

# ENVIRONMENTAL MONITORING REPORT

November, 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, 2<sup>nd</sup> Cross, Kammanahalli Main Road,  
St Thomas Town Post, Bangalore- 560 084, Karnataka,

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# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

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Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto 23.05.2025

## TEST REPORT

Table No. 1

### Fugitive Emission

<b>Name of the Client</b>	: M/s. Gogte Minerals						
<b>Name of the Project</b>	: Redi Iron Ore Mine (203)						
<b>Sample Collected by</b>	: Environmental Laboratory (Unit of Mineral Engineering Services)						
<b>Duration</b>	: 08 Hrs						
<b>Issue Date</b>	: 04.12.2024						
Station at & Code	Date of sample	Lab Code	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> (µg/m <sup>3</sup> )	SPM (µg/m <sup>3</sup> )	Carbon Monoxide* (CO), mg/m <sup>3</sup>
FA1- Dumping site (North Eastern side of Mining Lease)	04.11.2024	N/24/11/3-0026	12	16	122	268	0.42
	15.11.2024	N/24/11/4-0177	11	18	161	288	0.32
FA2 - Haulage/Transport road	04.11.2024	N/24/11/3-0027	9	12	134	296	0.28
	15.11.2024	N/24/11/4-0178	10	14	120	255	0.22
FA3 - Near Mine Pit Edge	04.11.2024	N/24/11/3-0028	12	16	130	387	0.35
	15.11.2024	N/24/11/4-0179	9	12	142	285	0.24
<b>Within in Mining Area Pollutant</b>			<b>SO<sub>2</sub></b>	<b>NO<sub>2</sub></b>	<b>RPM (PM<sub>10</sub>)</b>	<b>SPM (PM)</b>	<b>CO</b>
<b>Concentration in Ambient Air</b>			<b>120</b>	<b>120</b>	<b>250</b>	<b>500</b>	<b>4</b>
<b>Time Weighted Average</b>			<b>24 Hrs</b>	<b>24 Hrs</b>	<b>24 Hrs</b>	<b>24 Hrs</b>	<b>1 Hr</b>
<b>Note : * Parameters monitored for period of 1 hr</b>							

  
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 Dy. T.M. - Chemical  
 Govt. Analyst / Authorised Signatory

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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	: 04.12.2024
Reference	IS 5182 & Lab SOP

Date of Sampling	Lab Code	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>
04.11.2024	N/24/11/3-0019	7	11	48	24	<20	<1
05.11.2024	N/24/11/3-0054	12	14	53	28	<20	<1
15.11.2024	N/24/11/4-0170	10	11	51	25	<20	<1
16.11.2024	N/24/11/4-0234	11	13	46	25	<20	<1
22.11.2024	N/24/11/5-0155	12	14	49	27	<20	<1
23.11.2024	N/24/11/5-0226	11	15	44	25	<20	<1
25.11.2024	N/24/11/5-0054	7	9	50	26	<20	<1
26.11.2024	N/24/11/5-0121	9	10	40	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 <sup>3</sup>	Nickel (Ni), ng/m <sup>3</sup>	Arsenic (As), ng/m <sup>3</sup>	Benzo(a) Pyrene (BaP), ng/m <sup>3</sup>	Carbon Monoxide* (CO), mg/m <sup>3</sup>	Ozone* (O <sub>3</sub> ), µg/m <sup>3</sup>
04.11.2024	N/24/11/3-0019	0.11	<0.1	<0.5	<0.5	0.25	20
05.11.2024	N/24/11/3-0054	0.19	<0.1	<0.5	<0.5	0.38	27
15.11.2024	N/24/11/4-0170	0.13	<0.1	<0.5	<0.5	0.26	26
16.11.2024	N/24/11/4-0234	0.11	<0.1	<0.5	<0.5	0.33	20
22.11.2024	N/24/11/5-0155	0.15	<0.1	<0.5	<0.5	0.29	23
23.11.2024	N/24/11/5-0226	0.12	<0.1	<0.5	<0.5	0.22	24
25.11.2024	N/24/11/5-0054	0.19	<0.1	<0.5	<0.5	0.28	22
26.11.2024	N/24/11/5-0121	0.23	<0.1	<0.5	<0.5	0.36	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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## TEST REPORT

