



MS2  
R/201  
**Eco Care**



Phone : (0341) 2252011  
Fax : (0341) 2252011

Specialised House on Environmental Monitoring, Analysis, Assessment & Management  
ISO 9001 : 2015 Certified, OHSAS 18001:2007 Certified

E-mail : ecocareasansol@rediffmail.com  
Manoj Talkies Basement, Kumarpur  
ASANSOL-713304 (W.B.)

ULR NO – TC510919000000249F

Format No. : EC/TRT/42/FM/01

### TEST REPORT

Report Release Date : 02.03.2019	Sample Ref. No.(ARF) : EC/ARF/29/190257
Test Report No : EC/TR/42/02130	Source of Sample : Steel Plant
Type of Sample : Dust & Gaseous Emission	Sampling Date : 26.02.2019
Sample Collected by : Mr. Sisir Kr. Roy & Team	Period of Analysis : 28.02.2019
Sample Details : Stack Emission	Sampling Location : Reheating Furnace Stack
Name & Address : <b>Mongia Steel Limited</b> <b>(Rolling Mill Div.)</b> At – Bhudhiyadih P.O – Bhudhiyadih, Giridih Jharkhand – 815302	Sample Condition : Preserved & Sealed
	Sample Stamped as : TH – 266
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Remarks : ----
	Deviation if any : None

### GENERAL INFORMATION

1 Particular of the Plant	: Steel Plant
2 Emission Due to	: Combustion of Producer Gas
3 Stack Connected to	: Reheating Furnace
4 Material of Construction	: M.S.
5 Stack Height from G.L.	: 30.0 m
6 Height of Sampling Port from G.L.	: 15.0 m
7 Height of Sampling Port from L.D.Z.	: ----
8 Dimension of Stack at Sampling Port	: 0.60 m
9 Shape of the Stack	: Circular Ø
10 Working Load	: 90 MT/day

### FUEL CHARACTERISTIC REPORT

1 Source of Energy	: Producer Gas
2 Energy Consumption	: 9000 NM <sup>3</sup> /hr
3 Calorific Value (K-Cal/Kg)	: ----

### RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		Method
1 Flue Gas Temperature	172 °C	IS 11255 : Part 3
2 Barometric Pressure	752 mm Hg	IS 11255 : Part 3
3 Velocity of Flue Gas	7.37 m/sec	IS 11255 : Part 3
4 Flue Gas Quantity	4979 NM <sup>3</sup> /hr	IS 11255 : Part 3
5 Concentration of Particulate Matter	63.39 mg/NM <sup>3</sup>	IS 11255 : Part 1
6 Concentration of Carbon Dioxide	6.8 %	IS 13270
7 Concentration of SO <sub>2</sub>	64.56 mg/NM <sup>3</sup>	IS 11255 : Part 2
8 Concentration of NO <sub>x</sub>	28.07 mg/NM <sup>3</sup>	IS 11255 : Part 7

Note :- Latitude-24°9'26.16634"(N) Longitude-86°19'35.75308"(E)

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
3. The Test report shall not be reproduced, without the written approval of laboratory

**Authorised Signatory**  
**NTRANJAN LAL AGARWALLA**  
B Tech MS (USA), A.M.I.E.  
Scientist & Chief Executive





# Eco Care



Phone : (0341) 2252011  
Fax : (0341) 2252011

Specialised House on Environmental Monitoring, Analysis, Assessment & Management  
ISO 9001 : 2015 Certified, OHSAS 18001:2007 Certified

E-mail : ecocareansol@rediffmail.com  
Manoj Talkies Basement, Kumarpur  
ASANSOL-713304 (W.B.)

