

ENVIRONMENTAL MONITORING REPORT

November, 2023

PROJECT: **REDI IRON ORE MINE (Block -1)**
village Redi, Vengurla taluka, Sindhudurg district,
Maharashtra State.

Lessee: **M/S. GOGTE MINERALS**
BELAGAVI
KARNATAKA

CONSULTANT

MINERAL ENGINEERING SERVICES
(Accredited by QCI-NABET ORG000756)
25/XXV, Club Road, BELLARY-583103,
Karnataka, Tel 08392-267421, Mob:
0919448367421,
Email : mes_msraju@yahoo.co.uk
mesbly25@gmail.com

ENVIRONMENTAL LABORATORY
Unit of Mineral Engineering Services)
(Accredited by NABL & MOEF&CC Under
E(P) 1986)
#948, 2nd Cross, Kammanahalli Main
Road, St Thomas Town Post, Bangalore-
560 084, Karnataka,

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TEST REPORT

Table No. 1

Fugitive Emission

Project	: Redi Iron Ore Mine (203)					
Client	: M/s. Gogte Minerals					
Station at & Code	: AI - Dumping site (North Eastern side of Mining Lease)					
Duration	: 24 Hrs					
Issue Date	: 02.12.2023					
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	SPM (µg/m ³)	PM ₁₀ (µg/m ³)	Carbon Monoxide ^a (CO), mg/m ³
03.11.2023	N/23/11/2-0023	10	16	215	145	0.22
04.11.2023	N/23/11/2-0071	10	15	26	132	0.42
06.11.2023	N/23/11/3-0043	11	13	235	88	0.35
07.11.2023	N/23/11/3-0081	9	12	268	112	0.33
17.11.2023	N/23/11/3-0335	6	12	325	137	0.32
18.11.2023	N/23/11/4-0027	11	16	365	141	0.35
20.11.2023	N/23/11/5-0025	12	16	412	155	0.33
21.11.2023	N/23/11/5-0059	12	16	365	133	0.35
Within in Mining Area Pollutant		SO₂	NO₂	SPM (PM)	RPM (PM₁₀)	CO
Concentration in Ambient Air		120	120	500	250	4
Time Weighted Average		24 Hrs	24 Hrs	24 Hrs	24 Hrs	1 Hr
Note : * Parameters monitored for period of 1 hr						

Arshiya Kousar

ARSHIYA KOUSAR
Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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TEST REPORT

Table No. 2

Fugitive Emission

Project	: Redi Iron Ore Mine (203)					
Client	: M/s. Gogte Minerals					
Station at & Code	: A2 - Haulage/Transport road					
Duration	: 24 Hrs					
Issue Date	: 02.12.2023					
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	SPM (µg/m ³)	PM ₁₀ (µg/m ³)	Carbon Monoxide* (CO), mg/m ³
03.11.2023	N/23/11/2-0024	9	10	285	120	0.31
04.11.2023	N/23/11/2-0072	11	13	29	108	0.22
06.11.2023	N/23/11/3-0044	12	15	247	96	0.27
07.11.2023	N/23/11/3-0082	10	11	287	123	0.4
17.11.2023	N/23/11/3-0336	5	12	399	153	0.35
18.11.2023	N/23/11/4-0028	12	18	415	162	0.25
20.11.2023	N/23/11/5-0026	12	18	456	161	0.28
21.11.2023	N/23/11/5-0060	10	9	415	155	0.32
Within in Mining Area Pollutant		SO₂	NO₂	SPM (PM)	RPM (PM₁₀)	CO
Concentration in Ambient Air		120	120	500	250	4
Time Weighted Average		24 Hrs	24 Hrs	24 Hrs	24 Hrs	1 Hr
Note : * Parameters monitored for period of 1 hr						

Arshiya Kousar

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Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