Table No. 3

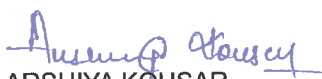
### AMBIENT AIR QUALITY

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	: 04.12.2024
Reference	IS 5182 & Lab SOP

Date of Sampling	Lab Code	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>
04.11.2024	N/24/11/3-0020	6	9	47	26	<20	<1
05.11.2024	N/24/11/3-0055	8	11	53	27	<20	<1
15.11.2024	N/24/11/4-0171	9	12	54	28	<20	<1
16.11.2024	N/24/11/4-0235	6	10	49	26	<20	<1
22.11.2024	N/24/11/5-0156	8	9	47	24	<20	<1
23.11.2024	N/24/11/5-0227	11	14	48	23	<20	<1
25.11.2024	N/24/11/6-0055	9	11	56	30	<20	<1
26.11.2024	N/24/11/6-0122	11	12	50	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 <sup>3</sup>	Nickel (Ni), ng/m <sup>3</sup>	Arsenic (As), ng/m <sup>3</sup>	Benzo(a) Pyrene (BaP), ng/m <sup>3</sup>	Carbon Monoxide* (CO), mg/m <sup>3</sup>	Ozone* (O <sub>3</sub> ), µg/m <sup>3</sup>
04.11.2024	N/24/11/3-0020	0.25	<0.1	<0.5	<0.5	0.32	28
05.11.2024	N/24/11/3-0055	0.22	<0.1	<0.5	<0.5	0.21	26
15.11.2024	N/24/11/4-0171	0.26	<0.1	<0.5	<0.5	0.26	20
16.11.2024	N/24/11/4-0235	0.14	<0.1	<0.5	<0.5	0.22	27
22.11.2024	N/24/11/5-0156	0.21	<0.1	<0.5	<0.5	0.23	28
23.11.2024	N/24/11/5-0227	0.22	<0.1	<0.5	<0.5	0.28	20
25.11.2024	N/24/11/6-0055	0.16	<0.1	<0.5	<0.5	0.31	21
26.11.2024	N/24/11/6-0122	0.13	<0.1	<0.5	<0.5	0.36	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

  
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## TEST REPORT

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	: 04.12.2024
Reference	IS 5182 & Lab SOP

Date of Sampling	Lab Code	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>
04.11.2024	N/24/11/3-0021	9	11	45	27	<20	<1
05.11.2024	N/24/11/3-0056	8	9	53	25	<20	<1
15.11.2024	N/24/11/4-0172	10	11	42	22	<20	<1
16.11.2024	N/24/11/4-0236	8	12	38	20	<20	<1
22.11.2024	N/24/11/5-0157	7	9	33	19	<20	<1
23.11.2024	N/24/11/5-0228	10	11	46	22	<20	<1
25.11.2024	N/24/11/5-0056	8	9	52	27	<20	<1
26.11.2024	N/24/11/5-0123	7	9	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 <sup>3</sup>	Nickel (Ni), ng/m <sup>3</sup>	Arsenic (As), ng/m <sup>3</sup>	Benzo(a) Pyrene (BaP), ng/m <sup>3</sup>	Carbon Monoxide* (CO), mg/m <sup>3</sup>	Ozone* (O <sub>3</sub> ), µg/m <sup>3</sup>
04.11.2024	N/24/11/3-0021	0.18	<0.1	<0.5	<0.5	0.25	25
05.11.2024	N/24/11/3-0056	0.21	<0.1	<0.5	<0.5	0.31	22
15.11.2024	N/24/11/4-0172	0.16	<0.1	<0.5	<0.5	0.33	24
16.11.2024	N/24/11/4-0236	0.18	<0.1	<0.5	<0.5	0.25	21
22.11.2024	N/24/11/5-0157	0.22	<0.1	<0.5	<0.5	0.31	21
23.11.2024	N/24/11/5-0228	0.20	<0.1	<0.5	<0.5	0.21	23
25.11.2024	N/24/11/5-0056	0.11	<0.1	<0.5	<0.5	0.35	26
26.11.2024	N/24/11/5-0123	0.19	<0.1	<0.5	<0.5	0.20	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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## TEST REPORT

