.2022
- Sample Tested as Received**

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

<b>INFERENCE</b>	<b>As per NAAQS Standards</b> <b>Report Status :- The analyzed values for above measured parameter are within the limits</b>
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Verified by

*[Signature]*

:- End of The Report



*[Signature]*  
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.





# MSV Analytical Laboratories

Recognition by MoEF under Environment (Protection) Act, 1986 and Accredited by NABL  
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C.M.C Ward No 18 & C.T.C W.No.16 T.S No. 695/A/32/B1, Block No 19 (1<sup>st</sup> & 2<sup>nd</sup> Floor)  
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (O) : 08392-255169,  
E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



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)  
Vyasankere, 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 : 08.07.2022
- Analysis Starting Date : 09.07.2022
- Analysis Completion Date : 13.07.2022
- Sample Tested as Received

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

*Ramesh*

:- End of The Report:-



*Authorized Signature*  
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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Sanganakallu Road, KEB Circle, Ballari - 583103 **Contact No** : Mob : 94498 03895, (O) : 08392-255169,  
**E-mail** : msv.lab01@gmail.com, labmsv@gmail.com, **Website** : www.msvbellary.com

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7247

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** : Sample collected with RDS APM460 and FDS GTI-131
- Date of Sample Receipt** : 08.07.2022
- Analysis Starting Date** : 09.07.2022
- Analysis Completion Date** : 13.07.2022
- Sample Tested as Received**

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

<b>INFERENCE</b>	As per NAAQS Standards Report Status :- The analyzed values for above measured parameter are within the limits
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Verified by

*Ramesh*

:- End of The Report :-



*Lingy C. L.*  
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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Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (O) : 08392-255169,  
E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



TC-7207

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014424F

Report Issued Date: 13.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasankere, 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** : 08.07.2022
- Analysis Starting Date** : 09.07.2022
- Analysis Completion Date** : 13.07.2022
- Sample Tested as Received**

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	58.0	58.5	59.0	µg / m <sup>3</sup>	58.5	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	20.1	20.6	21.0	µg / m <sup>3</sup>	20.5	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	10.2	10.8	11.3	µg / m <sup>3</sup>	10.7	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	14.3	14.8	15.3	µg / m <sup>3</sup>	14.8	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	8.4	8.6	8.8	µg / m <sup>3</sup>	8.6	100
6	Lead	IS-5182(Part22) - 2004	0.30	0.32	0.28	µg / m <sup>3</sup>	0.3	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	8.4	8.6	8.8	mg / m <sup>3</sup>	8.6	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.06	1.05	1.04	ng / m <sup>3</sup>	1.05	20

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

Verified by

*Ramesh*

MSV ANALYTICAL LABORATORIES  
BALLARI  
-: End of The Report :-

*Devi K. R.*  
Authorized Signature

- 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/2022/7248

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** : 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** : 08.07.2022
- Analysis Starting Date** : 09.07.2022
- Analysis Completion Date** : 13.07.2022
- Sample Tested as Received**

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

<b>INFERENCE</b>	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 The Report

Authorized Signature

- Note: 1. The results listed only to the tested samples & applicable parameters,  
2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.  
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E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014425F

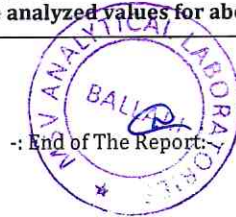
Report Issued Date: 13.07.2022

1. Name of the Project : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vysanakere, 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 :
5. Date of Sample Receipt : 08.07.2022
6. Analysis Starting Date : 09.07.2022
7. Analysis Completion Date : 13.07.2022
8. Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	50.8	51.2	51.4	µg / m <sup>3</sup>	51.1	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	17.4	17.8	18.2	µg / m <sup>3</sup>	17.8	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	6.9	7.7	7.8	µg / m <sup>3</sup>	7.4	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	12.3	12.55	13.05	µg / m <sup>3</sup>	12.6	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	6.9	7.2	7.4	µg / m <sup>3</sup>	7.1	100
6	Lead	IS-5182(Part22) - 2004	0.082	0.081	0.080	µg / m <sup>3</sup>	0.08	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.24	0.26	0.22	mg / m <sup>3</sup>	0.24	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.26	1.25	1.04	ng / m <sup>3</sup>	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,  
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/2022/7249

Report Issued Date: 13.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyanakere, Hanumanahalli Village,  
Hospet Taluk, Bellary District, Karnataka.
- Name of the location** : Vyanakere 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** : 08.07.2022
- Analysis Starting Date** : 09.07.2022
- Analysis Completion Date** : 13.07.2022
- Sample Tested as Received**

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

<b>INFERENCE</b>	As per NAAQS Standards Report Status :- The analyzed values for above measured parameter are within the limits
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Verified by

*Pameel*

-. End of The Report:-



*Authorized Signature*  
Authorized Signature

- Note: 1. The results listed only to the tested samples & applicable parameters,  
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E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014426F

