

ENVIRONMENTAL MONITORING REPORT

May, 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					
Date of Report	: 09.06.2023					
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
05.05.2023	ED/23/05/1-79	11	12	358	170.00	0.11
06.05.2023	ED/23/05/1-160	10	11	365	125.00	0.17
08.05.2023	ED/23/05/2-174	8.6	10	412	148.00	0.21
09.05.2023	ED/23/05/2-226	7.6	12	421	151.00	0.14
19.05.2023	ED/23/05/4-058	9	11	354	130.00	0.15
20.05.2023	ED/23/05/4-0100	11	14	362	140.00	0.08
22.05.2023	ED/23/05/4-220	10	15	415	145.00	0.22
23.05.2023	ED/23/05/4-261	12	15	264	185.00	0.08
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						

M. Sachin Raju
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					
Date of Report	: 09.06.2023					
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
05.05.2023	ED/23/05/1-80	12	12	386	156.00	0.12
06.05.2023	ED/23/05/1-161	10	14	425	188.00	0.21
08.05.2023	ED/23/05/2-175	9	11	376	145.00	0.16
09.05.2023	ED/23/05/2-227	9.8	14	356	142.00	0.11
19.05.2023	ED/23/05/4-059	7	9	285	140.00	0.08
20.05.2023	ED/23/05/4-0101	10	12	410	183.00	0.17
22.05.2023	ED/23/05/4-221	9	11	364	140.00	0.15
23.05.2023	ED/23/05/4-262	11	18	485	184.00	0.15
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						

M. Sachin Raju
M. SACHIN RAJU
T.M. - CHEMICAL

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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					
Date of Report	: 09.06.2023					
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
05.05.2023	ED/23/05/1-81	12	13	365	125.00	0.34
06.05.2023	ED/23/05/1-162	9	11	372	133.00	0.24
08.05.2023	ED/23/05/2-176	10	10	385	134.00	0.14
09.05.2023	ED/23/05/2-228	11	13	451	150.00	0.18
19.05.2023	ED/23/05/4-060	11	12	358	146.00	0.12
20.05.2023	ED/23/05/4-0102	11	12	326	150.00	0.22
22.05.2023	ED/23/05/4-0222	11	14	354	136.00	0.31
23.05.2023	ED/23/05/4-263	9	13	384	134.00	0.24
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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TEST REPORT

Table No. 4

Fugitive Emission

Project	: Redi Iron Ore Mine (203)					
Client	: M/s. Gogte Minerals					
Station at & Code	: A - XI, Proposed Dump Area					
Duration	: 24 Hrs					
Date of Report	: 09.06.2023					
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
05.05.2023	ED/23/05/1-82	10	12	412	163.00	0.11
06.05.2023	ED/23/05/1-163	9	11	363	128.00	0.07
08.05.2023	ED/23/05/2-177	10	12	388	142.00	0.15
09.05.2023	ED/23/05/2-229	10	12	422	146.00	0.28
19.05.2023	ED/23/05/4-061	10	14	412	185.00	0.33
20.05.2023	ED/23/05/4-0103	12	14	285	136.00	0.09
22.05.2023	ED/23/05/4-223	7	11	258	132.00	0.25
23.05.2023	ED/23/05/4-264	7	11	248	124.00	0.11
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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TEST REPORT

Table No. 5

AMBIENT AIR QUALITY

Project : Redi Iron Ore Mine (203)
Client : M/s. Gogte Minerals
Station at & Code : A - IV, Core Zone (Near Mine Office and Screening Plant)
Duration : 24 Hrs
Date of Report : 09.06.2023
Reference IS 5182