ULR NO – TC510919000000250F

Format No. : EC/TRT/42/FM/04

## TEST REPORT

Report Release Date : 02.03.2019	Sample Ref. No.(ARF) : EC/ARF/29/190257
Test Report No : EC/TR/42/02131	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 26.02.19 to 27.02.19
Sample Collected by : Mr. Sisir Kr. Roy & Team	Period of Analysis : 28.02.19 to 01.03.19
Sample Details : Ambient Air	Sample Condition : Sealed & Preserved
Name & Address : <b>Mongia Steel Limited</b> (Rolling Mill Div.) At – Bhudhiyadih P.O – Bhudhiyadih, Giridih Jharkhand – 815302	Remarks : --- Sample Drawn By : ECO CARE Sampling Plan & Procedure : EC/SOP/03/01 Deviation if any : None

### METEOROLOGICAL INFORMATION

1	Average Temperature	25.2 °C	2	Barometric Pressure	752 mm of Hg
3	Average Relative Humidity	46.0 %	4	Weather Condition	Clear Day

### AMBIENT AIR QUALITY ANALYSIS REPORT

TEST METHOD	IS : 5182 ( Part – 2 )	IS : 5182 ( Part – 6 )	IS : 5182 ( Part – 23 )	EPA CFR40 (pt 50), Appendix I
PARAMETERS	SO <sub>2</sub> (µg/M <sup>3</sup> )	NO <sub>x</sub> (µg/M <sup>3</sup> )	PM <sub>10</sub> (µg/M <sup>3</sup> )	PM <sub>2.5</sub> (µg/M <sup>3</sup> )
Method Detection Limit	5	8	20	10
<b>1. Sampling Location : Near Office- Lat-24°9'30.26137" (N) Long-86°19'40.94849" (E)</b>				
Shift - A (10:10 AM To 06:10 PM)	45.12	43.39	84.46	35.16
Shift - B (06:20 PM To 02:20 AM)	35.98	37.87	67.11	
Shift - C (02:30 AM To 10:30 AM)	42.07	39.25	76.02	
Average (Shift - A To Shift - C)	41.06	40.17	75.86	
<b>2. Sampling Location : Near Cooling Tower- Lat-24°9'28.19228" (N) Long-86°19'36.57323" (E)</b>				
Shift - A (10:40 AM To 06:40 PM)	39.02	38.56	79.31	42.24
Shift - B (06:50 PM To 02:50 AM)	26.83	25.45	56.37	
Shift - C (03:00 AM To 11:00 AM)	32.93	28.90	65.18	
Average (Shift - A To Shift - C)	32.93	30.97	66.95	
<b>3. Sampling Location : Finished Goods Stock Yard- Lat-24°9'32.71534" (N) Long-86°19'37.68276" (E)</b>				
Shift - A (11:10 AM To 07:10 PM)	35.98	33.04	62.25	46.31
Shift - B (07:20 PM To 03:20 AM)	20.73	19.24	81.15	
Shift - C (03:30 AM To 11:30 AM)	23.78	27.52	70.64	
Average (Shift - A To Shift - C)	26.83	26.60	71.35	

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
3. The Test report shall not be reproduced, without the written approval of laboratory.

*Authorised Signatory*  
**NIRANJAN LAL AGARWALLA**  
 B Tech MS (USA), A.M.I.E.  
 Scientist & Chief Executive



# Eco Care



Phone : (0341) 2252011  
Fax : (0341) 2252011

Specialised House on Environmental Monitoring, Analysis, Assessment & Management  
ISO 9001 : 2015 Certified, OHSAS 18001:2007 Certified

E-mail : ecocareasansol@rediffmail.com  
Manoj Talkies Basement, Kumarpur  
ASANSOL-713304 (W.B.)

ULR NO – TC510919000000251F

Format No. : EC/TRT/42/FM/07

## TEST REPORT

Report Release Date : 02.03.2019	Sample Ref. No.(ARF) : EC/ARF/29/190257
Test Report No : EC/TR/42/02132	Source of Sample : Steel Plant
Type of Sample : Noise	Sampling Date : 26.02.2019
Sample Collected by : Mr. Sisir Kr. Roy & Team	Period of Analysis : ----
Sample Details : Ambient Noise	Sample Condition : ----
Name & Address : <b>Mongia Steel Ltd (Rolling Mill Div)</b>	Remarks : ----
At – Bhudhiyadih	Sample Drawn By : ECO CARE
P.O – Bhudhiyadih, Giridih	Sampling Plan &
Jharkhand – 815302	Procedure : EC/SOP/03/01
	Deviation if any : None

## METEOROLOGICAL INFORMATION

1	Average Temperature ( °C )	25.2
2	Average Relative Humidity (%)	46.0
3	Barometric Pressure (mm of Hg)	752
4	Weather Condition	Clear Day

## AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL		
	Minimum	Leq – Mean	Maximum
1. Near Office Lat-24°9'30.26137" (N) Long-86°19'40.94849" (E)	55.40 dB(A)	65.79 dB(A)	75.60 dB(A)
2. Near Cooling Tower Lat-24°9'28.19228" (N) Long-86°19'36.57323" (E)	51.40 dB(A)	59.16 dB(A)	64.50 dB(A)
3. Finished Goods stock Yard Lat-24°9'32.71534" (N) Long-86°19'37.62276" (E)	54.20 dB(A)	68.84 dB(A)	74.40 dB(A)

1. Test values are reported based on the samples received.
2. The Test report shall not be reproduced, without the written approval of laboratory

**Authorised Signatory**  
**NIRANJAN LAL AGARWALLA**  
 B Tech MS (USA), A.M.I.E.  
 Scientist & Chief Executive





# Eco Care



Phone : (0341) 2252011

Fax : (0341) 2252011

Specialised House on Environmental Monitoring, Analysis, Assessment & Management  
ISO 9001 : 2015 Certified, OHSAS 18001:2007 Certified

E-mail : [ecocareasansol@rediffmail.com](mailto:ecocareasansol@rediffmail.com)

Manoj Talkies Basement, Kumarpur

ASANSOL-713304 (W.B.)

ULR NO – TC510919000000253F

Format No. : EC/TR/42/FM/04

## TEST REPORT

Report Release Date : 02.03.2019	Sample Ref. No.(ARF) : EC/ARF/29/190257
Test Report No : EC/TR/42/02204	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 26.02.2019
Sample Collected by : Mr. Sisir Kr. Roy & Team	Period of Analysis : 28.02.19 to 01.03.19
Sample Details : Fugitive Ambient Air	Sample Condition : Sealed & Preserved
Name & Address : <b>Mongia Steel Limited</b> <b>(Rolling Mill Div.)</b> At – Bhudhiyadih P.O – Bhudhiyadih, Giridih Jharkhand – 815302	Remarks : ---- Sample Drawn By : ECO CARE Sampling Plan & Procedure : EC/SOP/03/01 Deviation if any : None

### METEOROLOGICAL INFORMATION

1	Average Temperature	25.2 °C	2	Barometric Pressure	752 mm of Hg
3	Average Relative Humidity	46.0 %	4	Weather Condition	Clear Day

### 1. Sampling Location : Near Gasifier ( 10 Meter Distance )

Sl. No	Parameters	Test Method	Results
1	Concentration of Total Suspended Particulate Matter	IS : 5182 ( Part – 4 )	418.22 µg/M <sup>3</sup>

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
3. The Test report shall not be reproduced, without the written approval of laboratory.

**Authorised Signatory**  
**NIRANJAN LAL AGARWALLA**  
B Tech MS (USA), A.M.I.E.  
Scientist & Chief Executive



*Eco Care*

MSL  
Ind.



NABL ACCREDITED  
Certificate No. TC-5109

Phone : (0341) 2252011

Fax : (0341) 2252011

Specialised House on Environmental Monitoring, Analysis, Assessment & Management

E-mail : ecocareasansol@rediffmail.com

Manoj Talkies Basement, Kumarpur

ISO 9001 : 2015 Certified, OHSAS 18001:2007 Certified

ASANSOL-713304 (W.B.)

ULR NO - TC51091900000246F

Format No. : EC/TRT/42/FM/01

### TEST REPORT

Report Release Date	: 02.03.2019	Sample Ref. No.(ARF)	: EC/ARF/29/190256
Test Report No	: EC/TR/42/02127	Source of Sample	: Steel Plant
Type of Sample	: Dust & Gaseous Emission	Sampling Date	: 25.02.2019
Sample Collected by	: Mr. Sumit Sarkar & Team	Period of Analysis	: 28.02.2019
Sample Details	: Stack Emission	Sampling Location	: Bag Filter Stack
Name & Address	: <b>Mongia Steel Ltd</b> (Induction Furnace Div.) Bhudhiyadih, P.O. - Bhudhiyadih Giridih, Jharkhand	Sample Condition	: Sealed
		Sample Stamped as	: TH - 265
		Sample Drawn By	
		Sampling Plan & Procedure	: ECO CARE : EC/SOP/03/01
		Remarks	: ----
		Deviation if any	: None