Report Issued Date: 13.07.2022

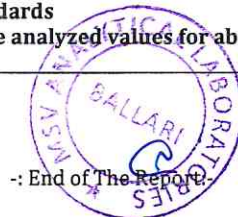
- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasankere, Hanumanahalli Village,  
Hospet Taluk, Bellary District, Karnataka.
- Name of the location** : Gunda Village
- Sample Collected By** : MSV Analytical Laboratories, Bellary.
- Particulars of the sample** : Sample collected with RDS APM460 and FDS GTI-131
- Date of Sample Receipt** : 08.07.2022
- Analysis Starting Date** : 09.07.2022
- Analysis Completion Date** : 13.07.2022
- Sample Tested as Received**

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	53.2	53.8	54.1	µg / m <sup>3</sup>	53.7	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	15.2	15.6	16.1	µg / m <sup>3</sup>	15.6	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	7.7	8.15	8.2	µg / m <sup>3</sup>	8.0	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	11.15	11.3	11.75	µg / m <sup>3</sup>	11.4	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	8.0	8.2	8.4	µg / m <sup>3</sup>	8.2	100
6	Lead	IS-5182(Part22) - 2004	0.017	0.018	0.016	µg / m <sup>3</sup>	0.01	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.22	0.24	0.20	mg / m <sup>3</sup>	0.2	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.22	1.21	1.20	ng / m <sup>3</sup>	1.21	20

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

Verified by

*Ramesh*



:- End of The Report.

*Authorized Signature*  
Authorized Signature

- Note :
- The results listed only to the tested samples & applicable parameters,
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Sanganakallu Road, KEB Circle, Ballari - 583103 **Contact No** : Mob : 94498 03895, (O) : 08392-255169,  
**E-mail** : msv.lab01@gmail.com, labmsv@gmail.com, **Website** : www.msvbellary.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)  
Vyanakere, 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** : 08.07.2022
- Analysis Starting Date** : 09.07.2022
- Analysis Completion Date** : 13.07.2022
- Sample Tested as Received**

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

<b>INFERENCE</b>	As per NAAQS Standards Report Status :- The analyzed values for above measured parameter are within the limits
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Authorized Signature

- Note :
- The results listed only to the tested samples & applicable parameters.
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Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,  
E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014697F

Report Issued Date: 16.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vysanakere, 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** : 12.07.2022
- Analysis Starting Date** : 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			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	52.6	51.4	50.8	µg / m <sup>3</sup>	51.6	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	22.0	21.5	20.6	µg / m <sup>3</sup>	21.3	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	9.8	9.5	8.8	µg / m <sup>3</sup>	9.3	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	15.7	15.1	14.1	µg / m <sup>3</sup>	14.9	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	9.6	9.2	8.7	µg / m <sup>3</sup>	9.1	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.02	0.01	µg / m <sup>3</sup>	0.01	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.40	0.35	0.31	mg / m <sup>3</sup>	0.35	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.18	1.15	1.12	ng / m <sup>3</sup>	1.15	20

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



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- 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.msvlabellary.com

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7370

Report Issued Date: 16.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasnakere, 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** : 12.07.2022
- Analysis Starting Date** : 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			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng / m <sup>3</sup>	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng / m <sup>3</sup>	<0.01	6

<b>INFERENCE</b>	<b>As per NAAQS Standards</b> <b>Report Status :- The analyzed values for above measured parameter are within the limits</b>
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Verified by



Authorized Signature

- Note: 1. The results listed only to the tested samples & applicable parameters,  
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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: TC720722000014698F

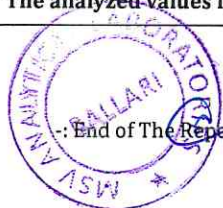
Report Issued Date: 16.07.2022

- Name of the Project : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasnakere, 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 : 12.07.2022
- Analysis Starting Date : 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			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	58.6	57.8	57.2	µg / m <sup>3</sup>	57.8	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	17.5	16.4	15.6	µg / m <sup>3</sup>	16.5	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	8.5	7.8	7.2	µg / m <sup>3</sup>	7.8	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	13.0	12.4	11.8	µg / m <sup>3</sup>	12.4	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	8.5	8.2	7.6	µg / m <sup>3</sup>	8.1	100
6	Lead	IS-5182(Part22) - 2004	0.01	0.01	0.01	µg / m <sup>3</sup>	0.01	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.28	0.24	0.20	mg / m <sup>3</sup>	0.24	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.12	1.10	1.07	ng / m <sup>3</sup>	1.09	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  
*Ramesh*



End of The Report:-

*Authorized Signature*  
Authorized Signature

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

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7373

Report Issued Date: 16.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasnakere, 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** : 12.07.2022
- Analysis Starting Date** : 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			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng / m <sup>3</sup>	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng / m <sup>3</sup>	<0.01	6

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

Verified by



:- End of The Report:-

Authorized Signature

- Note: 1. The results listed only to the tested samples & applicable parameters,  
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E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.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 : Vyasanakere Village
- Sample Collected By : MSV Analytical Laboratories, Bellary.
- Particulars of the sample :
- Date of Sample Receipt : 12.07.2022
- Analysis Starting Date : 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			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	56.0	55.4	54.6	µg / m <sup>3</sup>	55.3	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	16.2	15.8	15.1	µg / m <sup>3</sup>	15.7	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	7.8	7.2	6.5	µg / m <sup>3</sup>	7.1	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	12.4	11.7	11.1	µg / m <sup>3</sup>	11.7	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	8.5	8.2	8.0	µg / m <sup>3</sup>	8.2	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.01	0.01	µg / m <sup>3</sup>	0.01	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.22	0.20	0.17	mg / m <sup>3</sup>	0.19	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.15	1.13	1.10	ng / m <sup>3</sup>	1.12	20

