

Report No. : ENV/SSFAPL/AAQ/2019-20/01

Date : 02/07/2019

Order No. : SSFAPL/ CPP/19-20/0031

Date : 20/06/2019

SHREE SHAKAMBARI FERRO ALLOYS PVT. LTD.

Village: Rwiang; P. O.: Seinduly

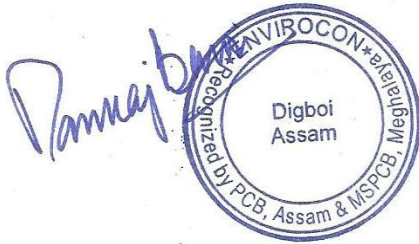
Dist.: West Khasi Hills

Meghalaya - 793119

AMBIENT AIR QUALITY TEST RESULTS

SL. No.	Location(s) ↓	Date of Sampling	PM 2.5 (µg/m ³)	PM 10 (µg/m ³)	NO ₂ (µg/m ³)	SO ₂ (µg/m ³)
	Limit(s) →		60 (24 Hrs. Av.)	100 (24 Hrs. Av.)	80 (24 Hrs. Av.)	80 (24 Hrs. Av.)
1.	Near Main Gate	24.06.2019	24.6	58.4	12.6	8.4
2.	Near Water Reservoir	24.06.2019	17.8	45.8	15.6	12.4
3.	North Side of the Plant	25.06.2019	19.6	51.7	10.2	7.3
4.	West Corner of the Plant	25.06.2019	16.4	42.7	8.3	6.6

Analysis Protocol: **IS 5182**



Checked By: Mr. Pankaj Baroi, **ENVIROCON**

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi – 786171, Assam.

Report No. : ENV/SSFAPL/SE/2019-20/06-01

Order No. : SSFAPL/ CPP/19-20/0031

Date : 02/07/2019

Date : 20/06/2019

SHREE SHAKAMBARI FERRO ALLOYS PVT. LTD.

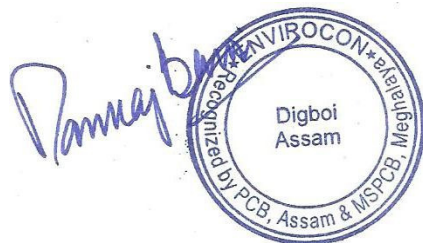
Village: Rwiang; P. O.: Seinduly

Dist.: West Khasi Hills

Meghalaya - 793119

STACK EMISSION TEST RESULTS

01	Stack Emission Test Ref. No.	SSFAPL/SE/2019/06-01	
02	Date of Sampling	24.06.2019	
03	Stack Attached To	10 MW CPP	
04	Stack Height (meter)	82	
05	Stack Diameter (meter)	3.4	
06	Flue Gas Temperature (°C)	142	
07	Exit Velocity of Gas (m/sec)	9.2	
08	Fuel Used	Coal	
Analysis Results of Flue Gas			
Sl. No.	Parameter(s)	Unit(s)	Result(s)
i.	PM- Particulate Matter	mg/Nm ³	25.8
ii.	Sulphur Dioxide (as SO ₂)	ppm	87
iii.	Oxides of Nitrogen (as NO _x)	ppm	124



Checked By: Mr. Pankaj Baroi, **ENVIROCON**

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi – 786171, Assam.

Core Services: Environmental Monitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs
Associate Services: Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No. : ENV/SSFAPL/SE/2019-20/06-02

Order No. : SSFAPL/ CPP/19-20/0031

Date : 02/07/2019

Date : 20/06/2019

SHREE SHAKAMBARI FERRO ALLOYS PVT. LTD.