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
05.05.2023	ED/23/05/1-83	9	11	56	32	<20	<1
06.05.2023	ED/23/05/1-164	10	12	50	28	<20	<1
08.05.2023	ED/23/05/2-178	10	12	44	22	<20	<1
09.05.2023	ED/23/05/2-230	11	13	56	26	<20	<1
19.05.2023	ED/23/05/4-062	11	14	50	24	<20	<1
20.05.2023	ED/23/05/4-0104	10	12	50	24	<20	<1
22.05.2023	ED/23/05/4-224	8	15	48	20	<20	<1
23.05.2023	ED/23/05/4-265	9	11	54	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
05.05.2023	ED/23/05/1-83	0.1	<0.5	<0.5	<0.5	0.21	25
06.05.2023	ED/23/05/1-164	<0.1	<0.5	<0.5	<0.5	0.18	23
08.05.2023	ED/23/05/2-178	<0.1	<0.5	<0.5	<0.5	0.15	23
09.05.2023	ED/23/05/2-230	<0.1	<0.5	<0.5	<0.5	0.08	26
19.05.2023	ED/23/05/4-062	<0.1	<0.5	<0.5	<0.5	0.19	21
20.05.2023	ED/23/05/4-0104	<0.1	<0.5	<0.5	<0.5	0.19	20
22.05.2023	ED/23/05/4-224	<0.1	<0.5	<0.5	<0.5	0.18	22
23.05.2023	ED/23/05/4-265	<0.1	<0.5	<0.5	<0.5	0.16	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

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T.M. - CHEMICAL

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TEST REPORT

Table No.6

AMBIENT AIR QUALITY

Project : Redi Iron Ore Mine (203)
Client : M/s. Gogte Minerals
Station at & Code : A - V, Redi village
Duration : 24 Hrs
Date of Report : 09.06.2023
Reference IS 5182

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
05.05.2023	ED/23/05/1-84	9	12	54	30	<20	<1
06.05.2023	ED/23/05/1-165	11	14	48	25	<20	<1
08.05.2023	ED/23/05/2-179	8	11	41	26	<20	<1
09.05.2023	ED/23/05/2-231	10	16	52	27	<20	<1
19.05.2023	ED/23/05/4-063	11	14	48	21	<20	<1
20.05.2023	ED/23/05/4-0105	9	13	56	30	<20	<1
22.05.2023	ED/23/05/4-225	7	13	52	35	<20	<1
23.05.2023	ED/23/05/4-266	11	15	52	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
05.05.2023	ED/23/05/1-84	<0.1	<0.5	<0.5	<0.5	0.25	26
06.05.2023	ED/23/05/1-165	<0.1	<0.5	<0.5	<0.5	0.33	23
08.05.2023	ED/23/05/2-179	<0.1	<0.5	<0.5	<0.5	0.16	22
09.05.2023	ED/23/05/2-231	<0.1	<0.5	<0.5	<0.5	0.17	25
19.05.2023	ED/23/05/4-063	<0.1	<0.5	<0.5	<0.5	0.21	23
20.05.2023	ED/23/05/4-0105	<0.1	<0.5	<0.5	<0.5	0.18	23
22.05.2023	ED/23/05/4-225	<0.1	<0.5	<0.5	<0.5	0.19	24
23.05.2023	ED/23/05/4-266	<0.1	<0.5	<0.5	<0.5	0.24	21
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

M. Sachin Raju
M. SACHIN RAJU
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 - VI, Shiroda village
Duration : 24 Hrs
Date of Report : 09.06.2023
Reference IS 5182

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
05.05.2023	ED/23/05/1-85	10	14	36	21	<20	<1
06.05.2023	ED/23/05/1-166	9	12	45	23	<20	<1
08.05.2023	ED/23/05/2-180	9	11	48	25	<20	<1
09.05.2023	ED/23/05/2-232	14	14	58	30	<20	<1
19.05.2023	ED/23/05/4-064	10	14	47	28	<20	<1
20.05.2023	ED/23/05/4-0106	9	12	48	24	<20	<1
22.05.2023	ED/23/05/4-226	13	14	48	23	<20	<1
23.05.2023	ED/23/05/4-267	7	11	43	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
05.05.2023	ED/23/05/1-85	<0.1	<0.5	<0.5	<0.5	0.32	22
06.05.2023	ED/23/05/1-166	<0.1	<0.5	<0.5	<0.5	0.15	21
08.05.2023	ED/23/05/2-180	<0.1	<0.5	<0.5	<0.5	0.20	25
09.05.2023	ED/23/05/2-232	<0.1	<0.5	<0.5	<0.5	0.16	23
19.05.2023	ED/23/05/4-064	<0.1	<0.5	<0.5	<0.5	0.21	21
20.05.2023	ED/23/05/4-0106	<0.1	<0.5	<0.5	<0.5	0.16	20
22.05.2023	ED/23/05/4-226	<0.1	<0.5	<0.5	<0.5	0.18	22
23.05.2023	ED/23/05/4-267	<0.1	<0.5	<0.5	<0.5	0.33	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