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TEST REPORT

Table No. 3

Fugitive Emission

Project	: Redi Iron Ore Mine (203)					
Client	: M/s. Gogte Minerals					
Station at & Code	: A3 - Near Mine Pit Edge					
Duration	: 24 Hrs					
Issue Date	: 02.12.2023					
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	SPM (µg/m ³)	PM ₁₀ (µg/m ³)	Carbon Monoxide* (CO), mg/m ³
03.11.2023	N/23/11/2-0025	12	17	248	139	0.24
04.11.2023	N/23/11/2-0073	6	9	20	115	0.36
06.11.2023	N/23/11/3-0045	9	11	285	121	0.28
07.11.2023	N/23/11/3-0083	12	14	245	108	0.26
17.11.2023	N/23/11/3-0337	8	13	351	161	0.39
18.11.2023	N/23/11/4-0029	12	14	486	154	0.42
20.11.2023	N/23/11/5-0027	11	16	322	125	0.23
21.11.2023	N/23/11/5-0061	12	18	385	125	0.13
Within in Mining Area Pollutant		SO ₂	NO ₂	SPM (PM)	RPM (PM ₁₀)	CO
Concentration in Ambient Air		120	120	500	250	4
Time Weighted Average		24 Hrs	24 Hrs	24 Hrs	24 Hrs	1 Hr
Note : * Parameters monitored for period of 1 hr						

Arshiya Kojisar

ARSHIYA KOJSAR
Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

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TEST REPORT

Table No. 4

Fugitive Emission

Project	: Redi Iron Ore Mine (203)					
Client	: M/s. Gogte Minerals					
Station at & Code	: A - 11, Proposed Dump Area					
Duration	: 24 Hrs					
Issue Date	: 02.12.2023					
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	SPM (µg/m ³)	PM ₁₀ (µg/m ³)	Carbon Monoxide* (CO), mg/m ³
03.11.2023	N/23/11/2-0033	10	10	121	80	23
04.11.2023	N/23/11/2-0080	6	10	24	76	0.35
06.11.2023	N/23/11/3-0052	11	13	231	66	0.32
07.11.2023	N/23/11/3-0090	11	18	264	136	0.29
17.11.2023	N/23/11/3-0344	11	13	386	122	0.38
18.11.2023	N/23/11/4-0036	10	13	356	142	0.45
20.11.2023	N/23/11/5-0034	12	18	263	111	0.28
21.11.2023	N/23/11/5-0068	12	15	318	120	0.29
Within in Mining Area Pollutant		SO ₂	NO ₂	SPM (PM)	RPM (PM ₁₀)	CO
Concentration in Ambient Air		120	120	500	250	4
Time Weighted Average		24 Hrs	24 Hrs	24 Hrs	24 Hrs	1 Hr
Note : * Parameters monitored for period of 1 hr						

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Dy. T.M. - Chemical

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TEST REPORT

Table No. 5

AMBIENT AIR QUALITY

Project : Redi Iron Ore Mine (203)
 Client : M/s. Gogte Minerals
 Station at & Code : A - 4, Core Zone (Near Mine Office and Screening Plant)
 Duration : 24 Hrs
 Issue Date : 02.12.2023
 Reference IS 5182 & Lab SOP

Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
03.11.2023	N/23/11/2-0026	11	12	53	28	<20	<1
04.11.2023	N/23/11/2-0070	7	10	54	28	<20	<1
06.11.2023	N/23/11/3-0042	10	13	58	29	<20	<1
07.11.2023	N/23/11/3-0080	12	17	58	33	<20	<1
17.11.2023	N/23/11/3-0334	7	14	49	25	<20	<1
18.11.2023	N/23/11/4-0026	12	16	58	31	<20	<1
20.11.2023	N/23/11/5-0024	8	12	50	27	<20	<1
21.11.2023	N/23/11/5-0058	12	16	52	24	<20	<1
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lab Code	Lead (Pb), µg/m ³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m ³	Benzo(a) Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m ³	Ozone* (O ₃), µg/m ³
03.11.2023	N/23/11/2-0026	0.10	<0.1	<0.5	<0.5	0.22	20
04.11.2023	N/23/11/2-0070	0.15	<0.1	<0.5	<0.5	0.25	22
06.11.2023	N/23/11/3-0042	0.14	<0.1	<0.5	<0.5	0.32	24
07.11.2023	N/23/11/3-0080	0.15	<0.1	<0.5	<0.5	0.36	25
17.11.2023	N/23/11/3-0334	0.18	<0.1	<0.5	<0.5	0.26	22
18.11.2023	N/23/11/4-0026	0.10	<0.1	<0.5	<0.5	0.35	28
20.11.2023	N/23/11/5-0024	0.11	<0.1	<0.5	<0.5	0.35	30
21.11.2023	N/23/11/5-0058	0.18	<0.1	<0.5	<0.5	0.22	23
Limits for Industrial , Residential, Rural and other Areas		1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : * Parameters monitored for period of 1 hr

Arshiya Kousar
 ARSHIYA KOUSAR
 Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