<b>INFERENCE</b>	<b>As per NAAQS Standards</b> <b>Report Status :- The analyzed values for above measured parameter are within the limits</b>
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Verified by



Authorized Signatory

- Note: 1. The results listed only to the tested samples & applicable parameters,  
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MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7371

Report Issued Date: 16.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vysanakere, 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** : 12.07.2022
- Analysis Starting Date** : 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			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng / m <sup>3</sup>	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng / m <sup>3</sup>	<0.01	6

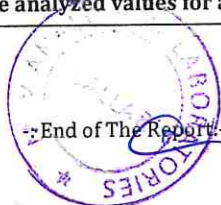
INFERENCE

As per NAAQS Standards

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

Verified by

:-End of The Report:-



Authorized Signature

- Note : 1. The results listed only to the tested samples & applicable parameters,  
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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: TC720722000014700F

Report Issued Date: 16.07.2022

- Name of the Project : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vysanakere, Hanumanahalli Village,  
Hospet Taluk, Bellary District, Karnataka.
- Name of the location : Gunda Village
- Sample Collected By : MSV Analytical Laboratories, Bellary.
- Particulars of the sample : Sample collected with RDS APM460 and FDS GTI-131
- Date of Sample Receipt : 12.07.2022
- Analysis Starting Date : 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			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	56.0	57.5	56.8	µg / m <sup>3</sup>	56.7	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	15.8	15.2	14.5	µg / m <sup>3</sup>	15.1	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	7.9	7.4	6.8	µg / m <sup>3</sup>	7.3	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	13.0	12.4	11.8	µg / m <sup>3</sup>	12.4	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	9.0	8.7	8.4	µg / m <sup>3</sup>	8.7	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.01	0.01	µg / m <sup>3</sup>	0.01	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.25	0.21	0.16	mg / m <sup>3</sup>	0.20	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.15	1.13	1.10	ng / m <sup>3</sup>	1.12	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,  
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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.msvbellary.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** : Gunda Village
- Sample Collected By** : MSV Analytical Laboratories, Bellary.
- Particulars of the sample** : Sample collected with RDS APM460 and FDS GTI-131
- Date of Sample Receipt** : 12.07.2022
- Analysis Starting Date** : 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			
10	Benzene as C <sub>6</sub> H <sub>6</sub>	IS:5182(part 11) - 2006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	5
11	Benzo (α) Pyrene (BaP)	CPCB Procedure	<0.01	<0.01	<0.01	ng / m <sup>3</sup>	<0.01	1
12	Arsenic as As	CPCB Procedure	<0.01	<0.01	<0.01	ng / m <sup>3</sup>	<0.01	6

<b>INFERENCE</b>	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 :
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Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (O) : 08392-255169,  
E-mail : msvlabellary2018@gmail.com, labmsv@gmail.com, Website : www.msvlabellary.com



MSVAL/A/F/16/03

## 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)  
Vyasnakere, 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 : 16.07.2022
- Analysis Completion Date : 20.07.2022
- Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	60.4	59.6	58.2	µg / m <sup>3</sup>	59.4	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	23.6	22.0	21.0	µg / m <sup>3</sup>	22.2	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	9.80	8.80	8.23	µg / m <sup>3</sup>	8.9	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	17.57	17.22	15.81	µg / m <sup>3</sup>	16.8	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	12.8	11.1	10.5	µg / m <sup>3</sup>	11.4	100
6	Lead	IS-5182(Part22) - 2004	0.08	0.07	0.06	µg / m <sup>3</sup>	0.07	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.22	0.20	0.18	mg / m <sup>3</sup>	0.20	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.24	1.20	1.18	ng / m <sup>3</sup>	1.20	20

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

Verified by

*Ramesh*



*Dinesh C. 2*  
Authorized Signature

- Note: 1. The results listed only to the tested samples & applicable parameters,  
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Sanganakallu Road, KEB Circle, Ballari - 583103 **Contact No** : Mob : 94498 03895, (O) : 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/2022/7493

Report Issued Date: 20.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyanakere, 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** : 16.07.2022
- Analysis Completion Date** : 20.07.2022
- Sample Tested as Received**

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

<b>INFERENCE</b>	As per NAAQS Standards Report Status :- The analyzed values for above measured parameter are within the limits
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Verified by  
*Ramesh*



*Dinesh U. R.*  
Authorized Signature

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

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



TC-7207

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014906F

Report Issued Date: 20.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasnakere, 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** : 15.07.2022
- Analysis Starting Date** : 16.07.2022
- Analysis Completion Date** : 20.07.2022
- Sample Tested as Received**

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	52.4	53.5	51.0	µg / m <sup>3</sup>	52.3	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	18.5	17.6	16.5	µg / m <sup>3</sup>	17.5	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	8.87	8.04	7.26	µg / m <sup>3</sup>	8.05	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	15.6	14.7	13.8	µg / m <sup>3</sup>	14.7	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	8.4	8.2	8.0	µg / m <sup>3</sup>	8.2	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.028	0.022	µg / m <sup>3</sup>	0.02	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.28	0.26	0.22	mg / m <sup>3</sup>	0.25	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.88	1.80	1.78	ng / m <sup>3</sup>	1.82	20

<b>INFERENCE</b>	<b>As per NAAQS Standards</b> <b>Report Status :- The analyzed values for above measured parameter are within the limits</b>
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Verified by  
*Ramesh*

-. End of The Report -.