### GENERAL INFORMATION

1	Particular of the Plant	: M.S Billet Mfg. Unit
2	Emission Due to	: Process Activity
3	Stack Connected to	: Bag Filter at Induction Furnace
4	Material of Construction	: M.S.
5	Stack Height from G.L.	: 30.0 m
6	Height of Sampling Port from G.L.	: 10.00 m
7	Height of Sampling Port from L.D.Z.	: ----
8	Dimension of Stack at Sampling Port	: 0.90 m
9	Shape of the Stack	: Circular Ø
10	Working Load	: 96 MT/day

### FUEL CHARACTERISTIC REPORT

1	Source of Energy	: Electricity
2	Energy Consumption	: ----
3	Calorific Value (K-Cal/Kg)	: ----

### RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

		Method	
1	Flue Gas Temperature	53 °C	IS 11255 : Part 3
2	Barometric Pressure	752 mm Hg	IS 11255 : Part 3
3	Velocity of Flue Gas	7.29 m/sec	IS 11255 : Part 3
4	Flue Gas Quantity	15107 NM <sup>3</sup> / hr	IS 11255 : Part 3
5	Concentration of Particulate Matter	129.22 mg/NM <sup>3</sup>	IS 11255 : Part 1
6	Concentration of Carbon Dioxide	2.8%	IS 13270
7	Concentration of SO <sub>2</sub>	33.88 mg/NM <sup>3</sup>	IS 11255 : Part 2
8	Concentration of NO <sub>x</sub>	16.10 mg/NM <sup>3</sup>	IS 11255 : Part 7

Note :- Latitude-24°9'33.72725"(N) Longitude-86°19'32.10856"(E)

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
3. The Test report shall not be reproduced, without the written approval of laboratory

**Authorised Signatory**  
**NIRANJAN LAL AGARWALLA**  
B Tech MS (USA), A.M.I.E.  
Scientist & Chief Executive





# Eco Care



NABL ACCREDITED  
Certificate No. TC-5109

Phone : (0341) 2252011  
Fax : (0341) 2252011

Specialised House on Environmental Monitoring, Analysis, Assessment & Management  
ISO 9001 : 2015 Certified, OHSAS 18001:2007 Certified

E-mail : ecocareasansol@rediffmail.com  
Manoj Talkies Basement, Kumarpur  
ASANSOL-713304 (W.B.)

ULR NO – TC510919000000247F

Format No. : EC/TRT/42/FM/04

## TEST REPORT

Report Release Date : 02.03.2019	Sample Ref. No.(ARF) : EC/ARF/29/190256
Test Report No : EC/TR/42/02128	Source of Sample : Steel Plant
Type of Sample : Suspended Dust & Gases	Sampling Date : 25.02.19 to 26.02.19
Sample Collected by : Mr. Sumit Sarkar & Team	Period of Analysis : 28.02.19 to 01.03.19
Sample Details : Ambient Air	Sample Condition : Sealed & Preserved
Name & Address : <b>Mongia Steel Ltd</b> (Induction Furnace Div.) Bhudhiyadih, P.O. – Bhudhiyadih Giridih, Jharkhand	Remarks : ----
	Sample Drawn By : ECO CARE
	Sampling Plan & Procedure : EC/SOP/03/01
	Deviation if any : None

### METEOROLOGICAL INFORMATION

1	Average Temperature	23.4 °C	2	Barometric Pressure	752 mm of Hg
3	Average Relative Humidity	39.0 %	4	Weather Condition	Clear Day