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Table No.6

AMBIENT AIR QUALITY

Project : Redi Iron Ore Mine (203)
Client : M/s. Gogte Minerals
Station at & Code : A - 5, Redi village
Duration : 24 Hrs
Issue Date : 02.12.2023
Reference IS 5182 & Lab SOP

Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
03.11.2023	N/23/11/2-0028	10	14	58	30	<20	<1
04.11.2023	N/23/11/2-0075	9	12	46	25	<20	<1
06.11.2023	N/23/11/3-0047	9	10	40	27	<20	<1
07.11.2023	N/23/11/3-0085	7	13	54	32	<20	<1
17.11.2023	N/23/11/3-0339	11	15	56	26	<20	<1
18.11.2023	N/23/11/4-0031	12	16	53	28	<20	<1
20.11.2023	N/23/11/5-0029	10	12	51	29	<20	<1
21.11.2023	N/23/11/5-0063	11	13	56	29	<20	<1
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lab Code	Lead (Pb), µg/m ³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m ³	Benzo(a) Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m ³	Ozone* (O ₃), µg/m ³
03.11.2023	N/23/11/2-0028	0.11	<0.1	<0.5	<0.5	0.21	23
04.11.2023	N/23/11/2-0075	0.16	<0.1	<0.5	<0.5	0.16	28
06.11.2023	N/23/11/3-0047	0.18	<0.1	<0.5	<0.5	0.33	28
07.11.2023	N/23/11/3-0085	0.18	<0.1	<0.5	<0.5	0.22	23
17.11.2023	N/23/11/3-0339	0.15	<0.1	<0.5	<0.5	0.32	28
18.11.2023	N/23/11/4-0031	0.12	<0.1	<0.5	<0.5	0.28	26
20.11.2023	N/23/11/5-0029	0.12	<0.1	<0.5	<0.5	0.23	25
21.11.2023	N/23/11/5-0063	0.11	<0.1	<0.5	<0.5	0.22	28
Limits for Industrial , Residential, Rural and other Areas		1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : * Parameters monitored for period of 1 hr

Arshiya Kousar
ARSHIYA KOUSAR
Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

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TEST REPORT

Table No. 7

AMBIENT AIR QUALITY

Project : Redi Iron Ore Mine (203)
Client : M/s. Gogte Minerals
Station at & Code : A - 6, Shiroda village
Duration : 24 Hrs
Issue Date : 02.12.2023
Reference IS 5182 & Lab SOP

Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
03.11.2023	N/23/11/2-0029	11	13	48	27	<20	<1
04.11.2023	N/23/11/2-0076	10	11	58	29	<20	<1
06.11.2023	N/23/11/3-0048	8	12	43	25	<20	<1
07.11.2023	N/23/11/3-0086	9	12	58	35	<20	<1
17.11.2023	N/23/11/3-0340	12	13	54	23	<20	<1
18.11.2023	N/23/11/4-0032	9	11	46	25	<20	<1
20.11.2023	N/23/11/5-0030	9	11	46	25	<20	<1
21.11.2023	N/23/11/5-0064	12	15	38	19	<20	<1
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lab Code	Lead (Pb), µg/m ³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m ³	Benzo(a) Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m ³	Ozone* (O ₃), µg/m ³
03.11.2023	N/23/11/2-0029	0.15	<0.1	<0.5	<0.5	0.15	25
04.11.2023	N/23/11/2-0076	0.11	<0.1	<0.5	<0.5	0.23	23
06.11.2023	N/23/11/3-0048	0.15	<0.1	<0.5	<0.5	0.25	25
07.11.2023	N/23/11/3-0086	0.20	<0.1	<0.5	<0.5	0.31	28
17.11.2023	N/23/11/3-0340	0.11	<0.1	<0.5	<0.5	0.22	20
18.11.2023	N/23/11/4-0032	0.13	<0.1	<0.5	<0.5	0.22	20
20.11.2023	N/23/11/5-0030	0.10	<0.1	<0.5	<0.5	0.26	21
21.11.2023	N/23/11/5-0064	0.13	<0.1	<0.5	<0.5	0.16	20
Limits for Industrial , Residential, Rural and other Areas		1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : * Parameters monitored for period of 1 hr

Arushi Kousar

ARSHIYA KOUSAR
Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

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TEST REPORT

Table No. 8

AMBIENT AIR QUALITY

Project : Redi Iron Ore Mine (203)
Client : M/s. Gogte Minerals
Station at & Code : A - 7, Gaontala village
Duration : 24 Hrs
Issue Date : 02.12.2023
Reference IS 5182 & Lab SOP

Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
03.11.2023	N/23/11/2-0030	9	10	50	24	<20	<1
04.11.2023	N/23/11/2-0077	11	13	54	27	<20	<1
06.11.2023	N/23/11/3-0049	11	14	37	23	<20	<1
07.11.2023	N/23/11/3-0087	10	13	47	28	<20	<1
17.11.2023	N/23/11/3-0341	11	11	39	19	<20	<1
18.11.2023	N/23/11/4-0033	11	14	50	27	<20	<1
20.11.2023	N/23/11/5-0031	8	10	51	27	<20	<1
21.11.2023	N/23/11/5-0065	9	11	50	27	<20	<1
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lab Code	Lead (Pb), µg/m ³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m ³	Benzo(a) Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m ³	Ozone* (O ₃), µg/m ³
03.11.2023	N/23/11/2-0030	0.16	<0.1	<0.5	<0.5	0.33	22
04.11.2023	N/23/11/2-0077	0.16	<0.1	<0.5	<0.5	<0.2	24
06.11.2023	N/23/11/3-0049	0.20	<0.1	<0.5	<0.5	0.22	21
07.11.2023	N/23/11/3-0087	0.11	<0.1	<0.5	<0.5	0.26	25
17.11.2023	N/23/11/3-0341	0.13	<0.1	<0.5	<0.5	0.29	27
18.11.2023	N/23/11/4-0033	0.11	<0.1	<0.5	<0.5	0.26	24
20.11.2023	N/23/11/5-0031	0.16	<0.1	<0.5	<0.5	0.29	25
21.11.2023	N/23/11/5-0065	0.18	<0.1	<0.5	<0.5	0.33	25
Limits for Industrial , Residential, Rural and other Areas		1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : * Parameters monitored for period of 1 hr

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TEST REPORT

Table No. 9

AMBIENT AIR QUALITY

Project : Redi Iron Ore Mine (203)
Client : M/s. Gogte Minerals
Station at & Code : A - 8, Kanyalwadi village
Duration : 24 Hrs
Issue Date : 02.12.2023
Reference IS 5182 & Lab SOP

Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)	Ammonia (NH ₃), µg/m ³	Benzene (C ₆ H ₆), µg/m ³
03.11.2023	N/23/11/2-0031	11	14	45	23	<20	<1
04.11.2023	N/23/11/2-0078	8	10	49	25	<20	<1
06.11.2023	N/23/11/3-0050	9	11	55	28	<20	<1
07.11.2023	N/23/11/3-0088	11	15	56	28	<20	<1
17.11.2023	N/23/11/3-0342	8	10	46	25	<20	<1
18.11.2023	N/23/11/4-0034	12	13	56	30	<20	<1
20.11.2023	N/23/11/5-0032	11	15	50	30	<20	<1
21.11.2023	N/23/11/5-0066	11	12	55	25	<20	<1
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lab Code	Lead (Pb), µg/m ³	Nickel (Ni), ng/m ³	Arsenic (As), ng/m ³	Benzo(a) Pyrene (BaP), ng/m ³	Carbon Monoxide* (CO), mg/m ³	Ozone* (O ₃), µg/m ³
03.11.2023	N/23/11/2-0031	0.18	<0.1	<0.5	<0.5	0.23	25
04.11.2023	N/23/11/2-0078	0.11	<0.1	<0.5	<0.5	0.22	25
06.11.2023	N/23/11/3-0050	0.13	<0.1	<0.5	<0.5	0.26	20
07.11.2023	N/23/11/3-0088	0.18	<0.1	<0.5	<0.5	0.22	24
17.11.2023	N/23/11/3-0342	0.18	<0.1	<0.5	<0.5	0.20	26
18.11.2023	N/23/11/4-0034	0.18	<0.1	<0.5	<0.5	0.35	26
20.11.2023	N/23/11/5-0032	0.18	<0.1	<0.5	<0.5	0.32	28
21.11.2023	N/23/11/5-0066	0.12	<0.1	<0.5	<0.5	0.21	28
Limits for Industrial , Residential, Rural and other Areas		1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : * Parameters monitored for period of 1 hr

Arshiya Kousar
ARSHIYA KOUSAR

Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.
Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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TEST REPORT