*Dinesh K. R.*  
Authorized Signature

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

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7494

Report Issued Date: 20.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vysanakere, 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** : 15.07.2022
- Analysis Starting Date** : 16.07.2022
- Analysis Completion Date** : 20.07.2022
- Sample Tested as Received**

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

INFERENCE

As per NAAQS Standards

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

Verified by

:- End of The Report :-



Authorized Signature

- Note: 1. The results listed only to the tested samples & applicable parameters,  
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E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



TC-7207

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000014907F

Report Issued Date: 20.07.2022

1. Name of the Project : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vysanakere, 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 :
5. Date of Sample Receipt : 15.07.2022
6. Analysis Starting Date : 16.07.2022
7. Analysis Completion Date : 20.07.2022
8. Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	53.6	52.3	50.5	µg / m <sup>3</sup>	52.1	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	12.8	11.6	10.3	µg / m <sup>3</sup>	11.5	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	7.56	7.06	6.47	µg / m <sup>3</sup>	7.03	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	11.74	10.78	9.53	µg / m <sup>3</sup>	10.6	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	8.8	8.6	8.0	µg / m <sup>3</sup>	8.4	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.02	0.02	µg / m <sup>3</sup>	0.02	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.28	0.26	0.24	mg / m <sup>3</sup>	0.26	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.26	1.28	1.20	ng / m <sup>3</sup>	1.24	20

INFERENCE

As per NAAQS Standards

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

Verified by

*Ramesh*

:- End of The Report:-



*Linga C. R.*  
Authorized Signature

- 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.msvbellary.com

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7495

Report Issued Date: 20.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vysanakere, 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** : 15.07.2022
- Analysis Starting Date** : 16.07.2022
- Analysis Completion Date** : 20.07.2022
- Sample Tested as Received**

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

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

Verified by



Authorized Signature

- Note:
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E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



TC-7207

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)  
Vyasankere, 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 : 15.07.2022
6. Analysis Starting Date : 16.07.2022
7. Analysis Completion Date : 20.07.2022
8. Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	56.4	55.4	53.2	µg / m <sup>3</sup>	55.0	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	18.5	17.8	16.5	µg / m <sup>3</sup>	17.6	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	8.09	7.06	6.32	µg / m <sup>3</sup>	7.1	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	14.0	12.6	11.6	µg / m <sup>3</sup>	12.7	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	1.12	10.6	09.6	µg / m <sup>3</sup>	7.1	100
6	Lead	IS-5182(Part22) - 2004	0.028	0.026	0.024	µg / m <sup>3</sup>	0.02	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	11.2	10.6	9.6	mg / m <sup>3</sup>	10.4	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.26	1.28	1.20	ng / m <sup>3</sup>	1.24	20

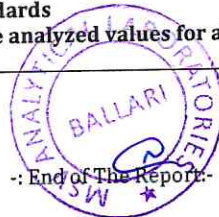
INFERENCE

As per NAAQS Standards

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

Verified by

*Ramul*



:- End of The Report:-

*Dhanya C. S.*  
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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(Certified by ISO 14001-2015, ISO 22000-2018, ISO 45001-2018, ISO 9001-2015)

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

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vysanakere, 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** : 15.07.2022
- Analysis Starting Date** : 16.07.2022
- Analysis Completion Date** : 20.07.2022
- Sample Tested as Received**

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

<b>INFERENCE</b>	As per NAAQS Standards Report Status :- The analyzed values for above measured parameter are within the limits
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Verified by

*Ramesh*

:- End of The Report:-



*L. S. Srinivas*  
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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# MSV Analytical Laboratories

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 (1<sup>st</sup> & 2<sup>nd</sup> Floor)  
Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (O) : 08392-255169,  
E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.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)  
Vyasankere, Hanumanahalli Village,  
Hospet Taluk, Bellary District, Karnataka.
- Name of the location** : Sniore 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** : 19.07.2022
- Analysis Starting Date** : 20.07.2022
- Analysis Completion Date** : 23.07.2022
- Sample Tested as Received**

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	61.8	60.4	58.6	µg / m <sup>3</sup>	60.2	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	18.9	17.6	16.3	µg / m <sup>3</sup>	17.6	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	15.6	15.0	14.0	µg / m <sup>3</sup>	14.8	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	9.2	8.8	7.8	µg / m <sup>3</sup>	8.6	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	18.2	19.6	17.7	µg / m <sup>3</sup>	18.5	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.03	0.02	µg / m <sup>3</sup>	0.02	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.44	0.48	0.32	mg / m <sup>3</sup>	0.41	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.08	1.12	1.04	ng / m <sup>3</sup>	1.08	20