M. Sachin Raju
M. SACHIN RAJU
T.M. - CHEMICAL

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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 - VII, Gaontala village
Duration : 24 Hrs
Date of Report : 09.06.2023
Reference IS 5182

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
05.05.2023	ED/23/05/1-86	12	14	50	24	<20	<1
06.05.2023	ED/23/05/1-167	9	12	54	32	<20	<1
08.05.2023	ED/23/05/2-181	8	12	50	24	<20	<1
09.05.2023	ED/23/05/2-233	12	13	56	25	<20	<1
19.05.2023	ED/23/05/4-065	9	12	47	22	<20	<1
20.05.2023	ED/23/05/4-0107	10	14	48	23	<20	<1
22.05.2023	ED/23/05/4-227	9	12	53	29	<20	<1
23.05.2023	ED/23/05/4-268	10	15	50	26	<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
05.05.2023	ED/23/05/1-86	<0.1	<0.5	<0.5	<0.5	0.13	20
06.05.2023	ED/23/05/1-167	<0.1	<0.5	<0.5	<0.5	0.21	25
08.05.2023	ED/23/05/2-181	<0.1	<0.5	<0.5	<0.5	0.17	24
09.05.2023	ED/23/05/2-233	<0.1	<0.5	<0.5	<0.5	0.14	22
19.05.2023	ED/23/05/4-065	<0.1	<0.5	<0.5	<0.5	0.15	21
20.05.2023	ED/23/05/4-0107	<0.1	<0.5	<0.5	<0.5	0.20	20
22.05.2023	ED/23/05/4-227	<0.1	<0.5	<0.5	<0.5	0.12	20
23.05.2023	ED/23/05/4-268	0.17	<0.5	<0.5	<0.5	0.24	24
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 - VIII, Kanyalwadi village
Duration : 24 Hrs
Date of Report : 09.06.2023
Reference IS 5182

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
05.05.2023	ED/23/05/1-87	10	12	56	33	<20	<1
06.05.2023	ED/23/05/1-168	12	14	53	24	<20	<1
08.05.2023	ED/23/05/2-182	7	13	46	22	<20	<1
09.05.2023	ED/23/05/2-234	12	14.9	53	28	<20	<1
19.05.2023	ED/23/05/4-066	8	11	49	23	<20	<1
20.05.2023	ED/23/05/4-0108	9	13	45	25	<20	<1
22.05.2023	ED/23/05/4-228	7	9	49	26	<20	<1
23.05.2023	ED/23/05/4-269	11	12	35	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
05.05.2023	ED/23/05/1-87	<0.1	<0.5	<0.5	<0.5	0.32	26
06.05.2023	ED/23/05/1-168	<0.1	<0.5	<0.5	<0.5	0.21	24
08.05.2023	ED/23/05/2-182	<0.1	<0.5	<0.5	<0.5	0.21	20
09.05.2023	ED/23/05/2-234	<0.1	<0.5	<0.5	<0.5	0.08	25
19.05.2023	ED/23/05/4-066	<0.1	<0.5	<0.5	<0.5	0.14	23
20.05.2023	ED/23/05/4-0108	<0.1	<0.5	<0.5	<0.5	0.21	22
22.05.2023	ED/23/05/4-228	<0.1	<0.5	<0.5	<0.5	0.11	22
23.05.2023	ED/23/05/4-269	0.22	<0.5	<0.5	<0.5	0.19	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

M. Sachin Raju
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	: AIX - Near NIMCO Gate - Tivrewadi, Redi village				
Duration	: 24 Hrs				
Date of Report	: 09.06.2023				
Reference	IS 5182				
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)
05.05.2023	ED/23/05/1-88	12	15	56	32
06.05.2023	ED/23/05/1-169	11	13	53	28
08.05.2023	ED/23/05/2-183	9	11	42	21
09.05.2023	ED/23/05/2-235	10	12	50	28
19.05.2023	ED/23/05/4-067	10	13	51	24
20.05.2023	ED/23/05/4-0109	10	13	51	30
22.05.2023	ED/23/05/4-230	10	13	43	25
23.05.2023	ED/23/05/4-270	11	14	40	22
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs

M. Sachin Raju
M. SACHIN RAJU
T.M. - CHEMICAL

Govt. Analyst / Authorised Signatory

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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	: AX - Near Primary School - sakalbhatwadi Redi village				
Duration	: 24 Hrs				
Date of Report	: 09.06.2023				
Reference	IS 5182				
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)
05.05.2023	ED/23/05/1-89	10	15	47	26
06.05.2023	ED/23/05/1-170	13	16	56	33
08.05.2023	ED/23/05/2-184	8	12	47	24
09.05.2023	ED/23/05/2-236	7	11	57	32
19.05.2023	ED/23/05/4-068	10	14	53	25
20.05.2023	ED/23/05/4-0110	10	15	52	24
22.05.2023	ED/23/05/4-229	11	12	50	27
23.05.2023	ED/23/05/4-271	10	13	46	26
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs

M. Sachin Raju
M. SACHIN RAJU
T.M. - CHEMICAL

Govt. Analyst / Authorised Signatory

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TEST REPORT

Table No. 12

STATISTICAL AIR QUALITY DATA

Project : Redi Iron Ore Mine (203)

Month : May, 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.	8	11	44	20	7	11	41	21	7	11	36	21
10%	9	11	47	21	8	12	46	24	8	11	41	22
25%	9	12	50	24	9	13	48	26	9	12	45	23
50%	10	12	50	25	10	14	52	27	10	13	48	25
75%	10	13	55	28	11	14	53	30	11	14	48	26
98%	11	15	56	32	11	16	56	34	14	14	57	30
Max.	11	15	56	32	11	16	56	35	14	14	58	30
Avg.	10	13	51	26	10	14	50	28	10	13	47	25
SD	1	1	4	4	2	2	5	4	2	1	6	3
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	12	47	22	7	9	35	19				
10%	9	12	48	23	7	10	42	21				
25%	9	12	50	24	8	12	46	23				
50%	10	13	50	25	10	13	49	25				
75%	11	14	53	27	11	13	53	27				
98%	12	15	56	32	12	15	56	32				
Max.	12	15	56	32	12	15	56	33				
Avg.	10	13	51	26	10	12	48	25				
SD	1	1	3	3	2	2	7	4				
No. of obs	8				8							

M. SACHIN RAJU
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: ED011123052

Report No: ED01112301

Name of the Client	: M/s. Gogte Minerals
Name of the Project	: Redi Iron Ore Mine (203)
Particulars of sample collected	: SW1 - Pit water
Sample Collected by	: Environmental Laboratory Representative
Date of sample collection	: 10.05.2023
Date of sample receipt	: 12.05.2023
Lab Code	: ED/23/05/2-0111
Issue Date	: 24.05.2023
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	7.43	6.0-9.0	IS 3025 (P-11) 2022
3	Chemical Oxygen Demand (COD) mg/l	68	250	IS 3025 (P-58) 2006 RA2022
2	Biochemical Oxygen Demand mg/l, BOD ₅ 27 ^o C	30	30	IS 3025 (P-44) 2014
4	Total Suspended Solids, mg/l	88	100	IS 3025 (P-17) 2022
5	Fixed Dissolved Solids (FDS) mg/l	1902	2100	IS 3025(P-18) 2022
6	Temperature ^o C	25	Shall not 5 ^o c above the receiving water temp	IS 3025 (P-9) 1984 RA2022
7	Oil & Grease, mg/l	1	10	IS 3025 (P-39) 2021
8	Ammonical Nitrogen, mg/l	<0.1	50	IS 3025 (P-34) 1988 RA2019
9	Total Kjedah! Nitrogen, mg/l	<0.5	50	IS 3025 (P-34) 1988 RA2019
10	Nitrate as NO3, mg/l	1.42	10	IS 3025 (P-34) 1988 RA2019
11	Phosphates (as P), mg/l	<0.1	5	IS 3025 (P-31)
12	Chlorides (as Cl), mg/l	956.4	1000	IS 3025 (P-32) 1988 RA2019
13	Sulphates (as SO ₄) mg/l	547.14	1000	IS 3025 (P-24) Sec 1 2022
14	Fluoride (as F), mg/l	1	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	<0.03	2	SOP/CW-4
22	Manganese (as Mn), mg/l	<0.001	2	IS 3025 (P-2) 2019
23	Nickel (as Ni), mg/l	<0.01	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	<0.01	0.2	IS 3025 (P-2) 2019
27	Lead (as Pb), mg/l	<0.01	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