Table No.10

AMBIENT AIR QUALITY

Project	: Redi Iron Ore Mine (203)				
Client	: M/s. Gogte Minerals				
Station at & Code	: A9 - Near NIMCO Gate - Tivrewadi, Redi village				
Duration	: 24 Hrs				
Issue Date	: 02.12.2023				
Reference	IS 5182 & Lab SOP				
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)
03.11.2023	N/23/11/2-0027	10	11	57	29
04.11.2023	N/23/11/2-0074	12	19	50	27
06.11.2023	N/23/11/3-0046	12	18	56	32
07.11.2023	N/23/11/3-0084	11	13	49	23
17.11.2023	N/23/11/3-0338	10	12	58	33
18.11.2023	N/23/11/4-0030	11	15	51	28
20.11.2023	N/23/11/5-0028	12	14	61	33
21.11.2023	N/23/11/5-0062	12	18	51	29
Limits for Industrial , Residential, Rural and other Areas		80	80	100	60
		24 Hrs	24 Hrs	24 Hrs	24 Hrs

Arshiya Kousar
ARSHIYA KOUSAR

Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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TEST REPORT

Table No. 11

AMBIENT AIR QUALITY

Project		: Redi Iron Ore Mine (203)			
Client		: M/s. Gogte Minerals			
Station at & Code		: A10- Near Primary School - sakalbhatwadi Redi village			
Duration		: 24 Hrs			
Issue Date		: 02.12.2023			
Reference		IS 5182 & Lab SOP			
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)
03.11.2023	N/23/11/2-0032	12	13	54	27
04.11.2023	N/23/11/2-0079	8	15	57	32
06.11.2023	N/23/11/3-0051	12	14	46	22
07.11.2023	N/23/11/3-0089	12	16	58	33
17.11.2023	N/23/11/3-0343	6	9	54	30
18.11.2023	N/23/11/4-0035	11	14	59	33
20.11.2023	N/23/11/5-0033	10	14	36	22
21.11.2023	N/23/11/5-0067	8	12	51	29
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs


ARSHIYA KOUSAR
Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

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TEST REPORT

Table No. 12

STATISTICAL AIR QUALITY DATA

Project : Redi Iron Ore Mine (203)												
Month : November, 2023												
Station Code : A IV - Core Zone (ML Area, behind the Mines Office)					Station Code : A V - Redi village				Station Code : A VI - Shiroda village			
	SO ₂	NO ₂	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	PM ₁₀	PM _{2.5}
Min.	7	10	49	24	7	10	40	25	8	11	38	19
10%	7	11	50	25	8	11	44	26	9	11	42	22
25%	8	12	52	27	9	12	50	27	9	11	45	25
50%	11	14	54	28	10	13	54	29	10	12	47	25
75%	12	16	58	30	11	14	56	29	11	13	55	28
98%	12	17	58	33	12	16	58	32	12	15	58	34
Max.	12	17	58	33	12	16	58	32	12	15	58	35
Avg.	10	14	54	28	10	13	52	28	10	12	49	26
SD	2	2	4	3	2	2	6	2	2	1	7	5
No. of obs	8				8				8			
Station Code : A VII - Gaontala village					Station Code : A VIII - Kanyalwadi village							
	SO ₂	NO ₂	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	PM ₁₀	PM _{2.5}				
Min.	8	10	37	19	8	10	45	23				
10%	9	10	38	21	8	10	46	24				
25%	9	11	45	24	9	11	48	25				
50%	11	12	50	27	11	13	53	27				
75%	11	13	50	27	11	14	55	29				
98%	11	14	54	28	12	15	56	30				
Max.	11	14	54	28	12	15	56	30				
Avg.	10	12	47	25	10	13	52	27				
SD	1	2	6	3	2	2	5	3				
No. of obs	8				8							

Arshiya Kousar

ARSHIYA KOUSAR
Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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TEST REPORT

Table No.13

Report No :ED005023114

Name of the Client	: M/s. Gogte Minerals
Name of the Project	: Redi Iron Ore Mine (203), village Redi, Vengurla taluka, Sindhudurg dist, Maharashtra State.
Particulars of sample collected	: SW1 - Pit water
Sample Collected by	: Environmental Laboratory Representative
Date of sample collection	: 20.11.2023
Lab Code	: ED/23/11/4-0050
Issue Date	: 01.12.2023
Ref	: Environmental (P) Rules, 1986 SCHEDULE I, - 01.01.2016