### AMBIENT AIR QUALITY ANALYSIS REPORT

TEST METHOD	IS : 5182 ( Part – 2 )	IS : 5182 ( Part – 6 )	IS : 5182 ( Part – 23 )	EPA CFR40 (pt 50), Appendix I
PARAMETERS	SO <sub>2</sub> (µg/M <sup>3</sup> )	NO <sub>x</sub> (µg/M <sup>3</sup> )	PM <sub>10</sub> (µg/M <sup>3</sup> )	PM <sub>2.5</sub> (µg/M <sup>3</sup> )
Method Detection Limit	5	8	20	10
<b>1. Sampling Location : Near Induction Furnace Area - Lat-24°9'33.7526" (N) Long-86°19'36.31856" (E)</b>				
Shift - A (10:30 AM To 06:30 PM)	29.88	28.90	80.17	39.43
Shift - B (06:40 PM To 02:40 AM)	32.93	30.97	57.70	
Shift - C (02:50 AM To 10:50 AM)	20.73	24.07	69.12	
Average (Shift - A To Shift - C)	27.85	27.98	69.00	
<b>2. Sampling Location : Near Labour Room - Lat-24°9'37.55614" (N) Long-86°19'36.2739" (E)</b>				
Shift - A (11:00 AM To 07:00 PM)	26.83	35.11	66.31	31.99
Shift - B (07:10 PM To 03:10 AM)	17.68	18.56	52.23	
Shift - C (03:20 AM To 11:50 AM)	39.02	33.04	74.47	
Average (Shift - A To Shift - C)	27.84	28.90	64.34	
<b>3. Sampling Location : Near Cooling Tower - Lat-24°9'34.4163" (N) Long-86°19'30.44683" (E)</b>				
Shift - A (11:10 AM To 07:10 PM)	42.07	37.87	72.24	35.48
Shift - B (07:20 PM To 03:20 AM)	23.78	19.24	54.87	
Shift - C (03:30 AM To 11:30 AM)	26.83	27.52	67.08	
Average (Shift - A To Shift - C)	30.89	28.21	64.73	

1. Test values are reported based on the samples received.
2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
3. The Test report shall not be reproduced, without the written approval of laboratory.

**Authorised Signatory**  
**NIRANJANA LAL AGARWALLA**  
B Tech MS (USA), A.M.I.E.  
Scientist & Chief Executive



# Eco Care



NABL ACCREDITED  
Certificate No. TC-5109

Phone : (0341) 2252011  
Fax : (0341) 2252011

Specialised House on Environmental Monitoring, Analysis, Assessment & Management  
ISO 9001 : 2015 Certified, OHSAS 18001:2007 Certified

E-mail : [ecocareasansol@rediffmail.com](mailto:ecocareasansol@rediffmail.com)  
Manoj Talkies Basement, Kumarpur  
ASANSOL-713304 (W.B.)

ULR NO – TC510919000000248F

Format No. : EC/TRT/42/FM/07

## TEST REPORT

Report Release Date : 02.03.2019	Sample Ref. No.(ARF) : EC/ARF/29/190256
Test Report No : EC/TR/42/02129	Source of Sample : Steel Plant
Type of Sample : Noise	Sampling Date : 25.02.2019
Sample Collected by : Mr. Sumit Sarkar & Team	Period of Analysis : ----
Sample Details : Ambient Noise	Sample Condition : ----
Name & Address : <b>Mongia Steel Ltd</b>	Remarks : ----
(Induction Furnace Div.)	Sample Drawn By : ECO CARE
Bhudhiyadih,	Sampling Plan &
P.O. – Bhudhiyadih	Procedure : EC/SOP/03/01
Giridih, Jharkhand	Deviation if any : None

## METEOROLOGICAL INFORMATION

1	Average Temperature ( °C )	23.4
2	Average Relative Humidity (%)	39.0
3	Barometric Pressure (mm of Hg)	752
4	Weather Condition	Clear Day

## AMBIENT NOISE QUALITY REPORT

Sampling Location	NOISE LEVEL		
	Minimum	Leq – Mean	Maximum
1. Near Induction Furnace Area Lat-24°9'33.7526" (N) Long-86°19'36.31856" (E)	53.70 dB(A)	67.57 dB(A)	73.10 dB(A)
2. Near Labour Room Lat-24°9'37.55614" (N) Long-86°19'36.2739" (E)	54.50 dB(A)	62.69 dB(A)	68.40 dB(A)
3. Near Cooling Tower Lat-24°9'34.4163" (N) Long-86°19'30.44683" (E)	49.50 dB(A)	62.91 dB(A)	70.60 dB(A)

1. Test values are reported based on the samples received.
2. The Test report shall not be reproduced, without the written approval of laboratory

**Authorised Signatory**  
**NIRANJAN LAL AGARWALLA**  
B Tech MS (USA), A.M.I.E.  
Scientist & Chief Executive