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

Verified by  
*Ramesh*



*Authorized Signature*  
Authorized Signature

- Note : 1. The results listed only to the tested samples & applicable parameters,  
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Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (O) : 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: MSVAL/2022/7620

Report Issued Date: 23.07.2022

- Name of the Project : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasnakere, 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 : 19.07.2022
- Analysis Starting Date : 20.07.2022
- Analysis Completion Date : 23.07.2022
- Sample Tested as Received

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

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

:- End of The Report:-



*Author*  
Authorized Signature

- Note :
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Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (0) : 08392-255169,  
E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000015346F

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 : Sample collected with RDS APM460 and FDS GTI-131
- Date of Sample Receipt : 19.07.2022
- Analysis Starting Date : 20.07.2022
- Analysis Completion Date : 23.07.2022
- Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	55.2	56.4	54.6	µg / m <sup>3</sup>	55.4	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	18.4	19.7	17.3	µg / m <sup>3</sup>	18.4	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	09.5	10.2	07.7	µg / m <sup>3</sup>	9.1	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	15.7	16.9	14.2	µg / m <sup>3</sup>	15.6	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	18.4	17.6	16.8	µg / m <sup>3</sup>	17.6	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.02	0.02	µg / m <sup>3</sup>	0.02	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.46	0.52	0.38	mg / m <sup>3</sup>	0.45	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.07	1.02	1.00	ng / m <sup>3</sup>	1.03	20

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

Verified by  
*Ram*



:- End of The Report:-

*Authorized Signature*  
Authorized Signature

- Note : 1. The results listed only to the tested samples & applicable parameters,  
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Sanganakallu Road, KEB Circle, Ballari - 583103 **Contact No** : Mob : 94498 03895, (O) : 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/2022/7621

Report Issued Date: 23.07.2022

1. Name of the Project : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasnakere, 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 Receipt : 19.07.2022
6. Analysis Starting Date : 20.07.2022
7. Analysis Completion Date : 23.07.2022
8. Sample Tested as Received

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

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

Verified by



:- End of The Report:-

Authorized Signature

- Note : 1. The results listed only to the tested samples & applicable parameters,  
2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.  
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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: TC720722000015347F

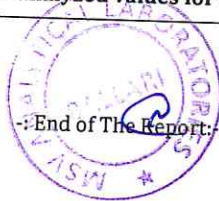
Report Issued Date: 23.07.2022

- Name of the Project : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vysanakere, 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 : 19.07.2022
- Analysis Starting Date : 20.07.2022
- Analysis Completion Date : 23.07.2022
- Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	53.7	52.5	51.1	µg / m <sup>3</sup>	52.4	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	20.9	19.4	18.5	µg / m <sup>3</sup>	19.6	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	9.5	8.1	6.8	µg / m <sup>3</sup>	8.1	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	14.7	13.2	12.8	µg / m <sup>3</sup>	13.5	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	10.2	09.4	08.3	µg / m <sup>3</sup>	9.3	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.02	0.02	µg / m <sup>3</sup>	0.02	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.22	0.28	0.22	mg / m <sup>3</sup>	0.24	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.15	1.12	1.10	ng / m <sup>3</sup>	1.12	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,  
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.msvlabellary.com

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7622

Report Issued Date: 23.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vysanakere, 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** : 19.07.2022
- Analysis Starting Date** : 20.07.2022
- Analysis Completion Date** : 23.07.2022
- Sample Tested as Received**

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

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

Verified by

--- End of The Report ---

Authorized Signature



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



# MSV Analytical Laboratories

Recognition by MoEF under Environment (Protection) Act, 1986 and Accredited by NABL  
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Sanganakallu Road, KEB Circle, Ballari - 583103 Contact No : Mob : 94498 03895, (O) : 08392-255169,  
E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: TC720722000015348F

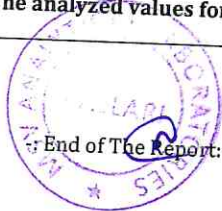
Report Issued Date: 23.07.2022

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.
2. Name of the location : Gunda Village
3. Sample Collected By : MSV Analytical Laboratories, Bellary.
4. Particulars of the sample : Sample collected with RDS APM460 and FDS GTI-131
5. Date of Sample Receipt : 19.07.2022
6. Analysis Starting Date : 20.07.2022
7. Analysis Completion Date : 23.07.2022
8. Sample Tested as Received

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	52.4	53.6	50.6	µg / m <sup>3</sup>	52.2	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	17.6	18.5	15.8	µg / m <sup>3</sup>	17.3	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	7.2	8.4	6.1	µg / m <sup>3</sup>	7.2	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	14.6	15.8	12.9	µg / m <sup>3</sup>	14.4	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	7.8	6.5	6.0	µg / m <sup>3</sup>	6.7	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.02	0.02	µg / m <sup>3</sup>	0.02	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.22	0.24	0.20	mg / m <sup>3</sup>	0.22	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.30	1.38	1.20	ng / m <sup>3</sup>	1.29	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



Authorized Signature

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Sanganakallu Road, KEB Circle, Ballari - 583103 **Contact No** : Mob : 94498 03895, (O) : 08392-255169,  
**E-mail** : msv.lab01@gmail.com, labmsv@gmail.com, **Website** : www.msvlabellary.com