Sl. No.	Parameters	SW1	General Standards For Effluent Discharge of Environmental Pollutants	Method of Testing
1	pH	6.18	6.0-9.0	IS 3025 (P-11) 2022
3	Chemical Oxygen Demand (COD) mg/l	20.8	250	IS 3025 (P-58) 2006 RA2022
2	Biochemical Oxygen Demand mg/l, BOD ₅ 27° C	<3.0	30	IS 3025 (P-44) 2014
4	Total Suspended Solids, mg/l	<5.0	100	IS 3025 (P-17) 2022
5	Fixed Dissolved Solids (FDS) mg/l	380.0	2100	IS 3025(P-18) 2022
6	Temperature ° C	28.0	Shall not 5°c above the receiving water temp	IS 3025 (P-9) 1984 RA2022
7	Oil & Grease, mg/l	<1.0	10	IS 3025 (P-39) 2021
8	Ammonical Nitrogen, mg/l	<0.1	50	IS 3025 (P-34) 1988 RA2019
9	Total Kjeldahl Nitrogen, mg/l	<0.5	50	IS 3025 (P-34) 1988 RA2019
10	Nitrate as (NO ₃), mg/l	3.55	10	IS 3025 (P-34) 1988 RA2019
11	Phosphates (as P), mg/l	<0.05	5	IS 3025 (P-31)
12	Chlorides (as Cl), mg/l	210.36	1000	IS 3025 (P-32) 1988 RA2019
13	Sulphates (as SO ₄) mg/l	65.5	1000	IS 3025 (P-24) Sec 1 2022
14	Fluoride (as F), mg/l	0.8	2	APHA23rd Edition 4500F
15	Sulphide (as S), mg/l	<0.01	2	IS 3025 (P-29) 2022
16	Phenolic Compounds (as C ₆ H ₅ OH), mg/l	<0.001	1	IS 3025 (P-43) Sec 1 2022
17	Total Residual Chlorine, mg/l	<0.1	1	IS 3025 (P-26) 2021
18	Zinc (as Zn), mg/l	<0.005	5	IS 3025 (P-2) 2019
19	Iron (as Fe), mg/l	<0.005	3	IS 3025 (P-2) 2019
20	Copper (as Cu), mg/l	<0.005	3	IS 3025 (P-2) 2019
21	Trivalent Chromium (as Cr ⁺³) mg/l	<0.001	2	SOP/CW-4
22	Manganese (as Mn), mg/l	<0.001	2	IS 3025 (P-2) 2019
23	Nickel (as Ni), mg/l	<0.001	3	IS 3025 (P-2) 2019
24	Arsenic (as As), mg/l	<0.002	0.2	IS 3025 (P-2) 2019
25	Cyanide (as CN), mg/l	<0.01	0.2	IS 3025 (P-27) Sec 1 2021
26	Vanadium (as V), mg/l	<0.001	0.2	IS 3025 (P-2) 2019
27	Lead (as Pb), mg/l	<0.005	0.1	IS 3025 (P-2) 2019
28	Hexavalent Chromium (as Cr ⁺⁶) mg/l	<0.03	2	IS 3025 (P-52) 2014
29	Selenium (as Se), mg/l	<0.005	0.05	IS 3025 (P-2) 2019
30	Cadmium (as Cd), mg/l	<0.001	2	IS 3025 (P-2) 2019
31	Mercury (as Hg), mg/l	<0.0005	0.01	IS 3025 (P-2) 2019

""END OF REPORT""

Arshiya Kousar
ARSHIYA KOUSAR

Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

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TEST REPORT

Table No. 14

Report No : ED005123114

Name of the Client : M/s. Gogte Minerals
Name of the Project : Redi Iron Ore Mine (203), village Redi, Vengurda taluka, Sindhudurg dist, MH State.
Particulars of sample collected : SW2 - Kanyal tank water
Sample Collected by : Environmental Laboratory Representative
Date of sample collection : 20.11.2023
Lab Code : ED/23/11/4-0051
Issue Date : 02.12.2023

Ref:IS : 2296, 1982 Class C Norms (Stream Water Standards)