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 : 04.12.2024  
 Reference IS 5182 & Lab SOP

Date of Sampling	Lab Code	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>
04.11.2024	N/24/11/3-0022	10	12	44	23	<20	<1
05.11.2024	N/24/11/3-0057	11	14	57	32	<20	<1
15.11.2024	N/24/11/4-0173	9	12	51	26	<20	<1
16.11.2024	N/24/11/4-0237	11	16	35	20	<20	<1
22.11.2024	N/24/11/5-0158	9	10	51	26	<20	<1
23.11.2024	N/24/11/5-0229	7	11	45	24	<20	<1
25.11.2024	N/24/11/5-0057	10	12	47	26	<20	<1
26.11.2024	N/24/11/6-0124	10	11	54	29	<20	<1
<b>Limits for Industrial , Residential, Rural and other Areas</b>		<b>80</b> 24 Hrs	<b>80</b> 24 Hrs	<b>100</b> 24 Hrs	<b>60</b> 24 Hrs	<b>400</b> 24 Hrs	<b>5</b> Annual

Date of Sampling	Lab Code	Lead (Pb), µg/m <sup>3</sup>	Nickel (Ni), ng/m <sup>3</sup>	Arsenic (As), ng/m <sup>3</sup>	Benzo(a) Pyrene (BaP), ng/m <sup>3</sup>	Carbon Monoxide* (CO), mg/m <sup>3</sup>	Ozone* (O <sub>3</sub> ), µg/m <sup>3</sup>
04.11.2024	N/24/11/3-0022	0.28	<0.1	<0.5	<0.5	0.31	20
05.11.2024	N/24/11/3-0057	0.11	<0.1	<0.5	<0.5	0.26	21
15.11.2024	N/24/11/4-0173	0.26	<0.1	<0.5	<0.5	0.29	22
16.11.2024	N/24/11/4-0237	0.10	<0.1	<0.5	<0.5	0.22	20
22.11.2024	N/24/11/5-0158	0.22	<0.1	<0.5	<0.5	0.20	26
23.11.2024	N/24/11/5-0229	0.11	<0.1	<0.5	<0.5	0.34	25
25.11.2024	N/24/11/5-0057	0.15	<0.1	<0.5	<0.5	0.31	22
26.11.2024	N/24/11/6-0124	0.26	<0.1	<0.5	<0.5	0.28	22
<b>Limits for Industrial , Residential, Rural and other Areas</b>		<b>1.0</b> 24 Hrs	<b>20</b> Annual	<b>6</b> Annual	<b>1</b> Annual	<b>4</b> 1 Hr	<b>180</b> 1 Hr

Note : \* Parameters monitored for period of 1 hr

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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	: 04.12.2024
Reference	IS 5182 & Lab SOP

Date of Sampling	Lab Code	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>
04.11.2024	N/24/11/3-0023	8	14	41	23	<20	<1
05.11.2024	N/24/11/3-0058	12	13	34	22	<20	<1
15.11.2024	N/24/11/4-0174	7	9	48	24	<20	<1
16.11.2024	N/24/11/4-0238	6	9	36	18	<20	<1
22.11.2024	N/24/11/5-0159	7	13	49	27	<20	<1
23.11.2024	N/24/11/5-0230	11	12	42	20	<20	<1
25.11.2024	N/24/11/5-0058	12	14	45	26	<20	<1
26.11.2024	N/24/11/5-0125	10	16	49	25	<20	<1
<b>Limits for Industrial , Residential, Rural and other Areas</b>		<b>80</b> 24 Hrs	<b>80</b> 24 Hrs	<b>100</b> 24 Hrs	<b>60</b> 24 Hrs	<b>400</b> 24 Hrs	<b>5</b> Annual