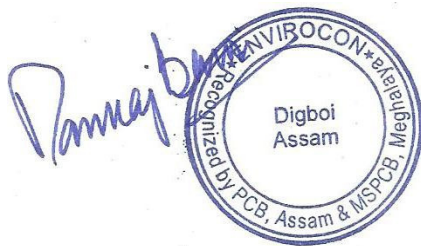
Village: Rwiang; P. O.: Seinduly

Dist.: West Khasi Hills

Meghalaya - 793119

STACK EMISSION TEST RESULTS

01	Stack Emission Test Ref. No.	SSFAPL/SE/2019/06-01	
02	Date of Sampling	24.06.2019	
03	Stack Attached To	Ferro Alloy Stack No. 1	
04	Stack Height (meter)	34	
05	Stack Diameter (meter)	1.8	
06	Flue Gas Temperature (°C)	157	
07	Exit Velocity of Gas (m/sec)	10.8	
08	Fuel Used	Coal	
Analysis Results of Flue Gas			
Sl. No.	Parameter(s)	Unit(s)	Result(s)
i.	PM- Particulate Matter	mg/Nm ³	45.6
ii.	Sulphur Dioxide (as SO ₂)	ppm	68
iii.	Oxides of Nitrogen (as NO _x)	ppm	104



Checked By: Mr. Pankaj Baroi, **ENVIROCON**

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi – 786171, Assam.

Core Services: Environmental Monitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs
Associate Services: Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No. : ENV/SSFAPL/NLM/2019-20/06-01

Date : 02/07/2019

Order No. : SSFAPL/ CPP/19-20/0031

Date : 20/06/2019

SHREE SHAKAMBARI FERRO ALLOYS PVT. LTD.

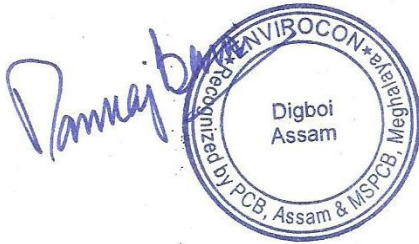
Village: Rwiang; P. O.: Seinduly

Dist.: West Khasi Hills

Meghalaya - 793119

NOISE LEVEL MEASUREMENT RESULTS

Sl. No.	Location(s)	Date Of Measurement	Day Time		Night Time	
			Leq (dB-A)	Limit (dB-A)	Leq (dB-A)	Limit (dB-A)
1	Near Main Gate	24.06.2019	67	75	62	70
2	Inside Office	24.06.2019	56	75	45	70
3	Coal Dumping Yard	24.06.2019	64	75	58	70
4	Near Cooling Tower	24.06.2019	72	75	65	70
5	Near Workers Colony	24.06.2019	65	75	48	70



Checked By: Mr. Pankaj Baroi, **ENVIROCON**

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi – 786171, Assam.

Core Services: Environmental Monitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs

Associate Services: Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No. : ENV/SSFAPL/RW/2019-20/06-01
Date : 02/07/2019

Order No. : SSFAPL/PPP/19-20/0031
Date : 20/06/2019

SHREE SHAKAMBARI FERRO ALLOYS PVT. LTD.