Sl. No.	Parameters	Results	Limits For Stream Water Standards	Method of Testing
1	Colour (Hazen Units), Max	15	300	IS:3025(Part-4)2021
2	pH	7.47	6.5 to 8.5	IS:3025(Part-11)2022
3	Dissolved Oxygen (as O ₂), mg/l	5.6	Min 4	IS:3025(Part-38)1989RA 2019
4	Oil and grease, mg/l, Max	<0.1	0.1	IS:3025(Part-39) 2021
5	Total Dissolved Solids (mg/l), Max	860	1500	IS:3025(Part-18)2023
6	Nitrates (as NO ₃),mg/l, Max	5.59	50	IS:3025(Part-34)1988 RA 2019
7	Anionic detergents (as MBAS),mg/l, Max	<0.1	1.0	IS:3025(Part-68)
8	Copper (as Cu),mg/l, Max	<0.005	1.5	IS:3025(Part-42) 2019
9	Chloride (as Cl),mg/l, Max	409.95	600	IS:3025(Part-32) ;1988RA2019
10	Fluoride (as F),mg/l, Max	0.55	1.5	APHA 23rd Edition 4500F
11	Iron (as Fe),mg/l, Max	<0.005	50	IS:3025(P-2) 2019
12	Phenolic compounds (as C ₆ H ₅ OH),mg/l, Max	<0.001	0.005	IS:3025(P-43)Sec 1 2022
13	Selenium (as Se), mg/l, Max	<0.005	0.05	IS:3025(P-2) 2019
14	Sulphates (as SO ₄),mg/l, Max	97.5	400	IS:3025(P-24)Sec 1 2022
15	Zinc (as Zn),mg/l, Max	<0.005	15	IS:3025(P-2) 2019
16	Cadmium (as Cd), mg/l, Max	<0.001	0.01	IS:3025(P-2) 2019
17	Cyanides (as CN), mg/l, Max	<0.01	0.05	IS:3025(P-27) Sec 12021
18	Lead (as Pb) mg/l, Max	<0.005	0.1	IS:3025(P-2) 2019
19	Total Arsenic as As (mg/l), Max	<0.002	0.2	IS:3025(P-2) 2019
20	Chromium (as Cr ⁺⁶), mg/l, Max	<0.03	0.05	IS:3025(P-52) 2014
21	Biochemical Oxygen Demand (as O ₂), mg/l	<3	3	IS:3025(P-44) 2014
22	Total Coliform, MPN/100ml, Max	63	5000	IS:1622:1981

"END OF REPORT"

BINU MANI

T.M. - Microbiology

Govt. Analyst / Authorised Signatory

ARSHIYA KOUSAR

Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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TEST REPORT

Table No. 15

Report No : ED005223114

Name of the Client	: M/s. Gogte Minerals
Name of the Project	: Redi Iron Ore Mine (203), village Redi, Vengurla taluka, Sindhudurg dist, MH State.
Particulars of sample collected	: SW3 - Nallah water Near Kanyalwadi
Sample Collected by	: Environmental Laboratory Representative
Date of sample collection	: 20.11.2023
Lab Code	: ED/23/11/4-0052
Issue Date	: 02.12.2023
Ref:IS : 2296, 1982 Class C Norms (Stream Water Standards)	

Sl. No.	Parameters	Results	Limits For Stream Water Standards	Method of Testing
1	Colour (Hazen Units), Max	15	300	IS:3025(Part-4)2021
2	pH	6.57	6.5 to 8.5	IS:3025(Part-11)2022
3	Dissolved Oxygen (as O ₂), mg/l	5.6	Min 4	IS:3025(Part-38)1989RA 2019
4	Oil and grease, mg/l, Max	<0.1	0.1	IS:3025(Part-39) 2021
5	Total Dissolved Solids (mg/l), Max	985.0	1500	IS:3025(Part-16)2023
6	Nitrates (as NO ₃),mg/l, Max	6.25	50	IS:3025(Part-34)1988 RA 2019
7	Anionic detergents (as MBAS),mg/l, Max	<0.1	1.0	IS:3025(Part-68)
8	Copper (as Cu),mg/l, Max	<0.005	1.5	IS:3025(Part-42) 2019
9	Chloride (as Cl),mg/l, Max	450.0	600	IS:3025(Part-32) ;1988RA2019
10	Fluoride (as F),mg/l, Max	0.89	1.5	APHA 23rd Edition 4500F
11	Iron (as Fe),mg/l, Max	<0.005	50	IS:3025(P-2) 2019
12	Phenolic compounds (as C ₆ H ₅ OH),mg/l, Max	<0.001	0.005	IS:3025(P-43)Sec 1 2022
13	Selenium (as Se), mg/l, Max	<0.005	0.05	IS:3025(P-2) 2019
14	Sulphates (as SO ₄), mg/l, Max	93.12	400	IS:3025(P-24)Sec 1 2022
15	Zinc (as Zn),mg/l, Max	<0.005	15	IS:3025(P-2) 2019
16	Cadmium (as Cd), mg/l, Max	<0.001	0.01	IS:3025(P-2) 2019
17	Cyanides (as CN), mg/l, Max	<0.01	0.05	IS:3025(P-27) Sec 12021
18	Lead (as Pb) mg/l, Max	<0.005	0.1	IS:3025(P-2) 2019
19	Total Arsenic as As (mg/l), Max	<0.002	0.2	IS:3025(P-2) 2019
20	Chromium (as Cr ⁺⁶), mg/l, Max	<0.03	0.05	IS:3025(P-52) 2014
21	Biochemical Oxygen Demand (as O ₂), mg/l	<3	3	IS:3025(P-44) 2014
22	Total Coliform, MPN/100ml, Max	84	5000	IS:1622:1981