Date of Sampling	Lab Code	Lead (Pb), µg/m <sup>3</sup>	Nickel (Ni), ng/m <sup>3</sup>	Arsenic (As), ng/m <sup>3</sup>	Benzo(a) Pyrene (BaP), ng/m <sup>3</sup>	Carbon Monoxide* (CO), mg/m <sup>3</sup>	Ozone* (O <sub>3</sub> ), µg/m <sup>3</sup>
04.11.2024	N/24/11/3-0023	0.28	<0.1	<0.5	<0.5	0.25	20
05.11.2024	N/24/11/3-0058	0.22	<0.1	<0.5	<0.5	0.22	20
15.11.2024	N/24/11/4-0174	0.17	<0.1	<0.5	<0.5	0.33	24
16.11.2024	N/24/11/4-0238	0.21	<0.1	<0.5	<0.5	0.28	22
22.11.2024	N/24/11/5-0159	0.13	<0.1	<0.5	<0.5	0.27	20
23.11.2024	N/24/11/5-0230	0.19	<0.1	<0.5	<0.5	0.21	23
25.11.2024	N/24/11/5-0058	0.11	<0.1	<0.5	<0.5	0.25	30
26.11.2024	N/24/11/5-0125	0.25	<0.1	<0.5	<0.5	0.31	26
<b>Limits for Industrial , Residential, Rural and other Areas</b>		<b>1.0</b> 24 Hrs	<b>20</b> Annual	<b>6</b> Annual	<b>1</b> Annual	<b>4</b> 1 Hr	<b>180</b> 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiya Kousar*

ARSHIYA KOUSAR

Dy. T.M. - Chemical

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## TEST REPORT

Table No.7

### AMBIENT AIR QUALITY

<b>Name of the Client</b> : M/s. Gogte Minerals					
<b>Name of the Project</b> : Redi Iron Ore Mine (203)					
<b>Sample Collected by</b> : Environmental Laboratory (Unit of Mineral Engineering Services)					
<b>Station at &amp; Code</b> : A6 - Near NIMCO Gate - Tivrewadi, Redi village					
<b>Duration</b> : 24 Hrs					
<b>Issue Date</b> : 04.12.2024					
<b>Reference</b> IS 5182 & Lab SOP					
Date of Sampling	Lab Code	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )
04.11.2024	N/24/11/3-0024	12	18	56	32
05.11.2024	N/24/11/3-0059	10	12	52	30
15.11.2024	N/24/11/4-0175	9	11	49	24
16.11.2024	N/24/11/4-0239	11	15	53	29
22.11.2024	N/24/11/5-0160	7	11	50	27
23.11.2024	N/24/11/5-0231	12	18	45	25
25.11.2024	N/24/11/6-0059	9	12	54	28
26.11.2024	N/24/11/6-0126	13	15	50	26
<b>Limits for Industrial , Residential, Rural and other Areas</b>		<b>80</b> 24 Hrs	<b>80</b> 24 Hrs	<b>100</b> 24 Hrs	<b>60</b> 24 Hrs