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7623

Report Issued Date: 23.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasankere, 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** : 19.07.2022
- Analysis Starting Date** : 20.07.2022
- Analysis Completion Date** : 23.07.2022
- Sample Tested as Received**

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

<b>INFERENCE</b>	As per NAAQS Standards Report Status :- The analyzed values for above measured parameter are within the limits
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Authorized Signature

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E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.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)  
Vyasnakere, 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** : 22.07.2022
- Analysis Starting Date** : 23.07.2022
- Analysis Completion Date** : 27.07.2022
- Sample Tested as Received**

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	63.5	62.4	60.5	µg / m <sup>3</sup>	62.1	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	20.6	19.8	18.3	µg / m <sup>3</sup>	19.5	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	16.2	14.4	13.8	µg / m <sup>3</sup>	14.8	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	10.4	09.5	08.5	µg / m <sup>3</sup>	9.4	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	18.4	17.2	16.5	µg / m <sup>3</sup>	17.3	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.02	0.02	µg / m <sup>3</sup>	0.02	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.50	0.46	0.37	mg / m <sup>3</sup>	0.44	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.22	1.18	1.12	ng / m <sup>3</sup>	1.17	20

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

Verified by  


:- End of The Report:-



  
Authorized Signature

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

MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7712

Report Issued Date: 27.07.2022

- Name of the Project** : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasnakere, 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** : 22.07.2022
- Analysis Starting Date** : 23.07.2022
- Analysis Completion Date** : 27.07.2022
- Sample Tested as Received**

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

<b>INFERENCE</b>	<b>As per NAAQS Standards</b> <b>Report Status :- The analyzed values for above measured parameter are within the limits</b>
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Verified by

*Ramesh*



End of The Report.

*Deepa V.P.*  
Authorized Signature

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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)  
Vyasnakere, 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** : 22.07.2022
- Analysis Starting Date** : 23.07.2022
- Analysis Completion Date** : 27.07.2022
- Sample Tested as Received**

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	56.8	55.6	54.2	µg / m <sup>3</sup>	55.5	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	19.7	18.3	17.5	µg / m <sup>3</sup>	18.5	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	10.0	08.9	07.6	µg / m <sup>3</sup>	8.8	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	17.8	15.7	14.5	µg / m <sup>3</sup>	16.0	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	17.6	16.5	14.5	µg / m <sup>3</sup>	16.2	100
6	Lead	IS-5182(Part22) - 2004	0.03	0.02	0.02	µg / m <sup>3</sup>	0.02	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.48	0.50	0.40	mg / m <sup>3</sup>	0.46	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.18	1.10	1.04	ng / m <sup>3</sup>	1.10	20

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

Verified by

*Ramy*



End of the Report:-

*Authorized Signature*  
Authorized Signature

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E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7713

Report Issued Date: 27.07.2022

- Name of the Project : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasnakere, 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 : 22.07.2022
- Analysis Starting Date : 23.07.2022
- Analysis Completion Date : 27.07.2022
- Sample Tested as Received

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

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

*Ramesh*



*L. Srinivas*  
Authorized Signature

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MSVAL/A/F/16/03

## 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)  
Vysanakere, 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** : 23.07.2022
- Analysis Completion Date** : 27.07.2022
- Sample Tested as Received**

S.No	Parameter	Protocols	Shift wise results			Units	Result in Avg.	Tolerance limits
			1	2	3			
1	Particulate Matter PM <sub>10</sub> µg/m <sup>3</sup>	IS-5182(Part-23) - 2006	55.2	54.6	52.4	µg / m <sup>3</sup>	54.0	100
2	Particulate Matter or PM <sub>2.5</sub> µg/m <sup>3</sup>	LAB SOP MSVAL/SOP/A/005	21.4	20.2	19.4	µg / m <sup>3</sup>	20.3	60
3	Sulphur Dioxide as SO <sub>x</sub>	IS-5182(Part-2) - 2001	18.4	16.9	15.9	µg / m <sup>3</sup>	17.0	80
4	Oxides of Nitrogen as NO <sub>x</sub>	IS-5182(Part-6) - 2006	13.5	12.8	11.5	µg / m <sup>3</sup>	12.6	80
5	Ozone as O <sub>3</sub>	IS 5182(part-9)1974	12.6	10.4	08.2	µg / m <sup>3</sup>	10.4	100
6	Lead	IS-5182(Part22) - 2004	0.02	0.02	0.02	µg / m <sup>3</sup>	0.02	1
7	Carbon Monoxide as CO	LAB SOP MSVAL/SOP/A/007	0.24	0.28	0.22	mg / m <sup>3</sup>	0.24	2
8	Ammonia as NH <sub>3</sub>	LAB SOP MSVAL/SOP/A/006	<0.01	<0.01	<0.01	µg / m <sup>3</sup>	<0.01	400
9	Nickel as Ni	LAB SOP MSVAL/SOP/A/008	1.18	1.14	1.12	ng / m <sup>3</sup>	1.14	20

<b>INFERENCE</b>	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,  
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MSVAL/A/F/16/03