"END OF REPORT"

BINU MANI

T.M. - Microbiology

Govt. Analyst / Authorised Signatory

ARSHIYA KOUSAR

Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

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TEST REPORT

Table No. 16

Report No : ED005323114

Name of the Client : M/s. Gogte Minerals
 Name of the Project : Redi Iron Ore Mine (203), village Redi, Vengurla taluka, Sindhudurg dist, MH State.
 Particulars of sample collected : SW4- Near Hanuman temple Kanyalwadi village
 Sample Collected by : Environmental Laboratory Representative
 Date of sample collection : 20.11.2023
 Lab Code : ED/23/11/4-0053
 Issue Date : 02.12.2023

Ref:IS : 2296, 1982 Class C Norms (Stream Water Standards)

Sl. No.	Parameters	Results	Limits For Stream Water Standards	Method of Testing
1	Colour (Hazen Units), Max	5	300	IS:3025(Part-4)2021
2	pH	6.53	6.5 to 8.5	IS:3025(Part-11)2022
3	Dissolved Oxygen (as O ₂), mg/l	5.2	Min 4	IS:3025(Part-38)1989RA 2019
4	Oil and grease, mg/l, Max	<0.1	0.1	IS:3025(Part-39) 2021
5	Total Dissolved Solids (mg/l), Max	360.0	1500	IS:3025(Part-16)2023
6	Nitrates (as NO ₃),mg/l, Max	2.5	50	IS:3025(Part-34)1988 RA 2019
7	Anionic detergents (as MBAS),mg/l, Max	<0.1	1.0	IS:3025(Part-68)
8	Copper (as Cu),mg/l, Max	<0.005	1.5	IS:3025(Part-42) 2019
9	Chloride (as Cl),mg/l, Max	102.73	600	IS:3025(Part-32) ;1988RA2019
10	Fluoride (as F),mg/l, Max	<0.1	1.5	APHA 23rd Edition 4500F
11	Iron (as Fe),mg/l, Max	<0.005	50	IS:3025(P-2) 2019
12	Phenolic compounds (as C ₆ H ₅ OH),mg/l, Max	<0.001	0.005	IS:3025(P-43)Sec 1 2022
13	Selenium (as Se), mg/l, Max	<0.005	0.05	IS:3025(P-2) 2019
14	Sulphates (as SO ₄),mg/l, Max	12.5	400	IS:3025(P-24)Sec 1 2022
15	Zinc (as Zn),mg/l, Max	<0.005	15	IS:3025(P-2) 2019
16	Cadmium (as Cd), mg/l, Max	<0.001	0.01	IS:3025(P-2) 2019
17	Cyanides (as CN), mg/l, Max	<0.01	0.05	IS:3025(P-27) Sec 12021
18	Lead (as Pb) mg/l, Max	<0.005	0.1	IS:3025(P-2) 2019
19	Total Arsenic as As (mg/l), Max	<0.002	0.2	IS:3025(P-2) 2019
20	Chromium (as Cr ⁺⁶), mg/l, Max	<0.03	0.05	IS:3025(P-52) 2014
21	Biochemical Oxygen Demand (as O ₂), mg/l	<3	3	IS:3025(P-44) 2014
22	Total Coliform, MPN/100ml, Max	58	5000	IS:1622:1981

"END OF REPORT"

BINU MANI

T.M. - Microbiology

Govt. Analyst / Authorised Signatory

ARSHIYA KOUSAR

Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

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