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## TEST REPORT

Table No. 8

### AMBIENT AIR QUALITY

<b>Name of the Client</b>	: M/s. Gogte Minerals				
<b>Name of the Project</b>	: Redi Iron Ore Mine (203)				
<b>Sample Collected by</b>	: Environmental Laboratory (Unit of Mineral Engineering Services)				
<b>Station at &amp; Code</b>	: A7 - Near Primary School - sakalbhatwadi Redi village				
<b>Duration</b>	: 24 Hrs				
<b>Issue Date</b>	: 04.12.2024				
<b>Reference</b>	IS 5182 & Lab SOP				
Date of Sampling	Lab Code	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )
04.11.2024	N/24/11/3-0025	9	11	40	24
05.11.2024	N/24/11/3-0060	7	9	38	20
15.11.2024	N/24/11/4-0176	6	9	52	28
16.11.2024	N/24/11/4-0240	10	12	47	25
22.11.2024	N/24/11/5-0161	8	10	40	22
23.11.2024	N/24/11/5-0232	12	14	54	28
25.11.2024	N/24/11/5-0060	9	12	50	26
26.11.2024	N/24/11/6-0127	10	11	46	24
<b>Limits for Industrial , Residential, Rural and other Areas</b>		<b>80</b> 24 Hrs	<b>80</b> 24 Hrs	<b>100</b> 24 Hrs	<b>60</b> 24 Hrs

  
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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 : November, 2024												
Station Code : A4 - Core Zone (ML Area, behind the Mines Office)					Station Code : A5 - Redi village				Station Code : A6 - Shiroda village			
	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Min.	7	9	40	24	6	9	47	23	7	9	33	19
10%	7	10	43	24	6	9	47	24	7	9	37	20
25%	9	11	46	25	8	10	48	26	8	9	41	22
50%	11	12	49	25	9	11	50	27	8	10	46	24
75%	11	14	50	26	10	12	53	28	9	11	51	27
98%	12	15	53	28	11	14	56	30	10	12	53	27
Max.	12	15	53	28	11	14	56	30	10	12	53	27
Avg.	10	12	48	26	9	11	51	27	8	10	45	24
SD	2	2	4	1	2	2	3	2	1	1	7	3
No. of obs	8				8				8			
Station Code : A7 - Gaontala village					Station Code : A8 - Kanyalwadi village							
	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>				
Min.	7	10	35	20	6	9	34	18				
10%	8	11	41	22	7	9	35	19				
25%	9	11	45	24	7	11	40	22				
50%	10	12	49	26	9	13	44	24				
75%	10	13	52	27	11	14	48	25				
98%	11	16	57	32	12	16	49	27				
Max.	11	16	57	32	12	16	49	27				
Avg.	10	12	48	26	9	13	43	23				
SD	1	2	7	4	2	2	6	3				
No. of obs	8				8							

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Table No. 10  
Report No: N026324114

### TEST REPORT

Name of the Client	: M/s. Gogte Minerals
Name of the Project	: Redi Iron Ore Mine (203) Redi village, Vengurla taluk, 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	: 15.11.2024
Lab Code	: N/24/1/4-0263
Issue Date	: 29.11.2024
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	5	--	IS:3025(part-4) and IS 3025 (Part-5)
2	Suspended Solids (mg/l), Max	12	100	IS 3025 (P-17) 2022
3	Particle size of suspended solids	Pass through 850 micron	Shall Pass through 850 micron	AOHA 23rd edition
4	pH	6.20	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 RA 2019
9	Total Kjeldahl Nitrogen (mg/l), Max	<0.1	100	IS 3025 (P-34) 1988 RA 2019
10	Free Ammonia as NH <sub>3</sub> (mg/l), Max	<0.1	5.0	IS 3025 (P-34) 1988 RA 2019
11	BOD [3 days at 27°C] (mg/l), Max	<3	30	IS 3025 (P-44) 2014
12	COD (mg/l), Max	22.3	250	IS 3025 (P-58) 2006 RA2022
13	Arsenic as As (mg/l), Max	<0.01	0.2	APHA 3030K
14	Mercury as Hg (mg/l), Max	<0.001	0.01	APHA 3030K
15	Lead as Pb (mg/l), Max	<0.01	0.1	APHA 3030K
16	Cadmium as Cd (mg/l), Max	<0.01	2.0	APHA 3030K
17	Hexavalent Chromium as Cr <sup>+6</sup> (mg/l), Max	<0.03	0.1	IS 3025 (P-52) 2014
18	Total Chromium as Cr(mg/l), Max	<0.01	2.0	APHA 3030K
19	Copper as Cu (mg/l), Max	<0.05	3.0	APHA 3030K
20	Zinc as Zn (mg/l), Max	<0.05	5.0	APHA 3030K
21	Selenium as Se (mg/l), Max	<0.05	0.05	APHA 3030K
22	Nickel as Ni (mg/l), Max	<0.05	3.0	APHA 3030K
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	0.42	2.0	APHA23rd Edition 4500F
25	Dissolved Phosphates as PO <sub>4</sub> (mg/l), Max	<0.05	5.0	IS 2488 (P-31) Sec 1 2022
26	Sulphide as S (mg/l), Max	<0.01	2.0	IS 3025 (P-29) 2022
27	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> 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 <sup>-7</sup>	APHA 21 <sup>st</sup>
	b) Beta Emitters (µcurie/ml), Max	NA	10 <sup>-6</sup>	APHA 21 <sup>st</sup>
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	<0.01	2	APHA 3030K
31	Iron as Fe (mg/l), Max	<0.05	3	APHA 3030K
32	Vanadium as V (mg/l), Max	<0.01	0.2	APHA 3030K
33	Nitrate Nitrogen (mg/l), Max	<0.1	10	IS 3025 (P-34) 1988 RA 2019
34	Fixed Dissolved Solids (FDS) mg/l	1230	--	IS 3025(P-18) 2022
35	Chlorides (as Cl), mg/l	280	--	IS 3025 (P-32) 1988 RA2019

