

ENVIRONMENTAL MONITORING REPORT

April, 2024

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

Lessee: M/S. GOGTE MINERALS
BELAGAVI
KARNATAKA

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,

LIST OF TABLES

SL. NO.	PARTICULARS	TABLE NO.
1	Test Report of Fugitive Emission	1
2	Test Report of Ambient Air Quality	2 to 6
3	Analysis Report of Ambient Air Quality (Transportation Route)	7 & 8
4	Statistical Ambient Air Quality Report	9
5	Water Test Report As per GSR-422E	10
6	Water Test Report As per IS 2296	11 to 13
7	Sewage Water Test Report	14



ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

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TEST REPORT

Table No. 1

Fugitive Emission

Name of the Client	: M/s. Gogte Minerals						
Name of the Project	: Redi Iron Ore Mine (203)						
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services)						
Duration	: 08 Hrs						
Issue Date	: 10.05.2024						
Station at & Code	Date of sample	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	PM ₁₀ (µg/m ³)	SPM (µg/m ³)	Carbon Monoxide* (CO), mg/m ³
FA1- Dumping site (North Eastern side of Mining Lease)	24.04.2024	N/24/04/4-0144	9	13	157	285	0.42
	25.04.2024	N/24/04/4-0206	12	16	174	386	0.35
FA2 - Haulage/Transport road	24.04.2024	N/24/04/4-0145	14	16	147	342	0.25
	25.04.2024	N/24/04/4-0207	12	14	158	352	0.26
FA3 - Near Mine Pit Edge	24.04.2024	N/24/04/4-0146	11	15	148	328	0.25
	25.04.2024	N/24/04/4-0208	11	13	196	425	0.26
Within in Mining Area Pollutant			SO ₂	NO ₂	RPM (PM ₁₀)	SPM (PM)	CO
Concentration in Ambient Air			120	120	250	500	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

AMBIENT AIR QUALITY

Name of the Client : M/s. Gogte Minerals
 Name of the Project : Redi Iron Ore Mine (203)
 Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)
 Station at & Code : A1 - Core Zone Near Mine Office
 Duration : 24 Hrs
 Issue Date : 10.05.2024
 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
05.04.2024	N/24/04/1-0190	11	13	52	29	<20	<1
06.04.2024	N/24/04/2-0036	12	14	59	34	<20	<1
12.04.2024	N/24/04/2-0274	10	11	57	32	<20	<1
13.04.2024	N/24/04/3-0039	10	13	63	34	<20	<1
15.04.2024	N/24/04/3-00090	12	14	50	31	<20	<1
16.04.2024	N/24/04/3-00129	11	13	48	35	<20	<1
24.04.2024	N/24/04/4-0152	7	14	58	33	<20	<1
25.04.2024	N/24/04/4-0214	10	15	53	28	<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
05.04.2024	N/24/04/1-0190	0.15	<0.1	<0.5	<0.5	0.27	21
06.04.2024	N/24/04/2-0036	0.21	<0.1	<0.5	<0.5	0.31	25
12.04.2024	N/24/04/2-0274	0.25	<0.1	<0.5	<0.5	0.26	20
13.04.2024	N/24/04/3-0039	0.14	<0.1	<0.5	<0.5	0.35	23
15.04.2024	N/24/04/3-00090	0.18	<0.1	<0.5	<0.5	0.28	24
16.04.2024	N/24/04/3-00129	0.21	<0.1	<0.5	<0.5	0.22	27
24.04.2024	N/24/04/4-0152	0.26	<0.1	<0.5	<0.5	0.36	26
25.04.2024	N/24/04/4-0214	0.22	<0.1	<0.5	<0.5	0.24	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.envttest.in