Village: Rwiang; P. O.: Seinduly
Dist.: West Khasi Hills
Meghalaya - 793119

RAW WATER ANALYSIS TEST RESULTS

Sample Ref. No. : SSFAPL/RW/19-20/2406-01

Sample Source : Bore-well

Sample Type : Ground/Raw Water

Collected On : 24-06-2019

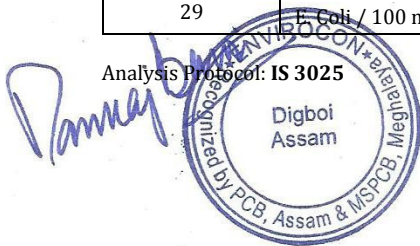
Received On : 26-06-2019

Collected By : ENVIROCON Representative

Sl. No.	Parameters	Results	Desirable Limit (IS:11100:2012)
01	Colour , Hazen Units, Max	2	5
02	Odour	Odourless	Agreeable
03	Taste	Acceptable	Agreeable
04	Turbidity, NTU, Max	0.12	1.0
05	pH	7.3	6.5 – 8.5
06	Total Dissolved Solids, mg/l, Max	138	500
07	Aluminium (as Al), mg/l, Max	ND	0.03
08	Boron (as B), mg/l, Max	ND	0.5
09	Calcium (as Ca), mg/l, Max	42	75
10	Chloride (as Cl), mg/l, Max	64	250
11	Copper (as Cu), mg/l, Max	ND	0.11
12	Fluorides (as F), mg/l, Max	ND	1.0
13	Free Residual Chlorine, mg/l, Min	ND	0.2
14	Iron (as Fe), mg/l, Max	0.071	0.3
15	Magnesium (as Mg), mg/l, Max	9.2	30
16	Manganese (as Mn), mg/l, Max	ND	0.1
17	Zinc (as Zn), mg/l, Max	ND	5.0
18	Nitrate (as NO ₃), mg/l, Max	ND	45
19	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max	ND	0.001
20	Sulfate (as SO ₄), mg/l, Max	21	200
21	Total Alkalinity(as CaCO ₃) , mg/l, Max	86	200
22	Total Hardness, (as CaCO ₃), mg/l, Max	58	200
23	Cyanide (as CN), mg/l, Max	ND	0.11
24	Lead (as Pb), mg/l, Max	ND	0.01
25	Total Arsenic (as As), mg/l, Max	ND	0.01
26	Total Chromium, (as Cr), mg/l, Max	ND	0.11
27	Total Coliform, MPN/100 ml	NIL	10 Max
28	Faecal Coliforms/ 100 ml	NIL	Absent
29	E. Coli / 100 ml	NIL	Absent

Analysis Protocol: IS 3025

ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi – 786171, Assam.

Core Services: Environmental Monitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs
Associate Services: Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No. : ENV/SSFAPL/WW/2019-20/06-01

Order No. : SSFAPL/PPP/19-20/0031

Date : 02/07/2019

Date : 20/06/2019

SHREE SHAKAMBARI FERRO ALLOYS PVT. LTD.

Village: Rwiang; P. O.: Seinduly

Dist.: West Khasi Hills

Meghalaya - 793119

ETP WATER ANALYSIS RESULTS

Sample Ref. No. : SSFAPL/ETP/19-20/2406-01

Sample Source : ETP Outlet

Sample Type : Treated Effluent

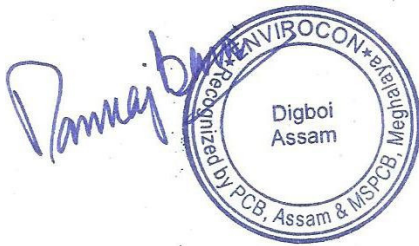
Collected On : 24-06-2019

Received On : 26-06-2019

Collected By : ENVIROCON Representative

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limits (IS: 2490)
01	pH	--	6.8	5.5 – 9.0
02	Temperature	°C	27.6	shall not exceed 5°C above the receiving water temperature
03	Total Suspended Solids	mg/l	25.6	100
04	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	12	30
05	Chemical Oxygen Demand	mg/l	43	250
06	Oil & Grease	mg/l	<0.1	10
07	Total Residual Chlorine	mg/l	<0.01	1.0
08	Ammonical Nitrogen (as N)	mg/l	8.6	50
09	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	15.3	100
10	Free Ammonia (as NH ₃)	mg/l	0.031	5.0

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi – 786171, Assam.

Report No. : ENV/SSFAPL/SW/2019-20/06-01

Order No. : SSFAPL/PPP/19-20/0031

Date : 02/07/2019

Date : 20/06/2019

SHREE SHAKAMBARI FERRO ALLOYS PVT. LTD.

Village: Rwiang; P. O.: Seinduly

Dist.: West Khasi Hills

Meghalaya - 793119

SURFACE WATER ANALYSIS RESULTS

Sample Ref. No. : SSFAPL/SW/19-20/2406-01

Sample Source : Plant Nala

Sample Type : Surface Water

Collected On : 24-06-2019

Received On : 26-06-2019

Collected By : ENVIROCON Representative

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limits (IS: 2490)
01	pH	--	7.2	5.5 – 9.0
02	Temperature	°C	27.2	shall not exceed 5°C above the receiving water temperature
03	Total Suspended Solids	mg/l	67.8	100
04	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	21	30
05	Chemical Oxygen Demand	mg/l	74	250
06	Oil & Grease	mg/l	0.36	10
07	Total Residual Chlorine	mg/l	<0.01	1.0
08	Ammonical Nitrogen (as N)	mg/l	3.4	50
09	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	8.1	100
10	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi – 786171, Assam.