## ANALYSIS REPORT OF AMBIENT AIR QUALITY

Test Report No: MSVAL/2022/7714

Report Issued Date: 27.07.2022

- Name of the Project : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vysanakere, 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 : 22.07.2022
- Analysis Starting Date : 23.07.2022
- Analysis Completion Date : 27.07.2022
- Sample Tested as Received

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

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

Verified by

*Ramesh*

-: End of the Report:-



*Lingappa C.P.*  
Authorized Signature

- Note :
- 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.
  - 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.
  - Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.
  - 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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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: TC720722000015548F

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** : 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** : 22.07.2022
- Analysis Starting Date** : 23.07.2022
- Analysis Completion Date** : 27.07.2022
- Sample Tested as Received**

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

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

Verified by  
*Ramul*

-: End of The Report:-



*Long U. R.*  
Authorized Signature

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

- 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** : 22.07.2022
- Analysis Starting Date** : 23.07.2022
- Analysis Completion Date** : 27.07.2022
- Sample Tested as Received**

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

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

Verified by



Authorized Signature

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E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



MSVAL/A/F/18/03

## ANALYSIS REPORT FOR SOURCE EMISSION

Report Issued Date : 28.07.2022

Test Report No : TC720722000015409F

1. Name of the Industry

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

2. Stack ID

: Coke Cutter

3. Sample Collected By

: MSV Analytical Laboratories, Bellary.

4. Particulars of Sample Collected

: Sample collected with VSS - 1

5. Date of Sample Receipt

: 20.07.2022

6. Analysis Starting Date

: 21.07.2022

7. Analysis Completion Date

: 28.07.2022

8. Sample Tested as Received

### GENERAL DETAILS

Date of Monitoring	20.07.2022
Fuel Used	---
Stack Temperature (°C)	39
Velocity (m/s)	5.1
Height (m)	15mtrs AGL
Diameter (m)	0.7
Cross sectional area (m <sup>2</sup> )	0.38465

### RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm <sup>3</sup>	23.7	50
Sulphur dioxide	IS-11255(Part2) - 1985	mg/Nm <sup>3</sup>	11.5	800
Nitrogen dioxide	IS-11255(Part7) - 2005	mg/Nm <sup>3</sup>	9.0	500
Carbon Monoxide as(CO)	IS 13270	%	0.18	Max 1%

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

Verified by



Authorized Signature

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

Test Report No : TC720722000015409F

Report Issued Date : 28.07.2022

- Name of the Industry : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyanakere, Hanumanahalli Village,  
Hospet Taluk, Bellary District, Karnataka.
- Stack ID : Coal Crushing Area
- Sample Collected By : MSV Analytical Laboratories, Bellary.
- Particulars of Sample Collected : Sample collected with VSS - 1
- Date of Sample Receipt : 20.07.2022
- Analysis Starting Date : 21.07.2022
- Analysis Completion Date : 28.07.2022
- Sample Tested as Received

### GENERAL DETAILS

Date of Monitoring	20.07.2022
Fuel Used	---
Stack Temperature (°C)	89
Velocity (m/s)	9.8
Height (m)	15mtrs AGL
Diameter (m)	0.75
Cross sectional area (m <sup>2</sup> )	0.44156

### RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm <sup>3</sup>	24.5	50
Sulphur dioxide	IS-11255(Part2) - 1985	mg/Nm <sup>3</sup>	13.0	800
Nitrogen dioxide	IS-11255(Part7) - 2005	mg/Nm <sup>3</sup>	10.4	500
Carbon Monoxide as(CO)	IS 13270	%	0.20	Max 1%

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

Verified by

Authorized Signature

:- END OF 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 destroyed after 1 month from the date of test certificate issue.  
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E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



MSVAL/A/F/18/03

## ANALYSIS REPORT FOR SOURCE EMISSION

Test Report No: TC720722000015411F

Report Issued Date : 28.07.2022

- Name of the Industry : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyanakere, Hanumanahalli Village,  
Hospet Taluk, Bellary District, Karnataka.
- Stack ID : DG Set 750 KVA
- Sample Collected By : MSV Analytical Laboratories, Bellary.
- Particulars of Sample Collected : Sample collected with VSS - 1
- Date of Sample Receipt : 20.07.2022
- Analysis Starting Date : 21.07.2022
- Analysis Completion Date : 28.07.2022
- Sample Tested as Received

### GENERAL DETAILS

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 (m <sup>2</sup> )	0.07065

### RESULTS

Parameters	Protocol	Unit	Result	KSPCB Consent Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm <sup>3</sup>	28.6	100
Sulphur dioxide	IS-11255(Part2) - 1985	PPM	13.6	50
Nitrogen dioxide	IS-11255(Part7) - 2005	PPM	16.8	50

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

Verified by



END OF REPORT:-

Authorized Signature

- Note: 1. The results listed only to the tested samples & applicable parameters,  
2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.  
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E-mail : msvbellary2018@gmail.com, labmsv@gmail.com, Website : www.msvbellary.com