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Table No. 3

AMBIENT AIR QUALITY

Name of the Client : M/s. Gogte Minerals
 Name of the Project : Redi Iron Ore Mine (203)
 Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)
 Station at & Code : A2 - Redi village
 Duration : 24 Hrs
 Issue Date : 10.05.2024
 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
05.04.2024	N/24/04/1-0186	10	15	58	33	<20	<1
06.04.2024	N/24/04/2-0032	11	12	55	28	<20	<1
12.04.2024	N/24/04/2-0270	9	14	49	36	<20	<1
13.04.2024	N/24/04/3-0035	11	12	53	26	<20	<1
15.04.2024	N/24/04/3-00086	10	14	49	37	<20	<1
16.04.2024	N/24/04/3-00125	9	12	50	28	<20	<1
24.04.2024	N/24/04/4-0148	9	14	48	25	<20	<1
25.04.2024	N/24/04/4-0210	10	11	46	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
05.04.2024	N/24/04/1-0186	0.18	<0.1	<0.5	<0.5	0.21	21
06.04.2024	N/24/04/2-0032	0.22	<0.1	<0.5	<0.5	0.35	26
12.04.2024	N/24/04/2-0270	0.16	<0.1	<0.5	<0.5	0.27	28
13.04.2024	N/24/04/3-0035	0.25	<0.1	<0.5	<0.5	0.22	25
15.04.2024	N/24/04/3-00086	0.11	<0.1	<0.5	<0.5	0.26	23
16.04.2024	N/24/04/3-00125	0.15	<0.1	<0.5	<0.5	0.32	20
24.04.2024	N/24/04/4-0148	0.18	<0.1	<0.5	<0.5	0.28	27
25.04.2024	N/24/04/4-0210	0.21	<0.1	<0.5	<0.5	0.22	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

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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Table No. 4

AMBIENT AIR QUALITY

Name of the Client : M/s. Gogte Minerals
 Name of the Project : Redi Iron Ore Mine (203)
 Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)
 Station at & Code : A3 - Shiroda village
 Duration : 24 Hrs
 Issue Date : 10.05.2024
 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
05.04.2024	N/24/04/1-0187	8	9	36	28	<20	<1
06.04.2024	N/24/04/2-0033	10	12	54	30	<20	<1
12.04.2024	N/24/04/2-0271	7	8	44	24	<20	<1
13.04.2024	N/24/04/3-0036	9	11	49	29	<20	<1
15.04.2024	N/24/04/3-00087	8	10	51	26	<20	<1
16.04.2024	N/24/04/3-00126	8	12	54	29	<20	<1
24.04.2024	N/24/04/4-0149	10	11	47	26	<20	<1
25.04.2024	N/24/04/4-0211	8	13	46	23	<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
05.04.2024	N/24/04/1-0187	0.11	<0.1	<0.5	<0.5	0.23	23
06.04.2024	N/24/04/2-0033	0.13	<0.1	<0.5	<0.5	0.34	22
12.04.2024	N/24/04/2-0271	0.20	<0.1	<0.5	<0.5	0.25	20
13.04.2024	N/24/04/3-0036	0.18	<0.1	<0.5	<0.5	0.25	25
15.04.2024	N/24/04/3-00087	0.15	<0.1	<0.5	<0.5	0.21	23
16.04.2024	N/24/04/3-00126	0.10	<0.1	<0.5	<0.5	0.22	21
24.04.2024	N/24/04/4-0149	0.18	<0.1	<0.5	<0.5	0.24	20
25.04.2024	N/24/04/4-0211	0.11	<0.1	<0.5	<0.5	0.36	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

Arshiya Kousar
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 Dy. T.M. - Chemical

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Table No. 5

AMBIENT AIR QUALITY

Name of the Client : M/s. Gogte Minerals
 Name of the Project : Redi Iron Ore Mine (203)
 Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)
 Station at & Code : A4 - Gaontala village
 Duration : 24 Hrs
 Issue Date : 10.05.2024
 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
05.04.2024	N/24/04/1-0188	7	12	52	24	<20	<1
06.04.2024	N/24/04/2-0034	8	14	48	29	<20	<1
12.04.2024	N/24/04/2-0272	11	16	44	26	<20	<1
13.04.2024	N/24/04/3-0037	9	10	55	30	<20	<1
15.04.2024	N/24/04/3-00088	8	14	51	39	<20	<1
16.04.2024	N/24/04/3-00127	11	13	38	18	<20	<1
24.04.2024	N/24/04/4-0150	10	18	48	17	<20	<1
25.04.2024	N/24/04/4-0212	10	13	43	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
05.04.2024	N/24/04/1-0188	0.18	<0.1	<0.5	<0.5	0.25	20
06.04.2024	N/24/04/2-0034	0.11	<0.1	<0.5	<0.5	0.36	25
12.04.2024	N/24/04/2-0272	0.23	<0.1	<0.5	<0.5	0.41	23
13.04.2024	N/24/04/3-0037	0.16	<0.1	<0.5	<0.5	0.25	21
15.04.2024	N/24/04/3-00088	0.15	<0.1	<0.5	<0.5	0.38	20
16.04.2024	N/24/04/3-00127	0.24	<0.1	<0.5	<0.5	0.32	28
24.04.2024	N/24/04/4-0150	0.22	<0.1	<0.5	<0.5	0.33	24
25.04.2024	N/24/04/4-0212	0.26	<0.1	<0.5	<0.5	0.20	22
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