""END OF REPORT""

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## TEST REPORT

Table No. 11

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, SW3 - Nallah water Near Kanyalwadi SW4- Near Hanuman temple Kanyalwadi village					
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services)					
Date of sample collection	: 15.11.2024					
Issue Date	: 29.11.2024					
Ref:IS : 2296, 1982 Class C Norms (Stream Water Standards)						
Sl. No.	Lab Code	N/24/11/4-0264	N/24/11/4-0265	N/24/11/4-0266	Limits For Stream Water Standards	Method of Testing
	Sample Code	SW2	SW3	SW4		
	Parameters	Results				
1	Colour (Hazen Units), Max	10	15	10	300	IS:3025(Part-4)2021
2	pH	6.88	7.12	6.93	6.5 to 8.5	IS:3025(Part-11)2022
3	Dissolved Oxygen (as O <sub>2</sub> ), mg/l	5.3	5.2	5.5	Min 4	IS:3025(Part-38)1989RA 2019
4	Oil and grease, mg/l, Max	<0.1	<0.1	<0.1	0.1	IS:3025(Part-39) 2021
5	Total Dissolved Solids (mg/l), Max	310	490	110	1500	IS:3025(Part-16)2023
6	Nitrates (as NO <sub>3</sub> ),mg/l, Max	6.5	7.6	2.5	50	IS:3025(Part-34)1988 RA 2019
7	Anionic detergents (as MBAS),mg/l, Max	<0.1	<0.1	<0.1	1.0	IS:3025(Part-68)
8	Copper (as Cu),mg/l, Max	<0.005	<0.005	<0.005	1.5	IS:3025(Part-42) 2019
9	Chloride (as Cl),mg/l, Max	230.0	310.0	76.0	600	IS:3025(Part-32) ;1988RA2019
10	Fluoride (as F),mg/l, Max	0.41	0.33	<0.1	1.5	APHA 23rd Edition 4500F
11	Iron (as Fe),mg/l, Max	<0.005	<0.005	<0.005	50	IS:3025(P-2) 2019
12	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH),mg/l, Max	<0.001	<0.001	<0.001	0.005	IS:3025(P-43)Sec 1 2022
13	Selenium (as Se), mg/l, Max	<0.005	<0.005	<0.005	0.05	IS:3025(P-2) 2019
14	Sulphates (as SO <sub>4</sub> ),mg/l, Max	64.0	92.0	22.0	400	IS:3025(P-24)Sec 1 2022
15	Zinc (as Zn),mg/l, Max	<0.005	<0.005	<0.005	15	IS:3025(P-2) 2019
16	Cadmium (as Cd), mg/l, Max	<0.001	<0.001	<0.001	0.01	IS:3025(P-2) 2019
17	Cyanides (as CN), mg/l, Max	<0.01	<0.01	<0.01	0.05	IS:3025(P-27) Sec 12021
18	Lead (as Pb) mg/l, Max	<0.005	<0.005	<0.005	0.1	IS:3025(P-2) 2019
19	Total Arsenic as As (mg/l), Max	<0.002	<0.002	<0.002	0.2	IS:3025(P-2) 2019
20	Chromium (as Cr <sup>+6</sup> ), mg/l, Max	<0.03	<0.03	<0.03	0.05	IS:3025(P-52) 2014
21	Biochemical Oxygen Demand (as O <sub>2</sub> ), mg/l	<3	<3	<3	3	IS:3025(P-44) 2014
22	Total Coliform, MPN/100ml, Max	210	321	120	5000	IS:1622:1981