MSVAL/A/F/18/03

## ANALYSIS REPORT FOR SOURCE EMISSION

Test Report No : TTC720722000015408F

Report Issued Date : 28.07.2022

1. Name of the Industry : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyasanakere, Hanumanahalli Village,  
Hospet Taluk, Bellary District, Karnataka.
2. Stack ID : Coke Oven Battery - Passes Through WHRB-1
3. Sample Collected By : MSV Analytical Laboratories, Bellary.
4. Particulars of Sample Collected : Sample collected with VSS - 1
5. Date of Sample Receipt : 20.07.2022
6. Analysis Starting Date : 21.07.2022
7. Analysis Completion Date : 28.07.2022
8. Sample Tested as Received

### GENERAL DETAILS

Date of Monitoring	20.07.2022
Fuel Used	----
Stack Temperature (°C)	37
Velocity (m/s)	4.9
Height (m)	60 mtrs AGL
Diameter (m)	3.4
Cross sectional area (m <sup>2</sup> )	9.0746

### RESULTS

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

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

Verified by



Authorized Signature

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MSVAL/A/F/18/03

## ANALYSIS REPORT FOR SOURCE EMISSION

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)  
Vyanakere, Hanumanahalli Village,  
Hospet Taluk, Bellary District, Karnataka.
- Stack ID** : Ferro Alloy Arc Furnace
- Sample Collected By** : MSV Analytical Laboratories, Bellary.
- Particulars of Sample Collected** : Sample collected with VSS - 1
- Date of Sample Receipt** : 20.07.2022
- Analysis Starting Date** : 21.07.2022
- Analysis Completion Date** : 28.07.2022
- Sample Tested as Received**

### GENERAL DETAILS

Date of Monitoring	20.07.2022
Fuel Used	----
Stack Temperature (°C)	103
Velocity (m/s)	6.3
Height (m)	35 mtrs AGL
Diameter (m)	2.5
Cross sectional area (m <sup>2</sup> )	4.90625

### RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm <sup>3</sup>	32.2	150

<b>INFERENCE</b>	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,  
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MSVAL/A/F/18/03

## ANALYSIS REPORT FOR SOURCE EMISSION

Test Report No : TC720722000013441F

Report Issued Date : 28.07.2022

- Name of the Industry : M/s. The Sandur Manganese & Iron Ores Ltd.  
(Metal & Ferro Alloys Plant)  
Vyanakere, Hanumanahalli Village,  
Hospet Taluk, Bellary District, Karnataka.
- Stack ID : Coke Screening & Store
- Sample Collected By : MSV Analytical Laboratories, Bellary.
- Particulars of Sample Collected : Sample collected with VSS - 1
- Date of Sample Receipt : 20.07.2022
- Analysis Starting Date : 21.07.2022
- Analysis Completion Date : 28.07.2022
- Sample Tested as Received

### GENERAL DETAILS

Date of Monitoring	20.07.2022
Fuel Used	---
Stack Temperature (°C)	155
Velocity (m/s)	8.2
Height (m)	15mtrs AGL
Diameter (m)	0.7
Cross sectional area (m <sup>2</sup> )	0.38465

### RESULTS

Parameters	Protocol	Unit	Result	GSR 277 (E) Standards
Particulate Matter	IS-11255(Part1) - 1985	mg/Nm <sup>3</sup>	24.5	50
Sulphur dioxide	IS-11255(Part2) - 1985	mg/Nm <sup>3</sup>	15.3	800
Nitrogen dioxide	IS-11255(Part7) - 2005	mg/Nm <sup>3</sup>	11.5	500
Carbon Monoxide as(CO)	IS 13270	%	0.25	Max 1%

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

Verified by



Authorized Signature

Handwritten signature of the authorized person.

- Note: 1. The results listed only to the tested samples & applicable parameters,  
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Sanganakallu Road, KEB Circle, Ballari - 583103 **Contact No** : Mob : 94498 03895, (O) : 08392-255169,  
**E-mail** : msvbellary2018@gmail.com, labmsv@gmail.com, **Website** : www.msvbellary.com



MSVAL/A/F/18/03

## ANALYSIS REPORT FOR SOURCE EMISSION

Test Report No : TC720722000015414F

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.
- Stack ID : Coke Oven Battery - Passes Through WHRB-2
- Sample Collected By : MSV Analytical Laboratories, Bellary.
- Particulars of Sample Collected : Sample collected with VSS - 1
- Date of Sample Receipt : 20.07.2022
- Analysis Starting Date : 21.07.2022
- Analysis Completion Date : 28.07.2022
- Sample Tested as Received

### GENERAL DETAILS

Date of Monitoring	20.07.2022
Fuel Used	----
Stack Temperature (°C)	93
Velocity (m/s)	6.8
Height (m)	60 mtrs AGL
Diameter (m)	3.4
Cross sectional area (m <sup>2</sup> )	9.0746

### RESULTS

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

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



Authorized Signature

- Note : 1. The results listed only to the tested samples & applicable parameters,  
2. Water samples will destroyed after 10days, Filter papers & Thimbles will be destroyed 3months from the date of issue of test certificate unless otherwise specified. ILC sample will be destroyed after 1 month from the date of test certificate issue.  
3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the court of law & should not be used in any advertising media without our special permission in writing.  
4. Total liability of our laboratory is limited to the invoice amount. Any dispute arising out of this report is subject to Bellary Jurisdiction only.  
5. Sampling is not done by us unless otherwise specified. 6. The tests and/or calibrations marked with an are not accredited by NABL.