Arushiya 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. 6

AMBIENT AIR QUALITY

Name of the Client : M/s. Gogte Minerals
 Name of the Project : Redi Iron Ore Mine (203)
 Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)
 Station at & Code : A5 - Kanyalwadi village
 Duration : 24 Hrs
 Issue Date : 10.05.2024
 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
05.04.2024	N/24/04/1-0189	9	14	54	30	<20	<1
06.04.2024	N/24/04/2-0035	11	10	49	25	<20	<1
12.04.2024	N/24/04/2-0273	11	13	58	33	<20	<1
13.04.2024	N/24/04/3-0038	11	11	55	27	<20	<1
15.04.2024	N/24/04/3-00089	12	14	52	30	<20	<1
16.04.2024	N/24/04/3-00128	10	12	49	29	<20	<1
24.04.2024	N/24/04/4-0151	9	10	53	28	<20	<1
25.04.2024	N/24/04/4-0213	10	14	59	30	<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
05.04.2024	N/24/04/1-0189	0.26	<0.1	<0.5	<0.5	0.36	25
06.04.2024	N/24/04/2-0035	0.15	<0.1	<0.5	<0.5	0.45	21
12.04.2024	N/24/04/2-0273	0.11	<0.1	<0.5	<0.5	0.42	23
13.04.2024	N/24/04/3-0038	0.13	<0.1	<0.5	<0.5	0.32	20
15.04.2024	N/24/04/3-00089	0.14	<0.1	<0.5	<0.5	0.28	24
16.04.2024	N/24/04/3-00128	0.17	<0.1	<0.5	<0.5	0.22	28
24.04.2024	N/24/04/4-0151	0.11	<0.1	<0.5	<0.5	0.34	25
25.04.2024	N/24/04/4-0213	0.24	<0.1	<0.5	<0.5	0.26	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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Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envttest.in



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TEST REPORT

Table No.7

AMBIENT AIR QUALITY

Name of the Client	: M/s. Gogte Minerals				
Name of the Project	: Redi Iron Ore Mine (203)				
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services)				
Station at & Code	: A6 - Near NIMCO Gate - Tivrewadi, Redi village				
Duration	: 24 Hrs				
Issue Date	: 10.05.2024				
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)
05.04.2024	N/24/04/1-0191	8	10	52	28
06.04.2024	N/24/04/2-0037	9	11	63	33
12.04.2024	N/24/04/2-0275	12	16	50	26
13.04.2024	N/24/04/3-0040	11	15	58	30
15.04.2024	N/24/04/3-00091	9	11	54	28
16.04.2024	N/24/04/3-00130	7	9	52	25
24.04.2024	N/24/04/4-0153	11	12	49	29
25.04.2024	N/24/04/4-0215	9	11	52	24
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs

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

Govt. Analyst / Authorised Signatory

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



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TEST REPORT

Table No. 8

AMBIENT AIR QUALITY

Name of the Client : M/s. Gogte Minerals					
Name of the Project : Redi Iron Ore Mine (203)					
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)					
Station at & Code : A7 - Near Primary School - sakalbhatwadi Redi village					
Duration : 24 Hrs					
Issue Date : 10.05.2024					
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)
05.04.2024	N/24/04/1-0192	11	15	55	28
06.04.2024	N/24/04/2-0038	10	14	52	27
12.04.2024	N/24/04/2-0276	12	16	44	24
13.04.2024	N/24/04/3-0041	7	10	57	33
15.04.2024	N/24/04/3-00092	8	14	50	28
16.04.2024	N/24/04/3-00131	11	13	54	29
24.04.2024	N/24/04/4-0154	12	15	53	26
25.04.2024	N/24/04/4-0216	10	12	48	22
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 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.envttest.in