"END OF REPORT"



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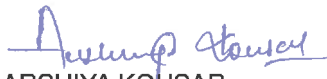
## TEST REPORT

### NOISE LEVEL DATA

Table No. 12

Report No : ELMES182411

Name of the Client		: M/s. Gogte Minerals					
Name of the Project		: Redi Iron Ore Mine (203)					
Particulars of sample collected		: Sound Levels					
Sample Collected by		: Environmental Laboratory (Unit of Mineral Engineering Services)					
Date of sample collection		: 15.11.2024					
Date of sample receipt		: 16.11.2024					
Issue Date		: 04.12.2024					
Sampling & Test Method		: IS:9989					
Code No.	Monitoring stations	Day			Night		
		L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>	L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>
<b>Bufferzone</b>							
N1	Redi village	40.0	47.4	54.3	35.0	39.5	44.2
N2	Gaontala village	42.0	46.8	52.6	34.0	40.0	46.8
N3	Kanyalwadi village	37.0	48.4	55.6	33.8	39.5	45.3
N4	Shiroda village	36.0	47.4	53.8	34.2	38.8	43.8
N5	Tiroda village	35.0	44.2	50.5	33.6	36.0	39.3
N6	Near NIMCO Gate - Tivrewadi, Redi village	43.0	49.3	54.8	34.6	39.8	46.0
N7	Near Primary School - sakalbhatwadi, Redi village	36.0	49.5	57.2	33.0	42.0	47.5
<b>Corezone</b>							
N8	Near Mine office	41.0	55.0	63.0	34.0	42.9	48.2
<b>Permissible Limits of Ambient Noise Levels as per CPCB Guidelines</b>							
		<b>Leq. Limit dB(A)</b>					
		<b>Day</b>	<b>Night</b>				
Industrial areas		75	70				
Commercial area		65	55				
Residential area		55	45				

  
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## TEST REPORT

Table No. 13


Report No :N026724114

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 Treatment Plant Water Sample			
Date of sample collection	: 15.11.2024			
Lab Code	: N/24/11/4-0267			
Issue Date	: 29.11.2024			
Ref	: Schedule -1 Sl.No-2 of CTO			
Sl. No.	Parameters	Results	Standards	Method of Testing
1	pH	7.44	6.5 -9.0	AOHA (23 <sup>rd</sup> Edition) 4500H* - B
2	Biochemical Oxygen Demand BOD <sub>3</sub> 27 <sup>o</sup> C, mg/l	17	<30	IS 3025 (P-44) 1993
3	Total Suspended Solids, at 105 <sup>o</sup> C, mg/l	44	<100	AOHA (23 <sup>rd</sup> Edition) 2540 - D
4	Fecal Coliform (FC), MPN/100ml	110	<1000	APHA 24 <sup>th</sup> Edition

  
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