(Signature)
BINUMANI
T.M. - Microbiology
ARSHIYAKOUSAR
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. 14
Report No: ED10823052

Name of the Client	: M/s. Gogte Minerals
Name of the Project	: Redi Iron Ore Mine (203)
Particulars of sample collected	: SW2 - Kanyal tank water
Sample Collected by	: Environmental Laboratory Representative
Date of sample collection	: 10.05.2023
Date of sample receipt	: 12.05.2023
Lab Code	: ED/23/05/2-0108
Issue Date	: 24.05.2023
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	7.45	6.5 to 8.5	IS:3025(Part-11)2022
3	Dissolved Oxygen (as O ₂), mg/l, Min	5.2	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	1350	1500	IS:3025(Part-16)2023
6	Nitrates (as NO ₃),mg/l, Max	0.85	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	578.9	600	IS:3025(Part-32) ;1988RA2019
10	Fluoride (as F),mg/l, Max	1.20	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	394.3	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	0.001	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, Max	<3	3	IS:3025(P-44) 2014
22	Total Coliform (mpn/100ml), Max	49	5000	IS:1622:2009

"END OF REPORT"


BINUMANI ARSHIY KOUSAR
T.M. - Microbiology 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: ED10923052

Report No.: ED/1092509

Name of the Client	: M/s. Gogte Minerals
Name of the Project	: Redi Iron Ore Mine (203)
Particulars of sample collected	: SW3 - Nallah water near Kanyalwadi
Sample Collected by	: Environmental Laboratory Representative
Date of sample collection	: 10.05.2023
Date of sample receipt	: 12.05.2023
Lab Code	: ED/23/05/2-0109
Issue Date	: 24.05.2023
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	7.11	6.5 to 8.5	IS:3025(Part-11)2022
3	Dissolved Oxygen (as O ₂), mg/l, Min	5.7	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	1320	1500	IS:3025(Part-16)2023
6	Nitrates (as NO ₃),mg/l, Max	1.7	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	583.9	600	IS:3025(Part-32) :1988RA2019
10	Fluoride (as F),mg/l, Max	0.90	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	238.6	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	0.001	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, Max	<3	3	IS:3025(P-44) 2014
22	Total Coliform (mpn/100ml), Max	17	5000	IS:1622:2009

"END OF REPORT"


BINUMANI ARSHIYA KOUSAR
T.M. - Microbiology
Dy. T.M. Chemical
Govt. Analyst / Authorised Signatory

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TEST REPORT

Table No.16
Report No: ED011023052

Name of the Client	: M/s. Gogte Minerals
Name of the Project	: Redi Iron Ore Mine (203)
Particulars of sample collected	: SW4- Spring water near Hanuman temple Kanyalwadi village
Sample Collected by	: Environmental Laboratory Representative
Date of sample collection	: 10.05.2023
Date of sample receipt	: 12.05.2023
Lab Code	: ED/23/05/2-0110
Issue Date	: 24.05.2023
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	7.14	6.5 to 8.5	IS:3025(Part-11)2022
3	Dissolved Oxygen (as O ₂), mg/l, Min	5.0	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	1110	1500	IS:3025(Part-16)2023
6	Nitrates (as NO ₃),mg/l, Max	1.4	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	553.7	600	IS:3025(Part-32) ;1988RA2019
10	Fluoride (as F),mg/l, Max	0.80	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	42.9	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	0.001	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 ⁺⁺), mg/l, Max	<0.03	0.05	IS:3025(P-52) 2014
21	Biochemical Oxygen Demand (as O ₂), mg/l, Max	<3	3	IS:3025(P-44) 2014
22	Total Coliform (mpn/100ml), Max	17	5000	IS:1622:2009

"END OF REPORT"


BINU ARSHIY KOUSAL
T.M. - Microbiology Dy. T.M. Chemical
Govt. Analyst / Authorised Signatory

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