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TEST REPORT

Table No. 9

STATISTICAL AIR QUALITY DATA

Name of the : M/s. Gogte Minerals												
Name of the : Redi Iron Ore Mine (203)												
Month : April, 2024												
Station Code : A4 - Core Zone (ML Area, behind the Mines Office)					Station Code : A5 - Redi village				Station Code : A6 - 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	11	48	28	9	11	46	24	7	8	36	23
10%	9	12	49	29	9	12	47	25	8	9	42	24
25%	10	13	52	31	9	12	49	26	8	10	46	26
50%	11	14	55	33	10	13	50	28	8	11	48	27
75%	11	14	58	34	10	14	54	34	9	12	52	29
98%	12	15	62	35	11	15	58	37	10	13	54	30
Max.	12	15	63	35	11	15	58	37	10	13	54	30
Avg.	10	13	55	32	10	13	51	30	9	11	48	27
SD	2	1	5	3	1	1	4	5	1	2	6	3
No. of obs	8				8				8			
Station Code : A7 - Gaontala village					Station Code : A8 - Kanyalwadi village							
	SO ₂	NO ₂	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	PM ₁₀	PM _{2.5}				
Min.	7	10	38	17	9	10	49	25				
10%	8	11	42	18	9	10	49	26				
25%	8	13	44	23	10	11	51	28				
50%	10	14	48	28	11	13	54	30				
75%	10	15	51	29	11	14	56	30				
98%	11	18	55	38	12	14	59	33				
Max.	11	18	55	39	12	14	59	33				
Avg.	9	14	47	27	10	12	54	29				
SD	1	2	6	7	1	2	4	2				
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. 10
Report No: ED003724044

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 (Unit of Mineral Engineering Services)			
Date of sample collection	: 26.04.2024			
Lab Code	: ED/24/04/4-0037			
Issue Date	: 10.05.2024			
Ref	: Environmental (P) Rules, 1986 SCHEDULE VI			
Sl. No.	Parameters	Results	General Standards For Effluent Discharge of Environmental Pollutants	Method of Testing
1	Colour (Hazen Units), & Odour	10	—	IS:3025(part-4) and IS 3025 (Part-5)
2	Suspended Solids (mg/l), Max	22	100	IS 3025 (P-17) 2022
3	Particle size of suspended solids	Pass through 850 micron	Shall Pass through 850 micron	IS 2488 (Part-1)
4	pH	7.61	5.5 to 9.0	IS 3025 (P-11) 2022
5	Temperature ° C	25	Shall not exceed 5° C above the receiving water temp	IS 3025 (P-9) 1984 RA2022
6	Oil & Grease (mg/l), Max	<1.0	10	IS 3025 (P-39) 2021
7	Total Residual Chlorine (mg/l), Max	<0.1	1.0	IS 3025 (P-26) 2021
8	Ammonical Nitrogen (mg/l), Max	<0.1	50	IS 3025 (P-34) 1988 RA2019
9	Total Kjeldahl Nitrogen (mg/l), Max	<0.5	100	IS 3025 (P-34) 1988 RA2019
10	Free Ammonia as NH ₃ (mg/l), Max	<0.1	5.0	IS 2488 (Part-IV)
11	BOD [3 days at 27°C] (mg/l), Max	<3	30	IS 3025 (P-44) 2014
12	COD (mg/l), Max	30	250	IS 3025 (P-58) 2006 RA2022
13	Arsenic as As (mg/l), Max	<0.002	0.2	IS 3025 (P-2) 2019
14	Mercury as Hg (mg/l), Max	<0.0005	0.01	IS 3025 (P-2) 2019
15	Lead as Pb (mg/l), Max	<0.005	0.1	IS 3025 (P-2) 2019
16	Cadmium as Cd (mg/l), Max	<0.001	2.0	IS 3025 (P-2) 2019
17	Hexavalent Chromium as Cr ⁺⁶ (mg/l), Max	<0.03	0.1	IS 3025 (P-52) 2014
18	Total Chromium as Cr(mg/l), Max	<0.03	2.0	IS 3025 (Part-52)
19	Copper as Cu (mg/l), Max	<0.005	3.0	IS 3025 (P-2) 2019
20	Zinc as Zn (mg/l), Max	<0.005	5.0	IS 3025 (P-2) 2019
21	Selenium as Se (mg/l), Max	<0.005	0.05	IS 3025 (P-2) 2019
22	Nickel as Ni (mg/l), Max	<0.001	3.0	IS 3025 (P-2) 2019
23	Cyanide as CN (mg/l), Max	<0.01	0.2	IS 3025 (P-27) Sec 1 2021
24	Fluoride as F (mg/l), Max	0.48	2.0	APHA23rd Edition 4500F
25	Dissolved Phosphates as PO ₄ (mg/l), Max	<0.05	5.0	IS 2488 (Part-IV)
26	Sulphide as S (mg/l), Max	<0.01	2.0	IS 3025 (P-29) 2022
27	Phenolic Compounds as C ₆ H ₅ OH (mg/l), Max	<0.001	1.0	IS 3025 (P-43) Sec 1 2022
28	Radio Active materials			
	a) Alpha Emitters (µcurie/ml), Max	NA	10 ⁻⁷	APHA 21 st
	b) Beta Emitters (µcurie/ml), Max	NA	10 ⁻⁶	APHA 21 st
29	Bio-assay test	NA	90% survival of fish after 96 hrs in 100% effluent)	IS 6582 (Part-1)
30	Manganese as Mn (mg/l), Max	<0.001	2	IS 3025 (P-2) 2019
31	Iron as Fe (mg/l), Max	0.72	3	IS 3025 (P-2) 2019
32	Vanadium as V (mg/l), Max	<0.001	0.2	IS 3025 (P-2) 2019
33	Nitrate Nitrogen (mg/l), Max	<0.1	10	IS 3025 (P-34) 1988 RA2019

""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.

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



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TEST REPORT

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Table No. 11

Report No : ED003824044

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	: SW2 - Kanyal tank water
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services)
Date of sample collection	: 26.04.2024
Lab Code	: ED/24/04/4-0038
Issue Date	: 10.05.2024
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	7.75	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	<1.0	0.1	IS:3025(Part-39) 2021
5	Total Dissolved Solids (mg/l), Max	1260	1500	IS:3025(Part-16)2023
6	Nitrates (as NO ₃),mg/l, Max	12.4	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	570.0	600	IS:3025(Part-32) ;1988RA2019
10	Fluoride (as F),mg/l, Max	0.63	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	296.0	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 1 2021
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	150	5000	IS:1622:1981

"END OF REPORT"

BINU MANI

T.M. - Microbiology

Govt. Analyst / Authorised Signatory

ARSHIYA KHOSAR

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. 12

Report No : ED003924044

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 (Unit of Mineral Engineering Services)
Date of sample collection	: 26.04.2024
Lab Code	: ED/24/04/4-0039
Issue Date	: 10.05.2024
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	7.81	6.5 to 8.5	IS:3025(Part-11)2022
3	Dissolved Oxygen (as O ₂), mg/l	5.5	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	1410	1500	IS:3025(Part-16)2023
6	Nitrates (as NO ₃),mg/l, Max	12.5	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	510.0	600	IS:3025(Part-32) ;1988RA2019
10	Fluoride (as F),mg/l, Max	0.71	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	285.0	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	128	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. 13

Report No : ED004024044

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 (Unit of Mineral Engineering Services)
Date of sample collection	: 26.04.2024
Lab Code	: ED/24/04/4-0040
Issue Date	: 10.05.2024
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	7.68	6.5 to 8.5	IS:3025(Part-11)2022
3	Dissolved Oxygen (as O ₂), mg/l	5.3	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	1010	1500	IS:3025(Part-16)2023
6	Nitrates (as NO ₃),mg/l, Max	11.7	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	250.0	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	160.0	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	178	5000	IS:1622:1981

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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. 14

Report No: ED0037A24044

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		: Sewage Water Sample		
Date of sample collection		: 26.04.2024		
Lab Code		: ED/24/04/4-0037A		
Issue Date		: 10.05.2024		
Ref		: Environmental (P) Rules, 1986 SCHEDULE VI		
Sl. No.	Parameters	Results	General Standards For Effluent Discharge of Environmental Pollutants	Method of Testing
1	pH	7.12	6.5 -9.0	AOHA (23 rd Edition) 4500H* - B
2	Biochemical Oxygen Demand BOD ₃ 27 ^o C, mg/l	16.31	<30	IS 3025 (P-44) 1993
3	Total Suspended Solids, at 105 ^o C, mg/l	32	<100	AOHA (23 rd Edition) 2540 - D
4	Fecal Coliform (FC), MPN/100ml	96	<1000	AOHA (23 rd Edition) 5520 - B

BINU MANI

T.M. - Microbiology

Govt. Analyst / Authorised Signatory

ARSHIYA KOUSAR

Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

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